

**A HIGH-DENSITY LAKE-SEDIMENT AND WATER  
SURVEY IN THE ALEXIS RIVER REGION,  
SOUTHEASTERN LABRADOR  
(NTS MAP AREAS 13A/02, 13A/07, 13A/08, 13A/10, 13A/14 & 13A/15)**



**S. Amor**

**Open File 013A/0089**

**St. John's, Newfoundland  
2013**

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*Cover: Sample collection from a lake in NTS map area 13A/07.*



Mines

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## ABSTRACT

*A detailed, helicopter-supported, lake-sediment and water survey was conducted over approximately 5500 km<sup>2</sup> of the Alexis River region of southeastern Labrador, within NTS map areas 13A/02, 13A/07, 13A/08, 13A/10, 13A/14 and 13A/15, west of Port Hope Simpson.*

*The sampled area is underlain by rocks of the Grenville Province. These are predominantly granitic in the south, and form a component of the Interior Magmatic Belt. To the north, the Exterior Thrust Belt consists of metamorphosed supracrustal rocks, predominantly sedimentary, as well as mafic and felsic-intermediate intrusive rocks. Search Minerals' 2010 REE discoveries south of Port Hope Simpson lie partly within the area of coverage.*

*A total of 854 sites were sampled. The absence of lakes and ponds of any kind over much of the survey area reduced the nominal sampling density of one sample per 4 km<sup>2</sup> to one sample per 6.4 km<sup>2</sup>. Water and sediment samples were collected at 833 sites, and water samples only at 21 sites. Field duplicate samples were collected at 1 site in 20.*

*Analysis of the sediment samples was carried out for 27 elements by Instrumental Neutron-Activation Analysis (INAA), for 31 elements by Induction Coupled Plasma Emission Spectroscopy (ICP-ES), for Ag by Atomic-Absorption Spectrometry (AAS), and Loss-on-Ignition (LOI) by gravimetry. The water samples were analyzed for 24 elements by ICP-ES, U by ICP-mass spectrometry, fluoride ion by ion-specific electrode, conductivity by Corning conductivity sensor, and pH by Corning combination pH electrode.*

*The response to the known REE mineralization takes the form of a zoned anomaly, with different element signatures, in sediment and in water, over Search Minerals' REE discoveries and to the southwest and northeast. Elsewhere, the most conspicuous geochemical features include several other areas of enrichment in REE and REE pathfinders, as well as of an element association in sediments that includes Al, Ba, Be, Ca, Cr, Cs, K, Mg, Na, Nb, Rb, Sc, Sr, Ta, Ti and Zr. This latter association is believed to be related to the amount of inorganic clastic material in the sample, but variations in the relative amounts of these elements, in the anomalies defined by the association, suggest variations in sediment provenance. An anomaly of Au and certain Au pathfinders is present in the southeast of the survey area, associated with metamorphosed felsic volcanic rocks. The probable effects of marine incursion can be seen in the Br content of the lake sediments, and the Na content of the waters, in lakes within about 20 km of the coast.*



## INTRODUCTION

This report presents the results of a helicopter-supported lake-sediment and lake-water sampling program carried out by the Geological Survey of Newfoundland and Labrador (GSNL) over an area of approximately 5 500 km<sup>2</sup> in the Alexis River area of southeastern Labrador in July 2011. The survey covers 1:50 000-scale NTS map areas 13A/02, 13A/07, 13A/08, 13A/10, 13A/14 and 13A/15 (Figure 1).

The 2011 work is a continuation of an earlier detailed lake-sediment and water-sampling program of the areas to the north, east and south (McConnell and Ricketts, 2010) of the present study of the Alexis River survey area.

The report comprises brief reviews of the geology and mineral occurrences of the region, and of previous work carried out in the area; a description of methods of sampling and analysis; general parameters of the survey; description and preliminary interpretation of certain representative and regionally important geochemical variables, and of strong anomalies. Appendice 1 consists of complete listings of the sediment and water data, whereas Appendices 2 and 3 comprise map plots of individual elements, in lake sediments and lake waters, respectively, that were not included in the main part of the text.

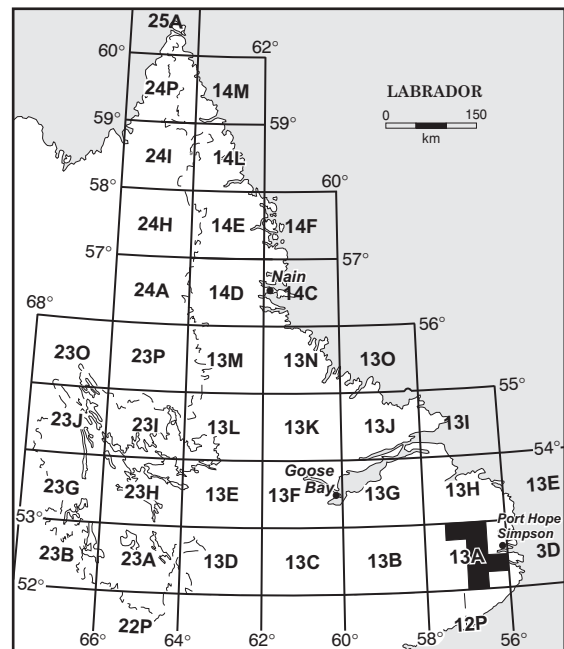


Figure 1. Location of survey area.

## LOCATION, ACCESS AND PHYSIOGRAPHY

The survey area is in southeastern Labrador and its centroid is located about 30 km west of Port Hope Simpson (Figure 1). Within the survey area, the unpaved Trans-Labrador Highway passes through NTS map areas 13A/08, 13A/10, 13A/14 and 13A/15.

The survey area is characterized by rugged relief, and abundant bedrock outcrop, on NTS map areas 13A/07 and 13A/08 and adjacent parts of 13A/02 and 13A/10, but with swampy terrain of lower relief on NTS map areas 13A/14 and 13A/15, the north of 13A/10 and the northwest corner of 13A/02. Elevations in the sampled area vary from less than 10 m asl on the lower Alexis River (NTS map area 13A/10) to 485 m asl at 52° 13' 37" N, 56° 44' 35" (52.227° N 56.743° W) in the north of NTS map area 13A/02. Major watercourses comprise the eastward-flowing Alexis, St. Lewis and Gilbert rivers, and the northward-flowing Hawke River.

## PREVIOUS GEOCHEMICAL SURVEYS

### Regional Studies

The survey area was previously sampled as part of the Federal National Geochemical

Reconnaissance (NGR) program of the Geological Survey of Canada (GSC, 1984). Samples of lake sediment and water were collected at a nominal density of one per 16 km<sup>2</sup>. The sediments were initially analyzed for Ag, As, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn, by Atomic-Absorption Spectrometry (AAS) after aqua-regia digestion; F, by ion-specific electrode (ISE) analysis; Hg, by cold-vapour-AAS; U, by Neutron Activation/Delayed Neutron Counting, and Loss-on-Ignition by gravimetry. The waters were analyzed for fluoride ion by ISE, and for U by fluorimetry. The lake-sediment samples were subsequently retrieved from archive and analyzed by instrumental neutron-activation analysis (INAA) for Au, Ba, Ce, Co, Cr, Cs, Eu, Fe, Hf, La, Lu, Mo, Na, Ni, Rb, Sb, Sc, Sm, Ta, Tb, Th, U, W, Yb and Zn (Friske *et al.*, 1994). Most recently, the samples have been analyzed for a 30-element ICP-ES package following multi-acid (HF-HCl-HClO<sub>4</sub>) digestion (McConnell and Finch, 2012).

Results of the NGR program indicate three groupings of samples that are anomalous or elevated (*i.e.*, exceeding the 97.5 or 90-percentile of the Labrador dataset) in REE and Th within the sampled area. One concentration is centred about 15 km SSE of Port Hope Simpson on NTS map area 13A/08. A second, situated south of the centre of NTS map area 13A/10, is also associated with elevated and anomalous values of U in sediment and water. It is located to the east of the Southwest Pond Granite (Gower *et al.*, 1991), a small granitic pluton of early Neoproterozoic age (Unit M<sub>3Dgr</sub>; Gower, 2010a) centred on 52° 34' 30" N, 56° 45' 58" W (52.575° N, 56.766° W). Element associations in till (*see* below) are also strongly suggestive of REE and rare metal (RM) enrichment in this area.

The third anomaly defined by NGR results is a concentration of mostly elevated (> regional 90-percentile) values of La, Ce and Sm, interspersed with background values, in the southeastern corner of NTS map area 13A/07. It corresponds approximately to the location of the Upper St. Lewis River Anomaly identified during the current study (*see* below).

## Detailed Studies

McCuaig (2002a, e) collected 367 till samples during the surficial mapping of NTS map areas 13A/10, 13A/14 and 13A/15. These were analyzed for Ag, As, Au, Ba, Br, Ca, Ce, Co, Cr, Cs, Eu, Fe, Hf, Hg, Ir, La, Lu, Mo, Na, Nd, Ni, Rb, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Th, U1, W1, Yb and Zn by INAA; Al, As, Ba, Be, Ca, Cd, Ce, Co, Cr, Cu, Dy, Fe, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Sc, Sr, Ti, V, Y, Zn and Zr by ICP-OES after multi-acid (HF-HCl-HClO<sub>4</sub>) digestion; Ag and Rb by AAS after HNO<sub>3</sub> digestion; and Pd and Pt by fire-assay ICP-MS. The Southwest Pond Granite (*see* above) is the focus of the highest values in the till dataset of Be, Ta and most of the REE (mainly disposed to the west of the intrusion); Cs, K and Th (mainly disposed to the east); and Li, Mo, Rb and U (centred on the pluton and extending both east and west of it).

The area to the north, east and south of that sampled in 2011 was the subject of an earlier detailed lake-sediment and water-sampling program (McConnell and Ricketts, 2010) of which the current study is a continuation.

The study area has been the focus of past mineral exploration for magmatic Ni–Cu–Co–platinum-group-metal deposits in the Kyfanan Lake layered mafic intrusion (Unit M<sub>1rg</sub>; *see* Figure 2) on NTS map area 13A/07, the Alexis River Anorthosite (Unit P<sub>3Ban</sub>) on 13A/10, and the White Bear Arm Intrusive Complex (Unit P<sub>3Crg</sub>; Gower, 2010a) on 13A/15; for uranium in late

Paleoproterozoic granites and gneisses on 13A/10 and 13A/14; and for sapphire in similar rocks on 13A/08. The area south (NTS map area 13A/08) and east (NTS map area 13A/09; not sampled in the current study) of Port Hope Simpson is the current focus of exploration for REE and a number of discoveries have been announced (*see* below).

## GEOLOGY AND MINERALIZATION

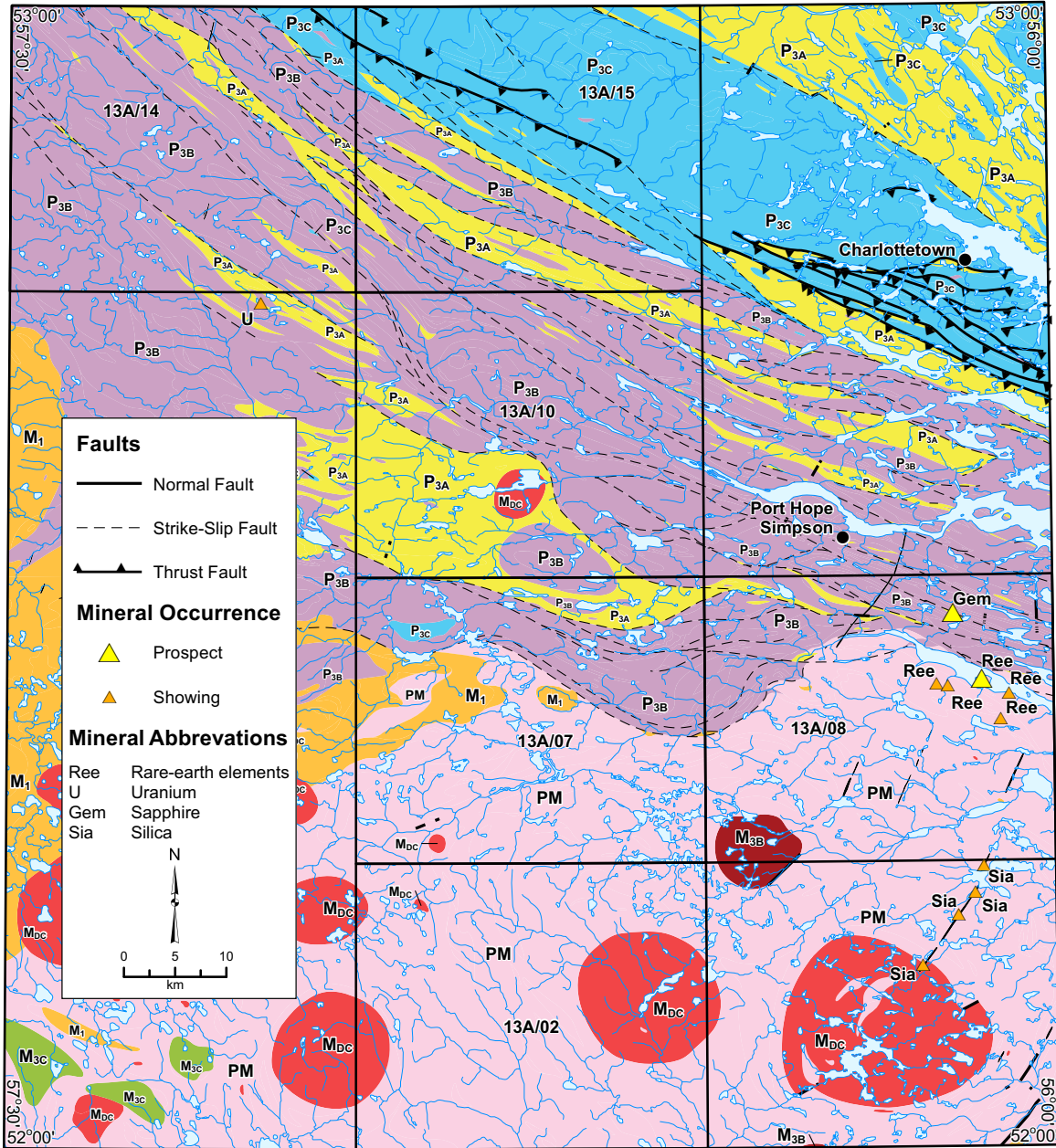
The sampled area is underlain by rocks of the Grenville Province (van Nostrand, 1992; Wardle *et al.*, 1997; Gower, 2010a, b, c; Figure 2), which have been divided into the northern, Exterior Thrust Belt and the southern, Interior Magmatic Belt. In the north (NTS map areas 13A/10, 13A/11, 13A/14 and 13A/15 and the northern parts of 13A/07 and 13A/08), rocks of the Exterior Thrust Belt comprise the following (summary descriptions from Gower, 2010a–c):

- a) Late Paleoproterozoic (1800–1710 Ma) fine- to medium-grained pelitic schist and gneiss (Unit P<sub>3A</sub>sp), and quartz-feldspar psammitic and gneiss schist (Unit P<sub>3A</sub>ss);
- b) Late Paleoproterozoic (1710–1660 Ma) foliated to gneissic diorite to quartz diorite (Unit P<sub>3B</sub>dr), foliated to gneissic granodiorite (Unit P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks (Unit P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (Unit P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (Unit P<sub>3B</sub>gr), amphibolite (Unit P<sub>3B</sub>am), anorthosite and leucogabbro (Unit P<sub>3B</sub>an), leucogabbro and leucogabbro (Unit P<sub>3B</sub>ln), and gabbro and norite (Unit P<sub>3B</sub>rg);
- c) Late Paleoproterozoic (1660–1600 Ma) mafic granulite (Unit P<sub>3C</sub>ag), amphibolite (Unit P<sub>3C</sub>am), anorthosite and leucogabbro (Unit P<sub>3C</sub>an), leucogabbro and leucogabbro (Unit P<sub>3C</sub>ln), gabbro and norite (Unit P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (Unit P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (Unit P<sub>3C</sub>ga), granite to granodiorite (Unit P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (Unit P<sub>3C</sub>gp), quartz monzonite (Unit P<sub>3C</sub>mq), and monzonite (Unit P<sub>3C</sub>mz);
- d) Early Neoproterozoic intrusions of granite to alkali-feldspar granite (Unit M<sub>3D</sub>gr), and syenite and quartz syenite (Unit M<sub>3D</sub>yq).

The southern portion of the sampled area (NTS map areas 13A/02 and the southern parts of 13A/07 and 13A/08) is underlain by rocks of the Interior Magmatic Belt, comprising:

- a) Late Paleoproterozoic and early Mesoproterozoic (1800–1350 Ma) recrystallized granite and alkali-feldspar granite (Unit PMgr); syenite, alkali-feldspar syenite and quartz syenite (Unit PMyq) and megacrystic/porphyritic granite to quartz monzonite (Unit PMgp);
- b) Early Mesoproterozoic (1600–1400 Ma) gabbro, norite and troctolite (Unit M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (Unit M<sub>1</sub>ln) and amphibolite (Unit M<sub>1</sub>am);
- c) Late Mesoproterozoic (ca. 1085–985 Ma) granite and alkali-feldspar granite (Unit M<sub>3B</sub>gr)
- d) Early Neoproterozoic (ca. 985–975 Ma) syenite, quartz syenite and alkali-feldspar syenite (Unit M<sub>3C</sub>yq);
- e) Early Neoproterozoic (ca. 975–955 Ma) granite to alkali-feldspar granite (Unit M<sub>3D</sub>gr), quartz monzonite (Unit M<sub>3D</sub>mq) and syenite, quartz syenite and alkali-feldspar quartz syenite (Unit M<sub>3D</sub>yq).

The Southwest Pond Granite (*see* above) is an isolated intrusion of early Neoproterozoic gran-



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>ln), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>ln), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 2. Synoptic geological map of sampled area.



ite (Unit M<sub>3D</sub>gr) into late Paleoproterozoic pelitic gneiss (Unit P<sub>3A</sub>sp). Zircons from the granite, which is pink- to buff-weathering and coarse-grained and homogeneous, with subsidiary medium grained and minor pegmatitic phases, have indicated an average <sup>207</sup>Pb/<sup>206</sup>Pb age of 962±3 Ma (Gower *et al.*, 1991). The granite is associated with anomalous till geochemistry (McCuaig, 2002e) and lake-sediment and water geochemistry (Friske *et al.*, 1994; this report).

It is not practical to reproduce the detailed geological information recently released by Gower (2010a–c) in a report of this nature; therefore, Figure 2 is a synoptic geological map that only denotes rock ages.

There are 40 documented mineral occurrences within the bounds of the sampled area (Gower, 2010d; Stapleton *et al.*, 2011), of which two have the status of prospect, and four the status of showing; the remainder are classed as indications. Both prospects are on NTS map area 13A/08. They comprise the following:

- a. The Rockhopper # 8 sapphire prospect (MODS number 013A/08/Gem001) is hosted in an intrusion of metasomatized anorthosite within a lens of pelitic gneiss (Unit P<sub>3A</sub>sp; Gower *et al.*, 1988; Gower, 2010a) approximately 12.5 km southeast of Port Hope Simpson.
- b. The HighREE Island REE prospect (MODS number 013A/08/Ree002), on the Trans Labrador-Highway about 25 km southwest of Port Hope Simpson, is hosted in pegmatite and aplite dykes, which intrude strongly recrystallized foliated granitic rocks (Gower *et al.*, 2011).

The four documented mineral showings within the survey area (Pesky Hill, Piperstock Hill, Southern Shore and Toots Cove) are all of REE and all are less than 5 km from the HighREE Island prospect. The mineralization is reported to occur in magnetite-quartz-amphibole veins and associated magnetite–amphibole pegmatites similar to those found in association with the HighREE Island prospect (Search Minerals, news release, November 2, 2010).

Of the 34 mineral indications, one is of Cu (the Bobbys Brook indication on NTS map area 13A/10, 13 km west of Port Hope Simpson), while eleven are of titanium (the Alexis River West showings on NTS map area 13A/10, 48 km northwest of Port Hope Simpson), one of Fe, one of P, one of sapphire and one of garnet; the remainder are of silica or pyrite.

## **SURFICIAL GEOLOGY**

Labrador was covered by the Laurentide Ice Sheet. Based on radiocarbon dates, regional ice retreat from the glacial maximum began at 13 000 years BP (King, 1985). Measured ice-flow directions are predominantly eastward; the five striation measurements within the sampled area range between 077° and 092° (Geological Survey of Newfoundland and Labrador, 2011; Figure 3). Confirmation of this general direction has been provided by the measurements of the orientation of crescentic fractures and *rôches moutonnées* (McCuaig, 2002a).

Regional mapping of the surficial deposits (Klassen *et al.*, 1992) indicates that the sampled area is mostly covered by undifferentiated till (although till is thin to absent at higher altitudes in

the south), with glaciofluvial sediment in river valleys, ablation till in the northwest and minor occurrences of glaciolacustrine sediment in the northeast (Figure 3). More detailed surficial mapping on NTS map areas 13A/10, 13A/14 and 13A/15 by McCuaig (2002a–d) indicates that till veneer is the most abundant cover type on all three map areas, especially 13A/15. Glaciofluvial material is the second most abundant type, after the till, in NTS map areas 13A/14 and 13A/15, but is very scarce (about 1% of the map area) in 13A/10, where thick till and concealed and exposed bedrock occupy 55% of the total map area, collectively exceeding the area covered by till veneer (37%). Marine sediments cover 1.2% of NTS map area 13A/10, where they are concentrated in the southeast corner.

## SAMPLE COLLECTION

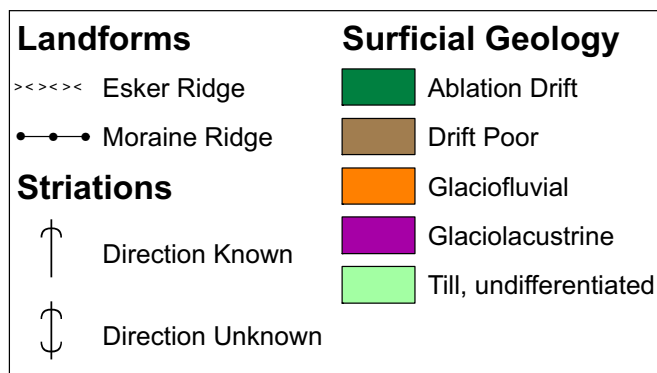
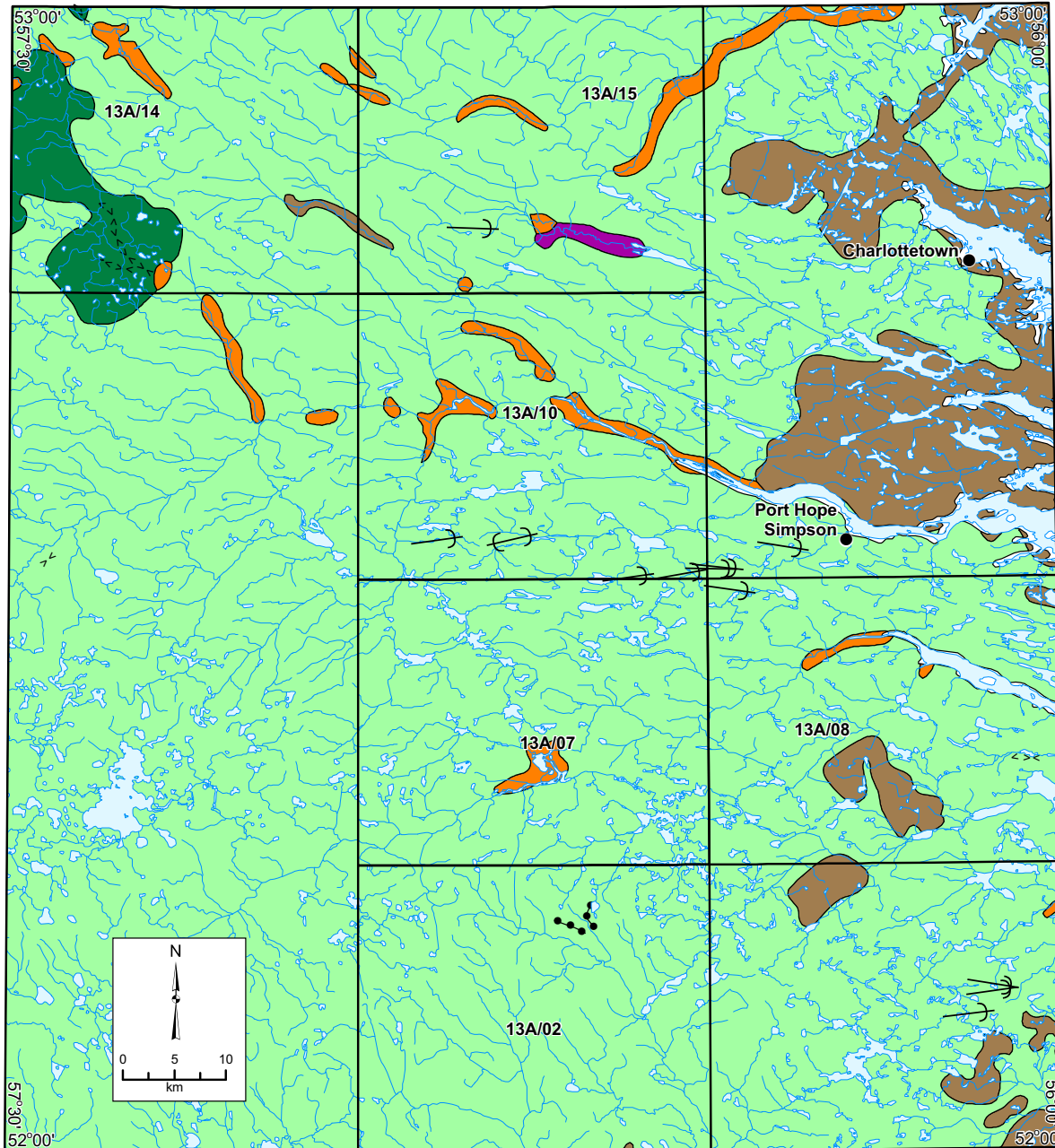
Fieldwork was based at Mary's Harbour (52° 18' 11" N, 55° 49' 48" W; 52.303° N, 55.830° W; NTS map area 03D/05), about 12 km from the nearest point in the survey area. Sampling was carried out from a float-equipped Bell 206-BL. A wooden platform was installed over the port float of the helicopter to facilitate sampling, but a winch was not used.

The locations of sample sites are shown in Figure 4. Sampling of both sediment and water followed procedures developed and described by McConnell (2009). Sample sites were selected by laying a 2-km grid over the area to be sampled and selecting one lake or pond within each cell for sampling. In general, smaller bodies of water were selected in preference to larger ones, although it was not always possible to apply this policy rigorously. In fact, over much of the sampled area the latter, and even the former, are absent, and the overall sampling density of one sample per 6.4 km<sup>2</sup> falls short of the target density of one sample per 4 km<sup>2</sup>.

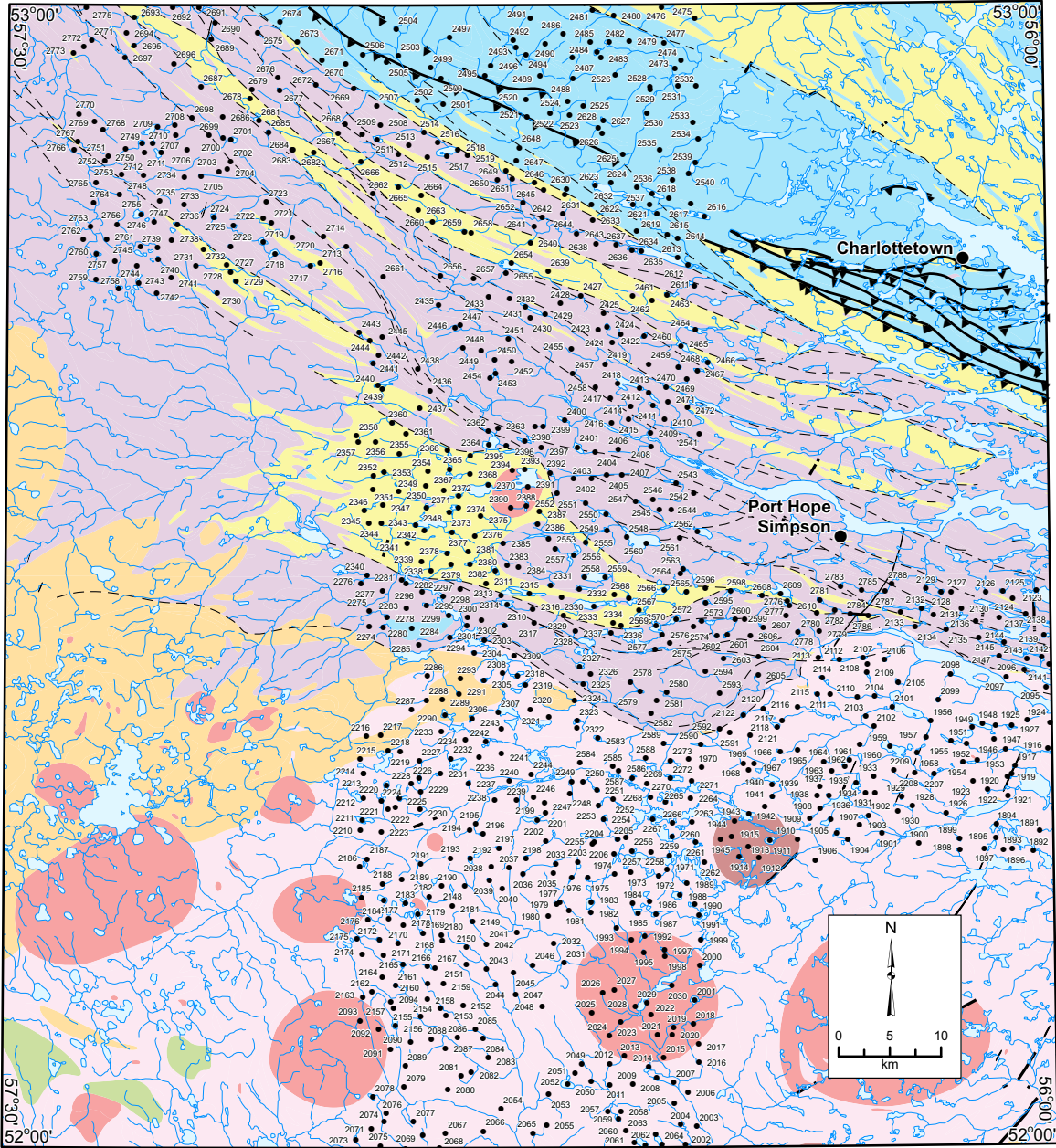
Two samples in every sequence of 20 consisted of a field duplicate pair, both of whose numbers (within the 20-sample sequence) were selected randomly; the two duplicate sites were typically separated by a distance of 50–100 m. The following field parameters were recorded at each site: latitude and longitude, sample depth, nature of vegetation surrounding the lake, sample colour, water colour, amount of suspended matter, sediment composition, potential sources of contamination and duplicate status. The NTS 1:50 000 map area number, lake area and lithologic classifications after Wardle *et al.* (1997), and Gower (2010a–c) of the upstream drainage cell were added to the field cards later.

Samples of lake sediment were collected using a tubular steel sampler fitted with a butterfly valve, which opens on impact with the sediment and closes as the sample is retrieved, trapping the contained sediment. The sampler is designed so that once retrieved, it can be inverted and the contained sediment poured into a plastic collection device and thence into a sample bag. The rope used for retrieving the sampler is marked at 1-m intervals to permit estimate of the lake depth at the point of sampling. Samples were stored in pre-numbered, water-resistant Kraft paper bags and air-dried at ambient temperatures for a few days.

Water samples were collected in purified Nalgene bottles, cleaned in the laboratory by leaching with acid and rinsing with distilled and de-ionized water. After collection, the sample bottles were stored in refrigerators before being air-freighted, in coolers, to St. John's.



**Figure 3.** Surficial geology of sampled area.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>yt)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic

(1660–1600 Ma)

**P<sub>3C</sub>**

Mafic granulite (P<sub>3C</sub>g), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>ln), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

(1800–1710 Ma)

**P<sub>3B</sub>**

Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>ln), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

(ca. 1800–1770 Ma)

**P<sub>3B</sub>**

Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 4. Locations of 2011 lake-sediment and water samples.

## **SAMPLE PREPARATION AND ANALYSIS**

### **Preparation**

On their arrival at the GSNL laboratory, drying of the sediment samples was completed at 40° C, followed by disaggregation using a mortar and pestle, and screening through a 180 micron (80 mesh) stainless-steel sieve, with the fine fraction being subjected to analysis. Water samples were filtered at the laboratory using a 0.45 µm millipore filtration apparatus.

### **Analysis**

Analytical methods are described in Tables 1 and 2. Sample preparation, and all analyses except the INAA of the sediment samples (performed by Becquerel Labs) and U analysis of the water samples (performed by Maxxam Labs) were carried out at the GSNL's laboratory in St. John's.

In subsequent discussion of the behaviour and distribution of the analyzed parameters, and in the database, the suffixes described in Tables 1 and 2 are used to denote the analytical and (where applicable) digestion methods. This convenient shorthand is specific to the GSNL. No suffixes are used for Loss-on-Ignition, pH or Conductivity.

## **DATA QUALITY**

A reference standard was inserted at a frequency of one in 20, for both the sediment and water analyses. The sediment inserts consisted of the certified reference standards LKSD2, LKSD3 and LKSD4, supplied by Natural Resources Canada. Of the water standards, only two are certified (ESL1 and EPL1, supplied by SCP Science). The other two, RR4 and KB2, were created in-house. Analytical duplicates were also inserted at a frequency of 1 in 20, as were field duplicates, as stated above. After reviewing the water standard analyses, re-analysis of certain sample sequences was requested for Mg, Na, S, Cu, Ni, V and Zn.

Analyses of the sediment standards by ICP-ES, after ostensibly total HF-HClO<sub>4</sub>-HNO<sub>3</sub>-HCl digestion, fell consistently short of the recommended total values for these standards (Lynch, 1990) for certain elements: specifically As (mean shortfall 10% over three standards), Cr (13%), Cu (14%), Ti (23%), Nb (26%), Be (27%) and Zr (mean shortfall 71% over three standards). Strontium was consistently overestimated (19%).

Analytical precision, as calculated on the sediment standards at the 95% confidence level, is summarized in Table 3; analytical precision calculated from analytical duplicates in Table 4; and sample inhomogeneity, calculated from field duplicates, in Table 5. The corresponding data for the waters are listed in Tables 6, 7 and 8. It is acknowledged that because the absolute value of the precision increases (that is, deteriorates) with decreasing concentration level, and because of the positive skew of most elements' frequency distributions, the calculation of a single value for the precision for each element will often produce potentially misleading (and normally pessimistic) estimates of the precision over most of the element's concentration range. Nevertheless, the data provide a rough idea of which elements returned the most and least precise analyses.

**Table 1.** Analytical methods for lake-sediment samples

| ANALYSIS   | UNITS   | METHOD  | METHOD SUFFIX | DIGESTION/ PREPARATION  |
|--|---|---|---------------|---|
| As, Au <sup>1</sup> , Ba, Br, Ce, Co, Cr, Cs, Eu, Fe <sup>2</sup> , Hf, La, Lu, Mo, Na <sup>2</sup> , Rb, Sb, Sc, Se, Sm, Ta, Tb, Th, U, W, Yb, Zr   | Parts per million (ppm)<br><sup>1</sup> Parts per billion (ppb)<br><sup>2</sup> Weight per cent | Instrumental Neutron Activation Analysis (INAA)           | 1             | 5 to 10 g in shrink-wrapped vial (total analysis)             |
| Al <sup>2</sup> , As, Ba, Be, Ca <sup>2</sup> , Cd, Ce, Co, Cr, Cu, Dy, Fe <sup>2</sup> , K <sup>2</sup> , La, Li, Mg <sup>2</sup> , Mn, Mo, Na <sup>2</sup> , Nb, Ni, P, Pb, Rb, Sc, Sr, Ti, V, Y, Zn, Zr | Parts per million (ppm)<br><sup>2</sup> Weight per cent   | Inductively-Coupled Plasma Emission Spectrometry (ICP-ES) | 2             | HF-HClO <sub>4</sub> -HNO <sub>3</sub> -HCl (total digestion) |
| Ag   | Parts per million (ppm)   | Atomic-Absorption Spectrometry (AAS)                      | 6             | HNO <sub>3</sub>  |
| Loss-on-Ignition (LOI)   | Weight per cent   | Gravimetric using muffle furnace raised to 500°C          |               | None  |

## RESULTS

### STATISTICAL ANALYSIS

#### Summary Statistics

The median, arithmetic mean, geometric mean, arithmetic standard deviation, logarithmic standard deviation, minimum and maximum of analytical parameters for lake sediment and lake water are summarized in Tables 9 and 10. Histograms and cumulative-frequency plots for all analyzed elements are included in their respective maps.

#### Field Observations

Figures 5–8 show the frequency of occurrence and areal distribution of sampling depth, pre-dominant shoreline vegetation types, sample colour and sediment composition, noted during the sampling.

**Table 2.** Analytical methods for lake-water samples

| ANALYSIS  | UNITS   | METHOD                           | METHOD SUFFIX | PREPARATION  |
|---|---|----------------------------------|---------------|--|
| pH  |   | Corning combination pH electrode |               | None   |
| Conductivity  | Microsiemens ( $\mu$ S)   | Corning conductivity sensor      |               | None   |
| Ca, Fe <sup>1</sup> , K, Mg, Mn <sup>1</sup> , Na, S, Si    | Parts per million (ppm)<br><sup>1</sup> Parts per billion (ppb) | ICP-ES                           | w1            | Filtration (0.45 $\mu$ m) and HNO <sub>3</sub> acidification |
| Al, Ba, Be, Co, Cr, Cu, Li, Mo, Ni, P, Pb, Sr, Ti, V, Y, Zn | Parts per billion (ppb)   | ICP-ES / ultrasonic nebulizer    | w2            | Filtration (0.45 $\mu$ m) and HNO <sub>3</sub> acidification |
| Fluoride (F-)   | Parts per billion (ppb)   | Fluoride-ion Specific Electrode  | w9            | Filtration (0.45 $\mu$ m)                                    |
| U   | Parts per billion (ppb)   | ICP-mass spectrometry (MS)       | w3            | Filtration (0.45 $\mu$ m) and HNO <sub>3</sub> acidification |

**Table 3.** Summary of sediment analytical precision, as measured on reference standards

|                                   | INAA  | ICP-ES   | Other   |
|-----------------------------------|---|--|---------|
| Better than $\pm 5\%$             |   |  |         |
| Between $\pm 5\%$ and $\pm 10\%$  | Th, Sm, U, Br, Sb, As, Ba                     | Ca, Sc, Zn, Na, Al, Cr, K, La, Mg, Co, V, Fe, Sr, Y, Ba, Be, Pb, P, Ce, Li, As |         |
| Between $\pm 10\%$ and $\pm 20\%$ | Na, Co, Sc, Cs, Rb, Yb, Ce                    | Mn, Ni, Dy, Ti, Cu, Zr, Nb   | LOI, Ag |
| Worse than $\pm 20\%$             | Cr, Ta, Tb, Eu, Hf, Fe, La, Lu, W, Zr, Au, Mo | Rb, Cd, Mo   |         |

The median and maximum sampling depths are 1.5 and 22 m respectively; the latter was reported at 52° 35' 39" N, 56° 51' 43" W (52.5941° N, 56.8619° W), west of the centre of NTS map area 13A/10. The northern (NTS map areas 13A/14 and 13A/15) and especially the southern (13A/02) parts of the survey area are characterized by very shallow sampling depths; there are concentrations of deeper lakes in the southwest of 13A/10, over most of 13A/08, and on the eastern part of the border between 13A/02 and 13A/07.

**Table 4.** Summary of sediment analytical precision, as measured on analytical duplicates

|                                   | INAA  | ICP-ES                                | Other |
|-----------------------------------|---|---------------------------------------|-------|
| Better than $\pm 5\%$             |   |                                       |       |
| Between $\pm 5\%$ and $\pm 10\%$  |   | Be, La, P, Sc, Sr, V, Y, Zn           | LOI   |
| Between $\pm 10\%$ and $\pm 20\%$ | Br, La, Sm, Zr                                    | Al, Ba, Ca, Ce, Cr, Fe, K, Mg, Na, Ti |       |
| Between $\pm 20\%$ and $\pm 50\%$ | Fe, Na, Sc, Th                                    | Co, Cu, Dy, Li, Mn, Ni, Pb, Zr        |       |
| Worse than $\pm 50\%$             | Ba, Ce, Co, Cr, Cs, Eu, Hf, Lu, Rb, Ta, Tb, U, Yb | Cd, Mo, Rb                            |       |

**Table 5.** Summary of sediment inhomogeneity, as measured on field duplicates

|                                    | INAA  | ICP-ES  | Other |
|------------------------------------|---|---|-------|
| Better than $\pm 20\%$             |   |   |       |
| Between $\pm 20\%$ and $\pm 50\%$  |   |   |       |
| Between $\pm 50\%$ and $\pm 100\%$ | Br, Ta  | Ba, Ca, Cd, Cr, Nb, P, Sr   | LOI   |
| Worse than $\pm 100\%$             | Ba, Ce, Co, Cr, Cs, Eu, Fe, Hf, La, Lu, Na, Rb, Sc, Sm, Tb, Th, U, Yb, Zr | Al, Be, Ce, Co, Cu, Dy, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, Pb, Rb, Sc, Ti, V, Y, Zn, Zr |       |

**Table 6.** Summary of water analytical precision, as measured on reference standards

|                                   | ICP-ES | ICP-ES / ultrasonic nebulizer |
|-----------------------------------|--------|-------------------------------|
| Better than $\pm 5\%$             |        | Mn, Sr, Ba                    |
| Between $\pm 5\%$ and $\pm 10\%$  | Na     | Co, Li, Be, Cr                |
| Between $\pm 10\%$ and $\pm 20\%$ | Ca, K  | Zn, Al, Cd                    |
| Worse than $\pm 20\%$             | Fe     | Ni, V, Cu, P, Mo, Pb          |

The most frequently encountered shoreline vegetation type was “Swamp” with 286 instances, closely followed by “Mixed Forest and Swamp” with 269, and “Forest” with 201. The remaining three classifications (“Rock and Forest”, “Barren” and “Tundra”) total only 141 instances. Swamp concentrates in the northwest of NTS map area 13A/02 and over most of 13A/15, while outcrop is most abundant in the southwest corner of 13A/10 and adjacent part of 13A/07. Forest, and mixed forest and swamp, characterize most of the rest of the survey area.

The predominant sample colour was “chocolate brown”, in 364 samples, followed by “brown” in 290. “Greenish brown” sediment was reported in 145 samples, while the remaining six colours (“tan yellow”, “brown, lustrous”, “green”, “grey”, “black” and “grey-brown”) were reported in 73



**Table 7.** Summary of water analytical precision, as measured on duplicates

|                                   | ICP-ES         | ICP-ES /<br>ultrasonic nebulizer | Other        |
|-----------------------------------|----------------|----------------------------------|--------------|
| Better than $\pm 5\%$             |                |                                  | pH           |
| Between $\pm 5\%$ and $\pm 10\%$  | Fe             |                                  | Conductivity |
| Between $\pm 10\%$ and $\pm 20\%$ | Na, S          |                                  |              |
| Between $\pm 20\%$ and $\pm 50\%$ | Ca, Mn, Si, Sr | Al, Ba, Be, P                    | Fluoride     |
| Worse than $\pm 50\%$             | K              | Cr, Cu, Li, Ti, Zn               |              |

**Table 8.** Summary of water inhomogeneity, as measured on field duplicates

|                                    | ICP-ES         | ICP-ES /<br>ultrasonic nebulizer | Other            |
|------------------------------------|----------------|----------------------------------|------------------|
| Better than $\pm 20\%$             |                |                                  | Conductivity, pH |
| Between $\pm 20\%$ and $\pm 50\%$  | S              |                                  |                  |
| Between $\pm 50\%$ and $\pm 100\%$ | Ca, Fe, Mn, Si | Al,                              | Fluoride         |
| Worse than $\pm 100\%$             | K              | Ba, Be, Cr, Cu, Li, P, Sr, Ti    |                  |

samples. The overall geographic impression is, unsurprisingly, of the ubiquity of chocolate brown samples; amongst the exceptions are concentrations of greyish brown and greenish brown samples in the northwest of NTS map area 13A/02, and of greenish brown samples in the northeast of 13A/08.

“Organic peaty”, “Organic ooze” and “Organic granular” composition were reported with approximately equal frequency at 260, 255 and 245 sites, respectively. Samples described as “clastic, coarse-grained” and “clastic, fine-grained” were reported at 46 and 67 sites, respectively. There are significant concentrations of such samples in the northwest and southeast of NTS map area 13A/02 and, as will be shown, these textural types appear to be a significant control on the chemical composition of the samples. Elsewhere, samples of organic ooze predominate on NTS map areas 13A/07, 13A/08 and the southern half of 13A/10. Organic granular and organic peaty samples, intermixed, predominate elsewhere.

### ***Element Associations***

Correlation matrices for the lake-sediment and lake-water data are displayed in Figures 9 and 10, respectively. Where more than 30% of the analyses of an element were below the analytical detection limit, it was not included in the compilation of the correlation matrices; application of these criteria resulted in the exclusion (in alphabetical order) of Ag6, As1, As2, Au1, Be2, Cs1, Eu1, Hf1, Li2, Lu1, Mo1, Mo2, Nb2, Sb1, Se1, Ta1, Tb1, W1, Yb1 and Zr1 from the sediments, and Bew2, Cdw2, Cow2, Crw2, Liw2, Mow2, Niw2, Pw2, Pbw2, Tiw2, Vw2, Yw2, Znw2 and

**Table 9.** Summary statistics for lake-sediment data

| Analysis | N   | Median | Arithmetic Mean | Geometric Mean | Standard Deviation Arithmetic | Standard Deviation Logarithmic | Minimum | Maximum |
|----------|-----|--------|-----------------|----------------|-------------------------------|--------------------------------|---------|---------|
| Ag6      | 818 | <0.1   | <0.1            | <0.1           | 0.03                          | 0.07                           | <0.1    | 0.8     |
| Al2(%)   | 829 | 0.76   | 1.38            | 0.65           | 1.752                         | 0.565                          | 0.06    | 9.55    |
| As1      | 748 | <0.5   | <0.5            | <0.5           | 0.25                          | 0.16                           | <0.5    | 4.9     |
| As2      | 829 | <2     | <2              | <2             | 1.0                           | 0.2                            | <2      | 19      |
| Au1(ppb) | 748 | <1     | <1              | <1             | 0.8                           | 0.2                            | <1      | 15      |
| Ba1      | 748 | 100    | 193             | 108            | 269.37                        | 0.45                           | <50     | 1900    |
| Ba2      | 829 | 113    | 203             | 125            | 258.3                         | 0.4                            | 20      | 1749    |
| Be2      | 829 | 0.3    | 0.5             | 0.2            | 1.00                          | 0.56                           | <0.1    | 23.8    |
| Br1      | 748 | 28     | 28              | 25             | 12.1                          | 0.2                            | 2       | 91      |
| Ca2(%)   | 829 | 0.34   | 0.56            | 0.40           | 0.588                         | 0.336                          | 0.07    | 3.84    |
| Cd2      | 829 | 0.2    | 0.2             | 0.1            | 0.10                          | 0.24                           | <0.1    | 0.8     |
| Ce1      | 748 | 37     | 64              | 22             | 105.0                         | 0.8                            | 1.5     | 1500    |
| Ce2      | 829 | 37     | 62              | 25             | 96.7                          | 0.7                            | 1       | 1491    |
| Co1      | 748 | 3      | 4               | 3              | 6.3                           | 0.3                            | <2      | 78      |
| Co2      | 829 | 2      | 4               | 2              | 6.8                           | 0.5                            | <1      | 73      |
| Cr1      | 748 | <10    | 13              | <10            | 14.7                          | 0.3                            | <10     | 160     |
| Cr2      | 829 | 6.2    | 9.6             | 5.7            | 10.30                         | 0.46                           | 0.5     | 54.3    |
| Cs1      | 748 | <0.5   | <0.5            | <0.5           | 0.25                          | 0.17                           | <0.5    | 2.8     |
| Cu2      | 829 | 5.2    | 9.2             | 5.1            | 12.13                         | 0.48                           | 0.5     | 96.3    |
| Dy2      | 829 | 1.5    | 2.7             | 0.8            | 4.78                          | 0.81                           | <0.1    | 103.5   |
| Eu1      | 748 | <0.5   | 0.7             | <0.5           | 0.86                          | 0.36                           | <0.5    | 13.0    |
| Fe1(%)   | 748 | 0.5    | 1.1             | 0.6            | 1.75                          | 0.47                           | 0.1     | 22.8    |
| Fe2(%)   | 829 | 0.43   | 1.10            | 0.50           | 1.769                         | 0.548                          | 0.04    | 22.23   |
| Hf1      | 748 | <1     | 2               | <1             | 4.3                           | 0.4                            | 0.5     | 48      |
| K2(%)    | 829 | 0.09   | 0.30            | 0.10           | 0.555                         | 0.600                          | <0.01   | 3.84    |
| La1      | 748 | 21     | 33              | 12             | 49.1                          | 0.7                            | 0.5     | 757     |
| La2      | 829 | 22     | 36              | 13             | 53.0                          | 0.8                            | <1      | 831     |
| Li2      | 829 | 0.5    | 1.5             | 0.4            | 2.56                          | 0.76                           | <0.1    | 28.5    |
| LOI(%)   | 827 | 54.7   | 62.4            | 51.9           | 31.67                         | 0.30                           | 1.8     | 98.9    |
| Lu1      | 748 | 0.08   | 0.16            | 0.08           | 0.317                         | 0.488                          | <0.05   | 6.96    |
| Mg2(%)   | 829 | 0.06   | 0.16            | 0.07           | 0.269                         | 0.558                          | <0.01   | 1.98    |
| Mn2      | 829 | 57.0   | 168.4           | 59.7           | 429.1                         | 0.7                            | <1      | 9046    |
| Mo1      | 748 | <1     | 1               | <1             | 8.0                           | 0.3                            | <1      | 210     |
| Mo2      | 829 | <1     | 1               | <1             | 7.0                           | 0.3                            | <1      | 189     |
| Na1(%)   | 748 | 0.09   | 0.27            | 0.10           | 0.525                         | 0.571                          | <0.05   | 3.2     |
| Na2(%)   | 829 | 0.08   | 0.30            | 0.10           | 0.601                         | 0.594                          | 0.01    | 4.48    |
| Nb2      | 829 | 1      | 3               | 1              | 4.6                           | 0.5                            | <1      | 41      |
| Ni2      | 829 | 2      | 5               | 2              | 6.4                           | 0.6                            | <1      | 39      |
| P2       | 829 | 493    | 821             | 560            | 836.8                         | 0.4                            | 135     | 6211    |
| Pb2      | 829 | 3      | 4               | 3              | 3.7                           | 0.4                            | <1      | 49      |
| Rb1      | 748 | <5     | 9               | 5              | 16.0                          | 0.4                            | <5      | 120     |
| Rb2      | 829 | 5      | 11              | 5              | 18.9                          | 0.5                            | <2      | 279     |
| Sb1      | 748 | <0.1   | <0.1            | <0.1           | 0.03                          | 0.11                           | <0.1    | 0.3     |
| Sc1      | 748 | 2.2    | 3.3             | 1.6            | 3.98                          | 0.57                           | 0.1     | 21.3    |
| Sc2      | 829 | 2.7    | 3.7             | 1.7            | 4.23                          | 0.61                           | <0.1    | 25.0    |
| Se1      |     |        |                 |                |                               |                                |         |         |
| Sm1      | 748 | 2.7    | 4.5             | 1.7            | 6.77                          | 0.75                           | <0.1    | 116     |
| Sr2      | 829 | 40     | 77              | 50             | 99.0                          | 0.3                            | 10      | 602     |
| Ta1      | 748 | <0.2   | 0.2             | 0.2            | 0.29                          | 0.32                           | <0.2    | 2.5     |
| Tb1      | 748 | <0.5   | 0.5             | <0.5           | 0.77                          | 0.30                           | <0.5    | 16      |
| Th1      | 748 | 2.2    | 2.9             | 1.3            | 3.59                          | 0.66                           | <0.1    | 47.1    |
| Ti2      | 829 | 519    | 1065            | 392            | 1644.9                        | 0.7                            | 24      | 12250   |
| U1       | 748 | 0.7    | 3.4             | 0.5            | 26.1                          | 0.8                            | <0.1    | 590     |
| V2       | 829 | 13     | 23              | 8              | 30.8                          | 0.8                            | <1      | 452     |
| W1       | 748 | <1     | <1              | <1             | 0.07                          | 0.03                           | <1      | 2       |
| Y2       | 829 | 8      | 15              | 6              | 27.7                          | 0.7                            | <1      | 631     |
| Yb1      | 748 | 0.5    | 1.2             | 0.7            | 2.29                          | 0.46                           | <0.5    | 50.9    |
| Zn2      | 829 | 15     | 27              | 18             | 28.3                          | 0.4                            | 4       | 239     |
| Zr1      | 748 | <100   | 88              | 60             | 149.8                         | 0.3                            | <100    | 1800    |
| Zr2      | 829 | 3.8    | 8.9             | 3.6            | 14.51                         | 0.58                           | <1      | 88.8    |

**Table 10.** Summary statistics for lake-water data

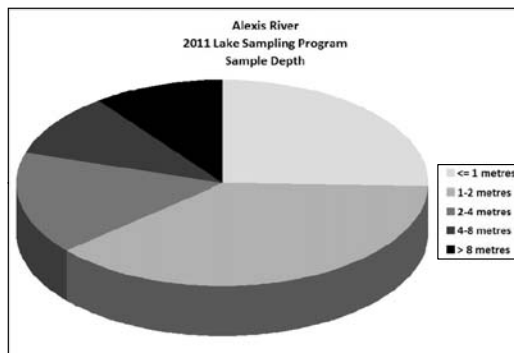
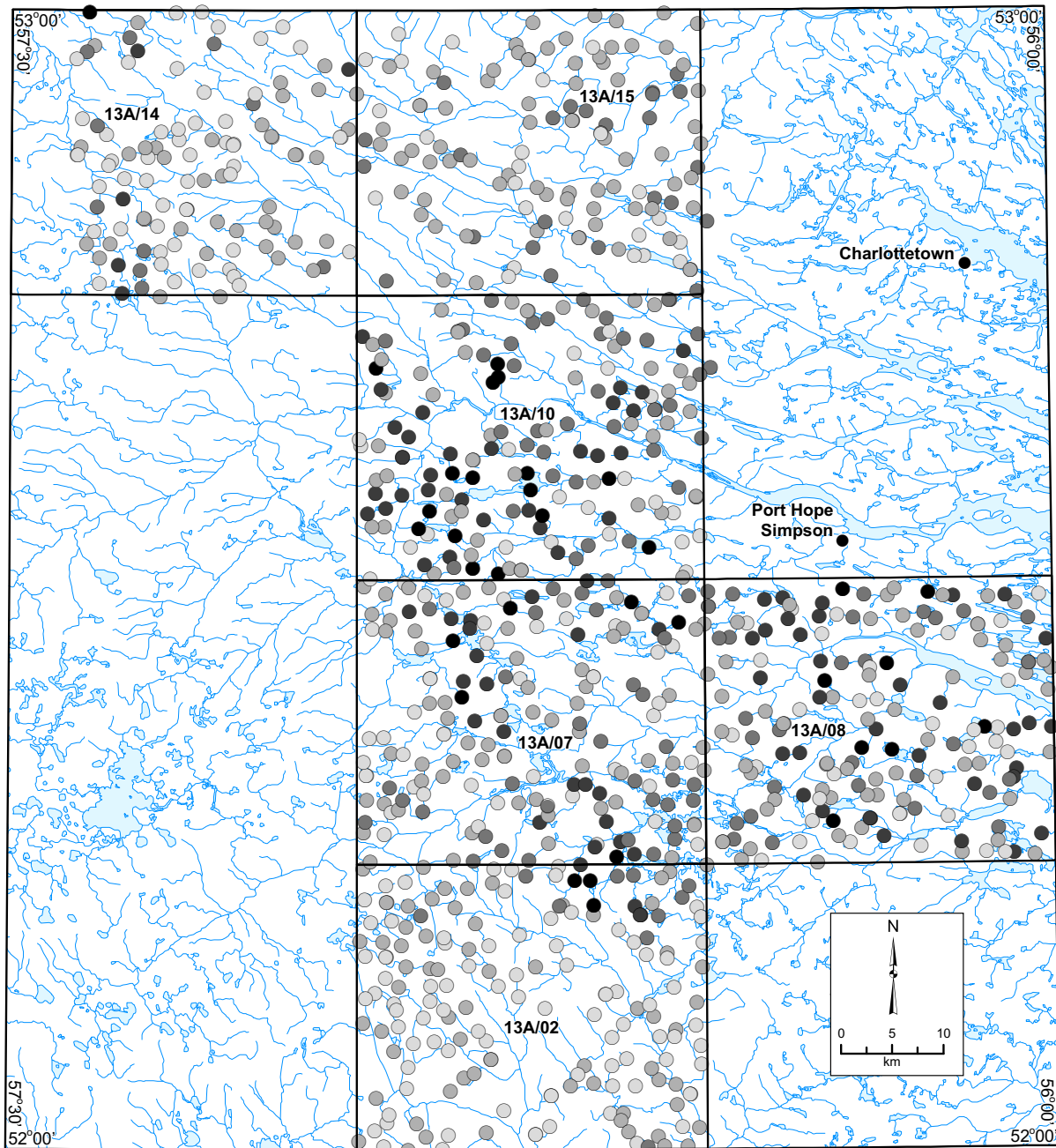
| Analysis     | N   | Median | Arithmetic Mean | Geometric Mean | Standard Deviation |             | Minimum | Maximum |
|--------------|-----|--------|-----------------|----------------|--------------------|-------------|---------|---------|
|              |     |        |                 |                | Arithmetic         | Logarithmic |         |         |
| Al(ppb)      | 849 | 100    | 137             | 71             | 128.2              | 0.6         | <2      | 688     |
| Ba(ppb)      | 849 | 3.1    | 3.8             | 1.7            | 4.50               | 0.71        | <0.1    | 70.0    |
| Be(ppb)      | 849 | 0.1    | 0.3             | 0.1            | 2.93               | 0.36        | <0.1    | 63.0    |
| Ca(ppm)      | 849 | 0.48   | 0.53            | 0.35           | 0.455              | 0.449       | 0.01    | 3.00    |
| Co(ppb)      | 849 | <1     | <1              | <1             | 0.03               | 0.11        | <1      | 1       |
| Conductivity |     |        |                 |                |                    |             |         |         |
| ( $\mu$ S)   | 850 | 19.40  | 21.06           | 19.35          | 12.027             | 0.185       | 7.10    | 266.00  |
| Cr(ppb)      | 849 | <0.5   | <0.5            | <0.5           | 0.65               | 0.24        | <0.5    | 14.4    |
| Cu(ppb)      | 848 | 4.4    | 4.9             | 2.7            | 4.20               | 0.59        | <0.5    | 27.1    |
| F-(ppb)      | 850 | 19     | 22              | 19             | 12.3               | 0.3         | 1       | 81      |
| Fe(ppb)      | 849 | 174    | 236             | 139            | 296.3              | 0.5         | <10     | 6079    |
| K(ppm)       | 849 | 0.05   | 0.07            | 0.04           | 0.080              | 0.523       | <0.01   | 0.76    |
| Li(ppb)      | 849 | <0.1   | <0.1            | <0.1           | 0.18               | 0.34        | 0.1     | 4.3     |
| Mg(ppm)      | 849 | 0.18   | 0.20            | 0.15           | 0.146              | 0.375       | <0.01   | 0.93    |
| Mn(ppb)      | 849 | 3.5    | 4.7             | 3.2            | 4.51               | 0.41        | <0.5    | 52.3    |
| Mo(ppb)      | 849 | <1     | <1              | <1             | 0.9                | 0.2         | <1      | 12      |
| Na(ppm)      | 849 | 0.76   | 0.78            | 0.69           | 0.395              | 0.254       | 0.14    | 2.42    |
| Ni(ppb)      | 849 | <1     | <1              | <1             | 0.99               | 0.24        | <1      | 22      |
| P(ppb)       | 849 | <5     | 6               | <5             | 6.7                | 0.3         | <5      | 91      |
| Pb(ppb)      | 849 | <1     | <1              | <1             | 4.03               | 0.15        | <1      | 117.7   |
| pH           | 850 | 4.94   | 5.07            | 5.08           | 0.515              | 0.087       | 4.07    | 6.71    |
| S(ppm)       | 849 | 0.13   | 0.14            | 0.13           | 0.071              | 0.244       | 0.05    | 0.63    |
| Si(ppm)      | 849 | 0.29   | 0.50            | 0.15           | 0.557              | 0.851       | <0.01   | 3.36    |
| Sr(ppb)      | 849 | 3.3    | 3.7             | 1.7            | 3.55               | 0.69        | <0.1    | 28.4    |
| Ti(ppb)      | 849 | 0.2    | 0.9             | 0.3            | 1.35               | 0.74        | <0.1    | 10.9    |
| U(ppb)       | 847 | <0.01  | 0.02            | <0.01          | 0.070              | 0.488       | <0.01   | 1.38    |
| V(ppb)       | 845 | <0.2   | <0.2            | <0.2           | 0.14               | 0.19        | <0.2    | 2.5     |
| Y(ppb)       | 849 | <0.1   | <0.1            | <0.1           | 0.17               | 0.32        | <0.1    | 1.8     |
| Zn(ppb)      | 844 | 2      | 3               | 2              | 5.0                | 0.4         | <1      | 90      |

Uw3 from those of the waters. Also, in the cases where an element was measured by more than one method, only one suite of analyses was included in the calculations; application of these criteria resulted in the exclusion of Ba1, Ce1, Co2, Cr1, Fe2, La1, Na1, Ni2, Rb1, Sc1, from the sediment analyses.

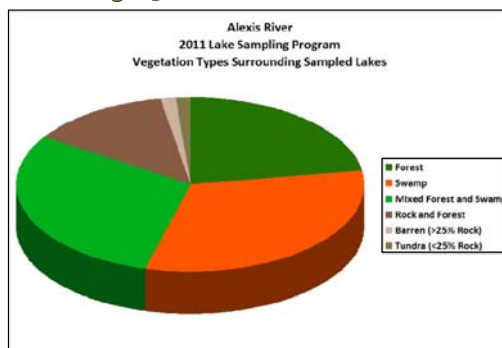
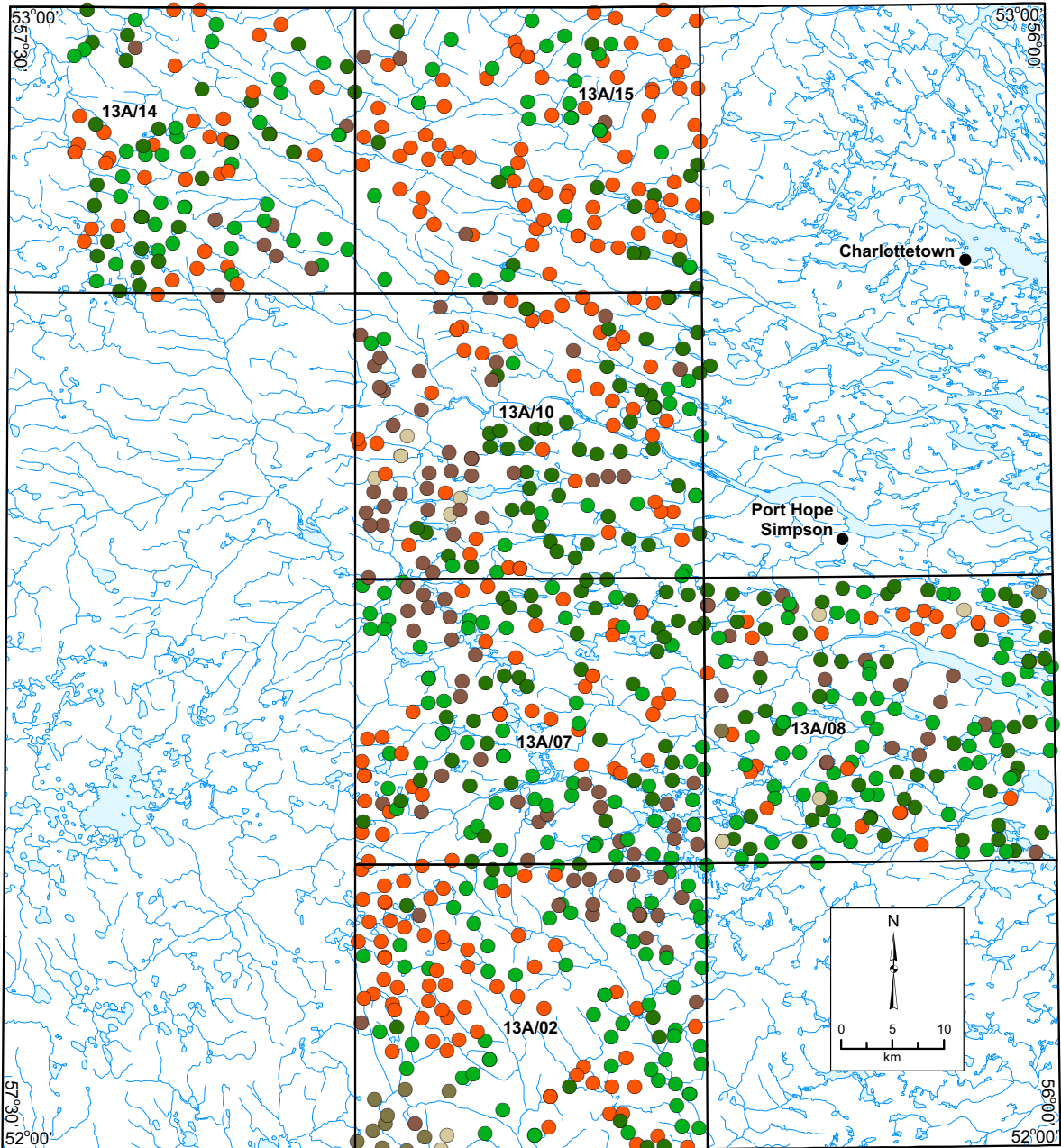
In Figures 9 and 10, the lower left hand quadrant displays, in graphical form, the magnitude of the Pearson correlation coefficients (of data transformed, where necessary, by square-root or logarithmic transformation to create normal distributions) while the Spearman correlation coefficients are displayed in the upper right. The elements are grouped in such a way as to emphasize their co-associations.

These associations are as follows:

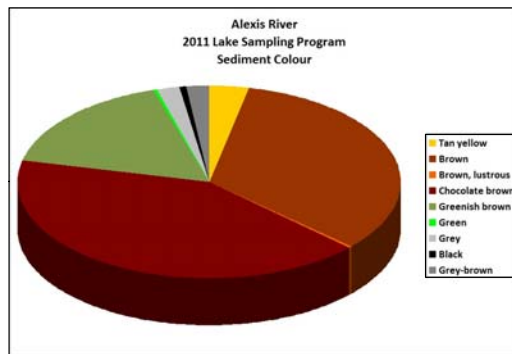
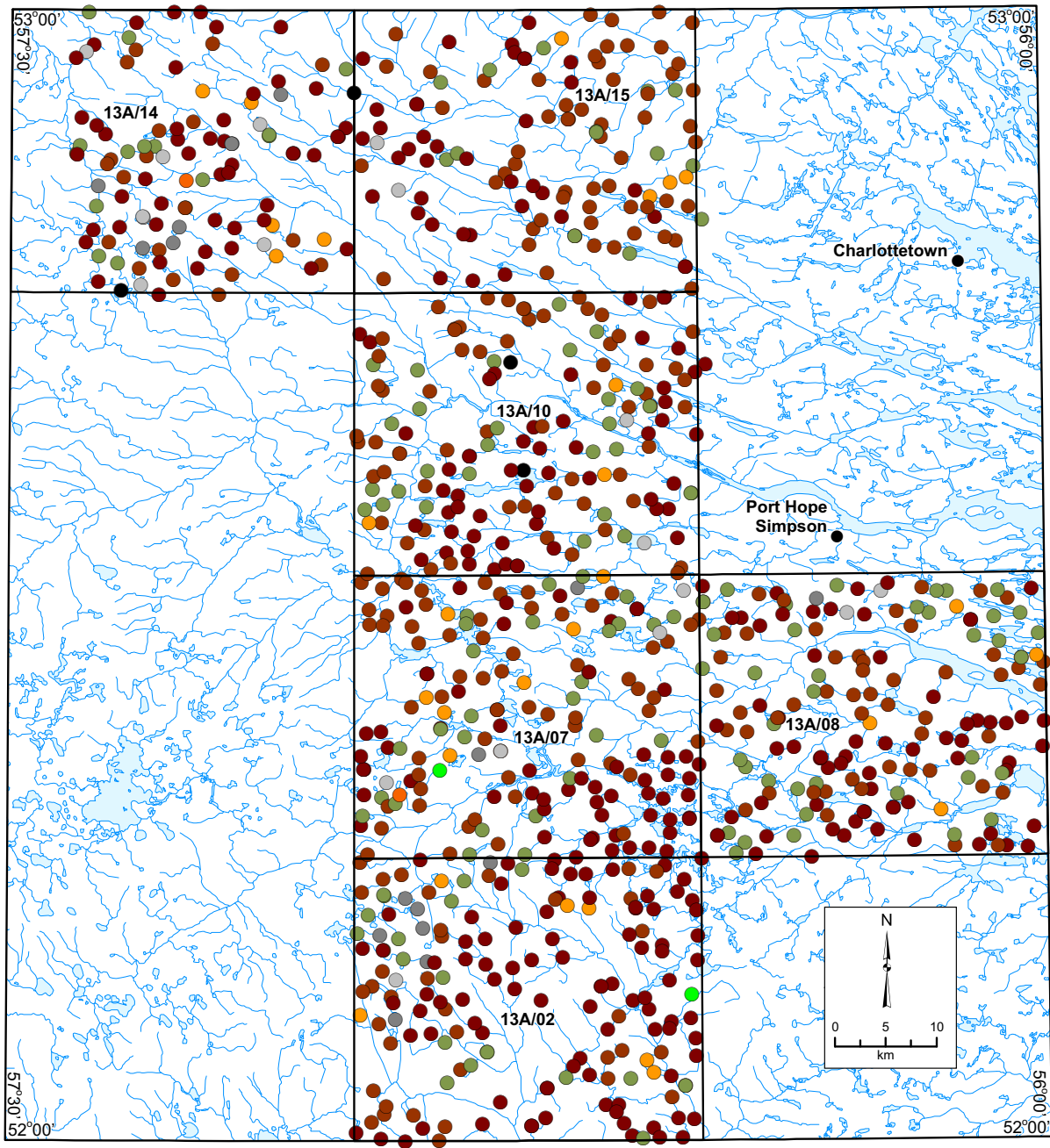
- a) Na, Rb, K, Sr, Zr, Ti, Mg, Ca, Ba, Al, Sc, Cr, Mn, Fe, V, Zn, Br (oppositely) LOI (oppositely)
- b) La, Ce, Cu, Sm, Y, Th, U, Dy and P
- c) Cd, Co, and Zn
- d) Pb



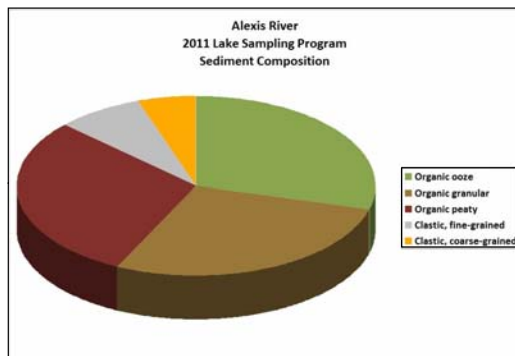
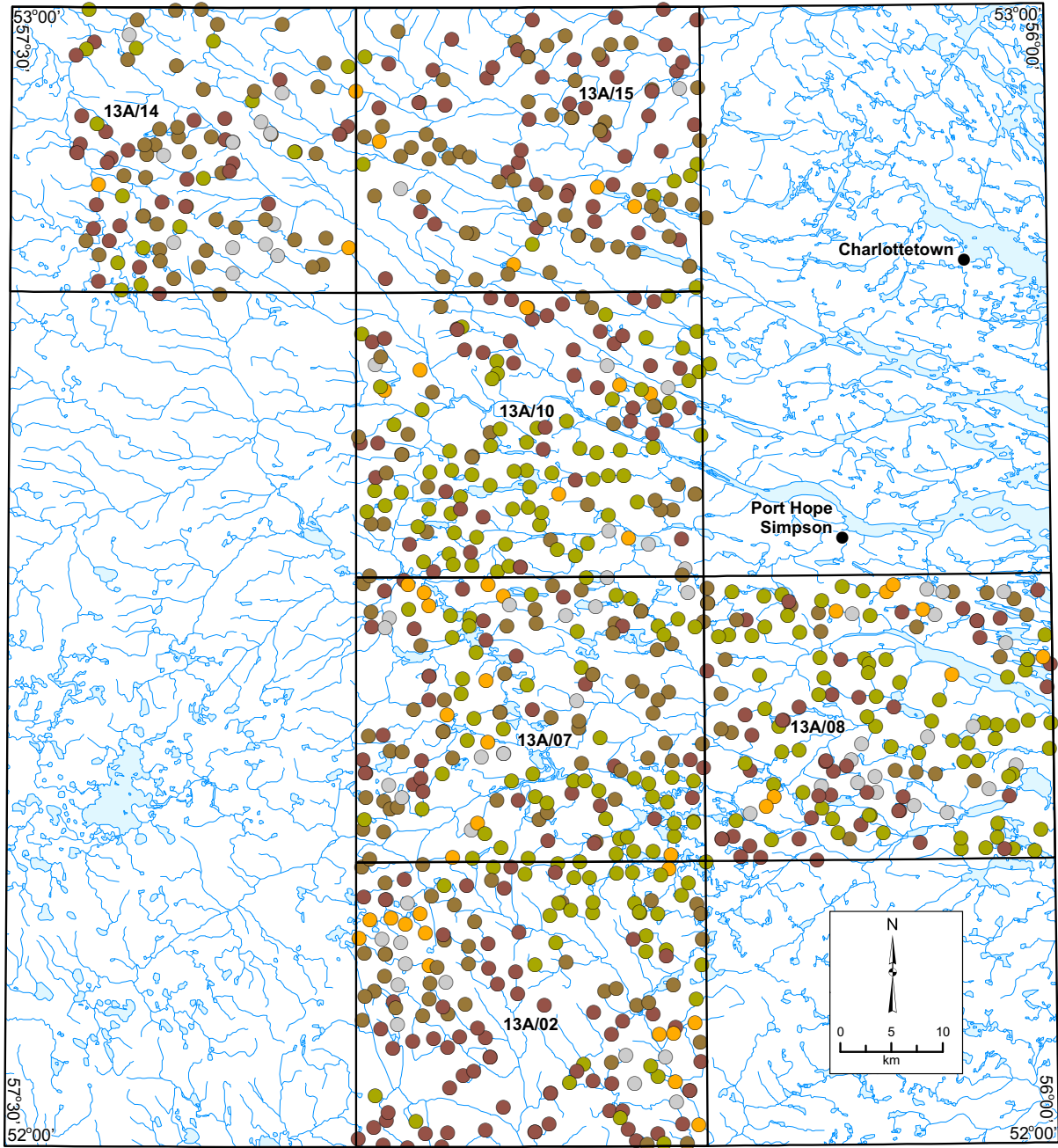
**Figure 5.** Areal distribution and frequency of occurrence of sampling depth.



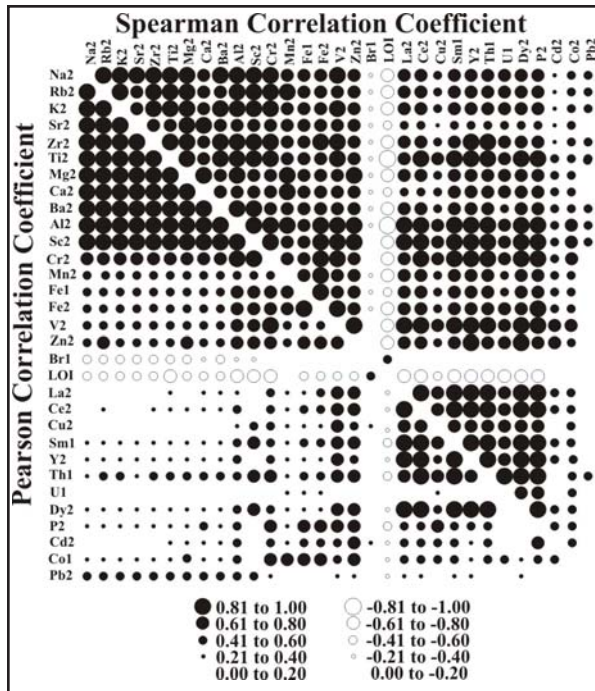
**Figure 6.** Areal distribution and frequency of occurrence of predominant shoreline vegetation types.



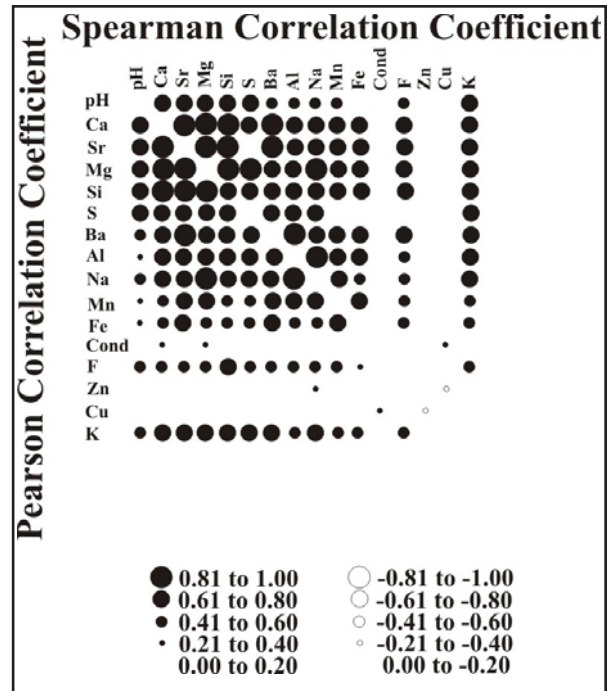
**Figure 7.** Areal distribution and frequency of occurrence of sample colour.



**Figure 8.** Areal distribution and frequency of occurrence of sample composition.



**Figure 9.** Correlation matrix for lake-sediment data.



**Figure 10.** Correlation matrix for lake-water data.

Element associations in the lake waters, identified in the same way as for the sediments comprise:

- a) pH, Ca, Sr, Mg, Si, S, Ba
- b) Al, Na, Mn, Si
- c) Fe, Mn, Ba
- d) Conductivity
- e) F<sup>-</sup>
- f) Cu
- G) K

## ELEMENT DISTRIBUTION IN LAKE SEDIMENT AND WATER

Selected symbol plot maps of lake-sediment and water geochemistry are displayed in the main body of the report (Figures 11–29), while the remainder are included in Appendices 3 and 4.

In most cases, the data for each element are divided into six class intervals, separated by cut-points determined using Jenks' Optimization (Slocum *et al.*, 2009). However, in the not infrequent cases where the optimization process resulted in an uppermost category that comprised less than one per cent of the total, the two (or in some cases, more than two) topmost intervals were merged to facilitate map interpretation. As an exception, the symbols for LOI values in sediment, and pH in water, are based on 20-percentile (quintile) intervals.



## **Sediment Data**

The behaviour of selected elements is described below. In general, only one element from each of the associations described above, plus elements that are uncorrelated, are correlated ambiguously, or are of particular economic interest, are described in the main body of the report. All remaining geochemical symbol maps are included in Appendices 2 and 3. Conspicuous multi-element anomalies are described briefly in a later section.

### ***Sodium (Na2)***

Sodium correlates most strongly with K2 (Spearman correlation coefficient 0.98), Zr2 (0.96), Ti2 (0.95), Al2 (0.91), Rb2 (0.90), Sc2 (0.88) and Cr2 (0.87). Its strongest negative correlation coefficients are with LOI (-0.80) and Br1 (-0.35).

The distribution of Na2 shows a conspicuous relation to the amount of clastic material in the samples (Figures 8 and 11). Samples described as “clastic, fine-grained” and “clastic, coarse-grained” are widely scattered over the northern part of the survey area, as are samples whose Na2 analyses fall within the uppermost (red) class interval, although the correspondence between the two groups of samples is close, but not total.

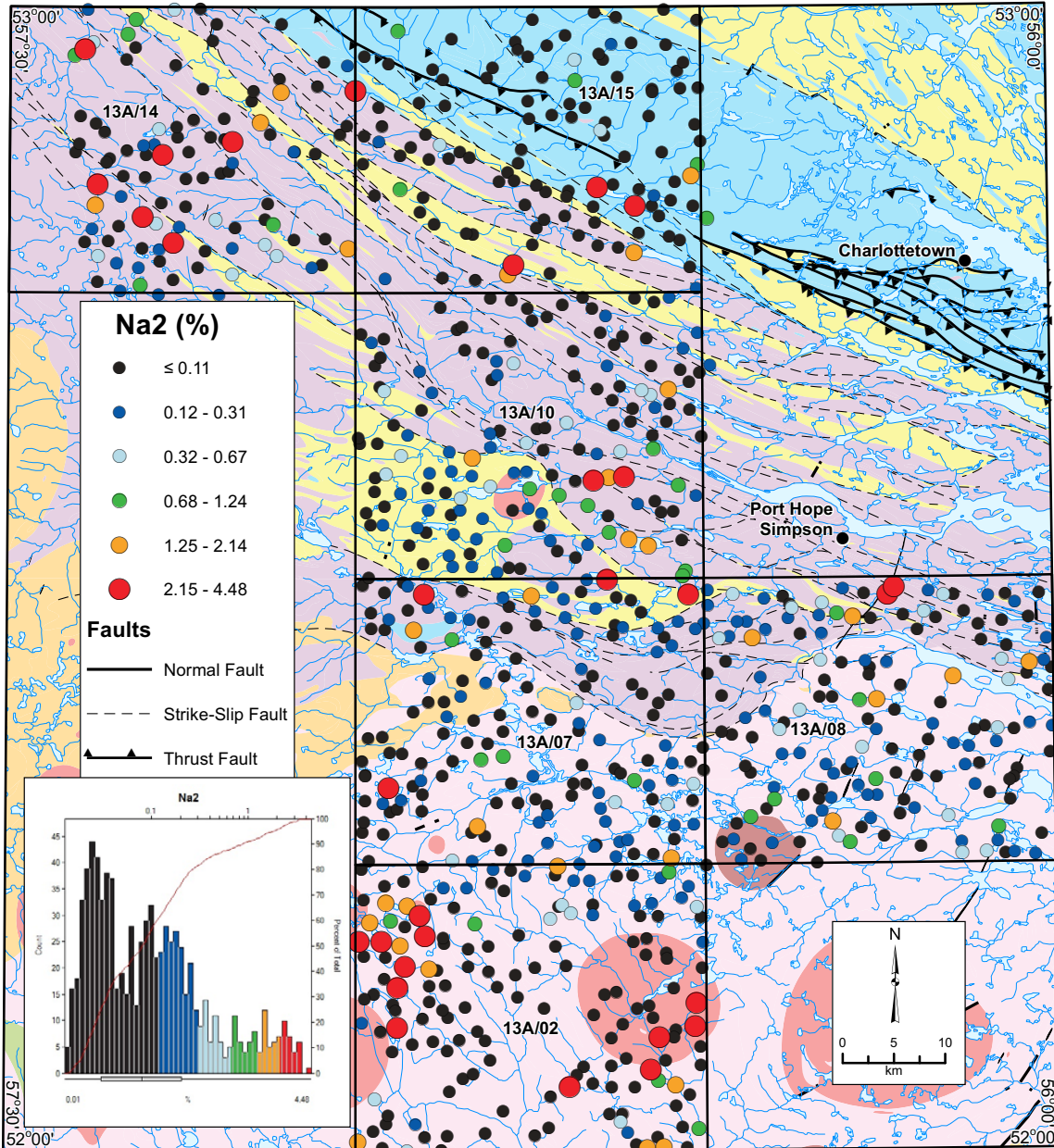
Two clusters of samples on NTS map area 13A/02, centred on 52° 10' 30" N, 56° 56' 20" W (52.175° N, 56.939° W) in the northwest, and probably derived from the extensive late Paleoproterozoic or early Mesoproterozoic granite Unit PMgr; and centred on 52° 5' 56" N, 56° 32' 42" W (52.099° N, 56.545° W) in the southeast, show similarly strong Na2 responses. Although the overall association (Al2, Ba1, Ba2, Be2, Ca2, Cr1, Cr2, K2, Li2, Mg2, Na2, Rb1, Rb2, Sc1, Sc2, Sr2, Ta1, Ti2, Zr1, Zr2) is essentially the same in both clusters, they differ in other compositional respects: the southeastern feature, which is proximal to an intrusion of early Neoproterozoic granite (Unit M<sub>3D</sub>gr) that has been termed the Upper Pinware River Pluton (C. Gower, pers. comm., 2012) and probably derived from it, shows stronger responses for Be2, Eu1, Mg2, Nb2, Rb1, Rb2, Sc1, Sc2, Ta1, Ti2, Zr1 and Zr2 than its counterpart in the northwest.

### ***Lanthanum (La2)***

The strongest correlations with this element are displayed by Ce2 (Spearman correlation coefficient 0.99), Sm1 (0.96), Y2 (0.95) and Dy2 (0.94).

Samples returning La2 values in the uppermost two class intervals are disposed over most of the Southwest Pond Granite, and define what may be a glacial dispersion train extending about 15 km to the east (Figure 12). Many other REE, as well as Li2 and Th1, exhibit a similar dispersion train. Striation information is lacking locally.

Samples with La2 values in the same two classes are scattered (and interspersed with samples returning lower values) over the southeastern quarter of NTS map area 13A/07 and the adjacent part of 13A/02. A similar feature is defined, to a greater or lesser extent, by Ce1, Ce2, Dy2, P2, Sm1, Tb1, Th1, Y2 and Yb1, as well as fluoride in waters, but not by Eu1 or Lu1. The underlying bedrock is dominated by Unit PMgr (*see* above) but there are numerous slivers of other units,



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>ln), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

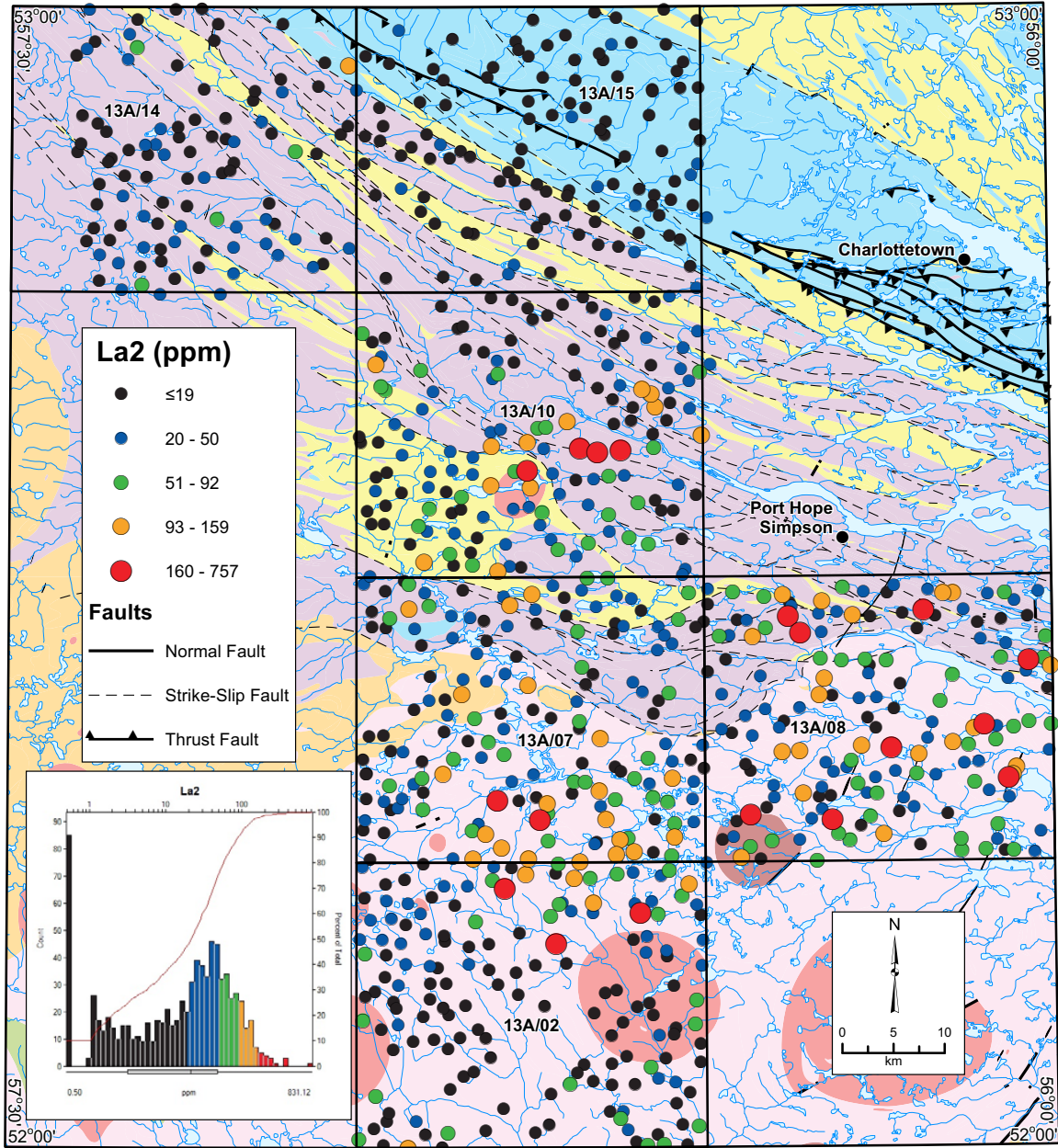
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>ln), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 11. Sodium (Na<sub>2</sub>) in lake sediment.



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>sp) and psammitic (P<sub>3A</sub>ss) schist and gneiss

**Figure 12. Lanthanum (La<sub>2</sub>) in lake sediment.**

including PMyq (quartz syenite), PMsp (pelitic gneiss), PMmq (quartz monzonite), PMss (psammitic gneiss), PMgd (granodiorite), PMgp (porphyritic granite), PMmd (monzodiorite) and PMdr (diorite), whose age relation to PMgr is uncertain. There are also two small intrusions of the younger granite Unit M<sub>3D</sub>gr, to the west of the La-enriched samples, in the southwestern corner of NTS map area 13A/07. One, with a mapped outcrop area of 2.4 km<sup>2</sup>, is centred on 52° 16' 6" N, 56° 52' 54" W (52.268° N, 56.882° W), while the other, of only 1.3 km<sup>2</sup>, is centred on 52° 12' 53" N, 56° 54' 31" W (52.214° N, 56.909° W).

The above feature is semi-contiguous to the east, onto the southern part of NTS map area 13A/08, and extends to the easterly limit of 2011 sampling. However, La<sub>2</sub> values increase in the vicinity of a circular intrusion of Unit M<sub>3D</sub>gr, 46 km<sup>2</sup> in area, centred on 52° 16' 2" N, 56° 25' 15" W (52.267° N, 56.421° W) which may, therefore, represent the source of a separate, somewhat less well-defined, dispersion train. Similar responses are exhibited by Ce<sub>1</sub>, Ce<sub>2</sub>, Dy<sub>2</sub>, Eu<sub>1</sub>, La<sub>1</sub>, Lu<sub>1</sub>, Mo<sub>1</sub>, Mo<sub>2</sub>, P<sub>2</sub>, Sm<sub>1</sub>, Tb<sub>1</sub>, Th<sub>1</sub>, Y<sub>2</sub> and Yb<sub>1</sub>. The Fw<sub>9</sub> response in waters of this easterly extension is, however, weak.

Although samples returning La<sub>2</sub> values in the uppermost two class intervals were collected in the vicinity of the new REE discoveries in the northeast of NTS map area 13A/08, the features they define are less distinct than any of those described above.

Finally, a concentration of La<sub>2</sub> values in the uppermost two class intervals is present in the northwest of NTS map area 13A/08, and terminates against the limit of sampling. No late intrusions have been mapped in the vicinity, and although the feature is crudely along strike from the new REE discoveries to the SE, there is no evidence that it is directly derived from the same rock units. The element association is, however similar, comprising Be<sub>2</sub>, Ce<sub>1</sub>, Ce<sub>2</sub>, Cu<sub>2</sub>, Dy<sub>2</sub>, La<sub>1</sub>, Lu<sub>1</sub>, Mo<sub>1</sub>, Mo<sub>2</sub>, P<sub>2</sub>, Sm<sub>1</sub>, Tb<sub>1</sub>, Th<sub>1</sub>, U<sub>1</sub>, and Y<sub>2</sub>.

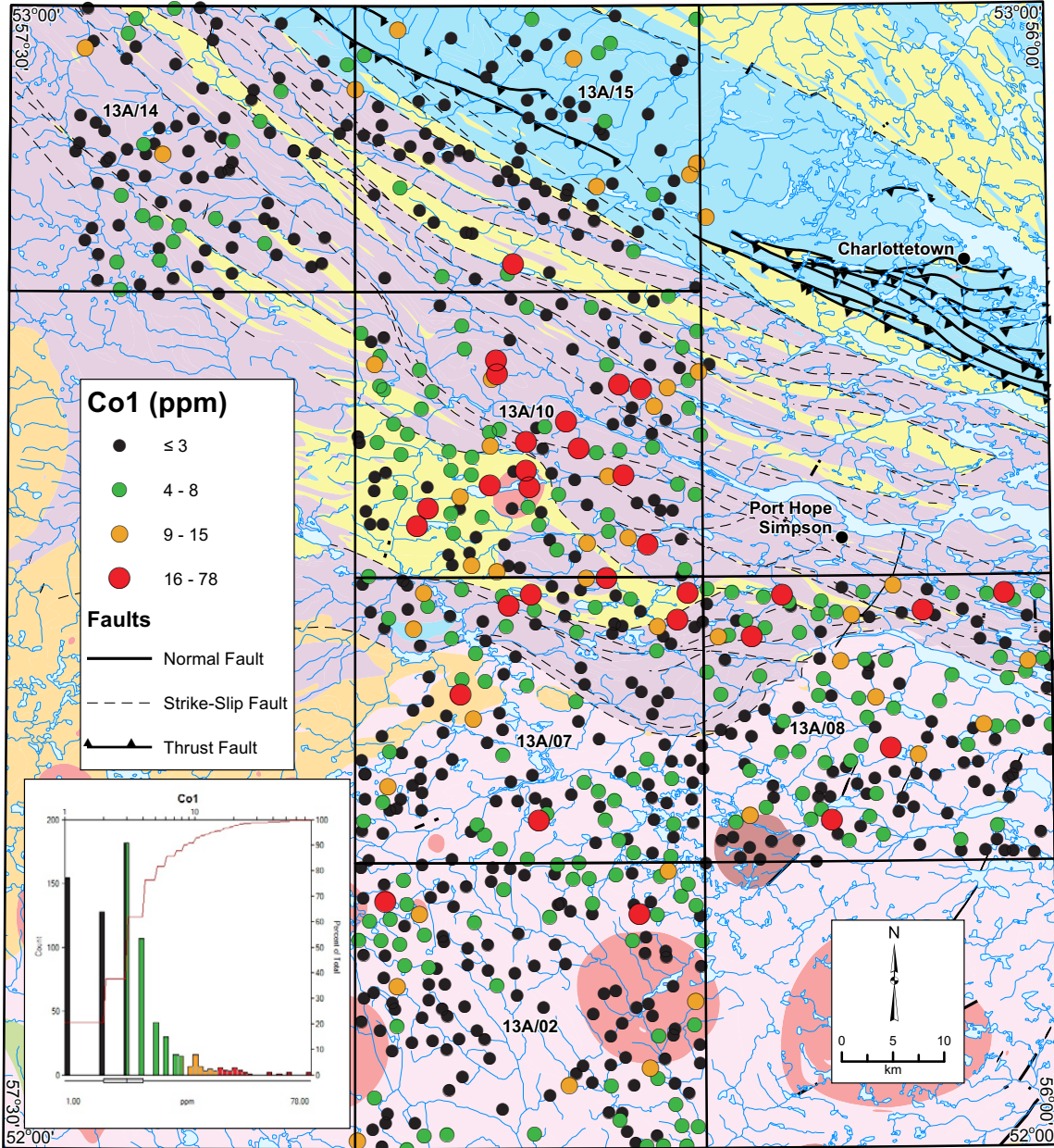
### ***Cobalt (Co1)***

Cobalt correlates most strongly with V<sub>2</sub> (Spearman correlation coefficient 0.64), Cr<sub>2</sub> (0.64), Sc<sub>2</sub> (0.62), and Al<sub>2</sub> (0.62). Samples returning Co<sub>1</sub> values in the uppermost two categories form a distinct linear, southwest–northeast-trending zone extending both southwest and northeast of the Southwest Pond Granite (Figure 13). In this respect, Co<sub>1</sub> differs from La<sub>2</sub> and the co-associated REE elements described above, whose dispersion is concentrated to the northeast of the pluton. The distribution of As<sub>1</sub>, As<sub>2</sub>, Cd<sub>2</sub>, Co<sub>2</sub>, Cr<sub>1</sub>, Cr<sub>2</sub>, Cu<sub>2</sub>, Fe<sub>1</sub>, Fe<sub>2</sub>, Mn<sub>2</sub>, Ni<sub>2</sub>, P<sub>2</sub>, Sc<sub>1</sub>, Sc<sub>2</sub>, V<sub>2</sub> and Zn<sub>2</sub> outlines the same feature as Co<sub>1</sub>.

The remainder of the samples returning Co<sub>1</sub> values enriched to the same extent (although they are interspersed with samples returning lower values) are concentrated in the southern half of NTS map area 13A/10, adjacent part of 13A/07 and the latter's extension into 13A/08.

### ***Lead (Pb2)***

Lead's strongest correlations are with K<sub>2</sub> (Spearman correlation coefficient 0.50), Zr<sub>2</sub> (0.49), and Ti<sub>2</sub> (0.49). The highest values are concentrated in the vicinity of the new REE discoveries (and the sapphire occurrence) in the northeast corner of NTS map area 13A/08, and define an



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rn)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 13. Cobalt (Co) in lake sediment.**

anomaly at least as strong and homogeneous as any of the REE (Figure 14). C.F. Gower (pers. comm., 2012) has suggested that the Pb enrichment may be related to the local abundance of pegmatite.

Another concentration of such values is located in the southeast of NTS map area 13A/02. Enriched values of As1, As2, Au1 and Sb1 are also present in the same area.

### ***Cesium (Cs1)***

Almost all of the Cs1 values that fall within the uppermost two class intervals were returned for samples collected over and to the southeast of the Southwest Pond Granite (Figure 15). The direction of this dispersion, which extends at least 30 km onto NTS map area 13A/08, contrasts with the northeasterly direction indicated by the REE (*see above*). It is, however, more in harmony with the predominant direction of present-day drainage in the area, although the axis of the anomaly crosses the watershed of the St. Lewis and Alexis rivers. Similar patterns are displayed by Hf1, K2, Li2, Nb2, Rb1, Rb2, Sc1, Sc2, Ta1, Th1, Ti2 and Zr2.

### ***Uranium (U1)***

The most significant concentrations of uranium lake-sediment values in the uppermost two class intervals are located over and to the west of the Southwest Pond Granite (Figure 16). The former feature trends in a northeasterly direction and extends to the southwest (but not to the northeast) of the granite. The latter trends slightly east of due north in the west of NTS map area 13A/10 and is underlain by Unit P<sub>3A</sub>sp (late Paleoproterozoic metapelite) and P<sub>3B</sub>gp (late Paleoproterozoic foliated to gneissic megacrystic/porphyritic granitoid rocks). Both of these features are also delineated by enriched values of Mo2.

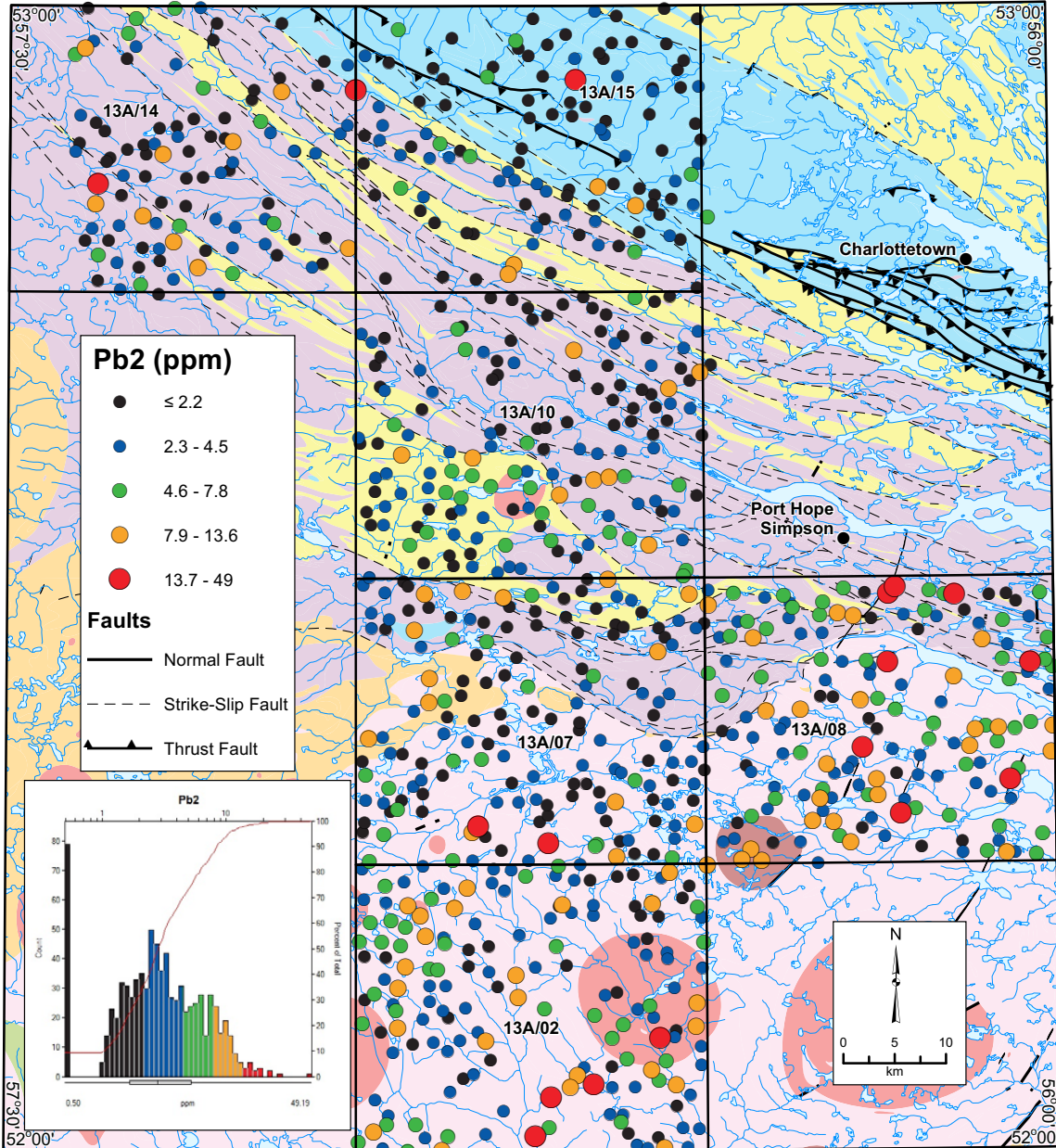
The Alexis River Tributary #4 U occurrence (MODS number 13A/11/U001) is located about 18 km to the northwest, along the regional strike direction, although its mapped host rocks are not the same. The relationship between the anomaly and the occurrence may become more apparent when sampling is completed on NTS map area 13A/11.

A few U1 values in the uppermost two class intervals are located in the northwest of NTS map area 13A/08; an area where enriched values of Be2, Ce1, Ce2, Cu2, Dy2, La1, La2, Lu1, Mo1, Mo2, P2, Sm1, Tb1, Th1 and Y2 are also apparent.

Three very high U1 values of 590, 335 and 190 ppm are located at 52° 35' 37" N, 56° 45' 14" W (52.594° N, 56.754° W), 52° 34' 29" N, 56° 56' 6" W (52.575° N, 56.935° W) and 52° 37' 32" N, 56° 55' 29" W (52.625° N, 56.925° W). The first of these is located over the Southwest Pond Granite, whereas the other two are from the west of NTS map area 13A/10, over Unit P<sub>3A</sub>sp.

### ***Bromine (Br1)***

Bromine concentrates mainly, although not exclusively, on NTS map area 13A/08, with the highest values returned for sediment samples from locations closest to the coast (Figure 17). It seems reasonable to attribute this feature to the proximity of salt water. There is, however, another



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

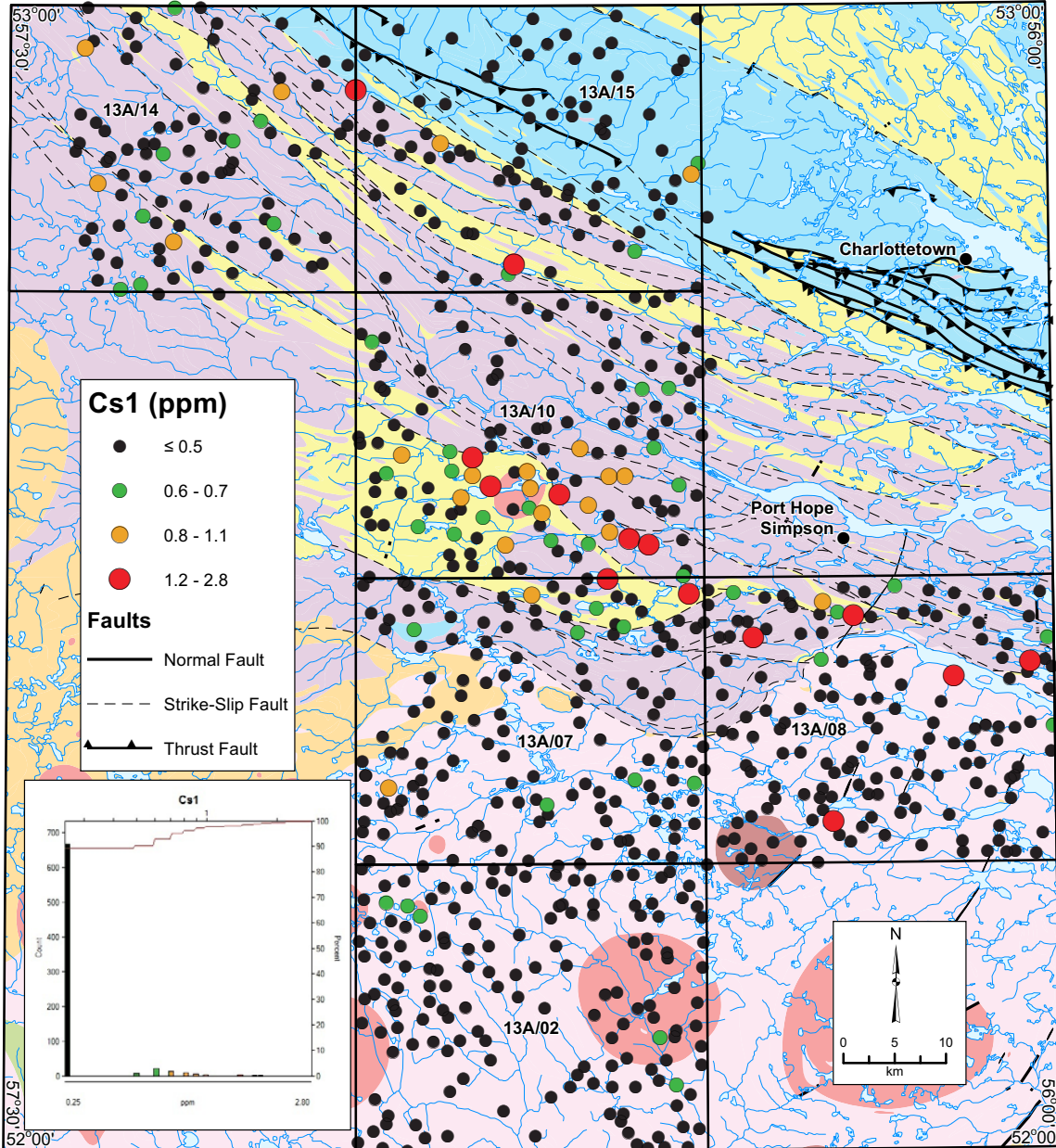
**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rn)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 14. Lead (Pb<sub>2</sub>) in lake sediment.**



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

**(1800–1710 Ma)**

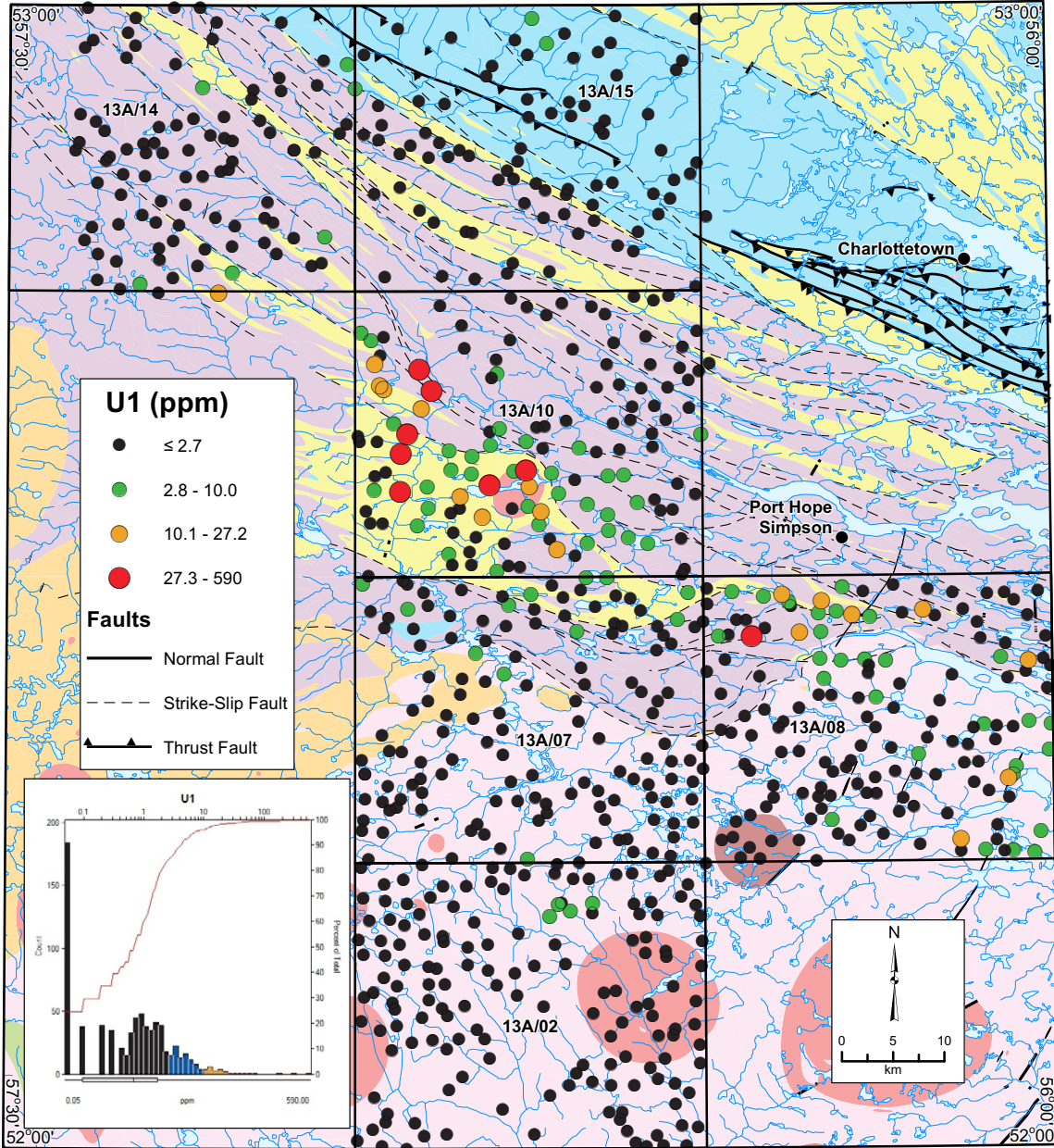
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rn)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 15. Cesium (Cs1) in lake sediment.**





**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

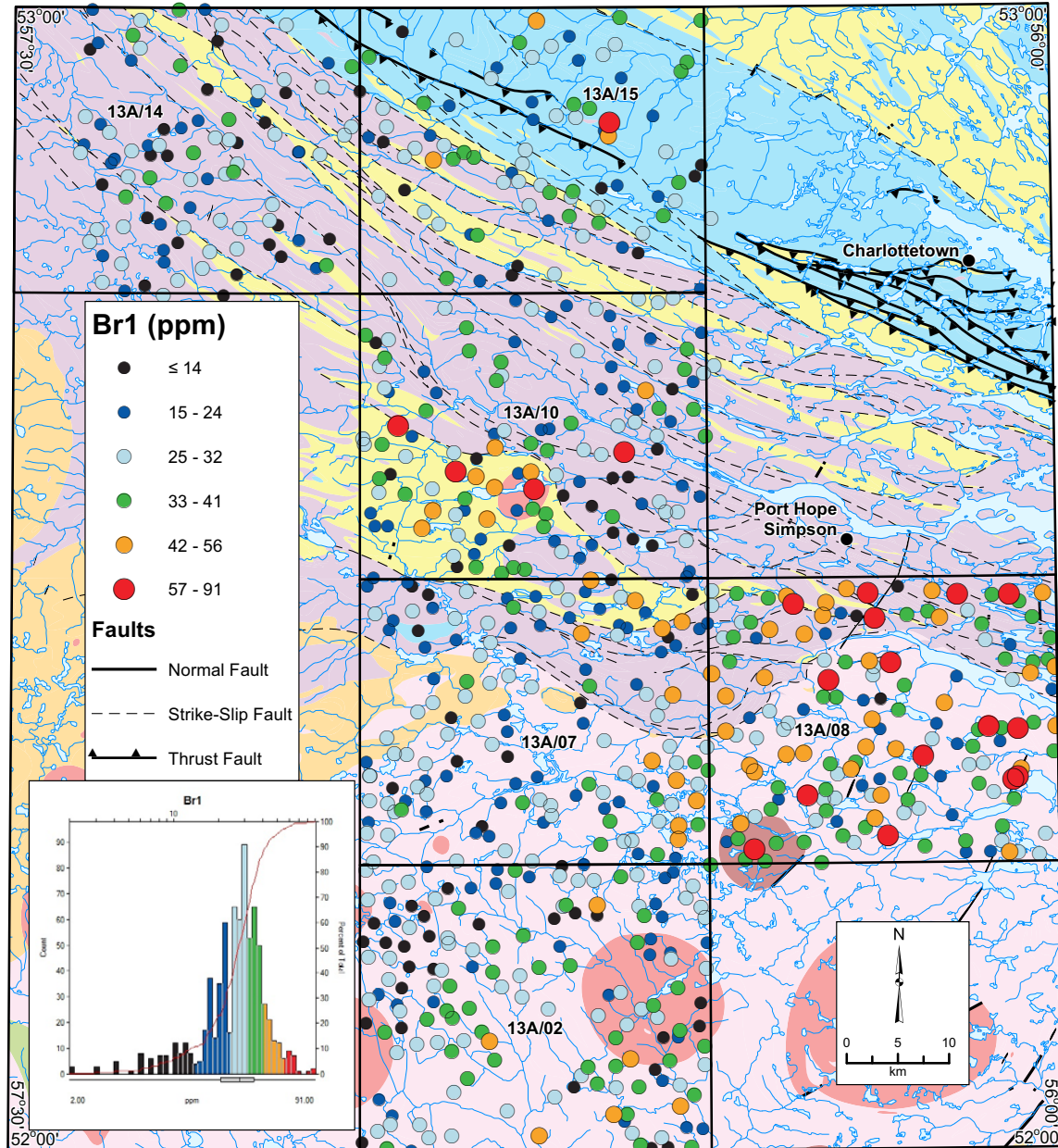
**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 16.** Uranium (U1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 17. Bromine (Br1) in lake sediment.

er concentration of samples whose Br1 values are in the uppermost two class intervals, over the Southwest Pond Granite. This concentration of points is elliptical, with long access trending east-northeast, and extending both east and west of the intrusion.

### ***Loss-on-Ignition (LOI)***

Values of LOI in the uppermost two class intervals form a conspicuous concentration in the north of the sampled area (Figure 18). There appears to be a geological control (presumably indirect) on this feature as the orientation of its southwestern boundary corresponds to the regional strike. A second concentration of high values is located in the west of NTS map area 13A/02, directly to the south of an equally conspicuous concentration of samples with LOI values in the lowermost class interval. The latter sediment samples exhibit enrichment in Al2, Ba1, Ba2, Be2, Ca2, Cr1, Cr2, K2, Li2, Mg2, Na2, Rb1, Rb2, Sc1, Sc2, Sr2, Ta1, Ti2 and Zr2 and the low LOI levels are to be expected in view of the relatively high amounts of clastic material noted in the sediment. In the east of NTS map area 13A/02, there is a similar association in samples collected south of the Upper Pinware River Pluton (*see above*).

### **Water Data**

Water analyses are described in the same way as those of the sediments, with a limited number of representative and important elements being described. Of the many water analyses whose frequency distributions were too severely truncated by the analytical detection limit for meaningful correlation coefficients to be calculated, the aerial distribution of Yw2 and Uw3 will also be described.

### ***Strontium (Srw2)***

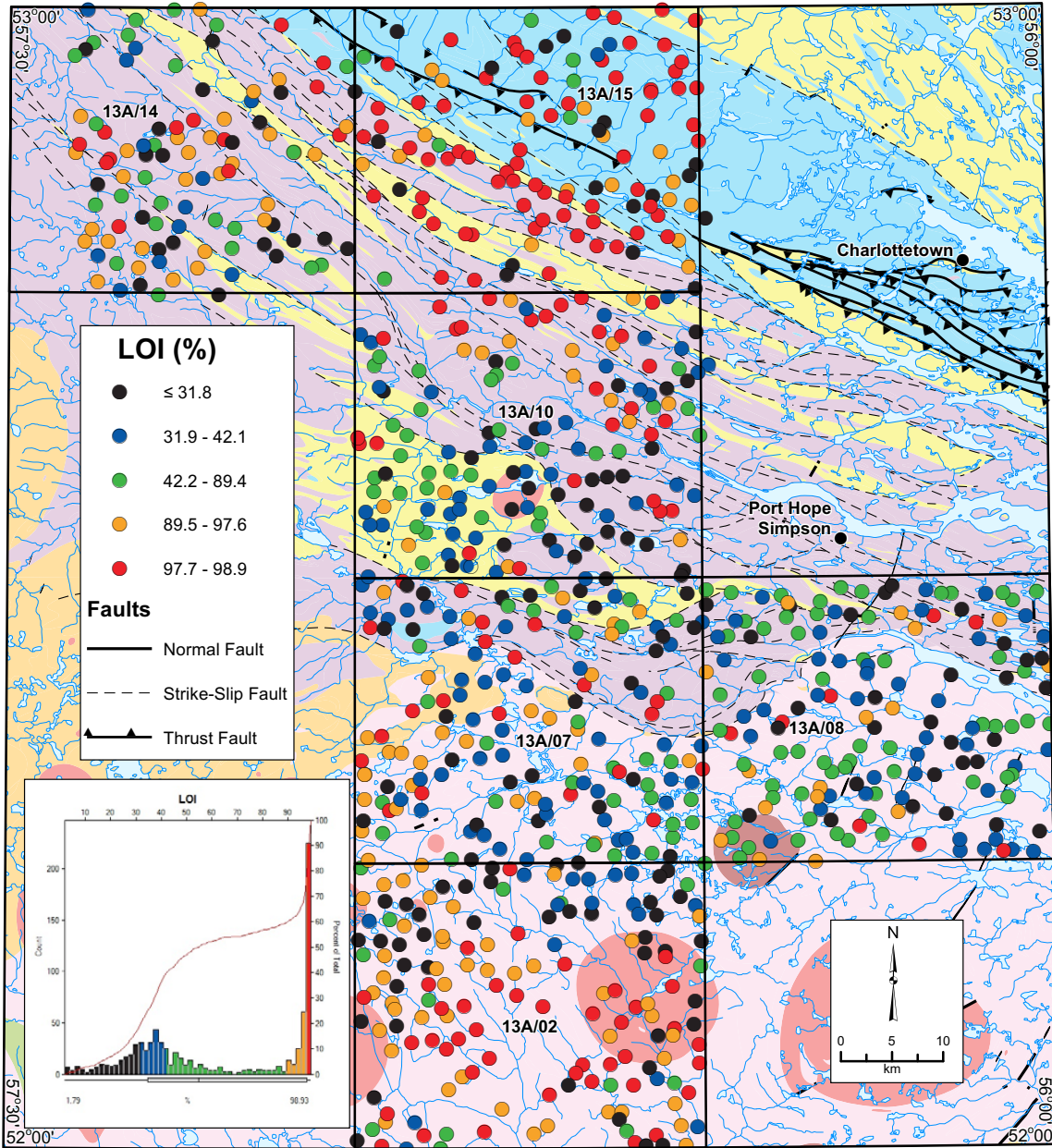
Strontium correlates most strongly with Caw1 (Spearman correlation coefficient 0.93), Mgw1 (0.90), Baw2 (0.89) and Siw1 (0.88).

Most samples returning values in the uppermost two class intervals are concentrated along the Trans-Labrador Highway, northwest of Port Hope Simpson (Figure 19). A few more are concentrated along the contact between the Interior Magmatic Belt, and Exterior Thrust Belt, north of the centre of NTS map area 13A/07. These latter samples are marginal to a linear local maximum (green sample points) extending more than 40 km in a northwesterly direction from the centre of NTS map area 13A/07 to the western boundary of NTS map area 13A/10. This latter feature is also delineated by enriched Caw1 values.

### ***Aluminum (Alw2)***

The strongest correlations with this element are those of Naw1 and Baw2 (Spearman correlation coefficients 0.81), Siw1 (0.80), Mgw1 (0.79), Srw2 (0.79) and Caw1 (0.76).

Values in the topmost two class intervals concentrate conspicuously around the REE discoveries on NTS map area 13A/08, and to the east of the Southwest Pond Granite (Figure 20). This feature may be related to the abundant pegmatite in the area, including the veins that host the REE



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>YQ)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>GR)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>RG); leucogabbro and anorthositic gabbro (M<sub>1</sub>LN) and amphibolite (M<sub>1</sub>AM)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMGR); syenite, alkali-feldspar syenite and quartz syenite (PMYQ) and megacrystic/porphyritic granite to quartz monzonite (PMGZ)

**Late Paleoproterozoic**

**(1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>AG), amphibolite (P<sub>3C</sub>AM), anorthosite and leucogabbro (P<sub>3C</sub>AN), leucogabbro and leucogabbro (P<sub>3C</sub>LN), gabbro and norite (P<sub>3C</sub>RG), diorite, quartz diorite and tonalite (P<sub>3C</sub>DR), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>GGA), granite to granodiorite (P<sub>3C</sub>GDD), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>GP), quartz monzonite (P<sub>3C</sub>MQ) and monzonite (P<sub>3C</sub>MZ)

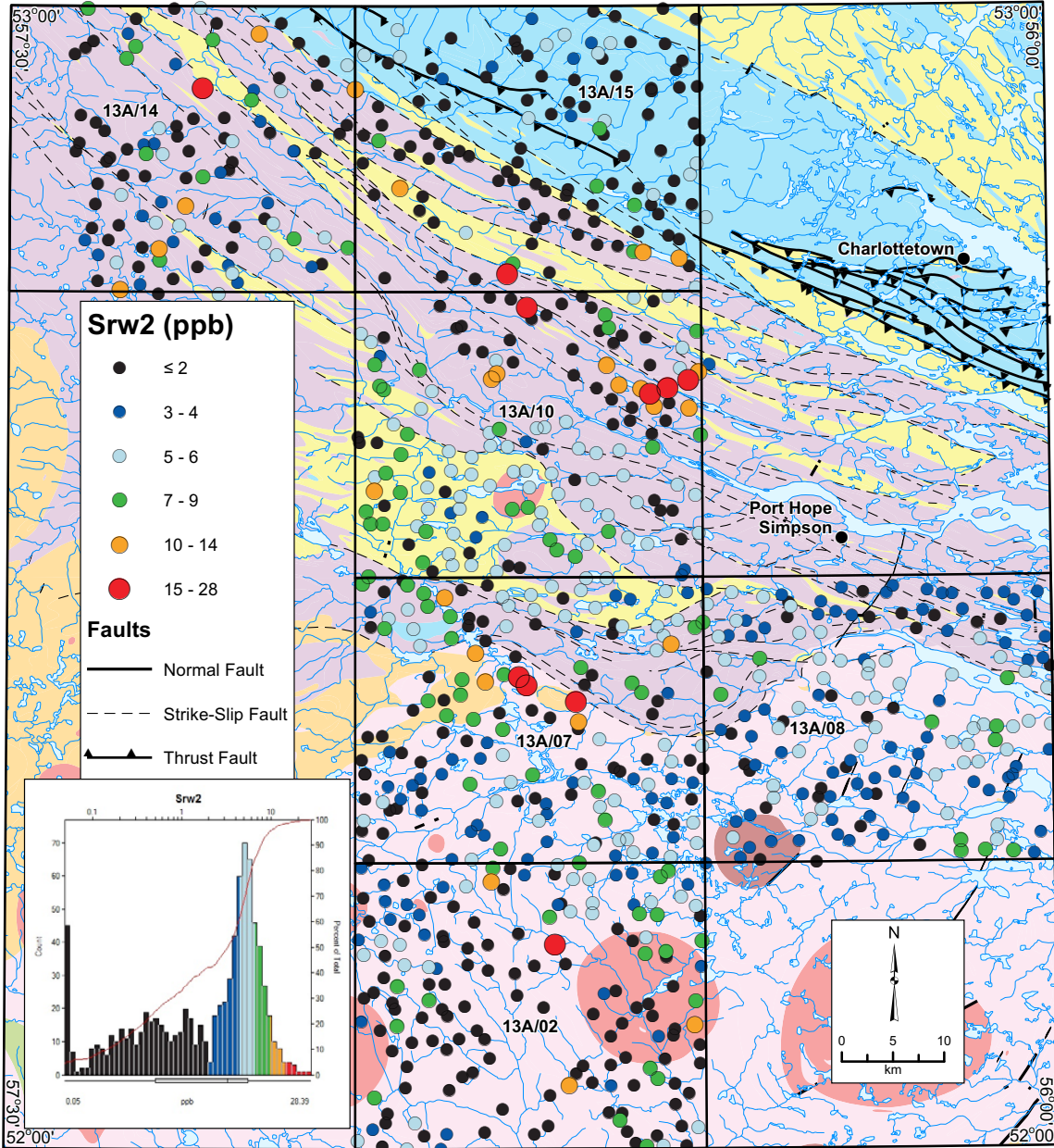
**(1800–1710 Ma)**

Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>DR), foliated to gneissic granodiorite (P<sub>3B</sub>GD), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>GP), foliated to gneissic quartz monzonite (P<sub>3B</sub>MQ), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>GR), amphibolite (P<sub>3B</sub>AM), anorthosite and leucogabbro (P<sub>3B</sub>AN), leucogabbro and leucogabbro (P<sub>3B</sub>LN) and gabbro and norite (P<sub>3B</sub>NR)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>SP) and psammitic (P<sub>3A</sub>SS) schist and gneiss

**Figure 18. Loss-on-Ignition (LOI) in lake sediment.**



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

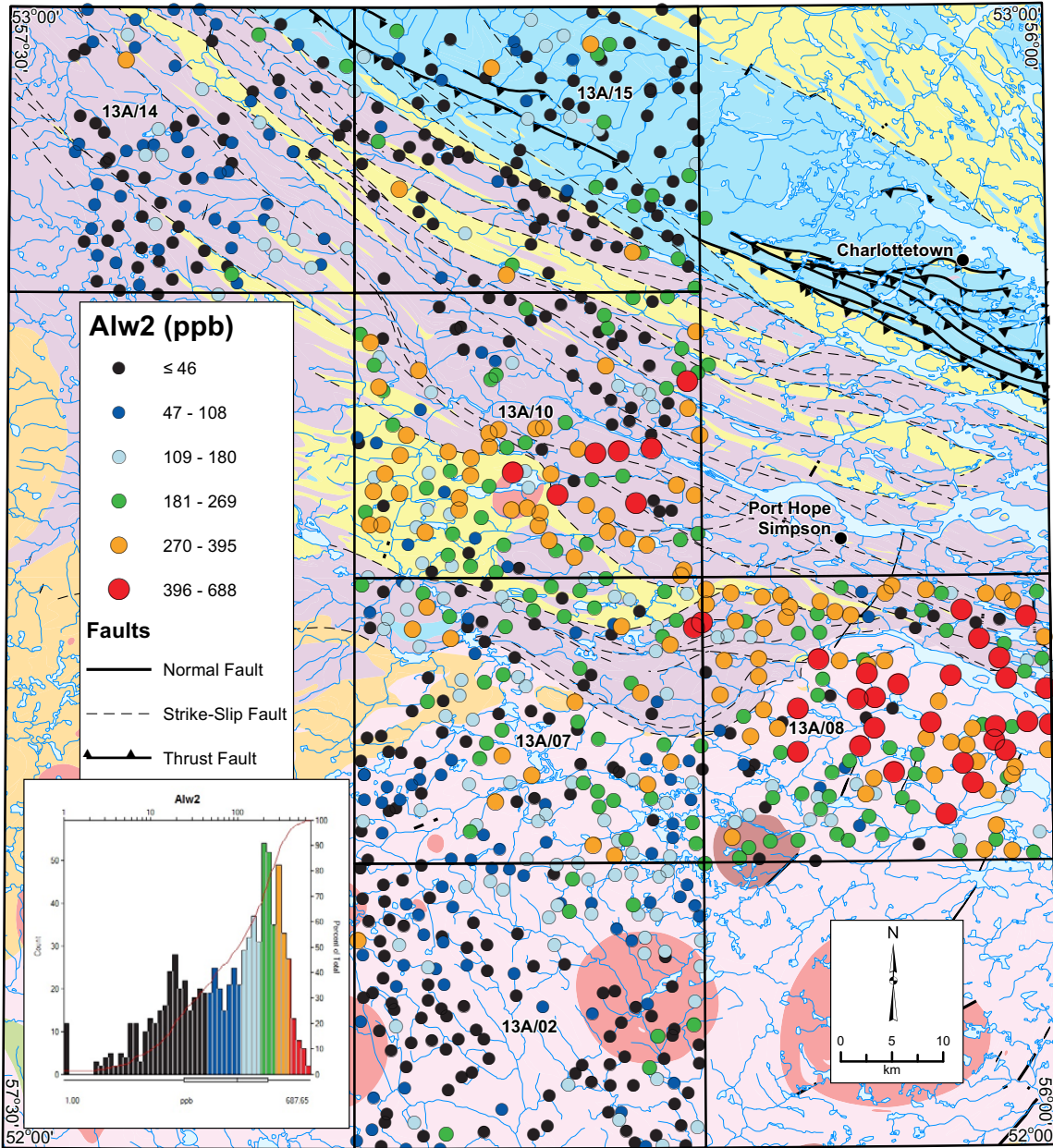
**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rn)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 19. Strontium (Sr<sub>w2</sub>) in lake water.**



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 20.** Aluminum (Alw2) in lake water.

mineralization. The former feature is echoed in the responses of Bew2, Kw1, Liw2, Mnw1, Tiw2, Yw2 and Naw1, although the enrichment in the last-named element may be a consequence of marine incursions or windblown sea spray (*cf.* Br1 in sediment, above)

### ***Iron (Few1)***

Correlations are strongest with Baw2 (Spearman correlation coefficient 0.71), Mnw1 (0.70), Srw2 (0.69), Alw2 (0.69), Mgw1 (0.65), Caw1 (0.65) and Siw1 (0.61). Concentrations of iron enrichment in waters are apparent in the northwest and east of NTS map area 13A/02, in the same locations as two features delineated by Al2, Ba1, Ba2, Be2, Ca2, Cr1, Cr2, K2, Li2, Mg2, Na2, Rb1, Rb2, Sc1, Sc2, Sr2, Ta1, Ti2 and Zr2 in sediments, and believed to be related to the relatively high proportion of clastic material in the sediment (Figure 21).

### ***Potassium (Kw2)***

Rather than showing strong correlations with a few elements, K displays relatively strong correlation (i.e. amongst the highest recorded in the water samples) with most of the variables in the dataset: Sw1 and Mgw1 (Spearman correlation coefficient 0.76), Caw1 (0.72), Srw2 (0.72), Naw1 (0.71), Siw1 (0.67), Baw2 (0.67), pH (0.65), Alw2 (0.64), Fw9 (0.54) and Mnw2 (0.52). The most conspicuous concentrations of samples whose Kw1 values fall within the uppermost two class intervals is to the south and west of the REE discoveries on NTS map area 13A/08 (Figure 22); like Alw2 in water, and Pb2 in sediment, this may be related to the local abundance of pegmatite.

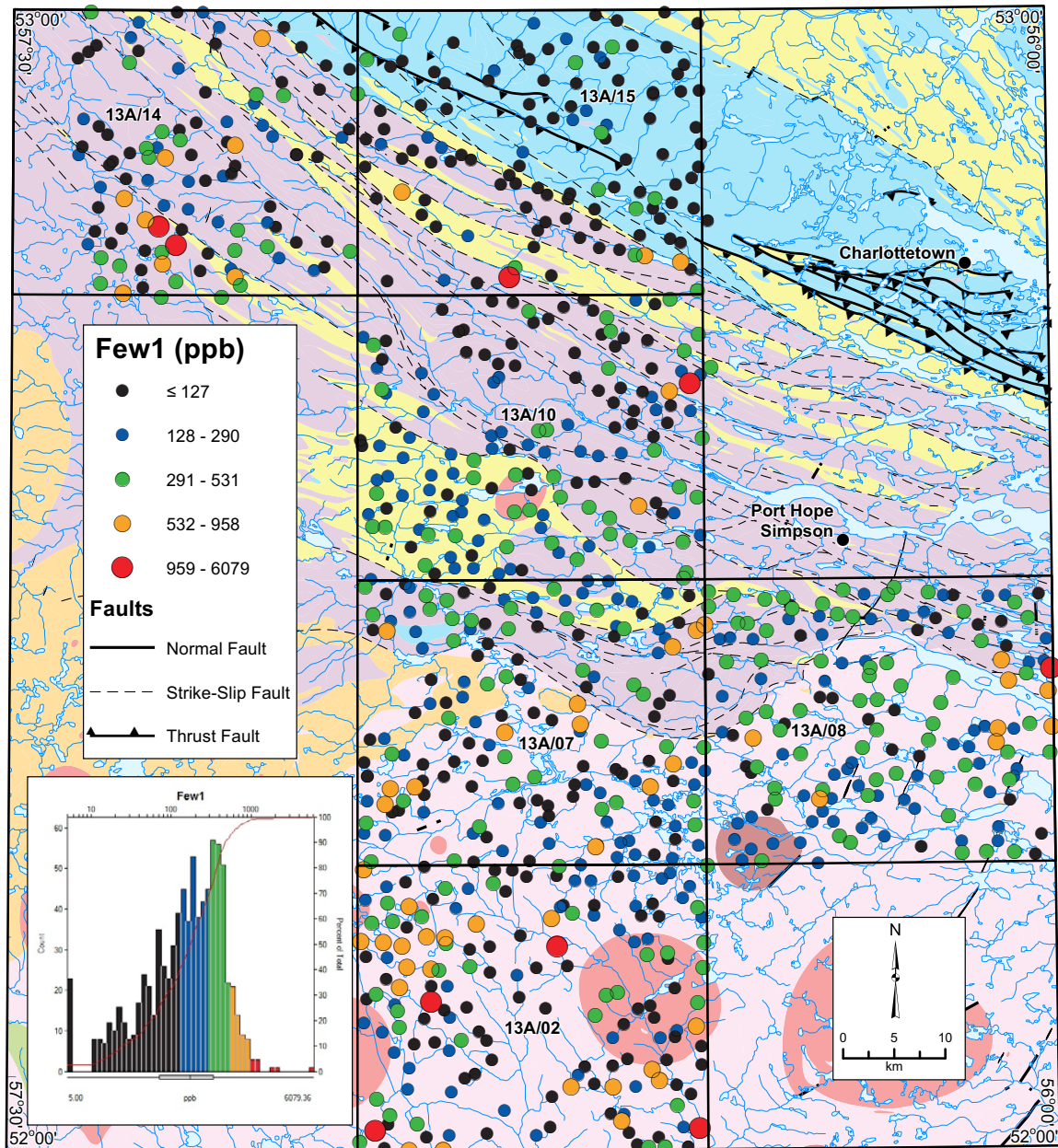
### ***Fluoride (Fw9)***

Fluoride displays Spearman correlation coefficients in excess of 0.50 with ten of the 15 parameters in the dataset: Siw1 (0.64), Srw2 (0.63), Caw1 (0.62), Baw2 (0.62), Mgw1 (0.61), Naw1 (0.57), Sw1 (0.56), Alw2 (0.56), Kw1 (0.54) and pH (0.52).

The multi-element anomaly dominated by REE and extending to the northeast of the Southwest Pond Granite also has its expression in the distribution of fluoride (Figure 23), as does the REE anomaly in the southern half of NTS map area 13A/07, which appears to be related to one or both of the two small intrusions of the same younger granite Unit M<sub>3D</sub>gr, centred on 52° 16' 6" N, 56° 52' 54" W (52.268° N, 56.882° W) and 52° 12' 53" N, 56° 54' 31" W (52.214° N, 56.909° W).

A further zone of fluoride enrichment is present to the northeast of the REE discoveries south of Port Hope Simpson, and, to a lesser extent, to the southwest.

Samples returning Fw9 values in the uppermost two class intervals, interspersed with lower values, are present to the north of the Alexis River Tributary #4 U occurrence, which is situated off the 2011 survey area, on NTS map area 13A/11 just south of the boundary with 13A/14. A few such values are also located to the northwest of the Southwest Pond Granite within the bounds of the larger U and Mo anomalies.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3c</sub>ag), amphibolite (P<sub>3c</sub>am), anorthosite and leucogabbro (P<sub>3c</sub>an), leucogabbro and leucogabbro (P<sub>3c</sub>ln), gabbro and norite (P<sub>3c</sub>rg), diorite, quartz diorite and tonalite (P<sub>3c</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3c</sub>ga), granite to granodiorite (P<sub>3c</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3c</sub>gp), quartz monzonite (P<sub>3c</sub>mq) and monzonite (P<sub>3c</sub>mz)

#### (1800–1710 Ma)

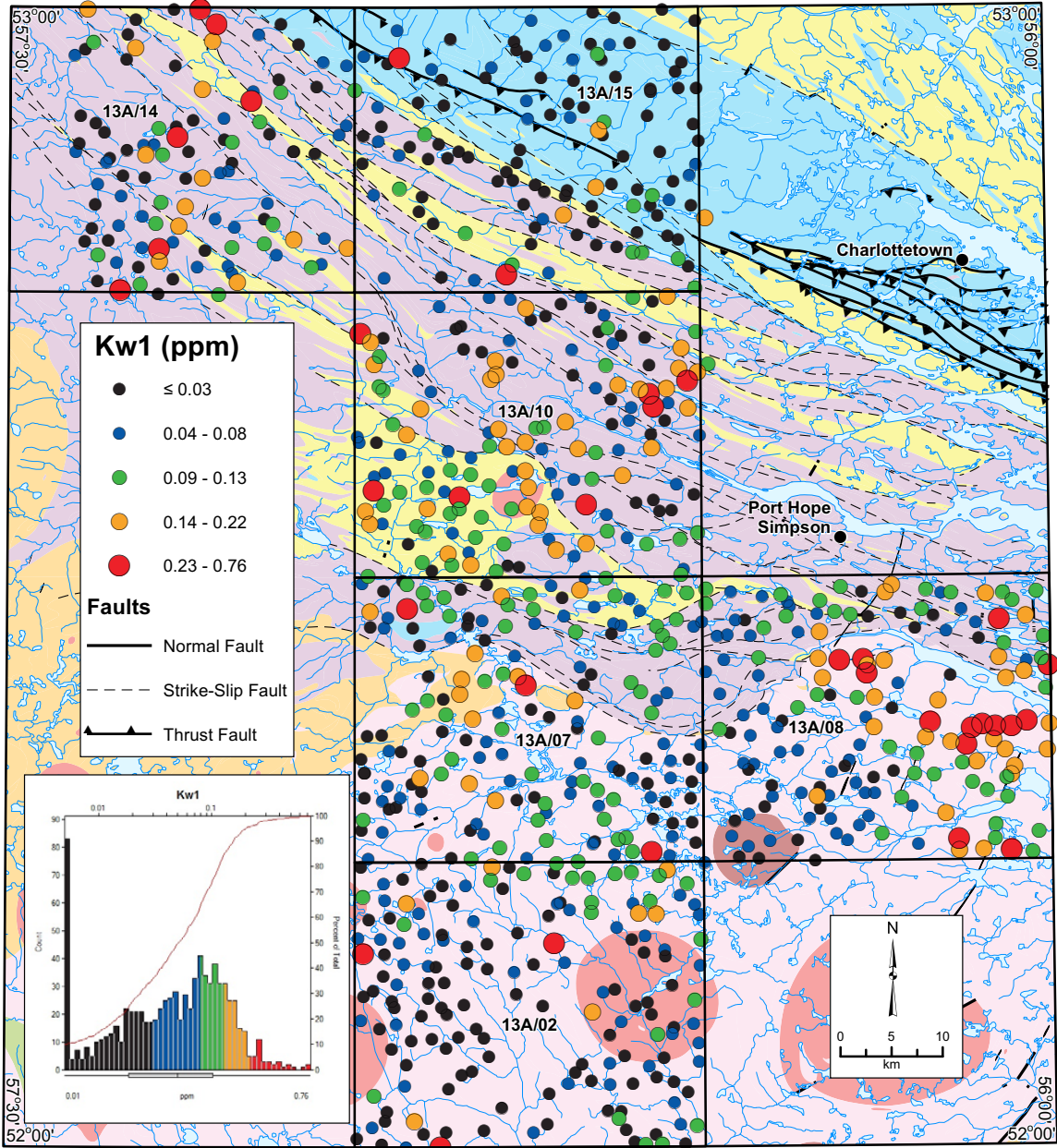
Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>sp) and psammitic (P<sub>3A</sub>ss) schist and gneiss

Figure 21. Iron (Few1) in lake water.





**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgz)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

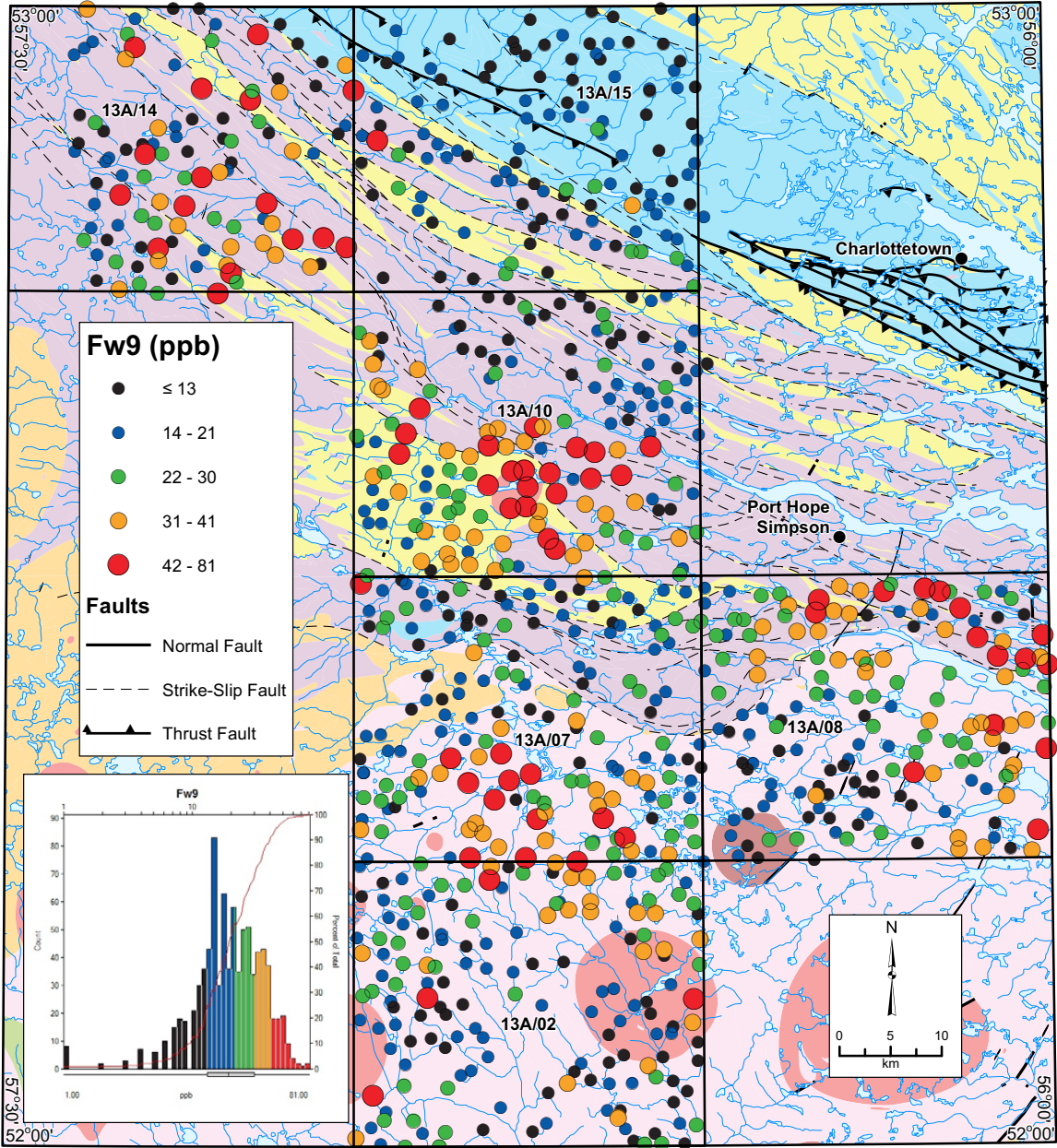
**(1800–1710 Ma)**

Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>sp) and psammitic (P<sub>3A</sub>ss) schist and gneiss

**Figure 22. Potassium (Kw2) in lake water.**



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic**

**(1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>sp) and psammitic (P<sub>3A</sub>ss) schist and gneiss

**Figure 23. Fluoride (Fw9) in lake water.**

## ***Conductivity***

Conductivity is not strongly correlated with any other water parameter; the Spearman correlation coefficient of the greatest, albeit modest magnitude is that with Cuw2 (0.30). Samples displaying high conductivity (uppermost two class intervals) are concentrated in the northern part of the sampled area, underlain by rocks of the Exterior Thrust Belt (Figure 24). A particularly conspicuous concentration extends in a westerly direction for about 20 km from the vicinity of the new REE discoveries, along the northern boundary of NTS map area 13A/08: an area also characterized by enrichment of Be2, Ce1, Ce2, Cu2, Dy2, Lu1, Mo1, Mo2, P2, Sm1, Tb1, Th1, U1, and Y2 in the lake sediments and Cuw2 in waters.

Water samples returning the lowest conductivity define a linear zone trending northeast from the southwestern corner of NTS map area 13A/07, as well as a concentration in the northwest of 13A/02 that coincides with a high in Few2 and of Al2, Ba1, Ba2, Be2, Ca2, Cr1, Cr2, K2, Li2, Mg2, Na2, Rb1, Rb2, Sc1, Sc2, Sr2, Ta1, Ti2, and Zr2 in sediments.

## ***Copper (Cuw2)***

Copper displays weak positive correlation with conductivity (Spearman correlation coefficient 0.30) and negative correlation with Znw2 (-0.21). Samples returning Cuw2 values in the uppermost two class intervals are concentrated in the north of NTS map area 13A/08, coincident with a feature defined by high conductivity in the waters and high Be2, Ce2, Cu2, Dy2, Lu1, Mo1, Mo2, P2, Sm1, Tb1, Th1, U1, and Y2 in sediments (Figure 25).

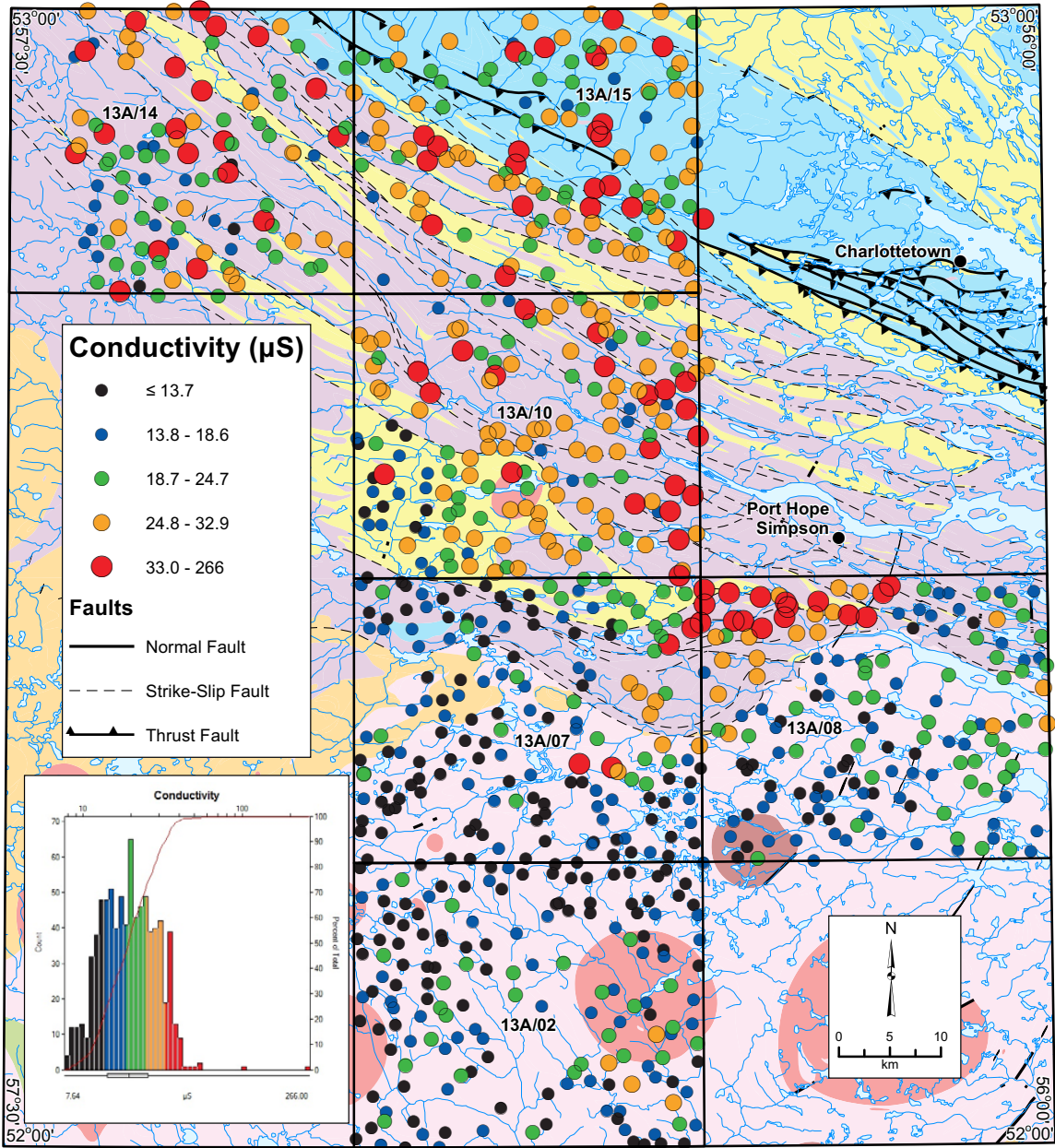
## ***Yttrium (Yw2)***

All of the water samples returning Yw2 values in the uppermost two categories are concentrated in the east of NTS map area 13A/08 (Figure 26). It is not clear from the 2011 data whether this is related to the presence of the newly discovered REE mineralization south of Port Hope Simpson, or of the proximity of tidewater; certainly, the pattern is similar to that displayed by Naw2 in waters, and Br1 in sediments. However, data for the neighbouring map areas (McConnell and Ricketts, 2010) indicate that the association of yttrium enrichment in waters with coastline does not persist north of Port Hope Simpson.

## ***Uranium (Uw3)***

The strongest concentration of samples returning Uw3 values from the uppermost two class intervals occurs in the west of NTS map area 13A/10, to the west and northwest of the Southwest Pond Granite (Figure 27), over units P<sub>3A</sub>sp (late Paleoproterozoic metapelite) and P<sub>3B</sub>gp (late Paleoproterozoic foliated to gneissic megacrystic/ porphyritic granitoid rocks), and probably associated with the Alexis River Tributary #4 U showing on NTS map area 13A/11. Values in these two class intervals follow the regional strike to the southeast at least as far as the vicinity of the newly discovered REE occurrences south of Port Hope Simpson.

Overall, the responses of uranium in sediment and uranium in water are very similar.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgz)

#### Late Paleoproterozoic

(1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

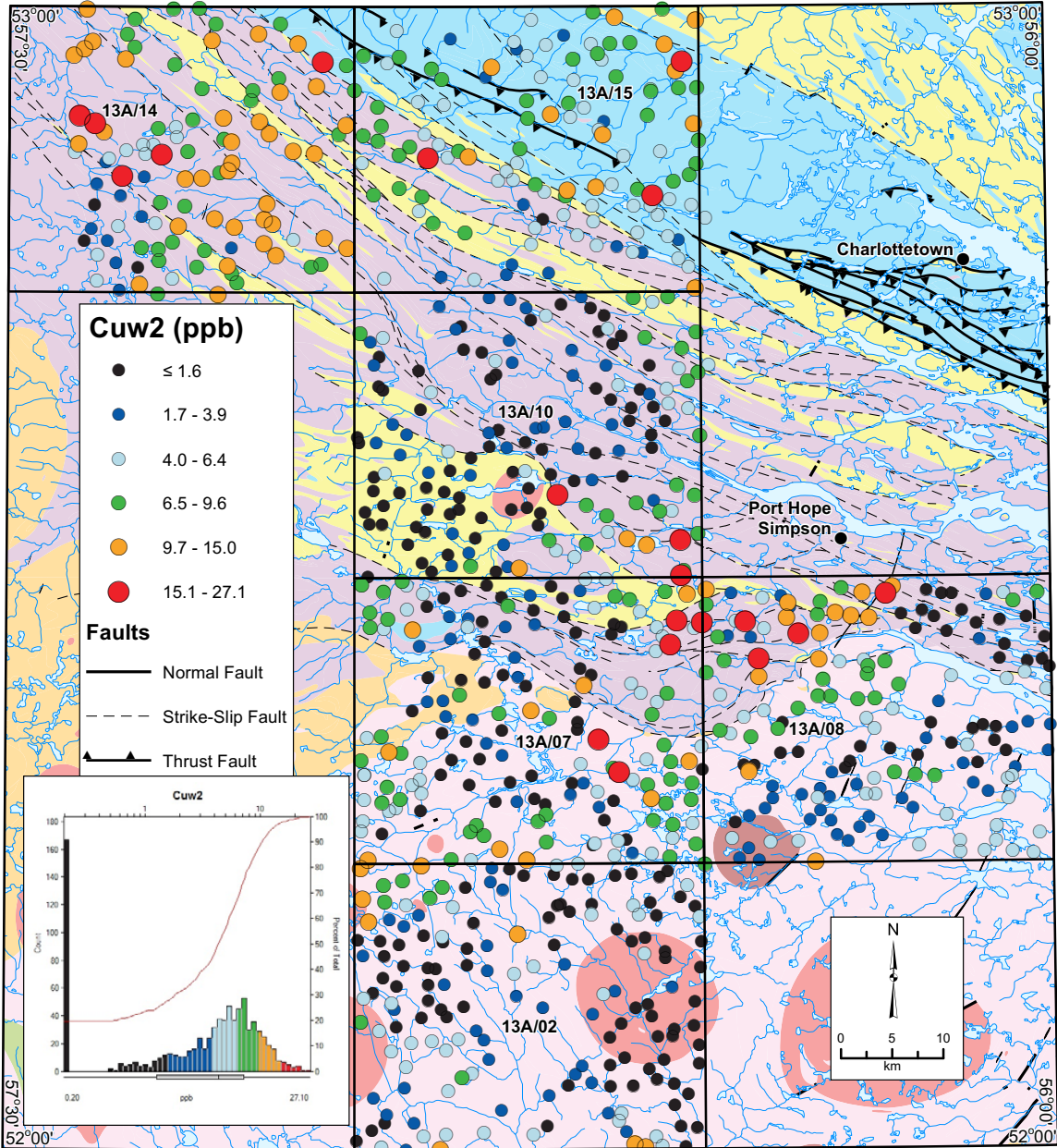
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>sp) and psammitic (P<sub>3A</sub>ss) schist and gneiss

Figure 24. Conductivity in lake water.



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

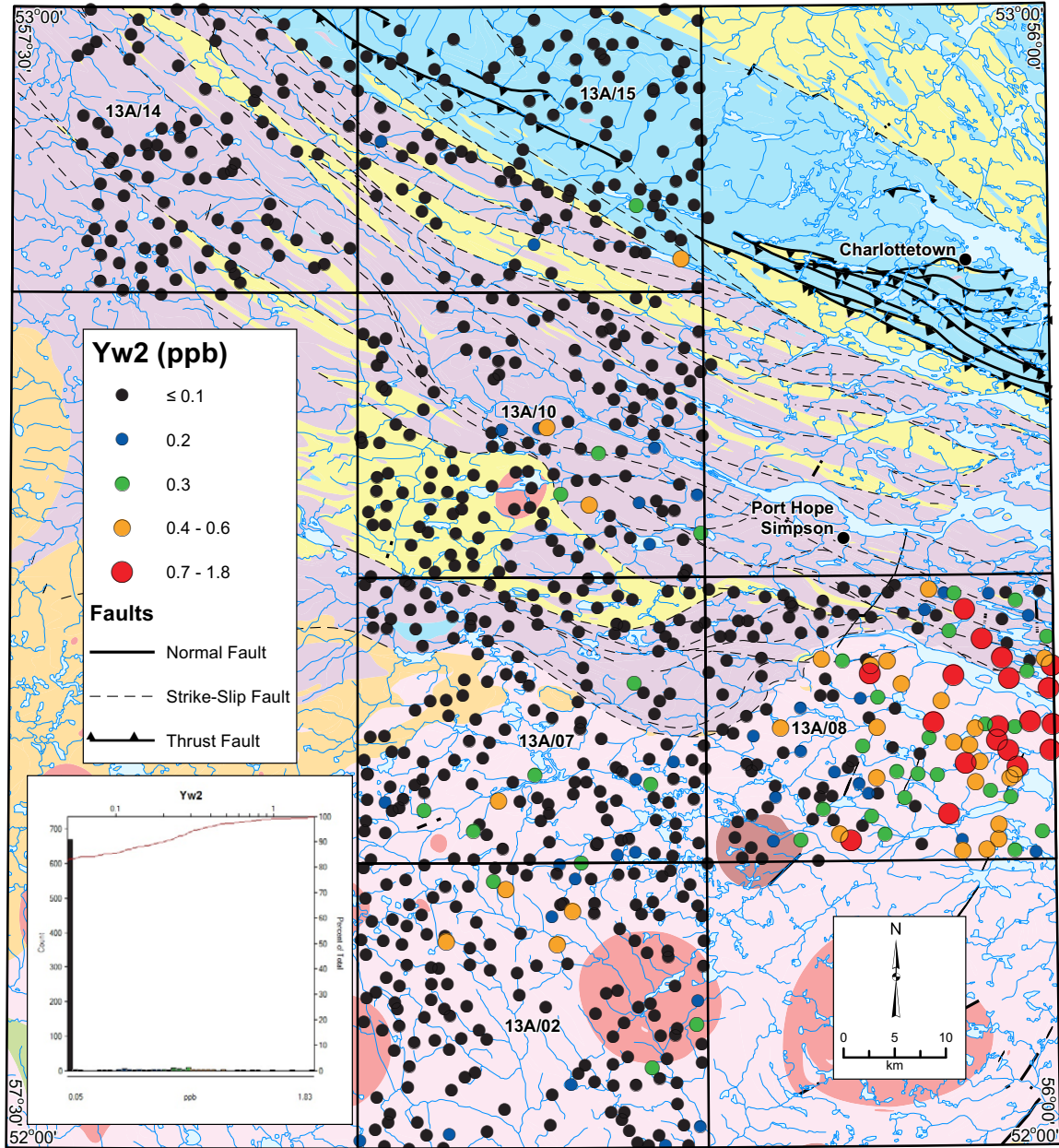
**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3A</sub>sp) and psammitic (P<sub>3A</sub>ss) schist and gneiss

**Figure 25.** Copper (Cuw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMyq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

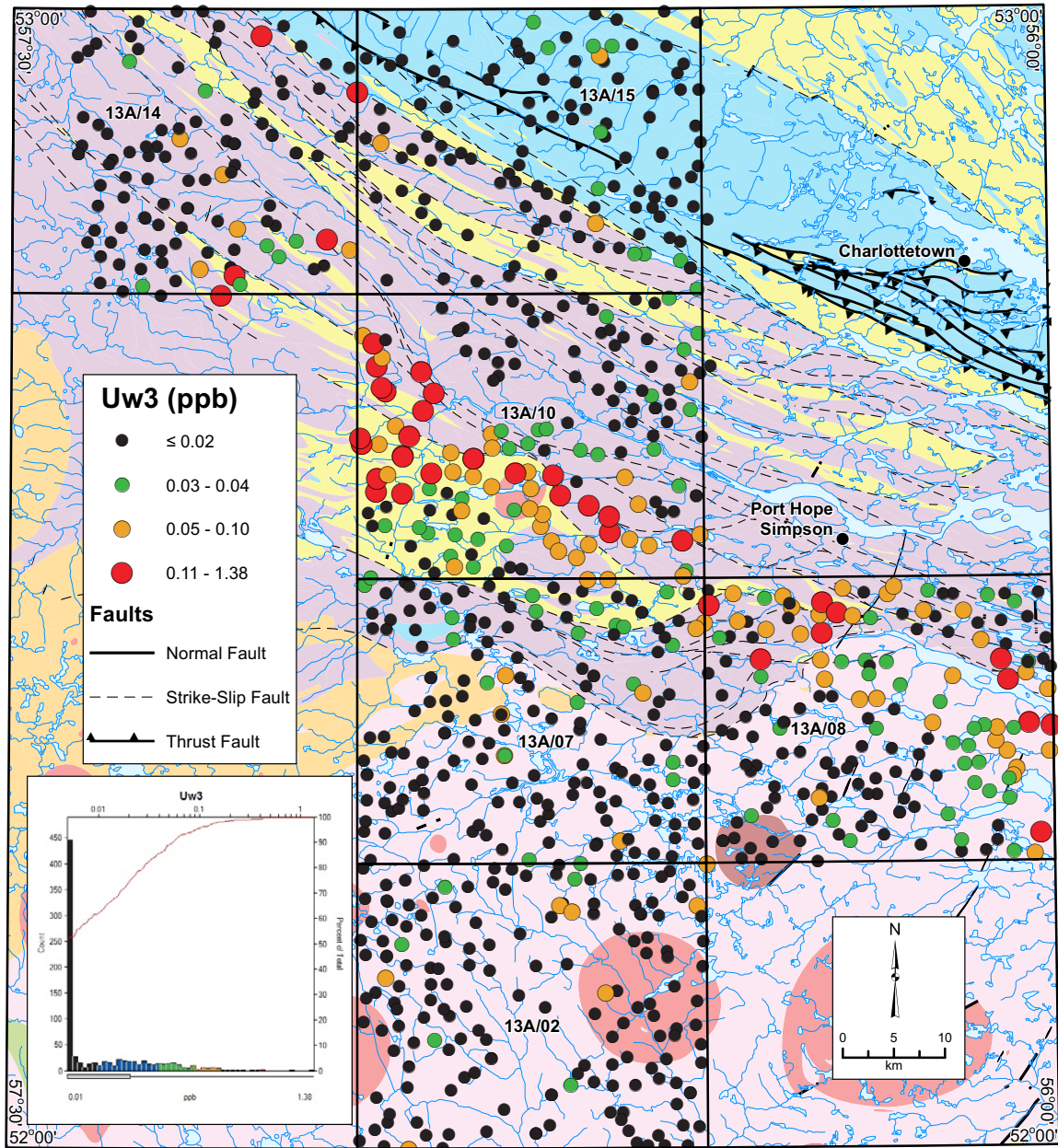
#### (1800–1710 Ma)

Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 26. Yttrium (Yw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr) amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 27. Uranium (Uw3) in lake water.

## ***Molybdenum (Mow2)***

Concentrations of Mow2 values in the uppermost two class intervals are scattered over the entire map area, but show a concentration to the west of the Southwest Pond Granite, over pelitic gneiss (Figure 28). A stronger, more or less congruent anomaly of Mo2 and U1 in sediment, and Uw3 in water, accompanies this feature.

Other concentrations are present in the southeast of NTS map area 13A/14 and the southeast of 13A/15, overlying a complex sequence of late Paleoproterozoic metasediments (units P<sub>3</sub>Asp, P<sub>3</sub>Ass) and late Paleoproterozoic intrusive rocks (units P<sub>3</sub>Bgd, P<sub>3</sub>Bgr, P<sub>3</sub>Bgp), and to the northeast of the REE discoveries in the northeast of 13A/08. Finally, an accumulation of Mo-enriched water samples is present in the southwest of NTS map area 13A/02, over and to the northeast of a circular intrusion of quartz syenite termed the Rivière Bujeault Headwaters Quartz Syenite (Unit M<sub>3</sub>Dyq; Gower *et al.*, 1991). None of these features are accompanied by Mo1 or Mo2 enrichment in sediments.

## **SOME IMPORTANT ANOMALIES**

In this section, some of the stronger anomalies are described. This is not intended to imply that other significant anomalies do not exist and might be identified on more detailed study. The term “Anomaly”, in this context, is defined as a spatial accumulation of samples, the analyses of which exceed the 90-percentile (termed “elevated” values) or 97.5-percentile (termed “anomalous”) of the 2010 dataset. The locations of the anomalies are shown in Figure 29.

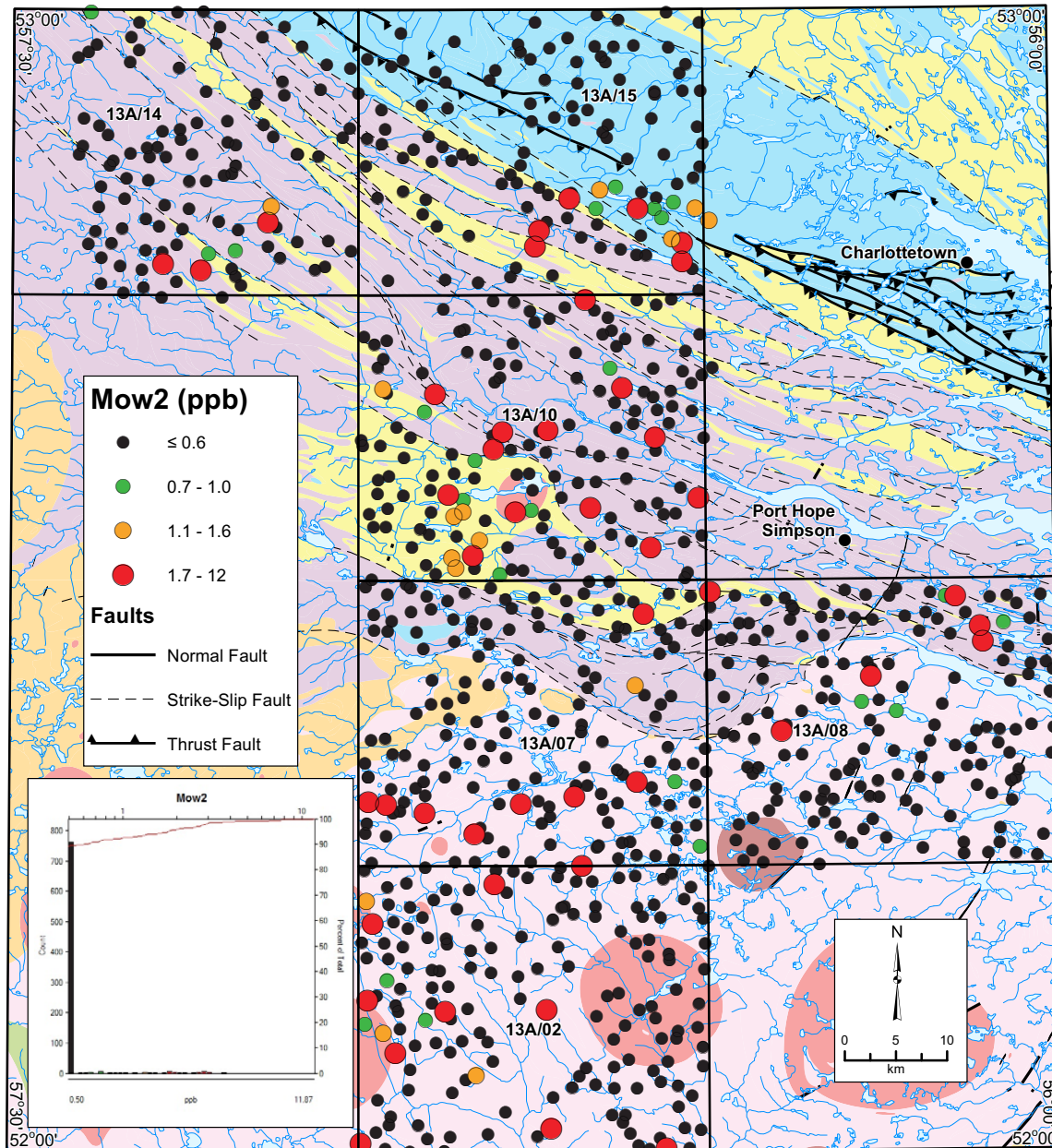
### **Southwest Pond Granite REE Anomaly**

This anomaly comprises 29 samples; in descending order of strength, the REE (and REE pathfinder) association in sediment and water comprises Fw9, Ce2, Sm1, Ce1, La1, Dy2, La2, Be2, Th1 and Y2. Because of the overlap with other anomalies, many other elements show enrichment in the same sediment samples: Cu2, Ni2, Co2, Cr1, Cr2, Cs1, Co1, Fe2, Zn2, As2, Li2, U1, Fe1, V2, Mn2, Mo2, P2, Sc2, Sc1 and Tb1, while the waters are enriched in Alw2, Uw3, Mow2 and Tiw2.

The anomaly is roughly elliptical in shape with a long axis striking slightly north of east. The presence of the Southwest Pond Granite, an isolated, approximately circular intrusion of early Neoproterozoic age (Unit M<sub>3Dgr</sub>), with outcrop area 19 km<sup>2</sup>, is clearly an important causative factor for this anomaly, although the anomaly extends to the west over the country rock of late Paleoproterozoic metasediments (Unit P<sub>3A</sub>sp). This host is unusual by comparison with most of the early Neoproterozoic intrusions, and may also be of significance. The eastward extension can be attributed to glacial displacement from the granite.

The corresponding anomaly defined by the REE content of tills is not 100% congruent with the lake-sediment and water anomaly; in particular, very few till samples collected north of the latter’s long, eastward-trending axis have anomalous REE contents. Perhaps significantly, this axis corresponds approximately to a drainage divide.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3cyq</sub>)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3Bgr</sub>)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1rg</sub>); leucogabbro and anorthositic gabbro (M<sub>1ln</sub>) and amphibolite (M<sub>1am</sub>)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3cag</sub>), amphibolite (P<sub>3cam</sub>), anorthosite and leucogabbro (P<sub>3can</sub>), leucogabbro and leucogabbro (P<sub>3cIn</sub>), gabbro and norite (P<sub>3crg</sub>), diorite, quartz diorite and tonalite (P<sub>3cdr</sub>), alkali-feldspar granite, granite and quartz syenite (P<sub>3cga</sub>), granite to granodiorite (P<sub>3cgd</sub>), megacrystic/porphyritic granite to granodiorite (P<sub>3cgp</sub>), quartz monzonite (P<sub>3cmq</sub>) and monzonite (P<sub>3cmz</sub>)

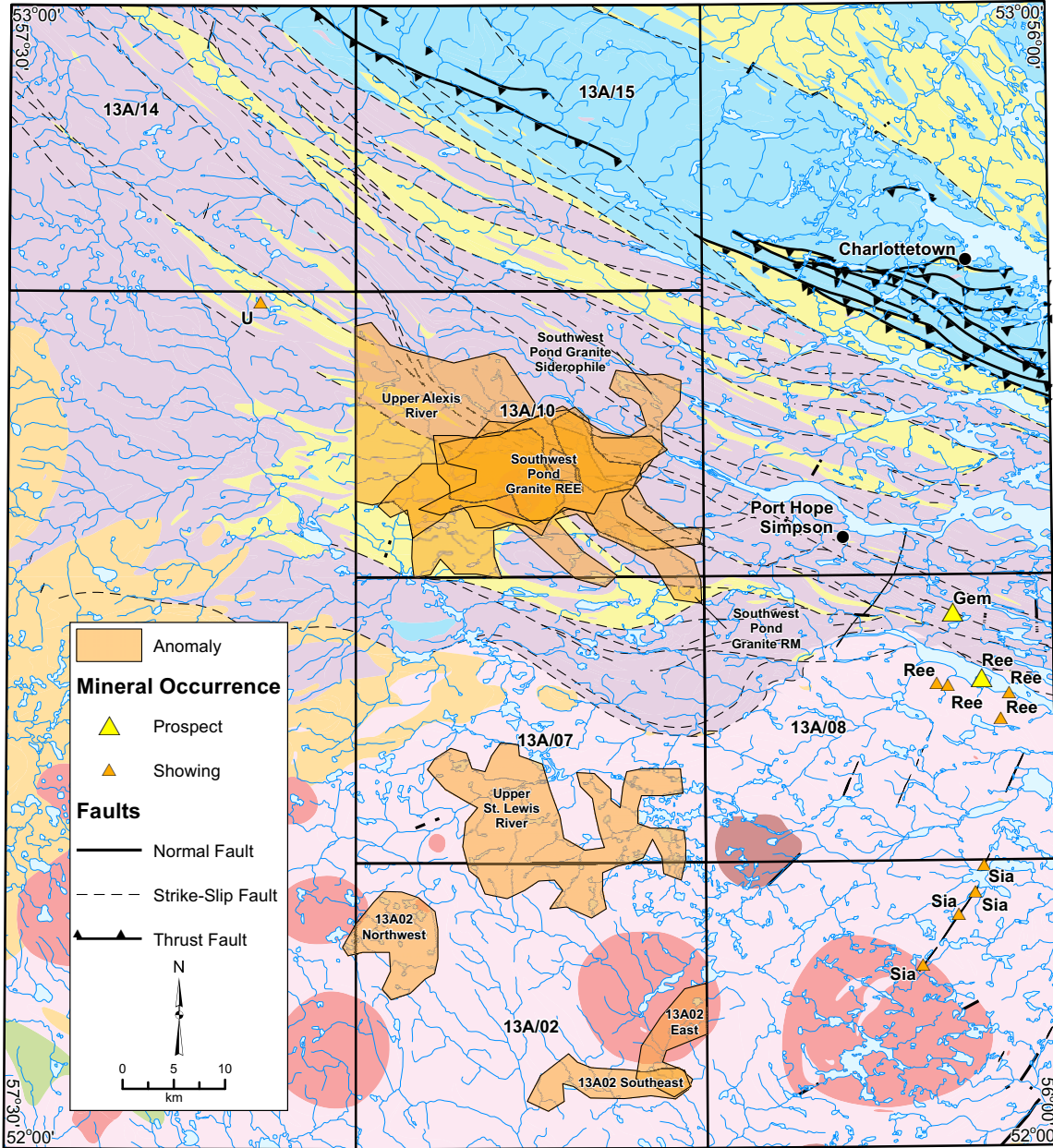
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3Bdr</sub>), foliated to gneissic granodiorite (P<sub>3Bgd</sub>), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3Bgp</sub>), foliated to gneissic quartz monzonite (P<sub>3Bmq</sub>), foliated to gneissic granite and alkali-feldspar granite (P<sub>3Bgr</sub>) amphibolite (P<sub>3Bam</sub>), anorthosite and leucogabbro (P<sub>3Ban</sub>), leucogabbro and leucogabbro (P<sub>3Bln</sub>) and gabbro and norite (P<sub>3Brg</sub>)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3Bsp</sub>) and psammitic (P<sub>3Bss</sub>) schist and gneiss

Figure 28. Molybdenum (Mow2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3cyq</sub>)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3Bgr</sub>)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1rg</sub>); leucogabbro and anorthositic gabbro (M<sub>1ln</sub>) and amphibolite (M<sub>1am</sub>)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PM<sub>q</sub>) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3cag</sub>), amphibolite (P<sub>3cam</sub>), anorthosite and leucogabbro (P<sub>3can</sub>), leucogabbro and leucogabbro (P<sub>3cIn</sub>), gabbro and norite (P<sub>3crg</sub>), diorite, quartz diorite and tonalite (P<sub>3cdr</sub>), alkali-feldspar granite, granite and quartz syenite (P<sub>3cga</sub>), granite to granodiorite (P<sub>3cgd</sub>), megacrystic/porphyritic granite to granodiorite (P<sub>3cgp</sub>), quartz monzonite (P<sub>3cmq</sub>) and monzonite (P<sub>3cmz</sub>)

#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3Bdr</sub>), foliated to gneissic granodiorite (P<sub>3Bgd</sub>), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3Bgp</sub>), foliated to gneissic quartz monzonite (P<sub>3Bmq</sub>), foliated to gneissic granite and alkali-feldspar granite (P<sub>3Bgr</sub>) amphibolite (P<sub>3Bam</sub>), anorthosite and leucogabbro (P<sub>3Ban</sub>), leucogabbro and leucogabbro (P<sub>3Bln</sub>) and gabbro and norite (P<sub>3Brg</sub>)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3Bsp</sub>) and psammitic (P<sub>3Bss</sub>) schist and gneiss

Figure 29. Significant geochemical anomalies.

### **Southwest Pond Granite Siderophile Anomaly**

As its name implies, this anomaly is characterized by an anomalous association of siderophile elements, although it overlaps the Southwest Pond Granite REE and Southwest Pond Granite Rare Metal anomalies. The elements most strongly represented (in decreasing order of strength) are Cu<sub>2</sub>, Ni<sub>2</sub>, Mo<sub>2</sub>, Co<sub>2</sub>, Cr<sub>2</sub>, Co<sub>1</sub>, Cr<sub>1</sub>, Fe<sub>2</sub>, U<sub>1</sub>, P<sub>2</sub>, Cs<sub>1</sub>, Fe<sub>1</sub> and V<sub>2</sub>. The anomaly is centred over the Southwest Pond Granite and almost entirely encloses the Southwest Pond Granite REE Anomaly, extending farther to the east and west and striking in the same direction.

West of the Southwest Pond Granite, an outcrop of late Paleoproterozoic gabbro and norite (Unit P<sub>3Brg</sub>) is present, intrusive into late Paleoproterozoic pelitic schist and gneiss (Unit P<sub>3A</sub>sp) and centred on 52° 33' 54" N, 56° 53' 33" W (52.5651° N, 56.8924° W), but its mapped area is only 0.6 km<sup>2</sup> and as such, it scarcely constitutes a plausible source for such an extensive anomaly. Furthermore, with the exception of a weak local maximum in Cr<sub>1</sub> and Cr<sub>2</sub> to the northeast of this outcrop, the large lake-sediment anomaly has no echo in the till geochemistry.

### **Southwest Pond Granite Rare-metal Anomaly**

The principal metal associations of this anomaly are Cs<sub>1</sub>, Cr<sub>2</sub>, Cr<sub>1</sub>, Co<sub>2</sub>, Cu<sub>2</sub>, Li<sub>2</sub> and Ni<sub>2</sub>. The presence of Co, Cu and Ni, and to a lesser extent of Cr, is a direct consequence of the overlap between this anomaly and the Southwest Pond Siderophile Anomaly (*see* above).

The orientation of the anomaly's long axis (trending southeast) is discordant to that of the Southwest Pond Granite REE and Siderophile anomalies, and to the ice-movement direction as estimated from limited striation data. It is, however, consistent with the direction of present day drainage from the Southwest Pond Granite. The presence of Cs<sub>1</sub> and Li<sub>2</sub> in the element association is more suggestive of an association with clastic material in the lake sediment (Amor, unpublished data, 2012). That the response of these elements is much stronger than that of other elements that normally feature in this association, such as Al, Ba and Na, may be because of the distinctive composition of the sediment's source (*cf.* the 13A02E anomaly, below); that is, the Southwest Pond Granite, or possibly the area to the southwest, since till samples are anomalous in Cs<sub>1</sub> in this area (McCuaig, 2002e) and in the lake anomaly's up-drainage extension.

### **Upper St Lewis River Anomaly**

This anomaly is characterized by sediment samples most strongly enriched in Dy<sub>2</sub>, Y<sub>2</sub>, Lu<sub>1</sub>, Yb<sub>1</sub> and Zr<sub>1</sub>, and waters enriched in Yw<sub>2</sub>, Naw<sub>1</sub>, Crw<sub>2</sub>, Alw<sub>2</sub>, Baw<sub>2</sub> and Tiw<sub>2</sub>. There is a high level of dilution by samples with weak REE responses that fall within the bounds of the anomaly.

Although the anomaly is primarily underlain by late Paleoproterozoic–early Mesoproterozoic granite (Unit PMgr), numerous slivers of other late Paleoproterozoic–early Mesoproterozoic plutonic and supracrustal rock types, whose age relationship to Unit PMgr is uncertain (C. Gower, pers. comm., 2012), are present within its bounds. Perhaps more significantly, two small intrusions of early Neoproterozoic granite (Unit M<sub>3Dgr</sub>) are located 2 km west and 7 km southwest (*i.e.*, up ice) of the anomaly's western boundary.

## Upper Alexis River Anomaly

The Alexis River Tributary #4 U showing (Cole and Janes, 2008; Stapleton *et al.*, 2011; MODS number 13A/11/U001), hosted in pegmatite within psammitic schist and gneiss (Unit P<sub>3</sub>Ass; Gower, 2010b) is located in the extreme northeast of NTS map area 13A/11, just outside the area of 2011 coverage. The occurrence is located close to a lake from which a sediment sample collected during the NGR program returned a Delayed Neutron Counting (DNC) uranium analysis of 926 ppm, and an INAA analysis of 1030 ppm, Labrador's highest values for these parameters. It is highly probable that when sampling coverage is complete, the showing will lie within the bounds of a larger anomaly of which the Upper Alexis River Anomaly identified here is a component. The anomalous metal associations in the lake sediments, in descending order of strength, are Mo<sub>2</sub>, U<sub>1</sub> and Cu<sub>2</sub>, while U<sub>w3</sub> is the only water parameter to show a comparable response.

The core of the anomaly is located over an extensive unit of late Paleoproterozoic pelitic schist and gneiss (Unit P<sub>3A</sub>sp) intruded by the Southwest Pond Granite, although the northern third of the anomaly is not down-drainage of the southern portion and may be derived from other, late Paleoproterozoic rock units, of which gneissic megacrystic/ porphyritic granitoid rocks (Unit P<sub>3B</sub>gp) granodiorite (Unit P<sub>3B</sub>gd) and alkali-feldspar granite (Unit P<sub>3B</sub>gr) constitute plausible sources for the sediment.

### 13A02 Northwest Anomaly

This anomaly comprises 12 samples; a thirteenth sample, showing no anomalous responses, is surrounded by anomalous samples and therefore, falls within the anomaly's bounds. The responses in sediments (in descending order of strength) are of Ba<sub>1</sub>, Ba<sub>2</sub>, Sr<sub>2</sub>, Hf<sub>1</sub>, K<sub>2</sub>, Na<sub>1</sub>, Na<sub>2</sub>, Ca<sub>2</sub>, Mg<sub>2</sub>, Sc<sub>2</sub>, Zr<sub>1</sub>, Al<sub>2</sub>, Rb<sub>1</sub>, Rb<sub>2</sub>, Sc<sub>1</sub>, LOI (anomalously low), Mn<sub>2</sub>, Ta<sub>1</sub>, Ti<sub>2</sub>, Zr<sub>2</sub>, Li<sub>2</sub> and Nb<sub>2</sub>. There are also responses in water: conductivity (anomalously low) and Few<sub>1</sub>. The bedrock underlying the anomaly, and of its potential upstream sources, consists primarily of late Paleoproterozoic and early Mesoproterozoic recrystallized granite and alkali-feldspar granite (Unit PMgr) although there is a small intrusion (outcrop area 1.25 km<sup>2</sup>) of early Neoproterozoic granite (Unit M<sub>3D</sub>gr) in the north. The early Neoproterozoic quartz monzonite (Unit M<sub>3D</sub>mq) and late Paleoproterozoic and early Mesoproterozoic syenite or quartz syenite (Unit PMyq), monzodiorite (Unit PMmd), psammitic gneiss (Unit PMss) and pelitic gneiss (Unit PMsp) may also have made a contribution to the sediment.

All of the anomaly's component samples were described as "clastic, fine-grained" (6 samples) or "clastic, coarse-grained" (6 samples). The anomaly is believed to be an artifact of the relatively high inorganic content of the sediments, although the majority of the sampled lakes are bounded by swamp, or mixed forest and swamp.

### 13A02 East Anomaly

The 13A02E anomaly shares certain characteristics with its counterpart in the northwest (*see* above), with an association that includes Al, Ba, K and Na, and a generally swampy environment, although the samples are not dominated by clastic varieties to the same extent. However, certain

elements in the “clastic” association show a much stronger response in this anomaly; in descending order, they comprise Nb<sub>2</sub>, Sr<sub>2</sub>, Ta<sub>1</sub>, Ti<sub>2</sub>, Zr<sub>1</sub>, Al<sub>2</sub>, Ba<sub>1</sub>, Ba<sub>2</sub>, Hf<sub>1</sub>, K<sub>2</sub>, Na<sub>1</sub>, Na<sub>2</sub>, Sc<sub>1</sub>, Se<sub>1</sub>, Eu<sub>1</sub>, Rb<sub>1</sub>, Sc<sub>2</sub> and Zr<sub>2</sub>.

The most likely source for the inorganic material in the samples is the early Neoproterozoic granite of the Upper Pinware River Pluton, and the distinctive composition of the lake sediments may be an indirect reflection of the pluton’s chemistry.

### **13A02 Southeast Anomaly**

The 13A02SE Anomaly, which comprises nine sample sites, is the only anomaly of gold and gold pathfinders within the 2011 dataset judged to be significant. Its element association in sediment is, in descending order of strength, of Sb<sub>1</sub>, Pb<sub>2</sub>, LOI (anomalously high) and Au<sub>1</sub>; the waters are also anomalous in Niw<sub>2</sub>, Few<sub>1</sub> and pH (anomalously low). The last-named feature may indicate the presence of oxidizing pyrite or other sulphide in the lakes’ catchment area.

Potential source rock types for the lake sediments and waters are the early Neoproterozoic granite of the Upper Pinware River Pluton (Unit M<sub>3D</sub>gr) and the late Paleoproterozoic and early Mesoproterozoic plutonic units PMgr (recrystallized granite and alkali-feldspar granite) and PMgp (megacrystic/porphyritic granite to quartz monzonite) and, perhaps more significantly, the supracrustal units PMss (psammitic gneiss) and PMvf (banded quartzofeldspathic rocks, provisionally assigned as the Pitts Harbour Group, and possibly derived from a felsic volcanoclastic protolith; Gower, 2010c).

Only two of the component samples were described as clastic with the remainder described as “organic ooze” (three samples) and “peaty” (four samples). Shoreline vegetation is predominantly of swamp or mixed forest and swamp, with only one sampled lake flanked by forest and one by rock and forest.

## **CONCLUSIONS**

A detailed program of lake-sediment and water sampling in the Alexis River region of southeastern Labrador has revealed several anomalies suggestive of REE mineralization, mostly associated with granitic rocks of the Interior Magmatic Belt, as well as one weak anomaly of precious metals and pathfinders, also underlain by granitic rocks, but spatially associated with metavolcanic rocks.

The presence of inorganic, clastic material in the lake sediment can give rise to false anomalies of such elements as Al, Ba, Be, Ca, Cr, Cs, K, Mg, Na, Nb, Rb, Sc, Sr, Ta, Ti and Zr. However, the relative strength of response of these elements varies from one anomaly to the other; this may be a consequence of the clastic material being sourced from different rock types.

The Southwest Pond Granite, an intrusion of early Neoproterozoic age into mixed supracrustal and intrusive rocks of the Exterior Thrust Belt, is spatially associated with four partially overlapping anomalies of REE, Cs–Li, siderophile elements and Mo–U. The non-congruency of the first

two anomalies appears to be a consequence, respectively, of glacial dispersion to the east, and fluvial dispersion to the southeast, from the granite. The third may be coincidental, and derived from mafic rocks southwest of the granite. The fourth, which was not fully delineated by the 2011 sampling, may be related to a known uranium occurrence which is just outside the survey area.

The response in lake sediments and waters to the recently discovered, and economically promising, REE discoveries south of Port Hope Simpson is complex, with the area to the southwest, the area around the occurrences, and the area to the northeast, each having different signatures. The area around the occurrences is also characterized by strong enrichment of bromine in lake sediments, and sodium in lake waters, but these features are believed to be related to the area's proximity to the coastline.

This survey complements earlier work to the north, south and east whose results were released in 2010. The final phase of coverage of this area of southeastern Labrador will be carried out in the near future.

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## **APPENDIX 1**

### **Locations, field data and analyses of lake-sediment and water data**



## Explanation of Data Codes in Appendix 1

For numeric fields, -9 indicates there is no data value for that sample (e.g. sample wasn't analyzed for that element)

### Veg: Dominant Shoreline Vegetation

- |                       |                       |
|-----------------------|-----------------------|
| 1: forest             | 5: burned             |
| 2: bog                | 6: rock and forest    |
| 3: mixed bog & forest | 7: tundra (<25% rock) |
| 4: barren (>25% rock) |                       |

### WaterLevel: Water Level

- |                    |        |
|--------------------|--------|
| 1: high (flooding) | 3: low |
| 2: normal          |        |

### SedColour: Sediment Colour

- |                    |                |
|--------------------|----------------|
| 1: tan-yellow      | 7: grey        |
| 2: brown           | 8: black       |
| 3: brown, lustrous | 10: orange     |
| 4: chocolate-brown | 13: grey-brown |
| 5: greenish brown  | 14: other      |
| 6: green           |                |

### Comp: Sample Composition

- |                            |                      |
|----------------------------|----------------------|
| 1: clastic, fine grained   | 4: organic, granular |
| 2: clastic, coarse grained | 5: organic, peaty    |
| 3: organic ooze            |                      |

### Contam: Contamination

- |                               |               |
|-------------------------------|---------------|
| 0: absent                     | 3: settlement |
| 1: road                       | 4: dump       |
| 2: trenching or mine workings | 5: other      |

### SiteDup: Site Duplicate Status

- |                                |                                 |
|--------------------------------|---------------------------------|
| 0 routine single sample        | 2 Second of site duplicate pair |
| 1 First of site duplicate pair |                                 |

### Mineralztn: Mineralization

Element symbols

### WaterColr: Water Colour

- |               |          |
|---------------|----------|
| 1: colourless | 3: brown |
| 2: yellow     |          |

WatSusp: Suspended Matter

0: None

2: heavy

1: light

Atlas\_Lithology: Dominant rock unit in catchment area

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## SEDIMENT ANALYTICAL DATA

### Analytical Methods

#### Suffix Abbreviation Method

|   |        |  |
|---|--------|--|
| 1 | INAA   | Instrumental Neutron Activation Analysis         |
| 2 | ICP-ES | Induction Coupled Plasma – Emission Spectroscopy |
| 6 | AAS    | Atomic-Absorption Spectrometry                   |
| 9 | ISE    | Ion Specific Electrode                           |

| Variable | Digestion (if applicable)                   | Method      |
|----------|---|-------------|
| Ag6_PPM  | HNO <sub>3</sub>                            | AAS         |
| Al2_PCT  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| As1_PPM  |   | INAA        |
| As2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Au1_PPB  |   | INAA        |
| Ba1_PPM  |   | INAA        |
| Ba2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Be2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Br1_PPM  |   | INAA        |
| Ca2_PCT  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Cd2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Ce1_PPM  |   | INAA        |
| Ce2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Co1_PPM  |   | INAA        |
| Co2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Cr1_PPM  |   | INAA        |
| Cr2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Cs1_PPM  |   | INAA        |
| Cu2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Dy2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Eu1_PPM  |   | INAA        |
| Fe1_PCT  |   | INAA        |
| Fe2_PCT  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Hf1_PPM  |   | INAA        |
| K2_PCT   | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| La1_PPM  |   | INAA        |
| La2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Li2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| LOI_PCT  | (Loss-on-ignition)                          | Gravimetric |
| Lu1_PPM  |   | INAA        |
| Mg2_PCT  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Mn2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Mo1_PPM  |   | INAA        |
| Mo2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES      |
| Na1_PCT  |   | INAA        |

|         |   |        |
|---------|---|--------|
| Na2_PCT | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Nb2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Ni2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| P2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Pb2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Rb1_PPM |   | INAA   |
| Rb2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Sb1_PPM |   | INAA   |
| Sc1_PPM |   | INAA   |
| Sc2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Se1_PPM |   | INAA   |
| Sm1_PPM |   | INAA   |
| Sr2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Ta1_PPM |   | INAA   |
| Tb1_PPM |   | INAA   |
| Th1_PPM |   | INAA   |
| Ti2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| U1_PPM  |   | INAA   |
| V2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| W1_PPM  |   | INAA   |
| Y2_PPM  | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Yb1_PPM |   | INAA   |
| Zn2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |
| Zr1_PPM |   | INAA   |
| Zr2_PPM | HClO <sub>4</sub> -HNO <sub>3</sub> -HF-HCl | ICP-ES |



## WATER ANALYTICAL DATA

### Analytical Methods

#### Suffix Abbreviation Method

|    |         |  |
|----|---------|--|
| w1 | ICP-ES  | Induction Coupled Plasma – Emission Spectroscopy                         |
| w2 | ICP-USN | Induction Coupled Plasma – Ultrasonic Nebulizer                          |
| w3 | ICP-MS  | Induction Coupled Plasma – Mass Spectrometry<br>(Maxxam Analytical Inc.) |
| w9 | ISE     | Ion Specific Electrode   |

#### Variable

#### Method

|                  |               |
|------------------|---------------|
| Conduct_ $\mu$ S | Corning meter |
| pH_w             | Corning meter |
| Alw2_PPB         | ICP-USN       |
| Asw2_PPB         | ICP-USN       |
| Baw2_PPB         | ICP-USN       |
| Bew2_PPB         | ICP-USN       |
| Caw1_PPM         | ICP-ES        |
| Cdw2_PPB         | ICP-USN       |
| Cow2_PPB         | ICP-USN       |
| Crw2_PPB         | ICP-USN       |
| Fw9_PPB          | ISE           |
| Cuw2_PPB         | ICP-USN       |
| Few1_PPB         | ICP-ES        |
| Kw1_PPM          | ICP-ES        |
| Liw2_PPB         | ICP-USN       |
| Mgw1_PPM         | ICP-ES        |
| Mnw1_PPB         | ICP-ES        |
| Mow2_PPB         | ICP-USN       |
| Naw1_PPM         | ICP-ES        |
| Niw2_PPB         | ICP-USN       |
| Pw2_PPB          | ICP-USN       |
| Pbw2_PPB         | ICP-USN       |
| Siw1_PPM         | ICP-ES        |
| Sw1_PPM          | ICP-ES        |
| Srw2_PPB         | ICP-USN       |
| Tiw2_PPB         | ICP-USN       |
| Uw3_PPB          | ICP-MS        |
| Vw2_PPB          | ICP-USN       |
| Yw2_PPB          | ICP-USN       |
| Znw2_PPB         | ICP-USN       |

















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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterCoIr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112290 | 10022528  | 21      | 508916  | 5802998  | 13A/07 | 52.379133 | -56.869017 | 0.622    | 2.0     | 1   | 1          | 1         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112291 | 10022529  | 21      | 510272  | 5805042  | 13A/07 | 52.397483 | -56.849033 | 0.065    | 13.5    | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112292 | 10022531  | 21      | 507183  | 5806779  | 13A/07 | 52.413150 | -56.894400 | 0.001    | 1.0     | 3   | 1          | 4         | 5    | 0      | 2       | 0          | 3         | 1       |
| SA5112293 | 10022532  | 21      | 510441  | 5806529  | 13A/07 | 52.410850 | -56.846500 | 0.039    | 6.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112294 | 10022533  | 21      | 509400  | 5810554  | 13A/07 | 52.447050 | -56.861700 | 0.013    | 9.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112295 | 10022534  | 21      | 507101  | 5813651  | 13A/07 | 52.474933 | -56.895450 | 0.147    | 4.0     | 6   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112296 | 10022535  | 21      | 506686  | 5814943  | 13A/07 | 52.486550 | -56.901533 | 6.996    | 1.0     | 6   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112297 | -9        | 21      | 508741  | 5814496  | 13A/07 | 52.482500 | -56.871283 | 6.996    | -9.0    | 6   | 1          | -9        | -9   | -9     | 0       | 0          | 2         | 1       |
| SA5112298 | 10022536  | 21      | 510405  | 5815248  | 13A/07 | 52.489233 | -56.846767 | 0.001    | 1.5     | 2   | 0          | 4         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112299 | 10022537  | 21      | 509278  | 5812682  | 13A/07 | 52.466183 | -56.863433 | 6.996    | 7.0     | 6   | 1          | 1         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112300 | 10022538  | 21      | 511118  | 5812498  | 13A/07 | 52.464500 | -56.836350 | 0.001    | 5.0     | 3   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112301 | -9        | 21      | 511054  | 5811710  | 13A/07 | 52.457417 | -56.837317 | 0.001    | 4.5     | 3   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112302 | 10022541  | 21      | 512466  | 5812197  | 13A/07 | 52.461767 | -56.816533 | 0.003    | 1.0     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112303 | 10022542  | 21      | 512733  | 5810294  | 13A/07 | 52.444650 | -56.812667 | 0.001    | 1.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112304 | 10022543  | 21      | 511755  | 5809063  | 13A/07 | 52.433600 | -56.827100 | 0.067    | 6.5     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112305 | 10022544  | 21      | 512705  | 5806334  | 13A/07 | 52.409050 | -56.813233 | 0.214    | 5.0     | 1   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112306 | 10022545  | 21      | 511541  | 5802663  | 13A/07 | 52.376067 | -56.830467 | 0.151    | 4.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112307 | 10022546  | 21      | 514099  | 5803236  | 13A/07 | 52.381167 | -56.792867 | 0.001    | 1.5     | 2   | 1          | 4         | 5    | 0      | 1       | 0          | 1         | 1       |
| SA5112308 | 10022547  | 21      | 514518  | 5807047  | 13A/07 | 52.415417 | -56.786550 | 0.023    | 2.5     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 3         | 1       |
| SA5112309 | 10022548  | 21      | 515640  | 5808756  | 13A/07 | 52.430750 | -56.769967 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112310 | 10022549  | 21      | 514730  | 5811698  | 13A/07 | 52.457217 | -56.783233 | 0.148    | 1.5     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112311 | -9        | 21      | 512919  | 5815747  | 13A/07 | 52.493667 | -56.809717 | 0.002    | 2.0     | 2   | 0          | 2         | 2    | 0      | 0       | 0          | 1         | 1       |
| SA5112312 | 10022552  | 21      | 514090  | 5803235  | 13A/07 | 52.381150 | -56.793000 | 0.001    | 1.5     | 2   | 1          | 2         | 4    | 0      | 2       | 0          | 1         | 2       |
| SA5112313 | 10022553  | 21      | 514376  | 5814607  | 13A/07 | 52.483383 | -56.788317 | 0.031    | 1.0     | 1   | 1          | 2         | 2    | 0      | 0       | 0          | 1         | 2       |
| SA5112314 | 10022554  | 21      | 514975  | 5813739  | 13A/07 | 52.475567 | -56.779533 | 0.636    | 10.0    | 1   | 1          | 4         | 1    | 0      | 0       | 0          | 2         | 1       |
| SA5112315 | 10022555  | 21      | 517141  | 5814788  | 13A/07 | 52.484933 | -56.747583 | 1.651    | 5.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112316 | 10022556  | 21      | 517480  | 5813301  | 13A/07 | 52.471550 | -56.742667 | 0.055    | 2.5     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112317 | 10022557  | 21      | 517602  | 5811928  | 13A/07 | 52.459200 | -56.740950 | 0.001    | 1.0     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112318 | -9        | 21      | 515960  | 5806796  | 13A/07 | 52.413117 | -56.765367 | 0.405    | -9.0    | 1   | 1          | -9        | -9   | -9     | 0       | 0          | 1         | 1       |
| SA5112319 | 10022558  | 21      | 516736  | 5805935  | 13A/07 | 52.405350 | -56.754000 | 0.079    | 1.5     | 1   | 1          | 1         | 3    | 2      | 0       | 0          | 1         | 2       |
| SA5112320 | 10022559  | 21      | 517230  | 5803543  | 13A/07 | 52.383833 | -56.746850 | 0.004    | 2.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112321 | 10022561  | 21      | 519040  | 5802782  | 13A/07 | 52.376933 | -56.720300 | 0.005    | 2.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112322 | 10022562  | 21      | 521768  | 5801716  | 13A/07 | 52.367250 | -56.680300 | 0.002    | 2.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 3         | 1       |
| SA5112323 | 10022563  | 21      | 521801  | 5802414  | 13A/07 | 52.373517 | -56.679767 | 0.221    | 2.5     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112324 | 10022564  | 21      | 521543  | 5804385  | 13A/07 | 52.391250 | -56.683433 | 0.079    | 1.5     | 3   | 1          | 5         | 1    | 0      | 0       | 0          | 2         | 1       |
| SA5112325 | 10022565  | 21      | 522402  | 5806024  | 13A/07 | 52.405950 | -56.670700 | 0.001    | 1.5     | 2   | 1          | 5         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112326 | 10022566  | 21      | 523121  | 5806999  | 13A/07 | 52.414683 | -56.660067 | 0.001    | 1.0     | 2   | 1          | 5         | 4    | 0      | 1       | 0          | 2         | 1       |
| SA5112327 | 10022567  | 21      | 522033  | 5807674  | 13A/07 | 52.420800 | -56.676017 | 0.370    | 2.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112328 | 10022568  | 21      | 521620  | 5811167  | 13A/07 | 52.452217 | -56.681867 | 0.052    | 7.5     | 1   | 1          | 1         | 3    | 3      | 0       | 0          | 1         | 1       |
| SA5112329 | 10022569  | 21      | 520480  | 5812677  | 13A/07 | 52.465833 | -56.698550 | 0.011    | 0.5     | 3   | 1          | 2         | 1    | 0      | 0       | 0          | 2         | 1       |
| SA5112330 | 10022571  | 21      | 520304  | 5814489  | 13A/07 | 52.482133 | -56.701033 | 0.002    | 1.5     | 2   | 0          | 4         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112331 | 10022572  | 21      | 519216  | 5815636  | 13A/07 | 52.492483 | -56.716983 | 0.125    | 2.5     | 3   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112332 | 10022573  | 21      | 522019  | 5815238  | 13A/07 | 52.488800 | -56.675733 | 0.356    | 2.5     | 1   | 1          | 13        | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112333 | 10022574  | 21      | 523432  | 5813563  | 13A/07 | 52.473683 | -56.655033 | 2.219    | 3.5     | 1   | 1          | 2         | 1    | 0      | 0       | 0          | 3         | 1       |
| SA5112334 | 10022575  | 21      | 525318  | 5811952  | 13A/07 | 52.459117 | -56.627400 | 0.001    | 1.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112335 | 10022576  | 21      | 523148  | 5807004  | 13A/07 | 52.414733 | -56.659667 | 0.001    | 1.0     | 2   | 1          | 4         | 4    | 0      | 2       | 0          | 2         | 1       |
| SA5112336 | 10022577  | 21      | 526071  | 5811732  | 13A/07 | 52.457100 | -56.616333 | 0.023    | 1.5     | 3   | 1          | 5         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112337 | 10022578  | 21      | 525104  | 5810994  | 13A/07 | 52.450517 | -56.630617 | 0.003    | 1.5     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112338 | -9        | 21      | 507559  | 5817067  | 13A/10 | 52.505633 | -56.888633 | 0.001    | 1.5     | 6   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112339 | 10022581  | 21      | 506621  | 5817942  | 13A/10 | 52.513517 | -56.902433 | 0.005    | 7.5     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112340 | 10022582  | 21      | 501323  | 5816568  | 13A/10 | 52.501200 | -56.980517 | 0.048    | 1.0     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112341 | 10022583  | 21      | 505240  | 5819693  | 13A/10 | 52.529267 | -56.922767 | 0.002    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112342 | 10022584  | 21      | 506913  | 5820929  | 13A/10 | 52.540367 | -56.898067 | 0.047    | 1.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112343 | 10022585  | 21      | 506055  | 5821440  | 13A/10 | 52.544967 | -56.910717 | 1.711    | 10.5    | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112344 | 10022586  | 21      | 502706  | 5821646  | 13A/10 | 52.546850 | -56.960100 | 0.034    | 1.5     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112345 | 10022587  | 21      | 501488  | 58221664 | 13A/10 | 52.547017 | -56.978050 | 0.007    | 1.5     | 6   | 1          | 1         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112346 | 10022588  | 21      | 501060  | 5822892  | 13A/10 | 52.558050 | -56.984367 | 0.083    | 6.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterCoIr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112347 | 10022589  | 21      | 502852  | 5823461  | 13A/10 | 52.563167 | -56.957933 | 0.003    | 7.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112348 | 10022591  | 21      | 507113  | 5823152  | 13A/10 | 52.560350 | -56.895083 | 0.172    | 13.0    | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112349 | 10022592  | 21      | 507043  | 5825255  | 13A/10 | 52.579250 | -56.896067 | 0.017    | 6.0     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112350 | 10022593  | 21      | 504412  | 5824745  | 13A/10 | 52.574700 | -56.934900 | 0.001    | 8.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112351 | 10022594  | 21      | 501861  | 5824918  | 13A/10 | 52.576267 | -56.972533 | 0.024    | 5.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112352 | 10022595  | 21      | 501935  | 5826259  | 13A/10 | 52.588317 | -56.971433 | 0.008    | 1.5     | 4   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112353 | 10022596  | 21      | 502978  | 5826656  | 13A/10 | 52.591883 | -56.956033 | 0.018    | 1.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112354 | 10022597  | 21      | 507236  | 5826745  | 13A/10 | 52.592650 | -56.893183 | 0.001    | 6.5     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112355 | 10022598  | 21      | 504468  | 5828429  | 13A/10 | 52.607817 | -56.934017 | 0.002    | 7.5     | 4   | 1          | 2         | 4    | 0      | 1       | 0          | 2         | 0       |
| SA5112356 | 10022599  | 21      | 502145  | 5829601  | 13A/10 | 52.618367 | -56.968317 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112357 | 10022601  | 21      | 500441  | 5829582  | 13A/10 | 52.618200 | -56.993483 | 0.003    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112358 | 10022602  | 21      | 500287  | 5830151  | 13A/10 | 52.623317 | -56.995767 | 0.002    | 1.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112359 | 10022603  | 21      | 504473  | 5828405  | 13A/10 | 52.607600 | -56.933950 | 0.002    | 6.0     | 4   | 1          | 2         | 4    | 0      | 2       | 0          | 2         | 0       |
| SA5112360 | 10022604  | 21      | 503744  | 5831386  | 13A/10 | 52.634400 | -56.944683 | 0.040    | 8.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112361 | 10022605  | 21      | 505102  | 5830388  | 13A/10 | 52.625417 | -56.924633 | 0.001    | 4.5     | 4   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112362 | 10022606  | 21      | 513120  | 5830588  | 13A/10 | 52.627083 | -56.806167 | 1.618    | 2.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112363 | 10022607  | 21      | 514068  | 5830900  | 13A/10 | 52.629867 | -56.792150 | 0.055    | 4.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112364 | 10022608  | 21      | 513192  | 5829272  | 13A/10 | 52.615250 | -56.805167 | 1.618    | 7.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112365 | 10022609  | 21      | 511383  | 5828201  | 13A/10 | 52.605667 | -56.831917 | 0.003    | 1.0     | 6   | 1          | 4         | 4    | 0      | 1       | 0          | 2         | 0       |
| SA5112366 | 10022611  | 21      | 509151  | 5828766  | 13A/10 | 52.610783 | -56.864867 | 0.113    | 7.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112367 | 10022612  | 21      | 509355  | 5826910  | 13A/10 | 52.594100 | -56.861900 | 0.243    | 22.0    | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112368 | 10022613  | 21      | 511346  | 5826479  | 13A/10 | 52.590183 | -56.832517 | 0.051    | 10.0    | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112369 | 10022614  | 21      | 511364  | 5828186  | 13A/10 | 52.605533 | -56.832200 | 0.003    | 1.5     | 6   | 1          | 4         | 4    | 0      | 2       | 0          | 2         | 0       |
| SA5112370 | 10022615  | 21      | 513126  | 5825417  | 13A/10 | 52.580600 | -56.806283 | 7.232    | 14.5    | -9  | -9         | 5         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112371 | 10022616  | 21      | 510250  | 5824306  | 13A/10 | 52.570667 | -56.848767 | 0.114    | 6.5     | 4   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112372 | 10022617  | 21      | 508791  | 5824822  | 13A/10 | 52.575333 | -56.870283 | 0.001    | 2.0     | 2   | 0          | 4         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112373 | 10022618  | 21      | 509329  | 5822708  | 13A/10 | 52.556317 | -56.862400 | 0.056    | 1.5     | 4   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112374 | 10022619  | 21      | 510208  | 5823128  | 13A/10 | 52.560083 | -56.849417 | 0.286    | 1.5     | 6   | 1          | 4         | 5    | 0      | 0       | 0          | 3         | 1       |
| SA5112375 | 10022621  | 21      | 512391  | 5822338  | 13A/10 | 52.552933 | -56.817250 | 0.015    | 5.0     | 6   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112376 | 10022622  | 21      | 511814  | 5820358  | 13A/10 | 52.535150 | -56.825833 | 0.007    | 1.5     | 2   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112377 | 10022623  | 21      | 509593  | 5820769  | 13A/10 | 52.538883 | -56.858567 | 0.086    | 10.0    | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112378 | 10022624  | 21      | 509125  | 5818710  | 13A/10 | 52.520383 | -56.865517 | 0.292    | 5.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112379 | 10022625  | 21      | 509504  | 5817663  | 13A/10 | 52.510967 | -56.859967 | 0.004    | 3.0     | 3   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112380 | 10022626  | 21      | 511338  | 5817632  | 13A/10 | 52.510650 | -56.832950 | 0.260    | 9.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112381 | 10022627  | 21      | 511174  | 5818874  | 13A/10 | 52.521817 | -56.835317 | 0.001    | 2.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112382 | 10022628  | 21      | 513823  | 5817058  | 13A/10 | 52.505433 | -56.796350 | 0.348    | 11.0    | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112383 | 10022629  | 21      | 514956  | 5817571  | 13A/10 | 52.510017 | -56.779633 | 0.007    | 1.5     | 2   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112384 | 10022631  | 21      | 516082  | 5817427  | 13A/10 | 52.508683 | -56.763050 | 0.001    | 1.5     | 2   | 1          | 4         | 5    | 0      | 1       | 0          | 1         | 1       |
| SA5112385 | 10022632  | 21      | 514580  | 5819704  | 13A/10 | 52.529200 | -56.785083 | 0.051    | 1.0     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112386 | 10022633  | 21      | 517930  | 5821584  | 13A/10 | 52.546000 | -56.735600 | 0.031    | 7.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112387 | 10022634  | 21      | 518134  | 5822805  | 13A/10 | 52.556967 | -56.732533 | 0.013    | 8.5     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112388 | 10022635  | 21      | 516846  | 5823321  | 13A/10 | 52.561650 | -56.751500 | 0.265    | 7.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112389 | 10022636  | 21      | 516082  | 5817410  | 13A/10 | 52.508533 | -56.763050 | 0.001    | 1.5     | 2   | 1          | 4         | 5    | 0      | 2       | 0          | 1         | 1       |
| SA5112390 | 10022637  | 21      | 515323  | 5823149  | 13A/10 | 52.560150 | -56.773967 | 0.024    | 3.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112391 | 10022638  | 21      | 516987  | 5825244  | 13A/10 | 52.578933 | -56.749317 | 7.232    | 21.0    | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112392 | 10022639  | 21      | 519176  | 5826589  | 13A/10 | 52.590950 | -56.716933 | 0.102    | 4.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112393 | 10022641  | 21      | 516676  | 5826871  | 13A/10 | 52.593567 | -56.753833 | 7.232    | 16.0    | 1   | 1          | 8         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112394 | 10022642  | 21      | 515463  | 5826778  | 13A/10 | 52.592767 | -56.771733 | 0.013    | 1.5     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 2       |
| SA5112395 | 10022643  | 21      | 514868  | 5829182  | 13A/10 | 52.614400 | -56.780417 | 0.059    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 3         | 2       |
| SA5112396 | 10022644  | 21      | 516676  | 5829653  | 13A/10 | 52.618583 | -56.753683 | 0.210    | 3.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112397 | 10022645  | 21      | 518301  | 5828990  | 13A/10 | 52.612567 | -56.729717 | 0.003    | 2.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112398 | 10022646  | 21      | 517698  | 5831027  | 13A/10 | 52.630900 | -56.738517 | 0.036    | 4.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112399 | 10022647  | 21      | 518487  | 5831108  | 13A/10 | 52.631600 | -56.726850 | 0.058    | 1.5     | 1   | 1          | 2         | 5    | 0      | 0       | 0          | 3         | 1       |
| SA5112400 | 10022648  | 21      | 520595  | 5831656  | 13A/10 | 52.636450 | -56.695683 | 0.254    | 2.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112401 | 10022649  | 21      | 521832  | 5829051  | 13A/10 | 52.612983 | -56.677567 | 0.573    | 6.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112402 | 10022651  | 21      | 521452  | 5825968  | 13A/10 | 52.585283 | -56.683383 | 0.003    | 3.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112403 | 10022652  | 21      | 523193  | 5826052  | 13A/10 | 52.585972 | -56.657685 | 0.006    | 1.5     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 0       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterColr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112404 | 10022653  | 21      | 523545  | 5828616  | 13A/10 | 52.609000 | -56.652300 | 0.025    | 4.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112405 | 10022654  | 21      | 524673  | 5826346  | 13A/10 | 52.588550 | -56.635817 | 0.067    | 10.0    | 6   | 1          | 1         | 3    | 3      | 0       | 0          | 1         | 2       |
| SA5112406 | 10022655  | 21      | 525804  | 5828864  | 13A/10 | 52.611133 | -56.618933 | 0.004    | 8.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112407 | 10022656  | 21      | 526181  | 5826397  | 13A/10 | 52.588933 | -56.613550 | 0.020    | 0.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112408 | 10022657  | 21      | 529017  | 5829129  | 13A/10 | 52.613350 | -56.571450 | 0.036    | 3.5     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112409 | 10022658  | 21      | 528964  | 5830438  | 13A/10 | 52.625117 | -56.572117 | 0.003    | 2.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112410 | 10022659  | 21      | 530318  | 5831784  | 13A/10 | 52.637150 | -56.552000 | 0.001    | 1.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112411 | 10022661  | 21      | 529190  | 5833122  | 13A/10 | 52.649233 | -56.568550 | 0.186    | 2.5     | 1   | 1          | 2         | 3    | 0      | 1       | 0          | 2         | 0       |
| SA5112412 | 10022662  | 21      | 528778  | 5834350  | 13A/10 | 52.660300 | -56.574533 | 0.280    | 1.0     | 1   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112413 | 10022663  | 21      | 527885  | 5834838  | 13A/10 | 52.664733 | -56.587683 | 1.771    | 7.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112414 | 10022664  | 21      | 527025  | 5833015  | 13A/10 | 52.648383 | -56.600550 | 0.004    | 5.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112415 | 10022665  | 21      | 526834  | 5831751  | 13A/10 | 52.637033 | -56.603483 | 0.001    | 2.0     | 1   | 1          | 7         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112416 | 10022666  | 21      | 525172  | 5831414  | 13A/10 | 52.634083 | -56.628067 | 0.008    | 3.0     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112417 | 10022667  | 21      | 525038  | 5833812  | 13A/10 | 52.655650 | -56.629867 | 0.001    | 5.0     | 2   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112418 | 10022668  | 21      | 525757  | 5835238  | 13A/10 | 52.668433 | -56.619117 | 1.771    | 5.0     | 1   | 1          | 1         | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112419 | 10022669  | 21      | 524551  | 5837160  | 13A/10 | 52.685767 | -56.636817 | 0.038    | 1.0     | 1   | 1          | 2         | 1    | 0      | 0       | 0          | 3         | 0       |
| SA5112420 | 10022671  | 21      | 529132  | 5833125  | 13A/10 | 52.649267 | -56.569400 | 0.186    | 2.5     | 1   | 1          | 5         | 4    | 0      | 2       | 0          | 2         | 0       |
| SA5112421 | 10022672  | 21      | 525224  | 5839279  | 13A/10 | 52.704783 | -56.626700 | 0.005    | 2.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112422 | 10022673  | 21      | 526051  | 5840054  | 13A/10 | 52.711717 | -56.614400 | 0.001    | 2.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112423 | 10022674  | 21      | 523870  | 5840453  | 13A/10 | 52.715400 | -56.646650 | 0.001    | 3.0     | 2   | 1          | 5         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112424 | -9        | 21      | 524726  | 5840785  | 13A/10 | 52.718350 | -56.633950 | 0.198    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 3         | 1       |
| SA5112425 | 10022675  | 21      | 524385  | 5842067  | 13A/10 | 52.729883 | -56.638900 | 0.033    | 3.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112426 | 10022676  | 21      | 523045  | 5842772  | 13A/10 | 52.736283 | -56.658700 | 0.003    | 1.5     | 2   | 1          | 2         | 4    | 5      | 2       | 0          | 2         | 0       |
| SA5112427 | 10022677  | 21      | 522153  | 5843823  | 13A/10 | 52.745767 | -56.671833 | 0.005    | 3.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112428 | 10022678  | 21      | 520168  | 5843100  | 13A/10 | 52.739350 | -56.701283 | 0.001    | 1.5     | 2   | 1          | 5         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112429 | 10022679  | 21      | 518679  | 5841982  | 13A/10 | 52.729350 | -56.723400 | 0.003    | 3.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112430 | 10022681  | 21      | 517217  | 5841613  | 13A/10 | 52.726083 | -56.745067 | 0.005    | 3.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112431 | 10022682  | 21      | 516753  | 5842726  | 13A/10 | 52.736100 | -56.751883 | 0.590    | 1.5     | 1   | 1          | 2         | 4    | 0      | 1       | 0          | 2         | 0       |
| SA5112432 | 10022683  | 21      | 515217  | 5843562  | 13A/10 | 52.743667 | -56.774600 | 0.001    | 2.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112433 | 10022684  | 21      | 513162  | 5843731  | 13A/10 | 52.745233 | -56.805033 | 0.002    | 3.5     | 6   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112434 | 10022685  | 21      | 516662  | 5842772  | 13A/10 | 52.736517 | -56.753233 | 0.590    | 1.5     | 1   | 1          | 2         | 2    | 0      | 2       | 0          | 2         | 0       |
| SA5112435 | 10022686  | 21      | 508295  | 5842878  | 13A/10 | 52.737667 | -56.877150 | 0.001    | 1.5     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112436 | 10022687  | 21      | 507474  | 5834584  | 13A/10 | 52.663117 | -56.889500 | 0.011    | 1.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112437 | 10022688  | 21      | 506451  | 5832870  | 13A/10 | 52.647717 | -56.904650 | 0.015    | 6.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112438 | 10022689  | 21      | 506274  | 5836666  | 13A/10 | 52.681850 | -56.907200 | 0.008    | 2.0     | 6   | 1          | 5         | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112439 | 10022691  | 21      | 502791  | 5834729  | 13A/10 | 52.664467 | -56.958733 | 0.045    | 1.5     | 6   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112440 | 10022692  | 21      | 502385  | 5835082  | 13A/10 | 52.667633 | -56.964733 | 0.565    | 6.0     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112441 | 10022693  | 21      | 501916  | 5837189  | 13A/10 | 52.686583 | -56.971650 | 0.132    | 13.0    | 6   | 1          | 5         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112442 | 10022694  | 21      | 502434  | 5838000  | 13A/10 | 52.693867 | -56.963983 | 0.015    | 2.0     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112443 | 10022695  | 21      | 500552  | 5840215  | 13A/10 | 52.713783 | -56.991833 | 0.127    | 7.0     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112444 | 10022696  | 21      | 501580  | 5839431  | 13A/10 | 52.706733 | -56.976617 | 0.006    | 2.0     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112445 | 10022697  | 21      | 502798  | 5839815  | 13A/10 | 52.710183 | -56.958583 | 0.006    | 2.5     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112446 | 10022698  | 21      | 509907  | 5840707  | 13A/10 | 52.718117 | -56.853333 | 0.003    | 2.0     | 2   | 0          | 2         | 5    | 0      | 1       | 0          | 1         | 2       |
| SA5112447 | 10022699  | 21      | 510391  | 5840932  | 13A/10 | 52.720133 | -56.846167 | 0.008    | 3.0     | 2   | 0          | 2         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112448 | 10022701  | 21      | 510651  | 5838699  | 13A/10 | 52.700050 | -56.842383 | 0.001    | 2.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 3         | 1       |
| SA5112449 | 10022702  | 21      | 512433  | 5838451  | 13A/10 | 52.697783 | -56.816033 | 0.005    | 3.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112450 | 10022703  | 21      | 513758  | 5837592  | 13A/10 | 52.690033 | -56.796450 | 0.092    | 9.0     | 6   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112451 | 10022704  | 21      | 515099  | 5839565  | 13A/10 | 52.707733 | -56.776533 | 0.001    | 3.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112452 | 10022705  | 21      | 515409  | 5837425  | 13A/10 | 52.688483 | -56.772033 | 0.001    | 3.5     | 3   | 1          | 8         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112453 | 10022706  | 21      | 513829  | 5836282  | 13A/10 | 52.678250 | -56.795467 | 0.111    | 13.0    | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112454 | 10022707  | 21      | 513309  | 5835811  | 13A/10 | 52.674033 | -56.803167 | 0.155    | 9.0     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112455 | 10022708  | 21      | 521235  | 5838659  | 13A/10 | 52.699383 | -56.685767 | 0.002    | 1.0     | 6   | 1          | 5         | 5    | 0      | 0       | 0          | 3         | 1       |
| SA5112456 | 10022709  | 21      | 509928  | 5840673  | 13A/10 | 52.717817 | -56.853033 | 0.003    | 1.5     | 2   | 0          | 2         | 5    | 0      | 2       | 0          | 1         | 1       |
| SA5112457 | 10022711  | 21      | 521344  | 5836205  | 13A/10 | 52.677317 | -56.684317 | 0.002    | 2.0     | 2   | 0          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112458 | 10022712  | 21      | 523587  | 5834936  | 13A/10 | 52.665817 | -56.651233 | 0.006    | 4.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112459 | 10022713  | 21      | 528788  | 5837155  | 13A/10 | 52.685517 | -56.574133 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112460 | 10022714  | 21      | 528347  | 5839869  | 13A/10 | 52.709933 | -56.580433 | 0.162    | 3.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 1       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterColr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112461 | 10022715  | 21      | 527200  | 5843759  | 13A/10 | 52.744967 | -56.597083 | 0.007    | 1.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112462 | 10022716  | 21      | 529097  | 5843381  | 13A/10 | 52.741467 | -56.569017 | 0.004    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112463 | 10022717  | 21      | 530572  | 5843868  | 13A/10 | 52.745767 | -56.547117 | 0.314    | 3.5     | 1   | 1          | 4         | 3    | 0      | 1       | 0          | 3         | 1       |
| SA5112464 | 10022718  | 21      | 533320  | 5840455  | 13A/10 | 52.714917 | -56.506767 | 0.513    | 3.5     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112465 | 10022719  | 21      | 531928  | 5838855  | 13A/10 | 52.700617 | -56.527517 | 0.937    | 7.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112466 | 10022721  | 21      | 534549  | 5837267  | 13A/10 | 52.686183 | -56.488900 | 0.001    | 3.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112467 | 10022722  | 21      | 533519  | 5836526  | 13A/10 | 52.679583 | -56.504217 | 0.116    | 4.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112468 | 10022723  | 21      | 531676  | 5836845  | 13A/10 | 52.682567 | -56.531450 | 0.100    | 2.0     | 6   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112469 | 10022724  | 21      | 532500  | 5835682  | 13A/10 | 52.672067 | -56.519367 | 0.037    | 2.0     | 3   | 1          | 2         | 3    | 1      | 0       | 0          | 2         | 0       |
| SA5112470 | 10022725  | 21      | 530479  | 5834935  | 13A/10 | 52.665467 | -56.549333 | 0.112    | 1.5     | 3   | 1          | 4         | 1    | 0      | 0       | 0          | 3         | 1       |
| SA5112471 | 10022726  | 21      | 530648  | 5833488  | 13A/10 | 52.652450 | -56.546967 | 0.001    | 2.5     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112472 | 10022727  | 21      | 532560  | 5832972  | 13A/10 | 52.647700 | -56.518750 | 0.040    | 2.0     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 3         | 0       |
| SA5112473 | 10022728  | 21      | 531329  | 5865875  | 13A/10 | 52.943550 | -56.533800 | 0.008    | 2.5     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112474 | 10022729  | 21      | 531926  | 5866758  | 13A/10 | 52.951450 | -56.524817 | 0.002    | 2.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112475 | 10022731  | 21      | 533262  | 5870818  | 13A/10 | 52.987867 | -56.504517 | 0.004    | 2.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112476 | 10022732  | 21      | 530030  | 5871882  | 13A/10 | 52.997617 | -56.552567 | 0.002    | 2.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112477 | 10022733  | 21      | 530256  | 5868449  | 13A/10 | 52.966750 | -56.549517 | 0.001    | 1.5     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112478 | 10022734  | 21      | 530495  | 5843883  | 13A/10 | 52.745900 | -56.548267 | 0.314    | 4.0     | 1   | 1          | 4         | 3    | 0      | 2       | 0          | 3         | 1       |
| SA5112479 | 10022735  | 21      | 526870  | 5868628  | 13A/15 | 52.968533 | -56.599917 | 0.002    | 2.0     | 2   | 0          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112480 | 10022736  | 21      | 525371  | 5871095  | 13A/15 | 52.990783 | -56.622050 | 0.003    | 1.5     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 2         | 2       |
| SA5112481 | 10022737  | 21      | 523283  | 5871600  | 13A/15 | 52.995417 | -56.653117 | 0.001    | 2.0     | 2   | 0          | 2         | 8    | 0      | 0       | 0          | 1         | 0       |
| SA5112482 | 10022738  | 21      | 524913  | 5868474  | 13A/15 | 52.967250 | -56.629067 | 0.231    | 1.5     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112483 | 10022739  | 21      | 524115  | 5866961  | 13A/15 | 52.953683 | -56.641067 | 0.001    | 1.5     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112484 | 10022741  | 21      | 523726  | 5867517  | 13A/15 | 52.958700 | -56.646817 | 0.270    | 1.5     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112485 | -9        | 21      | 523075  | 5868502  | 13A/15 | 52.967583 | -56.656433 | 0.001    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 1         | 0       |
| SA5112486 | 10022742  | 21      | 520430  | 5869312  | 13A/15 | 52.974967 | -56.695767 | 0.003    | 2.0     | 3   | 1          | 1         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112487 | 10022743  | 21      | 521325  | 5866957  | 13A/15 | 52.953767 | -56.682583 | 0.001    | 1.5     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112488 | 10022744  | 21      | 521394  | 5864933  | 13A/15 | 52.935567 | -56.681700 | 0.001    | 2.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112489 | 10022745  | 21      | 518197  | 5865241  | 13A/15 | 52.938450 | -56.729250 | 0.001    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112490 | 10022746  | 21      | 518676  | 5868344  | 13A/15 | 52.966333 | -56.721933 | 0.002    | 2.0     | 3   | 1          | 5         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112491 | 10022747  | 21      | 517231  | 5870836  | 13A/15 | 52.988783 | -56.743317 | 0.001    | 1.5     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112492 | 10022748  | 21      | 515577  | 5868689  | 13A/15 | 52.969533 | -56.768067 | 0.001    | 1.5     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112493 | 10022749  | 21      | 515833  | 5867937  | 13A/15 | 52.962767 | -56.764283 | 0.001    | 1.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112494 | 10022751  | 21      | 516806  | 5867282  | 13A/15 | 52.956850 | -56.749833 | 0.003    | 2.0     | 2   | 1          | 4         | 4    | 0      | 1       | 0          | 1         | 0       |
| SA5112495 | 10022752  | 21      | 512804  | 5865199  | 13A/15 | 52.938233 | -56.809483 | 0.001    | 2.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112496 | 10022753  | 21      | 513367  | 5866200  | 13A/15 | 52.947217 | -56.801067 | 0.002    | 2.0     | 3   | 1          | 5         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112497 | 10022754  | 21      | 509375  | 5868940  | 13A/15 | 52.971933 | -56.860400 | 0.001    | 1.0     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112498 | 10022755  | 21      | 516770  | 5867301  | 13A/15 | 52.957017 | -56.750367 | 0.003    | 1.5     | 2   | 1          | 4         | 4    | 0      | 2       | 0          | 1         | 0       |
| SA5112499 | 10022756  | 21      | 507528  | 5866028  | 13A/15 | 52.945783 | -56.887967 | 0.001    | 2.0     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112500 | 10022757  | 21      | 508526  | 5864984  | 13A/15 | 52.936383 | -56.873150 | 0.003    | 2.5     | 2   | 0          | 5         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112501 | 10022758  | 21      | 508720  | 5862509  | 13A/15 | 52.914133 | -56.870333 | 0.002    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112502 | 10022759  | 21      | 506214  | 5862798  | 13A/15 | 52.916767 | -56.907583 | 0.001    | 1.5     | 3   | 1          | 4         | 3    | 0      | 1       | 0          | 2         | 0       |
| SA5112503 | -9        | 21      | 504370  | 5867123  | 13A/15 | 52.955667 | -56.934950 | 0.001    | -9.0    | 6   | 1          | -9        | -9   | 0      | 0       | 0          | 1         | 0       |
| SA5112504 | 10022761  | 21      | 504150  | 5869765  | 13A/15 | 52.979417 | -56.938200 | 0.109    | 1.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112505 | 10022762  | 21      | 503221  | 5866563  | 13A/15 | 52.950633 | -56.952067 | 0.001    | 2.0     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112506 | 10022763  | 21      | 500897  | 5867283  | 13A/15 | 52.957117 | -56.986650 | 0.001    | 0.5     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112507 | 10022764  | 21      | 502257  | 5862302  | 13A/15 | 52.912333 | -56.966433 | 0.001    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 3         | 2       |
| SA5112508 | 10022765  | 21      | 502620  | 5860464  | 13A/15 | 52.895817 | -56.961050 | 0.001    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112509 | 10022766  | 21      | 500851  | 5859481  | 13A/15 | 52.886983 | -56.987350 | 0.010    | 3.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112510 | 10022767  | 21      | 506185  | 5862813  | 13A/15 | 52.916900 | -56.908017 | 0.001    | 1.5     | 3   | 1          | 4         | 5    | 0      | 2       | 0          | 2         | 0       |
| SA5112511 | 10022768  | 21      | 502315  | 5859011  | 13A/15 | 52.882750 | -56.965600 | 0.407    | 1.5     | 1   | 1          | 7         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112512 | 10022769  | 21      | 504363  | 5857603  | 13A/15 | 52.870083 | -56.935183 | 0.001    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112513 | 10022771  | 21      | 505382  | 5858416  | 13A/15 | 52.877383 | -56.920033 | 0.001    | 2.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112514 | 10022772  | 21      | 506854  | 5859675  | 13A/15 | 52.888683 | -56.898133 | 0.002    | 1.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 3         | 2       |
| SA5112515 | 10022773  | 21      | 507183  | 5857289  | 13A/15 | 52.867233 | -56.893300 | 0.007    | 2.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112516 | 10022774  | 21      | 508215  | 5858700  | 13A/15 | 52.879900 | -56.877933 | 0.003    | 2.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112517 | 10022775  | 21      | 509101  | 5857376  | 13A/15 | 52.867983 | -56.864800 | 0.006    | 1.5     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 1       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterColr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112518 | 10022776  | 21      | 510176  | 5858007  | 13A/15 | 52.873633 | -56.848817 | 0.007    | 2.5     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112519 | 10022777  | 21      | 511107  | 5857480  | 13A/15 | 52.868883 | -56.835000 | 0.006    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112520 | 10022778  | 21      | 516803  | 5862918  | 13A/15 | 52.917617 | -56.750100 | 0.001    | 2.0     | 3   | 0          | -9        | 4    | 4      | 0       | 0          | 1         | 1       |
| SA5112521 | 10022779  | 21      | 516909  | 5861202  | 13A/15 | 52.902183 | -56.748617 | 0.001    | 1.5     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112522 | 10022781  | 21      | 519151  | 5861575  | 13A/15 | 52.905467 | -56.715267 | 0.003    | 2.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112523 | 10022782  | 21      | 521072  | 5861361  | 13A/15 | 52.903467 | -56.686717 | 0.001    | 1.5     | 3   | 1          | 2         | 4    | 0      | 1       | 0          | 2         | 1       |
| SA5112524 | 10022783  | 21      | 520888  | 5862704  | 13A/15 | 52.915550 | -56.689367 | 0.001    | 3.5     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112525 | 10022784  | 21      | 522396  | 5862299  | 13A/15 | 52.911850 | -56.666967 | 0.002    | 2.5     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112526 | 10022785  | 21      | 525512  | 5865270  | 13A/15 | 52.938417 | -56.620400 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112527 | 10022786  | 21      | 521063  | 5861364  | 13A/15 | 52.903500 | -56.686850 | 0.001    | 1.5     | 3   | 1          | 2         | 4    | 0      | 2       | 0          | 2         | 2       |
| SA5112528 | 10022787  | 21      | 528905  | 5864099  | 13A/15 | 52.927717 | -56.570017 | 0.006    | 3.0     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112529 | 10022788  | 21      | 528925  | 5863865  | 13A/15 | 52.925617 | -56.569750 | 0.012    | 2.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112530 | 10022789  | 21      | 528600  | 5861538  | 13A/15 | 52.904717 | -56.574783 | 0.001    | 3.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 2       |
| SA5112531 | 10022791  | 21      | 531631  | 5864209  | 13A/15 | 52.928550 | -56.529467 | 0.002    | 2.5     | 2   | 1          | 5         | 1    | 0      | 0       | 0          | 1         | 2       |
| SA5112532 | 10022792  | 21      | 533386  | 5864246  | 13A/15 | 52.928783 | -56.503350 | 0.010    | 1.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112533 | 10022793  | 21      | 533087  | 5860681  | 13A/15 | 52.896750 | -56.508167 | 0.001    | 1.5     | 2   | 0          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112534 | 10022794  | 21      | 533585  | 5859082  | 13A/15 | 52.882350 | -56.500933 | 0.001    | 2.0     | 2   | 0          | 2         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112535 | 10022795  | 21      | 529843  | 5858019  | 13A/15 | 52.873017 | -56.556633 | 0.002    | 2.0     | 3   | 1          | 5         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112536 | 10022796  | 21      | 527633  | 5854339  | 13A/15 | 52.840050 | -56.589767 | 0.006    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112537 | 10022797  | 21      | 529100  | 5853741  | 13A/15 | 52.834600 | -56.568050 | 0.668    | 3.0     | 1   | 1          | 1         | 3    | 3      | 0       | 0          | 2         | 1       |
| SA5112538 | 10022798  | 21      | 531109  | 5855118  | 13A/15 | 52.846867 | -56.538100 | 0.002    | 1.5     | 2   | 1          | 1         | 3    | 2      | 0       | 0          | 1         | 1       |
| SA5112539 | 10022799  | 21      | 533327  | 5856772  | 13A/15 | 52.861600 | -56.505000 | 0.799    | 3.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 2       |
| SA5112540 | 10022801  | 21      | 532673  | 5855692  | 13A/15 | 52.851933 | -56.514817 | 0.799    | 2.0     | 1   | 1          | 1         | 3    | 1      | 0       | 0          | 2         | 1       |
| SA5112541 | 10022802  | 21      | 533708  | 5830357  | 13A/10 | 52.624117 | -56.502050 | 0.001    | 4.0     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112542 | 10022803  | 21      | 533190  | 5824548  | 13A/10 | 52.571933 | -56.510283 | 0.015    | 2.5     | 3   | 1          | 5         | 3    | 0      | 1       | 0          | 2         | 1       |
| SA5112543 | 10022804  | 21      | 531455  | 5825545  | 13A/10 | 52.581000 | -56.535783 | 0.216    | 4.0     | 1   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112544 | 10022805  | 21      | 530970  | 5823019  | 13A/10 | 52.558317 | -56.543183 | 0.001    | 1.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112545 | 10022806  | 21      | 529802  | 5822971  | 13A/10 | 52.557950 | -56.560417 | 0.002    | 2.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 1         | 2       |
| SA5112546 | 10022807  | 21      | 529204  | 5823995  | 13A/10 | 52.567183 | -56.569150 | 0.002    | 1.0     | 2   | 0          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112547 | 10022808  | 21      | 527511  | 5823755  | 13A/10 | 52.565117 | -56.594150 | 0.125    | 1.5     | 3   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112548 | 10022809  | 21      | 526640  | 5820322  | 13A/10 | 52.534300 | -56.607267 | 3.904    | 3.0     | 1   | 1          | 5         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112549 | 10022811  | 21      | 524708  | 5820961  | 13A/10 | 52.540133 | -56.635700 | 0.001    | 1.0     | 2   | 1          | 2         | 1    | 0      | 0       | 0          | 2         | 1       |
| SA5112550 | 10022812  | 21      | 524642  | 5822549  | 13A/10 | 52.554417 | -56.636550 | 0.313    | 7.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112551 | 10022813  | 21      | 522642  | 5823559  | 13A/10 | 52.563583 | -56.665983 | 0.054    | 1.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112552 | 10022814  | 21      | 519846  | 5824584  | 13A/10 | 52.572900 | -56.707167 | 0.008    | 1.0     | 1   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 1       |
| SA5112553 | 10022815  | 21      | 519016  | 5820133  | 13A/10 | 52.532917 | -56.719667 | 0.089    | 1.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112554 | 10022816  | 21      | 533156  | 5824594  | 13A/07 | 52.572350 | -56.510783 | 0.015    | 2.0     | 3   | 1          | 5         | 4    | 0      | 2       | 0          | 2         | 1       |
| SA5112555 | 10022817  | 21      | 522638  | 5819794  | 13A/10 | 52.529733 | -56.666300 | 0.149    | 4.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 2       |
| SA5112556 | 10022818  | 21      | 521471  | 5818519  | 13A/10 | 52.518317 | -56.683583 | 0.832    | 2.5     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 2       |
| SA5112557 | 10022819  | 21      | 519686  | 5819140  | 13A/10 | 52.523967 | -56.709850 | 0.040    | 5.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112558 | 10022821  | 21      | 522536  | 5816371  | 13A/10 | 52.498967 | -56.668033 | 1.247    | 5.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112559 | 10022822  | 21      | 524540  | 5816403  | 13A/10 | 52.499167 | -56.638517 | 1.247    | 3.5     | 1   | 1          | 1         | 1    | 0      | 0       | 0          | 2         | 2       |
| SA5112560 | 10022823  | 21      | 528538  | 5819712  | 13A/10 | 52.528717 | -56.579333 | 3.904    | 9.0     | 1   | 1          | 7         | 1    | 0      | 0       | 0          | 2         | 1       |
| SA5112561 | 10022824  | 21      | 531815  | 5820210  | 13A/10 | 52.533017 | -56.530983 | 0.001    | 1.0     | 2   | 0          | 4         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112562 | -9        | 21      | 533532  | 5820822  | 13A/10 | 52.538417 | -56.505617 | 0.313    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 1       |
| SA5112563 | 10022825  | 21      | 532147  | 5817239  | 13A/10 | 52.506283 | -56.526383 | 0.054    | 1.0     | 3   | 1          | 2         | 1    | 0      | 0       | 0          | 2         | 1       |
| SA5112564 | 10022826  | 21      | 531871  | 5816716  | 13A/10 | 52.501600 | -56.530500 | 0.008    | 2.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 3         | 2       |
| SA5112565 | 10022827  | 21      | 532444  | 5814958  | 13A/10 | 52.485767 | -56.522233 | 0.089    | 3.0     | 1   | 1          | 7         | 1    | 0      | 0       | 0          | 1         | 2       |
| SA5112566 | -9        | 21      | 530308  | 5815162  | 13A/10 | 52.487717 | -56.553667 | 0.798    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 2       |
| SA5112567 | 10022828  | 21      | 526856  | 5814378  | 13A/10 | 52.480850 | -56.604567 | 0.538    | 9.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 3         | 1       |
| SA5112568 | 10022829  | 21      | 525435  | 5814693  | 13A/10 | 52.483750 | -56.625467 | 0.010    | 2.0     | 3   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 1       |
| SA5112569 | 10022831  | 21      | 527835  | 5813199  | 13A/10 | 52.470200 | -56.590250 | 0.002    | 1.0     | 2   | 1          | 4         | 4    | 0      | 1       | 0          | 1         | 1       |
| SA5112570 | 10022832  | 21      | 529504  | 5811682  | 13A/10 | 52.456483 | -56.565817 | 1.024    | 5.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 2       |
| SA5112571 | 10022833  | 21      | 527853  | 5813180  | 13A/10 | 52.470033 | -56.589983 | 0.002    | 1.5     | 2   | 1          | 4         | 4    | 0      | 2       | 0          | 1         | 2       |
| SA5112572 | 10022834  | 21      | 531441  | 5812353  | 13A/10 | 52.462400 | -56.537250 | 0.629    | 13.0    | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 2       |
| SA5112573 | 10022835  | 21      | 533932  | 5812137  | 13A/10 | 52.460317 | -56.500600 | 0.049    | 1.5     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 3         | 2       |
| SA5112574 | 10022836  | 21      | 533141  | 5811624  | 13A/10 | 52.455750 | -56.512300 | 0.031    | 1.5     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 2       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterColr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112575 | 10022837  | 21      | 530838  | 5810002  | 13A/10 | 52.441300 | -56.546333 | 0.007    | 1.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112576 | 10022838  | 21      | 530082  | 5810792  | 13A/10 | 52.448450 | -56.557383 | 1.024    | 3.0     | 1   | 1          | 7         | 3    | 0      | 0       | 0          | 3         | 2       |
| SA5112577 | 10022839  | 21      | 529418  | 5809357  | 13A/10 | 52.435583 | -56.567283 | 0.478    | 1.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112578 | 10022841  | 21      | 527017  | 5806220  | 13A/10 | 52.407500 | -56.602850 | 0.087    | 2.5     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112579 | 10022842  | 21      | 527942  | 5805303  | 13A/10 | 52.399217 | -56.589333 | 0.118    | 3.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112580 | 10022843  | 21      | 530521  | 5805219  | 13A/10 | 52.398317 | -56.551433 | 0.011    | 2.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112581 | 10022844  | 21      | 529545  | 5804432  | 13A/10 | 52.391300 | -56.565850 | 0.011    | 0.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112582 | 10022845  | 21      | 529028  | 5803194  | 13A/10 | 52.380200 | -56.573550 | 0.004    | 1.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112583 | 10022846  | 21      | 523820  | 5800764  | 13A/10 | 52.358600 | -56.650233 | 0.298    | 4.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112584 | 10022847  | 21      | 522084  | 5798325  | 13A/10 | 52.336750 | -56.675883 | 0.001    | 1.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112585 | 10022848  | 21      | 525277  | 5797988  | 13A/10 | 52.333583 | -56.629050 | 0.001    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112586 | 10022849  | 21      | 525853  | 5797585  | 13A/07 | 52.329933 | -56.620633 | 0.007    | 2.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112587 | 10022851  | 21      | 527188  | 5796844  | 13A/07 | 52.323200 | -56.601100 | 0.142    | 3.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112588 | 10022852  | 21      | 528492  | 5798801  | 13A/07 | 52.340733 | -56.581800 | 0.016    | 2.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112589 | 10022853  | 21      | 530230  | 5800230  | 13A/07 | 52.353483 | -56.556167 | 0.062    | 3.0     | 1   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112590 | 10022854  | 21      | 533844  | 5800110  | 13A/07 | 52.352200 | -56.503117 | 0.126    | 1.5     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112591 | 10022855  | 21      | 536688  | 5801315  | 13A/08 | 52.362850 | -56.461233 | 0.001    | 1.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112592 | 10022856  | 21      | 535688  | 5801646  | 13A/08 | 52.365883 | -56.475883 | 0.049    | 2.0     | 7   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112593 | 10022857  | 21      | 535684  | 5805103  | 13A/08 | 52.396967 | -56.475567 | 0.006    | 1.5     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112594 | 10022858  | 21      | 534317  | 5807283  | 13A/08 | 52.416650 | -56.495433 | 0.001    | 1.5     | 2   | 1          | 5         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112595 | 10022859  | 21      | 534329  | 5813894  | 13A/08 | 52.476083 | -56.494583 | 0.197    | 1.5     | 6   | 1          | 5         | 4    | 0      | 1       | 0          | 2         | 0       |
| SA5112596 | 10022861  | 21      | 534316  | 5815349  | 13A/08 | 52.489167 | -56.494617 | 0.023    | 3.5     | 1   | 0          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112597 | 10022862  | 21      | 534373  | 5813885  | 13A/08 | 52.476000 | -56.493933 | 0.197    | 3.0     | 6   | 1          | 5         | 4    | 0      | 2       | 0          | 2         | 0       |
| SA5112598 | 10022863  | 21      | 536757  | 5815048  | 13A/08 | 52.486300 | -56.458717 | 0.438    | 3.0     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112599 | 10022864  | 21      | 538125  | 5812285  | 13A/08 | 52.461367 | -56.438883 | 0.010    | 0.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112600 | 10022865  | 21      | 537194  | 5812304  | 13A/08 | 52.461600 | -56.452583 | 0.081    | 1.5     | 1   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112601 | 10022866  | 21      | 536427  | 5810854  | 13A/08 | 52.448617 | -56.464033 | 0.073    | 3.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112602 | 10022867  | 21      | 535427  | 5810724  | 13A/08 | 52.447517 | -56.478750 | 0.063    | 2.5     | 3   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112603 | 10022868  | 21      | 536085  | 5808456  | 13A/08 | 52.427083 | -56.469317 | 0.065    | 2.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112604 | -9        | 21      | 539461  | 5808641  | 13A/08 | 52.428517 | -56.419650 | 0.055    | -9.0    | 6   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 0       |
| SA5112605 | 10022869  | 21      | 539455  | 5806873  | 13A/08 | 52.412617 | -56.419950 | 0.064    | 6.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112606 | 10022871  | 21      | 538684  | 5810740  | 13A/08 | 52.447433 | -56.430833 | 0.004    | 7.0     | 2   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112607 | 10022872  | 21      | 539961  | 5811553  | 13A/08 | 52.454650 | -56.411950 | 0.026    | 7.0     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112608 | 10022873  | 21      | 539821  | 5814601  | 13A/08 | 52.482067 | -56.413650 | 0.100    | 5.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112609 | 10022874  | 21      | 541628  | 5814787  | 13A/08 | 52.483600 | -56.387017 | 1.737    | 7.5     | 6   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112610 | 10022875  | 21      | 542493  | 5813667  | 13A/08 | 52.473467 | -56.374417 | 0.103    | 1.0     | 6   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112611 | 10022876  | 21      | 533233  | 5844742  | 13A/15 | 52.753467 | -56.507617 | 0.189    | 3.0     | 1   | 1          | 2         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112612 | 10022877  | 21      | 532602  | 5846805  | 13A/15 | 52.772050 | -56.516767 | 0.002    | 2.5     | 3   | 1          | 2         | 3    | 0      | 1       | 0          | 1         | 0       |
| SA5112613 | -9        | 21      | 531614  | 5847539  | 13A/15 | 52.778700 | -56.531333 | 4.072    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 0       |
| SA5112614 | 10022878  | 21      | 531606  | 5849393  | 13A/15 | 52.795367 | -56.531267 | 0.001    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112615 | 10022879  | 21      | 530577  | 5849777  | 13A/15 | 52.798883 | -56.546500 | 0.001    | 2.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112616 | 10022881  | 21      | 534223  | 5851554  | 13A/15 | 52.814633 | -56.492233 | 0.732    | 4.0     | 1   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112617 | 10022882  | 21      | 532879  | 5852787  | 13A/15 | 52.825800 | -56.512050 | 0.001    | 2.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112618 | 10022883  | 21      | 530732  | 5853334  | 13A/15 | 52.830850 | -56.543867 | 0.002    | 3.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112619 | 10022884  | 21      | 529588  | 5851805  | 13A/15 | 52.817167 | -56.560983 | 0.002    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112620 | 10022885  | 21      | 532584  | 5846831  | 13A/15 | 52.772283 | -56.517017 | 0.002    | 1.5     | 3   | 1          | 4         | 4    | 0      | 2       | 0          | 1         | 0       |
| SA5112621 | 10022886  | 21      | 528886  | 5852726  | 13A/15 | 52.825483 | -56.571317 | 0.001    | 1.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112622 | 10022887  | 21      | 527238  | 5852728  | 13A/15 | 52.825583 | -56.595767 | 0.985    | 1.5     | 1   | 1          | 2         | 2    | 0      | 0       | 0          | 1         | 0       |
| SA5112623 | 10022888  | 21      | 523565  | 5854555  | 13A/15 | 52.842183 | -56.650150 | 1.964    | 2.0     | 1   | 1          | 2         | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112624 | 10022889  | 21      | 525108  | 5854828  | 13A/15 | 52.844567 | -56.627217 | 0.002    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112625 | 10022891  | 21      | 526252  | 5857548  | 13A/15 | 52.868967 | -56.610017 | 0.001    | 2.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112626 | 10022892  | 21      | 524243  | 5859618  | 13A/15 | 52.887667 | -56.639700 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112627 | 10022893  | 21      | 524352  | 5860898  | 13A/15 | 52.899167 | -56.637983 | 0.126    | 2.5     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112628 | 10022894  | 21      | 523852  | 5860128  | 13A/15 | 52.892267 | -56.645483 | 0.005    | 1.5     | 3   | 1          | 5         | 4    | 0      | 1       | 0          | 2         | 0       |
| SA5112629 | 10022895  | 21      | 523815  | 5860083  | 13A/15 | 52.891867 | -56.646033 | 0.005    | 1.0     | 3   | 1          | 5         | 4    | 0      | 2       | 0          | 2         | 0       |
| SA5112630 | 10022896  | 21      | 520783  | 5854238  | 13A/15 | 52.839450 | -56.691467 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112631 | 10022897  | 21      | 520605  | 5853651  | 13A/15 | 52.834183 | -56.694150 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterColr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112632 | 10022898  | 21      | 523193  | 5852705  | 13A/15 | 52.825567 | -56.655800 | 0.001    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112633 | 10022899  | 21      | 523334  | 5851166  | 13A/15 | 52.811733 | -56.653817 | 0.003    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112634 | 10022901  | 21      | 527601  | 5850112  | 13A/15 | 52.802050 | -56.590600 | 0.005    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112635 | -9        | 21      | 528076  | 5848153  | 13A/15 | 52.784417 | -56.583733 | 4.072    | -9.0    | 1   | 1          | -9        | -9   | -9     | 0       | 0          | 2         | 0       |
| SA5112636 | 10022902  | 21      | 527158  | 5848203  | 13A/15 | 52.784917 | -56.597333 | 0.077    | 1.0     | 1   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112637 | 10022903  | 21      | 525611  | 5848740  | 13A/15 | 52.789817 | -56.620233 | 0.002    | 2.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112638 | 10022904  | 21      | 523645  | 5848882  | 13A/15 | 52.791183 | -56.649367 | 0.002    | 3.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112639 | 10022905  | 21      | 518973  | 5846184  | 13A/15 | 52.767117 | -56.718800 | 0.004    | 3.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112640 | 10022906  | 21      | 517243  | 5848975  | 13A/15 | 52.792267 | -56.744300 | 0.004    | 4.0     | 2   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112641 | 10022907  | 21      | 517622  | 5850579  | 13A/15 | 52.806667 | -56.738600 | 0.003    | 1.5     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112642 | 10022908  | 21      | 518394  | 5851394  | 13A/15 | 52.813967 | -56.727100 | 0.006    | 2.5     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112643 | 10022909  | 21      | 521753  | 5849863  | 13A/15 | 52.800083 | -56.677367 | 0.011    | 2.0     | 2   | 1          | 4         | 5    | 0      | 1       | 0          | 1         | 0       |
| SA5112644 | 10022911  | 21      | 520419  | 5851795  | 13A/15 | 52.817500 | -56.697033 | 0.001    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112645 | 10022912  | 21      | 518536  | 5854081  | 13A/15 | 52.838117 | -56.724833 | 0.002    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112646 | 10022913  | 21      | 517634  | 5854780  | 13A/15 | 52.844433 | -56.738183 | 0.017    | 2.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112647 | 10022914  | 21      | 515853  | 5856897  | 13A/15 | 52.863517 | -56.764533 | 0.002    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112648 | 10022915  | 21      | 516151  | 5858210  | 13A/15 | 52.875317 | -56.760033 | 0.001    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112649 | 10022916  | 21      | 514850  | 5855998  | 13A/15 | 52.855467 | -56.779467 | 0.020    | 1.5     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112650 | 10022917  | 21      | 514005  | 5855117  | 13A/15 | 52.847567 | -56.792050 | 0.003    | 2.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112651 | 10022918  | 21      | 515481  | 5855199  | 13A/15 | 52.848267 | -56.770133 | 0.008    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112652 | 10022919  | 21      | 516509  | 5852824  | 13A/15 | 52.826883 | -56.754983 | 0.001    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112653 | 10022921  | 21      | 521704  | 5849852  | 13A/15 | 52.799983 | -56.678083 | 0.011    | 2.0     | 2   | 1          | 5         | 4    | 0      | 2       | 0          | 1         | 0       |
| SA5112654 | 10022922  | 21      | 515396  | 5846974  | 13A/15 | 52.774333 | -56.771783 | 1.847    | 1.0     | 1   | 1          | 10        | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112655 | 10022923  | 21      | 514851  | 5846035  | 13A/15 | 52.765900 | -56.779900 | 0.024    | 0.5     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112656 | 10022924  | 21      | 508485  | 5845767  | 13A/15 | 52.763633 | -56.874250 | 0.001    | 2.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112657 | 10022925  | 21      | 511697  | 5845511  | 13A/15 | 52.761267 | -56.826667 | 0.002    | 2.0     | 3   | 1          | 4         | 4    | 1      | 0       | 0          | 1         | 1       |
| SA5112658 | 10022926  | 21      | 511453  | 5849947  | 13A/15 | 52.801150 | -56.830133 | 0.004    | 2.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112659 | 10022927  | 21      | 510805  | 5850047  | 13A/15 | 52.802067 | -56.839733 | 0.092    | 1.5     | 6   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112660 | 10022928  | 21      | 507682  | 5851001  | 13A/15 | 52.810700 | -56.886033 | 0.004    | 1.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112661 | 10022929  | 21      | 502893  | 5845647  | 13A/15 | 52.762617 | -56.957133 | 0.003    | 2.5     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112662 | 10022931  | 21      | 501866  | 5853732  | 13A/15 | 52.835300 | -56.972300 | 0.005    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112663 | 10022932  | 21      | 506300  | 5852169  | 13A/15 | 52.821217 | -56.906517 | 0.002    | 1.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112664 | 10022933  | 21      | 506598  | 5853566  | 13A/15 | 52.833767 | -56.902067 | 0.001    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112665 | 10022934  | 21      | 504366  | 5854364  | 13A/15 | 52.840967 | -56.935183 | 0.039    | 2.0     | 2   | 1          | 7         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112666 | 10022935  | 21      | 500743  | 5856824  | 13A/15 | 52.863100 | -56.988967 | 0.005    | 3.5     | 2   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112667 | 10022936  | 21      | 498501  | 5859648  | 13A/14 | 52.888483 | -57.022283 | 0.007    | 1.0     | 3   | 1          | 4         | 4    | 0      | 1       | 0          | 3         | 2       |
| SA5112668 | 10022937  | 21      | 499186  | 5860501  | 13A/14 | 52.896150 | -57.012100 | 0.014    | 2.0     | 6   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112669 | 10022938  | 21      | 500009  | 5863934  | 13A/15 | 52.927017 | -56.999867 | 0.007    | 1.5     | 1   | 1          | 8         | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112670 | 10022939  | 21      | 499238  | 5866337  | 13A/14 | 52.948617 | -57.011333 | 0.001    | 5.5     | 1   | 0          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112671 | 10022941  | 21      | 496940  | 5866694  | 13A/14 | 52.951817 | -57.045550 | 0.012    | 2.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112672 | 10022942  | 21      | 496320  | 5864336  | 13A/14 | 52.930617 | -57.054750 | 0.002    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 3         | 0       |
| SA5112673 | -9        | 21      | 494522  | 5868472  | 13A/14 | 52.967783 | -57.081567 | 0.001    | -9.0    | 1   | 1          | -9        | -9   | 0      | 0       | 0          | 1         | 0       |
| SA5112674 | 10022943  | 21      | 492821  | 5870423  | 13A/14 | 52.985300 | -57.106933 | 0.001    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112675 | -9        | 21      | 490652  | 5869396  | 13A/14 | 52.976033 | -57.139217 | 0.015    | -9.0    | 2   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 0       |
| SA5112676 | 10022944  | 21      | 492617  | 5865060  | 13A/14 | 52.937083 | -57.109850 | 0.006    | 1.5     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112677 | 10022945  | 21      | 492791  | 5863788  | 13A/14 | 52.925650 | -57.107233 | 0.053    | 1.5     | 3   | 1          | 13        | 1    | 0      | 0       | 0          | 3         | 0       |
| SA5112678 | 10022946  | 21      | 489909  | 5862979  | 13A/14 | 52.918333 | -57.150083 | 0.048    | 3.0     | 1   | 1          | 1         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112679 | 10022947  | 21      | 490092  | 5863891  | 13A/14 | 52.926533 | -57.147383 | 0.007    | 0.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112680 | 10022948  | 21      | 498394  | 5859659  | 13A/14 | 52.888583 | -57.023867 | 0.007    | 1.0     | 3   | 1          | 4         | 5    | 0      | 2       | 0          | 3         | 2       |
| SA5112681 | 10022949  | 21      | 490753  | 5860873  | 13A/14 | 52.899417 | -57.137467 | 0.180    | 1.5     | 3   | 1          | 7         | 1    | 0      | 0       | 0          | 3         | 1       |
| SA5112682 | 10022951  | 21      | 496113  | 5857764  | 13A/14 | 52.871533 | -57.057750 | 0.007    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 3         | 1       |
| SA5112683 | 10022952  | 21      | 494096  | 5857996  | 13A/14 | 52.873600 | -57.087717 | 0.003    | 2.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112684 | 10022953  | 21      | 494031  | 5858011  | 13A/14 | 52.873733 | -57.088683 | 0.003    | 2.0     | 1   | 1          | 4         | 3    | 0      | 1       | 0          | 2         | 0       |
| SA5112685 | 10022954  | 21      | 491712  | 5859737  | 13A/14 | 52.889217 | -57.123183 | 0.116    | 1.0     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112686 | 10022955  | 21      | 487232  | 5861233  | 13A/14 | 52.902583 | -57.189817 | 0.002    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 3         | 0       |
| SA5112687 | 10022956  | 21      | 485133  | 5864104  | 13A/14 | 52.928333 | -57.221150 | 0.008    | 1.0     | 1   | 1          | 1         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112688 | 10022957  | 21      | 491665  | 5859768  | 13A/14 | 52.889500 | -57.123883 | 0.116    | 1.5     | 1   | 1          | 5         | 1    | 0      | 2       | 0          | 2         | 0       |

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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterCoIr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112689 | 10022958  | 21      | 486116  | 5868806  | 13A/14 | 52.970633 | -57.206733 | 0.001    | 3.0     | 3   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112690 | 10022959  | 21      | 486496  | 5870418  | 13A/14 | 52.985133 | -57.201150 | 0.001    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112691 | 10022961  | 21      | 484908  | 5871901  | 13A/14 | 52.998417 | -57.224867 | 0.001    | 0.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 2       |
| SA5112692 | 10022962  | 21      | 482365  | 5871872  | 13A/14 | 52.998083 | -57.262750 | 0.004    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112693 | 10022963  | 21      | 478623  | 5870883  | 13A/14 | 52.989050 | -57.318450 | 0.001    | 1.5     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112694 | 10022964  | 21      | 477860  | 5869432  | 13A/14 | 52.975983 | -57.329717 | 0.015    | 2.5     | 1   | 1          | 5         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112695 | 10022965  | 21      | 478603  | 5868142  | 13A/14 | 52.964417 | -57.318567 | 0.033    | 7.5     | 6   | 1          | 2         | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112696 | 10022966  | 21      | 482495  | 5866401  | 13A/14 | 52.948900 | -57.260517 | 0.001    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 3         | 0       |
| SA5112697 | 10022967  | 21      | 477717  | 5866973  | 13A/14 | 52.953867 | -57.331667 | 0.003    | 1.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112698 | 10022968  | 21      | 484241  | 5861090  | 13A/14 | 52.901217 | -57.234283 | 0.002    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112699 | 10022969  | 21      | 485908  | 5859440  | 13A/14 | 52.886433 | -57.209433 | 0.001    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112700 | 10022971  | 21      | 487256  | 5859198  | 13A/14 | 52.884283 | -57.189383 | 0.001    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112701 | 10022972  | 21      | 488028  | 5858942  | 13A/14 | 52.882000 | -57.177900 | 0.377    | 1.0     | 1   | 1          | 13        | 1    | 0      | 1       | 0          | 2         | 1       |
| SA5112702 | 10022973  | 21      | 488030  | 5856871  | 13A/14 | 52.863383 | -57.177800 | 0.001    | 1.0     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 1       |
| SA5112703 | 10022974  | 21      | 486898  | 5855902  | 13A/14 | 52.854650 | -57.194567 | 0.011    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 3         | 1       |
| SA5112704 | 10022975  | 21      | 487681  | 5856117  | 13A/14 | 52.856600 | -57.182950 | 0.003    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112705 | 10022976  | 21      | 485134  | 5855434  | 13A/14 | 52.850400 | -57.220750 | 0.027    | 1.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112706 | 10022977  | 21      | 483765  | 5857979  | 13A/14 | 52.873233 | -57.241200 | 0.001    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112707 | 10022978  | 21      | 482674  | 5859419  | 13A/14 | 52.886150 | -57.257483 | 0.001    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 1         | 2       |
| SA5112708 | 10022979  | 21      | 482584  | 5860408  | 13A/14 | 52.895033 | -57.258883 | 0.001    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112709 | 10022981  | 21      | 480890  | 5860240  | 13A/14 | 52.893467 | -57.284050 | 0.799    | 1.0     | 1   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112710 | 10022982  | 21      | 480416  | 5858673  | 13A/14 | 52.879367 | -57.291000 | 0.054    | 1.5     | 2   | 1          | 5         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112711 | 10022983  | 21      | 481226  | 5857697  | 13A/14 | 52.870617 | -57.278900 | 0.432    | 1.5     | 3   | 1          | 7         | 1    | 0      | 0       | 0          | 3         | 1       |
| SA5112712 | 10022984  | 21      | 479619  | 5857716  | 13A/14 | 52.870733 | -57.302783 | 0.026    | 1.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112713 | 10022985  | 21      | 499284  | 5848569  | 13A/14 | 52.788883 | -57.010617 | 0.004    | 1.0     | 3   | 1          | 4         | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112714 | 10022986  | 21      | 497066  | 5849543  | 13A/14 | 52.797633 | -57.043517 | 0.009    | 1.5     | 3   | 1          | 1         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112715 | 10022987  | 21      | 487980  | 5858927  | 13A/14 | 52.881867 | -57.178617 | 0.377    | -9.0    | 1   | 1          | 13        | 1    | 0      | 2       | 0          | 2         | 0       |
| SA5112716 | 10022988  | 21      | 496752  | 5847005  | 13A/14 | 52.774817 | -57.048150 | 0.004    | 2.5     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 1         | 0       |
| SA5112717 | 10022989  | 21      | 495782  | 5846716  | 13A/14 | 52.772217 | -57.062517 | 0.105    | 1.5     | 6   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112718 | 10022991  | 21      | 492338  | 5847877  | 13A/14 | 52.782617 | -57.113600 | 0.485    | 1.5     | 6   | 1          | 1         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112719 | 10022992  | 21      | 491177  | 5848996  | 13A/14 | 52.792650 | -57.130833 | 0.420    | 1.5     | 6   | 1          | 7         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112720 | 10022993  | 21      | 494037  | 5849429  | 13A/14 | 52.796583 | -57.088433 | 0.019    | 2.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112721 | 10022994  | 21      | 492003  | 5850933  | 13A/14 | 52.810083 | -57.118633 | 0.001    | 1.5     | 6   | 1          | 1         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112722 | 10022995  | 21      | 491183  | 5851378  | 13A/14 | 52.814067 | -57.130817 | 0.003    | 1.5     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112723 | 10022996  | 21      | 491475  | 5852914  | 13A/14 | 52.827883 | -57.126517 | 0.001    | 1.5     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112724 | 10022997  | 21      | 486376  | 5851400  | 13A/14 | 52.814167 | -57.202133 | 0.229    | 2.0     | 6   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112725 | 10022998  | 21      | 488280  | 5850596  | 13A/14 | 52.806983 | -57.173850 | 0.036    | 1.5     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112726 | 10022999  | 21      | 487992  | 5848624  | 13A/14 | 52.789250 | -57.178050 | 0.076    | 1.0     | 3   | 1          | 4         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112727 | -9        | 21      | 487626  | 5846832  | 13A/14 | 52.773133 | -57.183417 | 0.002    | 0.5     | 2   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 2       |
| SA5112728 | 10023001  | 21      | 488008  | 5846099  | 13A/14 | 52.766550 | -57.177733 | 0.053    | 0.5     | 3   | 1          | 2         | 1    | 0      | 0       | 0          | 2         | 0       |
| SA5112729 | -9        | 21      | 488537  | 5845217  | 13A/14 | 52.758633 | -57.169850 | 0.001    | 0.5     | 2   | 1          | -9        | -9   | 0      | 0       | 0          | 2         | 2       |
| SA5112730 | 10023002  | 21      | 486698  | 5844076  | 13A/11 | 52.748333 | -57.197067 | 0.138    | 2.0     | 6   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112731 | 10023003  | 21      | 484632  | 5846705  | 13A/14 | 52.771917 | -57.227783 | 0.004    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112732 | 10023004  | 21      | 485374  | 5848325  | 13A/14 | 52.786500 | -57.216867 | 0.005    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112733 | 10023005  | 21      | 483464  | 5852661  | 13A/14 | 52.825417 | -57.245400 | 0.005    | 2.5     | 3   | 1          | 5         | 3    | 0      | 1       | 0          | 2         | 0       |
| SA5112734 | 10023006  | 21      | 483507  | 5855353  | 13A/14 | 52.849617 | -57.244900 | 0.005    | 1.0     | 2   | 1          | 3         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112735 | 10023007  | 21      | 481092  | 5853048  | 13A/14 | 52.828817 | -57.280633 | 0.011    | 1.0     | 3   | 0          | 4         | 5    | 0      | 0       | 0          | 2         | 2       |
| SA5112736 | 10023008  | 21      | 482834  | 5850716  | 13A/14 | 52.807917 | -57.254650 | 0.092    | 2.0     | 1   | 1          | 13        | 3    | 0      | 0       | 0          | 1         | 1       |
| SA5112737 | 10023009  | 21      | 483397  | 5852661  | 13A/14 | 52.825417 | -57.246400 | 0.005    | 1.0     | 3   | 1          | 2         | 5    | 0      | 2       | 0          | 2         | 0       |
| SA5112738 | 10023011  | 21      | 482256  | 5849165  | 13A/14 | 52.793950 | -57.263133 | 0.016    | 1.0     | 3   | 1          | 13        | 1    | 0      | 0       | 0          | 3         | 0       |
| SA5112739 | 10023012  | 21      | 480868  | 5848480  | 13A/14 | 52.787750 | -57.283683 | 0.012    | 1.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112740 | 10023013  | 21      | 480932  | 5847329  | 13A/14 | 52.777400 | -57.282667 | 0.107    | 1.0     | 1   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112741 | 10023014  | 21      | 482238  | 5845579  | 13A/14 | 52.761717 | -57.263217 | 0.004    | 1.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 3         | 0       |
| SA5112742 | 10023015  | 21      | 480814  | 5844099  | 13A/14 | 52.748367 | -57.284233 | 0.011    | 1.5     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 3         | 0       |
| SA5112743 | 10023016  | 21      | 479033  | 5845013  | 13A/14 | 52.756517 | -57.310667 | 0.260    | 3.5     | 1   | 1          | 7         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112744 | 10023017  | 21      | 478875  | 5846735  | 13A/14 | 52.771983 | -57.313117 | 0.009    | 2.5     | 1   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112745 | 10023018  | 21      | 479231  | 5848615  | 13A/14 | 52.788900 | -57.307967 | 0.006    | 3.5     | 1   | 1          | 13        | 3    | 0      | 0       | 0          | 1         | 1       |



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| FldNum    | SedLabNum | UtmZone | UtmEast | UtmNorth | NTSmap | Lat_NAD27 | Long_NAD27 | Area_km2 | Depth_m | Veg | WaterLevel | SedColour | Comp | Contam | SiteDup | Mineralztn | WaterCoIr | WatSusp |
|-----------|-----------|---------|---------|----------|--------|-----------|------------|----------|---------|-----|------------|-----------|------|--------|---------|------------|-----------|---------|
| SA5112746 | 10023019  | 21      | 480568  | 5850992  | 13A/14 | 52.810317 | -57.288283 | 0.057    | 1.0     | 3   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112747 | 10023021  | 21      | 479271  | 5851668  | 13A/14 | 52.816350 | -57.307567 | 0.598    | 1.5     | 1   | 1          | 7         | 4    | 0      | 1       | 0          | 3         | 1       |
| SA5112748 | 10023022  | 21      | 479513  | 5855511  | 13A/14 | 52.850900 | -57.304217 | 0.005    | 1.0     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112749 | 10023023  | 21      | 479371  | 5858637  | 13A/14 | 52.879000 | -57.306517 | 0.240    | 1.5     | 1   | 1          | 5         | 4    | 0      | 0       | 0          | 1         | 1       |
| SA5112750 | 10023024  | 21      | 477758  | 5858119  | 13A/14 | 52.874283 | -57.330450 | 0.005    | 1.5     | 3   | 1          | 5         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112751 | 10023025  | 21      | 476076  | 5857353  | 13A/14 | 52.867317 | -57.355383 | 0.004    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112752 | 10023026  | 21      | 475759  | 5856950  | 13A/14 | 52.863683 | -57.360067 | 0.004    | 1.0     | 2   | 1          | 2         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112753 | 10023027  | 21      | 477381  | 5855629  | 13A/14 | 52.851883 | -57.335883 | 0.011    | 1.0     | 3   | 1          | 2         | 4    | 0      | 0       | 0          | 2         | 0       |
| SA5112754 | 10023028  | 21      | 479218  | 5851743  | 13A/14 | 52.817017 | -57.308350 | 0.598    | 1.5     | 1   | 1          | 7         | 4    | 0      | 2       | 0          | 2         | 0       |
| SA5112755 | 10023029  | 21      | 477192  | 5853695  | 13A/14 | 52.834483 | -57.338550 | 0.006    | 5.5     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112756 | 10023031  | 21      | 476954  | 5850761  | 13A/14 | 52.808100 | -57.341883 | 0.001    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112757 | 10023032  | 21      | 476739  | 5847154  | 13A/14 | 52.775667 | -57.344817 | 0.008    | 4.5     | 3   | 1          | 5         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112758 | 10023033  | 21      | 477088  | 5844503  | 13A/14 | 52.751850 | -57.339450 | 0.193    | 6.5     | 1   | 1          | 8         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112759 | 10023034  | 21      | 474874  | 5845398  | 13A/14 | 52.759800 | -57.372317 | 0.001    | 1.0     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 2       |
| SA5112760 | 10023035  | 21      | 474935  | 5847912  | 13A/14 | 52.782400 | -57.371617 | 0.147    | 1.5     | 1   | 1          | 5         | 4    | 0      | 0       | 0          | 3         | 0       |
| SA5112761 | 10023036  | 21      | 475915  | 5849325  | 13A/14 | 52.795150 | -57.357183 | 0.006    | 2.0     | 1   | 1          | 2         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112762 | 10023037  | 21      | 473652  | 5849282  | 13A/14 | 52.794650 | -57.390750 | 0.013    | 1.5     | 2   | 1          | 4         | 4    | 0      | 0       | 0          | 2         | 1       |
| SA5112763 | 10023038  | 21      | 474347  | 5850496  | 13A/14 | 52.805600 | -57.380533 | 0.021    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 3         | 0       |
| SA5112764 | 10023039  | 21      | 474666  | 5852860  | 13A/14 | 52.826867 | -57.375983 | 0.009    | 3.5     | 1   | 1          | 5         | 5    | 0      | 0       | 0          | 2         | 1       |
| SA5112765 | 10023041  | 21      | 474891  | 5854859  | 13A/14 | 52.844850 | -57.372800 | 0.001    | 1.0     | 1   | 1          | 13        | 2    | 0      | 0       | 0          | 2         | 0       |
| SA5112766 | 10023042  | 21      | 472751  | 5857971  | 13A/14 | 52.872717 | -57.404833 | 0.001    | 1.0     | 2   | 1          | 5         | 5    | 0      | 1       | 0          | 2         | 0       |
| SA5112767 | 10023043  | 21      | 473110  | 5858768  | 13A/14 | 52.879900 | -57.399567 | 0.001    | 1.5     | 2   | 1          | 5         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112768 | 10023044  | 21      | 475580  | 5859927  | 13A/14 | 52.890433 | -57.362950 | 0.003    | 1.0     | 2   | 1          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112769 | 10023045  | 21      | 474738  | 5860767  | 13A/14 | 52.897950 | -57.375533 | 0.001    | 2.5     | 1   | 1          | 4         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112770 | 10023046  | 21      | 473243  | 5861520  | 13A/14 | 52.904650 | -57.397817 | 0.001    | 1.0     | 2   | 0          | 4         | 5    | 0      | 0       | 0          | 2         | 0       |
| SA5112771 | 10023047  | 21      | 474479  | 5868685  | 13A/14 | 52.969117 | -57.380000 | 0.001    | 2.0     | 1   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112772 | 10023048  | 21      | 473701  | 5868011  | 13A/14 | 52.963017 | -57.391533 | 0.007    | 3.0     | 3   | 1          | 7         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112773 | 10023049  | 21      | 472675  | 5867410  | 13A/14 | 52.957567 | -57.406750 | 0.002    | 1.0     | 3   | 1          | 4         | 5    | 0      | 0       | 0          | 1         | 0       |
| SA5112774 | 10023051  | 21      | 472771  | 5857947  | 13A/14 | 52.872500 | -57.404533 | 0.001    | 1.0     | 2   | 1          | 4         | 5    | 0      | 2       | 0          | 2         | 0       |
| SA5112775 | 10023052  | 21      | 473953  | 5871892  | 13A/14 | 52.997917 | -57.388083 | 0.039    | 8.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112776 | 10023053  | 21      | 542293  | 5814066  | 13A/08 | 52.477067 | -56.377317 | 0.001    | 1.5     | 3   | 1          | 2         | 5    | 0      | 0       | 0          | 3         | 0       |
| SA5112777 | 10023054  | 21      | 542150  | 5812672  | 13A/08 | 52.464550 | -56.379600 | 0.027    | 6.0     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112778 | 10023055  | 21      | 543331  | 5811110  | 13A/08 | 52.450417 | -56.362417 | 0.075    | 6.5     | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 1         | 0       |
| SA5112779 | 10023056  | 21      | 545428  | 5811188  | 13A/08 | 52.450950 | -56.331550 | 0.001    | 1.0     | 2   | 1          | 2         | 4    | 0      | 0       | 0          | 3         | 0       |
| SA5112780 | 10023057  | 21      | 545174  | 5812949  | 13A/08 | 52.466800 | -56.335050 | 0.025    | 4.5     | 4   | 1          | 4         | 4    | 0      | 0       | 0          | 3         | 1       |
| SA5112781 | 10023058  | 21      | 545461  | 5814203  | 13A/08 | 52.478050 | -56.330650 | 0.134    | 5.5     | 1   | 1          | 13        | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112782 | 10023059  | 21      | 546914  | 5813157  | 13A/08 | 52.468517 | -56.309417 | 0.008    | 1.0     | 3   | 1          | 4         | 2    | 0      | 0       | 0          | 3         | 0       |
| SA5112783 | 10023061  | 21      | 547485  | 5815550  | 13A/08 | 52.489983 | -56.300667 | 0.107    | 10.0    | 1   | 1          | 5         | 3    | 0      | 0       | 0          | 2         | 0       |
| SA5112784 | 10023062  | 21      | 548452  | 5812858  | 13A/08 | 52.465700 | -56.286817 | 0.005    | 4.0     | 3   | 1          | 7         | 1    | 0      | 0       | 0          | 3         | 0       |
| SA5112785 | 10023063  | 21      | 549544  | 5815118  | 13A/08 | 52.485917 | -56.270417 | 0.001    | 3.0     | 3   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112786 | 10023064  | 21      | 550187  | 5812664  | 13A/08 | 52.463800 | -56.261317 | 0.002    | 2.0     | 2   | 1          | 4         | 3    | 0      | 0       | 0          | 3         | 0       |
| SA5112787 | 10023065  | 21      | 551834  | 5815029  | 13A/08 | 52.484900 | -56.236700 | 0.002    | 2.0     | 1   | 1          | 7         | 2    | 0      | 0       | 0          | 3         | 0       |
| SA5112788 | 10023066  | 21      | 552472  | 5815745  | 13A/08 | 52.491283 | -56.227200 | 0.002    | 2.0     | 1   | 1          | 4         | 2    | 0      | 0       | 0          | 3         | 0       |

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| FldNum    | 1M_Lith | 100K_Lith | Comments  | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|---|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5111891 | P-Mgs   | PMgr      |   | 0.05    | 0.75    | 0.25    | 1       | 0.5     | 120     | 133     | 0.82    |
| SA5111892 | P-Mgs   | PMgr      |   | 0.05    | 1.04    | 0.25    | 1       | 0.5     | 100     | 125     | 0.79    |
| SA5111893 | P-Mgs   | PMgr      |   | 0.05    | 1.30    | 0.25    | 1       | 0.5     | 210     | 249     | 2.13    |
| SA5111894 | P-Mgs   | PMgr      |   | 0.05    | 3.41    | 0.25    | 1       | 0.5     | 380     | 456     | 1.35    |
| SA5111895 | P-Mgs   | PMgr      | Some plant debris   | 0.05    | 1.13    | 0.25    | 1       | 0.5     | 92      | 122     | 0.50    |
| SA5111896 | P-Mgs   | PMgr      | No water sample (too shallow) - mud sample collected with scoop   | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 23      | 0.05    |
| SA5111897 | P-Mgs   | PMgr      | Had to drop 3 times - plant debris                                | 0.05    | 2.01    | 0.25    | 1       | 0.5     | 250     | 295     | 0.65    |
| SA5111898 | P-Mgs   | PMgr      |   | 0.05    | 1.98    | 0.25    | 1       | 0.5     | 260     | 303     | 0.66    |
| SA5111899 | P-Mgs   | PMgr      |   | 0.05    | 1.73    | 0.25    | 1       | 0.5     | 160     | 170     | 0.63    |
| SA5111900 | M3gr    | PMgr      |   | 0.05    | 0.13    | 0.25    | 1       | 1       | 25      | 30      | 0.05    |
| SA5111901 | M3gr    | PMgr      |   | 0.05    | 1.75    | 0.25    | 3       | 0.5     | 130     | 151     | 1.19    |
| SA5111902 | M3gr    | PMgr      |   | 0.05    | 1.55    | 0.25    | 1       | 0.5     | 140     | 162     | 0.65    |
| SA5111903 | M3gr    | PMgr      |   | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 50      | 0.05    |
| SA5111904 | M3gr    | PMgr      |   | 0.05    | 3.29    | 0.25    | 1       | 0.5     | 550     | 648     | 1.09    |
| SA5111905 | M3gr    | PMgr      | Some plant debris   | 0.05    | 1.58    | 0.5     | 3       | 0.5     | 220     | 276     | 0.62    |
| SA5111906 | M3gr    | PMgr      |   | 0.05    | 0.59    | 0.25    | 1       | 0.5     | 98      | 116     | 0.22    |
| SA5111907 | M3gr    | PMgr      | Some fine grained grey inorganic material                         | 0.05    | 7.97    | 0.25    | 4       | 0.5     | 1200    | 1255    | 2.85    |
| SA5111908 | M3gr    | PMgr      |   | 0.05    | 1.28    | 0.25    | 1       | 0.5     | 150     | 209     | 0.48    |
| SA5111909 | M3gr    | PMgr      | Abundant plant material   | 0.05    | 1.35    | 0.7     | 1       | 3       | 110     | 152     | 0.66    |
| SA5111910 | M3gr    | M3Bgr     | Abundant plant material   | 0.05    | 0.60    | 0.25    | 1       | 2       | 310     | 373     | 0.39    |
| SA5111911 | M3gr    | M3Bgr     |   | 0.05    | 1.37    | 0.25    | 1       | 0.5     | 130     | 161     | 0.57    |
| SA5111912 | M3gr    | M3Bgr     | Small sample  | 0.05    | 0.25    | 0.25    | 1       | 4       | 70      | 89      | 0.05    |
| SA5111913 | M3gr    | M3Bgr     | Abundant plant material   | 0.05    | 1.28    | 0.7     | 1       | 0.5     | 110     | 110     | 0.37    |
| SA5111914 | M3gr    | M3Bgr     | Abundant plant material   | 0.05    | 1.55    | 0.25    | 3       | 0.5     | 140     | 191     | 0.52    |
| SA5111915 | M3gr    | M3Bgr     |   | 0.05    | 1.16    | 0.25    | 1       | 0.5     | 170     | 207     | 0.35    |
| SA5111916 | P-Mgs   | PMgr      | Some plant debris   | 0.05    | 0.80    | 0.8     | 1       | 3       | 70      | 102     | 0.74    |
| SA5111917 | P-Mgs   | PMgr      |   | 0.05    | 1.37    | 0.25    | 3       | 0.5     | 140     | 162     | 1.64    |
| SA5111918 | P-Mgs   | PMgr      | Some fine-grained clastic   | 0.05    | 7.65    | 0.25    | 3       | 0.5     | 1500    | 1487    | 2.40    |
| SA5111919 | P-Mgs   | PMgr      |   | 0.05    | 1.82    | 0.25    | 3       | 0.5     | 190     | 240     | 2.31    |
| SA5111920 | P-Mgs   | PMgr      |   | 0.05    | 1.94    | 0.25    | 19      | 0.5     | 68      | 124     | 23.82   |
| SA5111921 | P-Mgs   | PMgr      |   | 0.05    | 0.57    | 0.25    | 1       | 0.5     | 76      | 89      | 0.97    |
| SA5111922 | P-Mgs   | PMgr      | Some plant debris   | 0.05    | 0.83    | 0.25    | 1       | 2       | 84      | 103     | 0.29    |
| SA5111923 | P-Mgs   | PMgr      |   | 0.05    | 1.38    | 0.25    | 1       | 0.5     | 160     | 189     | 0.54    |
| SA5111924 | P-Mgs   | PMgr      | Some plant debris   | 0.05    | 1.41    | 0.25    | 1       | 0.5     | 270     | 283     | 1.28    |
| SA5111925 | P-Mgs   | PMgr      |   | 0.05    | 1.36    | 0.25    | 1       | 0.5     | 200     | 220     | 1.68    |
| SA5111926 | P-Mgs   | PMgr      |   | 0.05    | 1.53    | 0.25    | 1       | 2       | 190     | 226     | 0.40    |
| SA5111927 | P-Mgs   | PMYq      |   | 0.05    | 1.27    | 0.25    | 2       | 0.5     | 190     | 230     | 0.94    |
| SA5111928 | P-Mgs   | PMmq      |   | 0.05    | 1.24    | 0.25    | 1       | 2       | 140     | 149     | 0.41    |
| SA5111929 | P-Mgs   | PMgr      |   | 0.05    | 0.80    | 0.25    | 1       | 0.5     | 94      | 116     | 0.34    |
| SA5111930 | P-Mgs   | PMgr      | Lots of organic material  | 0.05    | 0.16    | 0.25    | 1       | 1       | 54      | 39      | 0.05    |
| SA5111931 | P-Mgs   | PMgr      | Few rocks around lake   | 0.05    | 1.31    | 0.25    | 1       | 0.5     | 120     | 141     | 0.31    |
| SA5111932 | P-Mgs   | PMgr      |   | 0.05    | 0.32    | 0.25    | 2       | 0.5     | 25      | 42      | 0.21    |
| SA5111933 | P-Mgs   | PMgr      | Some organic debris   | 0.05    | 2.82    | 0.25    | 1       | 0.5     | 440     | 491     | 0.72    |
| SA5111934 | P-Mgs   | PMgr      | Was part of a river, Point moved slightly. Lots of plant material | 0.05    | 1.18    | 0.25    | 1       | 0.5     | 140     | 175     | 0.30    |
| SA5111935 | P-Mgs   | PMgr      |   | 0.05    | 1.61    | 0.25    | 1       | 0.5     | 170     | 204     | 0.59    |
| SA5111936 | P-Mgs   | PMgr      |   | 0.05    | 0.87    | 0.25    | 1       | 1       | 80      | 109     | 0.21    |
| SA5111937 | P-Mgs   | PMmq      | Few rocks around lake   | 0.05    | 0.64    | 0.25    | 1       | 2       | 100     | 113     | 0.15    |
| SA5111938 | M3gr    | PMgr      | Lots of suspension in water sample                                | 0.05    | 0.26    | 0.25    | 1       | 0.5     | 56      | 63      | 0.05    |
| SA5111939 | M3gr    | PMgr      |   | 0.05    | 2.40    | 0.7     | 4       | 3       | 290     | 331     | 0.76    |
| SA5111940 | M3gr    | PMgr      |   | 0.05    | 0.98    | 0.25    | 1       | 0.5     | 120     | 134     | 0.32    |
| SA5111941 | M3gr    | PMdr      |   | 0.05    | 2.37    | 0.25    | 1       | 0.5     | 330     | 404     | 0.62    |
| SA5111942 | M3gr    | PMgr      | Some plant debris   | 0.05    | 0.47    | 0.25    | 1       | 0.5     | 25      | 75      | 0.13    |
| SA5111943 | M3gr    | PMgr      | Fine-grained clastic grey layer at the bottom of sampler          | 0.05    | 5.19    | 0.5     | 4       | 0.5     | 760     | 835     | 1.93    |
| SA5111944 | M3gr    | M3Bgr     | Plant debris  | 0.05    | 0.40    | 0.25    | 1       | 0.5     | 63      | 100     | 0.19    |
| SA5111945 | M3gr    | M3Bgr     |   | 0.05    | 0.28    | 0.25    | 1       | 0.5     | 72      | 101     | 0.10    |
| SA5111946 | P-Mgs   | PMgr      | Dropped 3 times. Connected to small brook. No mud sample          | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5111947 | P-Mgs   | PMgr      | Plant debris  | 0.05    | 1.23    | 0.25    | 1       | 3       | 130     | 160     | 0.64    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments   | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5111948 | P-Mgs   | PMyq      | Abundance of plant debris                          | 0.05    | 1.45    | 0.25    | 1       | 0.5     | 210     | 244     | 0.51    |
| SA5111949 | P-Mgs   | PMmq      |  | 0.05    | 3.91    | 0.25    | 8       | 0.5     | 200     | 257     | 2.62    |
| SA5111950 | M3gr    | M3Bgr     |  | 0.05    | 0.35    | 0.5     | 1       | 2       | 76      | 88      | 0.11    |
| SA5111951 | P-Mgs   | PMgr      | Dropped twice                                      | 0.05    | 1.25    | 0.6     | 3       | 0.5     | 110     | 109     | 0.56    |
| SA5111952 | P-Mgs   | PMgr      |  | 0.05    | 1.38    | 0.6     | 2       | 0.5     | 120     | 140     | 0.71    |
| SA5111953 | P-Mgs   | PMgr      | Abundance of plant debris                          | 0.05    | 0.68    | 0.25    | 1       | 0.5     | 65      | 67      | 0.32    |
| SA5111954 | P-Mgs   | PMgr      | Abundance of plant debris                          | 0.05    | 0.80    | 0.25    | 1       | 2       | 87      | 105     | 0.31    |
| SA5111955 | P-Mgs   | PMgr      |  | 0.05    | 1.42    | 0.25    | 3       | 0.5     | 200     | 261     | 1.09    |
| SA5111956 | P-Mgs   | PMgr      | Plant debris                                       | 0.05    | 1.38    | 0.25    | 1       | 0.5     | 130     | 170     | 0.48    |
| SA5111957 | P-Mgs   | PMgr      | Plant debris                                       | 0.05    | 0.87    | 0.25    | 1       | 0.5     | 71      | 87      | 0.30    |
| SA5111958 | P-Mgs   | PMgr      |  | 0.05    | 3.07    | 0.25    | 2       | 0.5     | 180     | 178     | 2.29    |
| SA5111959 | P-Mgs   | PMgr      |  | 0.05    | 4.58    | 0.25    | 5       | 0.5     | 180     | 191     | 2.49    |
| SA5111960 | P-Mgs   | PMgr      |  | 0.05    | 2.73    | 0.25    | 4       | 0.5     | 460     | 441     | 0.84    |
| SA5111961 | P-Mgs   | PMmq      |  | 0.05    | 1.61    | 0.5     | 1       | 0.5     | 760     | 45      | 0.62    |
| SA5111962 | P-Mgs   | PMgr      |  | 0.05    | 0.59    | 0.25    | 1       | 0.5     | 100     | 116     | 0.19    |
| SA5111963 | P-Mgs   | PMgr      | Plant debris                                       | 0.05    | 1.02    | 0.25    | 1       | 0.5     | 120     | 144     | 0.31    |
| SA5111964 | P-Mgs   | PMgr      |  | 0.05    | 1.56    | 0.6     | 1       | 0.5     | 130     | 158     | 0.58    |
| SA5111965 | P-Mgs   | PMgd      |  | 0.05    | 2.32    | 0.25    | 3       | 0.5     | 640     | 517     | 0.71    |
| SA5111966 | P-Mgs   | PMdr      |  | 0.05    | 2.57    | 0.25    | 2       | 2       | 280     | 351     | 0.75    |
| SA5111967 | M3gr    | PMgr      | Shallow lake. Too much plant debris. No mud sample | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5111968 | M3gr    | PMgr      |  | 0.05    | 0.32    | 0.5     | 1       | 0.5     | 67      | 57      | 0.05    |
| SA5111969 | M3gr    | PMgr      | Peaty top layer                                    | 0.05    | 0.26    | 0.25    | 1       | 3       | 57      | 64      | 0.05    |
| SA5111970 | P-Mgs   | PMgr      |  | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 74      | 78      | 0.05    |
| SA5111971 | M3gr    | PMgr      | rocky bottom. Connected to brook.                  | 0.05    | 3.73    | 0.25    | 1       | 0.5     | 570     | 607     | 1.25    |
| SA5111972 | M3gr    | PMgr      |  | 0.05    | 1.32    | 0.25    | 1       | 0.5     | 120     | 133     | 0.42    |
| SA5111973 | M3gr    | PMgr      |  | 0.05    | 0.90    | 0.25    | 1       | 0.5     | 150     | 162     | 0.39    |
| SA5111974 | M3gr    | PMgr      |  | 0.05    | 0.94    | 0.5     | 2       | 0.5     | 110     | 127     | 0.46    |
| SA5111975 | M3gr    | PMgr      |  | 0.05    | 1.95    | 0.25    | 1       | 0.5     | 180     | 214     | 0.76    |
| SA5111976 | M3gr    | PMgr      |  | 0.05    | 1.74    | 0.25    | 1       | 0.5     | 220     | 247     | 0.72    |
| SA5111977 | M3gr    | PMgr      | Plant debris                                       | 0.05    | 2.52    | 0.5     | 1       | 0.5     | 290     | 373     | 0.52    |
| SA5111978 | M3gr    | PMgr      |  | 0.05    | 2.28    | 0.25    | 3       | 0.5     | 110     | 125     | 1.13    |
| SA5111979 | M3gr    | PMgr      |  | 0.05    | 1.40    | 0.25    | 1       | 0.5     | 98      | 121     | 0.71    |
| SA5111980 | M3gr    | PMgr      | Plant debris                                       | 0.05    | 1.54    | 0.25    | 1       | 2       | 320     | 358     | 0.61    |
| SA5111981 | M3gr    | PMgr      | Abundant plant material                            | 0.05    | 1.41    | 0.25    | 1       | 0.5     | 190     | 216     | 0.59    |
| SA5111982 | M3gr    | PMgr      |  | 0.05    | 1.05    | 0.25    | 1       | 1       | 100     | 125     | 0.43    |
| SA5111983 | M3gr    | PMgr      |  | 0.05    | 2.81    | 0.25    | 3       | 0.5     | 150     | 163     | 2.36    |
| SA5111984 | M3gr    | PMgr      |  | 0.05    | 1.45    | 0.25    | 1       | 0.5     | 130     | 144     | 0.40    |
| SA5111985 | M3gr    | PMgr      |  | 0.05    | 4.51    | 0.25    | 3       | 0.5     | 140     | 138     | 2.40    |
| SA5111986 | M3gr    | PMmq      | Some ooze in composition                           | 0.05    | 0.81    | 0.25    | 1       | 0.5     | 110     | 117     | 0.21    |
| SA5111987 | M3gr    | PMgr      |  | 0.05    | 1.33    | 0.25    | 3       | 0.5     | 110     | 139     | 0.46    |
| SA5111988 | M3gr    | PMgr      |  | 0.05    | 1.12    | 0.25    | 1       | 0.5     | 140     | 163     | 0.45    |
| SA5111989 | P-Mgs   | PMgr      |  | 0.05    | 1.32    | 0.7     | 3       | 0.5     | 150     | 178     | 0.48    |
| SA5111990 | M3gr    | PMgr      |  | 0.05    | 1.44    | 0.25    | 1       | 0.5     | 220     | 262     | 0.40    |
| SA5111991 | M3gr    | PMgr      | Plant debris                                       | 0.05    | 0.16    | 0.25    | 1       | 1       | 68      | 64      | 0.05    |
| SA5111992 | M3gs    | M3Dgr     |  | 0.05    | 0.71    | 0.25    | 1       | 0.5     | 100     | 111     | 0.33    |
| SA5111993 | M3gr    | PMgr      | No sample. Rocky bottom.                           | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5111994 | M3gs    | M3Dgr     |  | 0.05    | 0.20    | 0.8     | 1       | 0.5     | 90      | 79      | 0.05    |
| SA5111995 | M3gs    | M3Dgr     | Abundant plant material                            | 0.05    | 0.67    | 0.25    | 1       | 0.5     | 150     | 133     | 0.27    |
| SA5111996 | M3gr    | M3Dgr     |  | 0.05    | 3.45    | 0.25    | 3       | 0.5     | 170     | 201     | 1.65    |
| SA5111997 | M3gs    | M3Dgr     | abundant peat                                      | 0.05    | 0.81    | 0.25    | 1       | 0.5     | 86      | 109     | 0.43    |
| SA5111998 | M3gs    | M3Dgr     |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 61      | 78      | 0.05    |
| SA5111999 | M3gr    | PMgr      |  | 0.05    | 1.38    | 0.6     | 1       | 0.5     | 180     | 217     | 0.46    |
| SA5112000 | M3gr    | M3Dgr     | plant debris                                       | 0.05    | 0.64    | 0.25    | 1       | 0.5     | 140     | 146     | 0.28    |
| SA5112001 | M3gs    | M3Dgr     | Green gray sample color                            | 0.05    | 7.45    | 0.25    | 1       | 0.5     | 1500    | 1477    | 2.11    |
| SA5112002 | P-Mgs   | PMgr      |  | 0.05    | 0.32    | 0.6     | 1       | 4       | 91      | 94      | 0.05    |
| SA5112003 | P-Mgs   | PMgr      |  | 0.05    | 3.55    | 0.25    | 1       | 0.5     | 680     | 195     | 0.99    |
| SA5112004 | P-Mgs   | PMgr      |  | 0.05    | 0.16    | 0.7     | 1       | 0.5     | 690     | 67      | 0.05    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments                | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112005 | P-Mgs   | PMgr      | Abundant plant material | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 33      | 0.05    |
| SA5112006 | P-Mgs   | PMgr      |                         | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 28      | 0.05    |
| SA5112007 | P-Mgs   | PMgr      | Small sample            | 0.05    | 4.31    | 0.5     | 1       | 0.5     | 810     | 810     | 1.20    |
| SA5112008 | P-Mgs   | PMgr      |                         | 0.05    | 2.43    | 0.25    | 1       | 15      | 400     | 432     | 0.63    |
| SA5112009 | M3gr    | PMgr      |                         | 0.05    | 0.10    | 0.25    | 1       | 5       | 55      | 39      | 0.05    |
| SA5112010 | P-Mgs   | PMgr      |                         | 0.05    | 0.16    | 1       | 1       | 5       | 25      | 48      | 0.05    |
| SA5112011 | M3gr    | PMgr      |                         | 0.05    | 0.32    | 0.9     | 1       | 0.5     | 82      | 80      | 0.05    |
| SA5112012 | M3gr    | PMgr      |                         | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 61      | 57      | 0.05    |
| SA5112013 | M3gr    | M3Dgr     |                         | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 41      | 0.05    |
| SA5112014 | M3gr    | PMgr      | Poor sample.            | 0.05    | 7.21    | 0.25    | 1       | 0.5     | 1600    | 1412    | 1.88    |
| SA5112015 | M3gs    | M3Dgr     |                         | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 50      | 60      | 0.05    |
| SA5112016 | P-Mgs   | PMgr      |                         | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 73      | 102     | 0.05    |
| SA5112017 | P-Mgs   | PMgr      |                         | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 70      | 76      | 0.05    |
| SA5112018 | M3gs    | M3Dgr     | Abundant plant material | 0.05    | 7.22    | 0.25    | 1       | 0.5     | 1700    | 1523    | 2.17    |
| SA5112019 | M3gs    | M3Dgr     |                         | 0.05    | 0.20    | 0.5     | 1       | 0.5     | 25      | 39      | 0.05    |
| SA5112020 | M3gs    | M3Dgr     | Some plant debris       | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 59      | 56      | 0.05    |
| SA5112021 | M3gs    | M3Dgr     |                         | 0.05    | 7.60    | 0.25    | 1       | 0.5     | 1900    | 1749    | 2.04    |
| SA5112022 | M3gs    | M3Dgr     |                         | 0.05    | 0.30    | 0.25    | 1       | 0.5     | 110     | 108     | 0.05    |
| SA5112023 | M3gs    | M3Dgr     |                         | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 73      | 62      | 0.05    |
| SA5112024 | M3gs    | M3Dgr     |                         | 0.05    | 0.16    | 1.1     | 1       | 0.5     | 54      | 57      | 0.05    |
| SA5112025 | M3gs    | M3Dgr     |                         | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 60      | 72      | 0.05    |
| SA5112026 | M3gs    | M3Dgr     |                         | 0.05    | 0.30    | 0.25    | 1       | 0.5     | 78      | 86      | 0.12    |
| SA5112027 | M3gs    | M3Dgr     |                         | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 58      | 59      | 0.05    |
| SA5112028 | M3gs    | M3Dgr     | Plant debris            | 0.05    | 0.08    | 0.25    | 1       | 2       | 56      | 50      | 0.05    |
| SA5112029 | M3gs    | M3Dgr     |                         | 0.05    | 0.23    | 0.5     | 1       | 2       | 51      | 53      | 0.05    |
| SA5112030 | M3gs    | M3Dgr     |                         | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 48      | 0.05    |
| SA5112031 | M3gs    | PMgr      |                         | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 62      | 69      | 0.05    |
| SA5112032 | M3gs    | PMgr      | Abundant peat           | 0.05    | 1.10    | 0.25    | 4       | 0.5     | 210     | 255     | 1.16    |
| SA5112033 | M3gr    | PMgr      | Rocks - dropped twice   | 0.05    | 5.21    | 0.25    | 1       | 0.5     | 800     | 855     | 1.44    |
| SA5112034 | M3gs    | M3Dgr     |                         | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 61      | 79      | 0.05    |
| SA5112035 | M3gr    | PMgr      | Dropped twice           | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 96      | 93      | 0.05    |
| SA5112036 | M3gr    | PMgr      |                         | 0.05    | 1.52    | 0.25    | 2       | 0.5     | 130     | 131     | 0.82    |
| SA5112037 | M3gr    | PMYq      | Dropped twice           | 0.05    | 0.24    | 0.25    | 1       | 0.5     | 25      | 55      | 0.05    |
| SA5112038 | M3gr    | PMgr      | Dropped twice           | 0.05    | 0.89    | 0.25    | 1       | 0.5     | 190     | 236     | 0.41    |
| SA5112039 | M3gr    | PMgr      | Dropped twice           | 0.05    | 0.52    | 0.25    | 1       | 0.5     | 170     | 194     | 0.30    |
| SA5112040 | M3gr    | PMYq      |                         | 0.05    | 0.92    | 0.25    | 7       | 0.5     | 86      | 93      | 0.64    |
| SA5112041 | M3gs    | PMgr      |                         | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 80      | 79      | 0.05    |
| SA5112042 | M3gs    | PMgr      | Dropped twice           | 0.05    | 0.20    | 0.7     | 1       | 0.5     | 100     | 109     | 0.05    |
| SA5112043 | M3gr    | PMgr      |                         | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 80      | 105     | 0.05    |
| SA5112044 | M3gr    | PMgr      |                         | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 160     | 151     | 0.05    |
| SA5112045 | M3gs    | PMss      | Used scoop to collect   | 0.05    | 0.19    | 0.7     | 1       | 0.5     | 61      | 55      | 0.05    |
| SA5112046 | M3gs    | PMgr      |                         | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 47      | 0.05    |
| SA5112047 | M3gr    | PMgr      |                         | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 50      | 44      | 0.05    |
| SA5112048 | M3gs    | PMgr      |                         | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 25      | 63      | 0.05    |
| SA5112049 | M3gr    | PMgr      |                         | 0.05    | 0.15    | 0.5     | 1       | 0.5     | 25      | 46      | 0.05    |
| SA5112050 | M3gr    | PMgr      | Dropped twice           | 0.05    | 0.13    | 0.8     | 1       | 0.5     | 25      | 38      | 0.05    |
| SA5112051 | M3gr    | PMgr      |                         | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 56      | 53      | 0.05    |
| SA5112052 | M3gr    | PMgr      |                         | 0.05    | 6.67    | 0.25    | 1       | 0.5     | 1200    | 1270    | 1.57    |
| SA5112053 | M3gr    | PMgr      |                         | 0.05    | 0.23    | 0.6     | 1       | 0.5     | 74      | 85      | 0.05    |
| SA5112054 | P-Mgs   | PMgr      |                         | 0.05    | 0.23    | 0.25    | 1       | 0.5     | 98      | 89      | 0.13    |
| SA5112055 | M3gr    | PMgr      |                         | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 91      | 0.05    |
| SA5112056 | M3gr    | PMgr      |                         | 0.05    | 0.18    | 0.7     | 1       | 0.5     | 97      | 82      | 0.05    |
| SA5112057 | M3gr    | PMYq      |                         | 0.05    | 0.23    | 0.7     | 1       | 0.5     | 84      | 90      | 0.10    |
| SA5112058 | P-Mgs   | PMYq      |                         | 0.05    | 0.30    | 0.7     | 1       | 0.5     | 81      | 95      | 0.11    |
| SA5112059 | M3gr    | PMYq      |                         | 0.05    | 2.22    | 0.25    | 1       | 0.5     | 330     | 377     | 0.61    |
| SA5112060 | M3gr    | PMYq      |                         | 0.05    | 0.61    | 0.25    | 1       | 0.5     | 98      | 111     | 0.18    |
| SA5112061 | M3gr    | PMgr      |                         | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 58      | 75      | 0.05    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments   | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112062 | M3gr    | PMgr      | Dropped 3 times - poor sample                        | 0.05    | 4.53    | 0.25    | 1       | 0.5     | 760     | 778     | 1.18    |
| SA5112063 | P-Mgs   | PMgr      |  | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 43      | 0.05    |
| SA5112064 | P-Mgs   | PMgr      |  | 0.05    | 5.00    | 0.25    | 1       | 0.5     | 890     | 903     | 1.32    |
| SA5112065 | P-Mgs   | PMgr      |  | 0.05    | 0.29    | 1.1     | 1       | 0.5     | 64      | 79      | 0.05    |
| SA5112066 | P-Mgs   | PMgr      |  | 0.05    | 0.18    | -9      | 1       | -9      | -9      | 78      | 0.05    |
| SA5112067 | P-Mgs   | PMgr      |  | 0.05    | 0.75    | 0.25    | 2       | 0.5     | 120     | 126     | 0.36    |
| SA5112068 | P-Mgs   | PMYq      | Not much sediment - abundant plant material          | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 112     | 0.05    |
| SA5112069 | P-Msy   | PMgr      |  | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 61      | 71      | 0.05    |
| SA5112070 | P-Msy   | PMYq      | Some ooze  | 0.05    | 1.68    | 0.8     | 2       | 0.5     | 260     | 297     | 0.53    |
| SA5112071 | P-Msy   | PMYq      |  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 99      | 109     | 0.05    |
| SA5112072 | P-Mgs   | PMgr      | Some plant debris                                    | 0.05    | 0.36    | -9      | 1       | -9      | -9      | 92      | 0.11    |
| SA5112073 | P-Msy   | PMYq      |  | 0.05    | 6.05    | 0.25    | 1       | 0.5     | 990     | 1044    | 1.60    |
| SA5112074 | P-Msy   | PMYq      |  | 0.05    | 0.56    | 0.5     | 1       | 0.5     | 77      | 97      | 0.16    |
| SA5112075 | P-Msy   | PMYq      |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 65      | 82      | 0.05    |
| SA5112076 | P-Msy   | PMmq      |  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 60      | 68      | 0.05    |
| SA5112077 | P-Msy   | PMgr      |  | 0.05    | 0.89    | 0.25    | 1       | 0.5     | 150     | 152     | 0.27    |
| SA5112078 | P-Msy   | PMmq      |  | 0.05    | 2.21    | 0.7     | 1       | 0.5     | 450     | 506     | 0.69    |
| SA5112079 | M3gr    | PMgr      | Water only   | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112080 | M3gr    | PMgr      |  | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 60      | 60      | 0.05    |
| SA5112081 | M3gr    | PMgr      |  | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 130     | 122     | 0.05    |
| SA5112082 | M3gr    | PMgr      |  | -9      | 0.18    | -9      | 1       | -9      | -9      | 126     | 0.05    |
| SA5112083 | M3gr    | PMgr      |  | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 120     | 138     | 0.05    |
| SA5112084 | M3gr    | PMgr      |  | 0.05    | 0.19    | 0.6     | 1       | 0.5     | 140     | 174     | 0.05    |
| SA5112085 | M3gr    | PMgr      |  | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 72      | 79      | 0.05    |
| SA5112086 | M3gr    | PMgr      |  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 50      | 0.05    |
| SA5112087 | M3gr    | PMgr      |  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 49      | 0.05    |
| SA5112088 | M3gr    | PMgr      | Abundant plant material                              | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 50      | 57      | 0.05    |
| SA5112089 | M3gr    | PMgr      | Water only   | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112090 | M3gr    | PMgr      | Thin layer of ooze                                   | 0.05    | 0.15    | 0.5     | 1       | 0.5     | 72      | 73      | 0.10    |
| SA5112091 | P-Msy   | PMmq      |  | 0.05    | 0.25    | 0.25    | 1       | 0.5     | 89      | 94      | 0.05    |
| SA5112092 | M3gs    | M3Dyq     |  | 0.05    | 0.21    | 0.25    | 1       | 0.5     | 110     | 115     | 0.11    |
| SA5112093 | M3gs    | M3Dyq     |  | 0.05    | 0.96    | 0.25    | 1       | 0.5     | 180     | 218     | 0.56    |
| SA5112094 | P-Mgs   | PMgr      |  | 0.05    | 0.08    | 0.6     | 1       | 1       | 25      | 44      | 0.05    |
| SA5112095 | P3gm    | PMgr      |  | 0.05    | 0.53    | 0.25    | 1       | 0.5     | 25      | 66      | 0.35    |
| SA5112096 | P3gm    | P3Bgp     |  | 0.05    | 0.66    | 0.25    | 1       | 0.5     | 79      | 100     | 0.66    |
| SA5112097 | M1lga   | PMgd      | Plant debris   | 0.05    | 1.84    | 0.25    | 1       | 0.5     | 230     | 243     | 1.13    |
| SA5112098 | P-Msy   | PMgr      | Looks like forest fire in area. Wood chips in sample | 0.05    | 5.66    | 1.5     | 2       | 0.5     | 750     | 814     | 2.32    |
| SA5112099 | P-Msy   | PMmq      |  | 0.05    | 1.35    | 0.25    | 2       | 0.5     | 130     | 137     | 0.69    |
| SA5112100 | M3gr    | PMgr      |  | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 130     | 160     | 0.05    |
| SA5112101 | P-Mgs   | PMgr      | Oozy top layer                                       | 0.05    | 0.26    | 0.6     | 1       | 0.5     | 83      | 70      | 0.05    |
| SA5112102 | P-Mgs   | PMgr      | Plant debris. Ooze top, peat bottom                  | 0.05    | 0.85    | 0.25    | 1       | 0.5     | 93      | 126     | 0.36    |
| SA5112103 | P-Mgs   | PMgr      |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 56      | 0.05    |
| SA5112104 | P-Mgs   | PMgr      | Poor sample.   | 0.05    | 5.60    | 0.25    | 1       | 0.5     | 570     | 590     | 1.72    |
| SA5112105 | P-Msy   | PMmq      |  | 0.05    | 0.80    | 0.6     | 1       | 0.5     | 84      | 95      | 0.25    |
| SA5112106 | P-Msy   | PMmq      |  | 0.05    | 1.92    | 0.25    | 3       | 0.5     | 300     | 337     | 1.01    |
| SA5112107 | P-Msy   | PMmq      |  | 0.05    | 1.77    | 0.25    | 2       | 0.5     | 140     | 148     | 1.05    |
| SA5112108 | P-Msy   | PMmq      | Plant debris   | 0.05    | 0.45    | 0.25    | 1       | 0.5     | 68      | 75      | 0.20    |
| SA5112109 | P-Msy   | PMmq      | Plant debris   | 0.05    | 0.73    | 0.25    | 1       | 0.5     | 120     | 124     | 0.28    |
| SA5112110 | P-Mgs   | PMgr      |  | 0.05    | 2.69    | 0.25    | 1       | 0.5     | 340     | 395     | 0.67    |
| SA5112111 | P-Msy   | PMmq      |  | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 41      | 0.05    |
| SA5112112 | P-Msy   | PMmd      |  | 0.05    | 1.86    | 0.25    | 2       | 0.5     | 110     | 124     | 0.85    |
| SA5112113 | P-Msy   | PMmd      |  | 0.05    | 2.22    | 0.25    | 1       | 0.5     | 350     | 404     | 0.71    |
| SA5112114 | P-Msy   | PMmq      |  | 0.05    | 2.05    | 0.5     | 3       | 0.5     | 190     | 196     | 0.82    |
| SA5112115 | P-Msy   | PMmq      |  | 0.05    | 1.55    | 0.25    | 2       | 0.5     | 90      | 105     | 0.47    |
| SA5112116 | P-Mgs   | PMgr      |  | 0.05    | 1.55    | 0.25    | 1       | 0.5     | 200     | 225     | 0.39    |
| SA5112117 | P-Mgs   | PMgr      |  | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 56      | 68      | 0.05    |
| SA5112118 | P-Mgs   | PMgr      |  | 0.05    | 1.83    | 0.25    | 1       | 0.5     | 240     | 252     | 0.49    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments  | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|---|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112119 | P-Mgs   | PMgr      | Sediment stirred up by chopper  | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 84      | 79      | 0.05    |
| SA5112120 | P-Mgs   | PMgr      | Plant debris  | 0.05    | 1.08    | 0.7     | 1       | 0.5     | 100     | 143     | 0.30    |
| SA5112121 | P-Mgs   | PMmq      | Plant debris abundant   | 0.05    | 0.80    | 0.6     | 1       | 0.5     | 76      | 92      | 0.23    |
| SA5112122 | P-Msy   | P3Bdr     | Oozy top layer. Peaty bottom  | 0.05    | 1.13    | 0.25    | 1       | 0.5     | 140     | 167     | 0.28    |
| SA5112123 | P3a     | P3Ban     |   | 0.05    | 1.32    | 0.6     | 1       | 0.5     | 78      | 84      | 0.33    |
| SA5112124 | P3a     | P3Bdr     |   | 0.05    | 1.04    | 0.25    | 1       | 0.5     | 83      | 92      | 0.43    |
| SA5112125 | P3a     | P3Bdr     |   | 0.05    | 2.73    | 0.25    | 1       | 0.5     | 160     | 141     | 1.28    |
| SA5112126 | P3a     | P3Bdr     | Few rocks around lake   | 0.05    | 1.02    | 0.25    | 1       | 0.5     | 54      | 87      | 0.41    |
| SA5112127 | P3a     | P3Bam     | Looks like burned terrain   | 0.05    | 1.87    | 0.25    | 2       | 0.5     | 110     | 124     | 1.71    |
| SA5112128 | P3a     | P3Brg     | Dropped three times - poor sample   | 0.05    | 2.30    | -9      | 3       | -9      | -9      | 182     | 1.60    |
| SA5112129 | P3a     | P3Brg     | Small area of burned terrain  | 0.05    | 1.15    | 0.25    | 1       | 0.5     | 120     | 136     | 0.53    |
| SA5112130 | P3a     | P3Bmq     | Plant debris abundant   | 0.05    | 0.70    | 0.25    | 1       | 0.5     | 110     | 110     | 0.48    |
| SA5112131 | P3a     | P3Bgp     | Close to main road. Some peat material  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 42      | 0.05    |
| SA5112132 | P3gm    | P3Bgp     | Dropped three times - poor sample. Some fine grained & some coarse grained sediment | 0.05    | 4.32    | 0.25    | 8       | 0.5     | 150     | 170     | 4.68    |
| SA5112133 | P3gm    | P3Bgp     |   | 0.05    | 0.27    | 0.25    | 1       | 0.5     | 25      | 60      | 0.11    |
| SA5112134 | P3gm    | P3Bgd     | Few rocks around lake - plant debris abundant                                       | 0.05    | 0.16    | -9      | 1       | -9      | -9      | 51      | 0.05    |
| SA5112135 | P3gm    | P3Bgr     | Dropped three times - no mud sample   | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112136 | P3gm    | P3Bdr     | Sediment mixed by chopper   | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112137 | P3a     | P3Bmq     | Lots of plant debris. Lots of suspension  | 0.05    | 0.10    | -9      | 1       | -9      | -9      | 23      | 0.05    |
| SA5112138 | P3a     | P3Bam     | Some plant debris   | 0.05    | 0.72    | 0.25    | 1       | 2       | 25      | 81      | 0.25    |
| SA5112139 | P3gm    | P3Bmq     |   | 0.05    | 2.49    | 0.25    | 2       | 0.5     | 190     | 267     | 1.12    |
| SA5112140 | P3gm    | P3Bdr     | Plant Debris  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 25      | 0.05    |
| SA5112141 | P3gm    | P3Bgp     | Plant Debris  | 0.05    | 0.68    | 0.25    | 3       | 0.5     | 180     | 203     | 1.52    |
| SA5112142 | P3gm    | P3Bgp     |   | 0.05    | 1.31    | 0.25    | 1       | 0.5     | 270     | 288     | 0.98    |
| SA5112143 | P3gm    | P3Bgp     | Dropped twice - Bottom layer is grey  | 0.05    | 5.89    | 2.1     | 6       | 0.5     | 790     | 802     | 3.18    |
| SA5112144 | P3gm    | P3Bgp     |   | 0.05    | 0.74    | 0.25    | 1       | 0.5     | 87      | 96      | 0.43    |
| SA5112145 | P3gm    | P3Bgr     | Abundant plant material   | 0.05    | 0.65    | 0.25    | 1       | 0.5     | 53      | 58      | 0.87    |
| SA5112146 | P3gm    | P3Bdr     |   | 0.05    | 0.77    | 0.25    | 1       | 0.5     | 110     | 127     | 1.00    |
| SA5112147 | P3gm    | P3Bgp     | Huge rock (hill) next to lake   | 0.05    | 1.54    | 0.5     | 1       | 0.5     | 260     | 275     | 1.26    |
| SA5112148 | M3gr    | PMgr      | Plant debris  | 0.05    | 0.66    | 0.25    | 1       | 0.5     | 140     | 181     | 0.24    |
| SA5112149 | M3gr    | PMgr      |   | 0.05    | 2.70    | 0.25    | 2       | 0.5     | 570     | 573     | 0.66    |
| SA5112150 | M3gr    | PMyq      |   | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 74      | 73      | 0.05    |
| SA5112151 | M3gr    | PMmd      |   | 0.05    | 0.26    | 0.25    | 1       | 0.5     | 78      | 78      | 0.34    |
| SA5112152 | M3gr    | PMgr      |   | 0.05    | 0.22    | 0.6     | 1       | 0.5     | 91      | 112     | 0.05    |
| SA5112153 | M3gr    | PMgr      | Plant debris  | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 150     | 172     | 0.05    |
| SA5112154 | M3gr    | PMgr      |   | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 170     | 210     | 0.05    |
| SA5112155 | M3gr    | PMgr      | Plant debris  | 0.05    | 0.25    | 0.25    | 1       | 0.5     | 270     | 285     | 0.12    |
| SA5112156 | P-Msy   | PMgr      | Poor sample. Rocks in area & beaches. Dropped twice                                 | 0.05    | 8.11    | 0.25    | 1       | 0.5     | 1700    | 1607    | 1.83    |
| SA5112157 | P-Mgs   | PMgr      |   | 0.05    | 0.33    | 0.25    | 1       | 0.5     | 73      | 94      | 0.05    |
| SA5112158 | P-Mgs   | PMgr      |   | 0.05    | 0.20    | 0.25    | 1       | 0.5     | 290     | 369     | 0.05    |
| SA5112159 | M3gr    | PMgr      | Dropped twice. Chopper moving sediment  | 0.05    | 0.23    | 0.25    | 1       | 0.5     | 96      | 119     | 0.05    |
| SA5112160 | P-Mgs   | PMgr      |   | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 78      | 91      | 0.05    |
| SA5112161 | P-Mgs   | PMgr      |   | 0.05    | 6.54    | 0.25    | 1       | 0.5     | 1300    | 1202    | 1.54    |
| SA5112162 | P-Mgs   | PMgr      | Lots of plant debris. Poor sample   | 0.05    | 0.34    | 0.25    | 1       | 0.5     | 80      | 100     | 0.05    |
| SA5112163 | P-Msy   | PMYq      | Lots of plant debris  | 0.05    | 0.19    | 0.25    | 1       | 1       | 51      | 77      | 0.05    |
| SA5112164 | P-Mgs   | PMgr      |   | 0.05    | 0.29    | 0.25    | 1       | 0.5     | 25      | 96      | 0.05    |
| SA5112165 | P-Mgs   | PMgr      | Dropped twice. Rocks in area around edges of lake                                   | 0.05    | 7.16    | 0.25    | 1       | 0.5     | 1400    | 1299    | 1.64    |
| SA5112166 | P-Mgs   | PMgr      | Rocks in area around edges of lake  | 0.05    | 4.08    | 0.25    | 1       | 0.5     | 780     | 836     | 1.02    |
| SA5112167 | P-Mgs   | PMgr      |   | 0.05    | 0.27    | 0.7     | 1       | 0.5     | 66      | 79      | 0.17    |
| SA5112168 | P-Mgs   | PMgr      | Dropped twice   | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 84      | 99      | 0.05    |
| SA5112169 | P-Mgs   | PMgr      | Dropped twice   | 0.05    | 6.38    | 0.25    | 1       | 0.5     | 1300    | 1266    | 1.35    |
| SA5112170 | P-Mgs   | PMgr      |   | 0.05    | 5.46    | 0.25    | 1       | 0.5     | 970     | 986     | 1.25    |
| SA5112171 | P-Mgs   | PMgr      | Plant debris  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 59      | 0.05    |
| SA5112172 | P-Mgs   | PMgr      | Dropped twice   | 0.05    | 6.70    | 0.25    | 1       | 0.5     | 1300    | 1391    | 1.49    |
| SA5112173 | P-Mgs   | PMgr      |   | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 69      | 68      | 0.05    |
| SA5112174 | P-Mgs   | PMgr      | Lots of suspension  | 0.05    | 0.49    | 0.25    | 1       | 0.5     | 240     | 283     | 1.06    |
| SA5112175 | P-Mgs   | PMgr      |   | 0.05    | 6.97    | 0.25    | 1       | 0.5     | 1200    | 1257    | 1.65    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments   | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112176 | P-Mgs   | PMgr      |  | 0.05    | 4.82    | 0.25    | 1       | 0.5     | 800     | 876     | 1.03    |
| SA5112177 | P-Mgs   | PMgr      | Dropped twice  | 0.05    | 2.84    | 0.9     | 1       | 0.5     | 510     | 587     | 0.60    |
| SA5112178 | P-Mgs   | PMgr      | Dropped twice  | 0.05    | 0.38    | 0.25    | 1       | 0.5     | 93      | 101     | 0.10    |
| SA5112179 | P-Mgs   | PMgr      |  | 0.05    | 7.49    | 0.6     | 1       | 0.5     | 1300    | 1283    | 1.52    |
| SA5112180 | P-Mgs   | PMgr      |  | 0.05    | 0.39    | 0.25    | 1       | 0.5     | 150     | 152     | 0.05    |
| SA5112181 | M3gr    | PMYq      |  | 0.05    | 0.51    | 0.5     | 1       | 0.5     | 65      | 52      | 0.17    |
| SA5112182 | P-Mgs   | PMgr      |  | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 78      | 93      | 0.05    |
| SA5112183 | P-Mgs   | PMgr      |  | 0.05    | 6.56    | 0.8     | 1       | 0.5     | 1000    | 1036    | 1.34    |
| SA5112184 | P-Mgs   | PMgr      |  | 0.05    | 5.00    | 0.6     | 1       | 0.5     | 710     | 706     | 1.07    |
| SA5112185 | P-Mgs   | M3Dmq     |  | 0.05    | 0.29    | 0.25    | 1       | 0.5     | 56      | 72      | 0.05    |
| SA5112186 | P-Mgs   | PMgr      |  | 0.05    | 0.58    | 0.5     | 1       | 0.5     | 130     | 131     | 0.17    |
| SA5112187 | P-Mgs   | PMgr      | Plant debris   | 0.05    | 0.29    | 0.25    | 1       | 1       | 71      | 58      | 0.05    |
| SA5112188 | P-Mgs   | PMgr      | Poor sample  | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 68      | 54      | 0.05    |
| SA5112189 | P-Mgs   | PMgr      |  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 52      | 72      | 0.05    |
| SA5112190 | P-Mgs   | PMss      |  | 0.05    | 1.18    | 0.25    | 2       | 0.5     | 240     | 262     | 0.29    |
| SA5112191 | P-Mgs   | PMgr      |  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 100     | 105     | 0.05    |
| SA5112192 | M3gr    | PMmq      | Plant debris   | 0.05    | 1.42    | 0.25    | 2       | 0.5     | 260     | 301     | 0.52    |
| SA5112193 | P-Mgs   | PMgr      | Peaty top layer. Bottom layer is large clastic grains - tan yellow in color of mud | 0.05    | 1.32    | 0.25    | 1       | 0.5     | 200     | 227     | 0.40    |
| SA5112194 | P-Mgs   | PMgr      | Plant debris   | 0.05    | 1.01    | 0.25    | 2       | 2       | 81      | 108     | 0.50    |
| SA5112195 | P-Mgs   | PMgr      | Plant debris   | 0.05    | 4.40    | 0.25    | 1       | 0.5     | 780     | 809     | 1.29    |
| SA5112196 | P-Mgs   | PMmq      | Plant debris   | 0.05    | 1.33    | 0.25    | 3       | 0.5     | 78      | 91      | 0.71    |
| SA5112197 | M3gr    | PMgr      |  | 0.05    | 1.17    | 0.25    | 3       | 0.5     | 320     | 361     | 0.59    |
| SA5112198 | M3gr    | PMgr      |  | 0.05    | 1.62    | 0.25    | 3       | 2       | 220     | 234     | 1.14    |
| SA5112199 | M3gr    | PMgr      |  | 0.05    | 2.75    | 0.25    | 4       | 0.5     | 190     | 194     | 1.40    |
| SA5112200 | P-Mgs   | PMgr      |  | 0.05    | 6.60    | 0.25    | 1       | 0.5     | 880     | 987     | 1.50    |
| SA5112201 | M3gr    | PMgr      |  | 0.05    | 1.27    | 0.25    | 1       | 0.5     | 120     | 159     | 0.42    |
| SA5112202 | M3gr    | PMgr      | Poor Sample.Rocky bottom.  | 0.05    | 0.74    | -9      | 3       | -9      | -9      | 188     | 0.28    |
| SA5112203 | M3gr    | PMgr      |  | 0.05    | 1.95    | 0.25    | 3       | 0.5     | 180     | 210     | 0.90    |
| SA5112204 | M3gr    | PMgr      |  | 0.05    | 0.20    | 0.25    | 1       | 0.5     | 96      | 101     | 0.05    |
| SA5112205 | M3gr    | PMgr      |  | 0.05    | 1.97    | 0.25    | 3       | 0.5     | 130     | 198     | 0.74    |
| SA5112206 | M3gr    | PMYq      | Poor sample.   | -9      | 1.90    | -9      | 3       | -9      | -9      | 215     | 0.61    |
| SA5112207 | P-Mgs   | PMgr      |  | 0.05    | 0.53    | 0.25    | 1       | 0.5     | 25      | 57      | 0.20    |
| SA5112208 | P-Mgs   | PMgr      |  | 0.05    | 1.05    | 0.25    | 2       | 0.5     | 97      | 113     | 0.78    |
| SA5112209 | P-Mgs   | PMgr      | Abundant plant debris  | 0.05    | 0.73    | 0.25    | 1       | 0.5     | 25      | 46      | 0.20    |
| SA5112210 | P-Mgs   | PMgr      |  | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 66      | 96      | 0.10    |
| SA5112211 | P-Mgs   | PMgr      |  | 0.05    | 0.80    | 0.5     | 1       | 0.5     | 120     | 138     | 0.32    |
| SA5112212 | P-Mgs   | PMgr      |  | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 65      | 67      | 0.05    |
| SA5112213 | P-Mgs   | PMgd      |  | 0.05    | 0.29    | 0.25    | 1       | 0.5     | 69      | 64      | 0.05    |
| SA5112214 | P-Mgs   | PMgd      |  | 0.05    | 0.28    | 0.25    | 1       | 0.5     | 25      | 56      | 0.05    |
| SA5112215 | P-Mgs   | PMgr      |  | 0.05    | 0.13    | 0.25    | 1       | 2       | 57      | 69      | 0.05    |
| SA5112216 | M1lga   | PMdr      | Plant debris   | 0.05    | 0.17    | -9      | 1       | -9      | -9      | 70      | 0.05    |
| SA5112217 | M1lga   | M1ln      |  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 76      | 58      | 0.05    |
| SA5112218 | M1lga   | M1rg      |  | 0.05    | 0.20    | 0.25    | 1       | 0.5     | 190     | 225     | 0.05    |
| SA5112219 | P-Mgs   | PMgr      | Plant debris   | 0.05    | 0.29    | 0.25    | 1       | 2       | 140     | 163     | 0.19    |
| SA5112220 | P-Mgs   | PMgr      |  | 0.05    | 7.16    | 0.25    | 1       | 0.5     | 980     | 979     | 1.61    |
| SA5112221 | P-Mgs   | PMgr      |  | 0.05    | 1.49    | 0.25    | 1       | 0.5     | 260     | 279     | 0.46    |
| SA5112222 | P-Mgs   | PMgr      |  | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 83      | 75      | 0.05    |
| SA5112223 | P-Mgs   | PMgr      | Very shallow, abundant peat.chopper suspension.                                    | 0.05    | 0.23    | 0.25    | 1       | 0.5     | 310     | 357     | 0.05    |
| SA5112224 | P-Mgs   | PMgr      | Top layer tan yellow ~1 cm   | 0.05    | 0.33    | 0.7     | 1       | 0.5     | 190     | 210     | 0.13    |
| SA5112225 | P-Mgs   | PMgr      |  | 0.05    | 1.01    | 0.25    | 1       | 0.5     | 85      | 131     | 0.34    |
| SA5112226 | M3gs    | PMgr      |  | 0.05    | 0.55    | 0.7     | 1       | 0.5     | 88      | 123     | 0.22    |
| SA5112227 | M3gs    | PMmd      | Plant debris   | 0.05    | 0.27    | 0.25    | 1       | 0.5     | 110     | 87      | 0.15    |
| SA5112228 | M3gs    | PMgr      |  | 0.05    | 1.15    | 0.25    | 1       | 0.5     | 110     | 117     | 0.37    |
| SA5112229 | P-Mgs   | PMgr      |  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 42      | 0.05    |
| SA5112230 | P-Mgs   | PMgr      | Plant debris   | 0.05    | 0.46    | 0.25    | 1       | 0.5     | 25      | 59      | 0.37    |
| SA5112231 | P-Mgs   | PMgr      |  | 0.05    | 1.78    | 0.25    | 3       | 0.5     | 84      | 90      | 0.85    |
| SA5112232 | P-Mgs   | PMgr      | Some plant debris  | 0.05    | 1.15    | 0.25    | 1       | 0.5     | 74      | 96      | 0.37    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments                                   | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112233 | P-Mgs   | PMmd      |  | 0.05    | 0.24    | 0.25    | 1       | 0.5     | 120     | 141     | 0.05    |
| SA5112234 | P-Mgs   | PMgr      | Abundant plant debris                      | 0.05    | 0.62    | -9      | 1       | -9      | -9      | 148     | 0.21    |
| SA5112235 | P-Mgs   | PMmd      |  | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 140     | 149     | 0.05    |
| SA5112236 | P-Mgs   | PMgr      | Bottom is Rock.                            | 0.05    | 3.49    | -9      | 1       | -9      | -9      | 544     | 0.87    |
| SA5112237 | P-Mgs   | PMmq      | No sample. Two attempts.                   | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112238 | P-Mgs   | PMgr      | Abundant plant debris                      | 0.05    | 0.75    | 0.25    | 3       | 2       | 160     | 172     | 0.64    |
| SA5112239 | P-Mgs   | PMyq      | Abundant plant debris                      | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 62      | 80      | 0.05    |
| SA5112240 | P-Mgs   | PMgr      |  | 0.05    | 0.48    | 0.25    | 1       | 0.5     | 86      | 106     | 0.16    |
| SA5112241 | P-Mgs   | PMgd      |  | 0.05    | 2.68    | 0.25    | 3       | 0.5     | 480     | 189     | 1.12    |
| SA5112242 | P-Mgs   | PMgr      | Plant debris                               | 0.05    | 0.80    | 0.25    | 1       | 0.5     | 90      | 132     | 0.32    |
| SA5112243 | P-Mgs   | PMgr      |  | 0.05    | 0.90    | 0.25    | 1       | 0.5     | 270     | 347     | 0.27    |
| SA5112244 | P-Mgs   | PMgr      |  | 0.05    | 0.88    | 0.25    | 1       | 0.5     | 110     | 146     | 0.26    |
| SA5112245 | P-Mgs   | PMgd      |  | 0.05    | 2.49    | 0.25    | 1       | 0.5     | 570     | 120     | 2.22    |
| SA5112246 | P-Mgs   | PMyq      | Abundant plant debris                      | 0.05    | 0.22    | 0.25    | 1       | 2       | 25      | 91      | 0.05    |
| SA5112247 | M3gr    | PMgr      | Plant debris                               | 0.05    | 0.61    | 1       | 2       | 8       | 170     | 159     | 0.26    |
| SA5112248 | M3gr    | PMgr      |  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 52      | 0.05    |
| SA5112249 | P-Mgs   | PMgr      |  | 0.2     | 1.03    | -9      | 1       | -9      | -9      | 425     | 0.51    |
| SA5112250 | P-Mgs   | PMgr      |  | 0.05    | 1.92    | 0.25    | 1       | 3       | 190     | 242     | 0.48    |
| SA5112251 | P-Mgs   | PMgr      |  | 0.05    | 2.05    | 0.25    | 2       | 0.5     | 290     | 295     | 0.58    |
| SA5112252 | P-Mgs   | PMgr      | Strong H2S smell. Dropped twice            | 0.05    | 2.29    | 0.25    | 1       | 0.5     | 280     | 185     | 0.58    |
| SA5112253 | P-Mgs   | PMgr      |  | 0.05    | 0.78    | 0.25    | 1       | 0.5     | 110     | 117     | 0.20    |
| SA5112254 | M3gr    | PMgr      |  | 0.05    | 1.97    | 0.25    | 3       | 0.5     | 190     | 201     | 0.77    |
| SA5112255 | M3gr    | PMgr      | Plant debris. Poor sample                  | -9      | 1.03    | -9      | 2       | -9      | -9      | 167     | 0.28    |
| SA5112256 | M3gr    | PMgr      | Abundant plant debris                      | 0.05    | 0.96    | 0.25    | 1       | 0.5     | 130     | 179     | 0.40    |
| SA5112257 | M3gr    | PMgr      |  | 0.05    | 1.46    | 0.25    | 2       | 0.5     | 140     | 159     | 0.60    |
| SA5112258 | M3gr    | PMgr      | Plant debris                               | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 70      | 107     | 0.05    |
| SA5112259 | P-Mgs   | PMgr      | Dropped twice                              | 0.05    | 4.12    | 0.25    | 1       | 0.5     | 710     | 823     | 1.14    |
| SA5112260 | P-Mgs   | PMmq      |  | 0.05    | 1.61    | 0.25    | 2       | 0.5     | 120     | 153     | 0.63    |
| SA5112261 | M3gr    | PMgr      | No sample                                  | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112262 | M3gr    | PMgr      | Plant debris                               | 0.05    | 0.68    | 0.25    | 1       | 2       | 97      | 124     | 0.20    |
| SA5112263 | M3gr    | PMmq      | Plant debris                               | 0.05    | 0.78    | 0.25    | 1       | 0.5     | 200     | 246     | 0.27    |
| SA5112264 | P-Mgs   | PMmq      |  | 0.05    | 0.51    | 0.25    | 1       | 0.5     | 76      | 81      | 0.16    |
| SA5112265 | P-Msy   | PMmq      | Plant debris                               | 0.05    | 1.80    | 0.25    | 1       | 2       | 220     | 266     | 0.50    |
| SA5112266 | P-Mgs   | PMgr      | Plant debris                               | 0.05    | 1.27    | 0.25    | 1       | 0.5     | 150     | 180     | 0.43    |
| SA5112267 | P-Mgs   | PMgr      |  | 0.05    | 0.15    | 0.25    | 1       | 2       | 54      | 84      | 0.05    |
| SA5112268 | P-Msy   | PMgr      |  | 0.05    | 1.23    | 0.25    | 1       | 0.5     | 110     | 122     | 0.46    |
| SA5112269 | P-Msy   | PMgr      |  | 0.05    | 1.06    | 0.7     | 1       | 0.5     | 220     | 262     | 1.11    |
| SA5112270 | P-Msy   | PMgr      |  | 0.05    | 2.31    | 0.25    | 2       | 0.5     | 130     | 153     | 0.79    |
| SA5112271 | P-Mgs   | PMgr      |  | 0.05    | 2.09    | 0.25    | 1       | 1       | 260     | 298     | 0.56    |
| SA5112272 | P-Msy   | PMmd      |  | 0.05    | 0.27    | 0.5     | 1       | 2       | 96      | 126     | 0.05    |
| SA5112273 | P-Msy   | PMmd      |  | 0.05    | 0.93    | 0.25    | 1       | 0.5     | 250     | 297     | 0.26    |
| SA5112274 | P3gm    | P3Bgp     |  | 0.05    | 0.12    | -9      | 1       | -9      | -9      | 33      | 0.05    |
| SA5112275 | P3gm    | P3Bgp     | Plant debris                               | 0.05    | 0.37    | 0.25    | 1       | 0.5     | 58      | 55      | 0.05    |
| SA5112276 | P3gm    | P3Bgp     |  | 0.05    | 0.75    | 0.25    | 1       | 0.5     | 68      | 74      | 0.23    |
| SA5112277 | P3gm    | P3Bgp     |  | 0.05    | 0.22    | -9      | 1       | -9      | -9      | 61      | 0.05    |
| SA5112278 | P3gm    | P3Bgp     |  | 0.05    | 1.03    | 0.25    | 1       | 0.5     | 71      | 87      | 0.30    |
| SA5112279 | M3gr    | PMmq      | Plant debris                               | 0.05    | 1.15    | 0.25    | 1       | 0.5     | 260     | 273     | 0.32    |
| SA5112280 | P3gm    | P3Bgp     |  | 0.05    | 0.40    | 0.25    | 1       | 0.5     | 25      | 55      | 0.05    |
| SA5112281 | P3gm    | P3Bgp     | Burned terrain                             | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 25      | 40      | 0.05    |
| SA5112282 | P3sgn   | P3Bgp     | Burned terrain.Plant debris                | 0.05    | 1.60    | 0.25    | 3       | 0.5     | 84      | 94      | 0.40    |
| SA5112283 | P3gm    | P3Bgp     |  | 0.05    | 0.77    | 0.25    | 3       | 0.5     | 93      | 106     | 0.49    |
| SA5112284 | M3gs    | P3Cga     | Dropped twice. Poor sample. Burned terrain | 0.05    | 7.38    | 0.25    | 1       | 0.5     | 970     | 991     | 1.34    |
| SA5112285 | P3gm    | P3Bgp     | Burned terrain                             | 0.1     | 0.30    | 0.25    | 1       | 0.5     | 130     | 153     | 0.05    |
| SA5112286 | M1lga   | PMgr      |  | 0.05    | 0.50    | 0.25    | 1       | 0.5     | 66      | 82      | 0.05    |
| SA5112287 | M1lga   | PMdr      | Chopper suspension.                        | 0.1     | 0.13    | 0.25    | 1       | 0.5     | 25      | 43      | 0.05    |
| SA5112288 | M1lga   | PMgr      | Dropped twice                              | 0.05    | 0.51    | 0.25    | 1       | 0.5     | 25      | 53      | 0.13    |
| SA5112289 | M1lga   | M1ln      | Dropped twice. Plant debris                | 0.05    | 0.13    | -9      | 1       | -9      | -9      | 87      | 0.05    |



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| FldNum    | 1M_Lith | 100K_Lith | Comments                               | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112290 | M1lga   | M1ln      |  | 0.05    | 1.10    | 0.25    | 1       | 0.5     | 190     | 226     | 0.20    |
| SA5112291 | M1lga   | M1ln      |  | 0.05    | 2.74    | 0.9     | 2       | 0.5     | 400     | 465     | 0.79    |
| SA5112292 | M1lga   | PMgr      | Chopper suspension                     | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 59      | 58      | 0.05    |
| SA5112293 | M1lga   | M1ln      |  | 0.05    | 1.43    | 0.25    | 1       | 0.5     | 140     | 205     | 0.37    |
| SA5112294 | P3gm    | P3Bgp     | Burned terrain                         | 0.05    | 2.99    | 0.25    | 1       | 0.5     | 320     | 389     | 0.68    |
| SA5112295 | P3gm    | P3Bgp     | Burned terrain                         | 0.05    | 1.57    | 0.25    | 3       | 0.5     | 120     | 134     | 0.43    |
| SA5112296 | P3gm    | P3Bgp     | Plant debris.Poorsample.Burned terrain | 0.05    | 9.55    | 0.25    | 1       | 0.5     | 900     | 1233    | 2.05    |
| SA5112297 | P3gm    | P3Bgp     | No mud sample. Dropped thrice          | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112298 | P3gm    | P3Bgp     |  | 0.05    | 0.14    | 0.6     | 1       | 0.5     | 25      | 33      | 0.05    |
| SA5112299 | P3gm    | P3Bgp     |  | 0.05    | 1.37    | 0.25    | 1       | 0.5     | 180     | 228     | 0.36    |
| SA5112300 | P3gm    | P3Bgp     |  | 0.05    | 0.91    | -9      | 1       | -9      | -9      | 184     | 0.29    |
| SA5112301 | P3gm    | P3Bgp     |  | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112302 | P3gm    | P3Bgp     | Plant debris. Burned terrain           | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 58      | 44      | 0.05    |
| SA5112303 | P3gm    | P3Bgd     |  | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 28      | 0.05    |
| SA5112304 | M1lga   | PMdr      |  | 0.05    | 1.67    | 0.7     | 1       | 0.5     | 210     | 224     | 0.34    |
| SA5112305 | M1lga   | PMam      |  | 0.05    | 1.69    | 0.25    | 1       | 0.5     | 200     | 229     | 0.33    |
| SA5112306 | P-Mgs   | PMgr      |  | 0.05    | 2.22    | 0.25    | 1       | 0.5     | 180     | 197     | 0.60    |
| SA5112307 | P-Mgs   | PMgr      |  | 0.05    | 0.07    | 0.25    | 1       | 0.5     | 91      | 98      | 0.05    |
| SA5112308 | P-Mgs   | PMmq      |  | 0.05    | 0.56    | 0.25    | 1       | 0.5     | 54      | 82      | 0.13    |
| SA5112309 | P3gm    | PMdr      | Plant debris                           | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 38      | 0.05    |
| SA5112310 | P3gm    | P3Bgp     | Plant debris. Dropped twice            | 0.05    | 0.83    | 0.25    | 1       | 0.5     | 25      | 83      | 0.25    |
| SA5112311 | P3sgn   | P3Asp     | Dropped twice. Abundant plant debris   | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112312 | P-Mgs   | PMgr      | Chopper suspension                     | 0.05    | 0.19    | -9      | 1       | -9      | -9      | 71      | 0.05    |
| SA5112313 | P3gm    | P3Bgr     | Plant debris. Dropped twice            | 0.05    | 1.18    | 0.6     | 1       | 0.5     | 86      | 99      | 0.26    |
| SA5112314 | P3gm    | P3Bgr     |  | 0.05    | 2.16    | 0.25    | 2       | 0.5     | 130     | 148     | 0.72    |
| SA5112315 | P3sgn   | P3Asp     |  | 0.05    | 5.75    | 0.25    | 1       | 0.5     | 590     | 663     | 1.46    |
| SA5112316 | P3gm    | P3Bgr     | Plant debris                           | 0.05    | 1.08    | 0.5     | 1       | 0.5     | 100     | 109     | 0.32    |
| SA5112317 | P3gm    | P3Bgp     | Plant debris .Burned terrain           | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 73      | 73      | 0.05    |
| SA5112318 | P-Mgs   | PMgr      | No mud sample. Dropped twice           | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112319 | P-Mgs   | PMgr      | Plant debris                           | 0.05    | 1.62    | 0.25    | 2       | 0.5     | 160     | 199     | 0.34    |
| SA5112320 | P-Mgs   | PMgr      |  | 0.05    | 0.18    | -9      | 1       | -9      | -9      | 102     | 0.05    |
| SA5112321 | P-Mgs   | PMgr      |  | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 140     | 0.05    |
| SA5112322 | P-Mgs   | PMgr      | Plant debris                           | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 142     | 0.05    |
| SA5112323 | P-Mgs   | PMgr      |  | 0.05    | 0.91    | 0.25    | 1       | 0.5     | 200     | 246     | 0.24    |
| SA5112324 | P-Mgs   | M1rg      | Plant debris                           | 0.05    | 1.66    | 0.25    | 1       | 0.5     | 300     | 243     | 0.31    |
| SA5112325 | P3gm    | P3Bgp     |  | 0.05    | 0.18    | 0.5     | 1       | 0.5     | 88      | 85      | 0.05    |
| SA5112326 | P3gm    | P3Bgp     | Dropped twice                          | 0.05    | 0.20    | -9      | 1       | -9      | -9      | 88      | 0.05    |
| SA5112327 | P3gm    | P3Bgd     |  | 0.05    | 1.46    | 0.25    | 1       | 0.5     | 150     | 160     | 0.37    |
| SA5112328 | P3gm    | P3Bgr     |  | 0.05    | 1.90    | 0.9     | 2       | 0.5     | 150     | 167     | 0.53    |
| SA5112329 | P3sgn   | P3Asp     | Burned terrain. Plant debris           | 0.05    | 0.70    | 0.25    | 1       | 0.5     | 97      | 98      | 0.16    |
| SA5112330 | P3gm    | P3Bgp     |  | 0.05    | 0.74    | 0.25    | 1       | 0.5     | 110     | 121     | 0.19    |
| SA5112331 | P3gm    | P3Bgp     | Dropped twice                          | 0.05    | 0.97    | 0.25    | 1       | 0.5     | 110     | 107     | 0.28    |
| SA5112332 | P3gm    | P3Bgp     | Some burned terrain                    | 0.05    | 1.01    | 0.25    | 1       | 0.5     | 79      | 87      | 0.29    |
| SA5112333 | P3gm    | P3Bgp     | Some burned terrain                    | 0.05    | 1.56    | 0.25    | 1       | 0.5     | 130     | 168     | 0.38    |
| SA5112334 | P3sgn   | P3Asp     | Some peat material                     | 0.05    | 0.50    | 0.25    | 1       | 0.5     | 63      | 76      | 0.15    |
| SA5112335 | P3gm    | P3Bgp     | Dropped twice                          | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 130     | 137     | 0.05    |
| SA5112336 | P3sgn   | P3Asp     |  | 0.05    | 0.88    | 0.25    | 1       | 0.5     | 100     | 113     | 0.26    |
| SA5112337 | P3gm    | P3Bgp     | Dropped twice                          | 0.05    | 0.20    | 0.25    | 1       | 0.5     | 25      | 62      | 0.05    |
| SA5112338 | P3sgn   | P3Asp     |  | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112339 | P3sgn   | P3Asp     |  | 0.05    | 2.28    | -9      | 3       | -9      | -9      | 472     | 0.74    |
| SA5112340 | P3gm    | P3Bgp     | Plant debris                           | 0.05    | 0.84    | 0.25    | 1       | 2       | 87      | 92      | 0.22    |
| SA5112341 | P3sgn   | P3Ass     |  | 0.05    | 0.19    | -9      | 1       | -9      | -9      | 39      | 0.05    |
| SA5112342 | P3sgn   | P3Asp     |  | 0.05    | 0.65    | -9      | 1       | -9      | -9      | 95      | 0.18    |
| SA5112343 | P3sgn   | P3Asp     |  | 0.05    | 2.33    | 0.25    | 1       | 0.5     | 160     | 179     | 0.74    |
| SA5112344 | P3sgn   | P3Asp     |  | 0.05    | 0.96    | 0.25    | 1       | 0.5     | 82      | 91      | 0.26    |
| SA5112345 | P3sgn   | P3Asp     | Plant debris                           | 0.05    | 0.53    | 0.25    | 1       | 0.5     | 61      | 76      | 0.16    |
| SA5112346 | P3sgn   | P3Asp     | Diseased trees                         | 0.05    | 0.87    | 0.25    | 1       | 0.5     | 71      | 76      | 0.28    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments  | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|---|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112347 | P3sgn   | P3Asp     |   | 0.1     | 0.88    | -9      | 1       | -9      | -9      | 108     | 0.55    |
| SA5112348 | P3sgn   | P3Asp     |   | 0.05    | 3.37    | 0.8     | 1       | 0.5     | 110     | 136     | 1.40    |
| SA5112349 | P3sgn   | P3Asp     |   | 0.05    | 1.85    | 0.25    | 1       | 0.5     | 270     | 329     | 0.75    |
| SA5112350 | P3sgn   | P3Asp     |   | 0.05    | 1.89    | 0.25    | 1       | 0.5     | 180     | 44      | 0.51    |
| SA5112351 | P3sgn   | P3Asp     |   | 0.05    | 1.06    | 0.25    | 1       | 0.5     | 150     | 171     | 0.36    |
| SA5112352 | P3sgn   | P3Asp     | Plant debris  | 0.05    | 0.36    | 0.25    | 1       | 0.5     | 56      | 80      | 0.23    |
| SA5112353 | P3sgn   | P3Asp     | Plant debris  | 0.05    | 1.49    | 0.25    | 1       | 0.5     | 170     | 210     | 0.38    |
| SA5112354 | P3sgn   | P3Asp     | Some tan yellow sediment                              | 0.2     | 1.79    | -9      | 1       | -9      | -9      | 157     | 0.57    |
| SA5112355 | P3sgn   | P3Asp     | Tan yellow speckles at base                           | 0.05    | 3.08    | 0.25    | 1       | 0.5     | 600     | 629     | 1.13    |
| SA5112356 | P3sgn   | P3Asp     | Plant debris  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 59      | 40      | 0.05    |
| SA5112357 | P3sgn   | P3Asp     | Plant debris  | 0.05    | 0.08    | 0.25    | 1       | 2       | 25      | 36      | 0.05    |
| SA5112358 | P3sgn   | P3Asp     |   | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 53      | 48      | 0.05    |
| SA5112359 | P3sgn   | P3Asp     | Tan yellow speckles at base                           | 0.05    | 3.44    | 0.25    | 1       | 0.5     | 500     | 595     | 1.20    |
| SA5112360 | P3gm    | P3Asp     |   | 0.05    | 3.04    | 0.25    | 1       | 3       | 260     | 232     | 1.16    |
| SA5112361 | P3gm    | P3Asp     |   | 0.05    | 1.57    | 0.25    | 1       | 0.5     | 53      | 130     | 0.66    |
| SA5112362 | P3gm    | P3Bgp     |   | 0.05    | 1.30    | 0.25    | 1       | 0.5     | 110     | 126     | 0.48    |
| SA5112363 | P3gm    | P3Bgp     |   | 0.05    | 1.18    | 0.25    | 1       | 0.5     | 83      | 97      | 0.32    |
| SA5112364 | P3gm    | P3Bgp     |   | 0.05    | 2.66    | 0.25    | 2       | 0.5     | 160     | 189     | 1.07    |
| SA5112365 | P3gm    | P3Asp     | Plant debris  | 0.05    | 5.43    | 0.25    | 1       | 0.5     | 600     | 643     | 1.36    |
| SA5112366 | P3gm    | P3Asp     |   | 0.05    | 1.70    | 0.25    | 1       | 0.5     | 150     | 169     | 0.52    |
| SA5112367 | P3sgn   | P3Asp     |   | 0.05    | 2.47    | 0.25    | 1       | 0.5     | 170     | 166     | 0.83    |
| SA5112368 | P3sgn   | P3Asp     | Forest vs. Sparse                                     | 0.2     | 2.27    | 0.25    | 1       | 0.5     | 200     | 210     | 0.77    |
| SA5112369 | P3sgn   | P3Asp     | Plant debris. Poor sample                             | 0.05    | 4.67    | 0.25    | 1       | 0.5     | 500     | 524     | 1.21    |
| SA5112370 | P3sgn   | P3Asp     |   | 0.05    | 5.71    | 1       | 3       | 0.5     | 410     | 415     | 2.32    |
| SA5112371 | P3sgn   | P3Asp     |   | 0.05    | 4.52    | 0.25    | 1       | 0.5     | 340     | 374     | 1.76    |
| SA5112372 | P3sgn   | P3Asp     | Barren area as well                                   | 0.05    | 0.20    | -9      | 1       | -9      | -9      | 53      | 0.05    |
| SA5112373 | P3sgn   | P3Asp     | Plant debris  | 0.05    | 0.89    | 0.25    | 1       | 0.5     | 55      | 66      | 0.27    |
| SA5112374 | P3sgn   | P3Asp     |   | 0.05    | 1.03    | 0.25    | 1       | 0.5     | 65      | 107     | 0.28    |
| SA5112375 | P3sgn   | P3Asp     |   | 0.05    | 2.51    | 0.25    | 1       | 3       | 140     | 161     | 1.03    |
| SA5112376 | P3sgn   | P3Asp     | Minor suspended                                       | 0.05    | 0.76    | 0.25    | 1       | 0.5     | 95      | 114     | 0.22    |
| SA5112377 | P3sgn   | P3Asp     | Minor suspended                                       | 0.05    | 1.37    | 0.25    | 1       | 0.5     | 170     | 188     | 0.38    |
| SA5112378 | P3sgn   | P3Ass     |   | 0.05    | 1.77    | 0.25    | 1       | 0.5     | 110     | 129     | 0.65    |
| SA5112379 | P3sgn   | P3Asp     | Minor suspended                                       | 0.05    | 0.73    | 0.25    | 1       | 0.5     | 89      | 102     | 0.19    |
| SA5112380 | P3sgn   | P3Asp     |   | 0.05    | 1.79    | 0.25    | 1       | 0.5     | 170     | 173     | 0.67    |
| SA5112381 | P3sgn   | P3Ass     |   | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 51      | 42      | 0.05    |
| SA5112382 | P3gm    | P3Asp     |   | 0.05    | 2.87    | 0.25    | 2       | 0.5     | 200     | 230     | 1.02    |
| SA5112383 | P3gm    | P3Bgp     |   | 0.05    | 0.50    | 0.6     | 1       | 0.5     | 62      | 90      | 0.16    |
| SA5112384 | P3gm    | P3Bgp     |   | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 70      | 81      | 0.05    |
| SA5112385 | P3gm    | P3Bgp     | Minor suspended. Some clastic material, Dropped twice | 0.05    | 3.47    | 0.25    | 1       | 0.5     | 420     | 448     | 0.86    |
| SA5112386 | P3gm    | P3Bgp     | Minor suspended.                                      | 0.05    | 1.70    | 0.25    | 1       | 0.5     | 150     | 172     | 0.72    |
| SA5112387 | P3sgn   | P3Asp     | Minor suspended                                       | 0.05    | 2.65    | 0.25    | 1       | 0.5     | 300     | 310     | 1.34    |
| SA5112388 | M3gs    | M3Dgr     |   | 0.05    | 1.50    | 0.25    | 1       | 0.5     | 180     | 205     | 0.55    |
| SA5112389 | P3gm    | P3Bgp     | Minor suspended                                       | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 85      | 0.05    |
| SA5112390 | M3gs    | M3Dgr     | Minor suspended. Abundant plant debris                | 0.05    | 0.74    | 0.25    | 1       | 0.5     | 98      | 139     | 0.31    |
| SA5112391 | M3gs    | M3Dgr     | Grey layer & some red material                        | 0.8     | 5.37    | 1.1     | 3       | 0.5     | 380     | 498     | 2.15    |
| SA5112392 | P3gm    | P3Bgp     | Minor suspended                                       | 0.05    | 1.02    | 0.25    | 1       | 0.5     | 25      | 89      | 0.61    |
| SA5112393 | M3gs    | M3Dgr     |   | 0.05    | 6.07    | 1.9     | 6       | 0.5     | 620     | 157     | 2.78    |
| SA5112394 | M3gs    | M3Dgr     | Hydrogen sulfide. Abundant suspended matter           | 0.05    | 1.57    | 0.25    | 1       | 0.5     | 190     | 235     | 0.52    |
| SA5112395 | P3gm    | P3Bgd     | No mud sample, Dropped 3 times                        | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112396 | P3gm    | P3Bgp     |   | 0.05    | 3.30    | 0.25    | 3       | 0.5     | 140     | 171     | 1.69    |
| SA5112397 | P3gm    | P3Bgp     |   | 0.05    | 0.55    | 0.25    | 1       | 0.5     | 25      | 73      | 0.70    |
| SA5112398 | P3a     | P3Bln     |   | 0.05    | 0.94    | 0.25    | 2       | 0.5     | 85      | 110     | 0.39    |
| SA5112399 | P3a     | P3Bln     |   | 0.05    | 0.89    | 0.25    | 4       | 0.5     | 67      | 84      | 0.33    |
| SA5112400 | P3a     | P3Bam     |   | 0.05    | 3.94    | 1.5     | 4       | 0.5     | 300     | 310     | 1.09    |
| SA5112401 | P3a     | P3Bln     |   | 0.05    | 3.62    | 0.25    | 8       | 0.5     | 200     | 185     | 2.01    |
| SA5112402 | P3gm    | P3Bgp     |   | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 25      | 66      | 0.05    |
| SA5112403 | P3a     | P3Bgp     | Poor sample   | 0.05    | 5.68    | 0.6     | 1       | 0.5     | 450     | 468     | 2.10    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments                  | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112404 | P3a     | P3Bln     |                           | 0.05    | 2.31    | 0.25    | 4       | 0.5     | 200     | 235     | 1.02    |
| SA5112405 | P3a     | P3Bgp     |                           | 0.05    | 4.84    | 0.5     | 3       | 0.5     | 550     | 607     | 1.40    |
| SA5112406 | P3a     | P3Bam     |                           | 0.05    | 3.30    | 0.25    | 5       | 0.5     | 380     | 453     | 0.84    |
| SA5112407 | P3a     | P3Bgp     | Poor sample               | 0.05    | 6.64    | 0.5     | 1       | 0.5     | 500     | 547     | 1.86    |
| SA5112408 | P3a     | P3Ban     |                           | 0.05    | 2.90    | 0.25    | 1       | 0.5     | 330     | 388     | 0.67    |
| SA5112409 | P3a     | P3Ban     |                           | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 30      | 0.05    |
| SA5112410 | P3gm    | P3Bgp     |                           | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 36      | 0.05    |
| SA5112411 | P3gm    | P3Bgr     |                           | 0.05    | 2.08    | 0.25    | 2       | 0.5     | 220     | 216     | 0.44    |
| SA5112412 | P3gm    | P3Bgr     | Poor sample               | 0.05    | 2.63    | -9      | 1       | -9      | -9      | 245     | 0.65    |
| SA5112413 | P3gm    | P3Bgr     |                           | 0.05    | 4.23    | 0.25    | 1       | 0.5     | 290     | 311     | 1.09    |
| SA5112414 | P3gm    | P3Bgp     |                           | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 46      | 0.05    |
| SA5112415 | P3a     | P3Ban     | Plant debris              | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 25      | 64      | 0.05    |
| SA5112416 | P3a     | P3Ban     | Peaty plant debris        | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 25      | 41      | 0.05    |
| SA5112417 | P3gm    | P3Bgp     |                           | 0.05    | 0.22    | -9      | 1       | -9      | -9      | 162     | 0.05    |
| SA5112418 | P3gm    | P3Bgp     |                           | 0.2     | 1.84    | 0.5     | 1       | 0.5     | 73      | 93      | 0.43    |
| SA5112419 | P3gm    | P3Bgr     | Plant debris              | 0.05    | 0.89    | 0.25    | 2       | 0.5     | 130     | 116     | 0.19    |
| SA5112420 | P3gm    | P3Bgr     |                           | 0.05    | 1.36    | 0.25    | 1       | 2       | 150     | 166     | 0.28    |
| SA5112421 | P3gm    | P3Bgp     |                           | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 53      | 0.05    |
| SA5112422 | P3gm    | P3Bgp     |                           | 0.05    | 0.12    | -9      | 1       | -9      | -9      | 50      | 0.05    |
| SA5112423 | P3gm    | P3Bgp     |                           | 0.05    | 0.14    | -9      | 1       | -9      | -9      | 64      | 0.05    |
| SA5112424 | P3gm    | P3Bgp     | No mud sample             | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112425 | P3gm    | P3Bgp     |                           | 0.05    | 0.96    | 0.25    | 1       | 0.5     | 110     | 126     | 0.28    |
| SA5112426 | P3gm    | P3Bgp     |                           | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 70      | 64      | 0.05    |
| SA5112427 | P3gm    | P3Bgr     | Some plant debris         | 0.05    | 0.15    | -9      | 1       | -9      | -9      | 65      | 0.05    |
| SA5112428 | P3gm    | P3Bgp     |                           | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 60      | 0.05    |
| SA5112429 | P3gm    | P3Bgr     |                           | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 49      | 0.05    |
| SA5112430 | P3gm    | P3Bgr     |                           | 0.05    | 0.08    | -9      | 1       | -9      | -9      | 55      | 0.05    |
| SA5112431 | P3gm    | P3Bgr     |                           | 0.05    | 0.72    | 0.25    | 1       | 0.5     | 110     | 106     | 0.16    |
| SA5112432 | P3gm    | P3Bgr     |                           | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 76      | 93      | 0.05    |
| SA5112433 | P3gm    | P3Bgr     |                           | 0.05    | 0.15    | -9      | 1       | -9      | -9      | 56      | 0.05    |
| SA5112434 | P3gm    | P3Bgr     |                           | 0.05    | 0.63    | 0.25    | 1       | 0.5     | 86      | 92      | 0.13    |
| SA5112435 | P3gm    | P3Bgp     | Some peat                 | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 63      | 91      | 0.05    |
| SA5112436 | P3gm    | P3Bgd     | Skunk smell               | 0.05    | 1.26    | 0.25    | 1       | 0.5     | 110     | 128     | 0.44    |
| SA5112437 | P3sgn   | P3Asp     |                           | 0.05    | 0.68    | 0.25    | 1       | 0.5     | 25      | 50      | 0.29    |
| SA5112438 | P3a     | P3Bgd     |                           | 0.05    | 1.63    | 0.25    | 1       | 0.5     | 140     | 181     | 0.62    |
| SA5112439 | P3sgn   | P3Asp     | Plant debris              | 0.05    | 2.02    | 0.25    | 1       | 0.5     | 170     | 188     | 0.68    |
| SA5112440 | P3sgn   | P3Asp     |                           | 0.05    | 1.66    | 0.6     | 1       | 0.5     | 100     | 106     | 0.71    |
| SA5112441 | P3gm    | P3Bgd     | First drop 22m, no sample | 0.05    | 3.06    | 0.25    | 3       | 0.5     | 150     | 200     | 1.61    |
| SA5112442 | P3gm    | P3Ass     |                           | 0.05    | 0.72    | 0.5     | 1       | 0.5     | 130     | 156     | 0.26    |
| SA5112443 | P3gm    | P3Bgd     | Burned terrain            | 0.05    | 1.62    | 0.5     | 1       | 0.5     | 63      | 75      | 0.74    |
| SA5112444 | P3gm    | P3Bgd     | Burned terrain            | 0.05    | 1.15    | 0.6     | 1       | 0.5     | 120     | 128     | 0.39    |
| SA5112445 | P3gm    | P3Bgr     | Burned terrain            | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 40      | 0.05    |
| SA5112446 | P3a     | P3Ban     |                           | 0.05    | 0.08    | -9      | 1       | -9      | -9      | 39      | 0.05    |
| SA5112447 | P3a     | P3Ban     | Abundant Plant debris     | 0.05    | 0.18    | 0.25    | 1       | 2       | 78      | 74      | 0.05    |
| SA5112448 | P3a     | P3Brg     |                           | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 46      | 0.05    |
| SA5112449 | P3a     | P3Brg     |                           | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 80      | 0.05    |
| SA5112450 | P3a     | P3Bln     |                           | 0.05    | 2.20    | 0.25    | 1       | 0.5     | 140     | 154     | 0.49    |
| SA5112451 | P3a     | P3Ban     |                           | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 69      | 63      | 0.05    |
| SA5112452 | P3a     | P3Ban     |                           | -9      | 1.62    | -9      | 1       | -9      | -9      | 186     | 0.42    |
| SA5112453 | P3a     | P3Bln     |                           | 0.05    | 3.11    | 0.25    | 1       | 0.5     | 240     | 253     | 0.62    |
| SA5112454 | P3a     | P3Ban     |                           | 0.05    | 2.87    | 0.25    | 1       | 0.5     | 180     | 211     | 0.51    |
| SA5112455 | P3gm    | P3Bgp     |                           | -9      | 0.46    | 0.25    | 1       | 0.5     | 55      | 87      | 0.11    |
| SA5112456 | P3a     | P3Ban     |                           | 0.05    | 0.10    | -9      | 1       | -9      | -9      | 48      | 0.05    |
| SA5112457 | P3gm    | P3Bgp     |                           | 0.05    | 0.22    | -9      | 1       | -9      | -9      | 46      | 0.05    |
| SA5112458 | P3gm    | P3Bgp     |                           | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 25      | 23      | 0.05    |
| SA5112459 | P3gm    | P3Bgp     |                           | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 45      | 0.05    |
| SA5112460 | P3gm    | P3Bgp     |                           | 0.05    | 1.27    | 0.25    | 2       | 0.5     | 78      | 104     | 0.39    |

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| FlidNum   | 1M_Lith | 100K_Lith | Comments                                       | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112461 | P3sgn   | P3Ass     |  | 0.05    | 0.18    | 0.6     | 1       | 0.5     | 25      | 44      | 0.05    |
| SA5112462 | P3sgn   | P3Ass     |  | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 28      | 0.05    |
| SA5112463 | P3sgn   | P3Ass     |  | 0.05    | 1.42    | 0.6     | 1       | 0.5     | 98      | 128     | 0.40    |
| SA5112464 | P3gm    | P3Bgr     |  | 0.05    | 1.36    | 0.25    | 1       | 0.5     | 110     | 143     | 0.35    |
| SA5112465 | P3gm    | P3Bgp     |  | 0.05    | 1.69    | 0.25    | 1       | 0.5     | 110     | 148     | 0.45    |
| SA5112466 | P3sgn   | P3Bgp     |  | 0.05    | 1.38    | 0.25    | 1       | 0.5     | 83      | 118     | 0.37    |
| SA5112467 | P3gm    | P3Bgp     |  | 0.05    | 2.39    | 0.25    | 1       | 0.5     | 180     | 207     | 0.74    |
| SA5112468 | P3gm    | P3Bgp     | Fresh logging                                  | 0.05    | 0.89    | 0.25    | 1       | 0.5     | 79      | 108     | 0.22    |
| SA5112469 | P3gm    | P3Bgr     | Abundant plant debris, fresh logging           | 0.05    | 0.99    | 0.25    | 1       | 0.5     | 120     | 133     | 0.21    |
| SA5112470 | P3gm    | P3Bgp     | Abundant plant debris                          | 0.05    | 4.95    | 0.25    | 1       | 0.5     | 640     | 731     | 1.10    |
| SA5112471 | P3gm    | P3Bgr     | Abundant Plant debris                          | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 88      | 0.05    |
| SA5112472 | P3gm    | P3Asp     |  | 0.05    | 0.83    | 0.25    | 1       | 2       | 130     | 134     | 0.17    |
| SA5112473 | P3ga    | P3Crg     |  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 36      | 0.05    |
| SA5112474 | P3ga    | P3Crg     |  | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 45      | 0.05    |
| SA5112475 | P3sgn   | P3Asp     |  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 25      | 0.05    |
| SA5112476 | P3gr    | P3Cgp     |  | 0.05    | 0.17    | -9      | 1       | -9      | -9      | 39      | 0.05    |
| SA5112477 | P3gr    | P3Crg     |  | 0.05    | 0.07    | -9      | 1       | -9      | -9      | 22      | 0.05    |
| SA5112478 | P3sgn   | P3Ass     |  | 0.05    | 1.23    | 0.25    | 1       | 0.5     | 81      | 108     | 0.36    |
| SA5112479 | P3ga    | P3Cgp     |  | 0.05    | 0.12    | -9      | 1       | -9      | -9      | 32      | 0.05    |
| SA5112480 | P3gr    | P3Asp     |  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 55      | 38      | 0.05    |
| SA5112481 | P3gr    | P3Crg     |  | 0.05    | 0.14    | -9      | 1       | -9      | -9      | 38      | 0.05    |
| SA5112482 | P3gr    | P3Cgp     |  | 0.05    | 1.12    | 0.25    | 1       | 0.5     | 71      | 78      | 0.22    |
| SA5112483 | P3ga    | P3Cag     |  | 0.05    | 0.09    | -9      | 1       | -9      | -9      | 20      | 0.05    |
| SA5112484 | P3gr    | P3Cag     | Poor sample, dropped twice                     | 0.05    | 0.95    | 0.25    | 1       | 0.5     | 25      | 44      | 0.15    |
| SA5112485 | P3gr    | P3Cag     | No mud sample, rocks on bottom                 | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112486 | P3ga    | P3Cag     |  | 0.05    | 0.92    | 0.25    | 1       | 0.5     | 25      | 47      | 0.13    |
| SA5112487 | P3ga    | P3Crg     | Smells boggy , abundant plant debris           | 0.05    | 2.04    | 0.25    | 1       | 0.5     | 130     | 168     | 0.23    |
| SA5112488 | P3ga    | P3Crg     | Some fine grain clastic, Abundant plant debris | -9      | 3.22    | -9      | 1       | -9      | -9      | 533     | 0.66    |
| SA5112489 | P3gr    | P3Cmz     |  | 0.05    | 0.18    | -9      | 1       | -9      | -9      | 41      | 0.05    |
| SA5112490 | P3ga    | P3Crg     |  | 0.05    | 0.68    | 0.25    | 1       | 0.5     | 25      | 37      | 0.05    |
| SA5112491 | P3ga    | P3Crg     |  | 0.05    | 1.15    | 0.25    | 1       | 0.5     | 25      | 41      | 0.19    |
| SA5112492 | P3ga    | P3Crg     |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 39      | 0.05    |
| SA5112493 | P3gr    | P3Cmz     |  | 0.05    | 0.14    | -9      | 1       | -9      | -9      | 36      | 0.05    |
| SA5112494 | P3gr    | P3Cmz     |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 58      | 46      | 0.05    |
| SA5112495 | P3ga    | P3Cmz     |  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 29      | 0.05    |
| SA5112496 | P3gr    | P3Cmq     |  | 0.05    | 0.48    | 0.25    | 1       | 0.5     | 25      | 43      | 0.14    |
| SA5112497 | P3ga    | P3Crg     | Abundant plant debris                          | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 34      | 0.05    |
| SA5112498 | P3gr    | P3Cmz     |  | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 25      | 55      | 0.05    |
| SA5112499 | P3ga    | P3Crg     |  | 0.05    | 0.12    | -9      | 1       | -9      | -9      | 63      | 0.05    |
| SA5112500 | P3gr    | P3Crg     |  | 0.05    | 0.31    | -9      | 1       | -9      | -9      | 110     | 0.05    |
| SA5112501 | P3gr    | P3Cga     |  | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 30      | 0.05    |
| SA5112502 | P3gr    | P3Cmq     |  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 42      | 0.05    |
| SA5112503 | P3ga    | P3Crg     |  | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112504 | P3ga    | P3Crg     |  | 0.4     | 4.60    | 0.25    | 1       | 0.5     | 480     | 493     | 0.93    |
| SA5112505 | P3gr    | P3Cmq     |  | 0.05    | 0.15    | -9      | 1       | -9      | -9      | 47      | 0.05    |
| SA5112506 | P3gr    | P3Cmq     | Poor sample, abundant plant debris.            | 0.05    | 0.63    | 0.25    | 1       | 0.5     | 140     | 155     | 0.13    |
| SA5112507 | P3gm    | P3Bgp     | Chopper suspension                             | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112508 | P3gm    | P3Bgr     |  | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112509 | P3gm    | P3Bgr     | Plant debris                                   | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 60      | 0.05    |
| SA5112510 | P3gr    | P3Cmq     |  | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112511 | P3gm    | P3Bgr     | Gray/white sediment ( Beige) with plant debris | 0.05    | 1.17    | 0.25    | 1       | 0.5     | 110     | 124     | 0.31    |
| SA5112512 | P3gm    | P3Bgr     | Plant debris                                   | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 40      | 0.05    |
| SA5112513 | P3gm    | P3Bgr     | Plant debris                                   | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112514 | P3gm    | P3Bgp     | Plant debris, chopper suspension               | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 34      | 0.05    |
| SA5112515 | P3gm    | P3Bgp     |  | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 27      | 0.05    |
| SA5112516 | P3gr    | P3Bgp     | Plant debris                                   | 0.05    | 2.42    | 0.25    | 1       | 0.5     | 250     | 285     | 0.59    |
| SA5112517 | P3gm    | P3Bgp     |  | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 25      | 49      | 0.05    |

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| FlidNum   | 1M_Lith | 100K_Lith | Comments                             | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112518 | P3gr    | P3Bgp     |                                      | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 44      | 0.05    |
| SA5112519 | P3gr    | P3Bgp     |                                      | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 25      | 42      | 0.05    |
| SA5112520 | P3ga    | P3Crg     | Plant debris                         | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 36      | 0.05    |
| SA5112521 | P3ga    | P3Crg     |                                      | 0.05    | 0.37    | 0.25    | 1       | 0.5     | 110     | 126     | 0.18    |
| SA5112522 | P3ga    | P3Crg     |                                      | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 36      | 0.05    |
| SA5112523 | P3ga    | P3Crg     |                                      | 0.05    | 0.61    | 0.25    | 1       | 0.5     | 67      | 65      | 0.15    |
| SA5112524 | P3gr    | P3Cmz     |                                      | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112525 | P3ga    | P3Crg     |                                      | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 37      | 0.05    |
| SA5112526 | P3ga    | P3Crg     |                                      | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 30      | 0.05    |
| SA5112527 | P3ga    | P3Crg     | Plant debris, chopper suspension     | 0.05    | 0.59    | 0.25    | 1       | 0.5     | 86      | 81      | 0.13    |
| SA5112528 | P3ga    | P3Crg     |                                      | 0.05    | 0.16    | -9      | 1       | -9      | -9      | 38      | 0.05    |
| SA5112529 | P3ga    | P3Crg     |                                      | 0.05    | 0.10    | -9      | 1       | -9      | -9      | 36      | 0.05    |
| SA5112530 | P3ga    | P3Crg     | Some ooze                            | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 25      | 40      | 0.05    |
| SA5112531 | P3ga    | P3Crg     | Plant debris                         | 0.05    | 0.17    | -9      | 1       | -9      | -9      | 46      | 0.05    |
| SA5112532 | P3ga    | P3Crg     | Plant debris                         | 0.05    | 0.09    | -9      | 1       | -9      | -9      | 30      | 0.05    |
| SA5112533 | P3ga    | P3Crg     |                                      | 0.05    | 0.09    | -9      | 1       | -9      | -9      | 28      | 0.05    |
| SA5112534 | P3ga    | P3Crg     | Plant debris                         | 0.05    | 0.16    | -9      | 1       | -9      | -9      | 46      | 0.05    |
| SA5112535 | P3ga    | P3Crg     |                                      | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 25      | 63      | 0.05    |
| SA5112536 | P3gr    | P3Cgp     |                                      | 0.05    | 0.16    | -9      | 1       | -9      | -9      | 48      | 0.05    |
| SA5112537 | P3ga    | P3Crg     |                                      | 0.05    | 1.71    | 0.25    | 1       | 0.5     | 120     | 158     | 0.31    |
| SA5112538 | P3ga    | P3Crg     | Plant debris                         | 0.05    | 0.25    | 0.25    | 1       | 0.5     | 25      | 44      | 0.05    |
| SA5112539 | P3ga    | P3Crg     |                                      | 0.05    | 4.55    | 0.25    | 1       | 0.5     | 460     | 478     | 0.86    |
| SA5112540 | P3ga    | P3Crg     |                                      | 0.05    | 5.21    | 0.25    | 1       | 0.5     | 600     | 615     | 1.10    |
| SA5112541 | P3sgn   | P3Bgp     |                                      | 0.05    | 1.46    | 0.25    | 3       | 0.5     | 290     | 304     | 0.50    |
| SA5112542 | P3a     | P3Bln     |                                      | 0.05    | 1.18    | 0.25    | 1       | 0.5     | 140     | 157     | 0.36    |
| SA5112543 | P3a     | P3Bgr     |                                      | 0.05    | 2.83    | 0.25    | 1       | 0.5     | 310     | 338     | 0.97    |
| SA5112544 | P3a     | P3Bln     | Plant debris                         | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 44      | 0.05    |
| SA5112545 | P3a     | P3Bln     | Plant debris                         | 0.05    | 0.08    | 0.25    | 1       | 1       | 25      | 28      | 0.05    |
| SA5112546 | P3a     | P3Bln     | Plant debris                         | 0.05    | 0.20    | 0.25    | 1       | 0.5     | 25      | 68      | 0.05    |
| SA5112547 | P3a     | P3Bln     |                                      | 0.05    | 1.36    | 0.6     | 1       | 0.5     | 110     | 135     | 0.58    |
| SA5112548 | P3gm    | P3Bgp     |                                      | 0.05    | 5.75    | 0.25    | 1       | 0.5     | 700     | 703     | 1.80    |
| SA5112549 | P3gm    | P3Bgp     | Plant debris, burned terrain         | 0.05    | 3.01    | 0.25    | 1       | 0.5     | 320     | 355     | 0.93    |
| SA5112550 | P3gm    | P3Bgp     | Burned terrain                       | 0.05    | 1.70    | 0.25    | 2       | 0.5     | 90      | 105     | 0.91    |
| SA5112551 | P3gm    | P3Bgp     |                                      | 0.05    | 2.55    | 0.25    | 1       | 0.5     | 310     | 350     | 0.83    |
| SA5112552 | P3gm    | P3Bgp     |                                      | 0.05    | 3.18    | 0.25    | 1       | 0.5     | 410     | 442     | 1.04    |
| SA5112553 | P3gm    | P3Bgp     | Plant debris, burned terrain         | 0.05    | 1.53    | 0.25    | 1       | 0.5     | 170     | 188     | 0.47    |
| SA5112554 | P3a     | P3Bln     |                                      | 0.05    | 0.80    | 0.25    | 1       | 0.5     | 77      | 96      | 0.25    |
| SA5112555 | P3sgn   | P3Asp     | Burned terrain                       | 0.05    | 2.01    | 0.6     | 2       | 0.5     | 150     | 175     | 0.76    |
| SA5112556 | P3gm    | P3Bgp     | Burned terrain                       | 0.05    | 0.87    | 0.25    | 1       | 0.5     | 65      | 98      | 0.28    |
| SA5112557 | P3gm    | P3Bgp     | Burned terrain                       | 0.05    | 1.31    | 0.25    | 2       | 0.5     | 94      | 119     | 1.51    |
| SA5112558 | P3gm    | P3Bgp     | Burned terrain                       | 0.05    | 2.45    | 0.25    | 2       | 0.5     | 120     | 164     | 0.81    |
| SA5112559 | P3gm    | P3Bgp     | Burned terrain, dropped 3 times      | 0.05    | 8.11    | 0.25    | 1       | 0.5     | 1300    | 1063    | 2.00    |
| SA5112560 | P3gm    | P3Bgp     | Some choc. Brown ooze                | 0.05    | 7.41    | 0.25    | 1       | 0.5     | 910     | 903     | 2.21    |
| SA5112561 | P3gm    | P3Bgp     |                                      | 0.05    | 0.29    | 0.25    | 1       | 0.5     | 25      | 52      | 0.05    |
| SA5112562 | P3a     | P3Bam     | No mud sample                        | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112563 | P3gm    | P3Bgp     | Plant debris                         | 0.05    | 2.61    | 0.25    | 1       | 0.5     | 250     | 296     | 0.65    |
| SA5112564 | P3gm    | P3Bgp     | Plant debris                         | 0.05    | 2.93    | 0.25    | 1       | 0.5     | 300     | 376     | 0.69    |
| SA5112565 | P3gm    | P3Asp     | Some brown ooze                      | 0.05    | 7.70    | 0.25    | 1       | 0.5     | 1100    | 1001    | 2.04    |
| SA5112566 | P3sgn   | P3Asp     | Lake too deep to reach bottom        | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112567 | P3sgn   | P3Asp     |                                      | 0.05    | 1.59    | 0.25    | 1       | 0.5     | 92      | 134     | 0.44    |
| SA5112568 | P3sgn   | P3Asp     | Abundant plant debris, dropped twice | 0.05    | 0.69    | 0.25    | 2       | 0.5     | 82      | 99      | 0.20    |
| SA5112569 | P3sgn   | P3Asp     | Plant debris                         | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 71      | 78      | 0.05    |
| SA5112570 | P3sgn   | P3Bgp     |                                      | 0.05    | 2.31    | 0.25    | 1       | 0.5     | 120     | 155     | 0.69    |
| SA5112571 | P3sgn   | P3Asp     | Plant debris                         | 0.05    | 0.26    | -9      | 1       | -9      | -9      | 83      | 0.05    |
| SA5112572 | P3gm    | P3Bgp     |                                      | 0.05    | 4.29    | 4.9     | 7       | 0.5     | 220     | 238     | 1.40    |
| SA5112573 | P3gm    | P3Bgp     | Plant debris                         | 0.05    | 0.85    | 0.25    | 1       | 0.5     | 87      | 109     | 0.22    |
| SA5112574 | P3gm    | P3Bmq     | Plant debris                         | 0.05    | 0.98    | 0.25    | 1       | 0.5     | 100     | 136     | 0.23    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments                                       | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112575 | P3gm    | P3Bln     | Plant debris                                   | 0.05    | 1.27    | 0.25    | 1       | 0.5     | 180     | 243     | 0.28    |
| SA5112576 | P3gm    | P3Bgp     | White beige color brown ooze top layer         | 0.05    | 1.65    | 0.25    | 1       | 0.5     | 57      | 91      | 0.43    |
| SA5112577 | P3gm    | P3Bgr     |  | 0.05    | 1.33    | 1.2     | 1       | 0.5     | 100     | 150     | 0.31    |
| SA5112578 | P3gm    | P3Bgp     |  | 0.05    | 0.86    | 0.9     | 1       | 0.5     | 120     | 140     | 0.22    |
| SA5112579 | P3gm    | P3Bgp     | Plant debris                                   | 0.05    | 0.57    | 0.25    | 1       | 0.5     | 83      | 111     | 0.16    |
| SA5112580 | P3gm    | P3Bgp     |  | 0.05    | 0.74    | 0.25    | 1       | 0.5     | 160     | 197     | 0.25    |
| SA5112581 | P3gm    | P3Bgp     |  | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 88      | 107     | 0.05    |
| SA5112582 | P3gm    | P3Bgp     |  | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 63      | 68      | 0.05    |
| SA5112583 | P-Msy   | PMmq      |  | 0.05    | 1.98    | 0.5     | 3       | 0.5     | 240     | 266     | 0.58    |
| SA5112584 | P-Msy   | PMgr      |  | 0.05    | 0.16    | -9      | 1       | -9      | -9      | 55      | 0.05    |
| SA5112585 | P-Msy   | PMgr      | Plant debris                                   | -9      | 0.19    | -9      | 1       | -9      | -9      | 87      | 0.05    |
| SA5112586 | P-Msy   | PMgr      |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 220     | 248     | 0.05    |
| SA5112587 | P-Msy   | PMgr      |  | 0.05    | 3.64    | 0.25    | 2       | 0.5     | 530     | 569     | 0.93    |
| SA5112588 | P-Msy   | PMmd      |  | 0.05    | 0.65    | 0.25    | 1       | 0.5     | 160     | 185     | 0.28    |
| SA5112589 | P-Mgs   | PMgr      | Plant debris                                   | 0.05    | 0.92    | 0.25    | 1       | 0.5     | 150     | 186     | 0.24    |
| SA5112590 | P-Msy   | PMgr      |  | 0.05    | 0.70    | 0.6     | 1       | 0.5     | 98      | 138     | 0.23    |
| SA5112591 | P-Msy   | PMgr      |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 57      | 0.05    |
| SA5112592 | P-Msy   | P3Bgr     |  | 0.05    | 0.82    | 0.25    | 1       | 0.5     | 110     | 121     | 0.20    |
| SA5112593 | P3gm    | P3Bmq     |  | 0.05    | 0.61    | 0.25    | 3       | 0.5     | 150     | 165     | 0.21    |
| SA5112594 | M1lga   | P3Bgr     |  | 0.05    | 0.18    | 0.25    | 1       | 2       | 96      | 109     | 0.05    |
| SA5112595 | P3gm    | P3Bgp     |  | 0.05    | 1.20    | 0.7     | 1       | 0.5     | 90      | 109     | 0.33    |
| SA5112596 | P3sgn   | P3Asp     |  | 0.05    | 1.28    | 0.25    | 1       | 0.5     | 110     | 125     | 0.34    |
| SA5112597 | P3gm    | P3Bgp     |  | 0.05    | 1.14    | 0.25    | 1       | 0.5     | 71      | 102     | 0.33    |
| SA5112598 | P3sgn   | P3Bgp     |  | 0.05    | 3.23    | 0.25    | 1       | 0.5     | 200     | 252     | 1.12    |
| SA5112599 | P3gm    | P3Bmq     | Plant debris                                   | 0.05    | 0.92    | 0.25    | 1       | 0.5     | 76      | 119     | 0.23    |
| SA5112600 | P3gm    | P3Bmq     |  | 0.05    | 0.92    | 0.25    | 1       | 1       | 99      | 114     | 0.22    |
| SA5112601 | M1lga   | P3Bgp     |  | 0.05    | 1.53    | 0.25    | 1       | 0.5     | 140     | 170     | 0.41    |
| SA5112602 | P3gm    | P3Bgp     | Gray material at base                          | 0.05    | 2.90    | 0.25    | 2       | 0.5     | 460     | 304     | 0.76    |
| SA5112603 | P3gm    | P3Bam     |  | 0.05    | 0.81    | 0.25    | 1       | 0.5     | 97      | 124     | 0.22    |
| SA5112604 | P3gm    | P3Bam     | Weeds, no mud sample                           | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112605 | P3gm    | P3Bdr     |  | 0.05    | 1.80    | 0.25    | 1       | 0.5     | 190     | 216     | 0.61    |
| SA5112606 | P3gm    | P3Bgp     | Brown top layer, gray bottom half              | 0.05    | 6.48    | 0.25    | 2       | 0.5     | 810     | 863     | 1.57    |
| SA5112607 | P3gm    | P3Bgp     |  | 0.05    | 2.21    | 0.25    | 3       | 0.5     | 260     | 293     | 0.77    |
| SA5112608 | M1lga   | P3Bgp     | Gray lower quarter                             | 0.05    | 1.89    | 0.25    | 2       | 0.5     | 130     | 144     | 0.84    |
| SA5112609 | M1lga   | P3Asp     |  | 0.05    | 3.53    | 0.7     | 4       | 0.5     | 270     | 304     | 1.99    |
| SA5112610 | P3gm    | P3Bgp     |  | 0.05    | 2.08    | 0.25    | 1       | 1       | 270     | 318     | 0.66    |
| SA5112611 | P3gm    | P3Bgr     |  | 0.05    | 1.26    | 0.25    | 1       | 0.5     | 100     | 117     | 0.35    |
| SA5112612 | P3gr    | P3Cga     |  | 0.05    | 0.12    | -9      | 1       | -9      | -9      | 34      | 0.05    |
| SA5112613 | P3gr    | P3Cga     | Water sample only. Waves too high for mid lake | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112614 | P3gr    | P3Cgp     |  | 0.05    | 0.30    | -9      | 1       | -9      | -9      | 86      | 0.05    |
| SA5112615 | P3gr    | P3Cgp     |  | 0.05    | 0.17    | -9      | 1       | -9      | -9      | 51      | 0.05    |
| SA5112616 | P3ga    | P3Crg     |  | 0.05    | 4.79    | 0.25    | 1       | 0.5     | 450     | 496     | 0.93    |
| SA5112617 | P3ga    | P3Crg     |  | 0.05    | 0.24    | -9      | 1       | -9      | -9      | 81      | 0.05    |
| SA5112618 | P3ga    | P3Crg     |  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 44      | 0.05    |
| SA5112619 | P3gr    | P3Cgp     |  | 0.05    | 0.16    | 0.25    | 1       | 0.5     | 25      | 43      | 0.05    |
| SA5112620 | P3gr    | P3Cga     |  | 0.05    | 0.37    | -9      | 1       | -9      | -9      | 68      | 0.05    |
| SA5112621 | P3gr    | P3Cgp     |  | 0.05    | 0.17    | -9      | 1       | -9      | -9      | 40      | 0.05    |
| SA5112622 | P3gr    | P3Cgp     | Poor sample. High waves on lake                | 0.05    | 7.21    | -9      | 1       | -9      | -9      | 991     | 1.58    |
| SA5112623 | P3gr    | P3Cgp     | Some dark fragments                            | 0.05    | 6.79    | 0.25    | 1       | 0.5     | 1000    | 969     | 1.69    |
| SA5112624 | P3gr    | P3Cgp     |  | 0.05    | 0.13    | 0.25    | 1       | 1       | 25      | 38      | 0.05    |
| SA5112625 | P3ga    | P3Crg     |  | 0.05    | 0.18    | -9      | 1       | -9      | -9      | 47      | 0.05    |
| SA5112626 | P3ga    | P3Crg     |  | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 34      | 0.05    |
| SA5112627 | P3ga    | P3Crg     | Some tan brown coloration                      | 0.05    | 0.97    | 0.25    | 1       | 0.5     | 25      | 44      | 0.16    |
| SA5112628 | P3ga    | P3Crg     |  | 0.05    | 1.94    | 0.25    | 1       | 0.5     | 200     | 216     | 0.37    |
| SA5112629 | P3ga    | P3Crg     | Plant debris                                   | 0.05    | 3.88    | 0.25    | 1       | 0.5     | 410     | 442     | 0.80    |
| SA5112630 | P3gr    | P3Cga     | Plant debris                                   | 0.05    | 0.21    | 0.25    | 1       | 0.5     | 64      | 66      | 0.15    |
| SA5112631 | P3gr    | P3Asp     |  | 0.05    | 0.08    | 0.25    | 1       | 0.5     | 25      | 29      | 0.05    |

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| FlidNum   | 1M_Lith | 100K_Lith | Comments                      | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112632 | P3gr    | P3Cga     | Plant debris                  | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 26      | 0.05    |
| SA5112633 | P3gr    | P3Bgp     |                               | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 57      | 46      | 0.05    |
| SA5112634 | P3gr    | P3Cga     | Plant debris                  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 41      | 0.05    |
| SA5112635 | P3gm    | P3Bgp     | Water only                    | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112636 | P3gm    | P3Bgp     |                               | 0.05    | 4.56    | 0.25    | 1       | 0.5     | 540     | 665     | 1.06    |
| SA5112637 | P3gm    | P3Bgp     |                               | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112638 | P3gm    | P3Bgp     | Plant debris                  | 0.05    | 0.18    | -9      | 1       | -9      | -9      | 50      | 0.05    |
| SA5112639 | P3sgn   | P3Asp     | Plant debris                  | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 54      | 63      | 0.05    |
| SA5112640 | P3gm    | P3Asp     |                               | 0.05    | 0.23    | -9      | 1       | -9      | -9      | 63      | 0.05    |
| SA5112641 | P3gm    | P3Bgp     |                               | 0.05    | 0.09    | -9      | 1       | -9      | -9      | 67      | 0.05    |
| SA5112642 | P3gm    | P3Bgr     | Plant debris                  | 0.05    | 0.06    | 0.25    | 1       | 0.5     | 25      | 30      | 0.05    |
| SA5112643 | P3gm    | P3Bgp     |                               | 0.05    | 0.15    | 0.25    | 1       | 0.5     | 59      | 71      | 0.05    |
| SA5112644 | P3gm    | P3Bgp     |                               | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 34      | 0.05    |
| SA5112645 | M3gr    | P3Asp     |                               | 0.05    | 0.10    | 0.5     | 1       | 0.5     | 25      | 33      | 0.05    |
| SA5112646 | M3gr    | P3Asp     |                               | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 32      | 0.05    |
| SA5112647 | M3gr    | P3Cga     |                               | 0.05    | 0.07    | 0.25    | 1       | 0.5     | 25      | 37      | 0.05    |
| SA5112648 | M3gr    | P3Cga     |                               | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 29      | 0.05    |
| SA5112649 | M3gr    | P3Asp     |                               | 0.05    | 0.09    | 0.7     | 1       | 2       | 25      | 37      | 0.05    |
| SA5112650 | P3gm    | P3Bgp     |                               | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 36      | 0.05    |
| SA5112651 | P3gm    | P3Bgp     | Some peat                     | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 40      | 0.05    |
| SA5112652 | P3gm    | P3Bgp     | Some peat                     | 0.05    | 0.06    | 0.25    | 1       | 0.5     | 25      | 24      | 0.05    |
| SA5112653 | P3gm    | P3Bgp     |                               | 0.05    | 0.25    | -9      | 1       | -9      | -9      | 70      | 0.05    |
| SA5112654 | P3sgn   | P3Ass     |                               | 0.05    | 7.45    | 0.25    | 1       | 0.5     | 1300    | 1093    | 1.85    |
| SA5112655 | P3sgn   | P3Bgp     |                               | 0.05    | 5.58    | 0.25    | 1       | 0.5     | 740     | 784     | 1.24    |
| SA5112656 | P3gm    | P3Bgp     | ~400m from road               | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 52      | 57      | 0.05    |
| SA5112657 | P3gm    | P3Bgp     | ~100m from road, Some peat    | 0.05    | 0.18    | 0.25    | 1       | 0.5     | 54      | 66      | 0.05    |
| SA5112658 | P3sgn   | P3Asp     | Some peat                     | 0.05    | 0.14    | 0.25    | 1       | 1       | 25      | 44      | 0.05    |
| SA5112659 | P3sgn   | P3Asp     |                               | 0.05    | 0.06    | 0.25    | 1       | 0.5     | 25      | 70      | 0.05    |
| SA5112660 | P3sgn   | P3Asp     |                               | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 25      | 0.05    |
| SA5112661 | P3gm    | P3Bgd     |                               | 0.05    | 1.15    | 0.25    | 1       | 1       | 140     | 148     | 0.29    |
| SA5112662 | P3gm    | P3Bgp     |                               | 0.05    | 0.32    | 0.25    | 1       | 1       | 25      | 45      | 0.10    |
| SA5112663 | P3sgn   | P3Asp     |                               | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 30      | 0.05    |
| SA5112664 | P3gm    | P3Asp     |                               | 0.05    | 0.14    | -9      | 1       | -9      | -9      | 39      | 0.05    |
| SA5112665 | P3sgn   | P3Asp     |                               | 0.05    | 3.40    | 0.25    | 1       | 0.5     | 410     | 471     | 0.80    |
| SA5112666 | P3sgn   | P3Asp     | Plant debris                  | 0.05    | 0.25    | -9      | 1       | -9      | -9      | 72      | 0.05    |
| SA5112667 | P3gdn   | P3Bgr     | Plant debris( wood chips)     | 0.05    | 0.12    | 0.25    | 1       | 0.5     | 25      | 51      | 0.05    |
| SA5112668 | P3gm    | P3Bgr     |                               | 0.05    | 0.14    | 0.5     | 1       | 0.5     | 25      | 49      | 0.05    |
| SA5112669 | P3gm    | P3Bgp     | Main brook area               | 0.05    | 8.01    | 0.25    | 1       | 0.5     | 1200    | 1319    | 2.68    |
| SA5112670 | P3gr    | P3Cmq     |                               | 0.05    | 3.12    | 0.6     | 3       | 0.5     | 250     | 262     | 0.78    |
| SA5112671 | P3ga    | P3Cmq     | Plant debris                  | 0.05    | 0.11    | 0.25    | 1       | 0.5     | 25      | 47      | 0.05    |
| SA5112672 | P3gm    | P3Bgr     | Plant debris                  | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 42      | 0.05    |
| SA5112673 | P3ga    | P3Cmq     | Water only, very rocky bottom | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112674 | P3ga    | P3Crg     | Minor plant debris            | 0.05    | 0.13    | 0.25    | 1       | 0.5     | 25      | 38      | 0.05    |
| SA5112675 | P3gm    | P3Bgr     | Swampy creek, water only      | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112676 | P3gdn   | P3Bgr     |                               | 0.05    | 0.38    | 0.25    | 1       | 0.5     | 73      | 80      | 0.18    |
| SA5112677 | P3gdn   | P3Bgd     | Poor sample                   | 0.05    | 4.43    | 0.6     | 1       | 0.5     | 560     | 642     | 1.04    |
| SA5112678 | P3gdn   | P3Asp     |                               | 0.05    | 0.72    | 0.5     | 2       | 0.5     | 110     | 122     | 0.18    |
| SA5112679 | P3gdn   | P3Bgd     | No depth, Plant debris        | 0.05    | 0.26    | 0.9     | 1       | 0.5     | 61      | 70      | 0.05    |
| SA5112680 | P3gdn   | P3Bgr     |                               | 0.05    | 0.10    | 0.25    | 1       | 0.5     | 25      | 49      | 0.05    |
| SA5112681 | P3sgn   | P3Bgd     |                               | 0.05    | 4.98    | 0.25    | 1       | 0.5     | 650     | 719     | 1.10    |
| SA5112682 | P3gdn   | P3Asp     | Some peat                     | 0.05    | 0.63    | 0.25    | 1       | 0.5     | 54      | 72      | 0.22    |
| SA5112683 | P3gm    | P3Asp     |                               | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 53      | 0.05    |
| SA5112684 | P3gm    | P3Asp     |                               | 0.05    | 1.09    | 0.25    | 1       | 0.5     | 150     | 162     | 0.37    |
| SA5112685 | P3sgn   | P3Bgd     | Abundant plant debris         | 0.05    | 0.23    | 0.25    | 1       | 0.5     | 58      | 66      | 0.05    |
| SA5112686 | P3sgn   | P3Bgp     |                               | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 53      | 54      | 0.05    |
| SA5112687 | P3sgn   | P3Bgd     |                               | 0.05    | 0.58    | 0.25    | 1       | 0.5     | 61      | 90      | 0.36    |
| SA5112688 | P3sgn   | P3Asp     |                               | 0.05    | 0.90    | 0.25    | 1       | 0.5     | 120     | 146     | 0.36    |

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| FldNum    | 1M_Lith | 100K_Lith | Comments   | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112689 | P3sgn   | P3Bgr     |  | 0.05    | 0.31    | 0.25    | 1       | 0.5     | 25      | 57      | 0.05    |
| SA5112690 | P3sgn   | P3Bgd     | Plant debris, chopper suspension                           | 0.05    | 0.48    | 0.25    | 1       | 0.5     | 300     | 389     | 0.29    |
| SA5112691 | P3sgn   | P3Bgr     |  | 0.05    | 0.24    | 0.25    | 1       | 0.5     | 55      | 73      | 0.14    |
| SA5112692 | P3gdn   | P3Bgr     |  | 0.05    | 3.25    | 1       | 1       | 0.5     | 420     | 476     | 0.51    |
| SA5112693 | P3gdn   | P3Asp     | Plant debris   | 0.05    | 3.20    | 0.25    | 1       | 0.5     | 550     | 597     | 0.73    |
| SA5112694 | P3sgn   | P3Bgp     | Poor sample  | 0.05    | 3.05    | 0.25    | 1       | 0.5     | 430     | 476     | 0.84    |
| SA5112695 | P3sgn   | P3Bgp     |  | 0.05    | 1.10    | 0.25    | 1       | 0.5     | 380     | 460     | 1.05    |
| SA5112696 | P3sgn   | P3Bgp     | Plant debris   | 0.05    | 0.31    | 0.25    | 1       | 0.5     | 70      | 97      | 0.05    |
| SA5112697 | P3gm    | P3Ban     | Plant debris   | 0.05    | 0.85    | 0.25    | 1       | 2       | 83      | 99      | 0.32    |
| SA5112698 | P3gm    | P3Bgd     |  | 0.05    | 0.14    | 0.25    | 1       | 0.5     | 25      | 56      | 0.05    |
| SA5112699 | P3gm    | P3Bgd     | Some peat  | 0.05    | 0.23    | 0.25    | 1       | 0.5     | 25      | 63      | 0.12    |
| SA5112700 | P3gm    | P3Bgd     |  | 0.05    | 0.19    | 0.25    | 1       | 0.5     | 25      | 45      | 0.05    |
| SA5112701 | P3gm    | P3Bgd     |  | 0.05    | 7.10    | 0.25    | 1       | 0.5     | 1000    | 1060    | 1.44    |
| SA5112702 | P3gm    | P3Bgp     |  | 0.05    | 0.72    | 0.25    | 1       | 0.5     | 95      | 122     | 0.19    |
| SA5112703 | P3gm    | P3Bgr     | Plant debris   | 0.05    | 0.25    | 0.25    | 1       | 0.5     | 25      | 65      | 0.05    |
| SA5112704 | P3gm    | P3Bgp     |  | 0.1     | 0.36    | 0.25    | 1       | 0.5     | 25      | 38      | 0.15    |
| SA5112705 | P3gm    | P3Bgp     |  | 0.05    | 0.61    | 0.25    | 1       | 0.5     | 73      | 86      | 0.24    |
| SA5112706 | P3gm    | P3Bgp     | Some peat  | 0.05    | 0.34    | 0.25    | 1       | 0.5     | 25      | 46      | 0.10    |
| SA5112707 | P3gm    | P3Bgp     | Poor sample, disturbed sediment, Plant debris              | 0.05    | 0.20    | -9      | 1       | -9      | -9      | 64      | 0.05    |
| SA5112708 | P3gm    | P3Bgp     | Plant debris   | 0.05    | 0.09    | 0.25    | 1       | 1       | 25      | 43      | 0.05    |
| SA5112709 | P3gm    | P3Bgp     |  | 0.05    | 1.49    | 0.25    | 1       | 0.5     | 170     | 209     | 0.38    |
| SA5112710 | P3gm    | P3Bgp     | Some ooze  | 0.05    | 1.34    | 0.25    | 1       | 0.5     | 140     | 169     | 0.34    |
| SA5112711 | P3gm    | P3Bgp     |  | 0.05    | 7.26    | 0.25    | 1       | 0.5     | 1100    | 1135    | 1.55    |
| SA5112712 | P3gm    | P3Bgp     |  | 0.05    | 0.64    | 0.25    | 1       | 0.5     | 64      | 85      | 0.17    |
| SA5112713 | P3gm    | P3Bgd     |  | 0.05    | 5.33    | -9      | 1       | -9      | -9      | 488     | 3.53    |
| SA5112714 | P3gm    | P3Ban     |  | 0.05    | 0.36    | 0.25    | 1       | 0.5     | 25      | 41      | 0.25    |
| SA5112715 | P3gm    | P3Bgd     |  | 0.05    | 5.84    | 0.25    | 1       | 0.5     | 840     | 939     | 1.20    |
| SA5112716 | P3gm    | P3Asp     |  | 0.05    | 0.46    | 0.25    | 2       | 0.5     | 110     | 124     | 0.26    |
| SA5112717 | P3gm    | P3Bgd     |  | 0.05    | 1.20    | 0.25    | 1       | 0.5     | 150     | 150     | 0.55    |
| SA5112718 | P3gm    | P3Bgr     |  | 0.05    | 1.65    | 0.25    | 1       | 0.5     | 140     | 161     | 0.37    |
| SA5112719 | P3gm    | P3Bgp     | Composition; white & gray with black coarse grain speckles | 0.05    | 2.38    | 0.25    | 1       | 0.5     | 180     | 223     | 0.50    |
| SA5112720 | P3gm    | P3Bgd     |  | 0.05    | 0.44    | 0.25    | 1       | 0.5     | 55      | 56      | 0.17    |
| SA5112721 | P3gm    | P3Bgd     |  | 0.05    | 3.68    | 0.25    | 1       | 0.5     | 550     | 636     | 0.76    |
| SA5112722 | P3gm    | P3Bgd     |  | 0.05    | 0.44    | 0.25    | 1       | 0.5     | 90      | 103     | 0.14    |
| SA5112723 | P3a     | P3Bgr     |  | 0.05    | 0.26    | 0.25    | 1       | 1       | 150     | 172     | 0.18    |
| SA5112724 | P3gm    | P3Bgp     |  | 0.05    | 1.75    | 0.6     | 1       | 0.5     | 170     | 175     | 0.44    |
| SA5112725 | P3gm    | P3Bgp     |  | 0.05    | 0.50    | 0.9     | 1       | 0.5     | 75      | 75      | 0.17    |
| SA5112726 | P3gm    | P3Bgp     |  | 0.05    | 0.92    | 0.9     | 1       | 1       | 69      | 79      | 0.33    |
| SA5112727 | P3gm    | P3Asp     | No mud sample, too planty                                  | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112728 | P3sgn   | P3Asp     |  | 0.05    | 1.35    | 0.25    | 1       | 0.5     | 180     | 195     | 0.38    |
| SA5112729 | P3sgn   | P3Asp     | No mud sample, too planty                                  | -9      | -9.00   | -9      | -9      | -9      | -9      | -9      | -9.00   |
| SA5112730 | P3gdn   | P3Bgr     |  | 0.05    | 1.03    | 0.25    | 1       | 0.5     | 88      | 122     | 0.52    |
| SA5112731 | P3sgn   | P3Bgd     |  | 0.05    | 0.17    | 0.25    | 1       | 0.5     | 25      | 45      | 0.05    |
| SA5112732 | P3gm    | P3Asp     |  | 0.05    | 0.27    | 0.7     | 1       | 0.5     | 25      | 57      | 0.12    |
| SA5112733 | P3gm    | P3Bgp     |  | 0.05    | 0.67    | 0.25    | 1       | 0.5     | 87      | 106     | 0.20    |
| SA5112734 | P3gm    | P3Bgp     |  | 0.05    | 0.48    | 0.25    | 1       | 0.5     | 100     | 108     | 0.14    |
| SA5112735 | P3gm    | P3Bgp     | Dropped twice  | 0.05    | 0.60    | 0.25    | 1       | 1       | 88      | 98      | 0.20    |
| SA5112736 | P3gm    | P3Asp     | Minor suspension   | 0.05    | 1.19    | 0.5     | 1       | 0.5     | 110     | 143     | 0.44    |
| SA5112737 | P3gm    | P3Bgp     |  | 0.05    | 0.33    | 0.25    | 3       | 0.5     | 77      | 73      | 0.10    |
| SA5112738 | P3sgn   | P3Bgd     | Poor sample, dropped three times                           | 0.05    | 6.63    | 0.6     | 1       | 0.5     | 950     | 959     | 1.76    |
| SA5112739 | P3gdn   | P3Bgd     |  | 0.05    | 1.37    | 0.25    | 1       | 2       | 78      | 189     | 0.32    |
| SA5112740 | P3gdn   | P3Bgd     | Minor suspension   | 0.05    | 0.61    | 0.25    | 1       | 0.5     | 150     | 89      | 0.14    |
| SA5112741 | P3gdn   | P3Bgd     | Plant debris   | 0.05    | 0.60    | 0.6     | 1       | 0.5     | 71      | 84      | 0.18    |
| SA5112742 | P3gm    | P3Bgd     |  | 0.05    | 0.64    | 0.5     | 1       | 0.5     | 69      | 88      | 0.17    |
| SA5112743 | P3gm    | P3Bgd     |  | 0.05    | 4.36    | 0.6     | 2       | 0.5     | 330     | 413     | 0.95    |
| SA5112744 | P3gm    | P3Bgd     | Abundant plant debris                                      | -9      | 0.70    | -9      | 1       | -9      | -9      | 125     | 0.19    |
| SA5112745 | P3gm    | P3Bgd     | Greenish tint, minor suspension                            | -9      | 1.02    | -9      | 5       | -9      | -9      | 83      | 0.27    |



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| FldNum    | 1M_Lith | 100K_Lith | Comments                             | Ag6_ppm | Al2_pct | As1_ppm | As2_ppm | Au1_ppb | Ba1_ppm | Ba2_ppm | Be2_ppm |
|-----------|---------|-----------|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| SA5112746 | P3gdn   | P3Bgd     | Dropped twice                        | 0.05    | 1.61    | 0.25    | 1       | 0.5     | 200     | 225     | 0.41    |
| SA5112747 | P3gdn   | P3Bgd     | Minor suspension                     | 0.05    | 7.27    | 0.25    | 1       | 0.5     | 1100    | 1066    | 1.48    |
| SA5112748 | P3gm    | P3Bgp     | Minor suspension                     | 0.05    | 0.42    | 0.25    | 1       | 0.5     | 77      | 114     | 0.05    |
| SA5112749 | P3gdn   | P3Bgp     | Minor suspension                     | 0.05    | 1.84    | 0.25    | 1       | 0.5     | 200     | 222     | 0.46    |
| SA5112750 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.41    | 0.25    | 3       | 0.5     | 66      | 88      | 0.13    |
| SA5112751 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.35    | 0.25    | 1       | 1       | 52      | 60      | 0.13    |
| SA5112752 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 76      | 78      | 0.12    |
| SA5112753 | P3gdn   | P3Bgr     | Plant debris                         | 0.05    | 0.43    | 0.25    | 1       | 0.5     | 75      | 103     | 0.14    |
| SA5112754 | P3gdn   | P3Bgd     |                                      | 0.05    | 7.63    | 0.25    | 1       | 0.5     | 1200    | 1181    | 1.56    |
| SA5112755 | P3gdn   | P3Bgd     |                                      | 0.05    | 1.36    | 0.25    | 1       | 0.5     | 190     | 236     | 0.38    |
| SA5112756 | P3gm    | P3Bgd     |                                      | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 25      | 48      | 0.05    |
| SA5112757 | P3gm    | P3Bgp     | Abundant plant debris                | 0.05    | 1.00    | 0.25    | 1       | 0.5     | 120     | 139     | 0.28    |
| SA5112758 | P3gm    | P3Bgp     |                                      | 0.3     | 1.52    | 0.25    | 1       | 0.5     | 200     | 194     | 0.44    |
| SA5112759 | P3gm    | P3Bgp     |                                      | 0.05    | 0.20    | 0.25    | 1       | 0.5     | 79      | 92      | 0.05    |
| SA5112760 | P3gm    | P3Bgp     |                                      | 0.05    | 1.72    | 0.6     | 1       | 0.5     | 190     | 239     | 0.37    |
| SA5112761 | P3gm    | P3Bgd     |                                      | -9      | 0.54    | -9      | 1       | -9      | -9      | 204     | 0.13    |
| SA5112762 | P3gm    | P3Bgp     | Minor suspension                     | 0.05    | 0.26    | 0.25    | 1       | 0.5     | 65      | 78      | 0.05    |
| SA5112763 | P3gm    | P3Bgd     |                                      | 0.05    | 0.79    | 0.6     | 1       | 0.5     | 110     | 146     | 0.23    |
| SA5112764 | P3gm    | P3Bgd     | Minor suspension                     | 0.05    | 4.50    | -9      | 1       | -9      | -9      | 864     | 0.97    |
| SA5112765 | P3gdn   | P3Bgd     | Dropped twice, plant debris          | 0.05    | 7.13    | 0.25    | 1       | 3       | 1200    | 1258    | 1.54    |
| SA5112766 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.28    | 0.25    | 1       | 2       | 25      | 59      | 0.05    |
| SA5112767 | P3gm    | P3Bgr     |                                      | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 22      | 0.05    |
| SA5112768 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.09    | 0.25    | 1       | 0.5     | 25      | 41      | 0.05    |
| SA5112769 | P3gdn   | P3Bgd     |                                      | 0.05    | 0.21    | 0.25    | 1       | 0.5     | 57      | 69      | 0.05    |
| SA5112770 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.18    | 0.25    | 1       | 1       | 60      | 63      | 0.05    |
| SA5112771 | P3a     | P3Bgp     |                                      | 0.05    | 1.43    | 0.25    | 1       | 0.5     | 250     | 294     | 0.32    |
| SA5112772 | P3gm    | P3Bgp     |                                      | 0.05    | 8.23    | 0.25    | 1       | 0.5     | 1400    | 1271    | 1.84    |
| SA5112773 | P3gm    | P3Bgd     | Dropped twice                        | 0.05    | 3.43    | -9      | 1       | -9      | -9      | 603     | 0.65    |
| SA5112774 | P3gdn   | P3Bgr     |                                      | 0.05    | 0.22    | 0.25    | 1       | 0.5     | 77      | 81      | 0.05    |
| SA5112775 | P3gm    | P3Bgd     |                                      | 0.05    | 1.53    | 0.25    | 1       | 0.5     | 200     | 259     | 0.28    |
| SA5112776 | M1lga   | P3Bgp     | Dropped twice, abundant plant debris | 0.05    | 0.16    | 0.6     | 1       | 0.5     | 140     | 53      | 0.05    |
| SA5112777 | P3gm    | P3Bmq     |                                      | 0.05    | 3.30    | -9      | 6       | -9      | -9      | 156     | 1.31    |
| SA5112778 | M1lga   | P3Bdr     |                                      | 0.05    | 3.35    | 0.25    | 5       | 0.5     | 130     | 147     | 1.84    |
| SA5112779 | P3gm    | P3Bdr     |                                      | 0.05    | 1.24    | 0.25    | 1       | 0.5     | 120     | 135     | 0.39    |
| SA5112780 | P3gm    | P3Asp     | Minor suspension                     | 0.05    | 1.00    | 0.25    | 1       | 0.5     | 71      | 102     | 0.45    |
| SA5112781 | M1lga   | P3Bgd     |                                      | 0.05    | 2.54    | 0.25    | 3       | 0.5     | 280     | 358     | 1.49    |
| SA5112782 | P3gm    | P3Bgd     | Dropped twice                        | 0.05    | 4.21    | 0.25    | 1       | 0.5     | 410     | 460     | 1.68    |
| SA5112783 | P3a     | P3Bdr     |                                      | 0.05    | 1.55    | 0.25    | 3       | 0.5     | 110     | 142     | 0.76    |
| SA5112784 | M1lga   | P3Bgd     |                                      | 0.05    | 7.18    | 0.25    | 3       | 0.5     | 990     | 981     | 2.21    |
| SA5112785 | P3sgn   | P3Bdr     |                                      | 0.05    | 0.56    | 0.25    | 1       | 0.5     | 83      | 66      | 0.65    |
| SA5112786 | P3gm    | P3Ass     |                                      | 0.05    | 0.51    | 0.25    | 1       | 0.5     | 85      | 71      | 0.24    |
| SA5112787 | P3gm    | P3Bdr     | Dropped three times, poor sample     | 0.05    | 7.90    | -9      | 1       | -9      | -9      | 876     | 2.95    |
| SA5112788 | P3a     | P3Bdr     | Dropped twice                        | 0.05    | 5.57    | 0.25    | 1       | 0.5     | 440     | 485     | 2.42    |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5111891 | 31      | 0.24    | 0.2     | 36      | 50      | 1       | 2       | 5       | 4       | 0.25    | 11      | 3.2     | 0.25    | 0.1     | 0.23    | 0.5     | 0.10   | 23      | 33      |
| SA5111892 | 26      | 0.28    | 0.2     | 44      | 60      | 1       | 2       | 5       | 6       | 0.25    | 8       | 2.9     | 0.25    | 0.2     | 0.24    | 1       | 0.22   | 26      | 36      |
| SA5111893 | 28      | 0.80    | 0.1     | 140     | 167     | 1       | 2       | 14      | 6       | 0.25    | 8       | 15.1    | 2.1     | 0.6     | 0.80    | 1       | 0.24   | 60      | 79      |
| SA5111894 | 37      | 0.86    | 0.2     | 130     | 152     | 4       | 6       | 18      | 13      | 0.25    | 13      | 6.8     | 1.4     | 1.0     | 1.23    | 3       | 0.85   | 56      | 70      |
| SA5111895 | 27      | 0.30    | 0.1     | 72      | 82      | 1       | 3       | 11      | 6       | 0.25    | 8       | 3.4     | 0.25    | 0.6     | 0.75    | 2       | 0.21   | 35      | 47      |
| SA5111896 | 51      | 0.31    | 0.2     | 1.5     | 2       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.22    | 0.5     | 0.03   | 0.5     | 1       |
| SA5111897 | 17      | 1.11    | 0.2     | 130     | 147     | 3       | 6       | 14      | 11      | 0.25    | 13      | 5.1     | 0.9     | 1.0     | 1.25    | 3       | 0.55   | 69      | 84      |
| SA5111898 | 22      | 0.73    | 0.2     | 100     | 115     | 2       | 4       | 14      | 12      | 0.25    | 8       | 4.5     | 1.3     | 0.7     | 0.85    | 4       | 0.58   | 55      | 66      |
| SA5111899 | 36      | 1.14    | 0.2     | 140     | 144     | 7       | 7       | 18      | 11      | 0.25    | 7       | 5.3     | 1.3     | 1.5     | 1.75    | 0.5     | 0.18   | 68      | 80      |
| SA5111900 | 40      | 0.18    | 0.1     | 1.5     | 4       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.03   | 3       | 3       |
| SA5111901 | 61      | 0.51    | 0.2     | 240     | 249     | 5       | 2       | 5       | 12      | 0.25    | 19      | 9.4     | 1.6     | 0.6     | 0.70    | 0.5     | 0.07   | 110     | 132     |
| SA5111902 | 44      | 0.46    | 0.2     | 110     | 119     | 4       | 4       | 18      | 13      | 0.25    | 16      | 5.2     | 0.25    | 0.7     | 0.82    | 2       | 0.27   | 55      | 67      |
| SA5111903 | 33      | 0.15    | 0.1     | 16      | 14      | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.2     | 0.25    | 0.3     | 0.31    | 0.5     | 0.03   | 8       | 9       |
| SA5111904 | 26      | 1.01    | 0.1     | 120     | 124     | 4       | 7       | 19      | 13      | 0.25    | 6       | 6.8     | 1.4     | 1.2     | 1.28    | 16      | 1.22   | 51      | 58      |
| SA5111905 | 33      | 0.42    | 0.1     | 100     | 98      | 2       | 4       | 5       | 11      | 0.25    | 8       | 5.1     | 0.8     | 0.5     | 0.61    | 3       | 0.46   | 46      | 55      |
| SA5111906 | 38      | 0.14    | 0.1     | 110     | 112     | 2       | 1       | 20      | 4       | 0.25    | 6       | 3.9     | 1.3     | 0.4     | 0.43    | 0.5     | 0.14   | 57      | 68      |
| SA5111907 | 15      | 1.63    | 0.3     | 364     | 321     | 18      | 23      | 72      | 47      | 1.7     | 57      | 15.4    | 4.1     | 4.8     | 4.83    | 9       | 2.60   | 203     | 194     |
| SA5111908 | 34      | 0.62    | 0.2     | 88      | 86      | 4       | 3       | 5       | 8       | 0.25    | 10      | 3.7     | 1.2     | 0.5     | 0.60    | 2       | 0.22   | 39      | 47      |
| SA5111909 | 32      | 0.37    | 0.2     | 70      | 80      | 4       | 3       | 5       | 6       | 0.25    | 8       | 4.1     | 0.25    | 0.4     | 0.50    | 0.5     | 0.21   | 32      | 41      |
| SA5111910 | 33      | 0.30    | 0.1     | 66      | 75      | 1       | 0.5     | 5       | 2       | 0.25    | 4       | 3.5     | 0.25    | 0.2     | 0.28    | 0.5     | 0.04   | 31      | 42      |
| SA5111911 | 35      | 0.35    | 0.1     | 120     | 140     | 3       | 4       | 12      | 7       | 0.25    | 8       | 5.0     | 0.9     | 0.9     | 1.17    | 0.5     | 0.19   | 58      | 77      |
| SA5111912 | 33      | 0.17    | 0.1     | 21      | 24      | 2       | 0.5     | 5       | 7       | 0.25    | 4       | 0.5     | 0.25    | 0.4     | 0.53    | 0.5     | 0.03   | 11      | 15      |
| SA5111913 | 59      | 0.15    | 0.2     | 94      | 88      | 3       | 2       | 5       | 7       | 0.25    | 10      | 3.4     | 0.25    | 0.2     | 0.21    | 0.5     | 0.13   | 43      | 51      |
| SA5111914 | 37      | 0.37    | 0.2     | 200     | 183     | 3       | 4       | 13      | 9       | 0.25    | 16      | 5.1     | 1.3     | 0.6     | 0.68    | 1       | 0.23   | 92      | 105     |
| SA5111915 | 34      | 0.39    | 0.1     | 81      | 75      | 3       | 2       | 5       | 5       | 0.25    | 9       | 2.1     | 1.1     | 0.4     | 0.36    | 1       | 0.24   | 39      | 47      |
| SA5111916 | 38      | 0.19    | 0.2     | 54      | 64      | 3       | 2       | 5       | 6       | 0.25    | 10      | 2.8     | 0.25    | 0.3     | 0.27    | 0.5     | 0.14   | 33      | 41      |
| SA5111917 | 43      | 0.25    | 0.2     | 190     | 197     | 3       | 3       | 16      | 9       | 0.25    | 19      | 9.2     | 1.4     | 1.0     | 1.08    | 0.5     | 0.08   | 94      | 115     |
| SA5111918 | 9       | 1.69    | 0.2     | 306     | 283     | 15      | 19      | 51      | 29      | 0.6     | 31      | 11.2    | 2.9     | 2.9     | 3.14    | 8       | 3.07   | 145     | 150     |
| SA5111919 | 64      | 0.37    | 0.3     | 200     | 223     | 3       | 3       | 21      | 10      | 0.25    | 22      | 12.9    | 1.7     | 0.6     | 0.63    | 0.5     | 0.07   | 92      | 119     |
| SA5111920 | 63      | 0.51    | 0.2     | 1500    | 1491    | 1       | 8       | 160     | 37      | 0.25    | 96      | 103.5   | 13.0    | 1.8     | 1.74    | 0.5     | 0.06   | 757     | 831     |
| SA5111921 | 38      | 0.19    | 0.2     | 54      | 67      | 2       | 1       | 5       | 4       | 0.25    | 11      | 5.1     | 0.7     | 0.1     | 0.14    | 0.5     | 0.07   | 32      | 43      |
| SA5111922 | 27      | 0.29    | 0.05    | 38      | 44      | 2       | 2       | 5       | 5       | 0.25    | 8       | 2.1     | 0.25    | 0.3     | 0.43    | 0.5     | 0.13   | 20      | 27      |
| SA5111923 | 38      | 0.58    | 0.2     | 93      | 93      | 3       | 3       | 5       | 7       | 0.25    | 14      | 4.1     | 0.6     | 0.6     | 0.73    | 2       | 0.18   | 44      | 54      |
| SA5111924 | 42      | 0.67    | 0.2     | 140     | 133     | 4       | 4       | 5       | 6       | 0.6     | 12      | 5.1     | 1.1     | 0.6     | 0.62    | 2       | 0.28   | 71      | 83      |
| SA5111925 | 39      | 0.57    | 0.2     | 120     | 127     | 3       | 4       | 14      | 8       | 0.25    | 16      | 5.4     | 0.8     | 0.7     | 0.82    | 0.5     | 0.16   | 55      | 69      |
| SA5111926 | 17      | 0.33    | 0.05    | 26      | 30      | 1       | 3       | 5       | 6       | 0.25    | 4       | 1.3     | 0.6     | 0.3     | 0.31    | 3       | 0.54   | 12      | 16      |
| SA5111927 | 60      | 0.30    | 0.3     | 130     | 142     | 4       | 3       | 5       | 7       | 0.25    | 14      | 5.2     | 1.2     | 0.6     | 0.68    | 0.5     | 0.09   | 64      | 83      |
| SA5111928 | 28      | 0.37    | 0.1     | 65      | 75      | 3       | 3       | 5       | 7       | 0.25    | 8       | 2.9     | 0.25    | 0.5     | 0.57    | 2       | 0.27   | 31      | 42      |
| SA5111929 | 36      | 0.15    | 0.1     | 65      | 71      | 1       | 1       | 5       | 5       | 0.25    | 9       | 3.5     | 0.25    | 0.2     | 0.21    | 0.5     | 0.12   | 31      | 40      |
| SA5111930 | 28      | 0.15    | 0.1     | 17      | 17      | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.2     | 0.25    | 0.3     | 0.26    | 0.5     | 0.01   | 8       | 10      |
| SA5111931 | 46      | 0.25    | 0.1     | 130     | 124     | 4       | 2       | 13      | 9       | 0.25    | 10      | 3.2     | 1.0     | 0.5     | 0.54    | 1       | 0.25   | 63      | 75      |
| SA5111932 | 29      | 0.19    | 0.1     | 67      | 66      | 2       | 1       | 5       | 3       | 0.25    | 6       | 1.4     | 0.25    | 0.3     | 0.32    | 1       | 0.03   | 36      | 45      |
| SA5111933 | 22      | 1.45    | 0.1     | 85      | 86      | 2       | 5       | 14      | 12      | 0.25    | 7       | 4.1     | 0.7     | 0.9     | 1.02    | 6       | 0.94   | 42      | 49      |
| SA5111934 | 30      | 0.29    | 0.1     | 44      | 45      | 1       | 2       | 5       | 6       | 0.25    | 8       | 1.6     | 0.25    | 0.3     | 0.35    | 0.5     | 0.30   | 19      | 26      |
| SA5111935 | 23      | 0.41    | 0.2     | 91      | 100     | 2       | 4       | 13      | 11      | 0.25    | 12      | 4.6     | 0.8     | 0.6     | 0.74    | 2       | 0.33   | 43      | 56      |
| SA5111936 | 30      | 0.19    | 0.05    | 30      | 32      | 1       | 2       | 5       | 6       | 0.25    | 8       | 1.3     | 0.25    | 0.2     | 0.23    | 0.5     | 0.16   | 15      | 19      |
| SA5111937 | 38      | 0.17    | 0.2     | 45      | 41      | 1       | 1       | 5       | 5       | 0.25    | 7       | 1.0     | 0.25    | 0.6     | 0.67    | 0.5     | 0.12   | 19      | 24      |
| SA5111938 | 27      | 0.21    | 0.1     | 17      | 21      | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.6     | 0.25    | 0.2     | 0.28    | 0.5     | 0.02   | 9       | 13      |
| SA5111939 | 91      | 1.52    | 0.3     | 270     | 236     | 7       | 3       | 29      | 10      | 0.25    | 83      | 7.9     | 2.1     | 1.3     | 1.23    | 0.5     | 0.07   | 143     | 152     |
| SA5111940 | 36      | 0.58    | 0.2     | 81      | 82      | 3       | 2       | 19      | 7       | 0.25    | 9       | 2.7     | 0.7     | 1.0     | 1.16    | 0.5     | 0.14   | 38      | 46      |
| SA5111941 | 24      | 0.58    | 0.1     | 81      | 79      | 3       | 3       | 14      | 9       | 0.25    | 13      | 2.9     | 0.9     | 0.5     | 0.59    | 3       | 0.77   | 37      | 44      |
| SA5111942 | 40      | 0.14    | 0.2     | 14      | 14      | 4       | 0.5     | 5       | 4       | 0.25    | 4       | 0.4     | 0.25    | 0.1     | 0.06    | 0.5     | 0.10   | 7       | 8       |
| SA5111943 | 26      | 1.28    | 0.3     | 364     | 325     | 10      | 14      | 48      | 29      | 0.25    | 32      | 11.9    | 3.3     | 3.7     | 3.85    | 6       | 1.45   | 178     | 188     |
| SA5111944 | 44      | 0.23    | 0.05    | 35      | 28      | 4       | 0.5     | 5       | 3       | 0.25    | 8       | 1.2     | 0.25    | 0.3     | 0.30    | 0.5     | 0.04   | 15      | 19      |
| SA5111945 | 23      | 0.25    | 0.1     | 12      | 16      | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.3     | 0.25    | 0.3     | 0.34    | 0.5     | 0.02   | 8       | 10      |
| SA5111946 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5111947 | 19      | 0.30    | 0.1     | 77      | 85      | 1       | 4       | 5       | 7       | 0.25    | 5       | 3.5     | 0.25    | 0.4     | 0.43    | 1       | 0.31   | 41      | 54      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5111948 | 38      | 0.38    | 0.1     | 71      | 77      | 4       | 4       | 5       | 6       | 0.25    | 6       | 3.1     | 0.8     | 0.5     | 0.56    | 4       | 0.38   | 33      | 45      |
| SA5111949 | 67      | 0.33    | 0.6     | 749     | 659     | 11      | 11      | 50      | 19      | 0.25    | 24      | 19.2    | 3.5     | 5.6     | 5.52    | 0.5     | 0.12   | 361     | 385     |
| SA5111950 | 30      | 0.20    | 0.05    | 22      | 24      | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.6     | 0.25    | 0.3     | 0.34    | 1       | 0.02   | 12      | 15      |
| SA5111951 | 39      | 0.29    | 0.1     | 170     | 181     | 3       | 4       | 5       | 7       | 0.25    | 7       | 5.8     | 1.5     | 1.2     | 1.36    | 2       | 0.09   | 86      | 108     |
| SA5111952 | 33      | 0.38    | 0.2     | 140     | 151     | 4       | 6       | 16      | 8       | 0.25    | 7       | 5.7     | 0.8     | 1.7     | 1.86    | 3       | 0.20   | 67      | 85      |
| SA5111953 | 25      | 0.24    | 0.05    | 42      | 46      | 1       | 2       | 5       | 5       | 0.25    | 8       | 1.9     | 0.7     | 0.2     | 0.25    | 0.5     | 0.09   | 20      | 27      |
| SA5111954 | 26      | 0.38    | 0.1     | 35      | 39      | 1       | 2       | 13      | 5       | 0.25    | 8       | 1.8     | 0.25    | 0.2     | 0.25    | 0.5     | 0.14   | 18      | 23      |
| SA5111955 | 19      | 0.34    | 0.1     | 240     | 254     | 3       | 4       | 20      | 9       | 0.25    | 15      | 9.9     | 1.7     | 0.6     | 0.75    | 0.5     | 0.13   | 108     | 136     |
| SA5111956 | 18      | 0.30    | 0.1     | 55      | 69      | 3       | 4       | 5       | 8       | 0.25    | 7       | 3.0     | 0.25    | 0.7     | 0.88    | 1       | 0.33   | 28      | 37      |
| SA5111957 | 31      | 0.17    | 0.2     | 32      | 35      | 1       | 2       | 5       | 6       | 0.25    | 9       | 1.4     | 0.9     | 0.2     | 0.21    | 0.5     | 0.13   | 14      | 21      |
| SA5111958 | 64      | 0.49    | 0.6     | 509     | 327     | 14      | 17      | 57      | 13      | 0.25    | 15      | 13.4    | 4.0     | 4.8     | 6.57    | 0.5     | 0.06   | 216     | 138     |
| SA5111959 | 46      | 0.45    | 0.7     | 363     | 484     | 19      | 14      | 27      | 28      | 0.25    | 44      | 20.8    | 2.8     | 6.2     | 5.18    | 0.5     | 0.11   | 122     | 242     |
| SA5111960 | 50      | 1.06    | 0.2     | 220     | 185     | 5       | 5       | 24      | 17      | 0.25    | 32      | 6.6     | 0.8     | 1.1     | 1.10    | 2       | 0.43   | 115     | 117     |
| SA5111961 | 34      | 2.19    | 0.3     | 130     | 134     | 4       | 3       | 13      | 9       | 0.25    | 13      | 7.3     | 1.1     | 2.0     | 2.16    | 0.5     | 0.23   | 65      | 73      |
| SA5111962 | 43      | 0.26    | 0.1     | 36      | 35      | 3       | 1       | 5       | 4       | 0.25    | 7       | 1.2     | 0.25    | 0.5     | 0.41    | 0.5     | 0.10   | 17      | 21      |
| SA5111963 | 30      | 0.34    | 0.1     | 48      | 56      | 1       | 2       | 10      | 8       | 0.25    | 8       | 2.6     | 0.6     | 0.4     | 0.43    | 0.5     | 0.22   | 26      | 33      |
| SA5111964 | 36      | 0.41    | 0.2     | 86      | 92      | 4       | 4       | 17      | 12      | 0.25    | 11      | 4.7     | 1.3     | 0.8     | 0.86    | 2       | 0.33   | 41      | 50      |
| SA5111965 | 51      | 1.31    | 0.2     | 280     | 240     | 4       | 4       | 20      | 13      | 0.25    | 29      | 6.2     | 2.3     | 1.7     | 1.81    | 0.5     | 0.24   | 134     | 149     |
| SA5111966 | 47      | 0.50    | 0.3     | 160     | 164     | 4       | 4       | 34      | 16      | 0.25    | 35      | 4.2     | 0.25    | 1.0     | 1.11    | 0.5     | 0.19   | 79      | 99      |
| SA5111967 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5111968 | 46      | 0.11    | 0.1     | 1.5     | 8       | 4       | 0.5     | 5       | 5       | 0.25    | 4       | 0.1     | 0.25    | 0.5     | 0.06    | 0.5     | 0.04   | 4       | 6       |
| SA5111969 | 42      | 0.13    | 0.05    | 1.5     | 14      | 3       | 0.5     | 5       | 3       | 0.25    | 3       | 0.3     | 0.25    | 0.3     | 0.25    | 0.5     | 0.04   | 8       | 8       |
| SA5111970 | 34      | 0.22    | 0.05    | 15      | 14      | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.3     | 0.6     | 0.2     | 0.23    | 0.5     | 0.03   | 8       | 9       |
| SA5111971 | 21      | 1.78    | 0.3     | 150     | 141     | 11      | 16      | 22      | 20      | 0.25    | 6       | 8.3     | 1.3     | 3.3     | 3.68    | 14      | 1.17   | 63      | 68      |
| SA5111972 | 20      | 0.26    | 0.1     | 76      | 92      | 6       | 6       | 11      | 8       | 0.25    | 4       | 3.5     | 0.8     | 2.4     | 2.95    | 2       | 0.20   | 40      | 50      |
| SA5111973 | 29      | 0.42    | 0.2     | 70      | 74      | 2       | 2       | 5       | 6       | 0.25    | 8       | 3.1     | 0.25    | 0.3     | 0.37    | 0.5     | 0.09   | 39      | 49      |
| SA5111974 | 33      | 0.38    | 0.2     | 68      | 78      | 4       | 2       | 5       | 6       | 0.25    | 9       | 3.6     | 0.7     | 0.4     | 0.45    | 0.5     | 0.07   | 44      | 56      |
| SA5111975 | 30      | 0.46    | 0.3     | 140     | 142     | 5       | 6       | 16      | 12      | 0.25    | 9       | 5.9     | 1.4     | 2.0     | 2.33    | 1       | 0.22   | 74      | 87      |
| SA5111976 | 27      | 0.53    | 0.2     | 130     | 136     | 4       | 4       | 22      | 11      | 0.25    | 10      | 5.1     | 1.4     | 1.2     | 1.31    | 2       | 0.26   | 82      | 98      |
| SA5111977 | 35      | 0.37    | 0.05    | 47      | 49      | 1       | 7       | 5       | 12      | 0.25    | 9       | 1.7     | 0.6     | 0.3     | 0.32    | 6       | 0.81   | 22      | 28      |
| SA5111978 | 52      | 0.44    | 0.4     | 260     | 278     | 5       | 4       | 27      | 18      | 0.25    | 26      | 13.5    | 1.9     | 1.0     | 1.17    | 0.5     | 0.18   | 123     | 150     |
| SA5111979 | 30      | 0.21    | 0.2     | 110     | 117     | 2       | 2       | 5       | 11      | 0.25    | 20      | 4.7     | 1.2     | 0.3     | 0.42    | 0.5     | 0.13   | 59      | 74      |
| SA5111980 | 14      | 0.62    | 0.2     | 96      | 104     | 6       | 7       | 12      | 8       | 0.25    | 5       | 3.7     | 0.25    | 1.9     | 2.38    | 2       | 0.36   | 50      | 60      |
| SA5111981 | 12      | 0.38    | 0.1     | 50      | 56      | 1       | 2       | 5       | 6       | 0.25    | 3       | 2.9     | 0.6     | 0.8     | 0.95    | 2       | 0.39   | 31      | 40      |
| SA5111982 | 10      | 0.17    | 0.05    | 45      | 50      | 1       | 2       | 5       | 6       | 0.25    | 2       | 2.4     | 0.25    | 0.7     | 0.79    | 0.5     | 0.19   | 30      | 37      |
| SA5111983 | 52      | 0.35    | 0.5     | 190     | 200     | 6       | 6       | 20      | 14      | 0.25    | 15      | 9.0     | 1.2     | 1.7     | 1.99    | 0.5     | 0.10   | 105     | 119     |
| SA5111984 | 27      | 0.27    | 0.1     | 61      | 70      | 1       | 2       | 5       | 7       | 0.25    | 14      | 2.7     | 0.8     | 0.4     | 0.45    | 1       | 0.15   | 33      | 41      |
| SA5111985 | 33      | 0.71    | 0.7     | 478     | 424     | 24      | 23      | 25      | 20      | 0.25    | 26      | 10.3    | 2.1     | 6.0     | 6.30    | 0.5     | 0.06   | 187     | 204     |
| SA5111986 | 17      | 0.20    | 0.1     | 29      | 36      | 3       | 2       | 5       | 7       | 0.25    | 4       | 1.5     | 0.25    | 0.5     | 0.64    | 0.5     | 0.15   | 16      | 21      |
| SA5111987 | 24      | 0.46    | 0.2     | 110     | 125     | 8       | 8       | 5       | 11      | 0.25    | 9       | 4.2     | 0.7     | 1.2     | 1.48    | 0.5     | 0.09   | 58      | 76      |
| SA5111988 | 27      | 0.34    | 0.2     | 91      | 100     | 4       | 4       | 5       | 9       | 0.25    | 7       | 3.9     | 0.8     | 1.2     | 1.36    | 0.5     | 0.14   | 47      | 59      |
| SA5111989 | 32      | 0.43    | 0.2     | 170     | 173     | 5       | 3       | 15      | 10      | 0.25    | 10      | 5.7     | 1.4     | 1.0     | 1.20    | 1       | 0.19   | 92      | 110     |
| SA5111990 | 25      | 0.55    | 0.2     | 39      | 52      | 4       | 5       | 5       | 11      | 0.25    | 5       | 2.2     | 0.25    | 1.6     | 1.88    | 2       | 0.39   | 23      | 29      |
| SA5111991 | 31      | 0.24    | 0.2     | 1.5     | 5       | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.1     | 0.25    | 0.7     | 0.67    | 0.5     | 0.03   | 2       | 3       |
| SA5111992 | 19      | 0.23    | 0.2     | 46      | 52      | 2       | 2       | 5       | 4       | 0.25    | 5       | 2.4     | 0.25    | 0.6     | 0.69    | 0.5     | 0.08   | 24      | 31      |
| SA5111993 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5111994 | 39      | 0.18    | 0.1     | 24      | 18      | 5       | 0.5     | 5       | 2       | 0.25    | 2       | 0.5     | 0.7     | 0.2     | 0.16    | 0.5     | 0.03   | 10      | 11      |
| SA5111995 | 17      | 0.49    | 0.2     | 53      | 54      | 1       | 2       | 5       | 4       | 0.25    | 4       | 2.2     | 1.3     | 0.4     | 0.46    | 0.5     | 0.11   | 32      | 38      |
| SA5111996 | 31      | 1.26    | 0.5     | 317     | 313     | 28      | 27      | 33      | 15      | 0.25    | 20      | 7.9     | 1.7     | 4.5     | 4.94    | 0.5     | 0.06   | 141     | 160     |
| SA5111997 | 18      | 0.19    | 0.1     | 53      | 73      | 3       | 2       | 5       | 5       | 0.25    | 3       | 3.2     | 0.6     | 0.8     | 0.90    | 0.5     | 0.08   | 32      | 44      |
| SA5111998 | 30      | 0.16    | 0.2     | 1.5     | 5       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.09    | 0.5     | 0.03   | 2       | 3       |
| SA5111999 | 21      | 0.49    | 0.2     | 78      | 88      | 5       | 6       | 5       | 10      | 0.25    | 6       | 3.3     | 0.7     | 3.4     | 3.93    | 0.5     | 0.22   | 38      | 46      |
| SA5112000 | 27      | 0.30    | 0.1     | 29      | 38      | 1       | 2       | 5       | 4       | 0.25    | 4       | 1.8     | 0.6     | 0.6     | 0.62    | 0.5     | 0.11   | 19      | 23      |
| SA5112001 | 2       | 3.11    | 0.3     | 180     | 181     | 11      | 18      | 43      | 28      | 0.25    | 3       | 11.4    | 3.6     | 5.1     | 5.33    | 27      | 2.52   | 83      | 80      |
| SA5112002 | 40      | 0.32    | 0.2     | 1.5     | 8       | 4       | 0.5     | 5       | 2       | 0.25    | 1       | 0.2     | 0.25    | 0.3     | 0.33    | 0.5     | 0.08   | 4       | 5       |
| SA5112003 | 18      | 1.85    | 0.2     | 120     | 112     | 6       | 9       | 23      | 19      | 0.25    | 8       | 6.3     | 1.7     | 2.7     | 2.91    | 12      | 1.13   | 54      | 58      |
| SA5112004 | 19      | 0.30    | 0.1     | 110     | 6       | 8       | 0.5     | 26      | 2       | 0.25    | 1       | 0.05    | 1.5     | 2.7     | 0.26    | 13      | 0.03   | 56      | 4       |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112005 | 48      | 0.14    | 0.1     | 1.5     | 2       | 4       | 0.5     | 5       | 2       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.14    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112006 | 37      | 0.16    | 0.2     | 1.5     | 8       | 3       | 0.5     | 5       | 2       | 0.25    | 1       | 0.2     | 0.6     | 0.3     | 0.18    | 0.5     | 0.02   | 5       | 7       |
| SA5112007 | 28      | 1.13    | 0.2     | 66      | 56      | 3       | 16      | 19      | 15      | 0.6     | 5       | 2.9     | 1.5     | 1.3     | 1.43    | 23      | 1.41   | 29      | 27      |
| SA5112008 | 20      | 1.08    | 0.2     | 71      | 71      | 5       | 6       | 20      | 15      | 0.25    | 4       | 3.2     | 1.2     | 1.2     | 1.36    | 4       | 0.71   | 35      | 38      |
| SA5112009 | 39      | 0.11    | 0.05    | 1.5     | 4       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.11    | 0.5     | 0.02   | 2       | 3       |
| SA5112010 | 37      | 0.12    | 0.2     | 14      | 10      | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.2     | 0.25    | 0.3     | 0.21    | 0.5     | 0.03   | 7       | 8       |
| SA5112011 | 32      | 0.29    | 0.2     | 15      | 22      | 4       | 1       | 5       | 6       | 0.25    | 3       | 0.6     | 0.25    | 3.9     | 4.16    | 0.5     | 0.07   | 7       | 8       |
| SA5112012 | 37      | 0.20    | 0.1     | 7       | 10      | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.3     | 0.25    | 0.1     | 0.08    | 0.5     | 0.03   | 7       | 8       |
| SA5112013 | 43      | 0.23    | 0.2     | 1.5     | 4       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.02   | 1       | 2       |
| SA5112014 | 3       | 2.95    | 0.2     | 180     | 155     | 9       | 15      | 42      | 24      | 0.25    | 2       | 9.3     | 3.8     | 3.6     | 3.23    | 27      | 2.41   | 82      | 69      |
| SA5112015 | 38      | 0.17    | 0.2     | 1.5     | 5       | 3       | 0.5     | 5       | 2       | 0.25    | 0.5     | 0.05    | 0.6     | 0.2     | 0.20    | 0.5     | 0.06   | 2       | 2       |
| SA5112016 | 25      | 0.27    | 0.1     | 1.5     | 6       | 1       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.17    | 0.5     | 0.01   | 5       | 6       |
| SA5112017 | 36      | 0.12    | 0.2     | 9       | 5       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.04   | 2       | 3       |
| SA5112018 | 6       | 2.72    | 0.2     | 160     | 137     | 8       | 16      | 33      | 19      | 0.25    | 0.5     | 8.5     | 3.8     | 3.3     | 3.03    | 40      | 2.46   | 67      | 58      |
| SA5112019 | 38      | 0.13    | 0.05    | 17      | 18      | 3       | 0.5     | 5       | 2       | 0.25    | 1       | 0.6     | 0.25    | 0.2     | 0.19    | 0.5     | 0.02   | 8       | 9       |
| SA5112020 | 23      | 0.14    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.3     | 0.38    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112021 | 7       | 2.10    | 0.1     | 120     | 88      | 6       | 21      | 32      | 20      | 0.6     | 0.5     | 5.1     | 2.8     | 2.5     | 2.49    | 48      | 2.72   | 50      | 37      |
| SA5112022 | 28      | 0.21    | 0.2     | 9       | 7       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.1     | 0.25    | 0.1     | 0.14    | 0.5     | 0.07   | 5       | 5       |
| SA5112023 | 27      | 0.24    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 2       | 0.25    | 0.5     | 0.05    | 0.25    | 0.3     | 0.25    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112024 | 35      | 0.30    | 0.2     | 1.5     | 11      | 3       | 0.5     | 5       | 2       | 0.25    | 1       | 0.3     | 0.25    | 0.3     | 0.31    | 0.5     | 0.03   | 7       | 9       |
| SA5112025 | 30      | 0.20    | 0.1     | 17      | 17      | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.5     | 0.25    | 0.2     | 0.18    | 0.5     | 0.02   | 9       | 11      |
| SA5112026 | 23      | 0.24    | 0.1     | 20      | 25      | 1       | 0.5     | 5       | 2       | 0.25    | 1       | 0.9     | 0.25    | 0.7     | 0.75    | 0.5     | 0.03   | 12      | 15      |
| SA5112027 | 26      | 0.25    | 0.1     | 1.5     | 4       | 1       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.4     | 0.39    | 0.5     | 0.01   | 1       | 2       |
| SA5112028 | 25      | 0.13    | 0.1     | 1.5     | 3       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.3     | 0.36    | 0.5     | 0.01   | 0.5     | 1       |
| SA5112029 | 36      | 0.20    | 0.3     | 1.5     | 4       | 1       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.09    | 0.5     | 0.05   | 2       | 3       |
| SA5112030 | 35      | 0.17    | 0.05    | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.23    | 0.5     | 0.02   | 2       | 2       |
| SA5112031 | 38      | 0.11    | 0.05    | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.06    | 0.5     | 0.03   | 1       | 2       |
| SA5112032 | 19      | 0.73    | 0.2     | 110     | 141     | 1       | 2       | 5       | 4       | 0.25    | 4       | 6.4     | 2.7     | 0.7     | 0.82    | 1       | 0.11   | 137     | 166     |
| SA5112033 | 8       | 1.91    | 0.2     | 100     | 100     | 6       | 12      | 23      | 20      | 0.25    | 3       | 6.5     | 1.4     | 2.6     | 2.55    | 14      | 1.67   | 51      | 53      |
| SA5112034 | 23      | 0.28    | 0.1     | 1.5     | 6       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.7     | 0.63    | 0.5     | 0.04   | 3       | 4       |
| SA5112035 | 28      | 0.33    | 0.2     | 8       | 13      | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.3     | 0.25    | 0.4     | 0.36    | 0.5     | 0.02   | 12      | 14      |
| SA5112036 | 17      | 0.31    | 0.2     | 130     | 159     | 1       | 3       | 5       | 6       | 0.25    | 6       | 8.3     | 1.4     | 0.6     | 0.69    | 2       | 0.21   | 83      | 110     |
| SA5112037 | 36      | 0.08    | 0.1     | 1.5     | 5       | 2       | 0.5     | 5       | 2       | 0.25    | 4       | 0.05    | 0.25    | 0.5     | 0.08    | 0.5     | 0.06   | 2       | 3       |
| SA5112038 | 16      | 0.30    | 0.1     | 37      | 51      | 1       | 2       | 5       | 4       | 0.25    | 3       | 2.1     | 1.1     | 0.4     | 0.36    | 0.5     | 0.17   | 34      | 44      |
| SA5112039 | 15      | 0.22    | 0.1     | 38      | 56      | 1       | 2       | 5       | 3       | 0.25    | 2       | 2.5     | 0.7     | 0.5     | 0.65    | 0.5     | 0.08   | 55      | 70      |
| SA5112040 | 32      | 0.16    | 0.1     | 680     | 606     | 4       | 2       | 5       | 4       | 0.25    | 23      | 13.0    | 2.2     | 0.6     | 0.61    | 0.5     | 0.06   | 251     | 293     |
| SA5112041 | 34      | 0.12    | 0.1     | 7       | 4       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.17    | 0.5     | 0.03   | 2       | 3       |
| SA5112042 | 34      | 0.17    | 0.1     | 1.5     | 8       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.05   | 4       | 5       |
| SA5112043 | 35      | 0.32    | 0.2     | 1.5     | 5       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.17    | 0.5     | 0.04   | 2       | 3       |
| SA5112044 | 30      | 0.20    | 0.1     | 1.5     | 6       | 4       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.1     | 0.25    | 0.4     | 0.32    | 0.5     | 0.03   | 3       | 4       |
| SA5112045 | 31      | 0.30    | 0.2     | 1.5     | 8       | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.3     | 0.29    | 0.5     | 0.03   | 3       | 5       |
| SA5112046 | 33      | 0.21    | 0.05    | 1.5     | 3       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.02   | 0.5     | 2       |
| SA5112047 | 27      | 0.29    | 0.2     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.22    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112048 | 25      | 0.19    | 0.1     | 18      | 17      | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.5     | 0.25    | 0.2     | 0.25    | 0.5     | 0.02   | 10      | 12      |
| SA5112049 | 36      | 0.14    | 0.05    | 5       | 6       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.02   | 3       | 4       |
| SA5112050 | 38      | 0.18    | 0.2     | 1.5     | 3       | 1       | 0.5     | 5       | 3       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.18    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112051 | 25      | 0.24    | 0.1     | 1.5     | 4       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.29    | 0.5     | 0.01   | 2       | 2       |
| SA5112052 | 6       | 2.32    | 0.2     | 140     | 116     | 10      | 15      | 45      | 23      | 0.25    | 4       | 6.8     | 2.1     | 3.7     | 3.64    | 12      | 2.15   | 60      | 55      |
| SA5112053 | 31      | 0.19    | 0.2     | 12      | 15      | 3       | 0.5     | 5       | 3       | 0.25    | 3       | 0.5     | 0.7     | 0.1     | 0.17    | 0.5     | 0.04   | 9       | 9       |
| SA5112054 | 29      | 0.24    | 0.2     | 1.5     | 21      | 3       | 1       | 5       | 2       | 0.25    | 3       | 0.7     | 0.25    | 0.9     | 0.98    | 0.5     | 0.03   | 11      | 13      |
| SA5112055 | -9      | 0.21    | 0.2     | -9      | 6       | -9      | 0.5     | -9      | 2       | 0.11    | 3       | 0.05    | -9      | -9      | 0.11    | -9      | 0.05   | -9      | 4       |
| SA5112056 | 36      | 0.11    | 0.1     | 8       | 6       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.04   | 2       | 4       |
| SA5112057 | 42      | 0.33    | 0.2     | 8       | 16      | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.7     | 0.25    | 0.2     | 0.23    | 0.5     | 0.03   | 9       | 10      |
| SA5112058 | 38      | 0.24    | 0.2     | 35      | 37      | 3       | 0.5     | 5       | 2       | 0.25    | 4       | 1.2     | 0.25    | 0.2     | 0.26    | 0.5     | 0.04   | 23      | 27      |
| SA5112059 | 16      | 1.12    | 0.3     | 84      | 90      | 4       | 5       | 15      | 11      | 0.25    | 5       | 3.7     | 1.0     | 1.0     | 1.12    | 3       | 0.64   | 53      | 58      |
| SA5112060 | 27      | 0.44    | 0.1     | 31      | 34      | 3       | 1       | 5       | 4       | 0.25    | 3       | 1.0     | 0.7     | 0.5     | 0.48    | 0.5     | 0.14   | 20      | 23      |
| SA5112061 | 36      | 0.32    | 0.2     | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.03   | 0.5     | 1       |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112062 | 12      | 1.54    | 0.3     | 120     | 114     | 6       | 11      | 23      | 16      | 0.25    | 4       | 6.4     | 2.0     | 3.1     | 3.43    | 10      | 1.42   | 60      | 61      |
| SA5112063 | 28      | 0.21    | 0.2     | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.31    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112064 | 12      | 1.82    | 0.3     | 140     | 124     | 8       | 12      | 29      | 17      | 0.25    | 4       | 7.6     | 2.1     | 3.1     | 3.35    | 14      | 1.58   | 59      | 63      |
| SA5112065 | 45      | 0.25    | 0.4     | 1.5     | 6       | 4       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.21    | 0.5     | 0.07   | 2       | 2       |
| SA5112066 | -9      | 0.24    | 0.2     | -9      | 4       | -9      | 0.5     | -9      | 2       | -9      | 4       | 0.05    | -9      | -9      | 0.13    | -9      | 0.04   | -9      | 2       |
| SA5112067 | 28      | 0.33    | 0.3     | 120     | 116     | 4       | 3       | 5       | 5       | 0.25    | 12      | 4.1     | 0.25    | 0.6     | 0.72    | 0.5     | 0.08   | 69      | 79      |
| SA5112068 | -9      | 0.23    | 0.2     | -9      | 6       | -9      | 0.5     | -9      | 2       | -9      | 4       | 0.05    | -9      | -9      | 0.38    | -9      | 0.09   | -9      | 4       |
| SA5112069 | 31      | 0.26    | 0.1     | 1.5     | 8       | 4       | 0.5     | 5       | 1       | 0.25    | 3       | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.02   | 4       | 5       |
| SA5112070 | 17      | 0.59    | 0.3     | 140     | 144     | 5       | 6       | 18      | 14      | 0.25    | 7       | 4.7     | 0.9     | 2.6     | 3.08    | 2       | 0.44   | 78      | 94      |
| SA5112071 | 33      | 0.15    | 0.1     | 5       | 5       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.02   | 2       | 3       |
| SA5112072 | -9      | 0.25    | 0.4     | -9      | 6       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.18    | -9      | 0.10   | -9      | 3       |
| SA5112073 | 7       | 2.50    | 0.3     | 160     | 134     | 12      | 16      | 31      | 25      | 0.25    | 4       | 9.0     | 2.2     | 4.2     | 4.33    | 16      | 1.80   | 73      | 64      |
| SA5112074 | 27      | 0.36    | 0.2     | 29      | 36      | 1       | 2       | 5       | 5       | 0.25    | 3       | 0.9     | 0.25    | 1.7     | 1.87    | 0.5     | 0.13   | 16      | 19      |
| SA5112075 | 30      | 0.13    | 0.1     | 23      | 18      | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.4     | 0.25    | 0.2     | 0.24    | 0.5     | 0.02   | 8       | 10      |
| SA5112076 | 22      | 0.11    | 0.05    | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 3       | 0.05    | 0.25    | 0.3     | 0.33    | 0.5     | 0.01   | 0.5     | 1       |
| SA5112077 | 26      | 0.36    | 0.2     | 42      | 55      | 2       | 3       | 15      | 10      | 0.25    | 8       | 2.1     | 0.7     | 0.7     | 0.83    | 0.5     | 0.17   | 26      | 35      |
| SA5112078 | 17      | 0.88    | 0.3     | 120     | 125     | 4       | 5       | 16      | 8       | 0.25    | 3       | 5.9     | 1.6     | 1.7     | 1.93    | 3       | 0.61   | 66      | 73      |
| SA5112079 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112080 | 28      | 0.23    | 0.1     | 1.5     | 6       | 3       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.54    | 0.5     | 0.02   | 3       | 3       |
| SA5112081 | 36      | 0.25    | 0.2     | 10      | 7       | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.1     | 0.25    | 0.2     | 0.24    | 0.5     | 0.03   | 5       | 6       |
| SA5112082 | -9      | 0.20    | 0.2     | -9      | 4       | -9      | 0.5     | -9      | 3       | -9      | 2       | 0.05    | -9      | -9      | 0.07    | -9      | 0.04   | -9      | 2       |
| SA5112083 | 34      | 0.31    | 0.2     | 1.5     | 10      | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.1     | 0.25    | 0.3     | 0.20    | 0.5     | 0.03   | 5       | 7       |
| SA5112084 | 44      | 0.18    | 0.2     | 1.5     | 9       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.08    | 0.5     | 0.05   | 3       | 5       |
| SA5112085 | 35      | 0.23    | 0.2     | 1.5     | 3       | 3       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.03   | 0.5     | 2       |
| SA5112086 | 25      | 0.18    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.4     | 0.45    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112087 | 41      | 0.13    | 0.05    | 1.5     | 4       | 3       | 0.5     | 5       | 9       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.21    | 0.5     | 0.02   | 0.5     | 2       |
| SA5112088 | 27      | 0.18    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.22    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112089 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112090 | 30      | 0.15    | 0.1     | 17      | 14      | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.4     | 0.25    | 0.2     | 0.17    | 0.5     | 0.02   | 7       | 8       |
| SA5112091 | 31      | 0.21    | 0.1     | 11      | 14      | 3       | 0.5     | 5       | 3       | 0.25    | 2       | 0.2     | 0.25    | 0.6     | 0.67    | 0.5     | 0.05   | 6       | 8       |
| SA5112092 | 37      | 0.29    | 0.2     | 1.5     | 9       | 3       | 0.5     | 5       | 5       | 0.25    | 3       | 0.2     | 0.25    | 0.6     | 0.58    | 0.5     | 0.03   | 7       | 9       |
| SA5112093 | 11      | 0.28    | 0.2     | 79      | 105     | 2       | 2       | 13      | 4       | 0.25    | 3       | 4.5     | 1.4     | 0.8     | 0.98    | 0.5     | 0.15   | 49      | 62      |
| SA5112094 | 22      | 0.16    | 0.05    | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.4     | 0.47    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112095 | 20      | 0.18    | 0.05    | 21      | 25      | 1       | 1       | 5       | 3       | 0.25    | 6       | 1.0     | 0.25    | 0.2     | 0.15    | 0.5     | 0.09   | 11      | 13      |
| SA5112096 | 45      | 0.33    | 0.05    | 59      | 68      | 4       | 2       | 5       | 7       | 0.25    | 13      | 2.8     | 0.25    | 0.4     | 0.37    | 0.5     | 0.07   | 28      | 37      |
| SA5112097 | 26      | 0.62    | 0.1     | 54      | 62      | 4       | 4       | 5       | 10      | 0.25    | 7       | 3.9     | 0.25    | 0.5     | 0.71    | 3       | 0.53   | 24      | 30      |
| SA5112098 | 16      | 1.96    | 0.2     | 120     | 126     | 8       | 14      | 29      | 25      | 1.2     | 8       | 7.9     | 1.6     | 2.4     | 2.70    | 13      | 1.95   | 56      | 62      |
| SA5112099 | 50      | 0.25    | 0.1     | 130     | 145     | 4       | 2       | 5       | 9       | 0.25    | 20      | 5.5     | 0.9     | 0.6     | 0.76    | 0.5     | 0.07   | 58      | 76      |
| SA5112100 | 40      | 0.26    | 0.1     | 6       | 10      | 2       | 0.5     | 5       | 2       | 0.25    | 9       | 0.4     | 0.25    | 0.2     | 0.19    | 0.5     | 0.04   | 6       | 7       |
| SA5112101 | 41      | 0.15    | 0.2     | 1.5     | 5       | 4       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.1     | 0.08    | 0.5     | 0.07   | 1       | 2       |
| SA5112102 | 18      | 0.28    | 0.05    | 29      | 36      | 2       | 2       | 5       | 6       | 0.25    | 8       | 1.5     | 0.25    | 0.2     | 0.25    | 0.5     | 0.16   | 16      | 18      |
| SA5112103 | 52      | 0.44    | 0.2     | 1.5     | 3       | 4       | 0.5     | 16      | 1       | 0.25    | 2       | 0.1     | 0.25    | 0.2     | 0.11    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112104 | 12      | 2.88    | 0.2     | 82      | 85      | 14      | 23      | 60      | 48      | 0.25    | 5       | 6.1     | 1.9     | 3.6     | 3.94    | 13      | 1.51   | 34      | 36      |
| SA5112105 | 34      | 0.26    | 0.1     | 34      | 32      | 3       | 2       | 5       | 6       | 0.25    | 10      | 1.5     | 0.25    | 0.3     | 0.29    | 0.5     | 0.10   | 14      | 17      |
| SA5112106 | 59      | 0.49    | 0.3     | 150     | 153     | 6       | 6       | 15      | 14      | 0.25    | 25      | 6.6     | 1.2     | 1.3     | 1.53    | 0.5     | 0.20   | 75      | 88      |
| SA5112107 | 53      | 0.43    | 0.3     | 130     | 148     | 5       | 4       | 5       | 17      | 0.25    | 28      | 7.1     | 1.2     | 0.6     | 0.64    | 2       | 0.19   | 63      | 81      |
| SA5112108 | 26      | 0.13    | 0.05    | 24      | 28      | 3       | 0.5     | 5       | 4       | 0.25    | 6       | 1.4     | 0.6     | 0.1     | 0.15    | 0.5     | 0.05   | 11      | 17      |
| SA5112109 | 26      | 0.37    | 0.1     | 41      | 41      | 3       | 2       | 5       | 5       | 0.25    | 8       | 2.0     | 0.25    | 0.1     | 0.18    | 0.5     | 0.07   | 18      | 23      |
| SA5112110 | 22      | 1.03    | 0.05    | 46      | 50      | 5       | 7       | 18      | 15      | 0.25    | 7       | 2.6     | 0.25    | 0.9     | 1.12    | 7       | 0.81   | 23      | 26      |
| SA5112111 | 37      | 0.21    | 0.1     | 5       | 2       | 3       | 0.5     | 5       | 0.5     | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112112 | 35      | 1.12    | 0.2     | 160     | 168     | 10      | 8       | 20      | 13      | 0.25    | 25      | 6.7     | 1.7     | 0.6     | 0.71    | 0.5     | 0.07   | 73      | 90      |
| SA5112113 | 29      | 0.82    | 0.1     | 79      | 90      | 3       | 6       | 17      | 18      | 0.6     | 17      | 3.6     | 1.4     | 0.9     | 0.97    | 2       | 0.51   | 43      | 52      |
| SA5112114 | 60      | 0.50    | 0.2     | 160     | 172     | 5       | 4       | 15      | 17      | 0.25    | 31      | 6.0     | 2.1     | 0.8     | 0.88    | 0.5     | 0.13   | 83      | 101     |
| SA5112115 | 38      | 0.32    | 0.1     | 130     | 147     | 5       | 3       | 5       | 11      | 0.25    | 21      | 3.9     | 0.7     | 0.6     | 0.66    | 0.5     | 0.09   | 72      | 92      |
| SA5112116 | 20      | 0.43    | 0.1     | 58      | 64      | 2       | 4       | 5       | 12      | 0.25    | 17      | 2.2     | 0.25    | 0.5     | 0.58    | 2       | 0.36   | 31      | 38      |
| SA5112117 | 30      | 0.12    | 0.1     | 1.5     | 5       | 4       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.2     | 0.21    | 0.5     | 0.03   | 2       | 2       |
| SA5112118 | 26      | 0.56    | 0.05    | 57      | 63      | 3       | 4       | 17      | 10      | 0.25    | 10      | 2.3     | 0.25    | 0.5     | 0.64    | 2       | 0.46   | 25      | 36      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112119 | 33      | 0.11    | 0.1     | 6       | 5       | 3       | 0.5     | 5       | 2       | 0.25    | 4       | 0.05    | 0.25    | 0.2     | 0.20    | 0.5     | 0.04   | 2       | 2       |
| SA5112120 | 30      | 0.26    | 0.1     | 57      | 61      | 2       | 3       | 5       | 8       | 0.25    | 12      | 2.2     | 0.25    | 0.4     | 0.40    | 0.5     | 0.20   | 31      | 36      |
| SA5112121 | 32      | 0.49    | 0.1     | 32      | 37      | 3       | 1       | 5       | 4       | 0.25    | 10      | 1.2     | 0.25    | 0.3     | 0.32    | 0.5     | 0.12   | 18      | 21      |
| SA5112122 | 24      | 0.36    | 0.1     | 72      | 68      | 3       | 3       | 16      | 10      | 0.25    | 20      | 1.7     | 0.25    | 0.3     | 0.46    | 0.5     | 0.20   | 32      | 39      |
| SA5112123 | 45      | 0.37    | 0.05    | 49      | 48      | 4       | 2       | 5       | 10      | 0.25    | 20      | 1.4     | 0.25    | 0.3     | 0.26    | 0.5     | 0.08   | 29      | 32      |
| SA5112124 | 40      | 0.78    | 0.2     | 60      | 58      | 5       | 4       | 5       | 12      | 0.25    | 26      | 3.2     | 1.0     | 0.3     | 0.37    | 0.5     | 0.10   | 27      | 32      |
| SA5112125 | 62      | 0.88    | 0.5     | 130     | 121     | 20      | 19      | 35      | 31      | 0.25    | 57      | 6.5     | 1.5     | 2.5     | 2.59    | 0.5     | 0.09   | 61      | 67      |
| SA5112126 | 40      | 0.45    | 0.2     | 60      | 54      | 5       | 5       | 5       | 11      | 0.25    | 20      | 2.9     | 0.25    | 0.4     | 0.51    | 0.5     | 0.12   | 22      | 29      |
| SA5112127 | 69      | 0.49    | 0.3     | 140     | 176     | 4       | 3       | 14      | 13      | 0.25    | 32      | 12.0    | 1.1     | 0.5     | 0.52    | 0.5     | 0.04   | 72      | 98      |
| SA5112128 | -9      | 0.81    | 0.4     | -9      | 218     | -9      | 8       | -9      | 23      | -9      | 36      | 13.5    | -9      | -9      | 1.26    | -9      | 0.42   | -9      | 109     |
| SA5112129 | 48      | 0.52    | 0.2     | 68      | 75      | 3       | 4       | 5       | 9       | 0.25    | 15      | 3.5     | 0.7     | 0.4     | 0.53    | 1       | 0.25   | 33      | 43      |
| SA5112130 | 25      | 0.30    | 0.1     | 61      | 66      | 1       | 2       | 5       | 6       | 0.25    | 14      | 3.9     | 0.6     | 0.2     | 0.18    | 0.5     | 0.09   | 27      | 36      |
| SA5112131 | 45      | 0.25    | 0.2     | 1.5     | 4       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.14    | 0.5     | 0.03   | 0.5     | 2       |
| SA5112132 | 39      | 0.50    | 0.8     | 870     | 833     | 21      | 20      | 69      | 38      | 0.25    | 74      | 34.6    | 6.2     | 5.1     | 5.25    | 2       | 0.36   | 345     | 373     |
| SA5112133 | 41      | 0.28    | 0.1     | 13      | 14      | 3       | 1       | 5       | 3       | 0.25    | 3       | 0.3     | 0.25    | 0.3     | 0.29    | 0.5     | 0.03   | 5       | 7       |
| SA5112134 | -9      | 0.33    | 0.1     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 1       | 0.05    | -9      | -9      | 0.17    | -9      | 0.05   | -9      | 1       |
| SA5112135 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112136 | 34      | 0.22    | 0.2     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.3     | 0.24    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112137 | -9      | 0.11    | 0.1     | -9      | 5       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.10    | -9      | 0.04   | -9      | 2       |
| SA5112138 | 33      | 0.26    | 0.2     | 31      | 29      | 3       | 3       | 5       | 7       | 0.25    | 19      | 1.3     | 0.25    | 0.2     | 0.20    | 0.5     | 0.09   | 14      | 17      |
| SA5112139 | 39      | 0.48    | 0.2     | 99      | 161     | 3       | 6       | 12      | 18      | 0.6     | 24      | 7.0     | 0.8     | 0.7     | 1.13    | 0.5     | 0.35   | 52      | 83      |
| SA5112140 | 39      | 0.16    | 0.1     | 1.5     | 3       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.13    | 0.5     | 0.02   | 1       | 0.5     |
| SA5112141 | 54      | 0.26    | 0.2     | 150     | 163     | 3       | 2       | 22      | 4       | 0.25    | 16      | 10.8    | 1.1     | 0.3     | 0.33    | 0.5     | 0.03   | 84      | 101     |
| SA5112142 | 39      | 0.24    | 0.1     | 110     | 132     | 7       | 6       | 13      | 10      | 0.25    | 12      | 7.3     | 0.25    | 3.2     | 3.87    | 0.5     | 0.14   | 55      | 69      |
| SA5112143 | 38      | 1.53    | 0.5     | 383     | 367     | 13      | 18      | 71      | 46      | 2.2     | 81      | 16.6    | 4.5     | 3.3     | 3.40    | 8       | 1.92   | 182     | 191     |
| SA5112144 | 21      | 0.14    | 0.05    | 54      | 62      | 1       | 2       | 5       | 6       | 0.25    | 8       | 3.0     | 0.25    | 0.2     | 0.22    | 0.5     | 0.09   | 29      | 36      |
| SA5112145 | 31      | 0.23    | 0.2     | 65      | 69      | 3       | 1       | 5       | 6       | 0.25    | 15      | 4.3     | 0.25    | 0.3     | 0.32    | 0.5     | 0.06   | 31      | 39      |
| SA5112146 | 67      | 0.70    | 0.2     | 100     | 104     | 3       | 2       | 5       | 6       | 0.25    | 13      | 5.4     | 0.25    | 0.6     | 0.53    | 1       | 0.12   | 51      | 59      |
| SA5112147 | 33      | 0.53    | 0.2     | 88      | 105     | 4       | 4       | 5       | 11      | 0.25    | 15      | 5.7     | 0.25    | 0.7     | 0.86    | 4       | 0.36   | 47      | 58      |
| SA5112148 | 15      | 0.33    | 0.3     | 36      | 50      | 3       | 2       | 5       | 4       | 0.25    | 2       | 1.7     | 0.25    | 0.3     | 0.41    | 0.5     | 0.15   | 29      | 38      |
| SA5112149 | 9       | 1.26    | 0.2     | 77      | 92      | 4       | 11      | 5       | 12      | 0.25    | 3       | 3.6     | 1.4     | 2.3     | 2.92    | 4       | 0.82   | 46      | 60      |
| SA5112150 | 27      | 0.21    | 0.1     | 1.5     | 8       | 3       | 4       | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.13    | 0.5     | 0.04   | 5       | 6       |
| SA5112151 | 23      | 0.25    | 0.1     | 44      | 42      | 1       | 2       | 5       | 2       | 0.25    | 4       | 1.7     | 0.25    | 0.8     | 0.81    | 0.5     | 0.01   | 27      | 30      |
| SA5112152 | 34      | 0.21    | 0.2     | 7       | 7       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.11    | 0.5     | 0.04   | 4       | 5       |
| SA5112153 | 35      | 0.32    | 0.1     | 15      | 17      | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.4     | 0.25    | 0.3     | 0.25    | 0.5     | 0.02   | 9       | 10      |
| SA5112154 | 35      | 0.38    | 0.2     | 1.5     | 4       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.09    | 0.5     | 0.02   | 2       | 2       |
| SA5112155 | 36      | 0.44    | 0.2     | 13      | 17      | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.5     | 0.25    | 0.2     | 0.17    | 0.5     | 0.05   | 14      | 16      |
| SA5112156 | 2       | 2.79    | 0.2     | 140     | 113     | 5       | 13      | 38      | 19      | 0.25    | 0.5     | 8.1     | 3.0     | 3.2     | 3.16    | 18      | 2.73   | 61      | 47      |
| SA5112157 | 27      | 0.20    | 0.1     | 1.5     | 11      | 1       | 2       | 5       | 4       | 0.25    | 2       | 0.2     | 0.25    | 0.6     | 0.60    | 0.5     | 0.10   | 5       | 6       |
| SA5112158 | 24      | 0.59    | 0.1     | 1.5     | 8       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.1     | 0.25    | 1.9     | 2.25    | 0.5     | 0.06   | 3       | 2       |
| SA5112159 | 36      | 0.24    | 0.05    | 8       | 12      | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.5     | 0.25    | 0.5     | 0.15    | 0.5     | 0.05   | 6       | 8       |
| SA5112160 | 30      | 0.20    | 0.1     | 1.5     | 5       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.17    | 0.5     | 0.03   | 2       | 3       |
| SA5112161 | 4       | 2.44    | 0.2     | 120     | 99      | 9       | 14      | 35      | 25      | 0.25    | 3       | 6.3     | 2.2     | 3.8     | 3.65    | 13      | 2.12   | 57      | 44      |
| SA5112162 | 24      | 0.18    | 0.05    | 16      | 11      | 3       | 0.5     | 5       | 3       | 0.25    | 3       | 0.4     | 0.25    | 0.3     | 0.47    | 0.5     | 0.10   | 5       | 5       |
| SA5112163 | 26      | 0.22    | 0.1     | 15      | 17      | 2       | 0.5     | 5       | 1       | 0.25    | 3       | 0.3     | 0.25    | 0.2     | 0.17    | 0.5     | 0.02   | 9       | 10      |
| SA5112164 | 30      | 0.20    | 0.05    | 17      | 17      | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.9     | 0.25    | 0.3     | 0.21    | 0.5     | 0.06   | 9       | 10      |
| SA5112165 | 4       | 2.65    | 0.2     | 140     | 91      | 8       | 14      | 36      | 23      | 0.25    | 0.5     | 6.4     | 1.7     | 3.1     | 2.86    | 17      | 2.32   | 62      | 40      |
| SA5112166 | 10      | 1.57    | 0.3     | 100     | 90      | 5       | 8       | 21      | 19      | 0.25    | 4       | 4.8     | 1.7     | 1.9     | 2.09    | 6       | 1.25   | 49      | 46      |
| SA5112167 | 28      | 0.29    | 0.1     | 13      | 21      | 2       | 0.5     | 5       | 2       | 0.25    | 4       | 0.8     | 0.25    | 0.5     | 0.58    | 0.5     | 0.03   | 10      | 13      |
| SA5112168 | 26      | 0.24    | 0.1     | 1.5     | 10      | 3       | 1       | 5       | 3       | 0.25    | 2       | 0.7     | 0.6     | 0.7     | 0.82    | 0.5     | 0.05   | 4       | 3       |
| SA5112169 | 8       | 2.57    | 0.2     | 110     | 81      | 7       | 14      | 32      | 25      | 0.25    | 2       | 6.6     | 2.3     | 3.0     | 2.90    | 16      | 2.07   | 51      | 34      |
| SA5112170 | 8       | 2.02    | 0.2     | 87      | 78      | 7       | 12      | 22      | 22      | 0.25    | 2       | 5.0     | 1.5     | 2.1     | 2.18    | 11      | 1.75   | 42      | 37      |
| SA5112171 | 26      | 0.27    | 0.05    | 1.5     | 5       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.43    | 0.5     | 0.02   | 2       | 2       |
| SA5112172 | 7       | 2.66    | 0.2     | 110     | 105     | 7       | 14      | 34      | 23      | 0.25    | 2       | 7.3     | 2.2     | 3.3     | 3.54    | 17      | 2.19   | 52      | 45      |
| SA5112173 | 25      | 0.26    | 0.05    | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.4     | 0.36    | 0.5     | 0.02   | 2       | 2       |
| SA5112174 | 27      | 0.60    | 0.5     | 87      | 99      | 1       | 0.5     | 5       | 3       | 0.25    | 5       | 6.1     | 2.2     | 0.5     | 0.05    | 0.5     | 0.05   | 74      | 86      |
| SA5112175 | 6       | 2.47    | 0.1     | 130     | 107     | 7       | 18      | 36      | 24      | 0.25    | 2       | 7.5     | 2.6     | 2.6     | 2.62    | 23      | 2.32   | 51      | 43      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112176 | 12      | 1.43    | 0.2     | 63      | 58      | 4       | 8       | 20      | 18      | 0.25    | 3       | 3.3     | 1.1     | 1.6     | 1.72    | 9       | 1.64   | 27      | 28      |
| SA5112177 | 17      | 1.21    | 0.2     | 50      | 59      | 4       | 6       | 13      | 15      | 0.25    | 5       | 3.0     | 1.3     | 2.0     | 2.27    | 4       | 0.88   | 27      | 30      |
| SA5112178 | 29      | 0.20    | 0.2     | 15      | 15      | 1       | 0.5     | 5       | 6       | 0.25    | 3       | 0.5     | 0.25    | 0.2     | 0.25    | 0.5     | 0.09   | 7       | 9       |
| SA5112179 | 6       | 2.41    | 0.2     | 100     | 97      | 10      | 14      | 40      | 30      | 0.7     | 6       | 5.7     | 2.1     | 3.7     | 3.81    | 8       | 2.38   | 48      | 46      |
| SA5112180 | 27      | 0.44    | 0.2     | 11      | 11      | 2       | 0.5     | 5       | 3       | 0.25    | 2       | 0.2     | 0.25    | 1.7     | 1.88    | 0.5     | 0.11   | 3       | 4       |
| SA5112181 | 37      | 0.10    | 0.1     | 16      | 14      | 3       | 0.5     | 5       | 3       | 0.25    | 8       | 0.7     | 0.25    | 0.1     | 0.12    | 0.5     | 0.09   | 6       | 7       |
| SA5112182 | 32      | 0.25    | 0.1     | 18      | 17      | 2       | 0.5     | 5       | 3       | 0.25    | 2       | 0.2     | 0.25    | 0.3     | 0.28    | 0.5     | 0.03   | 10      | 11      |
| SA5112183 | 9       | 2.28    | 0.2     | 80      | 77      | 8       | 13      | 31      | 29      | 0.6     | 4       | 4.5     | 1.6     | 3.2     | 3.24    | 7       | 1.95   | 37      | 38      |
| SA5112184 | 16      | 1.43    | 0.4     | 72      | 86      | 17      | 20      | 19      | 28      | 0.6     | 7       | 4.3     | 1.4     | 10.0    | 11.59   | 7       | 1.33   | 36      | 37      |
| SA5112185 | 25      | 0.31    | 0.1     | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.4     | 0.41    | 0.5     | 0.07   | 2       | 2       |
| SA5112186 | 26      | 0.33    | 0.2     | 46      | 44      | 3       | 2       | 5       | 7       | 0.25    | 6       | 1.2     | 1.2     | 2.1     | 2.32    | 0.5     | 0.12   | 19      | 25      |
| SA5112187 | 32      | 0.17    | 0.2     | 23      | 28      | 2       | 0.5     | 5       | 3       | 0.25    | 4       | 0.6     | 0.25    | 0.9     | 0.97    | 0.5     | 0.05   | 14      | 18      |
| SA5112188 | 31      | 0.30    | 0.2     | 1.5     | 9       | 3       | 0.5     | 5       | 2       | 0.25    | 4       | 0.05    | 0.25    | 0.5     | 0.41    | 0.5     | 0.02   | 5       | 6       |
| SA5112189 | 28      | 0.19    | 0.1     | 1.5     | 4       | 4       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.2     | 0.14    | 0.5     | 0.01   | 3       | 4       |
| SA5112190 | 9       | 0.34    | 0.1     | 38      | 49      | 2       | 2       | 5       | 6       | 0.25    | 3       | 2.3     | 0.7     | 1.2     | 1.44    | 1       | 0.31   | 30      | 37      |
| SA5112191 | 22      | 0.29    | 0.1     | 1.5     | 4       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.17    | 0.5     | 0.01   | 2       | 3       |
| SA5112192 | 19      | 0.47    | 0.2     | 120     | 137     | 1       | 4       | 15      | 7       | 0.25    | 3       | 5.2     | 1.8     | 1.1     | 1.23    | 0.5     | 0.22   | 80      | 97      |
| SA5112193 | 26      | 0.51    | 0.1     | 67      | 70      | 3       | 4       | 5       | 7       | 0.25    | 7       | 2.8     | 0.7     | 1.5     | 1.70    | 4       | 0.40   | 34      | 42      |
| SA5112194 | 22      | 0.29    | 0.1     | 100     | 124     | 1       | 2       | 5       | 7       | 0.25    | 9       | 4.9     | 0.25    | 0.4     | 0.63    | 0.5     | 0.08   | 54      | 71      |
| SA5112195 | 7       | 1.87    | 0.2     | 82      | 73      | 5       | 12      | 24      | 16      | 0.25    | 3       | 5.4     | 1.3     | 2.2     | 2.31    | 14      | 1.48   | 38      | 42      |
| SA5112196 | 20      | 0.25    | 0.2     | 140     | 163     | 4       | 4       | 19      | 7       | 0.25    | 11      | 6.5     | 1.7     | 1.1     | 1.35    | 0.5     | 0.11   | 92      | 123     |
| SA5112197 | 31      | 0.51    | 0.2     | 140     | 174     | 4       | 4       | 21      | 4       | 0.25    | 5       | 4.9     | 2.6     | 1.1     | 1.41    | 0.5     | 0.09   | 94      | 129     |
| SA5112198 | 25      | 0.52    | 0.2     | 200     | 209     | 4       | 3       | 5       | 8       | 0.25    | 12      | 11.4    | 0.25    | 0.9     | 0.92    | 1       | 0.14   | 102     | 125     |
| SA5112199 | 23      | 0.40    | 0.4     | 290     | 289     | 45      | 44      | 27      | 13      | 0.25    | 15      | 8.9     | 1.9     | 8.1     | 8.76    | 0.5     | 0.17   | 163     | 180     |
| SA5112200 | 13      | 2.07    | 0.3     | 76      | 71      | 20      | 18      | 28      | 27      | 0.5     | 5       | 4.6     | 0.9     | 8.6     | 6.56    | 8       | 1.87   | 36      | 30      |
| SA5112201 | 25      | 0.62    | 0.1     | 95      | 103     | 4       | 4       | 5       | 11      | 0.25    | 11      | 3.8     | 0.25    | 1.0     | 1.29    | 0.5     | 0.18   | 59      | 69      |
| SA5112202 | -9      | 0.33    | 0.2     | -9      | 53      | -9      | 2       | -9      | 5       | -9      | 6       | 2.3     | -9      | -9      | 0.85    | -9      | 0.21   | -9      | 88      |
| SA5112203 | 24      | 0.44    | 0.2     | 150     | 158     | 6       | 7       | 22      | 12      | 0.25    | 11      | 5.9     | 0.25    | 2.3     | 2.54    | 0.5     | 0.23   | 90      | 105     |
| SA5112204 | 36      | 0.32    | 0.2     | 1.5     | 5       | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.3     | 0.25    | 0.3     | 0.22    | 0.5     | 0.04   | 2       | 2       |
| SA5112205 | 30      | 0.39    | 0.2     | 200     | 219     | 4       | 5       | 22      | 12      | 0.25    | 17      | 7.3     | 1.5     | 1.9     | 2.26    | 0.5     | 0.15   | 108     | 133     |
| SA5112206 | -9      | 0.50    | 0.2     | -9      | 155     | -9      | 3       | -9      | 9       | -9      | 17      | 5.0     | -9      | -9      | 0.88    | -9      | 0.18   | -9      | 102     |
| SA5112207 | 16      | 0.12    | 0.05    | 41      | 36      | 3       | 1       | 5       | 4       | 0.25    | 6       | 1.6     | 0.25    | 0.2     | 0.19    | 0.5     | 0.06   | 16      | 21      |
| SA5112208 | 35      | 0.28    | 0.1     | 130     | 138     | 1       | 2       | 5       | 5       | 0.25    | 17      | 7.5     | 2.0     | 0.2     | 0.24    | 0.5     | 0.04   | 60      | 77      |
| SA5112209 | 38      | 0.09    | 0.05    | 46      | 43      | 3       | 2       | 5       | 6       | 0.25    | 12      | 1.8     | 0.25    | 0.5     | 0.11    | 0.5     | 0.08   | 22      | 26      |
| SA5112210 | 30      | 0.24    | 0.05    | 11      | 14      | 2       | 0.5     | 5       | 3       | 0.25    | 4       | 0.9     | 0.25    | 0.5     | 0.49    | 0.5     | 0.02   | 10      | 10      |
| SA5112211 | 17      | 0.26    | 0.1     | 63      | 67      | 4       | 3       | 5       | 6       | 0.25    | 7       | 2.8     | 0.25    | 1.3     | 1.34    | 0.5     | 0.09   | 40      | 46      |
| SA5112212 | 29      | 0.20    | 0.05    | 16      | 15      | 2       | 0.5     | 5       | 2       | 0.25    | 4       | 0.6     | 0.25    | 0.3     | 0.30    | 0.5     | 0.03   | 8       | 9       |
| SA5112213 | 30      | 0.18    | 0.1     | 13      | 11      | 3       | 0.5     | 5       | 3       | 0.25    | 6       | 0.05    | 0.25    | 0.2     | 0.18    | 0.5     | 0.05   | 7       | 8       |
| SA5112214 | 31      | 0.16    | 0.1     | 12      | 11      | 3       | 0.5     | 5       | 3       | 0.25    | 6       | 0.1     | 0.25    | 0.2     | 0.19    | 0.5     | 0.05   | 7       | 8       |
| SA5112215 | 23      | 0.24    | 0.1     | 1.5     | 6       | 3       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.20    | 0.5     | 0.02   | 4       | 5       |
| SA5112216 | -9      | 0.19    | 0.2     | -9      | 5       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.19    | -9      | 0.04   | -9      | 2       |
| SA5112217 | 31      | 0.21    | 0.1     | 1.5     | 4       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.02   | 1       | 2       |
| SA5112218 | 27      | 0.30    | 0.1     | 14      | 13      | 4       | 1       | 5       | 2       | 0.25    | 4       | 0.2     | 0.25    | 0.7     | 0.75    | 0.5     | 0.02   | 7       | 9       |
| SA5112219 | 29      | 0.21    | 0.1     | 36      | 40      | 1       | 0.5     | 5       | 4       | 0.25    | 2       | 0.6     | 0.25    | 0.3     | 0.33    | 0.5     | 0.05   | 19      | 25      |
| SA5112220 | 4       | 3.03    | 0.2     | 120     | 113     | 15      | 20      | 45      | 35      | 1.0     | 14      | 8.1     | 2.1     | 5.3     | 5.12    | 14      | 2.08   | 58      | 54      |
| SA5112221 | 30      | 1.19    | 0.3     | 78      | 83      | 8       | 7       | 14      | 12      | 0.25    | 8       | 3.4     | 0.7     | 2.4     | 2.65    | 2       | 0.29   | 42      | 48      |
| SA5112222 | 30      | 0.21    | 0.05    | 8       | 9       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.21    | 0.5     | 0.02   | 5       | 6       |
| SA5112223 | 26      | 0.21    | 0.1     | 11      | 14      | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.4     | 0.25    | 0.4     | 0.38    | 0.5     | 0.05   | 8       | 10      |
| SA5112224 | 36      | 0.15    | 0.2     | 23      | 27      | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.7     | 0.6     | 0.1     | 0.11    | 0.5     | 0.09   | 27      | 31      |
| SA5112225 | 18      | 0.68    | 0.1     | 79      | 76      | 1       | 3       | 5       | 8       | 0.25    | 9       | 3.4     | 0.25    | 1.0     | 1.04    | 0.5     | 0.16   | 41      | 49      |
| SA5112226 | 26      | 1.05    | 0.2     | 73      | 80      | 1       | 1       | 5       | 7       | 0.25    | 4       | 2.2     | 0.25    | 1.4     | 1.47    | 0.5     | 0.12   | 40      | 48      |
| SA5112227 | 26      | 0.21    | 0.1     | 13      | 17      | 3       | 0.5     | 5       | 3       | 0.25    | 8       | 0.3     | 0.25    | 0.1     | 0.14    | 0.5     | 0.03   | 10      | 12      |
| SA5112228 | 21      | 0.33    | 0.2     | 71      | 84      | 2       | 3       | 5       | 8       | 0.25    | 6       | 3.5     | 1.3     | 0.7     | 0.82    | 0.5     | 0.15   | 47      | 60      |
| SA5112229 | 28      | 0.27    | 0.05    | 5       | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.20    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112230 | 22      | 0.24    | 0.1     | 81      | 90      | 1       | 0.5     | 5       | 3       | 0.25    | 5       | 3.6     | 0.6     | 0.3     | 0.31    | 0.5     | 0.03   | 56      | 70      |
| SA5112231 | 18      | 0.26    | 0.2     | 140     | 156     | 1       | 2       | 16      | 10      | 0.25    | 7       | 5.8     | 2.0     | 1.0     | 1.10    | 0.5     | 0.10   | 115     | 133     |
| SA5112232 | 13      | 0.23    | 0.1     | 50      | 67      | 1       | 2       | 5       | 5       | 0.25    | 4       | 2.5     | 1.3     | 1.5     | 1.69    | 0.5     | 0.12   | 42      | 52      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112233 | 25      | 0.16    | 0.1     | 1.5     | 4       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.18    | 0.5     | 0.05   | 1       | 2       |
| SA5112234 | -9      | 0.30    | 0.1     | -9      | 24      | -9      | 1       | -9      | 7       | -9      | 11      | 0.8     | -9      | -9      | 0.22    | -9      | 0.10   | -9      | 17      |
| SA5112235 | 23      | 0.16    | 0.05    | 1.5     | 4       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.23    | 0.5     | 0.03   | 1       | 2       |
| SA5112236 | -9      | 1.01    | 0.1     | -9      | 88      | -9      | 9       | -9      | 11      | -9      | 7       | 6.3     | -9      | -9      | 1.06    | -9      | 1.18   | -9      | 46      |
| SA5112237 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112238 | 23      | 0.73    | 0.1     | 220     | 213     | 1       | 1       | 5       | 4       | 0.25    | 9       | 9.0     | 0.25    | 0.1     | 0.23    | 0.5     | 0.04   | 139     | 160     |
| SA5112239 | 34      | 0.07    | 0.05    | 9       | 5       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.06    | 0.5     | 0.04   | 3       | 3       |
| SA5112240 | 18      | 0.28    | 0.1     | 27      | 36      | 2       | 1       | 5       | 4       | 0.25    | 6       | 1.4     | 0.25    | 0.3     | 0.42    | 0.5     | 0.04   | 17      | 24      |
| SA5112241 | 11      | 1.76    | 0.3     | 150     | 158     | 6       | 9       | 28      | 12      | 0.25    | 6       | 8.1     | 1.9     | 1.8     | 2.01    | 5       | 0.68   | 77      | 87      |
| SA5112242 | 31      | 0.12    | 0.2     | 70      | 84      | 3       | 1       | 5       | 5       | 0.25    | 13      | 2.9     | 1.1     | 0.5     | 0.07    | 0.5     | 0.04   | 50      | 61      |
| SA5112243 | 21      | 0.71    | 0.2     | 49      | 52      | 2       | 2       | 5       | 5       | 0.25    | 8       | 2.0     | 0.25    | 0.2     | 0.29    | 0.5     | 0.14   | 31      | 36      |
| SA5112244 | 16      | 0.26    | 0.1     | 35      | 45      | 1       | 2       | 5       | 5       | 0.25    | 5       | 1.8     | 0.7     | 0.6     | 0.49    | 0.5     | 0.18   | 25      | 30      |
| SA5112245 | 11      | 1.64    | 0.3     | 200     | 201     | 3       | 8       | 14      | 12      | 0.25    | 7       | 11.4    | 3.3     | 2.7     | 2.91    | 4       | 0.58   | 92      | 104     |
| SA5112246 | 30      | 0.11    | 0.05    | 1.5     | 12      | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.1     | 0.25    | 0.2     | 0.17    | 0.5     | 0.04   | 7       | 8       |
| SA5112247 | 27      | 0.15    | 0.1     | 57      | 85      | 1       | 0.5     | 5       | 3       | 0.7     | 6       | 3.6     | 0.25    | 0.2     | 0.16    | 0.5     | 0.04   | 80      | 102     |
| SA5112248 | 20      | 0.14    | 0.1     | 1.5     | 3       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.02   | 1       | 1       |
| SA5112249 | -9      | 0.61    | 0.4     | -9      | 85      | -9      | 2       | -9      | 5       | -9      | 29      | 4.5     | -9      | -9      | 0.43    | -9      | 0.08   | -9      | 63      |
| SA5112250 | 36      | 0.49    | 0.2     | 84      | 110     | 4       | 3       | 5       | 11      | 0.25    | 16      | 3.7     | 0.25    | 0.5     | 0.66    | 0.5     | 0.12   | 53      | 73      |
| SA5112251 | 30      | 1.67    | 0.3     | 170     | 174     | 6       | 6       | 26      | 12      | 0.25    | 15      | 5.4     | 0.25    | 1.8     | 2.11    | 0.5     | 0.26   | 100     | 122     |
| SA5112252 | 18      | 1.89    | 0.2     | 96      | 100     | 5       | 6       | 11      | 11      | 0.25    | 7       | 3.9     | 0.9     | 2.1     | 2.45    | 4       | 0.64   | 57      | 65      |
| SA5112253 | 20      | 0.27    | 0.1     | 54      | 50      | 1       | 2       | 18      | 5       | 0.25    | 6       | 1.4     | 0.8     | 0.3     | 0.42    | 0.5     | 0.14   | 26      | 32      |
| SA5112254 | 39      | 0.48    | 0.2     | 190     | 204     | 7       | 6       | 5       | 11      | 0.25    | 13      | 6.2     | 1.6     | 2.2     | 2.48    | 1       | 0.16   | 122     | 142     |
| SA5112255 | -9      | 0.53    | 0.2     | -9      | 50      | -9      | 2       | -9      | 7       | -9      | 11      | 1.6     | -9      | -9      | 0.81    | -9      | 0.19   | -9      | 30      |
| SA5112256 | 32      | 0.65    | 0.1     | 80      | 92      | 1       | 3       | 5       | 6       | 0.25    | 8       | 4.1     | 0.25    | 0.3     | 0.45    | 0.5     | 0.14   | 44      | 57      |
| SA5112257 | 24      | 0.37    | 0.2     | 150     | 155     | 4       | 5       | 12      | 7       | 0.25    | 7       | 6.0     | 0.25    | 1.9     | 2.15    | 0.5     | 0.13   | 83      | 102     |
| SA5112258 | 33      | 0.15    | 0.1     | 14      | 9       | 3       | 0.5     | 5       | 2       | 0.25    | 6       | 0.2     | 0.8     | 0.1     | 0.08    | 0.5     | 0.04   | 6       | 7       |
| SA5112259 | 15      | 1.68    | 0.2     | 100     | 107     | 5       | 11      | 16      | 19      | 0.25    | 5       | 6.7     | 1.7     | 3.0     | 3.30    | 9       | 1.38   | 49      | 52      |
| SA5112260 | 43      | 0.24    | 0.3     | 160     | 161     | 1       | 3       | 5       | 10      | 0.25    | 15      | 6.0     | 0.25    | 1.6     | 1.77    | 0.5     | 0.13   | 80      | 98      |
| SA5112261 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112262 | 38      | 0.35    | 0.1     | 40      | 51      | 3       | 1       | 5       | 5       | 0.25    | 10      | 1.6     | 0.25    | 0.5     | 0.60    | 0.5     | 0.09   | 21      | 30      |
| SA5112263 | 39      | 0.43    | 0.2     | 50      | 61      | 3       | 2       | 5       | 5       | 0.25    | 9       | 2.2     | 0.8     | 0.4     | 0.43    | 0.5     | 0.13   | 28      | 36      |
| SA5112264 | 43      | 0.13    | 0.05    | 33      | 34      | 1       | 1       | 5       | 4       | 0.25    | 8       | 1.2     | 0.25    | 0.3     | 0.33    | 0.5     | 0.08   | 16      | 20      |
| SA5112265 | 27      | 0.59    | 0.2     | 95      | 94      | 3       | 5       | 21      | 9       | 0.25    | 8       | 3.4     | 0.25    | 1.2     | 1.27    | 3       | 0.45   | 50      | 57      |
| SA5112266 | 48      | 0.25    | 0.05    | 92      | 83      | 4       | 2       | 5       | 10      | 0.25    | 10      | 2.8     | 0.25    | 0.5     | 0.55    | 2       | 0.31   | 48      | 54      |
| SA5112267 | 32      | 0.24    | 0.1     | 1.5     | 4       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.23    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112268 | 34      | 0.52    | 0.1     | 140     | 146     | 1       | 3       | 5       | 7       | 0.25    | 12      | 5.5     | 1.6     | 0.4     | 0.52    | 0.5     | 0.09   | 69      | 82      |
| SA5112269 | 21      | 0.91    | 0.2     | 82      | 85      | 2       | 3       | 5       | 6       | 0.25    | 9       | 4.4     | 1.0     | 4.0     | 4.61    | 1       | 0.23   | 38      | 44      |
| SA5112270 | 43      | 0.31    | 0.3     | 180     | 182     | 5       | 5       | 24      | 14      | 0.25    | 18      | 7.1     | 1.5     | 2.2     | 2.39    | 1       | 0.18   | 85      | 102     |
| SA5112271 | 25      | 0.57    | 0.2     | 77      | 86      | 2       | 5       | 13      | 12      | 0.6     | 10      | 3.7     | 0.25    | 0.7     | 0.93    | 3       | 0.57   | 38      | 49      |
| SA5112272 | 40      | 0.14    | 0.1     | 16      | 19      | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.5     | 0.25    | 0.5     | 0.08    | 0.5     | 0.04   | 9       | 11      |
| SA5112273 | 27      | 0.59    | 0.05    | 52      | 56      | 3       | 2       | 12      | 7       | 0.25    | 9       | 2.0     | 0.8     | 0.4     | 0.43    | 0.5     | 0.21   | 28      | 34      |
| SA5112274 | -9      | 0.22    | 0.2     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.09    | -9      | 0.02   | -9      | 0.5     |
| SA5112275 | 25      | 0.35    | 0.2     | 1.5     | 15      | 2       | 1       | 5       | 4       | 0.25    | 4       | 0.4     | 0.25    | 0.2     | 0.26    | 0.5     | 0.07   | 8       | 10      |
| SA5112276 | 22      | 0.36    | 0.1     | 35      | 42      | 1       | 2       | 11      | 6       | 0.25    | 4       | 1.5     | 0.25    | 0.6     | 0.68    | 0.5     | 0.09   | 26      | 33      |
| SA5112277 | -9      | 0.18    | 0.2     | -9      | 4       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.13    | -9      | 0.06   | -9      | 2       |
| SA5112278 | 21      | 0.54    | 0.2     | 45      | 58      | 4       | 4       | 18      | 7       | 0.25    | 5       | 2.3     | 0.25    | 0.5     | 0.56    | 0.5     | 0.13   | 48      | 59      |
| SA5112279 | 36      | 0.49    | 0.1     | 46      | 55      | 3       | 2       | 5       | 5       | 0.25    | 7       | 2.0     | 0.25    | 0.4     | 0.47    | 2       | 0.28   | 26      | 31      |
| SA5112280 | 17      | 0.28    | 0.1     | 11      | 14      | 2       | 1       | 5       | 5       | 0.25    | 4       | 0.3     | 0.25    | 0.4     | 0.38    | 0.5     | 0.07   | 6       | 8       |
| SA5112281 | 21      | 0.25    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.14    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112282 | 11      | 0.39    | 0.2     | 73      | 90      | 3       | 3       | 17      | 12      | 0.25    | 11      | 2.7     | 1.4     | 1.2     | 1.63    | 0.5     | 0.17   | 45      | 61      |
| SA5112283 | 25      | 0.28    | 0.4     | 25      | 65      | 3       | 3       | 25      | 6       | 0.25    | 6       | 3.9     | 1.2     | 0.6     | 0.77    | 0.5     | 0.06   | 107     | 132     |
| SA5112284 | 9       | 2.53    | 0.2     | 52      | 55      | 9       | 18      | 45      | 44      | 0.7     | 7       | 4.2     | 1.4     | 3.1     | 3.59    | 10      | 2.08   | 27      | 25      |
| SA5112285 | 21      | 0.22    | 0.2     | 1.5     | 6       | 1       | 0.5     | 5       | 2       | 0.25    | 9       | 0.05    | 0.25    | 0.5     | 0.07    | 0.5     | 0.04   | 3       | 4       |
| SA5112286 | 22      | 0.45    | 0.2     | 1.5     | 5       | 1       | 1       | 5       | 4       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.32    | 0.5     | 0.13   | 1       | 2       |
| SA5112287 | 26      | 0.24    | 0.2     | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112288 | 28      | 0.50    | 0.2     | 28      | 31      | 2       | 2       | 5       | 4       | 0.25    | 10      | 1.1     | 0.25    | 0.1     | 0.16    | 0.5     | 0.04   | 20      | 24      |
| SA5112289 | -9      | 0.27    | 0.2     | -9      | 3       | -9      | 0.5     | -9      | 1       | -9      | 1       | 0.05    | -9      | -9      | 0.09    | -9      | 0.02   | -9      | 1       |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112290 | 13      | 0.35    | 0.1     | 31      | 45      | 3       | 3       | 5       | 8       | 0.25    | 7       | 1.3     | 0.25    | 0.6     | 0.76    | 0.5     | 0.17   | 26      | 34      |
| SA5112291 | 25      | 0.47    | 0.7     | 120     | 148     | 21      | 22      | 27      | 17      | 0.25    | 16      | 5.2     | 1.9     | 8.2     | 9.09    | 0.5     | 0.23   | 118     | 133     |
| SA5112292 | 20      | 0.30    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.15    | 0.5     | 0.02   | 1       | 0.5     |
| SA5112293 | 35      | 0.35    | 0.3     | 27      | 47      | 4       | 3       | 5       | 7       | 0.25    | 11      | 2.5     | 0.8     | 0.8     | 0.86    | 0.5     | 0.05   | 32      | 41      |
| SA5112294 | 22      | 1.09    | 0.2     | 67      | 72      | 4       | 8       | 13      | 19      | 0.25    | 14      | 3.1     | 1.0     | 1.3     | 1.55    | 2       | 0.67   | 42      | 48      |
| SA5112295 | 24      | 0.48    | 0.1     | 68      | 85      | 5       | 4       | 12      | 10      | 0.25    | 8       | 3.2     | 0.9     | 1.5     | 1.82    | 0.5     | 0.17   | 54      | 67      |
| SA5112296 | 3       | 3.84    | 0.3     | 53      | 72      | 13      | 23      | 39      | 45      | 0.25    | 3       | 7.7     | 1.5     | 5.3     | 6.88    | 9       | 2.55   | 31      | 36      |
| SA5112297 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112298 | 30      | 0.29    | 0.2     | 1.5     | 3       | 4       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.09    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112299 | 25      | 0.90    | 0.2     | 60      | 61      | 3       | 3       | 5       | 9       | 0.25    | 11      | 2.0     | 0.25    | 0.5     | 0.66    | 0.5     | 0.17   | 32      | 39      |
| SA5112300 | -9      | 0.57    | 0.4     | -9      | 50      | -9      | 4       | -9      | 11      | -9      | 24      | 2.0     | -9      | -9      | 0.83    | -9      | 0.17   | -9      | 29      |
| SA5112301 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112302 | 31      | 0.11    | 0.1     | 1.5     | 4       | 3       | 0.5     | 14      | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.09    | 0.5     | 0.02   | 1       | 1       |
| SA5112303 | 27      | 0.13    | 0.2     | 1.5     | 3       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.04    | 0.5     | 0.03   | 1       | 1       |
| SA5112304 | 32      | 0.66    | 0.2     | 53      | 58      | 7       | 6       | 25      | 21      | 0.25    | 14      | 2.2     | 0.25    | 2.1     | 2.42    | 0.5     | 0.11   | 30      | 36      |
| SA5112305 | 30      | 0.53    | 0.3     | 36      | 56      | 6       | 7       | 15      | 14      | 0.25    | 10      | 1.9     | 0.25    | 2.0     | 2.69    | 0.5     | 0.18   | 24      | 34      |
| SA5112306 | 32      | 0.46    | 0.4     | 100     | 131     | 13      | 13      | 16      | 16      | 0.25    | 16      | 4.3     | 1.4     | 4.2     | 5.06    | 0.5     | 0.08   | 64      | 82      |
| SA5112307 | 19      | 0.30    | 0.05    | 1.5     | 3       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.005  | 0.5     | 0.5     |
| SA5112308 | 26      | 0.43    | 0.1     | 39      | 42      | 2       | 2       | 5       | 5       | 0.25    | 8       | 1.6     | 0.6     | 0.3     | 0.30    | 0.5     | 0.04   | 23      | 29      |
| SA5112309 | 17      | 0.34    | 0.1     | 1.5     | 3       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112310 | 21      | 0.51    | 0.1     | 62      | 68      | 4       | 2       | 5       | 7       | 0.25    | 13      | 2.2     | 0.25    | 0.3     | 0.34    | 0.5     | 0.12   | 35      | 43      |
| SA5112311 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112312 | -9      | 0.21    | 0.2     | -9      | 4       | -9      | 0.5     | -9      | 2       | -9      | 1       | 0.05    | -9      | -9      | 0.06    | -9      | 0.04   | -9      | 2       |
| SA5112313 | 18      | 0.33    | 0.2     | 51      | 55      | 4       | 4       | 5       | 10      | 0.25    | 7       | 2.0     | 1.2     | 1.2     | 1.43    | 0.5     | 0.14   | 23      | 29      |
| SA5112314 | 41      | 0.54    | 0.4     | 200     | 195     | 16      | 15      | 24      | 18      | 0.25    | 26      | 6.3     | 1.5     | 3.5     | 3.76    | 0.5     | 0.14   | 97      | 114     |
| SA5112315 | 17      | 2.08    | 0.4     | 170     | 176     | 17      | 20      | 56      | 46      | 0.9     | 38      | 8.7     | 2.6     | 3.5     | 4.05    | 7       | 1.57   | 85      | 94      |
| SA5112316 | 29      | 0.60    | 0.1     | 53      | 66      | 4       | 3       | 5       | 8       | 0.25    | 15      | 2.3     | 0.9     | 0.3     | 0.31    | 0.5     | 0.15   | 30      | 40      |
| SA5112317 | 23      | 0.17    | 0.1     | 1.5     | 4       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.18    | 0.5     | 0.02   | 2       | 2       |
| SA5112318 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112319 | 26      | 0.37    | 0.1     | 140     | 147     | 5       | 5       | 16      | 11      | 0.25    | 10      | 3.7     | 1.8     | 1.7     | 1.78    | 0.5     | 0.11   | 83      | 96      |
| SA5112320 | -9      | 0.18    | 0.05    | -9      | 4       | -9      | 0.5     | -9      | 1       | -9      | 0.5     | 0.05    | -9      | -9      | 0.14    | -9      | 0.05   | -9      | 2       |
| SA5112321 | -9      | 0.19    | 0.1     | -9      | 9       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.05    | -9      | -9      | 0.12    | -9      | 0.06   | -9      | 6       |
| SA5112322 | -9      | 0.18    | 0.1     | -9      | 9       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.36    | -9      | 0.04   | -9      | 5       |
| SA5112323 | 23      | 0.81    | 0.05    | 94      | 92      | 1       | 2       | 5       | 8       | 0.25    | 10      | 2.1     | 1.0     | 0.5     | 0.57    | 0.5     | 0.17   | 48      | 59      |
| SA5112324 | 11      | 1.30    | 0.05    | 51      | 58      | 6       | 7       | 10      | 9       | 0.25    | 5       | 1.7     | 0.8     | 1.3     | 1.47    | 2       | 0.38   | 29      | 35      |
| SA5112325 | 40      | 0.22    | 0.2     | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.09    | 0.5     | 0.04   | 1       | 2       |
| SA5112326 | -9      | 0.17    | 0.2     | -9      | 5       | -9      | 0.5     | -9      | 3       | -9      | 7       | 0.05    | -9      | -9      | 0.21    | -9      | 0.04   | -9      | 2       |
| SA5112327 | 20      | 0.46    | 0.2     | 92      | 96      | 3       | 4       | 27      | 16      | 0.25    | 16      | 3.6     | 0.25    | 0.7     | 0.77    | 0.5     | 0.22   | 48      | 57      |
| SA5112328 | 53      | 0.76    | 0.3     | 140     | 146     | 6       | 6       | 17      | 19      | 0.6     | 29      | 4.7     | 1.4     | 1.6     | 1.79    | 0.5     | 0.15   | 78      | 90      |
| SA5112329 | 23      | 0.56    | 0.05    | 36      | 31      | 3       | 2       | 14      | 5       | 0.25    | 10      | 0.8     | 0.25    | 0.1     | 0.21    | 0.5     | 0.13   | 14      | 18      |
| SA5112330 | 32      | 0.33    | 0.05    | 22      | 31      | 3       | 2       | 5       | 9       | 0.25    | 6       | 0.8     | 0.25    | 0.5     | 0.53    | 0.5     | 0.19   | 14      | 18      |
| SA5112331 | 27      | 0.28    | 0.1     | 34      | 39      | 3       | 2       | 17      | 11      | 0.25    | 13      | 1.5     | 0.7     | 0.4     | 0.40    | 0.5     | 0.19   | 19      | 23      |
| SA5112332 | 16      | 0.19    | 0.05    | 49      | 55      | 2       | 2       | 5       | 10      | 0.25    | 10      | 1.8     | 0.25    | 0.3     | 0.39    | 0.5     | 0.13   | 25      | 31      |
| SA5112333 | 16      | 0.44    | 0.1     | 40      | 46      | 4       | 6       | 13      | 18      | 0.7     | 10      | 1.7     | 0.25    | 0.9     | 1.00    | 0.5     | 0.38   | 20      | 25      |
| SA5112334 | 23      | 0.36    | 0.1     | 36      | 33      | 2       | 1       | 5       | 5       | 0.25    | 5       | 0.8     | 0.6     | 0.7     | 0.81    | 0.5     | 0.06   | 15      | 18      |
| SA5112335 | 37      | 0.27    | 0.1     | 1.5     | 6       | 3       | 0.5     | 5       | 2       | 0.3     | 2       | 0.05    | 0.25    | 0.4     | 0.45    | 0.5     | 0.04   | 2       | 3       |
| SA5112336 | 23      | 0.83    | 0.1     | 45      | 55      | 3       | 3       | 12      | 9       | 0.5     | 14      | 1.6     | 0.25    | 0.7     | 0.72    | 0.5     | 0.14   | 24      | 29      |
| SA5112337 | 29      | 0.15    | 0.1     | 1.5     | 8       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.36    | 0.5     | 0.04   | 4       | 4       |
| SA5112338 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112339 | -9      | 1.13    | 0.3     | -9      | 163     | -9      | 5       | -9      | 19      | -9      | 40      | 7.1     | -9      | -9      | 4.05    | -9      | 0.07   | -9      | 101     |
| SA5112340 | 19      | 0.35    | 0.1     | 37      | 48      | 4       | 3       | 5       | 6       | 0.25    | 4       | 2.1     | 0.25    | 0.5     | 0.59    | 0.5     | 0.11   | 27      | 36      |
| SA5112341 | -9      | 0.49    | 0.2     | -9      | 5       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.05    | -9      | -9      | 0.26    | -9      | 0.04   | -9      | 2       |
| SA5112342 | -9      | 0.34    | 0.2     | -9      | 37      | -9      | 2       | -9      | 6       | -9      | 8       | 1.5     | -9      | -9      | 0.33    | -9      | 0.08   | -9      | 25      |
| SA5112343 | 52      | 0.49    | 0.4     | 86      | 99      | 22      | 20      | 24      | 26      | 0.5     | 20      | 4.7     | 0.9     | 5.1     | 5.59    | 0.5     | 0.20   | 47      | 58      |
| SA5112344 | 18      | 0.54    | 0.2     | 19      | 23      | 2       | 3       | 5       | 9       | 0.25    | 6       | 1.0     | 0.6     | 0.4     | 0.41    | 0.5     | 0.17   | 10      | 13      |
| SA5112345 | 17      | 0.30    | 0.1     | 9       | 11      | 1       | 1       | 5       | 5       | 0.25    | 6       | 0.6     | 0.25    | 0.2     | 0.26    | 0.5     | 0.06   | 5       | 7       |
| SA5112346 | 23      | 0.27    | 0.1     | 12      | 17      | 1       | 2       | 5       | 9       | 0.25    | 6       | 0.7     | 0.25    | 0.4     | 0.49    | 0.5     | 0.10   | 9       | 11      |

## Open File 013A/0089 - Appendix 1

| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112347 | -9      | 0.39    | 0.4     | -9      | 22      | -9      | 2       | -9      | 11      | -9      | 31      | 1.4     | -9      | -9      | 0.43    | -9      | 0.07   | -9      | 14      |
| SA5112348 | 49      | 0.33    | 0.7     | 110     | 125     | 37      | 35      | 42      | 41      | 0.25    | 70      | 8.1     | 1.8     | 7.5     | 8.22    | 0.5     | 0.20   | 60      | 67      |
| SA5112349 | 30      | 1.74    | 0.2     | 39      | 43      | 3       | 3       | 22      | 19      | 0.25    | 27      | 2.3     | 0.6     | 0.4     | 0.51    | 0.5     | 0.16   | 21      | 24      |
| SA5112350 | 34      | 2.61    | 0.3     | 1.5     | 42      | 7       | 5       | 39      | 15      | 0.25    | 30      | 0.05    | 0.25    | 4.0     | 4.48    | 0.5     | 0.23   | 14      | 17      |
| SA5112351 | 27      | 0.74    | 0.2     | 25      | 30      | 2       | 2       | 12      | 9       | 0.25    | 12      | 1.2     | 0.25    | 1.0     | 1.13    | 0.5     | 0.08   | 18      | 22      |
| SA5112352 | 35      | 0.50    | 0.1     | 1.5     | 9       | 3       | 0.5     | 5       | 4       | 0.25    | 8       | 0.3     | 0.25    | 0.3     | 0.17    | 0.5     | 0.06   | 5       | 6       |
| SA5112353 | 10      | 0.48    | 0.1     | 1.5     | 20      | 1       | 3       | 5       | 9       | 0.6     | 4       | 0.7     | 0.25    | 0.4     | 0.47    | 2       | 0.39   | 9       | 11      |
| SA5112354 | -9      | 0.79    | 0.3     | -9      | 66      | -9      | 4       | -9      | 23      | -9      | 51      | 4.1     | -9      | -9      | 1.00    | -9      | 0.15   | -9      | 35      |
| SA5112355 | 31      | 1.76    | 0.4     | 39      | 63      | 7       | 8       | 23      | 24      | 1.0     | 23      | 3.2     | 1.0     | 1.5     | 1.73    | 3       | 0.63   | 29      | 36      |
| SA5112356 | 35      | 0.18    | 0.1     | 1.5     | 3       | 4       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.12    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112357 | 26      | 0.22    | 0.1     | 1.5     | 3       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.14    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112358 | 29      | 0.20    | 0.1     | 10      | 8       | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.1     | 0.10    | 0.5     | 0.03   | 5       | 6       |
| SA5112359 | 31      | 1.64    | 0.3     | 63      | 59      | 7       | 8       | 30      | 25      | 1.2     | 19      | 3.1     | 1.0     | 1.3     | 1.43    | 3       | 0.80   | 30      | 32      |
| SA5112360 | 63      | 0.66    | 0.4     | 53      | 55      | 8       | 5       | 24      | 24      | 0.25    | 27      | 3.3     | 1.2     | 1.6     | 1.69    | 0.5     | 0.14   | 27      | 29      |
| SA5112361 | 19      | 1.25    | 0.2     | 75      | 98      | 6       | 6       | 36      | 11      | 0.25    | 11      | 3.0     | 0.8     | 2.9     | 3.45    | 0.5     | 0.22   | 40      | 49      |
| SA5112362 | 20      | 0.44    | 0.1     | 76      | 82      | 4       | 5       | 5       | 10      | 0.25    | 11      | 2.9     | 0.25    | 0.6     | 0.70    | 0.5     | 0.19   | 36      | 47      |
| SA5112363 | 32      | 0.68    | 0.1     | 55      | 67      | 8       | 6       | 20      | 11      | 0.25    | 25      | 3.1     | 0.25    | 0.7     | 0.81    | 0.5     | 0.08   | 32      | 42      |
| SA5112364 | 44      | 0.49    | 0.3     | 150     | 174     | 10      | 12      | 35      | 22      | 0.25    | 25      | 6.0     | 0.25    | 2.1     | 2.31    | 0.5     | 0.26   | 79      | 100     |
| SA5112365 | 10      | 1.78    | 0.2     | 88      | 74      | 8       | 16      | 36      | 30      | 2.8     | 4       | 5.2     | 1.5     | 2.2     | 2.39    | 16      | 1.67   | 41      | 38      |
| SA5112366 | 27      | 0.43    | 0.2     | 34      | 42      | 4       | 3       | 5       | 16      | 0.7     | 13      | 1.8     | 0.25    | 0.9     | 0.90    | 0.5     | 0.30   | 20      | 24      |
| SA5112367 | 65      | 0.50    | 0.2     | 76      | 82      | 7       | 5       | 27      | 25      | 0.6     | 28      | 4.6     | 0.25    | 1.7     | 1.77    | 0.5     | 0.20   | 43      | 47      |
| SA5112368 | 42      | 0.58    | 0.3     | 70      | 64      | 5       | 5       | 27      | 22      | 1.1     | 25      | 2.7     | 1.0     | 0.9     | 0.96    | 0.5     | 0.37   | 34      | 39      |
| SA5112369 | 11      | 1.39    | 0.2     | 64      | 54      | 8       | 11      | 24      | 28      | 2.7     | 7       | 3.3     | 0.9     | 1.8     | 1.99    | 8       | 1.41   | 31      | 29      |
| SA5112370 | 56      | 1.07    | 0.7     | 341     | 314     | 52      | 47      | 72      | 49      | 1.4     | 40      | 10.0    | 3.2     | 6.6     | 6.86    | 4       | 0.82   | 142     | 146     |
| SA5112371 | 38      | 0.94    | 0.4     | 110     | 119     | 14      | 15      | 49      | 50      | 1.0     | 66      | 6.0     | 1.8     | 3.7     | 4.03    | 3       | 0.59   | 50      | 56      |
| SA5112372 | -9      | 0.23    | 0.1     | -9      | 5       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.05    | -9      | -9      | 0.10    | -9      | 0.04   | -9      | 2       |
| SA5112373 | 28      | 0.29    | 0.2     | 1.5     | 26      | 4       | 3       | 5       | 13      | 0.25    | 13      | 1.3     | 0.25    | 0.3     | 0.38    | 0.5     | 0.10   | 11      | 15      |
| SA5112374 | 23      | 0.25    | 0.05    | 18      | 22      | 3       | 2       | 12      | 12      | 0.25    | 12      | 0.7     | 0.25    | 0.3     | 0.36    | 0.5     | 0.17   | 9       | 12      |
| SA5112375 | 55      | 0.48    | 0.3     | 88      | 92      | 5       | 4       | 23      | 33      | 0.5     | 76      | 5.0     | 1.7     | 0.8     | 0.80    | 2       | 0.20   | 42      | 46      |
| SA5112376 | 17      | 0.49    | 0.05    | 12      | 17      | 1       | 2       | 5       | 6       | 0.25    | 6       | 1.0     | 0.25    | 0.3     | 0.36    | 0.5     | 0.20   | 8       | 10      |
| SA5112377 | 26      | 1.06    | 0.1     | 40      | 40      | 4       | 4       | 14      | 12      | 0.7     | 9       | 1.8     | 0.25    | 0.6     | 0.65    | 1       | 0.32   | 21      | 24      |
| SA5112378 | 29      | 0.65    | 0.1     | 95      | 107     | 2       | 3       | 15      | 14      | 0.25    | 12      | 4.2     | 1.0     | 1.2     | 1.27    | 0.5     | 0.16   | 65      | 73      |
| SA5112379 | 10      | 0.39    | 0.05    | 13      | 19      | 1       | 2       | 5       | 4       | 0.25    | 6       | 1.1     | 0.25    | 0.5     | 0.50    | 0.5     | 0.16   | 14      | 17      |
| SA5112380 | 37      | 0.43    | 0.2     | 82      | 87      | 10      | 10      | 15      | 17      | 0.25    | 53      | 3.8     | 0.25    | 1.8     | 1.92    | 0.5     | 0.21   | 45      | 51      |
| SA5112381 | 23      | 0.28    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 3       | 0.2     | 0.25    | 0.5     | 0.08    | 0.5     | 0.02   | 1       | 0.5     |
| SA5112382 | 35      | 1.28    | 0.3     | 180     | 179     | 10      | 12      | 39      | 31      | 0.25    | 32      | 6.6     | 2.5     | 2.4     | 2.55    | 0.5     | 0.27   | 93      | 101     |
| SA5112383 | 36      | 0.25    | 0.1     | 32      | 37      | 3       | 1       | 5       | 5       | 0.25    | 6       | 0.9     | 0.25    | 0.3     | 0.38    | 0.5     | 0.11   | 17      | 21      |
| SA5112384 | 35      | 0.27    | 0.1     | 1.5     | 2       | 3       | 0.5     | 5       | 1       | 0.25    | 3       | 0.3     | 0.25    | 0.1     | 0.09    | 0.5     | 0.02   | 1       | 0.5     |
| SA5112385 | 12      | 1.15    | 0.2     | 41      | 40      | 3       | 8       | 19      | 22      | 0.8     | 5       | 2.6     | 0.8     | 1.2     | 1.26    | 5       | 1.02   | 21      | 21      |
| SA5112386 | 36      | 0.45    | 0.2     | 72      | 75      | 4       | 4       | 15      | 16      | 0.25    | 20      | 3.2     | 1.1     | 0.7     | 0.79    | 0.5     | 0.14   | 40      | 46      |
| SA5112387 | 40      | 0.79    | 0.2     | 130     | 118     | 3       | 5       | 30      | 25      | 0.8     | 31      | 4.6     | 1.0     | 1.2     | 1.26    | 2       | 0.35   | 67      | 71      |
| SA5112388 | 34      | 0.45    | 0.1     | 66      | 70      | 4       | 4       | 17      | 18      | 0.6     | 14      | 2.3     | 0.25    | 0.9     | 0.97    | 0.5     | 0.19   | 42      | 48      |
| SA5112389 | 27      | 0.28    | 0.1     | 8       | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 3       | 0.2     | 0.25    | 0.1     | 0.11    | 0.5     | 0.02   | 1       | 1       |
| SA5112390 | 21      | 0.49    | 0.05    | 43      | 41      | 3       | 2       | 5       | 7       | 0.25    | 8       | 1.5     | 0.25    | 0.3     | 0.27    | 0.5     | 0.07   | 24      | 30      |
| SA5112391 | 64      | 0.96    | 0.4     | 385     | 285     | 73      | 73      | 57      | 36      | 0.9     | 46      | 10.1    | 3.7     | 17.1    | 15.72   | 3       | 0.97   | 186     | 148     |
| SA5112392 | 26      | 0.30    | 0.05    | 69      | 75      | 1       | 2       | 5       | 9       | 0.25    | 18      | 2.5     | 0.25    | 0.3     | 0.35    | 0.5     | 0.13   | 37      | 46      |
| SA5112393 | 53      | 2.13    | 0.4     | 430     | 472     | 78      | 69      | 110     | 39      | 0.9     | 50      | 10.3    | 2.4     | 11.0    | 12.98   | 1       | 0.29   | 193     | 243     |
| SA5112394 | 18      | 0.92    | 0.05    | 88      | 89      | 1       | 4       | 5       | 10      | 0.25    | 8       | 2.7     | 0.8     | 0.7     | 0.83    | 3       | 0.33   | 42      | 57      |
| SA5112395 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112396 | 36      | 0.85    | 0.3     | 240     | 255     | 16      | 20      | 35      | 31      | 0.25    | 68      | 10.2    | 2.7     | 2.9     | 3.38    | 2       | 0.29   | 111     | 137     |
| SA5112397 | 40      | 0.67    | 0.1     | 31      | 42      | 1       | 3       | 5       | 11      | 0.25    | 14      | 3.4     | 0.25    | 1.1     | 1.29    | 0.5     | 0.09   | 18      | 23      |
| SA5112398 | 23      | 0.44    | 0.1     | 92      | 101     | 3       | 3       | 5       | 9       | 0.25    | 31      | 4.5     | 1.0     | 0.3     | 0.37    | 0.5     | 0.09   | 54      | 71      |
| SA5112399 | 21      | 0.52    | 0.1     | 73      | 87      | 5       | 3       | 5       | 9       | 0.25    | 25      | 4.1     | 0.25    | 0.3     | 0.31    | 0.5     | 0.10   | 47      | 58      |
| SA5112400 | 34      | 1.37    | 0.2     | 250     | 227     | 17      | 17      | 45      | 33      | 0.25    | 71      | 9.1     | 1.1     | 2.7     | 2.80    | 2       | 0.54   | 125     | 129     |
| SA5112401 | 30      | 0.36    | 0.5     | 1040    | 895     | 53      | 55      | 57      | 25      | 0.8     | 70      | 21.4    | 2.6     | 7.6     | 8.03    | 0.5     | 0.15   | 345     | 379     |
| SA5112402 | 24      | 0.38    | 0.1     | 1.5     | 4       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.5     | 0.25    | 0.3     | 0.22    | 0.5     | 0.03   | 1       | 1       |
| SA5112403 | 16      | 2.96    | 0.1     | 80      | 94      | 20      | 31      | 58      | 51      | 0.9     | 9       | 9.2     | 1.7     | 5.3     | 5.95    | 13      | 1.44   | 41      | 44      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112404 | 29      | 0.78    | 0.2     | 240     | 280     | 4       | 5       | 23      | 14      | 0.25    | 29      | 9.6     | 0.25    | 0.9     | 1.05    | 0.5     | 0.26   | 138     | 176     |
| SA5112405 | 11      | 1.53    | 0.2     | 100     | 110     | 9       | 14      | 28      | 26      | 0.8     | 10      | 6.0     | 1.8     | 2.1     | 2.45    | 8       | 1.47   | 52      | 60      |
| SA5112406 | 59      | 1.88    | 0.3     | 309     | 298     | 6       | 6       | 37      | 20      | 0.25    | 62      | 9.3     | 0.25    | 1.7     | 1.68    | 2       | 0.37   | 162     | 182     |
| SA5112407 | 13      | 2.98    | 0.2     | 87      | 88      | 20      | 30      | 61      | 47      | 0.8     | 4       | 7.1     | 2.0     | 5.8     | 6.40    | 15      | 1.57   | 43      | 40      |
| SA5112408 | 12      | 1.08    | 0.1     | 91      | 98      | 8       | 10      | 25      | 21      | 0.6     | 14      | 4.1     | 1.3     | 1.3     | 1.56    | 1       | 0.74   | 44      | 54      |
| SA5112409 | 29      | 0.35    | 0.2     | 1.5     | 3       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.1     | 0.25    | 0.1     | 0.14    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112410 | 20      | 0.34    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.11    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112411 | 41      | 0.85    | 0.3     | 150     | 161     | 10      | 9       | 44      | 33      | 0.25    | 34      | 3.8     | 1.1     | 1.3     | 1.51    | 0.5     | 0.18   | 82      | 97      |
| SA5112412 | -9      | 1.25    | 0.3     | -9      | 159     | -9      | 27      | -9      | 27      | -9      | 23      | 4.7     | -9      | -9      | 4.15    | -9      | 0.29   | -9      | 96      |
| SA5112413 | 43      | 0.94    | 0.6     | 200     | 203     | 27      | 26      | 67      | 48      | 0.6     | 34      | 5.9     | 0.25    | 6.2     | 7.01    | 1       | 0.39   | 89      | 104     |
| SA5112414 | 23      | 0.36    | 0.05    | 1.5     | 1       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.08    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112415 | 32      | 0.38    | 0.2     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.33    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112416 | 28      | 0.30    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.06    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112417 | -9      | 0.43    | 0.2     | -9      | 5       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.3     | -9      | -9      | 0.32    | -9      | 0.05   | -9      | 3       |
| SA5112418 | 18      | 0.17    | 0.2     | 81      | 100     | 37      | 35      | 15      | 22      | 0.25    | 13      | 3.6     | 0.25    | 10.0    | 11.81   | 0.5     | 0.09   | 41      | 50      |
| SA5112419 | 22      | 0.58    | 0.2     | 34      | 37      | 4       | 3       | 5       | 12      | 0.25    | 9       | 1.3     | 0.8     | 0.3     | 0.41    | 0.5     | 0.15   | 18      | 22      |
| SA5112420 | 45      | 0.66    | 0.2     | 63      | 69      | 6       | 6       | 28      | 23      | 0.25    | 17      | 1.9     | 0.25    | 0.8     | 0.92    | 0.5     | 0.15   | 36      | 43      |
| SA5112421 | 22      | 0.58    | 0.2     | 1.5     | 2       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112422 | -9      | 0.25    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.16    | -9      | 0.02   | -9      | 1       |
| SA5112423 | -9      | 0.19    | 0.1     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.06    | -9      | 0.02   | -9      | 2       |
| SA5112424 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112425 | 17      | 0.48    | 0.2     | 27      | 35      | 1       | 2       | 5       | 7       | 0.25    | 6       | 1.7     | 0.25    | 0.8     | 0.91    | 0.5     | 0.13   | 20      | 24      |
| SA5112426 | 32      | 0.20    | 0.1     | 1.5     | 5       | 4       | 0.5     | 12      | 2       | 0.25    | 2       | 0.1     | 0.25    | 0.2     | 0.20    | 0.5     | 0.03   | 2       | 3       |
| SA5112427 | -9      | 0.36    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 1       | -9      | 2       | 0.05    | -9      | -9      | 0.14    | -9      | 0.03   | -9      | 0.5     |
| SA5112428 | 23      | 0.25    | 0.05    | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.3     | 0.36    | 0.5     | 0.01   | 0.5     | 1       |
| SA5112429 | 23      | 0.31    | 0.1     | 1.5     | 2       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112430 | -9      | 0.30    | 0.1     | -9      | 1       | -9      | 0.5     | -9      | 1       | -9      | 1       | 0.05    | -9      | -9      | 0.12    | -9      | 0.02   | -9      | 0.5     |
| SA5112431 | 27      | 0.49    | 0.2     | 24      | 28      | 4       | 2       | 5       | 10      | 0.25    | 7       | 1.2     | 0.6     | 0.3     | 0.36    | 0.5     | 0.10   | 13      | 17      |
| SA5112432 | 23      | 0.35    | 0.2     | 1.5     | 2       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.20    | 0.5     | 0.04   | 0.5     | 0.5     |
| SA5112433 | -9      | 0.43    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 0.5     | 0.05    | -9      | -9      | 0.12    | -9      | 0.03   | -9      | 0.5     |
| SA5112434 | 25      | 0.43    | 0.1     | 17      | 26      | 4       | 2       | 13      | 10      | 0.25    | 7       | 1.0     | 0.5     | 0.3     | 0.31    | 0.5     | 0.08   | 13      | 16      |
| SA5112435 | 28      | 0.25    | 0.2     | 1.5     | 2       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.10    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112436 | 24      | 1.00    | 0.2     | 28      | 37      | 6       | 6       | 5       | 12      | 0.25    | 17      | 2.5     | 0.25    | 0.6     | 0.62    | 0.5     | 0.24   | 21      | 26      |
| SA5112437 | 34      | 0.65    | 0.2     | 40      | 61      | 4       | 2       | 5       | 11      | 0.25    | 15      | 2.8     | 1.0     | 0.6     | 0.69    | 0.5     | 0.05   | 37      | 46      |
| SA5112438 | 17      | 1.02    | 0.2     | 53      | 73      | 5       | 6       | 15      | 12      | 0.25    | 14      | 4.6     | 0.25    | 0.8     | 1.09    | 1       | 0.31   | 42      | 52      |
| SA5112439 | 18      | 0.70    | 0.2     | 70      | 101     | 6       | 8       | 15      | 14      | 0.25    | 11      | 5.6     | 0.9     | 1.2     | 1.42    | 2       | 0.34   | 43      | 57      |
| SA5112440 | 31      | 0.49    | 0.3     | 83      | 97      | 5       | 5       | 14      | 14      | 0.25    | 15      | 4.7     | 1.1     | 1.4     | 1.51    | 0.5     | 0.10   | 48      | 57      |
| SA5112441 | 31      | 0.80    | 0.5     | 190     | 196     | 11      | 10      | 32      | 19      | 0.25    | 19      | 9.4     | 1.5     | 4.5     | 4.61    | 0.5     | 0.11   | 118     | 127     |
| SA5112442 | 38      | 0.26    | 0.2     | 27      | 35      | 5       | 3       | 5       | 9       | 0.25    | 29      | 3.1     | 0.25    | 0.3     | 0.26    | 0.5     | 0.10   | 21      | 24      |
| SA5112443 | 38      | 0.35    | 0.3     | 94      | 97      | 4       | 3       | 18      | 12      | 0.25    | 17      | 5.1     | 1.3     | 0.7     | 0.71    | 0.5     | 0.08   | 47      | 56      |
| SA5112444 | 14      | 0.43    | 0.2     | 22      | 30      | 3       | 3       | 5       | 7       | 0.7     | 10      | 1.8     | 0.8     | 0.5     | 0.54    | 2       | 0.26   | 16      | 18      |
| SA5112445 | 27      | 0.24    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.21    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112446 | -9      | 0.27    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 1       | -9      | 2       | 0.05    | -9      | -9      | 0.26    | -9      | 0.02   | -9      | 0.5     |
| SA5112447 | 33      | 0.35    | 0.2     | 1.5     | 2       | 4       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.10    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112448 | 34      | 0.27    | 0.2     | 1.5     | 2       | 4       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112449 | -9      | 0.42    | 0.2     | -9      | 4       | -9      | 0.5     | -9      | 2       | -9      | 5       | 0.2     | -9      | -9      | 0.10    | -9      | 0.03   | -9      | 3       |
| SA5112450 | 34      | 0.60    | 0.4     | 30      | 55      | 22      | 21      | 20      | 22      | 0.25    | 63      | 3.1     | 0.9     | 2.7     | 3.27    | 0.5     | 0.18   | 27      | 36      |
| SA5112451 | 23      | 0.49    | 0.2     | 1.5     | 3       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.1     | 0.25    | 0.5     | 0.09    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112452 | -9      | 0.64    | 0.2     | -9      | 12      | -9      | 4       | -9      | 8       | -9      | 9       | 1.2     | -9      | -9      | 0.46    | -9      | 0.36   | -9      | 6       |
| SA5112453 | 32      | 0.65    | 0.4     | 70      | 88      | 23      | 20      | 21      | 20      | 0.25    | 30      | 5.9     | 1.0     | 7.1     | 7.13    | 0.5     | 0.11   | 55      | 59      |
| SA5112454 | 40      | 0.58    | 0.4     | 56      | 66      | 9       | 7       | 16      | 17      | 0.25    | 24      | 4.3     | 1.0     | 3.3     | 3.23    | 0.5     | 0.10   | 44      | 47      |
| SA5112455 | 28      | 0.23    | 0.4     | 1.5     | 5       | 2       | 0.5     | 5       | 4       | 0.25    | 5       | 0.1     | 0.25    | 0.2     | 0.13    | 0.5     | 0.12   | 0.5     | 3       |
| SA5112456 | -9      | 0.11    | 0.1     | -9      | 1       | -9      | 0.5     | -9      | 1       | -9      | 0.5     | 0.05    | -9      | -9      | 0.18    | -9      | 0.02   | -9      | 0.5     |
| SA5112457 | -9      | 0.28    | 0.3     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.1     | -9      | -9      | 0.05    | -9      | 0.05   | -9      | 1       |
| SA5112458 | 22      | 0.31    | 0.1     | 1.5     | 1       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.13    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112459 | 30      | 0.14    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.07    | 0.5     | 0.04   | 1       | 1       |
| SA5112460 | 23      | 0.38    | 0.2     | 36      | 45      | 1       | 3       | 5       | 11      | 0.25    | 9       | 2.2     | 1.1     | 0.7     | 0.75    | 0.5     | 0.11   | 22      | 27      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112461 | 29      | 0.23    | 0.2     | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.2     | 0.25    | 0.1     | 0.08    | 0.5     | 0.03   | 3       | 3       |
| SA5112462 | 27      | 0.27    | 0.2     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.02   | 1       | 0.5     |
| SA5112463 | 25      | 0.63    | 0.2     | 45      | 56      | 5       | 4       | 5       | 12      | 0.25    | 8       | 2.6     | 0.25    | 0.9     | 1.14    | 0.5     | 0.22   | 23      | 32      |
| SA5112464 | 21      | 0.40    | 0.2     | 41      | 51      | 5       | 4       | 17      | 14      | 0.25    | 8       | 2.1     | 0.25    | 0.9     | 1.11    | 0.5     | 0.23   | 21      | 28      |
| SA5112465 | 37      | 0.38    | 0.2     | 60      | 65      | 5       | 5       | 13      | 16      | 0.25    | 13      | 2.6     | 0.25    | 1.6     | 1.76    | 0.5     | 0.20   | 30      | 37      |
| SA5112466 | 28      | 0.38    | 0.2     | 56      | 54      | 3       | 3       | 5       | 13      | 0.25    | 12      | 2.1     | 0.25    | 0.8     | 0.82    | 0.5     | 0.16   | 25      | 30      |
| SA5112467 | 30      | 1.29    | 0.4     | 150     | 154     | 9       | 7       | 22      | 19      | 0.25    | 19      | 4.2     | 0.9     | 3.7     | 4.00    | 0.5     | 0.13   | 81      | 92      |
| SA5112468 | 33      | 0.41    | 0.1     | 34      | 35      | 3       | 2       | 5       | 9       | 0.25    | 10      | 1.2     | 0.25    | 0.3     | 0.42    | 0.5     | 0.11   | 17      | 21      |
| SA5112469 | 23      | 0.43    | 0.05    | 34      | 40      | 5       | 4       | 5       | 9       | 0.25    | 9       | 1.1     | 0.25    | 0.4     | 0.48    | 0.5     | 0.11   | 17      | 23      |
| SA5112470 | 13      | 1.87    | 0.2     | 67      | 63      | 10      | 14      | 48      | 46      | 0.7     | 5       | 3.6     | 1.8     | 2.1     | 2.33    | 7       | 1.39   | 30      | 33      |
| SA5112471 | -9      | 0.24    | 0.3     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.1     | -9      | -9      | 0.06    | -9      | 0.06   | -9      | 2       |
| SA5112472 | 34      | 0.58    | 0.2     | 64      | 60      | 5       | 3       | 5       | 10      | 0.25    | 15      | 1.8     | 0.25    | 0.3     | 0.33    | 0.5     | 0.06   | 32      | 39      |
| SA5112473 | 38      | 0.28    | 0.2     | 1.5     | 2       | 3       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.07    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112474 | 41      | 0.27    | 0.2     | 11      | 2       | 3       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.08    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112475 | 36      | 0.29    | 0.2     | 1.5     | 1       | 4       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.1     | 0.04    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112476 | -9      | 0.26    | 0.3     | -9      | 2       | -9      | 0.5     | -9      | 3       | -9      | 2       | 0.05    | -9      | -9      | 0.06    | -9      | 0.04   | -9      | 1       |
| SA5112477 | -9      | 0.21    | 0.1     | -9      | 1       | -9      | 0.5     | -9      | 2       | -9      | 0.5     | 0.05    | -9      | -9      | 0.07    | -9      | 0.02   | -9      | 0.5     |
| SA5112478 | 25      | 0.39    | 0.2     | 44      | 51      | 5       | 3       | 22      | 11      | 0.25    | 9       | 2.3     | 0.25    | 0.9     | 1.00    | 0.5     | 0.17   | 26      | 31      |
| SA5112479 | -9      | 0.22    | 0.2     | -9      | 1       | -9      | 0.5     | -9      | 1       | -9      | 1       | 0.05    | -9      | -9      | 0.10    | -9      | 0.03   | -9      | 0.5     |
| SA5112480 | 33      | 0.27    | 0.1     | 1.5     | 2       | 3       | 0.5     | 5       | 2       | 0.25    | 0.5     | 0.05    | 0.6     | 0.2     | 0.16    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112481 | -9      | 0.24    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 1       | 0.05    | -9      | -9      | 0.07    | -9      | 0.03   | -9      | 0.5     |
| SA5112482 | 25      | 0.49    | 0.2     | 34      | 36      | 4       | 3       | 5       | 12      | 0.25    | 10      | 1.8     | 0.25    | 0.5     | 0.57    | 0.5     | 0.13   | 18      | 21      |
| SA5112483 | -9      | 0.34    | 0.05    | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 1       | 0.05    | -9      | -9      | 0.14    | -9      | 0.02   | -9      | 0.5     |
| SA5112484 | 25      | 0.36    | 0.2     | 26      | 24      | 5       | 2       | 12      | 12      | 0.25    | 10      | 1.2     | 1.0     | 0.4     | 0.39    | 0.5     | 0.09   | 12      | 14      |
| SA5112485 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112486 | 16      | 0.49    | 0.2     | 17      | 16      | 2       | 2       | 5       | 9       | 0.25    | 7       | 1.3     | 0.25    | 0.3     | 0.30    | 0.5     | 0.08   | 9       | 11      |
| SA5112487 | 21      | 1.00    | 0.2     | 1.5     | 15      | 10      | 6       | 40      | 35      | 0.25    | 8       | 1.0     | 0.25    | 2.2     | 1.93    | 0.5     | 0.23   | 7       | 8       |
| SA5112488 | -9      | 0.77    | 0.2     | -9      | 18      | -9      | 8       | -9      | 21      | -9      | 6       | 1.2     | -9      | -9      | 0.83    | -9      | 1.17   | -9      | 11      |
| SA5112489 | -9      | 0.19    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 3       | -9      | 2       | 0.05    | -9      | -9      | 0.06    | -9      | 0.04   | -9      | 1       |
| SA5112490 | 29      | 0.48    | 0.1     | 8       | 14      | 3       | 2       | 5       | 9       | 0.25    | 8       | 1.0     | 0.25    | 0.3     | 0.27    | 0.5     | 0.04   | 5       | 8       |
| SA5112491 | 55      | 0.89    | 0.2     | 17      | 20      | 6       | 2       | 15      | 25      | 0.25    | 12      | 1.4     | 0.25    | 0.3     | 0.33    | 0.5     | 0.02   | 8       | 10      |
| SA5112492 | 36      | 0.24    | 0.3     | 1.5     | 3       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.06    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112493 | -9      | 0.25    | 0.1     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.1     | -9      | -9      | 0.08    | -9      | 0.03   | -9      | 2       |
| SA5112494 | 32      | 0.27    | 0.2     | 1.5     | 2       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.2     | 0.25    | 0.3     | 0.20    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112495 | 30      | 0.32    | 0.2     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.3     | 0.25    | 0.1     | 0.12    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112496 | 18      | 0.12    | 0.05    | 22      | 21      | 1       | 0.5     | 5       | 3       | 0.25    | 12      | 1.2     | 0.25    | 0.1     | 0.06    | 0.5     | 0.02   | 12      | 15      |
| SA5112497 | 30      | 0.30    | 0.05    | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.3     | 0.25    | 0.2     | 0.24    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112498 | 30      | 0.30    | 0.1     | 1.5     | 3       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.3     | 0.25    | 0.3     | 0.24    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112499 | -9      | 0.53    | 0.05    | -9      | 2       | -9      | 0.5     | -9      | 1       | -9      | 3       | 0.2     | -9      | -9      | 0.11    | -9      | 0.02   | -9      | 0.5     |
| SA5112500 | -9      | 0.44    | 0.1     | -9      | 5       | -9      | 1       | -9      | 5       | -9      | 9       | 0.4     | -9      | -9      | 0.10    | -9      | 0.05   | -9      | 3       |
| SA5112501 | 24      | 0.26    | 0.2     | 1.5     | 2       | 3       | 0.5     | 5       | 3       | 0.25    | 2       | 0.2     | 0.25    | 0.3     | 0.20    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112502 | 33      | 0.18    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.2     | 0.25    | 0.1     | 0.07    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112503 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112504 | 11      | 1.52    | 0.2     | 51      | 52      | 10      | 14      | 39      | 40      | 0.25    | 10      | 3.5     | 0.6     | 2.8     | 2.92    | 7       | 1.12   | 25      | 26      |
| SA5112505 | -9      | 0.31    | 0.1     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.3     | -9      | -9      | 0.16    | -9      | 0.03   | -9      | 1       |
| SA5112506 | 33      | 0.21    | 0.1     | 9       | 14      | 4       | 2       | 5       | 10      | 0.25    | 22      | 0.9     | 0.25    | 0.7     | 0.76    | 0.5     | 0.02   | 6       | 7       |
| SA5112507 | 32      | 0.30    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.2     | 0.25    | 0.2     | 0.18    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112508 | 27      | 0.21    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.3     | 0.25    | 0.5     | 0.06    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112509 | 20      | 0.37    | 0.05    | 5       | 4       | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.4     | 0.25    | 0.2     | 0.22    | 0.5     | 0.02   | 2       | 2       |
| SA5112510 | 32      | 0.20    | 0.05    | 1.5     | 1       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.3     | 0.25    | 0.1     | 0.07    | 0.5     | 0.02   | 1       | 0.5     |
| SA5112511 | 6       | 0.26    | 0.05    | 21      | 31      | 1       | 2       | 5       | 8       | 0.25    | 2       | 1.9     | 0.6     | 0.4     | 0.48    | 0.5     | 0.27   | 14      | 17      |
| SA5112512 | 27      | 0.18    | 0.05    | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.3     | 0.25    | 0.3     | 0.34    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112513 | 26      | 0.29    | 0.05    | 1.5     | 1       | 2       | 0.5     | 5       | 0.5     | 0.25    | 2       | 0.2     | 0.25    | 0.2     | 0.24    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112514 | 23      | 0.34    | 0.05    | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.2     | 0.25    | 0.2     | 0.22    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112515 | 42      | 0.10    | 0.1     | 1.5     | 2       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.2     | 0.25    | 0.1     | 0.13    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112516 | 25      | 0.62    | 0.1     | 46      | 48      | 3       | 6       | 20      | 18      | 0.8     | 8       | 2.7     | 0.7     | 1.0     | 1.03    | 4       | 0.64   | 22      | 25      |
| SA5112517 | 36      | 0.31    | 0.1     | 1.5     | 3       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.3     | 0.25    | 0.2     | 0.15    | 0.5     | 0.04   | 1       | 1       |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112518 | 36      | 0.26    | 0.1     | 1.5     | 6       | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.5     | 0.25    | 0.1     | 0.21    | 0.5     | 0.03   | 0.5     | 3       |
| SA5112519 | 33      | 0.38    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.2     | 0.25    | 0.2     | 0.09    | 0.5     | 0.03   | 3       | 0.5     |
| SA5112520 | 18      | 0.45    | 0.05    | 1.5     | 4       | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.3     | 0.25    | 0.2     | 0.21    | 0.5     | 0.01   | 1       | 2       |
| SA5112521 | 22      | 0.67    | 0.1     | 12      | 16      | 2       | 1       | 5       | 2       | 0.25    | 6       | 1.0     | 0.25    | 0.1     | 0.14    | 0.5     | 0.02   | 10      | 12      |
| SA5112522 | 31      | 0.30    | 0.05    | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.2     | 0.25    | 0.1     | 0.16    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112523 | 26      | 0.76    | 0.1     | 36      | 36      | 3       | 2       | 5       | 6       | 0.25    | 8       | 1.4     | 0.25    | 0.5     | 0.52    | 0.5     | 0.03   | 19      | 22      |
| SA5112524 | 37      | 0.25    | 0.05    | 1.5     | 1       | 3       | 0.5     | 5       | 1       | 0.25    | 3       | 0.3     | 0.25    | 0.5     | 0.04    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112525 | 34      | 0.57    | 0.1     | 1.5     | 4       | 3       | 0.5     | 5       | 3       | 0.25    | 3       | 0.3     | 0.25    | 1.1     | 1.14    | 0.5     | 0.04   | 0.5     | 1       |
| SA5112526 | 20      | 0.41    | 0.1     | 1.5     | 2       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.3     | 0.25    | 0.5     | 0.07    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112527 | 26      | 0.84    | 0.2     | 20      | 21      | 4       | 2       | 5       | 6       | 0.25    | 7       | 0.8     | 0.25    | 0.5     | 0.51    | 0.5     | 0.07   | 10      | 12      |
| SA5112528 | -9      | 0.18    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 4       | -9      | 1       | 0.05    | -9      | -9      | 0.06    | -9      | 0.04   | -9      | 1       |
| SA5112529 | -9      | 0.44    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 1       | -9      | 1       | 0.05    | -9      | -9      | 0.22    | -9      | 0.02   | -9      | 0.5     |
| SA5112530 | 22      | 0.25    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 8       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.07    | 0.5     | 0.04   | 0.5     | 0.5     |
| SA5112531 | -9      | 0.24    | 0.05    | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.3     | -9      | -9      | 0.05    | -9      | 0.04   | -9      | 0.5     |
| SA5112532 | -9      | 0.26    | 0.1     | -9      | 1       | -9      | 0.5     | -9      | 1       | -9      | 2       | 0.2     | -9      | -9      | 0.27    | -9      | 0.02   | -9      | 0.5     |
| SA5112533 | -9      | 0.26    | 0.1     | -9      | 1       | -9      | 0.5     | -9      | 3       | -9      | 1       | 0.2     | -9      | -9      | 0.05    | -9      | 0.03   | -9      | 0.5     |
| SA5112534 | -9      | 0.27    | 0.1     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.1     | -9      | -9      | 0.05    | -9      | 0.03   | -9      | 0.5     |
| SA5112535 | 27      | 0.45    | 0.1     | 1.5     | 9       | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.6     | 0.25    | 0.1     | 0.13    | 0.5     | 0.03   | 5       | 5       |
| SA5112536 | -9      | 0.23    | 0.1     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.2     | -9      | -9      | 0.17    | -9      | 0.03   | -9      | 0.5     |
| SA5112537 | 18      | 0.56    | 0.1     | 27      | 32      | 5       | 6       | 11      | 23      | 0.25    | 13      | 1.7     | 0.25    | 1.6     | 1.82    | 0.5     | 0.29   | 13      | 16      |
| SA5112538 | 37      | 0.27    | 0.2     | 1.5     | 4       | 3       | 0.5     | 5       | 2       | 0.25    | 4       | 0.2     | 0.25    | 0.5     | 0.09    | 0.5     | 0.04   | 1       | 2       |
| SA5112539 | 13      | 1.42    | 0.2     | 40      | 48      | 10      | 13      | 36      | 35      | 0.7     | 14      | 3.0     | 0.8     | 2.6     | 2.95    | 6       | 1.06   | 22      | 24      |
| SA5112540 | 9       | 1.79    | 0.2     | 45      | 51      | 11      | 14      | 41      | 37      | 0.8     | 10      | 3.4     | 0.9     | 2.9     | 3.11    | 7       | 1.37   | 26      | 25      |
| SA5112541 | 37      | 1.74    | 0.1     | 160     | 158     | 5       | 3       | 26      | 28      | 0.25    | 46      | 2.6     | 1.7     | 0.6     | 0.58    | 0.5     | 0.05   | 96      | 109     |
| SA5112542 | 19      | 0.46    | 0.05    | 25      | 22      | 4       | 3       | 5       | 8       | 0.25    | 9       | 1.3     | 0.25    | 0.4     | 0.40    | 0.5     | 0.26   | 10      | 12      |
| SA5112543 | 23      | 0.98    | 0.1     | 56      | 54      | 6       | 8       | 20      | 20      | 0.6     | 19      | 3.4     | 1.0     | 0.9     | 1.09    | 3       | 0.76   | 27      | 29      |
| SA5112544 | 28      | 0.17    | 0.05    | 1.5     | 2       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.3     | 0.25    | 0.3     | 0.28    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112545 | 26      | 0.28    | 0.05    | 1.5     | 1       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.3     | 0.25    | 0.5     | 0.09    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112546 | 28      | 0.18    | 0.1     | 15      | 11      | 3       | 1       | 5       | 3       | 0.25    | 42      | 0.6     | 0.25    | 0.3     | 0.39    | 0.5     | 0.03   | 5       | 6       |
| SA5112547 | 23      | 0.57    | 0.1     | 100     | 118     | 3       | 4       | 5       | 14      | 0.25    | 21      | 4.5     | 0.25    | 0.6     | 0.75    | 2       | 0.26   | 49      | 66      |
| SA5112548 | 12      | 1.94    | 0.2     | 130     | 129     | 12      | 18      | 50      | 40      | 1.4     | 14      | 6.5     | 1.8     | 4.2     | 4.35    | 8       | 1.67   | 63      | 64      |
| SA5112549 | 14      | 1.13    | 0.1     | 74      | 74      | 6       | 11      | 18      | 20      | 0.9     | 9       | 3.7     | 1.3     | 1.6     | 1.75    | 6       | 0.79   | 36      | 40      |
| SA5112550 | 39      | 0.29    | 0.2     | 140     | 143     | 4       | 4       | 23      | 15      | 0.25    | 26      | 5.1     | 1.1     | 1.1     | 1.19    | 0.5     | 0.12   | 71      | 81      |
| SA5112551 | 10      | 0.92    | 0.1     | 58      | 61      | 3       | 7       | 21      | 15      | 0.9     | 11      | 2.7     | 0.7     | 0.9     | 1.06    | 4       | 0.74   | 31      | 34      |
| SA5112552 | 10      | 0.93    | 0.05    | 58      | 49      | 4       | 8       | 18      | 18      | 1.7     | 6       | 2.7     | 0.9     | 0.9     | 1.10    | 8       | 1.01   | 28      | 25      |
| SA5112553 | 20      | 0.53    | 0.1     | 62      | 67      | 3       | 5       | 5       | 11      | 0.6     | 9       | 1.9     | 0.8     | 0.5     | 0.65    | 1       | 0.33   | 35      | 42      |
| SA5112554 | 18      | 0.25    | 0.05    | 11      | 20      | 1       | 2       | 5       | 6       | 0.3     | 9       | 0.8     | 0.25    | 0.2     | 0.21    | 0.5     | 0.16   | 9       | 11      |
| SA5112555 | 24      | 0.42    | 0.2     | 130     | 146     | 10      | 12      | 23      | 15      | 0.5     | 18      | 3.8     | 1.2     | 1.3     | 1.69    | 0.5     | 0.22   | 69      | 87      |
| SA5112556 | 16      | 0.31    | 0.05    | 37      | 45      | 2       | 3       | 5       | 9       | 0.25    | 8       | 1.3     | 0.25    | 0.5     | 0.49    | 0.5     | 0.13   | 21      | 26      |
| SA5112557 | 29      | 0.58    | 0.1     | 100     | 121     | 5       | 5       | 5       | 11      | 0.25    | 12      | 4.6     | 0.25    | 1.4     | 1.74    | 0.5     | 0.11   | 63      | 84      |
| SA5112558 | 45      | 0.39    | 0.2     | 150     | 164     | 10      | 10      | 25      | 23      | 0.25    | 18      | 5.2     | 1.6     | 2.8     | 3.16    | 0.5     | 0.20   | 76      | 88      |
| SA5112559 | 6       | 2.78    | 0.1     | 150     | 125     | 22      | 24      | 77      | 54      | 1.9     | 21      | 7.5     | 2.7     | 5.4     | 4.67    | 14      | 2.62   | 70      | 58      |
| SA5112560 | 8       | 2.91    | 0.2     | 190     | 174     | 16      | 23      | 73      | 46      | 1.6     | 23      | 10.3    | 2.9     | 4.3     | 4.15    | 17      | 2.33   | 95      | 85      |
| SA5112561 | 32      | 0.14    | 0.05    | 11      | 11      | 3       | 0.5     | 5       | 3       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.05   | 6       | 6       |
| SA5112562 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112563 | 17      | 1.06    | 0.1     | 41      | 44      | 4       | 7       | 16      | 17      | 0.25    | 7       | 2.3     | 0.9     | 1.0     | 1.11    | 5       | 0.66   | 19      | 22      |
| SA5112564 | 15      | 1.58    | 0.1     | 41      | 41      | 3       | 7       | 17      | 17      | 0.7     | 6       | 2.0     | 0.8     | 0.8     | 0.91    | 5       | 0.85   | 19      | 21      |
| SA5112565 | 7       | 2.71    | 0.2     | 150     | 123     | 17      | 21      | 68      | 47      | 1.6     | 25      | 7.5     | 2.5     | 4.3     | 3.88    | 12      | 2.58   | 71      | 60      |
| SA5112566 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112567 | 43      | 0.43    | 0.2     | 85      | 90      | 4       | 4       | 11      | 18      | 0.25    | 25      | 2.7     | 0.25    | 1.4     | 1.64    | 0.5     | 0.16   | 41      | 50      |
| SA5112568 | 27      | 0.39    | 0.1     | 27      | 31      | 2       | 1       | 5       | 6       | 0.25    | 8       | 1.2     | 0.25    | 0.2     | 0.24    | 0.5     | 0.13   | 16      | 22      |
| SA5112569 | 24      | 0.32    | 0.2     | 1.5     | 3       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.30    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112570 | 42      | 0.42    | 0.2     | 91      | 97      | 9       | 8       | 22      | 20      | 0.25    | 19      | 3.3     | 0.9     | 1.9     | 2.11    | 0.5     | 0.16   | 43      | 49      |
| SA5112571 | -9      | 0.25    | 0.3     | -9      | 6       | -9      | 0.5     | -9      | 3       | -9      | 3       | 0.05    | -9      | -9      | 0.19    | -9      | 0.05   | -9      | 2       |
| SA5112572 | 55      | 0.65    | 0.5     | 170     | 161     | 18      | 17      | 42      | 35      | 0.25    | 33      | 5.7     | 2.6     | 4.1     | 4.09    | 1       | 0.23   | 80      | 83      |
| SA5112573 | 22      | 0.33    | 0.05    | 25      | 29      | 2       | 2       | 5       | 7       | 0.25    | 7       | 1.0     | 0.25    | 0.2     | 0.27    | 0.5     | 0.15   | 13      | 16      |
| SA5112574 | 17      | 0.36    | 0.05    | 18      | 24      | 2       | 2       | 5       | 7       | 0.25    | 5       | 0.8     | 0.25    | 0.3     | 0.34    | 0.5     | 0.21   | 11      | 13      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112575 | 18      | 0.94    | 0.1     | 39      | 40      | 3       | 3       | 16      | 12      | 0.25    | 6       | 1.5     | 0.25    | 0.5     | 0.58    | 1       | 0.26   | 17      | 22      |
| SA5112576 | 12      | 0.25    | 0.05    | 66      | 75      | 1       | 3       | 5       | 14      | 0.25    | 13      | 2.5     | 0.25    | 0.8     | 0.96    | 0.5     | 0.11   | 31      | 39      |
| SA5112577 | 17      | 0.35    | 0.1     | 45      | 57      | 4       | 4       | 12      | 12      | 0.25    | 8       | 1.8     | 0.8     | 1.2     | 1.52    | 0.5     | 0.20   | 23      | 30      |
| SA5112578 | 22      | 0.28    | 0.1     | 36      | 46      | 3       | 2       | 5       | 7       | 0.25    | 8       | 1.7     | 0.7     | 0.4     | 0.50    | 0.5     | 0.09   | 21      | 27      |
| SA5112579 | 30      | 0.24    | 0.2     | 27      | 36      | 3       | 1       | 5       | 7       | 0.25    | 20      | 1.2     | 0.25    | 0.3     | 0.29    | 0.5     | 0.06   | 15      | 22      |
| SA5112580 | 47      | 0.29    | 0.2     | 64      | 73      | 3       | 2       | 5       | 7       | 0.25    | 13      | 2.0     | 1.0     | 0.3     | 0.31    | 0.5     | 0.11   | 42      | 52      |
| SA5112581 | 32      | 0.20    | 0.2     | 1.5     | 7       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.16    | 0.5     | 0.02   | 3       | 4       |
| SA5112582 | 31      | 0.10    | 0.1     | 12      | 6       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.03   | 3       | 3       |
| SA5112583 | 32      | 0.43    | 0.2     | 160     | 164     | 3       | 5       | 20      | 14      | 0.25    | 17      | 4.7     | 1.3     | 1.4     | 1.48    | 1       | 0.22   | 82      | 99      |
| SA5112584 | -9      | 0.12    | 0.1     | -9      | 4       | -9      | 0.5     | -9      | 2       | -9      | 1       | 0.05    | -9      | -9      | 0.05    | -9      | 0.05   | -9      | 2       |
| SA5112585 | -9      | 0.23    | 0.2     | -9      | 9       | -9      | 0.5     | -9      | 3       | -9      | 4       | 0.05    | -9      | -9      | 0.10    | -9      | 0.04   | -9      | 7       |
| SA5112586 | 26      | 0.18    | 0.1     | 7       | 7       | 2       | 0.5     | 5       | 1       | 0.25    | 3       | 0.05    | 0.25    | 0.2     | 0.25    | 0.5     | 0.03   | 3       | 4       |
| SA5112587 | 27      | 1.05    | 0.3     | 150     | 153     | 6       | 9       | 33      | 24      | 0.6     | 25      | 6.2     | 1.7     | 1.5     | 1.70    | 4       | 0.96   | 78      | 92      |
| SA5112588 | 56      | 0.19    | 0.2     | 59      | 60      | 4       | 2       | 5       | 7       | 0.25    | 14      | 2.8     | 0.8     | 0.1     | 0.16    | 0.5     | 0.09   | 43      | 51      |
| SA5112589 | 26      | 0.38    | 0.1     | 39      | 44      | 3       | 2       | 5       | 7       | 0.25    | 11      | 1.4     | 0.25    | 0.4     | 0.39    | 0.5     | 0.18   | 21      | 29      |
| SA5112590 | 32      | 0.23    | 0.1     | 37      | 53      | 1       | 2       | 5       | 6       | 0.25    | 10      | 1.6     | 0.25    | 0.3     | 0.36    | 0.5     | 0.09   | 25      | 34      |
| SA5112591 | 32      | 0.14    | 0.1     | 11      | 11      | 3       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.5     | 0.11    | 0.5     | 0.03   | 6       | 6       |
| SA5112592 | 44      | 0.37    | 0.1     | 49      | 49      | 3       | 2       | 12      | 9       | 0.25    | 15      | 1.3     | 0.6     | 0.5     | 0.49    | 0.5     | 0.13   | 25      | 30      |
| SA5112593 | 48      | 0.24    | 0.2     | 41      | 45      | 4       | 1       | 5       | 5       | 0.25    | 10      | 1.4     | 1.0     | 0.2     | 0.17    | 0.5     | 0.03   | 23      | 28      |
| SA5112594 | 43      | 0.18    | 0.2     | 1.5     | 3       | 4       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.05   | 0.5     | 1       |
| SA5112595 | 26      | 0.33    | 0.1     | 31      | 29      | 3       | 3       | 5       | 9       | 0.25    | 9       | 1.0     | 0.25    | 0.3     | 0.41    | 0.5     | 0.22   | 13      | 16      |
| SA5112596 | 30      | 0.77    | 0.1     | 33      | 38      | 4       | 3       | 5       | 11      | 0.25    | 14      | 1.1     | 0.6     | 0.4     | 0.47    | 1       | 0.20   | 17      | 22      |
| SA5112597 | 31      | 0.35    | 0.1     | 30      | 34      | 4       | 2       | 5       | 9       | 0.3     | 10      | 1.0     | 0.25    | 0.4     | 0.52    | 1       | 0.14   | 15      | 19      |
| SA5112598 | 40      | 0.80    | 0.4     | 110     | 112     | 8       | 9       | 29      | 29      | 0.6     | 27      | 4.4     | 1.2     | 1.3     | 1.31    | 2       | 0.54   | 48      | 55      |
| SA5112599 | 37      | 0.47    | 0.2     | 27      | 34      | 4       | 2       | 24      | 10      | 0.25    | 10      | 1.1     | 0.25    | 0.5     | 0.55    | 0.5     | 0.19   | 15      | 20      |
| SA5112600 | 26      | 0.38    | 0.2     | 19      | 25      | 2       | 2       | 5       | 9       | 0.25    | 9       | 0.8     | 0.25    | 0.3     | 0.37    | 0.5     | 0.19   | 9       | 14      |
| SA5112601 | 39      | 0.51    | 0.3     | 44      | 50      | 4       | 3       | 19      | 15      | 0.25    | 20      | 1.7     | 0.8     | 0.6     | 0.65    | 0.5     | 0.23   | 23      | 28      |
| SA5112602 | 29      | 1.51    | 0.2     | 130     | 141     | 13      | 14      | 43      | 30      | 0.25    | 32      | 5.4     | 1.6     | 2.6     | 2.54    | 4       | 0.45   | 63      | 76      |
| SA5112603 | 36      | 0.33    | 0.1     | 30      | 33      | 3       | 2       | 5       | 8       | 0.25    | 10      | 1.0     | 0.25    | 0.3     | 0.37    | 0.5     | 0.12   | 15      | 19      |
| SA5112604 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112605 | 46      | 0.56    | 0.2     | 57      | 63      | 4       | 4       | 23      | 19      | 0.25    | 27      | 2.2     | 0.8     | 0.5     | 0.54    | 0.5     | 0.25   | 30      | 38      |
| SA5112606 | 23      | 2.17    | 0.3     | 190     | 201     | 16      | 19      | 63      | 52      | 1.4     | 70      | 10.0    | 2.2     | 3.7     | 3.87    | 8       | 1.79   | 109     | 115     |
| SA5112607 | 50      | 0.97    | 0.2     | 110     | 100     | 4       | 4       | 21      | 15      | 0.25    | 26      | 3.0     | 0.9     | 1.0     | 1.03    | 1       | 0.28   | 52      | 61      |
| SA5112608 | 41      | 0.75    | 0.2     | 120     | 127     | 5       | 4       | 15      | 22      | 0.25    | 26      | 8.1     | 1.7     | 0.6     | 0.68    | 1       | 0.26   | 58      | 70      |
| SA5112609 | 48      | 0.77    | 0.5     | 318     | 320     | 20      | 20      | 38      | 31      | 0.25    | 46      | 10.8    | 2.0     | 5.8     | 5.92    | 1       | 0.15   | 134     | 159     |
| SA5112610 | 17      | 0.87    | 0.1     | 41      | 47      | 3       | 5       | 11      | 13      | 0.25    | 6       | 2.1     | 0.25    | 0.6     | 0.76    | 3       | 0.59   | 21      | 25      |
| SA5112611 | 21      | 0.84    | 0.2     | 50      | 52      | 2       | 3       | 5       | 11      | 0.25    | 8       | 2.4     | 0.6     | 0.5     | 0.58    | 0.5     | 0.22   | 25      | 29      |
| SA5112612 | -9      | 0.23    | 0.1     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.05    | -9      | 0.03   | -9      | 1       |
| SA5112613 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112614 | -9      | 0.48    | 0.4     | -9      | 5       | -9      | 0.5     | -9      | 3       | -9      | 2       | 0.05    | -9      | -9      | 0.12    | -9      | 0.07   | -9      | 2       |
| SA5112615 | -9      | 0.25    | 0.2     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.06    | -9      | 0.04   | -9      | 1       |
| SA5112616 | 27      | 1.31    | 0.2     | 60      | 61      | 15      | 15      | 43      | 39      | 0.25    | 13      | 3.3     | 1.3     | 3.6     | 3.79    | 5       | 1.02   | 29      | 28      |
| SA5112617 | -9      | 0.21    | 0.2     | -9      | 4       | -9      | 0.5     | -9      | 3       | -9      | 2       | 0.05    | -9      | -9      | 0.10    | -9      | 0.06   | -9      | 2       |
| SA5112618 | 28      | 0.56    | 0.2     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.3     | 0.27    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112619 | 38      | 0.22    | 0.2     | 1.5     | 4       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.11    | 0.5     | 0.03   | 2       | 2       |
| SA5112620 | -9      | 0.25    | 0.3     | -9      | 4       | -9      | 0.5     | -9      | 3       | -9      | 3       | 0.05    | -9      | -9      | 0.07    | -9      | 0.11   | -9      | 2       |
| SA5112621 | -9      | 0.24    | 0.2     | -9      | 2       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.10    | -9      | 0.04   | -9      | 0.5     |
| SA5112622 | -9      | 2.30    | 0.2     | -9      | 45      | -9      | 14      | -9      | 39      | -9      | 2       | 3.7     | -9      | -9      | 2.99    | -9      | 2.24   | -9      | 20      |
| SA5112623 | 6       | 2.66    | 0.2     | 71      | 56      | 12      | 19      | 52      | 33      | 0.25    | 1       | 5.4     | 1.9     | 3.7     | 3.36    | 18      | 2.20   | 34      | 24      |
| SA5112624 | 22      | 0.42    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 0.5     | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112625 | -9      | 0.17    | 0.2     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.05    | -9      | 0.05   | -9      | 1       |
| SA5112626 | 42      | 0.13    | 0.1     | 1.5     | 3       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.13    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112627 | 80      | 0.59    | 0.2     | 21      | 24      | 6       | 2       | 5       | 9       | 0.25    | 11      | 1.1     | 0.25    | 0.8     | 0.84    | 0.5     | 0.06   | 10      | 13      |
| SA5112628 | 16      | 0.92    | 0.1     | 24      | 27      | 3       | 5       | 13      | 14      | 0.25    | 5       | 1.3     | 0.25    | 0.6     | 0.79    | 1       | 0.45   | 12      | 15      |
| SA5112629 | 14      | 1.64    | 0.1     | 35      | 39      | 8       | 11      | 33      | 26      | 0.25    | 6       | 2.4     | 0.5     | 1.9     | 2.06    | 6       | 0.97   | 19      | 20      |
| SA5112630 | 35      | 0.36    | 0.1     | 6       | 8       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.3     | 0.25    | 0.1     | 0.14    | 0.5     | 0.02   | 4       | 4       |
| SA5112631 | 26      | 0.20    | 0.2     | 1.5     | 3       | 3       | 2       | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.14    | 0.5     | 0.01   | 0.5     | 0.5     |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112632 | 31      | 0.25    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.07    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112633 | 38      | 0.18    | 0.2     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.10    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112634 | 26      | 0.17    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.21    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112635 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112636 | 10      | 1.50    | 0.2     | 48      | 51      | 5       | 10      | 25      | 25      | 0.6     | 4       | 3.2     | 1.0     | 1.5     | 1.79    | 7       | 1.45   | 25      | 27      |
| SA5112637 | 24      | 0.36    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.06    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112638 | -9      | 0.39    | 0.3     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.05    | -9      | 0.03   | -9      | 1       |
| SA5112639 | 31      | 0.34    | 0.1     | 1.5     | 3       | 3       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.28    | 0.5     | 0.03   | 0.5     | 1       |
| SA5112640 | -9      | 0.32    | 0.3     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.08    | -9      | 0.06   | -9      | 1       |
| SA5112641 | -9      | 0.26    | 0.1     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.28    | -9      | 0.02   | -9      | 0.5     |
| SA5112642 | 21      | 0.32    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 0.5     | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.20    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112643 | 29      | 0.39    | 0.2     | 1.5     | 3       | 3       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.11    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112644 | 34      | 0.19    | 0.1     | 4       | 3       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.1     | 0.11    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112645 | 37      | 0.25    | 0.2     | 5       | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 5       | 0.05    | 0.25    | 0.2     | 0.13    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112646 | 30      | 0.25    | 0.2     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.13    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112647 | 25      | 0.26    | 0.05    | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.25    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112648 | 27      | 0.22    | 0.05    | 6       | 5       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.3     | 0.29    | 0.5     | 0.01   | 2       | 2       |
| SA5112649 | 21      | 0.21    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112650 | 30      | 0.21    | 0.1     | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.16    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112651 | 32      | 0.21    | 0.1     | 1.5     | 2       | 3       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.12    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112652 | 30      | 0.23    | 0.05    | 1.5     | 2       | 3       | 0.5     | 5       | 1       | 0.25    | 0.5     | 0.05    | 0.25    | 0.2     | 0.22    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112653 | -9      | 0.28    | 0.3     | -9      | 4       | -9      | 0.5     | -9      | 2       | -9      | 3       | 0.05    | -9      | -9      | 0.08    | -9      | 0.06   | -9      | 1       |
| SA5112654 | 11      | 2.23    | 0.1     | 96      | 85      | 24      | 23      | 69      | 51      | 1.4     | 7       | 5.5     | 1.8     | 8.2     | 7.23    | 16      | 2.34   | 49      | 38      |
| SA5112655 | 10      | 1.83    | 0.2     | 63      | 64      | 8       | 12      | 38      | 33      | 0.7     | 4       | 4.3     | 1.5     | 2.8     | 2.91    | 11      | 1.76   | 33      | 31      |
| SA5112656 | 40      | 0.12    | 0.1     | 1.5     | 3       | 4       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.07    | 0.5     | 0.05   | 1       | 1       |
| SA5112657 | 23      | 0.32    | 0.2     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.09    | 0.5     | 0.05   | 1       | 0.5     |
| SA5112658 | 35      | 0.20    | 0.2     | 1.5     | 2       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.05    | 0.5     | 0.03   | 0.5     | 0.5     |
| SA5112659 | 16      | 0.47    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.27    | 0.5     | 0.005  | 0.5     | 0.5     |
| SA5112660 | 30      | 0.27    | 0.05    | 1.5     | 2       | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.09    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112661 | 25      | 0.65    | 0.2     | 17      | 26      | 3       | 3       | 5       | 8       | 0.25    | 5       | 0.9     | 0.25    | 0.8     | 0.94    | 1       | 0.27   | 12      | 17      |
| SA5112662 | 31      | 0.24    | 0.2     | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.05    | 0.25    | 0.5     | 0.06    | 0.5     | 0.03   | 2       | 3       |
| SA5112663 | 32      | 0.17    | 0.1     | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 1       | 0.05    | 0.25    | 0.5     | 0.07    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112664 | -9      | 0.20    | 0.2     | -9      | 3       | -9      | 0.5     | -9      | 2       | -9      | 2       | 0.05    | -9      | -9      | 0.06    | -9      | 0.03   | -9      | 1       |
| SA5112665 | 10      | 1.31    | 0.1     | 57      | 63      | 6       | 8       | 23      | 22      | 0.25    | 5       | 3.0     | 1.0     | 1.2     | 1.35    | 5       | 0.97   | 34      | 38      |
| SA5112666 | -9      | 0.37    | 0.2     | -9      | 5       | -9      | 0.5     | -9      | 3       | -9      | 2       | 0.05    | -9      | -9      | 0.13    | -9      | 0.07   | -9      | 2       |
| SA5112667 | 31      | 0.30    | 0.1     | 1.5     | 5       | 2       | 0.5     | 5       | 2       | 0.25    | 1       | 0.05    | 0.25    | 0.2     | 0.25    | 0.5     | 0.02   | 2       | 2       |
| SA5112668 | 32      | 0.07    | 0.05    | 10      | 11      | 2       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.34    | 0.5     | 0.03   | 4       | 5       |
| SA5112669 | 3       | 1.85    | 0.05    | 62      | 53      | 10      | 12      | 45      | 32      | 2.4     | 4       | 3.2     | 1.1     | 3.9     | 3.39    | 7       | 3.78   | 31      | 24      |
| SA5112670 | 38      | 0.65    | 0.1     | 170     | 190     | 6       | 5       | 12      | 25      | 0.25    | 53      | 8.7     | 1.8     | 5.6     | 5.64    | 1       | 0.25   | 112     | 123     |
| SA5112671 | 22      | 0.43    | 0.1     | 1.5     | 4       | 1       | 3       | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.16    | 0.5     | 0.01   | 0.5     | 1       |
| SA5112672 | 32      | 0.13    | 0.05    | 1.5     | 8       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.33    | 0.5     | 0.03   | 4       | 4       |
| SA5112673 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112674 | 32      | 0.10    | 0.05    | 4       | 4       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.5     | 0.04    | 0.5     | 0.02   | 1       | 2       |
| SA5112675 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112676 | 32      | 0.28    | 0.2     | 23      | 24      | 1       | 0.5     | 5       | 4       | 0.25    | 3       | 1.0     | 0.25    | 0.3     | 0.24    | 0.5     | 0.05   | 12      | 14      |
| SA5112677 | 11      | 1.62    | 0.2     | 60      | 59      | 6       | 10      | 20      | 25      | 0.8     | 4       | 3.9     | 1.1     | 2.1     | 2.19    | 8       | 1.41   | 27      | 30      |
| SA5112678 | 21      | 0.61    | 0.1     | 27      | 31      | 2       | 2       | 12      | 7       | 0.25    | 5       | 0.9     | 0.25    | 0.8     | 0.90    | 0.5     | 0.09   | 15      | 19      |
| SA5112679 | 27      | 0.23    | 0.1     | 7       | 10      | 2       | 0.5     | 5       | 4       | 0.25    | 2       | 0.2     | 0.25    | 0.9     | 1.05    | 0.5     | 0.05   | 3       | 4       |
| SA5112680 | 30      | 0.27    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 2       | 0.3     | 2       | 0.05    | 0.25    | 0.2     | 0.16    | 1       | 0.02   | 1       | 1       |
| SA5112681 | 7       | 1.54    | 0.1     | 68      | 71      | 5       | 8       | 25      | 25      | 0.6     | 4       | 4.0     | 0.8     | 2.1     | 2.28    | 6       | 1.48   | 36      | 41      |
| SA5112682 | 28      | 0.17    | 0.1     | 26      | 24      | 2       | 1       | 5       | 4       | 0.25    | 6       | 0.4     | 0.25    | 0.1     | 0.17    | 0.5     | 0.05   | 12      | 15      |
| SA5112683 | 23      | 0.54    | 0.05    | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.3     | 0.39    | 0.5     | 0.02   | 2       | 2       |
| SA5112684 | 19      | 0.77    | 0.1     | 76      | 84      | 1       | 3       | 12      | 9       | 0.25    | 7       | 2.7     | 0.25    | 0.8     | 0.85    | 1       | 0.21   | 52      | 64      |
| SA5112685 | 26      | 0.24    | 0.05    | 5       | 8       | 2       | 0.5     | 5       | 3       | 0.25    | 3       | 0.05    | 0.25    | 0.9     | 0.91    | 0.5     | 0.05   | 2       | 3       |
| SA5112686 | 38      | 0.35    | 0.1     | 6       | 7       | 2       | 0.5     | 5       | 3       | 0.25    | 3       | 0.05    | 0.25    | 1.2     | 1.41    | 0.5     | 0.04   | 2       | 3       |
| SA5112687 | 10      | 0.32    | 0.5     | 22      | 28      | 3       | 3       | 5       | 8       | 0.25    | 4       | 1.1     | 0.25    | 0.2     | 0.31    | 0.5     | 0.05   | 11      | 14      |
| SA5112688 | 20      | 0.48    | 0.2     | 93      | 102     | 1       | 2       | 12      | 9       | 0.25    | 9       | 3.4     | 0.6     | 0.6     | 0.73    | 0.5     | 0.13   | 61      | 75      |

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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112689 | 13      | 0.20    | 0.05    | 1.5     | 10      | 1       | 0.5     | 13      | 5       | 0.25    | 2       | 0.4     | 0.25    | 0.1     | 0.12    | 0.5     | 0.02   | 5       | 6       |
| SA5112690 | 31      | 0.27    | 0.2     | 23      | 24      | 2       | 2       | 5       | 3       | 0.25    | 5       | 0.9     | 0.25    | 0.2     | 0.25    | 0.5     | 0.04   | 16      | 19      |
| SA5112691 | 22      | 0.46    | 0.1     | 9       | 10      | 2       | 1       | 5       | 2       | 0.25    | 4       | 0.2     | 0.25    | 0.2     | 0.26    | 0.5     | 0.02   | 5       | 5       |
| SA5112692 | 33      | 0.34    | 0.1     | 38      | 28      | 4       | 5       | 34      | 27      | 0.5     | 10      | 1.1     | 0.25    | 0.4     | 0.50    | 3       | 1.00   | 14      | 16      |
| SA5112693 | 30      | 0.75    | 0.2     | 19      | 17      | 4       | 7       | 5       | 14      | 0.25    | 3       | 0.7     | 0.7     | 0.5     | 0.54    | 6       | 1.13   | 9       | 9       |
| SA5112694 | 35      | 0.98    | 0.3     | 31      | 40      | 4       | 7       | 17      | 14      | 0.25    | 7       | 2.0     | 1.0     | 1.1     | 1.23    | 4       | 0.86   | 22      | 25      |
| SA5112695 | 32      | 0.39    | 0.2     | 81      | 102     | 2       | 2       | 5       | 8       | 0.25    | 8       | 3.9     | 1.0     | 0.7     | 0.79    | 0.5     | 0.06   | 60      | 78      |
| SA5112696 | 33      | 0.18    | 0.1     | 8       | 10      | 3       | 0.5     | 5       | 3       | 0.25    | 4       | 0.2     | 0.25    | 0.2     | 0.16    | 0.5     | 0.06   | 5       | 6       |
| SA5112697 | 23      | 0.23    | 0.2     | 58      | 76      | 3       | 1       | 5       | 7       | 0.25    | 8       | 2.1     | 0.25    | 0.3     | 0.28    | 0.5     | 0.09   | 36      | 48      |
| SA5112698 | 23      | 0.21    | 0.1     | 1.5     | 5       | 1       | 0.5     | 5       | 2       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.19    | 0.5     | 0.01   | 2       | 2       |
| SA5112699 | 31      | 0.20    | 0.1     | 14      | 15      | 3       | 0.5     | 5       | 3       | 0.25    | 5       | 0.4     | 0.25    | 0.3     | 0.29    | 0.5     | 0.03   | 7       | 9       |
| SA5112700 | 31      | 0.09    | 0.05    | 1.5     | 4       | 1       | 0.5     | 5       | 3       | 0.25    | 2       | 0.05    | 0.25    | 0.1     | 0.07    | 0.5     | 0.03   | 1       | 1       |
| SA5112701 | 4       | 2.64    | 0.2     | 73      | 69      | 7       | 14      | 34      | 33      | 0.5     | 1       | 5.3     | 1.8     | 2.4     | 2.57    | 13      | 2.25   | 31      | 32      |
| SA5112702 | 29      | 0.20    | 0.2     | 21      | 22      | 3       | 1       | 5       | 8       | 0.25    | 2       | 0.9     | 0.25    | 0.2     | 0.14    | 0.5     | 0.15   | 8       | 10      |
| SA5112703 | 27      | 0.35    | 0.1     | 21      | 20      | 2       | 0.5     | 5       | 4       | 0.25    | 3       | 0.8     | 0.5     | 0.4     | 0.43    | 0.5     | 0.03   | 10      | 13      |
| SA5112704 | 36      | 0.11    | 0.1     | 1.5     | 7       | 2       | 0.5     | 5       | 4       | 0.25    | 7       | 0.3     | 0.25    | 0.5     | 0.07    | 0.5     | 0.03   | 3       | 4       |
| SA5112705 | 22      | 0.30    | 0.2     | 53      | 62      | 2       | 2       | 20      | 8       | 0.25    | 7       | 3.2     | 0.25    | 0.3     | 0.33    | 0.5     | 0.07   | 33      | 42      |
| SA5112706 | 37      | 0.09    | 0.05    | 7       | 9       | 3       | 0.5     | 11      | 3       | 0.25    | 5       | 0.4     | 0.25    | 0.5     | 0.06    | 0.5     | 0.03   | 4       | 5       |
| SA5112707 | -9      | 0.26    | 0.1     | -9      | 7       | -9      | 0.5     | -9      | 2       | -9      | 4       | 0.05    | -9      | -9      | 0.44    | -9      | 0.03   | -9      | 4       |
| SA5112708 | 20      | 0.12    | 0.1     | 1.5     | 3       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.05    | 0.25    | 0.2     | 0.18    | 0.5     | 0.02   | 0.5     | 1       |
| SA5112709 | 12      | 0.59    | 0.2     | 39      | 49      | 3       | 4       | 12      | 13      | 0.25    | 6       | 2.3     | 0.25    | 0.8     | 1.00    | 1       | 0.34   | 20      | 26      |
| SA5112710 | 25      | 0.55    | 0.2     | 41      | 49      | 1       | 3       | 5       | 11      | 0.25    | 7       | 1.9     | 0.7     | 1.2     | 1.35    | 1       | 0.32   | 21      | 27      |
| SA5112711 | 4       | 2.58    | 0.2     | 80      | 82      | 10      | 15      | 47      | 33      | 0.6     | 3       | 5.7     | 1.7     | 2.7     | 2.96    | 15      | 2.39   | 38      | 37      |
| SA5112712 | 14      | 0.23    | 0.1     | 26      | 37      | 1       | 1       | 5       | 7       | 0.25    | 4       | 1.3     | 0.25    | 0.4     | 0.48    | 0.5     | 0.10   | 12      | 19      |
| SA5112713 | -9      | 2.68    | 0.3     | -9      | 62      | -9      | 18      | -9      | 51      | -9      | 4       | 6.2     | -9      | -9      | 4.28    | -9      | 1.28   | -9      | 29      |
| SA5112714 | 12      | 0.22    | 0.1     | 10      | 21      | 1       | 0.5     | 11      | 3       | 0.25    | 4       | 0.9     | 0.25    | 0.1     | 0.21    | 0.5     | 0.03   | 9       | 14      |
| SA5112715 | 8       | 2.15    | 0.1     | 60      | 68      | 6       | 12      | 30      | 30      | 0.25    | 1       | 4.8     | 1.2     | 2.0     | 2.39    | 11      | 1.92   | 28      | 32      |
| SA5112716 | 39      | 0.21    | 0.2     | 19      | 20      | 3       | 1       | 5       | 5       | 0.25    | 10      | 0.7     | 0.5     | 0.2     | 0.20    | 0.5     | 0.04   | 12      | 16      |
| SA5112717 | 19      | 0.67    | 0.2     | 45      | 55      | 3       | 4       | 12      | 12      | 0.25    | 8       | 2.1     | 0.6     | 0.7     | 0.87    | 1       | 0.28   | 31      | 39      |
| SA5112718 | 9       | 0.44    | 0.05    | 44      | 55      | 2       | 4       | 15      | 15      | 0.25    | 5       | 2.0     | 0.25    | 0.9     | 1.08    | 0.5     | 0.33   | 24      | 30      |
| SA5112719 | 5       | 0.63    | 0.2     | 76      | 97      | 4       | 7       | 14      | 19      | 0.25    | 6       | 3.1     | 0.8     | 2.1     | 2.69    | 2       | 0.47   | 35      | 47      |
| SA5112720 | 16      | 0.24    | 0.1     | 24      | 31      | 1       | 0.5     | 5       | 4       | 0.25    | 4       | 1.0     | 0.25    | 0.3     | 0.26    | 0.5     | 0.04   | 21      | 27      |
| SA5112721 | 8       | 0.90    | 0.05    | 33      | 33      | 1       | 7       | 14      | 16      | 0.6     | 3       | 1.8     | 0.7     | 0.6     | 0.80    | 7       | 1.37   | 16      | 19      |
| SA5112722 | 30      | 0.15    | 0.1     | 38      | 38      | 3       | 1       | 5       | 5       | 0.25    | 6       | 0.8     | 0.6     | 0.3     | 0.24    | 0.5     | 0.07   | 17      | 23      |
| SA5112723 | 29      | 0.49    | 0.1     | 10      | 18      | 3       | 0.5     | 5       | 3       | 0.25    | 5       | 0.7     | 0.25    | 0.3     | 0.27    | 0.5     | 0.02   | 10      | 12      |
| SA5112724 | 25      | 0.60    | 0.2     | 120     | 126     | 4       | 5       | 17      | 15      | 0.25    | 9       | 3.1     | 0.9     | 1.8     | 1.92    | 2       | 0.35   | 59      | 65      |
| SA5112725 | 26      | 0.44    | 0.2     | 72      | 70      | 3       | 1       | 12      | 7       | 0.25    | 4       | 1.4     | 0.25    | 1.4     | 1.55    | 0.5     | 0.10   | 32      | 38      |
| SA5112726 | 25      | 0.48    | 0.2     | 42      | 55      | 2       | 2       | 10      | 16      | 0.25    | 13      | 2.1     | 0.25    | 1.2     | 1.33    | 0.5     | 0.13   | 25      | 30      |
| SA5112727 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112728 | 13      | 0.52    | 0.05    | 29      | 34      | 2       | 3       | 5       | 9       | 0.25    | 6       | 2.1     | 0.6     | 0.7     | 0.80    | 2       | 0.38   | 16      | 20      |
| SA5112729 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      |
| SA5112730 | 12      | 0.52    | 0.05    | 52      | 60      | 1       | 2       | 12      | 7       | 0.25    | 6       | 4.1     | 0.7     | 0.5     | 0.57    | 0.5     | 0.18   | 32      | 41      |
| SA5112731 | 29      | 0.27    | 0.1     | 1.5     | 8       | 1       | 0.5     | 5       | 2       | 0.25    | 3       | 0.6     | 0.25    | 0.1     | 0.16    | 0.5     | 0.03   | 3       | 4       |
| SA5112732 | 32      | 0.19    | 0.05    | 12      | 16      | 2       | 0.5     | 5       | 3       | 0.25    | 6       | 1.1     | 0.25    | 0.1     | 0.13    | 0.5     | 0.03   | 8       | 10      |
| SA5112733 | 21      | 0.30    | 0.05    | 17      | 27      | 2       | 2       | 5       | 6       | 0.25    | 6       | 1.5     | 0.6     | 1.5     | 1.83    | 0.5     | 0.06   | 10      | 15      |
| SA5112734 | 27      | 0.23    | 0.05    | 18      | 16      | 3       | 1       | 5       | 6       | 0.25    | 4       | 1.1     | 0.25    | 1.2     | 1.44    | 0.5     | 0.11   | 6       | 7       |
| SA5112735 | 40      | 0.25    | 0.05    | 26      | 34      | 3       | 1       | 5       | 7       | 0.25    | 6       | 2.0     | 0.25    | 0.6     | 0.70    | 0.5     | 0.04   | 13      | 16      |
| SA5112736 | 26      | 0.28    | 0.1     | 56      | 69      | 5       | 5       | 15      | 14      | 0.25    | 9       | 3.6     | 0.6     | 3.5     | 3.99    | 0.5     | 0.17   | 33      | 39      |
| SA5112737 | 28      | 0.25    | 0.05    | 10      | 13      | 1       | 0.5     | 5       | 3       | 0.3     | 4       | 0.8     | 0.25    | 0.5     | 0.54    | 1       | 0.03   | 6       | 7       |
| SA5112738 | 8       | 2.19    | 0.1     | 68      | 65      | 7       | 14      | 39      | 33      | 0.8     | 5       | 5.4     | 1.6     | 3.5     | 3.49    | 12      | 2.02   | 32      | 30      |
| SA5112739 | 16      | 0.50    | 0.2     | 12      | 33      | 1       | 3       | 5       | 13      | 0.25    | 4       | 2.0     | 0.25    | 0.4     | 2.55    | 0.5     | 0.26   | 9       | 16      |
| SA5112740 | 24      | 0.36    | 0.05    | 27      | 20      | 4       | 1       | 5       | 7       | 0.25    | 3       | 1.3     | 0.25    | 2.2     | 0.53    | 0.5     | 0.12   | 14      | 10      |
| SA5112741 | 31      | 0.22    | 0.05    | 20      | 24      | 1       | 1       | 5       | 10      | 0.25    | 8       | 1.4     | 0.25    | 1.0     | 0.99    | 0.5     | 0.11   | 10      | 11      |
| SA5112742 | 25      | 0.28    | 0.05    | 40      | 42      | 2       | 1       | 13      | 11      | 0.25    | 4       | 2.4     | 0.6     | 1.8     | 2.03    | 0.5     | 0.15   | 17      | 21      |
| SA5112743 | 13      | 0.85    | 0.2     | 140     | 155     | 3       | 8       | 35      | 36      | 0.5     | 22      | 7.7     | 1.3     | 1.9     | 2.20    | 5       | 0.83   | 72      | 87      |
| SA5112744 | -9      | 0.22    | 0.1     | -9      | 30      | -9      | 2       | -9      | 12      | -9      | 5       | 1.7     | -9      | -9      | 0.19    | -9      | 0.14   | -9      | 14      |
| SA5112745 | -9      | 0.24    | 0.05    | -9      | 51      | -9      | 3       | -9      | 21      | -9      | 8       | 4.9     | -9      | -9      | 0.16    | -9      | 0.14   | -9      | 23      |



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| FldNum    | Br1_ppm | Ca2_pct | Cd2_ppm | Ce1_ppm | Ce2_ppm | Co1_ppm | Co2_ppm | Cr1_ppm | Cr2_ppm | Cs1_ppm | Cu2_ppm | Dy2_ppm | Eu1_ppm | Fe1_pct | Fe2_pct | Hf1_ppm | K2_pct | La1_ppm | La2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| SA5112746 | 20      | 0.62    | 0.05    | 27      | 34      | 4       | 3       | 5       | 11      | 0.25    | 5       | 2.0     | 0.6     | 1.7     | 2.04    | 2       | 0.39   | 13      | 17      |
| SA5112747 | 6       | 2.28    | 0.1     | 69      | 67      | 8       | 13      | 39      | 30      | 0.7     | 2       | 4.6     | 1.8     | 3.1     | 3.26    | 10      | 2.30   | 34      | 31      |
| SA5112748 | 34      | 0.30    | 0.05    | 14      | 16      | 1       | 0.5     | 5       | 5       | 0.25    | 3       | 1.1     | 0.6     | 0.7     | 0.86    | 0.5     | 0.06   | 6       | 7       |
| SA5112749 | 19      | 0.46    | 0.1     | 43      | 50      | 4       | 5       | 13      | 15      | 0.25    | 6       | 2.7     | 0.7     | 2.4     | 2.63    | 1       | 0.30   | 21      | 24      |
| SA5112750 | 29      | 0.20    | 0.05    | 14      | 20      | 2       | 1       | 5       | 5       | 0.25    | 7       | 1.2     | 0.25    | 0.4     | 0.39    | 0.5     | 0.07   | 9       | 11      |
| SA5112751 | 23      | 0.15    | 0.05    | 29      | 32      | 2       | 1       | 5       | 6       | 0.25    | 3       | 1.7     | 0.25    | 0.3     | 0.22    | 0.5     | 0.02   | 13      | 17      |
| SA5112752 | 23      | 0.18    | 0.05    | 5       | 8       | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.7     | 0.25    | 0.3     | 0.25    | 0.5     | 0.03   | 3       | 4       |
| SA5112753 | 29      | 0.17    | 0.05    | 10      | 12      | 3       | 0.5     | 5       | 3       | 0.25    | 4       | 0.9     | 0.25    | 0.1     | 0.06    | 0.5     | 0.11   | 6       | 7       |
| SA5112754 | 3       | 2.52    | 0.1     | 69      | 64      | 7       | 12      | 41      | 30      | 0.5     | 2       | 4.8     | 1.7     | 2.7     | 3.09    | 9       | 2.46   | 30      | 27      |
| SA5112755 | 35      | 0.49    | 0.2     | 63      | 77      | 4       | 2       | 5       | 11      | 0.25    | 13      | 3.3     | 0.7     | 2.0     | 2.46    | 0.5     | 0.14   | 32      | 42      |
| SA5112756 | 32      | 0.17    | 0.05    | 1.5     | 8       | 2       | 0.5     | 5       | 3       | 0.25    | 3       | 0.5     | 0.25    | 0.2     | 0.20    | 0.5     | 0.03   | 2       | 3       |
| SA5112757 | 32      | 0.40    | 0.2     | 42      | 47      | 6       | 5       | 5       | 11      | 0.25    | 9       | 2.2     | 0.6     | 1.8     | 2.16    | 0.5     | 0.15   | 18      | 22      |
| SA5112758 | 23      | 0.62    | 0.2     | 40      | 95      | 7       | 5       | 5       | 14      | 0.5     | 8       | 2.7     | 0.7     | 22.8    | 22.23   | 1       | 0.24   | 26      | 26      |
| SA5112759 | 29      | 0.21    | 0.05    | 1.5     | 6       | 2       | 0.5     | 5       | 2       | 0.25    | 3       | 0.5     | 0.25    | 0.5     | 0.13    | 0.5     | 0.03   | 2       | 2       |
| SA5112760 | 19      | 0.53    | 0.2     | 33      | 40      | 3       | 4       | 14      | 14      | 0.25    | 5       | 2.0     | 0.7     | 1.2     | 1.46    | 2       | 0.40   | 16      | 19      |
| SA5112761 | -9      | 0.30    | 0.1     | -9      | 14      | -9      | 1       | -9      | 5       | -9      | 4       | 0.9     | -9      | -9      | 1.05    | -9      | 0.12   | -9      | 6       |
| SA5112762 | 29      | 0.25    | 0.1     | 5       | 12      | 1       | 0.5     | 5       | 3       | 0.25    | 2       | 0.6     | 0.25    | 1.3     | 1.57    | 0.5     | 0.04   | 3       | 3       |
| SA5112763 | 26      | 0.28    | 0.05    | 15      | 17      | 3       | 2       | 12      | 7       | 0.25    | 5       | 0.9     | 0.25    | 0.4     | 0.53    | 0.5     | 0.18   | 7       | 8       |
| SA5112764 | -9      | 1.19    | 0.1     | -9      | 32      | -9      | 8       | -9      | 19      | -9      | 6       | 2.4     | -9      | -9      | 1.15    | -9      | 1.61   | -9      | 16      |
| SA5112765 | 8       | 1.50    | 0.1     | 51      | 35      | 3       | 12      | 31      | 19      | 1.0     | 3       | 2.2     | 1.3     | 1.2     | 1.25    | 16      | 2.68   | 23      | 18      |
| SA5112766 | 29      | 0.12    | 0.05    | 1.5     | 5       | 2       | 0.5     | 5       | 3       | 0.25    | 3       | 0.4     | 0.25    | 0.5     | 0.07    | 0.5     | 0.06   | 2       | 3       |
| SA5112767 | 23      | 0.35    | 0.05    | 1.5     | 2       | 2       | 0.5     | 5       | 1       | 0.25    | 1       | 0.2     | 0.25    | 0.1     | 0.14    | 0.5     | 0.02   | 0.5     | 0.5     |
| SA5112768 | 26      | 0.26    | 0.05    | 1.5     | 2       | 1       | 0.5     | 5       | 1       | 0.25    | 2       | 0.1     | 0.25    | 0.2     | 0.11    | 0.5     | 0.01   | 0.5     | 0.5     |
| SA5112769 | 20      | 0.17    | 0.05    | 1.5     | 13      | 1       | 0.5     | 5       | 4       | 0.25    | 5       | 0.5     | 0.25    | 0.1     | 0.13    | 0.5     | 0.03   | 7       | 9       |
| SA5112770 | 28      | 0.12    | 0.05    | 1.5     | 5       | 2       | 0.5     | 5       | 3       | 0.25    | 2       | 0.1     | 0.25    | 0.2     | 0.10    | 0.5     | 0.03   | 3       | 3       |
| SA5112771 | 24      | 0.41    | 0.1     | 14      | 17      | 1       | 3       | 5       | 8       | 0.25    | 5       | 0.8     | 0.25    | 0.2     | 0.21    | 2       | 0.46   | 11      | 12      |
| SA5112772 | 2       | 2.50    | 0.1     | 120     | 101     | 11      | 16      | 56      | 39      | 1.0     | 10      | 6.0     | 2.6     | 3.2     | 3.00    | 12      | 2.70   | 59      | 50      |
| SA5112773 | -9      | 0.90    | 0.1     | -9      | 25      | -9      | 7       | -9      | 17      | -9      | 3       | 1.7     | -9      | -9      | 0.83    | -9      | 1.19   | -9      | 14      |
| SA5112774 | 18      | 0.18    | 0.05    | 1.5     | 5       | 1       | 0.5     | 5       | 3       | 0.25    | 3       | 0.05    | 0.25    | 0.2     | 0.15    | 0.5     | 0.04   | 2       | 3       |
| SA5112775 | 23      | 0.83    | 0.2     | 43      | 49      | 3       | 3       | 14      | 19      | 0.25    | 7       | 1.9     | 0.25    | 1.2     | 1.41    | 0.5     | 0.29   | 22      | 27      |
| SA5112776 | 85      | 0.20    | 0.05    | 433     | 6       | 7       | 0.5     | 5       | 3       | 0.25    | 4       | 0.1     | 2.6     | 1.3     | 0.07    | 0.5     | 0.04   | 227     | 3       |
| SA5112777 | -9      | 0.53    | 0.4     | -9      | 372     | -9      | 4       | -9      | 28      | -9      | 38      | 8.6     | -9      | -9      | 1.28    | -9      | 0.13   | -9      | 240     |
| SA5112778 | 51      | 0.63    | 0.5     | 315     | 336     | 6       | 6       | 42      | 24      | 0.25    | 29      | 11.6    | 1.7     | 1.6     | 1.71    | 0.5     | 0.09   | 173     | 203     |
| SA5112779 | 16      | 0.52    | 0.1     | 76      | 78      | 1       | 3       | 5       | 9       | 0.25    | 11      | 3.0     | 0.25    | 0.5     | 0.63    | 0.5     | 0.22   | 37      | 46      |
| SA5112780 | 43      | 0.28    | 0.1     | 65      | 67      | 4       | 3       | 5       | 7       | 0.25    | 15      | 3.0     | 0.7     | 0.3     | 0.24    | 0.5     | 0.18   | 32      | 40      |
| SA5112781 | 44      | 0.83    | 0.2     | 220     | 213     | 6       | 7       | 32      | 20      | 0.8     | 44      | 9.1     | 1.7     | 1.0     | 1.09    | 2       | 0.60   | 108     | 122     |
| SA5112782 | 16      | 1.69    | 0.2     | 92      | 90      | 6       | 14      | 26      | 20      | 0.7     | 7       | 7.9     | 1.5     | 2.7     | 2.82    | 19      | 1.48   | 43      | 45      |
| SA5112783 | 47      | 0.51    | 0.1     | 100     | 108     | 3       | 4       | 16      | 15      | 0.25    | 20      | 4.0     | 0.9     | 0.8     | 0.78    | 1       | 0.31   | 56      | 65      |
| SA5112784 | 9       | 2.50    | 0.3     | 230     | 215     | 13      | 20      | 58      | 43      | 2.0     | 35      | 13.2    | 3.1     | 4.6     | 4.44    | 14      | 2.58   | 129     | 124     |
| SA5112785 | 59      | 0.68    | 0.2     | 92      | 84      | 4       | 1       | 5       | 6       | 0.25    | 15      | 3.7     | 0.25    | 0.7     | 0.72    | 0.5     | 0.08   | 41      | 45      |
| SA5112786 | 58      | 0.37    | 0.2     | 39      | 32      | 3       | 1       | 5       | 6       | 0.25    | 8       | 1.2     | 0.6     | 0.5     | 0.40    | 0.5     | 0.09   | 17      | 18      |
| SA5112787 | -9      | 2.06    | 0.2     | -9      | 41      | -9      | 12      | -9      | 19      | -9      | 0.5     | 6.9     | -9      | -9      | 3.22    | -9      | 3.84   | -9      | 15      |
| SA5112788 | 10      | 2.67    | 0.3     | 83      | 86      | 11      | 24      | 32      | 30      | 0.7     | 4       | 11.8    | 1.8     | 3.8     | 4.16    | 20      | 1.75   | 35      | 40      |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5111891 | 1.3     | 29.44   | 0.025   | 0.05    | 0.5     | 0.5     | 1       | 0.05    | 0.09    | 4       | 4       | 717    | 6       | 2.5     | 6       | 0.05    | 1.6     | 2.2     |
| SA5111892 | 0.9     | 40.14   | 0.06    | 0.05    | 0.5     | 0.5     | 4       | 0.13    | 0.18    | 3       | 3       | 440    | 5       | 6       | 8       | 0.05    | 2.0     | 2.8     |
| SA5111893 | 1.3     | 38.33   | 0.78    | 0.11    | 247     | 0.5     | 3       | 0.14    | 0.17    | 4       | 0.5     | 945    | 4       | 6       | 10      | 0.05    | 3.5     | 4.9     |
| SA5111894 | 5.0     | 30.76   | 0.33    | 0.37    | 245     | 0.5     | 0.5     | 0.62    | 0.76    | 8       | 7       | 1611   | 6       | 22      | 24      | 0.05    | 6.0     | 7.7     |
| SA5111895 | 1.5     | 37.37   | 0.15    | 0.10    | 52      | 0.5     | 0.5     | 0.13    | 0.17    | 5       | 2       | 679    | 3       | 6       | 8       | 0.05    | 2.5     | 3.6     |
| SA5111896 | 0.05    | 97.66   | 0.025   | 0.09    | 0.5     | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 288    | 9       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5111897 | 4.3     | 38.01   | 0.21    | 0.22    | 116     | 0.5     | 2       | 0.39    | 0.48    | 6       | 6       | 542    | 5       | 15      | 15      | 0.05    | 4.4     | 5.7     |
| SA5111898 | 2.5     | 37.08   | 0.23    | 0.20    | 115     | 0.5     | 1       | 0.45    | 0.55    | 5       | 4       | 527    | 4       | 12      | 15      | 0.05    | 4.1     | 5.2     |
| SA5111899 | 3.2     | 35.77   | 0.025   | 0.18    | 27      | 5       | 5       | 0.15    | 0.14    | 3       | 6       | 921    | 1       | 2.5     | 5       | 0.05    | 3.0     | 3.7     |
| SA5111900 | 0.05    | 98.14   | 0.025   | 0.04    | 0.5     | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 166    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5111901 | 0.8     | 52.86   | 0.40    | 0.05    | 14      | 0.5     | 1       | 0.06    | 0.07    | 3       | 6       | 1801   | 2       | 2.5     | 5       | 0.05    | 4.0     | 4.9     |
| SA5111902 | 2.1     | 42.57   | 0.23    | 0.15    | 89      | 0.5     | 1       | 0.23    | 0.24    | 7       | 5       | 1771   | 4       | 6       | 9       | 0.05    | 4.4     | 5.3     |
| SA5111903 | 0.05    | 97.62   | 0.05    | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 265    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5111904 | 2.2     | 44.84   | 0.57    | 0.31    | 287     | 0.5     | 0.5     | 1.10    | 1.19    | 16      | 4       | 917    | 12      | 27      | 32      | 0.05    | 7.2     | 7.5     |
| SA5111905 | 1.7     | 46.07   | 0.35    | 0.16    | 91      | 0.5     | 1       | 0.36    | 0.41    | 7       | 3       | 658    | 8       | 12      | 13      | 0.05    | 4.5     | 5.0     |
| SA5111906 | 0.05    | 93.40   | 0.21    | 0.01    | 0.5     | 0.5     | 0.5     | 0.09    | 0.09    | 2       | 2       | 320    | 2       | 2.5     | 4       | 0.05    | 1.6     | 2.0     |
| SA5111907 | 28.5    | 10.45   | 1.20    | 1.98    | 842     | 0.5     | 2       | 1.80    | 1.79    | 16      | 28      | 1611   | 10      | 110     | 118     | 0.05    | 20.3    | 19.5    |
| SA5111908 | 2.0     | 38.25   | 0.19    | 0.15    | 82      | 0.5     | 0.5     | 0.19    | 0.21    | 4       | 4       | 1317   | 3       | 7       | 9       | 0.05    | 3.5     | 4.2     |
| SA5111909 | 1.8     | 47.46   | 0.23    | 0.12    | 71      | 0.5     | 0.5     | 0.19    | 0.22    | 3       | 5       | 791    | 8       | 2.5     | 6       | 0.2     | 3.0     | 3.8     |
| SA5111910 | 0.3     | 43.37   | 0.16    | 0.05    | 244     | 0.5     | 0.5     | 0.025   | 0.04    | 2       | 1       | 612    | 4       | 2.5     | 2       | 0.05    | 1.6     | 2.5     |
| SA5111911 | 1.5     | 31.86   | 0.22    | 0.10    | 93      | 0.5     | 1       | 0.13    | 0.16    | 5       | 3       | 1685   | 2       | 6       | 6       | 0.05    | 2.6     | 3.9     |
| SA5111912 | 0.05    | 94.76   | 0.025   | 0.01    | 0.5     | 1       | 0.5     | 0.025   | 0.03    | 0.5     | 3       | 365    | 8       | 2.5     | 3       | 0.1     | 0.5     | 0.8     |
| SA5111913 | 0.5     | 60.89   | 0.11    | 0.05    | 9       | 0.5     | 0.5     | 0.10    | 0.11    | 4       | 4       | 898    | 8       | 2.5     | 6       | 0.1     | 3.3     | 4.0     |
| SA5111914 | 1.8     | 48.17   | 0.25    | 0.11    | 58      | 0.5     | 0.5     | 0.19    | 0.21    | 5       | 5       | 1025   | 10      | 6       | 6       | 0.1     | 4.6     | 5.5     |
| SA5111915 | 0.5     | 51.40   | 0.11    | 0.07    | 41      | 0.5     | 0.5     | 0.19    | 0.22    | 4       | 2       | 803    | 3       | 7       | 8       | 0.05    | 2.8     | 3.3     |
| SA5111916 | 0.9     | 39.81   | 0.11    | 0.05    | 13      | 0.5     | 1       | 0.07    | 0.10    | 4       | 3       | 560    | 9       | 6       | 7       | 0.1     | 2.3     | 2.8     |
| SA5111917 | 0.9     | 40.77   | 0.39    | 0.05    | 77      | 0.5     | 1       | 0.06    | 0.06    | 5       | 5       | 2154   | 7       | 2.5     | 3       | 0.05    | 3.0     | 3.7     |
| SA5111918 | 19.1    | 8.75    | 0.78    | 1.43    | 708     | 0.5     | 2       | 2.20    | 2.31    | 18      | 21      | 2123   | 13      | 110     | 108     | 0.05    | 15.2    | 15.4    |
| SA5111919 | 1.1     | 46.92   | 0.49    | 0.08    | 42      | 0.5     | 1       | 0.06    | 0.06    | 5       | 6       | 2365   | 3       | 2.5     | 5       | 0.05    | 3.3     | 4.7     |
| SA5111920 | 0.9     | 76.74   | 6.96    | 0.08    | 0.5     | 24      | 24      | 0.05    | 0.05    | 5       | 12      | 1475   | 22      | 2.5     | 2       | 0.05    | 21.3    | 25.0    |
| SA5111921 | 0.3     | 45.49   | 0.25    | 0.03    | 0.5     | 0.5     | 0.5     | 0.06    | 0.07    | 2       | 4       | 287    | 3       | 2.5     | 4       | 0.05    | 1.9     | 3.0     |
| SA5111922 | 0.9     | 34.00   | 0.07    | 0.07    | 28      | 0.5     | 1       | 0.09    | 0.11    | 3       | 2       | 830    | 3       | 2.5     | 5       | 0.05    | 2.0     | 2.7     |
| SA5111923 | 0.9     | 52.61   | 0.20    | 0.10    | 80      | 0.5     | 2       | 0.15    | 0.17    | 5       | 3       | 1636   | 4       | 2.5     | 7       | 0.05    | 3.2     | 4.1     |
| SA5111924 | 1.2     | 78.62   | 0.30    | 0.12    | 75      | 0.5     | 1       | 0.22    | 0.26    | 7       | 3       | 1489   | 11      | 8       | 10      | 0.05    | 4.1     | 4.9     |
| SA5111925 | 3.4     | 42.40   | 0.23    | 0.19    | 102     | 0.5     | 0.5     | 0.13    | 0.15    | 5       | 4       | 2139   | 7       | 7       | 9       | 0.05    | 3.3     | 4.3     |
| SA5111926 | 0.8     | 26.74   | 0.11    | 0.09    | 63      | 0.5     | 0.5     | 0.33    | 0.44    | 6       | 0.5     | 401    | 6       | 14      | 15      | 0.05    | 2.2     | 2.8     |
| SA5111927 | 1.8     | 45.96   | 0.23    | 0.09    | 34      | 0.5     | 0.5     | 0.06    | 0.07    | 5       | 6       | 2064   | 5       | 2.5     | 4       | 0.05    | 3.2     | 4.2     |
| SA5111928 | 1.6     | 31.28   | 0.12    | 0.11    | 57      | 0.5     | 1       | 0.18    | 0.23    | 5       | 2       | 592    | 5       | 8       | 9       | 0.05    | 2.3     | 3.4     |
| SA5111929 | 0.6     | 36.94   | 0.13    | 0.05    | 6       | 0.5     | 0.5     | 0.08    | 0.09    | 3       | 2       | 455    | 4       | 2.5     | 4       | 0.05    | 2.2     | 3.2     |
| SA5111930 | 0.05    | 95.57   | 0.025   | 0.03    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 351    | 28      | 2.5     | 1       | 0.2     | 0.3     | 0.4     |
| SA5111931 | 0.5     | 80.22   | 0.17    | 0.07    | 23      | 0.5     | 0.5     | 0.18    | 0.21    | 4       | 3       | 599    | 12      | 7       | 7       | 0.1     | 3.3     | 4.2     |
| SA5111932 | 0.05    | 95.75   | 0.08    | 0.03    | 3       | 1       | 0.5     | 0.025   | 0.04    | 1       | 0.5     | 389    | 4       | 3       | 1       | 0.05    | 1.3     | 1.7     |
| SA5111933 | 2.4     | 41.70   | 0.28    | 0.26    | 290     | 3       | 3       | 0.77    | 0.91    | 7       | 4       | 562    | 9       | 20      | 22      | 0.05    | 4.9     | 5.7     |
| SA5111934 | 1.0     | 37.31   | 0.06    | 0.09    | 44      | 0.5     | 1       | 0.19    | 0.24    | 3       | 2       | 533    | 5       | 8       | 9       | 0.05    | 2.1     | 2.9     |
| SA5111935 | 2.2     | 28.79   | 0.23    | 0.17    | 103     | 0.5     | 1       | 0.24    | 0.31    | 4       | 4       | 1066   | 3       | 5       | 10      | 0.05    | 3.5     | 4.6     |
| SA5111936 | 0.4     | 33.89   | 0.09    | 0.04    | 18      | 0.5     | 0.5     | 0.12    | 0.15    | 2       | 0.5     | 506    | 3       | 5       | 4       | 0.05    | 1.7     | 2.4     |
| SA5111937 | 0.05    | 92.07   | 0.025   | 0.02    | 5       | 0.5     | 0.5     | 0.10    | 0.11    | 0.5     | 2       | 356    | 5       | 2.5     | 4       | 0.05    | 1.5     | 1.9     |
| SA5111938 | 0.05    | 93.67   | 0.05    | 0.04    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 359    | 8       | 2.5     | 1       | 0.05    | 0.5     | 0.7     |
| SA5111939 | 1.2     | 73.71   | 0.37    | 0.16    | 60      | 2       | 3       | 0.08    | 0.06    | 2       | 8       | 3173   | 2       | 2.5     | 4       | 0.05    | 5.9     | 6.4     |
| SA5111940 | 1.0     | 46.70   | 0.10    | 0.07    | 77      | 0.5     | 0.5     | 0.11    | 0.13    | 2       | 4       | 941    | 2       | 2.5     | 7       | 0.05    | 2.7     | 3.4     |
| SA5111941 | 1.2     | 42.12   | 0.17    | 0.12    | 101     | 0.5     | 0.5     | 0.66    | 0.75    | 5       | 3       | 479    | 6       | 16      | 18      | 0.05    | 4.0     | 4.7     |
| SA5111942 | 0.05    | 96.19   | 0.06    | 0.005   | 2       | 0.5     | 0.5     | 0.09    | 0.09    | 0.5     | 0.5     | 206    | 3       | 5       | 3       | 0.05    | 1.0     | 1.1     |
| SA5111943 | 9.3     | 24.12   | 0.77    | 0.75    | 463     | 0.5     | 2       | 1.10    | 1.18    | 10      | 17      | 2266   | 5       | 49      | 45      | 0.05    | 11.5    | 12.4    |
| SA5111944 | 0.05    | 63.32   | 0.025   | 0.02    | 9       | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 2       | 453    | 1       | 2.5     | 4       | 0.05    | 2.3     | 2.7     |
| SA5111945 | 0.05    | 96.48   | 0.08    | 0.03    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 353    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.5     |
| SA5111946 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5111947 | 2.5     | 30.00   | 0.09    | 0.10    | 61      | 0.5     | 2       | 0.21    | 0.25    | 8       | 2       | 560    | 5       | 2.5     | 10      | 0.05    | 2.3     | 2.8     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5111948 | 1.1     | 50.17   | 0.14    | 0.10    | 78      | 0.5     | 0.5     | 0.26    | 0.35    | 7       | 4       | 1017   | 10      | 9       | 9       | 0.05    | 3.1     | 4.1     |
| SA5111949 | 1.3     | 47.09   | 1.00    | 0.09    | 713     | 0.5     | 2       | 0.11    | 0.10    | 7       | 13      | 3017   | 7       | 2.5     | 6       | 0.05    | 8.9     | 10.0    |
| SA5111950 | 0.05    | 93.92   | 0.05    | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 428    | 3       | 2.5     | 1       | 0.1     | 0.7     | 0.8     |
| SA5111951 | 0.9     | 41.31   | 0.20    | 0.07    | 125     | 0.5     | 0.5     | 0.09    | 0.09    | 4       | 3       | 849    | 13      | 2.5     | 4       | 0.1     | 2.8     | 3.7     |
| SA5111952 | 1.5     | 38.05   | 0.23    | 0.13    | 174     | 0.5     | 1       | 0.15    | 0.19    | 6       | 5       | 957    | 10      | 2.5     | 9       | 0.05    | 3.4     | 4.2     |
| SA5111953 | 0.9     | 29.12   | 0.10    | 0.05    | 17      | 0.5     | 0.5     | 0.07    | 0.08    | 2       | 2       | 611    | 4       | 2.5     | 3       | 0.05    | 1.8     | 2.4     |
| SA5111954 | 0.6     | 30.89   | 0.08    | 0.05    | 41      | 0.5     | 1       | 0.10    | 0.13    | 3       | 1       | 524    | 6       | 2.5     | 7       | 0.05    | 1.8     | 2.4     |
| SA5111955 | 1.1     | 30.10   | 0.36    | 0.08    | 22      | 0.5     | 1       | 0.12    | 0.13    | 2       | 5       | 431    | 3       | 2.5     | 5       | 0.05    | 3.3     | 4.4     |
| SA5111956 | 2.8     | 29.68   | 0.08    | 0.16    | 68      | 0.5     | 0.5     | 0.21    | 0.28    | 3       | 4       | 567    | 6       | 7       | 13      | 0.05    | 2.4     | 3.4     |
| SA5111957 | 0.5     | 39.05   | 0.09    | 0.04    | 14      | 0.5     | 0.5     | 0.10    | 0.12    | 3       | 2       | 668    | 7       | 2.5     | 6       | 0.05    | 2.3     | 3.1     |
| SA5111958 | 0.8     | 35.72   | 1.00    | 0.08    | 3180    | 3       | 2       | 0.11    | 0.06    | 2       | 15      | 1552   | 2       | 2.5     | 6       | 0.05    | 8.0     | 7.6     |
| SA5111959 | 1.6     | 50.04   | 0.75    | 0.10    | 437     | 2       | 5       | 0.07    | 0.10    | 5       | 15      | 3042   | 4       | 2.5     | 7       | 0.05    | 6.3     | 9.9     |
| SA5111960 | 2.2     | 71.58   | 0.37    | 0.19    | 192     | 2       | 4       | 0.37    | 0.38    | 5       | 7       | 3822   | 18      | 9       | 13      | 0.05    | 6.1     | 6.5     |
| SA5111961 | 2.5     | 52.36   | 0.50    | 0.19    | 371     | 4       | 4       | 0.16    | 0.18    | 2       | 8       | 567    | 3       | 9       | 11      | 0.05    | 4.2     | 5.1     |
| SA5111962 | 0.05    | 89.24   | 0.11    | 0.03    | 0.5     | 0.5     | 0.5     | 0.07    | 0.08    | 1       | 2       | 382    | 4       | 2.5     | 1       | 0.05    | 1.7     | 2.2     |
| SA5111963 | 0.6     | 43.41   | 0.16    | 0.07    | 40      | 0.5     | 0.5     | 0.17    | 0.21    | 2       | 3       | 569    | 4       | 7       | 7       | 0.05    | 2.4     | 3.2     |
| SA5111964 | 2.2     | 46.24   | 0.23    | 0.18    | 108     | 0.5     | 0.5     | 0.25    | 0.31    | 4       | 7       | 680    | 11      | 10      | 10      | 0.2     | 3.5     | 4.6     |
| SA5111965 | 1.5     | 72.08   | 0.31    | 0.11    | 157     | 0.5     | 2       | 0.21    | 0.22    | 4       | 6       | 3990   | 6       | 2.5     | 8       | 0.05    | 5.2     | 6.0     |
| SA5111966 | 1.5     | 52.40   | 0.18    | 0.09    | 91      | 0.5     | 2       | 0.16    | 0.17    | 4       | 7       | 3396   | 3       | 2.5     | 8       | 0.05    | 4.5     | 6.0     |
| SA5111967 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5111968 | 0.05    | 90.48   | 0.025   | 0.005   | 0.5     | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 1       | 266    | 3       | 2.5     | 1       | 0.05    | 0.5     | 0.7     |
| SA5111969 | 0.05    | 78.83   | 0.06    | 0.005   | 0.5     | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 230    | 1       | 2.5     | 1       | 0.05    | 0.6     | 0.6     |
| SA5111970 | 0.05    | 97.87   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 304    | 2       | 2.5     | 1       | 0.05    | 0.6     | 0.7     |
| SA5111971 | 5.4     | 18.20   | 0.58    | 0.85    | 900     | 0.5     | 0.5     | 1.00    | 1.21    | 18      | 12      | 1731   | 10      | 24      | 28      | 0.05    | 11.8    | 15.0    |
| SA5111972 | 1.0     | 21.13   | 0.17    | 0.10    | 379     | 0.5     | 0.5     | 0.15    | 0.19    | 3       | 5       | 751    | 3       | 5       | 7       | 0.05    | 2.7     | 3.7     |
| SA5111973 | 1.0     | 36.03   | 0.18    | 0.07    | 35      | 0.5     | 0.5     | 0.07    | 0.08    | 1       | 3       | 910    | 2       | 2.5     | 1       | 0.05    | 2.5     | 3.4     |
| SA5111974 | 0.6     | 38.05   | 0.15    | 0.05    | 17      | 0.5     | 1       | 0.06    | 0.07    | 1       | 5       | 784    | 1       | 2.5     | 3       | 0.05    | 2.3     | 3.1     |
| SA5111975 | 1.5     | 36.84   | 0.33    | 0.14    | 137     | 0.5     | 1       | 0.17    | 0.20    | 3       | 7       | 1761   | 2       | 7       | 7       | 0.05    | 4.3     | 5.6     |
| SA5111976 | 1.5     | 37.50   | 0.25    | 0.12    | 132     | 0.5     | 2       | 0.21    | 0.25    | 4       | 4       | 1799   | 4       | 6       | 7       | 0.05    | 3.5     | 4.2     |
| SA5111977 | 1.2     | 73.98   | 0.11    | 0.06    | 105     | 0.5     | 1       | 0.51    | 0.62    | 13      | 3       | 817    | 11      | 20      | 20      | 0.05    | 4.4     | 4.7     |
| SA5111978 | 1.6     | 53.30   | 0.71    | 0.12    | 71      | 2       | 2       | 0.13    | 0.17    | 3       | 9       | 1852   | 3       | 6       | 9       | 0.05    | 4.8     | 6.5     |
| SA5111979 | 1.0     | 33.46   | 0.14    | 0.05    | 33      | 0.5     | 2       | 0.10    | 0.11    | 4       | 3       | 1416   | 2       | 2.5     | 3       | 0.05    | 2.7     | 3.7     |
| SA5111980 | 1.9     | 31.33   | 0.15    | 0.15    | 200     | 7       | 6       | 0.27    | 0.34    | 3       | 5       | 825    | 3       | 12      | 11      | 0.05    | 3.7     | 5.1     |
| SA5111981 | 0.9     | 25.64   | 0.11    | 0.10    | 62      | 0.5     | 1       | 0.28    | 0.38    | 2       | 2       | 654    | 4       | 10      | 9       | 0.05    | 2.0     | 2.7     |
| SA5111982 | 0.7     | 17.22   | 0.12    | 0.07    | 24      | 0.5     | 0.5     | 0.12    | 0.17    | 2       | 1       | 766    | 3       | 2.5     | 4       | 0.05    | 2.0     | 2.8     |
| SA5111983 | 1.0     | 38.41   | 0.51    | 0.08    | 319     | 2       | 3       | 0.10    | 0.08    | 4       | 6       | 3197   | 2       | 2.5     | 2       | 0.05    | 3.9     | 4.6     |
| SA5111984 | 0.6     | 36.32   | 0.10    | 0.07    | 36      | 0.5     | 0.5     | 0.23    | 0.14    | 3       | 3       | 1559   | 1       | 2.5     | 2       | 0.05    | 2.3     | 3.1     |
| SA5111985 | 0.6     | 33.82   | 0.54    | 0.11    | 222     | 10      | 8       | 0.16    | 0.05    | 4       | 17      | 3195   | 0.5     | 2.5     | 3       | 0.05    | 5.2     | 6.0     |
| SA5111986 | 1.2     | 23.77   | 0.06    | 0.08    | 33      | 0.5     | 0.5     | 0.25    | 0.12    | 2       | 3       | 581    | 12      | 2.5     | 1       | 0.05    | 1.9     | 2.6     |
| SA5111987 | 1.2     | 31.79   | 0.20    | 0.08    | 58      | 2       | 2       | 0.09    | 0.08    | 2       | 9       | 1072   | 0.5     | 2.5     | 2       | 0.05    | 2.4     | 3.5     |
| SA5111988 | 1.1     | 30.88   | 0.20    | 0.10    | 110     | 0.5     | 0.5     | 0.13    | 0.12    | 2       | 6       | 1242   | 0.5     | 2.5     | 1       | 0.05    | 2.8     | 3.9     |
| SA5111989 | 1.4     | 42.89   | 0.22    | 0.12    | 90      | 0.5     | 0.5     | 0.19    | 0.18    | 3       | 7       | 1065   | 2       | 5       | 6       | 0.05    | 4.3     | 5.8     |
| SA5111990 | 2.2     | 37.71   | 0.16    | 0.21    | 162     | 0.5     | 0.5     | 0.30    | 0.36    | 3       | 7       | 528    | 5       | 8       | 11      | 0.05    | 3.3     | 4.4     |
| SA5111991 | 0.05    | 96.51   | 0.025   | 0.03    | 17      | 0.5     | 0.5     | 0.05    | 0.03    | 0.5     | 0.5     | 305    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5111992 | 0.5     | 27.72   | 0.12    | 0.05    | 44      | 0.5     | 0.5     | 0.08    | 0.07    | 2       | 2       | 917    | 0.5     | 2.5     | 1       | 0.05    | 1.8     | 2.4     |
| SA5111993 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5111994 | 0.05    | 97.27   | 0.10    | 0.01    | 7       | 0.5     | 0.5     | 0.07    | 0.02    | 0.5     | 0.5     | 281    | 4       | 2.5     | 1       | 0.2     | 0.7     | 0.8     |
| SA5111995 | 0.4     | 31.00   | 0.14    | 0.05    | 33      | 0.5     | 0.5     | 0.15    | 0.11    | 2       | 1       | 443    | 4       | 7       | 5       | 0.05    | 2.0     | 2.7     |
| SA5111996 | 0.9     | 33.70   | 0.39    | 0.13    | 633     | 3       | 4       | 0.08    | 0.05    | 2       | 14      | 2851   | 0.5     | 2.5     | 3       | 0.05    | 3.9     | 4.9     |
| SA5111997 | 0.5     | 24.47   | 0.13    | 0.04    | 53      | 0.5     | 0.5     | 0.10    | 0.08    | 2       | 2       | 988    | 4       | 2.5     | 1       | 0.05    | 1.8     | 2.6     |
| SA5111998 | 0.05    | 98.00   | 0.025   | 0.03    | 8       | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 203    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5111999 | 1.9     | 31.24   | 0.19    | 0.15    | 182     | 0.5     | 1       | 0.19    | 0.21    | 2       | 8       | 807    | 6       | 7       | 6       | 0.05    | 3.1     | 4.1     |
| SA5112000 | 0.5     | 46.53   | 0.12    | 0.05    | 21      | 0.5     | 0.5     | 0.11    | 0.10    | 2       | 1       | 647    | 3       | 2.5     | 1       | 0.05    | 1.9     | 2.6     |
| SA5112001 | 8.3     | 2.98    | 0.81    | 1.25    | 1070    | 1       | 1       | 2.50    | 2.65    | 24      | 17      | 3145   | 8       | 68      | 67      | 0.05    | 19.4    | 21.6    |
| SA5112002 | 0.1     | 95.82   | 0.06    | 0.09    | 29      | 0.5     | 0.5     | 0.08    | 0.08    | 0.5     | 0.5     | 265    | 3       | 2.5     | 3       | 0.05    | 0.6     | 0.8     |
| SA5112003 | 3.3     | 33.36   | 0.45    | 0.54    | 459     | 3       | 4       | 1.10    | 1.20    | 8       | 10      | 1289   | 4       | 26      | 25      | 0.05    | 9.2     | 10.3    |
| SA5112004 | 0.05    | 97.05   | 0.52    | 0.03    | 2       | 4       | 0.5     | 1.10    | 0.03    | 0.5     | 0.5     | 236    | 3       | 27      | 1       | 0.05    | 9.3     | 0.4     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112005 | 0.05    | 97.47   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 235    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112006 | 0.05    | 98.29   | 0.11    | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 227    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.4     |
| SA5112007 | 2.4     | 51.27   | 0.25    | 0.45    | 619     | 0.5     | 0.5     | 1.20    | 1.39    | 24      | 5       | 772    | 13      | 33      | 33      | 0.2     | 10.2    | 11.3    |
| SA5112008 | 2.8     | 36.30   | 0.16    | 0.30    | 248     | 0.5     | 0.5     | 0.66    | 0.75    | 6       | 5       | 596    | 7       | 14      | 17      | 0.2     | 5.8     | 7.1     |
| SA5112009 | 0.05    | 98.43   | 0.025   | 0.005   | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 227    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112010 | 0.05    | 97.93   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 238    | 4       | 2.5     | 1       | 0.2     | 0.3     | 0.4     |
| SA5112011 | 0.05    | 84.92   | 0.08    | 0.02    | 37      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 5       | 268    | 4       | 2.5     | 1       | 0.2     | 1.0     | 1.3     |
| SA5112012 | 0.05    | 97.94   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 195    | 1       | 2.5     | 1       | 0.05    | 0.4     | 0.5     |
| SA5112013 | 0.05    | 98.09   | 0.025   | 0.03    | 7       | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 248    | 7       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5112014 | 7.4     | 3.42    | 0.73    | 1.12    | 846     | 0.5     | 0.5     | 2.60    | 2.53    | 21      | 13      | 3133   | 9       | 62      | 58      | 0.05    | 18.2    | 17.0    |
| SA5112015 | 0.05    | 97.17   | 0.025   | 0.03    | 7       | 0.5     | 0.5     | 0.05    | 0.05    | 0.5     | 0.5     | 269    | 5       | 2.5     | 1       | 0.05    | 0.5     | 0.4     |
| SA5112016 | 0.05    | 98.46   | 0.025   | 0.04    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 187    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112017 | 0.05    | 97.95   | 0.025   | 0.01    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 198    | 4       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112018 | 4.9     | 5.08    | 0.73    | 1.02    | 1074    | 0.5     | 0.5     | 2.80    | 2.71    | 29      | 10      | 1718   | 11      | 59      | 53      | 0.05    | 20.6    | 18.8    |
| SA5112019 | 0.05    | 98.12   | 0.06    | 0.01    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 324    | 2       | 2.5     | 1       | 0.1     | 0.6     | 0.8     |
| SA5112020 | 0.05    | 97.35   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 309    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112021 | 4.4     | 8.51    | 0.68    | 0.87    | 1060    | 0.5     | 0.5     | 2.70    | 2.60    | 37      | 9       | 781    | 17      | 66      | 67      | 0.05    | 17.6    | 15.6    |
| SA5112022 | 0.05    | 97.14   | 0.025   | 0.02    | 11      | 0.5     | 0.5     | 0.11    | 0.06    | 0.5     | 0.5     | 211    | 4       | 2.5     | 2       | 0.05    | 0.6     | 0.7     |
| SA5112023 | 0.05    | 98.38   | 0.025   | 0.02    | 5       | 0.5     | 0.5     | 0.09    | 0.01    | 0.5     | 0.5     | 271    | 5       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112024 | 0.05    | 97.18   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.13    | 0.02    | 0.5     | 0.5     | 301    | 8       | 2.5     | 1       | 0.1     | 0.4     | 0.5     |
| SA5112025 | 0.05    | 97.99   | 0.025   | 0.02    | 4       | 0.5     | 0.5     | 0.13    | 0.02    | 0.5     | 0.5     | 266    | 5       | 2.5     | 1       | 0.05    | 0.4     | 0.5     |
| SA5112026 | 0.05    | 95.31   | 0.025   | 0.02    | 3       | 0.5     | 0.5     | 0.08    | 0.03    | 0.5     | 0.5     | 374    | 3       | 2.5     | 1       | 0.05    | 0.7     | 0.9     |
| SA5112027 | 0.05    | 98.06   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.07    | 0.01    | 0.5     | 0.5     | 243    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112028 | 0.05    | 98.37   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.06    | 0.01    | 0.5     | 0.5     | 337    | 2       | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112029 | 0.05    | 97.49   | 0.025   | 0.02    | 5       | 0.5     | 0.5     | 0.08    | 0.04    | 0.5     | 0.5     | 213    | 5       | 2.5     | 1       | 0.1     | 0.5     | 0.4     |
| SA5112030 | 0.05    | 98.37   | 0.025   | 0.01    | 0.5     | 0.5     | 0.5     | 0.07    | 0.01    | 0.5     | 0.5     | 246    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112031 | 0.05    | 98.52   | 0.025   | 0.005   | 0.5     | 0.5     | 0.5     | 0.09    | 0.02    | 0.5     | 0.5     | 244    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112032 | 0.6     | 32.71   | 0.28    | 0.08    | 15      | 0.5     | 0.5     | 0.17    | 0.10    | 0.5     | 0.5     | 1600   | 5       | 2.5     | 1       | 0.05    | 2.9     | 3.6     |
| SA5112033 | 5.2     | 15.46   | 0.52    | 0.80    | 616     | 0.5     | 0.5     | 1.60    | 1.73    | 14      | 10      | 1108   | 7       | 42      | 43      | 0.05    | 12.7    | 13.6    |
| SA5112034 | 0.05    | 96.01   | 0.07    | 0.03    | 5       | 0.5     | 0.5     | 0.11    | 0.04    | 0.5     | 0.5     | 296    | 4       | 2.5     | 1       | 0.05    | 0.3     | 0.4     |
| SA5112035 | 0.05    | 97.56   | 0.025   | 0.03    | 6       | 0.5     | 0.5     | 0.09    | 0.02    | 0.5     | 0.5     | 311    | 4       | 2.5     | 1       | 0.05    | 0.4     | 0.3     |
| SA5112036 | 1.6     | 35.78   | 0.36    | 0.09    | 52      | 0.5     | 0.5     | 0.19    | 0.18    | 4       | 5       | 1190   | 5       | 8       | 9       | 0.05    | 2.6     | 3.6     |
| SA5112037 | 0.05    | 97.72   | 0.025   | 0.005   | 0.5     | 0.5     | 0.5     | 0.05    | 0.03    | 0.5     | 0.5     | 376    | 3       | 2.5     | 1       | 0.05    | 0.6     | 0.7     |
| SA5112038 | 1.5     | 27.50   | 0.06    | 0.10    | 31      | 0.5     | 0.5     | 0.16    | 0.15    | 2       | 2       | 941    | 4       | 7       | 7       | 0.05    | 1.9     | 2.5     |
| SA5112039 | 0.2     | 28.60   | 0.07    | 0.03    | 5       | 0.5     | 0.5     | 0.07    | 0.06    | 0.5     | 2       | 616    | 4       | 2.5     | 2       | 0.05    | 1.0     | 1.3     |
| SA5112040 | 0.05    | 85.65   | 0.60    | 0.02    | 0.5     | 0.5     | 1       | 0.06    | 0.04    | 1       | 4       | 604    | 4       | 2.5     | 1       | 0.05    | 4.2     | 5.4     |
| SA5112041 | 0.05    | 98.19   | 0.025   | 0.01    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 225    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.4     |
| SA5112042 | 0.05    | 97.40   | 0.025   | 0.01    | 0.5     | 0.5     | 0.5     | 0.06    | 0.03    | 0.5     | 0.5     | 197    | 2       | 2.5     | 1       | 0.1     | 0.5     | 0.5     |
| SA5112043 | 0.05    | 97.51   | 0.025   | 0.05    | 10      | 0.5     | 0.5     | 0.06    | 0.03    | 0.5     | 0.5     | 274    | 4       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112044 | 0.05    | 97.67   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.08    | 0.02    | 0.5     | 0.5     | 248    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5112045 | 0.05    | 96.95   | 0.025   | 0.02    | 8       | 0.5     | 0.5     | 0.05    | 0.03    | 0.5     | 0.5     | 312    | 8       | 2.5     | 1       | 0.2     | 0.4     | 0.4     |
| SA5112046 | 0.05    | 96.39   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 277    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5112047 | 0.05    | 97.88   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 200    | 13      | 2.5     | 1       | 0.3     | 0.1     | 0.2     |
| SA5112048 | 0.05    | 97.62   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.01    | 0.5     | 0.5     | 414    | 6       | 2.5     | 1       | 0.05    | 0.6     | 0.6     |
| SA5112049 | 0.05    | 98.25   | 0.05    | 0.02    | 0.5     | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 262    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112050 | 0.05    | 98.29   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.05    | 0.02    | 0.5     | 0.5     | 281    | 15      | 2.5     | 1       | 0.2     | 0.2     | 0.2     |
| SA5112051 | 0.05    | 98.35   | 0.06    | 0.02    | 2       | 0.5     | 0.5     | 0.025   | 0.01    | 0.5     | 0.5     | 218    | 11      | 2.5     | 1       | 0.2     | 0.3     | 0.2     |
| SA5112052 | 6.6     | 8.03    | 0.58    | 0.93    | 675     | 0.5     | 1       | 2.30    | 2.25    | 14      | 13      | 1647   | 8       | 48      | 50      | 0.05    | 16.0    | 15.8    |
| SA5112053 | 0.05    | 97.60   | 0.025   | 0.02    | 0.5     | 0.5     | 0.5     | 0.08    | 0.03    | 0.5     | 0.5     | 212    | 16      | 2.5     | 1       | 0.05    | 0.9     | 0.7     |
| SA5112054 | 0.05    | 95.72   | 0.09    | 0.03    | 26      | 0.5     | 0.5     | 0.08    | 0.02    | 0.5     | 0.5     | 345    | 3       | 2.5     | 1       | 0.05    | 0.7     | 1.1     |
| SA5112055 | 0.05    | 97.50   | -9      | 0.01    | 25      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 181    | 5       | -9      | 2       | -9      | -9      | 0.6     |
| SA5112056 | 0.05    | 97.82   | 0.07    | 0.01    | 20      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 214    | 3       | 2.5     | 2       | 0.1     | 0.4     | 0.5     |
| SA5112057 | 0.05    | 97.53   | 0.09    | 0.03    | 22      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 256    | 2       | 2.5     | 1       | 0.05    | 0.7     | 0.9     |
| SA5112058 | 0.05    | 96.77   | 0.10    | 0.02    | 38      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 287    | 3       | 2.5     | 1       | 0.05    | 0.9     | 1.1     |
| SA5112059 | 1.9     | 28.26   | 0.27    | 0.27    | 219     | 0.5     | 0.5     | 0.58    | 0.66    | 4       | 7       | 549    | 5       | 13      | 18      | 0.05    | 4.7     | 5.6     |
| SA5112060 | 0.4     | 78.83   | 0.15    | 0.08    | 63      | 0.5     | 0.5     | 0.15    | 0.14    | 1       | 0.5     | 327    | 2       | 2.5     | 5       | 0.05    | 1.6     | 1.7     |
| SA5112061 | 0.05    | 97.87   | 0.025   | 0.05    | 27      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 200    | 4       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |    |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|----|
| SA5112062 | 4.4     | 18.20   | 0.45    | 0.66    | 665     | 0.5     | 0.5     | 1.40    | 1.57    | 10      | 11      | 1589   | 4       | 30      | 36      | 0.05    | 12.2    | 13.9    |    |
| SA5112063 | 0.05    | 98.20   | 0.06    | 0.08    | 43      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 282    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |    |
| SA5112064 | 4.2     | 15.82   | 0.53    | 0.76    | 770     | 0.5     | 0.5     | 1.60    | 1.78    | 12      | 12      | 1690   | 8       | 35      | 39      | 0.2     | 13.5    | 16.1    |    |
| SA5112065 | 0.05    | 96.36   | 0.025   | 0.04    | 43      | 0.5     | 0.5     | 0.07    | 0.07    | 0.5     | 0.5     | 265    | 14      | 2.5     | 4       | 0.3     | 0.4     | 0.6     |    |
| SA5112066 | 0.05    | 97.89   | -9      | 0.03    | 28      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 180    | 3       | -9      | 2       | -9      | -9      | 0.4     |    |
| SA5112067 | 0.05    | 84.82   | 0.33    | 0.04    | 64      | 0.5     | 0.5     | 0.08    | 0.07    | 1       | 4       | 909    | 7       | 2.5     | 1       | 0.05    | 4.3     | 5.5     |    |
| SA5112068 | 0.05    | 67.40   | -9      | 0.04    | 24      | -9      | 0.5     | -9      | 0.05    | 0.5     | 1       | 849    | 11      | -9      | 3       | -9      | -9      | 0.8     |    |
| SA5112069 | 0.05    | 98.02   | 0.025   | 0.04    | 37      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 278    | 2       | 2.5     | 1       | 0.05    | 0.6     | 0.6     |    |
| SA5112070 | 1.4     | 38.48   | 0.31    | 0.17    | 194     | 0.5     | 0.5     | 0.34    | 0.42    | 3       | 8       | 728    | 5       | 10      | 15      | 0.05    | 4.7     | 5.8     |    |
| SA5112071 | 0.05    | 98.31   | 0.025   | 0.03    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 323    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.4     |    |
| SA5112072 | 0.2     | 95.44   | -9      | 0.04    | 48      | -9      | 0.5     | -9      | 0.10    | 0.5     | 0.5     | 281    | 13      | -9      | 4       | -9      | -9      | 0.8     |    |
| SA5112073 | 5.5     | 15.82   | 0.69    | 1.10    | 1014    | 0.5     | 0.5     | 2.00    | 2.15    | 12      | 16      | 1993   | 7       | 43      | 46      | 0.05    | 16.3    | 18.1    |    |
| SA5112074 | 0.1     | 89.24   | 0.09    | 0.07    | 111     | 0.5     | 0.5     | 0.10    | 0.12    | 0.5     | 3       | 546    | 8       | 2.5     | 6       | 0.2     | 1.5     | 1.9     |    |
| SA5112075 | 0.05    | 97.49   | 0.05    | 0.01    | 22      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 398    | 5       | 2.5     | 3       | 0.05    | 0.6     | 0.7     |    |
| SA5112076 | 0.05    | 97.99   | 0.025   | 0.01    | 21      | 0.5     | 0.5     | 0.025   | 0.01    | 0.5     | 0.5     | 364    | 3       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |    |
| SA5112077 | 0.3     | 41.89   | 0.06    | 0.11    | 93      | 0.5     | 0.5     | 0.12    | 0.15    | 1       | 9       | 902    | 5       | 2.5     | 6       | 0.2     | 2.5     | 3.7     |    |
| SA5112078 | 2.8     | 27.34   | 0.29    | 0.33    | 324     | 0.5     | 0.5     | 0.50    | 0.61    | 4       | 5       | 1239   | 4       | 11      | 14      | 0.05    | 6.9     | 9.0     |    |
| SA5112079 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      | -9 |
| SA5112080 | 0.05    | 94.00   | 0.025   | 0.02    | 32      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 375    | 4       | 2.5     | 3       | 0.05    | 0.3     | 0.4     |    |
| SA5112081 | 0.05    | 97.34   | 0.025   | 0.01    | 20      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 210    | 2       | 2.5     | 1       | 0.05    | 0.5     | 0.6     |    |
| SA5112082 | 0.05    | 97.86   | -9      | 0.01    | 30      | -9      | 0.5     | -9      | 0.04    | 0.5     | 10      | 166    | 2       | -9      | 5       | -9      | -9      | 0.4     |    |
| SA5112083 | 0.05    | 97.65   | 0.025   | 0.01    | 23      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 198    | 1       | 2.5     | 1       | 0.05    | 0.5     | 0.6     |    |
| SA5112084 | 0.2     | -9      | 0.05    | 0.02    | 21      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 208    | 9       | 2.5     | 1       | 0.1     | 0.5     | 0.6     |    |
| SA5112085 | 0.05    | 98.16   | 0.025   | 0.02    | 23      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 257    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |    |
| SA5112086 | 0.05    | 97.67   | 0.025   | 0.02    | 29      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 309    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |    |
| SA5112087 | 0.05    | 98.17   | 0.025   | 0.005   | 17      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 1       | 199    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |    |
| SA5112088 | 0.05    | 98.14   | 0.025   | 0.01    | 20      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 260    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |    |
| SA5112089 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      | -9 |
| SA5112090 | 0.05    | 98.45   | 0.025   | 0.005   | 24      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 246    | 2       | 2.5     | 1       | 0.05    | 0.5     | 0.5     |    |
| SA5112091 | 0.05    | 95.65   | 0.05    | 0.02    | 49      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 302    | 4       | 2.5     | 1       | 0.05    | 0.9     | 1.3     |    |
| SA5112092 | 0.05    | 96.42   | 0.07    | 0.02    | 43      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 3       | 325    | 0.5     | 2.5     | 1       | 0.05    | 0.6     | 0.8     |    |
| SA5112093 | 0.2     | 21.84   | 0.15    | 0.06    | 106     | 0.5     | 0.5     | 0.12    | 0.14    | 2       | 1       | 1491   | 8       | 2.5     | 5       | 0.2     | 3.2     | 4.6     |    |
| SA5112094 | 0.05    | 97.57   | 0.025   | 0.02    | 28      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 469    | 4       | 2.5     | 2       | 0.05    | 0.2     | 0.2     |    |
| SA5112095 | 0.3     | 25.85   | 0.025   | 0.03    | 26      | 0.5     | 2       | 0.07    | 0.08    | 2       | 0.5     | 315    | 3       | 2.5     | 6       | 0.05    | 1.2     | 1.7     |    |
| SA5112096 | 0.2     | 47.22   | 0.14    | 0.04    | 37      | 0.5     | 0.5     | 0.025   | 0.06    | 3       | 2       | 506    | 4       | 2.5     | 7       | 0.05    | 2.2     | 3.1     |    |
| SA5112097 | 3.7     | 30.14   | 0.28    | 0.20    | 153     | 0.5     | 0.5     | 0.43    | 0.53    | 6       | 3       | 604    | 5       | 14      | 20      | 0.05    | 3.3     | 4.6     |    |
| SA5112098 | 9.0     | 24.71   | 0.49    | 0.82    | 688     | 4       | 3       | 1.60    | 1.90    | 24      | 11      | 1202   | 13      | 53      | 65      | 0.05    | 10.3    | 13.1    |    |
| SA5112099 | 0.4     | 41.56   | 0.22    | 0.04    | 62      | 0.5     | 0.5     | 0.025   | 0.05    | 4       | 4       | 1948   | 3       | 2.5     | 9       | 0.05    | 2.8     | 4.2     |    |
| SA5112100 | 0.05    | 97.40   | 0.05    | 0.01    | 25      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 4       | 232    | 4       | 2.5     | 2       | 0.1     | 0.5     | 0.6     |    |
| SA5112101 | 0.05    | 96.91   | 0.025   | 0.03    | 29      | 0.5     | 0.5     | 0.06    | 0.06    | 0.5     | 0.5     | 278    | 8       | 2.5     | 5       | 0.1     | 0.3     | 0.4     |    |
| SA5112102 | 1.3     | 21.84   | 0.11    | 0.10    | 65      | 0.5     | 0.5     | 0.12    | 0.15    | 2       | 0.5     | 516    | 2       | 6       | 6       | 0.05    | 1.5     | 2.0     |    |
| SA5112103 | 0.05    | 97.15   | 0.025   | 0.09    | 50      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 171    | 2       | 2.5     | 4       | 0.05    | 0.3     | 0.2     |    |
| SA5112104 | 5.6     | 22.41   | 0.44    | 1.61    | 860     | 0.5     | 3       | 1.50    | 1.72    | 19      | 22      | 546    | 6       | 44      | 52      | 0.05    | 18.5    | 21.8    |    |
| SA5112105 | 0.2     | 38.68   | 0.08    | 0.05    | 46      | 0.5     | 0.5     | 0.08    | 0.08    | 3       | 1       | 706    | 3       | 2.5     | 7       | 0.05    | 2.1     | 2.7     |    |
| SA5112106 | 1.7     | 50.68   | 0.26    | 0.11    | 299     | 5       | 6       | 0.15    | 0.17    | 7       | 6       | 2983   | 14      | 2.5     | 10      | 0.05    | 4.4     | 5.7     |    |
| SA5112107 | 2.7     | 43.77   | 0.29    | 0.15    | 113     | 0.5     | 3       | 0.15    | 0.16    | 5       | 6       | 1775   | 5       | 2.5     | 10      | 0.05    | 5.3     | 7.3     |    |
| SA5112108 | 0.05    | 32.62   | 0.025   | 0.02    | 20      | 0.5     | 0.5     | 0.025   | 0.04    | 2       | 1       | 352    | 4       | 2.5     | 7       | 0.05    | 1.4     | 2.2     |    |
| SA5112109 | 0.4     | 31.85   | 0.12    | 0.03    | 57      | 0.5     | 0.5     | 0.06    | 0.06    | 2       | 2       | 570    | 4       | 2.5     | 7       | 0.05    | 1.8     | 2.6     |    |
| SA5112110 | 2.2     | 32.34   | 0.21    | 0.34    | 265     | 0.5     | 1       | 0.63    | 0.77    | 8       | 5       | 547    | 10      | 16      | 24      | 0.05    | 5.2     | 6.7     |    |
| SA5112111 | 0.05    | 98.40   | 0.025   | 0.05    | 26      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 249    | 2       | 2.5     | 4       | 0.05    | 0.2     | 0.2     |    |
| SA5112112 | 1.0     | 40.51   | 0.29    | 0.07    | 312     | 0.5     | 2       | 0.06    | 0.06    | 3       | 4       | 1161   | 4       | 2.5     | 6       | 0.05    | 3.6     | 4.8     |    |
| SA5112113 | 4.2     | 40.57   | 0.18    | 0.36    | 228     | 0.5     | 2       | 0.38    | 0.44    | 6       | 7       | 1437   | 6       | 12      | 17      | 0.05    | 5.6     | 7.0     |    |
| SA5112114 | 1.4     | 50.56   | 0.15    | 0.09    | 98      | 0.5     | 2       | 0.09    | 0.09    | 4       | 6       | 2742   | 4       | 2.5     | 10      | 0.05    | 4.5     | 5.9     |    |
| SA5112115 | 0.6     | 33.72   | 0.13    | 0.06    | 78      | 0.5     | 1       | 0.06    | 0.07    | 2       | 5       | 1682   | 2       | 2.5     | 7       | 0.05    | 2.9     | 4.1     |    |
| SA5112116 | 0.9     | 29.65   | 0.11    | 0.14    | 112     | 0.5     | 1       | 0.28    | 0.32    | 4       | 4       | 479    | 9       | 7       | 12      | 0.1     | 3.6     | 4.7     |    |
| SA5112117 | 0.05    | 97.89   | 0.06    | 0.02    | 23      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 231    | 2       | 2.5     | 4       | 0.05    | 0.3     | 0.4     |    |
| SA5112118 | 1.9     | 30.28   | 0.10    | 0.18    | 157     | 0.5     | 0.5     | 0.28    | 0.40    | 6       | 3       | 994    | 4       | 8       | 16      | 0.05    | 3.0     | 4.7     |    |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112119 | 0.05    | 97.85   | 0.025   | 0.02    | 25      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 239    | 4       | 2.5     | 4       | 0.1     | 0.4     | 0.3     |
| SA5112120 | 1.0     | 41.29   | 0.10    | 0.08    | 72      | 0.5     | 0.5     | 0.14    | 0.17    | 3       | 3       | 630    | 8       | 7       | 11      | 0.1     | 3.0     | 3.9     |
| SA5112121 | 0.05    | 39.46   | 0.10    | 0.04    | 81      | 0.5     | 0.5     | 0.10    | 0.10    | 2       | 0.5     | 747    | 4       | 2.5     | 7       | 0.05    | 1.6     | 2.2     |
| SA5112122 | 0.5     | 37.24   | 0.10    | 0.08    | 89      | 0.5     | 0.5     | 0.17    | 0.19    | 3       | 2       | 702    | 2       | 2.5     | 8       | 0.05    | 3.2     | 3.9     |
| SA5112123 | 0.05    | 80.46   | 0.025   | 0.05    | 32      | 0.5     | 0.5     | 0.08    | 0.08    | 2       | 5       | 771    | 6       | 2.5     | 9       | 0.05    | 3.1     | 3.4     |
| SA5112124 | 1.6     | 44.99   | 0.12    | 0.12    | 132     | 0.5     | 0.5     | 0.10    | 0.12    | 3       | 8       | 605    | 1       | 2.5     | 7       | 0.05    | 4.1     | 5.0     |
| SA5112125 | 1.3     | 48.30   | 0.38    | 0.14    | 497     | 4       | 3       | 0.13    | 0.10    | 4       | 14      | 2311   | 0.5     | 2.5     | 7       | 0.05    | 6.2     | 6.9     |
| SA5112126 | 1.9     | 39.23   | 0.09    | 0.15    | 86      | 0.5     | 0.5     | 0.12    | 0.14    | 3       | 5       | 632    | 2       | 2.5     | 5       | 0.05    | 3.7     | 4.2     |
| SA5112127 | 0.6     | 55.01   | 0.42    | 0.06    | 50      | 0.5     | 0.5     | 0.025   | 0.04    | 2       | 16      | 540    | 15      | 2.5     | 4       | 0.05    | 4.0     | 6.6     |
| SA5112128 | 5.1     | 46.95   | -9      | 0.37    | 263     | -9      | 1       | -9      | 0.45    | 10      | 16      | 940    | 5       | -9      | 20      | -9      | -9      | 9.6     |
| SA5112129 | 1.5     | 38.33   | 0.16    | 0.14    | 92      | 0.5     | 2       | 0.18    | 0.23    | 7       | 5       | 840    | 5       | 7       | 11      | 0.05    | 3.6     | 5.0     |
| SA5112130 | 0.9     | 27.43   | 0.14    | 0.06    | 33      | 0.5     | 0.5     | 0.07    | 0.08    | 3       | 3       | 340    | 2       | 2.5     | 5       | 0.05    | 1.8     | 2.6     |
| SA5112131 | 0.05    | 97.69   | 0.06    | 0.04    | 36      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 153    | 3       | 2.5     | 2       | 0.05    | 0.3     | 0.3     |
| SA5112132 | 3.9     | 40.97   | 2.30    | 0.27    | 379     | 4       | 5       | 0.34    | 0.36    | 5       | 26      | 2474   | 5       | 13      | 15      | 0.05    | 11.9    | 13.9    |
| SA5112133 | 0.05    | 95.30   | 0.025   | 0.03    | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 299    | 4       | 2.5     | 3       | 0.05    | 0.7     | 0.9     |
| SA5112134 | 0.05    | 97.30   | -9      | 0.08    | 60      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 197    | 0.5     | -9      | 3       | -9      | -9      | 0.2     |
| SA5112135 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112136 | 0.05    | 98.13   | 0.025   | 0.14    | 49      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 241    | 4       | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112137 | 0.05    | 97.48   | -9      | 0.03    | 25      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 373    | 6       | -9      | 2       | -9      | -9      | 0.3     |
| SA5112138 | 1.1     | 33.94   | 0.10    | 0.06    | 37      | 0.5     | 1       | 0.07    | 0.09    | 2       | 5       | 422    | 4       | 2.5     | 5       | 0.05    | 2.2     | 2.9     |
| SA5112139 | 6.2     | 36.42   | 0.18    | 0.29    | 139     | 0.5     | 1       | 0.26    | 0.26    | 5       | 11      | 1224   | 5       | 11      | 18      | 0.05    | 4.0     | 6.5     |
| SA5112140 | 0.05    | 98.41   | 0.025   | 0.11    | 37      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 184    | 2       | 2.5     | 1       | 0.05    | 0.05    | 0.2     |
| SA5112141 | 0.05    | 95.01   | 0.48    | 0.03    | 35      | 0.5     | 0.5     | 0.025   | 0.03    | 2       | 5       | 500    | 5       | 2.5     | 1       | 0.05    | 3.8     | 5.1     |
| SA5112142 | 3.3     | 16.65   | 0.28    | 0.12    | 380     | 0.5     | 0.5     | 0.11    | 0.15    | 4       | 9       | 698    | 5       | 5       | 7       | 0.05    | 3.5     | 4.8     |
| SA5112143 | 19.7    | 31.57   | 1.10    | 1.09    | 567     | 4       | 6       | 1.30    | 1.41    | 19      | 28      | 1257   | 49      | 70      | 77      | 0.05    | 14.4    | 15.5    |
| SA5112144 | 1.0     | 24.72   | 0.12    | 0.06    | 37      | 0.5     | 0.5     | 0.07    | 0.07    | 2       | 2       | 364    | 3       | 2.5     | 5       | 0.05    | 2.5     | 3.2     |
| SA5112145 | 0.2     | 39.70   | 0.19    | 0.03    | 52      | 0.5     | 0.5     | 0.05    | 0.06    | 3       | 2       | 383    | 10      | 2.5     | 3       | 0.2     | 2.8     | 3.7     |
| SA5112146 | 0.8     | 60.32   | 0.29    | 0.06    | 64      | 0.5     | 0.5     | 0.10    | 0.09    | 5       | 2       | 572    | 11      | 2.5     | 4       | 0.05    | 3.6     | 4.3     |
| SA5112147 | 2.1     | 45.26   | 0.18    | 0.16    | 158     | 0.5     | 2       | 0.29    | 0.37    | 7       | 5       | 721    | 6       | 2.5     | 12      | 0.05    | 4.4     | 5.9     |
| SA5112148 | 0.5     | 29.89   | 0.14    | 0.06    | 61      | 0.5     | 0.5     | 0.11    | 0.13    | 1       | 0.5     | 529    | 10      | 2.5     | 5       | 0.05    | 1.6     | 2.2     |
| SA5112149 | 2.2     | 24.50   | 0.25    | 0.36    | 325     | 0.5     | 0.5     | 0.62    | 0.86    | 5       | 7       | 438    | 4       | 14      | 20      | 0.1     | 4.8     | 7.0     |
| SA5112150 | 0.05    | 97.70   | 0.025   | 0.005   | 25      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 199    | 1       | 2.5     | 1       | 0.05    | 0.5     | 0.4     |
| SA5112151 | 0.05    | 94.75   | 0.15    | 0.02    | 85      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 6       | 350    | 2       | 2.5     | 1       | 0.05    | 1.1     | 1.3     |
| SA5112152 | 0.05    | 97.65   | 0.025   | 0.01    | 23      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 1       | 205    | 3       | 2.5     | 3       | 0.05    | 0.5     | 0.5     |
| SA5112153 | 0.05    | 97.35   | 0.09    | 0.02    | 23      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 296    | 2       | 2.5     | 1       | 0.05    | 0.5     | 0.7     |
| SA5112154 | 0.05    | 97.79   | 0.025   | 0.01    | 21      | 0.5     | 2       | 0.025   | 0.02    | 0.5     | 0.5     | 189    | 2       | 2.5     | 4       | 0.05    | 0.4     | 0.3     |
| SA5112155 | 0.05    | 96.36   | 0.12    | 0.03    | 41      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 254    | 3       | 2.5     | 3       | 0.05    | 0.7     | 0.8     |
| SA5112156 | 5.2     | 2.18    | 0.68    | 1.01    | 952     | 0.5     | 0.5     | 3.20    | 3.15    | 18      | 10      | 2292   | 10      | 58      | 61      | 0.05    | 19.4    | 18.3    |
| SA5112157 | 0.05    | 93.36   | 0.09    | 0.02    | 45      | 0.5     | 0.5     | 0.09    | 0.08    | 0.5     | 15      | 413    | 8       | 2.5     | 5       | 0.05    | 0.8     | 1.0     |
| SA5112158 | 0.6     | 87.36   | 0.025   | 0.09    | 121     | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 0.5     | 429    | 4       | 2.5     | 8       | 0.05    | 0.5     | 0.4     |
| SA5112159 | 0.05    | 96.37   | 0.025   | 0.005   | 26      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 266    | 4       | 2.5     | 8       | 0.05    | 0.4     | 0.7     |
| SA5112160 | 0.05    | 98.10   | 0.025   | 0.01    | 26      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 285    | 3       | 2.5     | 8       | 0.05    | 0.3     | 0.3     |
| SA5112161 | 6.4     | 7.88    | 0.52    | 0.92    | 744     | 0.5     | 0.5     | 2.30    | 2.33    | 13      | 13      | 1764   | 9       | 59      | 53      | 0.05    | 14.8    | 15.3    |
| SA5112162 | 0.05    | 90.40   | 0.07    | 0.03    | 43      | 0.5     | 0.5     | 0.06    | 0.09    | 0.5     | 0.5     | 605    | 6       | 2.5     | 12      | 0.05    | 0.8     | 1.1     |
| SA5112163 | 0.05    | 98.05   | 0.025   | 0.02    | 40      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 332    | 1       | 2.5     | 7       | 0.05    | 0.8     | 0.9     |
| SA5112164 | 0.05    | 94.70   | 0.11    | 0.02    | 34      | 0.5     | 0.5     | 0.06    | 0.06    | 0.5     | 0.5     | 344    | 3       | 2.5     | 7       | 0.05    | 1.3     | 1.8     |
| SA5112165 | 5.1     | 6.24    | 0.60    | 0.90    | 813     | 0.5     | 0.5     | 2.60    | 2.60    | 14      | 11      | 1531   | 10      | 59      | 54      | 0.05    | 15.3    | 15.2    |
| SA5112166 | 4.7     | 20.51   | 0.35    | 0.55    | 522     | 0.5     | 0.5     | 1.20    | 1.33    | 6       | 10      | 845    | 7       | 28      | 34      | 0.05    | 9.1     | 10.3    |
| SA5112167 | 0.05    | 92.98   | 0.025   | 0.02    | 37      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 442    | 7       | 2.5     | 10      | 0.05    | 0.6     | 0.7     |
| SA5112168 | 0.05    | 96.02   | 0.06    | 0.03    | 50      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 458    | 6       | 2.5     | 10      | 0.05    | 1.3     | 1.9     |
| SA5112169 | 5.0     | 14.37   | 0.56    | 0.91    | 852     | 0.5     | 0.5     | 2.20    | 2.32    | 12      | 11      | 1677   | 9       | 42      | 47      | 0.05    | 16.0    | 16.7    |
| SA5112170 | 4.8     | 17.88   | 0.42    | 0.66    | 605     | 0.5     | 0.5     | 1.80    | 1.94    | 12      | 9       | 1206   | 7       | 44      | 44      | 0.05    | 11.0    | 12.1    |
| SA5112171 | 0.05    | 96.47   | 0.025   | 0.03    | 22      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 318    | 2       | 2.5     | 8       | 0.05    | 0.4     | 0.5     |
| SA5112172 | 6.3     | 13.83   | 0.56    | 0.86    | 859     | 0.5     | 0.5     | 2.20    | 2.39    | 17      | 12      | 1752   | 7       | 51      | 54      | 0.05    | 14.8    | 15.6    |
| SA5112173 | 0.05    | 96.79   | 0.025   | 0.02    | 22      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 317    | 1       | 2.5     | 3       | 0.05    | 0.2     | 0.4     |
| SA5112174 | 0.05    | 76.11   | 0.41    | 0.06    | 25      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 2       | 392    | 2       | 2.5     | 1       | 0.05    | 5.9     | 7.5     |
| SA5112175 | 5.6     | 11.98   | 0.63    | 1.07    | 916     | 0.5     | 0.5     | 2.40    | 2.46    | 26      | 12      | 1504   | 7       | 54      | 57      | 0.05    | 16.8    | 16.6    |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112176 | 3.3     | 41.79   | 0.26    | 0.46    | 392     | 0.5     | 0.5     | 1.50    | 1.64    | 9       | 7       | 710    | 7       | 36      | 39      | 0.05    | 8.4     | 8.7     |
| SA5112177 | 3.2     | 58.24   | 0.21    | 0.35    | 367     | 0.5     | 0.5     | 0.70    | 0.87    | 5       | 7       | 769    | 5       | 21      | 21      | 0.05    | 6.1     | 7.5     |
| SA5112178 | 0.05    | 95.38   | 0.05    | 0.02    | 33      | 0.5     | 0.5     | 0.06    | 0.07    | 0.5     | 0.5     | 365    | 7       | 2.5     | 1       | 0.05    | 0.9     | 1.3     |
| SA5112179 | 8.4     | 9.13    | 0.43    | 1.03    | 663     | 0.5     | 0.5     | 2.30    | 2.47    | 11      | 16      | 1626   | 9       | 62      | 63      | 0.05    | 14.2    | 15.2    |
| SA5112180 | 0.3     | 91.01   | 0.025   | 0.06    | 110     | 0.5     | 0.5     | 0.09    | 0.11    | 0.5     | 2       | 465    | 3       | 2.5     | 5       | 0.05    | 0.9     | 1.1     |
| SA5112181 | 0.05    | 95.00   | 0.025   | 0.01    | 25      | 0.5     | 0.5     | 0.07    | 0.07    | 0.5     | 0.5     | 599    | 12      | 2.5     | 5       | 0.3     | 1.3     | 1.7     |
| SA5112182 | 0.05    | 96.55   | 0.025   | 0.02    | 26      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 333    | 6       | 2.5     | 1       | 0.05    | 0.6     | 0.6     |
| SA5112183 | 6.9     | 13.36   | 0.40    | 0.92    | 624     | 0.5     | 0.5     | 2.00    | 2.15    | 10      | 15      | 1076   | 8       | 46      | 51      | 0.05    | 12.0    | 12.9    |
| SA5112184 | 6.6     | 30.63   | 0.35    | 0.72    | 593     | 0.5     | 1       | 1.50    | 1.49    | 7       | 26      | 1743   | 4       | 39      | 40      | 0.05    | 10.4    | 11.1    |
| SA5112185 | 0.05    | 95.52   | 0.025   | 0.06    | 44      | 0.5     | 0.5     | 0.08    | 0.09    | 0.5     | 0.5     | 379    | 4       | 2.5     | 3       | 0.05    | 0.5     | 0.7     |
| SA5112186 | 0.1     | 87.10   | 0.025   | 0.03    | 93      | 0.5     | 0.5     | 0.11    | 0.10    | 0.5     | 4       | 535    | 3       | 2.5     | 4       | 0.05    | 1.5     | 1.9     |
| SA5112187 | 0.05    | 94.53   | 0.08    | 0.005   | 35      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 440    | 5       | 2.5     | 4       | 0.05    | 0.6     | 0.8     |
| SA5112188 | 0.05    | 97.27   | 0.025   | 0.01    | 32      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 340    | 7       | 2.5     | 1       | 0.05    | 0.5     | 0.6     |
| SA5112189 | 0.05    | 96.80   | 0.025   | 0.005   | 14      | 0.5     | 0.5     | 0.025   | 0.01    | 0.5     | 0.5     | 315    | 3       | 2.5     | 3       | 0.05    | 0.1     | 0.3     |
| SA5112190 | 0.8     | 23.86   | 0.13    | 0.10    | 142     | 0.5     | 0.5     | 0.22    | 0.28    | 2       | 4       | 823    | 4       | 8       | 10      | 0.05    | 2.9     | 4.1     |
| SA5112191 | 0.05    | 97.10   | 0.025   | 0.04    | 24      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 237    | 3       | 2.5     | 2       | 0.05    | 0.3     | 0.3     |
| SA5112192 | 1.7     | 29.29   | 0.25    | 0.14    | 145     | 0.5     | 0.5     | 0.18    | 0.21    | 3       | 4       | 1203   | 3       | 2.5     | 6       | 0.05    | 4.2     | 5.5     |
| SA5112193 | 2.2     | 75.74   | 0.17    | 0.21    | 217     | 0.5     | 0.5     | 0.26    | 0.33    | 6       | 3       | 677    | 7       | 16      | 17      | 0.05    | 3.3     | 4.3     |
| SA5112194 | 0.9     | 39.34   | 0.27    | 0.04    | 77      | 0.5     | 0.5     | 0.07    | 0.07    | 2       | 4       | 627    | 8       | 7       | 8       | 0.05    | 2.8     | 3.7     |
| SA5112195 | 5.9     | 23.71   | 0.46    | 0.78    | 1005    | 0.5     | 1       | 1.40    | 1.52    | 13      | 7       | 762    | 15      | 33      | 40      | 0.2     | 12.4    | 13.8    |
| SA5112196 | 0.9     | 35.35   | 0.32    | 0.06    | 106     | 0.5     | 0.5     | 0.07    | 0.09    | 3       | 6       | 1020   | 2       | 2.5     | 13      | 0.05    | 3.2     | 4.6     |
| SA5112197 | 0.8     | 33.48   | 0.16    | 0.07    | 132     | 0.5     | 0.5     | 0.06    | 0.08    | 1       | 2       | 1441   | 2       | 2.5     | 9       | 0.05    | 2.6     | 3.9     |
| SA5112198 | 1.1     | 37.64   | 0.50    | 0.09    | 152     | 0.5     | 3       | 0.12    | 0.15    | 3       | 8       | 946    | 3       | 2.5     | 11      | 0.05    | 3.5     | 4.6     |
| SA5112199 | 1.5     | 28.70   | 0.48    | 0.12    | 955     | 0.5     | 3       | 0.16    | 0.17    | 2       | 17      | 2136   | 1       | 9       | 8       | 0.05    | 5.3     | 6.4     |
| SA5112200 | 6.7     | 14.21   | 0.43    | 0.89    | 671     | 0.5     | 0.5     | 1.90    | 2.36    | 9       | 18      | 1235   | 7       | 41      | 49      | 0.05    | 12.0    | 13.2    |
| SA5112201 | 1.3     | 36.81   | 0.23    | 0.13    | 187     | 0.5     | 1       | 0.13    | 0.19    | 3       | 8       | 834    | 2       | 2.5     | 7       | 0.05    | 3.9     | 5.2     |
| SA5112202 | 0.7     | 44.18   | -9      | 0.08    | 107     | -9      | 0.5     | -9      | 0.20    | 3       | 3       | 441    | 16      | -9      | 7       | -9      | -9      | 2.7     |
| SA5112203 | 2.4     | 31.70   | 0.28    | 0.20    | 265     | 0.5     | 2       | 0.19    | 0.23    | 3       | 6       | 2119   | 3       | 5       | 9       | 0.05    | 4.1     | 5.2     |
| SA5112204 | 0.3     | 96.81   | 0.025   | 0.03    | 33      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 260    | 5       | 2.5     | 1       | 0.05    | 0.2     | 0.4     |
| SA5112205 | 1.5     | 34.07   | 0.35    | 0.09    | 153     | 0.5     | 1       | 0.12    | 0.14    | 3       | 8       | 1771   | 2       | 6       | 7       | 0.05    | 4.8     | 6.1     |
| SA5112206 | 0.9     | 63.98   | -9      | 0.07    | 113     | -9      | 1       | -9      | 0.18    | 4       | 4       | 3119   | 8       | -9      | 8       | -9      | -9      | 6.7     |
| SA5112207 | 0.6     | 21.50   | 0.025   | 0.02    | 32      | 0.5     | 0.5     | 0.025   | 0.05    | 2       | 0.5     | 501    | 2       | 2.5     | 4       | 0.05    | 1.7     | 2.2     |
| SA5112208 | 0.6     | 38.60   | 0.23    | 0.03    | 36      | 0.5     | 0.5     | 0.025   | 0.04    | 2       | 5       | 504    | 2       | 5       | 5       | 0.05    | 2.6     | 3.7     |
| SA5112209 | 0.05    | 52.00   | 0.07    | 0.005   | 23      | 0.5     | 0.5     | 0.06    | 0.08    | 4       | 1       | 469    | 2       | 2.5     | 2       | 0.05    | 2.0     | 2.4     |
| SA5112210 | 0.1     | 96.85   | 0.05    | 0.02    | 36      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 303    | 1       | 2.5     | 4       | 0.05    | 0.6     | 0.6     |
| SA5112211 | 1.3     | 28.61   | 0.22    | 0.09    | 109     | 0.5     | 0.5     | 0.08    | 0.08    | 2       | 3       | 863    | 1       | 2.5     | 4       | 0.05    | 2.0     | 2.7     |
| SA5112212 | 0.05    | 96.98   | 0.025   | 0.02    | 26      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 367    | 4       | 2.5     | 2       | 0.05    | 0.6     | 0.7     |
| SA5112213 | 0.05    | 96.40   | 0.05    | 0.02    | 26      | 0.5     | 2       | 0.025   | 0.04    | 0.5     | 0.5     | 319    | 4       | 2.5     | 1       | 0.05    | 0.8     | 0.9     |
| SA5112214 | 0.05    | 96.15   | 0.025   | 0.01    | 22      | 0.5     | 2       | 0.025   | 0.04    | 0.5     | 0.5     | 347    | 6       | 2.5     | 1       | 0.05    | 0.8     | 0.9     |
| SA5112215 | 0.05    | 98.21   | 0.025   | 0.01    | 24      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 314    | 1       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112216 | 0.1     | 97.32   | -9      | 0.005   | 24      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 312    | 10      | -9      | 1       | -9      | -9      | 0.4     |
| SA5112217 | 0.05    | 98.16   | 0.025   | 0.005   | 17      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 248    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112218 | 0.2     | 95.87   | 0.025   | 0.02    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 308    | 2       | 2.5     | 1       | 0.05    | 0.6     | 0.7     |
| SA5112219 | 0.2     | 96.63   | 0.07    | 0.02    | 30      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 0.5     | 294    | 2       | 2.5     | 1       | 0.05    | 0.9     | 1.2     |
| SA5112220 | 12.8    | 7.41    | 0.71    | 1.55    | 1057    | 0.5     | 0.5     | 2.20    | 2.36    | 15      | 21      | 2715   | 5       | 61      | 66      | 0.05    | 18.5    | 19.5    |
| SA5112221 | 2.8     | 52.33   | 0.26    | 0.23    | 264     | 4       | 5       | 0.25    | 0.30    | 2       | 7       | 637    | 3       | 2.5     | 11      | 0.05    | 4.0     | 4.7     |
| SA5112222 | 0.05    | 97.68   | 0.05    | 0.02    | 27      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 275    | 0.5     | 2.5     | 1       | 0.05    | 0.3     | 0.4     |
| SA5112223 | 0.2     | 75.00   | 0.06    | 0.02    | 19      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 389    | 7       | 2.5     | 3       | 0.05    | 0.6     | 0.8     |
| SA5112224 | 0.3     | 91.15   | 0.11    | 0.02    | 27      | 0.5     | 0.5     | 0.07    | 0.08    | 0.5     | 0.5     | 274    | 6       | 2.5     | 4       | 0.05    | 1.0     | 1.1     |
| SA5112225 | 1.7     | 33.80   | 0.22    | 0.13    | 141     | 0.5     | 0.5     | 0.12    | 0.14    | 2       | 3       | 623    | 0.5     | 2.5     | 8       | 0.05    | 2.8     | 3.4     |
| SA5112226 | 0.4     | 89.52   | 0.20    | 0.04    | 214     | 0.5     | 3       | 0.08    | 0.09    | 0.5     | 1       | 388    | 2       | 2.5     | 5       | 0.05    | 2.8     | 3.3     |
| SA5112227 | 0.05    | 96.46   | 0.025   | 0.005   | 19      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 302    | 0.5     | 2.5     | 1       | 0.05    | 1.0     | 1.3     |
| SA5112228 | 2.1     | 38.65   | 0.15    | 0.12    | 123     | 0.5     | 0.5     | 0.09    | 0.13    | 2       | 4       | 1379   | 2       | 2.5     | 8       | 0.05    | 3.4     | 4.8     |
| SA5112229 | 0.05    | 98.32   | 0.025   | 0.02    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 267    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112230 | 0.2     | 37.00   | 0.14    | 0.03    | 32      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 363    | 0.5     | 2.5     | 3       | 0.05    | 1.7     | 2.4     |
| SA5112231 | 1.6     | 35.56   | 0.30    | 0.08    | 104     | 0.5     | 0.5     | 0.08    | 0.09    | 2       | 4       | 1780   | 2       | 2.5     | 7       | 0.05    | 5.0     | 6.3     |
| SA5112232 | 1.2     | 25.33   | 0.12    | 0.07    | 153     | 0.5     | 0.5     | 0.09    | 0.11    | 1       | 3       | 744    | 6       | 2.5     | 6       | 0.1     | 2.5     | 3.3     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112233 | 0.1     | 97.32   | 0.025   | 0.01    | 18      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 235    | 3       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112234 | 0.6     | 91.72   | -9      | 0.05    | 45      | -9      | 0.5     | -9      | 0.11    | 0.5     | 6       | 335    | 3       | -9      | 4       | -9      | -9      | 2.4     |
| SA5112235 | 0.05    | 97.91   | 0.025   | 0.01    | 21      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 262    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.3     |
| SA5112236 | 3.4     | 38.56   | -9      | 0.40    | 335     | -9      | 0.5     | -9      | 1.02    | 15      | 4       | 1356   | 8       | -9      | 31      | -9      | -9      | 8.4     |
| SA5112237 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112238 | 0.3     | 77.90   | 0.39    | 0.06    | 131     | 0.5     | 1       | 0.025   | 0.04    | 0.5     | 1       | 493    | 3       | 2.5     | 1       | 0.05    | 4.4     | 5.4     |
| SA5112239 | 0.1     | 95.89   | 0.025   | 0.01    | 19      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 258    | 3       | 2.5     | 2       | 0.05    | 0.5     | 0.4     |
| SA5112240 | 0.3     | 30.84   | 0.11    | 0.04    | 95      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 504    | 0.5     | 2.5     | 4       | 0.05    | 1.4     | 2.2     |
| SA5112241 | 7.6     | 38.61   | 0.38    | 0.41    | 401     | 0.5     | 4       | 0.58    | 0.71    | 8       | 6       | 984    | 4       | 16      | 20      | 0.05    | 7.0     | 8.4     |
| SA5112242 | 0.3     | 47.35   | 0.16    | 0.01    | 14      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 7       | 489    | 0.5     | 2.5     | 1       | 0.05    | 3.5     | 4.6     |
| SA5112243 | 2.2     | 33.61   | 0.12    | 0.10    | 120     | 0.5     | 0.5     | 0.10    | 0.10    | 1       | 0.5     | 813    | 2       | 2.5     | 7       | 0.05    | 2.9     | 3.5     |
| SA5112244 | 0.9     | 30.37   | 0.10    | 0.08    | 69      | 0.5     | 0.5     | 0.15    | 0.17    | 2       | 0.5     | 551    | 3       | 7       | 5       | 0.05    | 2.4     | 3.0     |
| SA5112245 | 8.6     | 37.76   | 0.74    | 0.37    | 426     | 0.5     | 4       | 0.53    | 0.60    | 6       | 8       | 866    | 4       | 13      | 17      | 0.05    | 7.2     | 8.4     |
| SA5112246 | 0.1     | 95.19   | 0.025   | 0.02    | 24      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 295    | 3       | 2.5     | 3       | 0.05    | 0.7     | 0.6     |
| SA5112247 | 0.3     | 41.05   | 0.19    | 0.01    | 16      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 2       | 379    | 1       | 2.5     | 3       | 0.05    | 3.1     | 4.1     |
| SA5112248 | 0.05    | 98.63   | 0.025   | 0.03    | 27      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 238    | 0.5     | 2.5     | 3       | 0.05    | 0.3     | 0.2     |
| SA5112249 | 0.5     | 85.42   | -9      | 0.04    | 37      | -9      | 1       | -9      | 0.07    | 0.5     | 6       | 1530   | 1       | -9      | 4       | -9      | -9      | 7.0     |
| SA5112250 | 1.1     | 39.67   | 0.09    | 0.07    | 98      | 0.5     | 0.5     | 0.08    | 0.10    | 2       | 4       | 2320   | 0.5     | 2.5     | 3       | 0.05    | 2.9     | 4.5     |
| SA5112251 | 1.5     | 37.43   | 0.24    | 0.12    | 174     | 0.5     | 0.5     | 0.20    | 0.23    | 2       | 7       | 2763   | 2       | 2.5     | 10      | 0.05    | 4.3     | 5.5     |
| SA5112252 | 3.4     | 48.72   | 0.18    | 0.31    | 323     | 0.5     | 2       | 0.49    | 0.65    | 6       | 7       | 735    | 11      | 13      | 16      | 0.05    | 5.5     | 7.2     |
| SA5112253 | 1.0     | 31.19   | 0.14    | 0.06    | 61      | 0.5     | 0.5     | 0.10    | 0.12    | 1       | 0.5     | 551    | 3       | 8       | 6       | 0.05    | 2.0     | 2.5     |
| SA5112254 | 1.7     | 38.53   | 0.25    | 0.11    | 185     | 0.5     | 1       | 0.14    | 0.14    | 3       | 11      | 1881   | 1       | 2.5     | 9       | 0.05    | 4.9     | 6.1     |
| SA5112255 | 0.6     | 62.39   | -9      | 0.09    | 103     | -9      | 0.5     | -9      | 0.18    | 2       | 2       | 1383   | 8       | -9      | 9       | -9      | -9      | 3.5     |
| SA5112256 | 1.2     | 37.73   | 0.14    | 0.13    | 134     | 0.5     | 0.5     | 0.10    | 0.13    | 2       | 2       | 723    | 3       | 2.5     | 4       | 0.05    | 2.9     | 3.9     |
| SA5112257 | 1.6     | 32.52   | 0.29    | 0.10    | 140     | 0.5     | 1       | 0.11    | 0.12    | 2       | 5       | 1467   | 2       | 2.5     | 5       | 0.05    | 3.4     | 4.6     |
| SA5112258 | 0.2     | 73.12   | 0.025   | 0.01    | 19      | 0.5     | 2       | 0.025   | 0.04    | 0.5     | 12      | 225    | 0.5     | 2.5     | 1       | 0.05    | 1.1     | 1.2     |
| SA5112259 | 4.4     | 19.98   | 0.45    | 0.77    | 744     | 0.5     | 0.5     | 1.20    | 1.34    | 13      | 11      | 1304   | 6       | 34      | 36      | 0.05    | 10.7    | 12.4    |
| SA5112260 | 1.4     | 45.05   | 0.30    | 0.10    | 109     | 0.5     | 0.5     | 0.11    | 0.11    | 3       | 7       | 2230   | 2       | 2.5     | 8       | 0.05    | 4.9     | 6.2     |
| SA5112261 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112262 | 0.4     | 55.55   | 0.025   | 0.03    | 54      | 0.5     | 0.5     | 0.07    | 0.08    | 1       | 0.5     | 579    | 10      | 2.5     | 2       | 0.05    | 1.8     | 2.8     |
| SA5112263 | 0.8     | 57.02   | 0.10    | 0.06    | 84      | 0.5     | 0.5     | 0.10    | 0.13    | 2       | 2       | 608    | 9       | 2.5     | 4       | 0.1     | 2.3     | 3.1     |
| SA5112264 | 0.2     | 87.15   | 0.07    | 0.01    | 26      | 0.5     | 0.5     | 0.05    | 0.06    | 1       | 5       | 389    | 2       | 2.5     | 3       | 0.05    | 1.5     | 2.0     |
| SA5112265 | 2.4     | 38.93   | 0.25    | 0.22    | 217     | 0.5     | 0.5     | 0.38    | 0.45    | 5       | 5       | 942    | 3       | 8       | 13      | 0.05    | 4.8     | 5.6     |
| SA5112266 | 1.0     | 82.83   | 0.22    | 0.06    | 66      | 0.5     | 0.5     | 0.24    | 0.26    | 3       | 2       | 471    | 3       | 8       | 9       | 0.05    | 3.3     | 3.6     |
| SA5112267 | 0.05    | 97.65   | 0.025   | 0.07    | 35      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 249    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112268 | 1.1     | 47.64   | 0.28    | 0.06    | 111     | 0.5     | 0.5     | 0.06    | 0.07    | 2       | 5       | 1132   | 2       | 2.5     | 3       | 0.05    | 3.5     | 4.3     |
| SA5112269 | 0.8     | 48.02   | 0.31    | 0.15    | 341     | 0.5     | 5       | 0.18    | 0.21    | 0.5     | 8       | 377    | 3       | 2.5     | 7       | 0.05    | 3.2     | 4.0     |
| SA5112270 | 1.8     | 40.96   | 0.32    | 0.11    | 218     | 0.5     | 1       | 0.14    | 0.14    | 4       | 8       | 2053   | 2       | 9       | 8       | 0.05    | 5.2     | 6.3     |
| SA5112271 | 3.2     | 39.18   | 0.13    | 0.24    | 197     | 0.5     | 0.5     | 0.40    | 0.54    | 6       | 5       | 938    | 3       | 16      | 17      | 0.05    | 4.3     | 5.9     |
| SA5112272 | 0.1     | 93.19   | 0.10    | 0.01    | 19      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 346    | 3       | 2.5     | 1       | 0.05    | 0.7     | 1.1     |
| SA5112273 | 0.6     | 50.83   | 0.12    | 0.06    | 102     | 0.5     | 0.5     | 0.16    | 0.19    | 2       | 0.5     | 456    | 2       | 2.5     | 7       | 0.05    | 3.0     | 3.9     |
| SA5112274 | 0.05    | 98.10   | -9      | 0.01    | 26      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 268    | 4       | -9      | 1       | -9      | -9      | 0.2     |
| SA5112275 | 0.3     | 40.73   | 0.025   | 0.03    | 34      | 0.5     | 1       | 0.06    | 0.06    | 0.5     | 0.5     | 274    | 3       | 5       | 3       | 0.05    | 1.1     | 1.4     |
| SA5112276 | 0.9     | 32.82   | 0.025   | 0.06    | 65      | 0.5     | 1       | 0.07    | 0.08    | 0.5     | 1       | 599    | 3       | 2.5     | 5       | 0.05    | 1.6     | 2.0     |
| SA5112277 | 0.2     | 94.53   | -9      | 0.02    | 29      | -9      | 0.5     | -9      | 0.06    | 0.5     | 0.5     | 271    | 3       | -9      | 3       | -9      | -9      | 0.5     |
| SA5112278 | 1.6     | 37.02   | 0.07    | 0.13    | 101     | 3       | 3       | 0.13    | 0.14    | 2       | 2       | 832    | 4       | 8       | 5       | 0.05    | 2.4     | 3.1     |
| SA5112279 | 1.0     | 53.95   | 0.15    | 0.10    | 117     | 0.5     | 0.5     | 0.25    | 0.30    | 3       | 1       | 561    | 5       | 2.5     | 8       | 0.05    | 3.0     | 3.5     |
| SA5112280 | 0.3     | 29.39   | 0.05    | 0.05    | 39      | 0.5     | 0.5     | 0.06    | 0.07    | 0.5     | 0.5     | 313    | 1       | 2.5     | 3       | 0.05    | 1.1     | 1.4     |
| SA5112281 | 0.05    | 98.43   | 0.05    | 0.02    | 33      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 190    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112282 | 1.4     | 23.67   | 0.025   | 0.12    | 122     | 0.5     | 1       | 0.12    | 0.19    | 1       | 4       | 700    | 2       | 2.5     | 7       | 0.05    | 2.4     | 3.6     |
| SA5112283 | 0.4     | 39.06   | 0.13    | 0.03    | 51      | 0.5     | 4       | 0.025   | 0.05    | 0.5     | 2       | 1234   | 0.5     | 2.5     | 4       | 0.05    | 1.9     | 2.4     |
| SA5112284 | 7.6     | 12.72   | 0.33    | 1.22    | 681     | 0.5     | 0.5     | 1.80    | 2.11    | 14      | 19      | 1862   | 10      | 58      | 59      | 0.05    | 13.6    | 14.8    |
| SA5112285 | 0.1     | 44.49   | 0.025   | 0.01    | 20      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 223    | 3       | 2.5     | 4       | 0.05    | 0.8     | 1.2     |
| SA5112286 | 0.4     | 93.60   | 0.05    | 0.09    | 77      | 0.5     | 0.5     | 0.10    | 0.14    | 0.5     | 0.5     | 315    | 10      | 2.5     | 5       | 0.1     | 0.7     | 1.1     |
| SA5112287 | 0.05    | 98.20   | 0.025   | 0.01    | 24      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 271    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112288 | 0.1     | 54.68   | 0.05    | 0.04    | 26      | 0.5     | 2       | 0.025   | 0.04    | 0.5     | 3       | 798    | 9       | 2.5     | 4       | 0.1     | 1.5     | 1.8     |
| SA5112289 | 0.05    | 98.04   | -9      | 0.02    | 27      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 247    | 7       | -9      | 1       | -9      | -9      | 0.2     |



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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112290 | 1.1     | 23.14   | 0.025   | 0.14    | 96      | 0.5     | 0.5     | 0.14    | 0.18    | 1       | 5       | 823    | 0.5     | 2.5     | 5       | 0.05    | 2.3     | 3.2     |
| SA5112291 | 2.3     | 37.87   | 0.19    | 0.23    | 436     | 0.5     | 3       | 0.17    | 0.18    | 1       | 24      | 6211   | 0.5     | 7       | 11      | 0.05    | 5.3     | 6.4     |
| SA5112292 | 0.05    | 98.30   | 0.025   | 0.02    | 35      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 225    | 4       | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112293 | 0.5     | 41.37   | 0.10    | 0.04    | 52      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 4       | 1607   | 0.5     | 2.5     | 3       | 0.05    | 2.3     | 3.2     |
| SA5112294 | 4.8     | 40.08   | 0.15    | 0.42    | 265     | 2       | 3       | 0.55    | 0.69    | 6       | 7       | 1744   | 5       | 18      | 19      | 0.05    | 5.8     | 7.2     |
| SA5112295 | 2.2     | 35.04   | 0.16    | 0.13    | 109     | 0.5     | 2       | 0.15    | 0.16    | 2       | 8       | 1172   | 2       | 9       | 8       | 0.05    | 2.9     | 3.7     |
| SA5112296 | 11.3    | 6.62    | 0.48    | 1.78    | 1162    | 0.5     | 2       | 2.20    | 2.98    | 18      | 25      | 1182   | 8       | 47      | 72      | 0.05    | 18.8    | 24.1    |
| SA5112297 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112298 | 0.05    | 97.62   | 0.025   | 0.06    | 48      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 231    | 9       | 2.5     | 3       | 0.1     | 0.4     | 0.3     |
| SA5112299 | 1.4     | 36.18   | 0.07    | 0.13    | 175     | 0.5     | 0.5     | 0.13    | 0.15    | 2       | 4       | 1915   | 1       | 6       | 5       | 0.05    | 2.8     | 3.4     |
| SA5112300 | 1.0     | 89.84   | -9      | 0.08    | 87      | -9      | 0.5     | -9      | 0.16    | 1       | 7       | 1021   | 2       | -9      | 7       | -9      | -9      | 3.7     |
| SA5112301 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112302 | 0.05    | 98.30   | 0.025   | 0.005   | 21      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 217    | 2       | 2.5     | 3       | 0.05    | 0.5     | 0.2     |
| SA5112303 | 0.1     | 98.50   | 0.025   | 0.02    | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 226    | 5       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112304 | 1.8     | 37.58   | 0.025   | 0.15    | 314     | 0.5     | 3       | 0.09    | 0.09    | 1       | 9       | 2849   | 0.5     | 2.5     | 7       | 0.05    | 3.8     | 4.7     |
| SA5112305 | 1.8     | 32.57   | 0.13    | 0.18    | 170     | 0.5     | 2       | 0.13    | 0.18    | 1       | 8       | 1282   | 0.5     | 2.5     | 8       | 0.05    | 2.5     | 3.8     |
| SA5112306 | 1.0     | 35.36   | 0.14    | 0.09    | 361     | 5       | 6       | 0.06    | 0.07    | 0.5     | 15      | 1717   | 0.5     | 7       | 3       | 0.05    | 4.2     | 5.9     |
| SA5112307 | 0.05    | 98.50   | 0.025   | 0.06    | 46      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 164    | 0.5     | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112308 | 0.3     | 36.40   | 0.025   | 0.03    | 22      | 3       | 5       | 0.025   | 0.03    | 0.5     | 2       | 386    | 2       | 2.5     | 2       | 0.05    | 1.5     | 1.9     |
| SA5112309 | 0.05    | 97.69   | 0.025   | 0.04    | 44      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 174    | 1       | 2.5     | 1       | 0.05    | 0.1     | 0.1     |
| SA5112310 | 1.2     | 40.37   | 0.10    | 0.07    | 77      | 0.5     | 0.5     | 0.08    | 0.10    | 2       | 2       | 571    | 1       | 2.5     | 6       | 0.05    | 2.6     | 3.4     |
| SA5112311 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112312 | 0.1     | 97.87   | -9      | 0.03    | 35      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 200    | 2       | -9      | 1       | -9      | -9      | 0.3     |
| SA5112313 | 1.0     | 30.79   | 0.15    | 0.08    | 134     | 0.5     | 1       | 0.12    | 0.14    | 2       | 4       | 642    | 11      | 2.5     | 2       | 0.1     | 1.9     | 2.6     |
| SA5112314 | 2.0     | 42.56   | 0.25    | 0.12    | 585     | 0.5     | 3       | 0.10    | 0.10    | 3       | 10      | 2508   | 2       | 2.5     | 6       | 0.05    | 5.2     | 6.2     |
| SA5112315 | 9.4     | 18.54   | 0.41    | 0.99    | 590     | 3       | 3       | 1.30    | 1.49    | 11      | 26      | 2096   | 6       | 47      | 56      | 0.05    | 12.3    | 14.8    |
| SA5112316 | 1.4     | 45.29   | 0.025   | 0.09    | 64      | 0.5     | 0.5     | 0.10    | 0.13    | 2       | 4       | 620    | 2       | 7       | 9       | 0.05    | 2.7     | 3.8     |
| SA5112317 | 0.05    | 98.40   | 0.025   | 0.02    | 36      | 0.5     | 0.5     | 0.025   | 0.01    | 0.5     | 0.5     | 204    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5112318 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112319 | 1.7     | 36.12   | 0.16    | 0.12    | 102     | 0.5     | 0.5     | 0.09    | 0.10    | 2       | 6       | 1425   | 5       | 2.5     | 4       | 0.05    | 3.3     | 4.1     |
| SA5112320 | 0.1     | 96.73   | -9      | 0.03    | 35      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 223    | 1       | -9      | 1       | -9      | -9      | 0.2     |
| SA5112321 | 0.1     | 97.10   | -9      | 0.02    | 29      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 254    | 1       | -9      | 1       | -9      | -9      | 0.9     |
| SA5112322 | 0.1     | 96.62   | -9      | 0.005   | 29      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 288    | 2       | -9      | 1       | -9      | -9      | 0.5     |
| SA5112323 | 1.1     | 42.91   | 0.11    | 0.12    | 109     | 0.5     | 1       | 0.13    | 0.16    | 2       | 3       | 545    | 1       | 6       | 5       | 0.05    | 3.1     | 3.9     |
| SA5112324 | 2.0     | 31.45   | 0.025   | 0.23    | 166     | 0.5     | 0.5     | 0.32    | 0.41    | 3       | 6       | 539    | 2       | 10      | 12      | 0.05    | 3.2     | 4.0     |
| SA5112325 | 0.2     | 97.73   | 0.025   | 0.01    | 28      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 209    | 3       | 2.5     | 1       | 0.05    | 0.5     | 0.3     |
| SA5112326 | 0.2     | 96.67   | -9      | 0.01    | 19      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 194    | 5       | -9      | 1       | -9      | -9      | 0.5     |
| SA5112327 | 2.3     | 34.46   | 0.09    | 0.19    | 113     | 0.5     | 1       | 0.20    | 0.22    | 2       | 4       | 805    | 2       | 2.5     | 7       | 0.05    | 3.8     | 4.8     |
| SA5112328 | 1.8     | 52.15   | 0.19    | 0.15    | 185     | 4       | 4       | 0.12    | 0.12    | 2       | 12      | 2771   | 2       | 2.5     | 7       | 0.05    | 5.2     | 6.4     |
| SA5112329 | 0.4     | 39.58   | 0.025   | 0.05    | 49      | 0.5     | 0.5     | 0.10    | 0.12    | 1       | 0.5     | 418    | 1       | 2.5     | 5       | 0.05    | 2.0     | 2.5     |
| SA5112330 | 0.5     | 90.79   | 0.025   | 0.04    | 52      | 0.5     | 0.5     | 0.11    | 0.14    | 2       | 3       | 249    | 2       | 2.5     | 6       | 0.05    | 1.9     | 2.5     |
| SA5112331 | 0.5     | 49.95   | 0.025   | 0.05    | 58      | 0.5     | 0.5     | 0.15    | 0.18    | 3       | 1       | 561    | 3       | 2.5     | 6       | 0.05    | 2.9     | 3.7     |
| SA5112332 | 1.8     | 25.75   | 0.025   | 0.08    | 46      | 0.5     | 0.5     | 0.07    | 0.09    | 2       | 2       | 725    | 2       | 6       | 6       | 0.05    | 2.3     | 3.1     |
| SA5112333 | 4.4     | 26.28   | 0.06    | 0.31    | 145     | 0.5     | 0.5     | 0.20    | 0.24    | 4       | 6       | 847    | 2       | 14      | 16      | 0.05    | 3.6     | 4.6     |
| SA5112334 | 0.2     | 94.47   | 0.10    | 0.01    | 50      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 0.5     | 408    | 2       | 2.5     | 3       | 0.05    | 1.6     | 2.1     |
| SA5112335 | 0.1     | 95.20   | 0.06    | 0.03    | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 247    | 3       | 2.5     | 1       | 0.05    | 0.4     | 0.6     |
| SA5112336 | 2.0     | 42.38   | 0.05    | 0.07    | 68      | 0.5     | 1       | 0.11    | 0.12    | 2       | 3       | 355    | 1       | 2.5     | 7       | 0.05    | 2.7     | 3.5     |
| SA5112337 | 0.1     | 97.41   | 0.025   | 0.01    | 26      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 243    | 1       | 2.5     | 1       | 0.05    | 0.4     | 0.5     |
| SA5112338 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112339 | 0.6     | 71.55   | -9      | 0.06    | 155     | -9      | 6       | -9      | 0.06    | 1       | 12      | 5058   | 2       | -9      | 4       | -9      | -9      | 6.5     |
| SA5112340 | 1.0     | 33.84   | 0.08    | 0.07    | 86      | 0.5     | 1       | 0.09    | 0.11    | 1       | 3       | 468    | 4       | 2.5     | 1       | 0.05    | 1.8     | 2.6     |
| SA5112341 | 0.2     | 96.34   | -9      | 0.07    | 55      | -9      | 0.5     | -9      | 0.06    | 0.5     | 0.5     | 306    | 6       | -9      | 1       | -9      | -9      | 0.5     |
| SA5112342 | 0.6     | 43.07   | -9      | 0.04    | 44      | -9      | 3       | -9      | 0.06    | 1       | 3       | 641    | 6       | -9      | 5       | -9      | -9      | 2.7     |
| SA5112343 | 2.5     | 48.22   | 0.13    | 0.16    | 408     | 3       | 5       | 0.13    | 0.15    | 4       | 16      | 2923   | 1       | 8       | 11      | 0.05    | 5.2     | 6.6     |
| SA5112344 | 1.0     | 34.40   | 0.025   | 0.09    | 65      | 0.5     | 1       | 0.13    | 0.16    | 2       | 2       | 503    | 3       | 2.5     | 8       | 0.05    | 1.9     | 2.6     |
| SA5112345 | 0.4     | 35.19   | 0.025   | 0.03    | 36      | 0.5     | 0.5     | 0.025   | 0.06    | 0.5     | 2       | 442    | 2       | 2.5     | 1       | 0.05    | 1.2     | 1.8     |
| SA5112346 | 0.7     | 33.05   | 0.025   | 0.05    | 37      | 0.5     | 0.5     | 0.06    | 0.08    | 2       | 2       | 1024   | 1       | 2.5     | 4       | 0.05    | 1.6     | 2.1     |

## Open File 013A/0089 - Appendix 1

| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112347 | 0.6     | 89.46   | -9      | 0.03    | 42      | -9      | 2       | -9      | 0.05    | 1       | 8       | 988    | 3       | -9      | 3       | -9      | -9      | 4.0     |
| SA5112348 | 1.9     | 32.46   | 0.36    | 0.12    | 1031    | 8       | 9       | 0.16    | 0.18    | 2       | 29      | 3491   | 2       | 6       | 10      | 0.05    | 8.4     | 10.8    |
| SA5112349 | 2.1     | 50.11   | 0.025   | 0.11    | 140     | 7       | 9       | 0.11    | 0.11    | 3       | 6       | 1733   | 4       | 8       | 10      | 0.05    | 4.0     | 4.9     |
| SA5112350 | 4.9     | 62.19   | 0.025   | 0.12    | 280     | 210     | 189     | 0.18    | 0.20    | 1       | 12      | 1565   | 4       | 6       | 10      | 0.05    | 3.7     | 4.1     |
| SA5112351 | 0.6     | 55.56   | 0.025   | 0.08    | 59      | 4       | 7       | 0.06    | 0.08    | 1       | 5       | 1564   | 1       | 2.5     | 4       | 0.05    | 2.1     | 2.7     |
| SA5112352 | 0.2     | 62.57   | 0.025   | 0.02    | 29      | 0.5     | 3       | 0.025   | 0.05    | 0.5     | 1       | 532    | 2       | 2.5     | 3       | 0.05    | 1.1     | 1.6     |
| SA5112353 | 1.9     | 24.46   | 0.025   | 0.11    | 91      | 0.5     | 2       | 0.26    | 0.35    | 3       | 0.5     | 468    | 4       | 11      | 15      | 0.05    | 2.0     | 2.7     |
| SA5112354 | 1.6     | 73.43   | -9      | 0.10    | 155     | -9      | 3       | -9      | 0.12    | 2       | 10      | 2482   | 2       | -9      | 9       | -9      | -9      | 6.7     |
| SA5112355 | 6.4     | 56.59   | 0.025   | 0.30    | 222     | 19      | 17      | 0.48    | 0.55    | 6       | 9       | 2209   | 9       | 21      | 26      | 0.05    | 5.6     | 7.1     |
| SA5112356 | 0.1     | 98.13   | 0.025   | 0.01    | 24      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 298    | 0.5     | 2.5     | 1       | 0.05    | 0.2     | 0.3     |
| SA5112357 | 0.05    | 98.49   | 0.025   | 0.05    | 41      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 264    | 1       | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112358 | 0.05    | 97.99   | 0.025   | 0.01    | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 295    | 2       | 2.5     | 4       | 0.05    | 0.6     | 0.7     |
| SA5112359 | 7.1     | 54.66   | 0.025   | 0.32    | 220     | 16      | 13      | 0.63    | 0.71    | 7       | 8       | 1758   | 10      | 33      | 31      | 0.05    | 7.0     | 7.7     |
| SA5112360 | 1.4     | 57.86   | 0.025   | 0.07    | 114     | 5       | 4       | 0.11    | 0.11    | 3       | 9       | 1795   | 5       | 6       | 8       | 0.05    | 4.7     | 5.3     |
| SA5112361 | 1.1     | 46.07   | 0.025   | 0.07    | 109     | 51      | 45      | 0.17    | 0.21    | 2       | 10      | 1106   | 4       | 2.5     | 10      | 0.05    | 2.7     | 3.6     |
| SA5112362 | 2.5     | 30.54   | 0.08    | 0.15    | 124     | 0.5     | 1       | 0.16    | 0.18    | 3       | 3       | 546    | 2       | 10      | 6       | 0.05    | 2.9     | 3.9     |
| SA5112363 | 1.3     | 42.11   | 0.025   | 0.08    | 78      | 0.5     | 2       | 0.06    | 0.07    | 1       | 8       | 1076   | 0.5     | 2.5     | 4       | 0.05    | 2.6     | 3.8     |
| SA5112364 | 3.3     | 40.16   | 0.14    | 0.17    | 281     | 0.5     | 2       | 0.18    | 0.21    | 4       | 9       | 1958   | 3       | 9       | 11      | 0.05    | 4.9     | 6.5     |
| SA5112365 | 7.2     | 24.82   | 0.41    | 0.78    | 553     | 0.5     | 2       | 1.30    | 1.56    | 17      | 13      | 679    | 10      | 55      | 61      | 0.05    | 11.7    | 12.8    |
| SA5112366 | 3.1     | 36.50   | 0.025   | 0.13    | 90      | 0.5     | 2       | 0.19    | 0.24    | 3       | 4       | 1319   | 3       | 10      | 12      | 0.05    | 3.3     | 4.1     |
| SA5112367 | 2.2     | 51.59   | 0.06    | 0.10    | 130     | 6       | 6       | 0.12    | 0.13    | 5       | 6       | 3012   | 6       | 2.5     | 12      | 0.05    | 5.3     | 6.1     |
| SA5112368 | 4.1     | 45.63   | 0.025   | 0.15    | 108     | 3       | 4       | 0.21    | 0.25    | 6       | 5       | 2131   | 6       | 16      | 20      | 0.05    | 4.9     | 5.9     |
| SA5112369 | 8.4     | 36.16   | 0.24    | 0.64    | 361     | 1       | 2       | 1.10    | 1.20    | 12      | 11      | 732    | 12      | 53      | 57      | 0.05    | 9.4     | 10.4    |
| SA5112370 | 9.0     | 32.33   | 0.025   | 0.51    | 2290    | 23      | 20      | 0.52    | 0.54    | 7       | 32      | 2174   | 5       | 41      | 38      | 0.05    | 10.3    | 11.0    |
| SA5112371 | 6.3     | 36.11   | 0.025   | 0.33    | 309     | 4       | 4       | 0.41    | 0.49    | 6       | 23      | 2878   | 6       | 22      | 27      | 0.05    | 8.4     | 10.0    |
| SA5112372 | 0.2     | 95.06   | -9      | 0.03    | 42      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 309    | 5       | -9      | 1       | -9      | -9      | 0.4     |
| SA5112373 | 1.3     | 41.64   | 0.025   | 0.09    | 50      | 0.5     | 2       | 0.09    | 0.09    | 2       | 4       | 673    | 1       | 8       | 6       | 0.05    | 2.5     | 3.5     |
| SA5112374 | 1.3     | 38.45   | 0.025   | 0.07    | 48      | 0.5     | 2       | 0.11    | 0.13    | 2       | 2       | 502    | 4       | 2.5     | 6       | 0.05    | 2.1     | 3.0     |
| SA5112375 | 2.0     | 55.98   | 0.12    | 0.11    | 88      | 0.5     | 2       | 0.17    | 0.18    | 4       | 10      | 3036   | 3       | 6       | 9       | 0.05    | 6.3     | 7.5     |
| SA5112376 | 0.7     | 32.38   | 0.025   | 0.05    | 60      | 0.5     | 5       | 0.12    | 0.16    | 2       | 1       | 335    | 2       | 2.5     | 6       | 0.05    | 1.7     | 2.1     |
| SA5112377 | 2.3     | 36.93   | 0.07    | 0.16    | 107     | 0.5     | 2       | 0.22    | 0.26    | 4       | 4       | 871    | 3       | 13      | 13      | 0.05    | 3.7     | 4.3     |
| SA5112378 | 1.5     | 34.33   | 0.12    | 0.11    | 88      | 0.5     | 1       | 0.11    | 0.13    | 2       | 7       | 1938   | 1       | 2.5     | 7       | 0.05    | 3.7     | 4.6     |
| SA5112379 | 0.5     | 24.84   | 0.025   | 0.07    | 83      | 0.5     | 2       | 0.13    | 0.16    | 2       | 0.5     | 329    | 1       | 8       | 7       | 0.05    | 1.4     | 1.7     |
| SA5112380 | 2.3     | 36.93   | 0.16    | 0.14    | 236     | 0.5     | 3       | 0.16    | 0.17    | 3       | 8       | 2145   | 3       | 11      | 11      | 0.05    | 4.1     | 5.1     |
| SA5112381 | 0.05    | 98.28   | 0.025   | 0.04    | 64      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 203    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112382 | 4.1     | 40.76   | 0.27    | 0.24    | 268     | 0.5     | 3       | 0.21    | 0.21    | 4       | 14      | 3681   | 3       | 2.5     | 14      | 0.05    | 6.8     | 7.7     |
| SA5112383 | 0.3     | 92.14   | 0.025   | 0.02    | 39      | 0.5     | 0.5     | 0.08    | 0.09    | 1       | 0.5     | 300    | 3       | 2.5     | 3       | 0.05    | 1.2     | 1.5     |
| SA5112384 | 0.05    | 98.12   | 0.025   | 0.03    | 41      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 256    | 3       | 2.5     | 2       | 0.05    | 0.2     | 0.2     |
| SA5112385 | 4.4     | 22.74   | 0.21    | 0.44    | 281     | 0.5     | 1       | 0.90    | 1.02    | 7       | 7       | 658    | 7       | 28      | 33      | 0.05    | 6.4     | 7.4     |
| SA5112386 | 1.8     | 43.84   | 0.025   | 0.10    | 86      | 0.5     | 1       | 0.11    | 0.11    | 3       | 7       | 2900   | 2       | 2.5     | 9       | 0.05    | 3.6     | 4.5     |
| SA5112387 | 3.4     | 62.33   | 0.025   | 0.19    | 147     | 0.5     | 2       | 0.25    | 0.26    | 5       | 9       | 2830   | 5       | 14      | 15      | 0.05    | 6.6     | 7.4     |
| SA5112388 | 3.1     | 33.96   | 0.025   | 0.14    | 88      | 0.5     | 1       | 0.11    | 0.13    | 3       | 7       | 1925   | 3       | 7       | 10      | 0.05    | 3.3     | 3.8     |
| SA5112389 | 0.1     | 97.87   | 0.025   | 0.04    | 46      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 286    | 5       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112390 | 0.9     | 28.64   | 0.025   | 0.04    | 48      | 0.5     | 1       | 0.025   | 0.05    | 1       | 3       | 758    | 1       | 2.5     | 7       | 0.05    | 1.4     | 1.8     |
| SA5112391 | 9.2     | 21.01   | 0.40    | 0.52    | 9046    | 7       | 5       | 0.51    | 0.84    | 6       | 36      | 2894   | 7       | 34      | 38      | 0.05    | 11.0    | 11.3    |
| SA5112392 | 1.6     | 33.29   | 0.025   | 0.06    | 69      | 0.5     | 0.5     | 0.08    | 0.10    | 3       | 3       | 1116   | 3       | 6       | 9       | 0.05    | 2.7     | 3.5     |
| SA5112393 | 10.3    | 35.14   | 0.025   | 0.37    | 3533    | 0.5     | 11      | 0.15    | 0.18    | 2       | 32      | 3303   | 4       | 2.5     | 19      | 0.05    | 8.2     | 10.7    |
| SA5112394 | 3.1     | 29.87   | 0.025   | 0.10    | 160     | 0.5     | 6       | 0.24    | 0.30    | 4       | 4       | 591    | 6       | 12      | 14      | 0.05    | 2.7     | 3.6     |
| SA5112395 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112396 | 4.8     | 37.32   | 0.50    | 0.40    | 332     | 0.5     | 3       | 0.27    | 0.35    | 6       | 22      | 1991   | 5       | 12      | 16      | 0.05    | 8.1     | 9.9     |
| SA5112397 | 0.5     | 67.83   | 0.33    | 0.06    | 91      | 0.5     | 1       | 0.08    | 0.10    | 2       | 6       | 364    | 2       | 2.5     | 6       | 0.05    | 2.5     | 3.0     |
| SA5112398 | 1.1     | 30.01   | 0.11    | 0.06    | 60      | 0.5     | 1       | 0.07    | 0.08    | 2       | 2       | 800    | 0.5     | 2.5     | 7       | 0.05    | 2.3     | 3.1     |
| SA5112399 | 1.0     | 32.67   | 0.13    | 0.08    | 42      | 0.5     | 1       | 0.10    | 0.10    | 2       | 4       | 368    | 0.5     | 2.5     | 5       | 0.05    | 2.7     | 3.6     |
| SA5112400 | 5.9     | 40.39   | 0.49    | 0.48    | 341     | 0.5     | 1       | 0.60    | 0.67    | 5       | 27      | 2343   | 1       | 20      | 23      | 0.05    | 9.2     | 10.0    |
| SA5112401 | 2.6     | 33.73   | 0.80    | 0.13    | 1738    | 0.5     | 6       | 0.12    | 0.11    | 3       | 39      | 2184   | 3       | 15      | 10      | 0.05    | 10.0    | 12.0    |
| SA5112402 | 0.05    | 97.67   | 0.025   | 0.08    | 100     | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 145    | 0.5     | 2.5     | 6       | 0.05    | 0.2     | 0.3     |
| SA5112403 | 13.7    | 11.90   | 0.56    | 1.65    | 914     | 2       | 2       | 1.40    | 4.48    | 24      | 28      | 1469   | 8       | 55      | 52      | 0.05    | 17.9    | 21.8    |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112404 | 2.6     | 44.63   | 0.24    | 0.18    | 111     | 0.5     | 1       | 0.17    | 0.22    | 3       | 8       | 1166   | 4       | 11      | 13      | 0.05    | 4.7     | 6.2     |
| SA5112405 | 8.7     | 18.44   | 0.40    | 0.71    | 418     | 0.5     | 1       | 1.20    | 1.40    | 13      | 16      | 959    | 9       | 40      | 41      | 0.05    | 10.0    | 11.8    |
| SA5112406 | 3.2     | 62.13   | 0.42    | 0.23    | 167     | 0.5     | 3       | 0.32    | 0.36    | 4       | 15      | 2679   | 3       | 2.5     | 14      | 0.05    | 5.7     | 6.6     |
| SA5112407 | 9.3     | 8.90    | 0.53    | 1.69    | 908     | 0.5     | 1       | 1.60    | 3.23    | 21      | 38      | 1034   | 6       | 45      | 54      | 0.05    | 15.4    | 17.0    |
| SA5112408 | 7.9     | 23.04   | 0.22    | 0.51    | 236     | 0.5     | 2       | 0.56    | 0.69    | 5       | 15      | 971    | 3       | 25      | 27      | 0.05    | 5.2     | 6.6     |
| SA5112409 | 0.2     | 97.94   | 0.025   | 0.07    | 47      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 2       | 152    | 0.5     | 2.5     | 2       | 0.05    | 0.1     | 0.2     |
| SA5112410 | 0.2     | 97.85   | 0.025   | 0.13    | 69      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 148    | 2       | 2.5     | 2       | 0.05    | 0.2     | 0.2     |
| SA5112411 | 2.4     | 50.76   | 0.25    | 0.29    | 175     | 0.5     | 1       | 0.19    | 0.21    | 3       | 29      | 1206   | 2       | 10      | 9       | 0.05    | 5.4     | 6.4     |
| SA5112412 | 2.9     | 37.20   | -9      | 0.28    | 222     | -9      | 20      | -9      | 0.38    | 3       | 29      | 833    | 1       | -9      | 10      | -9      | -9      | 6.5     |
| SA5112413 | 3.7     | 37.34   | 0.33    | 0.43    | 792     | 6       | 8       | 0.41    | 0.44    | 5       | 34      | 3184   | 0.5     | 14      | 15      | 0.05    | 7.9     | 9.9     |
| SA5112414 | 0.2     | 98.12   | 0.025   | 0.09    | 63      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 202    | 0.5     | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112415 | 0.3     | 97.50   | 0.025   | 0.08    | 97      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 1       | 175    | 0.5     | 2.5     | 2       | 0.05    | 0.2     | 0.2     |
| SA5112416 | 0.2     | 98.09   | 0.025   | 0.03    | 34      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 189    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112417 | 0.3     | 96.88   | -9      | 0.06    | 89      | -9      | 0.5     | -9      | 0.05    | 0.5     | 3       | 269    | 0.5     | -9      | 3       | -9      | -9      | 0.6     |
| SA5112418 | 1.3     | 19.23   | 0.08    | 0.13    | 3057    | 2       | 5       | 0.08    | 0.09    | 0.5     | 28      | 1265   | 0.5     | 2.5     | 5       | 0.05    | 3.1     | 4.1     |
| SA5112419 | 1.3     | 34.06   | 0.14    | 0.11    | 75      | 0.5     | 1       | 0.12    | 0.14    | 1       | 9       | 446    | 1       | 5       | 7       | 0.05    | 2.1     | 2.7     |
| SA5112420 | 2.2     | 52.81   | 0.11    | 0.23    | 126     | 0.5     | 0.5     | 0.15    | 0.17    | 2       | 20      | 776    | 2       | 2.5     | 7       | 0.05    | 3.7     | 4.8     |
| SA5112421 | 0.2     | 97.36   | 0.025   | 0.09    | 71      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 1       | 178    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.1     |
| SA5112422 | 0.1     | 98.09   | -9      | 0.05    | 47      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 175    | 2       | -9      | 1       | -9      | -9      | 0.2     |
| SA5112423 | 0.1     | 98.38   | -9      | 0.05    | 35      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 195    | 2       | -9      | 2       | -9      | -9      | 0.3     |
| SA5112424 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112425 | 0.8     | 32.26   | 0.09    | 0.10    | 64      | 0.5     | 0.5     | 0.09    | 0.12    | 0.5     | 5       | 1225   | 1       | 8       | 6       | 0.05    | 1.8     | 2.5     |
| SA5112426 | 0.2     | 97.75   | 0.025   | 0.03    | 27      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 195    | 1       | 2.5     | 4       | 0.05    | 0.3     | 0.4     |
| SA5112427 | 0.2     | 97.78   | -9      | 0.05    | 54      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 221    | 0.5     | -9      | 2       | -9      | -9      | 0.2     |
| SA5112428 | 0.05    | 97.87   | 0.025   | 0.08    | 47      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 1       | 255    | 0.5     | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112429 | 0.1     | 98.32   | 0.025   | 0.07    | 49      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 182    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112430 | 0.1     | 98.16   | -9      | 0.09    | 41      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 236    | 0.5     | -9      | 3       | -9      | -9      | 0.1     |
| SA5112431 | 0.9     | 36.71   | 0.07    | 0.10    | 57      | 0.5     | 0.5     | 0.07    | 0.09    | 0.5     | 7       | 661    | 2       | 2.5     | 5       | 0.05    | 1.8     | 2.5     |
| SA5112432 | 0.2     | 97.38   | 0.025   | 0.07    | 78      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 236    | 1       | 2.5     | 3       | 0.05    | 0.3     | 0.3     |
| SA5112433 | 0.2     | 97.62   | -9      | 0.09    | 81      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 176    | 0.5     | -9      | 3       | -9      | -9      | 0.2     |
| SA5112434 | 0.7     | 33.77   | 0.025   | 0.08    | 49      | 0.5     | 0.5     | 0.06    | 0.07    | 0.5     | 7       | 564    | 0.5     | 2.5     | 3       | 0.05    | 1.6     | 2.3     |
| SA5112435 | 0.2     | 97.80   | 0.025   | 0.04    | 49      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 1       | 228    | 0.5     | 2.5     | 3       | 0.05    | 0.3     | 0.3     |
| SA5112436 | 2.7     | 39.32   | 0.025   | 0.18    | 108     | 0.5     | 4       | 0.20    | 0.24    | 2       | 10      | 495    | 3       | 2.5     | 9       | 0.05    | 3.7     | 4.7     |
| SA5112437 | 0.8     | 46.15   | 0.025   | 0.06    | 45      | 4       | 3       | 0.025   | 0.04    | 0.5     | 8       | 767    | 0.5     | 2.5     | 5       | 0.05    | 2.5     | 3.5     |
| SA5112438 | 2.6     | 46.14   | 0.025   | 0.21    | 176     | 5       | 5       | 0.26    | 0.31    | 2       | 8       | 842    | 3       | 9       | 11      | 0.05    | 3.5     | 5.0     |
| SA5112439 | 3.3     | 29.38   | 0.025   | 0.25    | 233     | 0.5     | 2       | 0.25    | 0.35    | 5       | 9       | 989    | 3       | 11      | 13      | 0.05    | 4.1     | 6.2     |
| SA5112440 | 2.3     | 35.04   | 0.16    | 0.13    | 123     | 0.5     | 3       | 0.08    | 0.08    | 2       | 15      | 1689   | 1       | 2.5     | 5       | 0.05    | 3.4     | 4.3     |
| SA5112441 | 1.8     | 47.06   | 0.45    | 0.11    | 1153    | 0.5     | 4       | 0.10    | 0.10    | 3       | 15      | 5482   | 2       | 2.5     | 8       | 0.05    | 5.2     | 6.2     |
| SA5112442 | 0.8     | 64.20   | 0.23    | 0.05    | 38      | 0.5     | 1       | 0.08    | 0.09    | 1       | 16      | 340    | 2       | 2.5     | 5       | 0.05    | 3.0     | 3.8     |
| SA5112443 | 1.9     | 41.71   | 0.21    | 0.08    | 66      | 0.5     | 1       | 0.06    | 0.05    | 3       | 8       | 1853   | 3       | 7       | 6       | 0.05    | 3.2     | 4.0     |
| SA5112444 | 1.6     | 35.58   | 0.06    | 0.11    | 92      | 0.5     | 0.5     | 0.19    | 0.23    | 3       | 5       | 639    | 3       | 8       | 12      | 0.05    | 2.5     | 3.0     |
| SA5112445 | 0.1     | 98.06   | 0.025   | 0.04    | 41      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 255    | 1       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112446 | 0.1     | 97.97   | -9      | 0.04    | 44      | -9      | 0.5     | -9      | 0.02    | 0.5     | 0.5     | 411    | 5       | -9      | 1       | -9      | -9      | 0.1     |
| SA5112447 | 0.3     | 97.95   | 0.025   | 0.06    | 52      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 177    | 0.5     | 2.5     | 3       | 0.05    | 0.3     | 0.3     |
| SA5112448 | 0.2     | 96.89   | 0.025   | 0.04    | 33      | 0.5     | 1       | 0.025   | 0.02    | 0.5     | 0.5     | 286    | 7       | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112449 | 0.2     | 96.41   | -9      | 0.05    | 32      | -9      | 0.5     | -9      | 0.04    | 0.5     | 2       | 230    | 3       | -9      | 5       | -9      | -9      | 0.5     |
| SA5112450 | 1.6     | 26.62   | 0.11    | 0.22    | 187     | 0.5     | 3       | 0.17    | 0.24    | 1       | 18      | 2173   | 0.5     | 2.5     | 11      | 0.05    | 5.6     | 8.4     |
| SA5112451 | 0.2     | 97.25   | 0.025   | 0.07    | 74      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 3       | 165    | 0.5     | 2.5     | 2       | 0.05    | 0.3     | 0.3     |
| SA5112452 | 0.6     | 82.35   | -9      | 0.12    | 107     | -9      | 0.5     | -9      | 0.35    | 4       | 7       | 968    | 3       | -9      | 12      | -9      | -9      | 2.9     |
| SA5112453 | 1.5     | 44.79   | 0.36    | 0.14    | 970     | 5       | 7       | 0.12    | 0.13    | 1       | 25      | 4772   | 0.5     | 2.5     | 6       | 0.05    | 4.0     | 4.5     |
| SA5112454 | 1.1     | 47.76   | 0.24    | 0.12    | 233     | 0.5     | 4       | 0.11    | 0.10    | 2       | 18      | 3879   | 0.5     | 2.5     | 6       | 0.05    | 3.3     | 3.6     |
| SA5112455 | 0.8     | 94.79   | 0.025   | 0.04    | 46      | 0.5     | 0.5     | 0.025   | 0.10    | 0.5     | 2       | 217    | 8       | 2.5     | 6       | 0.05    | 0.5     | 0.9     |
| SA5112456 | 0.05    | 98.56   | -9      | 0.03    | 23      | -9      | 0.5     | -9      | 0.02    | 0.5     | 0.5     | 247    | 2       | -9      | 1       | -9      | -9      | 0.2     |
| SA5112457 | 0.2     | 97.49   | -9      | 0.04    | 46      | -9      | 0.5     | -9      | 0.04    | 0.5     | 2       | 199    | 2       | -9      | 3       | -9      | -9      | 0.3     |
| SA5112458 | 0.1     | 98.45   | 0.025   | 0.05    | 49      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 208    | 0.5     | 2.5     | 1       | 0.05    | 0.2     | 0.1     |
| SA5112459 | 0.2     | 98.17   | 0.025   | 0.03    | 27      | 0.5     | 0.5     | 0.06    | 0.04    | 0.5     | 0.5     | 207    | 3       | 2.5     | 2       | 0.05    | 0.3     | 0.2     |
| SA5112460 | 1.0     | 33.04   | 0.025   | 0.08    | 64      | 0.5     | 0.5     | 0.11    | 0.09    | 1       | 8       | 2012   | 1       | 2.5     | 5       | 0.05    | 2.6     | 2.9     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112461 | 0.2     | 97.44   | 0.025   | 0.04    | 30      | 0.5     | 0.5     | 0.08    | 0.03    | 0.5     | 0.5     | 220    | 6       | 2.5     | 1       | 0.05    | 0.6     | 0.4     |
| SA5112462 | 0.1     | 98.42   | 0.13    | 0.05    | 34      | 0.5     | 0.5     | 0.05    | 0.02    | 0.5     | 0.5     | 212    | 0.5     | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112463 | 1.8     | 32.10   | 0.10    | 0.14    | 140     | 0.5     | 0.5     | 0.15    | 0.21    | 2       | 7       | 1280   | 1       | 2.5     | 9       | 0.05    | 2.5     | 3.7     |
| SA5112464 | 1.9     | 30.63   | 0.06    | 0.15    | 116     | 0.5     | 0.5     | 0.17    | 0.21    | 2       | 7       | 1146   | 2       | 2.5     | 11      | 0.05    | 2.5     | 3.4     |
| SA5112465 | 1.6     | 39.52   | 0.07    | 0.12    | 134     | 0.5     | 0.5     | 0.15    | 0.18    | 2       | 9       | 1642   | 3       | 2.5     | 6       | 0.05    | 3.3     | 4.2     |
| SA5112466 | 1.4     | 36.15   | 0.12    | 0.11    | 79      | 0.5     | 0.5     | 0.13    | 0.15    | 2       | 8       | 1283   | 2       | 2.5     | 8       | 0.05    | 3.2     | 3.9     |
| SA5112467 | 2.2     | 36.43   | 0.20    | 0.15    | 268     | 0.5     | 1       | 0.11    | 0.11    | 2       | 15      | 2561   | 9       | 2.5     | 6       | 0.05    | 4.6     | 5.6     |
| SA5112468 | 1.0     | 54.92   | 0.025   | 0.08    | 65      | 0.5     | 0.5     | 0.09    | 0.10    | 2       | 8       | 694    | 2       | 2.5     | 4       | 0.05    | 2.5     | 3.0     |
| SA5112469 | 1.7     | 28.64   | 0.025   | 0.10    | 72      | 0.5     | 1       | 0.09    | 0.10    | 2       | 7       | 462    | 1       | 2.5     | 8       | 0.05    | 1.9     | 2.4     |
| SA5112470 | 6.7     | 22.10   | 0.28    | 0.93    | 458     | 0.5     | 0.5     | 1.40    | 1.50    | 9       | 19      | 1025   | 9       | 32      | 39      | 0.05    | 10.0    | 11.0    |
| SA5112471 | 0.4     | 97.20   | -9      | 0.04    | 51      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 233    | 3       | -9      | 3       | -9      | -9      | 0.4     |
| SA5112472 | 0.7     | 58.39   | 0.025   | 0.06    | 33      | 0.5     | 2       | 0.05    | 0.05    | 0.5     | 10      | 551    | 4       | 7       | 4       | 0.05    | 2.2     | 2.6     |
| SA5112473 | 0.2     | 98.41   | 0.025   | 0.06    | 38      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 213    | 0.5     | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112474 | 0.2     | 98.08   | 0.06    | 0.04    | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 157    | 1       | 2.5     | 4       | 0.05    | 0.3     | 0.2     |
| SA5112475 | 0.2     | 98.26   | 0.025   | 0.06    | 37      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 174    | 2       | 2.5     | 3       | 0.05    | 0.3     | 0.2     |
| SA5112476 | 0.2     | 97.93   | -9      | 0.05    | 37      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 154    | 1       | -9      | 3       | -9      | -9      | 0.3     |
| SA5112477 | 0.1     | 98.72   | -9      | 0.07    | 26      | -9      | 0.5     | -9      | 0.03    | 0.5     | 1       | 223    | 1       | -9      | 1       | -9      | -9      | 0.1     |
| SA5112478 | 1.4     | 32.14   | 0.09    | 0.11    | 101     | 0.5     | 0.5     | 0.15    | 0.15    | 2       | 6       | 1254   | 1       | 2.5     | 7       | 0.05    | 2.7     | 3.3     |
| SA5112479 | 0.1     | 97.88   | -9      | 0.04    | 30      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 177    | 0.5     | -9      | 1       | -9      | -9      | 0.2     |
| SA5112480 | 0.2     | 98.06   | 0.025   | 0.05    | 31      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 186    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112481 | 0.1     | 98.20   | -9      | 0.05    | 52      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 248    | 3       | -9      | 1       | -9      | -9      | 0.2     |
| SA5112482 | 1.0     | 35.76   | 0.11    | 0.10    | 82      | 0.5     | 0.5     | 0.13    | 0.14    | 1       | 8       | 499    | 0.5     | 2.5     | 5       | 0.05    | 2.8     | 3.5     |
| SA5112483 | 0.1     | 97.90   | -9      | 0.08    | 35      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 188    | 0.5     | -9      | 2       | -9      | -9      | 0.1     |
| SA5112484 | 0.7     | 38.40   | 0.025   | 0.07    | 47      | 0.5     | 0.5     | 0.08    | 0.09    | 0.5     | 9       | 500    | 2       | 2.5     | 3       | 0.05    | 2.0     | 2.5     |
| SA5112485 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112486 | 0.5     | 29.44   | 0.025   | 0.07    | 33      | 0.5     | 0.5     | 0.08    | 0.08    | 0.5     | 6       | 326    | 2       | 2.5     | 2       | 0.05    | 1.5     | 2.0     |
| SA5112487 | 2.3     | 71.93   | 0.025   | 0.38    | 173     | 0.5     | 0.5     | 0.34    | 0.34    | 1       | 15      | 470    | 3       | 2.5     | 7       | 0.05    | 5.8     | 6.4     |
| SA5112488 | 1.9     | 58.28   | -9      | 0.34    | 269     | -9      | 0.5     | -9      | 0.91    | 7       | 11      | 1096   | 18      | -9      | 34      | -9      | -9      | 5.3     |
| SA5112489 | 0.2     | 97.88   | -9      | 0.02    | 28      | -9      | 0.5     | -9      | 0.03    | 0.5     | 3       | 291    | 1       | -9      | 1       | -9      | -9      | 0.3     |
| SA5112490 | 0.5     | 31.77   | 0.025   | 0.05    | 24      | 0.5     | 1       | 0.025   | 0.04    | 0.5     | 17      | 283    | 0.5     | 2.5     | 3       | 0.05    | 1.5     | 2.4     |
| SA5112491 | 0.5     | 83.35   | 0.10    | 0.07    | 30      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 12      | 541    | 2       | 2.5     | 2       | 0.05    | 2.9     | 3.8     |
| SA5112492 | 0.2     | 97.84   | 0.025   | 0.04    | 40      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 210    | 8       | 2.5     | 3       | 0.05    | 0.2     | 0.3     |
| SA5112493 | 0.1     | 98.12   | -9      | 0.03    | 22      | -9      | 0.5     | -9      | 0.02    | 0.5     | 0.5     | 223    | 0.5     | -9      | 1       | -9      | -9      | 0.3     |
| SA5112494 | 0.4     | 97.68   | 0.025   | 0.03    | 39      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 204    | 2       | 2.5     | 2       | 0.05    | 0.4     | 0.3     |
| SA5112495 | 0.05    | 98.11   | 0.025   | 0.06    | 72      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 221    | 5       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112496 | 0.05    | 25.75   | 0.06    | 0.01    | 9       | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 2       | 256    | 0.5     | 2.5     | 3       | 0.05    | 1.2     | 1.6     |
| SA5112497 | 0.05    | 97.95   | 0.025   | 0.03    | 26      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 289    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112498 | 0.05    | 97.77   | 0.025   | 0.04    | 36      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 215    | 3       | 2.5     | 4       | 0.05    | 0.2     | 0.3     |
| SA5112499 | 0.05    | 96.25   | -9      | 0.09    | 31      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 275    | 1       | -9      | 1       | -9      | -9      | 0.3     |
| SA5112500 | 0.2     | 92.02   | -9      | 0.04    | 35      | -9      | 0.5     | -9      | 0.04    | 0.5     | 4       | 260    | 2       | -9      | 1       | -9      | -9      | 0.9     |
| SA5112501 | 0.05    | 98.31   | 0.025   | 0.02    | 40      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 213    | 2       | 2.5     | 4       | 0.05    | 0.4     | 0.2     |
| SA5112502 | 0.05    | 98.33   | 0.025   | 0.02    | 28      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 225    | 1       | 2.5     | 1       | 0.05    | 0.3     | 0.4     |
| SA5112503 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112504 | 5.2     | 18.93   | 0.28    | 0.82    | 461     | 0.5     | 0.5     | 1.00    | 1.15    | 7       | 20      | 1770   | 6       | 25      | 32      | 0.05    | 10.0    | 10.7    |
| SA5112505 | 0.2     | 97.74   | -9      | 0.04    | 50      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 223    | 2       | -9      | 3       | -9      | -9      | 0.3     |
| SA5112506 | 0.9     | 63.18   | 0.05    | 0.02    | 39      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 12      | 397    | 3       | 2.5     | 2       | 0.05    | 2.0     | 2.5     |
| SA5112507 | 0.1     | 98.11   | 0.025   | 0.05    | 53      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 316    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112508 | 0.1     | 98.71   | 0.025   | 0.05    | 43      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 222    | 2       | 2.5     | 1       | 0.05    | 0.1     | 0.2     |
| SA5112509 | 0.1     | 97.87   | 0.025   | 0.07    | 73      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 196    | 1       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112510 | 0.05    | 98.47   | 0.025   | 0.03    | 27      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 296    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112511 | 1.9     | 11.72   | 0.11    | 0.11    | 92      | 0.5     | 0.5     | 0.20    | 0.25    | 2       | 0.5     | 503    | 3       | 6       | 9       | 0.05    | 1.8     | 2.5     |
| SA5112512 | 0.05    | 97.45   | 0.025   | 0.03    | 36      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 335    | 3       | 2.5     | 4       | 0.05    | 0.2     | 0.2     |
| SA5112513 | 0.05    | 98.37   | 0.025   | 0.05    | 40      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 232    | 2       | 2.5     | 2       | 0.05    | 0.1     | 0.1     |
| SA5112514 | 0.05    | 97.52   | 0.025   | 0.05    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 268    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.1     |
| SA5112515 | 0.05    | 98.67   | 0.025   | 0.02    | 19      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 319    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112516 | 2.2     | 74.05   | 0.19    | 0.22    | 181     | 0.5     | 0.5     | 0.49    | 0.55    | 5       | 4       | 639    | 8       | 14      | 19      | 0.05    | 5.2     | 6.0     |
| SA5112517 | 0.2     | 97.62   | 0.025   | 0.03    | 37      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 209    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112518 | 0.3     | 98.03   | 0.025   | 0.09    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 255    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.5     |
| SA5112519 | 0.1     | 97.97   | 0.05    | 0.03    | 57      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 253    | 6       | 2.5     | 3       | 0.05    | 0.5     | 0.2     |
| SA5112520 | 0.05    | 97.91   | 0.025   | 0.06    | 57      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 197    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112521 | 0.05    | 90.14   | 0.025   | 0.07    | 23      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 2       | 301    | 0.5     | 2.5     | 1       | 0.05    | 1.5     | 1.7     |
| SA5112522 | 0.05    | 98.18   | 0.025   | 0.05    | 43      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 227    | 1       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112523 | 0.1     | 89.15   | 0.07    | 0.11    | 28      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 14      | 426    | 1       | 2.5     | 4       | 0.05    | 1.8     | 2.2     |
| SA5112524 | 0.05    | 98.45   | 0.025   | 0.04    | 47      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 182    | 1       | 2.5     | 2       | 0.05    | 0.2     | 0.2     |
| SA5112525 | 0.1     | 95.26   | 0.025   | 0.10    | 53      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 208    | 1       | 2.5     | 3       | 0.05    | 0.4     | 0.3     |
| SA5112526 | 0.05    | 97.96   | 0.025   | 0.10    | 71      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 135    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.1     |
| SA5112527 | 0.5     | 86.92   | 0.025   | 0.13    | 38      | 0.5     | 0.5     | 0.05    | 0.05    | 0.5     | 15      | 419    | 0.5     | 2.5     | 1       | 0.05    | 1.8     | 2.2     |
| SA5112528 | 0.2     | 98.14   | -9      | 0.03    | 27      | -9      | 0.5     | -9      | 0.03    | 0.5     | 1       | 172    | 0.5     | -9      | 3       | -9      | -9      | 0.3     |
| SA5112529 | 0.3     | 97.71   | -9      | 0.09    | 50      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 155    | 2       | -9      | 1       | -9      | -9      | 0.1     |
| SA5112530 | 0.2     | 97.90   | 0.025   | 0.09    | 47      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 4       | 167    | 0.5     | 2.5     | 5       | 0.05    | 0.3     | 0.2     |
| SA5112531 | 0.05    | 97.89   | -9      | 0.04    | 33      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 184    | 1       | -9      | 2       | -9      | -9      | 0.3     |
| SA5112532 | 0.05    | 98.20   | -9      | 0.04    | 36      | -9      | 0.5     | -9      | 0.02    | 0.5     | 0.5     | 203    | 3       | -9      | 1       | -9      | -9      | 0.1     |
| SA5112533 | 0.05    | 98.40   | -9      | 0.05    | 30      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 144    | 2       | -9      | 9       | -9      | -9      | 0.1     |
| SA5112534 | 0.05    | 98.13   | -9      | 0.05    | 49      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 185    | 1       | -9      | 2       | -9      | -9      | 0.2     |
| SA5112535 | 0.05    | 97.29   | 0.025   | 0.06    | 46      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 180    | 1       | 2.5     | 1       | 0.05    | 0.5     | 0.5     |
| SA5112536 | 0.1     | 97.74   | -9      | 0.03    | 35      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 227    | 2       | -9      | 1       | -9      | -9      | 0.3     |
| SA5112537 | 2.1     | 25.85   | 0.025   | 0.24    | 163     | 0.5     | 0.5     | 0.23    | 0.27    | 3       | 18      | 907    | 2       | 11      | 11      | 0.05    | 2.5     | 3.5     |
| SA5112538 | 0.2     | 97.43   | 0.025   | 0.03    | 39      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 172    | 3       | 2.5     | 3       | 0.05    | 0.4     | 0.5     |
| SA5112539 | 4.5     | 17.46   | 0.15    | 0.66    | 361     | 0.5     | 0.5     | 0.87    | 1.04    | 5       | 22      | 2153   | 4       | 27      | 31      | 0.05    | 6.9     | 8.9     |
| SA5112540 | 5.3     | 16.50   | 0.30    | 0.78    | 472     | 0.5     | 0.5     | 1.30    | 1.47    | 8       | 21      | 1037   | 6       | 35      | 40      | 0.05    | 9.5     | 11.2    |
| SA5112541 | 0.6     | 53.46   | 0.06    | 0.08    | 103     | 3       | 4       | 0.06    | 0.06    | 0.5     | 13      | 1382   | 1       | 2.5     | 3       | 0.05    | 2.6     | 3.4     |
| SA5112542 | 0.8     | 33.56   | 0.025   | 0.11    | 80      | 0.5     | 0.5     | 0.25    | 0.27    | 3       | 3       | 440    | 2       | 9       | 10      | 0.05    | 2.4     | 2.9     |
| SA5112543 | 4.0     | 32.27   | 0.16    | 0.38    | 222     | 0.5     | 1       | 0.62    | 0.75    | 9       | 9       | 881    | 5       | 23      | 26      | 0.05    | 5.4     | 6.7     |
| SA5112544 | 0.05    | 97.84   | 0.025   | 0.03    | 31      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 250    | 3       | 2.5     | 2       | 0.05    | 0.2     | 0.2     |
| SA5112545 | 0.05    | 98.48   | 0.025   | 0.06    | 42      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 180    | 1       | 2.5     | 3       | 0.05    | 0.1     | 0.1     |
| SA5112546 | 0.05    | 97.62   | 0.025   | 0.02    | 27      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 243    | 2       | 2.5     | 3       | 0.05    | 0.4     | 0.5     |
| SA5112547 | 3.0     | 40.18   | 0.15    | 0.15    | 120     | 0.5     | 0.5     | 0.21    | 0.26    | 4       | 6       | 604    | 4       | 8       | 11      | 0.05    | 3.7     | 5.3     |
| SA5112548 | 11.7    | 13.86   | 0.37    | 0.98    | 586     | 0.5     | 2       | 1.30    | 1.48    | 12      | 21      | 2682   | 7       | 66      | 61      | 0.05    | 10.6    | 13.5    |
| SA5112549 | 6.7     | 25.47   | 0.20    | 0.50    | 297     | 0.5     | 1       | 0.66    | 0.78    | 10      | 10      | 1279   | 7       | 28      | 30      | 0.05    | 6.7     | 7.8     |
| SA5112550 | 1.5     | 40.08   | 0.18    | 0.08    | 84      | 0.5     | 2       | 0.09    | 0.10    | 4       | 6       | 1939   | 3       | 2.5     | 6       | 0.05    | 3.8     | 4.8     |
| SA5112551 | 3.9     | 28.97   | 0.15    | 0.26    | 210     | 0.5     | 1       | 0.59    | 0.73    | 7       | 6       | 616    | 7       | 19      | 25      | 0.05    | 4.6     | 5.6     |
| SA5112552 | 4.1     | 27.69   | 0.20    | 0.32    | 272     | 0.5     | 2       | 0.79    | 0.95    | 9       | 6       | 602    | 12      | 29      | 35      | 0.05    | 5.5     | 6.3     |
| SA5112553 | 3.4     | 31.53   | 0.11    | 0.16    | 114     | 0.5     | 0.5     | 0.22    | 0.28    | 4       | 5       | 803    | 5       | 10      | 12      | 0.05    | 3.2     | 4.2     |
| SA5112554 | 0.6     | 32.28   | 0.025   | 0.05    | 43      | 0.5     | 0.5     | 0.11    | 0.15    | 2       | 2       | 374    | 2       | 7       | 8       | 0.05    | 1.7     | 2.2     |
| SA5112555 | 2.8     | 30.59   | 0.11    | 0.13    | 231     | 0.5     | 2       | 0.12    | 0.16    | 3       | 8       | 1313   | 2       | 8       | 15      | 0.05    | 3.4     | 4.9     |
| SA5112556 | 1.7     | 25.87   | 0.06    | 0.08    | 58      | 0.5     | 0.5     | 0.09    | 0.10    | 2       | 3       | 838    | 2       | 2.5     | 8       | 0.05    | 2.0     | 2.6     |
| SA5112557 | 1.7     | 39.89   | 0.025   | 0.10    | 57      | 0.5     | 2       | 0.07    | 0.08    | 2       | 9       | 1719   | 2       | 2.5     | 8       | 0.05    | 3.1     | 4.6     |
| SA5112558 | 2.5     | 38.46   | 0.22    | 0.18    | 243     | 0.5     | 2       | 0.14    | 0.15    | 3       | 12      | 1658   | 2       | 8       | 13      | 0.05    | 5.1     | 6.1     |
| SA5112559 | 16.0    | 1.91    | 0.72    | 1.44    | 959     | 0.5     | 0.5     | 2.50    | 2.21    | 17      | 26      | 2336   | 10      | 120     | 110     | 0.05    | 20.6    | 18.3    |
| SA5112560 | 14.3    | 6.09    | 0.90    | 1.33    | 791     | 0.5     | 2       | 2.10    | 2.06    | 22      | 23      | 3657   | 9       | 89      | 93      | 0.05    | 19.3    | 18.7    |
| SA5112561 | 0.05    | 97.39   | 0.025   | 0.02    | 24      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 200    | 4       | 2.5     | 1       | 0.05    | 0.5     | 0.6     |
| SA5112562 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112563 | 2.8     | 30.27   | 0.20    | 0.33    | 235     | 0.5     | 0.5     | 0.59    | 0.70    | 6       | 6       | 775    | 6       | 14      | 22      | 0.05    | 5.3     | 6.2     |
| SA5112564 | 2.6     | 31.49   | 0.16    | 0.34    | 265     | 0.5     | 0.5     | 0.66    | 0.84    | 7       | 5       | 413    | 6       | 24      | 26      | 0.05    | 5.3     | 6.3     |
| SA5112565 | 13.8    | 6.06    | 0.62    | 1.32    | 671     | 2       | 2       | 2.30    | 2.22    | 18      | 25      | 2074   | 10      | 100     | 101     | 0.05    | 17.8    | 16.4    |
| SA5112566 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112567 | 2.0     | 44.57   | 0.12    | 0.16    | 144     | 0.5     | 2       | 0.09    | 0.10    | 3       | 8       | 2061   | 2       | 5       | 9       | 0.05    | 3.8     | 4.5     |
| SA5112568 | 0.6     | 39.97   | 0.025   | 0.06    | 48      | 0.5     | 2       | 0.10    | 0.11    | 1       | 3       | 369    | 2       | 2.5     | 6       | 0.05    | 2.1     | 2.8     |
| SA5112569 | 0.05    | 97.58   | 0.025   | 0.02    | 32      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 226    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112570 | 1.5     | 37.81   | 0.16    | 0.13    | 223     | 0.5     | 1       | 0.14    | 0.15    | 3       | 8       | 2012   | 2       | 2.5     | 8       | 0.05    | 4.4     | 5.1     |
| SA5112571 | 0.05    | 96.31   | -9      | 0.02    | 35      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 218    | 3       | -9      | 2       | -9      | -9      | 0.5     |
| SA5112572 | 2.2     | 45.95   | 0.29    | 0.17    | 577     | 0.5     | 2       | 0.22    | 0.21    | 4       | 16      | 3536   | 4       | 6       | 12      | 0.05    | 7.6     | 8.2     |
| SA5112573 | 0.5     | 31.89   | 0.07    | 0.05    | 59      | 0.5     | 0.5     | 0.11    | 0.14    | 2       | 2       | 486    | 2       | 2.5     | 6       | 0.05    | 2.0     | 2.7     |
| SA5112574 | 0.6     | 26.82   | 0.025   | 0.08    | 76      | 0.5     | 0.5     | 0.17    | 0.21    | 2       | 0.5     | 443    | 2       | 5       | 8       | 0.05    | 2.0     | 2.6     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112575 | 1.4     | 36.82   | 0.06    | 0.15    | 126     | 0.5     | 0.5     | 0.23    | 0.26    | 2       | 4       | 503    | 3       | 5       | 8       | 0.05    | 2.9     | 3.7     |
| SA5112576 | 1.0     | 20.65   | 0.08    | 0.08    | 65      | 0.5     | 0.5     | 0.09    | 0.09    | 2       | 3       | 1034   | 1       | 2.5     | 6       | 0.05    | 2.6     | 3.8     |
| SA5112577 | 1.4     | 26.52   | 0.09    | 0.16    | 132     | 0.5     | 0.5     | 0.16    | 0.20    | 2       | 4       | 942    | 12      | 7       | 8       | 0.1     | 2.9     | 3.6     |
| SA5112578 | 0.4     | 29.12   | 0.025   | 0.05    | 54      | 0.5     | 0.5     | 0.07    | 0.08    | 0.5     | 1       | 722    | 1       | 2.5     | 4       | 0.05    | 1.6     | 2.3     |
| SA5112579 | 0.2     | 38.65   | 0.025   | 0.05    | 40      | 0.5     | 0.5     | 0.025   | 0.06    | 0.5     | 1       | 562    | 3       | 2.5     | 4       | 0.05    | 1.9     | 2.8     |
| SA5112580 | 0.2     | 81.23   | 0.12    | 0.03    | 37      | 0.5     | 1       | 0.09    | 0.08    | 1       | 3       | 439    | 3       | 2.5     | 4       | 0.05    | 2.8     | 3.6     |
| SA5112581 | 0.05    | 98.17   | 0.025   | 0.02    | 26      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 236    | 3       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112582 | 0.05    | 98.28   | 0.025   | 0.005   | 19      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 218    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112583 | 1.4     | 36.04   | 0.24    | 0.14    | 186     | 0.5     | 0.5     | 0.17    | 0.20    | 3       | 5       | 1701   | 2       | 2.5     | 8       | 0.05    | 4.1     | 5.1     |
| SA5112584 | 0.05    | 97.60   | -9      | 0.005   | 20      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 206    | 3       | -9      | 1       | -9      | -9      | 0.3     |
| SA5112585 | 0.05    | 88.97   | -9      | 0.005   | 42      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 344    | 4       | -9      | 47      | -9      | -9      | 0.8     |
| SA5112586 | 0.05    | 97.70   | 0.025   | 0.03    | 37      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 237    | 2       | 2.5     | 1       | 0.05    | 0.4     | 0.4     |
| SA5112587 | 5.9     | 30.37   | 0.37    | 0.51    | 320     | 0.5     | 0.5     | 0.69    | 0.87    | 7       | 12      | 1531   | 5       | 26      | 32      | 0.05    | 7.9     | 9.9     |
| SA5112588 | 0.2     | 83.51   | 0.18    | 0.01    | 27      | 0.5     | 1       | 0.08    | 0.07    | 1       | 4       | 495    | 2       | 2.5     | 4       | 0.05    | 3.5     | 4.1     |
| SA5112589 | 0.6     | 33.26   | 0.06    | 0.07    | 83      | 0.5     | 0.5     | 0.15    | 0.16    | 2       | 0.5     | 633    | 3       | 2.5     | 6       | 0.05    | 2.4     | 3.2     |
| SA5112590 | 0.3     | 35.94   | 0.05    | 0.04    | 50      | 0.5     | 0.5     | 0.08    | 0.09    | 1       | 0.5     | 606    | 3       | 2.5     | 2       | 0.05    | 2.0     | 2.9     |
| SA5112591 | 0.05    | 97.83   | 0.08    | 0.01    | 21      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 244    | 3       | 2.5     | 1       | 0.05    | 0.4     | 0.5     |
| SA5112592 | 0.3     | 61.31   | 0.08    | 0.06    | 61      | 0.5     | 0.5     | 0.11    | 0.11    | 2       | 3       | 544    | 2       | 2.5     | 3       | 0.05    | 3.3     | 4.2     |
| SA5112593 | 0.05    | 52.18   | 0.06    | 0.02    | 33      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 2       | 674    | 6       | 2.5     | 1       | 0.05    | 2.5     | 3.2     |
| SA5112594 | 0.05    | 96.00   | 0.025   | 0.02    | 32      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 0.5     | 282    | 5       | 2.5     | 2       | 0.05    | 0.3     | 0.4     |
| SA5112595 | 1.1     | 31.66   | 0.05    | 0.10    | 77      | 0.5     | 1       | 0.14    | 0.20    | 2       | 2       | 484    | 8       | 2.5     | 6       | 0.05    | 2.1     | 2.9     |
| SA5112596 | 1.8     | 42.55   | 0.025   | 0.14    | 105     | 0.5     | 0.5     | 0.16    | 0.18    | 3       | 3       | 826    | 3       | 6       | 6       | 0.05    | 3.0     | 3.7     |
| SA5112597 | 1.1     | 31.11   | 0.025   | 0.08    | 67      | 1       | 1       | 0.11    | 0.13    | 2       | 2       | 793    | 3       | 2.5     | 6       | 0.05    | 1.9     | 2.7     |
| SA5112598 | 4.6     | 46.09   | 0.18    | 0.36    | 216     | 3       | 3       | 0.44    | 0.51    | 7       | 9       | 2304   | 7       | 16      | 19      | 0.05    | 7.2     | 8.4     |
| SA5112599 | 0.7     | 51.78   | 0.10    | 0.10    | 89      | 0.5     | 0.5     | 0.16    | 0.19    | 2       | 2       | 457    | 7       | 2.5     | 8       | 0.05    | 2.4     | 3.6     |
| SA5112600 | 0.5     | 39.90   | 0.025   | 0.08    | 71      | 0.5     | 0.5     | 0.13    | 0.18    | 2       | 0.5     | 513    | 3       | 2.5     | 8       | 0.05    | 2.2     | 3.3     |
| SA5112601 | 1.4     | 51.94   | 0.025   | 0.14    | 100     | 0.5     | 0.5     | 0.19    | 0.23    | 3       | 5       | 1012   | 8       | 2.5     | 10      | 0.05    | 4.0     | 5.4     |
| SA5112602 | 5.0     | 39.20   | 0.29    | 0.39    | 297     | 7       | 8       | 0.76    | 0.49    | 3       | 20      | 1592   | 3       | 24      | 16      | 0.05    | 8.8     | 8.4     |
| SA5112603 | 0.6     | 35.85   | 0.10    | 0.08    | 59      | 0.5     | 0.5     | 0.09    | 0.11    | 1       | 0.5     | 564    | 3       | 2.5     | 6       | 0.05    | 2.3     | 3.0     |
| SA5112604 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112605 | 2.1     | 48.46   | 0.10    | 0.16    | 100     | 0.5     | 1       | 0.18    | 0.22    | 3       | 5       | 1645   | 5       | 6       | 9       | 0.05    | 4.3     | 5.6     |
| SA5112606 | 12.4    | 18.34   | 0.76    | 1.19    | 605     | 10      | 9       | 1.60    | 1.74    | 10      | 31      | 1993   | 10      | 56      | 63      | 0.05    | 15.0    | 16.7    |
| SA5112607 | 2.2     | 56.44   | 0.09    | 0.19    | 282     | 0.5     | 1       | 0.22    | 0.24    | 4       | 5       | 3181   | 5       | 2.5     | 11      | 0.05    | 5.0     | 6.0     |
| SA5112608 | 3.2     | 39.49   | 0.37    | 0.22    | 114     | 0.5     | 1       | 0.21    | 0.26    | 3       | 7       | 1970   | 3       | 9       | 12      | 0.05    | 5.4     | 6.8     |
| SA5112609 | 2.1     | 49.84   | 0.49    | 0.12    | 525     | 4       | 4       | 0.12    | 0.11    | 4       | 15      | 3589   | 6       | 2.5     | 9       | 0.05    | 7.0     | 8.8     |
| SA5112610 | 2.6     | 28.19   | 0.17    | 0.21    | 206     | 0.5     | 0.5     | 0.47    | 0.58    | 5       | 2       | 442    | 6       | 11      | 16      | 0.05    | 4.1     | 5.4     |
| SA5112611 | 1.7     | 27.11   | 0.08    | 0.17    | 86      | 0.5     | 0.5     | 0.16    | 0.20    | 2       | 2       | 706    | 2       | 6       | 9       | 0.05    | 2.8     | 3.6     |
| SA5112612 | 0.05    | 96.99   | -9      | 0.04    | 27      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 249    | 2       | -9      | 3       | -9      | -9      | 0.2     |
| SA5112613 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112614 | 0.2     | 96.21   | -9      | 0.04    | 60      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 202    | 2       | -9      | 2       | -9      | -9      | 0.5     |
| SA5112615 | 0.05    | 97.81   | -9      | 0.03    | 31      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 211    | 3       | -9      | 3       | -9      | -9      | 0.3     |
| SA5112616 | 3.3     | 14.96   | 0.27    | 0.54    | 546     | 0.5     | 0.5     | 1.00    | 1.08    | 5       | 22      | 1202   | 6       | 25      | 29      | 0.05    | 7.3     | 7.7     |
| SA5112617 | 0.1     | 96.77   | -9      | 0.02    | 35      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 248    | 3       | -9      | 3       | -9      | -9      | 0.5     |
| SA5112618 | 0.05    | 97.48   | 0.025   | 0.09    | 75      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 149    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112619 | 0.05    | 98.07   | 0.025   | 0.02    | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 209    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112620 | 0.1     | 95.03   | -9      | 0.03    | 40      | -9      | 0.5     | -9      | 0.08    | 0.5     | 0.5     | 230    | 5       | -9      | 4       | -9      | -9      | 0.6     |
| SA5112621 | 0.05    | 98.02   | -9      | 0.04    | 41      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 187    | 1       | -9      | 3       | -9      | -9      | 0.3     |
| SA5112622 | 7.1     | 5.59    | -9      | 1.01    | 629     | -9      | 0.5     | -9      | 2.44    | 11      | 18      | 907    | 10      | -9      | 61      | -9      | -9      | 13.3    |
| SA5112623 | 4.7     | 5.21    | 0.55    | 0.92    | 813     | 0.5     | 0.5     | 2.50    | 3.21    | 16      | 14      | 2214   | 8       | 58      | 59      | 0.05    | 15.6    | 14.7    |
| SA5112624 | 0.05    | 97.47   | 0.025   | 0.07    | 48      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 187    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.3     |
| SA5112625 | 0.05    | 97.84   | -9      | 0.02    | 30      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 218    | 2       | -9      | 4       | -9      | -9      | 0.3     |
| SA5112626 | 0.05    | 96.96   | 0.025   | 0.02    | 24      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 230    | 3       | 2.5     | 4       | 0.05    | 0.3     | 0.2     |
| SA5112627 | 0.3     | 31.00   | 0.09    | 0.09    | 38      | 0.5     | 1       | 0.025   | 0.05    | 0.5     | 6       | 1391   | 0.5     | 2.5     | 4       | 0.05    | 1.6     | 2.2     |
| SA5112628 | 2.0     | 27.29   | 0.06    | 0.21    | 131     | 0.5     | 0.5     | 0.33    | 0.44    | 2       | 6       | 606    | 3       | 13      | 14      | 0.05    | 2.6     | 3.5     |
| SA5112629 | 4.9     | 27.56   | 0.19    | 0.54    | 340     | 0.5     | 0.5     | 0.9     | 1.03    | 6       | 13      | 921    | 5       | 24      | 27      | 0.05    | 6.7     | 8.0     |
| SA5112630 | 0.05    | 92.64   | 0.07    | 0.04    | 25      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 264    | 0.5     | 2.5     | 5       | 0.05    | 0.5     | 0.6     |
| SA5112631 | 0.05    | 98.65   | 0.025   | 0.04    | 37      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 289    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.2     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112632 | 0.05    | 98.50   | 0.025   | 0.03    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 216    | 1       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112633 | 0.05    | 98.14   | 0.025   | 0.02    | 32      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 262    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112634 | 0.05    | 98.28   | 0.025   | 0.01    | 27      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 239    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112635 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112636 | 5.0     | 14.27   | 0.26    | 0.56    | 405     | 0.5     | 0.5     | 1.20    | 1.44    | 9       | 9       | 955    | 7       | 36      | 41      | 0.05    | 7.4     | 8.9     |
| SA5112637 | 0.05    | 98.15   | 0.025   | 0.06    | 42      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 170    | 1       | 2.5     | 4       | 0.05    | 0.2     | 0.2     |
| SA5112638 | 0.05    | 97.67   | -9      | 0.06    | 64      | -9      | 0.5     | -9      | 0.04    | 0.5     | 0.5     | 168    | 3       | -9      | 2       | -9      | -9      | 0.3     |
| SA5112639 | 0.05    | 97.68   | 0.025   | 0.08    | 59      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 220    | 1       | 2.5     | 4       | 0.05    | 0.3     | 0.2     |
| SA5112640 | 0.05    | 97.17   | -9      | 0.04    | 57      | -9      | 0.5     | -9      | 0.05    | 0.5     | 0.5     | 214    | 2       | -9      | 4       | -9      | -9      | 0.4     |
| SA5112641 | 0.05    | 98.23   | -9      | 0.03    | 41      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 314    | 2       | -9      | 1       | -9      | -9      | 0.1     |
| SA5112642 | 0.05    | 98.40   | 0.025   | 0.08    | 47      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 206    | 0.5     | 2.5     | 1       | 0.05    | 0.5     | 0.05    |
| SA5112643 | 0.05    | 97.61   | 0.025   | 0.06    | 57      | 0.5     | 0.5     | 0.06    | 0.04    | 0.5     | 0.5     | 150    | 1       | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112644 | 0.05    | 98.43   | 0.025   | 0.04    | 42      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 279    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112645 | 0.05    | 98.40   | 0.025   | 0.06    | 49      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 248    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112646 | 0.05    | 98.41   | 0.025   | 0.06    | 48      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 246    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112647 | 0.05    | 98.52   | 0.025   | 0.02    | 28      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 267    | 0.5     | 2.5     | 2       | 0.05    | 0.1     | 0.1     |
| SA5112648 | 0.05    | 98.23   | 0.025   | 0.02    | 24      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 293    | 0.5     | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112649 | 0.05    | 98.46   | 0.025   | 0.02    | 36      | 0.5     | 0.5     | 0.07    | 0.02    | 0.5     | 0.5     | 247    | 3       | 2.5     | 1       | 0.05    | 0.3     | 0.2     |
| SA5112650 | 0.05    | 98.44   | 0.025   | 0.03    | 36      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 240    | 3       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112651 | 0.05    | 98.60   | 0.025   | 0.02    | 34      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 246    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112652 | 0.05    | 98.49   | 0.025   | 0.04    | 26      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 265    | 1       | 2.5     | 1       | 0.05    | 0.1     | 0.1     |
| SA5112653 | 0.1     | 97.03   | -9      | 0.03    | 44      | -9      | 0.5     | -9      | 0.06    | 0.5     | 0.5     | 188    | 2       | -9      | 2       | -9      | -9      | 0.4     |
| SA5112654 | 9.1     | 4.04    | 0.58    | 1.03    | 1422    | 0.5     | 2       | 2.50    | 2.27    | 12      | 24      | 1198   | 10      | 83      | 75      | 0.05    | 17.5    | 16.1    |
| SA5112655 | 6.5     | 15.48   | 0.41    | 0.79    | 527     | 0.5     | 0.5     | 1.50    | 1.76    | 9       | 13      | 1152   | 10      | 45      | 51      | 0.05    | 10.7    | 11.8    |
| SA5112656 | 0.05    | 98.14   | 0.025   | 0.03    | 41      | 0.5     | 0.5     | 0.05    | 0.04    | 0.5     | 0.5     | 220    | 1       | 2.5     | 3       | 0.05    | 0.5     | 0.4     |
| SA5112657 | 0.05    | 97.84   | 0.025   | 0.04    | 63      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 165    | 1       | 2.5     | 4       | 0.05    | 0.3     | 0.3     |
| SA5112658 | 0.05    | 98.40   | 0.025   | 0.02    | 39      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 214    | 2       | 2.5     | 2       | 0.05    | 0.3     | 0.3     |
| SA5112659 | 0.05    | 98.19   | 0.025   | 0.07    | 88      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 197    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.05    |
| SA5112660 | 0.05    | 98.39   | 0.025   | 0.03    | 31      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 227    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.2     |
| SA5112661 | 0.7     | 46.13   | 0.025   | 0.15    | 114     | 0.5     | 0.5     | 0.21    | 0.28    | 2       | 5       | 464    | 2       | 2.5     | 9       | 0.05    | 1.9     | 2.6     |
| SA5112662 | 0.05    | 97.71   | 0.025   | 0.02    | 38      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 199    | 0.5     | 2.5     | 3       | 0.05    | 0.4     | 0.4     |
| SA5112663 | 0.05    | 98.84   | 0.025   | 0.02    | 30      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 214    | 1       | 2.5     | 4       | 0.05    | 0.2     | 0.2     |
| SA5112664 | 0.05    | 98.34   | -9      | 0.01    | 30      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 237    | 3       | -9      | 3       | -9      | -9      | 0.3     |
| SA5112665 | 3.5     | 15.70   | 0.21    | 0.45    | 282     | 0.5     | 0.5     | 0.86    | 1.03    | 5       | 9       | 631    | 5       | 24      | 27      | 0.05    | 5.9     | 7.2     |
| SA5112666 | 0.05    | 96.25   | -9      | 0.03    | 45      | -9      | 0.5     | -9      | 0.06    | 0.5     | 0.5     | 229    | 2       | -9      | 5       | -9      | -9      | 0.4     |
| SA5112667 | 0.05    | 98.13   | 0.025   | 0.02    | 42      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 310    | 2       | 2.5     | 3       | 0.05    | 0.2     | 0.3     |
| SA5112668 | 0.05    | 97.58   | 0.025   | 0.005   | 19      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 352    | 3       | 2.5     | 3       | 0.05    | 0.3     | 0.5     |
| SA5112669 | 8.9     | 1.79    | 0.37    | 0.84    | 469     | 0.5     | 0.5     | 2.30    | 3.18    | 12      | 16      | 635    | 22      | 120     | 116     | 0.05    | 10.2    | 9.5     |
| SA5112670 | 1.4     | 60.41   | 0.40    | 0.14    | 179     | 0.5     | 2       | 0.26    | 0.25    | 2       | 18      | 3729   | 3       | 7       | 11      | 0.05    | 6.7     | 7.6     |
| SA5112671 | 0.05    | 98.19   | 0.025   | 0.04    | 53      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 223    | 1       | 2.5     | 2       | 0.05    | 0.2     | 0.3     |
| SA5112672 | 0.05    | 98.07   | 0.025   | 0.005   | 29      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 276    | 0.5     | 2.5     | 1       | 0.05    | 0.3     | 0.4     |
| SA5112673 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112674 | 0.05    | 98.93   | 0.025   | 0.005   | 18      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 219    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.3     |
| SA5112675 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112676 | 0.05    | 95.81   | 0.08    | 0.02    | 41      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 341    | 2       | 2.5     | 3       | 0.05    | 0.9     | 1.1     |
| SA5112677 | 4.7     | 20.95   | 0.32    | 0.56    | 444     | 0.5     | 0.5     | 1.20    | 1.41    | 10      | 9       | 946    | 12      | 35      | 41      | 0.1     | 8.2     | 9.3     |
| SA5112678 | 0.6     | 35.01   | 0.06    | 0.08    | 169     | 0.5     | 0.5     | 0.05    | 0.07    | 0.5     | 3       | 472    | 0.5     | 2.5     | 5       | 0.05    | 1.6     | 2.1     |
| SA5112679 | 0.05    | 93.46   | 0.06    | 0.02    | 58      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 501    | 0.5     | 2.5     | 3       | 0.05    | 0.6     | 0.6     |
| SA5112680 | 0.05    | 98.36   | 0.025   | 0.02    | 37      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 291    | 2       | 2.5     | 3       | 0.05    | 0.3     | 0.3     |
| SA5112681 | 3.9     | 14.66   | 0.28    | 0.48    | 352     | 0.5     | 0.5     | 1.30    | 1.55    | 8       | 8       | 734    | 7       | 39      | 40      | 0.05    | 7.7     | 8.8     |
| SA5112682 | 0.05    | 96.57   | 0.025   | 0.01    | 32      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 492    | 3       | 2.5     | 4       | 0.05    | 1.2     | 1.4     |
| SA5112683 | 0.05    | 97.04   | 0.025   | 0.06    | 108     | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 468    | 0.5     | 2.5     | 3       | 0.05    | 0.2     | 0.3     |
| SA5112684 | 1.2     | 45.16   | 0.14    | 0.13    | 118     | 0.5     | 0.5     | 0.16    | 0.19    | 3       | 5       | 715    | 3       | 8       | 12      | 0.05    | 2.5     | 3.0     |
| SA5112685 | 0.05    | 93.63   | 0.025   | 0.02    | 39      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 476    | 3       | 2.5     | 6       | 0.05    | 0.5     | 0.6     |
| SA5112686 | 0.05    | 94.89   | 0.025   | 0.03    | 79      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 603    | 2       | 2.5     | 4       | 0.05    | 0.4     | 0.5     |
| SA5112687 | 0.05    | 23.57   | 0.025   | 0.02    | 73      | 0.5     | 1       | 0.025   | 0.04    | 0.5     | 1       | 526    | 6       | 2.5     | 4       | 0.05    | 1.0     | 1.4     |
| SA5112688 | 0.8     | 46.99   | 0.14    | 0.08    | 85      | 0.5     | 0.5     | 0.09    | 0.11    | 2       | 5       | 852    | 2       | 5       | 10      | 0.05    | 2.3     | 2.9     |

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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112689 | 0.05    | 28.51   | 0.025   | 0.005   | 13      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 186    | 0.5     | 2.5     | 1       | 0.05    | 0.6     | 0.9     |
| SA5112690 | 0.05    | 78.36   | 0.06    | 0.01    | 48      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 2       | 390    | 2       | 2.5     | 4       | 0.05    | 1.2     | 1.6     |
| SA5112691 | 0.05    | 96.41   | 0.025   | 0.03    | 25      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 391    | 3       | 2.5     | 4       | 0.05    | 0.7     | 0.8     |
| SA5112692 | 2.7     | 66.50   | 0.18    | 0.14    | 131     | 0.5     | 0.5     | 0.61    | 0.64    | 7       | 7       | 411    | 6       | 25      | 28      | 0.05    | 5.7     | 6.1     |
| SA5112693 | 1.3     | 64.94   | 0.13    | 0.12    | 235     | 0.5     | 1       | 0.83    | 0.99    | 10      | 3       | 442    | 6       | 26      | 31      | 0.05    | 4.0     | 4.4     |
| SA5112694 | 3.3     | 55.48   | 0.12    | 0.25    | 261     | 0.5     | 0.5     | 0.72    | 0.89    | 8       | 5       | 895    | 6       | 23      | 26      | 0.05    | 4.7     | 5.9     |
| SA5112695 | 1.0     | 37.19   | 0.17    | 0.06    | 50      | 0.5     | 0.5     | 0.05    | 0.06    | 1       | 3       | 1856   | 4       | 2.5     | 6       | 0.05    | 2.4     | 3.5     |
| SA5112696 | 0.05    | 85.55   | 0.025   | 0.005   | 29      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 0.5     | 313    | 2       | 2.5     | 3       | 0.05    | 0.8     | 0.9     |
| SA5112697 | 0.5     | 39.46   | 0.07    | 0.02    | 30      | 0.5     | 0.5     | 0.08    | 0.09    | 1       | 3       | 422    | 2       | 2.5     | 3       | 0.05    | 2.2     | 3.4     |
| SA5112698 | 0.05    | 98.08   | 0.025   | 0.02    | 23      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 395    | 2       | 2.5     | 1       | 0.05    | 0.3     | 0.3     |
| SA5112699 | 0.05    | 96.75   | 0.06    | 0.005   | 33      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 462    | 2       | 2.5     | 4       | 0.05    | 0.9     | 1.3     |
| SA5112700 | 0.05    | 98.40   | 0.025   | 0.005   | 15      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 284    | 2       | 2.5     | 3       | 0.05    | 0.3     | 0.4     |
| SA5112701 | 4.7     | 7.35    | 0.41    | 0.83    | 698     | 0.5     | 0.5     | 2.20    | 3.21    | 13      | 12      | 1434   | 9       | 49      | 54      | 0.05    | 12.2    | 14.0    |
| SA5112702 | 0.1     | 93.78   | 0.06    | 0.02    | 41      | 0.5     | 1       | 0.10    | 0.14    | 0.5     | 1       | 309    | 3       | 2.5     | 8       | 0.05    | 0.9     | 1.4     |
| SA5112703 | 0.05    | 96.55   | 0.07    | 0.01    | 38      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 342    | 2       | 2.5     | 4       | 0.05    | 0.6     | 0.8     |
| SA5112704 | 0.05    | 97.81   | 0.06    | 0.005   | 21      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 588    | 2       | 2.5     | 1       | 0.05    | 1.0     | 1.3     |
| SA5112705 | 0.6     | 38.37   | 0.11    | 0.04    | 40      | 0.5     | 1       | 0.05    | 0.06    | 0.5     | 3       | 411    | 2       | 2.5     | 1       | 0.05    | 2.0     | 2.7     |
| SA5112706 | 0.2     | 94.68   | 0.025   | 0.005   | 18      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 366    | 1       | 2.5     | 1       | 0.05    | 1.0     | 1.3     |
| SA5112707 | 0.1     | 94.12   | -9      | 0.02    | 45      | -9      | 0.5     | -9      | 0.03    | 0.5     | 0.5     | 403    | 3       | -9      | 3       | -9      | -9      | 0.6     |
| SA5112708 | 0.05    | 98.70   | 0.025   | 0.005   | 18      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 318    | 1       | 2.5     | 1       | 0.05    | 0.2     | 0.2     |
| SA5112709 | 2.2     | 27.70   | 0.15    | 0.19    | 155     | 0.5     | 0.5     | 0.26    | 0.34    | 3       | 5       | 788    | 2       | 10      | 13      | 0.05    | 3.2     | 4.3     |
| SA5112710 | 1.4     | 60.37   | 0.09    | 0.11    | 145     | 0.5     | 0.5     | 0.23    | 0.30    | 3       | 5       | 862    | 4       | 8       | 13      | 0.05    | 2.8     | 3.8     |
| SA5112711 | 6.7     | 6.83    | 0.49    | 0.88    | 656     | 0.5     | 0.5     | 2.40    | 2.65    | 14      | 13      | 1204   | 8       | 59      | 73      | 0.05    | 13.3    | 14.0    |
| SA5112712 | 0.6     | 27.04   | 0.025   | 0.04    | 47      | 0.5     | 0.5     | 0.06    | 0.10    | 0.5     | 0.5     | 485    | 1       | 2.5     | 6       | 0.05    | 1.6     | 2.2     |
| SA5112713 | 7.2     | 20.33   | -9      | 1.19    | 676     | -9      | 1       | -9      | 1.93    | 18      | 18      | 851    | 12      | -9      | 53      | -9      | -9      | 17.4    |
| SA5112714 | 0.3     | 25.18   | 0.025   | 0.01    | 23      | 0.5     | 1       | 0.025   | 0.04    | 0.5     | 0.5     | 334    | 1       | 2.5     | 4       | 0.05    | 0.6     | 1.0     |
| SA5112715 | 4.3     | 13.92   | 0.35    | 0.70    | 565     | 0.5     | 0.5     | 1.7     | 2.16    | 12      | 9       | 1008   | 7       | 44      | 55      | 0.05    | 10.0    | 12.2    |
| SA5112716 | 0.2     | 86.88   | 0.025   | 0.02    | 29      | 0.5     | 3       | 0.025   | 0.04    | 0.5     | 3       | 372    | 2       | 2.5     | 3       | 0.05    | 1.5     | 2.0     |
| SA5112717 | 2.1     | 42.12   | 0.10    | 0.17    | 147     | 0.5     | 1       | 0.20    | 0.26    | 4       | 5       | 791    | 4       | 7       | 12      | 0.05    | 2.8     | 3.6     |
| SA5112718 | 3.1     | 20.38   | 0.07    | 0.22    | 137     | 0.5     | 0.5     | 0.24    | 0.32    | 3       | 5       | 876    | 2       | 9       | 14      | 0.05    | 3.1     | 4.3     |
| SA5112719 | 3.3     | 14.84   | 0.14    | 0.28    | 223     | 0.5     | 0.5     | 0.39    | 0.47    | 4       | 7       | 510    | 3       | 14      | 20      | 0.05    | 4.4     | 5.9     |
| SA5112720 | 0.1     | 29.68   | 0.08    | 0.02    | 24      | 0.5     | 1       | 0.025   | 0.04    | 0.5     | 0.5     | 546    | 1       | 2.5     | 6       | 0.05    | 0.9     | 1.3     |
| SA5112721 | 3.2     | 21.69   | 0.19    | 0.24    | 255     | 0.5     | 0.5     | 0.94    | 1.21    | 9       | 3       | 608    | 7       | 34      | 39      | 0.05    | 4.5     | 5.2     |
| SA5112722 | 0.3     | 95.40   | 0.08    | 0.005   | 28      | 0.5     | 0.5     | 0.025   | 0.05    | 0.5     | 0.5     | 301    | 3       | 2.5     | 5       | 0.05    | 1.2     | 1.5     |
| SA5112723 | 0.05    | 90.94   | 0.05    | 0.04    | 32      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 361    | 0.5     | 2.5     | 2       | 0.05    | 0.9     | 1.1     |
| SA5112724 | 2.8     | 49.73   | 0.17    | 0.20    | 159     | 0.5     | 0.5     | 0.30    | 0.33    | 3       | 7       | 1389   | 3       | 13      | 15      | 0.05    | 4.3     | 4.8     |
| SA5112725 | 0.4     | 89.22   | 0.05    | 0.03    | 79      | 0.5     | 0.5     | 0.07    | 0.08    | 0.5     | 2       | 478    | 4       | 2.5     | 5       | 0.05    | 1.4     | 1.7     |
| SA5112726 | 1.5     | 55.61   | 0.09    | 0.10    | 91      | 0.5     | 0.5     | 0.11    | 0.12    | 1       | 6       | 822    | 3       | 5       | 8       | 0.05    | 2.4     | 3.3     |
| SA5112727 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112728 | 0.8     | 35.24   | 0.025   | 0.10    | 113     | 0.5     | 2       | 0.30    | 0.38    | 3       | 0.5     | 420    | 5       | 9       | 14      | 0.05    | 2.4     | 3.1     |
| SA5112729 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9      | -9      | -9      | -9      | -9      | -9      |
| SA5112730 | 0.9     | 26.33   | 0.025   | 0.08    | 75      | 0.5     | 1       | 0.14    | 0.18    | 2       | 0.5     | 1023   | 3       | 6       | 9       | 0.05    | 2.3     | 3.0     |
| SA5112731 | 0.05    | 95.24   | 0.025   | 0.02    | 36      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 352    | 8       | 2.5     | 4       | 0.05    | 0.3     | 0.4     |
| SA5112732 | 0.05    | 96.98   | 0.025   | 0.005   | 23      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 274    | 2       | 2.5     | 5       | 0.05    | 0.7     | 1.0     |
| SA5112733 | 0.3     | 34.97   | 0.07    | 0.03    | 99      | 0.5     | 1       | 0.025   | 0.05    | 0.5     | 3       | 604    | 0.5     | 2.5     | 5       | 0.05    | 1.2     | 1.8     |
| SA5112734 | 0.1     | 92.52   | 0.025   | 0.02    | 57      | 0.5     | 0.5     | 0.07    | 0.09    | 0.5     | 0.5     | 450    | 2       | 2.5     | 5       | 0.05    | 1.0     | 1.2     |
| SA5112735 | 0.05    | 85.63   | 0.08    | 0.01    | 44      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 679    | 2       | 2.5     | 4       | 0.05    | 1.8     | 2.5     |
| SA5112736 | 2.1     | 40.57   | 0.16    | 0.11    | 155     | 0.5     | 0.5     | 0.13    | 0.15    | 2       | 7       | 2040   | 6       | 8       | 10      | 0.05    | 3.6     | 4.9     |
| SA5112737 | 0.05    | 48.50   | 0.025   | 0.02    | 40      | 0.5     | 1       | 0.025   | 0.03    | 0.5     | 0.5     | 538    | 3       | 2.5     | 1       | 0.05    | 0.9     | 1.3     |
| SA5112738 | 6.3     | 17.13   | 0.54    | 0.78    | 667     | 0.5     | 0.5     | 2.00    | 3.22    | 14      | 12      | 880    | 8       | 53      | 58      | 0.05    | 13.1    | 13.9    |
| SA5112739 | 1.2     | 27.53   | 0.06    | 0.13    | 163     | 0.5     | 0.5     | 0.10    | 0.26    | 1       | 4       | 496    | 3       | 2.5     | 13      | 0.05    | 1.4     | 3.4     |
| SA5112740 | 0.4     | 40.35   | 0.10    | 0.06    | 66      | 0.5     | 0.5     | 0.22    | 0.11    | 0.5     | 0.5     | 339    | 2       | 7       | 5       | 0.05    | 2.7     | 1.7     |
| SA5112741 | 0.3     | 91.62   | 0.08    | 0.02    | 41      | 0.5     | 0.5     | 0.09    | 0.10    | 0.5     | 0.5     | 491    | 3       | 2.5     | 7       | 0.05    | 1.7     | 2.1     |
| SA5112742 | 0.4     | 85.28   | 0.10    | 0.04    | 66      | 0.5     | 0.5     | 0.15    | 0.15    | 0.5     | 0.5     | 420    | 2       | 2.5     | 6       | 0.05    | 1.7     | 2.1     |
| SA5112743 | 3.5     | 24.75   | 0.35    | 0.39    | 303     | 0.5     | 2       | 0.70    | 0.85    | 7       | 10      | 1438   | 5       | 21      | 27      | 0.05    | 10.0    | 12.1    |
| SA5112744 | 1.0     | 94.19   | -9      | 0.005   | 40      | -9      | 3       | -9      | 0.12    | 0.5     | 0.5     | 372    | 1       | -9      | 20      | -9      | -9      | 2.6     |
| SA5112745 | 0.05    | 93.79   | -9      | 0.005   | 40      | -9      | 0.5     | -9      | 0.12    | 0.5     | 0.5     | 768    | 1       | -9      | 279     | -9      | -9      | 3.8     |



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| FldNum    | Li2_ppm | LOI_pct | Lu1_ppm | Mg2_pct | Mn2_ppm | Mo1_ppm | Mo2_ppm | Na1_pct | Na2_pct | Nb2_ppm | Ni2_ppm | P2_ppm | Pb2_ppm | Rb1_ppm | Rb2_ppm | Sb1_ppm | Sc1_ppm | Sc2_ppm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| SA5112746 | 1.6     | 51.85   | 0.10    | 0.15    | 179     | 0.5     | 0.5     | 0.30    | 0.40    | 3       | 3       | 744    | 4       | 7       | 12      | 0.05    | 2.6     | 3.9     |
| SA5112747 | 5.9     | 10.33   | 0.34    | 0.78    | 570     | 0.5     | 0.5     | 2.30    | 3.21    | 11      | 10      | 1168   | 10      | 58      | 64      | 0.05    | 11.5    | 12.2    |
| SA5112748 | 0.2     | 87.16   | 0.08    | 0.03    | 76      | 0.5     | 0.5     | 0.06    | 0.06    | 0.5     | 0.5     | 439    | 1       | 2.5     | 7       | 0.05    | 0.8     | 1.0     |
| SA5112749 | 2.2     | 41.10   | 0.17    | 0.16    | 179     | 0.5     | 0.5     | 0.25    | 0.29    | 2       | 6       | 1904   | 2       | 8       | 12      | 0.05    | 3.8     | 4.7     |
| SA5112750 | 0.05    | 94.72   | 0.025   | 0.01    | 44      | 0.5     | 3       | 0.05    | 0.06    | 0.5     | 0.5     | 401    | 2       | 2.5     | 4       | 0.05    | 1.6     | 2.0     |
| SA5112751 | 0.05    | 97.65   | 0.07    | 0.005   | 22      | 0.5     | 0.5     | 0.025   | 0.02    | 0.5     | 0.5     | 358    | 2       | 2.5     | 4       | 0.05    | 1.0     | 1.3     |
| SA5112752 | 0.05    | 97.87   | 0.025   | 0.005   | 28      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 328    | 1       | 2.5     | 1       | 0.05    | 0.4     | 0.5     |
| SA5112753 | 0.6     | 95.76   | 0.07    | 0.005   | 25      | 0.5     | 0.5     | 0.07    | 0.08    | 0.5     | 0.5     | 195    | 4       | 2.5     | 6       | 0.05    | 0.8     | 1.0     |
| SA5112754 | 5.9     | 7.15    | 0.35    | 0.79    | 565     | 0.5     | 0.5     | 2.60    | 2.53    | 10      | 11      | 1234   | 10      | 69      | 68      | 0.05    | 11.6    | 12.2    |
| SA5112755 | 0.9     | 57.59   | 0.13    | 0.07    | 131     | 0.5     | 1       | 0.11    | 0.13    | 1       | 5       | 2185   | 2       | 2.5     | 8       | 0.05    | 2.6     | 3.8     |
| SA5112756 | 0.05    | 97.91   | 0.025   | 0.005   | 24      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 366    | 2       | 2.5     | 3       | 0.05    | 0.5     | 0.7     |
| SA5112757 | 0.9     | 54.74   | 0.15    | 0.08    | 166     | 0.5     | 1       | 0.12    | 0.14    | 1       | 6       | 1381   | 3       | 2.5     | 7       | 0.05    | 2.4     | 3.1     |
| SA5112758 | 1.9     | 35.25   | 0.18    | 0.20    | 702     | 0.5     | 0.5     | 0.24    | 0.23    | 0.5     | 26      | 5393   | 3       | 10      | 12      | 0.05    | 4.7     | 4.7     |
| SA5112759 | 0.05    | 95.53   | 0.025   | 0.01    | 22      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 231    | 1       | 2.5     | 1       | 0.05    | 0.6     | 0.8     |
| SA5112760 | 2.6     | 38.60   | 0.10    | 0.18    | 156     | 0.5     | 0.5     | 0.32    | 0.37    | 3       | 5       | 819    | 6       | 7       | 15      | 0.05    | 3.4     | 4.3     |
| SA5112761 | 0.2     | 93.49   | -9      | 0.02    | 70      | -9      | 1       | -9      | 0.10    | 1       | 0.5     | 433    | 2       | -9      | 5       | -9      | -9      | 1.1     |
| SA5112762 | 0.05    | 92.77   | 0.025   | 0.01    | 67      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 423    | 1       | 2.5     | 6       | 0.05    | 0.4     | 0.4     |
| SA5112763 | 0.3     | 92.15   | 0.05    | 0.04    | 59      | 0.5     | 0.5     | 0.12    | 0.14    | 2       | 1       | 449    | 4       | 5       | 6       | 0.05    | 1.5     | 1.9     |
| SA5112764 | 2.4     | 50.22   | -9      | 0.33    | 370     | -9      | 0.5     | -9      | 1.37    | 10      | 5       | 1088   | 8       | -9      | 45      | -9      | -9      | 7.4     |
| SA5112765 | 3.2     | 17.04   | 0.28    | 0.37    | 475     | 0.5     | 0.5     | 2.10    | 2.26    | 18      | 5       | 535    | 15      | 65      | 70      | 0.05    | 7.9     | 7.6     |
| SA5112766 | 0.2     | 96.09   | 0.025   | 0.005   | 20      | 0.5     | 0.5     | 0.05    | 0.06    | 0.5     | 0.5     | 317    | 3       | 2.5     | 5       | 0.05    | 0.5     | 0.6     |
| SA5112767 | 0.05    | 98.14   | 0.025   | 0.05    | 32      | 0.5     | 0.5     | 0.06    | 0.06    | 0.5     | 0.5     | 216    | 2       | 2.5     | 1       | 0.05    | 0.2     | 0.1     |
| SA5112768 | 0.05    | 98.37   | 0.025   | 0.01    | 20      | 0.5     | 0.5     | 0.025   | 0.03    | 0.5     | 0.5     | 317    | 2       | 2.5     | 3       | 0.05    | 0.1     | 0.2     |
| SA5112769 | 0.2     | 55.42   | 0.025   | 0.005   | 16      | 0.5     | 2       | 0.025   | 0.05    | 0.5     | 0.5     | 174    | 0.5     | 2.5     | 4       | 0.05    | 0.7     | 0.8     |
| SA5112770 | 0.1     | 96.95   | 0.025   | 0.005   | 16      | 0.5     | 0.5     | 0.025   | 0.04    | 0.5     | 0.5     | 266    | 3       | 2.5     | 4       | 0.05    | 0.5     | 0.5     |
| SA5112771 | 0.7     | 79.66   | 0.10    | 0.05    | 88      | 0.5     | 0.5     | 0.34    | 0.39    | 3       | 0.5     | 522    | 4       | 11      | 14      | 0.05    | 2.4     | 2.5     |
| SA5112772 | 9.4     | 3.23    | 0.61    | 1.03    | 685     | 0.5     | 0.5     | 2.90    | 2.76    | 13      | 15      | 1335   | 10      | 85      | 76      | 0.05    | 17.1    | 15.8    |
| SA5112773 | 1.9     | 59.99   | -9      | 0.27    | 305     | -9      | 0.5     | -9      | 1.13    | 8       | 2       | 470    | 6       | -9      | 29      | -9      | -9      | 6.4     |
| SA5112774 | 0.2     | 96.39   | 0.025   | 0.01    | 39      | 0.5     | 0.5     | 0.06    | 0.06    | 0.5     | 0.5     | 251    | 2       | 2.5     | 4       | 0.05    | 0.4     | 0.4     |
| SA5112775 | 1.7     | 40.14   | 0.10    | 0.17    | 322     | 0.5     | 1       | 0.24    | 0.29    | 2       | 4       | 970    | 2       | 7       | 11      | 0.05    | 3.2     | 3.9     |
| SA5112776 | 0.2     | 96.96   | 0.28    | 0.02    | 28      | 0.5     | 0.5     | 0.17    | 0.06    | 0.5     | 0.5     | 360    | 3       | 2.5     | 4       | 0.05    | 7.0     | 1.0     |
| SA5112777 | 1.2     | 75.41   | -9      | 0.08    | 82      | -9      | 2       | -9      | 0.15    | 5       | 9       | 4013   | 4       | -9      | 8       | -9      | -9      | 7.8     |
| SA5112778 | 1.7     | 51.29   | 0.44    | 0.09    | 255     | 0.5     | 3       | 0.10    | 0.09    | 2       | 8       | 2320   | 3       | 5       | 9       | 0.05    | 7.1     | 9.0     |
| SA5112779 | 2.1     | 32.13   | 0.14    | 0.09    | 82      | 0.5     | 0.5     | 0.16    | 0.21    | 2       | 4       | 370    | 2       | 7       | 9       | 0.05    | 2.7     | 3.7     |
| SA5112780 | 0.6     | 57.88   | 0.13    | 0.04    | 49      | 0.5     | 0.5     | 0.13    | 0.17    | 4       | 1       | 493    | 6       | 5       | 9       | 0.05    | 3.5     | 4.5     |
| SA5112781 | 7.0     | 45.26   | 0.47    | 0.30    | 189     | 2       | 2       | 0.38    | 0.44    | 8       | 7       | 1461   | 8       | 20      | 30      | 0.05    | 7.1     | 8.6     |
| SA5112782 | 7.6     | 40.88   | 0.55    | 0.61    | 475     | 0.5     | 1       | 1.00    | 1.24    | 24      | 9       | 581    | 9       | 43      | 49      | 0.05    | 13.0    | 14.4    |
| SA5112783 | 2.0     | 46.79   | 0.20    | 0.14    | 134     | 0.5     | 3       | 0.23    | 0.28    | 7       | 4       | 1272   | 6       | 10      | 15      | 0.05    | 4.3     | 5.3     |
| SA5112784 | 20.3    | 7.40    | 1.00    | 1.25    | 753     | 0.5     | 1       | 2.10    | 2.13    | 18      | 22      | 1483   | 11      | 110     | 97      | 0.05    | 18.1    | 18.4    |
| SA5112785 | 0.7     | 82.06   | 0.22    | 0.04    | 114     | 0.5     | 1       | 0.08    | 0.09    | 2       | 5       | 419    | 1       | 2.5     | 6       | 0.05    | 2.3     | 2.7     |
| SA5112786 | 0.4     | 89.38   | 0.025   | 0.03    | 53      | 0.5     | 1       | 0.11    | 0.10    | 0.5     | 2       | 283    | 1       | 2.5     | 8       | 0.05    | 1.6     | 1.9     |
| SA5112787 | 4.5     | 2.89    | -9      | 0.69    | 591     | -9      | 1       | -9      | 2.88    | 21      | 12      | 285    | 17      | -9      | 117     | -9      | -9      | 12.4    |
| SA5112788 | 3.9     | 25.85   | 0.86    | 1.08    | 851     | 0.5     | 2       | 1.80    | 2.91    | 41      | 20      | 443    | 19      | 49      | 61      | 0.05    | 18.0    | 19.8    |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |   |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|---|
| SA5111891 | 0.5     | 3.5     | 26      | 0.3     | 0.25    | 4.1     | 777     | 6.9    | 7      | 0.5    | 20     | 1.0     | 19      | 50      | 4       | 10072089  | 165      | 1        |   |
| SA5111892 | 0.5     | 3.4     | 39      | 0.1     | 0.25    | 6.2     | 838     | 5.7    | 5      | 0.5    | 16     | 0.6     | 10      | 50      | 8       | 10072091  | 217      | 1        |   |
| SA5111893 | 0.5     | 11.4    | 84      | 0.3     | 1.9     | 5.1     | 1237    | 2.9    | 35     | 0.5    | 129    | 5.9     | 24      | 50      | 9       | 10072092  | 282      | 1        |   |
| SA5111894 | 0.5     | 9.4     | 147     | 0.4     | 1.1     | 6.2     | 2356    | 1.5    | 46     | 0.5    | 33     | 2.4     | 54      | 50      | 15      | 10072093  | 333      | 1        |   |
| SA5111895 | 0.5     | 4.3     | 39      | 0.3     | 0.5     | 4.0     | 1142    | 0.9    | 24     | 0.5    | 18     | 1.0     | 22      | 50      | 10      | 10072094  | 251      | 1        |   |
| SA5111896 | 0.5     | 0.1     | 47      | 0.1     | 0.25    | 0.1     | 76      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 15      | 50      | 1       | -9        | -9       | -9       |   |
| SA5111897 | 0.5     | 7.7     | 147     | 0.4     | 0.9     | 6.5     | 1796    | 2.8    | 21     | 0.5    | 25     | 1.4     | 32      | 50      | 18      | 10072095  | 294      | 1        |   |
| SA5111898 | 0.5     | 6.6     | 118     | 0.4     | 0.7     | 5.8     | 1523    | 1.0    | 24     | 0.5    | 23     | 2.1     | 28      | 50      | 17      | 10072096  | 241      | 1        |   |
| SA5111899 | 0.5     | 8.5     | 80      | 0.2     | 0.9     | 4.8     | 860     | 15.5   | 40     | 0.5    | 28     | 1.7     | 55      | 50      | 6       | 10072097  | 139      | 1        |   |
| SA5111900 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.3     | 65      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072098  | 37       | 1        |   |
| SA5111901 | 0.5     | 15.2    | 42      | 0.3     | 1.6     | 7.5     | 780     | 1.5    | 28     | 0.5    | 44     | 2.6     | 30      | 50      | 4       | 10072099  | 269      | 1        |   |
| SA5111902 | 0.5     | 6.5     | 52      | 0.5     | 0.8     | 6.3     | 1754    | 1.2    | 39     | 0.5    | 26     | 1.8     | 26      | 50      | 9       | 10072101  | 205      | 1        |   |
| SA5111903 | 0.5     | 0.7     | 23      | 0.1     | 0.25    | 0.3     | 88      | 0.05   | 0.5    | 0.5    | 2      | 0.25    | 8       | 50      | 1       | 10072102  | 67       | 1        |   |
| SA5111904 | 0.5     | 8.9     | 201     | 1.0     | 1.0     | 6.2     | 3602    | 1.8    | 22     | 0.5    | 37     | 3.8     | 30      | 640     | 39      | 10072103  | 229      | 1        |   |
| SA5111905 | 0.5     | 6.1     | 76      | 0.7     | 0.7     | 5.9     | 1754    | 1.3    | 19     | 0.5    | 31     | 2.6     | 17      | 50      | 16      | 10072104  | 190      | 1        |   |
| SA5111906 | 0.5     | 6.5     | 25      | 0.1     | 0.6     | 2.9     | 311     | 0.4    | 7      | 0.5    | 20     | 1.0     | 8       | 50      | 4       | 10072105  | 24       | 1        |   |
| SA5111907 | 0.5     | 25.6    | 333     | 1.0     | 2.7     | 22.6    | 5966    | 7.2    | 94     | 0.5    | 84     | 8.0     | 239     | 50      | 47      | 10072106  | 128      | 1        |   |
| SA5111908 | 0.5     | 4.9     | 83      | 0.1     | 0.6     | 3.8     | 1088    | 1.8    | 24     | 0.5    | 20     | 1.3     | 24      | 50      | 8       | 10072107  | 204      | 1        |   |
| SA5111909 | 0.5     | 5.2     | 53      | 0.1     | 0.6     | 3.2     | 777     | 1.7    | 19     | 0.5    | 20     | 1.2     | 27      | 50      | 8       | 10072108  | 162      | 1        |   |
| SA5111910 | 0.5     | 5.0     | 20      | 0.1     | 0.6     | 3.1     | 411     | 0.9    | 7      | 0.5    | 18     | 1.0     | 9       | 50      | 3       | 10072109  | 238      | 1        |   |
| SA5111911 | 0.5     | 7.9     | 45      | 0.3     | 0.8     | 5.4     | 1209    | 0.9    | 48     | 0.5    | 25     | 1.7     | 39      | 50      | 7       | 10072111  | 200      | 1        |   |
| SA5111912 | 0.5     | 1.1     | 25      | 0.1     | 0.25    | 0.7     | 135     | 0.05   | 3      | 0.5    | 4      | 0.25    | 11      | 50      | 1       | 10072112  | 45       | 1        |   |
| SA5111913 | 0.5     | 5.2     | 28      | 0.1     | 0.6     | 4.9     | 962     | 0.6    | 25     | 0.5    | 16     | 1.1     | 11      | 50      | 5       | 10072113  | 235      | 1        |   |
| SA5111914 | 0.5     | 9.1     | 54      | 0.3     | 0.9     | 7.4     | 1341    | 0.9    | 38     | 0.5    | 24     | 1.6     | 26      | 50      | 8       | 10072114  | 198      | 1        |   |
| SA5111915 | 0.5     | 3.6     | 62      | 0.3     | 0.25    | 3.7     | 1042    | 0.4    | 16     | 0.5    | 11     | 0.6     | 17      | 50      | 7       | 10072115  | 280      | 1        |   |
| SA5111916 | 0.5     | 3.7     | 27      | 0.4     | 0.25    | 4.8     | 772     | 2.9    | 11     | 0.5    | 15     | 1.1     | 14      | 50      | 5       | 10072116  | 303      | 1        |   |
| SA5111917 | 0.5     | 11.9    | 27      | 0.4     | 1.6     | 10.0    | 886     | 3.0    | 39     | 0.5    | 47     | 3.4     | 50      | 50      | 4       | 10072117  | 316      | 1        |   |
| SA5111918 | 0.5     | 19.9    | 426     | 1.3     | 2.1     | 15.3    | 4849    | 2.3    | 71     | 0.5    | 57     | 5.3     | 147     | 260     | 29      | 10072118  | 217      | 1        |   |
| SA5111919 | 0.5     | 16.7    | 41      | 0.2     | 2.0     | 10.2    | 911     | 5.1    | 23     | 0.5    | 69     | 4.1     | 32      | 50      | 4       | 10072119  | 294      | 1        |   |
| SA5111920 | 0.5     | 116.0   | 29      | 0.6     | 16.0    | 47.1    | 1058    | 15.9   | 452    | 0.5    | 631    | 50.9    | 110     | 50      | 14      | 10072121  | 226      | 1        |   |
| SA5111921 | 0.5     | 5.5     | 24      | 0.1     | 0.8     | 3.1     | 504     | 1.2    | 12     | 0.5    | 29     | 2.0     | 14      | 50      | 4       | 10072122  | 156      | 1        |   |
| SA5111922 | 0.5     | 2.5     | 36      | 0.3     | 0.25    | 3.3     | 1066    | 1.0    | 12     | 0.5    | 12     | 0.8     | 15      | 50      | 5       | 10072123  | 278      | 1        |   |
| SA5111923 | 0.5     | 5.2     | 55      | 0.2     | 0.6     | 4.7     | 1557    | 1.2    | 23     | 0.5    | 23     | 1.0     | 22      | 50      | 6       | 10072124  | 405      | 1        |   |
| SA5111924 | 0.5     | 7.1     | 82      | 0.3     | 0.9     | 6.4     | 1950    | 6.5    | 19     | 0.5    | 32     | 2.2     | 31      | 50      | 10      | 10072125  | 597      | 1        |   |
| SA5111925 | 0.5     | 6.8     | 72      | 0.3     | 0.8     | 6.0     | 1513    | 6.1    | 31     | 0.5    | 30     | 2.0     | 28      | 50      | 8       | 10072126  | 405      | 1        |   |
| SA5111926 | 0.5     | 1.9     | 79      | 0.4     | 0.25    | 3.9     | 1604    | 0.9    | 11     | 0.5    | 8      | 0.25    | 9       | 160     | 18      | 10072127  | 510      | 1        |   |
| SA5111927 | 0.5     | 8.0     | 30      | 0.3     | 0.8     | 5.1     | 1135    | 1.3    | 32     | 0.5    | 27     | 1.8     | 38      | 50      | 4       | 10072128  | 256      | 1        |   |
| SA5111928 | 0.5     | 4.6     | 50      | 0.3     | 0.5     | 5.3     | 1294    | 1.0    | 19     | 0.5    | 15     | 0.7     | 21      | 50      | 10      | 10072129  | 209      | 1        |   |
| SA5111929 | 0.5     | 4.6     | 23      | 0.1     | 0.6     | 5.3     | 666     | 0.7    | 11     | 0.5    | 17     | 0.6     | 10      | 50      | 5       | 10072131  | 264      | 1        |   |
| SA5111930 | 0.5     | 0.8     | 16      | 0.1     | 0.25    | 0.4     | 43      | 0.05   | 0.5    | 0.5    | 2      | 0.25    | 8       | 50      | 0.5     | 10072132  | 154      | 1        |   |
| SA5111931 | 0.5     | 5.6     | 49      | 0.1     | 0.6     | 4.6     | 964     | 0.5    | 12     | 0.5    | 16     | 1.1     | 14      | 50      | 8       | 10072133  | 150      | 1        |   |
| SA5111932 | 0.5     | 2.8     | 17      | 0.1     | 0.25    | 2.2     | 317     | 0.2    | 7      | 0.5    | 8      | 0.25    | 9       | 50      | 2       | 10072134  | 144      | 1        |   |
| SA5111933 | 0.5     | 5.6     | 196     | 0.4     | 0.6     | 4.1     | 2107    | 0.9    | 21     | 0.5    | 28     | 2.0     | 24      | 50      | 24      | 10072135  | 334      | 1        |   |
| SA5111934 | 0.5     | 2.4     | 62      | 0.3     | 0.25    | 3.0     | 1029    | 0.6    | 17     | 0.5    | 8      | 0.6     | 12      | 50      | 7       | 10072136  | 276      | 1        |   |
| SA5111935 | 0.5     | 6.7     | 63      | 0.3     | 0.7     | 4.6     | 1275    | 0.9    | 32     | 0.5    | 24     | 1.5     | 34      | 50      | 10      | 10072137  | 173      | 1        |   |
| SA5111936 | 0.5     | 1.7     | 41      | 0.1     | 0.25    | 2.3     | 711     | 0.5    | 15     | 0.5    | 6      | 0.25    | 7       | 50      | 5       | 10072138  | 232      | 1        |   |
| SA5111937 | 0.5     | 1.8     | 41      | 0.1     | 0.25    | 1.7     | 430     | 0.3    | 12     | 0.5    | 6      | 0.25    | 9       | 50      | 4       | 10072139  | 84       | 1        |   |
| SA5111938 | 0.5     | 1.2     | 29      | 0.1     | 0.25    | 0.4     | 58      | 0.1    | 0.5    | 0.5    | 4      | 0.25    | 8       | 50      | 1       | 10072141  | 153      | 1        |   |
| SA5111939 | 0.5     | 12.6    | 116     | 0.1     | 1.3     | 6.3     | 895     | 1.3    | 62     | 0.5    | 40     | 3.3     | 68      | 50      | 3       | 10072142  | 252      | 1        |   |
| SA5111940 | 0.5     | 4.3     | 67      | 0.1     | 0.25    | 3.0     | 782     | 0.6    | 34     | 0.5    | 15     | 1.0     | 26      | 50      | 6       | 10072143  | 156      | 1        |   |
| SA5111941 | 0.5     | 4.1     | 148     | 0.3     | 0.25    | 5.1     | 1379    | 0.9    | 24     | 0.5    | 16     | 1.3     | 17      | 50      | 14      | 10072144  | 268      | 1        |   |
| SA5111942 | 0.5     | 0.8     | 29      | 0.1     | 0.25    | 1.1     | 250     | 0.2    | 5      | 0.5    | 3      | 0.25    | 16      | 50      | 3       | 10072145  | 21       | 1        |   |
| SA5111943 | 0.5     | 19.3    | 249     | 0.7     | 1.9     | 12.5    | 3301    | 2.1    | 89     | 0.5    | 65     | 5.3     | 163     | 50      | 27      | 10072146  | 155      | 1        |   |
| SA5111944 | 0.5     | 1.7     | 30      | 0.1     | 0.25    | 1.4     | 194     | 0.2    | 9      | 0.5    | 7      | 0.25    | 14      | 50      | 2       | 10072147  | 113      | 1        |   |
| SA5111945 | 0.5     | 0.8     | 42      | 0.1     | 0.25    | 0.4     | 67      | 0.05   | 0.5    | 0.5    | 3      | 0.25    | 9       | 50      | 1       | 10072148  | 105      | 1        |   |
| SA5111946 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072149 | 405      | 1 |
| SA5111947 | 0.5     | 4.3     | 47      | 0.4     | 0.5     | 3.3     | 1674    | 1.4    | 14     | 0.5    | 20     | 0.25    | 28      | 50      | 10      | 10072151  | 498      | 1        |   |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5111948 | 0.5     | 4.8     | 66      | 0.5     | 0.25    | 4.3     | 2060    | 1.3    | 14     | 0.5    | 17     | 0.8     | 22      | 50      | 12      | 10072152  | 688      | 1        |
| SA5111949 | 0.5     | 32.9    | 34      | 0.6     | 3.3     | 15.3    | 1630    | 4.3    | 83     | 0.5    | 97     | 7.9     | 149     | 50      | 9       | 10072153  | 261      | 1        |
| SA5111950 | 0.5     | 1.3     | 31      | 0.1     | 0.25    | 0.5     | 79      | 0.05   | 1      | 0.5    | 5      | 0.25    | 11      | 50      | 1       | 10072154  | 101      | 1        |
| SA5111951 | 0.5     | 9.0     | 25      | 0.3     | 0.9     | 4.5     | 1168    | 1.2    | 26     | 0.5    | 30     | 2.4     | 29      | 50      | 9       | 10072155  | 339      | 1        |
| SA5111952 | 0.5     | 8.0     | 39      | 0.4     | 0.9     | 5.2     | 1503    | 1.3    | 38     | 0.5    | 30     | 1.9     | 31      | 50      | 11      | 10072156  | 278      | 1        |
| SA5111953 | 0.5     | 2.6     | 22      | 0.1     | 0.25    | 4.2     | 716     | 1.0    | 8      | 0.5    | 12     | 0.6     | 13      | 50      | 4       | 10072157  | 339      | 1        |
| SA5111954 | 0.5     | 2.3     | 39      | 0.2     | 0.25    | 3.5     | 892     | 0.9    | 10     | 0.5    | 11     | 0.9     | 12      | 50      | 6       | 10072158  | 469      | 1        |
| SA5111955 | 0.5     | 14.6    | 38      | 0.1     | 1.4     | 8.8     | 713     | 2.0    | 29     | 0.5    | 54     | 3.6     | 43      | 50      | 6       | 10072159  | 279      | 1        |
| SA5111956 | 0.5     | 3.8     | 56      | 0.1     | 0.25    | 3.9     | 1178    | 1.1    | 19     | 0.5    | 15     | 0.8     | 22      | 50      | 10      | 10072161  | 452      | 1        |
| SA5111957 | 0.5     | 1.8     | 26      | 0.3     | 0.25    | 2.9     | 960     | 0.8    | 18     | 0.5    | 8      | 0.25    | 10      | 50      | 4       | 10072162  | 353      | 1        |
| SA5111958 | 0.5     | 31.3    | 30      | 0.4     | 3.6     | 18.3    | 750     | 5.6    | 53     | 0.5    | 74     | 7.4     | 115     | 50      | 6       | 10072163  | 186      | 1        |
| SA5111959 | 0.5     | 19.7    | 37      | 0.1     | 2.4     | 8.2     | 1518    | 2.6    | 106    | 0.5    | 110    | 5.6     | 117     | 50      | 7       | 10072164  | 202      | 1        |
| SA5111960 | 0.5     | 11.2    | 111     | 0.4     | 1.2     | 7.4     | 2029    | 1.9    | 40     | 0.5    | 35     | 2.6     | 41      | 50      | 12      | 10072165  | 412      | 1        |
| SA5111961 | 0.5     | 9.3     | 134     | 0.1     | 1.1     | 4.8     | 877     | 1.2    | 24     | 0.5    | 49     | 3.1     | 41      | 50      | 9       | 10072166  | 197      | 1        |
| SA5111962 | 0.5     | 1.9     | 44      | 0.1     | 0.25    | 1.5     | 411     | 0.3    | 8      | 0.5    | 8      | 0.25    | 10      | 50      | 4       | 10072167  | 91       | 1        |
| SA5111963 | 0.5     | 3.5     | 59      | 0.1     | 0.25    | 3.2     | 783     | 0.6    | 11     | 0.5    | 14     | 1.0     | 10      | 50      | 8       | 10072168  | 242      | 1        |
| SA5111964 | 0.5     | 6.3     | 63      | 0.3     | 0.7     | 3.9     | 1145    | 1.5    | 41     | 0.5    | 26     | 1.8     | 21      | 50      | 12      | 10072169  | 119      | 1        |
| SA5111965 | 0.5     | 11.0    | 128     | 0.3     | 1.2     | 6.9     | 1657    | 1.6    | 81     | 0.5    | 35     | 2.8     | 52      | 50      | 8       | 10072171  | 421      | 1        |
| SA5111966 | 0.5     | 7.5     | 89      | 0.2     | 0.7     | 7.4     | 1330    | 1.3    | 77     | 0.5    | 19     | 1.1     | 42      | 50      | 7       | 10072172  | 244      | 1        |
| SA5111967 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072173  | 42       | 1        |
| SA5111968 | 0.5     | 0.5     | 17      | 0.1     | 0.25    | 0.4     | 117     | 0.05   | 3      | 0.5    | 2      | 0.25    | 9       | 50      | 2       | 10072174  | 31       | 1        |
| SA5111969 | 0.5     | 0.8     | 19      | 0.1     | 0.25    | 0.5     | 102     | 0.05   | 3      | 0.5    | 3      | 0.25    | 8       | 50      | 2       | 10072175  | 82       | 1        |
| SA5111970 | 0.5     | 0.9     | 26      | 0.1     | 0.25    | 0.4     | 72      | 0.05   | 2      | 0.5    | 4      | 0.25    | 9       | 50      | 1       | 10072176  | 34       | 1        |
| SA5111971 | 0.5     | 11.4    | 223     | 0.9     | 1.3     | 5.6     | 5236    | 1.4    | 70     | 0.5    | 46     | 4.0     | 70      | 560     | 58      | 10072177  | 172      | 1        |
| SA5111972 | 0.5     | 5.7     | 44      | 0.2     | 0.6     | 2.8     | 835     | 0.5    | 39     | 0.5    | 18     | 1.3     | 21      | 50      | 10      | 10072178  | 155      | 1        |
| SA5111973 | 0.5     | 5.0     | 39      | 0.1     | 0.25    | 2.6     | 525     | 0.5    | 24     | 0.5    | 16     | 0.8     | 21      | 50      | 3       | 10072179  | 147      | 1        |
| SA5111974 | 0.5     | 5.6     | 32      | 0.1     | 0.5     | 2.4     | 466     | 1.8    | 23     | 0.5    | 20     | 1.5     | 27      | 50      | 3       | 10072181  | 127      | 1        |
| SA5111975 | 0.5     | 9.2     | 60      | 0.3     | 0.9     | 4.2     | 1050    | 0.6    | 47     | 0.5    | 32     | 2.9     | 56      | 50      | 8       | 10072182  | 148      | 1        |
| SA5111976 | 0.5     | 8.7     | 65      | 0.1     | 0.7     | 5.2     | 1332    | 2.4    | 44     | 0.5    | 29     | 2.1     | 42      | 50      | 10      | 10072183  | 193      | 1        |
| SA5111977 | 0.5     | 2.7     | 106     | 0.8     | 0.25    | 7.4     | 4159    | 0.8    | 31     | 0.5    | 10     | 0.9     | 16      | 190     | 44      | 10072184  | 66       | 1        |
| SA5111978 | 0.5     | 21.1    | 43      | 0.1     | 2.1     | 9.4     | 940     | 2.8    | 64     | 0.5    | 73     | 4.9     | 76      | 50      | 9       | 10072185  | 118      | 1        |
| SA5111979 | 0.5     | 8.0     | 29      | 0.2     | 0.7     | 7.4     | 843     | 4.2    | 38     | 0.5    | 24     | 1.3     | 20      | 50      | 8       | 10072186  | 176      | 1        |
| SA5111980 | 0.5     | 6.2     | 94      | 0.1     | 0.6     | 2.7     | 1381    | 4.6    | 35     | 0.5    | 22     | 1.4     | 34      | 50      | 13      | 10072187  | 175      | 1        |
| SA5111981 | 0.5     | 4.1     | 73      | 0.1     | 0.25    | 2.3     | 790     | 3.6    | 9      | 0.5    | 17     | 1.2     | 14      | 50      | 11      | 10072188  | 217      | 1        |
| SA5111982 | 0.5     | 3.4     | 35      | 0.1     | 0.25    | 2.4     | 924     | 0.6    | 13     | 0.5    | 15     | 0.9     | 9       | 50      | 6       | 10072189  | 120      | 1        |
| SA5111983 | 0.5     | 13.6    | 42      | 0.1     | 1.6     | 6.1     | 1001    | 5.5    | 59     | 0.5    | 52     | 3.4     | 88      | 50      | 4       | 10072191  | 102      | 1        |
| SA5111984 | 0.5     | 4.4     | 40      | 0.2     | 0.25    | 3.9     | 813     | 0.9    | 21     | 0.5    | 14     | 0.7     | 22      | 50      | 6       | 10072192  | 213      | 1        |
| SA5111985 | 0.5     | 20.2    | 46      | 0.1     | 1.7     | 12.5    | 793     | 1.8    | 94     | 0.5    | 51     | 3.6     | 219     | 50      | 6       | 10072193  | 166      | 1        |
| SA5111986 | 0.5     | 2.2     | 34      | 0.1     | 0.25    | 2.3     | 761     | 0.4    | 12     | 0.5    | 8      | 0.8     | 15      | 50      | 5       | 10072194  | 108      | 1        |
| SA5111987 | 0.5     | 8.0     | 53      | 0.1     | 0.7     | 4.8     | 578     | 0.7    | 36     | 0.5    | 23     | 1.3     | 71      | 50      | 4       | 10072195  | 113      | 1        |
| SA5111988 | 0.5     | 6.5     | 43      | 0.3     | 0.7     | 2.9     | 751     | 0.4    | 36     | 0.5    | 22     | 1.9     | 45      | 50      | 5       | 10072196  | 95       | 1        |
| SA5111989 | 0.5     | 10.4    | 47      | 0.3     | 0.9     | 4.7     | 936     | 0.7    | 48     | 0.5    | 30     | 2.1     | 56      | 50      | 8       | 10072197  | 108      | 1        |
| SA5111990 | 0.5     | 3.2     | 90      | 0.1     | 0.25    | 2.4     | 1237    | 0.3    | 36     | 0.5    | 14     | 0.9     | 34      | 50      | 12      | 10072198  | 86       | 1        |
| SA5111991 | 0.5     | 0.3     | 35      | 0.1     | 0.25    | 0.2     | 67      | 0.05   | 0.5    | 0.5    | 1      | 0.25    | 10      | 50      | 1       | 10072199  | 53       | 1        |
| SA5111992 | 0.5     | 3.4     | 31      | 0.1     | 0.25    | 1.2     | 456     | 0.3    | 20     | 0.5    | 13     | 0.8     | 34      | 50      | 3       | 10072201  | 115      | 1        |
| SA5111993 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072202  | 72       | 1        |
| SA5111994 | 0.5     | 1.2     | 25      | 0.1     | 0.25    | 0.4     | 82      | 0.05   | 2      | 0.5    | 4      | 0.25    | 8       | 50      | 2       | 10072203  | 54       | 1        |
| SA5111995 | 0.5     | 3.8     | 62      | 0.1     | 0.25    | 1.5     | 538     | 0.3    | 16     | 0.5    | 13     | 1.4     | 33      | 50      | 4       | 10072204  | 159      | 1        |
| SA5111996 | 0.5     | 15.0    | 76      | 0.1     | 1.3     | 10.0    | 622     | 1.3    | 64     | 0.5    | 43     | 2.8     | 173     | 50      | 5       | 10072205  | 146      | 1        |
| SA5111997 | 0.5     | 4.6     | 28      | 0.1     | 0.25    | 1.4     | 499     | 0.3    | 27     | 0.5    | 18     | 1.0     | 18      | 50      | 3       | 10072206  | 162      | 1        |
| SA5111998 | 0.5     | 0.3     | 31      | 0.1     | 0.25    | 0.3     | 80      | 0.05   | 1      | 0.5    | 1      | 0.25    | 12      | 50      | 1       | 10072207  | 19       | 1        |
| SA5111999 | 0.5     | 5.2     | 70      | 0.1     | 0.5     | 3.1     | 915     | 0.6    | 51     | 0.5    | 19     | 1.2     | 39      | 50      | 7       | 10072208  | 148      | 1        |
| SA5112000 | 0.5     | 2.8     | 35      | 0.1     | 0.25    | 1.3     | 634     | 0.2    | 14     | 0.5    | 12     | 0.8     | 20      | 50      | 4       | 10072209  | 138      | 1        |
| SA5112001 | 0.5     | 18.2    | 532     | 1.5     | 2.1     | 6.2     | 7099    | 1.4    | 86     | 0.5    | 60     | 5.6     | 105     | 980     | 72      | 10072211  | 164      | 1        |
| SA5112002 | 0.5     | 0.6     | 54      | 0.1     | 0.25    | 0.3     | 246     | 0.05   | 3      | 0.5    | 2      | 0.25    | 15      | 50      | 3       | 10072212  | 41       | 1        |
| SA5112003 | 0.5     | 10.0    | 265     | 0.5     | 1.1     | 3.6     | 3055    | 0.8    | 63     | 0.5    | 38     | 3.4     | 49      | 460     | 34      | 10072213  | 137      | 1        |
| SA5112004 | 0.5     | 10.0    | 44      | 0.6     | 1.0     | 3.7     | 91      | 0.8    | 1      | 0.5    | 1      | 3.4     | 10      | 540     | 1       | 10072214  | 38       | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112005 | 0.5     | 0.2     | 25      | 0.1     | 0.25    | 0.2     | 32      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072215  | 32       | 1        |
| SA5112006 | 0.5     | 0.6     | 20      | 0.1     | 0.25    | 0.4     | 35      | 0.05   | 2      | 0.5    | 2      | 0.25    | 10      | 50      | 0.5     | 10072216  | 33       | 1        |
| SA5112007 | 0.5     | 5.7     | 272     | 1.4     | 0.6     | 5.5     | 9058    | 1.0    | 49     | 0.5    | 16     | 1.5     | 39      | 880     | 42      | 10072217  | 53       | 1        |
| SA5112008 | 0.5     | 5.3     | 196     | 0.3     | 0.6     | 3.1     | 2156    | 0.6    | 46     | 0.5    | 19     | 1.9     | 45      | 50      | 21      | 10072218  | 138      | 1        |
| SA5112009 | 0.5     | 0.3     | 21      | 0.1     | 0.25    | 0.2     | 73      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 5       | 50      | 1       | 10072219  | 19       | 1        |
| SA5112010 | 0.5     | 0.7     | 26      | 0.1     | 0.25    | 0.4     | 89      | 0.05   | 2      | 0.5    | 3      | 0.25    | 9       | 50      | 1       | 10072221  | 28       | 1        |
| SA5112011 | 0.5     | 1.0     | 30      | 0.1     | 0.25    | 0.8     | 173     | 0.05   | 10     | 0.5    | 4      | 0.25    | 14      | 50      | 4       | 10072222  | 33       | 1        |
| SA5112012 | 0.5     | 0.7     | 27      | 0.1     | 0.25    | 0.3     | 45      | 0.1    | 1      | 0.5    | 3      | 0.25    | 6       | 50      | 0.5     | 10072223  | 37       | 1        |
| SA5112013 | 0.5     | 0.2     | 32      | 0.1     | 0.25    | 0.2     | 41      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 0.5     | 10072224  | 25       | 1        |
| SA5112014 | 0.5     | 18.1    | 505     | 1.5     | 2.0     | 5.2     | 6498    | 1.4    | 60     | 0.5    | 48     | 5.5     | 87      | 1100    | 53      | 10072225  | 208      | 1        |
| SA5112015 | 0.5     | 0.3     | 33      | 0.1     | 0.25    | 0.3     | 163     | 0.05   | 0.5    | 0.5    | 1      | 0.25    | 11      | 50      | 1       | 10072226  | 24       | 1        |
| SA5112016 | 0.5     | 0.3     | 39      | 0.1     | 0.25    | 0.05    | 38      | 0.05   | 0.5    | 0.5    | 2      | 0.25    | 6       | 50      | 0.5     | 10072227  | 30       | 1        |
| SA5112017 | 0.5     | 0.3     | 32      | 0.1     | 0.25    | 0.3     | 110     | 0.1    | 1      | 0.5    | 1      | 0.25    | 7       | 50      | 2       | 10072228  | 23       | 1        |
| SA5112018 | 0.5     | 16.5    | 524     | 2.0     | 1.8     | 4.9     | 8327    | 1.4    | 50     | 0.5    | 45     | 5.7     | 71      | 1500    | 68      | 10072229  | 204      | 1        |
| SA5112019 | 0.5     | 1.3     | 19      | 0.1     | 0.25    | 0.6     | 112     | 0.05   | 6      | 0.5    | 4      | 0.25    | 6       | 50      | 2       | 10072231  | 17       | 1        |
| SA5112020 | 0.5     | 0.1     | 22      | 0.1     | 0.25    | 0.05    | 62      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 1       | 10072232  | 13       | 1        |
| SA5112021 | 0.5     | 10.4    | 549     | 2.2     | 1.2     | 6.5     | 12250   | 1.7    | 56     | 0.5    | 28     | 4.0     | 61      | 1800    | 88      | 10072233  | 268      | 1        |
| SA5112022 | 0.5     | 0.6     | 36      | 0.1     | 0.25    | 0.4     | 183     | 0.1    | 5      | 0.5    | 2      | 0.25    | 11      | 50      | 4       | 10072234  | 17       | 1        |
| SA5112023 | 0.5     | 0.05    | 29      | 0.1     | 0.25    | 0.05    | 46      | 0.2    | 0.5    | 0.5    | 0.5    | 0.25    | 5       | 50      | 0.5     | 10072235  | 19       | 1        |
| SA5112024 | 0.5     | 0.8     | 32      | 0.1     | 0.25    | 0.3     | 81      | 0.1    | 1      | 0.5    | 3      | 0.25    | 10      | 50      | 1       | 10072236  | 28       | 1        |
| SA5112025 | 0.5     | 1.2     | 37      | 0.1     | 0.25    | 0.3     | 79      | 0.05   | 2      | 0.5    | 4      | 0.25    | 8       | 50      | 1       | 10072237  | 64       | 1        |
| SA5112026 | 0.5     | 1.5     | 35      | 0.1     | 0.25    | 0.5     | 178     | 0.2    | 3      | 0.5    | 6      | 0.25    | 7       | 50      | 3       | 10072238  | 45       | 1        |
| SA5112027 | 0.5     | 0.2     | 32      | 0.1     | 0.25    | 0.2     | 44      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072239  | 29       | 1        |
| SA5112028 | 0.5     | 0.1     | 16      | 0.1     | 0.25    | 0.1     | 40      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072241  | 19       | 1        |
| SA5112029 | 0.5     | 0.3     | 32      | 0.1     | 0.25    | 0.4     | 123     | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 11      | 50      | 2       | 10072242  | 53       | 1        |
| SA5112030 | 0.5     | 0.2     | 25      | 0.1     | 0.25    | 0.2     | 59      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 2       | 10072243  | 32       | 1        |
| SA5112031 | 0.5     | 0.2     | 23      | 0.1     | 0.25    | 0.1     | 82      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072244  | 17       | 1        |
| SA5112032 | 0.5     | 12.1    | 72      | 0.1     | 1.0     | 0.4     | 367     | 0.4    | 8      | 0.5    | 35     | 1.4     | 67      | 50      | 3       | 10072245  | 113      | 1        |
| SA5112033 | 0.5     | 9.0     | 311     | 0.7     | 1.2     | 4.6     | 4597    | 1.6    | 54     | 0.5    | 38     | 3.7     | 59      | 450     | 61      | 10072246  | 170      | 1        |
| SA5112034 | 0.5     | 0.3     | 43      | 0.1     | 0.25    | 0.2     | 113     | 0.05   | 1      | 0.5    | 2      | 0.25    | 8       | 50      | 2       | 10072247  | 34       | 1        |
| SA5112035 | 0.5     | 0.8     | 36      | 0.1     | 0.25    | 0.3     | 61      | 0.05   | 0.5    | 0.5    | 4      | 0.25    | 11      | 50      | 1       | 10072248  | 19       | 1        |
| SA5112036 | 0.5     | 12.8    | 39      | 0.1     | 1.4     | 7.3     | 826     | 2.1    | 12     | 0.5    | 52     | 2.9     | 34      | 50      | 15      | 10072249  | 96       | 1        |
| SA5112037 | 0.5     | 0.3     | 15      | 0.1     | 0.25    | 0.7     | 159     | 0.2    | 3      | 0.5    | 1      | 0.25    | 11      | 50      | 1       | 10072251  | 63       | 1        |
| SA5112038 | 0.5     | 4.1     | 43      | 0.1     | 0.25    | 3.0     | 985     | 0.3    | 7      | 0.5    | 13     | 0.6     | 16      | 50      | 6       | 10072252  | 89       | 1        |
| SA5112039 | 0.5     | 4.9     | 32      | 0.2     | 0.25    | 1.3     | 346     | 0.3    | 11     | 0.5    | 15     | 0.9     | 17      | 50      | 3       | 10072253  | 122      | 1        |
| SA5112040 | 0.5     | 23.8    | 18      | 0.1     | 2.3     | 7.8     | 362     | 1.5    | 11     | 0.5    | 68     | 4.6     | 36      | 50      | 6       | 10072254  | 159      | 1        |
| SA5112041 | 0.5     | 0.3     | 26      | 0.1     | 0.25    | 0.2     | 67      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 1       | 10072255  | 18       | 1        |
| SA5112042 | 0.5     | 0.5     | 29      | 0.1     | 0.25    | 0.5     | 106     | 0.05   | 1      | 0.5    | 2      | 0.25    | 7       | 50      | 2       | 10072256  | 15       | 1        |
| SA5112043 | 0.5     | 0.3     | 40      | 0.1     | 0.25    | 0.2     | 77      | 0.05   | 0.5    | 0.5    | 1      | 0.25    | 15      | 50      | 1       | 10072257  | 19       | 1        |
| SA5112044 | 0.5     | 0.3     | 37      | 0.1     | 0.25    | 0.2     | 68      | 0.3    | 0.5    | 0.5    | 1      | 0.25    | 8       | 50      | 2       | 10072258  | -9       | 1        |
| SA5112045 | 0.5     | 0.4     | 42      | 0.1     | 0.25    | 0.4     | 89      | 0.2    | 1      | 0.5    | 2      | 0.25    | 10      | 50      | 1       | 10072259  | 63       | 1        |
| SA5112046 | 0.5     | 0.2     | 29      | 0.1     | 0.25    | 0.1     | 53      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 0.5     | 10072261  | 36       | 1        |
| SA5112047 | 0.5     | 0.05    | 34      | 0.1     | 0.25    | 0.2     | 41      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072262  | 25       | 1        |
| SA5112048 | 0.5     | 1.0     | 22      | 0.1     | 0.25    | 0.4     | 71      | 0.2    | 2      | 0.5    | 4      | 0.25    | 9       | 50      | 2       | 10072263  | 53       | 1        |
| SA5112049 | 0.5     | 0.3     | 21      | 0.1     | 0.25    | 0.2     | 62      | 0.05   | 0.5    | 0.5    | 1      | 0.25    | 10      | 50      | 0.5     | 10072264  | 46       | 1        |
| SA5112050 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.3     | 69      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072265  | 18       | 1        |
| SA5112051 | 0.5     | 0.2     | 38      | 0.1     | 0.25    | 0.2     | 50      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072266  | 17       | 1        |
| SA5112052 | 0.5     | 11.1    | 424     | 0.9     | 1.4     | 4.6     | 4900    | 1.2    | 66     | 0.5    | 39     | 4.0     | 86      | 390     | 48      | 10072267  | 176      | 1        |
| SA5112053 | 0.5     | 1.0     | 29      | 0.1     | 0.25    | 0.6     | 120     | 0.2    | 4      | 0.5    | 4      | 0.25    | 9       | 50      | 2       | 10072268  | 13       | 1        |
| SA5112054 | 0.5     | 1.1     | 20      | 0.1     | 0.25    | 0.6     | 110     | 0.3    | 4      | 0.5    | 6      | 0.25    | 13      | 50      | 2       | 10072269  | 54       | 1        |
| SA5112055 | -9      | -9      | 37      | -9      | -9      | -9      | 121     | -9     | 2      | -9     | 2      | -9      | 14      | -9      | 2       | 10072271  | 11       | 1        |
| SA5112056 | 0.5     | 0.3     | 26      | 0.1     | 0.25    | 0.3     | 111     | 0.2    | 2      | 0.5    | 1      | 0.25    | 9       | 50      | 1       | 10072272  | 6        | 1        |
| SA5112057 | 0.5     | 1.5     | 48      | 0.1     | 0.25    | 0.5     | 79      | 0.1    | 1      | 0.5    | 6      | 0.7     | 12      | 50      | 1       | 10072273  | 26       | 1        |
| SA5112058 | 0.5     | 2.0     | 32      | 0.1     | 0.25    | 0.7     | 117     | 0.2    | 5      | 0.5    | 11     | 0.9     | 8       | 50      | 1       | 10072274  | 58       | 1        |
| SA5112059 | 0.5     | 6.2     | 248     | 0.3     | 0.6     | 2.6     | 1644    | 0.6    | 33     | 0.5    | 24     | 1.9     | 41      | 50      | 15      | 10072275  | 166      | 1        |
| SA5112060 | 0.5     | 2.2     | 90      | 0.1     | 0.25    | 1.0     | 431     | 0.2    | 11     | 0.5    | 9      | 1.1     | 16      | 50      | 4       | 10072276  | 11       | 1        |
| SA5112061 | 0.5     | 0.1     | 55      | 0.1     | 0.25    | 0.2     | 85      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 1       | 10072277  | 42       | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |   |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|---|
| SA5112062 | 0.5     | 9.4     | 288     | 0.6     | 1.1     | 3.7     | 3796    | 0.8    | 48     | 0.5    | 35     | 3.3     | 92      | 400     | 34      | 10072278  | 109      | 1        |   |
| SA5112063 | 0.5     | 0.05    | 27      | 0.1     | 0.25    | 0.05    | 48      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 15      | 50      | 0.5     | 10072279  | 13       | 1        |   |
| SA5112064 | 0.5     | 11.6    | 320     | 0.7     | 1.2     | 3.7     | 4425    | 0.8    | 54     | 0.5    | 42     | 3.8     | 92      | 660     | 43      | 10072281  | 111      | 1        |   |
| SA5112065 | 0.5     | 0.3     | 35      | 0.1     | 0.25    | 0.2     | 201     | 0.2    | 3      | 0.5    | 1      | 0.25    | 15      | 50      | 2       | 10072282  | 44       | 1        |   |
| SA5112066 | -9      | -9      | 31      | -9      | -9      | -9      | 86      | -9     | 1      | -9     | 0.5    | -9      | 13      | -9      | 3       | 10072283  | 13       | 1        |   |
| SA5112067 | 0.5     | 6.6     | 30      | 0.1     | 0.8     | 3.1     | 376     | 0.3    | 12     | 0.5    | 28     | 1.8     | 22      | 50      | 8       | 10072284  | 212      | 1        |   |
| SA5112068 | -9      | -9      | 27      | -9      | -9      | -9      | 92      | -9     | 3      | -9     | 2      | -9      | 11      | -9      | 1       | 10072285  | 85       | 1        |   |
| SA5112069 | 0.5     | 0.5     | 30      | 0.1     | 0.25    | 0.4     | 50      | 0.05   | 1      | 0.5    | 2      | 0.25    | 9       | 50      | 0.5     | 10072286  | 20       | 1        |   |
| SA5112070 | 0.5     | 7.8     | 90      | 0.1     | 0.8     | 3.6     | 1269    | 0.6    | 52     | 0.5    | 30     | 2.0     | 40      | 50      | 14      | 10072287  | 75       | 1        |   |
| SA5112071 | 0.5     | 0.2     | 28      | 0.1     | 0.25    | 0.2     | 54      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072288  | 14       | 1        |   |
| SA5112072 | -9      | -9      | 36      | -9      | -9      | -9      | 269     | -9     | 4      | -9     | 2      | -9      | 16      | -9      | 3       | 10072289  | 39       | 1        |   |
| SA5112073 | 0.5     | 13.0    | 393     | 0.7     | 1.6     | 6.5     | 4663    | 1.1    | 66     | 0.5    | 52     | 5.1     | 87      | 570     | 64      | 10072291  | 87       | 1        |   |
| SA5112074 | 0.5     | 2.0     | 48      | 0.1     | 0.25    | 1.2     | 393     | 0.05   | 6      | 0.5    | 7      | 0.25    | 16      | 50      | 5       | 10072292  | 95       | 1        |   |
| SA5112075 | 0.5     | 1.0     | 20      | 0.1     | 0.25    | 0.3     | 70      | 0.05   | 3      | 0.5    | 4      | 0.25    | 12      | 50      | 1       | 10072293  | 43       | 1        |   |
| SA5112076 | 0.5     | 0.05    | 17      | 0.1     | 0.25    | 0.05    | 45      | 0.2    | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 3       | 10072294  | 41       | 1        |   |
| SA5112077 | 0.5     | 3.7     | 48      | 0.1     | 0.25    | 1.9     | 595     | 0.3    | 18     | 0.5    | 13     | 0.9     | 22      | 50      | 5       | 10072295  | 131      | 1        |   |
| SA5112078 | 0.5     | 10.0    | 136     | 0.1     | 1.0     | 2.6     | 1654    | 0.3    | 22     | 0.5    | 32     | 2.1     | 86      | 50      | 11      | 10072296  | 80       | 1        |   |
| SA5112079 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072297 | 58       | 1 |
| SA5112080 | 0.5     | 0.4     | 25      | 0.1     | 0.25    | 0.2     | 64      | 0.05   | 0.5    | 0.5    | 2      | 0.25    | 11      | 50      | 1       | 10072298  | 17       | 1        |   |
| SA5112081 | 0.5     | 0.6     | 26      | 0.1     | 0.25    | 0.3     | 78      | 0.05   | 1      | 0.5    | 2      | 0.25    | 10      | 50      | 1       | 10072299  | 21       | 1        |   |
| SA5112082 | -9      | -9      | 35      | -9      | -9      | -9      | 103     | -9     | 0.5    | -9     | 0.5    | -9      | 16      | -9      | 1       | 10072301  | 15       | 1        |   |
| SA5112083 | 0.5     | 0.8     | 33      | 0.1     | 0.25    | 0.3     | 96      | 0.05   | 1      | 0.5    | 3      | 0.25    | 11      | 50      | 1       | 10072302  | 7        | 1        |   |
| SA5112084 | 0.5     | 0.5     | 29      | 0.1     | 0.25    | 0.3     | 89      | 0.05   | 1      | 0.5    | 2      | 0.25    | 14      | 50      | 1       | 10072303  | 16       | 1        |   |
| SA5112085 | 0.5     | 0.2     | 36      | 0.1     | 0.25    | 0.3     | 85      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 2       | 10072304  | 15       | 1        |   |
| SA5112086 | 0.5     | 0.1     | 26      | 0.1     | 0.25    | 0.1     | 53      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072305  | 17       | 1        |   |
| SA5112087 | 0.5     | 0.2     | 19      | 0.1     | 0.25    | 0.3     | 90      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 1       | 10072306  | 15       | 1        |   |
| SA5112088 | 0.5     | 0.1     | 24      | 0.1     | 0.25    | 0.2     | 49      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072307  | 14       | 1        |   |
| SA5112089 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072308 | 44       | 1 |
| SA5112090 | 0.5     | 1.1     | 18      | 0.1     | 0.25    | 0.3     | 67      | 0.2    | 0.5    | 0.5    | 4      | 0.25    | 7       | 50      | 1       | 10072309  | 13       | 1        |   |
| SA5112091 | 0.5     | 0.8     | 26      | 0.1     | 0.25    | 0.3     | 114     | 0.05   | 3      | 0.5    | 3      | 0.25    | 12      | 50      | 2       | 10072311  | 25       | 1        |   |
| SA5112092 | 0.5     | 0.6     | 32      | 0.1     | 0.25    | 0.3     | 84      | 0.05   | 3      | 0.5    | 3      | 0.25    | 20      | 50      | 1       | 10072312  | 24       | 1        |   |
| SA5112093 | 0.5     | 8.0     | 39      | 0.1     | 0.6     | 0.9     | 470     | 0.2    | 11     | 0.5    | 23     | 1.7     | 45      | 50      | 5       | 10072313  | 85       | 1        |   |
| SA5112094 | 0.5     | 0.1     | 16      | 0.1     | 0.25    | 0.1     | 38      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072314  | 16       | 1        |   |
| SA5112095 | 0.5     | 1.5     | 25      | 0.1     | 0.25    | 2.4     | 547     | 1.7    | 8      | 0.5    | 6      | 0.25    | 7       | 50      | 3       | 10072315  | 557      | 1        |   |
| SA5112096 | 0.5     | 3.8     | 32      | 0.3     | 0.25    | 3.9     | 672     | 1.7    | 16     | 0.5    | 17     | 1.2     | 12      | 50      | 4       | 10072316  | 265      | 1        |   |
| SA5112097 | 0.5     | 4.5     | 100     | 0.4     | 0.7     | 3.5     | 1321    | 2.1    | 17     | 0.5    | 24     | 2.4     | 23      | 50      | 14      | 10072317  | 581      | 1        |   |
| SA5112098 | 0.5     | 10.4    | 324     | 1.4     | 1.2     | 6.5     | 5694    | 2.7    | 62     | 0.5    | 44     | 3.5     | 70      | 590     | 51      | 10072318  | 509      | 1        |   |
| SA5112099 | 0.5     | 8.0     | 25      | 0.3     | 0.9     | 7.1     | 1034    | 2.4    | 48     | 0.5    | 34     | 1.9     | 20      | 50      | 4       | 10072319  | 287      | 1        |   |
| SA5112100 | 0.5     | 0.8     | 39      | 0.1     | 0.25    | 0.3     | 119     | 0.05   | 2      | 0.5    | 2      | 0.25    | 12      | 50      | 1       | 10072321  | 14       | 1        |   |
| SA5112101 | 0.5     | 0.2     | 63      | 0.1     | 0.25    | 0.3     | 123     | 0.05   | 3      | 0.5    | 0.5    | 0.25    | 15      | 50      | 2       | 10072322  | 23       | 1        |   |
| SA5112102 | 0.5     | 2.2     | 37      | 0.1     | 0.25    | 2.4     | 629     | 1.2    | 9      | 0.5    | 8      | 0.6     | 12      | 50      | 4       | 10072323  | 439      | 1        |   |
| SA5112103 | 0.5     | 0.2     | 43      | 0.1     | 0.25    | 0.2     | 63      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 18      | 50      | 0.5     | 10072324  | 14       | 1        |   |
| SA5112104 | 0.5     | 8.1     | 302     | 1.4     | 1.0     | 6.8     | 7797    | 3.3    | 103    | 0.5    | 34     | 3.0     | 61      | 550     | 48      | 10072325  | 461      | 1        |   |
| SA5112105 | 0.5     | 1.9     | 34      | 0.2     | 0.25    | 3.6     | 983     | 1.1    | 14     | 0.5    | 9      | 0.25    | 10      | 50      | 3       | 10072326  | 429      | 1        |   |
| SA5112106 | 0.5     | 9.5     | 60      | 0.4     | 1.2     | 7.7     | 1964    | 3.7    | 80     | 0.5    | 36     | 2.9     | 40      | 50      | 6       | 10072327  | 328      | 1        |   |
| SA5112107 | 0.5     | 10.0    | 44      | 0.4     | 1.2     | 8.5     | 1548    | 3.7    | 53     | 0.5    | 40     | 2.9     | 72      | 50      | 7       | 10072328  | 227      | 1        |   |
| SA5112108 | 0.5     | 1.7     | 16      | 0.1     | 0.25    | 2.3     | 386     | 0.8    | 6      | 0.5    | 8      | 0.25    | 6       | 50      | 2       | 10072329  | 348      | 1        |   |
| SA5112109 | 0.5     | 2.6     | 29      | 0.3     | 0.25    | 3.4     | 668     | 1.5    | 10     | 0.5    | 11     | 0.25    | 18      | 50      | 3       | 10072331  | 451      | 1        |   |
| SA5112110 | 0.5     | 3.7     | 176     | 0.4     | 0.25    | 4.9     | 2944    | 2.4    | 29     | 0.5    | 15     | 1.1     | 21      | 290     | 30      | 10072332  | 432      | 1        |   |
| SA5112111 | 0.5     | 0.05    | 34      | 0.1     | 0.25    | 0.1     | 50      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072333  | 22       | 1        |   |
| SA5112112 | 0.5     | 9.4     | 76      | 0.1     | 1.1     | 8.1     | 992     | 4.9    | 56     | 0.5    | 38     | 2.3     | 29      | 50      | 3       | 10072334  | 378      | 1        |   |
| SA5112113 | 0.5     | 5.5     | 117     | 0.5     | 0.6     | 7.1     | 2406    | 3.3    | 31     | 0.5    | 19     | 1.4     | 32      | 50      | 13      | 10072335  | 437      | 1        |   |
| SA5112114 | 0.5     | 10.6    | 46      | 0.1     | 1.0     | 10.0    | 1404    | 9.0    | 51     | 0.5    | 32     | 1.8     | 24      | 50      | 4       | 10072336  | 260      | 1        |   |
| SA5112115 | 0.5     | 8.0     | 32      | 0.1     | 0.7     | 4.5     | 775     | 1.6    | 29     | 0.5    | 19     | 0.25    | 24      | 50      | 3       | 10072337  | 191      | 1        |   |
| SA5112116 | 0.5     | 3.9     | 72      | 0.1     | 0.25    | 3.3     | 1544    | 1.0    | 27     | 0.5    | 11     | 1.0     | 17      | 50      | 9       | 10072338  | 427      | 1        |   |
| SA5112117 | 0.5     | 0.2     | 26      | 0.1     | 0.25    | 0.4     | 91      | 0.2    | 2      | 0.5    | 0.5    | 0.25    | 6       | 50      | 0.5     | 10072339  | 16       | 1        |   |
| SA5112118 | 0.5     | 3.7     | 91      | 0.3     | 0.25    | 4.3     | 1886    | 1.0    | 34     | 0.5    | 13     | 1.2     | 23      | 50      | 13      | 10072341  | 275      | 1        |   |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112119 | 0.5     | 0.2     | 28      | 0.1     | 0.25    | 0.3     | 100     | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072342  | 23       | 1        |
| SA5112120 | 0.5     | 3.4     | 42      | 0.2     | 0.25    | 4.4     | 1094    | 0.9    | 20     | 0.5    | 11     | 0.25    | 12      | 50      | 5       | 10072343  | 292      | 1        |
| SA5112121 | 0.5     | 2.0     | 41      | 0.1     | 0.25    | 3.3     | 596     | 0.8    | 15     | 0.5    | 7      | 0.25    | 11      | 50      | 4       | 10072344  | 367      | 1        |
| SA5112122 | 0.5     | 3.1     | 55      | 0.1     | 0.25    | 3.4     | 977     | 1.7    | 28     | 0.5    | 9      | 1.0     | 21      | 50      | 5       | 10072345  | 226      | 1        |
| SA5112123 | 0.5     | 2.6     | 37      | 0.1     | 0.25    | 3.8     | 595     | 2.2    | 8      | 0.5    | 9      | 0.25    | 7       | 50      | 4       | 10072346  | 216      | 1        |
| SA5112124 | 0.5     | 4.1     | 34      | 0.3     | 0.25    | 3.5     | 1395    | 1.2    | 21     | 0.5    | 19     | 1.2     | 20      | 50      | 5       | 10072347  | 386      | 1        |
| SA5112125 | 0.5     | 8.5     | 49      | 0.1     | 1.0     | 5.6     | 1592    | 2.3    | 92     | 0.5    | 34     | 2.4     | 61      | 50      | 6       | 10072348  | 275      | 1        |
| SA5112126 | 0.5     | 3.8     | 28      | 0.1     | 0.25    | 2.9     | 1463    | 1.1    | 27     | 0.5    | 17     | 1.2     | 17      | 50      | 5       | 10072349  | 294      | 1        |
| SA5112127 | 0.5     | 16.9    | 35      | 0.1     | 2.2     | 6.4     | 407     | 2.5    | 11     | 0.5    | 63     | 2.7     | 29      | 50      | 3       | 10072351  | 134      | 1        |
| SA5112128 | -9      | -9      | 61      | -9      | -9      | -9      | 2601    | -9     | 46     | -9     | 68     | -9      | 75      | -9      | 11      | 10072352  | 229      | 1        |
| SA5112129 | 0.5     | 5.0     | 50      | 0.4     | 0.6     | 4.4     | 1814    | 1.8    | 20     | 0.5    | 20     | 1.3     | 24      | 50      | 7       | 10072353  | 284      | 1        |
| SA5112130 | 0.5     | 4.7     | 32      | 0.1     | 0.6     | 3.3     | 627     | 1.3    | 7      | 0.5    | 21     | 1.0     | 15      | 50      | 3       | 10072354  | 578      | 1        |
| SA5112131 | 0.5     | 0.2     | 34      | 0.1     | 0.25    | 0.2     | 85      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 1       | 10072355  | 18       | 1        |
| SA5112132 | 0.5     | 55.9    | 66      | 0.3     | 5.7     | 25.0    | 1440    | 27.2   | 78     | 1      | 189    | 15.0    | 202     | 50      | 18      | 10072356  | 225      | 1        |
| SA5112133 | 0.5     | 0.8     | 35      | 0.1     | 0.25    | 0.5     | 134     | 0.3    | 2      | 0.5    | 3      | 0.25    | 10      | 50      | 1       | 10072357  | 46       | 1        |
| SA5112134 | -9      | -9      | 37      | -9      | -9      | -9      | 67      | -9     | 0.5    | -9     | 0.5    | -9      | 14      | -9      | 0.5     | 10072358  | 14       | 1        |
| SA5112135 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072359  | 210      | 1        |
| SA5112136 | 0.5     | 0.05    | 31      | 0.1     | 0.25    | 0.05    | 38      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 15      | 50      | 0.5     | 10072361  | 5        | 1        |
| SA5112137 | -9      | -9      | 13      | -9      | -9      | -9      | 57      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 1       | 10072362  | 35       | 1        |
| SA5112138 | 0.5     | 2.0     | 23      | 0.1     | 0.25    | 1.9     | 907     | 0.9    | 11     | 0.5    | 8      | 0.25    | 16      | 50      | 3       | 10072363  | 406      | 1        |
| SA5112139 | 0.5     | 7.2     | 59      | 0.2     | 0.9     | 3.8     | 1668    | 1.1    | 34     | 0.5    | 34     | 1.2     | 50      | 50      | 7       | 10072364  | 325      | 1        |
| SA5112140 | 0.5     | 0.1     | 33      | 0.1     | 0.25    | 0.1     | 49      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 0.5     | 10072365  | 7        | 1        |
| SA5112141 | 0.5     | 11.8    | 27      | 0.1     | 1.5     | 4.6     | 386     | 1.4    | 5      | 0.5    | 62     | 3.9     | 14      | 50      | 2       | 10072366  | 130      | 1        |
| SA5112142 | 0.5     | 9.3     | 42      | 0.3     | 1.1     | 6.1     | 1066    | 1.8    | 32     | 0.5    | 38     | 2.5     | 31      | 50      | 6       | 10072367  | 230      | 1        |
| SA5112143 | 0.5     | 28.7    | 239     | 0.9     | 2.9     | 26.0    | 4933    | 18.2   | 84     | 0.5    | 90     | 6.9     | 153     | 50      | 45      | 10072368  | 165      | 1        |
| SA5112144 | 0.5     | 4.5     | 16      | 0.3     | 0.5     | 3.6     | 781     | 1.0    | 11     | 0.5    | 15     | 1.0     | 10      | 50      | 3       | 10072369  | 205      | 1        |
| SA5112145 | 0.5     | 4.9     | 18      | 0.2     | 0.6     | 5.9     | 650     | 2.6    | 11     | 0.5    | 23     | 1.4     | 8       | 50      | 4       | 10072371  | 453      | 1        |
| SA5112146 | 0.5     | 7.4     | 49      | 0.4     | 0.8     | 6.6     | 1093    | 1.7    | 20     | 0.5    | 31     | 2.4     | 18      | 50      | 5       | 10072372  | 136      | 1        |
| SA5112147 | 0.5     | 7.5     | 69      | 0.6     | 0.9     | 6.4     | 1621    | 7.9    | 22     | 0.5    | 32     | 1.8     | 26      | 50      | 13      | 10072373  | 480      | 1        |
| SA5112148 | 0.5     | 3.3     | 34      | 0.1     | 0.25    | 1.0     | 495     | 0.7    | 9      | 0.5    | 11     | 0.25    | 19      | 50      | 4       | 10072374  | 115      | 1        |
| SA5112149 | 0.5     | 6.8     | 222     | 0.5     | 0.6     | 2.4     | 2134    | 0.5    | 39     | 0.5    | 21     | 1.5     | 46      | 220     | 23      | 10072375  | 1        | 1        |
| SA5112150 | 0.5     | 0.5     | 25      | 0.1     | 0.25    | 0.2     | 98      | 0.05   | 1      | 0.5    | 2      | 0.25    | 8       | 50      | 1       | 10072376  | 27       | 1        |
| SA5112151 | 0.5     | 2.7     | 27      | 0.1     | 0.25    | 1.0     | 71      | 0.2    | 4      | 0.5    | 12     | 1.2     | 7       | 50      | 1       | 10072377  | 72       | 1        |
| SA5112152 | 0.5     | 0.4     | 29      | 0.1     | 0.25    | 0.4     | 104     | 0.1    | 1      | 0.5    | 2      | 0.25    | 11      | 50      | 1       | 10072378  | 31       | 1        |
| SA5112153 | 0.5     | 0.9     | 37      | 0.1     | 0.25    | 0.4     | 85      | 0.1    | 6      | 0.5    | 4      | 0.25    | 8       | 50      | 1       | 10072379  | 22       | 1        |
| SA5112154 | 0.5     | 0.2     | 33      | 0.1     | 0.25    | 0.05    | 57      | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 10      | 50      | 0.5     | 10072381  | 1        | 1        |
| SA5112155 | 0.5     | 1.3     | 53      | 0.1     | 0.25    | 0.4     | 138     | 0.05   | 1      | 0.5    | 6      | 0.25    | 16      | 50      | 1       | 10072382  | 42       | 1        |
| SA5112156 | 0.5     | 13.4    | 521     | 1.1     | 1.6     | 3.3     | 5957    | 0.8    | 49     | 0.5    | 43     | 5.3     | 72      | 860     | 43      | 10072383  | 133      | 1        |
| SA5112157 | 0.5     | 0.6     | 31      | 0.1     | 0.25    | 0.6     | 246     | 0.05   | 3      | 0.5    | 2      | 0.25    | 10      | 50      | 3       | 10072384  | 32       | 1        |
| SA5112158 | 0.5     | 0.3     | 48      | 0.1     | 0.25    | 0.05    | 90      | 0.2    | 3      | 0.5    | 1      | 0.25    | 13      | 50      | 1       | 10072385  | 23       | 1        |
| SA5112159 | 0.5     | 1.1     | 27      | 0.1     | 0.25    | 0.3     | 96      | 0.05   | 2      | 0.5    | 4      | 0.5     | 10      | 50      | 1       | 10072386  | 52       | 1        |
| SA5112160 | 0.5     | 0.3     | 24      | 0.1     | 0.25    | 0.2     | 68      | 0.05   | 1      | 0.5    | 1      | 0.25    | 8       | 50      | 1       | 10072387  | 17       | 1        |
| SA5112161 | 0.5     | 11.4    | 445     | 0.9     | 1.3     | 4.8     | 4342    | 1.0    | 60     | 0.5    | 35     | 3.7     | 74      | 470     | 41      | 10072388  | 91       | 1        |
| SA5112162 | 0.5     | 0.6     | 29      | 0.1     | 0.25    | 0.4     | 234     | 0.1    | 5      | 0.5    | 3      | 0.25    | 10      | 50      | 2       | 10072389  | 35       | 1        |
| SA5112163 | 0.5     | 0.9     | 26      | 0.1     | 0.25    | 0.3     | 57      | 0.05   | 2      | 0.5    | 3      | 0.25    | 9       | 50      | 0.5     | 10072391  | 27       | 1        |
| SA5112164 | 0.5     | 1.2     | 24      | 0.1     | 0.25    | 0.6     | 132     | 0.2    | 6      | 0.5    | 6      | 0.25    | 10      | 50      | 2       | 10072392  | 41       | 1        |
| SA5112165 | 0.5     | 11.4    | 498     | 1.0     | 1.3     | 4.6     | 4945    | 1.2    | 49     | 0.5    | 35     | 4.2     | 72      | 560     | 50      | 10072393  | 74       | 1        |
| SA5112166 | 0.5     | 7.6     | 261     | 0.6     | 0.9     | 3.8     | 2513    | 0.6    | 38     | 0.5    | 28     | 2.6     | 87      | 50      | 27      | 10072394  | 111      | 1        |
| SA5112167 | 0.5     | 1.1     | 36      | 0.1     | 0.25    | 0.5     | 77      | 0.05   | 3      | 0.5    | 6      | 0.25    | 13      | 50      | 0.5     | 10072395  | 103      | 1        |
| SA5112168 | 0.5     | 1.0     | 18      | 0.1     | 0.25    | 0.3     | 214     | 0.05   | 7      | 0.5    | 4      | 0.6     | 14      | 50      | 2       | 10072396  | 60       | 1        |
| SA5112169 | 0.5     | 10.9    | 438     | 0.9     | 1.3     | 3.7     | 4830    | 0.9    | 48     | 0.5    | 36     | 4.4     | 69      | 620     | 43      | 10072397  | 59       | 1        |
| SA5112170 | 0.5     | 8.1     | 379     | 0.8     | 0.9     | 3.5     | 4073    | 0.8    | 50     | 0.5    | 28     | 2.7     | 63      | 410     | 36      | 10072398  | 115      | 1        |
| SA5112171 | 0.5     | 0.2     | 34      | 0.1     | 0.25    | 0.3     | 66      | 0.05   | 2      | 0.5    | 1      | 0.25    | 7       | 50      | 0.5     | 10072399  | 15       | 1        |
| SA5112172 | 0.5     | 10.8    | 461     | 1.0     | 1.2     | 3.9     | 5998    | 0.9    | 53     | 0.5    | 40     | 3.9     | 72      | 640     | 48      | 10072401  | 42       | 1        |
| SA5112173 | 0.5     | 0.2     | 35      | 0.1     | 0.25    | 0.2     | 62      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 1       | 10072402  | 14       | 1        |
| SA5112174 | 0.5     | 10.0    | 57      | 0.1     | 0.9     | 0.9     | 162     | 0.3    | 15     | 0.5    | 39     | 2.8     | 75      | 50      | 2       | 10072403  | 51       | 1        |
| SA5112175 | 0.5     | 12.2    | 446     | 1.4     | 1.3     | 5.0     | 8739    | 1.2    | 58     | 0.5    | 40     | 4.3     | 55      | 820     | 51      | 10072404  | 317      | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112176 | 0.5     | 5.2     | 303     | 0.7     | 0.25    | 2.8     | 3694    | 0.7    | 33     | 0.5    | 19     | 2.1     | 31      | 50      | 33      | 10072405  | 43       | 1        |
| SA5112177 | 0.5     | 4.3     | 176     | 0.4     | 0.25    | 2.5     | 2232    | 0.4    | 23     | 0.5    | 19     | 1.5     | 43      | 50      | 19      | 10072406  | 43       | 1        |
| SA5112178 | 0.5     | 1.2     | 29      | 0.1     | 0.25    | 0.7     | 262     | 0.05   | 5      | 0.5    | 5      | 0.25    | 10      | 50      | 3       | 10072407  | 36       | 1        |
| SA5112179 | 0.5     | 9.1     | 460     | 0.7     | 1.1     | 4.7     | 4402    | 0.9    | 60     | 0.5    | 32     | 3.0     | 89      | 360     | 37      | 10072408  | 47       | 1        |
| SA5112180 | 0.5     | 0.6     | 34      | 0.1     | 0.25    | 0.5     | 206     | 0.05   | 3      | 0.5    | 3      | 0.25    | 13      | 50      | 3       | 10072409  | 16       | 1        |
| SA5112181 | 0.5     | 1.0     | 16      | 0.1     | 0.25    | 1.8     | 347     | 0.05   | 6      | 0.5    | 4      | 0.8     | 10      | 50      | 3       | 10072411  | 99       | 1        |
| SA5112182 | 0.5     | 1.0     | 29      | 0.1     | 0.25    | 0.3     | 75      | 0.1    | 0.5    | 0.5    | 3      | 0.25    | 10      | 50      | 0.5     | 10072412  | 18       | 1        |
| SA5112183 | 0.5     | 7.0     | 408     | 0.8     | 0.8     | 4.0     | 4156    | 0.7    | 55     | 0.5    | 26     | 2.5     | 72      | 320     | 36      | 10072413  | 66       | 1        |
| SA5112184 | 0.5     | 6.0     | 272     | 0.5     | 0.7     | 4.1     | 3367    | 0.8    | 75     | 0.5    | 25     | 2.5     | 99      | 260     | 36      | 10072414  | 26       | 1        |
| SA5112185 | 0.5     | 0.3     | 42      | 0.1     | 0.25    | 0.5     | 170     | 0.05   | 2      | 0.5    | 2      | 0.25    | 10      | 50      | 2       | 10072415  | 22       | 1        |
| SA5112186 | 0.5     | 2.1     | 39      | 0.1     | 0.25    | 1.7     | 366     | 0.05   | 6      | 0.5    | 9      | 0.25    | 16      | 50      | 5       | 10072416  | 34       | 1        |
| SA5112187 | 0.5     | 1.3     | 22      | 0.1     | 0.25    | 1.1     | 120     | 0.2    | 7      | 0.5    | 5      | 0.25    | 8       | 50      | 2       | 10072417  | 37       | 1        |
| SA5112188 | 0.5     | 0.7     | 30      | 0.1     | 0.25    | 0.3     | 65      | 0.05   | 1      | 0.5    | 2      | 0.25    | 11      | 50      | 2       | 10072418  | 36       | 1        |
| SA5112189 | 0.5     | 0.3     | 27      | 0.1     | 0.25    | 0.2     | 47      | 0.05   | 0.5    | 0.5    | 1      | 0.25    | 7       | 50      | 0.5     | 10072419  | 24       | 1        |
| SA5112190 | 0.5     | 3.6     | 54      | 0.2     | 0.25    | 1.8     | 918     | 0.3    | 15     | 0.5    | 15     | 1.2     | 14      | 50      | 9       | 10072421  | 84       | 1        |
| SA5112191 | 0.5     | 0.2     | 38      | 0.1     | 0.25    | 0.05    | 47      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072422  | 14       | 1        |
| SA5112192 | 0.5     | 10.0    | 54      | 0.1     | 0.9     | 3.5     | 936     | 1.2    | 20     | 0.5    | 29     | 1.9     | 57      | 50      | 7       | 10072423  | 54       | 1        |
| SA5112193 | 0.5     | 4.4     | 67      | 0.5     | 0.25    | 5.3     | 1304    | 0.3    | 26     | 0.5    | 18     | 1.4     | 31      | 50      | 14      | 10072424  | 72       | 1        |
| SA5112194 | 0.5     | 7.7     | 28      | 0.1     | 0.7     | 4.0     | 455     | 1.5    | 23     | 0.5    | 28     | 1.9     | 20      | 50      | 4       | 10072425  | 237      | 1        |
| SA5112195 | 0.5     | 7.4     | 273     | 0.9     | 0.9     | 3.7     | 4083    | 1.2    | 52     | 0.5    | 32     | 3.3     | 56      | 470     | 54      | 10072426  | 154      | 1        |
| SA5112196 | 0.5     | 10.1    | 28      | 0.1     | 1.0     | 4.0     | 654     | 1.3    | 28     | 0.5    | 40     | 2.3     | 53      | 50      | 5       | 10072427  | 80       | 1        |
| SA5112197 | 0.5     | 11.4    | 45      | 0.1     | 1.0     | 2.9     | 507     | 0.6    | 23     | 0.5    | 26     | 1.4     | 56      | 50      | 3       | 10072428  | 77       | 1        |
| SA5112198 | 0.5     | 16.4    | 49      | 0.1     | 1.8     | 6.9     | 728     | 4.3    | 21     | 0.5    | 67     | 4.7     | 48      | 50      | 9       | 10072429  | 121      | 1        |
| SA5112199 | 0.5     | 16.0    | 51      | 0.3     | 1.7     | 6.9     | 1015    | 1.2    | 74     | 0.5    | 53     | 3.9     | 122     | 50      | 8       | 10072431  | 139      | 1        |
| SA5112200 | 0.5     | 6.7     | 440     | 0.6     | 0.8     | 4.3     | 3556    | 0.9    | 63     | 0.5    | 24     | 2.8     | 80      | 220     | 37      | 10072432  | 47       | 1        |
| SA5112201 | 0.5     | 6.7     | 66      | 0.1     | 0.6     | 2.8     | 880     | 0.6    | 35     | 0.5    | 21     | 1.7     | 46      | 50      | 8       | 10072433  | 117      | 1        |
| SA5112202 | -9      | -9      | 48      | -9      | -9      | -9      | 864     | -9     | 23     | -9     | 17     | -9      | 35      | -9      | 7       | 10072434  | 62       | 1        |
| SA5112203 | 0.5     | 10.0    | 56      | 0.1     | 1.0     | 5.2     | 1091    | 1.9    | 49     | 0.5    | 33     | 1.9     | 56      | 50      | 7       | 10072435  | 152      | 1        |
| SA5112204 | 0.5     | 0.3     | 56      | 0.1     | 0.25    | 0.2     | 99      | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 12      | 50      | 1       | 10072436  | 27       | 1        |
| SA5112205 | 0.5     | 12.4    | 50      | 0.4     | 1.2     | 5.9     | 1004    | 0.7    | 57     | 0.5    | 38     | 2.4     | 57      | 50      | 6       | 10072437  | 174      | 1        |
| SA5112206 | -9      | -9      | 64      | -9      | -9      | -9      | 1186    | -9     | 36     | -9     | 25     | -9      | 35      | -9      | 7       | 10072438  | 356      | 1        |
| SA5112207 | 0.5     | 2.0     | 14      | 0.1     | 0.25    | 3.3     | 507     | 0.7    | 6      | 0.5    | 7      | 0.25    | 6       | 50      | 2       | 10072439  | 381      | 1        |
| SA5112208 | 0.5     | 10.4    | 24      | 0.2     | 1.3     | 8.1     | 525     | 2.0    | 20     | 0.5    | 39     | 1.8     | 17      | 50      | 3       | 10072441  | 252      | 1        |
| SA5112209 | 0.5     | 2.4     | 17      | 0.2     | 0.25    | 7.5     | 731     | 1.1    | 10     | 0.5    | 8      | 0.25    | 5       | 50      | 4       | 10072442  | 465      | 1        |
| SA5112210 | 0.5     | 1.0     | 30      | 0.1     | 0.25    | 0.8     | 77      | 0.05   | 2      | 0.5    | 5      | 0.25    | 9       | 50      | 0.5     | 10072443  | 33       | 1        |
| SA5112211 | 0.5     | 4.3     | 25      | 0.2     | 0.25    | 3.3     | 611     | 0.2    | 22     | 0.5    | 16     | 1.1     | 35      | 50      | 4       | 10072444  | 120      | 1        |
| SA5112212 | 0.5     | 0.7     | 30      | 0.1     | 0.25    | 0.6     | 98      | 0.05   | 3      | 0.5    | 3      | 0.25    | 9       | 50      | 1       | 10072445  | 56       | 1        |
| SA5112213 | 0.5     | 0.6     | 28      | 0.1     | 0.25    | 0.8     | 181     | 0.05   | 4      | 0.5    | 3      | 0.25    | 9       | 50      | 2       | 10072446  | 50       | 1        |
| SA5112214 | 0.5     | 0.6     | 25      | 0.1     | 0.25    | 0.7     | 171     | 0.05   | 4      | 0.5    | 2      | 0.25    | 8       | 50      | 2       | 10072447  | 50       | 1        |
| SA5112215 | 0.5     | 0.3     | 31      | 0.1     | 0.25    | 0.3     | 48      | 0.05   | 0.5    | 0.5    | 1      | 0.25    | 7       | 50      | 0.5     | 10072448  | 8        | 1        |
| SA5112216 | -9      | -9      | 32      | -9      | -9      | -9      | 69      | -9     | 2      | -9     | 0.5    | -9      | 7       | -9      | 1       | 10072449  | 17       | 1        |
| SA5112217 | 0.5     | 0.2     | 31      | 0.1     | 0.25    | 0.2     | 52      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072451  | 38       | 1        |
| SA5112218 | 0.5     | 0.6     | 47      | 0.1     | 0.25    | 0.3     | 78      | 0.05   | 2      | 0.5    | 2      | 0.25    | 9       | 50      | 1       | 10072452  | 39       | 1        |
| SA5112219 | 0.5     | 1.9     | 38      | 0.1     | 0.25    | 0.8     | 201     | 0.3    | 32     | 0.5    | 6      | 0.25    | 7       | 50      | 3       | 10072453  | 25       | 1        |
| SA5112220 | 0.5     | 10.8    | 451     | 1.0     | 1.4     | 8.4     | 6123    | 1.7    | 106    | 0.5    | 46     | 5.0     | 96      | 420     | 57      | 10072454  | 64       | 1        |
| SA5112221 | 0.5     | 5.0     | 88      | 0.1     | 0.5     | 3.5     | 1236    | 0.5    | 42     | 0.5    | 23     | 1.5     | 43      | 50      | 12      | 10072455  | 91       | 1        |
| SA5112222 | 0.5     | 0.4     | 30      | 0.1     | 0.25    | 0.2     | 69      | 0.1    | 1      | 0.5    | 2      | 0.25    | 9       | 50      | 1       | 10072456  | 35       | 1        |
| SA5112223 | 0.5     | 0.8     | 25      | 0.1     | 0.25    | 0.8     | 97      | 0.05   | 6      | 0.5    | 4      | 0.25    | 7       | 50      | 1       | 10072457  | 87       | 1        |
| SA5112224 | 0.5     | 1.6     | 24      | 0.1     | 0.25    | 0.3     | 154     | 0.05   | 4      | 0.5    | 6      | 0.25    | 14      | 50      | 2       | 10072458  | 27       | 1        |
| SA5112225 | 0.5     | 4.6     | 60      | 0.1     | 0.25    | 3.6     | 773     | 0.7    | 24     | 0.5    | 22     | 1.9     | 32      | 50      | 6       | 10072459  | 98       | 1        |
| SA5112226 | 0.5     | 3.6     | 54      | 0.1     | 0.25    | 2.4     | 353     | 0.3    | 13     | 0.5    | 16     | 1.1     | 16      | 50      | 6       | 10072461  | 63       | 1        |
| SA5112227 | 0.5     | 1.0     | 25      | 0.1     | 0.25    | 0.4     | 117     | 0.1    | 8      | 0.5    | 4      | 0.9     | 7       | 50      | 1       | 10072462  | 24       | 1        |
| SA5112228 | 0.5     | 6.4     | 32      | 0.1     | 0.7     | 3.4     | 824     | 0.5    | 18     | 0.5    | 21     | 1.7     | 28      | 50      | 5       | 10072463  | 96       | 1        |
| SA5112229 | 0.5     | 0.05    | 26      | 0.1     | 0.25    | 0.05    | 41      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072464  | 31       | 1        |
| SA5112230 | 0.5     | 5.9     | 21      | 0.1     | 0.5     | 2.0     | 182     | 0.3    | 7      | 0.5    | 18     | 0.8     | 15      | 50      | 1       | 10072465  | 151      | 1        |
| SA5112231 | 0.5     | 10.0    | 25      | 0.1     | 1.0     | 2.7     | 791     | 0.4    | 30     | 0.5    | 35     | 2.4     | 33      | 50      | 4       | 10072466  | 99       | 1        |
| SA5112232 | 0.5     | 4.2     | 27      | 0.1     | 0.25    | 1.5     | 689     | 0.3    | 25     | 0.5    | 15     | 0.9     | 24      | 50      | 4       | 10072467  | 87       | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112233 | 0.5     | 0.2     | 32      | 0.1     | 0.25    | 0.2     | 75      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 8       | 50      | 1       | 10072468  | 38       | 1        |
| SA5112234 | -9      | -9      | 33      | -9      | -9      | -9      | 308     | -9     | 16     | -9     | 5      | -9      | 24      | -9      | 4       | 10072469  | 24       | 1        |
| SA5112235 | 0.5     | 0.2     | 32      | 0.1     | 0.25    | 0.2     | 56      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 6       | 50      | 0.5     | 10072471  | 27       | 1        |
| SA5112236 | -9      | -9      | 163     | -9      | -9      | -9      | 4634    | -9     | 31     | -9     | 35     | -9      | 31      | -9      | 18      | 10072472  | 192      | 1        |
| SA5112237 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072473  | 146      | 1        |
| SA5112238 | 0.5     | 12.6    | 30      | 0.1     | 1.4     | 3.8     | 227     | 1.3    | 5      | 0.5    | 48     | 3.1     | 8       | 50      | 2       | 10072474  | 337      | 1        |
| SA5112239 | 0.5     | 0.2     | 21      | 0.1     | 0.25    | 0.2     | 95      | 0.2    | 2      | 0.5    | 0.5    | 0.25    | 6       | 50      | 1       | 10072475  | 21       | 1        |
| SA5112240 | 0.5     | 2.2     | 20      | 0.1     | 0.25    | 1.2     | 274     | 0.3    | 13     | 0.5    | 8      | 0.25    | 19      | 50      | 1       | 10072476  | 154      | 1        |
| SA5112241 | 0.5     | 11.7    | 170     | 0.4     | 1.2     | 3.2     | 3003    | 1.7    | 35     | 0.5    | 47     | 3.4     | 55      | 50      | 18      | 10072477  | 281      | 1        |
| SA5112242 | 0.5     | 4.5     | 14      | 0.2     | 0.25    | 2.9     | 305     | 0.5    | 11     | 0.5    | 13     | 0.6     | 12      | 50      | 2       | 10072478  | 215      | 1        |
| SA5112243 | 0.5     | 3.4     | 53      | 0.1     | 0.25    | 1.4     | 719     | 0.3    | 14     | 0.5    | 11     | 0.25    | 46      | 50      | 3       | 10072479  | 245      | 1        |
| SA5112244 | 0.5     | 2.8     | 41      | 0.1     | 0.25    | 1.6     | 875     | 0.6    | 16     | 0.5    | 10     | 0.25    | 11      | 50      | 4       | 10072481  | 277      | 1        |
| SA5112245 | 0.5     | 14.2    | 144     | 0.4     | 1.6     | 3.7     | 2371    | 1.9    | 56     | 0.5    | 75     | 5.5     | 57      | 50      | 21      | 10072482  | 274      | 1        |
| SA5112246 | 0.5     | 0.6     | 21      | 0.1     | 0.25    | 0.05    | 63      | 0.05   | 3      | 0.5    | 3      | 0.25    | 8       | 50      | 0.5     | 10072483  | 28       | 1        |
| SA5112247 | 0.5     | 6.3     | 19      | 0.1     | 0.6     | 1.3     | 230     | 0.05   | 8      | 0.5    | 20     | 1.9     | 13      | 50      | 2       | 10072484  | 96       | 1        |
| SA5112248 | 0.5     | 0.05    | 25      | 0.1     | 0.25    | 0.05    | 51      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072485  | 7        | 1        |
| SA5112249 | -9      | -9      | 68      | -9      | -9      | -9      | 309     | -9     | 13     | -9     | 24     | -9      | 66      | -9      | 4       | 10072486  | 130      | 1        |
| SA5112250 | 0.5     | 7.3     | 46      | 0.1     | 0.7     | 2.4     | 745     | 0.5    | 31     | 0.5    | 19     | 1.1     | 25      | 50      | 4       | 10072487  | 221      | 1        |
| SA5112251 | 0.5     | 10.0    | 150     | 0.1     | 0.9     | 4.1     | 1043    | 0.9    | 59     | 0.5    | 28     | 1.8     | 43      | 50      | 7       | 10072488  | 234      | 1        |
| SA5112252 | 0.5     | 5.8     | 226     | 0.3     | 0.6     | 3.4     | 2063    | 0.7    | 30     | 0.5    | 22     | 1.3     | 31      | 50      | 21      | 10072489  | 227      | 1        |
| SA5112253 | 0.5     | 2.7     | 37      | 0.1     | 0.25    | 2.2     | 634     | 0.3    | 20     | 0.5    | 8      | 0.25    | 13      | 50      | 4       | 10072491  | 221      | 1        |
| SA5112254 | 0.5     | 10.7    | 54      | 0.1     | 1.0     | 4.8     | 960     | 0.7    | 61     | 0.5    | 33     | 2.1     | 94      | 50      | 6       | 10072492  | 120      | 1        |
| SA5112255 | -9      | -9      | 53      | -9      | -9      | -9      | 794     | -9     | 16     | -9     | 10     | -9      | 22      | -9      | 5       | 10072493  | 338      | 1        |
| SA5112256 | 0.5     | 5.8     | 67      | 0.3     | 0.5     | 2.6     | 710     | 0.4    | 23     | 0.5    | 23     | 1.7     | 30      | 50      | 4       | 10072494  | 199      | 1        |
| SA5112257 | 0.5     | 9.2     | 37      | 0.1     | 0.8     | 3.2     | 674     | 0.8    | 34     | 0.5    | 33     | 1.9     | 54      | 50      | 5       | 10072495  | 162      | 1        |
| SA5112258 | 0.5     | 0.6     | 18      | 0.1     | 0.25    | 0.2     | 108     | 0.05   | 3      | 0.5    | 3      | 0.25    | 8       | 50      | 1       | 10072496  | 55       | 1        |
| SA5112259 | 0.5     | 8.7     | 214     | 0.9     | 1.1     | 5.2     | 4031    | 0.9    | 67     | 0.5    | 37     | 3.0     | 63      | 350     | 31      | 10072497  | 131      | 1        |
| SA5112260 | 0.5     | 8.9     | 27      | 0.4     | 0.8     | 4.4     | 827     | 0.7    | 46     | 0.5    | 35     | 2.1     | 59      | 50      | 6       | 10072498  | 73       | 1        |
| SA5112261 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072499  | 207      | 1        |
| SA5112262 | 0.5     | 2.5     | 40      | 0.1     | 0.25    | 2.5     | 471     | 0.6    | 21     | 0.5    | 10     | 0.25    | 12      | 50      | 3       | 10072501  | 184      | 1        |
| SA5112263 | 0.5     | 3.4     | 55      | 0.3     | 0.25    | 2.7     | 652     | 0.6    | 11     | 0.5    | 14     | 1.1     | 15      | 50      | 4       | 10072502  | 198      | 1        |
| SA5112264 | 0.5     | 1.6     | 24      | 0.1     | 0.25    | 2.0     | 354     | 0.6    | 13     | 0.5    | 8      | 0.6     | 6       | 50      | 3       | 10072503  | 107      | 1        |
| SA5112265 | 0.5     | 5.0     | 82      | 0.3     | 0.6     | 3.6     | 1548    | 0.6    | 32     | 0.5    | 21     | 1.5     | 51      | 50      | 12      | 10072504  | 114      | 1        |
| SA5112266 | 0.5     | 4.4     | 55      | 0.2     | 0.25    | 4.1     | 961     | 0.8    | 23     | 0.5    | 18     | 1.3     | 11      | 50      | 10      | 10072505  | 66       | 1        |
| SA5112267 | 0.5     | 0.1     | 34      | 0.1     | 0.25    | 0.2     | 61      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 2       | 10072506  | 15       | 1        |
| SA5112268 | 0.5     | 8.7     | 40      | 0.1     | 0.9     | 4.6     | 702     | 0.7    | 28     | 0.5    | 30     | 1.9     | 27      | 50      | 4       | 10072507  | 217      | 1        |
| SA5112269 | 0.5     | 4.7     | 80      | 0.1     | 0.5     | 2.9     | 717     | 0.4    | 19     | 0.5    | 37     | 2.2     | 20      | 50      | 10      | 10072508  | 315      | 1        |
| SA5112270 | 0.5     | 10.4    | 35      | 0.1     | 1.0     | 6.4     | 1184    | 1.6    | 71     | 0.5    | 41     | 2.2     | 58      | 50      | 7       | 10072509  | 107      | 1        |
| SA5112271 | 0.5     | 5.2     | 97      | 0.3     | 0.6     | 5.0     | 1891    | 1.2    | 34     | 0.5    | 21     | 1.1     | 39      | 50      | 16      | 10072511  | 132      | 1        |
| SA5112272 | 0.5     | 1.0     | 19      | 0.1     | 0.25    | 0.6     | 109     | 0.05   | 5      | 0.5    | 4      | 0.25    | 8       | 50      | 2       | 10072512  | 54       | 1        |
| SA5112273 | 0.5     | 3.0     | 77      | 0.1     | 0.25    | 3.3     | 849     | 0.9    | 14     | 0.5    | 13     | 0.25    | 7       | 50      | 6       | 10072513  | 281      | 1        |
| SA5112274 | -9      | -9      | 19      | -9      | -9      | -9      | 53      | -9     | 0.5    | -9     | 0.5    | -9      | 10      | -9      | 1       | 10072514  | 19       | 1        |
| SA5112275 | 0.5     | 0.9     | 27      | 0.1     | 0.25    | 0.9     | 373     | 0.3    | 7      | 0.5    | 3      | 0.8     | 6       | 50      | 3       | 10072515  | 53       | 1        |
| SA5112276 | 0.5     | 3.0     | 32      | 0.1     | 0.25    | 1.5     | 538     | 4.1    | 21     | 0.5    | 10     | 0.25    | 15      | 50      | 3       | 10072516  | 223      | 1        |
| SA5112277 | -9      | -9      | 30      | -9      | -9      | -9      | 139     | -9     | 2      | -9     | 1      | -9      | 10      | -9      | 2       | 10072517  | 28       | 1        |
| SA5112278 | 0.5     | 4.1     | 41      | 0.3     | 0.25    | 2.7     | 945     | 0.7    | 22     | 0.5    | 16     | 0.9     | 27      | 50      | 5       | 10072518  | 143      | 1        |
| SA5112279 | 0.5     | 3.3     | 83      | 0.2     | 0.25    | 3.1     | 970     | 0.6    | 12     | 0.5    | 12     | 1.0     | 15      | 50      | 8       | 10072519  | 189      | 1        |
| SA5112280 | 0.5     | 0.7     | 26      | 0.1     | 0.25    | 0.5     | 325     | 0.5    | 13     | 0.5    | 3      | 0.25    | 11      | 50      | 3       | 10072521  | 143      | 1        |
| SA5112281 | 0.5     | 0.05    | 25      | 0.1     | 0.25    | 0.2     | 39      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072522  | 59       | 1        |
| SA5112282 | 0.5     | 5.7     | 47      | 0.1     | 0.25    | 2.7     | 752     | 1.3    | 40     | 0.5    | 16     | 0.25    | 14      | 50      | 6       | 10072523  | 162      | 1        |
| SA5112283 | 0.5     | 7.2     | 23      | 0.1     | 0.8     | 1.3     | 352     | 3.1    | 18     | 0.5    | 29     | 1.1     | 42      | 50      | 2       | 10072524  | 117      | 1        |
| SA5112284 | 0.5     | 5.9     | 442     | 0.8     | 0.8     | 5.0     | 6834    | 1.1    | 86     | 0.5    | 23     | 2.4     | 61      | 370     | 35      | 10072525  | 281      | 1        |
| SA5112285 | 0.5     | 0.3     | 33      | 0.1     | 0.25    | 0.3     | 184     | 0.3    | 10     | 0.5    | 2      | 0.25    | 8       | 50      | 1       | 10072526  | 130      | 1        |
| SA5112286 | 0.5     | 0.2     | 45      | 0.1     | 0.25    | 0.2     | 400     | 0.05   | 5      | 0.5    | 2      | 0.25    | 15      | 50      | 4       | 10072527  | 40       | 1        |
| SA5112287 | 0.5     | 0.1     | 28      | 0.1     | 0.25    | 0.2     | 60      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 1       | 10072528  | 20       | 1        |
| SA5112288 | 0.5     | 2.3     | 36      | 0.1     | 0.25    | 1.5     | 113     | 0.8    | 8      | 0.5    | 8      | 0.25    | 13      | 50      | 1       | 10072529  | 201      | 1        |
| SA5112289 | -9      | -9      | 37      | -9      | -9      | -9      | 65      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 1       | 10072531  | 10       | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |   |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|---|
| SA5112290 | 0.5     | 2.7     | 53      | 0.1     | 0.25    | 1.4     | 795     | 0.4    | 21     | 0.5    | 8      | 0.25    | 20      | 50      | 5       | 10072532  | 179      | 1        |   |
| SA5112291 | 0.5     | 10.5    | 65      | 0.2     | 0.9     | 2.9     | 1288    | 1.7    | 71     | 0.5    | 30     | 1.9     | 107     | 50      | 9       | 10072533  | 142      | 1        |   |
| SA5112292 | 0.5     | 0.05    | 36      | 0.1     | 0.25    | 0.1     | 45      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072534  | 13       | 1        |   |
| SA5112293 | 0.5     | 4.2     | 37      | 0.1     | 0.25    | 1.2     | 383     | 1.4    | 23     | 0.5    | 18     | 1.2     | 38      | 50      | 2       | 10072535  | 145      | 1        |   |
| SA5112294 | 0.5     | 4.9     | 155     | 0.4     | 0.5     | 3.4     | 2757    | 2.4    | 48     | 0.5    | 17     | 1.4     | 35      | 230     | 19      | 10072536  | 342      | 1        |   |
| SA5112295 | 0.5     | 5.4     | 47      | 0.1     | 0.25    | 2.9     | 1005    | 1.7    | 39     | 0.5    | 19     | 1.2     | 29      | 50      | 6       | 10072537  | 279      | 1        |   |
| SA5112296 | 0.5     | 6.7     | 552     | 0.7     | 0.9     | 2.5     | 7544    | 0.9    | 104    | 0.5    | 42     | 3.6     | 103     | 270     | 46      | 10072538  | 209      | 1        |   |
| SA5112297 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072539 | 162      | 1 |
| SA5112298 | 0.5     | 0.1     | 30      | 0.1     | 0.25    | 0.05    | 88      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 1       | 10072541  | 6        | 1        |   |
| SA5112299 | 0.5     | 3.5     | 90      | 0.3     | 0.25    | 2.7     | 914     | 1.9    | 30     | 0.5    | 12     | 0.25    | 25      | 50      | 5       | 10072542  | 217      | 1        |   |
| SA5112300 | -9      | -9      | 49      | -9      | -9      | -9      | 532     | -9     | 44     | -9     | 13     | -9      | 90      | -9      | 6       | 10072543  | 57       | 1        |   |
| SA5112301 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072544 | 34       | 1 |
| SA5112302 | 0.5     | 0.05    | 20      | 0.1     | 0.25    | 0.05    | 48      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072545  | 37       | 1        |   |
| SA5112303 | 0.5     | 0.05    | 19      | 0.1     | 0.25    | 0.05    | 71      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072546  | 24       | 1        |   |
| SA5112304 | 0.5     | 3.7     | 59      | 0.1     | 0.25    | 2.6     | 795     | 3.1    | 40     | 0.5    | 14     | 0.25    | 39      | 50      | 5       | 10072547  | 63       | 1        |   |
| SA5112305 | 0.5     | 3.8     | 67      | 0.1     | 0.25    | 1.8     | 1066    | 1.3    | 71     | 0.5    | 12     | 0.25    | 46      | 50      | 6       | 10072548  | 234      | 1        |   |
| SA5112306 | 0.5     | 8.5     | 47      | 0.1     | 0.8     | 2.8     | 648     | 2.4    | 57     | 0.5    | 25     | 1.4     | 106     | 50      | 6       | 10072549  | 152      | 1        |   |
| SA5112307 | 0.5     | 0.05    | 45      | 0.1     | 0.25    | 0.1     | 37      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072551  | 12       | 1        |   |
| SA5112308 | 0.5     | 3.3     | 37      | 0.1     | 0.25    | 1.5     | 256     | 6.3    | 15     | 0.5    | 9      | 0.7     | 15      | 50      | 2       | 10072552  | 195      | 1        |   |
| SA5112309 | 0.5     | 0.05    | 31      | 0.1     | 0.25    | 0.1     | 50      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 1       | 10072553  | 26       | 1        |   |
| SA5112310 | 0.5     | 3.9     | 37      | 0.1     | 0.25    | 3.7     | 645     | 1.2    | 19     | 0.5    | 12     | 0.25    | 10      | 50      | 4       | 10072554  | 226      | 1        |   |
| SA5112311 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072555 | 8        | 1 |
| SA5112312 | -9      | -9      | 34      | -9      | -9      | -9      | 83      | -9     | 0.5    | -9     | 0.5    | -9      | 12      | -9      | 1       | 10072556  | 4        | 1        |   |
| SA5112313 | 0.5     | 3.6     | 36      | 0.1     | 0.25    | 2.5     | 711     | 1.0    | 28     | 0.5    | 11     | 0.25    | 14      | 50      | 6       | 10072557  | 165      | 1        |   |
| SA5112314 | 0.5     | 11.1    | 41      | 0.1     | 1.0     | 8.4     | 1365    | 3.1    | 137    | 0.5    | 33     | 2.7     | 60      | 50      | 7       | 10072558  | 176      | 1        |   |
| SA5112315 | 0.5     | 13.8    | 292     | 0.6     | 1.3     | 10.6    | 4467    | 5.1    | 90     | 0.5    | 47     | 3.8     | 118     | 50      | 39      | 10072559  | 194      | 1        |   |
| SA5112316 | 0.5     | 4.5     | 45      | 0.1     | 0.25    | 4.5     | 852     | 2.0    | 26     | 0.5    | 12     | 0.25    | 11      | 50      | 5       | 10072561  | 221      | 1        |   |
| SA5112317 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.2     | 55      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072562  | 21       | 1        |   |
| SA5112318 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072563 | 121      | 1 |
| SA5112319 | 0.5     | 10.0    | 80      | 0.1     | 0.7     | 4.2     | 1121    | 1.3    | 40     | 0.5    | 18     | 1.2     | 26      | 50      | 5       | 10072564  | 157      | 1        |   |
| SA5112320 | -9      | -9      | 45      | -9      | -9      | -9      | 81      | -9     | 0.5    | -9     | 0.5    | -9      | 7       | -9      | 1       | 10072565  | 19       | 1        |   |
| SA5112321 | -9      | -9      | 42      | -9      | -9      | -9      | 128     | -9     | 2      | -9     | 1      | -9      | 9       | -9      | 1       | 10072566  | 7        | 1        |   |
| SA5112322 | -9      | -9      | 27      | -9      | -9      | -9      | 86      | -9     | 3      | -9     | 2      | -9      | 7       | -9      | 1       | 10072567  | 38       | 1        |   |
| SA5112323 | 0.5     | 4.5     | 90      | 0.1     | 0.25    | 2.9     | 873     | 0.7    | 20     | 0.5    | 11     | 1.0     | 28      | 50      | 5       | 10072568  | 253      | 1        |   |
| SA5112324 | 0.5     | 3.3     | 299     | 0.1     | 0.25    | 2.3     | 1685    | 1.6    | 21     | 0.5    | 9      | 0.6     | 25      | 50      | 11      | 10072569  | 387      | 1        |   |
| SA5112325 | 0.5     | 0.2     | 46      | 0.1     | 0.25    | 0.3     | 91      | 0.2    | 1      | 0.5    | 0.5    | 0.25    | 10      | 50      | 1       | 10072571  | 8        | 1        |   |
| SA5112326 | -9      | -9      | 29      | -9      | -9      | -9      | 112     | -9     | 2      | -9     | 0.5    | -9      | 7       | -9      | 2       | 10072572  | 18       | 1        |   |
| SA5112327 | 0.5     | 6.8     | 61      | 0.2     | 0.5     | 4.1     | 1153    | 1.9    | 43     | 0.5    | 19     | 1.3     | 41      | 50      | 7       | 10072573  | 209      | 1        |   |
| SA5112328 | 0.5     | 8.9     | 49      | 0.1     | 0.8     | 5.5     | 1087    | 5.4    | 76     | 0.5    | 25     | 1.8     | 49      | 50      | 6       | 10072574  | 103      | 1        |   |
| SA5112329 | 0.5     | 1.7     | 40      | 0.1     | 0.25    | 1.9     | 603     | 0.8    | 14     | 0.5    | 6      | 0.25    | 6       | 50      | 4       | 10072575  | 230      | 1        |   |
| SA5112330 | 0.5     | 1.9     | 42      | 0.1     | 0.25    | 2.5     | 701     | 0.6    | 12     | 0.5    | 6      | 0.25    | 8       | 50      | 7       | 10072576  | 24       | 1        |   |
| SA5112331 | 0.5     | 2.6     | 44      | 0.1     | 0.25    | 3.8     | 1038    | 1.8    | 17     | 0.5    | 8      | 0.6     | 7       | 50      | 6       | 10072577  | 240      | 1        |   |
| SA5112332 | 0.5     | 3.5     | 26      | 0.1     | 0.25    | 3.9     | 871     | 1.7    | 20     | 0.5    | 9      | 0.25    | 13      | 50      | 4       | 10072578  | 203      | 1        |   |
| SA5112333 | 0.5     | 2.9     | 54      | 0.1     | 0.25    | 3.0     | 1712    | 1.1    | 40     | 0.5    | 10     | 0.6     | 31      | 50      | 7       | 10072579  | 225      | 1        |   |
| SA5112334 | 0.5     | 1.8     | 26      | 0.1     | 0.25    | 1.4     | 275     | 0.4    | 10     | 0.5    | 6      | 0.5     | 7       | 50      | 4       | 10072581  | 80       | 1        |   |
| SA5112335 | 0.5     | 0.3     | 41      | 0.1     | 0.25    | 0.3     | 104     | 0.05   | 3      | 0.5    | 1      | 0.7     | 8       | 50      | 2       | 10072582  | 19       | 1        |   |
| SA5112336 | 0.5     | 3.2     | 60      | 0.1     | 0.25    | 3.7     | 714     | 2.4    | 14     | 0.5    | 10     | 0.6     | 14      | 50      | 5       | 10072583  | 309      | 1        |   |
| SA5112337 | 0.5     | 0.3     | 25      | 0.1     | 0.25    | 0.4     | 103     | 0.1    | 2      | 0.5    | 1      | 0.25    | 6       | 50      | 2       | 10072584  | 18       | 1        |   |
| SA5112338 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | -9        | 10072585 | 9        | 1 |
| SA5112339 | -9      | -9      | 106     | -9      | -9      | -9      | 753     | -9     | 97     | -9     | 38     | -9      | 41      | -9      | 5       | 10072586  | 175      | 1        |   |
| SA5112340 | 0.5     | 4.0     | 36      | 0.1     | 0.25    | 1.7     | 560     | 1.9    | 17     | 0.5    | 12     | 0.25    | 15      | 50      | 5       | 10072587  | 119      | 1        |   |
| SA5112341 | -9      | -9      | 27      | -9      | -9      | -9      | 157     | -9     | 3      | -9     | 1      | -9      | 12      | -9      | 2       | 10072588  | 90       | 1        |   |
| SA5112342 | -9      | -9      | 31      | -9      | -9      | -9      | 466     | -9     | 18     | -9     | 9      | -9      | 16      | -9      | 3       | 10072589  | 307      | 1        |   |
| SA5112343 | 0.5     | 8.0     | 53      | 0.1     | 0.8     | 4.3     | 1635    | 4.2    | 118    | 0.5    | 25     | 1.5     | 47      | 50      | 8       | 10072591  | 179      | 1        |   |
| SA5112344 | 0.5     | 1.8     | 49      | 0.1     | 0.25    | 1.3     | 835     | 0.9    | 18     | 0.5    | 6      | 0.7     | 12      | 50      | 6       | 10072592  | 274      | 1        |   |
| SA5112345 | 0.5     | 0.9     | 30      | 0.1     | 0.25    | 0.6     | 317     | 0.6    | 7      | 0.5    | 4      | 0.25    | 8       | 50      | 2       | 10072593  | 328      | 1        |   |
| SA5112346 | 0.5     | 1.4     | 29      | 0.1     | 0.25    | 1.0     | 619     | 0.5    | 17     | 0.5    | 5      | 0.5     | 11      | 50      | 3       | 10072594  | 267      | 1        |   |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112347 | -9      | -9      | 34      | -9      | -9      | -9      | 471     | -9     | 18     | -9     | 10     | -9      | 68      | -9      | 3       | 10072595  | 35       | 1        |
| SA5112348 | 0.5     | 11.2    | 48      | 0.1     | 1.3     | 5.3     | 870     | 8.4    | 52     | 0.5    | 45     | 3.0     | 102     | 50      | 14      | 10072596  | 123      | 1        |
| SA5112349 | 0.5     | 3.6     | 159     | 0.3     | 0.25    | 2.4     | 1042    | 5.8    | 31     | 0.5    | 14     | 1.2     | 39      | 50      | 5       | 10072597  | 217      | 1        |
| SA5112350 | 0.5     | 5.9     | 180     | 0.3     | 0.25    | 0.05    | 1097    | 335    | 25     | 2      | 11     | 0.25    | 37      | 50      | 9       | 10072598  | 372      | 1        |
| SA5112351 | 0.5     | 2.2     | 67      | 0.1     | 0.25    | 1.2     | 644     | 8.3    | 34     | 0.5    | 9      | 0.25    | 21      | 50      | 3       | 10072599  | 297      | 1        |
| SA5112352 | 0.5     | 0.6     | 45      | 0.1     | 0.25    | 0.6     | 253     | 2.4    | 7      | 0.5    | 3      | 0.25    | 6       | 50      | 2       | 10072601  | 140      | 1        |
| SA5112353 | 0.5     | 1.4     | 77      | 0.3     | 0.25    | 2.0     | 1298    | 1.8    | 11     | 0.5    | 5      | 0.8     | 9       | 50      | 15      | 10072602  | 302      | 1        |
| SA5112354 | -9      | -9      | 61      | -9      | -9      | -9      | 776     | -9     | 53     | -9     | 23     | -9      | 76      | -9      | 6       | 10072603  | 163      | 1        |
| SA5112355 | 0.5     | 6.0     | 157     | 0.5     | 0.7     | 4.0     | 2363    | 57.3   | 48     | 0.5    | 20     | 1.3     | 56      | 50      | 18      | 10072604  | 284      | 1        |
| SA5112356 | 0.5     | 0.05    | 22      | 0.1     | 0.25    | 0.3     | 75      | 0.4    | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072605  | 48       | 1        |
| SA5112357 | 0.5     | 0.05    | 22      | 0.1     | 0.25    | 0.1     | 39      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072606  | 42       | 1        |
| SA5112358 | 0.5     | 0.5     | 23      | 0.1     | 0.25    | 0.5     | 92      | 0.6    | 3      | 0.5    | 2      | 0.25    | 8       | 50      | 1       | 10072607  | 78       | 1        |
| SA5112359 | 0.5     | 5.7     | 174     | 0.7     | 0.6     | 4.4     | 2743    | 49.5   | 45     | 0.5    | 19     | 1.5     | 38      | 50      | 22      | 10072608  | 277      | 1        |
| SA5112360 | 0.5     | 4.9     | 59      | 0.3     | 0.6     | 2.5     | 1120    | 7.0    | 50     | 0.5    | 20     | 1.7     | 40      | 50      | 6       | 10072609  | 241      | 1        |
| SA5112361 | 0.5     | 8.3     | 67      | 0.2     | 0.8     | 2.7     | 934     | 190    | 49     | 0.5    | 22     | 1.3     | 17      | 50      | 9       | 10072611  | 284      | 1        |
| SA5112362 | 0.5     | 5.1     | 44      | 0.2     | 0.25    | 3.0     | 1206    | 2.1    | 26     | 0.5    | 15     | 0.9     | 25      | 50      | 7       | 10072612  | 292      | 1        |
| SA5112363 | 0.5     | 5.1     | 51      | 0.1     | 0.25    | 2.6     | 614     | 3.2    | 25     | 0.5    | 18     | 0.9     | 27      | 50      | 4       | 10072613  | 283      | 1        |
| SA5112364 | 0.5     | 11.9    | 58      | 0.1     | 1.1     | 7.6     | 1499    | 4.7    | 66     | 0.5    | 30     | 1.5     | 42      | 50      | 8       | 10072614  | 295      | 1        |
| SA5112365 | 0.5     | 8.5     | 248     | 1.1     | 1.1     | 11.8    | 6708    | 4.7    | 59     | 0.5    | 29     | 2.9     | 40      | 540     | 89      | 10072615  | 326      | 1        |
| SA5112366 | 0.5     | 3.2     | 55      | 0.1     | 0.25    | 2.5     | 1242    | 3.5    | 28     | 0.5    | 10     | 0.9     | 17      | 50      | 9       | 10072616  | 328      | 1        |
| SA5112367 | 0.5     | 7.0     | 47      | 0.3     | 0.9     | 3.5     | 1580    | 7.3    | 67     | 0.5    | 24     | 2.1     | 32      | 50      | 6       | 10072617  | 205      | 1        |
| SA5112368 | 0.5     | 4.7     | 65      | 0.4     | 0.5     | 4.1     | 2026    | 8.9    | 54     | 0.5    | 14     | 1.2     | 21      | 50      | 10      | 10072618  | 332      | 1        |
| SA5112369 | 0.5     | 5.6     | 200     | 0.9     | 0.8     | 7.2     | 4292    | 3.8    | 47     | 0.5    | 18     | 1.8     | 41      | 50      | 35      | 10072619  | 361      | 1        |
| SA5112370 | 0.5     | 17.1    | 123     | 0.6     | 1.7     | 10.0    | 2537    | 42.5   | 80     | 0.5    | 49     | 3.8     | 140     | 50      | 26      | 10072621  | 189      | 1        |
| SA5112371 | 0.5     | 9.5     | 124     | 0.3     | 1.0     | 6.7     | 2330    | 12.9   | 98     | 0.5    | 31     | 2.5     | 66      | 50      | 20      | 10072622  | 289      | 1        |
| SA5112372 | -9      | -9      | 26      | -9      | -9      | -9      | 82      | -9     | 1      | -9     | 0.5    | -9      | 13      | -9      | 1       | 10072623  | 48       | 1        |
| SA5112373 | 0.5     | 2.1     | 30      | 0.1     | 0.25    | 1.5     | 786     | 1.8    | 26     | 0.5    | 8      | 0.25    | 16      | 50      | 4       | 10072624  | 121      | 1        |
| SA5112374 | 0.5     | 1.4     | 38      | 0.1     | 0.25    | 1.9     | 969     | 2.6    | 18     | 0.5    | 5      | 0.25    | 9       | 50      | 5       | 10072625  | 306      | 1        |
| SA5112375 | 0.5     | 8.3     | 56      | 0.4     | 0.9     | 4.0     | 1047    | 12.3   | 57     | 0.5    | 25     | 2.2     | 34      | 50      | 10      | 10072626  | 189      | 1        |
| SA5112376 | 0.5     | 1.2     | 52      | 0.1     | 0.25    | 1.4     | 791     | 1.3    | 12     | 0.5    | 4      | 0.25    | 10      | 50      | 6       | 10072627  | 92       | 1        |
| SA5112377 | 0.5     | 3.0     | 84      | 0.3     | 0.25    | 2.7     | 1547    | 1.7    | 31     | 0.5    | 9      | 0.7     | 21      | 50      | 9       | 10072628  | 233      | 1        |
| SA5112378 | 0.5     | 8.3     | 53      | 0.1     | 0.6     | 4.1     | 890     | 3.5    | 42     | 0.5    | 22     | 1.3     | 28      | 50      | 5       | 10072629  | 205      | 1        |
| SA5112379 | 0.5     | 1.6     | 44      | 0.1     | 0.25    | 1.0     | 645     | 1.7    | 10     | 0.5    | 6      | 0.25    | 9       | 50      | 6       | 10072631  | 151      | 1        |
| SA5112380 | 0.5     | 6.5     | 54      | 0.2     | 0.6     | 4.1     | 1250    | 2.3    | 77     | 0.5    | 19     | 1.4     | 36      | 50      | 8       | 10072632  | 201      | 1        |
| SA5112381 | 0.5     | 0.1     | 29      | 0.1     | 0.25    | 0.2     | 51      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 16      | 50      | 0.5     | 10072633  | 9        | 1        |
| SA5112382 | 0.5     | 13.5    | 124     | 0.3     | 1.2     | 7.8     | 1648    | 3.7    | 87     | 0.5    | 33     | 2.2     | 74      | 50      | 8       | 10072634  | 212      | 1        |
| SA5112383 | 0.5     | 1.6     | 36      | 0.1     | 0.25    | 2.4     | 366     | 0.7    | 9      | 0.5    | 4      | 0.25    | 8       | 50      | 4       | 10072635  | 49       | 1        |
| SA5112384 | 0.5     | 0.1     | 39      | 0.1     | 0.25    | 0.2     | 51      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072636  | 15       | 1        |
| SA5112385 | 0.5     | 3.8     | 205     | 0.4     | 0.25    | 4.6     | 2941    | 1.7    | 31     | 0.5    | 13     | 1.3     | 26      | 270     | 35      | 10072637  | 242      | 1        |
| SA5112386 | 0.5     | 6.1     | 47      | 0.1     | 0.6     | 3.2     | 846     | 5.8    | 33     | 0.5    | 15     | 0.25    | 23      | 50      | 4       | 10072638  | 387      | 1        |
| SA5112387 | 0.5     | 8.7     | 90      | 0.4     | 0.7     | 5.5     | 1764    | 12.3   | 51     | 0.5    | 22     | 1.5     | 38      | 50      | 11      | 10072639  | 315      | 1        |
| SA5112388 | 0.5     | 4.6     | 52      | 0.3     | 0.25    | 2.8     | 1167    | 3.2    | 32     | 0.5    | 10     | 0.25    | 31      | 50      | 5       | 10072641  | 340      | 1        |
| SA5112389 | 0.5     | 0.05    | 41      | 0.1     | 0.25    | 0.1     | 55      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 12      | 50      | 0.5     | 10072642  | 13       | 1        |
| SA5112390 | 0.5     | 2.4     | 45      | 0.1     | 0.25    | 1.2     | 459     | 1.4    | 12     | 0.5    | 6      | 0.25    | 16      | 50      | 2       | 10072643  | 393      | 1        |
| SA5112391 | 0.5     | 19.7    | 170     | 0.5     | 1.8     | 10.3    | 2932    | 14.4   | 80     | 0.5    | 45     | 4.6     | 125     | 50      | 32      | 10072644  | 168      | 1        |
| SA5112392 | 0.5     | 4.1     | 30      | 0.3     | 0.25    | 5.3     | 816     | 4.7    | 18     | 0.5    | 12     | 0.9     | 14      | 50      | 5       | 10072645  | 365      | 1        |
| SA5112393 | 0.5     | 28.6    | 205     | 0.1     | 2.2     | 5.9     | 1498    | 590    | 86     | 0.5    | 61     | 2.7     | 159     | 50      | 13      | 10072646  | 170      | 1        |
| SA5112394 | 0.5     | 4.0     | 98      | 0.4     | 0.25    | 4.7     | 1226    | 4.4    | 12     | 0.5    | 11     | 0.25    | 20      | 50      | 14      | 10072647  | 615      | 1        |
| SA5112395 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072648  | 208      | 1        |
| SA5112396 | 0.5     | 17.4    | 63      | 0.3     | 1.7     | 10.0    | 2482    | 4.7    | 86     | 0.5    | 53     | 3.8     | 115     | 50      | 14      | 10072649  | 197      | 1        |
| SA5112397 | 0.5     | 3.0     | 38      | 0.1     | 0.25    | 2.5     | 701     | 1.1    | 25     | 0.5    | 28     | 1.6     | 25      | 50      | 9       | 10072651  | 14       | 1        |
| SA5112398 | 0.5     | 7.2     | 29      | 0.1     | 0.8     | 2.7     | 654     | 1.5    | 20     | 0.5    | 20     | 1.0     | 24      | 50      | 3       | 10072652  | 297      | 1        |
| SA5112399 | 0.5     | 6.4     | 28      | 0.2     | 0.6     | 2.7     | 754     | 1.2    | 18     | 0.5    | 19     | 1.5     | 28      | 50      | 4       | 10072653  | 325      | 1        |
| SA5112400 | 0.5     | 16.2    | 145     | 0.3     | 1.7     | 7.8     | 2652    | 1.9    | 71     | 0.5    | 46     | 3.5     | 80      | 50      | 18      | 10072654  | 240      | 1        |
| SA5112401 | 0.5     | 44.0    | 34      | 0.1     | 3.7     | 13.2    | 1231    | 4.1    | 85     | 0.5    | 96     | 6.1     | 176     | 50      | 9       | 10072655  | 283      | 1        |
| SA5112402 | 0.5     | 0.1     | 52      | 0.1     | 0.25    | 0.1     | 86      | 0.2    | 1      | 0.5    | 0.5    | 0.25    | 16      | 50      | 1       | 10072656  | 6        | 1        |
| SA5112403 | 0.5     | 10.7    | 208     | 1.9     | 1.4     | 7.1     | 10478   | 3.8    | 144    | 1      | 51     | 3.9     | 75      | 470     | 78      | 10072657  | 189      | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112404 | 0.5     | 19.4    | 66      | 0.1     | 1.6     | 4.9     | 1271    | 1.6    | 33     | 0.5    | 43     | 2.5     | 45      | 50      | 8       | 10072658  | 402      | 1        |
| SA5112405 | 0.5     | 8.6     | 217     | 0.7     | 0.9     | 6.0     | 5070    | 3.4    | 65     | 0.5    | 31     | 2.7     | 52      | 300     | 41      | -9        | -9       | -9       |
| SA5112406 | 0.5     | 18.7    | 115     | 0.3     | 1.8     | 5.8     | 2001    | 2.3    | 64     | 0.5    | 46     | 2.7     | 67      | 50      | 10      | 10072659  | 533      | 1        |
| SA5112407 | 0.5     | 10.0    | 281     | 1.7     | 1.2     | 9.3     | 10522   | 3.0    | 118    | 0.5    | 36     | 3.5     | 75      | 490     | 72      | 10072661  | 207      | 1        |
| SA5112408 | 0.5     | 6.6     | 145     | 0.2     | 0.8     | 3.6     | 2374    | 1.3    | 35     | 0.5    | 20     | 1.3     | 45      | 50      | 14      | 10072662  | 427      | 1        |
| SA5112409 | 0.5     | 0.05    | 31      | 0.1     | 0.25    | 0.05    | 93      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 13      | 50      | 0.5     | 10072663  | 6        | 1        |
| SA5112410 | 0.5     | 0.1     | 35      | 0.1     | 0.25    | 0.05    | 125     | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 1       | 10072664  | 6        | 1        |
| SA5112411 | 0.5     | 8.2     | 114     | 0.3     | 0.8     | 4.6     | 1404    | 1.7    | 55     | 0.5    | 20     | 1.5     | 52      | 50      | 7       | 10072665  | 118      | 1        |
| SA5112412 | -9      | -9      | 181     | -9      | -9      | -9      | 1665    | -9     | 64     | -9     | 25     | -9      | 68      | -9      | 12      | 10072666  | 146      | 1        |
| SA5112413 | 0.5     | 10.3    | 137     | 0.4     | 0.9     | 6.2     | 2495    | 2.2    | 109    | 0.5    | 30     | 1.8     | 103     | 50      | 13      | 10072667  | 123      | 1        |
| SA5112414 | 0.5     | 0.05    | 38      | 0.1     | 0.25    | 0.05    | 69      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 0.5     | 10072668  | 24       | 1        |
| SA5112415 | 0.5     | 0.1     | 46      | 0.1     | 0.25    | 0.05    | 81      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 18      | 50      | 0.5     | 10072669  | 13       | 1        |
| SA5112416 | 0.5     | 0.1     | 33      | 0.1     | 0.25    | 0.2     | 84      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072671  | 23       | 1        |
| SA5112417 | -9      | -9      | 75      | -9      | -9      | -9      | 115     | -9     | 3      | -9     | 1      | -9      | 17      | -9      | 1       | 10072672  | 6        | 1        |
| SA5112418 | 0.5     | 4.7     | 26      | 0.1     | 0.5     | 2.8     | 877     | 1.0    | 52     | 0.5    | 15     | 0.9     | 36      | 50      | 9       | 10072673  | 116      | 1        |
| SA5112419 | 0.5     | 2.3     | 80      | 0.1     | 0.25    | 1.9     | 655     | 0.6    | 15     | 0.5    | 7      | 0.25    | 13      | 50      | 5       | 10072674  | 287      | 1        |
| SA5112420 | 0.5     | 3.8     | 94      | 0.1     | 0.25    | 2.7     | 1310    | 1.2    | 33     | 0.5    | 10     | 0.25    | 25      | 50      | 5       | 10072675  | 127      | 1        |
| SA5112421 | 0.5     | 0.05    | 46      | 0.1     | 0.25    | 0.3     | 54      | 0.2    | 0.5    | 0.5    | 0.5    | 0.25    | 17      | 50      | 0.5     | 10072676  | 3        | 1        |
| SA5112422 | -9      | -9      | 36      | -9      | -9      | -9      | 61      | -9     | 0.5    | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072677  | 12       | 1        |
| SA5112423 | -9      | -9      | 36      | -9      | -9      | -9      | 62      | -9     | 1      | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072678  | 10       | 1        |
| SA5112424 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072679  | 188      | 1        |
| SA5112425 | 0.5     | 2.4     | 45      | 0.1     | 0.25    | 1.5     | 553     | 0.9    | 21     | 0.5    | 10     | 0.25    | 16      | 50      | 4       | 10072681  | 262      | 1        |
| SA5112426 | 0.5     | 0.3     | 34      | 0.1     | 0.25    | 0.3     | 92      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 8       | 50      | 1       | 10072682  | 24       | 1        |
| SA5112427 | -9      | -9      | 50      | -9      | -9      | -9      | 71      | -9     | 0.5    | -9     | 0.5    | -9      | 14      | -9      | 0.5     | 10072683  | 10       | 1        |
| SA5112428 | 0.5     | 0.05    | 31      | 0.1     | 0.25    | 0.2     | 42      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 5       | 50      | 0.5     | 10072684  | 13       | 1        |
| SA5112429 | 0.5     | 0.1     | 46      | 0.1     | 0.25    | 0.2     | 47      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072685  | 9        | 1        |
| SA5112430 | -9      | -9      | 36      | -9      | -9      | -9      | 46      | -9     | 0.5    | -9     | 0.5    | -9      | 10      | -9      | 0.5     | 10072686  | 12       | 1        |
| SA5112431 | 0.5     | 1.9     | 85      | 0.1     | 0.25    | 1.5     | 517     | 0.4    | 12     | 0.5    | 6      | 0.25    | 12      | 50      | 3       | 10072687  | 223      | 1        |
| SA5112432 | 0.5     | 0.05    | 49      | 0.1     | 0.25    | 0.2     | 83      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 14      | 50      | 1       | 10072688  | 4        | 1        |
| SA5112433 | -9      | -9      | 42      | -9      | -9      | -9      | 66      | -9     | 0.5    | -9     | 0.5    | -9      | 14      | -9      | 0.5     | 10072689  | 7        | 1        |
| SA5112434 | 0.5     | 1.7     | 75      | 0.1     | 0.25    | 1.3     | 419     | 0.3    | 11     | 0.5    | 5      | 0.25    | 15      | 50      | 2       | 10072691  | 224      | 1        |
| SA5112435 | 0.5     | 0.2     | 43      | 0.1     | 0.25    | 0.2     | 119     | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 13      | 50      | 1       | 10072692  | 9        | 1        |
| SA5112436 | 0.5     | 4.2     | 69      | 0.1     | 0.25    | 2.2     | 944     | 42.8   | 17     | 0.5    | 16     | 1.1     | 19      | 50      | 7       | 10072693  | 165      | 1        |
| SA5112437 | 0.5     | 5.8     | 31      | 0.1     | 0.25    | 2.9     | 416     | 24.0   | 17     | 0.5    | 15     | 1.3     | 23      | 50      | 3       | 10072694  | 104      | 1        |
| SA5112438 | 0.5     | 8.1     | 83      | 0.3     | 0.8     | 3.7     | 1139    | 70.7   | 23     | 0.5    | 27     | 1.8     | 20      | 50      | 10      | 10072695  | 305      | 1        |
| SA5112439 | 0.5     | 10.0    | 78      | 0.2     | 1.1     | 4.6     | 1740    | 11.0   | 31     | 0.5    | 30     | 1.9     | 30      | 50      | 10      | 10072696  | 269      | 1        |
| SA5112440 | 0.5     | 8.3     | 38      | 0.1     | 0.8     | 4.5     | 847     | 11.0   | 38     | 0.5    | 26     | 1.7     | 28      | 50      | 4       | 10072697  | 287      | 1        |
| SA5112441 | 0.5     | 15.7    | 56      | 0.1     | 1.7     | 8.3     | 1052    | 20.4   | 56     | 1      | 54     | 3.7     | 52      | 50      | 6       | 10072698  | 250      | 1        |
| SA5112442 | 0.5     | 3.8     | 32      | 0.1     | 0.25    | 2.2     | 669     | 1.5    | 12     | 0.5    | 18     | 1.9     | 19      | 50      | 5       | 10072699  | 157      | 1        |
| SA5112443 | 0.5     | 8.0     | 26      | 0.1     | 0.8     | 6.8     | 708     | 5.3    | 19     | 0.5    | 26     | 1.4     | 21      | 50      | 5       | 10072701  | 232      | 1        |
| SA5112444 | 0.5     | 2.3     | 53      | 0.1     | 0.25    | 2.8     | 879     | 3.0    | 9      | 0.5    | 9      | 0.7     | 15      | 50      | 10      | 10072702  | 309      | 1        |
| SA5112445 | 0.5     | 0.1     | 30      | 0.1     | 0.25    | 0.2     | 66      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072703  | 14       | 1        |
| SA5112446 | -9      | -9      | 30      | -9      | -9      | -9      | 36      | -9     | 0.5    | -9     | 0.5    | -9      | 11      | -9      | 0.5     | 10072704  | 6        | 1        |
| SA5112447 | 0.5     | 0.1     | 50      | 0.1     | 0.25    | 0.2     | 88      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 19      | 50      | 2       | 10072705  | 7        | 1        |
| SA5112448 | 0.5     | 0.1     | 24      | 0.1     | 0.25    | 0.2     | 58      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 13      | 50      | 0.5     | 10072706  | 10       | 1        |
| SA5112449 | -9      | -9      | 55      | -9      | -9      | -9      | 71      | -9     | 2      | -9     | 1      | -9      | 12      | -9      | 0.5     | 10072707  | 82       | 1        |
| SA5112450 | 0.5     | 5.0     | 57      | 0.3     | 0.6     | 2.4     | 1474    | 0.8    | 74     | 0.5    | 18     | 0.8     | 74      | 50      | 7       | 10072708  | 104      | 1        |
| SA5112451 | 0.5     | 0.1     | 46      | 0.1     | 0.25    | 0.1     | 89      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 1       | 10072709  | 9        | 1        |
| SA5112452 | -9      | -9      | 71      | -9      | -9      | -9      | 1479    | -9     | 18     | -9     | 7      | -9      | 27      | -9      | 12      | 10072711  | 128      | 1        |
| SA5112453 | 0.5     | 9.2     | 72      | 0.1     | 1.0     | 2.8     | 853     | 3.4    | 66     | 0.5    | 36     | 2.3     | 57      | 50      | 7       | 10072712  | 194      | 1        |
| SA5112454 | 0.5     | 6.8     | 61      | 0.2     | 0.7     | 2.0     | 749     | 1.7    | 54     | 0.5    | 26     | 1.7     | 45      | 50      | 5       | 10072713  | 208      | 1        |
| SA5112455 | 0.5     | 0.1     | 29      | 0.1     | 0.25    | 0.05    | 255     | 0.05   | 4      | 0.5    | 1      | 0.25    | 18      | 50      | 3       | 10072714  | 18       | 1        |
| SA5112456 | -9      | -9      | 33      | -9      | -9      | -9      | 61      | -9     | 0.5    | -9     | 0.5    | -9      | 8       | -9      | 1       | 10072715  | 5        | 1        |
| SA5112457 | -9      | -9      | 32      | -9      | -9      | -9      | 126     | -9     | 1      | -9     | 0.5    | -9      | 15      | -9      | 2       | 10072716  | 3        | 1        |
| SA5112458 | 0.5     | 0.05    | 18      | 0.1     | 0.25    | 0.05    | 39      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072717  | 1        | 1        |
| SA5112459 | 0.5     | 0.05    | 28      | 0.1     | 0.25    | 0.05    | 77      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 16      | 50      | 1       | 10072718  | 6        | 1        |
| SA5112460 | 0.5     | 3.1     | 35      | 0.1     | 0.25    | 1.8     | 624     | 0.6    | 20     | 0.5    | 12     | 0.25    | 20      | 50      | 4       | 10072719  | 7        | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112461 | 0.5     | 0.3     | 30      | 0.1     | 0.25    | 0.05    | 88      | 0.3    | 1      | 0.5    | 1      | 0.25    | 11      | 50      | 1       | 10072721  | 229      | 1        |
| SA5112462 | 0.5     | 0.05    | 23      | 0.1     | 0.25    | 0.05    | 48      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 0.5     | 10072722  | 6        | 1        |
| SA5112463 | 0.5     | 4.1     | 51      | 0.2     | 0.5     | 2.3     | 986     | 1.3    | 54     | 0.5    | 14     | 0.25    | 29      | 50      | 7       | 10072723  | 243      | 1        |
| SA5112464 | 0.5     | 3.3     | 53      | 0.1     | 0.25    | 2.2     | 1057    | 1.0    | 35     | 0.5    | 11     | 0.6     | 24      | 50      | 7       | 10072724  | 292      | 1        |
| SA5112465 | 0.5     | 4.2     | 51      | 0.1     | 0.25    | 2.8     | 1200    | 1.2    | 57     | 0.5    | 13     | 0.9     | 28      | 50      | 7       | 10072725  | 270      | 1        |
| SA5112466 | 0.5     | 3.6     | 41      | 0.1     | 0.25    | 2.6     | 915     | 1.2    | 27     | 0.5    | 11     | 0.9     | 25      | 50      | 19      | 10072726  | 237      | 1        |
| SA5112467 | 0.5     | 8.8     | 382     | 0.1     | 0.7     | 4.6     | 909     | 1.5    | 58     | 1      | 22     | 1.0     | 60      | 50      | 7       | 10072727  | 221      | 1        |
| SA5112468 | 0.5     | 2.0     | 60      | 0.1     | 0.25    | 1.7     | 791     | 0.6    | 14     | 0.5    | 6      | 0.7     | 9       | 50      | 4       | 10072728  | 202      | 1        |
| SA5112469 | 0.5     | 2.1     | 75      | 0.1     | 0.25    | 1.5     | 743     | 2.1    | 17     | 0.5    | 6      | 0.25    | 19      | 50      | 4       | 10072729  | 526      | 1        |
| SA5112470 | 0.5     | 5.2     | 346     | 0.7     | 0.6     | 3.8     | 4524    | 1.2    | 57     | 0.5    | 19     | 2.1     | 51      | 50      | 42      | 10072731  | 245      | 1        |
| SA5112471 | -9      | -9      | 36      | -9      | -9      | -9      | 122     | -9     | 2      | -9     | 0.5    | -9      | 21      | -9      | 1       | 10072732  | 3        | 1        |
| SA5112472 | 0.5     | 3.7     | 65      | 0.1     | 0.25    | 2.0     | 451     | 2.4    | 18     | 0.5    | 9      | 0.25    | 18      | 50      | 2       | 10072733  | 282      | 1        |
| SA5112473 | 0.5     | 0.05    | 33      | 0.1     | 0.25    | 0.2     | 55      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072734  | 3        | 1        |
| SA5112474 | 0.5     | 0.1     | 41      | 0.1     | 0.25    | 0.05    | 76      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 1       | 10072735  | 8        | 1        |
| SA5112475 | 0.5     | 0.05    | 26      | 0.1     | 0.25    | 0.05    | 51      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 13      | 50      | 0.5     | 10072736  | 32       | 1        |
| SA5112476 | -9      | -9      | 27      | -9      | -9      | -9      | 81      | -9     | 1      | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072737  | 6        | 1        |
| SA5112477 | -9      | -9      | 24      | -9      | -9      | -9      | 35      | -9     | 0.5    | -9     | 0.5    | -9      | 10      | -9      | 0.5     | 10072738  | 6        | 1        |
| SA5112478 | 0.5     | 3.6     | 42      | 0.2     | 0.25    | 2.2     | 846     | 1.0    | 50     | 0.5    | 12     | 0.9     | 23      | 50      | 16      | 10072739  | 242      | 1        |
| SA5112479 | -9      | -9      | 25      | -9      | -9      | -9      | 60      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 4       | 10072741  | 4        | 1        |
| SA5112480 | 0.5     | 0.05    | 27      | 0.2     | 0.25    | 0.05    | 65      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072742  | 18       | 1        |
| SA5112481 | -9      | -9      | 25      | -9      | -9      | -9      | 69      | -9     | 0.5    | -9     | 0.5    | -9      | 15      | -9      | 0.5     | 10072743  | 2        | 1        |
| SA5112482 | 0.5     | 2.8     | 36      | 0.1     | 0.25    | 1.8     | 567     | 1.6    | 15     | 0.5    | 10     | 1.0     | 16      | 50      | 4       | 10072744  | 239      | 1        |
| SA5112483 | -9      | -9      | 29      | -9      | -9      | -9      | 45      | -9     | 0.5    | -9     | 0.5    | -9      | 8       | -9      | 0.5     | 10072745  | 22       | 1        |
| SA5112484 | 0.5     | 1.9     | 24      | 0.1     | 0.25    | 1.0     | 355     | 2.0    | 15     | 0.5    | 7      | 0.25    | 10      | 50      | 2       | 10072746  | 196      | 1        |
| SA5112485 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072747  | 314      | 1        |
| SA5112486 | 0.5     | 1.6     | 24      | 0.1     | 0.25    | 0.4     | 262     | 0.4    | 19     | 0.5    | 7      | 0.25    | 17      | 50      | 2       | 10072748  | 172      | 1        |
| SA5112487 | 0.5     | 1.0     | 66      | 0.1     | 0.25    | 0.6     | 1214    | 0.3    | 40     | 0.5    | 6      | 0.25    | 15      | 50      | 7       | 10072749  | 71       | 1        |
| SA5112488 | -9      | -9      | 175     | -9      | -9      | -9      | 3816    | -9     | 24     | -9     | 6      | -9      | 22      | -9      | 31      | 10072751  | 12       | 1        |
| SA5112489 | -9      | -9      | 25      | -9      | -9      | -9      | 97      | -9     | 1      | -9     | 0.5    | -9      | 11      | -9      | 1       | 10072752  | 16       | 1        |
| SA5112490 | 0.5     | 1.4     | 22      | 0.1     | 0.25    | 0.6     | 181     | 6.2    | 10     | 0.5    | 6      | 0.8     | 17      | 50      | 1       | 10072753  | 127      | 1        |
| SA5112491 | 0.5     | 1.8     | 18      | 0.1     | 0.25    | 0.5     | 132     | 4.7    | 58     | 0.5    | 8      | 0.25    | 17      | 50      | 1       | 10072754  | 171      | 1        |
| SA5112492 | 0.5     | 0.2     | 29      | 0.1     | 0.25    | 0.3     | 96      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 17      | 50      | 1       | 10072755  | 53       | 1        |
| SA5112493 | -9      | -9      | 26      | -9      | -9      | -9      | 73      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 0.5     | 10072756  | 61       | 1        |
| SA5112494 | 0.5     | 0.1     | 30      | 0.1     | 0.25    | 0.05    | 82      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 12      | 50      | 1       | 10072757  | 19       | 1        |
| SA5112495 | 0.5     | 0.05    | 26      | 0.1     | 0.25    | 0.3     | 54      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 14      | 50      | 0.5     | 10072758  | 3        | 1        |
| SA5112496 | 0.5     | 1.7     | 10      | 0.1     | 0.25    | 0.5     | 139     | 0.05   | 5      | 0.5    | 4      | 0.25    | 7       | 50      | 0.5     | 10072759  | 338      | 1        |
| SA5112497 | 0.5     | 0.1     | 34      | 0.1     | 0.25    | 0.1     | 56      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072761  | 19       | 1        |
| SA5112498 | 0.5     | 0.1     | 37      | 0.1     | 0.25    | 0.2     | 79      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072762  | 19       | 1        |
| SA5112499 | -9      | -9      | 62      | -9      | -9      | -9      | 42      | -9     | 1      | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072763  | 20       | 1        |
| SA5112500 | -9      | -9      | 47      | -9      | -9      | -9      | 126     | -9     | 5      | -9     | 1      | -9      | 17      | -9      | 1       | 10072764  | 59       | 1        |
| SA5112501 | 0.5     | 0.05    | 23      | 0.1     | 0.25    | 0.05    | 51      | 0.2    | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072765  | 9        | 1        |
| SA5112502 | 0.5     | 0.2     | 25      | 0.1     | 0.25    | 0.3     | 66      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072766  | 19       | 1        |
| SA5112503 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072767  | 99       | 1        |
| SA5112504 | 0.5     | 4.6     | 206     | 0.4     | 0.5     | 3.6     | 3803    | 1.1    | 80     | 0.5    | 18     | 1.9     | 47      | 180     | 32      | 10072768  | 196      | 1        |
| SA5112505 | -9      | -9      | 29      | -9      | -9      | -9      | 85      | -9     | 2      | -9     | 0.5    | -9      | 11      | -9      | 1       | 10072769  | 11       | 1        |
| SA5112506 | 0.5     | 1.0     | 17      | 0.1     | 0.25    | 0.7     | 108     | 0.05   | 12     | 0.5    | 4      | 0.25    | 9       | 50      | 1       | 10072771  | 140      | 1        |
| SA5112507 | 0.5     | 0.1     | 28      | 0.1     | 0.25    | 0.2     | 52      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 12      | 50      | 0.5     | 10072772  | 21       | 1        |
| SA5112508 | 0.5     | 0.05    | 30      | 0.1     | 0.25    | 0.2     | 40      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072773  | 59       | 1        |
| SA5112509 | 0.5     | 0.2     | 45      | 0.1     | 0.25    | 0.2     | 45      | 0.4    | 1      | 0.5    | 1      | 0.25    | 10      | 50      | 0.5     | 10072774  | 18       | 1        |
| SA5112510 | 0.5     | 0.05    | 26      | 0.1     | 0.25    | 0.05    | 49      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072775  | 23       | 1        |
| SA5112511 | 0.5     | 2.3     | 48      | 0.2     | 0.25    | 3.6     | 825     | 1.9    | 11     | 0.5    | 9      | 0.6     | 10      | 50      | 8       | 10072776  | 206      | 1        |
| SA5112512 | 0.5     | 0.1     | 32      | 0.1     | 0.25    | 0.05    | 45      | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 6       | 50      | 0.5     | 10072777  | 9        | 1        |
| SA5112513 | 0.5     | 0.05    | 32      | 0.1     | 0.25    | 0.05    | 35      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072778  | 22       | 1        |
| SA5112514 | 0.5     | 0.05    | 36      | 0.1     | 0.25    | 0.1     | 40      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 0.5     | 10072779  | 23       | 1        |
| SA5112515 | 0.5     | 0.05    | 21      | 0.1     | 0.25    | 0.2     | 49      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 6       | 50      | 0.5     | 10072781  | 13       | 1        |
| SA5112516 | 0.5     | 3.5     | 112     | 0.3     | 0.25    | 4.4     | 2034    | 1.0    | 36     | 0.5    | 15     | 1.4     | 19      | 50      | 25      | 10072782  | 18       | 1        |
| SA5112517 | 0.5     | 0.2     | 39      | 0.1     | 0.25    | 0.1     | 83      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072783  | 14       | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112518 | 0.5     | 0.05    | 35      | 0.1     | 0.25    | 0.05    | 82      | 0.05   | 3      | 0.5    | 2      | 0.25    | 10      | 50      | 1       | 10072784  | 4        | 1        |
| SA5112519 | 0.5     | 0.4     | 46      | 0.1     | 0.25    | 0.5     | 69      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 18      | 50      | 0.5     | 10072785  | 11       | 1        |
| SA5112520 | 0.5     | 0.2     | 28      | 0.1     | 0.25    | 0.2     | 43      | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072786  | 80       | 1        |
| SA5112521 | 0.5     | 1.1     | 61      | 0.1     | 0.25    | 0.9     | 89      | 0.3    | 4      | 0.5    | 5      | 0.6     | 4       | 50      | 0.5     | 10072787  | 119      | 1        |
| SA5112522 | 0.5     | 0.05    | 27      | 0.1     | 0.25    | 0.2     | 58      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 0.5     | 10072788  | 13       | 1        |
| SA5112523 | 0.5     | 1.8     | 44      | 0.1     | 0.25    | 1.4     | 148     | 1.2    | 12     | 0.5    | 7      | 0.25    | 4       | 50      | 2       | 10072789  | 111      | 1        |
| SA5112524 | 0.5     | 0.05    | 28      | 0.1     | 0.25    | 0.3     | 51      | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 13      | 50      | 0.5     | 10072791  | 4        | 1        |
| SA5112525 | 0.5     | 0.2     | 23      | 0.1     | 0.25    | 0.3     | 87      | 0.1    | 2      | 0.5    | 0.5    | 0.25    | 6       | 50      | 2       | 10072792  | 6        | 1        |
| SA5112526 | 0.5     | 0.05    | 36      | 0.1     | 0.25    | 0.05    | 43      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 15      | 50      | 0.5     | 10072793  | 1        | 1        |
| SA5112527 | 0.5     | 1.2     | 44      | 0.1     | 0.25    | 1.5     | 214     | 1.2    | 8      | 0.5    | 5      | 0.25    | 6       | 50      | 3       | 10072794  | 110      | 1        |
| SA5112528 | -9      | -9      | 31      | -9      | -9      | -9      | 95      | -9     | 0.5    | -9     | 0.5    | -9      | 11      | -9      | 1       | 10072795  | 22       | 1        |
| SA5112529 | -9      | -9      | 42      | -9      | -9      | -9      | 48      | -9     | 0.5    | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072796  | 6        | 1        |
| SA5112530 | 0.5     | 0.05    | 34      | 0.1     | 0.25    | 0.05    | 74      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072797  | 3        | 1        |
| SA5112531 | -9      | -9      | 38      | -9      | -9      | -9      | 88      | -9     | 2      | -9     | 0.5    | -9      | 12      | -9      | 1       | 10072798  | 4        | 1        |
| SA5112532 | -9      | -9      | 36      | -9      | -9      | -9      | 46      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 0.5     | 10072799  | 18       | 1        |
| SA5112533 | -9      | -9      | 27      | -9      | -9      | -9      | 47      | -9     | 0.5    | -9     | 0.5    | -9      | 7       | -9      | 0.5     | 10072801  | 5        | 1        |
| SA5112534 | -9      | -9      | 34      | -9      | -9      | -9      | 62      | -9     | 2      | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072802  | 5        | 1        |
| SA5112535 | 0.5     | 0.6     | 56      | 0.1     | 0.25    | 0.3     | 69      | 0.2    | 2      | 0.5    | 3      | 0.25    | 12      | 50      | 0.5     | 10072803  | 4        | 1        |
| SA5112536 | -9      | -9      | 39      | -9      | -9      | -9      | 86      | -9     | 2      | -9     | 0.5    | -9      | 10      | -9      | 1       | 10072804  | 1        | 1        |
| SA5112537 | 0.5     | 2.1     | 65      | 0.1     | 0.25    | 1.8     | 1059    | 0.8    | 36     | 0.5    | 8      | 0.7     | 29      | 50      | 9       | 10072805  | 186      | 1        |
| SA5112538 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.4     | 102     | 0.1    | 3      | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072806  | 29       | 1        |
| SA5112539 | 0.5     | 4.4     | 208     | 0.4     | 0.6     | 3.4     | 2234    | 1.9    | 54     | 0.5    | 17     | 1.3     | 47      | 50      | 29      | 10072807  | 181      | 1        |
| SA5112540 | 0.5     | 4.6     | 281     | 0.6     | 0.6     | 3.6     | 3427    | 1.7    | 63     | 0.5    | 19     | 2.0     | 48      | 260     | 44      | 10072808  | 187      | 1        |
| SA5112541 | 0.5     | 7.3     | 235     | 0.1     | 0.6     | 3.0     | 390     | 5.7    | 34     | 0.5    | 15     | 1.0     | 32      | 50      | 3       | 10072809  | 377      | 1        |
| SA5112542 | 0.5     | 1.7     | 63      | 0.3     | 0.25    | 1.9     | 1238    | 0.8    | 13     | 0.5    | 6      | 0.25    | 9       | 50      | 7       | 10072811  | 329      | 1        |
| SA5112543 | 0.5     | 4.5     | 139     | 0.6     | 0.6     | 4.1     | 2818    | 1.8    | 37     | 0.5    | 17     | 1.6     | 35      | 50      | 19      | 10072812  | 395      | 1        |
| SA5112544 | 0.5     | 0.05    | 30      | 0.1     | 0.25    | 0.2     | 72      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072813  | 15       | 1        |
| SA5112545 | 0.5     | 0.05    | 27      | 0.1     | 0.25    | 0.1     | 42      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 0.5     | 10072814  | 25       | 1        |
| SA5112546 | 0.5     | 0.6     | 27      | 0.1     | 0.25    | 0.5     | 84      | 0.2    | 4      | 0.5    | 3      | 0.25    | 6       | 50      | 1       | 10072815  | 10       | 1        |
| SA5112547 | 0.5     | 6.8     | 53      | 0.1     | 0.8     | 6.2     | 1216    | 3.6    | 25     | 0.5    | 24     | 1.4     | 21      | 50      | 11      | 10072816  | 401      | 1        |
| SA5112548 | 0.5     | 12.2    | 290     | 0.7     | 1.4     | 10.5    | 4593    | 5.1    | 105    | 0.5    | 35     | 2.4     | 93      | 320     | 48      | 10072817  | 283      | 1        |
| SA5112549 | 0.5     | 6.3     | 158     | 0.6     | 0.7     | 6.7     | 3784    | 3.1    | 51     | 0.5    | 19     | 1.9     | 42      | 50      | 34      | 10072818  | 361      | 1        |
| SA5112550 | 0.5     | 9.3     | 29      | 0.4     | 0.9     | 7.7     | 1100    | 6.0    | 58     | 0.5    | 27     | 1.6     | 27      | 50      | 6       | 10072819  | 375      | 1        |
| SA5112551 | 0.5     | 4.3     | 142     | 0.5     | 0.5     | 6.1     | 2741    | 3.9    | 25     | 0.5    | 15     | 1.1     | 20      | 50      | 29      | 10072821  | 336      | 1        |
| SA5112552 | 0.5     | 4.7     | 178     | 0.6     | 0.6     | 7.3     | 3580    | 5.0    | 29     | 0.5    | 15     | 1.6     | 20      | 50      | 47      | 10072822  | 539      | 1        |
| SA5112553 | 0.5     | 3.8     | 72      | 0.3     | 0.25    | 4.2     | 1609    | 1.8    | 26     | 0.5    | 10     | 0.7     | 24      | 50      | 10      | 10072823  | 372      | 1        |
| SA5112554 | 0.5     | 1.3     | 36      | 0.1     | 0.25    | 1.7     | 775     | 0.7    | 9      | 0.5    | 5      | 0.25    | 5       | 50      | 7       | 10072824  | 337      | 1        |
| SA5112555 | 0.5     | 8.1     | 47      | 0.1     | 0.7     | 5.2     | 1177    | 3.4    | 44     | 0.5    | 20     | 1.2     | 49      | 50      | 7       | 10072825  | 233      | 1        |
| SA5112556 | 0.5     | 2.6     | 35      | 0.1     | 0.25    | 2.8     | 850     | 2.0    | 20     | 0.5    | 7      | 0.25    | 17      | 50      | 4       | 10072826  | 355      | 1        |
| SA5112557 | 0.5     | 10.0    | 46      | 0.1     | 0.8     | 3.6     | 752     | 12.5   | 36     | 0.5    | 25     | 1.3     | 32      | 50      | 4       | 10072827  | 226      | 1        |
| SA5112558 | 0.5     | 10.2    | 45      | 0.1     | 0.9     | 7.7     | 1261    | 6.6    | 63     | 0.5    | 27     | 1.8     | 54      | 50      | 7       | 10072828  | 158      | 1        |
| SA5112559 | 0.5     | 13.1    | 437     | 1.4     | 1.7     | 13.5    | 6779    | 4.0    | 105    | 0.5    | 39     | 4.6     | 91      | 450     | 63      | 10072829  | 205      | 1        |
| SA5112560 | 0.5     | 18.0    | 398     | 1.5     | 2.2     | 16.8    | 8555    | 10.0   | 109    | 0.5    | 55     | 5.5     | 105     | 470     | 75      | 10072831  | 272      | 1        |
| SA5112561 | 0.5     | 0.6     | 24      | 0.1     | 0.25    | 0.6     | 129     | 0.2    | 4      | 0.5    | 2      | 0.25    | 5       | 50      | 1       | 10072832  | 259      | 1        |
| SA5112562 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072833  | 246      | 1        |
| SA5112563 | 0.5     | 3.7     | 144     | 0.4     | 0.25    | 3.5     | 2761    | 1.2    | 26     | 0.5    | 14     | 1.1     | 23      | 50      | 25      | 10072834  | 325      | 1        |
| SA5112564 | 0.5     | 3.1     | 190     | 0.2     | 0.25    | 3.5     | 3042    | 1.3    | 27     | 0.5    | 11     | 1.3     | 21      | 50      | 26      | 10072835  | 318      | 1        |
| SA5112565 | 0.5     | 13.3    | 423     | 1.3     | 1.7     | 12.1    | 6534    | 3.5    | 91     | 0.5    | 40     | 4.6     | 83      | 320     | 49      | 10072836  | 126      | 1        |
| SA5112566 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072837  | 225      | 1        |
| SA5112567 | 0.5     | 5.0     | 40      | 0.1     | 0.6     | 4.8     | 1282    | 2.2    | 107    | 0.5    | 14     | 0.7     | 30      | 50      | 5       | 10072838  | 171      | 1        |
| SA5112568 | 0.5     | 2.1     | 38      | 0.1     | 0.25    | 1.7     | 524     | 1.8    | 12     | 0.5    | 7      | 0.25    | 8       | 50      | 4       | 10072839  | 136      | 1        |
| SA5112569 | 0.5     | 0.1     | 42      | 0.1     | 0.25    | 0.2     | 73      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 5       | 50      | 1       | 10072841  | 20       | 1        |
| SA5112570 | 0.5     | 6.4     | 50      | 0.1     | 0.6     | 3.9     | 1244    | 1.9    | 80     | 0.5    | 17     | 1.1     | 39      | 50      | 5       | 10072842  | 179      | 1        |
| SA5112571 | -9      | -9      | 34      | -9      | -9      | -9      | 131     | -9     | 3      | -9     | 0.5    | -9      | 11      | -9      | 2       | 10072843  | 25       | 1        |
| SA5112572 | 0.5     | 10.8    | 73      | 0.3     | 1.1     | 6.3     | 1945    | 4.1    | 115    | 0.5    | 29     | 2.3     | 101     | 50      | 9       | 10072844  | 190      | 1        |
| SA5112573 | 0.5     | 1.6     | 42      | 0.1     | 0.25    | 1.8     | 797     | 1.3    | 11     | 0.5    | 6      | 0.25    | 6       | 50      | 5       | 10072845  | 463      | 1        |
| SA5112574 | 0.5     | 1.3     | 53      | 0.1     | 0.25    | 1.5     | 917     | 1.0    | 11     | 0.5    | 5      | 0.25    | 8       | 50      | 6       | 10072846  | 466      | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112575 | 0.5     | 2.4     | 114     | 0.2     | 0.25    | 2.0     | 969     | 0.9    | 19     | 0.5    | 9      | 0.9     | 14      | 50      | 9       | 10072847  | 364      | 1        |
| SA5112576 | 0.5     | 4.6     | 32      | 0.1     | 0.25    | 3.1     | 931     | 1.4    | 46     | 0.5    | 13     | 1.0     | 18      | 50      | 4       | 10072848  | 195      | 1        |
| SA5112577 | 0.5     | 3.1     | 55      | 0.1     | 0.25    | 2.3     | 1066    | 0.9    | 49     | 0.5    | 11     | 0.25    | 18      | 50      | 6       | 10072849  | 161      | 1        |
| SA5112578 | 0.5     | 2.8     | 39      | 0.1     | 0.25    | 1.5     | 554     | 1.3    | 30     | 0.5    | 10     | 0.25    | 16      | 50      | 3       | 10072851  | 262      | 1        |
| SA5112579 | 0.5     | 2.0     | 32      | 0.1     | 0.25    | 1.8     | 493     | 0.9    | 18     | 0.5    | 7      | 0.25    | 8       | 50      | 3       | 10072852  | 275      | 1        |
| SA5112580 | 0.5     | 4.6     | 40      | 0.1     | 0.25    | 3.7     | 572     | 1.2    | 19     | 0.5    | 10     | 0.25    | 8       | 50      | 4       | 10072853  | 126      | 1        |
| SA5112581 | 0.5     | 0.3     | 38      | 0.1     | 0.25    | 0.2     | 74      | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072854  | 70       | 1        |
| SA5112582 | 0.5     | 0.3     | 19      | 0.1     | 0.25    | 0.2     | 69      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 5       | 50      | 0.5     | 10072855  | 17       | 1        |
| SA5112583 | 0.5     | 9.1     | 63      | 0.1     | 0.9     | 4.9     | 1191    | 1.0    | 67     | 0.5    | 26     | 1.7     | 50      | 50      | 7       | 10072856  | 199      | 1        |
| SA5112584 | -9      | -9      | 25      | -9      | -9      | -9      | 89      | -9     | 1      | -9     | 0.5    | -9      | 7       | -9      | 1       | 10072857  | 28       | 1        |
| SA5112585 | -9      | -9      | 22      | -9      | -9      | -9      | 97      | -9     | 1      | -9     | 3      | -9      | 12      | -9      | 1       | 10072858  | 43       | 1        |
| SA5112586 | 0.5     | 0.4     | 32      | 0.1     | 0.25    | 0.3     | 103     | 0.05   | 2      | 0.5    | 1      | 0.25    | 8       | 50      | 1       | 10072859  | 12       | 1        |
| SA5112587 | 0.5     | 10.0    | 171     | 0.4     | 1.0     | 7.3     | 2618    | 1.1    | 66     | 0.5    | 36     | 2.8     | 64      | 50      | 22      | 10072861  | 162      | 1        |
| SA5112588 | 0.5     | 4.6     | 28      | 0.1     | 0.25    | 1.9     | 553     | 0.9    | 19     | 0.5    | 18     | 1.1     | 13      | 50      | 4       | 10072862  | 51       | 1        |
| SA5112589 | 0.5     | 2.4     | 56      | 0.2     | 0.25    | 1.9     | 896     | 0.6    | 18     | 0.5    | 9      | 0.25    | 13      | 50      | 5       | 10072863  | 243      | 1        |
| SA5112590 | 0.5     | 2.8     | 30      | 0.1     | 0.25    | 2.3     | 655     | 0.6    | 29     | 0.5    | 10     | 0.25    | 7       | 50      | 3       | 10072864  | 264      | 1        |
| SA5112591 | 0.5     | 0.5     | 24      | 0.1     | 0.25    | 0.2     | 77      | 0.05   | 2      | 0.5    | 2      | 0.25    | 7       | 50      | 0.5     | 10072865  | 25       | 1        |
| SA5112592 | 0.5     | 2.7     | 38      | 0.1     | 0.25    | 2.5     | 970     | 0.9    | 19     | 0.5    | 8      | 0.6     | 11      | 50      | 6       | 10072866  | 105      | 1        |
| SA5112593 | 0.5     | 2.7     | 29      | 0.1     | 0.25    | 1.8     | 254     | 0.8    | 9      | 0.5    | 8      | 0.25    | 8       | 50      | 2       | 10072867  | 367      | 1        |
| SA5112594 | 0.5     | 0.1     | 32      | 0.1     | 0.25    | 0.3     | 87      | 0.05   | 2      | 0.5    | 0.5    | 0.25    | 13      | 50      | 1       | 10072868  | 6        | 1        |
| SA5112595 | 0.5     | 1.8     | 45      | 0.1     | 0.25    | 2.5     | 1105    | 1.7    | 23     | 0.5    | 6      | 0.25    | 10      | 50      | 6       | 10072869  | 385      | 1        |
| SA5112596 | 0.5     | 2.4     | 59      | 0.1     | 0.25    | 2.9     | 1261    | 2.1    | 19     | 0.5    | 7      | 0.25    | 17      | 50      | 7       | 10072871  | 313      | 1        |
| SA5112597 | 0.5     | 2.0     | 38      | 0.3     | 0.25    | 2.6     | 948     | 1.8    | 26     | 0.5    | 6      | 0.25    | 16      | 50      | 5       | 10072872  | 404      | 1        |
| SA5112598 | 0.5     | 7.9     | 108     | 0.4     | 0.8     | 6.6     | 2764    | 6.0    | 84     | 0.5    | 24     | 1.7     | 46      | 50      | 15      | 10072873  | 346      | 1        |
| SA5112599 | 0.5     | 2.0     | 49      | 0.1     | 0.25    | 1.7     | 953     | 0.9    | 22     | 0.5    | 7      | 0.25    | 12      | 50      | 5       | 10072874  | 192      | 1        |
| SA5112600 | 0.5     | 1.5     | 48      | 0.1     | 0.25    | 1.7     | 979     | 2.0    | 15     | 0.5    | 6      | 0.25    | 10      | 50      | 5       | 10072875  | 310      | 1        |
| SA5112601 | 0.5     | 3.2     | 64      | 0.2     | 0.25    | 2.7     | 1442    | 2.7    | 34     | 0.5    | 10     | 0.25    | 23      | 50      | 6       | 10072876  | 172      | 1        |
| SA5112602 | 0.5     | 10.0    | 159     | 0.4     | 1.0     | 6.3     | 1688    | 7.9    | 62     | 0.5    | 31     | 2.2     | 76      | 50      | 14      | 10072877  | 156      | 1        |
| SA5112603 | 0.5     | 1.8     | 46      | 0.1     | 0.25    | 1.8     | 759     | 0.7    | 18     | 0.5    | 6      | 0.25    | 10      | 50      | 4       | 10072878  | 272      | 1        |
| SA5112604 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072879  | 288      | 1        |
| SA5112605 | 0.5     | 4.0     | 78      | 0.2     | 0.25    | 3.8     | 1627    | 2.7    | 40     | 0.5    | 13     | 0.8     | 23      | 50      | 7       | 10072881  | 288      | 1        |
| SA5112606 | 0.5     | 17.1    | 361     | 0.6     | 1.9     | 12.0    | 4700    | 34.0   | 94     | 0.5    | 58     | 4.5     | 118     | 50      | 39      | 10072882  | 130      | 1        |
| SA5112607 | 0.5     | 5.6     | 117     | 0.3     | 0.5     | 5.1     | 1808    | 2.6    | 49     | 0.5    | 16     | 1.0     | 22      | 50      | 8       | 10072883  | 365      | 1        |
| SA5112608 | 0.5     | 10.0    | 73      | 0.2     | 1.3     | 6.7     | 1251    | 4.6    | 35     | 0.5    | 50     | 2.8     | 45      | 50      | 9       | 10072884  | 307      | 1        |
| SA5112609 | 0.5     | 16.7    | 64      | 0.3     | 1.8     | 11.8    | 1681    | 11.5   | 189    | 0.5    | 58     | 3.7     | 84      | 50      | 8       | 10072885  | 277      | 1        |
| SA5112610 | 0.5     | 3.2     | 120     | 0.2     | 0.25    | 3.7     | 2121    | 1.6    | 19     | 0.5    | 13     | 1.0     | 19      | 50      | 16      | 10072886  | 376      | 1        |
| SA5112611 | 0.5     | 3.8     | 49      | 0.1     | 0.25    | 2.4     | 930     | 1.7    | 31     | 0.5    | 14     | 0.7     | 27      | 50      | 8       | 10072887  | 234      | 1        |
| SA5112612 | -9      | -9      | 27      | -9      | -9      | -9      | 73      | -9     | 1      | -9     | 0.5    | -9      | 12      | -9      | 0.5     | 10072888  | 6        | 1        |
| SA5112613 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072889  | 239      | 1        |
| SA5112614 | -9      | -9      | 55      | -9      | -9      | -9      | 135     | -9     | 3      | -9     | 0.5    | -9      | 26      | -9      | 2       | 10072891  | 11       | 1        |
| SA5112615 | -9      | -9      | 40      | -9      | -9      | -9      | 83      | -9     | 1      | -9     | 0.5    | -9      | 12      | -9      | 1       | 10072892  | 11       | 1        |
| SA5112616 | 0.5     | 5.2     | 214     | 0.3     | 0.6     | 2.7     | 2282    | 1.0    | 68     | 0.5    | 19     | 1.8     | 63      | 50      | 21      | 10072893  | 193      | 1        |
| SA5112617 | -9      | -9      | 31      | -9      | -9      | -9      | 139     | -9     | 2      | -9     | 0.5    | -9      | 11      | -9      | 2       | 10072894  | 4        | 1        |
| SA5112618 | 0.5     | 0.05    | 51      | 0.1     | 0.25    | 0.2     | 50      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 0.5     | 10072895  | 2        | 1        |
| SA5112619 | 0.5     | 0.2     | 31      | 0.1     | 0.25    | 0.2     | 77      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072896  | 19       | 1        |
| SA5112620 | -9      | -9      | 33      | -9      | -9      | -9      | 184     | -9     | 2      | -9     | 1      | -9      | 17      | -9      | 2       | 10072897  | 9        | 1        |
| SA5112621 | -9      | -9      | 28      | -9      | -9      | -9      | 78      | -9     | 0.5    | -9     | 0.5    | -9      | 14      | -9      | 1       | 10072898  | 16       | 1        |
| SA5112622 | -9      | -9      | 435     | -9      | -9      | -9      | 4570    | -9     | 53     | -9     | 22     | -9      | 56      | -9      | 53      | 10072899  | 206      | 1        |
| SA5112623 | 0.5     | 8.0     | 464     | 1.1     | 1.1     | 5.7     | 7953    | 1.8    | 60     | 0.5    | 31     | 4.1     | 54      | 620     | 65      | 10072901  | 201      | 1        |
| SA5112624 | 0.5     | 0.1     | 45      | 0.1     | 0.25    | 0.1     | 118     | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072902  | 17       | 1        |
| SA5112625 | -9      | -9      | 26      | -9      | -9      | -9      | 102     | -9     | 1      | -9     | 0.5    | -9      | 12      | -9      | 1       | 10072903  | 5        | 1        |
| SA5112626 | 0.5     | 0.1     | 21      | 0.1     | 0.25    | 0.2     | 75      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072904  | 19       | 1        |
| SA5112627 | 0.5     | 1.6     | 25      | 0.1     | 0.25    | 1.3     | 284     | 1.0    | 13     | 0.5    | 7      | 0.25    | 16      | 50      | 2       | 10072905  | 194      | 1        |
| SA5112628 | 0.5     | 2.1     | 92      | 0.2     | 0.25    | 1.6     | 1155    | 0.8    | 23     | 0.5    | 9      | 0.25    | 20      | 50      | 12      | 10072906  | 176      | 1        |
| SA5112629 | 0.5     | 3.6     | 195     | 0.3     | 0.25    | 3.1     | 2776    | 1.5    | 49     | 0.5    | 15     | 1.5     | 36      | 170     | 27      | 10072907  | 182      | 1        |
| SA5112630 | 0.5     | 0.6     | 37      | 0.1     | 0.25    | 0.3     | 88      | 0.1    | 3      | 0.5    | 3      | 0.25    | 9       | 50      | 1       | 10072908  | 78       | 1        |
| SA5112631 | 0.5     | 0.1     | 24      | 0.1     | 0.25    | 0.2     | 36      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072909  | 4        | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112632 | 0.5     | 0.05    | 29      | 0.1     | 0.25    | 0.1     | 41      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072911  | 12       | 1        |
| SA5112633 | 0.5     | 0.1     | 24      | 0.1     | 0.25    | 0.2     | 65      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 13      | 50      | 1       | 10072912  | 7        | 1        |
| SA5112634 | 0.5     | 0.05    | 26      | 0.1     | 0.25    | 0.1     | 65      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 1       | 10072913  | 6        | 1        |
| SA5112635 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072914  | 227      | 1        |
| SA5112636 | 0.5     | 4.6     | 292     | 0.6     | 0.6     | 3.9     | 3920    | 1.1    | 43     | 0.5    | 19     | 1.9     | 41      | 210     | 40      | 10072915  | 320      | 1        |
| SA5112637 | 0.5     | 0.05    | 40      | 0.1     | 0.25    | 0.1     | 48      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 0.5     | 10072916  | 3        | 1        |
| SA5112638 | -9      | -9      | 41      | -9      | -9      | -9      | 79      | -9     | 1      | -9     | 0.5    | -9      | 17      | -9      | 1       | 10072917  | 1        | 1        |
| SA5112639 | 0.5     | 0.1     | 36      | 0.1     | 0.25    | 0.2     | 61      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 12      | 50      | 0.5     | 10072918  | 10       | 1        |
| SA5112640 | -9      | -9      | 52      | -9      | -9      | -9      | 126     | -9     | 2      | -9     | 0.5    | -9      | 19      | -9      | 2       | 10072919  | 9        | 1        |
| SA5112641 | -9      | -9      | 36      | -9      | -9      | -9      | 40      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 0.5     | 10072921  | 10       | 1        |
| SA5112642 | 0.5     | 0.05    | 37      | 0.1     | 0.25    | 0.05    | 24      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 1       | 10072922  | 1        | 1        |
| SA5112643 | 0.5     | 0.1     | 52      | 0.1     | 0.25    | 0.1     | 83      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 15      | 50      | 2       | 10072923  | 17       | 1        |
| SA5112644 | 0.5     | 0.05    | 27      | 0.1     | 0.25    | 0.1     | 53      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 0.5     | 10072924  | 6        | 1        |
| SA5112645 | 0.5     | 0.05    | 32      | 0.1     | 0.25    | 0.2     | 49      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 0.5     | 10072925  | 1        | 1        |
| SA5112646 | 0.5     | 0.05    | 31      | 0.1     | 0.25    | 0.1     | 46      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 14      | 50      | 0.5     | 10072926  | 10       | 1        |
| SA5112647 | 0.5     | 0.05    | 25      | 0.1     | 0.25    | 0.1     | 33      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 7       | 50      | 0.5     | 10072927  | 11       | 1        |
| SA5112648 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.3     | 39      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10072928  | 14       | 1        |
| SA5112649 | 0.5     | 0.1     | 27      | 0.1     | 0.25    | 0.2     | 48      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072929  | 1        | 1        |
| SA5112650 | 0.5     | 0.05    | 26      | 0.1     | 0.25    | 0.05    | 53      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072931  | 52       | 1        |
| SA5112651 | 0.5     | 0.05    | 24      | 0.1     | 0.25    | 0.1     | 44      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072932  | 3        | 1        |
| SA5112652 | 0.5     | 0.05    | 27      | 0.1     | 0.25    | 0.1     | 34      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 0.5     | 10072933  | 2        | 1        |
| SA5112653 | -9      | -9      | 43      | -9      | -9      | -9      | 144     | -9     | 2      | -9     | 0.5    | -9      | 16      | -9      | 3       | 10072934  | 21       | 1        |
| SA5112654 | 0.5     | 9.1     | 433     | 1.1     | 1.2     | 9.1     | 5317    | 2.4    | 93     | 0.5    | 33     | 3.8     | 78      | 510     | 82      | 10072935  | 218      | 1        |
| SA5112655 | 0.5     | 6.0     | 338     | 0.6     | 0.8     | 5.7     | 4213    | 1.4    | 55     | 0.5    | 25     | 2.9     | 48      | 390     | 60      | 10072936  | 335      | 1        |
| SA5112656 | 0.5     | 0.2     | 32      | 0.1     | 0.25    | 0.3     | 141     | 0.1    | 1      | 0.5    | 0.5    | 0.25    | 11      | 50      | 3       | 10072937  | 64       | 1        |
| SA5112657 | 0.5     | 0.1     | 42      | 0.1     | 0.25    | 0.2     | 94      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 13      | 50      | 2       | 10072938  | 36       | 1        |
| SA5112658 | 0.5     | 0.1     | 31      | 0.1     | 0.25    | 0.2     | 88      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 11      | 50      | 1       | 10072939  | 128      | 1        |
| SA5112659 | 0.5     | 0.05    | 44      | 0.1     | 0.25    | 0.05    | 26      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 16      | 50      | 0.5     | 10072939  | 128      | 1        |
| SA5112660 | 0.5     | 0.05    | 28      | 0.1     | 0.25    | 0.05    | 56      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 1       | 10072941  | 7        | 1        |
| SA5112661 | 0.5     | 1.8     | 71      | 0.1     | 0.25    | 1.7     | 880     | 0.6    | 11     | 0.5    | 7      | 0.25    | 22      | 50      | 12      | 10072942  | 1        | 1        |
| SA5112662 | 0.5     | 0.3     | 25      | 0.1     | 0.25    | 0.4     | 114     | 0.2    | 1      | 0.5    | 0.5    | 0.25    | 12      | 50      | 8       | 10072943  | 1        | 1        |
| SA5112663 | 0.5     | 0.05    | 21      | 0.1     | 0.25    | 0.2     | 49      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 1       | 10072944  | 3        | 1        |
| SA5112664 | -9      | -9      | 24      | -9      | -9      | -9      | 89      | -9     | 0.5    | -9     | 0.5    | -9      | 9       | -9      | 2       | 10072945  | 10       | 1        |
| SA5112665 | 0.5     | 4.9     | 223     | 0.4     | 0.6     | 4.0     | 2383    | 0.9    | 36     | 0.5    | 18     | 1.4     | 33      | 170     | 29      | 10072946  | 287      | 1        |
| SA5112666 | -9      | -9      | 47      | -9      | -9      | -9      | 206     | -9     | 2      | -9     | 1      | -9      | 15      | -9      | 2       | 10072947  | 1        | 1        |
| SA5112667 | 0.5     | 0.2     | 28      | 0.1     | 0.25    | 0.3     | 60      | 0.1    | 0.5    | 0.5    | 0.5    | 0.25    | 8       | 50      | 1       | 10072948  | 28       | 1        |
| SA5112668 | 0.5     | 0.5     | 24      | 0.1     | 0.25    | 0.6     | 79      | 0.2    | 2      | 0.5    | 2      | 0.25    | 5       | 50      | 1       | 10072949  | 6        | 1        |
| SA5112669 | 0.5     | 5.5     | 602     | 1.3     | 0.9     | 11.4    | 3700    | 4.5    | 62     | 1      | 20     | 2.5     | 48      | 150     | 42      | 10072951  | 175      | 1        |
| SA5112670 | 0.5     | 15.0    | 77      | 0.1     | 1.5     | 5.2     | 1063    | 2.8    | 86     | 0.5    | 46     | 3.1     | 63      | 50      | 12      | 10072952  | 200      | 1        |
| SA5112671 | 0.5     | 0.2     | 43      | 0.1     | 0.25    | 0.1     | 46      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 10      | 50      | 0.5     | 10072953  | 8        | 1        |
| SA5112672 | 0.5     | 0.4     | 25      | 0.1     | 0.25    | 0.4     | 71      | 0.3    | 3      | 0.5    | 2      | 0.25    | 6       | 50      | 1       | 10072954  | 17       | 1        |
| SA5112673 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072955  | 77       | 1        |
| SA5112674 | 0.5     | 0.1     | 21      | 0.1     | 0.25    | 0.2     | 75      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 1       | 10072956  | 5        | 1        |
| SA5112675 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10072957  | 224      | 1        |
| SA5112676 | 0.5     | 1.5     | 40      | 0.1     | 0.25    | 1.2     | 158     | 0.7    | 4      | 0.5    | 8      | 0.25    | 9       | 50      | 2       | 10072958  | 9        | 1        |
| SA5112677 | 0.5     | 5.1     | 272     | 0.5     | 0.6     | 5.8     | 4008    | 1.3    | 42     | 0.5    | 23     | 2.1     | 48      | 260     | 48      | 10072959  | 83       | 1        |
| SA5112678 | 0.5     | 1.8     | 71      | 0.1     | 0.25    | 1.3     | 359     | 0.3    | 15     | 0.5    | 7      | 0.25    | 25      | 50      | 3       | 10072961  | 69       | 1        |
| SA5112679 | 0.5     | 0.4     | 33      | 0.1     | 0.25    | 0.5     | 87      | 0.05   | 3      | 0.5    | 2      | 0.25    | 6       | 50      | 2       | 10072962  | 15       | 1        |
| SA5112680 | 0.5     | 0.1     | 28      | 0.1     | 0.25    | 0.3     | 55      | 0.2    | 0.5    | 0.5    | 0.5    | 0.25    | 9       | 50      | 0.5     | 10072963  | 24       | 1        |
| SA5112681 | 0.5     | 5.7     | 293     | 0.5     | 0.6     | 5.0     | 3186    | 0.9    | 41     | 0.5    | 24     | 2.2     | 58      | 150     | 38      | 10072964  | 162      | 1        |
| SA5112682 | 0.5     | 1.2     | 26      | 0.1     | 0.25    | 0.9     | 246     | 0.2    | 5      | 0.5    | 4      | 0.25    | 9       | 50      | 2       | 10072965  | 33       | 1        |
| SA5112683 | 0.5     | 0.2     | 39      | 0.1     | 0.25    | 0.2     | 55      | 0.05   | 0.5    | 0.5    | 2      | 0.25    | 8       | 50      | 0.5     | 10072966  | 19       | 1        |
| SA5112684 | 0.5     | 5.1     | 61      | 0.2     | 0.25    | 3.6     | 892     | 0.6    | 13     | 0.5    | 16     | 1.0     | 27      | 50      | 10      | 10072967  | 100      | 1        |
| SA5112685 | 0.5     | 0.3     | 26      | 0.1     | 0.25    | 0.5     | 132     | 0.05   | 3      | 0.5    | 1      | 0.25    | 6       | 50      | 2       | 10072968  | 56       | 1        |
| SA5112686 | 0.5     | 0.3     | 26      | 0.1     | 0.25    | 0.3     | 90      | 0.05   | 3      | 0.5    | 1      | 0.25    | 14      | 50      | 2       | 10072969  | 18       | 1        |
| SA5112687 | 0.5     | 2.1     | 27      | 0.1     | 0.25    | 0.8     | 187     | 2.9    | 9      | 0.5    | 7      | 0.25    | 28      | 50      | 2       | 10072971  | 113      | 1        |
| SA5112688 | 0.5     | 6.1     | 43      | 0.1     | 0.6     | 3.5     | 641     | 0.6    | 14     | 0.5    | 19     | 1.0     | 43      | 50      | 5       | 10072972  | 94       | 1        |

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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112689 | 0.5     | 0.8     | 26      | 0.1     | 0.25    | 0.5     | 66      | 0.4    | 5      | 0.5    | 4      | 0.25    | 15      | 50      | 1       | 10072973  | 22       | 1        |
| SA5112690 | 0.5     | 1.5     | 38      | 0.1     | 0.25    | 0.9     | 190     | 1.8    | 7      | 0.5    | 8      | 0.5     | 7       | 50      | 3       | 10072974  | 83       | 1        |
| SA5112691 | 0.5     | 0.5     | 67      | 0.1     | 0.25    | 0.4     | 81      | 0.2    | 3      | 0.5    | 2      | 0.25    | 5       | 50      | 1       | 10072975  | 61       | 1        |
| SA5112692 | 0.5     | 2.0     | 121     | 0.4     | 0.25    | 4.9     | 2697    | 1.3    | 29     | 0.5    | 6      | 0.25    | 21      | 50      | 20      | 10072976  | 50       | 1        |
| SA5112693 | 0.5     | 1.5     | 208     | 0.6     | 0.25    | 2.6     | 4161    | 0.7    | 30     | 0.5    | 6      | 0.9     | 21      | 270     | 36      | 10072977  | 106      | 1        |
| SA5112694 | 0.5     | 3.3     | 184     | 0.6     | 0.25    | 3.6     | 3001    | 0.9    | 35     | 0.5    | 13     | 1.2     | 38      | 50      | 26      | 10072978  | 110      | 1        |
| SA5112695 | 0.5     | 7.1     | 46      | 0.1     | 0.6     | 3.7     | 506     | 2.1    | 17     | 0.5    | 20     | 1.5     | 25      | 50      | 3       | 10072979  | 82       | 1        |
| SA5112696 | 0.5     | 0.6     | 35      | 0.1     | 0.25    | 0.6     | 137     | 0.1    | 5      | 0.5    | 3      | 0.25    | 8       | 50      | 2       | 10072981  | 102      | 1        |
| SA5112697 | 0.5     | 3.7     | 32      | 0.1     | 0.25    | 4.6     | 513     | 1.7    | 20     | 0.5    | 11     | 0.25    | 16      | 50      | 4       | 10072982  | 365      | 1        |
| SA5112698 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.2     | 53      | 0.05   | 2      | 0.5    | 1      | 0.25    | 7       | 50      | 0.5     | 10072983  | 24       | 1        |
| SA5112699 | 0.5     | 0.9     | 25      | 0.1     | 0.25    | 1.1     | 114     | 0.3    | 7      | 0.5    | 4      | 0.25    | 7       | 50      | 2       | -9        | -9       | -9       |
| SA5112700 | 0.5     | 0.2     | 22      | 0.1     | 0.25    | 0.3     | 87      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 6       | 50      | 1       | 10072984  | 16       | 1        |
| SA5112701 | 0.5     | 7.2     | 484     | 0.9     | 1.0     | 4.9     | 5853    | 1.4    | 54     | 0.5    | 30     | 3.2     | 48      | 510     | 75      | 10072985  | 93       | 1        |
| SA5112702 | 0.5     | 1.5     | 38      | 0.1     | 0.25    | 1.3     | 384     | 1.3    | 11     | 0.5    | 7      | 0.25    | 12      | 50      | 6       | 10072986  | 19       | 1        |
| SA5112703 | 0.5     | 1.5     | 41      | 0.1     | 0.25    | 0.8     | 91      | 1.5    | 4      | 0.5    | 8      | 0.25    | 8       | 50      | 2       | 10072987  | 76       | 1        |
| SA5112704 | 0.5     | 0.4     | 10      | 0.1     | 0.25    | 0.8     | 198     | 0.2    | 6      | 0.5    | 3      | 0.25    | 7       | 50      | 1       | 10072988  | 67       | 1        |
| SA5112705 | 0.5     | 5.0     | 39      | 0.1     | 0.6     | 2.2     | 354     | 1.2    | 23     | 0.5    | 18     | 0.9     | 21      | 50      | 3       | 10072989  | 62       | 1        |
| SA5112706 | 0.5     | 0.5     | 15      | 0.1     | 0.25    | 0.8     | 131     | 0.2    | 4      | 0.5    | 3      | 0.25    | 8       | 50      | 2       | 10072991  | 74       | 1        |
| SA5112707 | -9      | -9      | 31      | -9      | -9      | -9      | 70      | -9     | 2      | -9     | 2      | -9      | 8       | -9      | 2       | 10072992  | 51       | 1        |
| SA5112708 | 0.5     | 0.05    | 15      | 0.1     | 0.25    | 0.1     | 52      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 4       | 50      | 2       | 10072993  | 7        | 1        |
| SA5112709 | 0.5     | 3.3     | 78      | 0.3     | 0.25    | 3.0     | 1253    | 0.8    | 21     | 0.5    | 13     | 0.7     | 32      | 50      | 12      | 10072994  | 141      | 1        |
| SA5112710 | 0.5     | 2.6     | 71      | 0.2     | 0.25    | 4.2     | 1063    | 0.6    | 17     | 0.5    | 10     | 0.6     | 24      | 50      | 12      | 10072995  | 88       | 1        |
| SA5112711 | 0.5     | 7.7     | 495     | 1.0     | 1.0     | 6.2     | 6257    | 1.6    | 60     | 0.5    | 32     | 3.3     | 61      | 490     | 73      | 10072996  | 126      | 1        |
| SA5112712 | 0.5     | 1.9     | 37      | 0.1     | 0.25    | 1.7     | 467     | 0.6    | 18     | 0.5    | 8      | 0.25    | 10      | 50      | 4       | 10072997  | 125      | 1        |
| SA5112713 | -9      | -9      | 289     | -9      | -9      | -9      | 6976    | -9     | 85     | -9     | 35     | -9      | 58      | -9      | 83      | 10072998  | 129      | 1        |
| SA5112714 | 0.5     | 1.4     | 16      | 0.1     | 0.25    | 1.3     | 167     | 5.2    | 3      | 0.5    | 6      | 0.25    | 7       | 50      | 1       | 10072999  | 82       | 1        |
| SA5112715 | 0.5     | 6.0     | 417     | 0.8     | 0.8     | 4.4     | 5330    | 1.1    | 49     | 0.5    | 27     | 2.7     | 47      | 380     | 63      | 10073001  | 90       | 1        |
| SA5112716 | 0.5     | 1.2     | 33      | 0.1     | 0.25    | 1.1     | 253     | 0.6    | 10     | 0.5    | 5      | 0.6     | 12      | 50      | 2       | 10073002  | 67       | 1        |
| SA5112717 | 0.5     | 3.5     | 61      | 0.3     | 0.25    | 2.7     | 1206    | 1.2    | 18     | 0.5    | 12     | 0.8     | 40      | 50      | 15      | 10073003  | 116      | 1        |
| SA5112718 | 0.5     | 3.7     | 62      | 0.1     | 0.25    | 5.1     | 1328    | 1.8    | 24     | 0.5    | 11     | 0.5     | 27      | 50      | 11      | 10073004  | 130      | 1        |
| SA5112719 | 0.5     | 5.7     | 87      | 0.2     | 0.6     | 6.8     | 1683    | 2.5    | 38     | 0.5    | 15     | 0.6     | 40      | 50      | 15      | 10073005  | 161      | 1        |
| SA5112720 | 0.5     | 2.2     | 25      | 0.1     | 0.25    | 1.4     | 198     | 1.3    | 6      | 0.5    | 6      | 0.25    | 8       | 50      | 2       | 10073006  | 177      | 1        |
| SA5112721 | 0.5     | 2.7     | 231     | 0.4     | 0.25    | 4.5     | 3747    | 1.2    | 19     | 0.5    | 11     | 0.9     | 18      | 250     | 45      | 10073007  | 140      | 1        |
| SA5112722 | 0.5     | 1.7     | 32      | 0.1     | 0.25    | 2.0     | 273     | 0.3    | 7      | 0.5    | 5      | 0.25    | 8       | 50      | 3       | 10073008  | 57       | 1        |
| SA5112723 | 0.5     | 1.3     | 56      | 0.1     | 0.25    | 1.1     | 93      | 0.8    | 2      | 0.5    | 5      | 0.25    | 10      | 50      | 1       | 10073009  | 93       | 1        |
| SA5112724 | 0.5     | 7.5     | 72      | 0.1     | 0.6     | 9.0     | 1326    | 0.8    | 34     | 0.5    | 16     | 0.25    | 53      | 50      | 13      | 10073011  | 85       | 1        |
| SA5112725 | 0.5     | 3.5     | 32      | 0.1     | 0.25    | 3.4     | 280     | 0.4    | 8      | 0.5    | 7      | 0.25    | 15      | 50      | 4       | 10073012  | 49       | 1        |
| SA5112726 | 0.5     | 3.6     | 36      | 0.1     | 0.25    | 3.9     | 635     | 1.4    | 17     | 0.5    | 12     | 0.6     | 25      | 50      | 6       | 10073013  | 87       | 1        |
| SA5112727 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10073014  | 39       | 1        |
| SA5112728 | 0.5     | 2.6     | 84      | 0.2     | 0.25    | 2.8     | 1107    | 10.0   | 14     | 0.5    | 9      | 0.6     | 13      | 50      | 12      | 10073015  | 194      | 1        |
| SA5112729 | -9      | -9      | -9      | -9      | -9      | -9      | -9      | -9     | -9     | -9     | -9     | -9      | -9      | -9      | -9      | 10073016  | 58       | 1        |
| SA5112730 | 0.5     | 5.7     | 47      | 0.1     | 0.7     | 4.5     | 636     | 18.5   | 10     | 0.5    | 19     | 1.3     | 15      | 50      | 6       | 10073017  | 149      | 1        |
| SA5112731 | 0.5     | 0.5     | 30      | 0.1     | 0.25    | 0.5     | 83      | 1.5    | 2      | 0.5    | 2      | 0.25    | 12      | 50      | 1       | 10073018  | 30       | 1        |
| SA5112732 | 0.5     | 1.1     | 24      | 0.1     | 0.25    | 0.8     | 110     | 0.5    | 6      | 0.5    | 5      | 0.25    | 9       | 50      | 1       | 10073019  | 32       | 1        |
| SA5112733 | 0.5     | 1.5     | 37      | 0.1     | 0.25    | 0.8     | 218     | 0.2    | 19     | 0.5    | 7      | 0.25    | 33      | 50      | 2       | 10073021  | 64       | 1        |
| SA5112734 | 0.5     | 0.8     | 42      | 0.1     | 0.25    | 0.8     | 230     | 0.05   | 8      | 0.5    | 4      | 0.25    | 7       | 50      | 4       | 10073022  | 13       | 1        |
| SA5112735 | 0.5     | 2.1     | 34      | 0.1     | 0.25    | 1.8     | 232     | 0.3    | 20     | 0.5    | 8      | 0.5     | 7       | 50      | 3       | 10073023  | 29       | 1        |
| SA5112736 | 0.5     | 4.8     | 43      | 0.1     | 0.25    | 3.8     | 663     | 0.8    | 34     | 0.5    | 20     | 1.4     | 41      | 50      | 9       | 10073024  | 43       | 1        |
| SA5112737 | 0.5     | 0.9     | 42      | 0.1     | 0.25    | 0.7     | 131     | 0.05   | 9      | 0.5    | 4      | 0.5     | 6       | 50      | 1       | 10073025  | 61       | 1        |
| SA5112738 | 0.5     | 6.5     | 435     | 0.8     | 1.0     | 6.0     | 5687    | 1.4    | 99     | 0.5    | 31     | 3.5     | 58      | 430     | 60      | 10073026  | 32       | 1        |
| SA5112739 | 0.5     | 1.5     | 73      | 0.1     | 0.25    | 0.8     | 789     | 0.7    | 33     | 0.5    | 10     | 0.25    | 37      | 50      | 8       | 10073027  | 93       | 1        |
| SA5112740 | 0.5     | 2.1     | 45      | 0.1     | 0.25    | 1.6     | 379     | 0.4    | 15     | 0.5    | 6      | 0.9     | 11      | 50      | 4       | 10073028  | 39       | 1        |
| SA5112741 | 0.5     | 1.4     | 35      | 0.1     | 0.25    | 1.2     | 328     | 0.2    | 13     | 0.5    | 7      | 0.25    | 9       | 50      | 5       | 10073029  | 31       | 1        |
| SA5112742 | 0.5     | 2.2     | 42      | 0.1     | 0.25    | 4.0     | 423     | 0.4    | 17     | 0.5    | 13     | 0.6     | 11      | 50      | 10      | 10073031  | 28       | 1        |
| SA5112743 | 0.5     | 10.9    | 184     | 0.4     | 1.1     | 7.3     | 3077    | 3.6    | 92     | 1      | 42     | 2.8     | 50      | 50      | 28      | 10073032  | 54       | 1        |
| SA5112744 | -9      | -9      | 39      | -9      | -9      | -9      | 377     | -9     | 29     | -9     | 9      | -9      | 16      | -9      | 6       | 10073033  | 29       | 1        |
| SA5112745 | -9      | -9      | 35      | -9      | -9      | -9      | 411     | -9     | 20     | -9     | 14     | -9      | 33      | -9      | 7       | 10073034  | 17       | 1        |



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| FldNum    | Se1_ppm | Sm1_ppm | Sr2_ppm | Ta1_ppm | Tb1_ppm | Th1_ppm | Ti2_ppm | U1_ppm | V2_ppm | W1_ppm | Y2_ppm | Yb1_ppm | Zn2_ppm | Zr1_ppm | Zr2_ppm | WatLabNum | Alw2_ppb | Asw2_ppb |
|-----------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|----------|----------|
| SA5112746 | 0.5     | 2.1     | 101     | 0.2     | 0.25    | 2.6     | 1193    | 0.5    | 20     | 0.5    | 9      | 0.6     | 25      | 50      | 13      | 10073035  | 145      | 1        |
| SA5112747 | 0.5     | 6.3     | 489     | 0.8     | 0.8     | 5.2     | 4485    | 1.2    | 52     | 0.5    | 23     | 2.7     | 64      | 300     | 51      | 10073036  | 37       | 1        |
| SA5112748 | 0.5     | 0.9     | 40      | 0.1     | 0.25    | 0.7     | 168     | 0.05   | 9      | 0.5    | 4      | 0.25    | 10      | 50      | 2       | 10073037  | 21       | 1        |
| SA5112749 | 0.5     | 3.3     | 71      | 0.1     | 0.25    | 3.2     | 1065    | 0.5    | 37     | 0.5    | 13     | 1.0     | 46      | 50      | 10      | 10073038  | 77       | 1        |
| SA5112750 | 0.5     | 1.1     | 29      | 0.1     | 0.25    | 1.6     | 235     | 0.6    | 10     | 0.5    | 5      | 0.25    | 8       | 50      | 3       | 10073039  | 50       | 1        |
| SA5112751 | 0.5     | 1.7     | 19      | 0.1     | 0.25    | 1.3     | 118     | 0.3    | 16     | 0.5    | 8      | 0.5     | 6       | 50      | 2       | 10073041  | 36       | 1        |
| SA5112752 | 0.5     | 0.4     | 33      | 0.1     | 0.25    | 0.4     | 97      | 0.05   | 3      | 0.5    | 2      | 0.25    | 8       | 50      | 1       | 10073042  | 13       | 1        |
| SA5112753 | 0.5     | 0.7     | 33      | 0.1     | 0.25    | 0.6     | 244     | 0.2    | 6      | 0.5    | 3      | 0.25    | 9       | 50      | 3       | 10073043  | 21       | 1        |
| SA5112754 | 0.5     | 6.3     | 518     | 0.8     | 0.9     | 4.3     | 4270    | 1.1    | 52     | 0.5    | 25     | 2.5     | 61      | 350     | 47      | 10073044  | 39       | 1        |
| SA5112755 | 0.5     | 4.1     | 61      | 0.1     | 0.25    | 2.7     | 519     | 0.9    | 42     | 0.5    | 17     | 1.1     | 54      | 50      | 6       | 10073045  | 93       | 1        |
| SA5112756 | 0.5     | 0.4     | 28      | 0.1     | 0.25    | 0.4     | 99      | 0.05   | 4      | 0.5    | 2      | 0.25    | 8       | 50      | 1       | 10073046  | 22       | 1        |
| SA5112757 | 0.5     | 2.7     | 52      | 0.1     | 0.25    | 2.1     | 510     | 0.5    | 38     | 0.5    | 12     | 1.2     | 33      | 50      | 6       | 10073047  | 84       | 1        |
| SA5112758 | 0.5     | 3.7     | 69      | 0.1     | 0.25    | 2.4     | 788     | 0.4    | 36     | 0.5    | 14     | 1.3     | 56      | 50      | 15      | 10073048  | 17       | 1        |
| SA5112759 | 0.5     | 0.3     | 47      | 0.1     | 0.25    | 0.3     | 95      | 0.05   | 4      | 0.5    | 2      | 0.5     | 9       | 50      | 1       | 10073049  | 45       | 1        |
| SA5112760 | 0.5     | 2.5     | 91      | 0.1     | 0.25    | 2.6     | 1312    | 0.6    | 35     | 0.5    | 11     | 0.7     | 35      | 50      | 12      | 10073051  | 88       | 1        |
| SA5112761 | -9      | -9      | 55      | -9      | -9      | -9      | 407     | -9     | 9      | -9     | 4      | -9      | 17      | -9      | 4       | 10073052  | 19       | 1        |
| SA5112762 | 0.5     | 0.5     | 32      | 0.1     | 0.25    | 0.5     | 79      | 0.05   | 4      | 0.5    | 2      | 0.25    | 10      | 50      | 2       | 10073053  | 23       | 1        |
| SA5112763 | 0.5     | 1.0     | 56      | 0.1     | 0.25    | 1.1     | 587     | 0.2    | 13     | 0.5    | 4      | 0.25    | 11      | 50      | 7       | 10073054  | 49       | 1        |
| SA5112764 | -9      | -9      | 293     | -9      | -9      | -9      | 4464    | -9     | 42     | -9     | 12     | -9      | 35      | -9      | 42      | 10073055  | 102      | 1        |
| SA5112765 | 0.5     | 3.7     | 449     | 1.2     | 0.5     | 6.1     | 7757    | 1.5    | 48     | 0.5    | 11     | 1.8     | 27      | 580     | 75      | 10073056  | 54       | 1        |
| SA5112766 | 0.5     | 0.3     | 21      | 0.1     | 0.25    | 0.4     | 129     | 0.1    | 6      | 0.5    | 2      | 0.25    | 9       | 50      | 2       | 10073057  | 47       | 1        |
| SA5112767 | 0.5     | 0.05    | 29      | 0.1     | 0.25    | 0.1     | 54      | 0.05   | 1      | 0.5    | 0.5    | 0.25    | 8       | 50      | 0.5     | 10073058  | 49       | 1        |
| SA5112768 | 0.5     | 0.05    | 30      | 0.1     | 0.25    | 0.05    | 49      | 0.05   | 0.5    | 0.5    | 0.5    | 0.25    | 6       | 50      | 1       | 10073059  | 9        | 1        |
| SA5112769 | 0.5     | 1.1     | 34      | 0.1     | 0.25    | 0.3     | 107     | 1.6    | 6      | 0.5    | 5      | 0.25    | 8       | 50      | 2       | 10073061  | 13       | 1        |
| SA5112770 | 0.5     | 0.3     | 27      | 0.1     | 0.25    | 0.4     | 88      | 0.1    | 4      | 0.5    | 2      | 0.25    | 6       | 50      | 1       | 10073062  | 36       | 1        |
| SA5112771 | 0.5     | 1.4     | 99      | 0.1     | 0.25    | 1.5     | 1577    | 0.4    | 11     | 0.5    | 5      | 0.25    | 16      | 50      | 12      | 10073063  | 55       | 1        |
| SA5112772 | 0.5     | 10.0    | 510     | 0.9     | 1.3     | 8.7     | 5830    | 1.8    | 78     | 0.5    | 32     | 4.0     | 75      | 370     | 58      | 10073064  | 41       | 1        |
| SA5112773 | -9      | -9      | 212     | -9      | -9      | -9      | 3557    | -9     | 27     | -9     | 9      | -9      | 24      | -9      | 39      | 10073065  | 24       | 1        |
| SA5112774 | 0.5     | 0.2     | 27      | 0.1     | 0.25    | 0.3     | 100     | 0.05   | 2      | 0.5    | 1      | 0.25    | 10      | 50      | 1       | 10073066  | 18       | 1        |
| SA5112775 | 0.5     | 2.8     | 100     | 0.2     | 0.25    | 1.9     | 992     | 0.7    | 50     | 0.5    | 11     | 0.5     | 34      | 50      | 8       | 10073067  | 87       | 1        |
| SA5112776 | 0.5     | 17.7    | 21      | 0.1     | 1.4     | 17.7    | 98      | 7.1    | 1      | 0.5    | 1      | 2.7     | 11      | 50      | 1       | 10073068  | 45       | 1        |
| SA5112777 | -9      | -9      | 51      | -9      | -9      | -9      | 1791    | -9     | 98     | -9     | 38     | -9      | 32      | -9      | 7       | 10073069  | 308      | 1        |
| SA5112778 | 0.5     | 21.9    | 45      | 0.2     | 2.1     | 8.1     | 872     | 13.4   | 61     | 0.5    | 57     | 3.4     | 56      | 50      | 5       | 10073071  | 224      | 1        |
| SA5112779 | 0.5     | 4.9     | 50      | 0.1     | 0.5     | 4.3     | 774     | 4.7    | 13     | 0.5    | 16     | 0.8     | 12      | 50      | 6       | 10073072  | 217      | 1        |
| SA5112780 | 0.5     | 4.0     | 32      | 0.1     | 0.25    | 7.1     | 1306    | 3.6    | 12     | 0.5    | 16     | 0.8     | 9       | 50      | 7       | 10073073  | 236      | 1        |
| SA5112781 | 0.5     | 13.9    | 88      | 0.4     | 1.6     | 18.0    | 2329    | 19.5   | 41     | 0.5    | 47     | 3.1     | 49      | 50      | 13      | 10073074  | 366      | 1        |
| SA5112782 | 0.5     | 8.5     | 155     | 1.7     | 1.2     | 6.4     | 6306    | 4.4    | 53     | 0.5    | 43     | 4.3     | 45      | 640     | 27      | 10073075  | 304      | 1        |
| SA5112783 | 0.5     | 6.6     | 54      | 0.4     | 0.7     | 5.9     | 2022    | 3.3    | 30     | 0.5    | 20     | 1.1     | 17      | 50      | 10      | 10073076  | 256      | 1        |
| SA5112784 | 0.5     | 20.6    | 358     | 1.1     | 2.4     | 16.1    | 6325    | 18.2   | 82     | 0.5    | 73     | 6.8     | 107     | 400     | 46      | 10073077  | 316      | 1        |
| SA5112785 | 0.5     | 5.4     | 30      | 0.1     | 0.5     | 4.0     | 423     | 2.0    | 11     | 0.5    | 20     | 1.7     | 16      | 50      | 4       | 10073078  | 55       | 1        |
| SA5112786 | 0.5     | 2.0     | 27      | 0.1     | 0.25    | 2.0     | 288     | 3.1    | 12     | 0.5    | 8      | 0.25    | 11      | 50      | 3       | 10073079  | 55       | 1        |
| SA5112787 | -9      | -9      | 233     | -9      | -9      | -9      | 4305    | -9     | 52     | -9     | 41     | -9      | 56      | -9      | 23      | 10073081  | 310      | 1        |
| SA5112788 | 0.5     | 10.0    | 195     | 2.5     | 1.6     | 4.3     | 10751   | 2.2    | 91     | 0.5    | 66     | 6.4     | 71      | 730     | 47      | 10073082  | 298      | 1        |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5111891 | 4.5      | 0.1      | 0.69     | 0.5      | 16.46      | 0.5      | 0.25     | 5.2      | 112      | 49      | 0.12    | 0.2      | 0.26     | 5.9      | 0.5      | 1.68     |
| SA5111892 | 2.6      | 0.05     | 0.74     | 0.5      | 15.16      | 0.5      | 0.25     | 4.5      | 93       | 34      | 0.10    | 0.2      | 0.27     | 6.0      | 0.5      | 1.62     |
| SA5111893 | 4.5      | 0.05     | 0.69     | 0.5      | 19.4       | 0.5      | 0.25     | 4.2      | 360      | 13      | 0.24    | 0.2      | 0.35     | 9.8      | 0.5      | 1.97     |
| SA5111894 | 6.6      | 0.05     | 0.49     | 0.5      | 17.35      | 0.5      | 0.25     | 5.3      | 175      | 6       | 0.12    | 0.2      | 0.29     | 14.7     | 0.5      | 1.63     |
| SA5111895 | 4.9      | 0.1      | 0.60     | 0.5      | 18.05      | 1        | 0.25     | 4.8      | 244      | 17      | 0.12    | 0.3      | 0.28     | 9.5      | 0.5      | 1.53     |
| SA5111896 | -9       | -9       | -9       | -9       | -9         | -9       | -9       | -9       | -9       | -9      | -9      | -9       | -9       | -9       | -9       | -9       |
| SA5111897 | 4.9      | 63.0     | 0.83     | 0.5      | 21         | 0.5      | 0.25     | 4.4      | 461      | 32      | 0.14    | 0.4      | 0.33     | 7.2      | 0.5      | 1.90     |
| SA5111898 | 4.2      | 40.7     | 0.75     | 0.5      | 18.4       | 0.5      | 0.25     | 4.1      | 361      | 31      | 0.14    | 0.4      | 0.32     | 6.2      | 0.5      | 1.75     |
| SA5111899 | 4.5      | 0.5      | 1.13     | 0.5      | 19.4       | 0.5      | 0.25     | 5.5      | 134      | 36      | 0.26    | 0.2      | 0.55     | 3.0      | 0.5      | 1.81     |
| SA5111900 | 0.9      | 0.05     | 0.13     | 0.5      | 14.33      | 0.5      | 0.25     | 4.9      | 38       | 6       | 0.04    | 0.05     | 0.06     | 0.8      | 0.5      | 0.71     |
| SA5111901 | 3.3      | 0.1      | 0.57     | 0.5      | 14.4       | 0.5      | 0.25     | 3.0      | 147      | 22      | 0.09    | 0.1      | 0.27     | 6.8      | 0.5      | 1.35     |
| SA5111902 | 3.3      | 0.05     | 0.40     | 0.5      | 15.6       | 0.5      | 0.25     | 2.6      | 253      | 19      | 0.05    | 0.2      | 0.18     | 6.0      | 0.5      | 1.22     |
| SA5111903 | 1.6      | 3.8      | 0.15     | 0.5      | 19.4       | 0.5      | 0.25     | 2.6      | 150      | 7       | 0.06    | 0.05     | 0.10     | 1.5      | 0.5      | 0.70     |
| SA5111904 | 4.9      | 40.7     | 0.52     | 0.5      | 17.21      | 0.5      | 0.25     | 3.8      | 461      | 24      | 0.05    | 0.2      | 0.23     | 8.9      | 0.5      | 1.26     |
| SA5111905 | 4.9      | 1.7      | 0.45     | 0.5      | 15.6       | 0.5      | 0.25     | 3.0      | 318      | 21      | 0.06    | 0.2      | 0.19     | 9.0      | 0.5      | 1.15     |
| SA5111906 | 0.6      | 0.05     | 0.10     | 0.5      | 14.6       | 0.5      | 0.25     | 11.2     | 165      | 8       | 0.005   | 0.05     | 0.05     | 1.0      | 0.5      | 0.56     |
| SA5111907 | 4.0      | 1.4      | 0.37     | 0.5      | 12.1       | 0.5      | 0.25     | 2.1      | 155      | 11      | 0.05    | 0.05     | 0.21     | 17.1     | 0.5      | 1.03     |
| SA5111908 | 6.1      | 0.8      | 0.59     | 0.5      | 13.9       | 0.5      | 0.25     | 3.9      | 226      | 15      | 0.03    | 0.05     | 0.27     | 8.6      | 0.5      | 1.18     |
| SA5111909 | 4.6      | 0.05     | 0.56     | 0.5      | 11.8       | 0.5      | 0.25     | 3.7      | 149      | 13      | 0.06    | 0.1      | 0.30     | 6.0      | 0.5      | 1.09     |
| SA5111910 | 9.6      | 0.05     | 0.37     | 0.5      | 14.7       | 0.5      | 0.25     | 5.0      | 214      | 28      | 0.03    | 0.05     | 0.20     | 20.2     | 0.5      | 1.20     |
| SA5111911 | 4.8      | 0.05     | 0.56     | 0.5      | 13.8       | 0.5      | 0.25     | 5.2      | 263      | 23      | 0.03    | 0.05     | 0.17     | 11.0     | 0.5      | 1.00     |
| SA5111912 | 1.8      | 0.1      | 0.10     | 0.5      | 19.57      | 0.5      | 0.25     | 3.3      | 356      | 9       | 0.005   | 0.05     | 0.07     | 1.3      | 0.5      | 0.49     |
| SA5111913 | 3.4      | 2.1      | 0.22     | 0.5      | 12.37      | 0.5      | 0.25     | 3.4      | 178      | 13      | 0.03    | 0.05     | 0.15     | 3.6      | 0.5      | 0.94     |
| SA5111914 | 4.6      | 0.1      | 0.47     | 0.5      | 13.5       | 0.5      | 0.25     | 3.1      | 186      | 21      | 0.02    | 0.05     | 0.15     | 9.7      | 0.5      | 0.97     |
| SA5111915 | 6.7      | 0.2      | 0.42     | 0.5      | 16.4       | 0.5      | 0.25     | 5.3      | 253      | 19      | 0.05    | 0.05     | 0.19     | 8.3      | 0.5      | 1.19     |
| SA5111916 | 5.5      | 0.2      | 0.47     | 0.5      | 19.6       | 0.5      | 0.25     | 2.9      | 328      | 53      | 0.19    | 0.3      | 0.31     | 11.1     | 0.5      | 1.94     |
| SA5111917 | 6.3      | 0.2      | 0.45     | 0.5      | 18.7       | 0.5      | 0.25     | 2.5      | 246      | 40      | 0.14    | 0.3      | 0.33     | 14.9     | 0.5      | 1.65     |
| SA5111918 | 3.4      | 3.9      | 0.42     | 0.5      | 16.1       | 0.5      | 0.25     | 3.5      | 273      | 28      | 0.05    | 0.2      | 0.20     | 7.0      | 0.5      | 1.06     |
| SA5111919 | 5.4      | 0.7      | 0.54     | 0.5      | 17.5       | 0.5      | 0.25     | 4.0      | 196      | 40      | 0.18    | 0.2      | 0.35     | 14.9     | 0.5      | 1.66     |
| SA5111920 | 3.4      | 0.2      | 0.43     | 0.5      | 19         | 0.5      | 0.25     | 5.4      | 316      | 29      | 0.11    | 0.2      | 0.28     | 12.0     | 0.5      | 1.59     |
| SA5111921 | 3.3      | 1.3      | 0.43     | 0.5      | 15.9       | 0.5      | 0.25     | 4.7      | 124      | 34      | 0.09    | 0.1      | 0.34     | 0.8      | 0.5      | 1.42     |
| SA5111922 | 3.8      | 0.4      | 0.45     | 0.5      | 20         | 0.5      | 0.8      | 2.9      | 283      | 20      | 0.10    | 0.1      | 0.27     | 9.8      | 0.5      | 1.48     |
| SA5111923 | 4.5      | 0.1      | 0.50     | 0.5      | 20.6       | 0.5      | 0.6      | 2.3      | 357      | 19      | 0.13    | 0.05     | 0.33     | 10.9     | 0.5      | 1.70     |
| SA5111924 | 11.1     | 0.2      | 0.71     | 0.5      | 31.7       | 0.5      | 0.8      | 3.1      | 605      | 27      | 0.16    | 0.4      | 0.45     | 15.3     | 0.5      | 2.22     |
| SA5111925 | 11.5     | 0.9      | 0.58     | 0.5      | 21.1       | 0.5      | 0.25     | 3.7      | 367      | 34      | 0.23    | 0.2      | 0.43     | 25.1     | 0.5      | 1.79     |
| SA5111926 | 4.5      | 0.1      | 0.60     | 0.5      | 23.3       | 0.5      | 0.25     | 4.4      | 432      | 16      | 0.17    | 0.05     | 0.33     | 8.3      | 0.5      | 1.48     |
| SA5111927 | 10.8     | 0.2      | 0.64     | 0.5      | 18.1       | 0.5      | 0.25     | 2.9      | 226      | 37      | 0.40    | 0.3      | 0.34     | 18.2     | 0.5      | 1.52     |
| SA5111928 | 2.8      | 0.05     | 0.39     | 0.5      | 13.11      | 0.5      | 0.25     | 3.0      | 181      | 13      | 0.05    | 0.05     | 0.18     | 5.9      | 0.5      | 1.01     |
| SA5111929 | 4.2      | 0.2      | 0.39     | 0.5      | 15         | 0.5      | 0.25     | 3.5      | 207      | 7       | 0.09    | 0.05     | 0.22     | 7.1      | 0.5      | 1.14     |
| SA5111930 | 1.8      | 0.1      | 0.21     | 0.5      | 16.4       | 0.5      | 0.25     | 3.3      | 147      | 5       | 0.02    | 0.05     | 0.13     | 1.8      | 0.5      | 0.73     |
| SA5111931 | 2.1      | 0.05     | 0.23     | 0.5      | 13.7       | 0.5      | 0.25     | 4.3      | 154      | 1       | 0.06    | 0.05     | 0.11     | 1.8      | 0.5      | 0.78     |
| SA5111932 | 3.6      | 0.1      | 0.25     | 0.5      | 16.2       | 0.5      | 0.25     | 6.6      | 194      | 6       | 0.09    | 0.05     | 0.15     | 2.1      | 0.5      | 0.76     |
| SA5111933 | 4.4      | 0.05     | 0.44     | 0.5      | 20         | 0.5      | 0.25     | 5.6      | 403      | 6       | 0.01    | 0.05     | 0.22     | 4.9      | 0.5      | 1.14     |
| SA5111934 | 3.7      | 0.1      | 0.48     | 0.5      | 17.4       | 0.5      | 0.25     | 5.1      | 410      | 9       | 0.03    | 0.05     | 0.23     | 6.7      | 0.5      | 1.23     |
| SA5111935 | 3.8      | 0.1      | 0.43     | 0.5      | 12.4       | 0.5      | 0.25     | 2.6      | 182      | 8       | 0.03    | 0.05     | 0.19     | 7.8      | 0.5      | 0.95     |
| SA5111936 | 4.2      | 0.1      | 0.36     | 0.5      | 14.8       | 0.5      | 0.25     | 2.9      | 274      | 1       | 0.03    | 0.05     | 0.19     | 5.5      | 0.5      | 1.05     |
| SA5111937 | 2.1      | 0.1      | 0.21     | 0.5      | 11.1       | 0.5      | 0.25     | 3.7      | 317      | 4       | 0.01    | 0.05     | 0.10     | 3.3      | 0.5      | 0.60     |
| SA5111938 | 1.7      | 0.4      | 0.12     | 0.5      | 17.8       | 0.5      | 5.1      | 4.8      | 712      | 34      | 0.17    | 0.05     | 0.06     | 0.7      | 0.5      | 0.98     |
| SA5111939 | 3.9      | 0.1      | 0.34     | 0.5      | 13.6       | 0.5      | 0.25     | 3.6      | 172      | 14      | 0.04    | 0.1      | 0.23     | 6.8      | 0.5      | 1.06     |
| SA5111940 | 3.2      | 0.05     | 0.68     | 0.5      | 12.4       | 0.5      | 0.25     | 2.8      | 318      | 14      | 0.03    | 0.05     | 0.17     | 8.3      | 0.5      | 0.89     |
| SA5111941 | 5.0      | 0.1      | 0.61     | 0.5      | 16.3       | 0.5      | 0.25     | 2.4      | 445      | 16      | 0.04    | 0.05     | 0.21     | 10.4     | 0.5      | 1.11     |
| SA5111942 | 0.4      | 0.05     | 0.05     | 0.5      | 17         | 0.5      | 0.25     | 1.9      | 53       | 19      | 0.005   | 0.05     | 0.05     | 0.25     | 0.5      | 0.54     |
| SA5111943 | 4.9      | 0.1      | 0.50     | 0.5      | 12         | 0.5      | 0.25     | 2.5      | 175      | 7       | 0.04    | 0.05     | 0.16     | 11.6     | 0.5      | 0.86     |
| SA5111944 | 3.0      | 0.1      | 0.20     | 0.5      | 15.7       | 0.5      | 0.25     | 0.25     | 147      | 16      | 0.02    | 0.05     | 0.13     | 1.7      | 0.5      | 0.84     |
| SA5111945 | 3.1      | 0.1      | 0.15     | 0.5      | 16.3       | 0.5      | 0.25     | 0.25     | 107      | 7       | 0.01    | 0.05     | 0.09     | 1.5      | 0.5      | 0.70     |
| SA5111946 | 9.9      | 0.1      | 0.77     | 0.5      | 20         | 0.5      | 0.25     | 0.25     | 350      | 13      | 0.20    | 0.2      | 0.40     | 20.7     | 0.5      | 1.72     |
| SA5111947 | 9.5      | 0.8      | 0.81     | 0.5      | 24.5       | 0.5      | 0.25     | 0.25     | 627      | 35      | 0.20    | 0.3      | 0.43     | 24.4     | 0.5      | 2.05     |

## Open File 013A/0089 - Appendix 1

| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5111948 | 19.9     | 0.1      | 1.06     | 0.5      | 25.2       | 0.5      | 0.25     | 0.25     | 735      | 50      | 0.73    | 0.3      | 0.52     | 28.3     | 0.5      | 1.92     |
| SA5111949 | 10.8     | 0.1      | 0.73     | 0.5      | 17.8       | 0.5      | 0.25     | 0.25     | 171      | 37      | 0.37    | 0.2      | 0.33     | 21.5     | 0.5      | 1.57     |
| SA5111950 | 3.1      | 0.05     | 0.20     | 0.5      | 16         | 0.5      | 0.25     | 0.25     | 121      | 8       | 0.02    | 0.05     | 0.10     | 2.0      | 0.5      | 0.69     |
| SA5111951 | 11.1     | 0.1      | 0.70     | 0.5      | 19.5       | 0.5      | 0.25     | 0.25     | 270      | 33      | 0.32    | 0.05     | 0.34     | 24.0     | 0.5      | 1.60     |
| SA5111952 | 7.6      | 0.1      | 0.61     | 0.5      | 17         | 0.5      | 0.25     | 4.0      | 184      | 30      | 0.25    | 0.05     | 0.32     | 18.7     | 0.5      | 1.58     |
| SA5111953 | 5.4      | 0.1      | 0.61     | 0.5      | 19.5       | 0.5      | 0.25     | 1.5      | 280      | 28      | 0.16    | 0.05     | 0.30     | 16.2     | 0.5      | 1.61     |
| SA5111954 | 6.2      | 0.1      | 0.70     | 0.5      | 21.9       | 0.5      | 0.25     | 2.5      | 418      | 22      | 0.11    | 0.2      | 0.36     | 12.9     | 0.5      | 1.61     |
| SA5111955 | 6.2      | 0.1      | 0.61     | 0.5      | 16.5       | 0.5      | 0.25     | 1.6      | 152      | 27      | 0.19    | 0.05     | 0.31     | 12.5     | 0.5      | 1.53     |
| SA5111956 | 7.8      | 0.1      | 0.72     | 0.5      | 19.7       | 0.5      | 0.25     | 0.25     | 455      | 34      | 0.28    | 0.05     | 0.45     | 13.4     | 0.5      | 1.67     |
| SA5111957 | 5.5      | 0.1      | 0.51     | 0.5      | 19.2       | 0.5      | 0.25     | 2.4      | 313      | 26      | 0.16    | 0.05     | 0.33     | 9.6      | 0.5      | 1.53     |
| SA5111958 | 4.5      | 0.1      | 0.43     | 0.5      | 13         | 0.5      | 0.25     | 0.25     | 101      | 30      | 0.10    | 0.05     | 0.27     | 12.8     | 0.5      | 1.31     |
| SA5111959 | 4.3      | 0.1      | 0.55     | 0.5      | 12.7       | 0.5      | 0.25     | 0.25     | 77       | 21      | 0.09    | 0.05     | 0.24     | 13.1     | 0.5      | 1.25     |
| SA5111960 | 4.5      | 0.1      | 0.52     | 0.5      | 19.9       | 0.5      | 0.25     | 0.9      | 351      | 17      | 0.05    | 0.05     | 0.26     | 7.5      | 0.5      | 1.34     |
| SA5111961 | 3.8      | 0.05     | 0.57     | 0.5      | 12.9       | 0.5      | 0.25     | 0.25     | 206      | 20      | 0.03    | 0.05     | 0.23     | 6.8      | 0.5      | 1.04     |
| SA5111962 | 1.7      | 0.1      | 0.21     | 0.5      | 13.2       | 0.5      | 0.25     | 0.25     | 188      | 10      | 0.03    | 0.05     | 0.12     | 1.5      | 0.5      | 0.82     |
| SA5111963 | 4.1      | 0.1      | 0.46     | 0.5      | 15.5       | 0.5      | 0.25     | 1.7      | 289      | 13      | 0.04    | 0.05     | 0.22     | 8.4      | 0.5      | 1.20     |
| SA5111964 | 2.1      | 0.05     | 0.51     | 0.5      | 10         | 0.5      | 0.25     | 1.7      | 177      | 19      | 0.03    | 0.05     | 0.15     | 6.1      | 0.5      | 0.86     |
| SA5111965 | 6.9      | 0.1      | 0.52     | 0.5      | 21.9       | 0.5      | 0.25     | 0.25     | 427      | 18      | 0.07    | 0.05     | 0.27     | 6.5      | 0.5      | 1.27     |
| SA5111966 | 4.7      | 0.1      | 0.36     | 0.5      | 14.2       | 0.5      | 0.25     | 0.6      | 281      | 13      | 0.06    | 0.05     | 0.17     | 5.6      | 0.5      | 1.02     |
| SA5111967 | 3.4      | 0.7      | 0.50     | 0.5      | 11.8       | 0.5      | 0.25     | 0.25     | 520      | 19      | 0.08    | 0.05     | 0.13     | 6.8      | 0.5      | 0.71     |
| SA5111968 | 0.5      | 0.5      | 0.04     | 0.5      | 12.6       | 0.5      | 0.25     | 13.3     | 51       | 6       | 0.01    | 0.05     | 0.03     | 0.25     | 0.5      | 0.53     |
| SA5111969 | 1.3      | 2.6      | 0.13     | 0.5      | 12.5       | 0.5      | 0.25     | 0.25     | 105      | 2       | 0.04    | 0.05     | 0.08     | 0.8      | 0.5      | 0.64     |
| SA5111970 | 0.7      | 3.8      | 0.17     | 0.5      | 13.2       | 0.5      | 0.25     | 0.25     | 189      | 6       | 0.07    | 0.05     | 0.08     | 0.8      | 0.5      | 0.66     |
| SA5111971 | 6.6      | 0.6      | 0.77     | 0.5      | 13.4       | 0.5      | 0.25     | 0.5      | 233      | 29      | 0.17    | 0.05     | 0.28     | 6.7      | 0.5      | 1.22     |
| SA5111972 | 6.3      | 0.1      | 0.74     | 0.5      | 12.8       | 0.5      | 0.25     | 0.25     | 164      | 22      | 0.11    | 0.2      | 0.27     | 4.9      | 0.5      | 1.14     |
| SA5111973 | 5.4      | 1.8      | 0.44     | 0.5      | 12.9       | 0.5      | 0.25     | 0.6      | 155      | 15      | 0.09    | 0.05     | 0.21     | 3.1      | 0.5      | 1.03     |
| SA5111974 | 4.1      | 0.6      | 0.62     | 0.5      | 12         | 0.5      | 0.25     | 0.7      | 127      | 27      | 0.08    | 0.05     | 0.26     | 2.2      | 0.5      | 0.96     |
| SA5111975 | 5.1      | 0.2      | 0.65     | 0.5      | 11.3       | 0.5      | 0.25     | 0.6      | 147      | 35      | 0.10    | 0.05     | 0.26     | 7.1      | 0.5      | 0.99     |
| SA5111976 | 6.6      | 0.2      | 0.74     | 0.5      | 11.7       | 0.5      | 0.25     | 0.25     | 216      | 38      | 0.12    | 0.05     | 0.23     | 7.1      | 0.5      | 1.01     |
| SA5111977 | 0.9      | 0.1      | 0.11     | 0.5      | 12         | 0.5      | 0.25     | 0.25     | 95       | 15      | 0.03    | 0.05     | 0.06     | 3.1      | 0.5      | 0.62     |
| SA5111978 | 2.3      | 0.2      | 0.54     | 0.5      | 10.9       | 0.5      | 0.25     | 0.25     | 179      | 26      | 0.06    | 0.05     | 0.15     | 6.3      | 0.5      | 0.88     |
| SA5111979 | 3.3      | 0.1      | 0.27     | 0.5      | 9.7        | 0.5      | 0.25     | 0.25     | 141      | 27      | 0.05    | 0.1      | 0.10     | 6.6      | 0.5      | 0.72     |
| SA5111980 | 11.7     | 0.1      | 0.85     | 0.5      | 17.7       | 0.5      | 0.25     | 0.25     | 759      | 36      | 0.02    | 0.1      | 0.25     | 12.4     | 0.5      | 1.03     |
| SA5111981 | 7.7      | 0.3      | 0.70     | 0.5      | 13.2       | 0.5      | 0.25     | 0.25     | 320      | 39      | 0.05    | 0.1      | 0.23     | 7.6      | 0.5      | 1.05     |
| SA5111982 | 5.2      | 0.1      | 0.50     | 0.5      | 11.4       | 0.5      | 0.25     | 4.4      | 182      | 36      | 0.10    | 0.05     | 0.18     | 4.0      | 0.5      | 1.09     |
| SA5111983 | 5.0      | 0.6      | 0.65     | 0.5      | 11.8       | 0.5      | 0.25     | 0.25     | 30       | 33      | 0.08    | 0.05     | 0.25     | 3.5      | 0.5      | 0.99     |
| SA5111984 | 4.5      | 1.8      | 0.31     | 0.5      | 12.2       | 0.5      | 0.25     | 5.7      | 182      | 16      | 0.05    | 0.05     | 0.16     | 4.0      | 0.5      | 0.85     |
| SA5111985 | 5.4      | 0.1      | 0.84     | 0.5      | 13.44      | 0.5      | 0.25     | 5.4      | 60       | 34      | 0.15    | 0.2      | 0.33     | 2.2      | 0.5      | 1.09     |
| SA5111986 | 5.1      | 0.7      | 0.53     | 0.5      | 11.9       | 0.5      | 0.25     | 1.3      | 117      | 25      | 0.09    | 0.05     | 0.25     | 2.1      | 0.5      | 1.08     |
| SA5111987 | 5.5      | 0.1      | 0.99     | 0.5      | 15.2       | 0.5      | 0.25     | 1.2      | 85       | 37      | 0.16    | 0.1      | 0.39     | 1.6      | 0.5      | 1.15     |
| SA5111988 | 5.8      | 0.1      | 0.60     | 0.5      | 11.1       | 0.5      | 0.25     | 0.25     | 175      | 25      | 0.07    | 0.05     | 0.23     | 2.8      | 0.5      | 0.91     |
| SA5111989 | 4.0      | 2.1      | 0.43     | 0.5      | 10.7       | 0.5      | 0.25     | 6.1      | 134      | 19      | 0.08    | 0.3      | 0.15     | 7.7      | 0.5      | 0.86     |
| SA5111990 | 5.2      | 0.9      | 0.63     | 0.5      | 11.7       | 0.5      | 0.25     | 0.25     | 471      | 23      | 0.07    | 0.05     | 0.24     | 7.7      | 0.5      | 0.90     |
| SA5111991 | 1.7      | 0.1      | 0.14     | 0.5      | 14.3       | 0.5      | 0.25     | 5.1      | 258      | 9       | 0.04    | 0.05     | 0.09     | 3.7      | 0.5      | 0.60     |
| SA5111992 | 5.6      | 1.1      | 0.59     | 0.5      | 12         | 0.5      | 0.25     | 0.25     | 200      | 26      | 0.07    | 0.05     | 0.20     | 6.2      | 0.5      | 0.97     |
| SA5111993 | 0.4      | 0.05     | 0.11     | 0.5      | 18.5       | 0.5      | 0.25     | 0.25     | 192      | 14      | 0.05    | 0.05     | 0.06     | 2.0      | 0.5      | 0.59     |
| SA5111994 | 1.3      | 0.05     | 0.09     | 0.5      | 18.8       | 0.5      | 0.25     | 0.25     | 129      | 10      | 0.01    | 0.05     | 0.05     | 2.8      | 0.5      | 0.43     |
| SA5111995 | 6.6      | 0.2      | 0.82     | 0.5      | 14.6       | 0.5      | 0.25     | 5.4      | 429      | 36      | 0.02    | 0.05     | 0.28     | 6.4      | 0.5      | 1.06     |
| SA5111996 | 5.1      | 0.2      | 0.81     | 0.5      | 13.6       | 0.5      | 0.25     | 0.25     | 53       | 31      | 0.12    | 0.05     | 0.32     | 3.0      | 0.5      | 1.06     |
| SA5111997 | 7.5      | 0.05     | 0.75     | 0.5      | 13         | 0.5      | 0.25     | 0.25     | 342      | 35      | 0.06    | 0.05     | 0.27     | 6.9      | 0.5      | 1.10     |
| SA5111998 | 0.3      | 0.1      | 0.06     | 0.5      | 14.2       | 0.5      | 0.25     | 0.25     | 22       | 8       | 0.005   | 0.05     | 0.03     | 0.9      | 0.5      | 0.30     |
| SA5111999 | 6.7      | 0.05     | 0.84     | 0.5      | 13.9       | 0.5      | 0.25     | 0.25     | 415      | 32      | 0.08    | 0.05     | 0.31     | 7.7      | 0.5      | 1.08     |
| SA5112000 | 7.1      | 0.05     | 0.51     | 0.5      | 8.34       | 0.5      | 0.25     | 0.25     | 380      | 27      | 0.06    | 0.05     | 0.16     | 4.9      | 0.5      | 0.94     |
| SA5112001 | 6.8      | 0.3      | 1.05     | 0.5      | 15.8       | 0.5      | 0.25     | 0.25     | 419      | 52      | 0.10    | 0.05     | 0.40     | 5.2      | 0.5      | 1.31     |
| SA5112002 | 0.6      | 0.05     | 0.06     | 0.5      | 13.1       | 0.5      | 0.25     | 0.25     | 51       | 13      | 0.02    | 0.05     | 0.05     | 0.5      | 0.5      | 0.42     |
| SA5112003 | 5.5      | 0.05     | 0.71     | 0.5      | 14.4       | 0.5      | 0.25     | 0.25     | 1229     | 24      | 0.09    | 0.05     | 0.28     | 10.1     | 0.5      | 1.20     |
| SA5112004 | 1.8      | 0.05     | 0.23     | 0.5      | 19.8       | 0.5      | 0.25     | 0.25     | 189      | 17      | 0.05    | 0.05     | 0.13     | 1.5      | 0.5      | 0.66     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112005 | 0.7      | 0.05     | 0.17     | 0.5      | 27.7       | 0.5      | 0.25     | 0.25     | 361      | 10      | 0.04    | 0.05     | 0.13     | 0.25     | 0.5      | 0.59     |
| SA5112006 | 0.2      | 0.05     | 0.06     | 0.5      | 18.6       | 0.5      | 0.25     | 0.25     | 119      | 12      | 0.01    | 0.05     | 0.06     | 1.0      | 0.5      | 0.47     |
| SA5112007 | 0.3      | 0.05     | 0.07     | 0.5      | 11.9       | 0.5      | 0.25     | 0.25     | 58       | 8       | 0.01    | 0.05     | 0.04     | 2.0      | 0.5      | 0.48     |
| SA5112008 | 5.7      | 0.05     | 0.67     | 0.5      | 15         | 0.5      | 0.25     | 0.25     | 839      | 24      | 0.02    | 0.05     | 0.26     | 8.8      | 0.5      | 1.06     |
| SA5112009 | 0.1      | 0.05     | 0.06     | 0.5      | 25.7       | 0.5      | 0.25     | 0.25     | 173      | 14      | 0.01    | 0.05     | 0.06     | 0.25     | 0.5      | 0.47     |
| SA5112010 | 0.1      | 0.05     | 0.07     | 0.5      | 17.6       | 0.5      | 0.25     | 0.25     | 120      | 9       | 0.02    | 0.05     | 0.07     | 1.4      | 0.5      | 0.48     |
| SA5112011 | 3.0      | 0.05     | 0.58     | 0.5      | 12.9       | 0.5      | 0.25     | 0.25     | 819      | 15      | 0.05    | 0.05     | 0.22     | 11.5     | 0.5      | 0.64     |
| SA5112012 | 1.2      | 0.05     | 0.17     | 0.5      | 25.7       | 0.5      | 0.25     | 0.25     | 124      | 4       | 0.07    | 0.05     | 0.10     | 1.4      | 0.5      | 0.41     |
| SA5112013 | 0.1      | 0.05     | 0.09     | 0.5      | 24.2       | 0.5      | 0.25     | 0.25     | 81       | 8       | 0.01    | 0.05     | 0.07     | 2.2      | 0.5      | 0.39     |
| SA5112014 | 8.8      | 0.05     | 0.98     | 0.5      | 17.7       | 0.5      | 0.25     | 0.25     | 732      | 35      | 0.05    | 0.05     | 0.33     | 9.4      | 0.5      | 1.29     |
| SA5112015 | 0.4      | 0.05     | 0.10     | 0.5      | 19         | 0.5      | 0.25     | 0.25     | 124      | 12      | 0.02    | 0.05     | 0.07     | 1.1      | 0.5      | 0.41     |
| SA5112016 | 0.4      | 0.05     | 0.08     | 0.5      | 12.5       | 0.5      | 0.25     | 0.25     | 63       | 7       | 0.05    | 0.05     | 0.03     | 0.5      | 0.5      | 0.39     |
| SA5112017 | 1.0      | 0.05     | 0.11     | 0.5      | 20.8       | 0.5      | 0.25     | 0.25     | 73       | 10      | 0.04    | 0.05     | 0.05     | 0.8      | 0.5      | 0.31     |
| SA5112018 | 9.6      | 0.3      | 1.06     | 0.5      | 14.4       | 0.5      | 0.25     | 0.25     | 910      | 36      | 0.03    | 0.05     | 0.34     | 6.4      | 0.5      | 1.39     |
| SA5112019 | 0.2      | 0.1      | 0.07     | 0.5      | 22.4       | 0.5      | 0.25     | 0.25     | 148      | 5       | 0.01    | 0.05     | 0.04     | 0.25     | 0.5      | 0.33     |
| SA5112020 | 0.4      | 0.05     | 0.07     | 0.5      | 13.8       | 0.5      | 0.25     | 0.25     | 39       | 19      | 0.03    | 0.05     | 0.04     | 0.7      | 0.5      | 0.72     |
| SA5112021 | 3.8      | 0.1      | 0.19     | 0.5      | 26.6       | 0.5      | 0.25     | 0.25     | 200      | 18      | 0.09    | 0.05     | 0.13     | 3.7      | 0.5      | 1.09     |
| SA5112022 | 0.1      | 0.05     | 0.06     | 0.5      | 9.28       | 0.5      | 0.25     | 0.25     | 25       | 10      | 0.02    | 0.05     | 0.02     | 0.8      | 0.5      | 0.33     |
| SA5112023 | 0.3      | 0.05     | 0.08     | 0.5      | 14.6       | 0.5      | 0.25     | 0.25     | 103      | 16      | 0.04    | 0.05     | 0.03     | 0.8      | 0.5      | 0.36     |
| SA5112024 | 1.0      | 0.05     | 0.14     | 0.5      | 19.1       | 0.5      | 0.25     | 0.25     | 185      | 13      | 0.01    | 0.05     | 0.07     | 0.8      | 0.5      | 0.45     |
| SA5112025 | 0.4      | 0.2      | 0.15     | 0.5      | 14.8       | 0.5      | 0.25     | 2.8      | 352      | 18      | 0.16    | 0.05     | 0.11     | 3.4      | 0.5      | 0.39     |
| SA5112026 | 1.7      | 0.2      | 0.21     | 0.5      | 21.8       | 0.5      | 0.25     | 4.7      | 316      | 20      | 0.05    | 0.05     | 0.09     | 0.25     | 0.5      | 0.50     |
| SA5112027 | 0.8      | 0.05     | 0.33     | 0.5      | 15         | 0.5      | 0.25     | 2.5      | 345      | 19      | 0.01    | 0.05     | 0.09     | 5.5      | 0.5      | 0.57     |
| SA5112028 | 0.2      | 0.05     | 0.05     | 0.5      | 18.7       | 0.5      | 0.25     | 0.25     | 64       | 20      | 0.005   | 0.05     | 0.02     | 0.25     | 0.5      | 0.52     |
| SA5112029 | 1.0      | 0.1      | 0.14     | 0.5      | 18.2       | 0.5      | 0.25     | 1.3      | 71       | 12      | 0.02    | 0.05     | 0.09     | 1.4      | 0.5      | 0.47     |
| SA5112030 | 0.2      | 0.05     | 0.06     | 0.5      | 21.6       | 0.5      | 0.25     | 1.8      | 110      | 16      | 0.02    | 0.05     | 0.04     | 0.25     | 0.5      | 0.47     |
| SA5112031 | 0.6      | 0.2      | 0.10     | 0.5      | 22.5       | 0.5      | 0.25     | 1.7      | 83       | 12      | 0.04    | 0.05     | 0.04     | 0.8      | 0.5      | 0.59     |
| SA5112032 | 70.0     | 0.2      | 1.94     | 0.5      | 102.7      | 0.5      | 1.5      | 0.25     | 6079     | 2       | 0.76    | 0.3      | 0.44     | 28.1     | 0.5      | 1.19     |
| SA5112033 | 6.9      | 0.05     | 0.60     | 0.5      | 12.12      | 0.5      | 0.8      | 4.2      | 422      | 31      | 0.10    | 0.2      | 0.24     | 12.3     | 0.5      | 1.04     |
| SA5112034 | 2.2      | 0.05     | 0.24     | 0.5      | 20.3       | 0.5      | 1.2      | 0.25     | 439      | 18      | 0.05    | 0.05     | 0.08     | 0.6      | 0.5      | 0.52     |
| SA5112035 | 0.6      | 0.1      | 0.11     | 0.5      | 12.7       | 0.5      | 0.25     | 1.5      | 69       | 12      | 0.02    | 0.05     | 0.04     | 1.2      | 0.5      | 0.39     |
| SA5112036 | 3.0      | 0.05     | 0.33     | 0.5      | 8.58       | 0.5      | 0.5      | 1.4      | 50       | 29      | 0.08    | 0.05     | 0.11     | 2.7      | 0.5      | 0.79     |
| SA5112037 | 1.8      | 0.05     | 0.08     | 0.5      | 17.4       | 0.5      | 0.6      | 1.6      | 88       | 12      | 0.01    | 0.05     | 0.04     | 1.4      | 0.5      | 0.44     |
| SA5112038 | 18.0     | 0.3      | 0.90     | 0.5      | 12.6       | 0.5      | 0.7      | 3.4      | 45       | 41      | 0.13    | 0.2      | 0.25     | 1.2      | 0.5      | 1.06     |
| SA5112039 | 23.8     | 0.2      | 1.06     | 0.5      | 14.6       | 0.5      | 1.2      | 2.0      | 307      | 42      | 0.13    | 0.2      | 0.27     | 4.2      | 3        | 1.13     |
| SA5112040 | 2.3      | 0.05     | 0.18     | 0.5      | 9.86       | 0.5      | 0.7      | 3.2      | 90       | 17      | 0.02    | 0.1      | 0.10     | 11.4     | 0.5      | 0.64     |
| SA5112041 | 1.8      | 0.05     | 0.08     | 0.5      | 15.2       | 0.5      | 0.25     | 10.4     | 108      | 19      | 0.02    | 0.05     | 0.03     | 0.25     | 0.5      | 0.36     |
| SA5112042 | 0.7      | 0.05     | 0.05     | 0.5      | 12.7       | 0.5      | 0.7      | 2.9      | 44       | 15      | 0.02    | 0.05     | 0.02     | 0.6      | 0.5      | 0.37     |
| SA5112043 | 1.1      | 0.05     | 0.10     | 0.5      | 13.4       | 0.5      | 0.8      | 1.8      | 42       | 14      | 0.03    | 0.05     | 0.05     | 0.9      | 0.5      | 0.46     |
| SA5112044 | -9       | -9       | -9       | -9       | 17.6       | -9       | -9       | -9       | -9       | 17      | -9      | -9       | -9       | -9       | -9       | -9       |
| SA5112045 | 1.6      | 0.6      | 0.25     | 0.5      | 19.2       | 0.5      | 0.7      | 5.2      | 242      | 15      | 0.03    | 0.2      | 0.12     | 4.8      | 0.5      | 0.57     |
| SA5112046 | 1.5      | 0.1      | 0.17     | 0.5      | 17.41      | 0.5      | 0.7      | 4.5      | 122      | 13      | 0.005   | 0.1      | 0.07     | 1.5      | 0.5      | 0.46     |
| SA5112047 | 0.8      | 0.05     | 0.14     | 0.5      | 19.7       | 0.5      | 0.25     | 1.8      | 123      | 22      | 0.01    | 0.05     | 0.07     | 0.9      | 0.5      | 0.37     |
| SA5112048 | 1.6      | 0.1      | 0.09     | 0.5      | 17.6       | 0.5      | 1.0      | 2.8      | 121      | 14      | 0.03    | 0.05     | 0.04     | 1.3      | 2        | 0.39     |
| SA5112049 | 0.6      | 0.2      | 0.09     | 0.5      | 21.4       | 0.5      | 0.25     | 3.8      | 75       | 18      | 0.02    | 0.2      | 0.05     | 1.1      | 0.5      | 0.49     |
| SA5112050 | 0.4      | 0.05     | 0.06     | 0.5      | 14.1       | 0.5      | 0.25     | 3.9      | 44       | 13      | 0.005   | 0.05     | 0.04     | 0.9      | 0.5      | 0.45     |
| SA5112051 | 0.4      | 0.05     | 0.08     | 0.5      | 22.3       | 0.5      | 0.25     | 2.7      | 140      | 12      | 0.005   | 0.05     | 0.06     | 1.1      | 0.5      | 0.47     |
| SA5112052 | 8.9      | 0.05     | 1.18     | 0.5      | 14.06      | 0.5      | 0.6      | 1.3      | 598      | 37      | 0.08    | 0.2      | 0.37     | 7.9      | 0.5      | 1.20     |
| SA5112053 | 0.4      | 0.05     | 0.07     | 0.5      | 10.12      | 0.5      | 0.5      | 2.8      | 31       | 11      | 0.02    | 0.3      | 0.04     | 1.4      | 0.5      | 0.36     |
| SA5112054 | 1.1      | 0.05     | 0.21     | 0.5      | 9.17       | 0.5      | 0.7      | 3.4      | 265      | 21      | 0.005   | 0.3      | 0.12     | 6.3      | 0.5      | 0.60     |
| SA5112055 | 0.4      | 0.1      | 0.05     | 0.5      | 10.45      | 0.5      | 0.9      | 1.2      | 48       | 16      | 0.01    | 0.05     | 0.04     | 0.25     | 2        | 0.31     |
| SA5112056 | 0.5      | 0.1      | 0.06     | 0.5      | 9.84       | 0.5      | 1.7      | 2.1      | 24       | 14      | 0.02    | 0.05     | 0.04     | 1.3      | 0.5      | 0.38     |
| SA5112057 | 0.6      | 0.1      | 0.07     | 0.5      | 13.9       | 0.5      | 0.6      | 2.4      | 55       | 17      | 0.02    | 0.05     | 0.05     | 0.6      | 0.5      | 0.42     |
| SA5112058 | 1.3      | 0.05     | 0.16     | 0.5      | 16.6       | 0.5      | 0.5      | 4.2      | 157      | 13      | 0.02    | 0.1      | 0.08     | 2.7      | 0.5      | 0.47     |
| SA5112059 | 9.8      | 0.05     | 0.85     | 0.5      | 13.3       | 0.5      | 0.6      | 4.1      | 692      | 31      | 0.12    | 0.05     | 0.29     | 8.0      | 0.5      | 1.22     |
| SA5112060 | 0.9      | 0.05     | 0.10     | 0.5      | 16.3       | 0.5      | 0.25     | 3.8      | 107      | 17      | 0.02    | 0.05     | 0.05     | 1.0      | 0.5      | 0.46     |
| SA5112061 | 0.9      | 0.05     | 0.08     | 0.5      | 11.5       | 0.5      | 0.25     | 10.2     | 38       | 7       | 0.01    | 0.05     | 0.05     | 0.6      | 0.5      | 0.36     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112062 | 7.6      | 0.05     | 0.67     | 0.5      | 12.81      | 0.5      | 0.25     | 10.9     | 511      | 28      | 0.12    | 0.2      | 0.23     | 5.5      | 0.5      | 1.10     |
| SA5112063 | 0.5      | 0.05     | 0.07     | 0.5      | 14.9       | 0.5      | 0.7      | 4.8      | 77       | 9       | 0.005   | 0.05     | 0.08     | 1.3      | 0.5      | 0.43     |
| SA5112064 | 6.7      | 0.1      | 0.62     | 0.5      | 11.54      | 0.5      | 0.8      | 4.1      | 367      | 26      | 0.09    | 0.3      | 0.22     | 5.5      | 2        | 1.15     |
| SA5112065 | 1.4      | 0.1      | 0.13     | 0.5      | 21.4       | 0.5      | 0.8      | 4.2      | 197      | 12      | 0.07    | 0.2      | 0.11     | 2.4      | 0.5      | 0.52     |
| SA5112066 | 0.2      | 0.05     | 0.07     | 0.5      | 14.11      | 0.5      | 0.25     | 4.6      | 77       | 13      | 0.005   | 0.05     | 0.06     | 0.8      | 0.5      | 0.33     |
| SA5112067 | 7.8      | 0.05     | 0.52     | 0.5      | 11.7       | 0.5      | 0.6      | 4.3      | 233      | 25      | 0.01    | 0.05     | 0.22     | 6.8      | 0.5      | 0.77     |
| SA5112068 | 11.5     | 0.05     | 0.64     | 0.5      | 14.9       | 0.5      | 0.7      | 12.1     | 658      | 30      | 0.41    | 0.05     | 0.33     | 3.3      | 0.5      | 1.04     |
| SA5112069 | 1.0      | 0.05     | 0.13     | 0.5      | 15.4       | 0.5      | 0.25     | 4.4      | 68       | 17      | 0.02    | 0.05     | 0.08     | 2.1      | 0.5      | 0.49     |
| SA5112070 | 6.0      | 0.05     | 0.63     | 0.5      | 9.19       | 0.5      | 0.25     | 2.8      | 628      | 23      | 0.04    | 0.05     | 0.25     | 6.5      | 0.5      | 0.76     |
| SA5112071 | 1.5      | 0.05     | 0.07     | 0.5      | 15.9       | 0.5      | 0.25     | 4.0      | 39       | 21      | 0.02    | 0.05     | 0.05     | 1.7      | 0.5      | 0.39     |
| SA5112072 | 2.0      | 0.05     | 0.15     | 0.5      | 20.4       | 0.5      | 1.2      | 2.6      | 187      | 22      | 0.06    | 0.05     | 0.11     | 2.4      | 0.5      | 0.48     |
| SA5112073 | 9.2      | 0.1      | 0.80     | 0.5      | 10         | 0.5      | 0.9      | 0.9      | 525      | 34      | 0.03    | 0.2      | 0.30     | 13.5     | 2        | 0.71     |
| SA5112074 | 2.4      | 0.05     | 0.35     | 0.5      | 9.68       | 0.5      | 0.5      | 0.25     | 1024     | 19      | 0.06    | 0.05     | 0.19     | 9.9      | 0.5      | 0.60     |
| SA5112075 | 1.7      | 0.05     | 0.09     | 0.5      | 19         | 0.5      | 0.25     | 1.0      | 118      | 24      | 0.005   | 0.05     | 0.05     | 1.2      | 0.5      | 0.44     |
| SA5112076 | 2.7      | 0.05     | 0.08     | 0.5      | 16.44      | 0.5      | 0.9      | 2.3      | 369      | 16      | 0.03    | 0.1      | 0.03     | 1.1      | 0.5      | 0.42     |
| SA5112077 | 6.7      | 0.05     | 0.59     | 0.5      | 10.4       | 0.5      | 0.6      | 3.4      | 348      | 30      | 0.16    | 0.05     | 0.34     | 5.8      | 0.5      | 0.85     |
| SA5112078 | 11.1     | 0.05     | 0.90     | 0.5      | 11.3       | 0.5      | 0.25     | 1.6      | 317      | 42      | 0.08    | 0.05     | 0.30     | 3.8      | 0.5      | 0.82     |
| SA5112079 | 5.4      | 0.05     | 0.26     | 0.5      | 10.7       | 0.5      | 0.25     | 3.3      | 192      | 24      | 0.06    | 0.05     | 0.14     | 5.6      | 0.5      | 0.44     |
| SA5112080 | 0.7      | 0.05     | 0.11     | 0.5      | 16.7       | 0.5      | 0.25     | 6.2      | 135      | 22      | 0.005   | 0.05     | 0.07     | 2.5      | 0.5      | 0.39     |
| SA5112081 | 0.8      | 0.05     | 0.11     | 0.5      | 19.4       | 0.5      | 0.25     | 8.5      | 117      | 15      | 0.01    | 0.05     | 0.05     | 1.0      | 0.5      | 0.34     |
| SA5112082 | 0.4      | 0.05     | 0.07     | 0.5      | 12.95      | 0.5      | 0.6      | 5.6      | 39       | 18      | 0.02    | 0.05     | 0.04     | 0.8      | 1        | 0.28     |
| SA5112083 | 0.2      | 0.05     | 0.08     | 0.5      | 9.03       | 0.5      | 1.0      | 2.6      | 37       | 15      | 0.01    | 0.05     | 0.02     | 0.7      | 0.5      | 0.33     |
| SA5112084 | 1.9      | 0.05     | 0.09     | 0.5      | 15.71      | 0.5      | 0.25     | 3.8      | 61       | 16      | 0.005   | 0.05     | 0.05     | 0.6      | 0.5      | 0.32     |
| SA5112085 | 0.6      | 0.05     | 0.10     | 0.5      | 14.3       | 0.5      | 0.25     | 3.9      | 99       | 14      | 0.005   | 0.05     | 0.05     | 0.25     | 0.5      | 0.36     |
| SA5112086 | 0.4      | 0.05     | 0.10     | 0.5      | 18.4       | 0.5      | 0.25     | 4.0      | 294      | 18      | 0.01    | 0.05     | 0.08     | 2.5      | 0.5      | 0.31     |
| SA5112087 | 0.6      | 0.05     | 0.10     | 0.5      | 16.7       | 0.5      | 0.6      | 4.9      | 132      | 6       | 0.005   | 0.05     | 0.05     | 0.8      | 0.5      | 0.35     |
| SA5112088 | 0.3      | 0.05     | 0.07     | 0.5      | 20         | 0.5      | 0.25     | 4.2      | 106      | 13      | 0.005   | 0.05     | 0.04     | 0.7      | 0.5      | 0.44     |
| SA5112089 | 2.1      | 0.05     | 0.09     | 0.5      | 20.4       | 0.5      | 0.25     | 4.5      | 140      | 15      | 0.02    | 0.05     | 0.06     | 2.6      | 0.5      | 0.44     |
| SA5112090 | 0.1      | 0.05     | 0.07     | 0.5      | 16.14      | 0.5      | 0.25     | 4.1      | 63       | 1       | 0.02    | 0.05     | 0.04     | 1.4      | 0.5      | 0.38     |
| SA5112091 | 1.2      | 0.1      | 0.13     | 0.5      | 11.42      | 0.5      | 0.9      | 5.5      | 286      | 14      | 0.005   | 0.2      | 0.09     | 5.5      | 4        | 0.44     |
| SA5112092 | 1.6      | 0.05     | 0.20     | 0.5      | 12.16      | 0.5      | 0.5      | 6.4      | 290      | 15      | 0.01    | 0.2      | 0.09     | 2.3      | 1        | 0.48     |
| SA5112093 | 7.4      | 0.05     | 0.49     | 0.5      | 9.6        | 0.5      | 0.25     | 6.8      | 287      | 21      | 0.05    | 0.2      | 0.18     | 5.0      | 1        | 0.81     |
| SA5112094 | 0.7      | 0.05     | 0.10     | 0.5      | 16.8       | 0.5      | 0.6      | 6.3      | 150      | 17      | 0.005   | 0.05     | 0.07     | 1.7      | 0.5      | 0.36     |
| SA5112095 | 4.5      | 0.05     | 0.50     | 0.5      | 26.6       | 0.5      | 0.6      | 5.9      | 547      | 29      | 0.10    | 0.3      | 0.40     | 4.7      | 0.5      | 2.38     |
| SA5112096 | 5.8      | 0.05     | 0.61     | 0.5      | 21         | 0.5      | 0.6      | 5.6      | 451      | 28      | 0.15    | 0.2      | 0.33     | 6.6      | 0.5      | 1.57     |
| SA5112097 | 10.8     | 0.05     | 0.70     | 0.5      | 22.1       | 0.5      | 0.8      | 5.1      | 758      | 40      | 0.14    | 0.6      | 0.56     | 11.9     | 0.5      | 2.42     |
| SA5112098 | 7.3      | 0.05     | 0.71     | 0.5      | 19.44      | 0.5      | 0.7      | 5.1      | 529      | 30      | 0.02    | 0.4      | 0.30     | 11.4     | 0.5      | 1.52     |
| SA5112099 | 5.8      | 0.05     | 0.57     | 0.5      | 15.07      | 0.5      | 0.25     | 3.7      | 341      | 23      | 0.19    | 0.2      | 0.26     | 11.7     | 0.5      | 1.46     |
| SA5112100 | 0.7      | 0.1      | 0.10     | 0.5      | 8.79       | 0.5      | 0.9      | 4.6      | 46       | 18      | 0.03    | 0.1      | 0.03     | 0.8      | 3        | 0.31     |
| SA5112101 | 0.5      | 0.05     | 0.07     | 0.5      | 10.04      | 0.5      | 0.7      | 4.6      | 24       | 14      | 0.02    | 0.05     | 0.04     | 1.0      | 1        | 0.58     |
| SA5112102 | 7.7      | 0.05     | 0.70     | 0.5      | 17.26      | 0.5      | 0.8      | 5.8      | 352      | 30      | 0.20    | 0.4      | 0.40     | 13.0     | 0.5      | 1.61     |
| SA5112103 | 0.3      | 0.05     | 0.08     | 0.5      | 11.57      | 0.5      | 0.6      | 5.9      | 12       | 10      | 0.05    | 0.05     | 0.08     | 1.2      | 0.5      | 0.63     |
| SA5112104 | 6.0      | 0.05     | 0.72     | 0.5      | 19.8       | 0.5      | 0.6      | 7.3      | 412      | 26      | 0.14    | 0.4      | 0.33     | 5.3      | 0.5      | 1.42     |
| SA5112105 | 5.9      | 0.05     | 0.67     | 0.5      | 16.4       | 0.5      | 0.5      | 7.7      | 331      | 25      | 0.06    | 0.4      | 0.27     | 7.0      | 0.5      | 1.40     |
| SA5112106 | 10.3     | 0.05     | 0.69     | 0.5      | 20.6       | 0.5      | 0.7      | 7.2      | 342      | 35      | 0.18    | 0.3      | 0.34     | 8.2      | 0.5      | 1.57     |
| SA5112107 | 5.3      | 0.05     | 0.58     | 0.5      | 15.91      | 0.5      | 0.25     | 5.8      | 225      | 31      | 0.25    | 0.3      | 0.27     | 6.7      | 0.5      | 1.38     |
| SA5112108 | 9.0      | 0.05     | 0.64     | 0.5      | 19.4       | 0.5      | 0.6      | 6.9      | 336      | 24      | 0.14    | 0.2      | 0.33     | 4.8      | 0.5      | 1.43     |
| SA5112109 | 8.3      | 0.05     | 0.78     | 0.5      | 19.7       | 0.5      | 1.0      | 7.4      | 382      | 35      | 0.45    | 0.2      | 0.40     | 14.8     | 3        | 1.49     |
| SA5112110 | 5.5      | 0.05     | 0.72     | 0.5      | 20.5       | 0.5      | 0.6      | 6.6      | 402      | 23      | 0.09    | 0.3      | 0.32     | 4.9      | 1        | 1.27     |
| SA5112111 | 0.2      | 0.05     | 0.05     | 0.5      | 15.6       | 0.5      | 0.25     | 6.8      | 40       | 15      | 0.01    | 0.1      | 0.04     | 0.25     | 0.5      | 0.50     |
| SA5112112 | 6.1      | 0.05     | 0.64     | 0.5      | 16.9       | 0.5      | 0.7      | 6.3      | 253      | 31      | 0.35    | 0.2      | 0.32     | 7.6      | 0.5      | 1.28     |
| SA5112113 | 10.1     | 0.05     | 0.66     | 0.5      | 17.58      | 0.5      | 1.1      | 10.1     | 315      | 25      | 0.17    | 0.3      | 0.38     | 7.6      | 0.5      | 1.39     |
| SA5112114 | 5.2      | 0.05     | 0.66     | 0.5      | 15.03      | 0.5      | 0.6      | 8.0      | 172      | 24      | 0.15    | 0.3      | 0.29     | 5.2      | 0.5      | 1.22     |
| SA5112115 | 3.6      | 0.05     | 0.55     | 0.5      | 13.66      | 0.5      | 0.5      | 8.2      | 128      | 26      | 0.10    | 0.2      | 0.24     | 7.5      | 0.5      | 1.07     |
| SA5112116 | 6.5      | 0.05     | 0.63     | 0.5      | 21.3       | 0.5      | 0.9      | 8.7      | 463      | 16      | 0.12    | 0.2      | 0.33     | 6.3      | 0.5      | 1.30     |
| SA5112117 | 0.05     | 0.05     | 0.01     | 0.5      | 11.9       | 0.5      | 0.25     | 0.25     | 40       | 12      | 0.005   | 0.05     | 0.01     | 0.25     | 0.5      | 0.34     |
| SA5112118 | 4.9      | 0.1      | 0.56     | 0.5      | 17.5       | 0.5      | 1.0      | 8.0      | 355      | 24      | 0.07    | 0.3      | 0.23     | 7.4      | 3        | 1.09     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112119 | 0.8      | 0.05     | 0.08     | 0.5      | 11.21      | 0.5      | 0.6      | 7.1      | 53       | 13      | 0.06    | 0.1      | 0.04     | 0.9      | 1        | 0.40     |
| SA5112120 | 4.5      | 0.05     | 0.54     | 0.5      | 17.3       | 0.5      | 0.7      | 6.0      | 375      | 21      | 0.05    | 0.2      | 0.25     | 8.0      | 0.5      | 1.13     |
| SA5112121 | 4.3      | 0.05     | 0.49     | 0.5      | 22.1       | 0.5      | 0.6      | 6.7      | 575      | 18      | 0.05    | 0.2      | 0.23     | 8.1      | 0.5      | 1.18     |
| SA5112122 | 4.4      | 0.05     | 0.51     | 0.5      | 17.08      | 0.5      | 0.6      | 6.2      | 434      | 15      | 0.06    | 0.3      | 0.22     | 5.9      | 0.5      | 1.04     |
| SA5112123 | 2.0      | 0.05     | 0.56     | 0.5      | 18.43      | 0.5      | 0.6      | 7.3      | 117      | 4       | 0.10    | 0.1      | 0.21     | 0.6      | 0.5      | 1.38     |
| SA5112124 | 4.5      | 0.05     | 1.26     | 0.5      | 19.8       | 0.5      | 1.2      | 7.5      | 318      | 22      | 0.09    | 0.4      | 0.42     | 6.4      | 0.5      | 1.98     |
| SA5112125 | 3.9      | 0.05     | 0.95     | 0.5      | 18         | 0.5      | 0.6      | 5.3      | 131      | 19      | 0.09    | 0.2      | 0.38     | 6.8      | 0.5      | 1.85     |
| SA5112126 | 4.3      | 0.05     | 1.21     | 0.5      | 18.8       | 0.5      | 0.8      | 3.5      | 228      | 30      | 0.14    | 0.3      | 0.39     | 7.2      | 0.5      | 1.86     |
| SA5112127 | 2.6      | 0.2      | 0.64     | 0.5      | 14.3       | 0.5      | 1.0      | 0.25     | 56       | 30      | 0.08    | 0.2      | 0.39     | 1.3      | 3        | 1.36     |
| SA5112128 | 3.4      | 0.05     | 0.52     | 0.5      | 15.3       | 0.5      | 0.7      | 0.25     | 188      | 53      | 0.04    | 0.3      | 0.28     | 5.4      | 1        | 1.34     |
| SA5112129 | 4.4      | 0.05     | 0.68     | 0.5      | 19.9       | 0.5      | 0.7      | 0.25     | 404      | 54      | 0.11    | 0.3      | 0.30     | 7.0      | 0.5      | 1.61     |
| SA5112130 | 8.3      | 0.05     | 0.89     | 0.5      | 18         | 0.5      | 0.8      | 0.25     | 397      | 48      | 0.04    | 0.4      | 0.42     | 8.2      | 0.5      | 1.59     |
| SA5112131 | 0.4      | 0.05     | 0.08     | 0.5      | 16.1       | 0.5      | 0.25     | 0.25     | 40       | 17      | 0.005   | 0.2      | 0.12     | 1.6      | 0.5      | 0.87     |
| SA5112132 | 3.0      | 0.05     | 0.49     | 0.5      | 17.2       | 0.5      | 0.25     | 0.25     | 276      | 37      | 0.13    | 0.2      | 0.25     | 6.8      | 0.5      | 1.32     |
| SA5112133 | 0.7      | 0.05     | 0.14     | 0.5      | 15.5       | 0.5      | 0.25     | 0.25     | 134      | 17      | 0.02    | 0.05     | 0.10     | 1.0      | 0.5      | 0.83     |
| SA5112134 | 0.2      | 0.05     | 0.07     | 0.5      | 13.43      | 0.5      | 0.5      | 0.6      | 36       | 7       | 0.01    | 0.2      | 0.08     | 1.9      | 0.5      | 0.75     |
| SA5112135 | 6.4      | 0.05     | 0.52     | 0.5      | 17         | 0.5      | 0.25     | 0.25     | 188      | 39      | 0.06    | 0.2      | 0.28     | 8.1      | 0.5      | 1.51     |
| SA5112136 | 0.05     | 0.05     | 0.06     | 0.5      | 11.82      | 0.5      | 1.0      | 0.8      | 18       | 14      | 0.06    | 0.05     | 0.08     | 1.1      | 3        | 0.72     |
| SA5112137 | 1.5      | 0.05     | 0.11     | 0.5      | 26.3       | 0.5      | 0.8      | 0.25     | 98       | 12      | 0.29    | 0.1      | 0.14     | 2.3      | 1        | 0.80     |
| SA5112138 | 6.0      | 0.05     | 0.84     | 0.5      | 22.9       | 0.5      | 0.8      | 0.25     | 361      | 11      | 0.16    | 0.2      | 0.46     | 4.8      | 0.5      | 1.92     |
| SA5112139 | 7.8      | 0.05     | 0.69     | 0.5      | 18.7       | 0.5      | 0.6      | 0.25     | 132      | 45      | 0.12    | 0.3      | 0.41     | 8.2      | 0.5      | 1.85     |
| SA5112140 | 0.1      | 0.05     | 0.15     | 0.5      | 11.77      | 0.5      | 0.25     | 0.25     | 17       | 10      | 0.01    | 0.05     | 0.09     | 1.3      | 0.5      | 0.73     |
| SA5112141 | 3.6      | 0.1      | 0.44     | 0.5      | 18.8       | 0.5      | 1.2      | 0.25     | 2213     | 51      | 0.51    | 0.2      | 0.28     | 6.7      | 0.5      | 0.97     |
| SA5112142 | 5.7      | 0.05     | 0.59     | 0.5      | 17.5       | 0.5      | 0.25     | 0.25     | 163      | 40      | 0.11    | 0.3      | 0.33     | 8.6      | 0.5      | 1.64     |
| SA5112143 | 7.6      | 1.0      | 0.41     | 0.5      | 16.9       | 0.5      | 0.25     | 0.25     | 289      | 43      | 0.08    | 0.1      | 0.22     | 5.5      | 0.5      | 1.23     |
| SA5112144 | 3.9      | 0.05     | 0.50     | 0.5      | 16.3       | 0.5      | 0.25     | 0.25     | 117      | 33      | 0.08    | 0.2      | 0.32     | 8.0      | 0.5      | 1.57     |
| SA5112145 | 4.1      | 0.1      | 0.71     | 0.5      | 21.5       | 0.5      | 1.1      | 2.0      | 458      | 44      | 0.02    | 0.4      | 0.38     | 10.4     | 3        | 1.51     |
| SA5112146 | 2.4      | 0.05     | 0.33     | 0.5      | 17.8       | 0.5      | 0.25     | 1.0      | 279      | 38      | 0.05    | 0.2      | 0.20     | 3.8      | 1        | 1.14     |
| SA5112147 | 16.1     | 0.05     | 0.69     | 0.5      | 24.5       | 0.5      | 0.6      | 1.5      | 710      | 59      | 0.16    | 0.3      | 0.46     | 9.3      | 0.5      | 1.99     |
| SA5112148 | 15.2     | 0.05     | 1.01     | 0.5      | 13.4       | 0.5      | 0.25     | 0.25     | 271      | 30      | 0.07    | 0.2      | 0.27     | 3.7      | 0.5      | 0.93     |
| SA5112149 | 0.05     | 0.05     | 0.82     | 0.5      | 14         | 0.5      | 0.25     | 0.25     | 726      | 25      | 0.04    | 0.05     | 0.26     | 8.5      | 0.5      | 0.95     |
| SA5112150 | 0.4      | 0.05     | 0.12     | 0.5      | 13         | 0.5      | 0.6      | 0.25     | 57       | 12      | 0.005   | 0.05     | 0.04     | 1.4      | 0.5      | 0.31     |
| SA5112151 | 1.0      | 0.05     | 0.18     | 0.5      | 18.89      | 0.5      | 0.25     | 0.25     | 355      | 17      | 0.005   | 0.1      | 0.10     | 3.6      | 0.5      | 0.54     |
| SA5112152 | 1.0      | 0.05     | 0.16     | 0.5      | 10.97      | 0.5      | 0.25     | 0.25     | 65       | 12      | 0.01    | 0.05     | 0.05     | 2.4      | 0.5      | 0.26     |
| SA5112153 | 1.8      | 0.05     | 0.19     | 0.5      | 19.8       | 0.5      | 0.25     | 0.25     | 129      | 3       | 0.005   | 0.1      | 0.08     | 1.1      | 0.5      | 0.24     |
| SA5112154 | 3.6      | 0.05     | 0.26     | 0.5      | 20.1       | 0.5      | 0.9      | 0.25     | 112      | 8       | 0.02    | 0.05     | 0.10     | 2.4      | 3        | 0.25     |
| SA5112155 | 2.5      | 0.05     | 0.18     | 0.5      | 16.59      | 0.5      | 0.6      | 0.25     | 72       | 11      | 0.01    | 0.05     | 0.07     | 2.6      | 1        | 0.25     |
| SA5112156 | 13.3     | 0.05     | 0.90     | 0.5      | 12.9       | 0.5      | 0.25     | 0.25     | 499      | 18      | 0.03    | 0.05     | 0.31     | 12.3     | 0.5      | 0.74     |
| SA5112157 | 0.9      | 0.05     | 0.11     | 0.5      | 15.44      | 0.5      | 0.6      | 1.9      | 369      | 12      | 0.005   | 0.05     | 0.08     | 2.1      | 0.5      | 0.27     |
| SA5112158 | 35.5     | 0.05     | 1.18     | 0.5      | 12.5       | 0.5      | 0.25     | 0.7      | 1166     | 56      | 0.03    | 0.1      | 0.50     | 15.3     | 0.5      | 0.47     |
| SA5112159 | 6.0      | 0.05     | 0.22     | 0.5      | 21.2       | 0.5      | 0.25     | 2.3      | 264      | 7       | 0.005   | 0.1      | 0.10     | 3.1      | 0.5      | 0.14     |
| SA5112160 | 0.9      | 0.05     | 0.11     | 0.5      | 11.9       | 0.5      | 0.25     | 0.25     | 55       | 19      | 0.01    | 0.05     | 0.05     | 1.9      | 0.5      | 0.19     |
| SA5112161 | 15.0     | 0.05     | 0.99     | 0.5      | 13.1       | 0.5      | 0.25     | 0.25     | 717      | 24      | 0.05    | 0.3      | 0.32     | 11.4     | 0.5      | 0.63     |
| SA5112162 | 1.6      | 0.05     | 0.19     | 0.5      | 13.25      | 0.5      | 0.25     | 0.7      | 367      | 25      | 0.01    | 0.1      | 0.13     | 3.9      | 0.5      | 0.32     |
| SA5112163 | 0.6      | 0.05     | 0.14     | 0.5      | 16.04      | 0.5      | 0.7      | 5.2      | 70       | 22      | 0.02    | 0.05     | 0.05     | 1.8      | 3        | 0.23     |
| SA5112164 | 1.6      | 0.05     | 0.12     | 0.5      | 14.05      | 0.5      | 0.25     | 0.25     | 107      | 20      | 0.02    | 0.05     | 0.07     | 2.0      | 1        | 0.24     |
| SA5112165 | 17.7     | 0.05     | 0.84     | 0.5      | 10.52      | 0.5      | 0.25     | 0.25     | 617      | 25      | 0.05    | 0.2      | 0.30     | 13.8     | 0.5      | 0.72     |
| SA5112166 | 7.9      | 0.05     | 0.74     | 0.5      | 9.85       | 0.5      | 0.25     | 0.25     | 803      | 32      | 0.05    | 0.1      | 0.24     | 8.4      | 0.5      | 0.71     |
| SA5112167 | 3.0      | 0.05     | 0.32     | 0.5      | 11.61      | 0.5      | 0.25     | 0.25     | 296      | 29      | 0.01    | 0.05     | 0.12     | 4.0      | 0.5      | 0.46     |
| SA5112168 | 3.8      | 0.4      | 0.17     | 0.5      | 11.2       | 0.5      | 1.3      | 1.2      | 328      | 20      | 0.04    | 0.6      | 0.10     | 3.9      | 0.5      | 0.41     |
| SA5112169 | 10.2     | 0.05     | 0.58     | 0.5      | 8.48       | 0.5      | 0.25     | 0.25     | 544      | 12      | 0.06    | 0.1      | 0.16     | 7.7      | 0.5      | 0.57     |
| SA5112170 | 12.1     | 0.05     | 0.70     | 0.5      | 12.3       | 0.5      | 0.25     | 1.5      | 827      | 27      | 0.04    | 0.2      | 0.25     | 15.6     | 0.5      | 0.76     |
| SA5112171 | 1.8      | 0.05     | 0.18     | 0.5      | 19.51      | 0.5      | 0.25     | 1.2      | 246      | 19      | 0.005   | 0.05     | 0.09     | 0.25     | 0.5      | 0.38     |
| SA5112172 | 18.3     | 0.05     | 0.94     | 0.5      | 9.28       | 0.5      | 0.25     | 0.25     | 918      | 25      | 0.04    | 0.05     | 0.22     | 13.6     | 0.5      | 0.48     |
| SA5112173 | 1.1      | 0.05     | 0.18     | 0.5      | 19.25      | 0.5      | 0.25     | 1.4      | 263      | 21      | 0.005   | 0.05     | 0.09     | 0.25     | 0.5      | 0.37     |
| SA5112174 | 11.4     | 0.05     | 0.93     | 0.5      | 11.22      | 0.5      | 0.25     | 1.9      | 119      | 36      | 0.26    | 0.4      | 0.31     | 2.9      | 0.5      | 1.51     |
| SA5112175 | 6.2      | 0.05     | 0.32     | 0.5      | 9.1        | 0.5      | 0.25     | 0.25     | 633      | 16      | 0.05    | 0.05     | 0.13     | 9.1      | 0.5      | 0.45     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112176 | 3.2      | 0.05     | 0.28     | 0.5      | 8.29       | 0.5      | 0.25     | 12.2     | 421      | 21      | 0.01    | 0.1      | 0.09     | 4.1      | 2        | 0.43     |
| SA5112177 | 6.1      | 0.05     | 0.40     | 0.5      | 7.73       | 0.5      | 0.25     | 2.9      | 509      | 21      | 0.01    | 0.05     | 0.13     | 8.8      | 0.5      | 0.49     |
| SA5112178 | 1.7      | 0.05     | 0.12     | 0.5      | 12.15      | 0.5      | 0.25     | 3.7      | 73       | 18      | 0.09    | 0.05     | 0.04     | 1.4      | 0.5      | 0.53     |
| SA5112179 | 8.8      | 0.05     | 0.68     | 0.5      | 8.41       | 0.5      | 0.25     | 3.7      | 482      | 25      | 0.07    | 0.05     | 0.17     | 3.5      | 0.5      | 0.62     |
| SA5112180 | 3.7      | 0.05     | 0.34     | 0.5      | 11.29      | 0.5      | 0.25     | 4.2      | 708      | 21      | 0.005   | 0.1      | 0.12     | 8.4      | 0.5      | 0.32     |
| SA5112181 | 0.9      | 0.05     | 0.11     | 0.5      | 19.4       | 0.5      | 0.25     | 5.2      | 191      | 9       | 0.005   | 0.1      | 0.07     | 1.3      | 0.5      | 0.48     |
| SA5112182 | 1.1      | 0.05     | 0.13     | 0.5      | 14.56      | 0.5      | 0.25     | 6.8      | 121      | 16      | 0.005   | 0.05     | 0.04     | 1.0      | 0.5      | 0.32     |
| SA5112183 | 5.7      | 0.05     | 0.85     | 0.5      | 8.39       | 0.5      | 0.25     | 6.1      | 608      | 25      | 0.13    | 0.05     | 0.17     | 6.4      | 0.5      | 0.66     |
| SA5112184 | 3.5      | 0.05     | 0.71     | 0.5      | 7.1        | 0.5      | 0.25     | 9.7      | 394      | 19      | 0.06    | 0.05     | 0.14     | 3.7      | 0.5      | 0.55     |
| SA5112185 | 2.1      | 0.05     | 0.39     | 0.5      | 17.1       | 0.5      | 0.25     | 11.2     | 172      | 13      | 0.10    | 0.05     | 0.08     | 1.3      | 2        | 0.59     |
| SA5112186 | 4.0      | 0.1      | 0.36     | 0.5      | 10.9       | 0.5      | 0.25     | 9.9      | 940      | 21      | 0.02    | 0.05     | 0.09     | 5.1      | 0.5      | 0.41     |
| SA5112187 | 2.6      | 0.05     | 0.27     | 0.5      | 8.22       | 0.5      | 0.25     | 14.8     | 431      | 21      | 0.03    | 0.2      | 0.07     | 4.3      | 0.5      | 0.44     |
| SA5112188 | 1.5      | 0.05     | 0.33     | 0.5      | 14.7       | 0.5      | 0.25     | 9.3      | 154      | 10      | 0.06    | 0.05     | 0.07     | 2.5      | 0.5      | 0.33     |
| SA5112189 | 1.0      | 0.05     | 0.09     | 0.5      | 19.8       | 0.5      | 0.25     | 8.6      | 115      | 14      | 0.01    | 0.05     | 0.04     | 0.8      | 0.5      | 0.37     |
| SA5112190 | 5.9      | 0.05     | 0.42     | 0.5      | 9.12       | 0.5      | 0.25     | 8.6      | 450      | 28      | 0.01    | 0.05     | 0.16     | 6.2      | 0.5      | 0.72     |
| SA5112191 | 0.4      | 0.05     | 0.10     | 0.5      | 13.33      | 0.5      | 0.25     | 11.0     | 29       | 23      | 0.01    | 0.05     | 0.01     | 0.25     | 0.5      | 0.51     |
| SA5112192 | 12.5     | 0.05     | 1.03     | 0.5      | 11.9       | 0.5      | 0.25     | 6.0      | 66       | 45      | 0.11    | 0.1      | 0.21     | 1.5      | 0.5      | 0.90     |
| SA5112193 | 2.6      | 0.05     | 0.26     | 0.5      | 8.2        | 0.5      | 0.25     | 7.0      | 418      | 21      | 0.02    | 0.05     | 0.10     | 4.2      | 0.5      | 0.61     |
| SA5112194 | 5.7      | 0.05     | 0.58     | 0.5      | 10.7       | 0.5      | 0.25     | 7.4      | 256      | 34      | 0.03    | 0.05     | 0.23     | 8.8      | 2        | 0.85     |
| SA5112195 | 5.0      | 0.05     | 0.52     | 0.5      | 11.4       | 0.5      | 0.25     | 6.8      | 460      | 31      | 0.07    | 0.05     | 0.19     | 10.9     | 0.5      | 0.89     |
| SA5112196 | 2.7      | 0.05     | 0.39     | 0.5      | 8.86       | 0.5      | 0.25     | 8.7      | 70       | 32      | 0.06    | 0.05     | 0.12     | 4.5      | 0.5      | 0.74     |
| SA5112197 | 19.6     | 0.05     | 1.13     | 0.5      | 14.2       | 0.5      | 0.25     | 9.9      | 148      | 40      | 0.11    | 0.2      | 0.23     | 2.7      | 0.5      | 0.99     |
| SA5112198 | 6.2      | 0.1      | 0.49     | 0.5      | 8.84       | 0.5      | 0.25     | 11.6     | 76       | 49      | 0.03    | 0.1      | 0.14     | 4.5      | 0.5      | 0.81     |
| SA5112199 | 6.9      | 0.1      | 0.77     | 0.5      | 11.58      | 0.5      | 0.25     | 7.2      | 164      | 42      | 0.11    | 0.2      | 0.22     | 9.1      | 0.5      | 0.93     |
| SA5112200 | 3.8      | 0.05     | 0.65     | 0.5      | 7.96       | 0.5      | 0.25     | 7.8      | 494      | 29      | 0.04    | 0.3      | 0.13     | 4.1      | 0.5      | 0.53     |
| SA5112201 | 4.5      | 0.05     | 0.50     | 0.5      | 9.82       | 0.5      | 0.25     | 6.9      | 102      | 36      | 0.07    | 0.2      | 0.16     | 3.5      | 0.5      | 0.80     |
| SA5112202 | 4.3      | 0.05     | 0.33     | 0.5      | 12.46      | 0.5      | 0.25     | 6.8      | 224      | 34      | 0.10    | 0.1      | 0.13     | 3.3      | 0.5      | 1.02     |
| SA5112203 | 6.0      | 0.05     | 0.70     | 0.5      | 11.88      | 0.5      | 0.7      | 6.3      | 132      | 43      | 0.13    | 0.2      | 0.24     | 6.7      | 2        | 0.99     |
| SA5112204 | 1.1      | 0.05     | 0.10     | 0.5      | 13.29      | 0.5      | 0.25     | 6.2      | 98       | 17      | 0.01    | 0.05     | 0.06     | 2.0      | 0.5      | 0.39     |
| SA5112205 | 6.7      | 0.05     | 0.61     | 0.5      | 10.93      | 0.5      | 0.25     | 4.9      | 269      | 30      | 0.09    | 0.2      | 0.22     | 15.9     | 0.5      | 0.95     |
| SA5112206 | 6.2      | 0.05     | 0.46     | 0.5      | 12.8       | 0.5      | 0.25     | 5.5      | 232      | 28      | 0.07    | 0.1      | 0.20     | 6.7      | 0.5      | 0.97     |
| SA5112207 | 5.8      | 0.05     | 0.66     | 0.5      | 17.52      | 0.5      | 0.25     | 7.4      | 332      | 40      | 0.12    | 0.3      | 0.29     | 15.4     | 0.5      | 1.60     |
| SA5112208 | 4.4      | 0.05     | 0.61     | 0.5      | 14.19      | 0.5      | 0.25     | 7.5      | 153      | 44      | 0.12    | 0.2      | 0.30     | 8.8      | 0.5      | 1.33     |
| SA5112209 | 3.3      | 0.05     | 0.30     | 0.5      | 18.45      | 0.5      | 0.25     | 7.1      | 341      | 24      | 0.03    | 0.2      | 0.20     | 5.0      | 0.5      | 1.27     |
| SA5112210 | 1.3      | 0.05     | 0.23     | 0.5      | 9.31       | 0.5      | 0.25     | 6.4      | 240      | 35      | 0.005   | 0.05     | 0.07     | 4.0      | 0.5      | 0.34     |
| SA5112211 | 7.1      | 0.05     | 0.75     | 0.5      | 9.8        | 0.5      | 0.25     | 5.4      | 431      | 21      | 0.08    | 0.05     | 0.21     | 6.1      | 0.5      | 0.69     |
| SA5112212 | 1.9      | 0.05     | 0.18     | 0.5      | 16.53      | 0.5      | 0.7      | 5.8      | 174      | 26      | 0.02    | 0.05     | 0.05     | 1.6      | 2        | 0.33     |
| SA5112213 | 1.2      | 0.05     | 0.17     | 0.5      | 19.57      | 0.5      | 0.25     | 6.0      | 90       | 21      | 0.01    | 0.1      | 0.04     | 1.1      | 0.5      | 0.37     |
| SA5112214 | 1.4      | 0.05     | 0.15     | 0.5      | 19.76      | 0.5      | 0.25     | 5.4      | 93       | 16      | 0.01    | 0.3      | 0.04     | 1.0      | 0.5      | 0.36     |
| SA5112215 | 0.2      | 0.05     | 0.10     | 0.5      | 13.61      | 0.5      | 0.25     | 6.8      | 45       | 12      | 0.005   | 0.05     | 0.01     | 1.1      | 0.5      | 0.25     |
| SA5112216 | 0.4      | 0.05     | 0.12     | 0.5      | 14.56      | 0.5      | 0.25     | 5.5      | 89       | 18      | 0.005   | 0.05     | 0.01     | 1.0      | 0.5      | 0.21     |
| SA5112217 | 1.3      | 0.05     | 0.15     | 0.5      | 19.33      | 0.5      | 0.25     | 7.3      | 150      | 20      | 0.02    | 0.05     | 0.04     | 0.7      | 0.5      | 0.21     |
| SA5112218 | 6.0      | 0.05     | 0.27     | 0.5      | 12.56      | 0.5      | 0.25     | 9.8      | 338      | 19      | 0.04    | 0.05     | 0.06     | 2.1      | 0.5      | 0.34     |
| SA5112219 | 1.6      | 0.1      | 0.15     | 0.5      | 14.1       | 0.5      | 0.25     | 9.1      | 139      | 15      | 0.005   | 0.1      | 0.03     | 1.3      | 0.5      | 0.28     |
| SA5112220 | 3.5      | 0.05     | 0.69     | 0.5      | 12.3       | 0.5      | 0.25     | 7.1      | 541      | 25      | 0.04    | 0.2      | 0.13     | 5.6      | 0.5      | 0.51     |
| SA5112221 | 5.1      | 0.1      | 0.82     | 0.5      | 8.76       | 0.5      | 0.7      | 7.6      | 958      | 24      | 0.04    | 0.2      | 0.17     | 9.6      | 2        | 0.53     |
| SA5112222 | 0.4      | 0.05     | 0.12     | 0.5      | 10.63      | 0.5      | 0.25     | 5.4      | 88       | 14      | 0.005   | 0.1      | 0.03     | 1.2      | 0.5      | 0.35     |
| SA5112223 | 0.6      | 0.05     | 0.25     | 0.5      | 13.71      | 0.5      | 0.25     | 0.25     | 195      | 29      | 0.08    | 0.1      | 0.17     | 1.6      | 0.5      | 0.70     |
| SA5112224 | 1.6      | 0.05     | 0.14     | 0.5      | 12.35      | 0.5      | 0.25     | 6.4      | 75       | 1       | 0.005   | 0.05     | 0.02     | 1.6      | 0.5      | 0.35     |
| SA5112225 | 3.8      | 0.05     | 0.54     | 0.5      | 8.55       | 0.5      | 0.25     | 6.5      | 309      | 27      | 0.05    | 0.2      | 0.12     | 5.9      | 0.5      | 0.55     |
| SA5112226 | 2.9      | 0.05     | 0.64     | 0.5      | 7.77       | 0.5      | 0.25     | 5.4      | 596      | 26      | 0.01    | 0.1      | 0.10     | 12.7     | 0.5      | 0.28     |
| SA5112227 | 0.6      | 0.05     | 0.18     | 0.5      | 10.14      | 0.5      | 0.25     | 5.1      | 55       | 22      | 0.01    | 0.05     | 0.05     | 1.1      | 0.5      | 0.45     |
| SA5112228 | 3.9      | 0.05     | 0.66     | 0.5      | 9.26       | 0.5      | 0.25     | 5.0      | 88       | 34      | 0.16    | 0.05     | 0.20     | 2.3      | 0.5      | 0.69     |
| SA5112229 | 0.7      | 0.05     | 0.12     | 0.5      | 11.57      | 0.5      | 0.25     | 5.1      | 67       | 18      | 0.01    | 0.05     | 0.03     | 0.6      | 0.5      | 0.25     |
| SA5112230 | 3.5      | 0.05     | 0.75     | 0.5      | 11.7       | 0.5      | 0.7      | 0.25     | 189      | 37      | 0.05    | 0.05     | 0.30     | 5.8      | 2        | 0.85     |
| SA5112231 | 2.3      | 0.05     | 0.45     | 0.5      | 7.64       | 0.5      | 0.25     | 0.25     | 100      | 31      | 0.11    | 0.1      | 0.14     | 4.1      | 0.5      | 0.67     |
| SA5112232 | 3.9      | 0.05     | 0.77     | 0.5      | 9.23       | 0.5      | 0.25     | 0.25     | 44       | 48      | 0.08    | 0.05     | 0.22     | 3.7      | 0.5      | 0.73     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112233 | 0.6      | 0.05     | 0.13     | 0.5      | 9.07       | 0.5      | 0.25     | 0.25     | 49       | 18      | 0.01    | 0.05     | 0.03     | 1.3      | 0.5      | 0.30     |
| SA5112234 | 1.2      | 0.05     | 0.22     | 0.5      | 10         | 0.5      | 0.25     | 0.25     | 75       | 17      | 0.03    | 0.05     | 0.04     | 1.6      | 0.5      | 0.42     |
| SA5112235 | 1.1      | 0.05     | 0.17     | 0.5      | 9.16       | 0.5      | 0.25     | 0.7      | 51       | 12      | 0.04    | 0.05     | 0.03     | 1.2      | 0.5      | 0.32     |
| SA5112236 | 4.0      | 0.05     | 0.51     | 0.5      | 12.56      | 0.5      | 0.25     | 0.6      | 84       | 35      | 0.05    | 0.2      | 0.20     | 2.5      | 0.5      | 0.84     |
| SA5112237 | 8.4      | 0.05     | 1.54     | 0.5      | 14.31      | 0.5      | 0.25     | 0.25     | 127      | 61      | 0.15    | 0.05     | 0.45     | 3.9      | 0.5      | 0.95     |
| SA5112238 | 10.5     | 0.05     | 0.87     | 0.5      | 14.37      | 0.5      | 0.25     | 1.5      | 243      | 51      | 0.17    | 0.2      | 0.33     | 11.4     | 0.5      | 0.94     |
| SA5112239 | 1.4      | 0.05     | 0.16     | 0.5      | 19.9       | 0.5      | 0.25     | 2.2      | 85       | 13      | 0.01    | 0.05     | 0.06     | 1.2      | 2        | 0.33     |
| SA5112240 | 9.0      | 0.05     | 0.80     | 0.5      | 12.83      | 0.5      | 0.25     | 0.7      | 356      | 47      | 0.08    | 0.2      | 0.33     | 3.7      | 0.5      | 0.95     |
| SA5112241 | 12.3     | 0.05     | 1.31     | 0.5      | 15.84      | 0.5      | 0.25     | 2.3      | 493      | 80      | 0.04    | 0.1      | 0.36     | 10.7     | 0.5      | 1.04     |
| SA5112242 | 6.7      | 0.05     | 0.43     | 0.5      | 13.5       | 0.5      | 0.25     | 1.7      | 174      | 27      | 0.07    | 0.1      | 0.21     | 5.6      | 0.5      | 0.82     |
| SA5112243 | 18.1     | 0.05     | 0.81     | 0.5      | 18.9       | 0.5      | 0.25     | 1.0      | 603      | 35      | 0.09    | 0.1      | 0.29     | 9.1      | 0.5      | 1.05     |
| SA5112244 | 11.8     | 0.05     | 0.92     | 0.5      | 15.45      | 0.5      | 0.25     | 0.8      | 529      | 81      | 0.11    | 0.2      | 0.35     | 8.5      | 0.5      | 1.10     |
| SA5112245 | 13.2     | 0.05     | 1.31     | 0.5      | 16.32      | 0.5      | 0.25     | 0.25     | 473      | 25      | 0.03    | 0.2      | 0.36     | 11.9     | 0.5      | 1.02     |
| SA5112246 | 0.9      | 0.05     | 0.10     | 0.5      | 13.4       | 0.5      | 0.25     | 0.25     | 111      | 25      | 0.005   | 0.05     | 0.06     | 1.8      | 0.5      | 0.34     |
| SA5112247 | 4.6      | 0.05     | 0.30     | 0.5      | 13.3       | 0.5      | 0.25     | 0.5      | 119      | 23      | 0.09    | 0.1      | 0.15     | 2.4      | 0.5      | 0.87     |
| SA5112248 | 1.1      | 0.05     | 0.08     | 0.5      | 9.35       | 0.5      | 0.5      | 1.9      | 21       | 12      | 0.03    | 0.05     | 0.03     | 1.0      | 2        | 0.21     |
| SA5112249 | 3.6      | 0.05     | 0.20     | 0.5      | 12.63      | 0.5      | 0.25     | 1.0      | 55       | 24      | 0.03    | 0.05     | 0.13     | 1.3      | 0.5      | 0.76     |
| SA5112250 | 10.3     | 0.05     | 0.56     | 0.5      | 12.15      | 0.5      | 0.25     | 1.9      | 190      | 25      | 0.10    | 0.2      | 0.23     | 8.1      | 0.5      | 0.94     |
| SA5112251 | 8.2      | 0.05     | 0.79     | 0.5      | 14.67      | 0.5      | 0.25     | 4.5      | 249      | 33      | 0.10    | 4.3      | 0.26     | 7.4      | 0.5      | 1.05     |
| SA5112252 | 8.2      | 0.05     | 0.75     | 0.5      | 15.71      | 0.5      | 0.25     | 0.8      | 375      | 31      | 0.10    | 0.4      | 0.25     | 7.3      | 0.5      | 1.09     |
| SA5112253 | 8.5      | 0.05     | 0.70     | 0.5      | 15.08      | 0.5      | 0.25     | 1.7      | 345      | 33      | 0.08    | 0.4      | 0.26     | 7.0      | 0.5      | 1.07     |
| SA5112254 | 8.0      | 0.05     | 0.95     | 0.5      | 14.21      | 0.5      | 0.25     | 0.25     | 192      | 43      | 0.11    | 0.05     | 0.21     | 6.4      | 0.5      | 0.91     |
| SA5112255 | 6.3      | 0.05     | 0.56     | 0.5      | 17.86      | 0.5      | 0.25     | 1.0      | 675      | 27      | 0.03    | 0.2      | 0.28     | 9.3      | 0.5      | 1.10     |
| SA5112256 | 7.5      | 0.05     | 0.82     | 0.5      | 15.07      | 0.5      | 0.25     | 1.2      | 228      | 45      | 0.11    | 0.3      | 0.36     | 7.7      | 0.5      | 1.13     |
| SA5112257 | 6.3      | 0.05     | 0.74     | 0.5      | 13.01      | 0.5      | 0.25     | 2.5      | 173      | 40      | 0.09    | 0.2      | 0.27     | 10.4     | 0.5      | 1.02     |
| SA5112258 | 5.1      | 0.05     | 0.36     | 0.5      | 13.81      | 0.5      | 0.25     | 5.4      | 71       | 19      | 0.26    | 0.2      | 0.22     | 0.7      | 0.5      | 0.81     |
| SA5112259 | 7.0      | 0.05     | 0.64     | 0.5      | 11.41      | 0.5      | 0.25     | 6.6      | 217      | 32      | 0.06    | 0.2      | 0.22     | 15.0     | 0.5      | 0.91     |
| SA5112260 | 2.7      | 0.05     | 0.27     | 0.5      | 9.74       | 0.5      | 0.25     | 5.7      | 113      | 25      | 0.06    | 0.2      | 0.16     | 5.9      | 0.5      | 0.79     |
| SA5112261 | 6.0      | 0.05     | 0.41     | 0.5      | 12.14      | 0.5      | 0.25     | 6.5      | 248      | 23      | 0.03    | 0.2      | 0.19     | 7.3      | 1        | 0.89     |
| SA5112262 | 5.4      | 0.05     | 0.39     | 0.5      | 18.2       | 0.5      | 0.25     | 6.9      | 479      | 19      | 0.04    | 0.3      | 0.17     | 7.2      | 0.5      | 0.87     |
| SA5112263 | 8.5      | 0.05     | 0.53     | 0.5      | 15.75      | 0.5      | 0.25     | 6.4      | 312      | 26      | 0.01    | 0.3      | 0.22     | 6.7      | 0.5      | 0.97     |
| SA5112264 | 1.9      | 0.05     | 0.19     | 0.5      | 16.42      | 0.5      | 0.25     | 7.5      | 334      | 17      | 0.005   | 0.2      | 0.11     | 1.9      | 0.5      | 0.58     |
| SA5112265 | 4.9      | 0.05     | 0.52     | 0.5      | 11.53      | 0.5      | 0.25     | 6.7      | 206      | 26      | 0.02    | 0.2      | 0.14     | 8.2      | 0.5      | 0.74     |
| SA5112266 | 1.1      | 0.05     | 0.16     | 0.5      | 12.79      | 0.5      | 0.25     | 6.9      | 165      | 13      | 0.02    | 0.05     | 0.09     | 1.9      | 0.5      | 0.57     |
| SA5112267 | 0.7      | 0.05     | 0.10     | 0.5      | 12.66      | 0.5      | 0.25     | 7.4      | 32       | 12      | 0.02    | 0.5      | 0.04     | 1.4      | 0.5      | 0.42     |
| SA5112268 | 4.3      | 0.05     | 0.64     | 0.5      | 12.13      | 0.5      | 0.25     | 11.5     | 170      | 18      | 0.07    | 0.5      | 0.22     | 9.0      | 0.5      | 0.88     |
| SA5112269 | 8.4      | 0.05     | 0.57     | 0.5      | 22         | 0.5      | 0.25     | 6.8      | 560      | 35      | 0.02    | 0.2      | 0.22     | 6.4      | 0.5      | 0.95     |
| SA5112270 | 3.1      | 0.05     | 0.38     | 0.5      | 10.68      | 0.5      | 0.25     | 6.9      | 118      | 24      | 0.05    | 0.1      | 0.15     | 9.1      | 1        | 0.79     |
| SA5112271 | 3.3      | 0.05     | 0.44     | 0.5      | 11.24      | 0.5      | 0.25     | 8.3      | 211      | 21      | 0.02    | 0.3      | 0.16     | 7.1      | 0.5      | 0.74     |
| SA5112272 | 2.0      | 0.05     | 0.13     | 0.5      | 17.3       | 0.5      | 0.25     | 11.9     | 137      | 13      | 0.005   | 1.0      | 0.08     | 1.0      | 0.5      | 0.55     |
| SA5112273 | 10.1     | 0.05     | 0.65     | 0.5      | 23.1       | 0.5      | 0.25     | 8.6      | 596      | 19      | 0.03    | 0.8      | 0.25     | 8.8      | 0.5      | 1.03     |
| SA5112274 | 0.5      | 0.05     | 0.09     | 0.5      | 16         | 0.5      | 0.25     | 8.1      | 55       | 11      | 0.005   | 0.1      | 0.03     | 1.1      | 0.5      | 0.31     |
| SA5112275 | 2.5      | 0.05     | 0.73     | 0.5      | 11.04      | 0.5      | 0.25     | 8.5      | 376      | 16      | 0.15    | 0.05     | 0.22     | 4.2      | 0.5      | 0.64     |
| SA5112276 | 5.7      | 0.05     | 1.49     | 0.5      | 16         | 0.5      | 0.25     | 7.5      | 336      | 45      | 0.07    | 0.4      | 0.38     | 6.1      | 0.5      | 0.88     |
| SA5112277 | 0.3      | 0.05     | 0.13     | 0.5      | 20.3       | 0.5      | 0.25     | 7.5      | 106      | 14      | 0.005   | 0.05     | 0.05     | 1.9      | 0.5      | 0.41     |
| SA5112278 | 3.3      | 0.05     | 0.83     | 0.5      | 11.9       | 0.5      | 0.25     | 6.7      | 221      | 26      | 0.07    | 0.05     | 0.30     | 3.6      | 0.5      | 0.83     |
| SA5112279 | 8.6      | 0.05     | 0.54     | 0.5      | 15.6       | 0.5      | 0.25     | 7.1      | 313      | 22      | 0.02    | 0.3      | 0.23     | 6.8      | 0.5      | 0.96     |
| SA5112280 | 5.4      | 0.05     | 1.10     | 0.5      | 16.3       | 0.5      | 0.25     | 5.9      | 698      | 23      | 0.06    | 0.2      | 0.37     | 4.7      | 0.5      | 0.82     |
| SA5112281 | 1.2      | 0.05     | 0.20     | 0.5      | 11.5       | 0.5      | 0.25     | 6.5      | 66       | 12      | 0.02    | 0.05     | 0.05     | 3.0      | 0.5      | 0.29     |
| SA5112282 | 7.5      | 0.05     | 1.04     | 0.5      | 13.6       | 0.5      | 0.25     | 4.6      | 229      | 20      | 0.11    | 0.05     | 0.31     | 7.4      | 0.5      | 0.78     |
| SA5112283 | 5.6      | 0.05     | 0.87     | 0.5      | 11.8       | 0.5      | 0.25     | 4.3      | 143      | 30      | 0.24    | 0.1      | 0.24     | 2.5      | 0.5      | 0.79     |
| SA5112284 | 6.9      | 0.05     | 0.89     | 0.5      | 14.9       | 0.5      | 0.25     | 11.7     | 221      | 15      | 0.03    | 0.2      | 0.25     | 3.1      | 0.5      | 0.94     |
| SA5112285 | 2.2      | 0.05     | 0.70     | 0.5      | 14.9       | 0.5      | 0.25     | 2.7      | 173      | 1       | 0.01    | 0.05     | 0.19     | 2.2      | 0.5      | 0.58     |
| SA5112286 | 0.9      | 0.7      | 0.14     | 0.5      | 9.36       | 0.5      | 0.25     | 0.25     | 54       | 3       | 0.01    | 0.05     | 0.03     | 1.8      | 0.5      | 0.18     |
| SA5112287 | 0.7      | 0.05     | 0.15     | 0.5      | 15.5       | 0.5      | 0.25     | 0.25     | 77       | 12      | 0.13    | 0.05     | 0.05     | 3.1      | 0.5      | 0.51     |
| SA5112288 | 4.9      | 0.05     | 1.22     | 0.5      | 15.5       | 0.5      | 0.25     | 1.9      | 151      | 14      | 0.10    | 0.05     | 0.45     | 2.0      | 0.5      | 0.98     |
| SA5112289 | 0.1      | 0.05     | 0.11     | 0.5      | 8.42       | 0.5      | 0.25     | 1.8      | 26       | 3       | 0.01    | 0.05     | 0.02     | 0.8      | 0.5      | 0.23     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112290 | 17.0     | 0.05     | 0.94     | 0.5      | 14.1       | 0.5      | 0.25     | 3.0      | 364      | 17      | 0.11    | 0.05     | 0.47     | 4.6      | 0.5      | 0.90     |
| SA5112291 | 8.9      | 0.05     | 1.15     | 0.5      | 14.7       | 0.5      | 0.25     | 6.5      | 139      | 17      | 0.16    | 0.2      | 0.48     | 5.8      | 0.5      | 0.95     |
| SA5112292 | 0.6      | 0.05     | 0.18     | 0.5      | 10.3       | 0.5      | 0.25     | 0.25     | 46       | 7       | 0.08    | 0.05     | 0.03     | 1.3      | 0.5      | 0.21     |
| SA5112293 | 9.9      | 0.05     | 0.82     | 0.5      | 12.5       | 0.5      | 0.25     | 0.25     | 155      | 14      | 0.15    | 0.05     | 0.26     | 2.3      | 0.5      | 0.94     |
| SA5112294 | 7.1      | 0.05     | 1.33     | 0.5      | 14.89      | 0.5      | 0.25     | 2.5      | 517      | 19      | 0.07    | 0.05     | 0.34     | 7.6      | 0.5      | 0.90     |
| SA5112295 | 5.8      | 0.05     | 1.25     | 0.5      | 14.5       | 0.5      | 1.7      | 1.5      | 388      | 18      | 0.09    | 0.2      | 0.34     | 5.7      | 0.5      | 0.84     |
| SA5112296 | 7.9      | 0.05     | 1.18     | 0.5      | 13.8       | 0.5      | 1.0      | 5.0      | 345      | 20      | 0.12    | 0.2      | 0.34     | 8.0      | 0.5      | 0.87     |
| SA5112297 | 8.3      | 0.05     | 1.12     | 0.5      | 13.5       | 0.5      | 0.25     | 1.2      | 331      | 4       | 0.11    | 0.05     | 0.35     | 8.0      | 0.5      | 0.84     |
| SA5112298 | 0.05     | 0.05     | 0.09     | 0.5      | 10.7       | 0.5      | 0.25     | 0.25     | 12       | 22      | 0.005   | 0.9      | 0.005    | 1.0      | 0.5      | 0.20     |
| SA5112299 | 8.7      | 0.05     | 1.09     | 0.5      | 13.6       | 0.5      | 0.25     | 3.7      | 306      | 13      | 0.11    | 0.1      | 0.34     | 9.1      | 0.5      | 0.85     |
| SA5112300 | 2.8      | 0.05     | 0.41     | 0.5      | 11.33      | 0.5      | 0.25     | 2.6      | 324      | 7       | 0.03    | 0.05     | 0.11     | 6.2      | 0.5      | 0.39     |
| SA5112301 | 1.2      | 0.05     | 0.25     | 0.5      | 19.9       | 0.5      | 0.25     | 4.2      | 139      | 9       | 0.02    | 0.05     | 0.11     | 1.6      | 0.5      | 0.49     |
| SA5112302 | 1.0      | 0.05     | 0.16     | 0.5      | 15.6       | 0.5      | 0.25     | 0.25     | 89       | 7       | 0.03    | 0.05     | 0.05     | 1.9      | 0.5      | 0.31     |
| SA5112303 | 0.5      | 0.05     | 0.09     | 0.5      | 11.5       | 0.5      | 0.25     | 0.25     | 25       | 25      | 0.02    | 0.05     | 0.02     | 1.6      | 0.5      | 0.20     |
| SA5112304 | 5.7      | 0.05     | 1.60     | 0.5      | 18.8       | 0.5      | 0.25     | 1.5      | 82       | 32      | 0.21    | 0.05     | 0.56     | 1.4      | 0.5      | 1.01     |
| SA5112305 | 12.2     | 0.05     | 1.17     | 0.5      | 15.1       | 0.5      | 0.25     | 0.25     | 379      | 14      | 0.13    | 0.1      | 0.35     | 10.2     | 0.5      | 0.95     |
| SA5112306 | 11.4     | 0.05     | 1.02     | 0.5      | 13.3       | 0.5      | 0.25     | 2.2      | 167      | 21      | 0.15    | 0.05     | 0.34     | 3.7      | 0.5      | 0.86     |
| SA5112307 | 0.4      | 0.05     | 0.09     | 0.5      | 8.46       | 0.5      | 0.25     | 8.6      | 13       | 6       | 0.05    | 0.05     | 0.03     | 1.3      | 0.5      | 0.26     |
| SA5112308 | 8.1      | 0.05     | 1.12     | 0.5      | 16.1       | 0.5      | 0.25     | 0.25     | 405      | 28      | 0.12    | 0.1      | 0.35     | 6.2      | 0.5      | 0.93     |
| SA5112309 | 0.4      | 0.05     | 0.15     | 0.5      | 8.33       | 0.5      | 0.25     | 3.1      | 59       | 9       | 0.03    | 0.05     | 0.06     | 1.8      | 0.5      | 0.28     |
| SA5112310 | 5.5      | 0.05     | 0.86     | 0.5      | 15.3       | 0.5      | 0.25     | 1.6      | 504      | 24      | 0.10    | 0.1      | 0.32     | 8.8      | 0.5      | 0.86     |
| SA5112311 | 0.05     | 0.05     | 0.07     | 0.5      | 11.3       | 0.5      | 0.25     | 0.25     | 13       | 8       | 0.01    | 0.05     | 0.03     | 1.1      | 0.5      | 0.37     |
| SA5112312 | 0.1      | 0.05     | 0.09     | 0.5      | 9.2        | 0.5      | 0.25     | 0.25     | 5        | 9       | 0.05    | 0.05     | 0.03     | 1.6      | 0.5      | 0.25     |
| SA5112313 | 4.2      | 0.05     | 0.80     | 0.5      | 13.1       | 0.5      | 0.25     | 0.25     | 132      | 13      | 0.14    | 0.2      | 0.25     | 7.5      | 0.5      | 0.79     |
| SA5112314 | 4.5      | 0.05     | 0.89     | 0.5      | 12.6       | 0.5      | 0.25     | 6.6      | 322      | 20      | 0.10    | 0.05     | 0.30     | 11.3     | 0.5      | 0.82     |
| SA5112315 | 4.4      | 0.05     | 0.83     | 0.5      | 13.7       | 0.5      | 0.25     | 3.1      | 200      | 17      | 0.13    | 0.05     | 0.28     | 7.1      | 0.5      | 0.80     |
| SA5112316 | 4.0      | 0.05     | 0.83     | 0.5      | 13.13      | 0.5      | 0.25     | 0.25     | 282      | 16      | 0.12    | 0.1      | 0.28     | 8.1      | 0.5      | 0.81     |
| SA5112317 | 0.4      | 0.05     | 0.08     | 0.5      | 11.3       | 0.5      | 0.25     | 3.5      | 48       | 8       | 0.03    | 0.05     | 0.04     | 1.7      | 0.5      | 0.34     |
| SA5112318 | 9.3      | 0.05     | 1.91     | 0.5      | 18.8       | 0.5      | 0.25     | 3.9      | 55       | 27      | 0.18    | 0.1      | 0.33     | 3.6      | 0.5      | 0.97     |
| SA5112319 | 19.3     | 0.05     | 1.32     | 0.5      | 15.6       | 0.5      | 0.25     | 0.9      | 143      | 15      | 0.26    | 0.05     | 0.34     | 3.1      | 0.5      | 0.99     |
| SA5112320 | 0.5      | 0.05     | 0.10     | 0.5      | 15.3       | 0.5      | 0.25     | 11.8     | 75       | 7       | 0.02    | 0.05     | 0.05     | 1.5      | 0.5      | 0.38     |
| SA5112321 | 0.5      | 0.05     | 0.07     | 0.5      | 13.19      | 0.5      | 0.25     | 9.1      | 22       | 10      | 0.02    | 0.05     | 0.04     | 0.6      | 0.5      | 0.32     |
| SA5112322 | 1.0      | 0.05     | 0.17     | 0.5      | 17.54      | 0.5      | 0.25     | 0.25     | 245      | 10      | 0.02    | 0.1      | 0.06     | 2.5      | 0.5      | 0.32     |
| SA5112323 | 16.1     | 0.05     | 0.95     | 0.5      | 17.41      | 0.5      | 0.25     | 0.25     | 548      | 38      | 0.07    | 0.1      | 0.30     | 8.6      | 0.5      | 0.95     |
| SA5112324 | 24.6     | 0.05     | 1.57     | 0.5      | 19.4       | 0.5      | 0.25     | 0.25     | 902      | 25      | 0.13    | 0.2      | 0.46     | 16.1     | 0.5      | 1.09     |
| SA5112325 | 0.2      | 0.05     | 0.08     | 0.5      | 8.56       | 0.5      | 0.25     | 11.1     | 20       | 7       | 0.02    | 0.05     | 0.04     | 1.0      | 0.5      | 0.26     |
| SA5112326 | 1.1      | 0.05     | 0.16     | 0.5      | 17         | 0.5      | 0.25     | 0.25     | 207      | 14      | 0.02    | 0.05     | 0.10     | 1.6      | 0.5      | 0.50     |
| SA5112327 | 7.9      | 0.05     | 0.93     | 0.5      | 15.3       | 0.5      | 0.25     | 0.25     | 523      | 19      | 0.06    | 0.1      | 0.27     | 9.3      | 0.5      | 0.82     |
| SA5112328 | 2.9      | 0.05     | 0.81     | 0.5      | 11.5       | 0.5      | 0.25     | 0.7      | 126      | 18      | 0.09    | 0.1      | 0.25     | 4.2      | 0.5      | 0.70     |
| SA5112329 | 4.2      | 0.05     | 0.77     | 0.5      | 17.9       | 0.5      | 0.25     | 0.25     | 423      | 15      | 0.08    | 0.05     | 0.27     | 3.4      | 0.5      | 0.84     |
| SA5112330 | 1.2      | 0.05     | 0.22     | 0.5      | 19.5       | 0.5      | 0.25     | 0.25     | 261      | 5       | 0.03    | 0.05     | 0.07     | 1.6      | 0.5      | 0.32     |
| SA5112331 | 5.1      | 0.05     | 0.67     | 0.5      | 19.8       | 0.5      | 0.25     | 1.3      | 407      | 15      | 0.07    | 0.05     | 0.25     | 4.9      | 0.5      | 0.80     |
| SA5112332 | 4.7      | 0.05     | 0.74     | 0.5      | 15.11      | 0.5      | 0.25     | 3.3      | 236      | 13      | 0.14    | 0.05     | 0.25     | 7.9      | 0.5      | 0.83     |
| SA5112333 | 4.6      | 0.05     | 0.70     | 0.5      | 14.1       | 0.5      | 0.25     | 4.4      | 298      | 13      | 0.08    | 0.1      | 0.22     | 5.8      | 0.5      | 0.75     |
| SA5112334 | 1.7      | 0.05     | 0.30     | 0.5      | 11.4       | 0.5      | 0.25     | 0.25     | 150      | 12      | 0.05    | 0.05     | 0.08     | 4.0      | 0.5      | 0.36     |
| SA5112335 | 1.1      | 0.05     | 0.18     | 0.5      | 17.5       | 0.5      | 0.25     | 0.25     | 208      | 14      | 0.02    | 0.05     | 0.10     | 1.7      | 0.5      | 0.50     |
| SA5112336 | 4.7      | 0.05     | 0.65     | 0.5      | 20.2       | 0.5      | 0.25     | 0.25     | 415      | 14      | 0.03    | 0.05     | 0.23     | 4.1      | 0.5      | 0.86     |
| SA5112337 | 0.3      | 0.05     | 0.09     | 0.5      | 11.5       | 0.5      | 0.25     | 0.25     | 85       | 14      | 0.01    | 0.05     | 0.04     | 1.1      | 0.5      | 0.35     |
| SA5112338 | 0.05     | 0.05     | 0.07     | 0.5      | 14.7       | 0.5      | 0.25     | 0.25     | 18       | 13      | 0.02    | 0.05     | 0.04     | 0.8      | 0.5      | 0.33     |
| SA5112339 | 5.0      | 0.05     | 0.97     | 0.5      | 13.91      | 0.5      | 0.25     | 0.25     | 319      | 32      | 0.12    | 0.05     | 0.33     | 3.9      | 0.5      | 0.86     |
| SA5112340 | 5.2      | 0.05     | 1.22     | 0.5      | 13.7       | 0.5      | 0.25     | 0.25     | 186      | 30      | 0.10    | 0.05     | 0.35     | 3.4      | 0.5      | 0.76     |
| SA5112341 | 2.2      | 0.05     | 0.22     | 0.5      | 28.1       | 0.5      | 0.25     | 0.25     | 121      | 14      | 0.02    | 0.05     | 0.02     | 2.4      | 0.5      | 0.26     |
| SA5112342 | 10.7     | 0.05     | 1.32     | 0.5      | 16.7       | 0.5      | 0.25     | 0.25     | 385      | 32      | 0.11    | 0.1      | 0.40     | 6.6      | 0.5      | 0.89     |
| SA5112343 | 4.9      | 0.05     | 0.85     | 0.5      | 13.52      | 0.5      | 0.25     | 0.25     | 247      | 30      | 0.10    | 0.05     | 0.26     | 6.0      | 0.5      | 0.76     |
| SA5112344 | 3.3      | 0.05     | 1.23     | 0.5      | 16.01      | 0.5      | 0.25     | 0.25     | 445      | 15      | 0.06    | 0.05     | 0.31     | 3.5      | 0.5      | 0.78     |
| SA5112345 | 6.3      | 0.05     | 1.08     | 0.5      | 14.2       | 0.5      | 0.25     | 0.25     | 336      | 17      | 0.18    | 0.2      | 0.33     | 3.9      | 0.5      | 0.76     |
| SA5112346 | 5.0      | 0.05     | 1.03     | 0.5      | 13.6       | 0.5      | 0.25     | 0.25     | 279      | 18      | 0.20    | 0.1      | 0.29     | 5.2      | 0.5      | 0.70     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112347 | 0.8      | 0.05     | 0.22     | 0.5      | 10.11      | 0.5      | 0.25     | 0.25     | 107      | 14      | 0.09    | 0.05     | 0.11     | 3.1      | 0.5      | 0.47     |
| SA5112348 | 3.6      | 0.05     | 0.71     | 0.5      | 11.11      | 0.5      | 0.25     | 0.25     | 43       | 21      | 0.13    | 0.1      | 0.25     | 2.1      | 0.5      | 0.73     |
| SA5112349 | 4.3      | 0.05     | 0.74     | 0.5      | 15.93      | 0.5      | 0.25     | 0.25     | 173      | 17      | 0.12    | 0.05     | 0.21     | 4.6      | 0.5      | 0.72     |
| SA5112350 | 6.3      | 0.05     | 1.42     | 0.5      | 15.1       | 0.5      | 0.25     | 0.25     | 186      | 34      | 0.11    | 0.2      | 0.31     | 4.3      | 0.5      | 0.72     |
| SA5112351 | 9.2      | 0.05     | 1.37     | 0.5      | 15.61      | 0.5      | 0.25     | 0.25     | 462      | 16      | 0.26    | 0.2      | 0.39     | 7.3      | 0.5      | 0.80     |
| SA5112352 | 4.3      | 0.05     | 0.70     | 0.5      | 12.01      | 0.5      | 0.25     | 1.0      | 200      | 31      | 0.07    | 0.05     | 0.19     | 4.3      | 0.5      | 0.61     |
| SA5112353 | 8.4      | 0.05     | 1.05     | 0.5      | 46.5       | 0.5      | 0.25     | 4.3      | 275      | 30      | 0.04    | 0.1      | 0.28     | 4.1      | 0.5      | 0.78     |
| SA5112354 | 3.4      | 0.05     | 0.48     | 0.5      | 17.2       | 0.5      | 0.25     | 2.8      | 170      | 21      | 0.05    | 0.05     | 0.15     | 1.8      | 0.5      | 0.72     |
| SA5112355 | 7.3      | 0.05     | 1.54     | 0.5      | 15.34      | 0.5      | 0.25     | 2.1      | 238      | 48      | 0.07    | 0.1      | 0.30     | 4.5      | 0.5      | 0.80     |
| SA5112356 | 0.7      | 0.05     | 0.18     | 0.5      | 18.8       | 0.5      | 0.25     | 2.5      | 141      | 14      | 0.02    | 0.05     | 0.09     | 1.4      | 0.5      | 0.38     |
| SA5112357 | 1.3      | 0.05     | 0.20     | 0.5      | 12.7       | 0.5      | 0.25     | 0.25     | 48       | 21      | 0.06    | 0.05     | 0.06     | 2.3      | 0.5      | 0.35     |
| SA5112358 | 2.1      | 0.05     | 0.24     | 0.5      | 17.52      | 0.5      | 0.25     | 0.25     | 88       | 24      | 0.03    | 0.05     | 0.07     | 3.0      | 0.5      | 0.29     |
| SA5112359 | 7.0      | 0.05     | 1.52     | 0.5      | 14.6       | 0.5      | 0.25     | 0.25     | 238      | 37      | 0.07    | 0.2      | 0.30     | 4.7      | 0.5      | 0.80     |
| SA5112360 | 5.0      | 0.05     | 0.91     | 0.5      | 12.47      | 0.5      | 0.25     | 2.9      | 127      | 25      | 0.11    | 0.2      | 0.26     | 3.0      | 0.5      | 0.78     |
| SA5112361 | 4.6      | 0.05     | 1.16     | 0.5      | 13.68      | 0.5      | 0.25     | 2.4      | 289      | 44      | 0.16    | 0.1      | 0.26     | 8.3      | 0.5      | 0.80     |
| SA5112362 | 5.3      | 0.05     | 0.94     | 0.5      | 25.3       | 0.5      | 0.25     | 3.6      | 167      | 38      | 0.07    | 0.2      | 0.31     | 6.7      | 0.5      | 0.96     |
| SA5112363 | 4.9      | 0.05     | 1.83     | 0.5      | 24.8       | 0.5      | 0.25     | 0.25     | 280      | 36      | 0.16    | 0.3      | 0.55     | 3.9      | 4        | 1.16     |
| SA5112364 | 5.3      | 0.05     | 0.88     | 0.5      | 25.8       | 0.5      | 3.6      | 0.25     | 206      | 43      | 0.08    | 0.2      | 0.30     | 6.5      | 2        | 0.94     |
| SA5112365 | 5.4      | 0.05     | 0.83     | 0.5      | 24.9       | 0.5      | 1.0      | 0.25     | 349      | 36      | 0.06    | 0.05     | 0.26     | 4.1      | 1        | 0.84     |
| SA5112366 | 4.6      | 0.05     | 0.82     | 0.5      | 21.2       | 0.5      | 0.25     | 4.9      | 283      | 40      | 0.06    | 0.2      | 0.29     | 3.8      | 0.5      | 0.89     |
| SA5112367 | 3.7      | 0.05     | 0.70     | 0.5      | 20.5       | 0.5      | 0.25     | 0.25     | 188      | 27      | 0.10    | 0.05     | 0.22     | 4.5      | 0.5      | 0.73     |
| SA5112368 | 5.6      | 0.05     | 0.91     | 0.5      | 28.1       | 0.5      | 0.25     | 4.0      | 428      | 29      | 0.09    | 0.1      | 0.28     | 4.5      | 0.5      | 0.85     |
| SA5112369 | 5.7      | 0.05     | 0.84     | 0.5      | 25.9       | 0.5      | 0.25     | 0.25     | 371      | 43      | 0.05    | 0.4      | 0.26     | 6.1      | 0.5      | 0.84     |
| SA5112370 | 5.5      | 0.05     | 0.81     | 0.5      | 20.8       | 0.5      | 14.4     | -9       | 68       | 51      | 0.11    | 0.05     | 0.25     | 3.5      | 2        | 0.74     |
| SA5112371 | 6.5      | 0.05     | 0.68     | 0.5      | 24.3       | 0.5      | 2.1      | 0.25     | 234      | 28      | 0.28    | 0.1      | 0.24     | 4.8      | 1        | 0.90     |
| SA5112372 | 0.6      | 0.05     | 0.24     | 0.5      | 27.1       | 0.5      | 0.25     | 0.8      | 49       | 28      | 0.04    | 0.05     | 0.13     | 1.2      | 3        | 0.50     |
| SA5112373 | 2.8      | 0.05     | 0.57     | 0.5      | 22.7       | 0.5      | 0.8      | 0.25     | 171      | 22      | 0.08    | 0.05     | 0.19     | 2.2      | 1        | 0.62     |
| SA5112374 | 5.8      | 0.05     | 0.83     | 0.5      | 22.8       | 0.5      | 2.5      | 0.25     | 227      | 30      | 0.09    | 0.05     | 0.26     | 4.3      | 1        | 0.73     |
| SA5112375 | 3.2      | 0.05     | 0.42     | 0.5      | 22.4       | 0.5      | 0.25     | 0.9      | 175      | 23      | 0.09    | 0.05     | 0.16     | 2.5      | 0.5      | 0.62     |
| SA5112376 | 2.8      | 0.05     | 0.65     | 0.5      | 25.7       | 0.5      | 2.7      | 1.3      | 279      | 37      | 0.09    | 0.05     | 0.18     | 2.1      | 1        | 0.69     |
| SA5112377 | 5.7      | 0.05     | 0.94     | 0.5      | 30.5       | 0.5      | 0.25     | 2.1      | 519      | 35      | 0.05    | 0.05     | 0.28     | 3.6      | 0.5      | 0.83     |
| SA5112378 | 4.4      | 0.05     | 0.75     | 0.5      | 20.8       | 0.5      | 4.4      | 0.25     | 233      | 36      | 0.14    | 0.05     | 0.27     | 4.7      | 1        | 0.82     |
| SA5112379 | 5.2      | 0.05     | 0.77     | 0.5      | 24         | 0.5      | 4.0      | 3.0      | 280      | 33      | 0.12    | 0.05     | 0.28     | 2.6      | 1        | 0.82     |
| SA5112380 | 5.6      | 0.05     | 0.85     | 0.5      | 28.3       | 0.5      | 0.25     | 7.0      | 245      | 32      | 0.14    | 0.05     | 0.31     | 6.6      | 0.5      | 0.82     |
| SA5112381 | 0.7      | 0.05     | 0.07     | 0.5      | 17.7       | 0.5      | 0.25     | 2.7      | 15       | 20      | 0.08    | 0.1      | 0.05     | 2.8      | 3        | 0.32     |
| SA5112382 | 5.5      | 0.05     | 0.81     | 0.5      | 29.4       | 0.5      | 0.25     | 0.8      | 198      | 33      | 0.12    | 0.3      | 0.27     | 6.0      | 1        | 0.79     |
| SA5112383 | 0.4      | 0.05     | 0.14     | 0.5      | 22.6       | 0.5      | 0.25     | 3.6      | 131      | 24      | 0.02    | 0.05     | 0.06     | 1.2      | 0.5      | 0.38     |
| SA5112384 | 1.5      | 0.05     | 0.13     | 0.5      | 30.3       | 0.5      | 0.25     | 13.3     | 47       | 19      | 0.02    | 0.1      | 0.05     | 1.5      | 0.5      | 0.30     |
| SA5112385 | 5.4      | 0.05     | 0.85     | 0.5      | 25.5       | 1        | 0.25     | 2.0      | 367      | 33      | 0.09    | 0.8      | 0.28     | 5.9      | 0.5      | 0.84     |
| SA5112386 | 6.8      | 0.05     | 0.78     | 0.5      | 26         | 1        | 0.25     | 0.25     | 231      | 34      | 0.20    | 0.8      | 0.36     | 5.6      | 0.5      | 0.99     |
| SA5112387 | 5.4      | 0.05     | 0.69     | 0.5      | 24.8       | 0.5      | 0.25     | 0.25     | 198      | 36      | 0.14    | 0.1      | 0.26     | 5.1      | 0.5      | 0.89     |
| SA5112388 | 10.5     | 0.05     | 1.09     | 0.5      | 29.3       | 0.5      | 0.25     | 0.25     | 391      | 53      | 0.13    | 0.4      | 0.35     | 8.3      | 1        | 0.91     |
| SA5112389 | 0.3      | 0.05     | 0.07     | 0.5      | 30.8       | 0.5      | 0.25     | 0.25     | 45       | 19      | 0.01    | 0.05     | 0.05     | 1.5      | 0.5      | 0.30     |
| SA5112390 | 12.1     | 0.05     | 1.05     | 0.5      | 29.4       | 0.5      | 0.25     | 1.1      | 303      | 53      | 0.13    | 0.2      | 0.34     | 7.4      | 3        | 0.93     |
| SA5112391 | 6.0      | 0.05     | 0.85     | 0.5      | 21.6       | 0.5      | 0.25     | 1.5      | 31       | 48      | 0.14    | 0.2      | 0.26     | 2.4      | 1        | 0.79     |
| SA5112392 | 4.0      | 0.05     | 0.67     | 0.5      | 29.2       | 1        | 0.25     | 0.7      | 338      | 48      | 0.08    | 0.3      | 0.27     | 3.7      | 0.5      | 1.00     |
| SA5112393 | 5.9      | 0.05     | 0.88     | 0.5      | 23.2       | 0.5      | 0.25     | 6.1      | 27       | 47      | 0.14    | 0.1      | 0.28     | 2.3      | 0.5      | 0.80     |
| SA5112394 | 8.3      | 0.05     | 0.95     | 0.5      | 34.3       | 0.5      | 0.25     | 1.5      | 368      | 48      | 0.03    | 0.1      | 0.21     | 7.7      | 0.5      | 0.91     |
| SA5112395 | 4.5      | 0.05     | 0.86     | 0.5      | 25.6       | 0.5      | 0.25     | 1.7      | 128      | 41      | 0.15    | 0.3      | 0.29     | 3.6      | 0.5      | 0.87     |
| SA5112396 | 4.0      | 0.05     | 1.16     | 0.5      | 27.3       | 0.5      | 0.25     | 0.8      | 215      | 32      | 0.13    | 0.2      | 0.37     | 3.8      | 0.5      | 0.86     |
| SA5112397 | 0.4      | 0.05     | 0.67     | 0.5      | 18.55      | 1        | 0.25     | 0.25     | 233      | 20      | 0.06    | 0.05     | 0.16     | 5.6      | 0.5      | 0.45     |
| SA5112398 | 5.9      | 0.05     | 1.15     | 0.5      | 32.6       | 0.5      | 0.25     | 1.8      | 406      | 45      | 0.13    | 0.2      | 0.40     | 4.8      | 0.5      | 1.10     |
| SA5112399 | 5.4      | 0.05     | 1.05     | 0.5      | 32.9       | 0.5      | 0.25     | 1.7      | 470      | 34      | 0.08    | 0.2      | 0.36     | 4.0      | 3        | 1.06     |
| SA5112400 | 4.1      | 0.05     | 1.17     | 0.5      | 28.2       | 0.5      | 0.25     | 3.5      | 179      | 29      | 0.15    | 0.2      | 0.43     | 1.8      | 0.5      | 1.07     |
| SA5112401 | 6.1      | 0.05     | 0.90     | 0.5      | 29         | 0.5      | 0.25     | 2.8      | 176      | 42      | 0.14    | 0.3      | 0.40     | 7.4      | 0.5      | 1.07     |
| SA5112402 | 0.2      | 0.05     | 0.08     | 0.5      | 18.5       | 0.5      | 0.25     | 1.4      | 18       | 14      | 0.04    | 0.05     | 0.09     | 2.8      | 0.5      | 0.46     |
| SA5112403 | 5.5      | 0.05     | 0.84     | 0.5      | 23.3       | 0.5      | 0.25     | 2.4      | 74       | 47      | 0.12    | 0.3      | 0.27     | 2.0      | 0.5      | 0.84     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112404 | 6.2      | 0.05     | 0.86     | 0.5      | 28.6       | 0.5      | 0.25     | 1.5      | 176      | 57      | 0.11    | 0.2      | 0.38     | 4.2      | 0.5      | 1.17     |
| SA5112405 | -9       | -9       | -9       | -9       | -9         | -9       | -9       | -9       | -9       | -9      | -9      | -9       | -9       | -9       | -9       | -9       |
| SA5112406 | 5.9      | 0.05     | 1.04     | 0.5      | 31         | 0.5      | 0.25     | 2.9      | 265      | 34      | 0.06    | 0.3      | 0.30     | 2.1      | 0.5      | 1.03     |
| SA5112407 | 5.5      | 0.05     | 0.85     | 0.5      | 24.1       | 0.5      | 0.25     | 0.9      | 108      | 42      | 0.13    | 0.1      | 0.29     | 2.9      | 0.5      | 0.87     |
| SA5112408 | 7.0      | 0.05     | 1.36     | 0.5      | 33.4       | 0.5      | 2.8      | 1.3      | 412      | 43      | 0.14    | 1.0      | 0.44     | 5.2      | 0.5      | 1.22     |
| SA5112409 | 0.1      | 0.05     | 0.10     | 0.5      | 20.1       | 0.5      | 0.25     | 1.3      | 17       | 14      | 0.02    | 0.05     | 0.05     | 1.0      | 3        | 0.34     |
| SA5112410 | 0.05     | 0.05     | 0.13     | 0.5      | 26.9       | 0.5      | 0.25     | 0.25     | 17       | 14      | 0.02    | 0.05     | 0.07     | 1.3      | 0.5      | 0.36     |
| SA5112411 | 7.2      | 0.05     | 1.17     | 0.5      | 27.5       | 0.5      | 0.25     | 0.25     | 162      | 20      | 0.22    | 0.05     | 0.33     | 1.7      | 0.5      | 0.84     |
| SA5112412 | 9.4      | 0.05     | 1.79     | 0.5      | 33.5       | 0.5      | 0.25     | 2.5      | 154      | 21      | 0.26    | 0.1      | 0.39     | 1.1      | 0.5      | 0.99     |
| SA5112413 | 6.6      | 0.05     | 1.39     | 0.5      | 28.8       | 0.5      | 0.25     | 0.6      | 80       | 20      | 0.19    | 0.05     | 0.36     | 1.7      | 0.5      | 0.92     |
| SA5112414 | 0.5      | 0.05     | 0.11     | 0.5      | 17.9       | 0.5      | 0.25     | 0.25     | 24       | 17      | 0.03    | 0.3      | 0.05     | 2.5      | 0.5      | 0.42     |
| SA5112415 | 0.5      | 0.05     | 0.15     | 0.5      | 14.8       | 0.5      | 0.25     | 0.25     | 16       | 12      | 0.07    | 0.1      | 0.09     | 5.4      | 0.5      | 0.42     |
| SA5112416 | 0.1      | 0.05     | 0.12     | 0.5      | 26.9       | 0.5      | 0.25     | 3.8      | 22       | 14      | 0.02    | 0.1      | 0.06     | 1.5      | 0.5      | 0.44     |
| SA5112417 | 0.05     | 0.05     | 0.08     | 0.5      | 30.9       | 0.5      | 0.25     | 0.25     | 10       | 19      | 0.02    | 0.05     | 0.04     | 0.8      | 0.5      | 0.34     |
| SA5112418 | 7.0      | 0.05     | 1.34     | 0.5      | 29.6       | 0.5      | 0.25     | 4.2      | 61       | 20      | 0.17    | 0.05     | 0.35     | 1.8      | 3        | 0.91     |
| SA5112419 | 9.1      | 0.05     | 1.58     | 0.5      | 35.5       | 0.5      | 0.25     | 2.9      | 532      | 28      | 0.11    | 0.1      | 0.51     | 9.5      | 1        | 1.18     |
| SA5112420 | 7.4      | 0.05     | 1.15     | 0.5      | 27         | 0.5      | 0.25     | 0.25     | 175      | 15      | 0.22    | 0.05     | 0.33     | 1.8      | 0.5      | 0.85     |
| SA5112421 | 0.05     | 0.05     | 0.12     | 0.5      | 17.9       | 0.5      | 0.25     | 0.25     | 14       | 11      | 0.04    | 0.05     | 0.09     | 2.5      | 0.5      | 0.54     |
| SA5112422 | 0.05     | 0.05     | 0.09     | 0.5      | 20.4       | 0.5      | 0.25     | 0.25     | 24       | 9       | 0.01    | 0.05     | 0.05     | 1.5      | 0.5      | 0.33     |
| SA5112423 | 0.3      | 0.05     | 0.11     | 0.5      | 35.6       | 0.5      | 0.25     | 0.25     | 19       | 15      | 0.03    | 0.05     | 0.06     | 1.4      | 0.5      | 0.41     |
| SA5112424 | 4.6      | 0.05     | 1.15     | 0.5      | 30         | 0.5      | 0.25     | 5.6      | 415      | 23      | 0.12    | 0.2      | 0.44     | 7.9      | 0.5      | 1.05     |
| SA5112425 | 5.7      | 0.05     | 0.99     | 0.5      | 30.2       | 0.5      | 0.25     | 0.25     | 472      | 25      | 0.07    | 0.2      | 0.37     | 6.2      | 1        | 1.12     |
| SA5112426 | 0.05     | 0.05     | 0.08     | 0.5      | 30.3       | 0.5      | 0.25     | 1.0      | 45       | 13      | 0.02    | 0.05     | 0.07     | 1.1      | 0.5      | 0.47     |
| SA5112427 | 0.6      | 0.05     | 0.12     | 0.5      | 21.3       | 0.5      | 0.25     | 2.1      | 24       | 10      | 0.04    | 0.05     | 0.07     | 2.6      | 3        | 0.58     |
| SA5112428 | 0.05     | 0.05     | 0.10     | 0.5      | 28.9       | 0.5      | 1.0      | 0.8      | 71       | 5       | 0.03    | 0.05     | 0.06     | 1.0      | 0.5      | 0.42     |
| SA5112429 | 0.3      | 0.05     | 0.09     | 0.5      | 26.3       | 0.5      | 0.25     | 4.8      | 17       | 10      | 0.02    | 0.1      | 0.06     | 1.7      | 0.5      | 0.46     |
| SA5112430 | 0.1      | 0.05     | 0.10     | 0.5      | 22.8       | 0.5      | 0.25     | 0.25     | 5        | 8       | 0.03    | 0.1      | 0.06     | 2.0      | 0.5      | 0.48     |
| SA5112431 | 10.7     | 0.05     | 1.60     | 0.5      | 36.2       | 0.5      | 0.25     | 2.6      | 315      | 24      | 0.16    | 0.05     | 0.63     | 3.7      | 0.5      | 1.16     |
| SA5112432 | 0.05     | 0.05     | 0.15     | 0.5      | 16         | 0.5      | 3.8      | 1.8      | 15       | 9       | 0.04    | 0.05     | 0.09     | 5.1      | 0.5      | 1.21     |
| SA5112433 | 0.1      | 0.05     | 0.14     | 0.5      | 19.3       | 0.5      | 1.5      | 3.8      | 17       | 9       | 0.04    | 0.05     | 0.09     | 4.9      | 0.5      | 0.75     |
| SA5112434 | 10.2     | 0.05     | 1.60     | 0.5      | 35.8       | 0.5      | 3.9      | 0.25     | 369      | -9      | 0.18    | 0.1      | 0.65     | 5.7      | 0.5      | 1.90     |
| SA5112435 | 0.05     | 0.05     | 0.10     | 0.5      | 18.4       | 0.5      | 0.25     | 2.3      | 15       | 11      | 0.03    | 0.05     | 0.05     | 2.6      | 0.5      | 0.35     |
| SA5112436 | 2.5      | 0.05     | 2.95     | 0.5      | 41.4       | 1        | 0.25     | 6.0      | 204      | 25      | 0.07    | 0.4      | 0.53     | 5.7      | 3        | 1.00     |
| SA5112437 | 1.8      | 0.05     | 1.33     | 0.5      | 29.2       | 0.5      | 0.25     | 0.25     | 129      | 65      | 0.22    | 0.3      | 0.36     | 2.9      | 1        | 0.94     |
| SA5112438 | 4.7      | 0.05     | 2.71     | 0.5      | 40.8       | 0.5      | 0.25     | 0.25     | 231      | 39      | 0.08    | 0.4      | 0.66     | 2.4      | 1        | 1.12     |
| SA5112439 | 5.5      | 0.05     | 1.78     | 0.5      | 30         | 0.5      | 0.25     | 0.9      | 284      | 37      | 0.11    | 0.3      | 0.44     | 4.5      | 0.5      | 0.92     |
| SA5112440 | 5.7      | 0.05     | 1.80     | 0.5      | 30.9       | 0.5      | 4.0      | 1.4      | 299      | 36      | 0.13    | 0.3      | 0.44     | 3.5      | 1        | 0.94     |
| SA5112441 | 4.2      | 0.05     | 1.29     | 0.5      | 28         | 0.5      | 0.25     | 1.7      | 135      | 40      | 0.18    | 0.4      | 0.37     | 4.8      | 0.5      | 0.94     |
| SA5112442 | 2.6      | 0.05     | 0.49     | 0.5      | 19.4       | 0.5      | 0.25     | 0.6      | 121      | 10      | 0.12    | 0.05     | 0.19     | 4.9      | 0.5      | 0.63     |
| SA5112443 | 3.3      | 0.05     | 1.00     | 0.5      | 26.4       | 0.5      | 0.25     | 7.1      | 154      | 30      | 0.28    | 0.2      | 0.32     | 2.8      | 0.5      | 0.89     |
| SA5112444 | 4.1      | 0.05     | 1.15     | 0.5      | 25.5       | 0.5      | 0.25     | 2.6      | 409      | 40      | 0.13    | 0.1      | 0.35     | 8.9      | 0.5      | 0.89     |
| SA5112445 | 0.2      | 0.05     | 0.14     | 0.5      | 25.5       | 0.5      | 0.25     | 4.5      | 43       | 13      | 0.03    | 0.1      | 0.07     | 1.7      | 0.5      | 0.33     |
| SA5112446 | 0.1      | 0.05     | 0.08     | 0.5      | 27.9       | 0.5      | 0.25     | 2.1      | 26       | 17      | 0.01    | 0.05     | 0.04     | 0.8      | 0.5      | 0.31     |
| SA5112447 | 0.1      | 0.05     | 0.10     | 0.5      | 27.1       | 0.5      | 0.25     | 1.1      | 12       | 12      | 0.01    | 0.05     | 0.05     | 1.2      | 0.5      | 0.37     |
| SA5112448 | 0.05     | 0.05     | 0.12     | 0.5      | 39.6       | 0.5      | 3.0      | 0.25     | 49       | 9       | 0.02    | 0.05     | 0.08     | 1.7      | 0.5      | 0.32     |
| SA5112449 | 0.6      | 0.05     | 0.35     | 0.5      | 21         | 0.5      | 0.25     | 0.25     | 42       | 11      | 0.02    | 0.05     | 0.12     | 0.9      | 0.5      | 0.61     |
| SA5112450 | 4.2      | 0.05     | 0.93     | 0.5      | 23.4       | 0.5      | 0.25     | 5.3      | 32       | 12      | 0.13    | 0.2      | 0.32     | 0.9      | 0.5      | 0.89     |
| SA5112451 | 0.1      | 0.05     | 0.09     | 0.5      | 22.4       | 0.5      | 0.25     | 2.9      | 13       | 13      | 0.07    | 0.05     | 0.09     | 4.5      | 0.5      | 0.51     |
| SA5112452 | 0.7      | 0.05     | 0.41     | 0.5      | 31.4       | 0.5      | 0.25     | 3.1      | 75       | 14      | 0.02    | 0.1      | 0.15     | 2.4      | 0.5      | 0.58     |
| SA5112453 | 7.2      | 0.05     | 1.47     | 0.5      | 55         | 0.5      | 0.25     | 1.5      | 209      | 25      | 0.18    | 0.1      | 0.41     | 5.1      | 0.5      | 0.97     |
| SA5112454 | 8.1      | 0.05     | 1.44     | 0.5      | 29.3       | 0.5      | 0.25     | 1.1      | 194      | 15      | 0.19    | 0.2      | 0.42     | 2.7      | 0.5      | 0.99     |
| SA5112455 | 0.3      | 0.05     | 0.13     | 0.5      | 28.1       | 0.5      | 0.25     | 1.9      | 61       | 12      | 0.04    | 0.05     | 0.04     | 1.4      | 0.5      | 0.37     |
| SA5112456 | 0.05     | 0.05     | 0.08     | 0.5      | 28         | 0.5      | 0.25     | 6.5      | 27       | 7       | 0.02    | 0.05     | 0.04     | 0.9      | 0.5      | 0.30     |
| SA5112457 | 0.05     | 0.05     | 0.07     | 0.5      | 22.5       | 0.5      | 0.25     | 1.7      | 5        | 10      | 0.03    | 0.05     | 0.05     | 2.0      | 0.5      | 0.44     |
| SA5112458 | 0.05     | 0.05     | 0.08     | 0.5      | 19.4       | 0.5      | 0.25     | 0.25     | 5        | 17      | 0.04    | 0.05     | 0.07     | 2.5      | 0.5      | 0.49     |
| SA5112459 | 0.05     | 0.05     | 0.08     | 0.5      | 27.9       | 0.5      | 0.25     | 1.5      | 18       | 17      | 0.02    | 0.05     | 0.05     | 0.6      | 0.5      | 0.38     |
| SA5112460 | 0.05     | 0.05     | 0.10     | 0.5      | 23.1       | 0.5      | 0.25     | 6.9      | 11       | 5       | 0.02    | 0.05     | 0.05     | 0.8      | 0.5      | 0.43     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112461 | 4.9      | 0.05     | 0.95     | 0.5      | 28         | 0.5      | 0.25     | 7.2      | 216      | 13      | 0.12    | 0.2      | 0.40     | 4.0      | 0.5      | 1.19     |
| SA5112462 | 0.05     | 0.05     | 0.09     | 0.5      | 22.5       | 0.5      | 0.25     | 6.4      | 23       | 21      | 0.01    | 0.05     | 0.05     | 0.9      | 0.5      | 0.41     |
| SA5112463 | 3.6      | 0.05     | 0.87     | 0.5      | 30.1       | 0.5      | 0.25     | 9.1      | 484      | 16      | 0.16    | 0.2      | 0.38     | 7.9      | 0.5      | 1.25     |
| SA5112464 | 5.0      | 0.05     | 0.96     | 0.5      | 28.9       | 0.5      | 0.25     | 7.8      | 519      | 17      | 0.10    | 0.05     | 0.40     | 8.7      | 0.5      | 1.17     |
| SA5112465 | 4.9      | 0.05     | 0.86     | 0.5      | 29.6       | 0.5      | 0.25     | 7.1      | 402      | 17      | 0.15    | 0.1      | 0.36     | 9.1      | 0.5      | 1.12     |
| SA5112466 | 3.3      | 0.05     | 0.69     | 0.5      | 27.6       | 0.5      | 0.25     | 6.4      | 297      | 13      | 0.12    | 0.1      | 0.30     | 6.8      | 0.5      | 1.05     |
| SA5112467 | 4.5      | 0.05     | 0.85     | 0.5      | 26.7       | 0.5      | 0.25     | 8.4      | 220      | 15      | 0.17    | 0.05     | 0.33     | 5.8      | 0.5      | 1.17     |
| SA5112468 | 4.4      | 0.05     | 0.64     | 0.5      | 23.6       | 0.5      | 0.25     | 5.3      | 266      | 10      | 0.20    | 0.05     | 0.27     | 5.6      | 0.5      | 1.03     |
| SA5112469 | 13.8     | 0.05     | 1.73     | 0.5      | 38.2       | 0.5      | 0.25     | 7.3      | 1108     | 18      | 0.48    | 0.2      | 0.62     | 37.1     | 0.5      | 1.40     |
| SA5112470 | 9.7      | 0.05     | 1.71     | 0.5      | 34.8       | 0.5      | 0.25     | 5.2      | 557      | 23      | 0.14    | 0.3      | 0.53     | 8.8      | 0.5      | 1.29     |
| SA5112471 | 0.1      | 0.05     | 0.10     | 0.5      | 15.62      | 0.5      | 0.25     | 4.6      | 14       | 14      | 0.04    | 0.05     | 0.05     | 2.1      | 0.5      | 0.53     |
| SA5112472 | 12.3     | 0.05     | 1.83     | 0.5      | 35.5       | 0.5      | 0.25     | 4.7      | 254      | 17      | 0.18    | 0.2      | 0.46     | 4.0      | 0.5      | 1.39     |
| SA5112473 | 0.2      | 0.05     | 0.10     | 0.5      | 21.1       | 0.5      | 0.25     | 10.0     | 5        | 15      | 0.02    | 0.05     | 0.08     | 1.9      | 0.5      | 0.60     |
| SA5112474 | 0.1      | 0.05     | 0.06     | 0.5      | 24.9       | 0.5      | 0.25     | 16.4     | 5        | 12      | 0.01    | 0.05     | 0.06     | 0.9      | 0.5      | 0.48     |
| SA5112475 | 0.4      | 0.05     | 0.08     | 0.5      | 24.7       | 0.5      | 0.25     | 10.8     | 49       | 14      | 0.01    | 0.05     | 0.09     | 2.8      | 0.5      | 0.53     |
| SA5112476 | 0.05     | 0.05     | 0.08     | 0.5      | 26.3       | 0.5      | 0.25     | 8.6      | 12       | 10      | 0.01    | 0.05     | 0.06     | 0.7      | 0.5      | 0.44     |
| SA5112477 | 0.05     | 0.05     | 0.07     | 0.5      | 38.7       | 0.5      | 0.25     | 13.5     | 11       | 8       | 0.005   | 0.05     | 0.06     | 0.6      | 0.5      | 0.50     |
| SA5112478 | 3.6      | 0.05     | 0.86     | 0.5      | 31.8       | 0.5      | 0.25     | 10.4     | 491      | 17      | 0.14    | 0.2      | 0.37     | 7.5      | 0.5      | 1.12     |
| SA5112479 | 0.05     | 0.05     | 0.07     | 0.5      | 25.5       | 0.5      | 0.25     | 7.9      | 16       | 12      | 0.005   | 0.2      | 0.05     | 1.0      | 0.5      | 0.37     |
| SA5112480 | 0.05     | 0.05     | 0.07     | 0.5      | 38.5       | 0.5      | 0.25     | 13.2     | 36       | 11      | 0.005   | 0.05     | 0.09     | 1.0      | 0.5      | 0.53     |
| SA5112481 | 0.05     | 0.05     | 0.06     | 0.5      | 27.4       | 0.5      | 0.25     | 7.5      | 5        | 11      | 0.03    | 0.05     | 0.05     | 1.9      | 0.5      | 0.44     |
| SA5112482 | 2.3      | 0.05     | 1.32     | 0.5      | 30.9       | 0.5      | 0.25     | 9.5      | 322      | 17      | 0.06    | 0.2      | 0.45     | 3.4      | 0.5      | 1.23     |
| SA5112483 | 0.05     | 0.05     | 0.12     | 0.5      | 27.4       | 0.5      | 0.25     | 4.6      | 37       | 6       | 0.005   | 0.05     | 0.10     | 1.4      | 0.5      | 0.43     |
| SA5112484 | 2.0      | 0.05     | 1.44     | 0.5      | 34.6       | 0.5      | 0.25     | 6.9      | 219      | 19      | 0.09    | 0.05     | 0.51     | 1.9      | 0.5      | 1.31     |
| SA5112485 | 2.3      | 0.05     | 0.81     | 0.5      | 23.4       | 0.5      | 0.25     | 4.5      | 69       | 4       | 0.02    | 0.05     | 0.24     | 2.5      | 0.5      | 0.85     |
| SA5112486 | 2.8      | 0.05     | 1.27     | 0.5      | 28         | 0.5      | 0.25     | 2.3      | 205      | 14      | 0.03    | 0.1      | 0.41     | 3.5      | 0.5      | 0.94     |
| SA5112487 | 2.2      | 0.05     | 0.97     | 0.5      | 24.7       | 0.5      | 0.25     | 7.1      | 412      | 1       | 0.04    | 0.05     | 0.36     | 3.1      | 0.5      | 0.89     |
| SA5112488 | 0.2      | 0.05     | 0.11     | 0.5      | 20.9       | 0.5      | 0.25     | 5.8      | 30       | 11      | 0.01    | 0.2      | 0.07     | 5.2      | 0.5      | 0.51     |
| SA5112489 | 0.1      | 0.05     | 0.08     | 0.5      | 24.1       | 0.5      | 0.25     | 5.0      | 34       | 13      | 0.005   | 0.05     | 0.06     | 1.9      | 0.5      | 0.33     |
| SA5112490 | 2.6      | 0.05     | 2.28     | 0.5      | 35         | 0.5      | 0.25     | 5.2      | 83       | 8       | 0.03    | 0.2      | 0.57     | 3.9      | 0.5      | 0.98     |
| SA5112491 | 1.6      | 0.05     | 1.56     | 0.5      | 29.9       | 0.5      | 0.25     | 6.1      | 136      | 11      | 0.03    | 0.2      | 0.44     | 2.7      | 0.5      | 0.98     |
| SA5112492 | 0.4      | 0.05     | 0.17     | 0.5      | 14.8       | 0.5      | 0.25     | 6.0      | 25       | 10      | 0.005   | 0.05     | 0.06     | 2.2      | 0.5      | 0.24     |
| SA5112493 | 0.7      | 0.05     | 0.23     | 0.5      | 34         | 0.5      | 0.25     | 2.9      | 45       | 1       | 0.01    | 0.05     | 0.08     | 2.0      | 0.5      | 0.31     |
| SA5112494 | 0.3      | 0.05     | 0.11     | 0.5      | 19.3       | 0.5      | 0.25     | 4.5      | 25       | 11      | 0.005   | 0.05     | 0.05     | 1.5      | 0.5      | 0.34     |
| SA5112495 | 0.05     | 0.05     | 0.06     | 0.5      | 18.7       | 0.5      | 0.25     | 3.9      | 5        | 9       | 0.005   | 0.05     | 0.05     | 2.3      | 0.5      | 0.39     |
| SA5112496 | 3.6      | 0.05     | 0.87     | 0.5      | 24.2       | 0.5      | 0.25     | 10.8     | 139      | 7       | 0.04    | 0.05     | 0.29     | 3.2      | 0.5      | 1.04     |
| SA5112497 | 0.2      | 0.05     | 0.14     | 0.5      | 26.5       | 0.5      | 0.25     | 3.8      | 95       | 13      | 0.005   | 0.1      | 0.07     | 1.5      | 0.5      | 0.27     |
| SA5112498 | 0.3      | 0.05     | 0.10     | 0.5      | 19.5       | 0.5      | 0.25     | 6.5      | 21       | 18      | 0.005   | 0.05     | 0.05     | 1.6      | 0.5      | 0.26     |
| SA5112499 | 0.4      | 0.05     | 0.25     | 0.5      | 19.9       | 0.5      | 0.25     | 7.2      | 23       | 20      | 0.04    | 0.05     | 0.14     | 1.2      | 0.5      | 0.75     |
| SA5112500 | 1.5      | 0.05     | 0.47     | 0.5      | 20.3       | 0.5      | 0.25     | 8.8      | 54       | 13      | 0.02    | 0.05     | 0.21     | 2.8      | 0.5      | 0.70     |
| SA5112501 | 0.1      | 0.05     | 0.08     | 0.5      | 23.9       | 0.5      | 0.25     | 6.4      | 42       | 15      | 0.005   | 0.05     | 0.05     | 2.1      | 0.5      | 0.27     |
| SA5112502 | 0.3      | 0.05     | 0.10     | 0.5      | 32.4       | 0.5      | 0.25     | 5.5      | 37       | 15      | 0.005   | 0.05     | 0.07     | 2.0      | 0.5      | 0.29     |
| SA5112503 | 2.3      | 0.05     | 0.86     | 0.5      | 24.8       | 0.5      | 0.25     | 9.2      | 43       | 21      | 0.26    | 0.05     | 0.29     | 3.8      | 0.5      | 0.90     |
| SA5112504 | 3.0      | 0.05     | 1.11     | 0.5      | 26.5       | 0.5      | 0.25     | 5.0      | 293      | 20      | 0.04    | 0.1      | 0.42     | 3.3      | 0.5      | 1.28     |
| SA5112505 | 0.1      | 0.05     | 0.10     | 0.5      | 21.1       | 0.5      | 0.25     | 5.2      | 21       | 12      | 0.01    | 0.05     | 0.05     | 1.4      | 0.5      | 0.30     |
| SA5112506 | 13.3     | 0.05     | 0.64     | 0.5      | 22.5       | 0.5      | 0.25     | 7.0      | 367      | 15      | 0.07    | 0.3      | 0.30     | 5.7      | 0.5      | 0.74     |
| SA5112507 | 0.6      | 0.05     | 0.10     | 0.5      | 27.3       | 0.5      | 0.25     | 8.3      | 85       | 15      | 0.04    | 0.05     | 0.03     | 1.4      | 0.5      | 0.24     |
| SA5112508 | 0.8      | 0.2      | 0.11     | 0.5      | 25.1       | 0.5      | 0.25     | 9.1      | 73       | 12      | 0.005   | 0.3      | 0.05     | 1.8      | 0.5      | 0.28     |
| SA5112509 | 0.1      | 0.1      | 0.08     | 0.5      | 17.08      | 0.5      | 0.25     | 6.5      | 12       | 16      | 0.02    | 0.05     | 0.07     | 2.8      | 0.5      | 0.35     |
| SA5112510 | 0.3      | 0.1      | 0.10     | 0.5      | 34.3       | 0.5      | 0.25     | 8.8      | 50       | 14      | 0.005   | 0.1      | 0.07     | 3.2      | 0.5      | 0.18     |
| SA5112511 | 2.8      | 0.1      | 1.05     | 0.5      | 25.1       | 0.5      | 0.25     | 8.9      | 250      | 52      | 0.05    | 0.2      | 0.42     | 5.0      | 0.5      | 1.06     |
| SA5112512 | 0.1      | 0.05     | 0.10     | 0.5      | 22.3       | 0.5      | 0.25     | 6.7      | 89       | 23      | 0.05    | 0.1      | 0.06     | 1.9      | 0.5      | 0.38     |
| SA5112513 | 0.5      | 0.3      | 0.14     | 0.5      | 27.9       | 0.5      | 0.25     | 7.4      | 60       | 12      | 0.005   | 0.05     | 0.07     | 2.8      | 0.5      | 0.17     |
| SA5112514 | 0.5      | 0.1      | 0.19     | 0.5      | 35.6       | 0.5      | 0.25     | 4.6      | 135      | 14      | 0.11    | 0.05     | 0.08     | 1.5      | 0.5      | 0.38     |
| SA5112515 | 0.5      | 0.2      | 0.14     | 0.5      | 35.3       | 0.5      | 0.25     | 21.7     | 79       | 20      | 0.01    | 0.05     | 0.06     | 1.1      | 0.5      | 0.31     |
| SA5112516 | 0.1      | 0.1      | 0.14     | 0.5      | 34.4       | 0.5      | 0.25     | 5.0      | 201      | 18      | 0.005   | 0.05     | 0.08     | 2.1      | 0.5      | 0.17     |
| SA5112517 | 0.2      | 0.05     | 0.13     | 0.5      | 30         | 0.5      | 0.25     | 6.3      | 68       | 20      | 0.005   | 0.2      | 0.08     | 2.0      | 0.5      | 0.27     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112518 | 0.1      | 0.1      | 0.11     | 0.5      | 26.1       | 0.5      | 0.25     | 7.4      | 15       | 18      | 0.01    | 0.05     | 0.06     | 1.6      | 0.5      | 0.29     |
| SA5112519 | 0.1      | 0.4      | 0.13     | 0.5      | 28.2       | 0.5      | 0.25     | 11.4     | 45       | 11      | 0.005   | 0.1      | 0.07     | 1.3      | 0.5      | 0.38     |
| SA5112520 | 0.4      | 0.1      | 0.11     | 0.5      | 18.24      | 0.5      | 0.25     | 7.3      | 11       | 19      | 0.06    | 0.05     | 0.05     | 1.1      | 0.5      | 0.34     |
| SA5112521 | 2.0      | 0.2      | 0.79     | 0.5      | 22.3       | 0.5      | 0.25     | 7.2      | 59       | 18      | 0.04    | 0.1      | 0.28     | 1.0      | 0.5      | 0.96     |
| SA5112522 | 0.2      | 0.1      | 0.11     | 0.5      | 25         | 0.5      | 0.25     | 10.2     | 18       | 14      | 0.02    | 0.05     | 0.09     | 2.3      | 0.5      | 0.52     |
| SA5112523 | 0.7      | 0.1      | 1.48     | 0.5      | 31.3       | 0.5      | 0.25     | 5.8      | 144      | 17      | 0.04    | 0.2      | 0.88     | 0.8      | 0.5      | 0.94     |
| SA5112524 | 0.05     | 0.2      | 0.09     | 0.5      | 14.73      | 0.5      | 0.25     | 8.9      | 5        | 11      | 0.005   | 0.1      | 0.03     | 1.5      | 0.5      | 0.35     |
| SA5112525 | 0.4      | 0.1      | 0.22     | 0.5      | 20.9       | 0.5      | 0.25     | 6.0      | 186      | 16      | 0.005   | 0.05     | 0.17     | 2.7      | 0.5      | 0.60     |
| SA5112526 | 0.05     | 0.05     | 0.08     | 0.5      | 18.4       | 0.5      | 0.25     | 8.5      | 5        | 15      | 0.03    | 0.05     | 0.06     | 1.5      | 0.5      | 0.42     |
| SA5112527 | 0.9      | 0.05     | 1.50     | 0.5      | 32.2       | 0.5      | 0.25     | 9.0      | 145      | 19      | 0.07    | 0.2      | 0.89     | 1.0      | 0.5      | 0.84     |
| SA5112528 | 0.05     | 0.1      | 0.12     | 0.5      | 27.1       | 0.5      | 0.25     | 4.5      | 11       | 14      | 0.005   | 0.05     | 0.07     | 1.3      | 0.5      | 0.42     |
| SA5112529 | 0.1      | 0.1      | 0.13     | 0.5      | 23         | 0.5      | 0.25     | 6.6      | 19       | 8       | 0.005   | 0.05     | 0.07     | 1.4      | 0.5      | 0.42     |
| SA5112530 | 0.05     | 0.05     | 0.10     | 0.5      | 17.7       | 0.5      | 0.25     | 8.1      | 5        | 10      | 0.005   | 0.05     | 0.03     | 1.3      | 0.5      | 0.35     |
| SA5112531 | 0.05     | 0.05     | 0.11     | 0.5      | 25         | 0.5      | 0.25     | 8.9      | 5        | 14      | 0.01    | 0.05     | 0.07     | 1.2      | 0.5      | 0.42     |
| SA5112532 | 0.8      | 0.1      | 0.09     | 0.5      | 29.8       | 0.5      | 0.25     | 7.5      | 116      | 13      | 0.03    | 0.2      | 0.11     | 1.7      | 0.5      | 0.45     |
| SA5112533 | 0.05     | 0.2      | 0.06     | 0.5      | 31.4       | 0.5      | 0.25     | 11.9     | 5        | 11      | 0.005   | 0.05     | 0.05     | 0.25     | 0.5      | 0.48     |
| SA5112534 | 0.2      | 0.1      | 0.10     | 0.5      | 18.3       | 0.5      | 0.25     | 6.5      | 5        | 16      | 0.02    | 0.05     | 0.08     | 2.4      | 0.5      | 0.52     |
| SA5112535 | 0.05     | 0.1      | 0.09     | 0.5      | 28.2       | 0.5      | 0.25     | 5.7      | 17       | 9       | 0.005   | 0.05     | 0.09     | 1.3      | 0.5      | 0.49     |
| SA5112536 | 0.05     | 0.1      | 0.10     | 0.5      | 18.9       | 0.5      | 0.25     | 7.0      | 19       | 7       | 0.005   | 0.05     | 0.05     | 1.3      | 0.5      | 0.44     |
| SA5112537 | 2.7      | 0.2      | 1.43     | 0.5      | 32.6       | 0.5      | 0.25     | 17.3     | 381      | 14      | 0.09    | 0.05     | 0.56     | 6.7      | 0.5      | 1.21     |
| SA5112538 | 0.3      | 0.1      | 0.17     | 0.5      | 21.2       | 0.5      | 0.25     | 7.1      | 48       | 12      | 0.02    | 0.05     | 0.09     | 2.7      | 0.5      | 0.75     |
| SA5112539 | 2.5      | 0.1      | 1.36     | 0.5      | 30.8       | 0.5      | 0.25     | 6.6      | 123      | 16      | 0.08    | 0.4      | 0.47     | 2.3      | 0.5      | 1.32     |
| SA5112540 | 2.3      | 0.1      | 1.33     | 0.5      | 31.2       | 0.5      | 0.25     | 7.1      | 126      | 18      | 0.06    | 0.2      | 0.46     | 2.0      | 0.5      | 1.31     |
| SA5112541 | 10.6     | 0.1      | 0.72     | 0.5      | 36.4       | 0.5      | 0.25     | 9.2      | 302      | 14      | 0.08    | 0.2      | 0.34     | 2.0      | 0.5      | 1.16     |
| SA5112542 | 5.8      | 0.3      | 0.70     | 0.5      | 33.1       | 0.5      | 0.25     | 9.1      | 338      | 17      | 0.02    | 0.2      | 0.31     | 3.6      | 3        | 1.00     |
| SA5112543 | 6.8      | 0.2      | 0.84     | 0.5      | 34.4       | 0.5      | 0.25     | 8.7      | 471      | 23      | 0.04    | 0.2      | 0.35     | 4.6      | 0.5      | 1.14     |
| SA5112544 | 0.6      | 0.2      | 0.13     | 0.5      | 41         | 0.5      | 0.25     | 6.1      | 215      | 11      | 0.02    | 0.05     | 0.12     | 1.5      | 0.5      | 0.47     |
| SA5112545 | 0.05     | 0.1      | 0.07     | 0.5      | 17.81      | 0.5      | 0.25     | 7.9      | 11       | 12      | 0.005   | 0.05     | 0.04     | 0.9      | 0.5      | 0.38     |
| SA5112546 | 0.3      | 0.1      | 0.12     | 0.5      | 28.2       | 0.5      | 0.25     | 3.3      | 69       | 14      | 0.005   | 0.05     | 0.07     | 1.7      | 0.5      | 0.43     |
| SA5112547 | 5.0      | 0.1      | 0.78     | 0.5      | 37.5       | 0.5      | 0.25     | 8.2      | 584      | 31      | 0.03    | 0.2      | 0.31     | 6.0      | 0.5      | 1.05     |
| SA5112548 | 5.6      | 0.1      | 0.86     | 0.5      | 24.6       | 0.5      | 0.25     | 9.9      | 333      | 28      | 0.07    | 0.2      | 0.28     | 7.5      | 0.5      | 0.92     |
| SA5112549 | 7.6      | 0.1      | 1.03     | 0.5      | 25         | 0.5      | 0.25     | 6.1      | 419      | 29      | 0.08    | 0.3      | 0.33     | 9.8      | 0.5      | 0.99     |
| SA5112550 | 5.7      | 0.1      | 0.76     | 0.5      | 25.2       | 0.5      | 0.25     | 9.7      | 321      | 39      | 0.06    | 0.2      | 0.28     | 6.4      | 0.5      | 0.98     |
| SA5112551 | 6.9      | 0.3      | 0.67     | 0.5      | 31.4       | 0.5      | 0.25     | 7.2      | 456      | 38      | 0.40    | 0.3      | 0.26     | 5.4      | 2        | 1.11     |
| SA5112552 | 5.5      | 0.2      | 0.74     | 0.5      | 28.5       | 0.5      | 0.25     | 17.8     | 391      | 48      | 0.07    | 0.4      | 0.25     | 6.9      | 0.5      | 1.14     |
| SA5112553 | 6.8      | 0.2      | 1.08     | 0.5      | 26         | 0.5      | 0.25     | 7.1      | 463      | 45      | 0.07    | 0.2      | 0.30     | 8.7      | 0.5      | 1.00     |
| SA5112554 | 6.0      | 0.1      | 0.75     | 0.5      | 31.2       | 0.5      | 0.25     | 6.2      | 339      | 20      | 0.02    | 0.1      | 0.33     | 4.1      | 0.5      | 0.89     |
| SA5112555 | 5.6      | 0.1      | 0.84     | 0.5      | 24.7       | 0.5      | 0.25     | 6.6      | 184      | 38      | 0.18    | 0.2      | 0.28     | 7.8      | 0.5      | 0.96     |
| SA5112556 | 7.7      | 0.1      | 1.11     | 0.5      | 26.8       | 0.5      | 0.25     | 5.7      | 342      | 33      | 0.05    | 0.2      | 0.33     | 9.0      | 0.5      | 0.91     |
| SA5112557 | 5.2      | 0.1      | 1.20     | 0.5      | 27.7       | 0.5      | 0.25     | 4.6      | 270      | 72      | 0.14    | 0.1      | 0.47     | 4.9      | 0.5      | 1.07     |
| SA5112558 | 4.2      | 0.1      | 0.77     | 0.5      | 20.7       | 0.5      | 0.25     | 4.7      | 135      | 31      | 0.07    | 0.2      | 0.25     | 6.0      | 0.5      | 0.84     |
| SA5112559 | 5.0      | 0.1      | 0.81     | 0.5      | 23.2       | 0.5      | 0.25     | 5.0      | 190      | 24      | 0.08    | 0.05     | 0.26     | 6.5      | 0.5      | 0.84     |
| SA5112560 | 5.6      | 0.3      | 0.85     | 0.5      | 25.3       | 0.5      | 0.25     | 11.9     | 270      | 28      | 0.08    | 0.2      | 0.28     | 7.6      | 2        | 0.90     |
| SA5112561 | 3.5      | 0.1      | 0.34     | 0.5      | 41.5       | 0.5      | 0.25     | 24.3     | 401      | 32      | 0.08    | 0.2      | 0.18     | 6.2      | 0.5      | 0.48     |
| SA5112562 | 6.2      | 0.1      | 0.77     | 0.5      | 25.5       | 0.5      | 0.25     | 6.9      | 136      | 30      | 0.11    | 0.3      | 0.30     | 8.9      | 0.5      | 1.05     |
| SA5112563 | 4.1      | 0.1      | 0.60     | 0.5      | 31.5       | 0.5      | 0.25     | 6.6      | 316      | 20      | 0.08    | 0.05     | 0.25     | 5.1      | 0.5      | 1.04     |
| SA5112564 | 4.2      | 0.1      | 0.73     | 0.5      | 33.9       | 0.5      | 0.25     | 16.8     | 318      | 28      | 0.09    | 0.3      | 0.25     | 5.9      | 0.5      | 1.16     |
| SA5112565 | 2.6      | 0.1      | 0.41     | 0.5      | 20.8       | 0.5      | 0.25     | 12.0     | 92       | 15      | 0.08    | 0.1      | 0.18     | 6.4      | 0.5      | 0.90     |
| SA5112566 | 4.7      | 0.1      | 0.74     | 0.5      | 22.8       | 0.5      | 0.25     | 6.5      | 175      | 17      | 0.12    | 0.1      | 0.28     | 7.4      | 0.5      | 0.97     |
| SA5112567 | 3.3      | 0.1      | 0.65     | 0.5      | 23.9       | 0.5      | 0.25     | 9.5      | 263      | 15      | 0.08    | 0.05     | 0.23     | 5.4      | 0.5      | 0.79     |
| SA5112568 | 2.3      | 0.1      | 0.56     | 0.5      | 24.5       | 0.5      | 0.25     | 8.3      | 184      | 27      | 0.09    | 0.05     | 0.23     | 2.7      | 0.5      | 0.93     |
| SA5112569 | 0.4      | 0.3      | 0.14     | 0.5      | 24.2       | 0.5      | 0.25     | 4.3      | 78       | 11      | 0.05    | 0.05     | 0.08     | 1.3      | 2        | 0.51     |
| SA5112570 | 4.3      | 0.1      | 0.64     | 0.5      | 23.7       | 0.5      | 0.25     | 5.0      | 132      | 21      | 0.12    | 0.05     | 0.24     | 6.2      | 0.5      | 0.90     |
| SA5112571 | 0.6      | 0.1      | 0.15     | 0.5      | 23.8       | 0.5      | 0.25     | 8.2      | 78       | 48      | 0.02    | 0.05     | 0.07     | 1.4      | 0.5      | 0.53     |
| SA5112572 | 5.8      | 0.1      | 0.64     | 0.5      | 24         | 0.5      | 0.25     | 18.4     | 89       | 22      | 0.11    | 0.05     | 0.27     | 6.9      | 0.5      | 0.92     |
| SA5112573 | 8.6      | 0.1      | 1.03     | 0.5      | 35.7       | 0.5      | 0.25     | 19.1     | 572      | 27      | 0.08    | 0.2      | 0.41     | 20.8     | 0.5      | 1.09     |
| SA5112574 | 8.7      | 0.1      | 1.12     | 0.5      | 34.3       | 0.5      | 0.25     | 5.1      | 691      | 30      | 0.07    | 0.1      | 0.46     | 21.7     | 0.5      | 1.13     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112575 | 13.4     | 0.1      | 1.63     | 0.5      | 35.9       | 0.5      | 0.25     | 21.1     | 798      | 21      | 0.11    | 0.2      | 0.64     | 17.9     | 0.5      | 1.21     |
| SA5112576 | 6.6      | 0.1      | 0.94     | 0.5      | 23.4       | 0.5      | 0.25     | 5.0      | 144      | 24      | 0.11    | 0.2      | 0.25     | 5.9      | 0.5      | 0.89     |
| SA5112577 | 4.7      | 0.1      | 0.66     | 0.5      | 22.5       | 0.5      | 0.25     | 5.6      | 237      | 20      | 0.10    | 0.05     | 0.24     | 8.7      | 0.5      | 0.82     |
| SA5112578 | 9.3      | 0.3      | 0.76     | 0.5      | 28.1       | 0.5      | 0.25     | 4.5      | 363      | 23      | 0.08    | 0.2      | 0.31     | 6.6      | 2        | 1.08     |
| SA5112579 | 10.7     | 0.1      | 0.94     | 0.5      | 28.9       | 0.5      | 0.25     | 5.9      | 432      | 26      | 0.09    | 0.05     | 0.34     | 8.2      | 0.5      | 1.06     |
| SA5112580 | 3.1      | 0.1      | 0.40     | 0.5      | 21.1       | 0.5      | 0.25     | 6.7      | 102      | 21      | 0.07    | 0.05     | 0.14     | 2.4      | 0.5      | 0.75     |
| SA5112581 | 2.4      | 0.1      | 0.19     | 0.5      | 31.1       | 0.5      | 0.25     | 4.8      | 68       | 16      | 0.04    | 0.05     | 0.07     | 2.0      | 0.5      | 0.41     |
| SA5112582 | 0.5      | 0.1      | 0.58     | 0.5      | 27.5       | 0.5      | 0.25     | 9.0      | 40       | 6       | 0.09    | 0.05     | 0.10     | 2.2      | 0.5      | 0.91     |
| SA5112583 | 8.9      | 0.3      | 0.59     | 0.5      | 22.4       | 0.5      | 0.25     | 21.0     | 441      | 29      | 0.11    | 0.05     | 0.24     | 11.8     | 0.5      | 0.92     |
| SA5112584 | 0.4      | 0.1      | 0.08     | 0.5      | 37         | 0.5      | 0.25     | 5.3      | 67       | 11      | 0.03    | 0.05     | 0.05     | 0.6      | 0.5      | 0.37     |
| SA5112585 | 1.7      | 0.1      | 0.19     | 0.5      | 42.1       | 0.5      | 0.25     | 6.6      | 84       | 18      | 0.04    | 0.05     | 0.11     | 1.1      | 0.5      | 0.63     |
| SA5112586 | 0.2      | 0.1      | 0.09     | 0.5      | 26         | 0.5      | 0.25     | 17.3     | 47       | 17      | 0.005   | 0.05     | 0.04     | 0.9      | 0.5      | 0.38     |
| SA5112587 | 5.3      | 0.3      | 0.44     | 0.5      | 20.7       | 0.5      | 0.25     | 4.1      | 147      | 35      | 0.06    | 0.05     | 0.18     | 4.9      | 2        | 0.84     |
| SA5112588 | 2.5      | 0.1      | 0.21     | 0.5      | 22.5       | 0.5      | 0.25     | 4.9      | 127      | 21      | 0.02    | 0.1      | 0.12     | 1.9      | 0.5      | 0.76     |
| SA5112589 | 6.9      | 0.1      | 0.65     | 0.5      | 29.5       | 0.5      | 0.25     | 9.0      | 382      | 22      | 0.04    | 0.1      | 0.27     | 6.3      | 0.5      | 1.03     |
| SA5112590 | 9.7      | 0.1      | 0.67     | 0.5      | 30.7       | 0.5      | 0.25     | 5.5      | 386      | 20      | 0.06    | 0.05     | 0.25     | 6.9      | 0.5      | 1.11     |
| SA5112591 | 0.7      | 0.1      | 0.11     | 0.5      | 25.8       | 0.5      | 0.25     | 6.2      | 86       | 12      | 0.02    | 0.05     | 0.06     | 0.8      | 0.5      | 0.47     |
| SA5112592 | 3.3      | 0.1      | 0.45     | 0.5      | 20.9       | 0.5      | 0.25     | 8.0      | 135      | 19      | 0.12    | 0.05     | 0.16     | 8.0      | 0.5      | 0.71     |
| SA5112593 | 11.4     | 0.2      | 0.76     | 0.5      | 25         | 0.5      | 0.25     | 4.0      | 170      | 27      | 0.04    | 0.2      | 0.29     | 7.4      | 0.5      | 1.07     |
| SA5112594 | 0.2      | 0.1      | 0.08     | 0.5      | 18.6       | 0.5      | 0.25     | 6.8      | 33       | 18      | 0.05    | 0.05     | 0.06     | 1.8      | 0.5      | 0.45     |
| SA5112595 | 4.7      | 0.1      | 0.61     | 0.5      | 33.4       | 0.5      | 0.25     | 7.5      | 305      | 21      | 0.10    | 0.2      | 0.26     | 6.2      | 0.5      | 1.07     |
| SA5112596 | 3.5      | 0.3      | 0.52     | 0.5      | 35.1       | 0.5      | 0.25     | 10.0     | 317      | 14      | 0.08    | 0.1      | 0.26     | 4.1      | 3        | 1.06     |
| SA5112597 | 4.5      | 0.1      | 0.61     | 0.5      | 33.1       | 0.5      | 0.25     | 4.6      | 349      | 23      | 0.09    | 0.3      | 0.26     | 6.2      | 0.5      | 1.05     |
| SA5112598 | 5.1      | 0.1      | 0.75     | 0.5      | 34         | 0.5      | 0.25     | 3.7      | 410      | 16      | 0.07    | 0.2      | 0.30     | 7.4      | 0.5      | 1.08     |
| SA5112599 | 3.3      | 0.1      | 0.64     | 0.5      | 33.5       | 0.5      | 0.25     | 18.1     | 394      | 22      | 0.03    | 0.05     | 0.25     | 4.0      | 0.5      | 0.97     |
| SA5112600 | 4.4      | 0.1      | 0.74     | 0.5      | 34.1       | 0.5      | 0.25     | 5.2      | 357      | 30      | 0.05    | 0.2      | 0.29     | 5.1      | 0.5      | 1.06     |
| SA5112601 | 3.4      | 0.1      | 0.71     | 0.5      | 24.2       | 0.5      | 0.25     | 3.4      | 132      | 20      | 0.07    | 0.05     | 0.23     | 2.8      | 0.5      | 0.89     |
| SA5112602 | 4.8      | 0.05     | 0.82     | 0.5      | 25         | 0.5      | 0.25     | 6.5      | 261      | 28      | 0.06    | 0.05     | 0.25     | 4.3      | 0.5      | 0.96     |
| SA5112603 | 5.4      | 0.1      | 0.90     | 0.5      | 28.4       | 0.5      | 0.25     | 7.7      | 358      | 27      | 0.04    | 0.05     | 0.31     | 6.3      | 0.5      | 1.01     |
| SA5112604 | 6.7      | 0.1      | 0.95     | 0.5      | 32.6       | 0.5      | 0.25     | 19.6     | 460      | 39      | 0.08    | 0.2      | 0.34     | 8.0      | 0.5      | 1.21     |
| SA5112605 | 5.4      | 0.1      | 0.72     | 0.5      | 29.6       | 0.5      | 0.25     | 10.5     | 209      | 31      | 0.08    | 0.05     | 0.34     | 5.8      | 0.5      | 1.07     |
| SA5112606 | 2.1      | 0.1      | 0.37     | 0.5      | 28.4       | 0.5      | 0.25     | 3.4      | 226      | 24      | 0.05    | 0.05     | 0.19     | 2.9      | 0.5      | 0.86     |
| SA5112607 | 4.2      | 0.1      | 0.53     | 0.5      | 33.3       | 0.5      | 0.25     | 5.8      | 388      | 34      | 0.08    | 0.2      | 0.27     | 5.4      | 0.5      | 1.11     |
| SA5112608 | 3.3      | 0.1      | 0.88     | 0.5      | 34.3       | 0.5      | 0.25     | 4.8      | 414      | 25      | 0.04    | 0.2      | 0.36     | 6.3      | 0.5      | 1.17     |
| SA5112609 | 4.3      | 0.1      | 0.66     | 0.5      | 29.2       | 0.5      | 1.3      | 3.3      | 343      | 28      | 0.08    | 0.05     | 0.26     | 7.3      | 0.5      | 1.02     |
| SA5112610 | 5.7      | 0.1      | 0.81     | 0.5      | 35.6       | 0.5      | 0.25     | 3.7      | 483      | 34      | 0.07    | 0.1      | 0.29     | 7.5      | 0.5      | 1.23     |
| SA5112611 | 3.6      | 0.1      | 0.94     | 0.5      | 31.1       | 0.5      | 0.25     | 10.7     | 428      | 24      | 0.13    | 0.2      | 0.39     | 8.8      | 0.5      | 1.27     |
| SA5112612 | 0.05     | 0.1      | 0.12     | 0.5      | 25.4       | 0.5      | 0.25     | 4.4      | 17       | 16      | 0.01    | 0.05     | 0.09     | 1.3      | 0.5      | 0.54     |
| SA5112613 | 5.5      | 0.3      | 1.47     | 0.5      | 32.2       | 0.5      | 4.2      | 6.3      | 542      | 29      | 0.13    | 0.2      | 0.48     | 3.8      | 12       | 1.28     |
| SA5112614 | 0.05     | 0.1      | 0.12     | 0.5      | 34.2       | 0.5      | 0.25     | 3.7      | 16       | 17      | 0.005   | 0.05     | 0.03     | 0.6      | 2        | 0.57     |
| SA5112615 | 0.05     | 0.1      | 0.11     | 0.5      | 30.1       | 0.5      | 0.25     | 4.0      | 23       | 17      | 0.01    | 0.05     | 0.07     | 0.8      | 1        | 0.53     |
| SA5112616 | 4.3      | 0.1      | 1.31     | 0.5      | 33.4       | 0.5      | 0.25     | 5.4      | 99       | 21      | 0.13    | 0.05     | 0.43     | 2.1      | 1        | 1.40     |
| SA5112617 | 0.05     | 0.1      | 0.10     | 0.5      | 22.6       | 0.5      | 0.25     | 4.8      | 11       | 13      | 0.02    | 0.05     | 0.05     | 0.6      | 1        | 0.55     |
| SA5112618 | 0.05     | 0.1      | 0.08     | 0.5      | 22.4       | 0.5      | 0.25     | 4.3      | 5        | 19      | 0.03    | 0.05     | 0.10     | 1.5      | 1        | 0.73     |
| SA5112619 | 0.4      | 0.1      | 0.13     | 0.5      | 30.7       | 0.5      | 0.25     | 4.3      | 46       | 16      | 0.005   | 0.05     | 0.08     | 1.4      | 1        | 0.54     |
| SA5112620 | 0.05     | 0.1      | 0.11     | 0.5      | 25.9       | 0.5      | 0.25     | 3.4      | 17       | 14      | 0.02    | 0.05     | 0.10     | 1.2      | 1        | 0.56     |
| SA5112621 | 0.2      | 0.2      | 0.12     | 0.5      | 20.3       | 0.5      | 0.25     | 4.1      | 18       | 21      | 0.02    | 0.05     | 0.07     | 1.9      | 1        | 0.44     |
| SA5112622 | 4.3      | 0.3      | 1.40     | 0.5      | 34.2       | 0.5      | 0.25     | 5.0      | 420      | 31      | 0.13    | 0.05     | 0.48     | 5.5      | 8        | 1.44     |
| SA5112623 | 4.7      | 0.2      | 1.43     | 0.5      | 34.3       | 0.5      | 0.25     | 9.8      | 329      | 27      | 0.16    | 0.05     | 0.48     | 4.2      | 1        | 1.42     |
| SA5112624 | 0.1      | 0.1      | 0.16     | 0.5      | 37.9       | 0.5      | 0.25     | 6.1      | 39       | 19      | 0.01    | 0.05     | 0.14     | 2.1      | 1        | 0.58     |
| SA5112625 | 0.05     | 0.1      | 0.11     | 0.5      | 25.1       | 0.5      | 0.25     | 4.8      | 5        | 15      | 0.01    | 0.05     | 0.06     | 1.4      | 1        | 0.49     |
| SA5112626 | 0.05     | 0.2      | 0.13     | 0.5      | 37.7       | 0.5      | 0.25     | 11.4     | 75       | 14      | 0.01    | 0.05     | 0.08     | 1.4      | 0.5      | 0.47     |
| SA5112627 | 1.9      | 0.1      | 2.01     | 0.5      | 37.3       | 0.5      | 0.25     | 3.5      | 284      | 21      | 0.08    | 0.05     | 0.64     | 1.9      | 0.5      | 1.27     |
| SA5112628 | 2.6      | 0.2      | 2.87     | 0.5      | 51.5       | 0.5      | 0.25     | 4.1      | 322      | 22      | 0.14    | 0.05     | 0.93     | 2.3      | 0.5      | 1.66     |
| SA5112629 | 2.8      | 0.1      | 2.79     | 0.5      | 51.2       | 0.5      | 0.25     | 3.2      | 297      | 23      | 0.15    | 0.2      | 0.92     | 1.9      | 0.5      | 1.60     |
| SA5112630 | 1.0      | 0.1      | 0.42     | 0.5      | 22.4       | 0.5      | 0.25     | 10.7     | 65       | 25      | 0.01    | 0.05     | 0.16     | 0.9      | 0.5      | 0.84     |
| SA5112631 | 0.05     | 0.3      | 0.10     | 0.5      | 19.55      | 0.5      | 0.25     | 7.0      | 12       | 9       | 0.01    | 0.05     | 0.06     | 1.9      | 8        | 0.44     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112632 | 0.05     | 0.3      | 0.14     | 0.5      | 40.1       | 0.5      | 0.25     | 4.2      | 42       | 11      | 0.01    | 0.05     | 0.08     | 1.2      | 1        | 0.56     |
| SA5112633 | 0.05     | 0.1      | 0.12     | 0.5      | 31.4       | 0.5      | 0.25     | 4.0      | 45       | 16      | 0.01    | 0.05     | 0.08     | 1.5      | 0.5      | 0.51     |
| SA5112634 | 0.05     | 0.1      | 0.09     | 0.5      | 23         | 0.5      | 0.25     | 5.5      | 32       | 16      | 0.02    | 0.05     | 0.06     | 1.2      | 0.5      | 0.47     |
| SA5112635 | 5.2      | 0.2      | 1.50     | 0.5      | 30.4       | 0.5      | 0.25     | 2.8      | 598      | 26      | 0.12    | 0.1      | 0.48     | 4.4      | 0.5      | 1.25     |
| SA5112636 | 4.8      | 0.3      | 1.17     | 0.5      | 31         | 0.5      | 0.25     | 4.2      | 479      | 29      | 0.10    | 0.1      | 0.42     | 5.3      | 0.5      | 1.39     |
| SA5112637 | 0.05     | 0.2      | 0.10     | 0.5      | 27.8       | 0.5      | 0.25     | 3.8      | 5        | 10      | 0.01    | 0.05     | 0.08     | 1.1      | 0.5      | 0.51     |
| SA5112638 | 0.05     | 0.1      | 0.07     | 0.5      | 23.5       | 0.5      | 0.25     | 4.2      | 5        | 14      | 0.02    | 0.05     | 0.06     | 2.0      | 0.5      | 0.61     |
| SA5112639 | 0.2      | 0.1      | 0.18     | 0.5      | 20.8       | 0.5      | 0.25     | 3.6      | 16       | 8       | 0.06    | 0.05     | 0.09     | 3.2      | 0.5      | 0.62     |
| SA5112640 | 0.05     | 0.3      | 0.09     | 0.5      | 23.3       | 0.5      | 0.25     | 5.1      | 5        | 9       | 0.02    | 0.05     | 0.07     | 2.0      | 11       | 0.50     |
| SA5112641 | 0.3      | 0.1      | 0.12     | 0.5      | 25.2       | 0.5      | 0.25     | 4.3      | 23       | 13      | 0.01    | 0.05     | 0.05     | 1.7      | 4        | 0.41     |
| SA5112642 | 0.05     | 0.05     | 0.08     | 0.5      | 19.7       | 0.5      | 0.25     | 1.3      | 5        | 12      | 0.03    | 0.05     | 0.07     | 1.9      | 0.5      | 0.51     |
| SA5112643 | 0.2      | 0.05     | 0.14     | 0.5      | 26.2       | 0.5      | 0.25     | 5.3      | 22       | 18      | 0.005   | 0.05     | 0.08     | 2.3      | 0.5      | 0.60     |
| SA5112644 | 0.05     | 0.05     | 0.12     | 0.5      | 26.3       | 0.5      | 0.25     | 6.2      | 15       | 11      | 0.17    | 0.05     | 0.07     | 1.8      | 0.5      | 0.53     |
| SA5112645 | 0.05     | 0.05     | 0.08     | 0.5      | 22         | 0.5      | 0.25     | 4.4      | 5        | 14      | 0.005   | 0.05     | 0.04     | 0.25     | 0.5      | 0.39     |
| SA5112646 | 0.05     | 0.05     | 0.10     | 0.5      | 25.1       | 0.5      | 0.25     | 7.3      | 26       | 11      | 0.03    | 0.05     | 0.06     | 1.6      | 0.5      | 0.45     |
| SA5112647 | 0.05     | 0.05     | 0.09     | 0.5      | 39.7       | 0.5      | 0.25     | 5.5      | 71       | 12      | 0.005   | 0.05     | 0.08     | 0.9      | 0.5      | 0.44     |
| SA5112648 | 0.05     | 0.05     | 0.10     | 0.5      | 48.9       | 0.5      | 0.25     | 6.5      | 144      | 14      | 0.01    | 0.05     | 0.08     | 1.0      | 0.5      | 0.42     |
| SA5112649 | 0.05     | 0.05     | 0.08     | 0.5      | 20         | 0.5      | 0.25     | 4.8      | 5        | 15      | 0.02    | 0.05     | 0.07     | 2.0      | 0.5      | 0.46     |
| SA5112650 | 0.05     | 0.1      | 0.10     | 0.5      | 30.7       | 0.5      | 0.25     | 4.5      | 32       | 16      | 0.005   | 0.05     | 0.05     | 1.4      | 0.5      | 0.38     |
| SA5112651 | 0.05     | 0.1      | 0.10     | 0.5      | 25.1       | 0.5      | 0.25     | 5.2      | 27       | 14      | 0.01    | 0.05     | 0.05     | 1.5      | 0.5      | 0.41     |
| SA5112652 | 0.05     | 0.1      | 0.11     | 0.5      | 38.8       | 0.5      | 0.25     | 3.7      | 65       | 13      | 0.01    | 0.05     | 0.08     | 1.2      | 0.5      | 0.43     |
| SA5112653 | 0.5      | 0.1      | 0.16     | 0.5      | 24.1       | 0.5      | 0.25     | 2.5      | 27       | 7       | 0.01    | 0.05     | 0.08     | 2.4      | 0.5      | 0.60     |
| SA5112654 | 4.6      | 0.1      | 1.43     | 0.5      | 30         | 0.5      | 0.25     | 3.0      | 356      | 22      | 0.08    | 0.05     | 0.49     | 3.6      | 0.5      | 1.21     |
| SA5112655 | 24.3     | 0.05     | 3.00     | 0.5      | 36.9       | 1        | 0.25     | 3.4      | 1932     | 24      | 0.32    | 0.3      | 0.84     | 52.3     | 0.5      | 1.23     |
| SA5112656 | 0.9      | 0.05     | 0.19     | 0.5      | 32.5       | 0.5      | 0.25     | 2.9      | 170      | 12      | 0.01    | 0.05     | 0.09     | 4.7      | 0.5      | 0.41     |
| SA5112657 | 0.6      | 0.05     | 0.13     | 0.5      | 19.61      | 0.5      | 0.25     | 4.4      | 66       | 12      | 0.04    | 0.05     | 0.11     | 3.3      | 0.5      | 0.42     |
| SA5112658 | 2.7      | 0.05     | 1.23     | 0.5      | 24.5       | 0.5      | 0.25     | 7.5      | 285      | 21      | 0.12    | 0.05     | 0.32     | 3.3      | 0.5      | 0.85     |
| SA5112659 | 2.7      | 0.05     | 1.23     | 0.5      | -9         | 0.5      | 0.25     | 7.5      | 285      | -9      | 0.12    | 0.05     | 0.32     | 3.3      | 0.5      | 0.85     |
| SA5112660 | 0.05     | 0.05     | 0.11     | 0.5      | 41.1       | 0.5      | 0.25     | 7.0      | 27       | 11      | 0.01    | 0.05     | 0.08     | 1.3      | 0.5      | 0.35     |
| SA5112661 | 0.05     | 0.05     | 0.15     | 0.5      | 17.8       | 0.5      | 0.25     | 5.3      | 5        | 9       | 0.06    | 0.05     | 0.07     | 2.9      | 0.5      | 0.41     |
| SA5112662 | 0.05     | 0.05     | 0.10     | 0.5      | 17.9       | 0.5      | 0.25     | 7.3      | 5        | 11      | 0.05    | 0.05     | 0.05     | 1.8      | 0.5      | 0.33     |
| SA5112663 | 0.05     | 0.05     | 0.11     | 0.5      | 32.5       | 0.5      | 0.25     | 5.1      | 22       | 14      | 0.01    | 0.05     | 0.05     | 1.5      | 0.5      | 0.32     |
| SA5112664 | 0.05     | 0.05     | 0.13     | 0.5      | 27.5       | 0.5      | 0.25     | 7.5      | 31       | 14      | 0.005   | 0.05     | 0.05     | 2.2      | 0.5      | 0.34     |
| SA5112665 | 6.5      | 0.05     | 1.37     | 0.5      | 29.3       | 0.5      | 0.25     | 7.7      | 547      | 27      | 0.08    | 0.05     | 0.47     | 6.0      | 0.5      | 1.11     |
| SA5112666 | 0.05     | 0.05     | 0.12     | 0.5      | 19.8       | 0.5      | 0.25     | 6.1      | 22       | 10      | 0.01    | 0.05     | 0.05     | 1.4      | 0.5      | 0.36     |
| SA5112667 | 0.7      | 0.05     | 0.13     | 0.5      | 42.1       | 0.5      | 0.25     | 9.2      | 157      | 6       | 0.06    | 0.05     | 0.03     | 1.1      | 0.5      | 0.29     |
| SA5112668 | 0.05     | 0.05     | 0.10     | 0.5      | 22.5       | 0.5      | 0.25     | 9.8      | 86       | 16      | 0.03    | 0.05     | 0.04     | 1.6      | 0.5      | 0.34     |
| SA5112669 | 4.9      | 0.05     | 1.48     | 0.5      | 31.5       | 0.5      | 0.25     | 8.2      | 385      | 60      | 0.10    | 0.2      | 0.49     | 2.9      | 0.5      | 1.23     |
| SA5112670 | 2.2      | 0.05     | 0.70     | 0.5      | 22         | 0.5      | 0.25     | 8.7      | 126      | 36      | 0.04    | 0.05     | 0.25     | 1.7      | 0.5      | 0.98     |
| SA5112671 | 0.9      | 0.05     | 0.14     | 0.5      | 15.72      | 0.5      | 0.25     | 15.9     | 19       | 10      | 0.04    | 0.05     | 0.05     | 1.3      | 0.5      | 0.36     |
| SA5112672 | 0.05     | 0.05     | 0.12     | 0.5      | 34.9       | 0.5      | 0.25     | 10.3     | 100      | 4       | 0.02    | 0.05     | 0.05     | 0.7      | 0.5      | 0.37     |
| SA5112673 | 0.6      | 0.05     | 0.21     | 0.5      | 20.5       | 0.5      | 0.25     | 10.9     | 56       | 11      | 0.005   | 0.05     | 0.09     | 3.3      | 0.5      | 0.50     |
| SA5112674 | 0.05     | 0.05     | 0.08     | 0.5      | 25.7       | 0.5      | 0.25     | 7.3      | 28       | 13      | 0.02    | 0.05     | 0.03     | 0.6      | 0.5      | 0.27     |
| SA5112675 | 8.6      | 0.05     | 1.63     | 0.5      | 33.1       | 0.5      | 0.25     | 13.7     | 943      | 49      | 0.06    | 0.2      | 0.49     | 8.5      | 0.5      | 1.17     |
| SA5112676 | 0.05     | 0.05     | 0.10     | 0.5      | 18.98      | 0.5      | 0.25     | 8.1      | 42       | 10      | 0.02    | 0.05     | 0.05     | 1.5      | 0.5      | 0.36     |
| SA5112677 | 2.7      | 0.05     | 0.95     | 0.5      | 24.7       | 0.5      | 0.25     | 13.8     | 371      | 31      | 0.13    | 0.05     | 0.37     | 4.5      | 0.5      | 0.97     |
| SA5112678 | 5.6      | 0.05     | 1.14     | 0.5      | 28         | 0.5      | 0.25     | 7.8      | 178      | 44      | 0.27    | 0.2      | 0.46     | 2.7      | 0.5      | 1.09     |
| SA5112679 | 0.7      | 0.05     | 0.49     | 0.5      | 14.6       | 0.5      | 0.25     | 8.8      | 357      | 22      | 0.04    | 0.05     | 0.15     | 8.8      | 0.5      | 0.31     |
| SA5112680 | 0.4      | 0.05     | 0.06     | 0.5      | 36.2       | 0.5      | 0.25     | 9.3      | 126      | 10      | 0.11    | 0.05     | 0.02     | 0.7      | 0.5      | 0.30     |
| SA5112681 | 3.6      | 0.05     | 0.62     | 0.5      | 19.7       | 0.5      | 0.25     | 10.3     | 268      | 27      | 0.11    | 0.05     | 0.18     | 4.5      | 0.5      | 0.72     |
| SA5112682 | 0.1      | 0.05     | 0.09     | 0.5      | 15.42      | 0.5      | 0.25     | 12.6     | 46       | 17      | 0.03    | 0.05     | 0.05     | 2.4      | 0.5      | 0.30     |
| SA5112683 | 0.4      | 0.05     | 0.28     | 0.5      | 21.4       | 0.5      | 0.25     | 8.1      | 72       | 17      | 0.005   | 0.05     | 0.11     | 4.3      | 0.5      | 0.52     |
| SA5112684 | 4.1      | 0.05     | 0.53     | 0.5      | 32.7       | 0.5      | 0.25     | 11.5     | 87       | 32      | 0.03    | 0.05     | 0.15     | 2.5      | 0.5      | 0.67     |
| SA5112685 | 0.7      | 0.05     | 0.17     | 0.5      | 23.1       | 0.5      | 0.25     | 11.7     | 185      | 5       | 0.005   | 0.05     | 0.08     | 3.0      | 0.5      | 0.30     |
| SA5112686 | 1.1      | 0.05     | 0.22     | 0.5      | 21.3       | 0.5      | 0.25     | 14.4     | 247      | 11      | 0.04    | 0.05     | 0.09     | 6.5      | 0.5      | 0.41     |
| SA5112687 | 9.9      | 0.05     | 2.73     | 0.5      | 53.3       | 0.5      | 0.25     | 9.3      | 115      | 51      | 0.20    | 0.3      | 0.93     | 3.6      | 0.5      | 1.57     |
| SA5112688 | 3.9      | 0.05     | 0.57     | 0.5      | 18.43      | 0.5      | 0.25     | 8.8      | 73       | 39      | 0.04    | 0.05     | 0.17     | 2.8      | 0.5      | 0.70     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112689 | 1.8      | 0.05     | 0.92     | 0.5      | 23         | 0.5      | 0.25     | 15.1     | 23       | 28      | 0.17    | 0.05     | 0.29     | 0.25     | 0.5      | 0.97     |
| SA5112690 | 1.4      | 0.05     | 0.54     | 0.5      | 37.5       | 0.5      | 0.25     | 7.6      | 257      | 19      | 0.62    | 0.05     | 0.24     | 6.5      | 0.5      | 0.71     |
| SA5112691 | 2.9      | 0.05     | 0.31     | 0.5      | 34.5       | 0.5      | 0.25     | 8.1      | 249      | 13      | 0.26    | 0.05     | 0.20     | 8.7      | 0.5      | 0.53     |
| SA5112692 | 0.1      | 0.05     | 0.18     | 0.5      | 32.9       | 0.5      | 0.25     | 9.3      | 50       | 13      | 0.01    | 0.05     | 0.09     | 2.1      | 0.5      | 0.47     |
| SA5112693 | 0.7      | 0.05     | 0.23     | 0.5      | 35.3       | 0.5      | 0.25     | 7.8      | 138      | 15      | 0.005   | 0.05     | 0.10     | 6.0      | 0.5      | 0.65     |
| SA5112694 | 1.1      | 0.05     | 0.33     | 0.5      | 30.7       | 0.5      | 0.25     | 7.9      | 131      | 24      | 0.02    | 0.05     | 0.12     | 8.9      | 0.5      | 0.57     |
| SA5112695 | 19.2     | 0.05     | 1.06     | 0.5      | 27.1       | 0.5      | 0.25     | 8.5      | 71       | 56      | 0.21    | 0.3      | 0.41     | 1.6      | 0.5      | 1.02     |
| SA5112696 | 2.9      | 0.05     | 0.39     | 0.5      | 37.5       | 0.5      | 0.25     | 7.4      | 197      | 19      | 0.005   | 0.05     | 0.15     | 2.0      | 0.5      | 0.53     |
| SA5112697 | 4.9      | 0.05     | 0.73     | 0.5      | 25.6       | 0.5      | 0.25     | 11.1     | 355      | 38      | 0.01    | 0.05     | 0.20     | 3.8      | 0.5      | 0.88     |
| SA5112698 | 0.3      | 0.05     | 0.15     | 0.5      | 29.7       | 0.5      | 0.25     | 7.7      | 65       | 13      | 0.02    | 0.05     | 0.09     | 1.5      | 0.5      | 0.33     |
| SA5112699 | -9       | -9       | -9       | -9       | -9         | -9       | -9       | -9       | -9       | -9      | -9      | -9       | -9       | -9       | -9       | -9       |
| SA5112700 | 0.05     | 0.05     | 0.10     | 0.5      | 38         | 0.5      | 0.25     | 8.7      | 74       | 8       | 0.02    | 0.05     | 0.05     | 0.8      | 0.5      | 0.34     |
| SA5112701 | 4.8      | 0.05     | 1.00     | 0.5      | 23.8       | 0.5      | 0.25     | 12.9     | 545      | 27      | 0.12    | 0.05     | 0.32     | 6.9      | 0.5      | 0.81     |
| SA5112702 | 0.05     | 0.05     | 0.09     | 0.5      | 12.7       | 0.5      | 0.25     | 10.2     | 23       | 11      | 0.005   | 0.05     | 0.02     | 1.4      | 0.5      | 0.22     |
| SA5112703 | 1.5      | 0.05     | 0.50     | 0.5      | 24.5       | 0.5      | 0.25     | 8.2      | 222      | 31      | 0.05    | 0.05     | 0.16     | 1.3      | 0.5      | 0.67     |
| SA5112704 | 0.2      | 0.05     | 0.14     | 0.5      | 33.4       | 0.5      | 0.25     | 11.3     | 81       | 19      | 0.04    | 0.1      | 0.09     | 2.6      | 0.5      | 0.49     |
| SA5112705 | 1.9      | 0.05     | 0.80     | 0.5      | 22.7       | 0.5      | 0.25     | 11.1     | 107      | 42      | 0.21    | 0.05     | 0.36     | 1.0      | 0.5      | 0.99     |
| SA5112706 | 0.7      | 0.05     | 0.15     | 0.5      | 33.6       | 0.5      | 0.25     | 9.3      | 96       | 8       | 0.01    | 0.05     | 0.07     | 1.8      | 0.5      | 0.51     |
| SA5112707 | 0.5      | 0.05     | 0.38     | 0.5      | 30.5       | 0.5      | 0.25     | 5.9      | 341      | 17      | 0.49    | 0.05     | 0.17     | 7.1      | 0.5      | 0.46     |
| SA5112708 | 0.5      | 0.05     | 0.07     | 0.5      | 35.3       | 0.5      | 0.25     | 4.1      | 102      | 18      | 0.02    | 0.05     | 0.04     | 1.4      | 0.5      | 0.22     |
| SA5112709 | 3.1      | 0.05     | 0.89     | 0.5      | 23.1       | 0.5      | 0.25     | 9.6      | 305      | 39      | 0.12    | 0.05     | 0.34     | 1.3      | 0.5      | 0.87     |
| SA5112710 | 1.6      | 0.05     | 0.39     | 0.5      | 15.81      | 0.5      | 0.25     | 5.9      | 221      | 20      | 0.05    | 0.05     | 0.15     | 5.2      | 0.5      | 0.57     |
| SA5112711 | 3.1      | 0.05     | 0.79     | 0.5      | 21.9       | 0.5      | 0.25     | 15.3     | 611      | 28      | 0.09    | 0.05     | 0.29     | 8.6      | 0.5      | 0.75     |
| SA5112712 | 3.7      | 0.05     | 0.91     | 0.5      | 23.5       | 0.5      | 0.25     | 6.4      | 407      | 53      | 0.14    | 0.2      | 0.37     | 2.5      | 0.5      | 1.07     |
| SA5112713 | 4.0      | 0.05     | 1.16     | 0.5      | 26.9       | 0.5      | 0.25     | 12.4     | 398      | 51      | 0.15    | 0.2      | 0.36     | 3.8      | 0.5      | 1.07     |
| SA5112714 | 2.9      | 0.05     | 1.30     | 0.5      | 26.8       | 0.5      | 0.25     | 10.7     | 105      | 67      | 0.05    | 0.2      | 0.34     | 1.1      | 0.5      | 1.06     |
| SA5112715 | 4.3      | 0.05     | 1.03     | 0.5      | 22.8       | 0.5      | 0.25     | 8.3      | 596      | 25      | 0.12    | 0.05     | 0.32     | 5.7      | 0.5      | 0.80     |
| SA5112716 | 0.4      | 0.05     | 0.26     | 0.5      | 19.77      | 0.5      | 0.25     | 8.5      | 90       | 11      | 0.05    | 0.05     | 0.12     | 2.6      | 0.5      | 0.54     |
| SA5112717 | 2.6      | 0.05     | 0.67     | 0.5      | 22.7       | 0.5      | 0.25     | 8.5      | 210      | 38      | 0.10    | 0.2      | 0.20     | 4.2      | 0.5      | 0.76     |
| SA5112718 | 2.7      | 0.05     | 0.91     | 0.5      | 20.7       | 0.5      | 0.25     | 9.8      | 279      | 40      | 0.06    | 0.05     | 0.29     | 2.0      | 0.5      | 0.74     |
| SA5112719 | 2.7      | 0.05     | 0.96     | 0.5      | 21.2       | 0.5      | 0.25     | 9.9      | 434      | 38      | 0.08    | 0.1      | 0.28     | 4.2      | 0.5      | 0.79     |
| SA5112720 | 3.5      | 0.05     | 1.28     | 0.5      | 27.3       | 0.5      | 0.25     | 5.7      | 108      | 54      | 0.13    | 0.1      | 0.41     | 0.9      | 0.5      | 1.08     |
| SA5112721 | 5.8      | 0.05     | 0.88     | 0.5      | 24.2       | 0.5      | 0.25     | 13.5     | 45       | 39      | 0.08    | 0.05     | 0.29     | 1.1      | 0.5      | 0.98     |
| SA5112722 | 0.9      | 0.05     | 0.12     | 0.5      | 35.9       | 0.5      | 0.25     | 13.2     | 167      | 14      | 0.03    | 0.2      | 0.07     | 1.8      | 7        | 0.37     |
| SA5112723 | 0.6      | 0.05     | 0.54     | 0.5      | 21.6       | 0.5      | 0.25     | 12.5     | 54       | 43      | 0.05    | 0.2      | 0.17     | 1.2      | 1        | 0.82     |
| SA5112724 | 1.6      | 0.05     | 0.48     | 0.5      | 14.61      | 0.5      | 0.25     | 11.8     | 169      | 27      | 0.07    | 0.05     | 0.13     | 3.2      | 0.5      | 0.54     |
| SA5112725 | 2.0      | 0.05     | 0.36     | 0.5      | 13.4       | 0.5      | 0.25     | 12.6     | 366      | 23      | 0.04    | 0.05     | 0.09     | 7.4      | 0.5      | 0.44     |
| SA5112726 | 0.05     | 0.05     | 0.22     | 0.5      | 17.7       | 0.5      | 0.25     | 1.7      | 315      | 32      | 0.09    | 0.05     | 0.09     | 1.6      | 1        | 0.60     |
| SA5112727 | 3.4      | 0.05     | 0.59     | 0.5      | 19.1       | 0.5      | 0.25     | 11.8     | 209      | 33      | 0.06    | 0.05     | 0.18     | 4.2      | 0.5      | 0.66     |
| SA5112728 | 4.6      | 0.05     | 0.79     | 0.5      | 26.1       | 0.5      | 0.25     | 8.2      | 699      | 44      | 0.07    | 0.1      | 0.24     | 8.3      | 0.5      | 0.90     |
| SA5112729 | 10.3     | 0.05     | 0.30     | 0.5      | 29.8       | 0.5      | 0.25     | 9.6      | 295      | 24      | 0.16    | 0.05     | 0.17     | 3.1      | 0.5      | 0.47     |
| SA5112730 | 2.9      | 0.05     | 0.83     | 0.5      | 19.5       | 0.5      | 0.25     | 10.5     | 305      | 44      | 0.12    | 0.2      | 0.19     | 3.9      | 0.5      | 0.76     |
| SA5112731 | 0.9      | 0.05     | 0.15     | 0.5      | 266        | 0.5      | 0.25     | 9.4      | 73       | 17      | 0.03    | 0.05     | 0.06     | 2.3      | 5        | 0.37     |
| SA5112732 | 0.5      | 0.05     | 0.13     | 0.5      | 28.7       | 0.5      | 0.25     | 9.0      | 112      | 19      | 0.01    | 0.2      | 0.06     | 1.0      | 1        | 0.41     |
| SA5112733 | 4.0      | 0.05     | 1.13     | 0.5      | 27.5       | 0.5      | 0.25     | 9.5      | 235      | 46      | 0.16    | 0.1      | 0.47     | 1.7      | 0.5      | 1.25     |
| SA5112734 | 0.5      | 0.05     | 0.17     | 0.5      | 16         | 0.5      | 0.25     | 10.4     | 223      | 26      | 0.01    | 0.05     | 0.09     | 3.1      | 0.5      | 0.47     |
| SA5112735 | 2.6      | 0.05     | 0.30     | 0.5      | 23.6       | 0.5      | 0.25     | 8.7      | 216      | 32      | 0.11    | 0.1      | 0.15     | 7.8      | 0.5      | 0.66     |
| SA5112736 | 2.7      | 0.05     | 0.57     | 0.5      | 22.7       | 0.5      | 0.25     | 12.9     | 114      | 41      | 0.19    | 0.2      | 0.35     | 0.9      | 0.5      | 0.96     |
| SA5112737 | 4.2      | 0.05     | 1.09     | 0.5      | 27.5       | 0.5      | 0.25     | 10.1     | 266      | 38      | 0.15    | 0.2      | 0.47     | 1.1      | 0.5      | 1.21     |
| SA5112738 | 3.2      | 0.05     | 0.48     | 0.5      | 16.3       | 0.5      | 0.25     | 9.4      | 1040     | 13      | 0.04    | 0.2      | 0.14     | 8.6      | 0.5      | 0.45     |
| SA5112739 | 5.4      | 0.05     | 1.32     | 0.5      | 34.4       | 0.5      | 0.25     | 9.4      | 443      | 44      | 0.34    | 0.4      | 0.70     | 1.9      | 0.5      | 1.47     |
| SA5112740 | 4.8      | 0.05     | 0.77     | 0.5      | 24.3       | 0.5      | 0.25     | 7.6      | 880      | 31      | 0.17    | 0.2      | 0.37     | 3.8      | 4        | 0.95     |
| SA5112741 | 0.9      | 0.05     | 0.20     | 0.5      | 29         | 0.5      | 0.25     | 6.1      | 373      | 11      | 0.01    | 0.05     | 0.10     | 1.8      | 0.5      | 0.28     |
| SA5112742 | 0.7      | 0.05     | 0.24     | 0.5      | 19.6       | 0.5      | 0.25     | 8.2      | 414      | 25      | 0.02    | 0.1      | 0.09     | 3.1      | 0.5      | 0.24     |
| SA5112743 | 2.0      | 0.05     | 0.42     | 0.5      | 13.7       | 0.5      | 0.25     | 14.3     | 53       | 23      | 0.11    | 0.05     | 0.17     | 1.2      | 0.5      | 0.63     |
| SA5112744 | 0.4      | 0.05     | 0.13     | 0.5      | 19.9       | 0.5      | 0.25     | 0.25     | 76       | 1       | 0.02    | 0.1      | 0.05     | 2.2      | 0.5      | 0.34     |
| SA5112745 | 0.05     | 0.05     | 0.08     | 0.5      | 20.4       | 0.5      | 0.25     | 9.5      | 46       | 8       | 0.05    | 0.05     | 0.05     | 2.6      | 0.5      | 0.32     |

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| FldNum    | Baw2_ppb | Bew2_ppb | Caw1_ppm | Cdw2_ppb | Conduct_uS | Cow2_ppb | Crw2_ppb | Cuw2_ppb | Few1_ppb | Fw9_ppb | Kw1_ppm | Liw2_ppb | Mgw1_ppm | Mnw1_ppb | Mow2_ppb | Naw1_ppm |
|-----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|
| SA5112746 | 3.5      | 0.05     | 0.63     | 0.5      | 15.6       | 0.5      | 0.25     | 4.7      | 1044     | 29      | 0.09    | 0.1      | 0.29     | 11.6     | 0.5      | 0.84     |
| SA5112747 | 1.9      | 0.05     | 0.42     | 0.5      | 19.9       | 0.5      | 0.25     | 2.0      | 599      | 28      | 0.08    | 0.1      | 0.17     | 3.9      | 0.5      | 0.57     |
| SA5112748 | 0.5      | 0.05     | 0.34     | 0.5      | 15.4       | 0.5      | 0.25     | 1.8      | 175      | 22      | 0.005   | 0.1      | 0.23     | 10.4     | 0.5      | 0.42     |
| SA5112749 | 3.3      | 0.05     | 0.54     | 0.5      | 16.8       | 0.5      | 0.25     | 4.9      | 293      | 13      | 0.08    | 0.2      | 0.22     | 4.7      | 0.5      | 0.67     |
| SA5112750 | 0.3      | 0.05     | 0.12     | 0.5      | 21.8       | 0.5      | 0.25     | 6.1      | 110      | 13      | 0.01    | 0.05     | 0.05     | 2.2      | 0.5      | 0.35     |
| SA5112751 | 0.1      | 0.05     | 0.11     | 0.5      | 24.3       | 0.5      | 0.25     | 4.5      | 89       | 20      | 0.01    | 0.05     | 0.05     | 1.8      | 0.5      | 0.32     |
| SA5112752 | 0.2      | 0.05     | 0.10     | 0.5      | 19.8       | 0.5      | 0.25     | 3.9      | 62       | 14      | 0.04    | 0.1      | 0.04     | 1.1      | 0.5      | 0.35     |
| SA5112753 | 0.3      | 0.05     | 0.10     | 0.5      | 19.8       | 0.5      | 0.25     | 27.1     | 32       | 19      | 0.01    | 0.1      | 0.04     | 1.2      | 0.5      | 0.35     |
| SA5112754 | 2.1      | 0.05     | 0.42     | 0.5      | 15.7       | 0.5      | 0.25     | 2.9      | 646      | 23      | 0.08    | 0.3      | 0.17     | 4.0      | 0.5      | 0.58     |
| SA5112755 | 4.1      | 0.05     | 0.77     | 0.5      | 20.4       | 0.5      | 0.25     | 3.9      | 712      | 43      | 0.06    | 0.2      | 0.28     | 8.3      | 0.5      | 0.78     |
| SA5112756 | 0.2      | 0.05     | 0.67     | 0.5      | 27.2       | 0.5      | 0.25     | 4.7      | 71       | 19      | 0.05    | 0.1      | 0.09     | 1.3      | 0.5      | 1.15     |
| SA5112757 | 3.7      | 0.05     | 0.48     | 0.5      | 21.4       | 0.5      | 0.25     | 2.7      | 296      | 24      | 0.08    | 0.2      | 0.25     | 15.0     | 0.5      | 0.76     |
| SA5112758 | 6.7      | 0.05     | 1.63     | 0.5      | 36         | 0.5      | 0.25     | 1.9      | 548      | 32      | 0.25    | 0.3      | 0.59     | 16.9     | 0.5      | 1.08     |
| SA5112759 | 0.6      | 0.05     | 0.26     | 0.5      | 20.9       | 0.5      | 0.25     | 5.9      | 314      | 13      | 0.01    | 0.2      | 0.10     | 2.1      | 0.5      | 0.63     |
| SA5112760 | 2.9      | 0.05     | 0.52     | 0.5      | 18.27      | 0.5      | 0.25     | 4.2      | 449      | 19      | 0.10    | 0.2      | 0.18     | 4.6      | 0.5      | 0.70     |
| SA5112761 | 0.2      | 0.05     | 0.10     | 0.5      | 20.4       | 0.5      | 0.25     | 2.2      | 53       | 9       | 0.02    | 0.2      | 0.03     | 2.3      | 0.5      | 0.35     |
| SA5112762 | 1.9      | 0.05     | 0.40     | 0.5      | 14.2       | 0.5      | 0.25     | 0.25     | 256      | 29      | 0.02    | 0.2      | 0.17     | 8.8      | 0.5      | 0.42     |
| SA5112763 | 0.7      | 0.05     | 0.11     | 0.5      | 16.7       | 0.5      | 0.25     | 2.3      | 104      | 14      | 0.005   | 0.05     | 0.04     | 1.8      | 0.5      | 0.36     |
| SA5112764 | 0.7      | 0.05     | 0.16     | 0.5      | 17.4       | 0.5      | 0.25     | 1.4      | 127      | 15      | 0.01    | 0.05     | 0.08     | 8.2      | 0.5      | 0.52     |
| SA5112765 | 1.0      | 0.05     | 0.22     | 0.5      | 18.1       | 0.5      | 0.25     | 3.1      | 147      | 7       | 0.06    | 0.05     | 0.06     | 11.3     | 0.5      | 0.47     |
| SA5112766 | 0.7      | 0.05     | 0.13     | 0.5      | 34.8       | 0.5      | 0.25     | 5.1      | 252      | 16      | 0.03    | 0.05     | 0.05     | 3.1      | 0.5      | 0.27     |
| SA5112767 | 0.6      | 0.05     | 0.11     | 0.5      | 30.2       | 0.5      | 0.25     | 10.4     | 110      | 4       | 0.02    | 0.05     | 0.07     | 1.2      | 0.5      | 0.37     |
| SA5112768 | 0.1      | 0.05     | 0.10     | 0.5      | 34.9       | 0.5      | 0.25     | 12.9     | 66       | 11      | 0.01    | 0.1      | 0.04     | 0.7      | 0.5      | 0.16     |
| SA5112769 | 0.1      | 0.05     | 0.19     | 0.5      | 21.8       | 0.5      | 0.25     | 15.3     | 31       | 22      | 0.01    | 0.05     | 0.06     | 0.25     | 0.5      | 0.72     |
| SA5112770 | 0.3      | 0.05     | 0.15     | 0.5      | 32.7       | 0.5      | 0.25     | 21.8     | 172      | 8       | 0.02    | 0.05     | 0.06     | 1.5      | 0.5      | 0.26     |
| SA5112771 | 0.3      | 0.05     | 0.35     | 0.5      | 15.5       | 0.5      | 0.25     | 13.1     | 25       | 21      | 0.10    | 0.2      | 0.13     | 3.4      | 0.5      | 0.68     |
| SA5112772 | 0.05     | 0.05     | 0.16     | 0.5      | 36.4       | 0.5      | 0.25     | 10.2     | 65       | 19      | 0.01    | 0.05     | 0.08     | 1.9      | 0.5      | 0.58     |
| SA5112773 | 0.3      | 0.05     | 0.14     | 0.5      | 17.05      | 0.5      | 0.25     | 9.8      | 43       | 14      | 0.06    | 0.05     | 0.05     | 4.6      | 0.5      | 0.39     |
| SA5112774 | 0.05     | 0.05     | 0.10     | 0.5      | 35.2       | 0.5      | 0.25     | 16.4     | 148      | 6       | 0.04    | 0.05     | 0.04     | 2.1      | 0.5      | 0.29     |
| SA5112775 | 3.4      | 0.05     | 1.16     | 0.5      | 29.9       | 0.5      | 0.25     | 13.1     | 381      | 33      | 0.19    | 0.3      | 0.52     | 4.6      | 1        | 1.16     |
| SA5112776 | 0.2      | 0.05     | 0.13     | 0.5      | 41.2       | 0.5      | 0.25     | 14.2     | 118      | 15      | 0.05    | 0.05     | 0.08     | 0.9      | 0.5      | 0.68     |
| SA5112777 | 2.1      | 0.05     | 0.26     | 0.5      | 36.1       | 0.5      | 0.25     | 13.7     | 247      | 24      | 0.10    | 0.2      | 0.13     | 2.2      | 0.5      | 0.97     |
| SA5112778 | 4.1      | 0.05     | 0.85     | 0.5      | 25         | 0.5      | 0.25     | 15.6     | 71       | 39      | 0.06    | 0.3      | 0.27     | 5.7      | 0.5      | 1.09     |
| SA5112779 | 4.5      | 0.05     | 0.77     | 0.5      | 27.1       | 0.5      | 0.25     | 14.9     | 163      | 41      | 0.13    | 0.3      | 0.27     | 3.3      | 0.5      | 1.25     |
| SA5112780 | 2.3      | 0.05     | 0.50     | 0.5      | 25.5       | 0.5      | 0.25     | 8.9      | 199      | 44      | 0.08    | 0.2      | 0.19     | 6.5      | 0.5      | 0.99     |
| SA5112781 | 4.5      | 0.05     | 0.58     | 0.5      | 34         | 0.5      | 0.25     | 9.2      | 360      | 43      | 0.09    | 0.2      | 0.24     | 8.1      | 0.5      | 1.17     |
| SA5112782 | 3.3      | 0.05     | 0.59     | 0.5      | 29.7       | 0.5      | 0.25     | 11.8     | 339      | 39      | 0.11    | 0.3      | 0.25     | 8.7      | 0.5      | 1.17     |
| SA5112783 | 2.6      | 0.05     | 0.49     | 0.5      | 30.2       | 0.5      | 0.25     | 7.8      | 307      | 36      | 0.09    | 0.05     | 0.23     | 7.4      | 0.5      | 1.08     |
| SA5112784 | 3.2      | 0.05     | 0.60     | 0.5      | 34         | 0.5      | 0.25     | 10.8     | 349      | 39      | 0.12    | 0.2      | 0.25     | 7.9      | 0.5      | 1.27     |
| SA5112785 | 0.4      | 0.05     | 0.34     | 0.5      | 31         | 0.5      | 0.25     | 10.1     | 185      | 35      | 0.02    | 0.2      | 0.11     | 4.4      | 0.5      | 0.76     |
| SA5112786 | 0.5      | 0.05     | 0.20     | 0.5      | 35.8       | 0.5      | 0.25     | 12.4     | 184      | 8       | 0.01    | 0.05     | 0.10     | 1.9      | 0.5      | 0.70     |
| SA5112787 | 2.9      | 0.05     | 0.56     | 0.5      | 34.9       | 0.5      | 0.25     | 15.6     | 464      | 50      | 0.15    | 0.3      | 0.27     | 10.8     | 0.5      | 1.31     |
| SA5112788 | 3.0      | 0.05     | 0.58     | 0.5      | 35.7       | 0.5      | 0.25     | 10.3     | 469      | 29      | 0.16    | 0.2      | 0.26     | 9.9      | 0.5      | 1.34     |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5111891 | 1        | 0.5      | 5.61 | 5       | 0.18    | 0.56     | 4.3      | 0.8      | 0.18    | 0.1     | 0.2     | 13       |
| SA5111892 | 1        | 0.5      | 5.55 | 6       | 0.18    | 0.51     | 4.1      | 1.0      | 0.09    | 0.1     | 0.2     | 8        |
| SA5111893 | 1        | 0.5      | 5.15 | 13      | 0.15    | 0.90     | 7.5      | 2.9      | 0.03    | 0.1     | 0.3     | 8        |
| SA5111894 | 2        | 0.5      | 5.12 | 5       | 0.19    | 0.60     | 4.8      | 1.4      | 0.01    | 0.1     | 0.3     | 9        |
| SA5111895 | 2        | 0.5      | 5.14 | 2.5     | 0.21    | 0.83     | 5.8      | 1.8      | 0.01    | 0.5     | 0.4     | 5        |
| SA5111896 | -9       | -9       | -9   | -9      | -9      | -9       | -9       | -9       | -9      | -9      | -9      | -9       |
| SA5111897 | 1        | 1        | 5.13 | 15      | 0.37    | 2.22     | 7.4      | 3.5      | 0.02    | 2.5     | 0.5     | 9        |
| SA5111898 | 1        | 0.5      | 5.24 | 10      | 0.19    | 0.90     | 6.9      | 2.7      | 0.02    | 2.1     | 0.4     | 4        |
| SA5111899 | 1        | 0.5      | 6.36 | 6       | 0.24    | 1.17     | 9.6      | 0.9      | 0.03    | 0.3     | 0.1     | 3        |
| SA5111900 | 1        | 0.5      | 4.75 | 2.5     | 0.08    | 0.005    | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5111901 | 0.5      | 0.5      | 5.66 | 2.5     | 0.17    | 0.63     | 4.1      | 1.1      | 0.01    | 0.1     | 0.2     | 2        |
| SA5111902 | 1        | 0.5      | 4.87 | 5       | 0.10    | 0.32     | 3.2      | 2.1      | 0.01    | 0.4     | 0.2     | 2        |
| SA5111903 | 1        | 0.5      | 4.63 | 8       | 0.12    | 0.005    | 1.1      | 0.4      | 0.005   | 0.1     | 0.05    | 7        |
| SA5111904 | 2        | 0.5      | 4.95 | 9       | 0.12    | 0.52     | 3.5      | 2.6      | 0.02    | 1.7     | 0.6     | 10       |
| SA5111905 | 0.5      | 0.5      | 4.99 | 6       | 0.09    | 0.21     | 3.3      | 2.2      | 0.01    | 0.3     | 0.5     | 2        |
| SA5111906 | 1        | 0.5      | 4.74 | 2.5     | 0.08    | 0.01     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5111907 | 0.5      | 0.5      | 5.36 | 2.5     | 0.13    | 0.54     | 3.1      | 0.3      | 0.02    | 0.1     | 0.05    | 1        |
| SA5111908 | 1        | 0.5      | 5.28 | 7       | 0.15    | 0.43     | 5.5      | 1.4      | 0.02    | 0.1     | 0.2     | 4        |
| SA5111909 | 0.5      | 0.5      | 5.71 | 7       | 0.14    | 0.34     | 4.5      | 0.7      | 0.01    | 0.1     | 0.05    | 2        |
| SA5111910 | 0.5      | 0.5      | 5.01 | 5       | 0.11    | 0.21     | 3.4      | 1.6      | 0.01    | 0.1     | 0.3     | 2        |
| SA5111911 | 0.5      | 0.5      | 5.11 | 2.5     | 0.17    | 0.54     | 4.2      | 1.7      | 0.01    | 0.1     | 0.1     | 3        |
| SA5111912 | 0.5      | 0.5      | 4.51 | 5       | 0.07    | 0.005    | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5111913 | 0.5      | 0.5      | 5.00 | 2.5     | 0.11    | 0.33     | 2.8      | 0.9      | 0.005   | 0.1     | 0.05    | 3        |
| SA5111914 | 0.5      | 0.5      | 5.06 | 2.5     | 0.16    | 0.07     | 4.0      | 1.1      | 0.005   | 0.1     | 0.05    | 3        |
| SA5111915 | 1        | 0.5      | 4.78 | 7       | 0.13    | 0.20     | 4.6      | 2.2      | 0.01    | 0.1     | 0.1     | 10       |
| SA5111916 | 0.5      | 0.5      | 4.97 | 5       | 0.19    | 0.64     | 4.3      | 2.6      | 0.10    | 0.1     | 0.6     | 4        |
| SA5111917 | 1        | 0.5      | 5.07 | 8       | 0.21    | 0.97     | 4.2      | 2.1      | 0.05    | 0.1     | 0.9     | 6        |
| SA5111918 | 2        | 0.5      | 4.86 | 6       | 0.11    | 0.31     | 2.8      | 2.1      | 0.01    | 3.6     | 0.2     | 16       |
| SA5111919 | 1        | 0.5      | 5.43 | 8       | 0.19    | 0.57     | 4.0      | 1.8      | 0.04    | 0.5     | 0.6     | 19       |
| SA5111920 | 0.5      | 0.5      | 4.91 | 2.5     | 0.14    | 0.39     | 3.5      | 1.3      | 0.02    | 0.1     | 0.4     | 4        |
| SA5111921 | 0.5      | 0.5      | 5.10 | 2.5     | 0.16    | 0.45     | 4.3      | 0.8      | 0.03    | 0.1     | 0.3     | 2        |
| SA5111922 | 0.5      | 0.5      | 4.86 | 5       | 0.17    | 0.26     | 3.6      | 2.1      | 0.02    | 0.1     | 0.2     | 2        |
| SA5111923 | 0.5      | 1        | 4.80 | 8       | 0.19    | 1.01     | 4.3      | 4.2      | 0.02    | 0.1     | 0.5     | 5        |
| SA5111924 | 3        | 1        | 4.50 | 14      | 0.23    | 1.27     | 5.9      | 8.1      | 0.13    | 0.1     | 1.3     | 40       |
| SA5111925 | 0.5      | 0.5      | 4.97 | 13      | 0.24    | 0.79     | 5.2      | 3.2      | 0.14    | 0.1     | 1.0     | 12       |
| SA5111926 | 1        | 0.5      | 4.61 | 13      | 0.16    | 1.10     | 5.2      | 5.0      | 0.03    | 0.2     | 0.7     | 6        |
| SA5111927 | 1        | 0.5      | 5.31 | 8       | 0.23    | 0.33     | 4.7      | 1.7      | 0.02    | 0.1     | 0.3     | 5        |
| SA5111928 | 0.5      | 0.5      | 5.07 | 2.5     | 0.10    | 0.22     | 2.7      | 1.1      | 0.01    | 0.1     | 0.1     | 3        |
| SA5111929 | 1        | 0.5      | 5.00 | 8       | 0.11    | 0.28     | 2.9      | 1.3      | 0.01    | 0.1     | 0.3     | 5        |
| SA5111930 | 0.5      | 1        | 4.66 | 2.5     | 0.09    | 0.24     | 1.3      | 0.9      | 0.01    | 0.1     | 0.05    | 10       |
| SA5111931 | 1        | 0.5      | 4.84 | 10      | 0.11    | 0.02     | 1.6      | 1.7      | 0.005   | 0.1     | 0.05    | 19       |
| SA5111932 | 1        | 0.5      | 4.73 | 21      | 0.11    | 0.27     | 2.3      | 0.5      | 0.005   | 0.1     | 0.05    | 16       |
| SA5111933 | 1        | 3        | 4.64 | 6       | 0.13    | 0.58     | 3.6      | 2.8      | 0.01    | 0.1     | 0.4     | 11       |
| SA5111934 | 1        | 0.5      | 4.83 | 5       | 0.12    | 0.61     | 3.9      | 2.4      | 0.01    | 0.1     | 0.1     | 5        |
| SA5111935 | 0.5      | 0.5      | 5.22 | 2.5     | 0.11    | 0.30     | 3.0      | 1.0      | 0.01    | 0.1     | 0.1     | 1        |
| SA5111936 | 0.5      | 0.5      | 4.91 | 5       | 0.09    | 0.21     | 4.0      | 1.5      | 0.01    | 0.1     | 0.05    | 3        |
| SA5111937 | 3        | 0.5      | 4.93 | 7       | 0.10    | 0.005    | 1.8      | 0.5      | 0.005   | 0.1     | 0.05    | 7        |
| SA5111938 | 1        | 0.5      | 4.35 | 31      | 0.21    | 0.005    | 0.8      | 0.7      | 0.07    | 0.1     | 0.05    | 5        |
| SA5111939 | 1        | 0.5      | 4.98 | 2.5     | 0.12    | 0.63     | 4.0      | 1.0      | 0.005   | 0.1     | 0.05    | 8        |
| SA5111940 | 0.5      | 0.5      | 5.13 | 6       | 0.09    | 0.21     | 5.4      | 1.0      | 0.005   | 0.1     | 0.05    | 4        |
| SA5111941 | 0.5      | 0.5      | 4.84 | 10      | 0.13    | 0.58     | 4.8      | 3.4      | 0.01    | 0.4     | 0.2     | 8        |
| SA5111942 | 1        | 0.5      | 4.54 | 6       | 0.06    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5111943 | 1        | 1        | 5.18 | 2.5     | 0.14    | 0.53     | 3.9      | 0.9      | 0.02    | 0.1     | 0.05    | 7        |
| SA5111944 | 0.5      | 0.5      | 4.67 | 2.5     | 0.11    | 0.03     | 2.5      | 0.5      | 0.005   | 0.1     | 0.05    | 2        |
| SA5111945 | 0.5      | 0.5      | 4.61 | 2.5     | 0.09    | 0.02     | 1.8      | 0.3      | 0.005   | 0.1     | 0.05    | 2        |
| SA5111946 | 0.5      | 0.5      | 4.98 | 10      | 0.22    | 0.94     | 6.5      | 3.8      | 0.04    | 0.1     | 0.8     | 10       |
| SA5111947 | 1        | 0.5      | 4.71 | 10      | 0.23    | 1.40     | 7.1      | 5.4      | 0.05    | 0.1     | 1.7     | 13       |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5111948 | 1        | 0.5      | 4.86 | 21      | 0.30    | 0.94     | 8.3      | 8.8      | 0.06    | 0.1     | 1.5     | 12       |
| SA5111949 | 1        | 1        | 5.42 | 10      | 0.28    | 0.99     | 5.2      | 2.5      | 0.04    | 0.1     | 0.3     | 14       |
| SA5111950 | 0.5      | 0.5      | 4.65 | 2.5     | 0.10    | 0.03     | 2.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5111951 | 0.5      | 0.5      | 5.14 | 6       | 0.25    | 0.77     | 5.2      | 2.5      | 0.03    | 0.1     | 0.6     | 5        |
| SA5111952 | 5        | 0.5      | 5.27 | 2.5     | 0.22    | 0.61     | 5.0      | 1.2      | 0.03    | 0.1     | 0.4     | 2        |
| SA5111953 | 0.5      | 0.5      | 4.96 | 5       | 0.19    | 0.26     | 4.5      | 2.4      | 0.04    | 0.1     | 0.5     | 1        |
| SA5111954 | 0.5      | 0.5      | 4.76 | 8       | 0.19    | 0.82     | 5.4      | 4.1      | 0.03    | 0.1     | 0.8     | 2        |
| SA5111955 | 0.5      | 0.5      | 5.32 | 5       | 0.20    | 0.54     | 4.9      | 1.0      | 0.03    | 0.1     | 0.4     | 2        |
| SA5111956 | 0.5      | 0.5      | 4.94 | 5       | 0.22    | 1.05     | 7.2      | 3.2      | 0.04    | 0.1     | 0.7     | 1        |
| SA5111957 | 0.5      | 0.5      | 4.73 | 6       | 0.17    | 0.64     | 4.4      | 3.1      | 0.02    | 0.1     | 0.2     | 2        |
| SA5111958 | 0.5      | 0.5      | 5.32 | 2.5     | 0.16    | 0.68     | 3.2      | 0.3      | 0.01    | 0.1     | 0.1     | 1        |
| SA5111959 | 1        | 0.5      | 5.38 | 2.5     | 0.17    | 0.77     | 3.6      | 0.5      | 0.01    | 0.1     | 0.1     | 3        |
| SA5111960 | 1        | 0.5      | 4.61 | 8       | 0.14    | 0.87     | 4.6      | 2.7      | 0.01    | 0.1     | 0.2     | 3        |
| SA5111961 | 0.5      | 0.5      | 5.10 | 2.5     | 0.10    | 0.31     | 3.5      | 0.8      | 0.01    | 0.1     | 0.1     | 1        |
| SA5111962 | 0.5      | 0.5      | 4.81 | 2.5     | 0.09    | 0.005    | 1.6      | 0.4      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111963 | 0.5      | 0.5      | 4.84 | 8       | 0.12    | 0.30     | 3.5      | 1.9      | 0.01    | 0.1     | 0.2     | 2        |
| SA5111964 | 0.5      | 0.5      | 5.37 | 2.5     | 0.09    | 0.30     | 2.6      | 0.2      | 0.01    | 0.1     | 0.05    | 1        |
| SA5111965 | 0.5      | 0.5      | 4.55 | 6       | 0.14    | 0.84     | 5.1      | 4.2      | 0.01    | 0.1     | 0.1     | 4        |
| SA5111966 | 0.5      | 0.5      | 4.89 | 2.5     | 0.14    | 0.53     | 3.8      | 1.3      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111967 | 0.5      | 0.5      | 5.02 | 9       | 0.12    | 0.07     | 2.5      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5111968 | 0.5      | 0.5      | 4.70 | 2.5     | 0.07    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 22       |
| SA5111969 | 0.5      | 0.5      | 4.70 | 2.5     | 0.09    | 0.01     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5111970 | 4        | 0.5      | 4.67 | 2.5     | 0.07    | 0.02     | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 6        |
| SA5111971 | 1        | 0.5      | 5.55 | 5       | 0.20    | 0.99     | 6.9      | 1.0      | 0.01    | 0.1     | 0.1     | 3        |
| SA5111972 | 0.5      | 0.5      | 5.71 | 5       | 0.19    | 0.85     | 7.0      | 0.5      | 0.005   | 0.1     | 0.05    | 3        |
| SA5111973 | 1        | 0.5      | 5.46 | 10      | 0.16    | 0.42     | 4.3      | 0.3      | 0.005   | 0.1     | 0.05    | 2        |
| SA5111974 | 0.5      | 0.5      | 5.73 | 5       | 0.18    | 0.34     | 4.2      | 0.1      | 0.01    | 0.1     | 0.05    | 1        |
| SA5111975 | 1        | 0.5      | 5.80 | 5       | 0.22    | 1.10     | 5.1      | 0.5      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111976 | 0.5      | 0.5      | 5.57 | 7       | 0.22    | 1.23     | 5.2      | 0.9      | 0.02    | 0.1     | 0.1     | 1        |
| SA5111977 | 3        | 0.5      | 4.87 | 2.5     | 0.08    | 0.005    | 0.5      | 0.2      | 0.005   | 0.1     | 0.05    | 2        |
| SA5111978 | 2        | 0.5      | 5.45 | 2.5     | 0.11    | 0.34     | 2.6      | 0.1      | 0.01    | 0.1     | 0.05    | 1        |
| SA5111979 | 1        | 0.5      | 5.22 | 2.5     | 0.13    | 0.30     | 2.3      | 0.4      | 0.05    | 0.1     | 0.05    | 1        |
| SA5111980 | 2        | 0.5      | 5.11 | 6       | 0.20    | 1.30     | 8.5      | 1.3      | 0.02    | 0.1     | 0.1     | 1        |
| SA5111981 | 0.5      | 0.5      | 5.24 | 5       | 0.17    | 1.46     | 6.3      | 0.9      | 0.08    | 0.1     | 0.4     | 2        |
| SA5111982 | 1        | 0.5      | 5.64 | 8       | 0.15    | 0.74     | 5.4      | 0.4      | 0.01    | 0.1     | 0.05    | 2        |
| SA5111983 | 1        | 0.5      | 6.24 | 2.5     | 0.17    | 1.35     | 6.4      | 0.05     | 0.02    | 0.1     | 0.05    | 2        |
| SA5111984 | 0.5      | 0.5      | 5.20 | 6       | 0.12    | 0.30     | 3.9      | 0.5      | 0.01    | 0.1     | 0.05    | 8        |
| SA5111985 | 0.5      | 0.5      | 6.28 | 5       | 0.20    | 1.26     | 8.0      | 0.3      | 0.01    | 0.1     | 0.05    | 3        |
| SA5111986 | 1        | 0.5      | 5.59 | 10      | 0.15    | 0.29     | 5.7      | 0.5      | 0.005   | 0.1     | 0.05    | 5        |
| SA5111987 | 0.5      | 0.5      | 6.25 | 2.5     | 0.25    | 0.81     | 9.3      | 0.2      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111988 | 0.5      | 0.5      | 5.86 | 7       | 0.15    | 0.44     | 5.4      | 0.2      | 0.005   | 0.1     | 0.05    | 2        |
| SA5111989 | 0.5      | 0.5      | 5.42 | 5       | 0.13    | 0.23     | 3.0      | 0.4      | 0.005   | 0.1     | 0.05    | 8        |
| SA5111990 | 0.5      | 0.5      | 5.58 | 10      | 0.12    | 0.32     | 6.2      | 0.4      | 0.06    | 0.1     | 0.05    | 9        |
| SA5111991 | 1        | 0.5      | 4.78 | 13      | 0.10    | 0.005    | 1.4      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5111992 | 1        | 0.5      | 5.27 | 9       | 0.15    | 0.54     | 5.9      | 0.2      | 0.01    | 0.1     | 0.05    | 10       |
| SA5111993 | 0.5      | 0.5      | 4.35 | 6       | 0.07    | 0.005    | 0.6      | 0.9      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111994 | 0.5      | 0.5      | 4.39 | 6       | 0.10    | 0.005    | 0.7      | 0.1      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111995 | 0.5      | 0.5      | 5.10 | 6       | 0.19    | 0.46     | 6.9      | 1.1      | 0.005   | 0.1     | 0.05    | 3        |
| SA5111996 | 0.5      | 0.5      | 6.18 | 2.5     | 0.19    | 1.23     | 7.9      | 0.1      | 0.005   | 0.1     | 0.05    | 1        |
| SA5111997 | 0.5      | 0.5      | 5.44 | 7       | 0.17    | 0.75     | 7.3      | 0.8      | 0.01    | 0.1     | 0.1     | 1        |
| SA5111998 | 0.5      | 0.5      | 4.94 | 2.5     | 0.07    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5111999 | 0.5      | 0.5      | 5.37 | 8       | 0.19    | 0.83     | 8.0      | 1.0      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112000 | 0.5      | 0.5      | 4.85 | 14      | 0.14    | 0.15     | 4.3      | 1.8      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112001 | 0.5      | 0.5      | 5.73 | 9       | 0.23    | 1.71     | 8.9      | 1.5      | 0.005   | 0.1     | 0.1     | 2        |
| SA5112002 | 1        | 0.5      | 4.61 | 2.5     | 0.10    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112003 | 1        | 0.5      | 5.20 | 13      | 0.16    | 0.85     | 5.8      | 1.9      | 0.005   | 0.1     | 0.1     | 5        |
| SA5112004 | 0.5      | 0.5      | 4.43 | 2.5     | 0.12    | 0.005    | 1.9      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112005 | 0.5      | 0.5      | 4.27 | 6       | 0.10    | 0.005    | 1.8      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112006 | 0.5      | 0.5      | 4.47 | 6       | 0.12    | 0.005    | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112007 | 0.5      | 0.5      | 4.75 | 8       | 0.05    | 0.005    | 0.4      | 0.6      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112008 | 1        | 0.5      | 5.16 | 8       | 0.12    | 0.72     | 7.2      | 1.9      | 0.005   | 0.1     | 0.05    | 6        |
| SA5112009 | 0.5      | 0.5      | 4.27 | 5       | 0.09    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112010 | 0.5      | 0.5      | 4.49 | 5       | 0.12    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112011 | 0.5      | 0.5      | 5.04 | 2.5     | 0.08    | 0.01     | 4.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112012 | 1        | 0.5      | 4.29 | 11      | 0.14    | 0.005    | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112013 | 0.5      | 0.5      | 4.42 | 6       | 0.15    | 0.005    | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112014 | 0.5      | 0.5      | 5.25 | 8       | 0.19    | 1.12     | 8.8      | 1.7      | 0.005   | 0.1     | 0.2     | 1        |
| SA5112015 | 0.5      | 0.5      | 4.41 | 6       | 0.12    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112016 | 1        | 0.5      | 4.76 | 12      | 0.11    | 0.005    | 0.3      | 0.05     | 0.01    | 0.1     | 0.05    | 2        |
| SA5112017 | 0.5      | 0.5      | 4.91 | 2.5     | 0.15    | 0.005    | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112018 | 0.5      | 0.5      | 4.62 | 9       | 0.19    | 1.61     | 11.0     | 3.7      | 0.005   | 0.2     | 0.2     | 4        |
| SA5112019 | 0.5      | 0.5      | 4.33 | 2.5     | 0.07    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112020 | 0.5      | 0.5      | 4.75 | 11      | 0.08    | 0.09     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112021 | 0.5      | 0.5      | 4.37 | 23      | 0.15    | 0.60     | 2.8      | 3.8      | 0.005   | 0.1     | 0.1     | 1        |
| SA5112022 | 0.5      | 0.5      | 4.94 | 5       | 0.06    | 0.005    | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112023 | 0.5      | 0.5      | 4.64 | 39      | 0.11    | 0.005    | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112024 | 1        | 0.5      | 4.47 | 8       | 0.14    | 0.005    | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112025 | 1        | 0.5      | 4.80 | 15      | 0.15    | 0.005    | 0.1      | 0.2      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112026 | 1        | 0.5      | 4.38 | 6       | 0.08    | 0.30     | 2.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112027 | 0.5      | 0.5      | 4.63 | 7       | 0.12    | 0.06     | 0.9      | 0.1      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112028 | 0.5      | 0.5      | 4.41 | 2.5     | 0.05    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112029 | 0.5      | 0.5      | 4.45 | 6       | 0.11    | 0.005    | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112030 | 1        | 0.5      | 4.34 | 9       | 0.07    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112031 | 0.5      | 0.5      | 4.38 | 8       | 0.09    | 0.005    | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112032 | 1        | 0.5      | 6.42 | 91      | 0.23    | 0.74     | 23.8     | 0.05     | -9      | 0.2     | 0.5     | 7        |
| SA5112033 | 1        | 0.5      | 5.40 | 6       | 0.17    | 0.88     | 4.9      | 0.6      | 0.02    | 0.1     | 0.1     | 3        |
| SA5112034 | 1        | 0.5      | 4.30 | 5       | 0.09    | 0.20     | 3.1      | 0.05     | 0.08    | 0.1     | 0.05    | 0.5      |
| SA5112035 | 1        | 0.5      | 4.68 | 2.5     | 0.07    | 0.005    | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112036 | 1        | 0.5      | 5.59 | 6       | 0.15    | 0.58     | 2.9      | 0.05     | 0.01    | 0.1     | 0.05    | 1        |
| SA5112037 | 0.5      | 0.5      | 4.59 | 8       | 0.07    | 0.005    | 1.1      | 1.3      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112038 | 2        | 0.5      | 5.93 | 18      | 0.26    | 0.50     | 7.8      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112039 | 1        | 1        | 5.83 | 9       | 0.28    | 1.45     | 11.9     | 1.8      | 0.005   | 0.1     | 0.3     | 1        |
| SA5112040 | 0.5      | 0.5      | 5.02 | 2.5     | 0.07    | 0.07     | 1.4      | 0.6      | 0.01    | 0.1     | 0.3     | 3        |
| SA5112041 | 0.5      | 0.5      | 4.55 | 2.5     | 0.08    | 0.005    | 0.7      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112042 | 0.5      | 0.5      | 4.75 | 2.5     | 0.07    | 0.005    | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112043 | 1        | 0.5      | 4.69 | 7       | 0.10    | 0.005    | 1.7      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112044 | -9       | -9       | 4.50 | -9      | -9      | -9       | -9       | -9       | -9      | -9      | -9      | -9       |
| SA5112045 | 2        | 0.5      | 4.55 | 7       | 0.21    | 0.09     | 1.8      | 0.1      | -9      | 0.1     | 0.05    | 2        |
| SA5112046 | 1        | 0.5      | 4.36 | 6       | 0.08    | 0.04     | 1.4      | 0.1      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112047 | 1        | 0.5      | 4.38 | 6       | 0.10    | 0.02     | 0.8      | 0.1      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112048 | 1        | 0.5      | 4.45 | 12      | 0.22    | 0.03     | 0.7      | 1.1      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112049 | 1        | 0.5      | 4.34 | 7       | 0.09    | 0.03     | 0.7      | 0.6      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112050 | 6        | 0.5      | 4.61 | 2.5     | 0.09    | 0.01     | 0.4      | 0.1      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112051 | 0.5      | 0.5      | 4.30 | 2.5     | 0.08    | 0.01     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112052 | 3        | 0.5      | 5.62 | 2.5     | 0.31    | 0.73     | 11.5     | 0.7      | 0.04    | 0.1     | 0.1     | 0.5      |
| SA5112053 | 3        | 0.5      | 4.79 | 6       | 0.11    | 0.01     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112054 | 2        | 0.5      | 5.04 | 6       | 0.11    | 0.04     | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112055 | 1        | 0.5      | 4.62 | 5       | 0.08    | 0.03     | 0.3      | 0.2      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112056 | 1        | 0.5      | 4.78 | 2.5     | 0.12    | 0.01     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112057 | 1        | 0.5      | 4.60 | 5       | 0.10    | 0.01     | 0.6      | 0.1      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112058 | 1        | 0.5      | 4.54 | 9       | 0.11    | 0.02     | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112059 | 0.5      | 0.5      | 5.48 | 8       | 0.26    | 0.76     | 9.8      | 1.9      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112060 | 1        | 0.5      | 4.53 | 2.5     | 0.10    | 0.02     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112061 | 1        | 0.5      | 4.71 | 2.5     | 0.12    | 0.01     | 0.6      | 0.4      | 0.005   | 0.1     | 0.05    | 1        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112062 | 0.5      | 0.5      | 5.80 | 10      | 0.24    | 0.33     | 6.8      | 0.4      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112063 | 1        | 0.5      | 4.65 | 7       | 0.14    | 0.01     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112064 | 3        | 0.5      | 5.73 | 14      | 0.22    | 0.37     | 5.8      | 1.2      | 0.005   | 0.3     | 0.1     | 8        |
| SA5112065 | 2        | 0.5      | 4.77 | 16      | 0.27    | 0.02     | 1.0      | 0.3      | 0.01    | 0.1     | 0.05    | 7        |
| SA5112066 | 1        | 0.5      | 4.65 | 7       | 0.10    | 0.01     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112067 | 1        | 0.5      | 5.10 | 2.5     | 0.23    | 0.54     | 4.2      | 1.0      | 0.005   | 0.5     | 0.2     | 4        |
| SA5112068 | 1        | 0.5      | 5.38 | 17      | 0.25    | 0.29     | 4.4      | 0.6      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112069 | 0.5      | 0.5      | 4.62 | 5       | 0.10    | 0.03     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112070 | 0.5      | 0.5      | 5.80 | 5       | 0.12    | 1.04     | 5.0      | 0.3      | 0.04    | 0.1     | 0.05    | 2        |
| SA5112071 | 0.5      | 0.5      | 4.59 | 8       | 0.11    | 0.05     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112072 | 4        | 0.5      | 4.51 | 19      | 0.27    | 0.02     | 1.3      | 0.1      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112073 | 0.5      | 0.5      | 5.70 | 2.5     | 0.12    | 1.13     | 5.7      | 4.0      | 0.005   | 0.2     | 0.1     | 3        |
| SA5112074 | 0.5      | 0.5      | 5.73 | 16      | 0.16    | 0.25     | 3.1      | 3.1      | 0.01    | 0.5     | 0.05    | 7        |
| SA5112075 | 0.5      | 0.5      | 4.49 | 7       | 0.09    | 0.05     | 0.7      | 0.2      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112076 | 1        | 0.5      | 4.39 | 21      | 0.31    | 0.06     | 0.7      | 0.1      | 0.005   | 0.1     | 0.05    | 10       |
| SA5112077 | 0.5      | 0.5      | 5.83 | 9       | 0.21    | 0.98     | 5.1      | 0.4      | 0.005   | 0.1     | 0.05    | 6        |
| SA5112078 | 0.5      | 0.5      | 6.09 | 17      | 0.31    | 0.82     | 7.9      | 0.1      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112079 | 0.5      | 0.5      | 4.93 | 2.5     | 0.11    | 0.01     | 1.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112080 | 0.5      | 0.5      | 4.57 | 2.5     | 0.08    | 0.20     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112081 | 0.5      | 0.5      | 4.48 | 2.5     | 0.08    | 0.04     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112082 | 0.5      | 0.5      | 4.53 | 6       | 0.09    | 0.04     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112083 | 0.5      | 0.5      | 4.74 | 2.5     | 0.08    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112084 | 0.5      | 0.5      | 4.48 | 2.5     | 0.09    | 0.01     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112085 | 0.5      | 0.5      | 4.56 | 2.5     | 0.08    | 0.02     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112086 | 0.5      | 0.5      | 4.44 | 2.5     | 0.09    | 0.04     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112087 | 0.5      | 0.5      | 4.48 | 2.5     | 0.08    | 0.02     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112088 | 0.5      | 0.5      | 4.40 | 2.5     | 0.07    | 0.05     | 0.2      | 0.05     | 0.03    | 0.1     | 0.05    | 3        |
| SA5112089 | 0.5      | 0.5      | 4.38 | 2.5     | 0.06    | 0.03     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112090 | 0.5      | 0.5      | 4.52 | 2.5     | 0.09    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112091 | 1        | 0.5      | 4.77 | 2.5     | 0.09    | 0.06     | 1.0      | 0.2      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112092 | 0.5      | 0.5      | 4.73 | 2.5     | 0.10    | 0.06     | 1.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112093 | 0.5      | 0.5      | 5.58 | 12      | 0.18    | 0.36     | 3.8      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |
| SA5112094 | 0.5      | 0.5      | 4.48 | 2.5     | 0.08    | 0.05     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112095 | 0.5      | 0.5      | 4.54 | 7       | 0.21    | 1.69     | 4.8      | 6.1      | 0.09    | 0.1     | 0.6     | 1        |
| SA5112096 | 0.5      | 0.5      | 4.68 | 6       | 0.17    | 0.66     | 4.8      | 3.3      | 0.04    | 0.1     | 0.2     | 3        |
| SA5112097 | 0.5      | 0.5      | 4.92 | 5       | 0.23    | 2.20     | 8.1      | 4.3      | 0.12    | 0.1     | 1.8     | 2        |
| SA5112098 | 0.5      | 0.5      | 4.79 | 6       | 0.15    | 1.44     | 5.5      | 5.8      | 0.06    | 0.1     | 1.0     | 2        |
| SA5112099 | 1        | 0.5      | 5.10 | 2.5     | 0.15    | 0.75     | 4.4      | 2.2      | 0.02    | 0.1     | 0.3     | 2        |
| SA5112100 | 0.5      | 0.5      | 4.82 | 2.5     | 0.08    | 0.02     | 0.5      | 0.1      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112101 | 0.5      | 0.5      | 4.84 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112102 | 1        | 0.5      | 5.10 | 7       | 0.23    | 1.70     | 5.8      | 2.5      | 0.04    | 0.1     | 0.5     | 4        |
| SA5112103 | 0.5      | 0.5      | 4.92 | 2.5     | 0.10    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112104 | 0.5      | 0.5      | 4.67 | 8       | 0.20    | 1.05     | 6.0      | 4.2      | 0.07    | 0.1     | 0.3     | 2        |
| SA5112105 | 1        | 0.5      | 4.88 | 8       | 0.15    | 0.99     | 5.1      | 4.1      | 0.02    | 0.1     | 0.3     | 3        |
| SA5112106 | 0.5      | 0.5      | 4.94 | 5       | 0.22    | 1.32     | 5.7      | 2.8      | 0.03    | 0.1     | 0.3     | 2        |
| SA5112107 | 0.5      | 0.5      | 5.22 | 8       | 0.19    | 0.70     | 4.2      | 1.6      | 0.02    | 0.1     | 0.1     | 3        |
| SA5112108 | 0.5      | 0.5      | 4.80 | 6       | 0.19    | 1.23     | 5.9      | 3.1      | 0.02    | 0.1     | 0.3     | 3        |
| SA5112109 | 0.5      | 0.5      | 4.54 | 11      | 0.22    | 0.45     | 6.2      | 5.1      | 0.04    | 0.3     | 0.7     | 3        |
| SA5112110 | 0.5      | 0.5      | 4.44 | 6       | 0.18    | 0.92     | 6.1      | 4.1      | 0.05    | 0.1     | 0.2     | 1        |
| SA5112111 | 2        | 0.5      | 4.88 | 2.5     | 0.07    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112112 | 1        | 0.5      | 4.80 | 7       | 0.20    | 0.86     | 5.3      | 2.9      | 0.04    | 0.1     | 0.3     | 4        |
| SA5112113 | 1        | 0.5      | 4.95 | 11      | 0.20    | 1.12     | 6.0      | 3.8      | 0.05    | 0.1     | 0.4     | 7        |
| SA5112114 | 1        | 0.5      | 5.29 | 2.5     | 0.20    | 1.11     | 5.4      | 1.8      | 0.06    | 0.1     | 0.05    | 4        |
| SA5112115 | 0.5      | 0.5      | 5.46 | 2.5     | 0.18    | 0.69     | 4.4      | 0.4      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112116 | 0.5      | 0.5      | 4.79 | 6       | 0.17    | 0.84     | 5.4      | 4.1      | 0.02    | 0.1     | 0.2     | 2        |
| SA5112117 | 0.5      | 0.5      | 4.82 | 2.5     | 0.09    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112118 | 1        | 0.5      | 4.90 | 11      | 0.17    | 0.57     | 4.6      | 3.3      | 0.02    | 0.3     | 0.3     | 7        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112119 | 1        | 0.5      | 4.84 | 14      | 0.12    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 9        |
| SA5112120 | 0.5      | 0.5      | 4.92 | 2.5     | 0.15    | 0.39     | 4.4      | 2.1      | 0.01    | 0.1     | 0.1     | 2        |
| SA5112121 | 0.5      | 0.5      | 4.67 | 7       | 0.13    | 0.86     | 4.5      | 3.5      | 0.02    | 0.1     | 0.2     | 8        |
| SA5112122 | 0.5      | 0.5      | 4.89 | 5       | 0.13    | 0.54     | 4.3      | 2.4      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112123 | 0.5      | 0.5      | 4.90 | 2.5     | 0.14    | 0.63     | 3.3      | 0.6      | 0.005   | 0.1     | 0.05    | 14       |
| SA5112124 | 1        | 0.5      | 5.47 | 9       | 0.21    | 1.07     | 3.9      | 4.0      | 0.02    | 0.1     | 0.3     | 13       |
| SA5112125 | 0.5      | 0.5      | 5.67 | 2.5     | 0.26    | 0.84     | 3.7      | 1.4      | 0.01    | 0.1     | 0.05    | 5        |
| SA5112126 | 1        | 0.5      | 5.67 | 7       | 0.24    | 0.84     | 3.7      | 2.3      | 0.02    | 0.1     | 0.1     | 11       |
| SA5112127 | 0.5      | 0.5      | 5.68 | 2.5     | 0.17    | 0.45     | 2.9      | 0.7      | 0.01    | 0.1     | 0.3     | 14       |
| SA5112128 | 0.5      | 0.5      | 5.14 | 2.5     | 0.12    | 0.28     | 2.8      | 1.1      | 0.01    | 0.1     | 0.1     | 3        |
| SA5112129 | 1        | 0.5      | 4.84 | 5       | 0.17    | 0.94     | 3.7      | 3.1      | 0.03    | 0.1     | 0.4     | 4        |
| SA5112130 | 1        | 0.5      | 5.05 | 27      | 0.18    | 1.41     | 4.4      | 4.2      | 0.05    | 0.1     | 1.3     | 10       |
| SA5112131 | 0.5      | 0.5      | 4.71 | 2.5     | 0.11    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |
| SA5112132 | 1        | 0.5      | 4.96 | 2.5     | 0.17    | 0.69     | 2.7      | 2.0      | 0.09    | 0.1     | 0.2     | 7        |
| SA5112133 | 0.5      | 0.5      | 4.72 | 6       | 0.10    | 0.01     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |
| SA5112134 | 1        | 0.5      | 4.84 | 2.5     | 0.09    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 6        |
| SA5112135 | 0.5      | 0.5      | 5.23 | 5       | 0.13    | 0.54     | 3.3      | 1.0      | 0.02    | 0.1     | 0.2     | 3        |
| SA5112136 | 1        | 0.5      | 4.78 | 2.5     | 0.11    | 0.005    | 0.2      | 0.1      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112137 | 1        | 0.5      | 4.41 | 6       | 0.09    | 0.005    | 0.9      | 0.1      | 0.005   | 0.1     | 0.05    | 5        |
| SA5112138 | 1        | 0.5      | 4.93 | 6       | 0.24    | 0.75     | 3.9      | 3.9      | 0.02    | 0.1     | 0.2     | 4        |
| SA5112139 | 0.5      | 0.5      | 5.41 | 2.5     | 0.21    | 0.46     | 4.3      | 1.5      | 0.02    | 0.1     | 0.2     | 7        |
| SA5112140 | 0.5      | 0.5      | 4.90 | 2.5     | 0.10    | 0.005    | 0.1      | 0.05     | -9      | 0.1     | 0.05    | 2        |
| SA5112141 | 1        | 0.5      | 5.36 | 15      | 0.18    | 0.01     | 1.3      | 3.4      | 0.01    | 0.4     | 0.7     | 6        |
| SA5112142 | 1        | 0.5      | 5.27 | 2.5     | 0.18    | 0.42     | 3.5      | 1.0      | 0.02    | 0.1     | 0.3     | 6        |
| SA5112143 | 0.5      | 0.5      | 4.93 | 2.5     | 0.11    | 0.24     | 2.5      | 1.1      | 0.02    | 0.1     | 0.1     | 9        |
| SA5112144 | 0.5      | 0.5      | 5.34 | 2.5     | 0.19    | 0.50     | 3.5      | 0.9      | 0.01    | 0.1     | 0.1     | 5        |
| SA5112145 | 0.5      | 0.5      | 4.87 | 5       | 0.15    | 0.75     | 4.7      | 4.0      | 0.09    | 0.2     | 1.8     | 3        |
| SA5112146 | 0.5      | 0.5      | 4.87 | 2.5     | 0.11    | 0.10     | 1.9      | 1.4      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112147 | 0.5      | 0.5      | 4.86 | 5       | 0.21    | 1.34     | 6.1      | 5.0      | 0.11    | 0.1     | 0.8     | 3        |
| SA5112148 | 0.5      | 0.5      | 5.88 | 5       | 0.29    | 1.74     | 5.5      | 0.5      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112149 | 0.5      | 0.5      | 5.25 | 2.5     | 0.25    | 1.45     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112150 | 0.5      | 0.5      | 4.88 | 2.5     | 0.08    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112151 | 0.5      | 0.5      | 4.65 | 2.5     | 0.07    | 0.02     | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112152 | 0.5      | 0.5      | 4.71 | 2.5     | 0.08    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 9        |
| SA5112153 | 0.5      | 0.5      | 4.37 | 6       | 0.13    | 0.005    | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112154 | 0.5      | 0.5      | 4.39 | 6       | 0.12    | 0.005    | 1.4      | 0.6      | 0.01    | 0.1     | 0.1     | 10       |
| SA5112155 | 0.5      | 0.5      | 4.53 | 10      | 0.10    | 0.005    | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 7        |
| SA5112156 | 0.5      | 0.5      | 5.40 | 7       | 0.21    | 0.58     | 7.4      | 0.8      | 0.005   | 0.1     | 0.05    | 6        |
| SA5112157 | 0.5      | 0.5      | 4.53 | 9       | 0.10    | 0.005    | 0.7      | 0.1      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112158 | 0.5      | 0.5      | 5.87 | 28      | 0.10    | 1.41     | 7.9      | 0.2      | 0.005   | 0.1     | 0.05    | 6        |
| SA5112159 | 0.5      | 0.5      | 4.33 | 8       | 0.17    | 0.005    | 1.8      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112160 | 0.5      | 0.5      | 4.68 | 14      | 0.13    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112161 | 0.5      | 0.5      | 5.26 | 7       | 0.19    | 0.80     | 7.8      | 0.8      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112162 | 0.5      | 1        | 4.69 | 6       | 0.10    | 0.005    | 0.9      | 0.2      | 0.005   | 0.1     | 0.05    | 5        |
| SA5112163 | 0.5      | 0.5      | 4.51 | 2.5     | 0.06    | 0.005    | 0.3      | 0.3      | 0.005   | 0.1     | 0.05    | 9        |
| SA5112164 | 0.5      | 0.5      | 4.61 | 5       | 0.14    | 0.005    | 0.5      | 0.05     | 0.06    | 0.1     | 0.05    | 2        |
| SA5112165 | 0.5      | 0.5      | 5.56 | 9       | 0.15    | 0.70     | 6.1      | 0.5      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112166 | 0.5      | 0.5      | 5.75 | 16      | 0.14    | 0.59     | 4.8      | 2.2      | 0.005   | 0.1     | 0.05    | 7        |
| SA5112167 | 0.5      | 0.5      | 4.69 | 2.5     | 0.09    | 0.07     | 2.8      | 0.3      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112168 | 0.5      | 0.5      | 4.77 | 14      | 0.12    | 0.005    | 1.4      | 1.4      | 0.005   | 0.9     | 0.3     | 6        |
| SA5112169 | 0.5      | 0.5      | 5.64 | 13      | 0.13    | 0.26     | 3.8      | 1.2      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112170 | 0.5      | 0.5      | 5.06 | 7       | 0.14    | 0.78     | 5.0      | 4.3      | 0.02    | 0.1     | 0.05    | 5        |
| SA5112171 | 1        | 0.5      | 4.43 | 2.5     | 0.07    | 0.10     | 1.3      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112172 | 0.5      | 0.5      | 5.58 | 5       | 0.09    | 0.76     | 5.8      | 0.3      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112173 | 0.5      | 0.5      | 4.45 | 2.5     | 0.07    | 0.10     | 1.3      | 0.05     | 0.01    | 0.1     | 0.05    | 2        |
| SA5112174 | 4        | 0.5      | 5.65 | 48      | 0.35    | 0.69     | 6.1      | 0.05     | 0.005   | 0.1     | 0.05    | 56       |
| SA5112175 | 0.5      | 0.5      | 5.08 | 25      | 0.17    | 0.06     | 2.7      | 10.9     | 0.01    | 0.1     | 0.05    | 2        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112176 | 0.5      | 0.5      | 5.05 | 13      | 0.08    | 0.03     | 1.7      | 1.5      | 0.01    | 0.4     | 0.05    | 2        |
| SA5112177 | 0.5      | 0.5      | 5.35 | 10      | 0.08    | 0.14     | 2.4      | 1.0      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112178 | 1        | 0.5      | 4.77 | 5       | 0.08    | 0.005    | 0.9      | 0.5      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112179 | 0.5      | 0.5      | 5.73 | 10      | 0.11    | 0.38     | 3.9      | 0.4      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112180 | 1        | 0.5      | 4.77 | 2.5     | 0.07    | 0.12     | 1.6      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112181 | 0.5      | 0.5      | 4.45 | 2.5     | 0.07    | 0.005    | 0.8      | 0.5      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112182 | 0.5      | 0.5      | 4.45 | 5       | 0.07    | 0.005    | 0.7      | 0.05     | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112183 | 0.5      | 0.5      | 5.70 | 10      | 0.11    | 0.20     | 4.3      | 0.9      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112184 | 0.5      | 0.5      | 5.93 | 5       | 0.07    | 0.11     | 3.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112185 | 1        | 0.5      | 4.38 | 21      | 0.11    | 0.01     | 1.4      | 0.6      | 0.005   | 0.1     | 0.05    | 23       |
| SA5112186 | 1        | 0.5      | 4.94 | 12      | 0.07    | 0.22     | 3.0      | 0.05     | 0.005   | 0.1     | 0.05    | 7        |
| SA5112187 | 1        | 0.5      | 4.96 | 5       | 0.08    | 0.07     | 2.0      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112188 | 0.5      | 0.5      | 4.52 | 2.5     | 0.11    | 0.005    | 2.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112189 | 1        | 0.5      | 4.35 | 10      | 0.10    | 0.02     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112190 | 0.5      | 0.5      | 5.21 | 5       | 0.11    | 0.50     | 3.3      | 0.2      | 0.03    | 0.1     | 0.05    | 2        |
| SA5112191 | 2        | 0.5      | 4.66 | 2.5     | 0.05    | 0.01     | 0.2      | 0.05     | 0.01    | 0.1     | 0.05    | 1        |
| SA5112192 | 1        | 0.5      | 6.25 | 2.5     | 0.36    | 0.45     | 6.3      | 0.05     | 0.01    | 0.1     | 0.05    | 1        |
| SA5112193 | 1        | 0.5      | 5.16 | 5       | 0.12    | 0.27     | 2.6      | 0.3      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112194 | 0.5      | 0.5      | 5.28 | 5       | 0.13    | 0.52     | 4.1      | 1.7      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112195 | 0.5      | 0.5      | 5.11 | 5       | 0.16    | 1.22     | 3.8      | 1.4      | 0.01    | 0.1     | 0.3     | 1        |
| SA5112196 | 1        | 0.5      | 5.55 | 2.5     | 0.14    | 0.43     | 2.5      | 0.2      | 0.005   | 0.1     | 0.05    | 10       |
| SA5112197 | 1        | 0.5      | 6.15 | 6       | 0.38    | 0.69     | 7.9      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112198 | 1        | 1        | 5.76 | 5       | 0.15    | 0.45     | 3.1      | 0.2      | 0.03    | 0.1     | 0.05    | 8        |
| SA5112199 | 2        | 0.5      | 5.65 | 2.5     | 0.25    | 1.23     | 6.0      | 0.2      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112200 | 1        | 0.5      | 5.96 | 8       | 0.07    | 0.15     | 3.1      | 1.4      | 0.005   | 0.1     | 0.05    | 10       |
| SA5112201 | 0.5      | 0.5      | 5.49 | 2.5     | 0.14    | 0.12     | 4.1      | 0.3      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112202 | 1        | 0.5      | 5.02 | 2.5     | 0.17    | 0.65     | 3.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112203 | 1        | 0.5      | 5.73 | 2.5     | 0.21    | 1.18     | 6.9      | 0.9      | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112204 | 0.5      | 0.5      | 4.60 | 6       | 0.14    | 0.005    | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112205 | 0.5      | 0.5      | 5.44 | 2.5     | 0.20    | 0.93     | 5.0      | 1.1      | 0.06    | 0.1     | 0.2     | 2        |
| SA5112206 | 0.5      | 0.5      | 4.88 | 5       | 0.18    | 0.95     | 4.3      | 2.0      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112207 | 0.5      | 0.5      | 4.90 | 2.5     | 0.21    | 1.18     | 4.8      | 3.1      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112208 | 0.5      | 0.5      | 5.42 | 5       | 0.17    | 0.50     | 4.2      | 1.2      | 0.02    | 0.1     | 0.2     | 3        |
| SA5112209 | 1        | 0.5      | 4.57 | 2.5     | 0.14    | 1.03     | 3.1      | 4.7      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112210 | 1        | 0.5      | 4.82 | 2.5     | 0.07    | 0.07     | 1.3      | 0.05     | 0.005   | 0.1     | 0.3     | 0.5      |
| SA5112211 | 0.5      | 0.5      | 5.52 | 5       | 0.15    | 0.53     | 4.6      | 0.8      | 0.005   | 0.1     | 0.3     | 0.5      |
| SA5112212 | 1        | 0.5      | 4.44 | 10      | 0.10    | 0.04     | 1.2      | 0.8      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112213 | 1        | 0.5      | 4.33 | 5       | 0.09    | 0.06     | 1.3      | 0.4      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112214 | 2        | 0.5      | 4.33 | 5       | 0.09    | 0.07     | 1.3      | 0.4      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112215 | 1        | 0.5      | 4.52 | 2.5     | 0.07    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112216 | 0.5      | 0.5      | 4.53 | 8       | 0.07    | 0.02     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112217 | 0.5      | 0.5      | 4.34 | 2.5     | 0.08    | 0.03     | 1.3      | 0.5      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112218 | 1        | 0.5      | 4.61 | 9       | 0.10    | 0.06     | 2.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112219 | 1        | 0.5      | 4.52 | 8       | 0.09    | 0.02     | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112220 | 0.5      | 0.5      | 4.70 | 9       | 0.07    | 0.44     | 4.2      | 0.6      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112221 | 1        | 0.5      | 5.62 | 8       | 0.10    | 0.56     | 4.9      | 2.0      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112222 | 1        | 0.5      | 5.15 | 2.5     | 0.07    | 0.04     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112223 | 1        | 0.5      | 4.56 | 2.5     | 0.12    | 0.18     | 1.7      | 0.05     | 0.005   | 0.1     | 0.1     | 1        |
| SA5112224 | 1        | 0.5      | 4.89 | 2.5     | 0.07    | 0.03     | 0.6      | 0.3      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112225 | 4        | 0.5      | 5.32 | 10      | 0.11    | 0.25     | 3.5      | 0.8      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112226 | 0.5      | 0.5      | 5.22 | 2.5     | 0.07    | 0.16     | 3.3      | 1.8      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112227 | 0.5      | 0.5      | 4.75 | 2.5     | 0.08    | 0.05     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112228 | 0.5      | 0.5      | 5.80 | 8       | 0.16    | 0.14     | 3.6      | 0.5      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112229 | 0.5      | 0.5      | 4.58 | 2.5     | 0.07    | 0.02     | 0.5      | 0.4      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112230 | 0.5      | 0.5      | 5.35 | 7       | 0.18    | 0.79     | 4.4      | 1.5      | 0.01    | 0.2     | 0.05    | 3        |
| SA5112231 | 1        | 0.5      | 5.51 | 13      | 0.13    | 0.17     | 2.6      | 0.4      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112232 | 0.5      | 0.5      | 5.88 | 2.5     | 0.20    | 0.95     | 4.2      | 0.05     | 0.005   | 0.1     | 0.3     | 1        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112233 | 1        | 0.5      | 4.76 | 2.5     | 0.08    | 0.02     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112234 | 1        | 0.5      | 4.74 | 2.5     | 0.10    | 0.05     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112235 | 2        | 0.5      | 4.79 | 2.5     | 0.09    | 0.02     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112236 | 1        | 0.5      | 4.95 | 6       | 0.14    | 0.85     | 3.6      | 1.4      | 0.005   | 0.1     | 0.05    | 32       |
| SA5112237 | 0.5      | 0.5      | 6.16 | 8       | 0.32    | 1.38     | 8.0      | 0.8      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112238 | 1        | 0.5      | 4.92 | 2.5     | 0.18    | 0.13     | 4.6      | 1.0      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112239 | 1        | 0.5      | 4.34 | 2.5     | 0.09    | 0.07     | 0.6      | 0.2      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112240 | 0.5      | 0.5      | 5.30 | 7       | 0.20    | 0.78     | 5.5      | 1.3      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112241 | 1        | 0.5      | 5.18 | 6       | 0.27    | 1.87     | 6.5      | 2.6      | 0.08    | 0.1     | 0.4     | 3        |
| SA5112242 | 0.5      | 0.5      | 4.91 | 6       | 0.18    | 0.64     | 4.1      | 0.6      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112243 | 1        | 0.5      | 4.69 | 7       | 0.20    | 1.53     | 7.7      | 2.4      | 0.005   | 0.1     | 0.05    | 7        |
| SA5112244 | 2        | 0.5      | 5.03 | 6       | 0.21    | 1.35     | 7.4      | 2.6      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112245 | 0.5      | 0.5      | 5.17 | 6       | 0.28    | 1.89     | 6.6      | 2.7      | 0.03    | 0.1     | 0.2     | 3        |
| SA5112246 | 0.5      | 0.5      | 4.61 | 2.5     | 0.07    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112247 | 0.5      | 0.5      | 5.02 | 2.5     | 0.18    | 0.53     | 2.5      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112248 | 1        | 0.5      | 4.85 | 2.5     | 0.08    | 0.01     | 0.3      | 0.3      | 0.005   | 0.2     | 0.2     | 2        |
| SA5112249 | 0.5      | 0.5      | 4.91 | 2.5     | 0.12    | 0.32     | 2.3      | 0.05     | 0.005   | 0.1     | 0.2     | 2        |
| SA5112250 | 1        | 0.5      | 5.36 | 5       | 0.18    | 0.71     | 5.3      | 0.4      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112251 | 6        | 0.5      | 5.25 | 13      | 0.33    | 0.93     | 6.8      | 0.5      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112252 | 1        | 0.5      | 5.03 | 7       | 0.27    | 0.77     | 6.4      | 1.4      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112253 | 4        | 0.5      | 5.13 | 9       | 0.23    | 0.56     | 6.5      | 1.2      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112254 | 1        | 0.5      | 5.66 | 5       | 0.39    | 0.50     | 7.5      | 0.2      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112255 | 1        | 0.5      | 4.76 | 5       | 0.16    | 1.51     | 4.7      | 2.1      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112256 | 2        | 0.5      | 5.58 | 20      | 0.22    | 0.68     | 6.2      | 0.8      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112257 | 0.5      | 0.5      | 5.56 | 2.5     | 0.24    | 1.02     | 5.3      | 0.1      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112258 | 1        | 0.5      | 4.82 | 6       | 0.20    | 0.47     | 3.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112259 | 0.5      | 0.5      | 5.45 | 2.5     | 0.17    | 0.62     | 5.5      | 0.05     | 0.005   | 0.1     | 0.1     | 2        |
| SA5112260 | 0.5      | 0.5      | 5.35 | 5       | 0.14    | 0.14     | 2.1      | 0.05     | 0.005   | 0.1     | 0.1     | 1        |
| SA5112261 | 2        | 0.5      | 4.98 | 2.5     | 0.12    | 0.30     | 4.6      | 1.3      | 0.01    | 0.1     | 0.1     | 1        |
| SA5112262 | 0.5      | 0.5      | 4.60 | 5       | 0.11    | 0.19     | 3.9      | 1.2      | 0.06    | 0.1     | 0.05    | 4        |
| SA5112263 | 1        | 0.5      | 4.79 | 6       | 0.13    | 0.30     | 5.2      | 1.0      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112264 | 1        | 0.5      | 4.55 | 2.5     | 0.10    | 0.06     | 1.6      | 0.1      | 0.01    | 0.1     | 0.05    | 5        |
| SA5112265 | 0.5      | 0.5      | 5.12 | 2.5     | 0.11    | 0.13     | 3.3      | 0.1      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112266 | 0.5      | 0.5      | 4.75 | 5       | 0.09    | 0.03     | 1.1      | 0.05     | 0.01    | 0.1     | 0.05    | 3        |
| SA5112267 | 1        | 0.5      | 4.68 | 2.5     | 0.10    | 0.005    | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112268 | 3        | 0.5      | 5.34 | 9       | 0.14    | 0.21     | 4.3      | 0.5      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112269 | 0.5      | 0.5      | 4.48 | 7       | 0.12    | 0.97     | 4.6      | 3.0      | 0.01    | 0.1     | 0.2     | 18       |
| SA5112270 | 0.5      | 0.5      | 5.34 | 6       | 0.13    | 0.26     | 2.7      | 0.4      | 0.03    | 0.1     | 0.1     | 2        |
| SA5112271 | 1        | 0.5      | 5.04 | 2.5     | 0.12    | 0.10     | 2.8      | 0.3      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112272 | 1        | 0.5      | 4.69 | 6       | 0.08    | 0.04     | 1.1      | 0.05     | 0.01    | 0.1     | 0.05    | 1        |
| SA5112273 | 1        | 0.5      | 4.65 | 11      | 0.15    | 0.68     | 5.2      | 3.5      | 0.02    | 0.1     | 0.1     | 1        |
| SA5112274 | 0.5      | 0.5      | 4.71 | 2.5     | 0.07    | 0.01     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112275 | 0.5      | 0.5      | 5.63 | 7       | 0.22    | 0.49     | 4.2      | 0.1      | 0.01    | 0.1     | 0.05    | 6        |
| SA5112276 | 2        | 0.5      | 5.99 | 6       | 0.21    | 1.65     | 8.5      | 1.4      | 0.02    | 0.1     | 0.05    | 6        |
| SA5112277 | 0.5      | 0.5      | 4.58 | 6       | 0.07    | 0.04     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112278 | 1        | 0.5      | 5.92 | 2.5     | 0.19    | 0.46     | 5.7      | 1.0      | 0.02    | 0.1     | 0.05    | 4        |
| SA5112279 | 0.5      | 0.5      | 4.96 | 2.5     | 0.12    | 0.30     | 5.3      | 1.5      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112280 | 0.5      | 0.5      | 5.13 | 5       | 0.19    | 1.08     | 8.8      | 1.1      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112281 | 0.5      | 0.5      | 4.85 | 6       | 0.08    | 0.05     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 9        |
| SA5112282 | 0.5      | 0.5      | 5.85 | 2.5     | 0.23    | 1.16     | 9.5      | 0.1      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112283 | 1        | 0.5      | 5.84 | 5       | 0.26    | 1.50     | 5.6      | 0.05     | 0.005   | 0.1     | 0.05    | 23       |
| SA5112284 | 0.5      | 0.5      | 5.12 | 8       | 0.16    | 1.80     | 6.4      | 1.5      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112285 | 0.5      | 0.5      | 4.90 | 5       | 0.12    | 0.58     | 6.6      | 0.3      | 0.01    | 0.1     | 0.05    | 7        |
| SA5112286 | 0.5      | 0.5      | 4.91 | 7       | 0.08    | 0.05     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 27       |
| SA5112287 | 0.5      | 0.5      | 4.85 | 5       | 0.07    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112288 | 0.5      | 0.5      | 6.05 | 2.5     | 0.24    | 1.21     | 8.5      | 0.05     | 0.005   | 0.1     | 0.05    | 6        |
| SA5112289 | 0.5      | 0.5      | 4.97 | 2.5     | 0.06    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |



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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112290 | 0.5      | 0.5      | 5.68 | 2.5     | 0.19    | 0.75     | 9.7      | 0.1      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112291 | 1        | 0.5      | 6.20 | 2.5     | 0.26    | 1.71     | 9.3      | 0.3      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112292 | 0.5      | 0.5      | 4.81 | 7       | 0.12    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112293 | 0.5      | 0.5      | 5.84 | 5       | 0.23    | 0.73     | 7.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112294 | 0.5      | 0.5      | 5.30 | 7       | 0.23    | 1.98     | 8.6      | 2.4      | 0.03    | 0.1     | 0.05    | 5        |
| SA5112295 | 0.5      | 0.5      | 5.63 | 8       | 0.19    | 0.96     | 7.3      | 2.0      | 0.02    | 0.1     | 0.05    | 7        |
| SA5112296 | 0.5      | 0.5      | 5.56 | 2.5     | 0.23    | 1.69     | 8.8      | 0.9      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112297 | 0.5      | 0.5      | 5.67 | 2.5     | 0.24    | 1.40     | 10.2     | 0.1      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112298 | 0.5      | 0.5      | 4.70 | 2.5     | 0.05    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112299 | 1        | 0.5      | 5.58 | 8       | 0.23    | 1.23     | 9.4      | 1.1      | 0.02    | 0.1     | 0.05    | 6        |
| SA5112300 | 0.5      | 0.5      | 4.91 | 7       | 0.07    | 0.12     | 1.7      | 0.3      | 0.005   | 0.1     | 0.05    | 6        |
| SA5112301 | 0.5      | 0.5      | 4.55 | 2.5     | 0.10    | 0.11     | 1.6      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112302 | 0.5      | 0.5      | 4.58 | 2.5     | 0.08    | 0.06     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112303 | 1        | 0.5      | 4.73 | 2.5     | 0.06    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 12       |
| SA5112304 | 0.5      | 0.5      | 6.48 | 2.5     | 0.43    | 1.20     | 11.2     | 0.05     | 0.01    | 0.1     | 0.05    | 4        |
| SA5112305 | 0.5      | 0.5      | 5.53 | 7       | 0.22    | 1.29     | 10.8     | 0.5      | 0.02    | 0.1     | 0.05    | 5        |
| SA5112306 | 0.5      | 0.5      | 6.06 | 2.5     | 0.22    | 0.97     | 8.1      | 0.05     | 0.01    | 0.1     | 0.05    | 1        |
| SA5112307 | 0.5      | 0.5      | 4.97 | 2.5     | 0.07    | 0.02     | 0.1      | 0.05     | 0.06    | 0.1     | 0.05    | 2        |
| SA5112308 | 0.5      | 0.5      | 5.51 | 2.5     | 0.21    | 0.88     | 8.9      | 0.5      | 0.04    | 0.1     | 0.05    | 1        |
| SA5112309 | 0.5      | 0.5      | 5.01 | 2.5     | 0.09    | 0.08     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112310 | 0.5      | 0.5      | 5.15 | 5       | 0.16    | 0.76     | 5.9      | 1.5      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112311 | 1        | 0.5      | 4.80 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112312 | 0.5      | 0.5      | 4.70 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112313 | 0.5      | 0.5      | 5.50 | 2.5     | 0.17    | 0.83     | 5.0      | 0.05     | 0.02    | 0.1     | 0.05    | 2        |
| SA5112314 | 2        | 0.5      | 5.37 | 2.5     | 0.17    | 1.20     | 5.2      | 0.4      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112315 | 0.5      | 0.5      | 5.44 | 2.5     | 0.15    | 0.78     | 5.2      | 0.4      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112316 | 0.5      | 0.5      | 5.38 | 7       | 0.15    | 0.65     | 5.1      | 1.3      | 0.03    | 0.1     | 0.05    | 4        |
| SA5112317 | 0.5      | 0.5      | 4.77 | 2.5     | 0.06    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112318 | 0.5      | 0.5      | 6.47 | 2.5     | 0.63    | 1.02     | 19.3     | 0.1      | 0.02    | 0.1     | 0.05    | 3        |
| SA5112319 | 0.5      | 0.5      | 6.17 | 6       | 0.34    | 0.59     | 18.3     | 1.3      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112320 | 0.5      | 0.5      | 4.58 | 2.5     | 0.06    | 0.08     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112321 | 0.5      | 0.5      | 4.70 | 2.5     | 0.07    | 0.01     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112322 | 0.5      | 0.5      | 4.64 | 2.5     | 0.07    | 0.05     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112323 | 0.5      | 0.5      | 4.98 | 7       | 0.16    | 0.70     | 11.2     | 2.5      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112324 | 0.5      | 0.5      | 5.16 | 14      | 0.30    | 1.34     | 28.4     | 4.3      | 0.04    | 0.1     | 0.05    | 5        |
| SA5112325 | 0.5      | 0.5      | 4.95 | 2.5     | 0.08    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112326 | 0.5      | 0.5      | 4.57 | 15      | 0.09    | 0.14     | 1.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112327 | 0.5      | 0.5      | 5.04 | 7       | 0.15    | 0.73     | 7.9      | 2.0      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112328 | 0.5      | 0.5      | 5.78 | 8       | 0.17    | 0.66     | 4.3      | 0.05     | 0.03    | 0.1     | 0.05    | 2        |
| SA5112329 | 0.5      | 0.5      | 4.76 | 9       | 0.14    | 0.72     | 5.1      | 1.7      | 0.02    | 0.1     | 0.05    | 4        |
| SA5112330 | 0.5      | 0.5      | 4.51 | 6       | 0.07    | 0.03     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112331 | 0.5      | 0.5      | 4.82 | 2.5     | 0.13    | 0.56     | 5.1      | 2.9      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112332 | 0.5      | 0.5      | 5.14 | 10      | 0.17    | 0.52     | 5.1      | 1.7      | 0.02    | 0.1     | 0.05    | 7        |
| SA5112333 | 0.5      | 0.5      | 4.88 | 2.5     | 0.13    | 0.74     | 4.6      | 2.3      | 0.02    | 0.1     | 0.05    | 3        |
| SA5112334 | 0.5      | 0.5      | 4.66 | 2.5     | 0.08    | 0.06     | 1.5      | 0.5      | 0.03    | 0.1     | 0.05    | 3        |
| SA5112335 | 0.5      | 0.5      | 4.40 | 2.5     | 0.07    | 0.14     | 1.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112336 | 0.5      | 0.5      | 4.49 | 8       | 0.13    | 0.69     | 4.8      | 4.7      | 0.04    | 0.1     | 0.05    | 4        |
| SA5112337 | 0.5      | 0.5      | 4.64 | 8       | 0.08    | 0.01     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112338 | 0.5      | 0.5      | 4.49 | 2.5     | 0.06    | 0.06     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 6        |
| SA5112339 | 0.5      | 0.5      | 5.36 | 2.5     | 0.16    | 1.98     | 7.4      | 1.1      | 0.02    | 0.1     | 0.05    | 3        |
| SA5112340 | 0.5      | 0.5      | 5.94 | 2.5     | 0.24    | 1.14     | 6.8      | 0.3      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112341 | 0.5      | 0.5      | 4.16 | 24      | 0.09    | 0.07     | 0.5      | 0.5      | 0.01    | 0.1     | 0.05    | 8        |
| SA5112342 | 0.5      | 0.5      | 5.20 | 6       | 0.27    | 0.90     | 9.1      | 2.5      | 0.04    | 0.1     | 0.05    | 4        |
| SA5112343 | 0.5      | 0.5      | 5.23 | 2.5     | 0.19    | 1.18     | 5.6      | 0.4      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112344 | 0.5      | 0.5      | 5.03 | 6       | 0.16    | 1.38     | 7.8      | 2.7      | 0.02    | 0.1     | 0.05    | 3        |
| SA5112345 | 0.5      | 0.5      | 5.21 | 2.5     | 0.14    | 1.05     | 8.4      | 2.7      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112346 | 0.5      | 0.5      | 5.34 | 2.5     | 0.15    | 0.77     | 7.2      | 1.6      | 0.01    | 0.1     | 0.05    | 2        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112347 | 0.5      | 0.5      | 4.82 | 2.5     | 0.08    | 0.10     | 1.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112348 | 0.5      | 0.5      | 5.86 | 2.5     | 0.20    | 1.02     | 5.1      | 0.05     | 0.01    | 0.1     | 0.05    | 4        |
| SA5112349 | 0.5      | 0.5      | 5.04 | 2.5     | 0.13    | 0.91     | 4.9      | 1.1      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112350 | 0.5      | 0.5      | 5.21 | 9       | 0.16    | 1.27     | 8.0      | 3.9      | 0.13    | 0.1     | 0.05    | 4        |
| SA5112351 | 0.5      | 0.5      | 5.55 | 13      | 0.39    | 1.50     | 11.8     | 3.7      | 0.86    | 0.1     | 0.05    | 6        |
| SA5112352 | 0.5      | 0.5      | 5.03 | 10      | 0.17    | 0.36     | 4.6      | 1.0      | 0.25    | 0.1     | 0.05    | 5        |
| SA5112353 | 0.5      | 0.5      | 4.07 | 2.5     | 0.15    | 1.35     | 8.7      | 1.6      | 0.08    | 0.1     | 0.05    | 2        |
| SA5112354 | 22       | 0.5      | 4.47 | 7       | 0.15    | 0.78     | 3.7      | 1.7      | 0.18    | 0.1     | 0.05    | 5        |
| SA5112355 | 0.5      | 0.5      | 5.55 | 6       | 0.15    | 1.60     | 8.0      | 2.3      | 0.44    | 0.1     | 0.05    | 4        |
| SA5112356 | 0.5      | 0.5      | 4.38 | 2.5     | 0.07    | 0.06     | 0.6      | 0.05     | 0.09    | 0.1     | 0.05    | 1        |
| SA5112357 | 0.5      | 0.5      | 4.59 | 2.5     | 0.08    | 0.03     | 0.5      | 0.05     | 0.15    | 0.1     | 0.05    | 3        |
| SA5112358 | 2        | 0.5      | 4.33 | 9       | 0.09    | 0.05     | 0.7      | 0.6      | 0.20    | 0.1     | 0.05    | 5        |
| SA5112359 | 0.5      | 0.5      | 5.55 | 5       | 0.14    | 1.60     | 7.9      | 1.8      | 0.43    | 0.1     | 0.05    | 1        |
| SA5112360 | 0.5      | 0.5      | 5.68 | 2.5     | 0.15    | 1.18     | 6.0      | 0.2      | 0.06    | 0.1     | 0.05    | 3        |
| SA5112361 | 0.5      | 0.5      | 5.43 | 2.5     | 0.14    | 1.74     | 6.8      | 1.1      | 0.11    | 0.1     | 0.05    | 2        |
| SA5112362 | 0.5      | 0.5      | 5.40 | 2.5     | 0.19    | 1.19     | 5.8      | 0.6      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112363 | 1        | 0.5      | 5.94 | 6       | 0.39    | 1.14     | 9.7      | 2.2      | 0.03    | 0.2     | 0.1     | 2        |
| SA5112364 | 0.5      | 0.5      | 5.36 | 2.5     | 0.18    | 1.21     | 5.6      | 1.4      | 0.06    | 0.1     | 0.05    | 1        |
| SA5112365 | 0.5      | 0.5      | 4.96 | 5       | 0.15    | 1.32     | 5.4      | 3.2      | 0.14    | 0.2     | 0.05    | 2        |
| SA5112366 | 0.5      | 0.5      | 5.16 | 2.5     | 0.15    | 0.98     | 5.8      | 1.9      | 0.06    | 0.1     | 0.05    | 7        |
| SA5112367 | 0.5      | 0.5      | 5.32 | 2.5     | 0.16    | 1.05     | 4.8      | 0.7      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112368 | 0.5      | 0.5      | 4.92 | 5       | 0.14    | 1.16     | 6.3      | 2.3      | 0.09    | 0.1     | 0.05    | 2        |
| SA5112369 | 3        | 0.5      | 5.02 | 9       | 0.16    | 1.36     | 5.5      | 3.9      | 0.17    | 0.4     | 0.05    | 3        |
| SA5112370 | 0.5      | 0.5      | 5.80 | 2.5     | 0.27    | 0.99     | 5.9      | 0.3      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112371 | 1        | 0.5      | 5.30 | 5       | 0.12    | 0.82     | 5.5      | 2.1      | 0.04    | 0.1     | 0.05    | 4        |
| SA5112372 | 0.5      | 0.5      | 4.65 | 2.5     | 0.09    | 0.30     | 1.2      | 0.3      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112373 | 0.5      | 0.5      | 4.94 | 2.5     | 0.11    | 0.32     | 4.0      | 0.6      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112374 | 1        | 0.5      | 5.19 | 2.5     | 0.14    | 0.57     | 6.6      | 1.8      | 0.07    | 0.1     | 0.05    | 3        |
| SA5112375 | 0.5      | 0.5      | 4.91 | 2.5     | 0.08    | 0.61     | 3.2      | 0.7      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112376 | 0.5      | 0.5      | 4.84 | 18      | 0.18    | 1.23     | 4.3      | 1.4      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112377 | 0.5      | 0.5      | 4.86 | 7       | 0.16    | 1.15     | 6.6      | 2.7      | 0.04    | 0.1     | 0.05    | 1        |
| SA5112378 | 0.5      | 0.5      | 5.53 | 2.5     | 0.19    | 0.90     | 5.3      | 0.8      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112379 | 1        | 0.5      | 5.23 | 5       | 0.24    | 2.07     | 6.3      | 1.1      | 0.05    | 0.1     | 0.05    | 2        |
| SA5112380 | 0.5      | 0.5      | 5.45 | 2.5     | 0.20    | 1.16     | 6.4      | 0.6      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112381 | 1        | 0.5      | 4.96 | 2.5     | 0.08    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 9        |
| SA5112382 | 2        | 0.5      | 5.48 | 6       | 0.16    | 1.04     | 6.3      | 0.7      | 0.02    | 0.1     | 0.05    | 9        |
| SA5112383 | 1        | 0.5      | 4.79 | 2.5     | 0.07    | 0.02     | 0.7      | 0.05     | 0.01    | 0.1     | 0.05    | 5        |
| SA5112384 | 1        | 0.5      | 4.61 | 2.5     | 0.07    | 0.01     | 0.5      | 0.05     | 0.01    | 0.1     | 0.05    | 4        |
| SA5112385 | 3        | 0.5      | 5.23 | 5       | 0.18    | 1.15     | 6.3      | 2.0      | 0.04    | 0.1     | 0.05    | 6        |
| SA5112386 | 3        | 0.5      | 5.36 | 6       | 0.22    | 1.21     | 6.5      | 1.9      | 0.09    | 0.1     | 0.05    | 7        |
| SA5112387 | 0.5      | 0.5      | 5.09 | 2.5     | 0.13    | 1.14     | 5.3      | 1.5      | 0.07    | 0.1     | 0.05    | 2        |
| SA5112388 | 2        | 0.5      | 5.28 | 8       | 0.21    | 1.04     | 8.6      | 2.3      | 0.07    | 0.1     | 0.05    | 3        |
| SA5112389 | 0.5      | 0.5      | 4.48 | 2.5     | 0.06    | 0.01     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112390 | 0.5      | 0.5      | 5.08 | 5       | 0.21    | 1.02     | 8.6      | 3.2      | 0.03    | 0.3     | 0.05    | 2        |
| SA5112391 | 0.5      | 0.5      | 5.79 | 2.5     | 0.28    | 1.05     | 6.2      | 0.05     | 0.04    | 0.1     | 0.05    | 1        |
| SA5112392 | 1        | 0.5      | 4.85 | 10      | 0.13    | 0.82     | 4.9      | 3.4      | 0.13    | 0.1     | 0.05    | 4        |
| SA5112393 | 1        | 0.5      | 5.75 | 12      | 0.29    | 1.08     | 6.1      | 0.05     | 0.05    | 0.1     | 0.05    | 4        |
| SA5112394 | 3        | 0.5      | 4.70 | 6       | 0.16    | 1.28     | 6.4      | 4.7      | 0.14    | 0.1     | 0.05    | 2        |
| SA5112395 | 0.5      | 0.5      | 5.65 | 2.5     | 0.17    | 0.86     | 5.1      | 0.5      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112396 | 0.5      | 0.5      | 5.69 | 2.5     | 0.17    | 0.89     | 4.3      | 0.8      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112397 | 1        | 0.5      | 5.29 | 2.5     | 0.07    | 0.14     | 1.7      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112398 | 1        | 0.5      | 5.22 | 2.5     | 0.21    | 1.57     | 5.9      | 1.7      | 0.03    | 0.1     | 0.1     | 2        |
| SA5112399 | 1        | 0.5      | 5.03 | 6       | 0.17    | 1.24     | 5.8      | 3.2      | 0.02    | 0.2     | 0.4     | 2        |
| SA5112400 | 0.5      | 0.5      | 5.82 | 2.5     | 0.20    | 0.77     | 5.7      | 0.5      | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112401 | 0.5      | 0.5      | 5.49 | 2.5     | 0.22    | 1.72     | 5.3      | 1.0      | 0.03    | 0.1     | 0.1     | 0.5      |
| SA5112402 | 0.5      | 0.5      | 4.87 | 5       | 0.11    | 0.02     | 0.05     | 0.05     | 0.01    | 0.1     | 0.05    | 3        |
| SA5112403 | 1        | 0.5      | 5.69 | 2.5     | 0.28    | 0.60     | 5.8      | 0.05     | 0.05    | 0.1     | 0.05    | 4        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112404 | 1        | 0.5      | 5.30 | 2.5     | 0.20    | 1.40     | 5.3      | 1.9      | 0.03    | 0.1     | 0.3     | 2        |
| SA5112405 | -9       | -9       | -9   | -9      | -9      | -9       | -9       | -9       | -9      | -9      | -9      | -9       |
| SA5112406 | 4        | 0.5      | 4.95 | 6       | 0.14    | 1.78     | 5.9      | 4.0      | 0.02    | 0.1     | 0.05    | 7        |
| SA5112407 | 0.5      | 0.5      | 5.61 | 2.5     | 0.28    | 0.50     | 6.0      | 0.4      | 0.07    | 0.1     | 0.05    | 1        |
| SA5112408 | 1        | 0.5      | 5.44 | 11      | 0.24    | 2.04     | 6.9      | 3.9      | 0.03    | 0.1     | 0.2     | 17       |
| SA5112409 | 0.5      | 0.5      | 4.73 | 2.5     | 0.06    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112410 | 1        | 0.5      | 4.61 | 2.5     | 0.07    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112411 | 0.5      | 0.5      | 5.91 | 2.5     | 0.22    | 0.48     | 10.2     | 0.7      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112412 | 0.5      | 0.5      | 6.26 | 2.5     | 0.30    | 0.58     | 17.0     | 0.9      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112413 | 2        | 0.5      | 6.17 | 2.5     | 0.28    | 0.62     | 10.9     | 0.2      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112414 | 0.5      | 0.5      | 4.87 | 2.5     | 0.06    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 8        |
| SA5112415 | 1        | 0.5      | 5.12 | 5       | 0.11    | 0.04     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 9        |
| SA5112416 | 0.5      | 0.5      | 4.65 | 2.5     | 0.06    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112417 | 1        | 0.5      | 4.54 | 2.5     | 0.05    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112418 | 0.5      | 0.5      | 6.13 | 2.5     | 0.24    | 0.58     | 11.2     | 0.6      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112419 | 1        | 0.5      | 5.46 | 5       | 0.23    | 1.35     | 14.5     | 2.2      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112420 | 0.5      | 0.5      | 5.90 | 5       | 0.21    | 0.50     | 10.4     | 1.0      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112421 | 0.5      | 0.5      | 4.95 | 2.5     | 0.09    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112422 | 0.5      | 0.5      | 4.79 | 2.5     | 0.06    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112423 | 1        | 0.5      | 4.39 | 2.5     | 0.06    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112424 | 0.5      | 0.5      | 5.66 | 11      | 0.19    | 1.53     | 8.4      | 1.6      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112425 | 1        | 0.5      | 5.00 | 7       | 0.15    | 1.11     | 7.2      | 1.5      | 0.03    | 0.1     | 0.05    | 6        |
| SA5112426 | 1        | 0.5      | 4.53 | 2.5     | 0.07    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 7        |
| SA5112427 | 0.5      | 0.5      | 4.83 | 2.5     | 0.07    | 0.01     | 0.6      | 0.1      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112428 | 2        | 0.5      | 4.56 | 7       | 0.05    | 0.03     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112429 | 2        | 0.5      | 4.63 | 2.5     | 0.05    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112430 | 1        | 0.5      | 4.74 | 2.5     | 0.06    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 8        |
| SA5112431 | 0.5      | 0.5      | 5.73 | 7       | 0.30    | 0.61     | 16.7     | 1.0      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112432 | 3        | 0.5      | 4.99 | 2.5     | 0.21    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112433 | 0.5      | 0.5      | 4.87 | 2.5     | 0.17    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112434 | 0.5      | 0.5      | 5.69 | 9       | 0.44    | 0.56     | 16.0     | 1.1      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112435 | 0.5      | 0.5      | 4.79 | 9       | 0.08    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112436 | 1        | 0.5      | 6.25 | 6       | 0.27    | 2.13     | 6.4      | 1.4      | 0.42    | 0.1     | 0.05    | 4        |
| SA5112437 | 1        | 0.5      | 5.79 | 2.5     | 0.17    | 1.39     | 5.7      | 0.4      | 0.13    | 0.1     | 0.05    | 2        |
| SA5112438 | 1        | 0.5      | 6.14 | 5       | 0.31    | 1.97     | 9.9      | 1.3      | 1.38    | 0.1     | 0.05    | 3        |
| SA5112439 | 2        | 0.5      | 5.99 | 6       | 0.21    | 1.46     | 8.4      | 1.4      | 0.23    | 0.1     | 0.05    | 3        |
| SA5112440 | 2        | 0.5      | 5.92 | 5       | 0.22    | 1.59     | 8.6      | 2.2      | 0.34    | 0.1     | 0.05    | 2        |
| SA5112441 | 1        | 0.5      | 6.08 | 7       | 0.20    | 1.57     | 7.2      | 1.2      | 0.15    | 0.1     | 0.05    | 4        |
| SA5112442 | 1        | 0.5      | 5.17 | 8       | 0.15    | 0.17     | 2.4      | 1.4      | 0.06    | 0.1     | 0.05    | 3        |
| SA5112443 | 0.5      | 0.5      | 5.98 | 5       | 0.13    | 0.71     | 5.0      | 1.0      | 0.09    | 0.1     | 0.05    | 2        |
| SA5112444 | 0.5      | 0.5      | 5.50 | 6       | 0.13    | 1.37     | 6.1      | 1.6      | 0.12    | 0.1     | 0.05    | 1        |
| SA5112445 | 0.5      | 0.5      | 4.66 | 11      | 0.08    | 0.02     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112446 | 0.5      | 0.5      | 4.30 | 2.5     | 0.05    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112447 | 0.5      | 0.5      | 4.66 | 2.5     | 0.06    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112448 | 0.5      | 0.5      | 4.44 | 2.5     | 0.06    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112449 | 0.5      | 0.5      | 4.93 | 2.5     | 0.08    | 0.09     | 1.9      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112450 | 0.5      | 0.5      | 6.21 | 2.5     | 0.23    | 1.04     | 6.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112451 | 0.5      | 0.5      | 4.79 | 2.5     | 0.10    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112452 | 1        | 0.5      | 4.63 | 23      | 0.07    | 0.10     | 1.6      | 1.1      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112453 | 1        | 0.5      | 6.33 | 5       | 0.20    | 2.04     | 12.5     | 0.1      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112454 | 1        | 0.5      | 6.28 | 5       | 0.19    | 1.97     | 11.9     | 0.05     | 0.01    | 0.1     | 0.05    | 2        |
| SA5112455 | 0.5      | 0.5      | 4.50 | 2.5     | 0.07    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112456 | 0.5      | 0.5      | 4.56 | 2.5     | 0.05    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112457 | 0.5      | 0.5      | 4.74 | 2.5     | 0.05    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112458 | 0.5      | 0.5      | 4.90 | 2.5     | 0.08    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112459 | 0.5      | 0.5      | 4.60 | 10      | 0.07    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112460 | 0.5      | 0.5      | 4.69 | 2.5     | 0.06    | 0.005    | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112461 | 0.5      | 0.5      | 5.78 | 9       | 0.16    | 0.88     | 6.6      | 1.2      | 0.02    | 0.1     | 0.1     | 2        |
| SA5112462 | 0.5      | 0.5      | 4.69 | 2.5     | 0.07    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112463 | 0.5      | 0.5      | 5.19 | 2.5     | 0.18    | 1.21     | 6.1      | 0.8      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112464 | 0.5      | 0.5      | 5.28 | 5       | 0.18    | 1.26     | 6.9      | 1.6      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112465 | 0.5      | 0.5      | 5.33 | 2.5     | 0.17    | 1.02     | 6.2      | 1.2      | 0.02    | 0.1     | 0.05    | 3        |
| SA5112466 | 0.5      | 0.5      | 5.28 | 2.5     | 0.16    | 0.45     | 4.4      | 0.5      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112467 | 0.5      | 0.5      | 5.56 | 2.5     | 0.21    | 0.86     | 11.1     | 0.1      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112468 | 1        | 0.5      | 5.31 | 15      | 0.15    | 0.17     | 5.6      | 3.3      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112469 | 1        | 0.5      | 5.38 | 15      | 0.25    | 1.07     | 16.5     | 4.6      | 0.05    | 0.2     | 0.05    | 5        |
| SA5112470 | 1        | 0.5      | 5.79 | 26      | 0.39    | 1.37     | 19.4     | 2.5      | 0.02    | 0.4     | 0.1     | 3        |
| SA5112471 | 0.5      | 0.5      | 4.98 | 11      | 0.09    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112472 | 0.5      | 0.5      | 5.86 | 5       | 0.28    | 1.22     | 13.1     | 1.3      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112473 | 0.5      | 0.5      | 4.79 | 2.5     | 0.08    | 0.03     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112474 | 0.5      | 0.5      | 4.65 | 7       | 0.06    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112475 | 1        | 0.5      | 4.73 | 2.5     | 0.07    | 0.07     | 0.1      | 3.0      | 0.005   | 0.1     | 0.05    | 4        |
| SA5112476 | 0.5      | 0.5      | 4.72 | 5       | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112477 | 0.5      | 0.5      | 4.52 | 9       | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112478 | 0.5      | 0.5      | 5.28 | 17      | 0.19    | 1.21     | 6.1      | 0.8      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112479 | 1        | 0.5      | 4.72 | 2.5     | 0.06    | 0.03     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112480 | 1        | 0.5      | 4.53 | 5       | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112481 | 0.5      | 0.5      | 4.85 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112482 | 0.5      | 0.5      | 6.24 | 11      | 0.23    | 1.06     | 4.9      | 0.5      | 0.04    | 0.1     | 0.05    | 2        |
| SA5112483 | 0.5      | 0.5      | 4.70 | 2.5     | 0.10    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112484 | 0.5      | 0.5      | 6.23 | 17      | 0.27    | 1.18     | 5.0      | 0.2      | 0.05    | 0.1     | 0.05    | 3        |
| SA5112485 | 1        | 0.5      | 5.66 | 2.5     | 0.16    | 1.13     | 2.6      | 0.2      | 0.03    | 0.1     | 0.05    | 2        |
| SA5112486 | 0.5      | 0.5      | 5.85 | 2.5     | 0.18    | 1.41     | 4.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112487 | 1        | 0.5      | 5.76 | 2.5     | 0.13    | 0.64     | 3.6      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112488 | 1        | 0.5      | 4.95 | 16      | 0.05    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112489 | 0.5      | 0.5      | 4.72 | 2.5     | 0.08    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112490 | 0.5      | 0.5      | 6.39 | 2.5     | 0.21    | 1.53     | 6.2      | 0.05     | 0.03    | 0.1     | 0.05    | 1        |
| SA5112491 | 2        | 0.5      | 6.16 | 2.5     | 0.16    | 0.50     | 3.8      | 0.05     | 0.04    | 0.1     | 0.05    | 5        |
| SA5112492 | 10       | 0.5      | 4.96 | 5       | 0.08    | 0.04     | 0.3      | 0.05     | 0.01    | 0.1     | 0.05    | 6        |
| SA5112493 | 1        | 0.5      | 4.53 | 2.5     | 0.07    | 0.04     | 0.8      | 0.05     | 0.01    | 0.1     | 0.05    | 4        |
| SA5112494 | 0.5      | 0.5      | 4.88 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112495 | 0.5      | 0.5      | 4.92 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112496 | 2        | 0.5      | 5.59 | 2.5     | 0.17    | 1.31     | 4.5      | 0.4      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112497 | 0.5      | 0.5      | 4.62 | 6       | 0.09    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112498 | 1        | 0.5      | 4.84 | 2.5     | 0.08    | 0.02     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112499 | 0.5      | 0.5      | 5.06 | 2.5     | 0.09    | 0.05     | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |
| SA5112500 | 1        | 0.5      | 5.25 | 2.5     | 0.14    | 0.11     | 3.0      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112501 | 0.5      | 0.5      | 4.74 | 2.5     | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112502 | 1        | 1        | 4.61 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112503 | 0.5      | 0.5      | 6.04 | 15      | 0.19    | 1.23     | 5.7      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112504 | 0.5      | 0.5      | 5.97 | 2.5     | 0.19    | 1.87     | 5.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112505 | 1        | 0.5      | 4.76 | 2.5     | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112506 | 2        | 0.5      | 5.48 | 7       | 0.15    | 0.26     | 4.7      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112507 | 1        | 0.5      | 4.66 | 10      | 0.24    | 0.04     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112508 | 1        | 0.5      | 4.68 | 6       | 0.07    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 11       |
| SA5112509 | 1        | 0.5      | 4.94 | 2.5     | 0.09    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 6        |
| SA5112510 | 1        | 0.5      | 4.52 | 2.5     | 0.10    | 0.02     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112511 | 0.5      | 0.5      | 5.79 | 6       | 0.16    | 0.93     | 7.1      | 0.9      | 0.09    | 0.1     | 0.1     | 5        |
| SA5112512 | 0.5      | 0.5      | 4.93 | 41      | 0.10    | 0.07     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112513 | 1        | 0.5      | 4.50 | 2.5     | 0.09    | 0.04     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112514 | 0.5      | 0.5      | 4.28 | 6       | 0.32    | 0.14     | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112515 | 0.5      | 0.5      | 4.42 | 2.5     | 0.07    | 0.03     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112516 | 1        | 0.5      | 4.45 | 2.5     | 0.07    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112517 | 1        | 0.5      | 4.56 | 2.5     | 0.07    | 0.02     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112518 | 1        | 0.5      | 4.65 | 8       | 0.08    | 0.02     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112519 | 1        | 0.5      | 4.64 | 2.5     | 0.07    | 0.03     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112520 | 2        | 0.5      | 4.91 | 6       | 0.09    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112521 | 1        | 0.5      | 5.65 | 2.5     | 0.17    | 0.74     | 5.2      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112522 | 0.5      | 0.5      | 4.71 | 5       | 0.08    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112523 | 2        | 0.5      | 6.20 | 2.5     | 0.11    | 0.31     | 4.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112524 | 0.5      | 0.5      | 4.92 | 2.5     | 0.07    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112525 | 0.5      | 0.5      | 4.90 | 2.5     | 0.06    | 0.11     | 0.7      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112526 | 0.5      | 0.5      | 4.93 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112527 | 1        | 0.5      | 6.15 | 2.5     | 0.12    | 0.33     | 4.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112528 | 0.5      | 0.5      | 4.68 | 2.5     | 0.06    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112529 | 1        | 0.5      | 4.73 | 2.5     | 0.07    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112530 | 0.5      | 0.5      | 4.85 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112531 | 0.5      | 0.5      | 4.69 | 2.5     | 0.06    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112532 | 2        | 0.5      | 4.59 | 6       | 0.15    | 0.02     | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 11       |
| SA5112533 | 1        | 0.5      | 4.56 | 2.5     | 0.05    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112534 | 1        | 0.5      | 4.97 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |
| SA5112535 | 4        | 0.5      | 4.72 | 2.5     | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112536 | 0.5      | 0.5      | 4.98 | 2.5     | 0.06    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112537 | 0.5      | 0.5      | 5.98 | 2.5     | 0.19    | 1.34     | 5.7      | 0.3      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112538 | 1        | 0.5      | 4.95 | 58      | 0.19    | 0.04     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112539 | 1        | 0.5      | 6.11 | 2.5     | 0.24    | 1.47     | 5.6      | 0.05     | 0.01    | 0.1     | 0.05    | 5        |
| SA5112540 | 1        | 0.5      | 6.12 | 11      | 0.24    | 1.47     | 5.6      | 0.05     | 0.02    | 0.1     | 0.05    | 3        |
| SA5112541 | 1        | 0.5      | 4.79 | 2.5     | 0.15    | 1.25     | 7.8      | 1.8      | 0.01    | 0.1     | 0.05    | 3        |
| SA5112542 | 1        | 0.5      | 4.83 | 2.5     | 0.10    | 0.92     | 5.4      | 3.1      | 0.01    | 0.3     | 0.1     | 2        |
| SA5112543 | 1        | 0.5      | 4.89 | 6       | 0.12    | 1.20     | 6.4      | 3.8      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112544 | 1        | 0.5      | 4.53 | 7       | 0.14    | 0.03     | 0.6      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112545 | 0.5      | 0.5      | 4.91 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112546 | 1        | 0.5      | 4.67 | 2.5     | 0.08    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 14       |
| SA5112547 | 1        | 0.5      | 4.73 | 5       | 0.12    | 1.07     | 5.1      | 4.6      | 0.06    | 0.2     | 0.1     | 0.5      |
| SA5112548 | 1        | 0.5      | 5.18 | 14      | 0.16    | 0.96     | 5.8      | 1.8      | 0.06    | 0.1     | 0.05    | 1        |
| SA5112549 | 1        | 0.5      | 5.29 | 15      | 0.19    | 1.13     | 7.3      | 6.4      | 0.11    | 1.0     | 0.05    | 0.5      |
| SA5112550 | 1        | 0.5      | 5.14 | 2.5     | 0.13    | 1.08     | 5.1      | 2.3      | 0.11    | 0.1     | 0.1     | 1        |
| SA5112551 | 1        | 0.5      | 4.89 | 11      | 0.23    | 0.28     | 4.7      | 4.0      | 0.13    | 0.2     | 0.4     | 0.5      |
| SA5112552 | 0.5      | 0.5      | 4.97 | 9       | 0.15    | 1.90     | 4.7      | 5.8      | 0.28    | 0.2     | 0.3     | 0.5      |
| SA5112553 | 2        | 1        | 5.37 | 8       | 0.24    | 1.04     | 7.0      | 3.9      | 0.06    | 0.2     | 0.05    | 0.5      |
| SA5112554 | 1        | 0.5      | 4.83 | 2.5     | 0.12    | 0.94     | 5.5      | 2.8      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112555 | 1        | 0.5      | 5.74 | 2.5     | 0.18    | 0.95     | 6.2      | 0.8      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112556 | 2        | 0.5      | 5.20 | 7       | 0.18    | 0.99     | 7.8      | 3.0      | 0.08    | 0.1     | 0.05    | 3        |
| SA5112557 | 0.5      | 0.5      | 5.98 | 2.5     | 0.27    | 1.24     | 7.8      | 1.5      | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112558 | 0.5      | 0.5      | 5.57 | 2.5     | 0.17    | 0.67     | 5.1      | 0.1      | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112559 | 0.5      | 0.5      | 5.57 | 2.5     | 0.19    | 0.71     | 5.2      | 1.3      | 0.09    | 0.1     | 0.05    | 0.5      |
| SA5112560 | 3        | 0.5      | 5.21 | 2.5     | 0.16    | 0.94     | 5.8      | 2.3      | 0.06    | 0.2     | 0.2     | 0.5      |
| SA5112561 | 0.5      | 1        | 4.41 | 83      | 0.10    | 0.18     | 1.1      | 9.5      | 0.11    | 0.9     | 0.05    | 0.5      |
| SA5112562 | 0.5      | 0.5      | 5.60 | 2.5     | 0.18    | 1.08     | 4.9      | 1.7      | 0.06    | 0.1     | 0.2     | 0.5      |
| SA5112563 | 1        | 0.5      | 4.85 | 7       | 0.15    | 0.63     | 4.3      | 3.2      | 0.03    | 0.1     | 0.05    | 0.5      |
| SA5112564 | 1        | 5        | 4.83 | 9       | 0.22    | 1.28     | 4.4      | 3.9      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112565 | 2        | 4        | 5.23 | 5       | 0.14    | 0.34     | 2.7      | 3.4      | 0.01    | 0.1     | 0.05    | 4        |
| SA5112566 | 0.5      | 118      | 5.52 | 17      | 0.19    | 0.67     | 4.6      | 5.7      | 0.03    | 0.1     | 0.05    | 0.5      |
| SA5112567 | 1        | 0.5      | 5.10 | 5       | 0.13    | 0.46     | 4.1      | 1.1      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112568 | 0.5      | 0.5      | 5.09 | 2.5     | 0.18    | 0.37     | 3.7      | 0.7      | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112569 | 1        | 0.5      | 4.73 | 2.5     | 0.10    | 0.02     | 0.6      | 0.2      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112570 | 1        | 0.5      | 5.29 | 2.5     | 0.17    | 0.51     | 4.7      | 0.6      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112571 | 0.5      | 0.5      | 4.77 | 2.5     | 0.10    | 0.02     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112572 | 0.5      | 0.5      | 5.52 | 2.5     | 0.19    | 0.80     | 5.2      | 0.2      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112573 | 1        | 0.5      | 5.01 | 9       | 0.15    | 0.51     | 7.4      | 3.7      | 0.06    | 0.1     | 0.05    | 2        |
| SA5112574 | 1        | 0.5      | 5.04 | 6       | 0.14    | 0.58     | 8.1      | 3.4      | 0.06    | 0.1     | 0.05    | 0.5      |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112575 | 1        | 0.5      | 5.55 | 7       | 0.21    | 1.14     | 13.4     | 2.2      | 0.03    | 0.1     | 0.05    | 1        |
| SA5112576 | 1        | 0.5      | 5.56 | 5       | 0.20    | 0.56     | 6.7      | 1.6      | 0.02    | 0.2     | 0.05    | 0.5      |
| SA5112577 | 1        | 0.5      | 5.37 | 2.5     | 0.16    | 0.26     | 5.4      | 0.4      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112578 | 1        | 0.5      | 5.14 | 2.5     | 0.18    | 0.76     | 7.7      | 1.9      | 0.02    | 0.1     | 0.2     | 0.5      |
| SA5112579 | 1        | 0.5      | 5.18 | 5       | 0.18    | 0.67     | 8.3      | 2.5      | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112580 | 1        | 0.5      | 5.11 | 2.5     | 0.11    | 0.23     | 3.0      | 1.4      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112581 | 1        | 0.5      | 4.81 | 5       | 0.12    | 0.06     | 1.0      | 0.5      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112582 | 3        | 0.5      | 4.72 | 22      | 0.18    | 0.08     | 0.8      | 0.05     | 0.005   | 0.1     | 0.05    | 90       |
| SA5112583 | 0.5      | 0.5      | 5.37 | 2.5     | 0.19    | 0.70     | 5.9      | 1.2      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112584 | 2        | 0.5      | 4.51 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112585 | 2        | 0.5      | 4.52 | 2.5     | 0.09    | 0.27     | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112586 | 0.5      | 0.5      | 4.74 | 2.5     | 0.08    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112587 | 1        | 0.5      | 5.32 | 2.5     | 0.13    | 0.18     | 3.3      | 0.9      | 0.01    | 0.1     | 0.2     | 1        |
| SA5112588 | 1        | 0.5      | 4.97 | 2.5     | 0.14    | 0.14     | 1.6      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112589 | 2        | 0.5      | 4.96 | 5       | 0.16    | 0.78     | 4.9      | 2.4      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112590 | 1        | 0.5      | 4.93 | 5       | 0.17    | 0.62     | 5.3      | 3.0      | 0.01    | 0.1     | 0.05    | 4        |
| SA5112591 | 0.5      | 0.5      | 4.75 | 2.5     | 0.08    | 0.02     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112592 | 1        | 0.5      | 5.21 | 2.5     | 0.11    | 0.27     | 2.4      | 0.7      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112593 | 1        | 0.5      | 5.28 | 2.5     | 0.15    | 0.83     | 7.2      | 1.5      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112594 | 0.5      | 0.5      | 5.00 | 2.5     | 0.10    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112595 | 1        | 0.5      | 4.92 | 2.5     | 0.17    | 0.75     | 4.7      | 3.1      | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112596 | 1        | 0.5      | 4.79 | 2.5     | 0.14    | 0.40     | 4.0      | 3.0      | 0.02    | 0.3     | 0.1     | 0.5      |
| SA5112597 | 4        | 0.5      | 4.90 | 5       | 0.17    | 0.75     | 4.8      | 3.2      | 0.12    | 0.1     | 0.05    | 6        |
| SA5112598 | 3        | 0.5      | 4.90 | 5       | 0.15    | 0.64     | 5.3      | 2.9      | 0.05    | 0.1     | 0.05    | 4        |
| SA5112599 | 0.5      | 0.5      | 4.83 | 2.5     | 0.13    | 0.14     | 3.9      | 1.7      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112600 | 2        | 0.5      | 4.88 | 6       | 0.13    | 0.51     | 5.2      | 2.9      | 0.05    | 0.1     | 0.05    | 3        |
| SA5112601 | 0.5      | 0.5      | 5.32 | 2.5     | 0.13    | 0.16     | 4.3      | 0.6      | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112602 | 1        | 0.5      | 5.39 | 2.5     | 0.14    | 0.29     | 5.1      | 0.5      | 0.04    | 0.1     | 0.05    | 0.5      |
| SA5112603 | 1        | 0.5      | 5.06 | 2.5     | 0.12    | 0.65     | 5.8      | 2.1      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112604 | 0.5      | 0.5      | 5.16 | 7       | 0.32    | 1.11     | 7.0      | 2.7      | 0.15    | 0.1     | 0.05    | 0.5      |
| SA5112605 | 0.5      | 0.5      | 5.35 | 2.5     | 0.15    | 0.81     | 6.3      | 0.6      | 0.03    | 0.1     | 0.05    | 2        |
| SA5112606 | 0.5      | 0.5      | 4.74 | 2.5     | 0.12    | 0.57     | 2.7      | 0.05     | 0.02    | 0.1     | 0.05    | 3        |
| SA5112607 | 1        | 0.5      | 4.82 | 2.5     | 0.14    | 0.61     | 4.3      | 2.7      | 0.06    | 0.1     | 0.05    | 4        |
| SA5112608 | 0.5      | 0.5      | 4.91 | 2.5     | 0.16    | 0.67     | 4.8      | 1.3      | 0.03    | 0.1     | 0.05    | 3        |
| SA5112609 | 0.5      | 0.5      | 4.98 | 2.5     | 0.15    | 0.73     | 3.8      | 1.3      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112610 | 0.5      | 0.5      | 4.84 | 2.5     | 0.14    | 0.59     | 4.6      | 2.9      | 0.05    | 0.1     | 0.05    | 1        |
| SA5112611 | 0.5      | 0.5      | 5.31 | 2.5     | 0.17    | 0.94     | 5.5      | 0.3      | 0.03    | 0.1     | 0.05    | 2        |
| SA5112612 | 0.5      | 0.5      | 4.72 | 2.5     | 0.08    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112613 | 1        | 0.5      | 5.83 | 7       | 0.24    | 2.03     | 11.2     | 3.1      | 0.03    | 0.6     | 0.4     | 3        |
| SA5112614 | 0.5      | 0.5      | 4.48 | 2.5     | 0.06    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112615 | 0.5      | 0.5      | 4.60 | 2.5     | 0.08    | 0.01     | 0.2      | 0.05     | 0.01    | 0.1     | 0.05    | 1        |
| SA5112616 | 1        | 1        | 6.08 | 2.5     | 0.26    | 1.58     | 6.2      | 0.4      | 0.01    | 0.1     | 0.05    | 4        |
| SA5112617 | 0.5      | 0.5      | 4.75 | 2.5     | 0.07    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112618 | 0.5      | 0.5      | 4.88 | 2.5     | 0.09    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112619 | 0.5      | 0.5      | 4.59 | 2.5     | 0.09    | 0.02     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112620 | 0.5      | 0.5      | 4.70 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112621 | 0.5      | 0.5      | 4.86 | 2.5     | 0.09    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112622 | 1        | 0.5      | 5.89 | 5       | 0.26    | 1.55     | 7.8      | 2.2      | 0.01    | 0.5     | 0.2     | 2        |
| SA5112623 | 1        | 0.5      | 5.86 | 2.5     | 0.29    | 1.51     | 8.5      | 1.4      | 0.03    | 0.1     | 0.05    | 5        |
| SA5112624 | 0.5      | 0.5      | 4.46 | 2.5     | 0.08    | 0.02     | 0.8      | 0.05     | 0.01    | 0.1     | 0.05    | 2        |
| SA5112625 | 0.5      | 0.5      | 4.67 | 2.5     | 0.07    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112626 | 0.5      | 0.5      | 4.46 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112627 | 0.5      | 0.5      | 6.39 | 6       | 0.23    | 0.67     | 6.4      | 0.4      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112628 | 0.5      | 0.5      | 6.59 | 2.5     | 0.33    | 3.03     | 9.5      | 0.5      | 0.02    | 0.1     | 0.05    | 1        |
| SA5112629 | 0.5      | 17       | 6.61 | 2.5     | 0.34    | 2.96     | 9.2      | 1.0      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112630 | 0.5      | 0.5      | 4.99 | 2.5     | 0.10    | 0.13     | 2.0      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112631 | 0.5      | 0.5      | 4.83 | 2.5     | 0.08    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.1     | 2        |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112632 | 1        | 0.5      | 4.42 | 2.5     | 0.07    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112633 | 0.5      | 0.5      | 4.36 | 2.5     | 0.08    | 0.01     | 0.1      | 0.05     | 0.06    | 0.1     | 0.05    | 2        |
| SA5112634 | 0.5      | 0.5      | 4.62 | 7       | 0.10    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112635 | 0.5      | 0.5      | 5.74 | 6       | 0.26    | 2.03     | 11.4     | 1.9      | 0.02    | 0.1     | 0.05    | 2        |
| SA5112636 | 0.5      | 0.5      | 5.40 | 2.5     | 0.20    | 1.47     | 9.5      | 2.7      | 0.03    | 0.1     | 0.05    | 2        |
| SA5112637 | 0.5      | 0.5      | 4.56 | 2.5     | 0.06    | 0.01     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112638 | 0.5      | 0.5      | 4.71 | 2.5     | 0.09    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112639 | 0.5      | 0.5      | 4.83 | 2.5     | 0.11    | 0.02     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112640 | 1        | 0.5      | 4.67 | 2.5     | 0.06    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.1     | 3        |
| SA5112641 | 0.5      | 0.5      | 4.63 | 2.5     | 0.08    | 0.02     | 0.7      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112642 | 0.5      | 0.5      | 4.84 | 2.5     | 0.08    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112643 | 0.5      | 0.5      | 4.70 | 2.5     | 0.08    | 0.03     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112644 | 0.5      | 0.5      | 4.69 | 7       | 0.11    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 27       |
| SA5112645 | 0.5      | 0.5      | 4.71 | 2.5     | 0.08    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112646 | 0.5      | 0.5      | 4.66 | 2.5     | 0.07    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112647 | 0.5      | 0.5      | 4.36 | 2.5     | 0.08    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112648 | 0.5      | 0.5      | 4.26 | 2.5     | 0.09    | 0.02     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112649 | 0.5      | 0.5      | 4.82 | 2.5     | 0.08    | 0.005    | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112650 | 0.5      | 0.5      | 4.51 | 2.5     | 0.06    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112651 | 0.5      | 0.5      | 4.63 | 2.5     | 0.07    | 0.01     | 0.1      | 0.05     | 0.01    | 0.1     | 0.05    | 3        |
| SA5112652 | 0.5      | 0.5      | 4.38 | 2.5     | 0.08    | 0.01     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112653 | 0.5      | 0.5      | 4.73 | 2.5     | 0.09    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112654 | 0.5      | 0.5      | 5.86 | 5       | 0.19    | 1.30     | 8.5      | 0.4      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112655 | 0.5      | 0.5      | 5.60 | 45      | 0.42    | 0.70     | 21.0     | 6.8      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112656 | 0.5      | 0.5      | 4.46 | 18      | 0.08    | 0.06     | 0.3      | 1.0      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112657 | 1        | 0.5      | 4.84 | 2.5     | 0.06    | 0.05     | 0.2      | 1.5      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112658 | 0.5      | 0.5      | 5.86 | 6       | 0.18    | 0.81     | 5.6      | 0.3      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112659 | 0.5      | 0.5      | -9   | 6       | 0.18    | 0.81     | 5.6      | 0.3      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112660 | 1        | 0.5      | 4.33 | 2.5     | 0.07    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112661 | 0.5      | 0.5      | 4.78 | 2.5     | 0.08    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112662 | 0.5      | 0.5      | 4.78 | 2.5     | 0.09    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112663 | 0.5      | 0.5      | 4.42 | 2.5     | 0.07    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112664 | 0.5      | 0.5      | 4.61 | 2.5     | 0.08    | 0.01     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112665 | 0.5      | 0.5      | 5.89 | 5       | 0.22    | 1.84     | 14.4     | 1.0      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112666 | 0.5      | 0.5      | 4.79 | 2.5     | 0.07    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112667 | 0.5      | 0.5      | 4.31 | 12      | 0.27    | 0.03     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 6        |
| SA5112668 | 0.5      | 0.5      | 4.79 | 17      | 0.08    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112669 | 0.5      | 0.5      | 6.25 | 2.5     | 0.31    | 2.70     | 12.6     | 0.05     | 0.15    | 0.1     | 0.05    | 0.5      |
| SA5112670 | 0.5      | 0.5      | 5.70 | 2.5     | 0.17    | 1.14     | 4.6      | 0.05     | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112671 | 0.5      | 0.5      | 4.94 | 2.5     | 0.08    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112672 | 0.5      | 0.5      | 4.46 | 2.5     | 0.07    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112673 | 0.5      | 0.5      | 4.90 | 2.5     | 0.07    | 0.04     | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112674 | 0.5      | 0.5      | 4.64 | 2.5     | 0.08    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112675 | 0.5      | 0.5      | 5.59 | 5       | 0.34    | 2.23     | 14.3     | 1.4      | 0.22    | 0.1     | 0.05    | 0.5      |
| SA5112676 | 0.5      | 0.5      | 4.85 | 2.5     | 0.06    | 0.03     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112677 | 0.5      | 0.5      | 5.78 | 6       | 0.13    | 0.65     | 6.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112678 | 0.5      | 0.5      | 6.41 | 5       | 0.18    | 0.50     | 9.9      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112679 | 0.5      | 0.5      | 5.27 | 6       | 0.07    | 0.33     | 2.4      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112680 | 0.5      | 0.5      | 4.54 | 16      | 0.25    | 0.03     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112681 | 0.5      | 0.5      | 5.41 | 5       | 0.12    | 0.25     | 4.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112682 | 0.5      | 0.5      | 4.90 | 2.5     | 0.07    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112683 | 1        | 0.5      | 4.82 | 2.5     | 0.07    | 0.02     | 1.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112684 | 0.5      | 0.5      | 5.50 | 2.5     | 0.12    | 0.11     | 3.4      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112685 | 0.5      | 0.5      | 4.52 | 2.5     | 0.07    | 0.05     | 0.5      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112686 | 0.5      | 0.5      | 4.77 | 22      | 0.07    | 0.07     | 1.5      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112687 | 0.5      | 0.5      | 6.71 | 2.5     | 0.47    | 3.36     | 16.8     | 0.05     | 0.03    | 0.1     | 0.05    | 0.5      |
| SA5112688 | 0.5      | 0.5      | 5.39 | 2.5     | 0.12    | 0.13     | 3.3      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |

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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112689 | 0.5      | 0.5      | 6.40 | 2.5     | 0.18    | 1.10     | 8.5      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112690 | 1        | 0.5      | 5.18 | 32      | 0.36    | 0.23     | 1.0      | 0.05     | 0.02    | 0.6     | 0.05    | 14       |
| SA5112691 | 0.5      | 0.5      | 4.54 | 9       | 0.21    | 0.06     | 6.0      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112692 | 0.5      | 0.5      | 4.53 | 5       | 0.08    | 0.07     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112693 | 0.5      | 0.5      | 4.54 | 2.5     | 0.08    | 0.07     | 1.6      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112694 | 0.5      | 0.5      | 4.68 | 2.5     | 0.08    | 0.06     | 2.4      | 0.05     | 0.005   | 0.4     | 0.05    | 0.5      |
| SA5112695 | 0.5      | 0.5      | 6.40 | 2.5     | 0.17    | 1.47     | 9.3      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112696 | 0.5      | 0.5      | 4.33 | 2.5     | 0.08    | 0.33     | 3.4      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112697 | 0.5      | 0.5      | 4.90 | 5       | 0.11    | 1.21     | 6.9      | 1.7      | 0.04    | 0.2     | 0.05    | 0.5      |
| SA5112698 | 0.5      | 0.5      | 4.43 | 2.5     | 0.09    | 0.02     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112699 | -9       | -9       | -9   | -9      | -9      | -9       | -9       | -9       | -9      | -9      | -9      | -9       |
| SA5112700 | 0.5      | 0.5      | 4.29 | 17      | 0.11    | 0.02     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112701 | 0.5      | 0.5      | 5.48 | 13      | 0.17    | 0.46     | 6.3      | 0.3      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112702 | 0.5      | 0.5      | 4.86 | 7       | 0.09    | 0.02     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112703 | 1        | 0.5      | 4.74 | 2.5     | 0.14    | 0.10     | 3.9      | 0.05     | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112704 | 0.5      | 0.5      | 4.42 | 2.5     | 0.09    | 0.02     | 0.3      | 0.6      | 0.005   | 0.2     | 0.05    | 0.5      |
| SA5112705 | 0.5      | 0.5      | 6.20 | 2.5     | 0.17    | 0.45     | 7.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112706 | 0.5      | 0.5      | 4.48 | 2.5     | 0.08    | 0.09     | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112707 | 0.5      | 0.5      | 5.10 | 20      | 0.14    | 0.25     | 0.5      | 0.05     | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112708 | 0.5      | 0.5      | 4.37 | 12      | 0.13    | 0.02     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112709 | 0.5      | 0.5      | 5.88 | 8       | 0.17    | 0.28     | 6.3      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112710 | 0.5      | 0.5      | 5.36 | 7       | 0.09    | 0.08     | 2.5      | 0.1      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112711 | 0.5      | 0.5      | 5.36 | 6       | 0.13    | 0.47     | 5.8      | 0.6      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112712 | 0.5      | 0.5      | 5.97 | 16      | 0.15    | 0.47     | 7.9      | 4.4      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112713 | 0.5      | 0.5      | 6.04 | 5       | 0.26    | 1.92     | 7.1      | 0.8      | 0.05    | 0.3     | 0.05    | 0.5      |
| SA5112714 | 0.5      | 0.5      | 6.18 | 2.5     | 0.23    | 1.76     | 6.2      | 0.05     | 0.15    | 0.1     | 0.05    | 0.5      |
| SA5112715 | 0.5      | 0.5      | 5.66 | 9       | 0.16    | 0.46     | 6.1      | 0.7      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112716 | 0.5      | 0.5      | 4.86 | 2.5     | 0.09    | 0.06     | 1.1      | 0.05     | 0.02    | 0.1     | 0.05    | 0.5      |
| SA5112717 | 0.5      | 0.5      | 5.42 | 2.5     | 0.14    | 0.36     | 4.1      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112718 | 0.5      | 0.5      | 5.84 | 24      | 0.17    | 0.18     | 5.0      | 0.05     | 0.03    | 0.1     | 0.05    | 0.5      |
| SA5112719 | 0.5      | 0.5      | 5.68 | 2.5     | 0.14    | 0.32     | 5.0      | 0.2      | 0.04    | 0.1     | 0.05    | 0.5      |
| SA5112720 | 0.5      | 0.5      | 6.03 | 2.5     | 0.27    | 1.14     | 7.8      | 0.3      | 0.03    | 0.1     | 0.05    | 0.5      |
| SA5112721 | 0.5      | 0.5      | 5.86 | 2.5     | 0.17    | 1.37     | 6.4      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112722 | 0.5      | 0.5      | 4.38 | 2.5     | 0.09    | 0.04     | 0.7      | 0.8      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112723 | 0.5      | 0.5      | 5.10 | 2.5     | 0.10    | 0.17     | 2.9      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112724 | 0.5      | 0.5      | 5.61 | 2.5     | 0.09    | 0.10     | 2.6      | 0.1      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112725 | 0.5      | 0.5      | 5.46 | 2.5     | 0.09    | 0.05     | 2.0      | 0.1      | 0.05    | 0.1     | 0.05    | 0.5      |
| SA5112726 | 0.5      | 0.5      | 5.57 | 7       | 0.11    | 0.18     | 1.2      | 0.8      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112727 | 0.5      | 0.5      | 5.16 | 2.5     | 0.09    | 0.17     | 2.7      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112728 | 0.5      | 0.5      | 5.07 | 7       | 0.16    | 0.88     | 5.3      | 2.7      | 0.39    | 0.1     | 0.05    | 0.5      |
| SA5112729 | 0.5      | 0.5      | 4.58 | 37      | 0.18    | 0.19     | 4.1      | 0.05     | 0.02    | 0.1     | 0.05    | 2        |
| SA5112730 | 0.5      | 0.5      | 5.75 | 9       | 0.13    | 0.26     | 4.7      | 0.8      | 0.43    | 0.1     | 0.05    | 0.5      |
| SA5112731 | 0.5      | 0.5      | 4.60 | 2.5     | 0.09    | 0.04     | 0.5      | 0.4      | 0.04    | 0.1     | 0.05    | 0.5      |
| SA5112732 | 0.5      | 0.5      | 4.59 | 2.5     | 0.09    | 0.02     | 0.4      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112733 | 0.5      | 0.5      | 6.37 | 2.5     | 0.10    | 0.49     | 10.3     | 0.2      | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112734 | 0.5      | 0.5      | 5.05 | 2.5     | 0.07    | 0.11     | 1.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112735 | 0.5      | 0.5      | 5.21 | 7       | 0.11    | 0.49     | 2.3      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112736 | 0.5      | 0.5      | 6.25 | 12      | 0.13    | 0.26     | 5.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112737 | 0.5      | 0.5      | 6.11 | 2.5     | 0.10    | 0.49     | 10.3     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112738 | 0.5      | 0.5      | 5.15 | 24      | 0.08    | 0.39     | 3.1      | 0.1      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112739 | 0.5      | 0.5      | 6.52 | 10      | 0.18    | 2.54     | 13.2     | 1.4      | 0.01    | 0.1     | 0.05    | 1        |
| SA5112740 | 0.5      | 0.5      | 6.19 | 21      | 0.12    | 0.84     | 7.6      | 0.5      | 0.005   | 0.4     | 0.05    | 0.5      |
| SA5112741 | 0.5      | 0.5      | 4.52 | 2.5     | 0.09    | 0.04     | 1.5      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112742 | 0.5      | 0.5      | 4.72 | 2.5     | 0.08    | 0.06     | 1.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112743 | 0.5      | 0.5      | 6.04 | 2.5     | 0.15    | 0.20     | 4.2      | 0.05     | 0.03    | 0.1     | 0.05    | 0.5      |
| SA5112744 | 0.5      | 0.5      | 4.75 | 2.5     | 0.07    | 0.03     | 0.4      | 0.05     | 0.01    | 0.1     | 0.05    | 0.5      |
| SA5112745 | 0.5      | 0.5      | 4.91 | 2.5     | 0.07    | 0.04     | 0.1      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |



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| FldNum    | Niw2_ppb | Pbw2_ppb | pH_w | Pw2_ppb | Sw1_ppm | Siw1_ppm | Srw2_ppb | Tiw2_ppb | Uw3_ppb | Vw2_ppb | Yw2_ppb | Znw2_ppb |
|-----------|----------|----------|------|---------|---------|----------|----------|----------|---------|---------|---------|----------|
| SA5112746 | 0.5      | 0.5      | 5.55 | 14      | 0.10    | 0.58     | 5.6      | 1.1      | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112747 | 0.5      | 0.5      | 5.69 | 13      | 0.08    | 0.16     | 2.8      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112748 | 0.5      | 0.5      | 5.33 | 2.5     | 0.07    | 0.12     | 1.6      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112749 | 0.5      | 0.5      | 5.80 | 13      | 0.10    | 0.22     | 3.7      | 0.1      | 0.005   | 0.1     | 0.05    | 3        |
| SA5112750 | 0.5      | 0.5      | 4.71 | 2.5     | 0.07    | 0.04     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112751 | 0.5      | 0.5      | 4.57 | 2.5     | 0.08    | 0.03     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112752 | 0.5      | 0.5      | 4.69 | 2.5     | 0.07    | 0.03     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112753 | 0.5      | 0.5      | 4.75 | 2.5     | 0.07    | 0.03     | 0.4      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112754 | 0.5      | 0.5      | 5.65 | 19      | 0.08    | 0.16     | 3.0      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112755 | 0.5      | 0.5      | 5.61 | 2.5     | 0.08    | 1.23     | 6.2      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112756 | 0.5      | 0.5      | 4.61 | 8       | 0.14    | 0.03     | 0.9      | 0.05     | 0.005   | 0.1     | 0.05    | 11       |
| SA5112757 | 0.5      | 0.5      | 5.19 | 11      | 0.09    | 0.13     | 5.1      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112758 | 0.5      | 0.5      | 6.55 | 8       | 0.14    | 0.44     | 12.5     | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112759 | 0.5      | 0.5      | 4.83 | 2.5     | 0.09    | 0.31     | 1.7      | 0.05     | 0.005   | 0.1     | 0.05    | 5        |
| SA5112760 | 0.5      | 0.5      | 5.47 | 5       | 0.10    | 0.08     | 4.0      | 0.4      | 0.005   | 0.1     | 0.05    | 1        |
| SA5112761 | 0.5      | 0.5      | 4.73 | 2.5     | 0.06    | 0.005    | 0.3      | 0.05     | 0.01    | 0.1     | 0.05    | 3        |
| SA5112762 | 0.5      | 0.5      | 5.33 | 5       | 0.06    | 0.05     | 3.2      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112763 | 0.5      | 0.5      | 4.84 | 2.5     | 0.06    | 0.01     | 0.7      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112764 | 0.5      | 0.5      | 4.93 | 2.5     | 0.07    | 0.06     | 1.0      | 0.05     | 0.005   | 0.1     | 0.05    | 0.5      |
| SA5112765 | 0.5      | 0.5      | 4.89 | 6       | 0.06    | 0.03     | 0.7      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112766 | 0.5      | 0.5      | 4.47 | 2.5     | 0.08    | 0.05     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112767 | 0.5      | 0.5      | 4.54 | 2.5     | 0.09    | 0.04     | 0.3      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112768 | 0.5      | 0.5      | 4.43 | 5       | 0.09    | 0.005    | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112769 | 0.5      | 0.5      | 4.82 | 2.5     | 0.06    | 0.37     | 1.1      | 0.05     | 0.01    | 0.1     | 0.05    | 3        |
| SA5112770 | 0.5      | 0.5      | 4.54 | 2.5     | 0.08    | 0.06     | 0.8      | 0.05     | 0.01    | 0.1     | 0.05    | 4        |
| SA5112771 | 0.5      | 0.5      | 5.46 | 2.5     | 0.06    | 0.32     | 2.0      | 0.05     | 0.005   | 0.1     | 0.05    | 1        |
| SA5112772 | 1        | 0.5      | 4.53 | 2.5     | 0.06    | 0.13     | 0.8      | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112773 | 0.5      | 0.5      | 4.97 | 2.5     | 0.06    | 0.04     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 3        |
| SA5112774 | 0.5      | 0.5      | 4.49 | 2.5     | 0.07    | 0.01     | 0.05     | 0.05     | 0.005   | 0.1     | 0.05    | 2        |
| SA5112775 | 0.5      | 0.5      | 5.95 | 5       | 0.14    | 2.13     | 9.4      | 0.7      | 0.005   | 0.1     | 0.05    | 2        |
| SA5112776 | 0.5      | 0.5      | 4.45 | 2.5     | 0.08    | 0.04     | 0.2      | 0.05     | 0.005   | 0.1     | 0.05    | 4        |
| SA5112777 | 0.5      | 0.5      | 4.68 | 2.5     | 0.12    | 0.46     | 1.8      | 2.8      | 0.01    | 0.1     | 0.05    | 2        |
| SA5112778 | 0.5      | 0.5      | 5.97 | 2.5     | 0.17    | 0.84     | 5.1      | 0.05     | 0.07    | 0.1     | 0.05    | 1        |
| SA5112779 | 0.5      | 0.5      | 5.62 | 2.5     | 0.18    | 1.47     | 4.6      | 0.05     | 0.12    | 0.1     | 0.05    | 2        |
| SA5112780 | 0.5      | 0.5      | 5.09 | 2.5     | 0.13    | 0.23     | 2.4      | 1.3      | 0.08    | 0.1     | 0.05    | 4        |
| SA5112781 | 0.5      | 0.5      | 4.87 | 2.5     | 0.13    | 0.84     | 3.4      | 1.8      | 0.14    | 0.1     | 0.05    | 3        |
| SA5112782 | 0.5      | 0.5      | 5.03 | 2.5     | 0.14    | 0.47     | 3.1      | 1.2      | 0.11    | 0.1     | 0.05    | 4        |
| SA5112783 | 0.5      | 0.5      | 4.94 | 2.5     | 0.14    | 0.49     | 2.5      | 1.4      | 0.08    | 0.1     | 0.05    | 3        |
| SA5112784 | 0.5      | 0.5      | 4.93 | 2.5     | 0.15    | 0.32     | 3.3      | 2.0      | 0.10    | 0.1     | 0.05    | 2        |
| SA5112785 | 0.5      | 0.5      | 4.73 | 2.5     | 0.08    | 0.09     | 0.8      | 0.05     | 0.02    | 0.1     | 0.05    | 2        |
| SA5112786 | 0.5      | 0.5      | 4.55 | 2.5     | 0.12    | 0.04     | 0.5      | 0.05     | 0.03    | 0.1     | 0.05    | 3        |
| SA5112787 | 0.5      | 0.5      | 4.91 | 2.5     | 0.17    | 0.44     | 3.0      | 1.9      | 0.06    | 0.1     | 0.05    | 2        |
| SA5112788 | 0.5      | 0.5      | 4.87 | 6       | 0.18    | 0.39     | 2.8      | 2.2      | 0.07    | 0.1     | 0.05    | 3        |

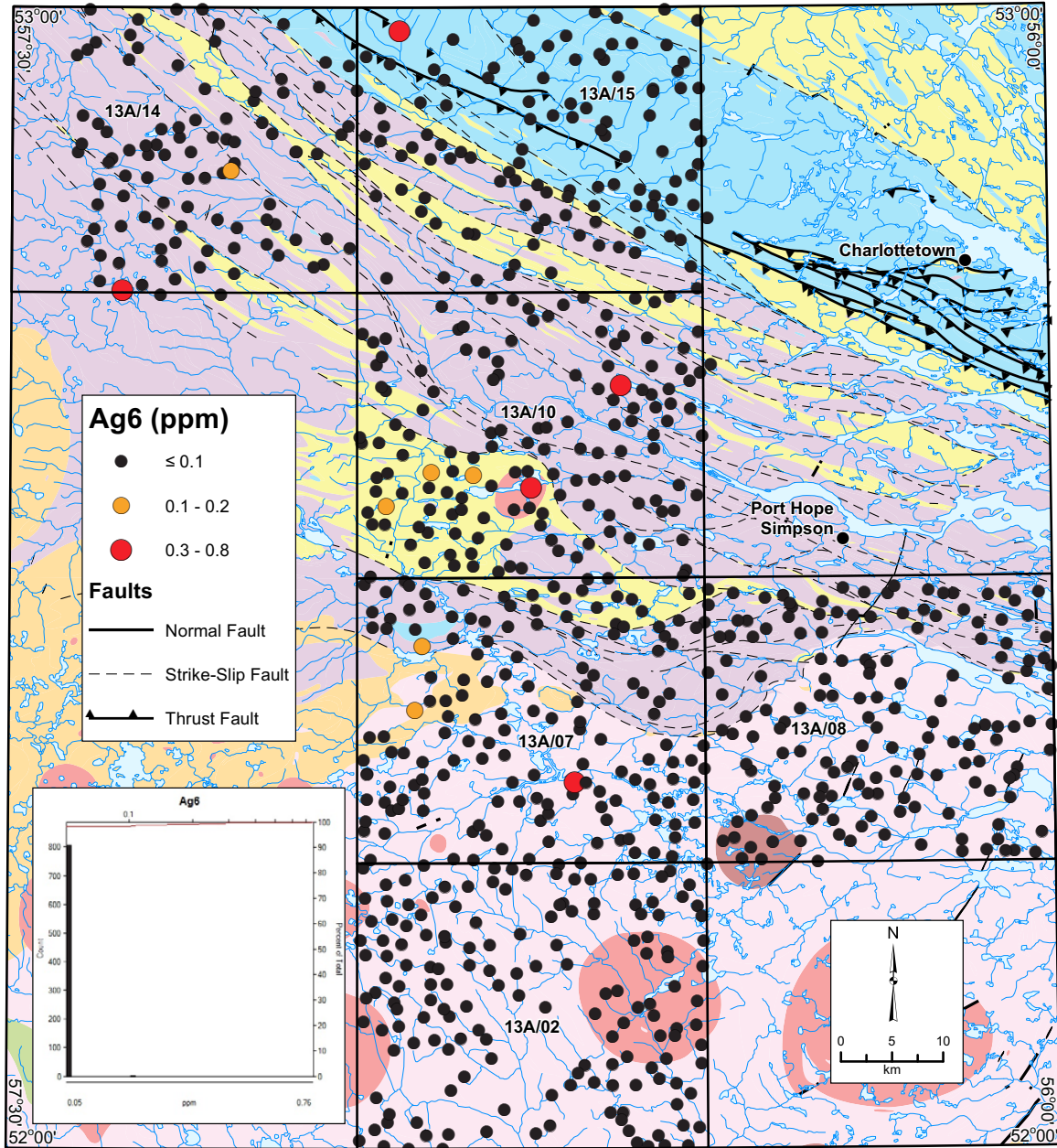


## **APPENDIX 2**

### **Figures 30-79**

### **Symbol Plots of Element Distributions of Sediment Data Not Discussed in the Text**





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

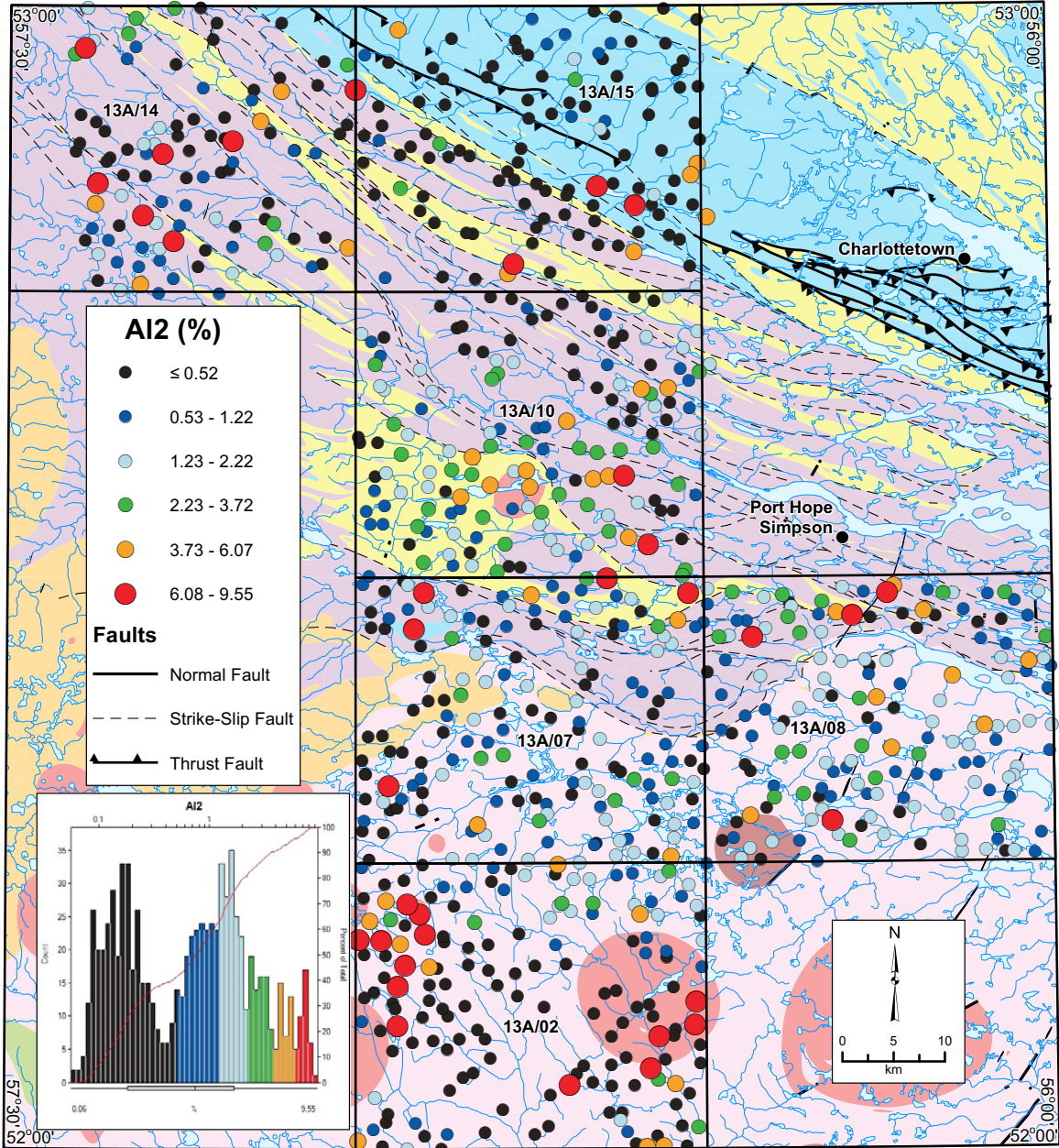
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 30. Silver (Ag) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>In) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic

(1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

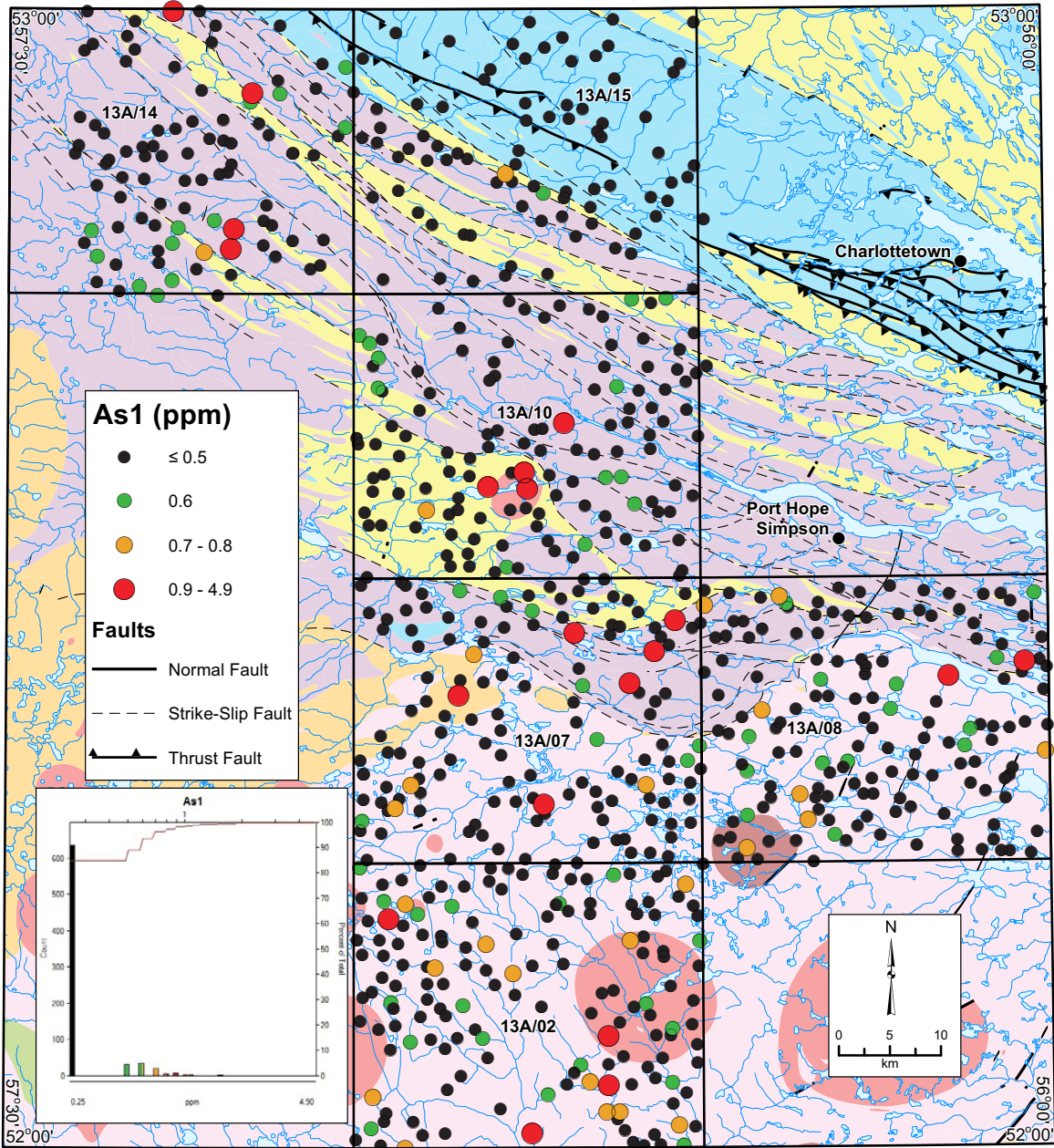
(1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

(ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 31. Aluminum (Al<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>YQ)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>GR)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>RG); leucogabbro and anorthositic gabbro (M<sub>1</sub>LN) and amphibolite (M<sub>1</sub>AM)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMGR); syenite, alkali-feldspar syenite and quartz syenite (PMYQ) and megacrystic/porphyritic granite to quartz monzonite (PMGP)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>AG), amphibolite (P<sub>3C</sub>AM), anorthosite and leucogabbro (P<sub>3C</sub>LN), leucogabbro and leucogabbro (P<sub>3C</sub>LN), gabbro and norite (P<sub>3C</sub>RG), diorite, quartz diorite and tonalite (P<sub>3C</sub>DR), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>GA), granite to granodiorite (P<sub>3C</sub>GD), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>GP), quartz monzonite (P<sub>3C</sub>MQ) and monzonite (P<sub>3C</sub>MZ)

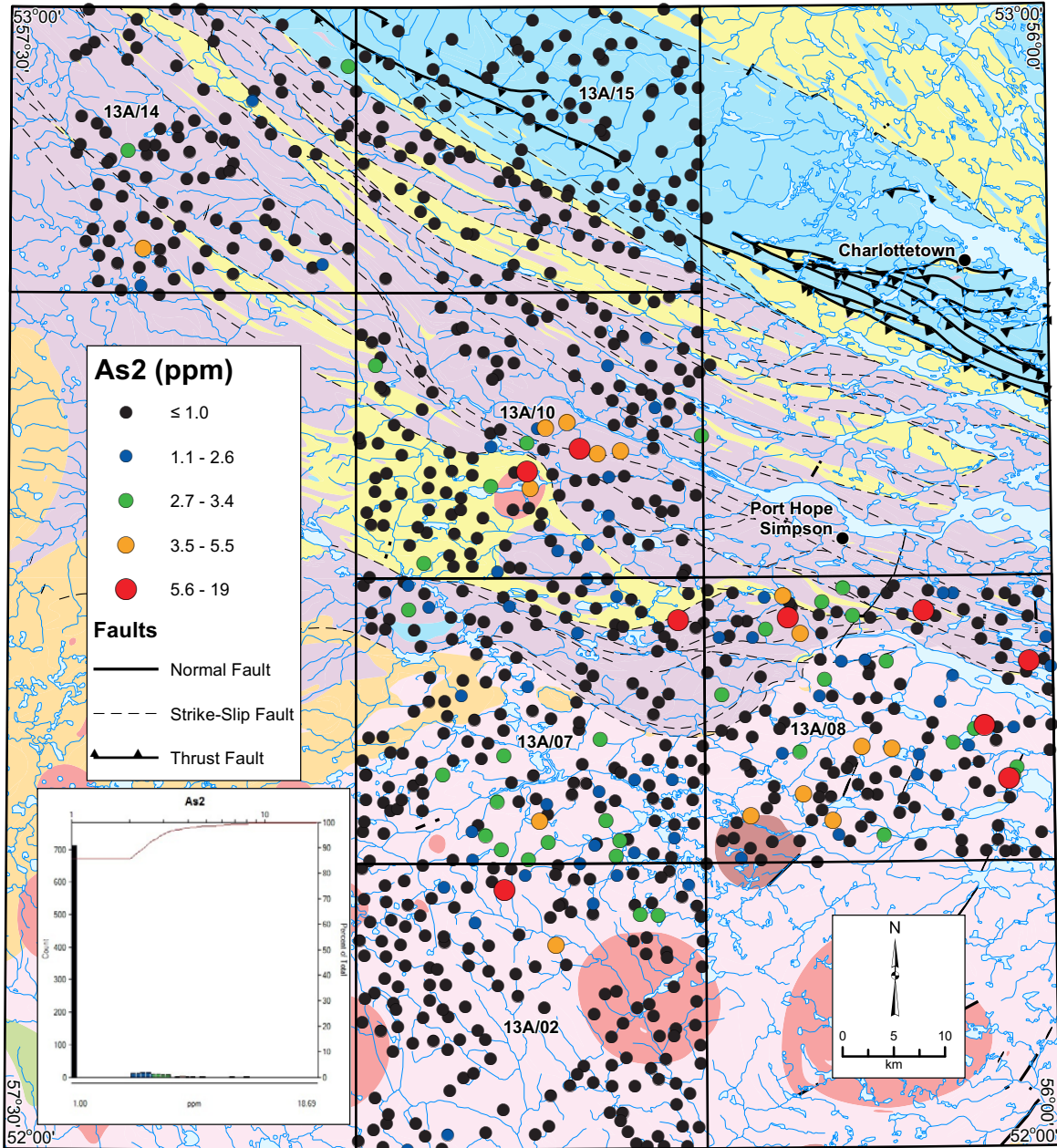
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>DR), foliated to gneissic granodiorite (P<sub>3B</sub>GD), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>GP), foliated to gneissic quartz monzonite (P<sub>3B</sub>QM), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>GR), amphibolite (P<sub>3B</sub>AM), anorthosite and leucogabbro (P<sub>3B</sub>LN), leucogabbro and leucogabbro (P<sub>3B</sub>LN) and gabbro and norite (P<sub>3B</sub>RG)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>SP) and psammitic (P<sub>3B</sub>SS) schist and gneiss

Figure 32. Arsenic (As1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

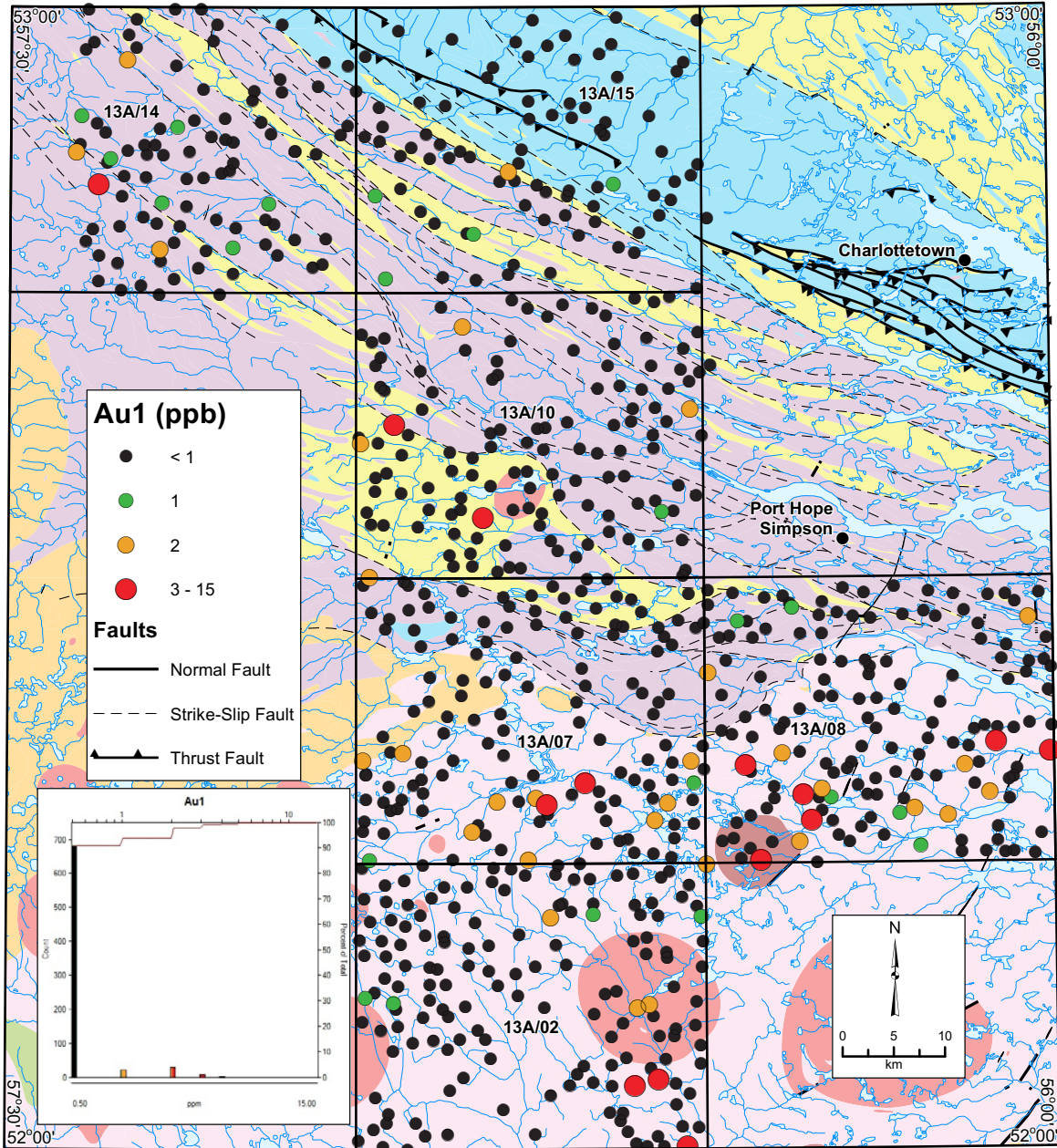
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 33. Arsenic (As<sub>2</sub>) in lake sediment.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

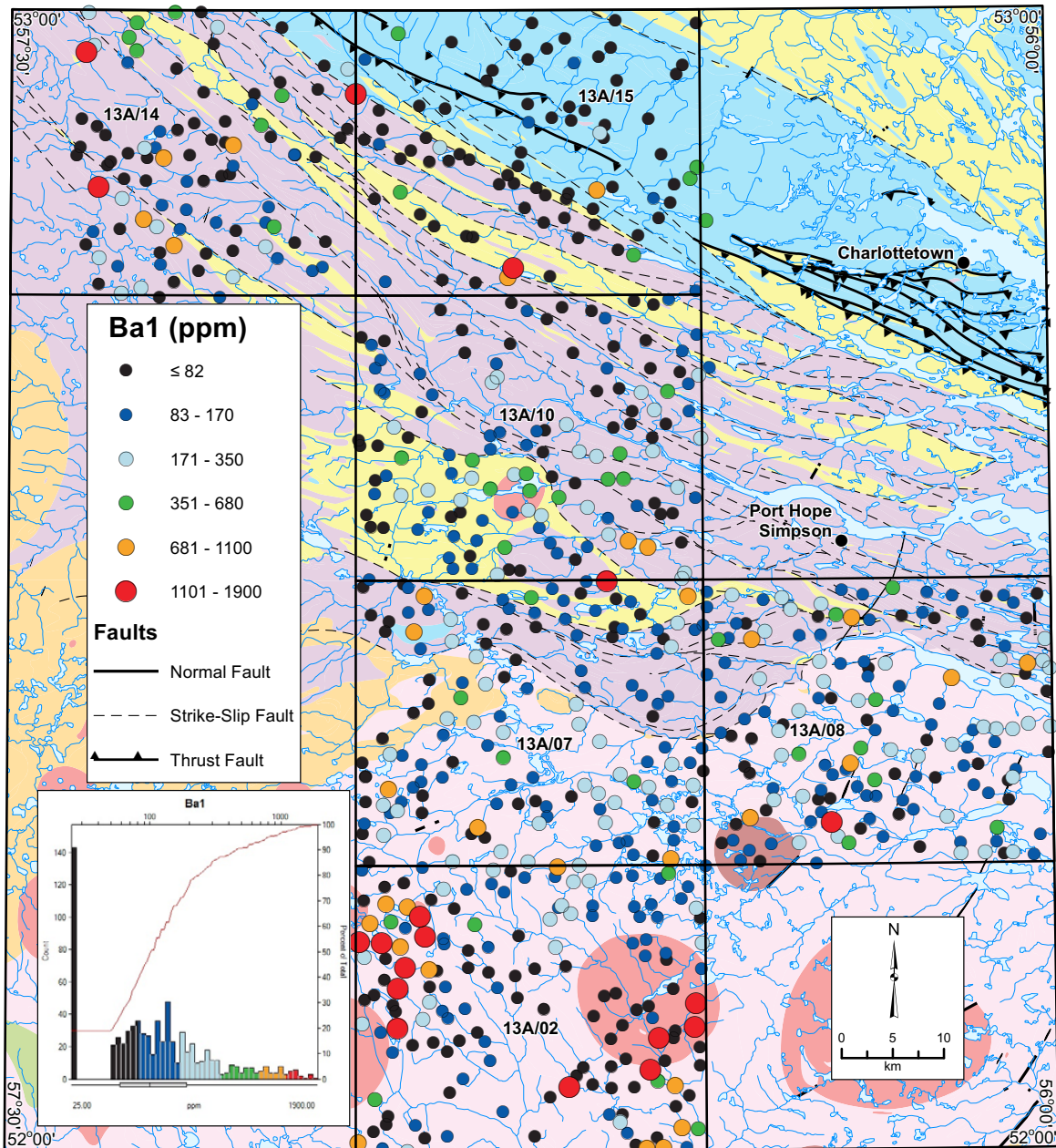
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 34. Gold (Au1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

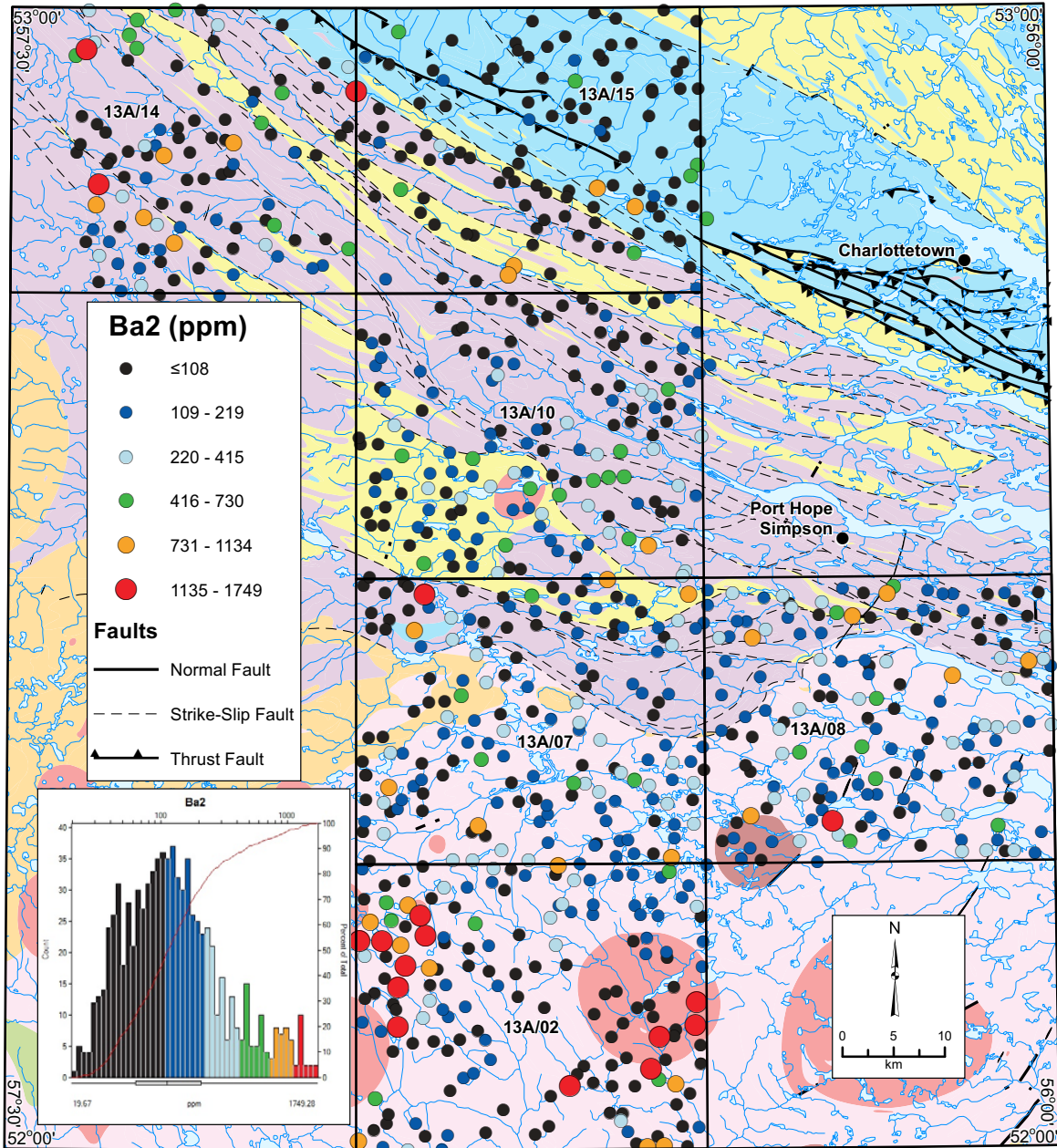
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 35. Barium (Ba) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

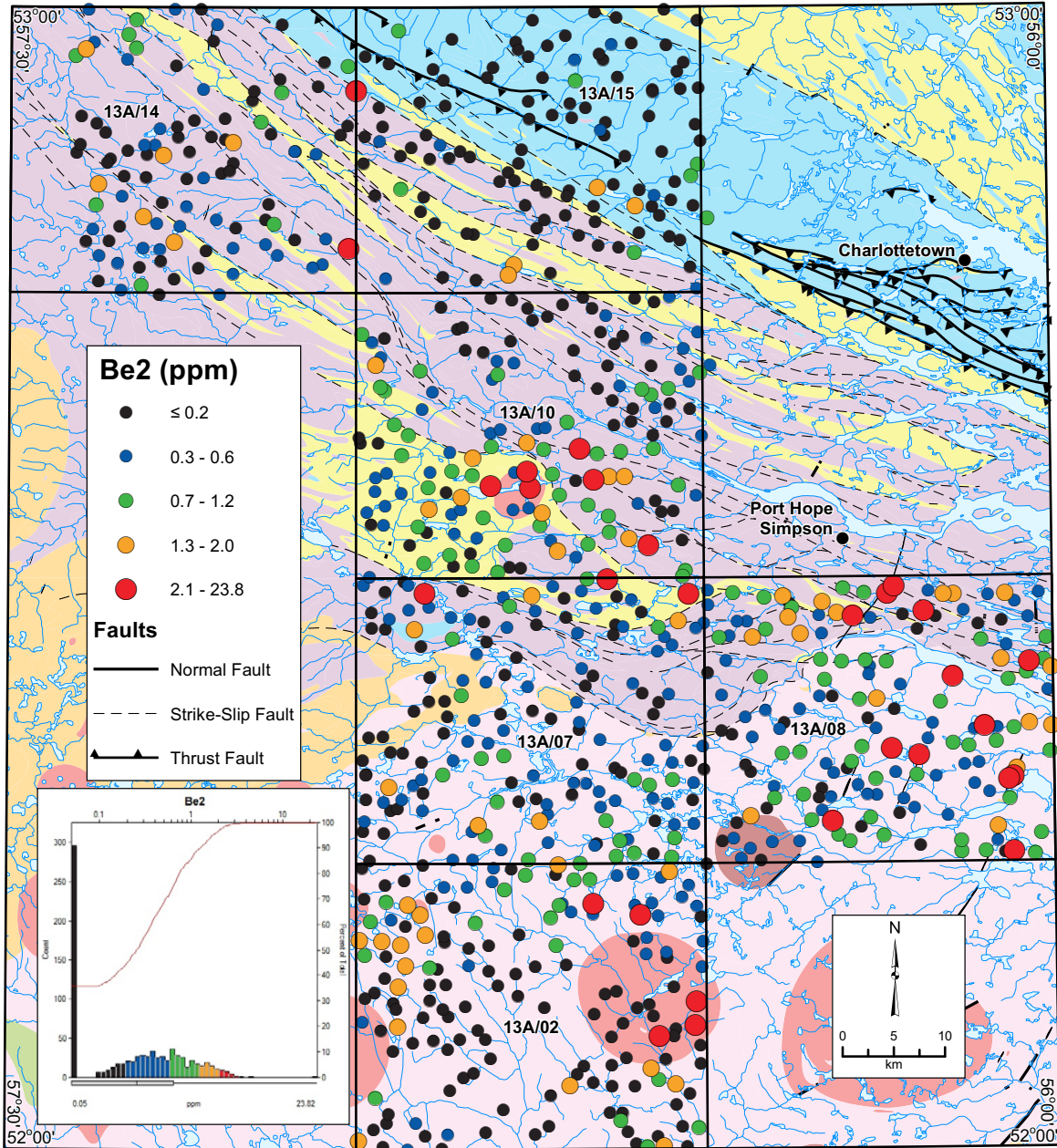
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 36. Barium (Ba<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

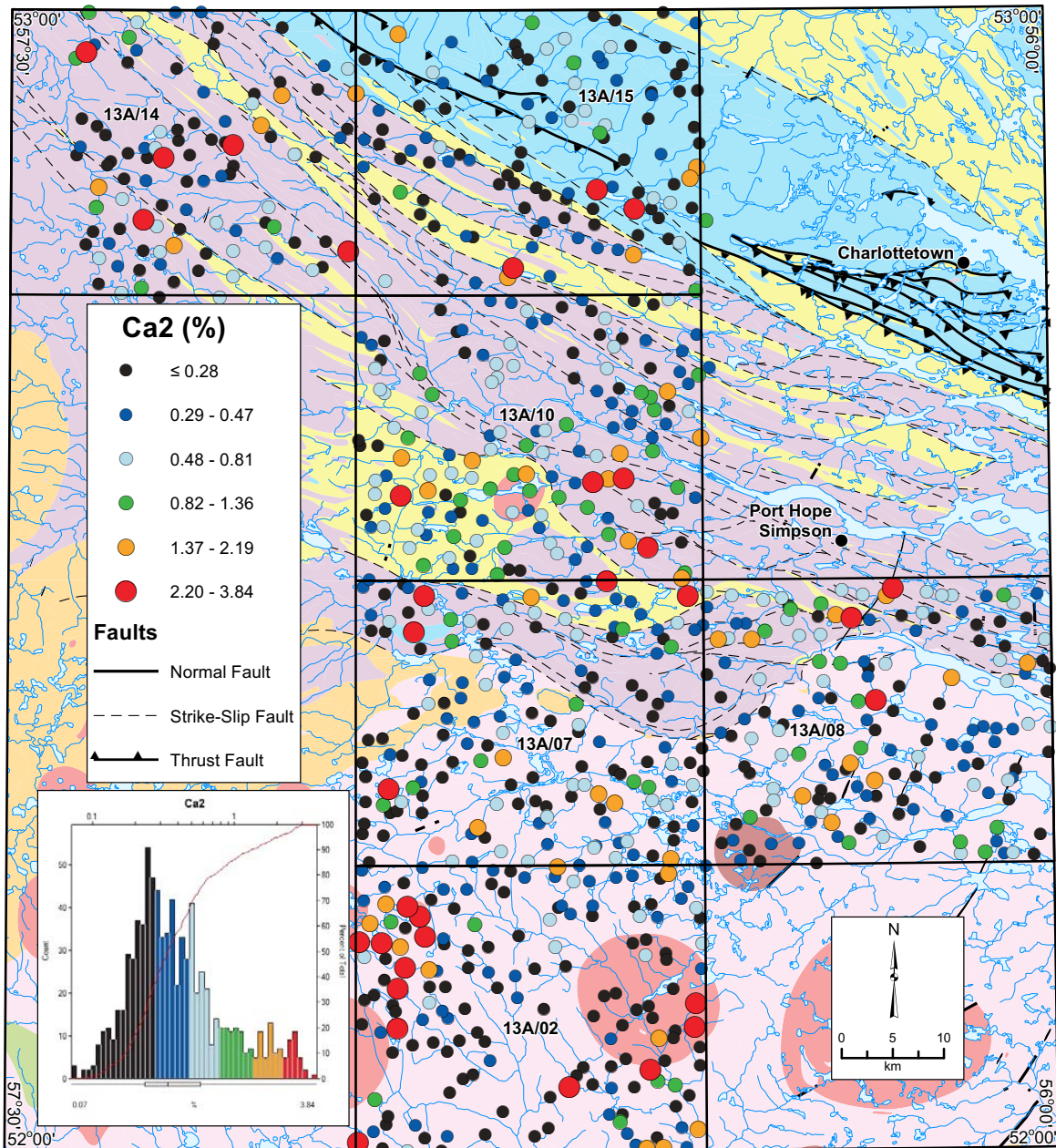
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 37. Beryllium (Be) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

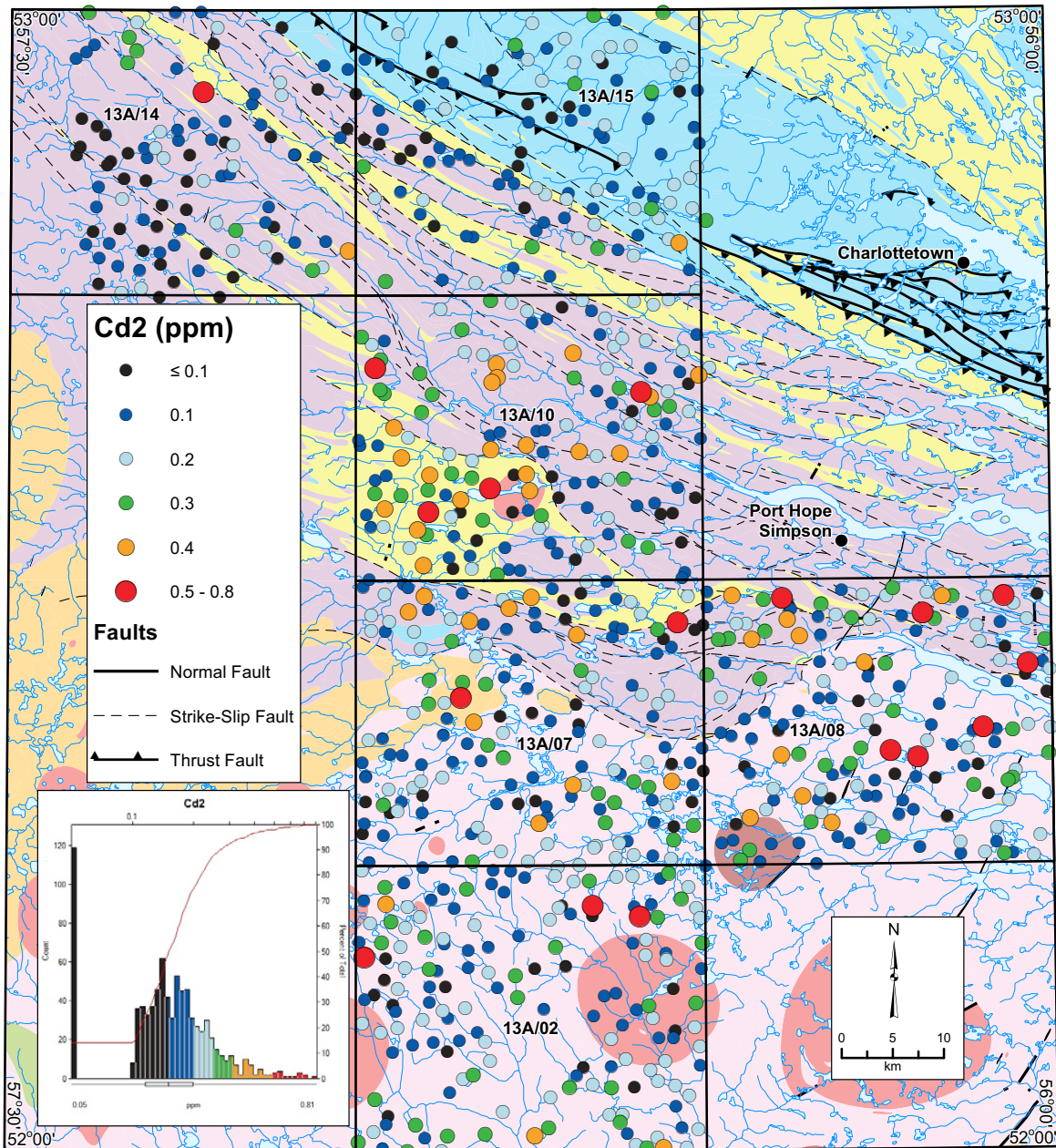
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 38. Calcium (Ca<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

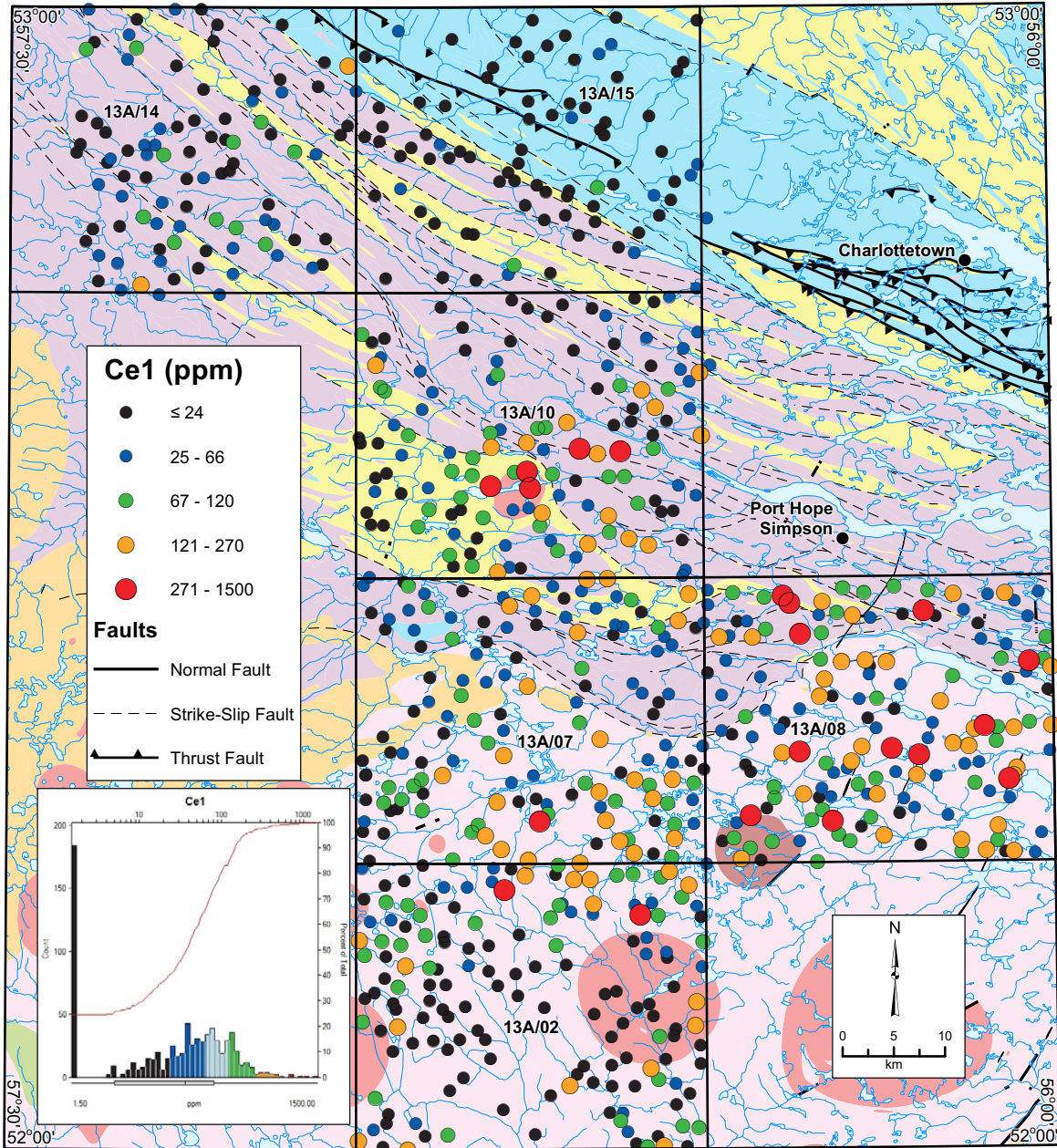
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 39. Cadmium (Cd<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

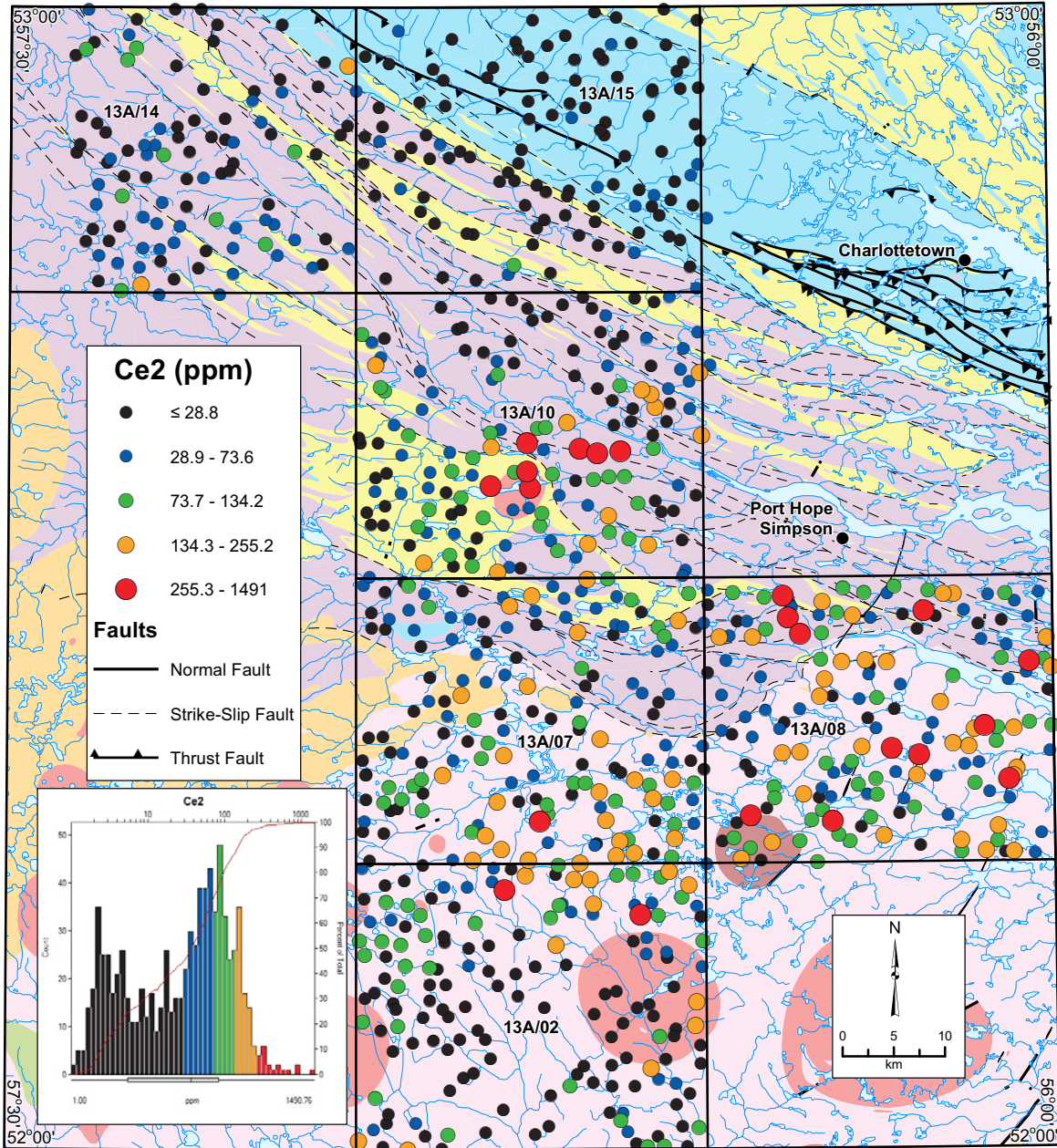
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 40. Cerium (Ce) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

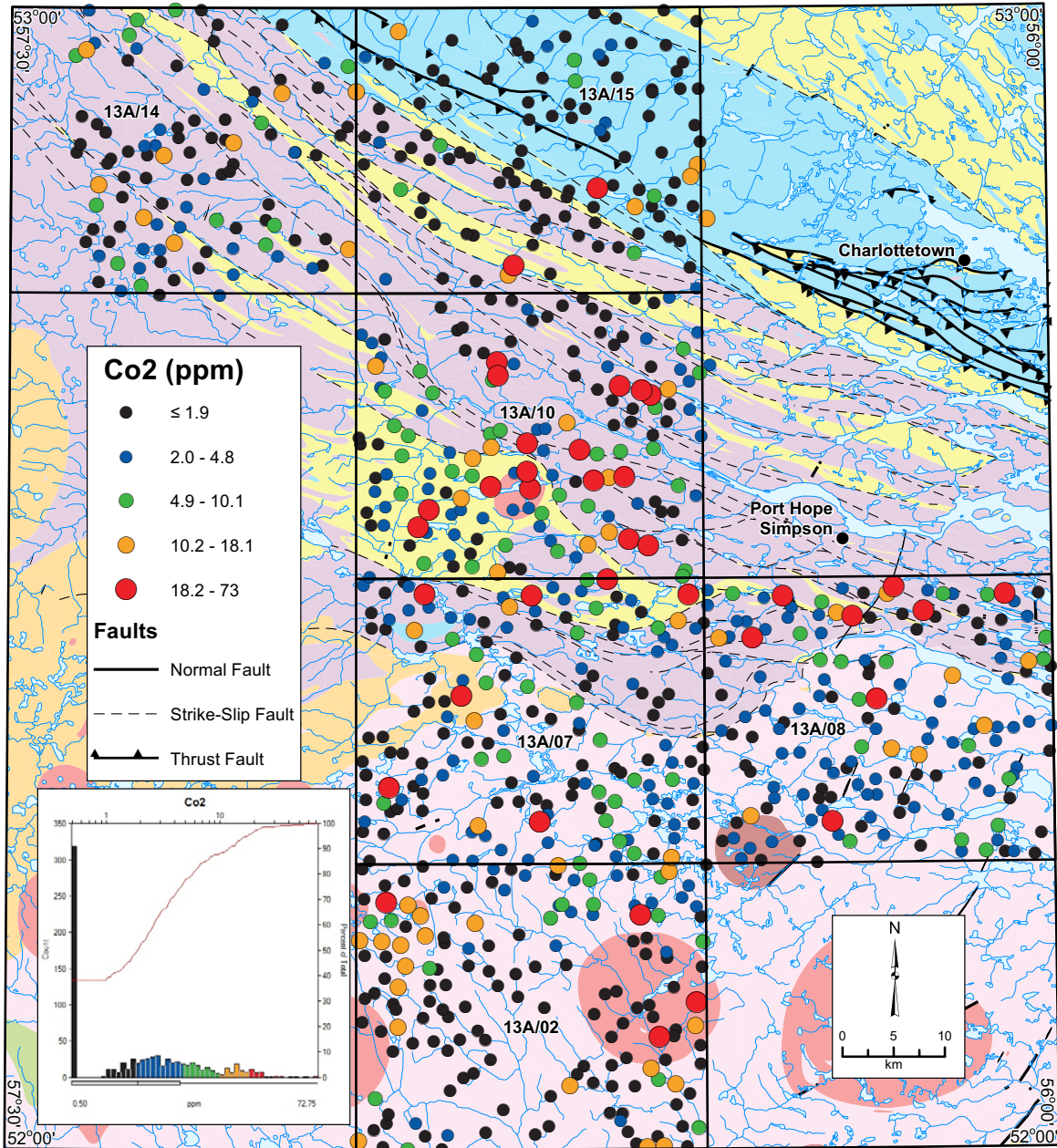
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 41. Cerium (Ce<sub>2</sub>) in lake sediment.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3c</sub>ag), amphibolite (P<sub>3c</sub>am), anorthosite and leucogabbro (P<sub>3c</sub>an), leucogabbro and leucogabbro (P<sub>3c</sub>ln), gabbro and norite (P<sub>3c</sub>rg), diorite, quartz diorite and tonalite (P<sub>3c</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3c</sub>ga), granite to granodiorite (P<sub>3c</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3c</sub>gp), quartz monzonite (P<sub>3c</sub>mq) and monzonite (P<sub>3c</sub>mz)

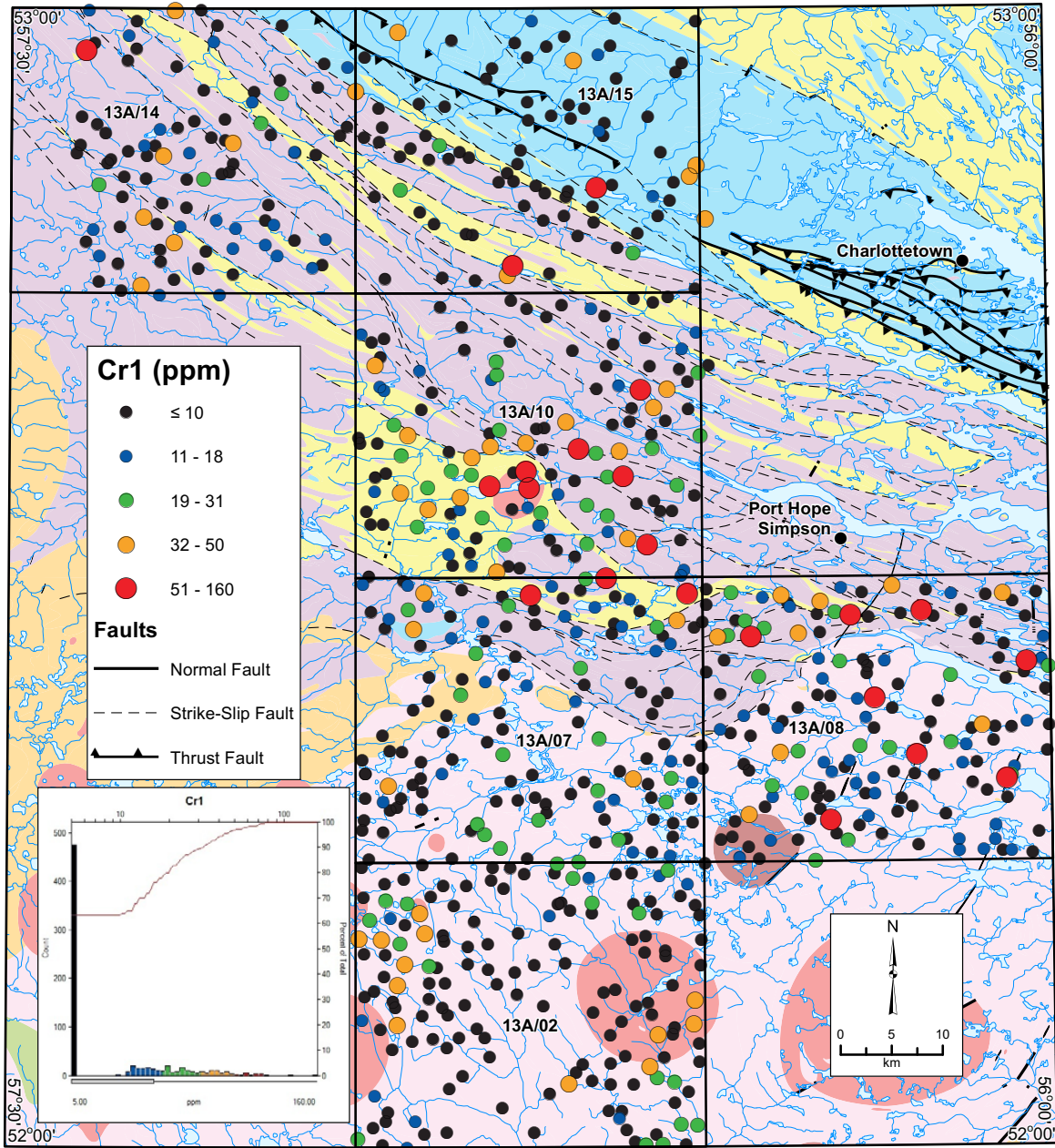
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 42. Cobalt (Co<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

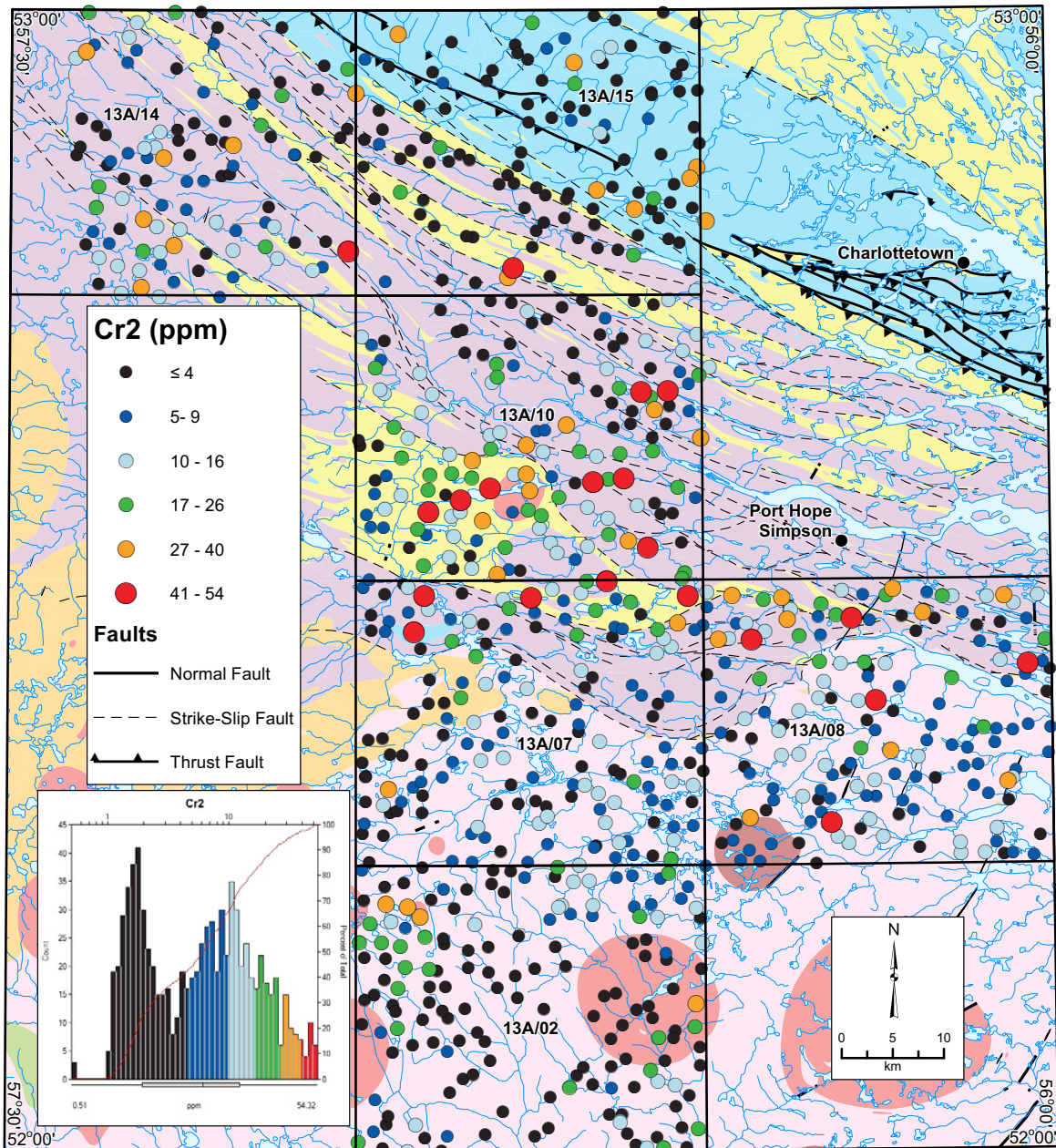
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 43. Chromium (Cr1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

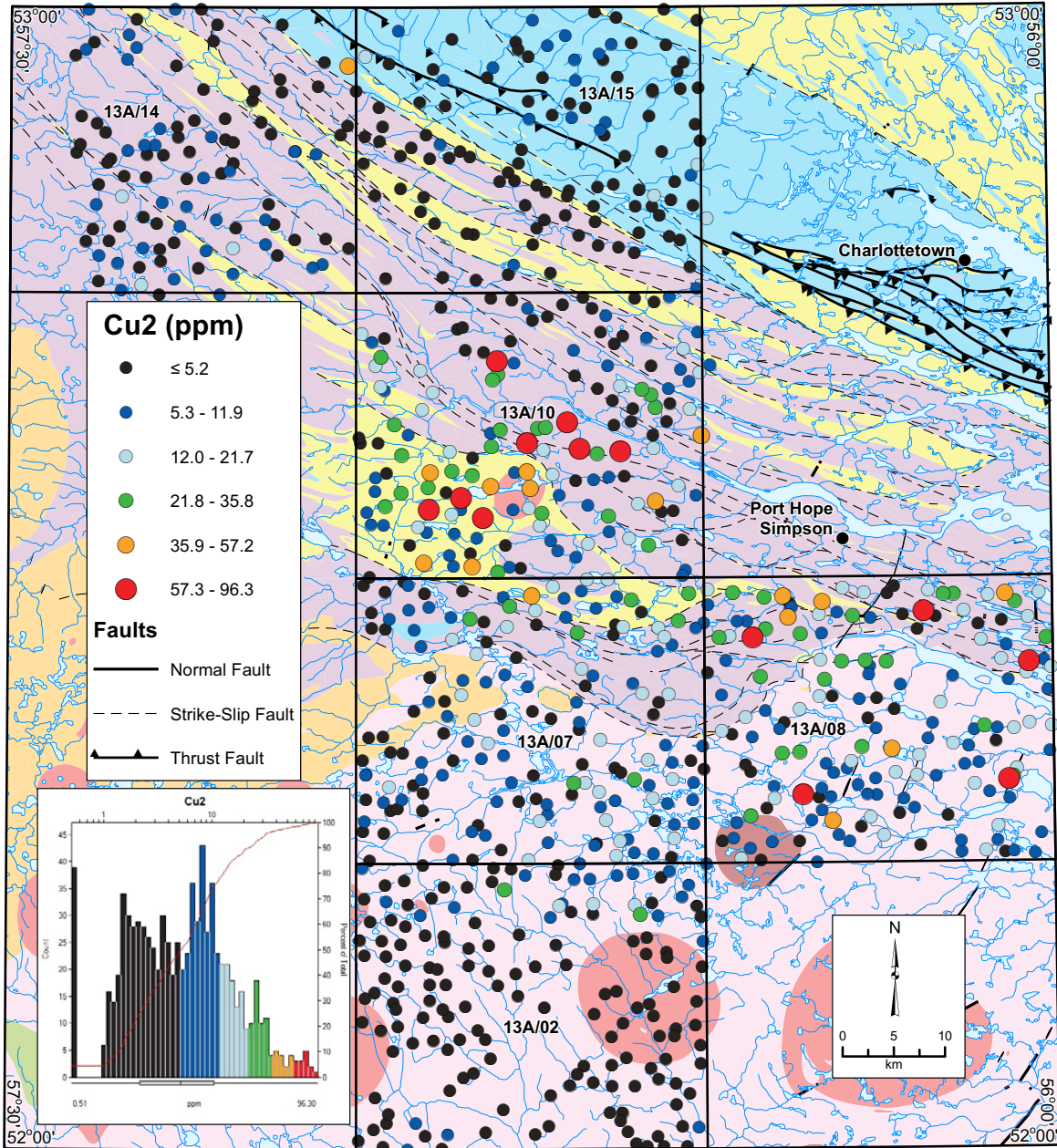
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 44. Chromium (Cr<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

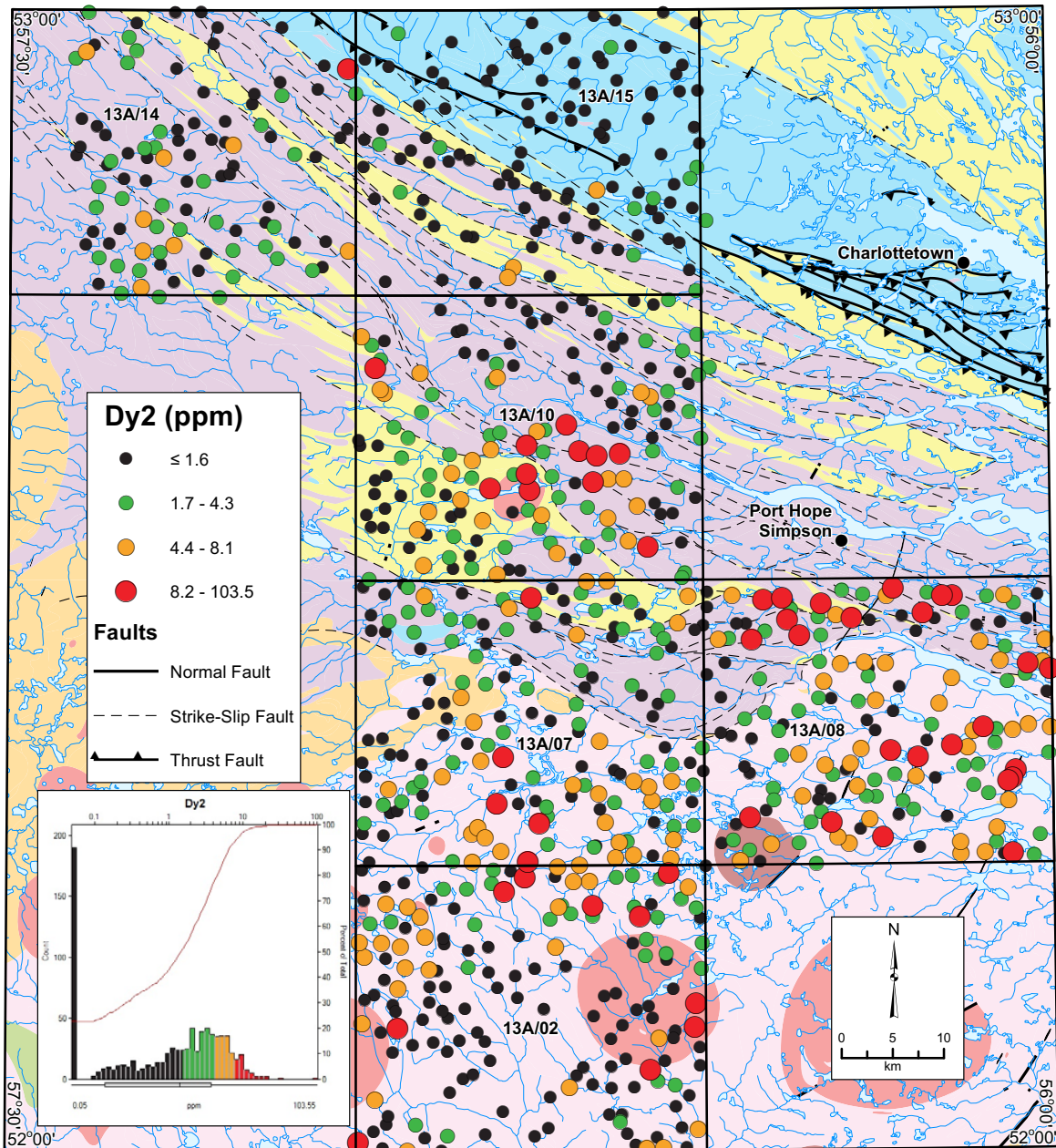
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 45. Copper (Cu<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

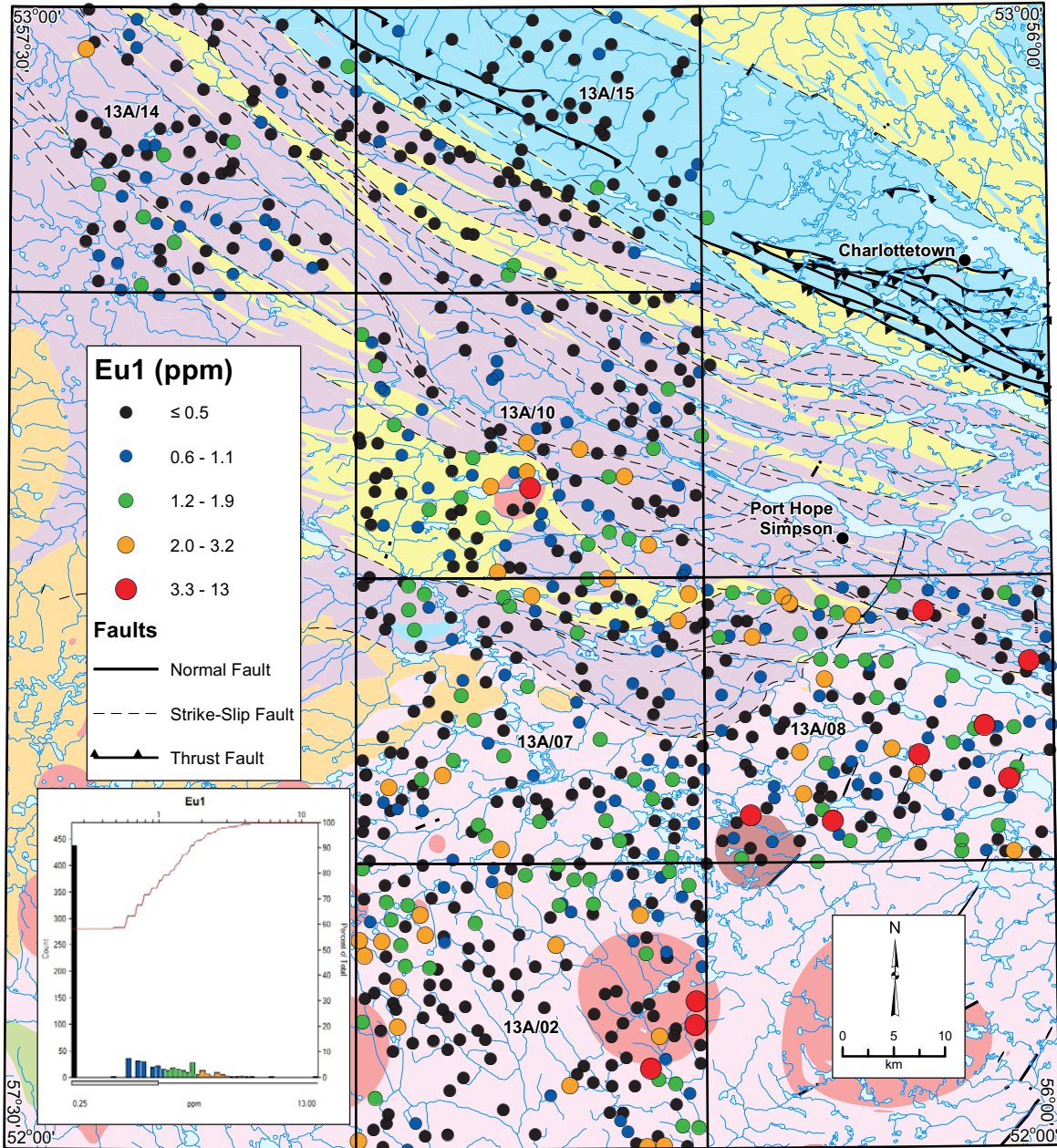
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 46. Dysprosium (Dy<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

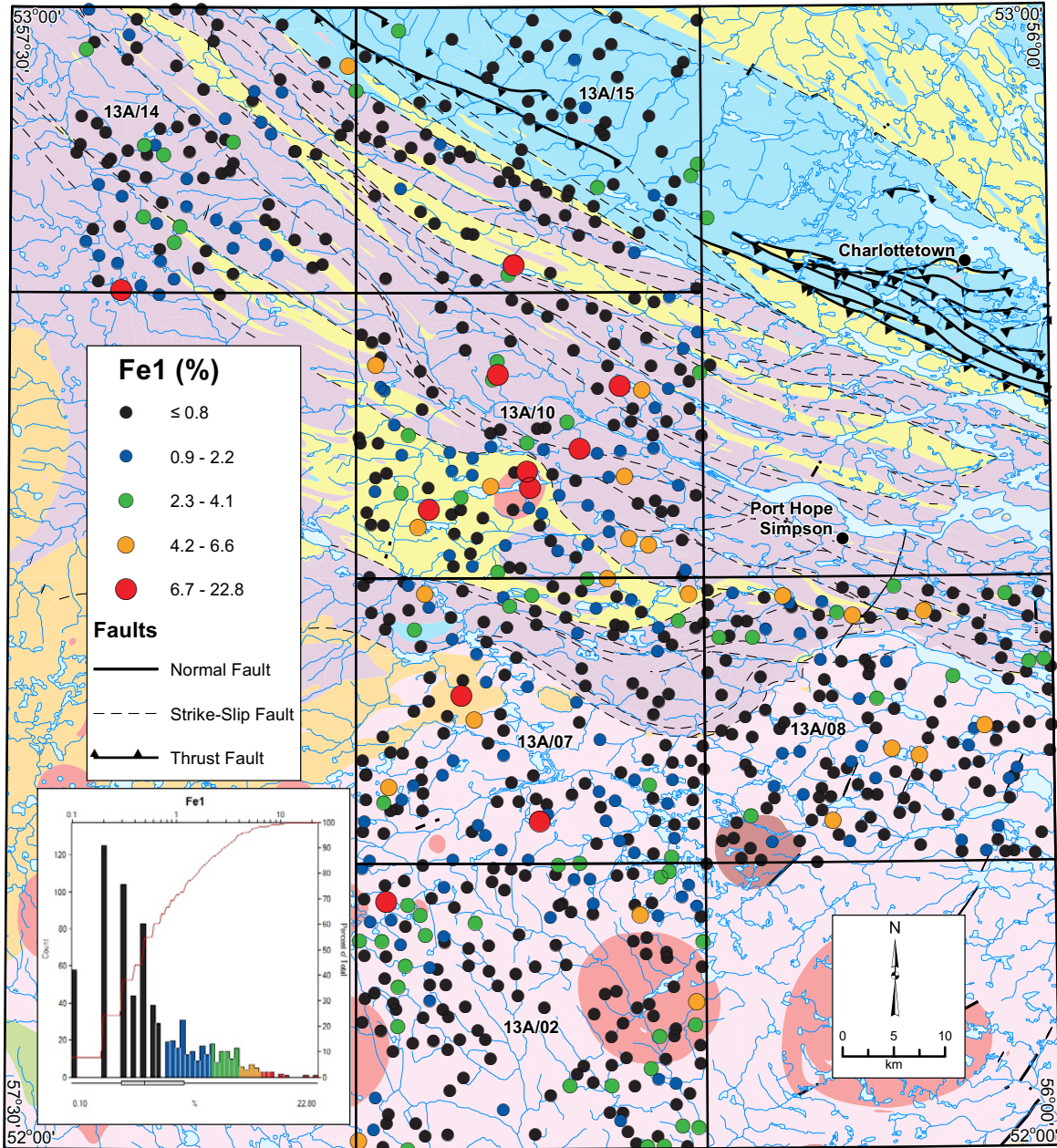
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 47. Europium (Eu1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

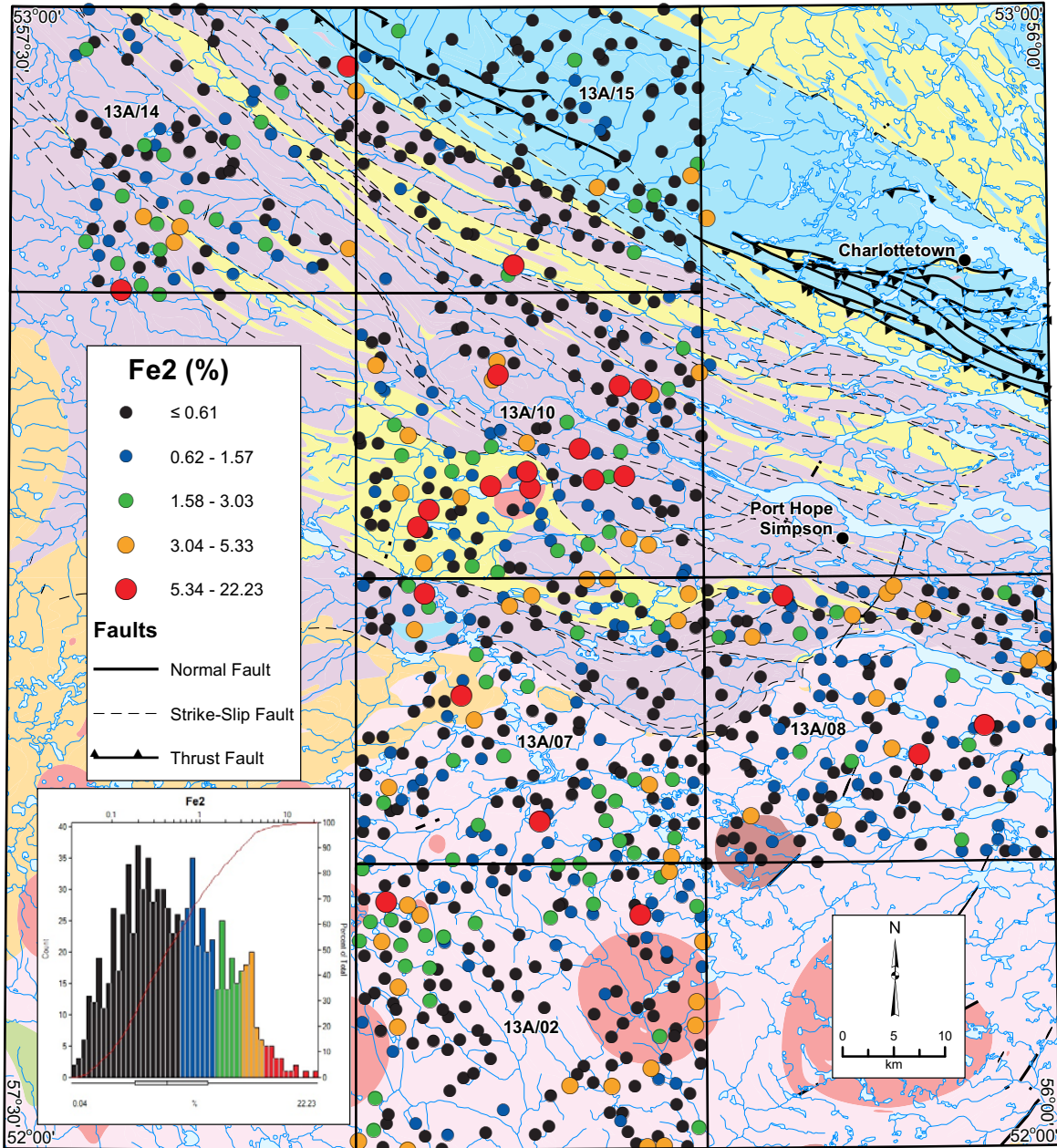
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 48. Iron (Fe1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

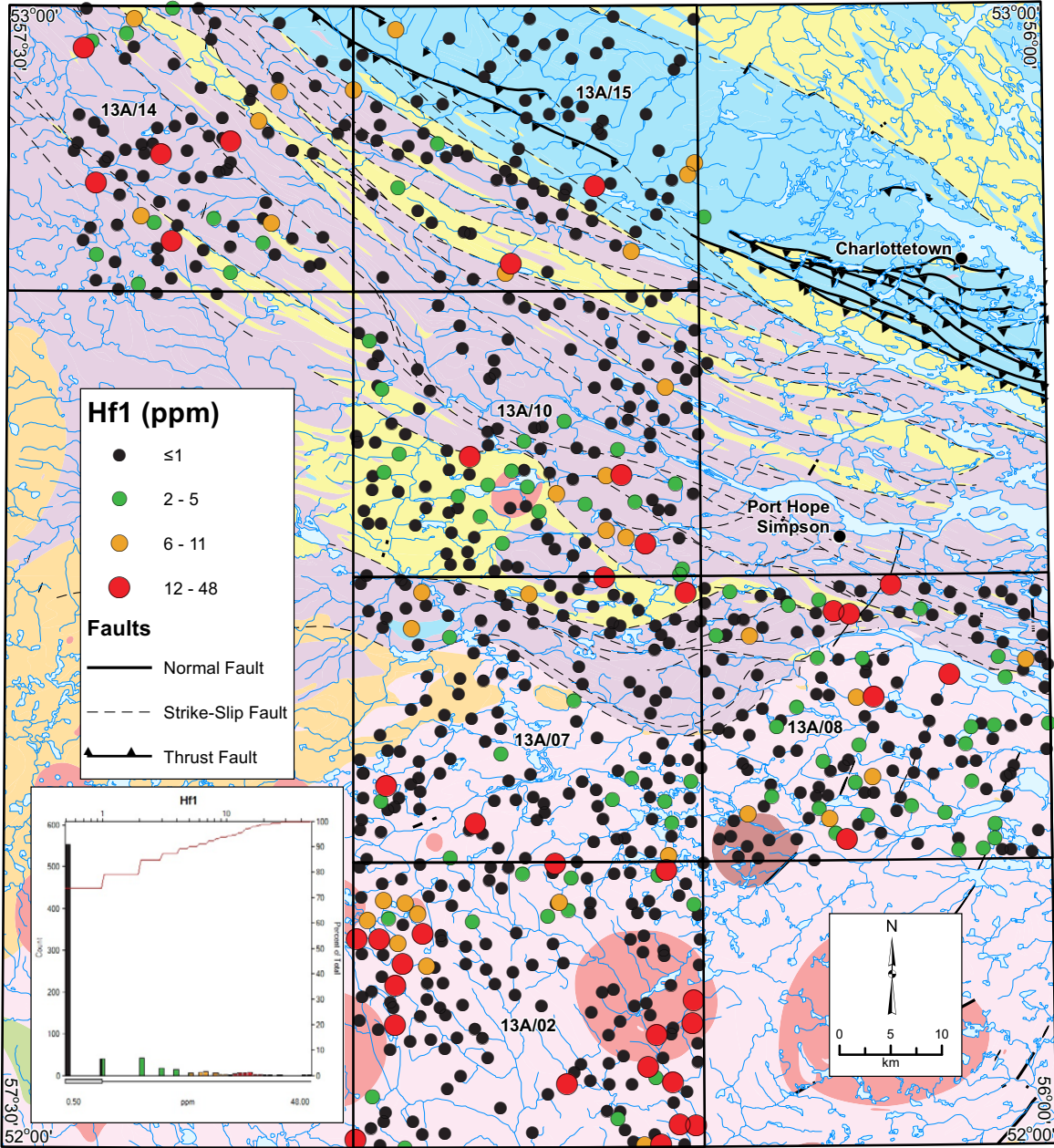
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 49. Iron (Fe<sub>2</sub>) in lake sediment.





**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

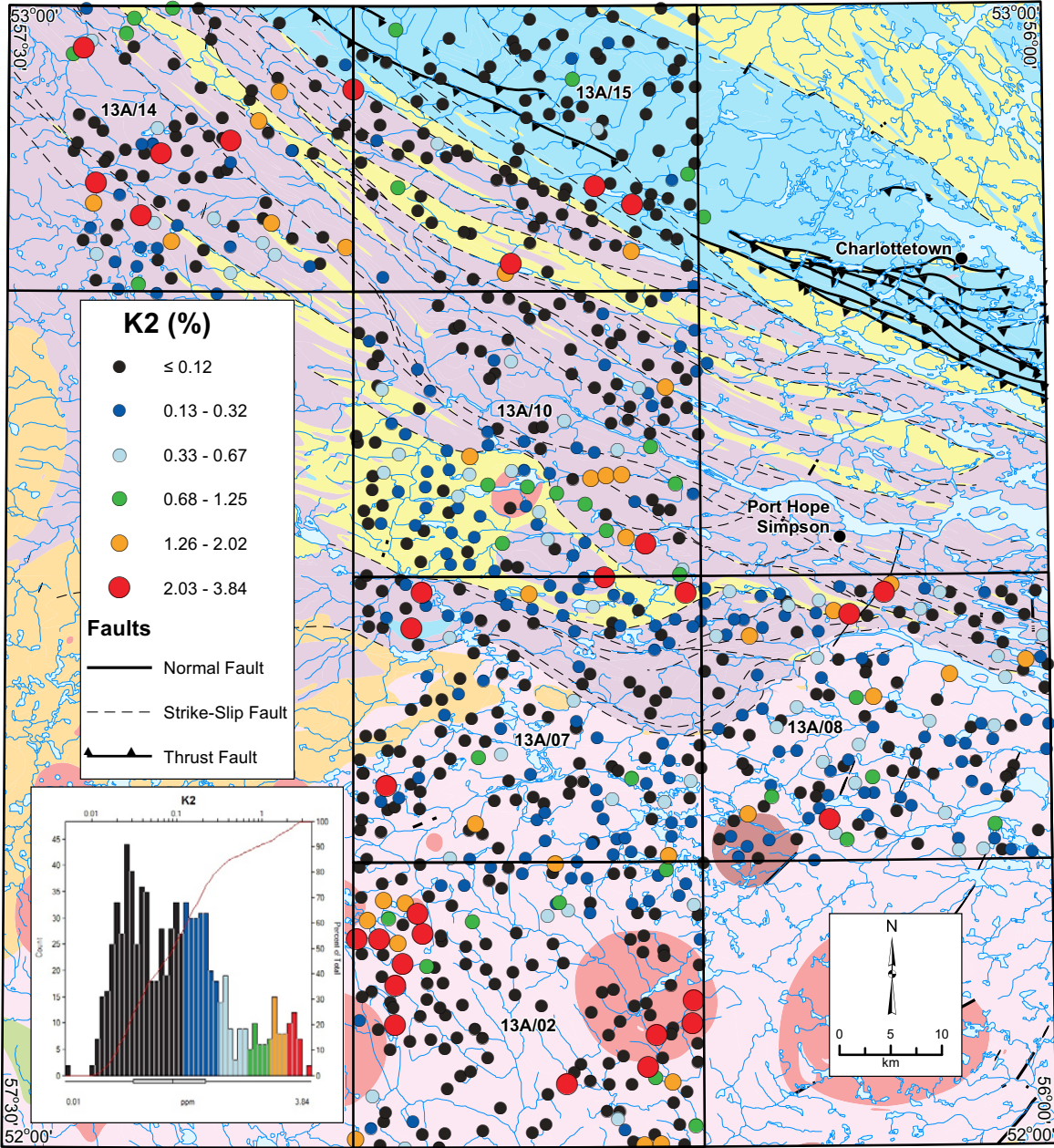
**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 50.** Hafnium (Hf1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3c</sub>ag), amphibolite (P<sub>3c</sub>am), anorthositic and leucogabbro (P<sub>3c</sub>an), leucogabbro and leucogabbro (P<sub>3c</sub>ln), gabbro and norite (P<sub>3c</sub>rg), diorite, quartz diorite and tonalite (P<sub>3c</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3c</sub>ga), granite to granodiorite (P<sub>3c</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3c</sub>gp), quartz monzonite (P<sub>3c</sub>mq) and monzonite (P<sub>3c</sub>mz)

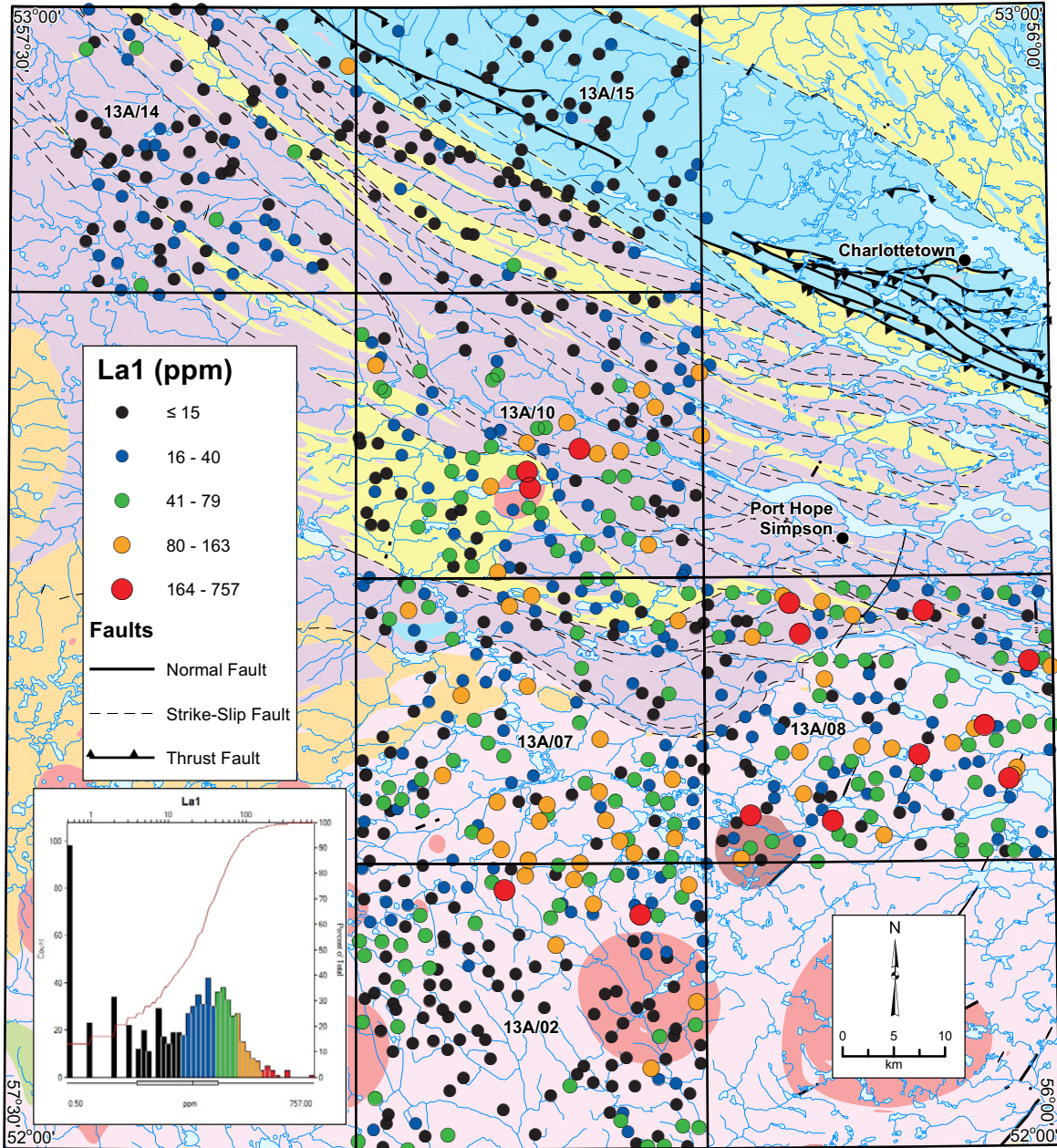
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 51. Potassium (K2) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

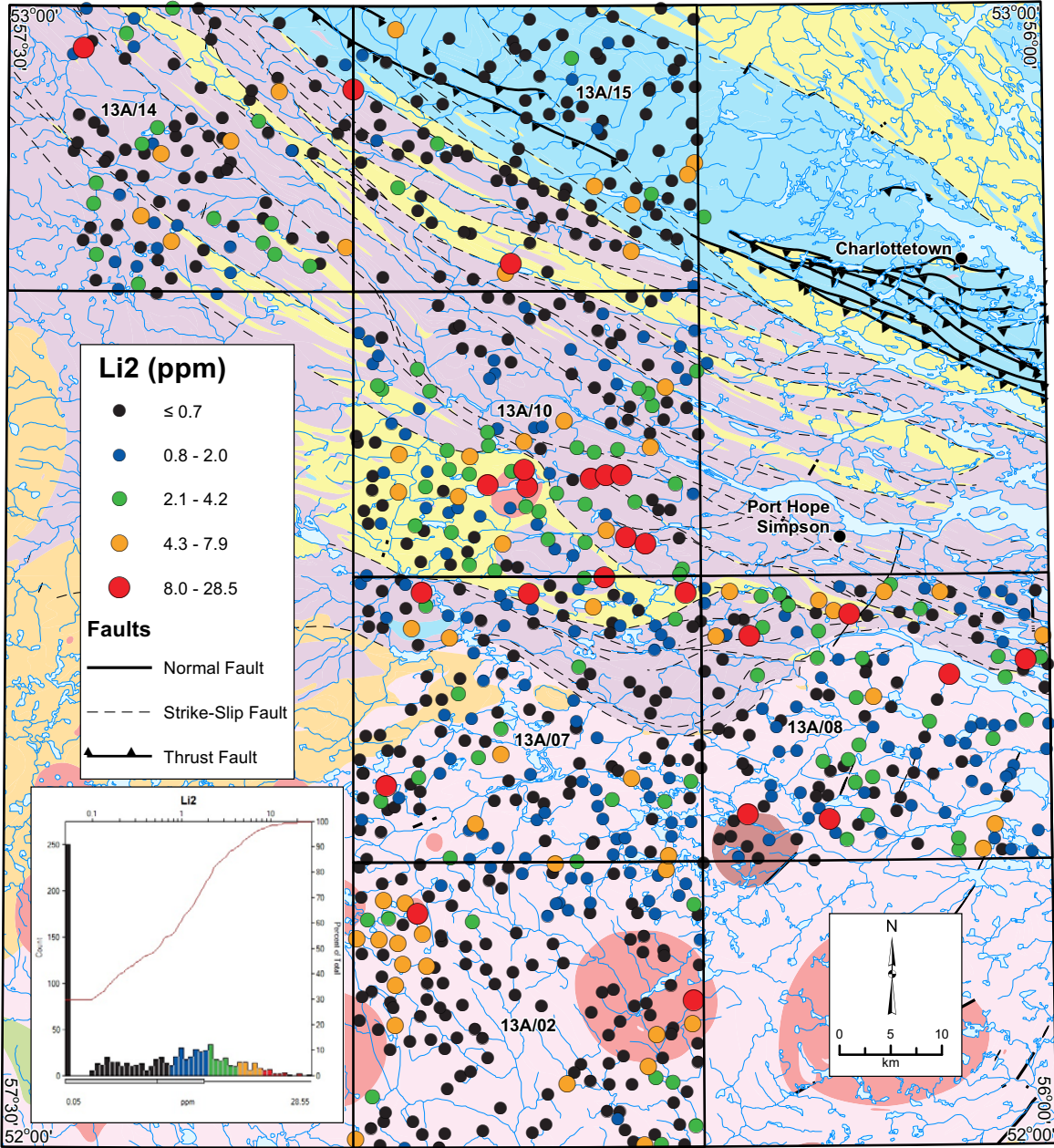
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 52. Lanthanum (La) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

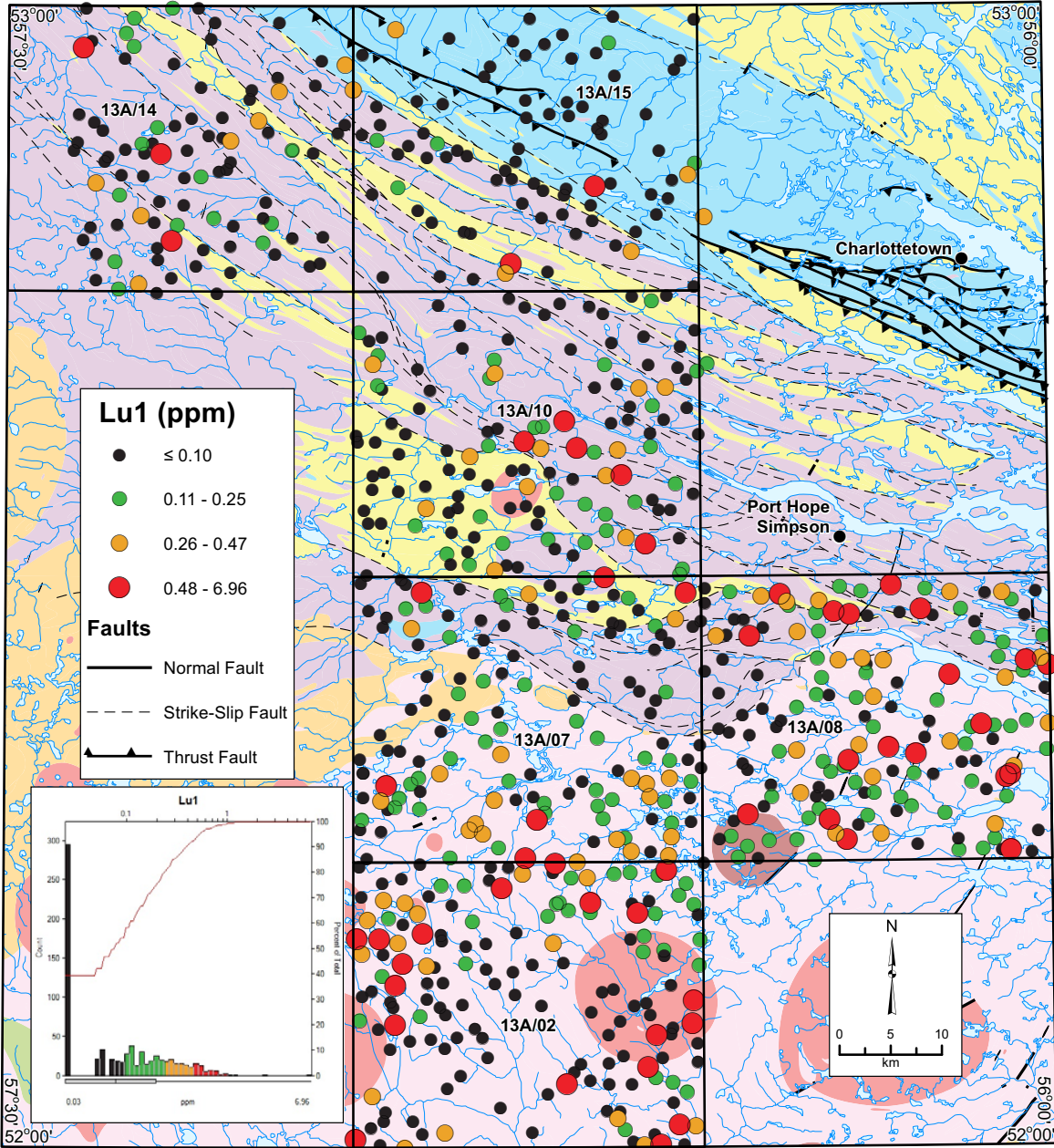
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 53. Lithium (Li<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

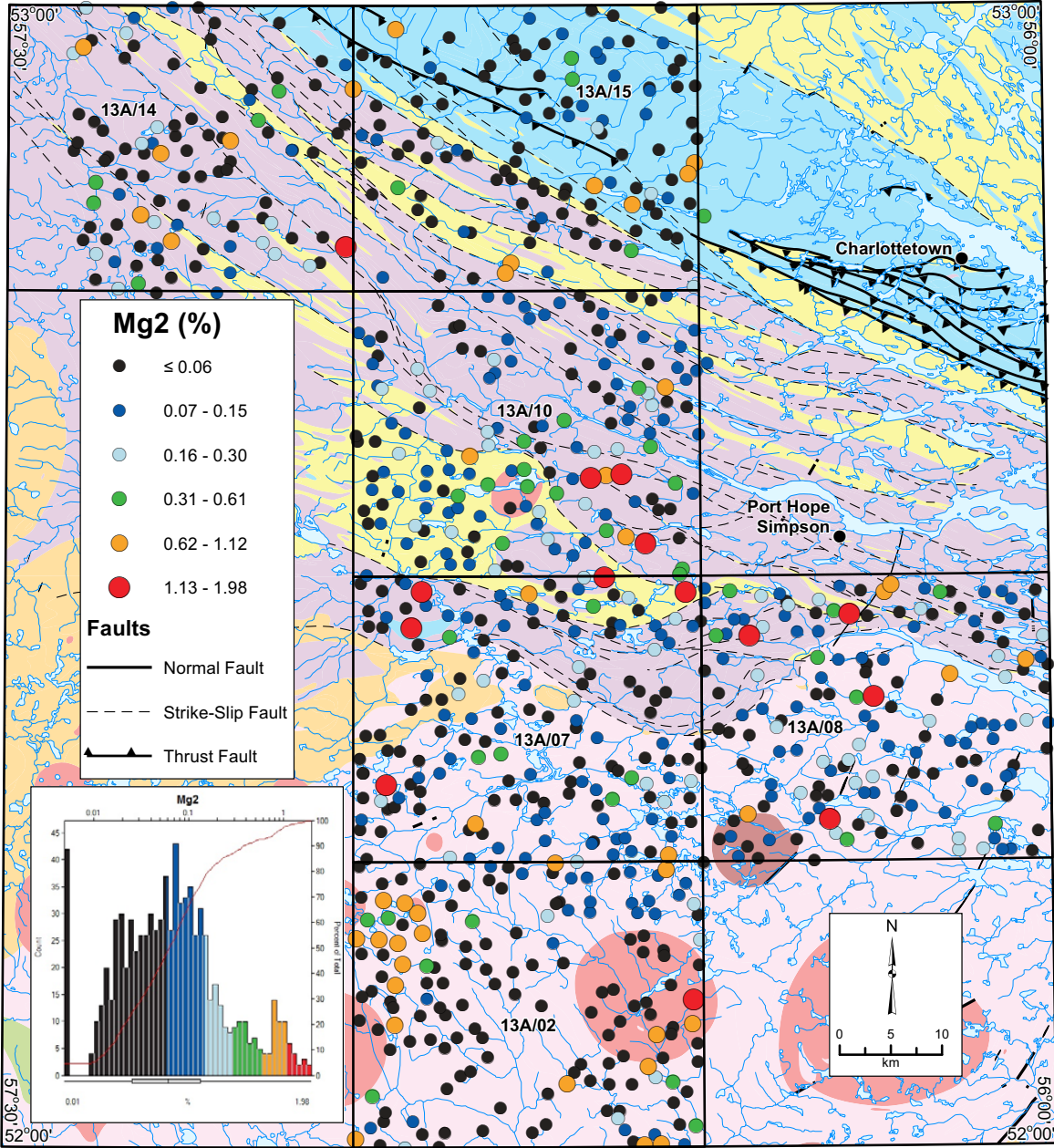
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 54. Lutetium (Lu1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMGp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

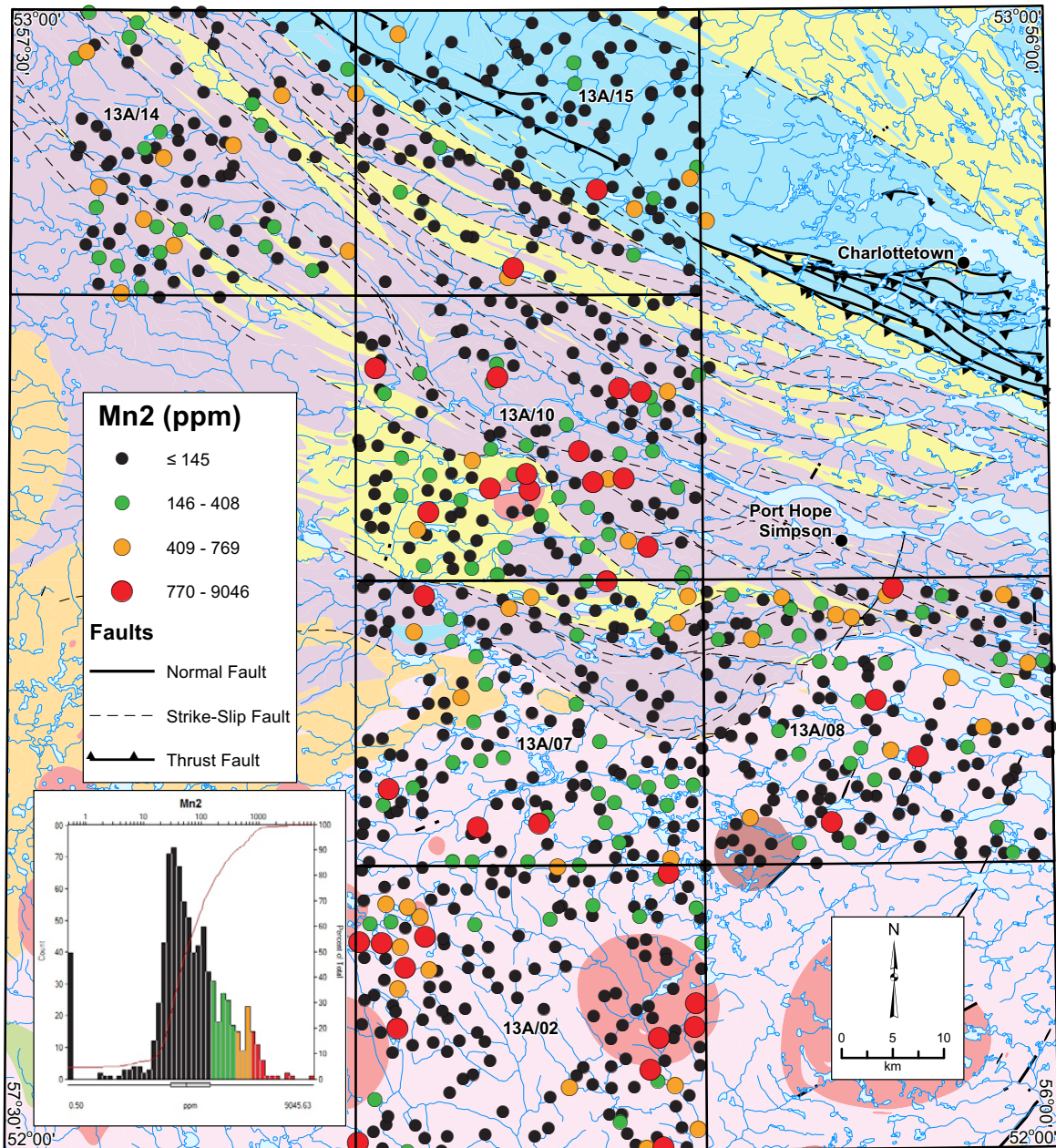
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 55. Magnesium (Mg<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

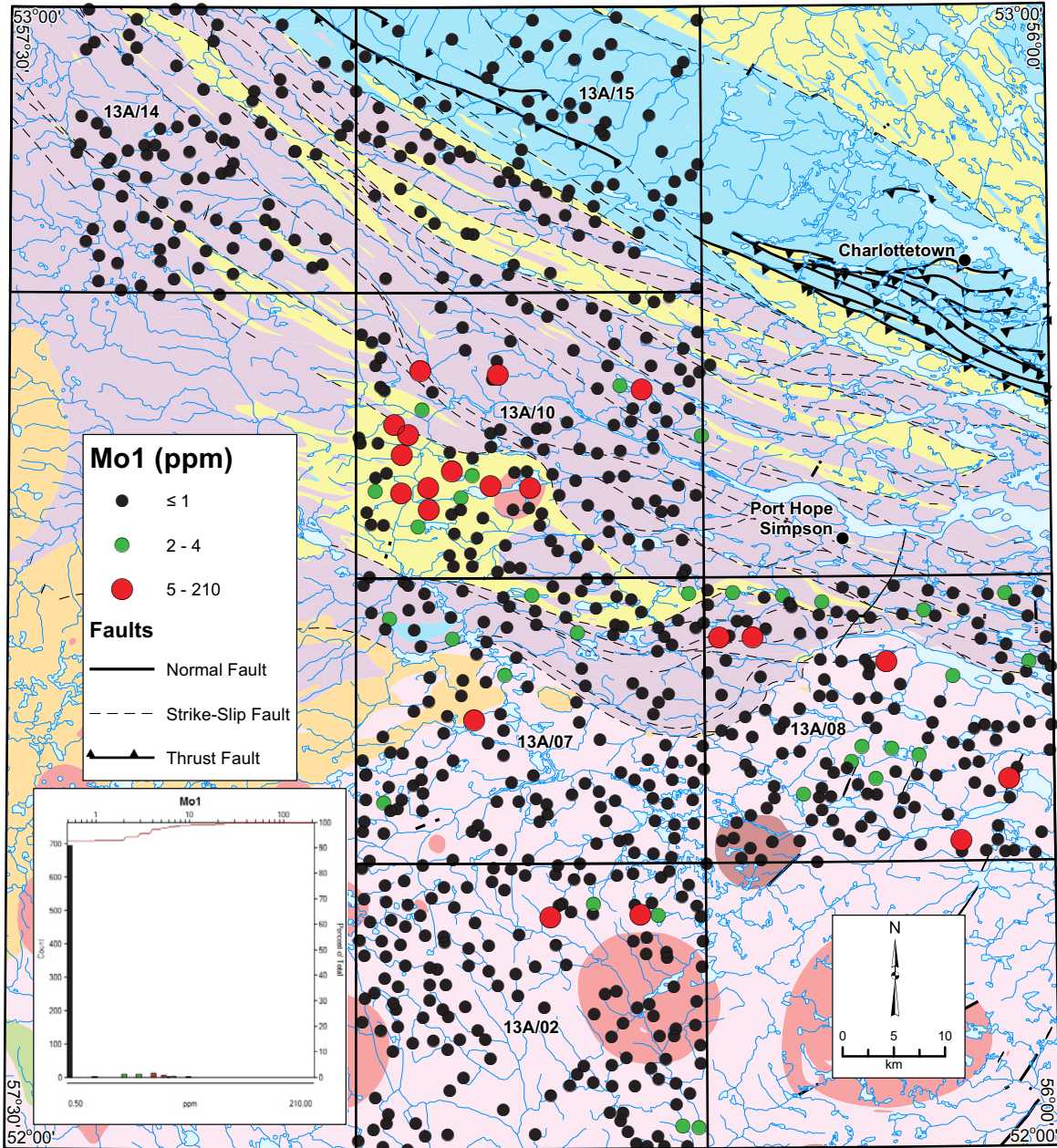
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 56. Manganese (Mn<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

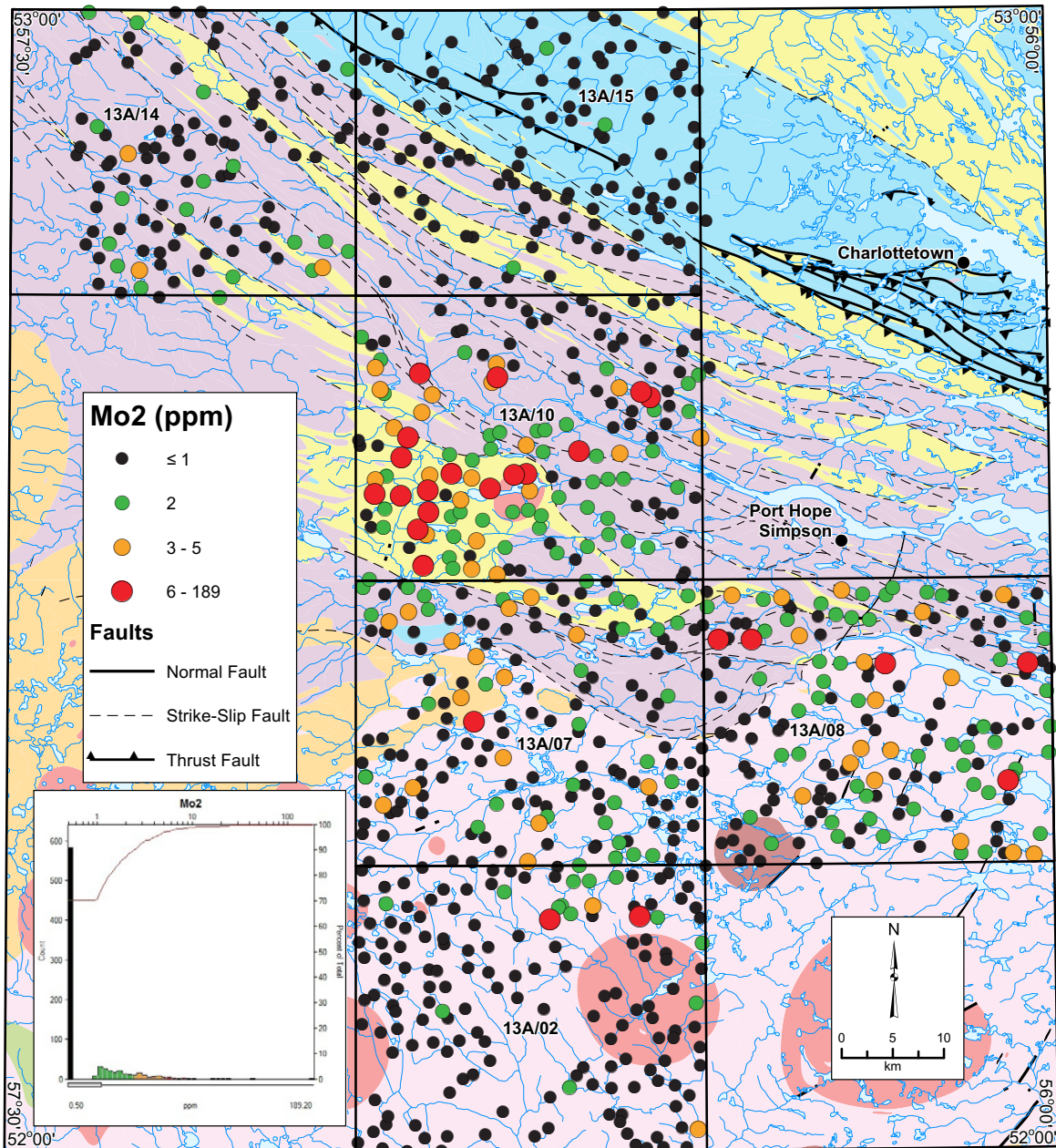
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 57. Molybdenum (Mo1) in lake sediment.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

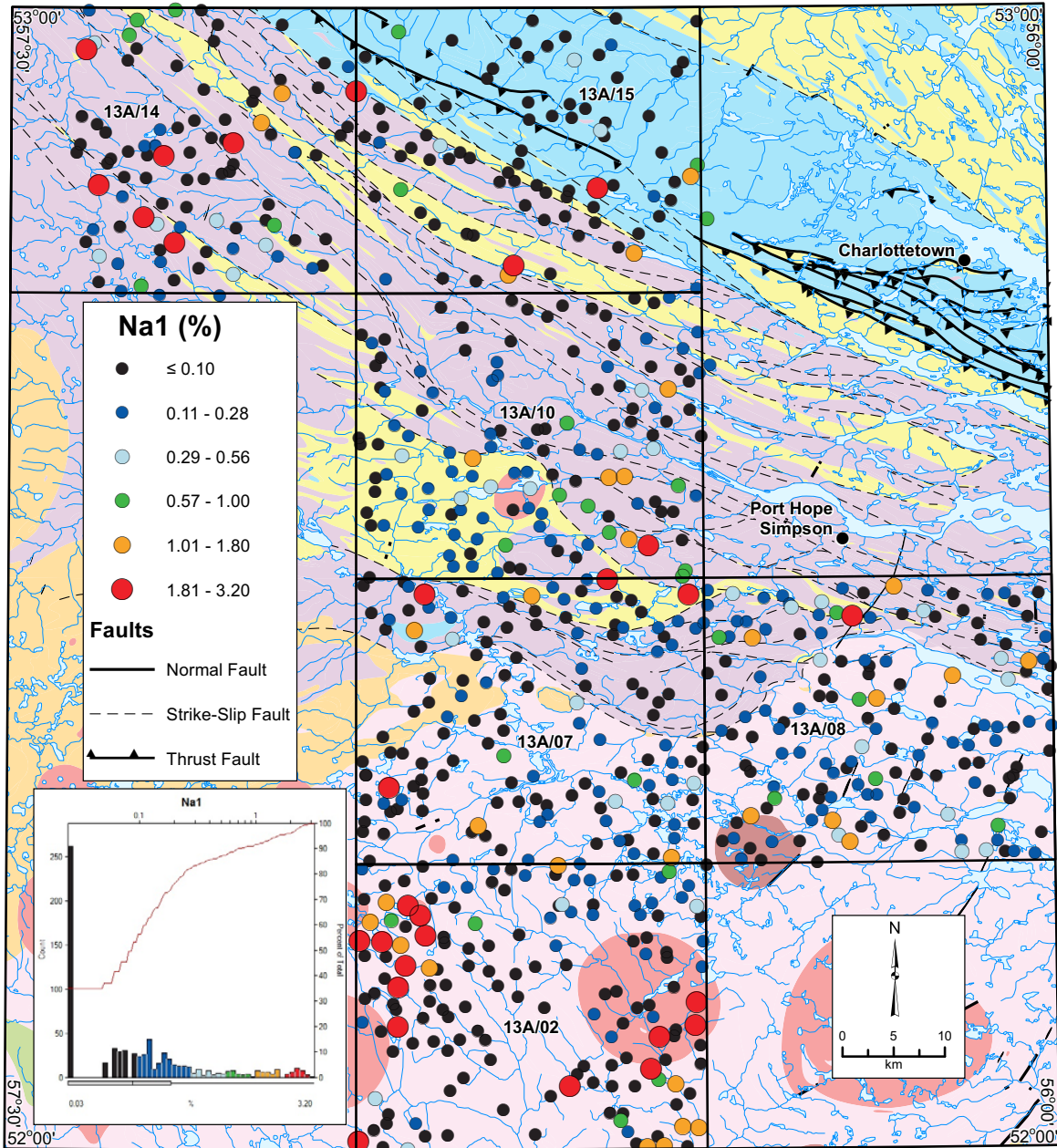
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 58. Molybdenum (Mo<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3c</sub>ag), amphibolite (P<sub>3c</sub>am), anorthositic and leucogabbro (P<sub>3c</sub>an), leucogabbro and leucogabbro (P<sub>3c</sub>ln), gabbro and norite (P<sub>3c</sub>rg), diorite, quartz diorite and tonalite (P<sub>3c</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3c</sub>ga), granite to granodiorite (P<sub>3c</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3c</sub>gp), quartz monzonite (P<sub>3c</sub>mq) and monzonite (P<sub>3c</sub>mz)

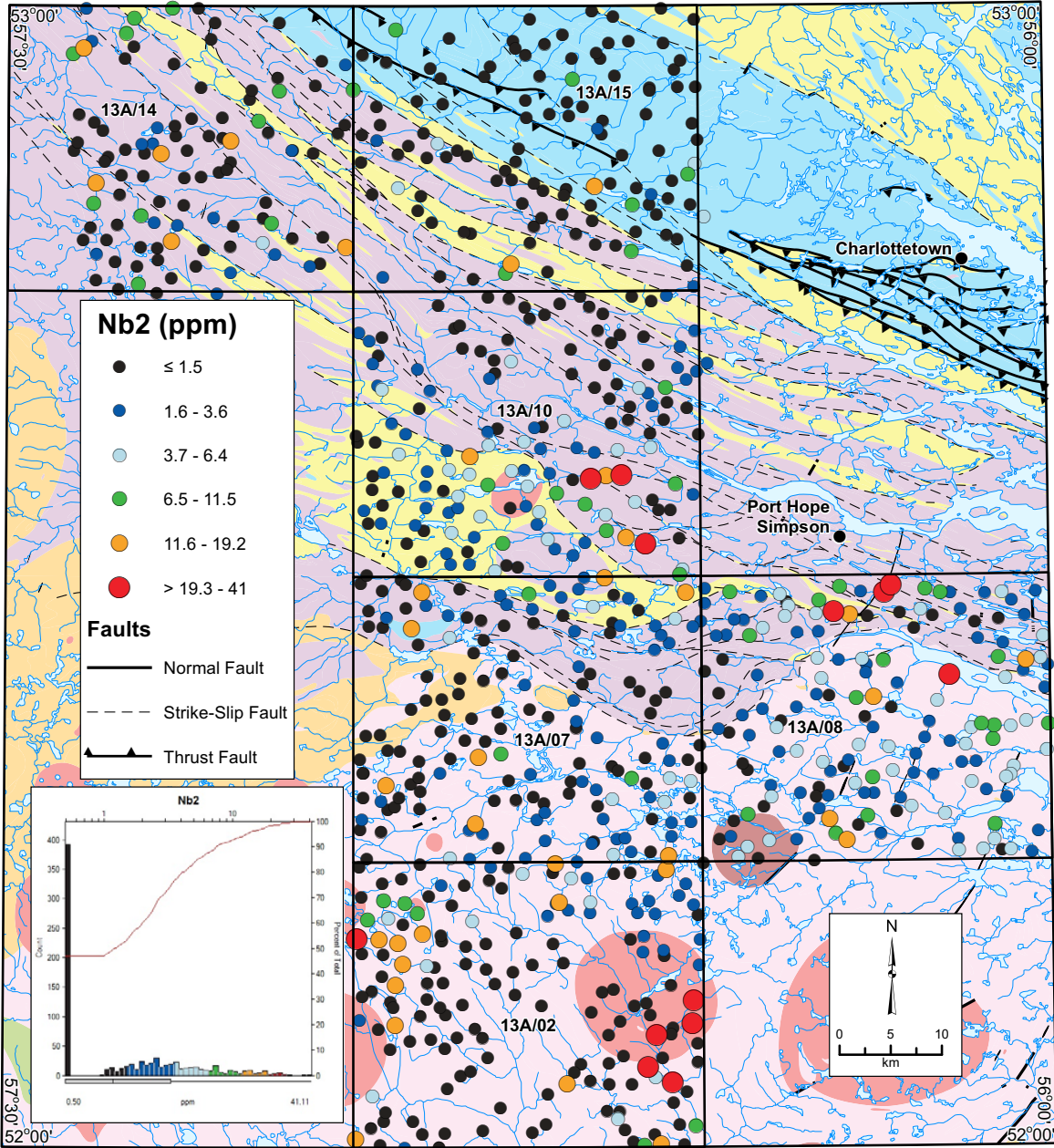
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 59. Sodium (Na) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3c</sub>ag), amphibolite (P<sub>3c</sub>am), anorthosite and leucogabbro (P<sub>3c</sub>ln), leucogabbro and leucogabbro (P<sub>3c</sub>lg), gabbro and norite (P<sub>3c</sub>rg), diorite, quartz diorite and tonalite (P<sub>3c</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3c</sub>ga), granite to granodiorite (P<sub>3c</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3c</sub>gp), quartz monzonite (P<sub>3c</sub>mq) and monzonite (P<sub>3c</sub>mz)

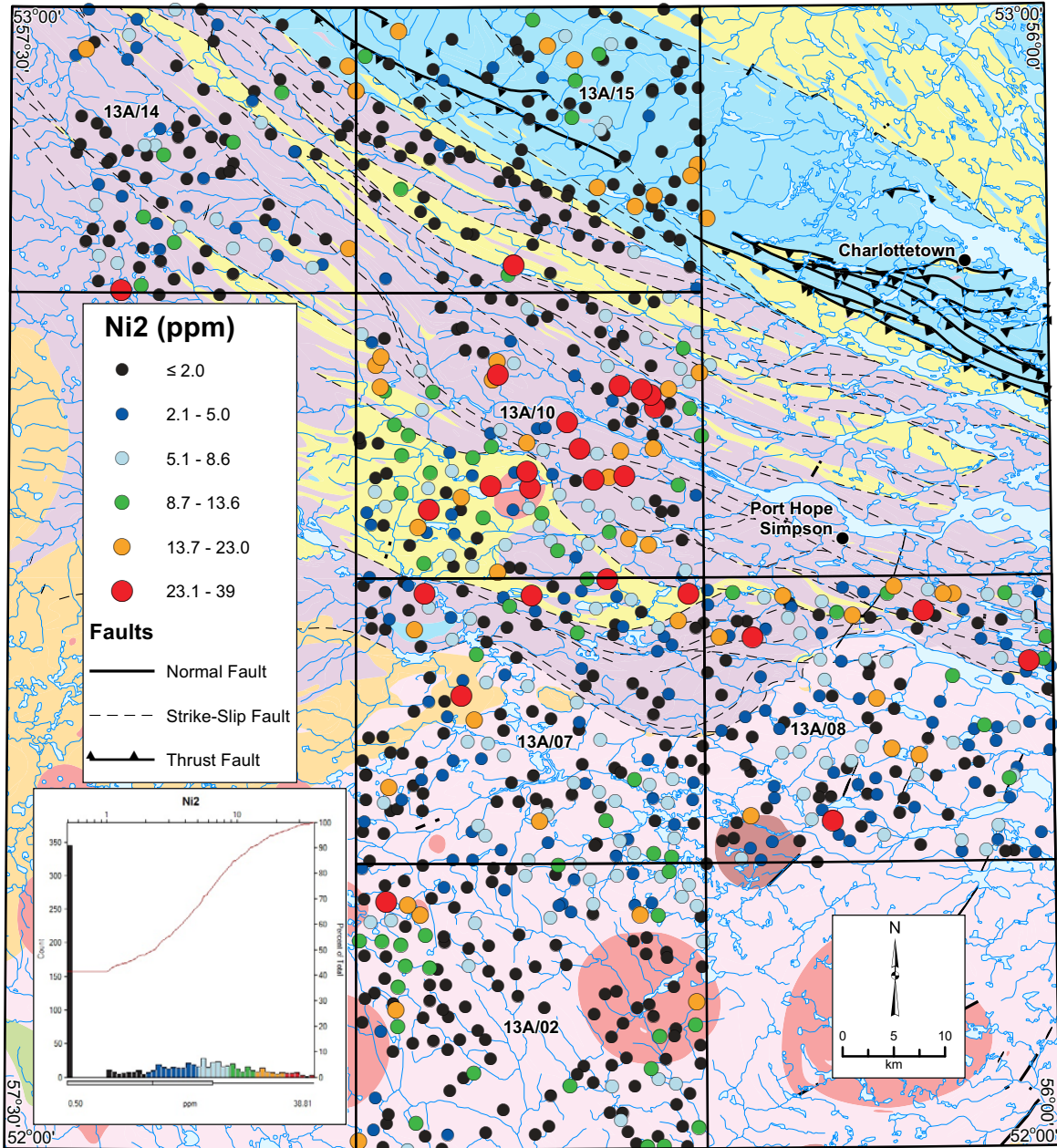
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 60. Niobium (Nb2) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

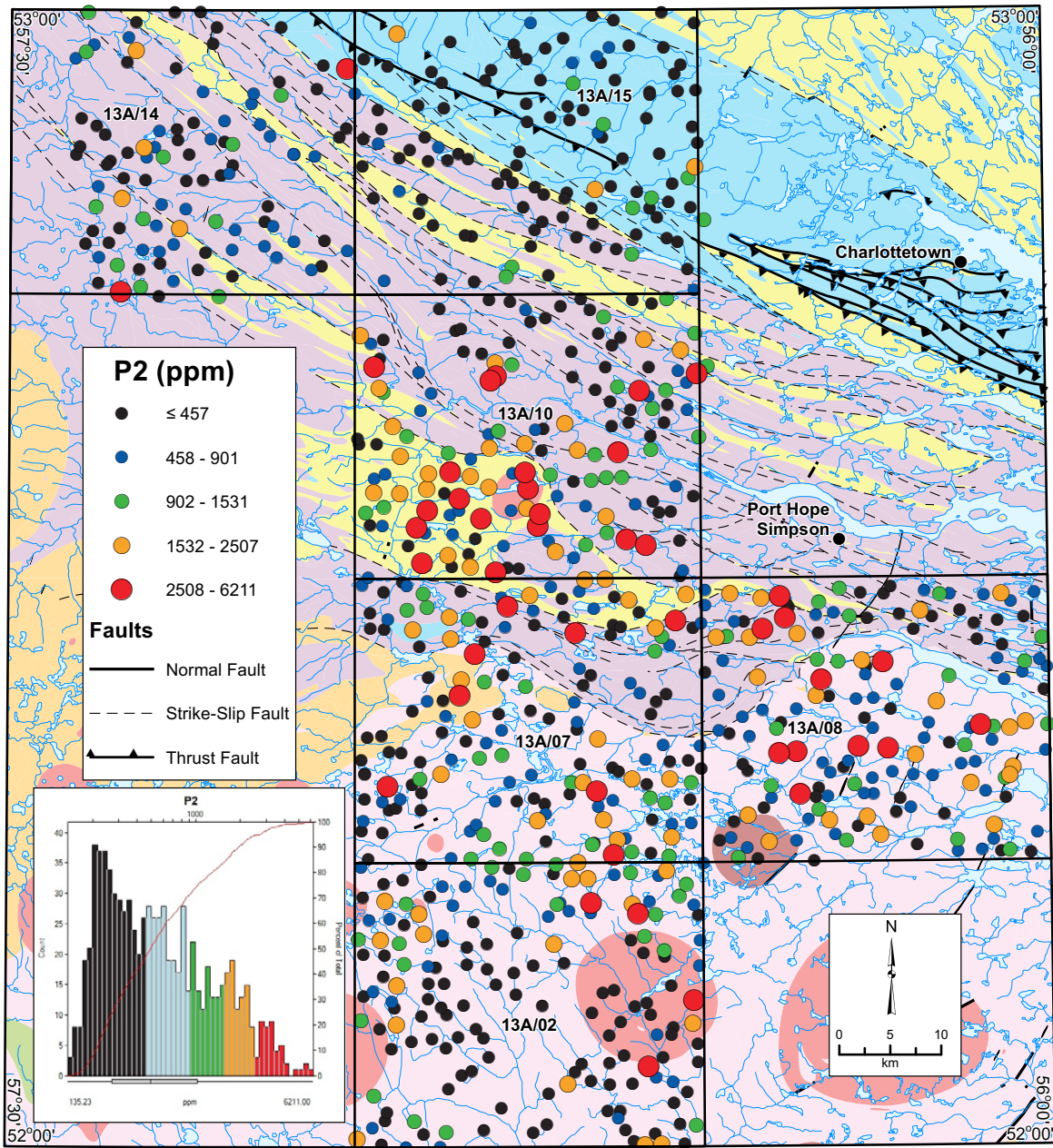
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 61. Nickel (Ni) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

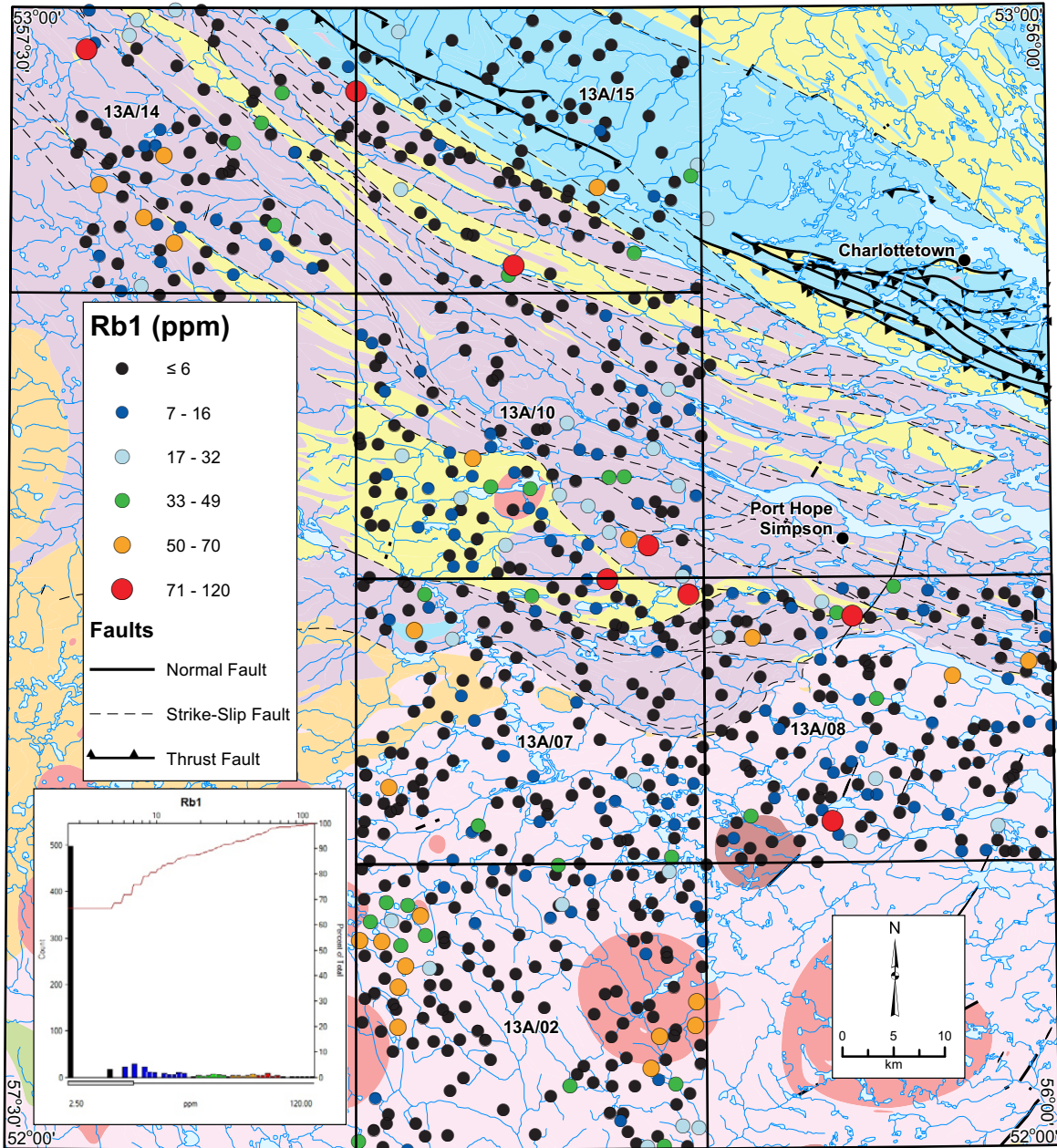
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 62. Phosphorus (P<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

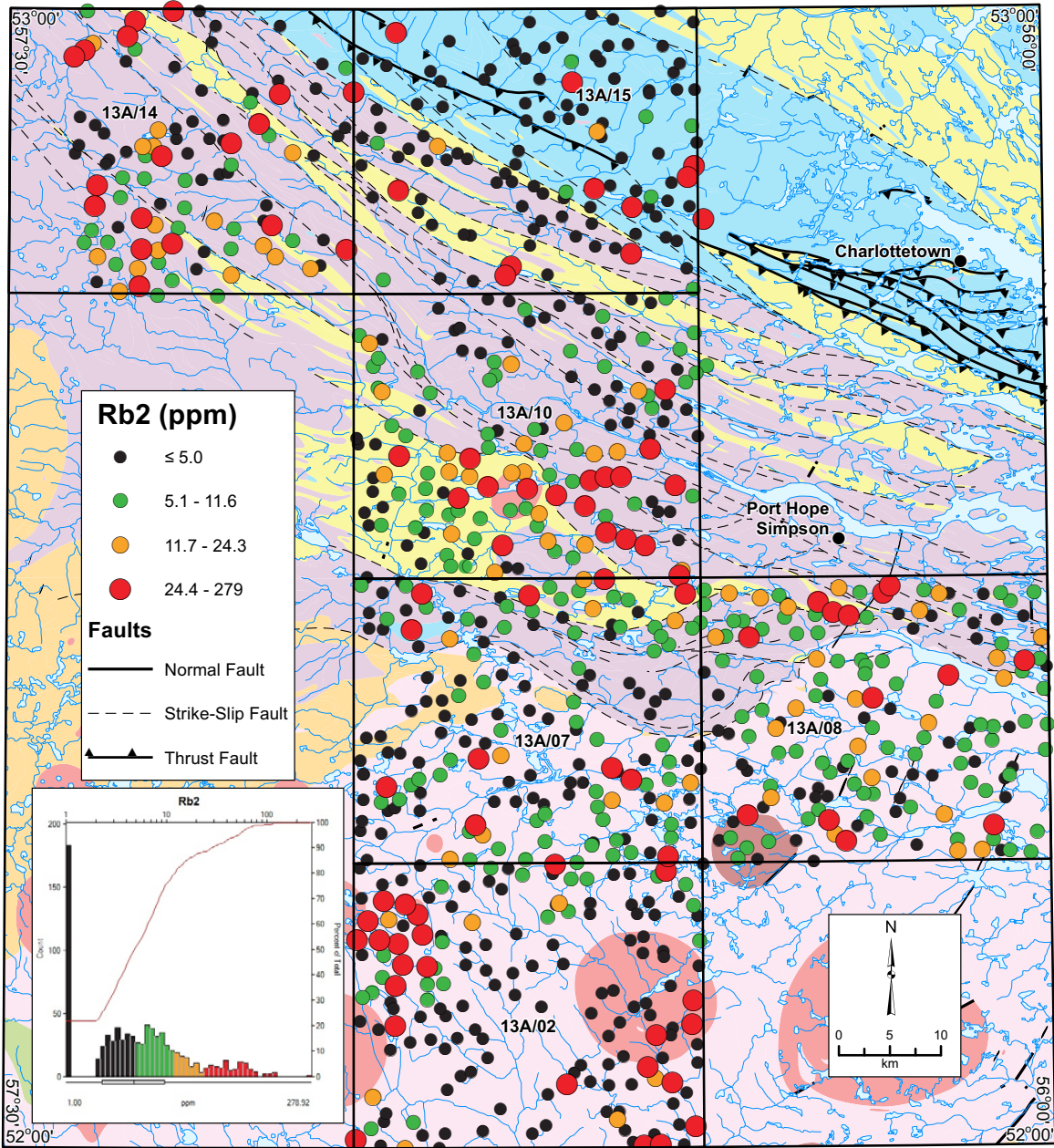
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 63. Rubidium (Rb1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>YQ)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>GR)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>RG); leucogabbro and anorthositic gabbro (M<sub>1</sub>LN) and amphibolite (M<sub>1</sub>AM)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMGR); syenite, alkali-feldspar syenite and quartz syenite (PMYQ) and megacrystic/porphyritic granite to quartz monzonite (PMGP)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>AG), amphibolite (P<sub>3C</sub>AM), anorthosite and leucogabbro (P<sub>3C</sub>LN), leucogabbro and leucogabbro (P<sub>3C</sub>LN), gabbro and norite (P<sub>3C</sub>RG), diorite, quartz diorite and tonalite (P<sub>3C</sub>DR), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>GA), granite to granodiorite (P<sub>3C</sub>GD), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>GP), quartz monzonite (P<sub>3C</sub>MQ) and monzonite (P<sub>3C</sub>MZ)

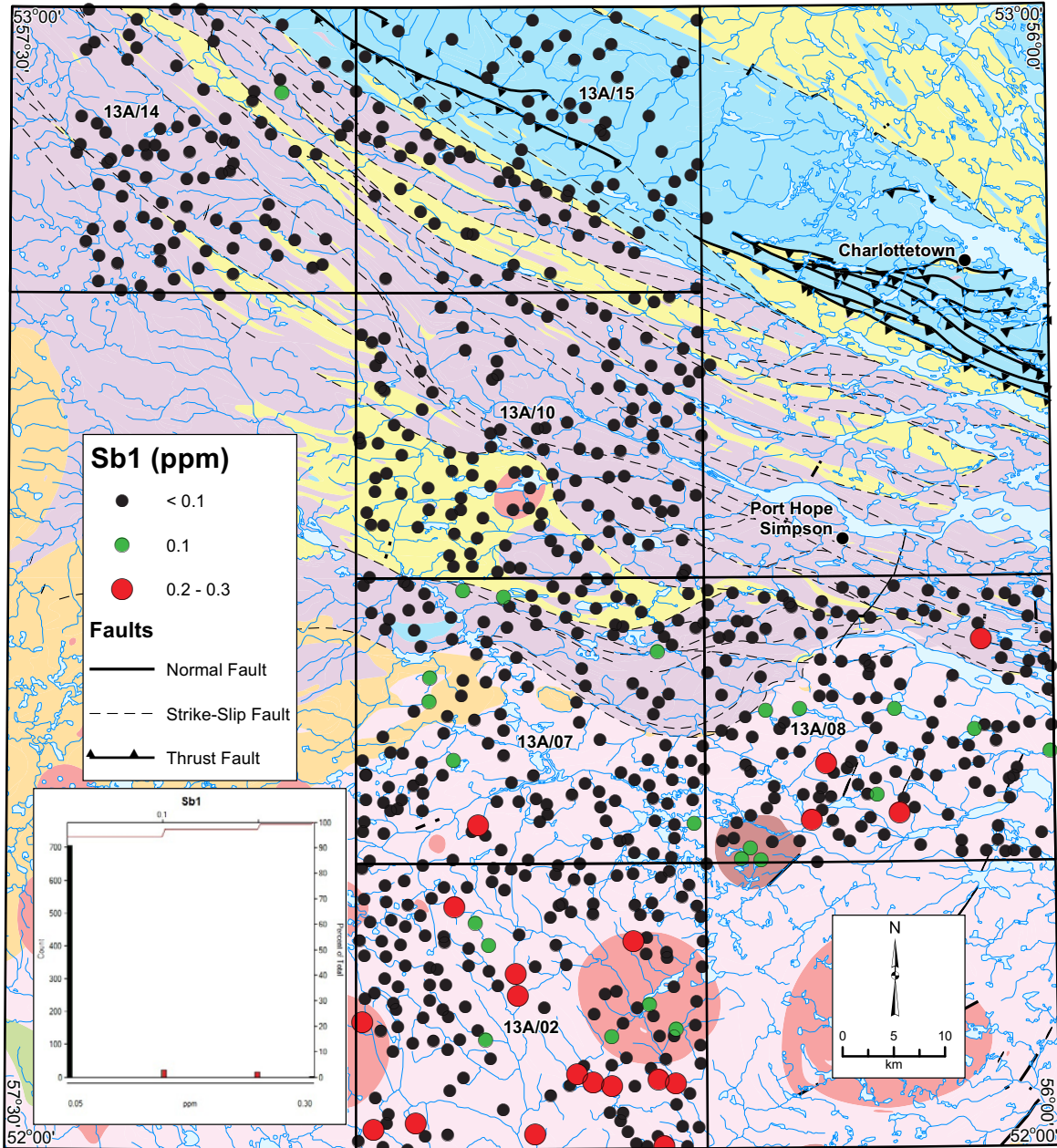
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>DR), foliated to gneissic granodiorite (P<sub>3B</sub>GD), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>GP), foliated to gneissic quartz monzonite (P<sub>3B</sub>MQ), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>GR), amphibolite (P<sub>3B</sub>AM), anorthosite and leucogabbro (P<sub>3B</sub>LN), leucogabbro and leucogabbro (P<sub>3B</sub>LN) and gabbro and norite (P<sub>3B</sub>RG)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>SP) and psammitic (P<sub>3B</sub>SS) schist and gneiss

Figure 64. Rubidium (Rb2) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

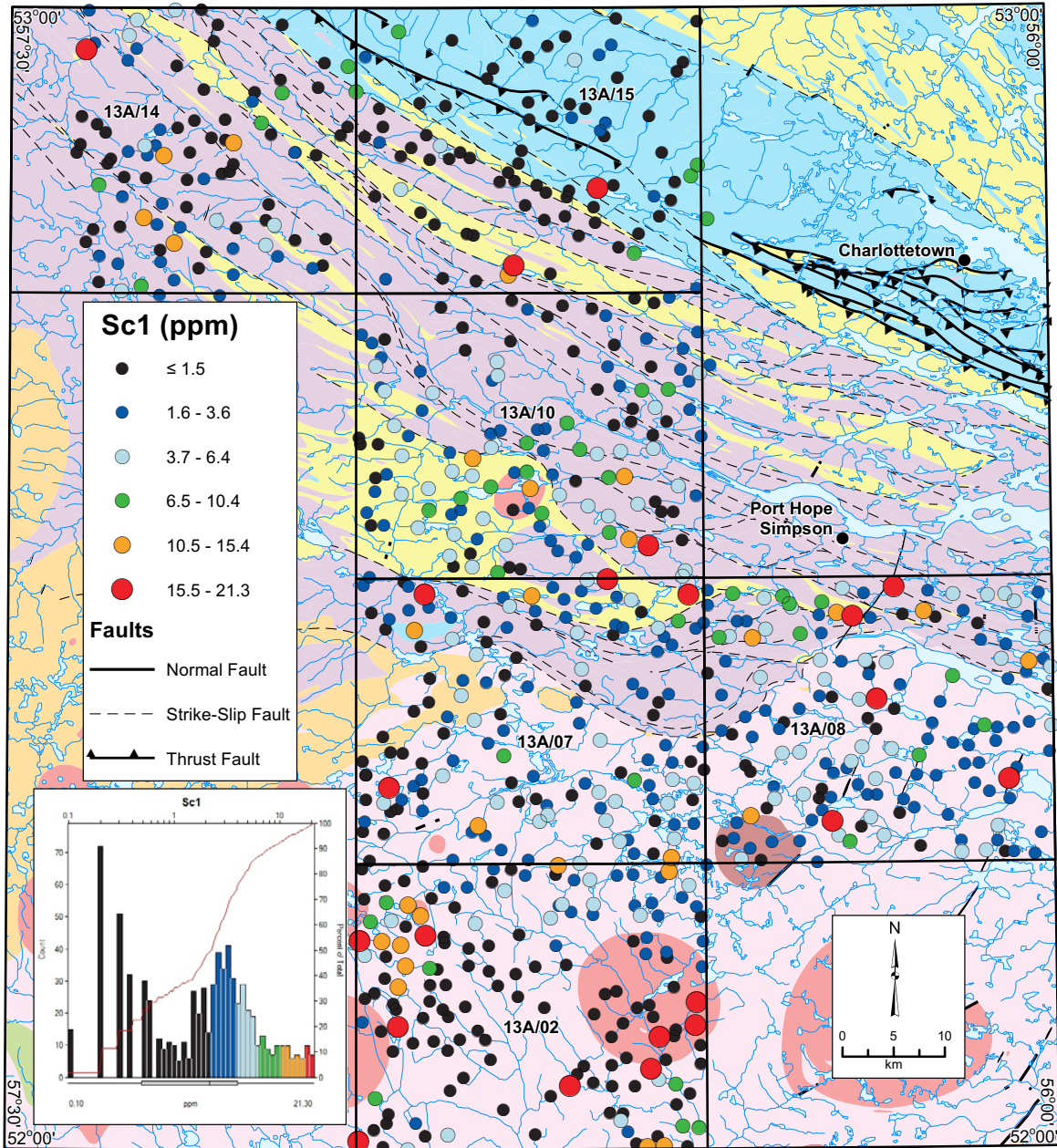
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 65. Antimony (Sb1) in lake sediment.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3c</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

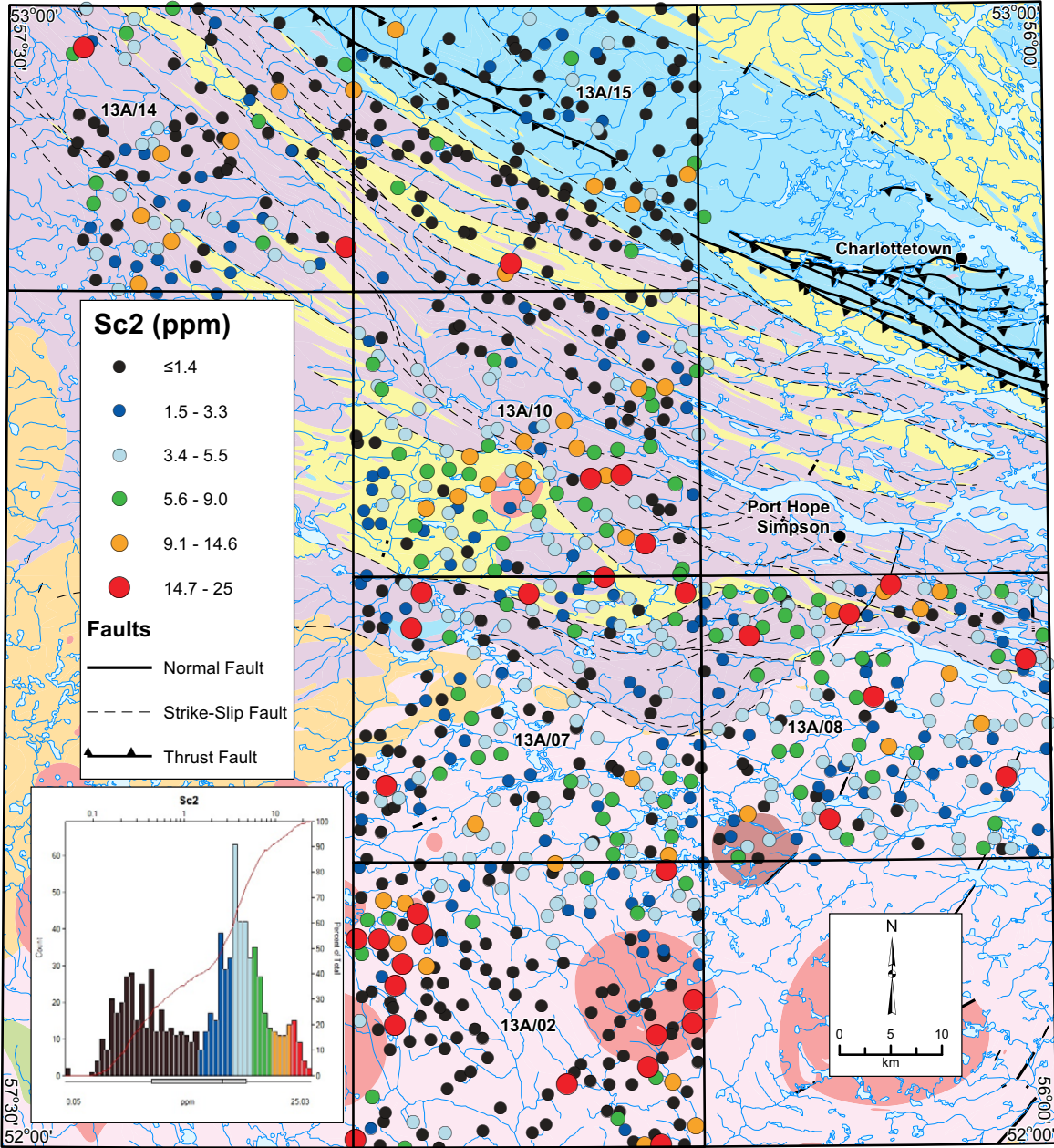
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 66. Scandium (Sc1) in lake sediment.



**Synoptic Bedrock Geology**

**Early Neoproterozoic (ca. 975–955 Ma)**

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

**(ca. 985–975 Ma)**

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

**Late Mesoproterozoic (ca. 1085–985 Ma)**

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

**Early Mesoproterozoic (1600–1400 Ma)**

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

**Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)**

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

**Late Paleoproterozoic (1660–1600 Ma)**

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

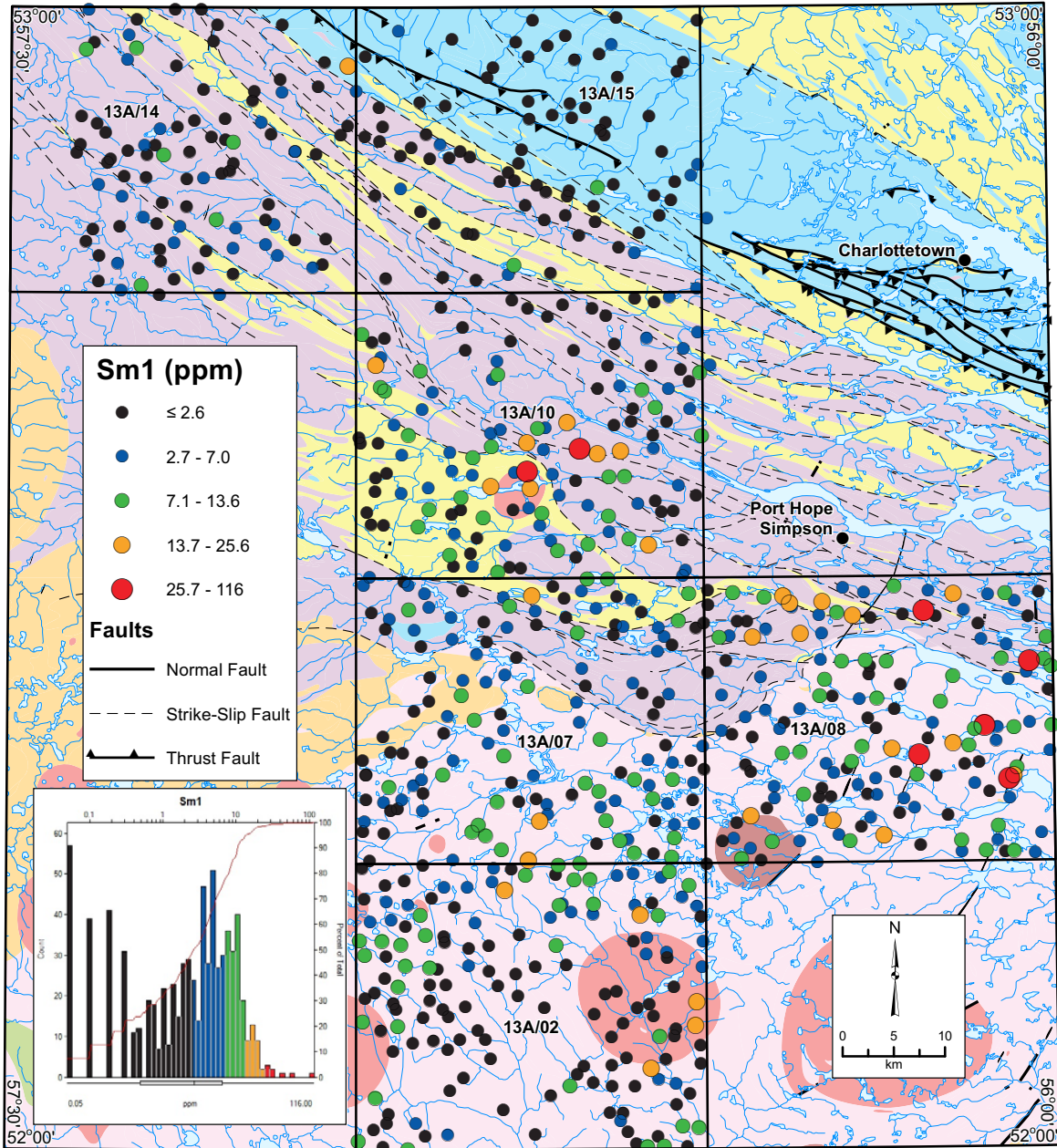
**(1800–1710 Ma)**

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

**(ca. 1800–1770 Ma)**

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

**Figure 67. Scandium (Sc<sub>2</sub>) in lake sediment.**



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

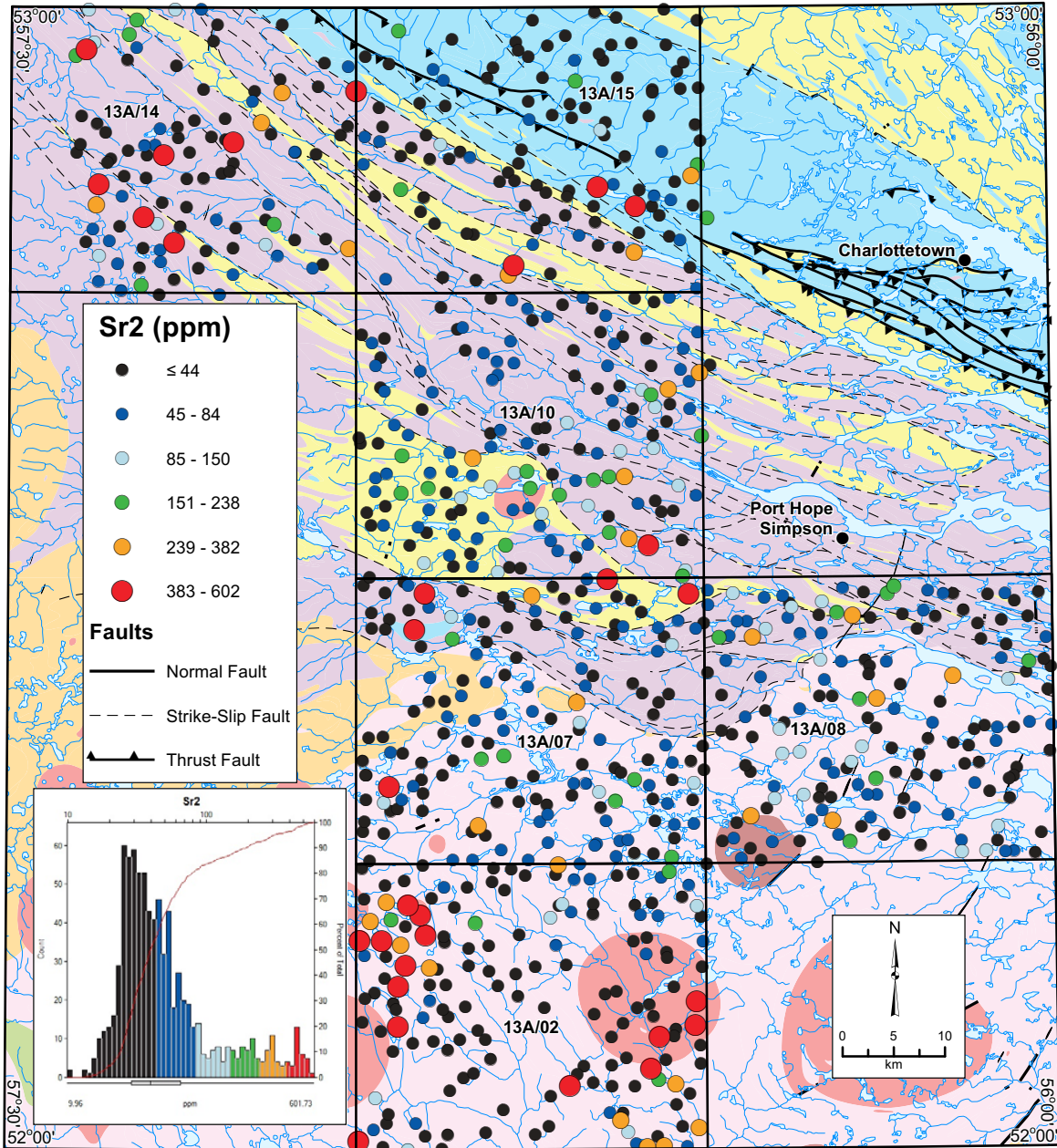
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 68. Samarium (Sm) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

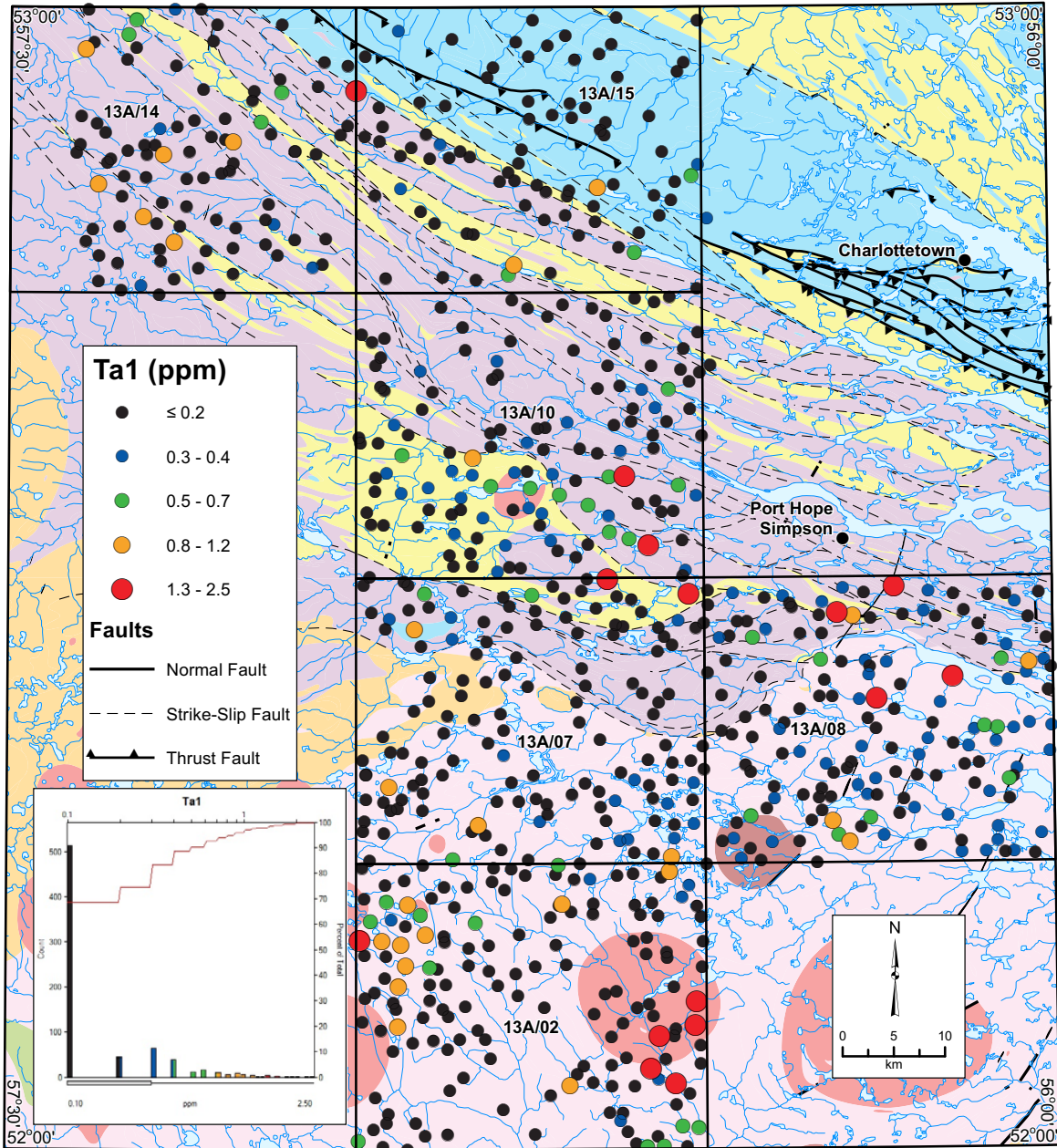
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 69. Strontium (Sr2) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

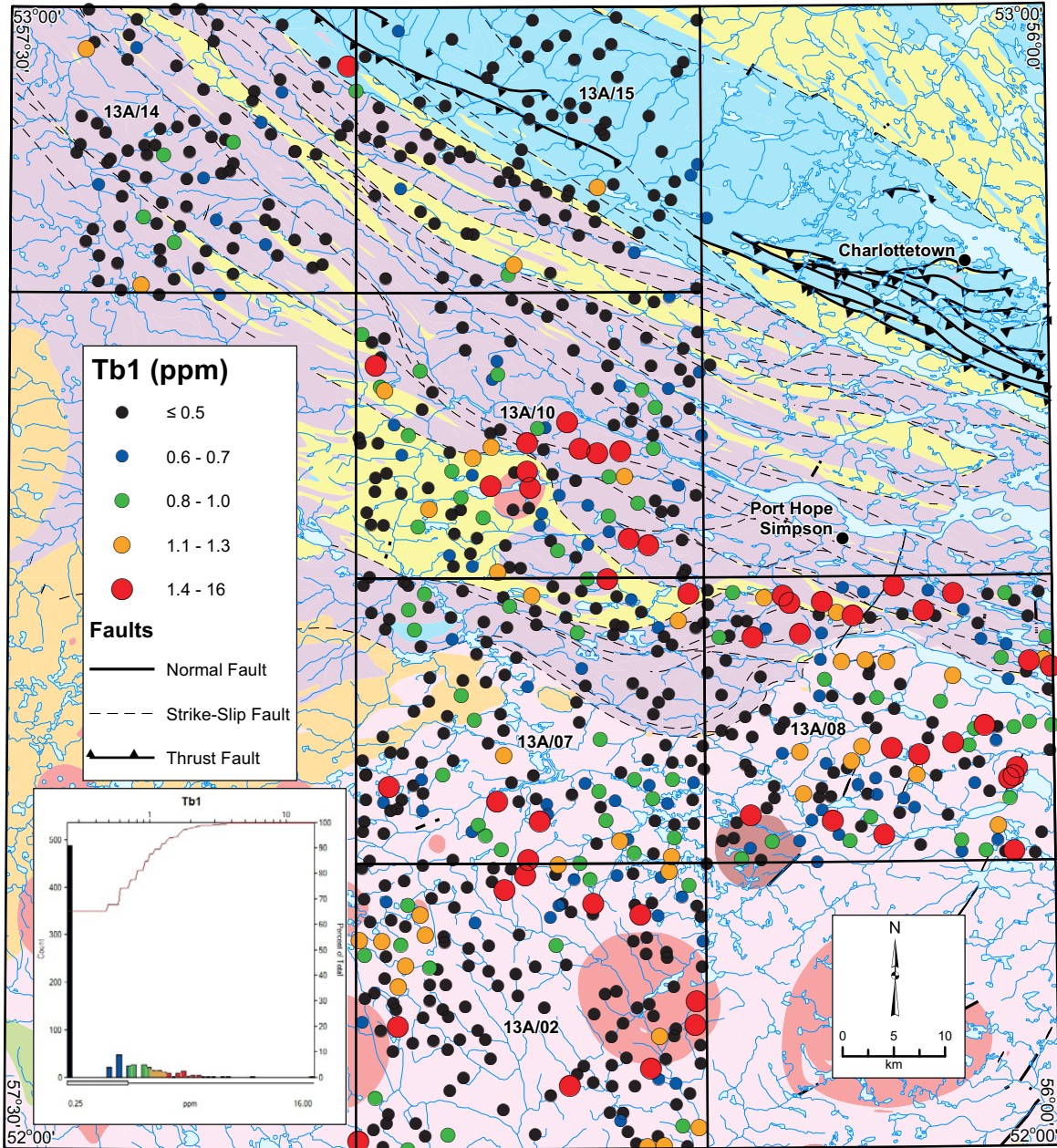
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 70. Tantalum (Ta1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

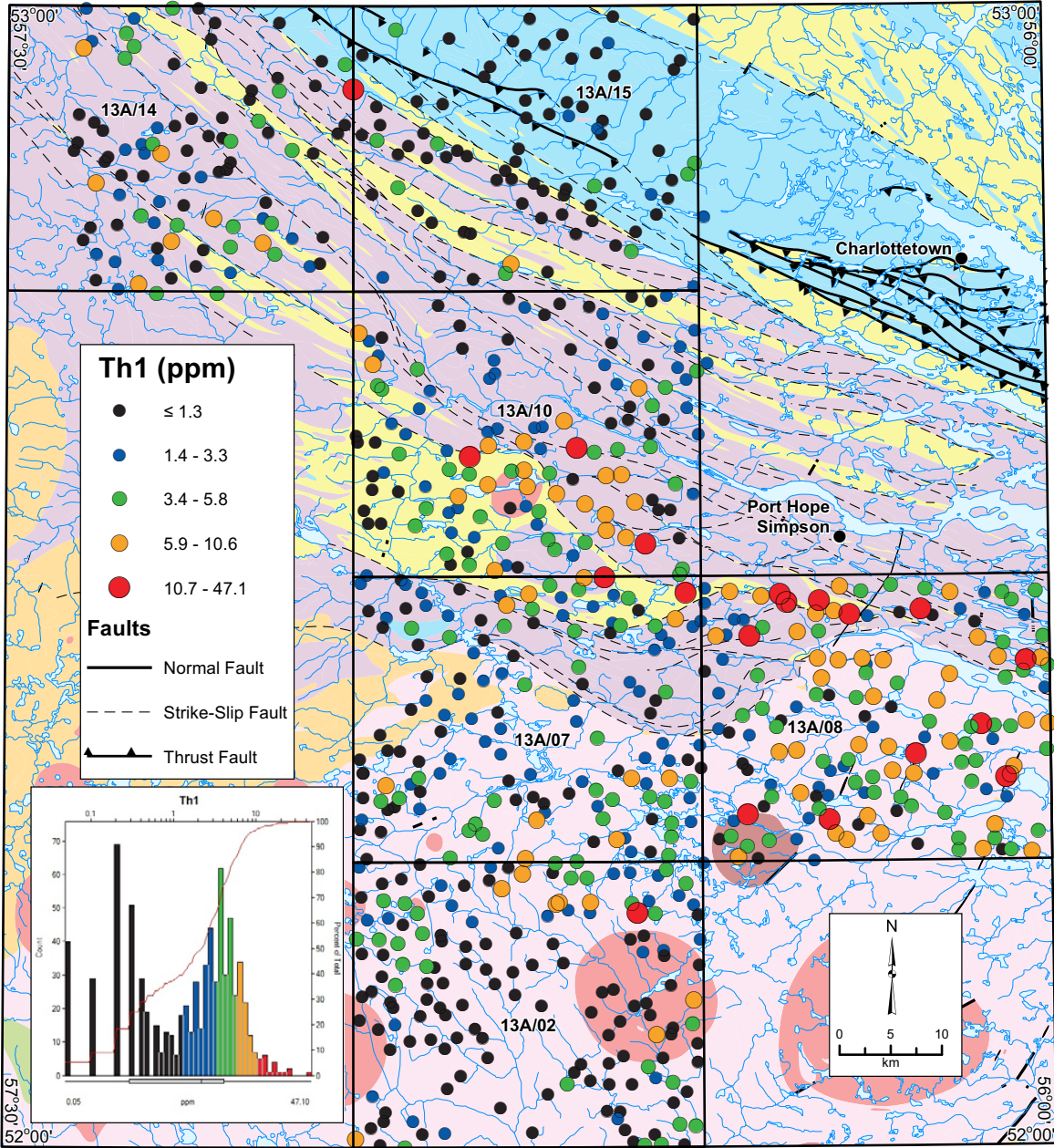
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 71. Terbitium (Tb1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

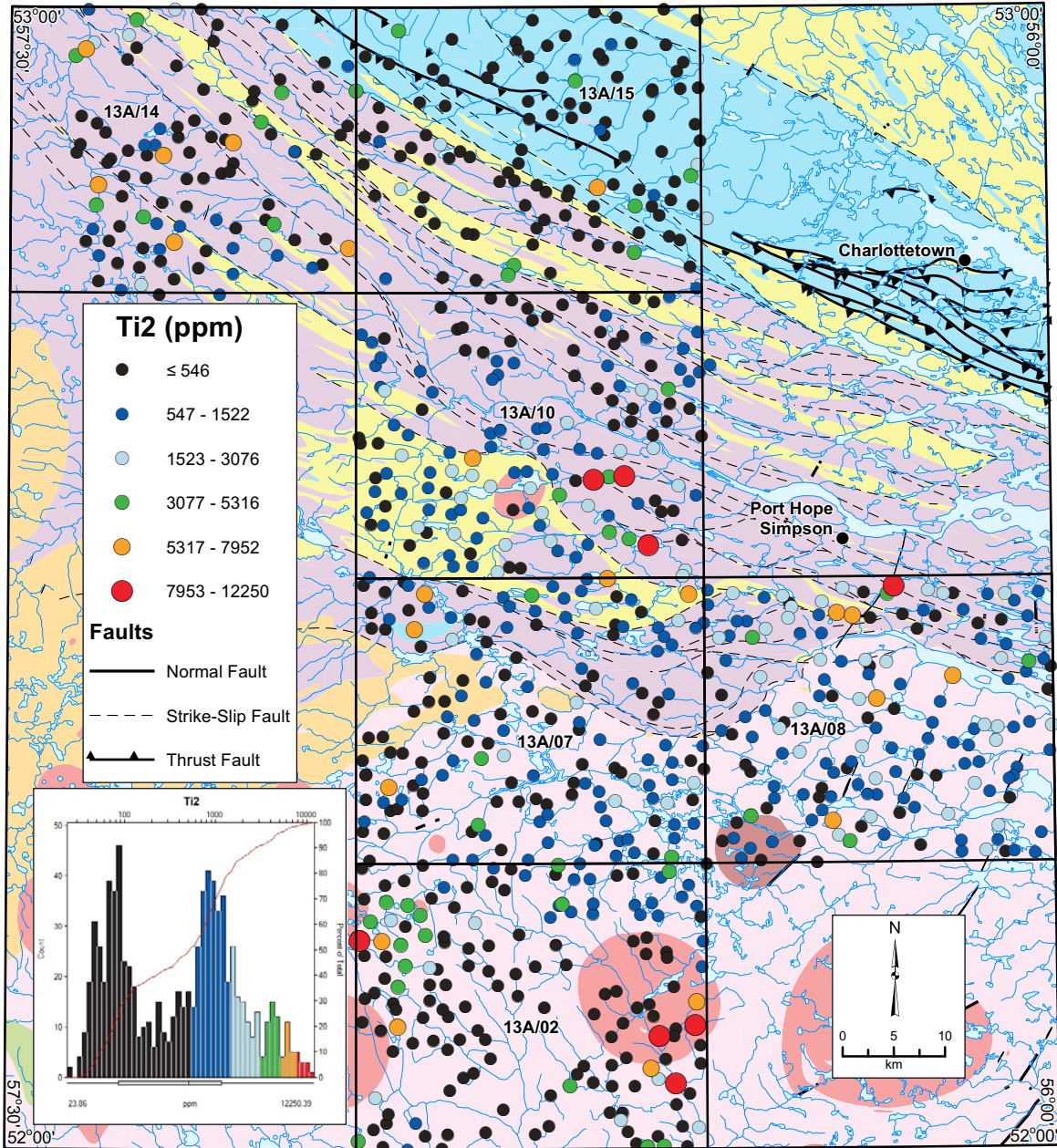
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 72. Thorium (Th1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

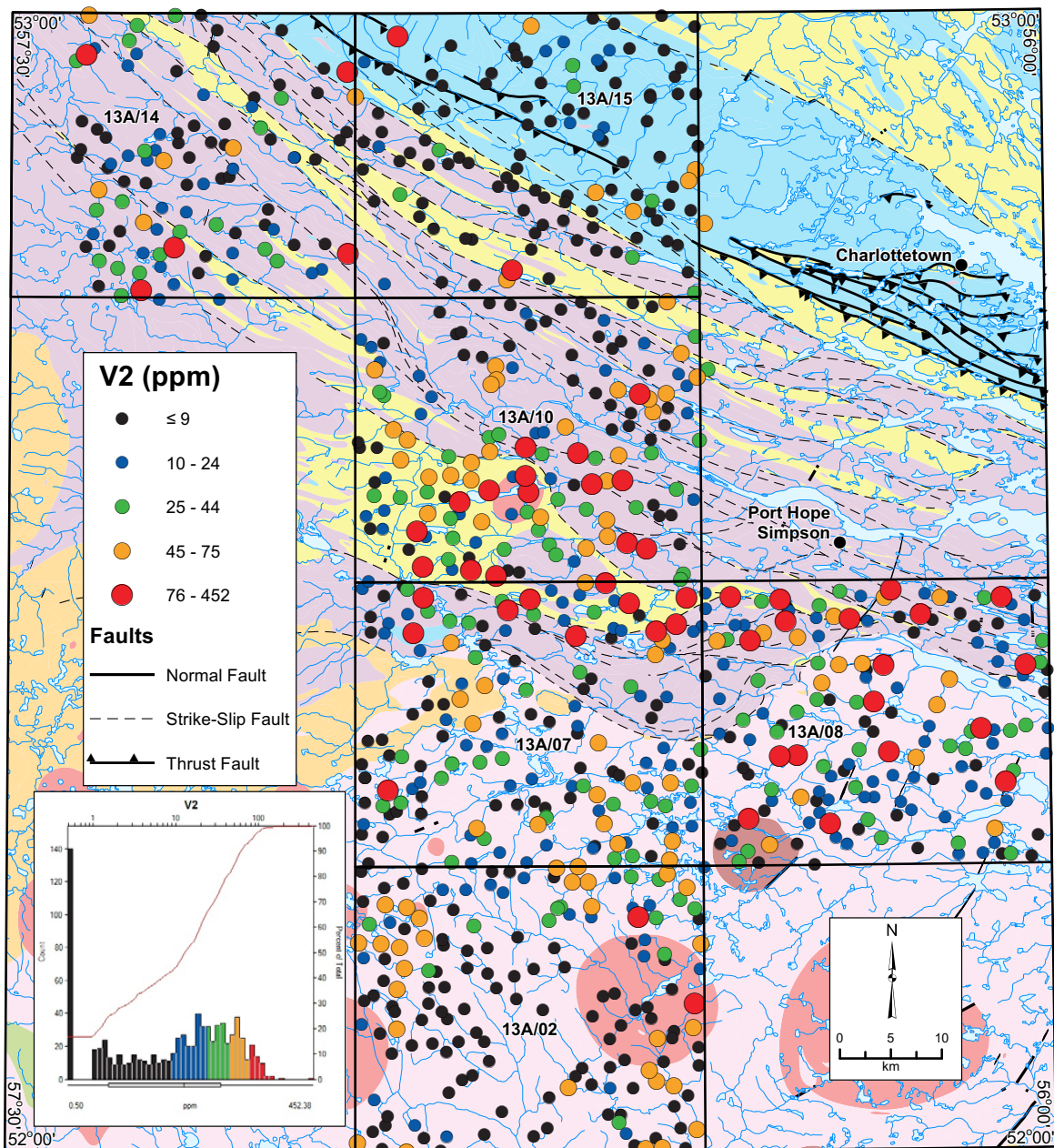
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 73. Titanium (Ti<sub>2</sub>) in lake sediment.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic

(1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

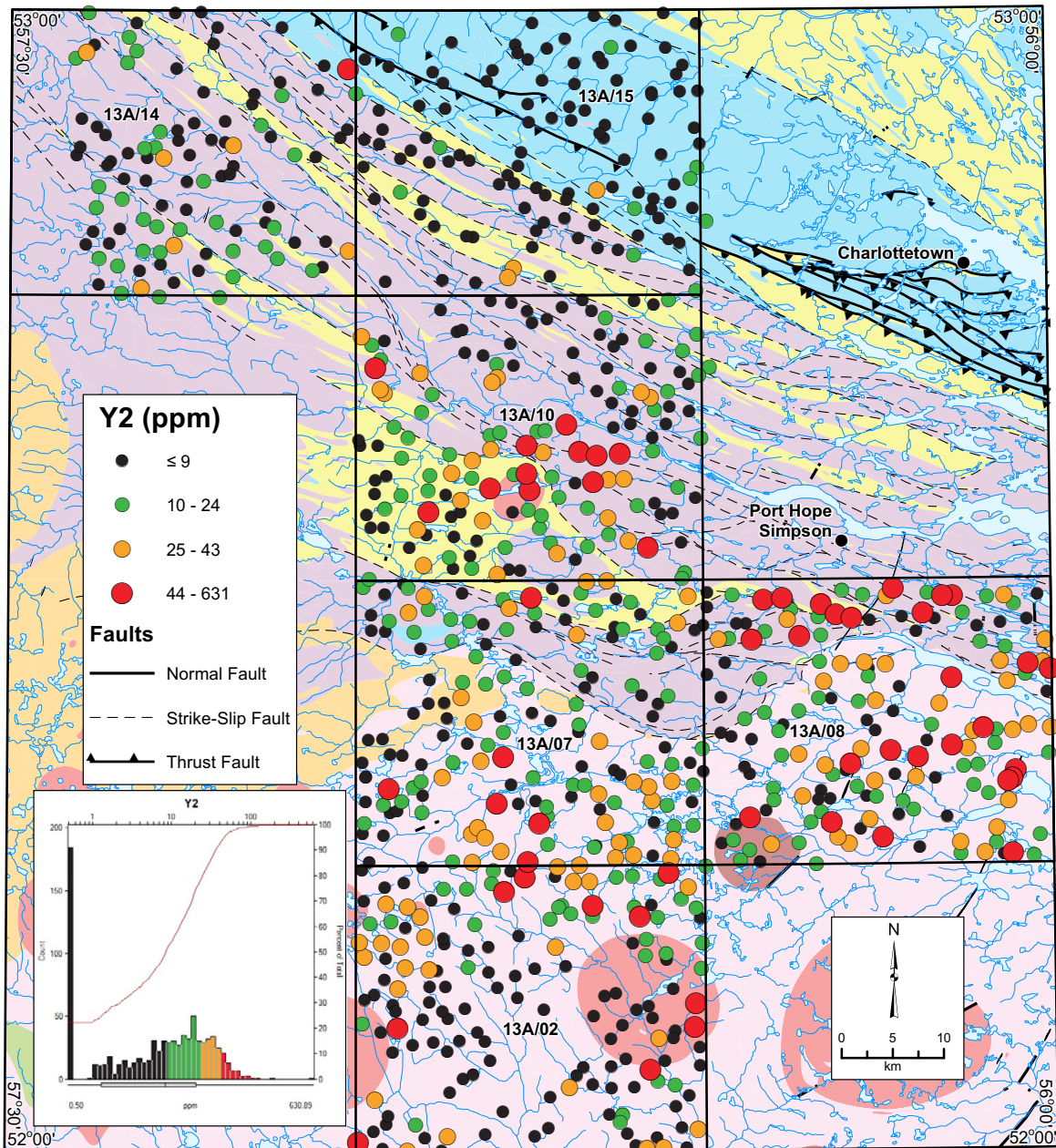
(1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

(ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 74. Vanadium (V2) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic

(1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

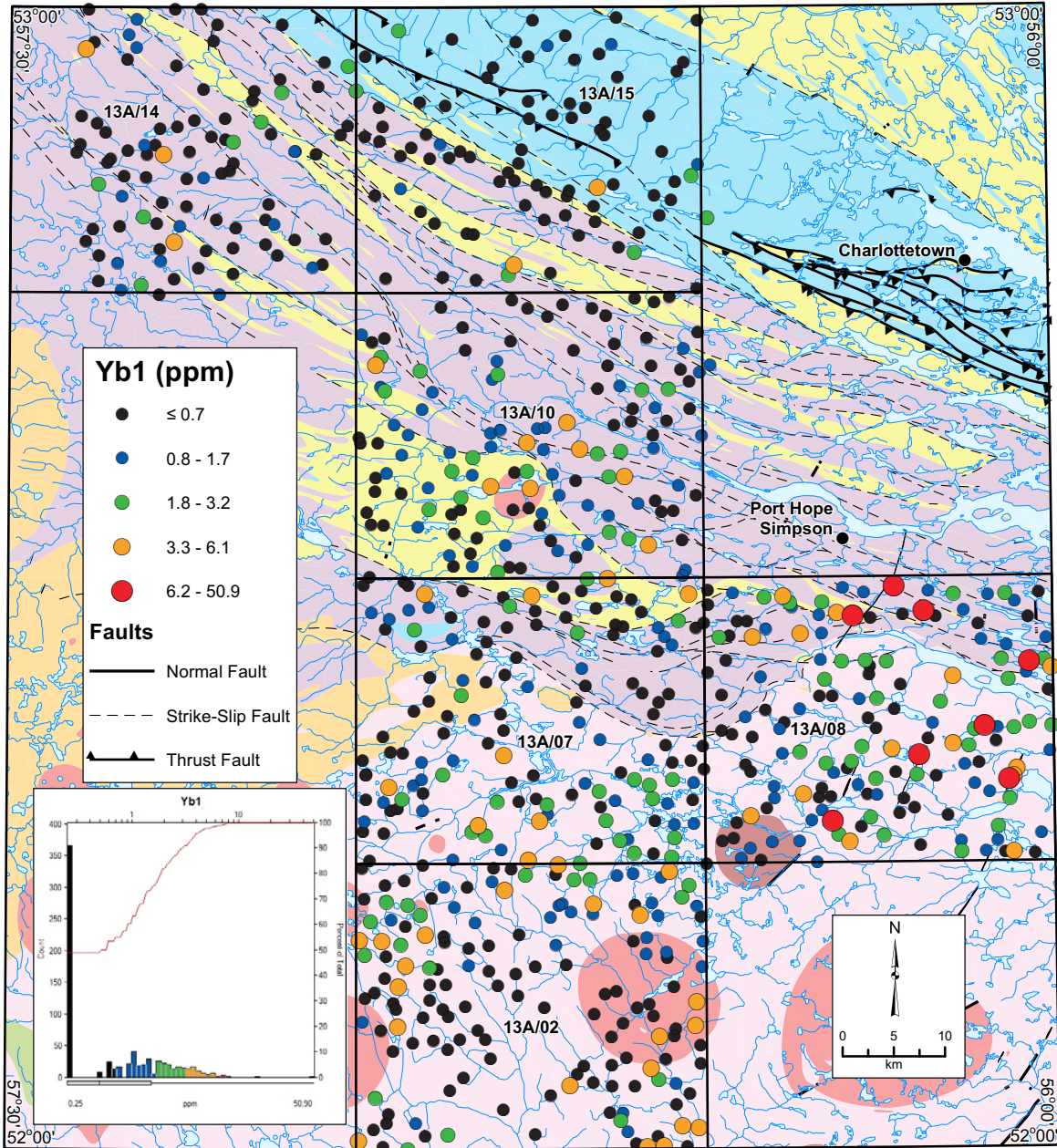
(1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

(ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 75. Yttrium (Y<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

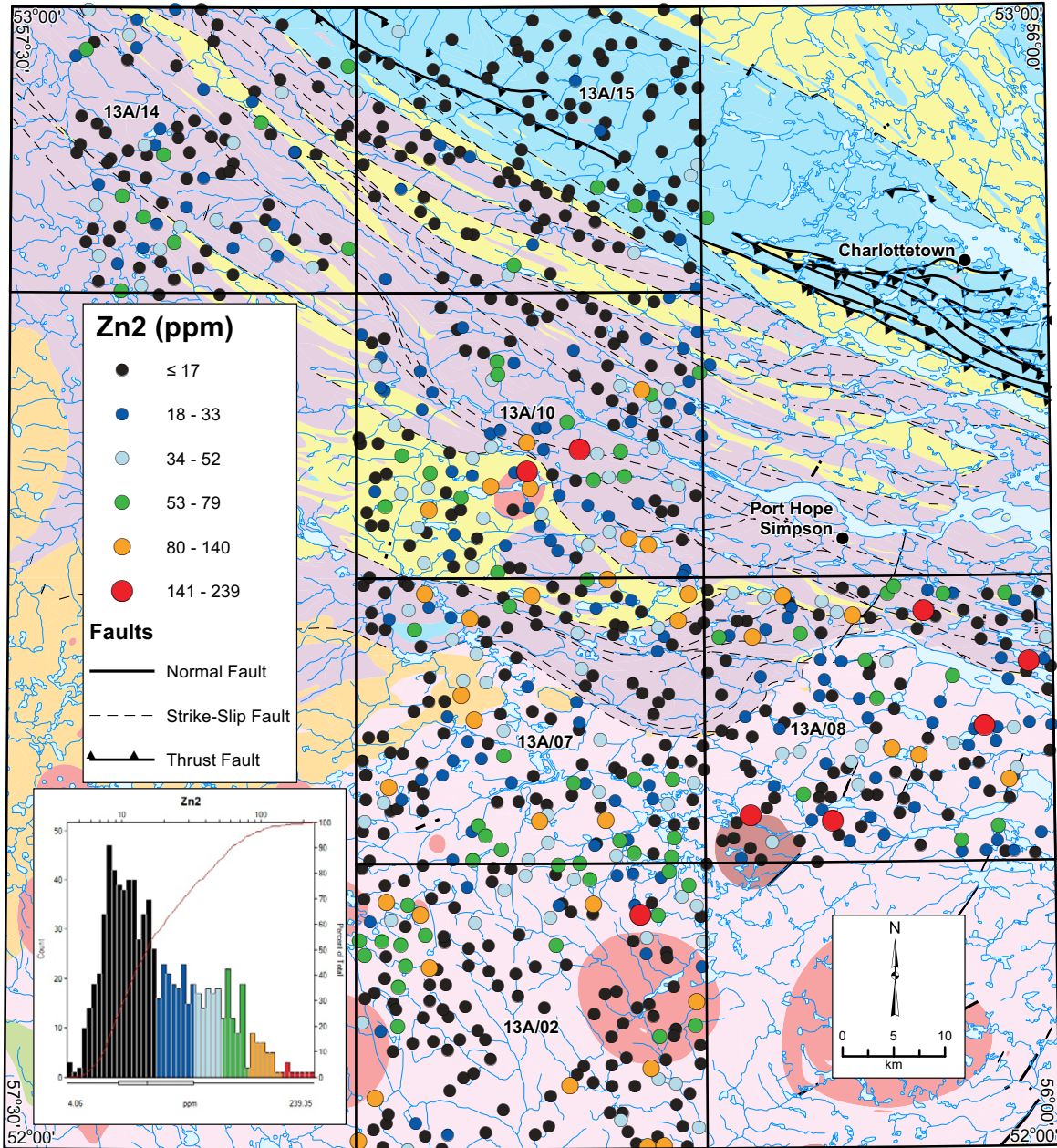
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 76. Ytterbium (Yb1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

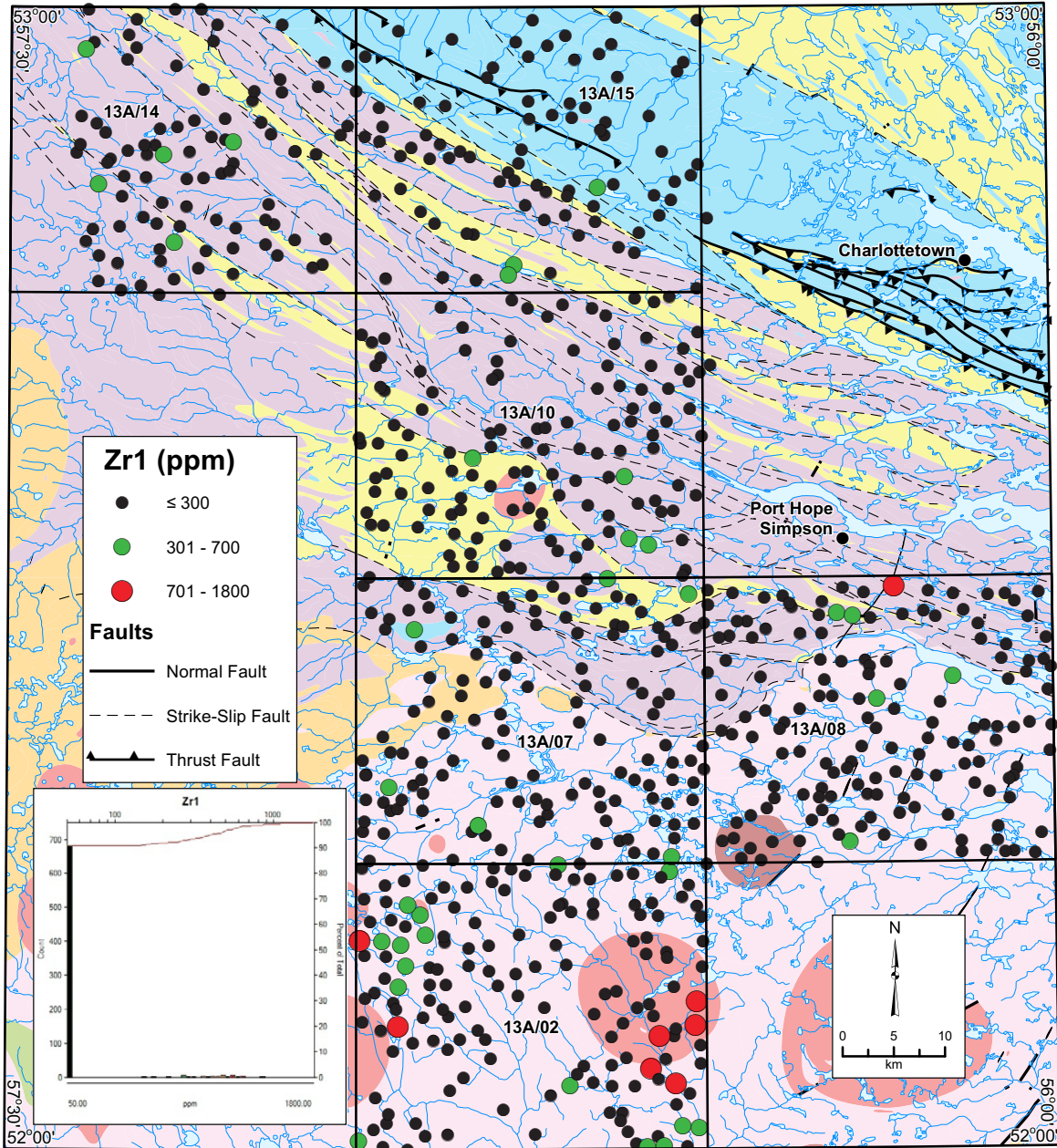
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 77. Zinc (Zn<sub>2</sub>) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

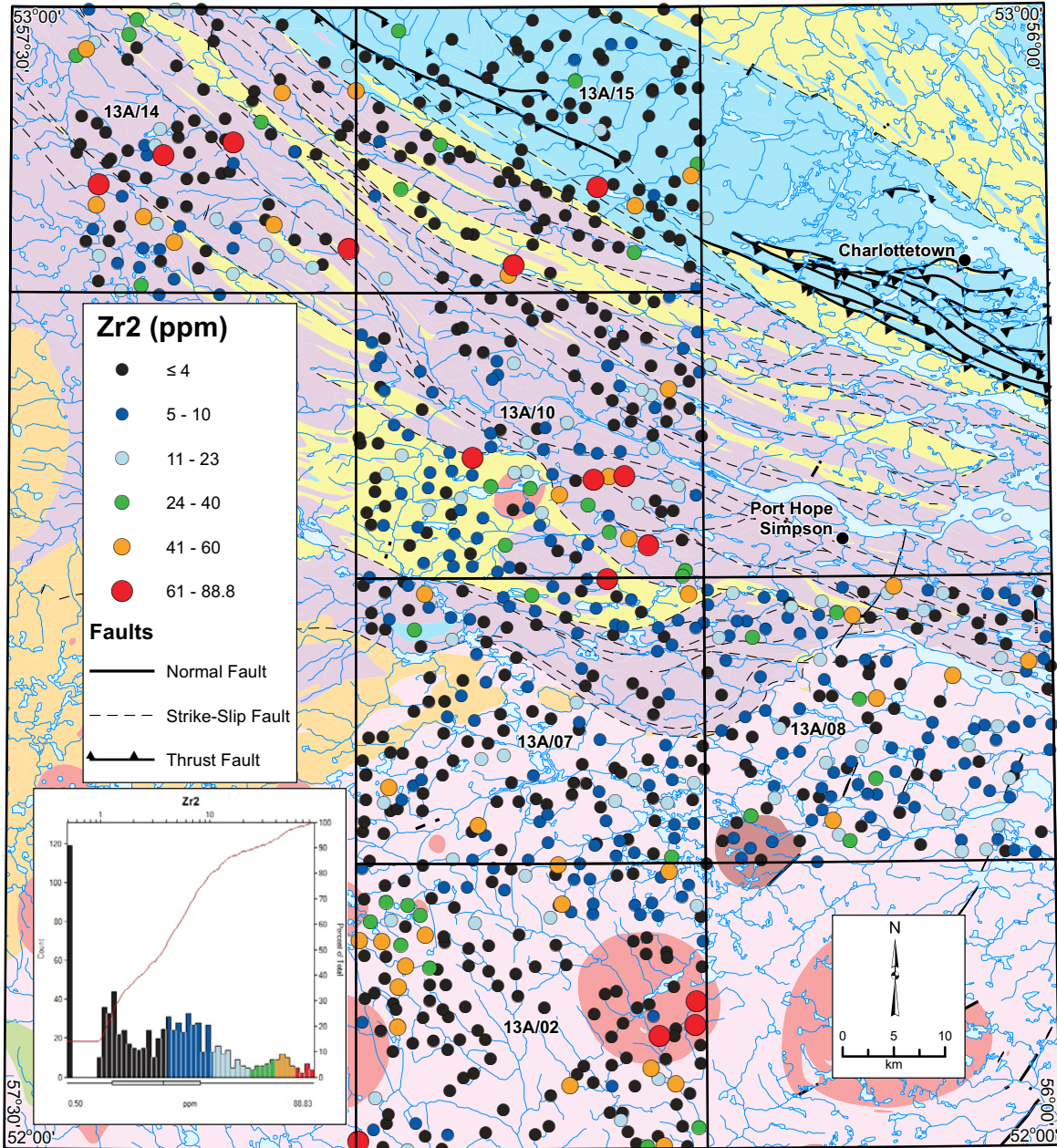
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 78. Zirconium (Zr1) in lake sediment.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 79. Zirconium (Zr<sub>2</sub>) in lake sediment.

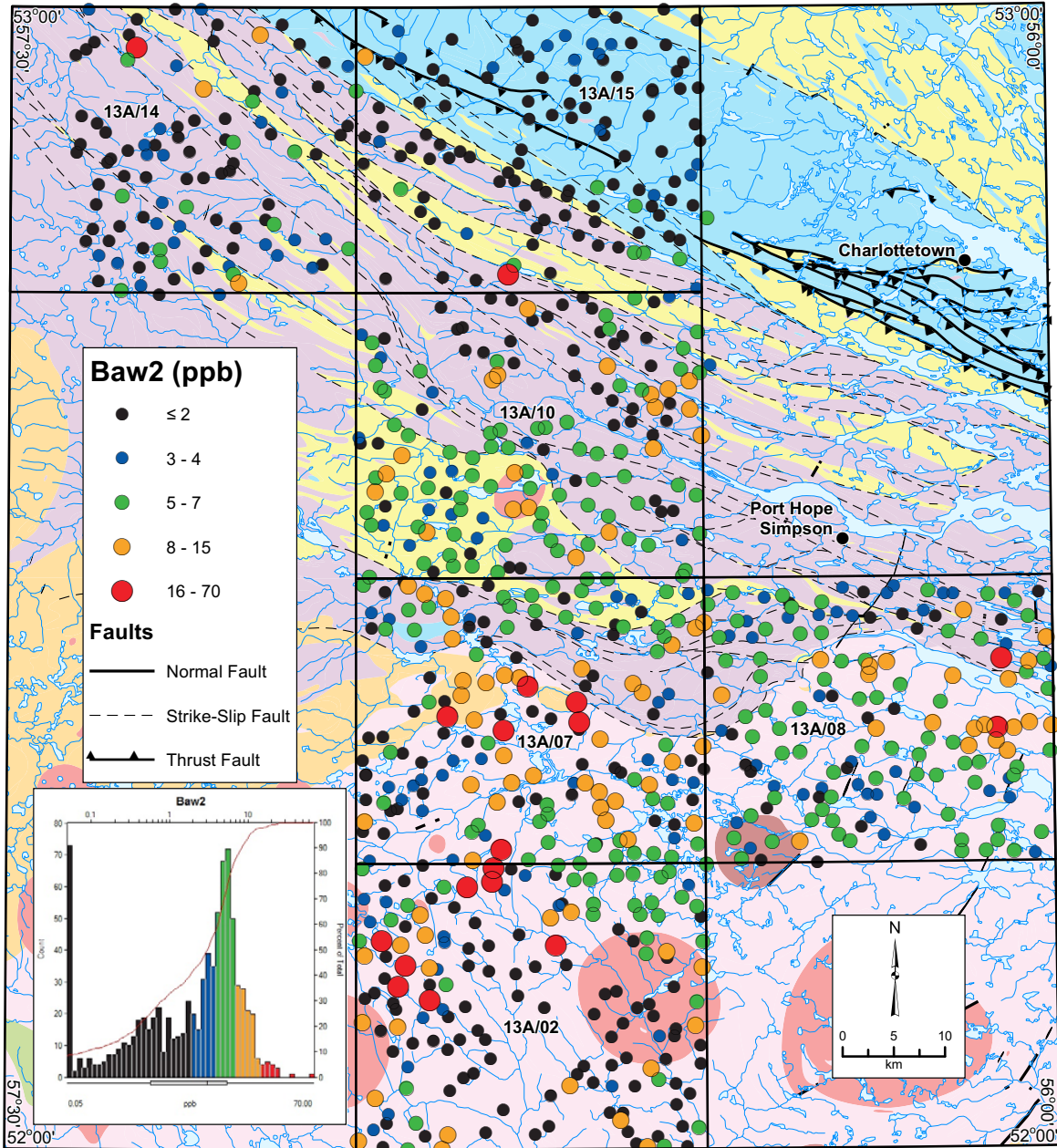
## **APPENDIX 3**

### **Figures 80-98**

### **Symbol Plots of Element Distributions of Water Data Not Discussed in the Text**







### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

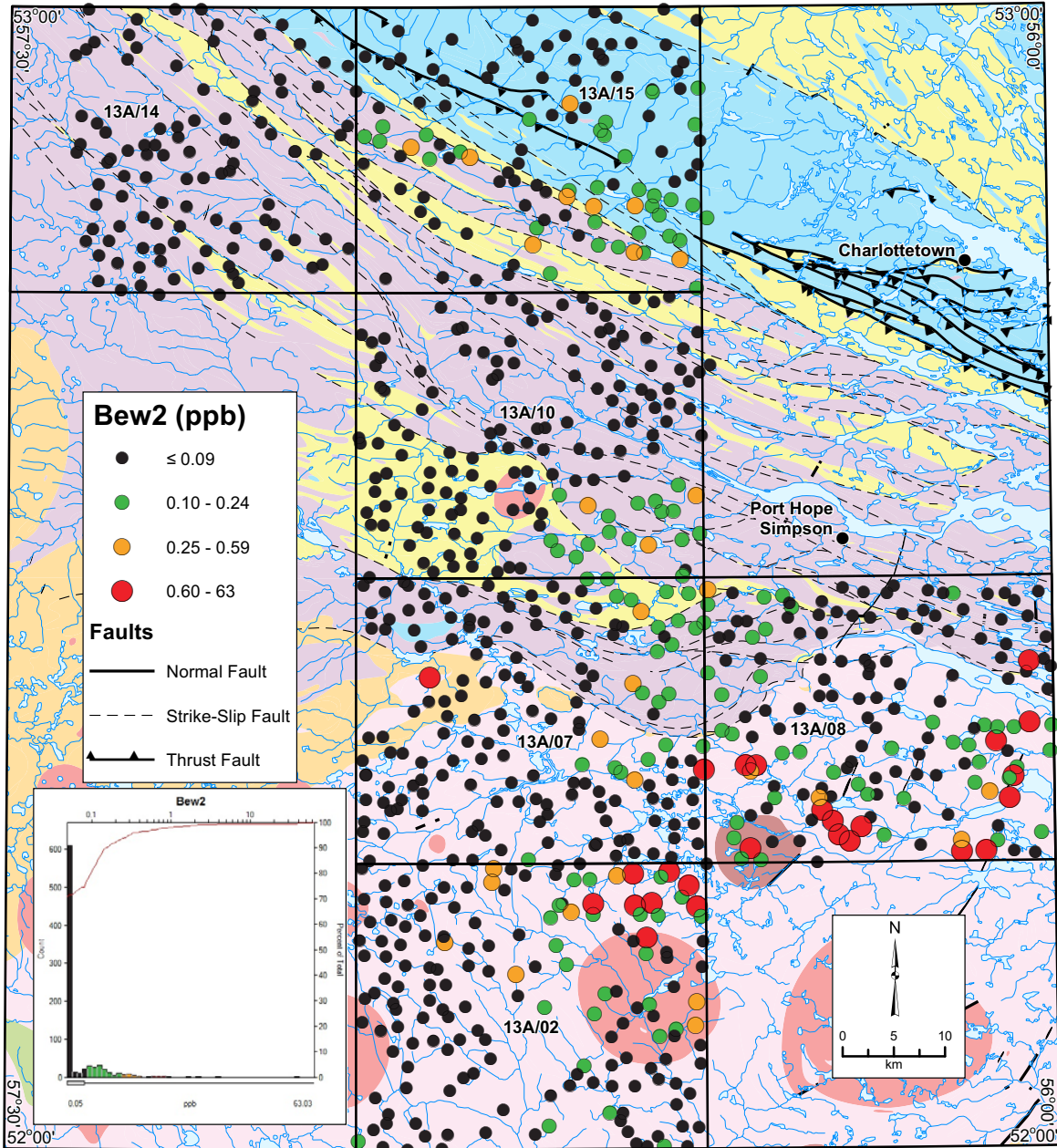
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 80. Barium (Baw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

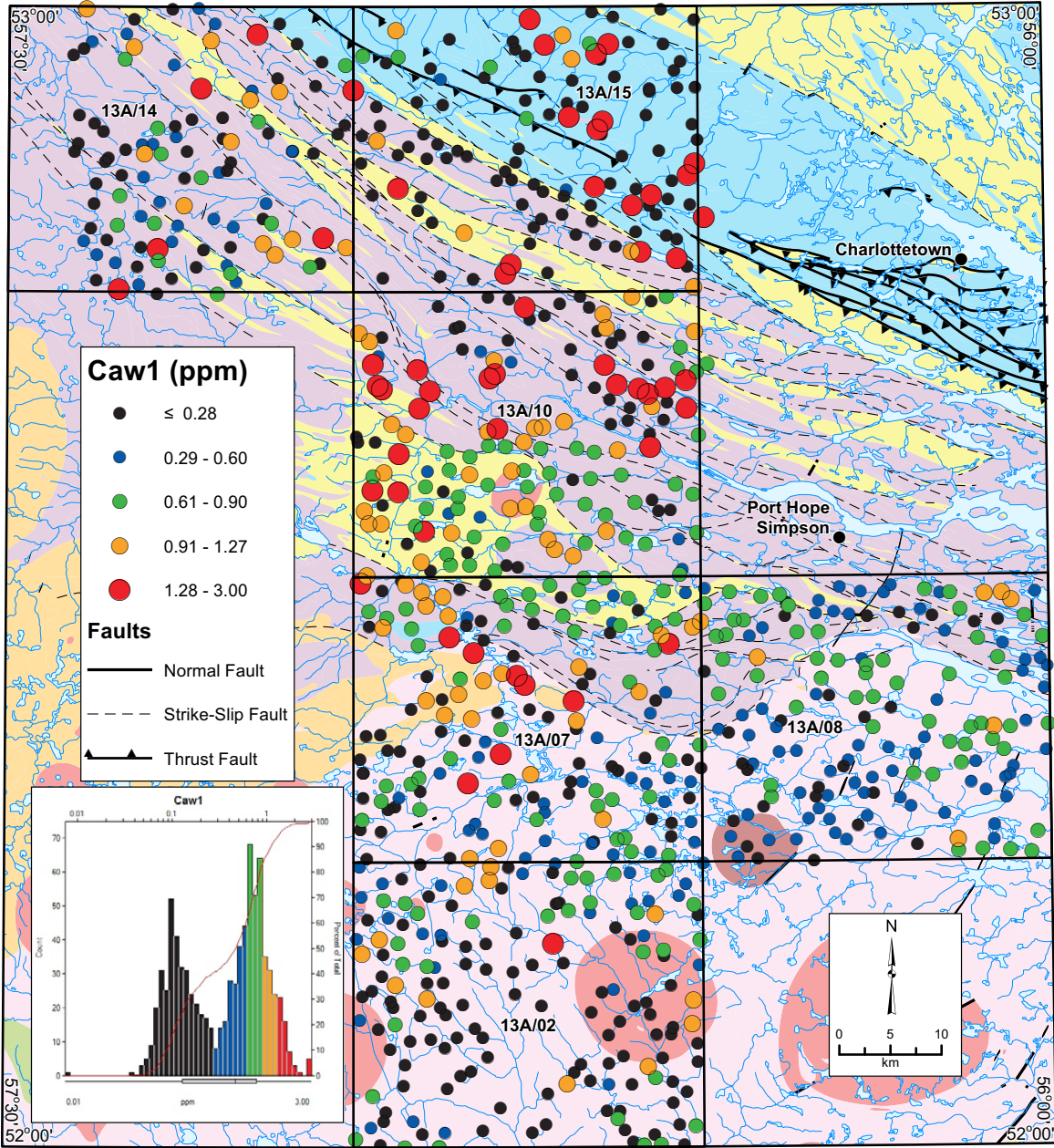
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 81. Beryllium (Bew2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

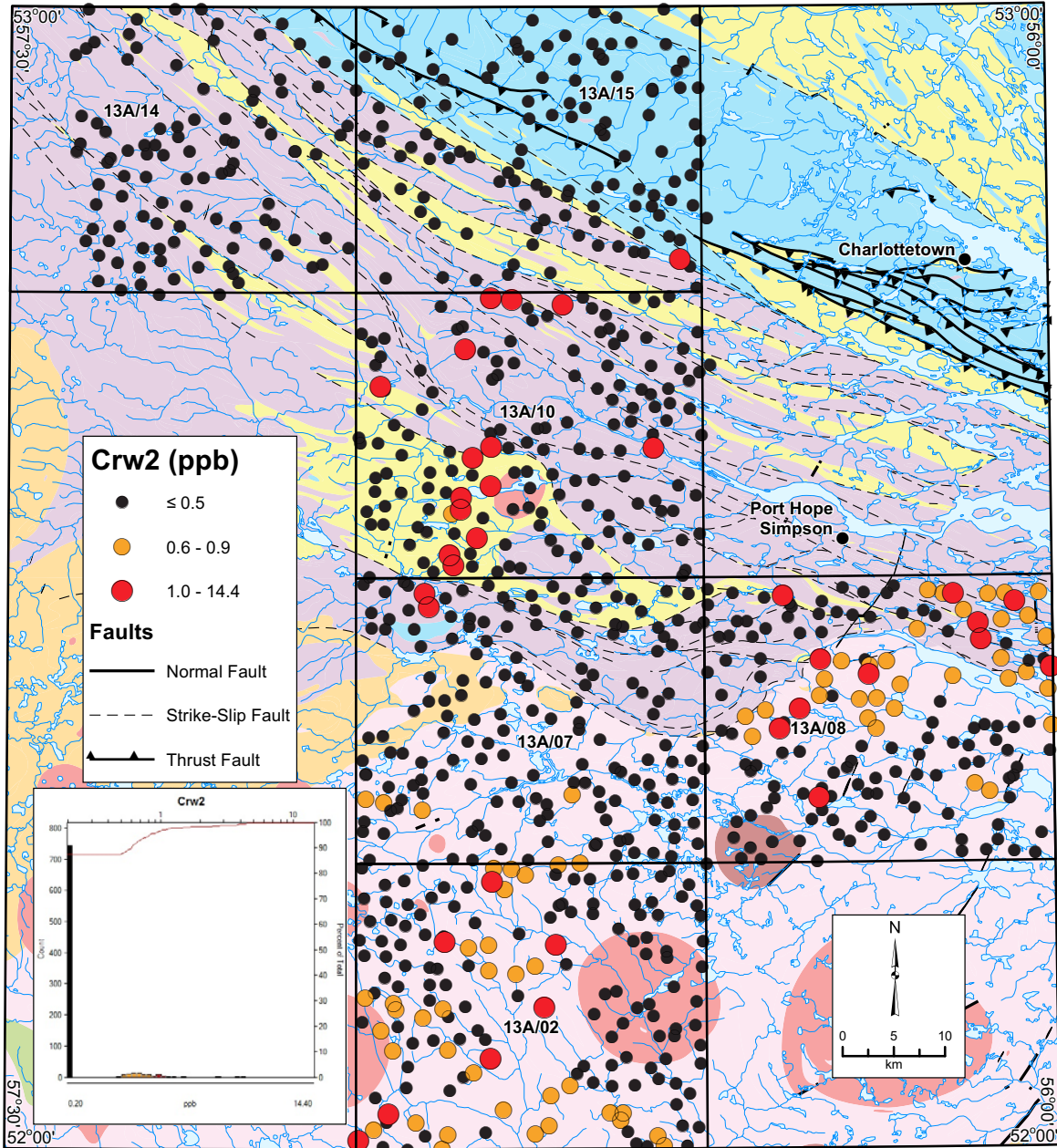
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 82. Calcium (Caw1) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

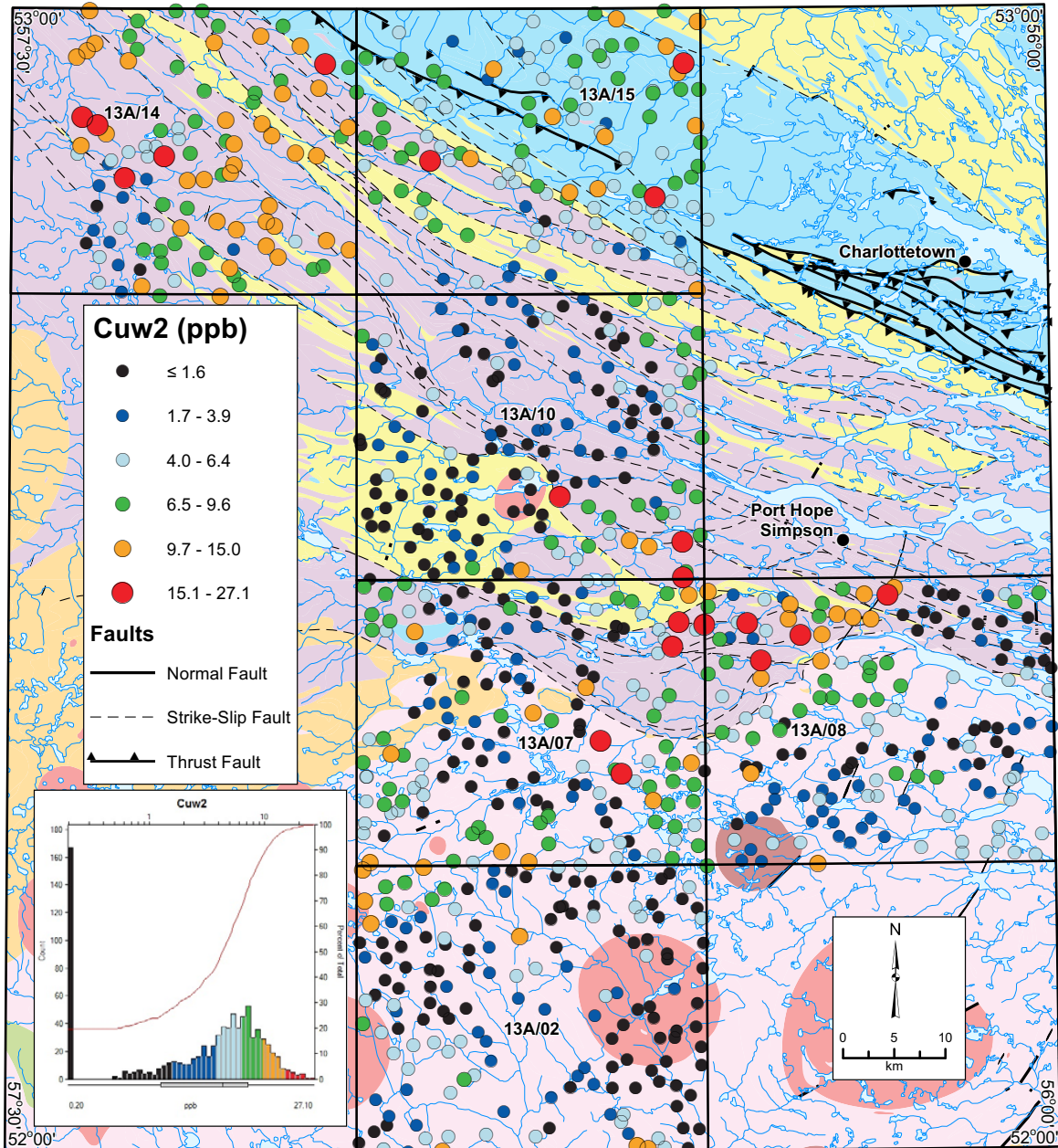
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 83. Chromium (Crw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

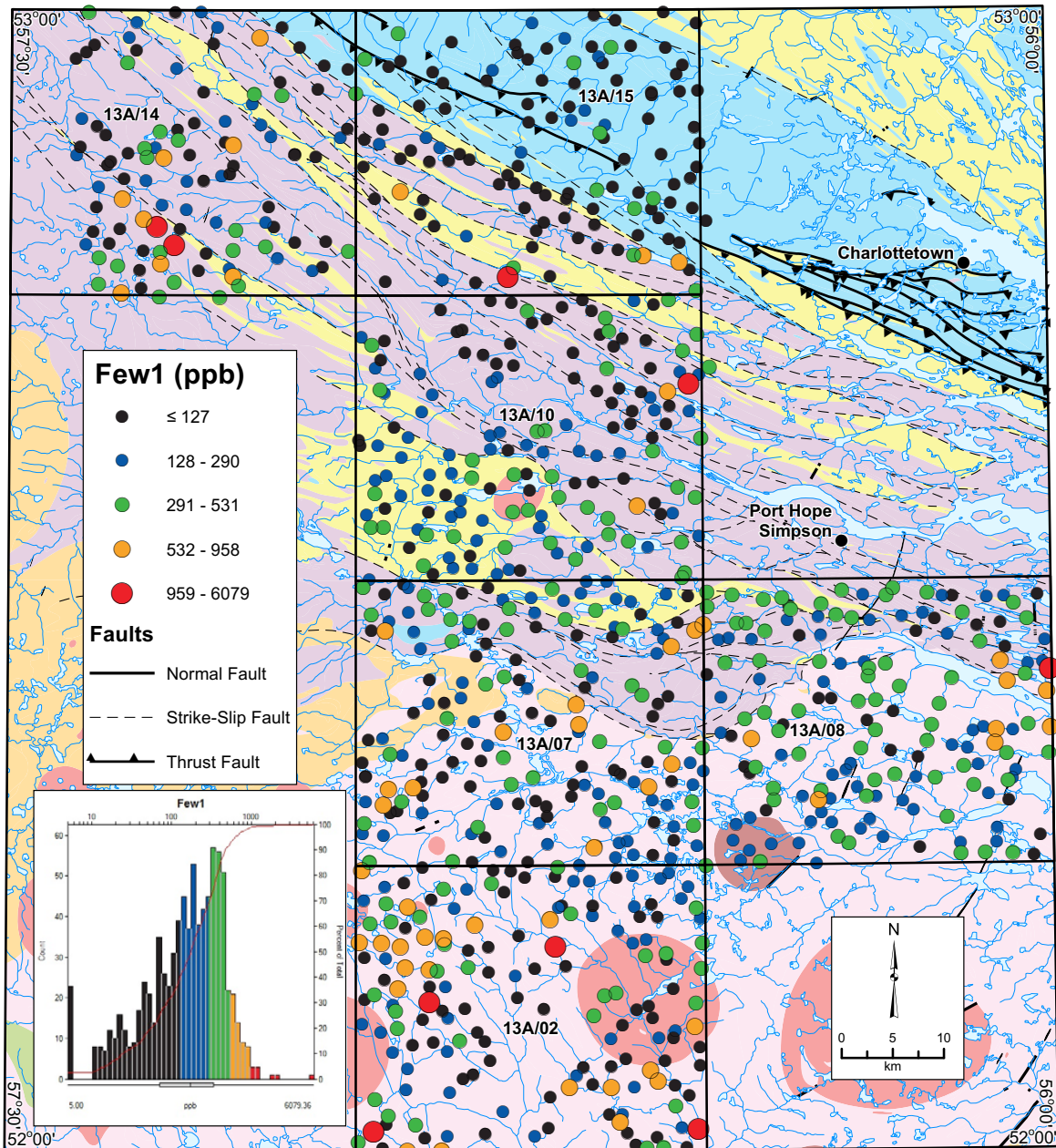
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 84. Copper (Cuw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

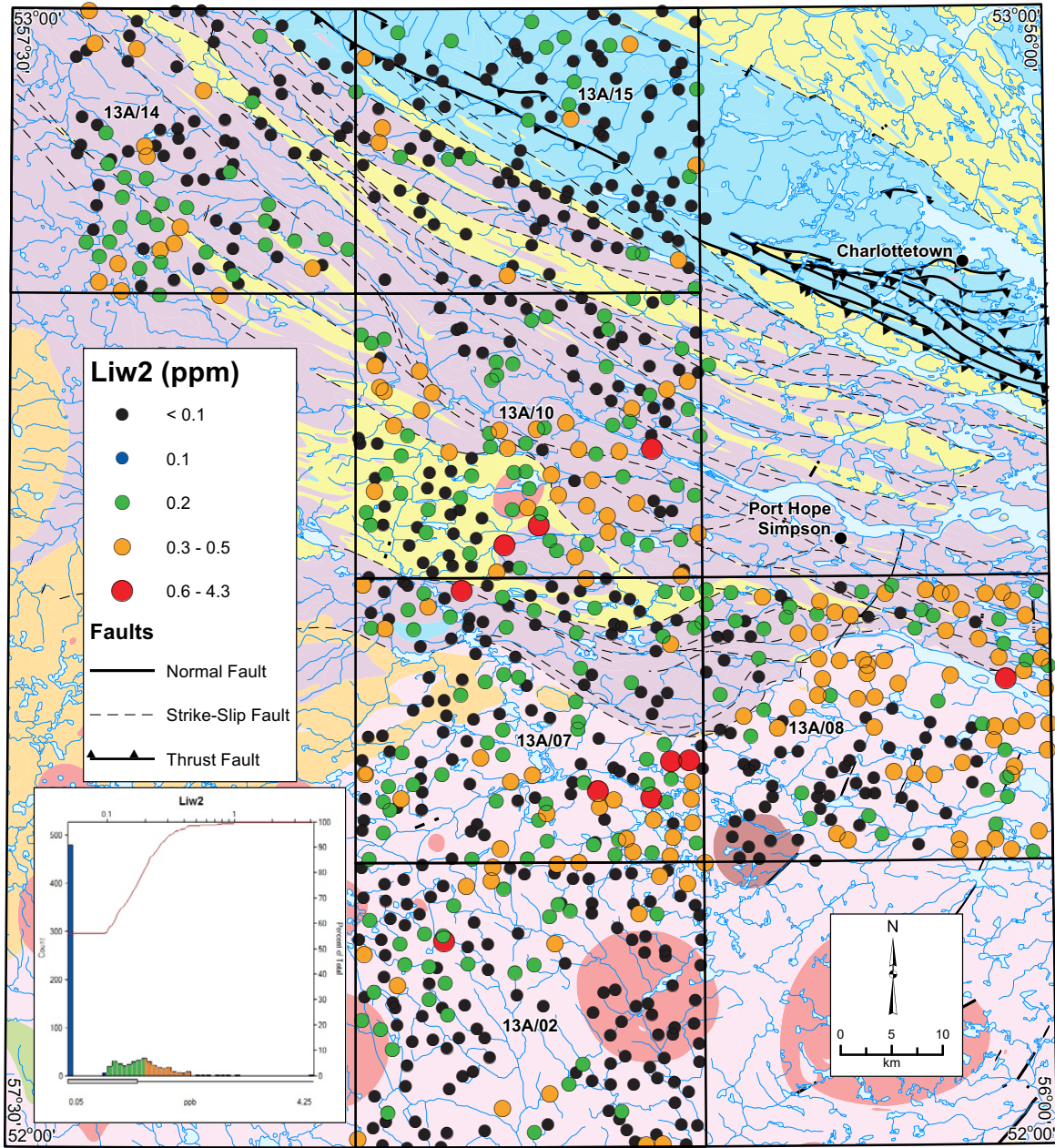
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 85. Iron (Few1) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

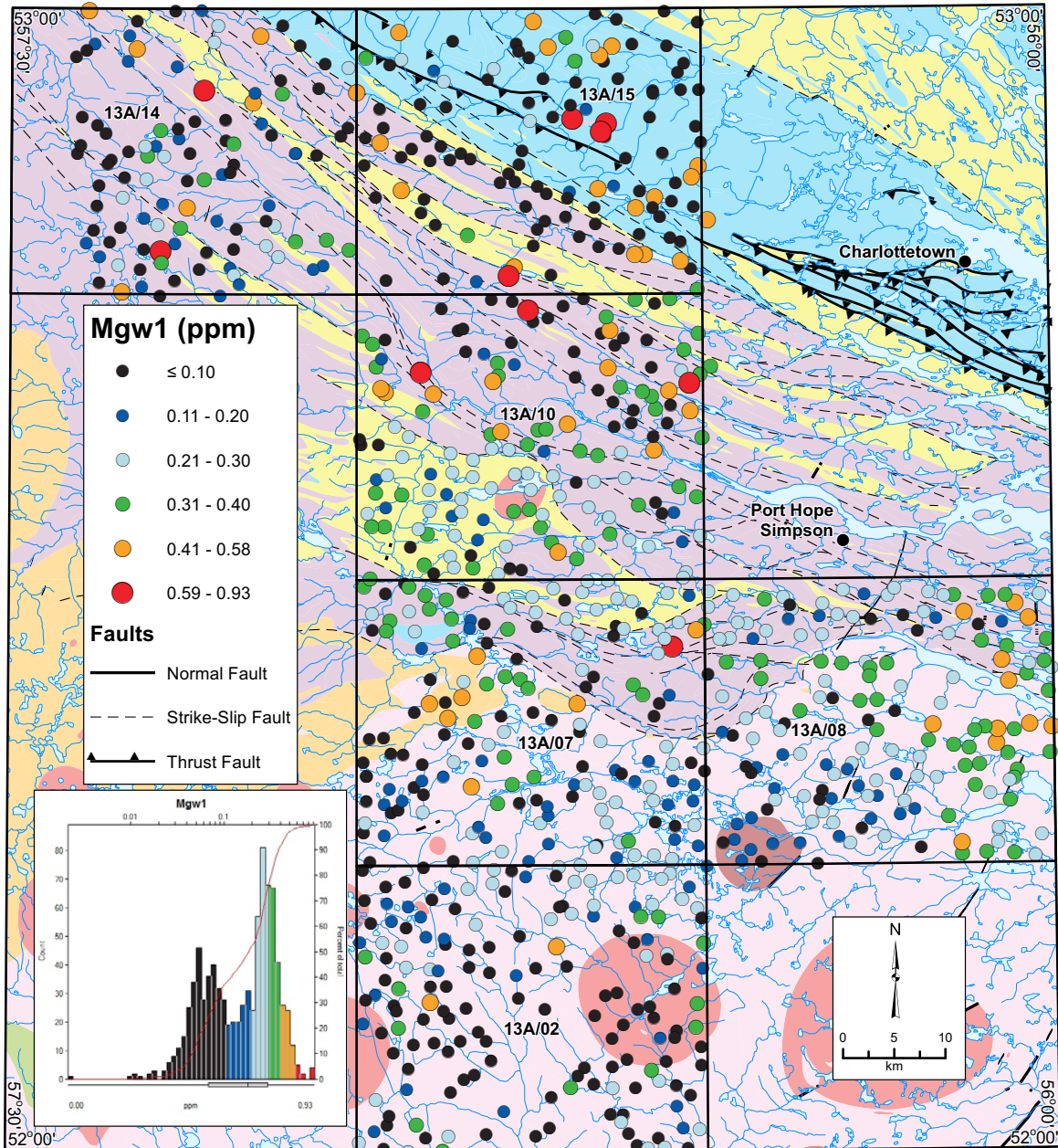
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 86. Lithium (Liw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

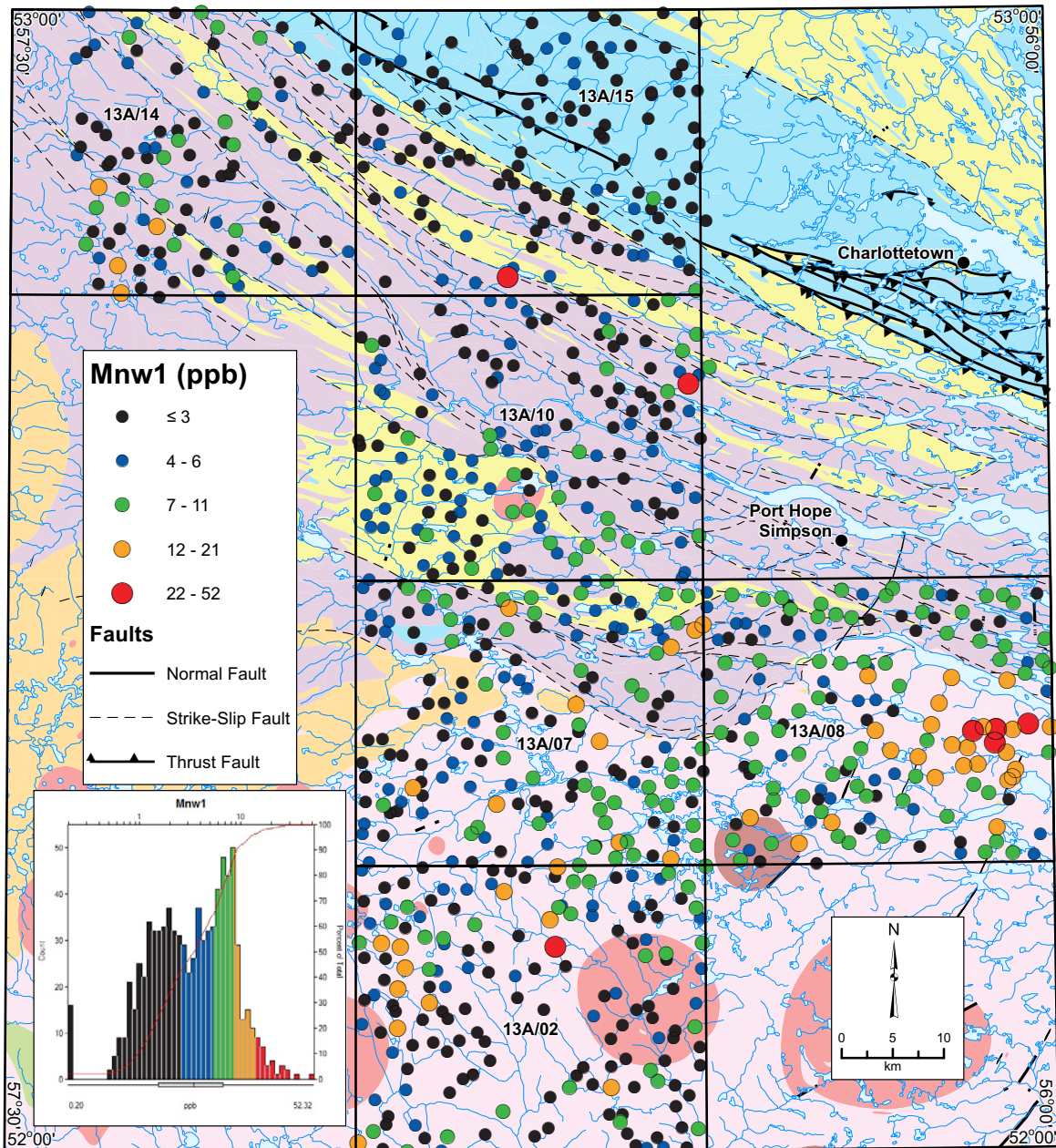
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 87. Magnesium (Mgw1) in lake water.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic

(1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

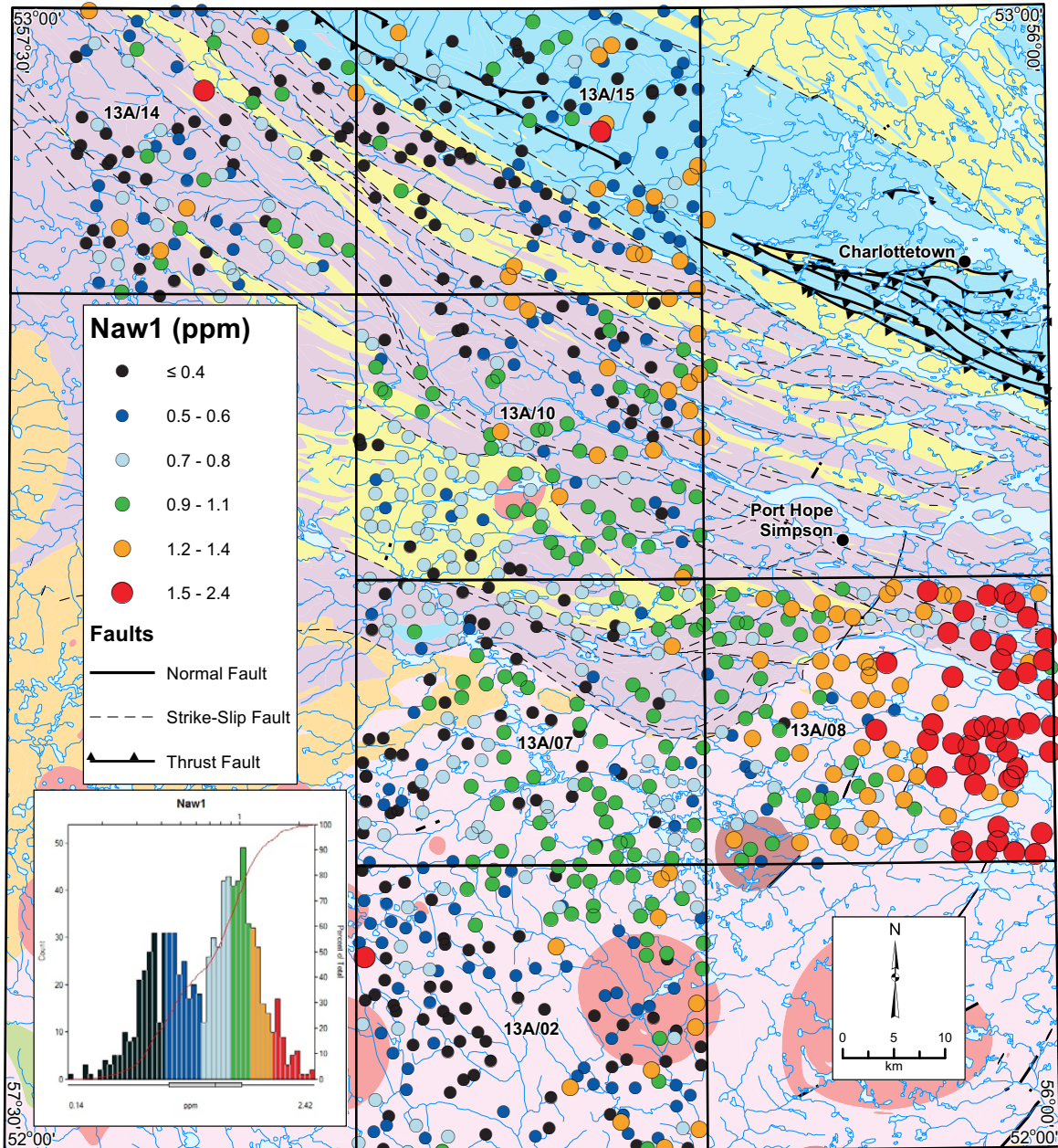
(1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

(ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 88. Manganese (Mnw1) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic

##### (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>ln), leucogabbro and leucogabbro (P<sub>3C</sub>gn), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

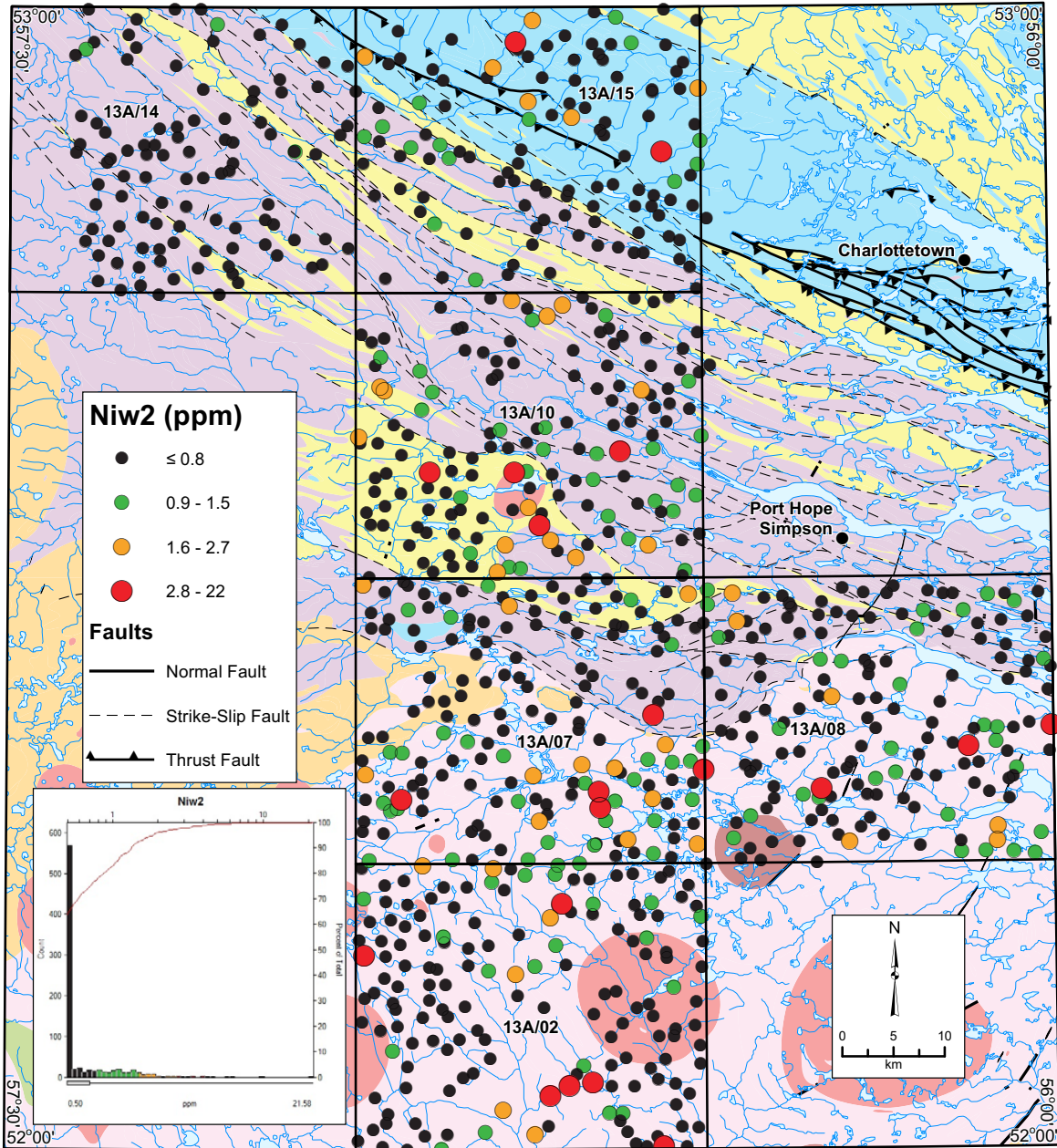
##### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

##### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 89. Sodium (Naw1) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

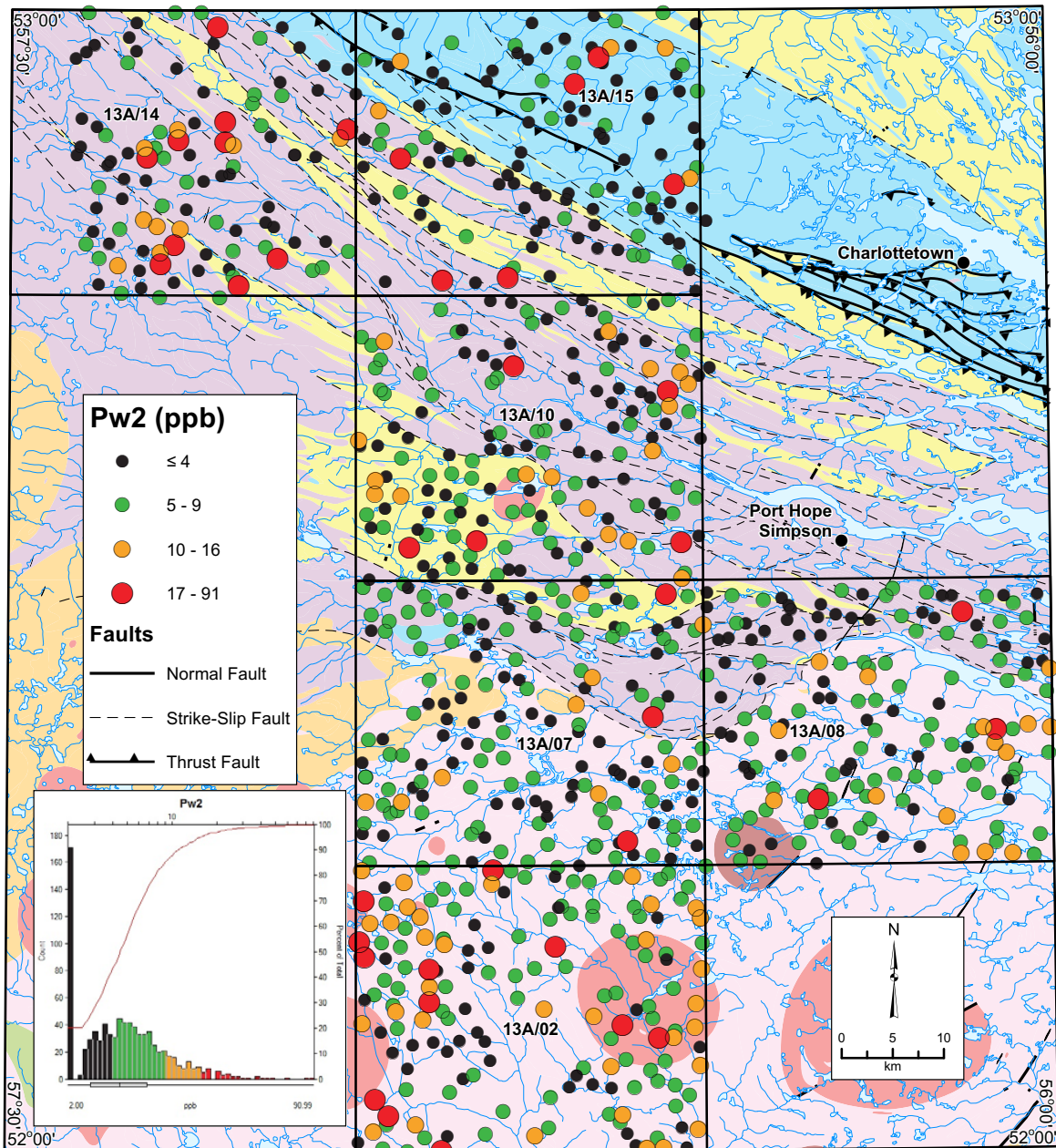
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 90. Nickel (Niw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

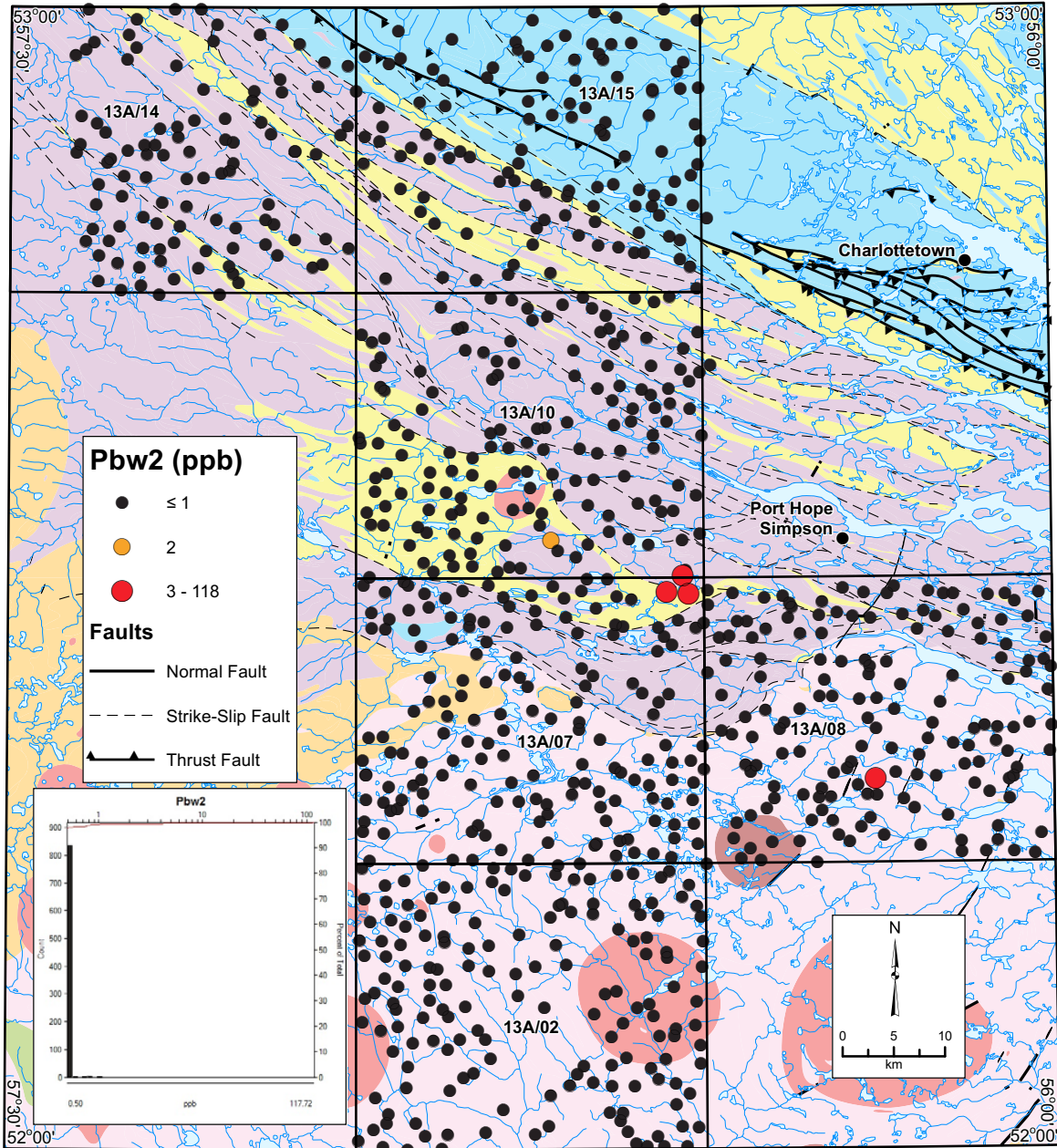
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 91. Phosphorus (Pw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

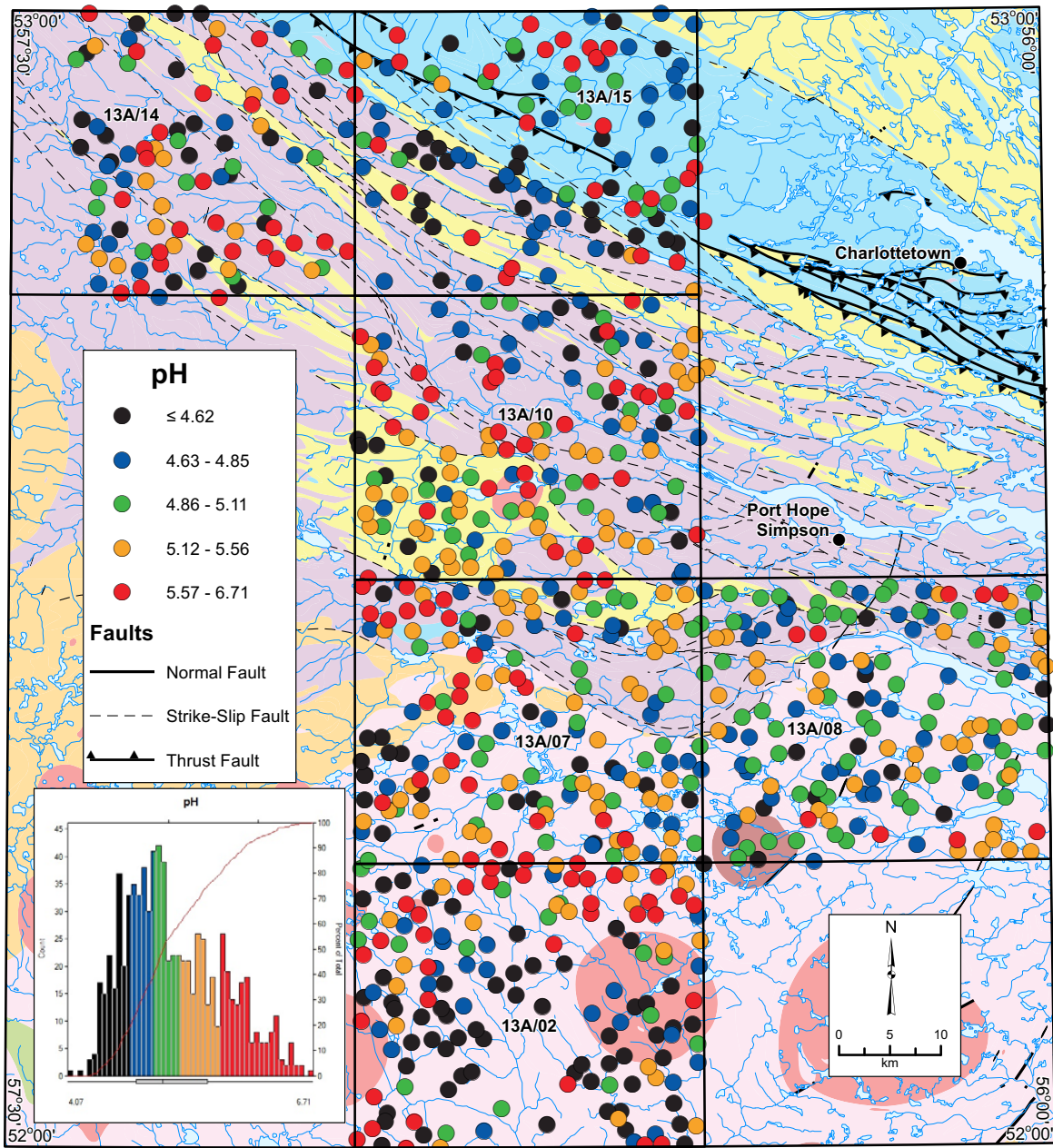
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 92. Lead (Pbw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

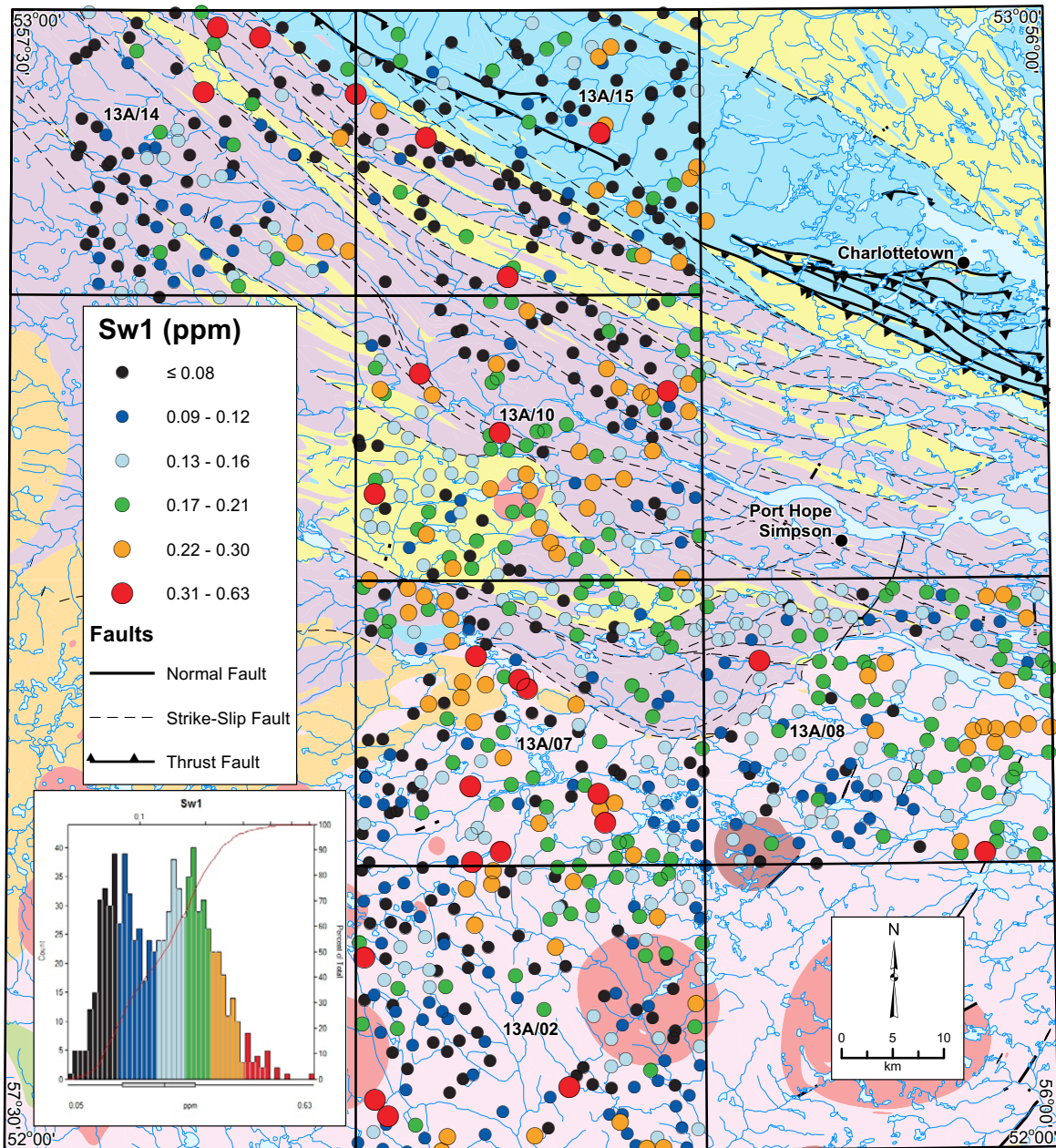
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 93. pH in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

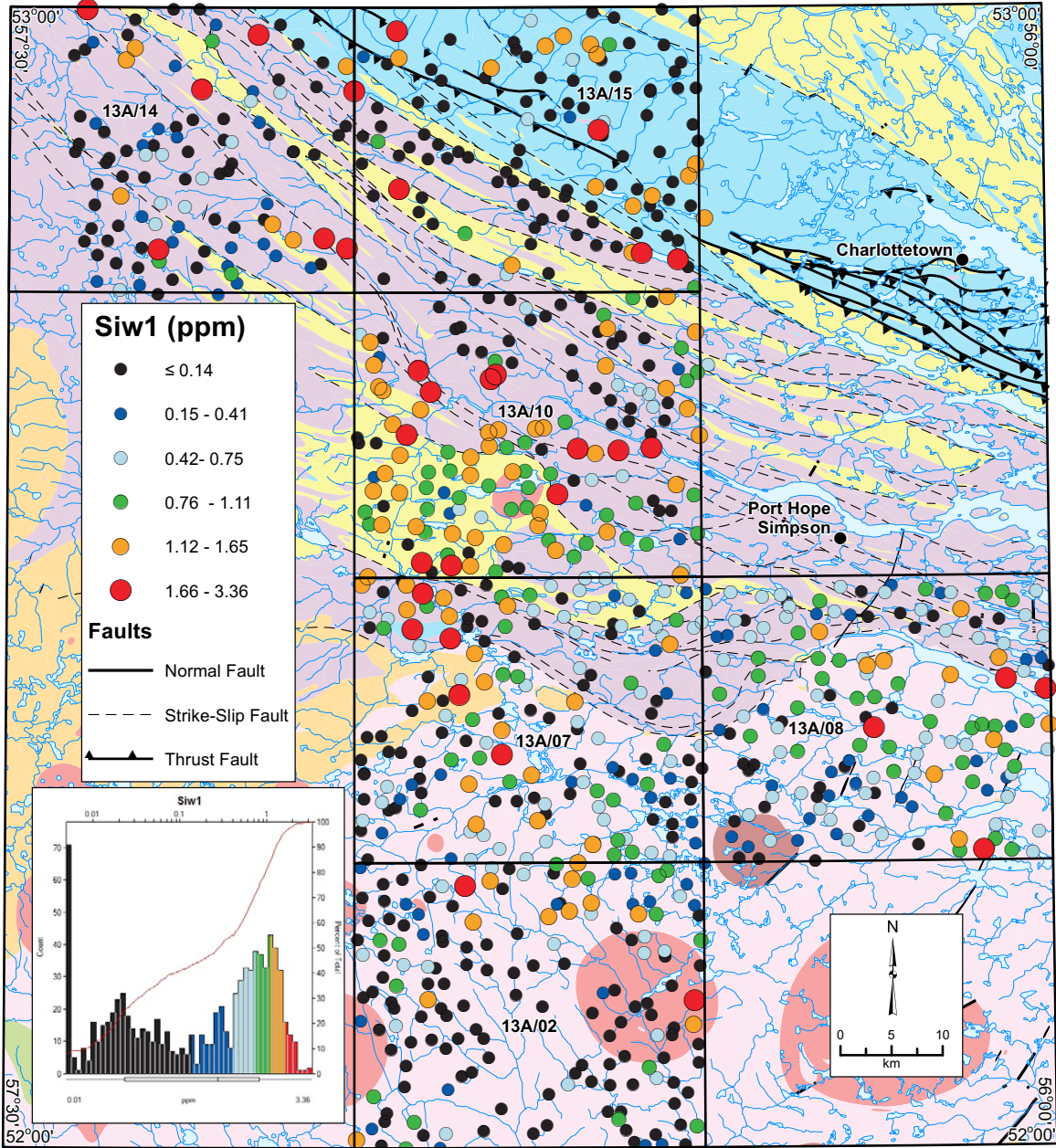
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 94. Sulphur (Sw1) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

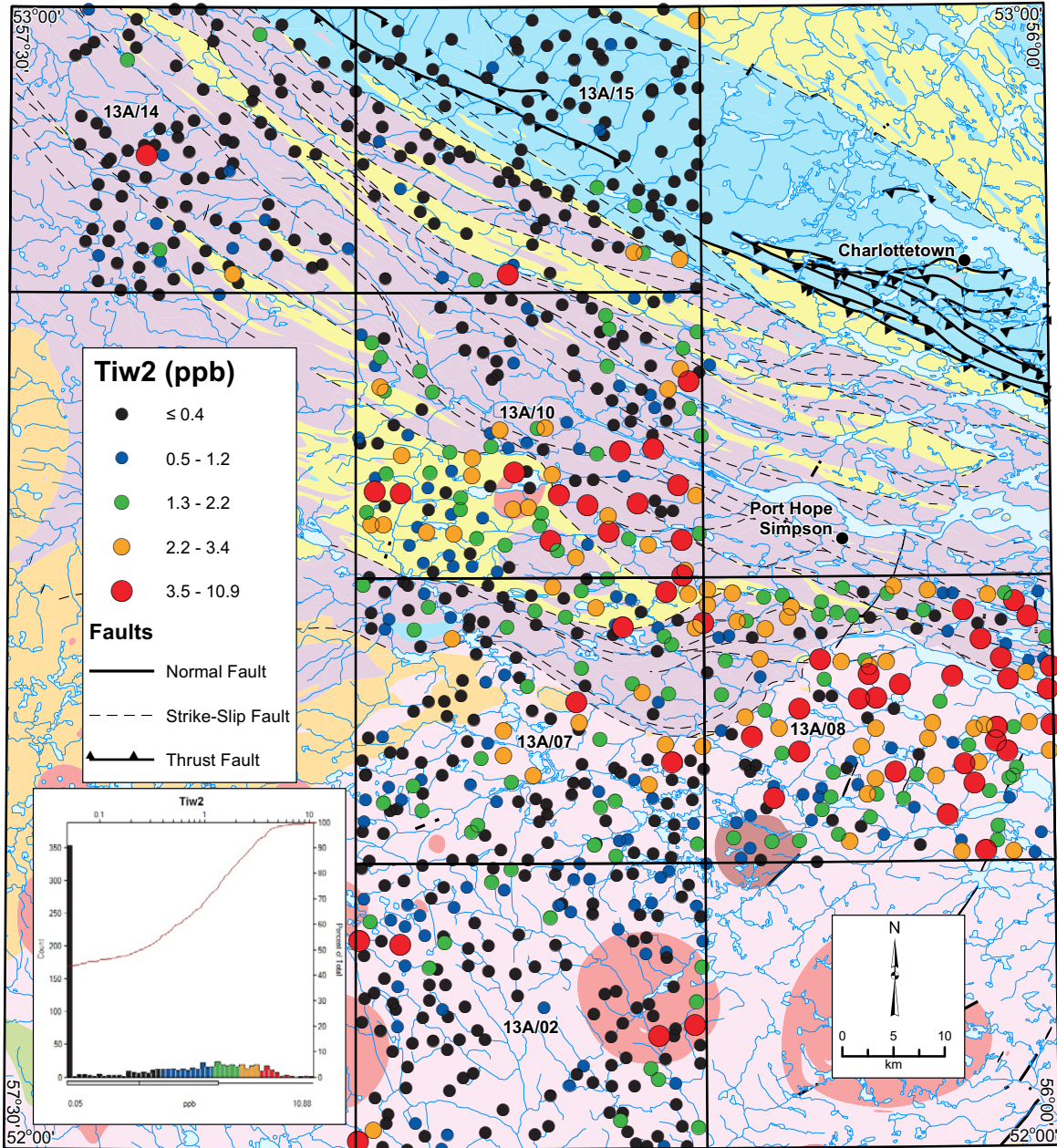
**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 95. Silicon (Siw1) in lake water.





### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthositic and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

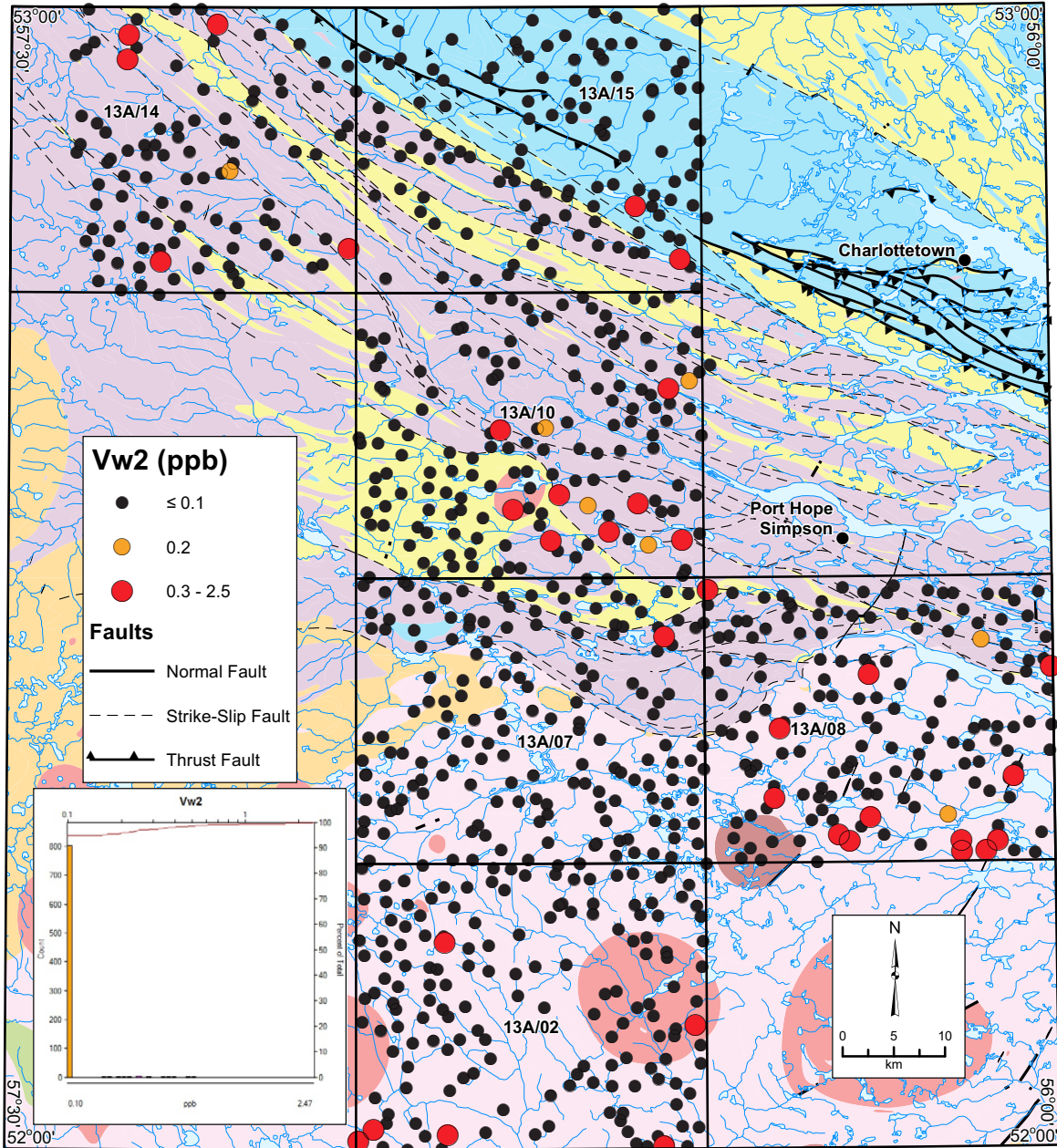
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthositic and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 96. Titanium (Tiw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rG); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

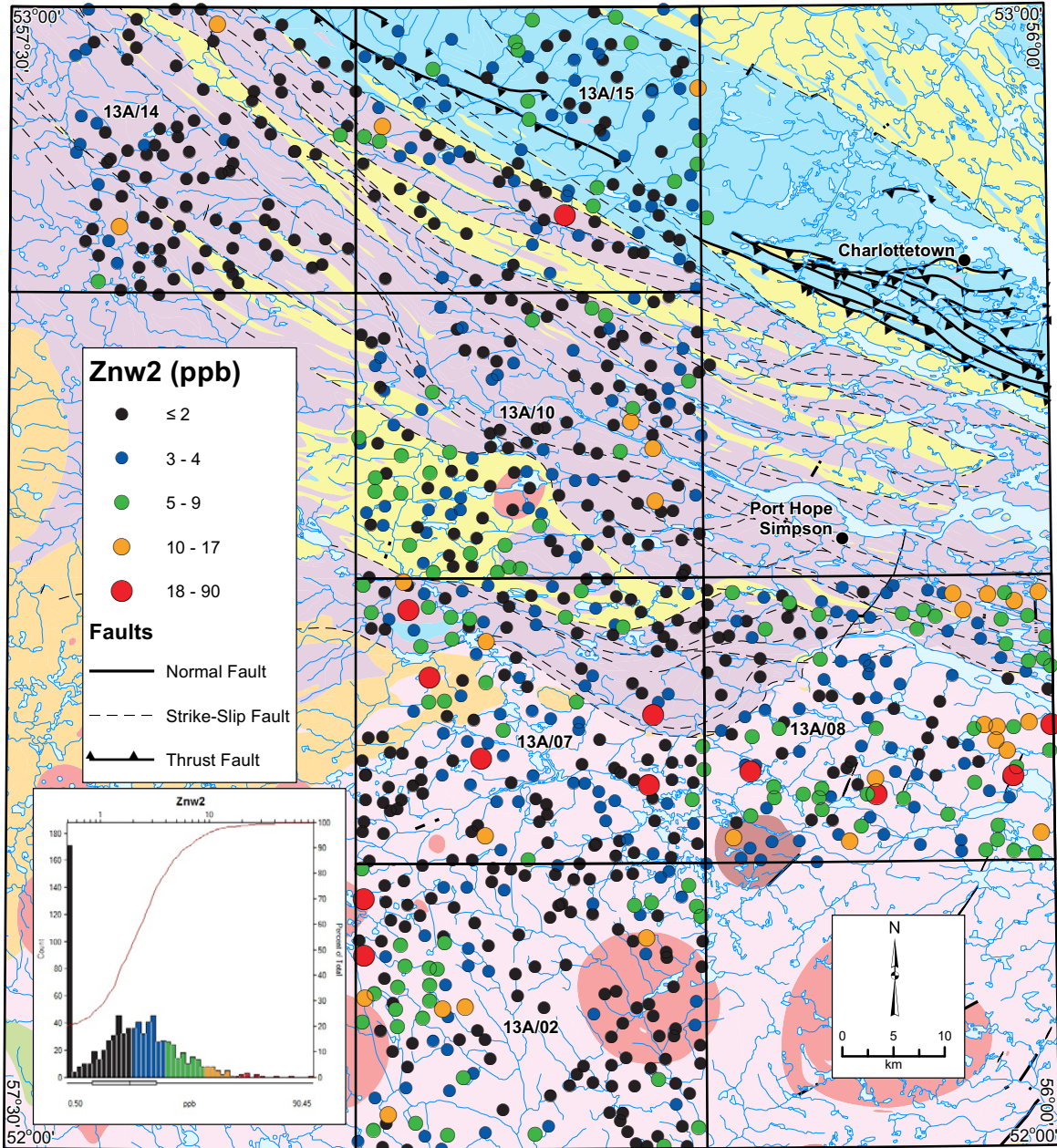
#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 97. Vanadium (Vw2) in lake water.



### Synoptic Bedrock Geology

#### Early Neoproterozoic (ca. 975–955 Ma)

**M<sub>3D</sub>** Granite to alkali-feldspar granite, syenite and quartz syenite

#### (ca. 985–975 Ma)

**M<sub>3C</sub>** Syenite, quartz syenite and alkali-feldspar syenite (M<sub>3C</sub>Yq)

#### Late Mesoproterozoic (ca. 1085–985 Ma)

**M<sub>3B</sub>** Granite and alkali-feldspar granite (M<sub>3B</sub>Gr)

#### Early Mesoproterozoic (1600–1400 Ma)

**M<sub>1</sub>** Gabbro, norite and troctolite (M<sub>1</sub>rg); leucogabbro and anorthositic gabbro (M<sub>1</sub>ln) and amphibolite (M<sub>1</sub>am)

#### Late Paleoproterozoic to Early Mesoproterozoic (1800–1350 Ma)

**PM** Recrystallized granite and alkali-feldspar granite (PMgr); syenite, alkali-feldspar syenite and quartz syenite (PMYq) and megacrystic/porphyritic granite to quartz monzonite (PMgp)

#### Late Paleoproterozoic (1660–1600 Ma)

**P<sub>3C</sub>** Mafic granulite (P<sub>3C</sub>ag), amphibolite (P<sub>3C</sub>am), anorthosite and leucogabbro (P<sub>3C</sub>an), leucogabbro and leucogabbro (P<sub>3C</sub>ln), gabbro and norite (P<sub>3C</sub>rg), diorite, quartz diorite and tonalite (P<sub>3C</sub>dr), alkali-feldspar granite, granite and quartz syenite (P<sub>3C</sub>ga), granite to granodiorite (P<sub>3C</sub>gd), megacrystic/porphyritic granite to granodiorite (P<sub>3C</sub>gp), quartz monzonite (P<sub>3C</sub>mq) and monzonite (P<sub>3C</sub>mz)

#### (1800–1710 Ma)

**P<sub>3B</sub>** Foliated to gneissic diorite to quartz diorite (P<sub>3B</sub>dr), foliated to gneissic granodiorite (P<sub>3B</sub>gd), foliated to gneissic megacrystic/porphyritic granitoid rocks and augen gneiss (P<sub>3B</sub>gp), foliated to gneissic quartz monzonite (P<sub>3B</sub>mq), foliated to gneissic granite and alkali-feldspar granite (P<sub>3B</sub>gr), amphibolite (P<sub>3B</sub>am), anorthosite and leucogabbro (P<sub>3B</sub>an), leucogabbro and leucogabbro (P<sub>3B</sub>ln) and gabbro and norite (P<sub>3B</sub>rg)

#### (ca. 1800–1770 Ma)

**P<sub>3B</sub>** Pelitic (P<sub>3B</sub>sp) and psammitic (P<sub>3B</sub>ss) schist and gneiss

Figure 98. Zinc (Znw2) in lake water.