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THE BUCK LAKE PGE PROSPECT, NORTHWESTERN ONTARIO

REPORT ON THE 2022 GEOCHEMICAL SURVEY

Thunder Bay Mining Division

Tib and Sharp Lake Townships, Senga Lake and Armistice Lake Areas
NTS 52 H/4NW
N49°09' 43.3'' and W89°58'53.3''
UTM Zones U15 and U16
282650E, 5449750N (U16)

for

Empire Metals Corp.
702-889 West Pender St.
Vancouver, B.C.
V6C 3B2

by

Bohumil (Boris) Molak, PhD., PGeo (BC) and William J. Richmond

January 20, 2023

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SUMMARY

The Buck Lake PGE Prospect ("BLP") is a group of 162 single cell, two multiple cell and 21 boundary cell mining claims situated approximately 110 km northwest of Thunder Bay in Northwestern Ontario. BLP covers an area of approximately 3,808.8 hectares (38.088 sq km), and is floored by the mafic to ultra-mafic intrusive rocks of Archean age with a potential to host significant platinum group element ("PGE") mineralization.

In 2022, Empire Metals Corp ("Empire") explored the central, northern and western portions of the BLP by prospecting, outcrop mapping and rock sampling with a rationale to find any evidence for the reef-style sulfidic PGE mineralization. Most fieldwork was conducted in the areas between the Dog River and Buck Lake Faults that are shown on the airborne magnetic map as negative mag anomalies and in to-date non-sampled trenches and/or outcrops situated in the wider vicinity of the Main Showing. Very low water level in the fall enabled the crew to examine and sample the ground that is usually submerged in water, which lead to a discovery of a new ore-grade PGE mineralization. In total, 168 rock samples were collected and submitted to an accredited laboratory for analysis. Several samples returned anomalous to ore-grade PGE values and the prospecting helped to update the geological map. Based on the 2022 work results, further work is warranted and should include outcrop mapping, stripping in anomalous areas, systematic sampling and further re-interpretation of historical geophysical surveys to gain a better insight into the shape, structure, and distribution of PGE mineralization at depth.

1. INTRODUCTION

This report has been prepared at the request of Empire Metals Corp., ("Empire"), which retained the writers on May 15, 2022 to conduct prospecting, outcrop mapping and sampling on the BLP and to prepare a report for filing. The first writer is a Professional Geoscientist (BC) with over fifty years of experience in mineral exploration. The second writer is the former claim holder and discoverer of the PGE mineralization at the Main Showing, who has excellent knowledge of the property. Together with a field assistant during the first part of the survey they conducted the field program on the BLP from May 22, 2022 to June 11, 2022 and from September 17 to October 6, 2022. Subject to agreement with Empire, the writers consent to the filing of this report with the Provincial Mining Recorders Office, Ministry of Northern Development and Mines of Ontario.

1.1. Location and Access

The BLP is situated approximately 110 kilometers north of Thunder Bay, in Northwestern Ontario, within the Tib and Sharp Lake Townships, Senga and Armistice Lake areas in Thunder Bay Mining Division (Figs. 1, 2). The property straddles the UTM zones U15 and U16 (NAD83) and its larger, eastern part is centered at N49°09'43.3'' latitude and W89°58'53.3'' longitude, the UTM coordinates 282650 E and 5449750 N (U16) while the southwestern part is centered at about 717900E, 5446700N (U15), on the Map Sheet NTS 52 H/4.

Fig. 1: Buck Lake PGE Prospect, location map.

The access from Thunder Bay is by Highway 17, then via all-weather Dog River Road and Wolf Tree Trail for 33.75 km to the junction with an old logging road and several newer logging roads serving various parts of the property. Central parts of the prospect are accessible by boat from the

Dog River and/or from Buck Lake. The western part of the claim block can be accessed via Sideen Road and a network of logging roads.

1.2. The Claims

The BLP consists of 162 single cell, two multiple cell and 21 boundary cell mining claims (total 185) covering 3,808.8 hectares (Fig. 2). The claim information as of May 15, 2022 is listed in Appendix II.

1.3. Topography, Vegetation and Local Resources

Topographic relief is moderately flat ranging from 462 meters to 485 meters above sea level. Swampy areas or treed swamps characterize topographic lows, while the areas surrounding Dog River are floating bogs. Topographic highs are generally forested, rounded knolls with gentle slopes and elongated, north-east south-west trending scarps of various heights are also present.

The area belongs to boreal forest eco-region characterized by numerous lakes and swamps. The area is characterized by hot summers with a maximum temperatures of 38 ° C and cold, snowy winters, with minimum temperature of - 40 ° C. Mean annual precipitation is about 715 mm. The area is snow covered for up to 5.5 months per year. Relative humidity ranges from 50 per cent to 80 per cent and the prevailing winds in the area blow from the northwest.

Vegetation consists of mature stands of black spruce, jack pine, poplar and birch with moss covered regolith and little underbrush composed mainly of willow and Labrador teeth. Swampy grounds are overgrown with dwarf cedar and alder underbrush. Patchy areas of thick willow bushes occur in lower elevated areas and along old logging roads. Active logging continues in the broader area. Outcrop is limited to topographic elevations and along the Dog River and Buck Lake shores.

The city of Thunder Bay is the closest centre that provides all services required to conduct mineral exploration. It includes an airport with daily flights to major Canadian cities, the rail and the ocean connection via Great Lakes and St. Lawrence Seaway.

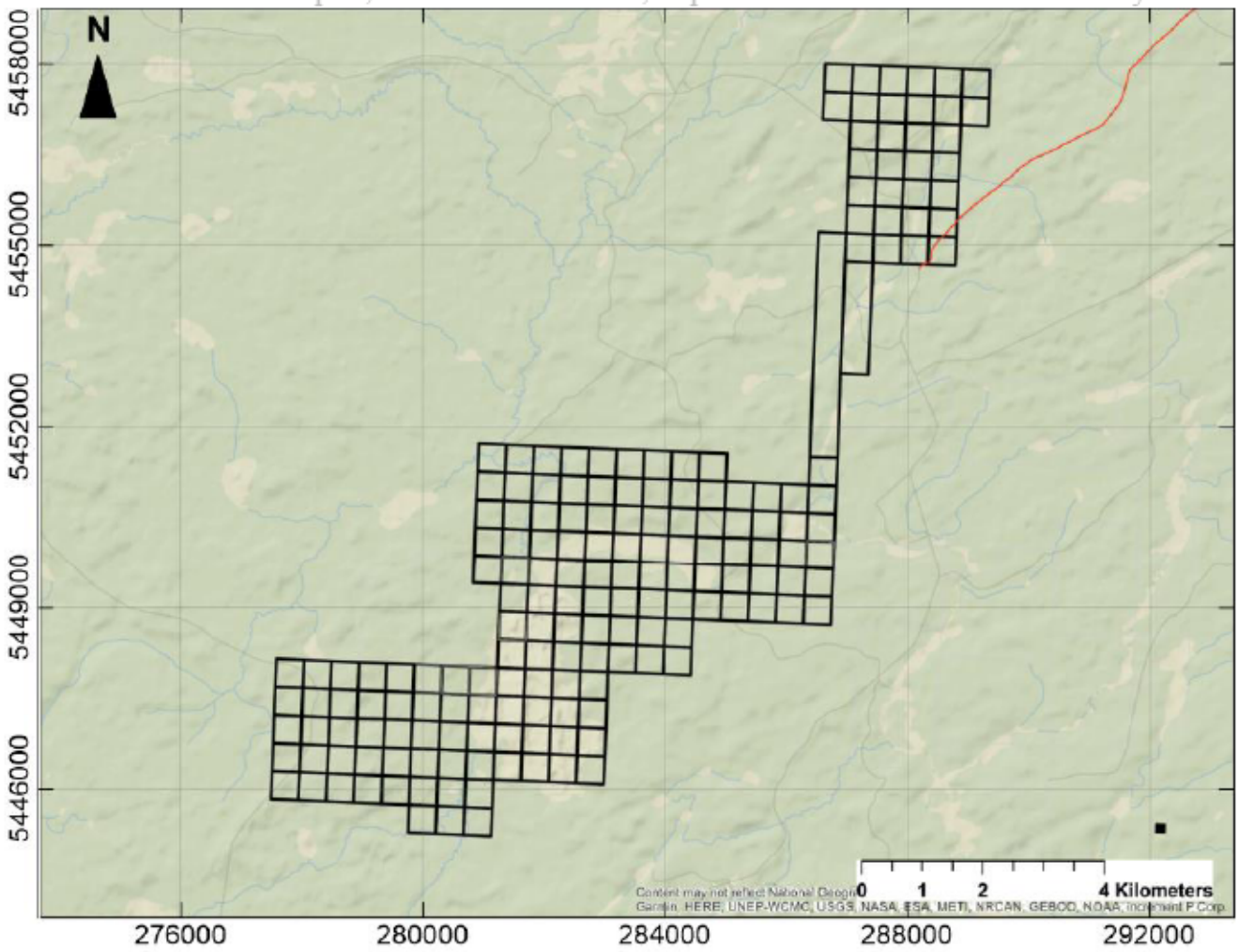

Fig. 2: Buck Lake PGE Prospect, claim map.

1.4. History

The mafic/ultra-mafic intrusions of Northwestern Ontario were targeted for copper – nickel - PGE mineralization since the 1950's. In 1962, the Ontario Department of Mines in conjunction with the Geological Survey of Canada conducted an aeromagnetic survey in the area (ODM-GSC 1962). In 1963, prospectors W. Baker and G. Moore discovered the copper-nickel mineralization south of the Lac des Iles. Further prospecting followed in the 1970's, culminating in a diamond drilling program in Lac des Iles area. In the late 1980s, economic PGE mineralization was delineated at the Roby zone and commercial, open pit production started in 1993.

A ground geophysical survey in the Lac des Iles area detected coincident magnetic and VLF-EM trends that were interpreted to relate to igneous layering in the mafic/ultramafic intrusives and with the sulfidic "reefs" (Sutcliffe, 1995). Concurrently, Ontario Geological Survey conducted geological mapping in the area, which resulted in the discovery of mafic/ultra-mafic rocks in the vicinity of Buck Lake (Sutcliffe, 1986). The area was staked by H. Watts, but no work was recorded and the claims lapsed in 1988.

In 1992 W. J. Richmond and W. D. Morehouse staked the Buck Lake prospect and conducted OPAP-funded projects over the next five years. Their work resulted in the discovery of the Main Showing, where selective grab and blast pit samples returned up to 2,030 ppb Pt and 2,276 ppb Pd and the small diameter drill cores returned up to 1.90 g/t Pd, 1.35 g/t Pt, 0.57 % Cu and 0.52 % Ni.

In 1998 W. J. Richmond and W. D. Morehouse optioned the BLP to Home Ventures Ltd., which continued to work the claims using geochemical and ground magnetometer surveys (McKay, 1999). The magnetic highs were outlined, which in part coincided with the Main Showing area.

In 1998, North American Palladium Ltd. ("NAP") staked the area surrounding the Home Ventures Ltd. claims and carried out geochemical surveys, during which anomalous to significant PGE values were detected in various parts of their claims and geological similarities with the Lac des Iles complex were recognized (Osmani, 2001).

The Ontario Geological Survey conducted an airborne magnetic and electromagnetic survey over an area that includes the Buck Lake prospect (Ontario Geological Survey, 2000). Simoneau (2000) carried out a combined ground magnetic and induced polarization survey over both, the NAP and Home claims. Several northeast trending IP anomalies and several magnetic anomalies were detected and pseudo-sections constructed.

In 2000 Home Ventures Ltd. changed the name to Buck Lake Ventures Ltd. ("Buck") and in a joint venture with LMX Resources Ltd., continued to explore the BLP by stripping, trenching, outcrop mapping, rock, soil and humus sampling. A grid was cut with a baseline running on azimuth 45 ° and perpendicular lines spaced 100 meters and 18 trenches were dug. Only 6 of them were systematically logged and sampled (McKay, 2001). Selective grab samples from the blast pits on the Main Showing assayed up to 31.60 ppm Pd, 2.82 ppm Pt, 0.13 ppm Au, 1.53 per cent Cu and 9.96 per cent Ni. Other Pt-Pd occurrences were discovered west and southwest of the Main Showing and the assays returned as much as 420 ppb Pt and 588 ppb Pd.

In 2003 NAP conducted a drilling program to test some of the geochemical and geophysical anomalies (Nelson, 2007). Four holes totaling 1,416 meters were drilled and PGE anomalous zones with values ranging up to 285 ppb platinum and 264 ppb palladium were intersected in each.

In 2004, Buck conducted a drilling program to test the presumed breccia pipe mineralization. A total of 14 holes were drilled ranging in depth from 49 to 250 meters. Ten drill holes were collared into the Main Showing ("MS") and four holes tested the coincident geophysical anomalies. Two drill holes into the MS intersected a mineralized zone 1.7 to 3.5 meters wide at depth less than 10 meters and the best values were intersected in hole DDH-1, including 0.32 ppm platinum and 0.49 ppm palladium. One drill hole sunk into a coincident IP - magnetic anomaly about 400 meters southwest of the MS encountered anomalous zone with nickel, but no significant PGE mineralization was intersected (Brickner, 2005).

In 2008 F. A. Houghton staked the claims adjoining the Ultra's claim block that were let lapse by NAP. In 2011, 51% of the BLP was acquired briefly by Goldbank Mining Corp. ("Goldbank") but in 2014 Goldbank ceded that percentage back to Ultra and Ultra continued to work the claims in the following years using prospecting, outcrop mapping and sampling, geochemical and airborne geophysical surveys (Molak, 2009, 2010, 2011; Molak 2014).

With the name changed to Empire Rock Minerals Inc. ("Empire"), the company optioned in 2015 the five new claims from W. J. Richmond and continued to explore the claim area using litho-geochemical sampling, airborne magnetic and VLF-EM surveys (Barrie, 2018), mineralogical research using a microprobe (Molak & Richmond, 2015, 2016) and inversion modeling was applied to 2011 and 2018 airborne geophysical survey data (Brett in Molak & Richmond, 2020). Further Empire's fieldwork was conducted in 2021 (Molak et al., 2022).

1.5. Regional Geology

The BLP is located in the Wabigoon Subprovince of Northwestern Ontario, within an Archean granite/gneiss terrain (Fig. 3). The area is underlain predominantly by an earlier, gneissic to foliated tonalite to granodiorite suite and supracrustal rocks of the Bo Lake - Heaven Lake greenstone belt. The Quetico Fault, a large regional northeast trending fault that has been referred to as a zone of structural weakening, is a structure along which several mafic to ultra-mafic intrusions were emplaced (OGS, 1991). A relatively younger granitoid suite comprised of granodiorite, tonalite, quartz diorite and granite, intrudes both gneissic tonalite and supracrustal rocks, and is thought to be coeval with mafic to ultramafic intrusive rocks of the Lac des Iles - Buck Lake area (Smith and Sutcliffe, 1988). Middle Proterozoic diabase dikes and sills were emplaced during the Keweenawan rifting (1.1 Ga) and intrude all the above rock types (Osmani 1991).

The mafic/ultramafic intrusions in the area occur on a circular structure about 30 kilometers across that comprises Lac des Iles, Tib Lake, Buck Lake, Dog River, Shelby Lake, Demars Lake, Wakinoo Lake and Taman Lake intrusions. The Lac des Iles Intrusive Complex, which hosts the Lac des Iles PGE deposit, is the largest of them. The whole rock geochemistry indicates that the mafic/ultramafic rocks are of calc-alkaline to tholeiitic affinity, and as such probably formed in an island arc environment. The geological setting and rock association, such as the dominance of amphibole, clino-pyroxene-bearing cumulates in the Buck Lake intrusion indicates that the parental magma contained water, which probably became concentrated during fractional crystallization until hornblende appeared as a liquidus phase. Such parental magmas are typical of igneous provinces formed at destructive plate boundaries (Osmani, 2001). Representatives of this mineralization style are the Lac des Iles and East Bull Lake suite in Ontario and the foreign examples are in the Kola Peninsula, in the Fenno-scandinavian countries and in South Africa (Hattori & Cameron, 2004).

All these intrusions are similar in that they are late tectonic, emplaced into tonalite gneiss and commonly contain phases ranging from ultra-mafic peridotite and pyroxenitic cumulates to

magnesium gabbronorite and iron-rich gabbro with hybrid marginal zones consisting of hornblendite intruded by hornblende diorite and are common to many intrusions thought to be contamination of the mafic magma by a granitoide component (Sutcliffe, 1986). Texturally, they are massive to varied with variable degrees of brecciation and hydrothermal alteration and the PGE mineralization occurs in most of them. The intrusions are characterized by magnetic and Bouguer gravity anomalies. Gravity modelling suggests that the Dog River intrusions represent apophyses of a larger mafic intrusion beneath a felsic plutonic veneer (Gupta and Sutcliffe 1990).

The PGE mineralization at the Lac des Iles Intrusive Complex has been described by Hinchey et al. (2005) and detailed descriptions can be found in papers by Barnes and Gomwe (2011), Boudreau et al. (2014), Schisa et al. (2015), Duran et al. (2013, 2016) and others and we refer to those authors for more information. Economically, the most important is the High-Grade zone, a unique, intensely and pervasively altered zone made up of actinolite, talc, anthophyllite, hornblende, chlorite, sericite, calcite and quartz that host much higher concentrations of Pd than any other rocks. According to Barnes and Gomwe (2011), the High-grade zone is probably a result of enrichment by a low-temperature fluid that exsolved from the underlying magma. The fluid scavenged Pd, Au, As and Sb from the sulphides formed at depth as it migrated upwards and the metal content was precipitated within the shear zone between East Gabbro and Roby Zone because most of the Lac des Iles intrusion had solidified at this point.

While the High-Grade zone with its low sulphide content is the primary Pd resource, sulfide-rich pods with PGE minerals also occur at the Lac des Iles deposit throughout the stratigraphy in all rock types and along comagmatic shear zones. The pods are composed of net-textured to massive pyrrhotite, pentlandite, chalcopyrite, pyrite, magnetite and ilmenite assemblages, which probably crystallized from magmatic sulfide liquids or precipitated from hydrothermal fluids. Very low Cu content of the pods suggests that they are mainly cumulates of monosulfide solid solution (MSS). Duran et al (2016) propose a model, in which sulfide liquids concentrated into dilation zones prior to crystallizing cumulus MSS. Intermediate solid solution crystallized from the fractionated liquids at the edges of some pods leaving residual liquids enriched in Pt, Pd, Au, As, Bi, Sb, and Te. These residual liquids are no longer associated with the pods. During subsequent alteration, pyrite replaced MSS/pyrrhotite, but this did not affect the platinum-group element contents of the pods.

1.6. Local Geology and Mineralization

The Buck Lake Intrusion was described as a mafic to ultra-mafic body of Archean age, oval in shape, measuring approximately 5 km by 2 km and trending northeast – southwest (Sutcliffe, 1986). The intrusion was classified as syn-tectonic to post-tectonic in age with tholeiitic affinity that was emplaced within a convergent continental margin. The PGE mineralization was assigned to types I and IV sensu Lesher and Keays (2002), the type I representing stratiform basal mineralization that formed at early stages of crystallization and occurred as layers at or near the base of the host units and the type IV represented secondary mineralization associated with type I.

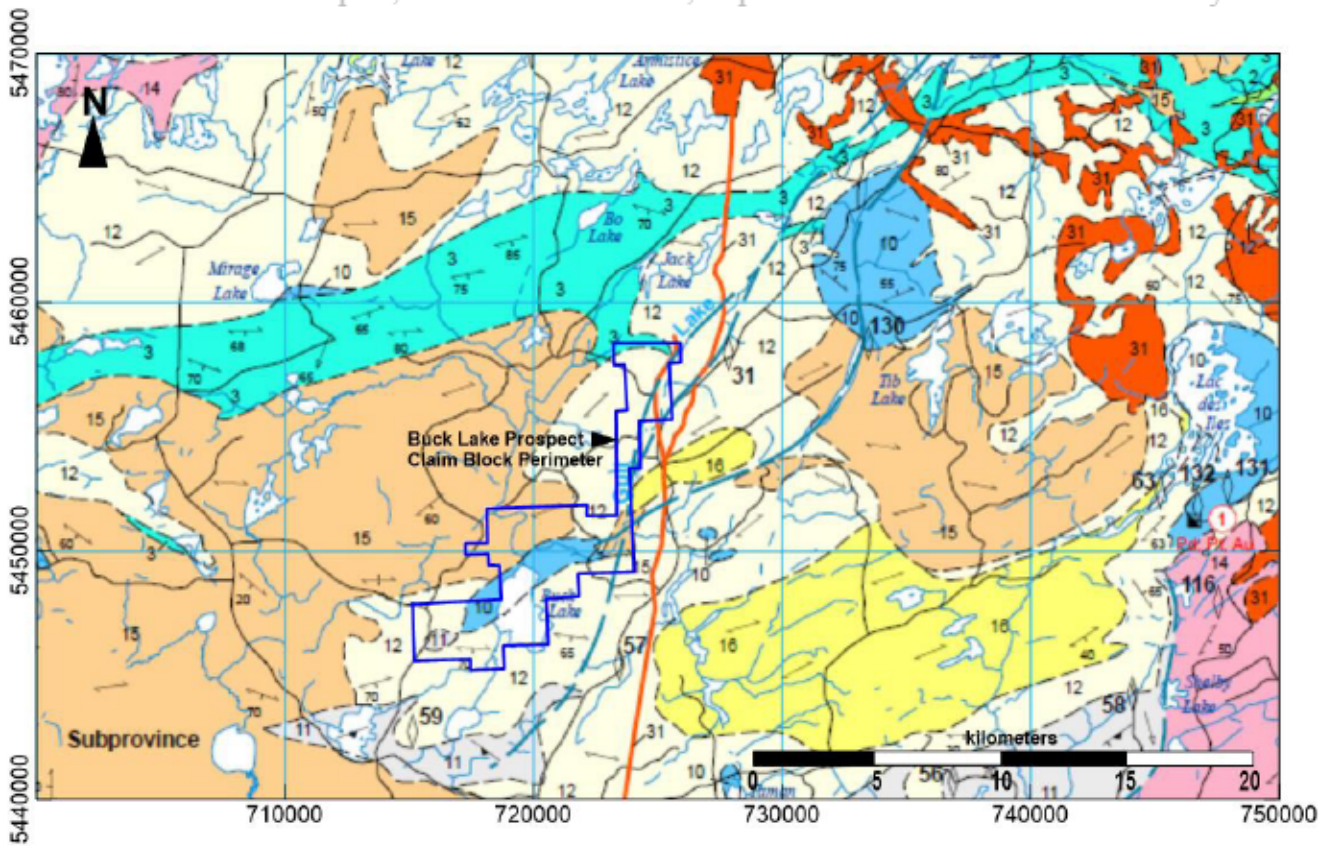

Fig. 3: Geology map with BLP location (3 – mafic to ultramafic volcanic rocks; 10 – mafic intrusive rocks; 12 – biotite tonalite to granodiorite; 15 – biotite granodiorite to granite; 16 – hornblende tonalite to granite (after Stone, 2010)).

Type IV included two sub-types to which Vaillancourt et al. (2003) added the hydrothermal, disseminated, sulphide-poor mineralization characterized by pegmatite pods, vari-textured lithologies, hydrous mineral alterations of silicates and intrusive breccias and enclaves. The Lac des Iles deposits was the best example of this mineralization style (Lavigne et al., 2002).

The Buck Lake intrusion, a 7 km long elongate intrusion trending northeasterly, is composed primarily of hornblende gabbro with minor hornblendite, pyroxenite and gabbro breccia. The breccia consists of angular blocks of hornblendite and hornblende melagabbro in a matrix of hornblende gabbro and leucogabbro. Smaller generally lobate bodies of mainly hornblende gabbro to hornblendite composition occur in a cluster on the Dog River, and at Taman and Demars lakes (Stone, 2010).

Microprobe study revealed the following rock-forming minerals: diopside clinopyroxene (preserved in the cores of hornblende grains), magnesium hornblende, pargasitic horblende, actinolite, plagioclases ranging from albite to bytownite, biotite (eastonite), epidote, zoisite, chlorite, apatite, ilmenite, titanite, rutile and calcite. Retrograde metamorphic processes resulted in the amphibolization of clinopyroxene, chloritization of hornblende, epidotization, zoisitization, saussuritization and sericitization of plagioclase (Molak and Richmond, 2015, 2016).

Disseminated, blebby and vein-style sulphidic ± PGE mineralization occurs mainly in varied textured pyroxenitic, amphibolitic and gabbroic rocks and breccias made of altered pyroxenite in gabbroic matrix. The most common sulphidic minerals are pyrrhotite, pyrite, chalcopyrite, millerite and pentlandite. The PGE minerals form tiny inclusions in Ni and/or Cu sulphides ranging from a few microns to a few tens of microns. The PGE minerals include PtBiTe (maslovite?), PdBiTe (michenerite and/or kotulskite), PdPtTeBi (merenskyite), telargpalite (?) and several unnamed alloys Pb-Ag-Fe-Cu, BiTeS, etc. Magnetite and ilmenite are frequently disseminated in retrograde chlorite and/or epidote. Late hydrothermal quartz and/or calcite veins or lenses commonly associate with felsic dykes or veins and locally contain pyrite, barite,.molybdenite, scheelite and or titanite inclusions. This mineralization rarely contains PGE ± Bi, (Molak and Richmond, 2015, 2016).

Mafic and ultramafic rocks and breccias are frequently cut by swarms of steeply dipping felsic dykes with generally north-east strikes, but non-conformable, cross-cutting also occur. Mafic diabase dykes of Proterozoic age cut locally across both, mafic/ultramafic and felsic rocks.

2. LITHO-GEOCHEMICAL SAMPLING AND PROSPECTING

Empire's fieldwork on the BLP took place in two periods, the first from May 22 to June 11, 2022 and the second from September 17 to October 6, 2022. The authors of this report (abbreviated BM and WR) were assisted by Robert Eyolfson (RE) during the former period, whereas the latter period was completed by BM and WR. The fieldwork included prospecting, outcrop mapping and sampling in three areas designated as A, B and C (Figs. 4 to 15). The rationale was to prospect and sample the areas characterized by negative (remanent) aeromagnetic response between the Dog River and Buck Lake faults, to re-sample historical showings and trenches in the surroundings of the Main Showing and to prospect and sample the outcrops in to-date under-explored areas. In total, 168 rock samples were collected and their locations are shown in Figs. 5 to 15 and the sample descriptions are attached in Appendix I.

2.1. Itinerary

May 22, 2022: Geologist B. (Boris) Molak (BM) arrives to Thunder Bay from Vancouver.

May 23, 2022: BM meets with prospector W. J. Richmond (WR) and together they travel to Shabaqua, where accommodation is provided at Timberland Motel. The fieldwork itinerary is discussed. WR then travels back to Thunder Bay to attend other business.

May 24, 2022: While BM prepares the maps at Shabaqua, the field assistant Robert Eyolfson (RE) arrives to Thunder Bay from Vancouver.

May 25, 2022: RE rents an SUV from Thunder Bay and drives to Timberland Motel in Shabaqua, where he meets with BM and together they prepare an itinerary for the BLP fieldwork.

May 26, 2022: BM and RE drive to the property, traverse the claim 229209 in Area C, searching for the outcrops and/or historical trenches, three rock samples 884551 - 884553 from a historical trench are collected (Figs. 4, 14). The samples are mafic rocks of hornblende gabbro composition, locally with retrograde altered pyroxenite fragments forming breccia and younger leucogabbro, the felsic veins and/or dykes intrude the mafics. Sparse disseminated sulfidic minerals, mainly pyrite, occur locally.

May 27, 2022: BM and RE travel to the BLP, Areas B and C, traverse the claims 229209 and 265793, five rock samples #s 884554 to 884558 are collected (Figs. 4, 8, 14). The stripped area is floored by macro-breccia made of altered, chloritized, amphibolized pyroxenite with gabbroic matrix, the rocks are cut by felsic veins and/or dykes striking generally northeast.

May 28, 2022: BM and RE travel to BLP, Area C, traverse the claim 148343, collect two rock samples #s 884559 and 884560 (Fig. 12) from the northernmost mafic rock occurrence that forms a bluff floored by altered, coarse-grained amphibolite and/or pyroxenite cut by felsic veins and dykes, locally with quartz. The bluff is surrounded by transitional mafic-felsic (granitoide) rocks that are also cut by felsic dykes and hydrothermal quartz veins striking NE. Rare remobilized sulfides associate with the felsics.

May 29, 2022: BM and RE travel to the BLP, walk to claim 580399 in Area B, collect six rock samples #s 884561 to 884566 including one field duplicate (Fig. 8). The area is floored by mafic gabbroic rocks with pink feldspars, the outcrops are made up of macro-breccia of altered, chloritized and amphibolized pyroxenite with gabbroic matrix, both cut by felsic veins or dykes.

May 31, 2022: BM and RE travel to BLP, traverse the claims 579424 and 580399 in Area B (Fig. 8). The outcrops are made up of granitoide rocks with gabbroic xenoliths or enclaves and scarce disseminated sulfides; samples 884567 to 884570 collected.

June 1, 2022: BM and RE drive to BLP, walk to historical trench T11 situated on the cell claim 580399 in south-central portion of the claim block (Area B, Fig. 8). Rock samples 884571 to 884575, including one field duplicate, are selective, hosted by fine to coarse grained gabbro, with plagioclases up to 40% cut by felsic dykes 5 - 7 cm wide, striking 30° to 70° and dipping 90° ± 10°.

June 2, 2022: BM and RE drive to BLP, walk to the claim 579424 in Area B, where historical trenches T12 to T15 are situated, as well as many outcrops and sub-crops (Fig. 8). The samples 884576 - from southern edge of T15 represent feldspathic gabbro, which locally contains biotite and rare pyrite and chalcopyrite (2-3%) in disseminated form or as tiny crystals lining up the fractures. Samples 884577 – 884580 collected from outcrops. The area south of T12 is floored by feldspathic mafic rocks of fine to medium texture and granularity, which are cut by felsic dykes and veins, the sulfides are either disseminated, at mafic-felsic contacts or on fractures. Gently

dipping to horizontal felsic dykes cut the mafic rocks. Chip samples 884581 to 884583 taken from two sub-crops made of altered pyroxenite contacting the feldspathic leucogabbro, the former contains actinolite laths as much as 3 cm long and the latter contains approx. 3 – 5 % of disseminated pyrite, chalcopyrite and pentlandite (?) crystals up to 2 cm in diameter.

June 3, 2022: BM and WR traverse the claims 265793 and 579424, Area B (Fig. 8), collect samples 884584 to 884591 from ledges exposing altered pyroxenite mingled with feldspathic gabbro; scarce pyrite and chalcopyrite occur in disseminated form or on fracture plains. Then they walk to historical trench T5 to collect samples of altered, chloritized pyroxenite and fine-grained feldspathic gabbro with scarce disseminated sulfides.

June 4, 2022: BM and WR traverse the claims 265793 and 580379, Area B (Fig. 8), to prospect for mafic outcrops, to collect mineralized samples and to re-sample historical anomalous sample sites. The area is floored by altered pyroxenite and/or gabbro with various amounts of plagioclase and/or orthoclase feldspars. These rocks are cut by felsic veins or dykes, striking generally NE – SW. Samples 884592 to 884599 taken, the best appear to be those with larger sulfides as much as 2 cm in diameter (samples 884594 to 884596) taken from a large scarpy outcrop.

June 5, 2022: BM and WR take two different routes, carrying walkie-talkies to communicate. The claims 579424, 579425, 580399 and 580400 (Area B) are traversed and samples 884600 to 885609 collected (Fig. 8). The area is underlain by various gabbroic rocks and altered, amphibolized, chloritized pyroxenite, all intruded by felsic veins and/or dykes. Gabbroic rocks range from fine to medium grained with variable amounts of plagioclases, locally reaching 50% or more. Feldspathization probably took place during the process of assimilation of mafic rocks into the granitoide magma. Sulfidic mineralization, either disseminated or covering the fractures or parting planes, is scanty, 1-2 %.

June 6, 2022: BM and WR drive to claim 191985 (Area B, Figs. 7, 8), traverse the area around historical PGE-anomalous sample sites, which are floored by granitoide rocks with mafic xenoliths, enclaves and "schlieren". A mafic rock # 884610 with disseminated pyrite ± chalcopyrite 3-5% is collected, then they drive to claims 579424 and 579425 to prospect the areas around historical trenches, where the samples 884612 to 884617 made of vari-textured gabbro, altered pyroxenite and breccia with scattered sulfides not exceeding 2-3% are collected.

June 7, 2022: BM and WR drive to BLP, walk the area on the claims 265793 and 579424 (Area B, Fig. 8) separately, carrying walkie-talkies to communicate. The area is floored by gabbroic rocks with variable amounts of feldspar, altered pyroxenite locally forming breccia and these rocks are cut by felsic veins and dykes. The outcrops commonly form scarps or ledges trending NE – SW. Samples 884618 to 884628 collected, most contain 1-3% disseminated pyrite and/or chalcopyrite, which also occur on the fractures or parting planes.

June 8, 2022: BM and WR drive to BLP, walk the area north of the sloughed bridge on the Dog River, Area C, Figs. 12, 14, situated on the claims 580401, 580402 and 119875. Samples 884629

to 884632 collected. Sample 884631 taken from a historical trench dug into medium to fine-grained amphibole - plagioclase gabbro with rare disseminated sulfides, the rock is cut by felsic veinlets. Sample 884632 is from a small ledge exposing a gabbroic rock that splits into thin slabs, rare (2-3 %) disseminated sulfides.

June 9, 2022: BM and WR drive to BLP, walk along the southern shore of Dog River on the claim 119875 (Fig. 14), where a scarpy outcrop is found made of coarse grained plagioclase gabbro and/or altered pyroxenite with biotite and chlorite. Three samples are collected, out of which two 884633 and 884635, contain rare disseminated sulfides, whereas the sample 884634 contains coarser-grained sulfides as much as 5%.

June 10, 2022: BM and WR check-up and package the samples, prepare the sample requisition sheets, then travel to Thunder Bay to submit samples to Activation Laboratories.

June 11, 2022: BM departs from Thunder Bay via Toronto and returns to Vancouver.

September 17, 2022: BM travels from Vancouver to Thunder Bay via Toronto. The flight to Thunder Bay however is cancelled, thus BM has to wait for the next day flight, spending the night in Toronto.

September 18, 2022 BM travels from Toronto to Thunder Bay, the aircraft however cannot land due to secondary fog and due to safety and security reasons the flight has to return to Toronto. On the same day in the late evening BM takes a flight from Toronto, which arrives in Thunder Bay early the next morning.

September 19: 2022: MB meets with WR and together they load the boat and engine on a trailer, hitch to the truck and travel to Timberland motel in Shabaqua, where the accommodation is provided and the fieldwork itinerary is prepared.

September 20, 2022: BM and WR travel to BLP, unload the boat and sail on the Dog River to the claims 310444, 344565, 580395 and 580396 in Areas B and C, where the outcrops are located as shown in Figs. 7, 10 and 12. The collected samples 884901 to 884906 are made of fine to medium grained, mostly feldspathic gabbro, locally affected by chloritization. Scarce sulfides, mainly pyrite ± chalcopyrite (1 – 2 %), are either disseminated or cover the fracture planes. Felsic dykes that strike generally 60 ° and are up to 30 cm wide, cut the mafic rock, forming the brecciated structures locally.

September 21, 2022: BM and WR travel to BLP, then sail up the Dog River to outcrops located on the claims 310444, 344556 and 580396 in Areas B and C (Figs. 10, 12). Samples 884907 to 884912 are collected from the ledge-like outcrops composed of feldspathic gabbro, locally cut by felsic veins or dykes. Rare disseminated sulfides may represent 1 – 3 % of the rock volume.

September 22, 2022: BM and WR drive to BLP, then sail the boat up the Dog River to outcrops located on the claims 310444 and 580396, in Area B (Fig. 10). Samples 884913 to 884918 are collected, including fine to medium grained feldspathic gabbro grading locally to coarse

pyroxenite. The rocks are locally cut by felsic veins 6 – 7 cm wide and contain disseminated sulfides ranging from 1 to 3 %.

September 23, 2022: BM and WR drive to BLP, then sail up the Dog River to the outcrops located on the claims 310444 and 580396 in Area B (Fig. 10). The samples 884919 to 884924 are collected including a fine to medium grained, vari-textured plagioclase gabbro with disseminated sulfides up to 5 % of the rock volume. Malachite and azurite occur in the outcrop and two samples 884923 and 884924 also contain these minerals.

September 24, 2022: BM and WR drive to BLP, then sail up the Dog River to outcrops located on the claims 310444, 580395 and 580396 in Area B (Fig. 10). The outcrops are made of plagioclase gabbro, locally cut by felsic dykes up to 0.5 meters wide, striking northeast and dipping steeply to vertical. The rocks are commonly chloritized, the presence of biotite was also noted. Seven samples 884925 to 884931 were collected including one field duplicate. Most samples contain 1 - 3 % sulfides in disseminated form or on the fracture planes.

September 25, 2022: BM and WR drive to BLP, then drive the Sideen Road to south-western part of the prospect, the claims 140648 and 323862 in Area A (Figs. 5, 6). Samples 884932 and 884933 taken from the outcrops made of migmatite and green gabbro, both cut by felsic dykes. Migmatite at the 884932sample site is distinctly folded and at the 884933 sample site it is cut by a dyke of very fine grained diabase (?). Rare disseminated sulfides (mainly pyrite) associate with the feldspathic bands.

September 26, 2022: BM and WR travel to BLP, Area B, then sail the Dog River west of the sloughed bridge to the outcrops and/or sub-crops located on the claims 265793, 580399 and 580377 (Fig. 8). Samples 884934 to 884942 are taken, which include fine to medium grained plagioclase - hornblende gabbro with sulfides in disseminated form or on the fracture planes. Sample 884940 is an altered pyroxenite with pink feldspars containing 5 – 10 % disseminated coarse sulfides including chalcopyrite. Sample 884942 is a field duplicate of 884940.

September 27, 2022: BM and WR travel to BLP, Area B, then sail up the Dog River to outcrops located on the claim 265793 (Fig. 8). Four rock samples are taken including one, # 884941, which is made of altered pyroxenite with coarse sulfides representing approx. 3 – 7 % of the rock volume. The samples 884943 to 884945 are made of pyroxenite breccia to gabbro, with sulfides in disseminated form or as patinas on the fracture planes.

September 28, 2022: BM and WR travel to BLP, then sail up the Dog River toward the Buck Lake, Area B, where seven rock samples 884946 to 884950 and 884801 to 884802 are collected from the outcrops located on the claim 265793 (Figs. 7, 8) The rocks include plagioclase gabbro and minor pyroxenite breccia locally cut by felsic veins. Most samples except one contain scarce sulfidic mineralization (1 - 3 %), while the sample 884946 contains as much as 10 % disseminated sulfides that are accumulated at the gabbro – felsic vein contact.

September 29, 2033: BM and WR travel to BLP, Area B, then sail up the river toward the Buck Lake but have to disembark due to shallows and continue on foot to the outcrops located on the claims 344365 and 266613 (331858), (Fig. 7), from which seven rock samples 884803 to 884809 are collected. The outcrops are made of altered pyroxenite and/or plagioclase gabbro that are locally cut by felsic dukes and/or veins. Disseminated sulfides, which also occur on the fracture planes, represent approximately 1 – 3 % of the rock volume.

September 30, 2022: BM and WR drive to BLP, Area C, claim 119875, where nine rock samples 884810 – 884818 are collected (Figs. 12, 14). The outcrops are made of granitoides with gabbroic enclaves, plagioclase gabbro and lesser altered pyroxenite cut by thin felsic veins. These rocks contain disseminated, fine-grained sulfides amounting to 1 – 2 %, the samples 884812 to 88414 hoever contain up to 5 % coarse grained sulfides including chalcopyrite. Sample 884814 taken as a field duplicate of 884813.

October 1, 2022: BM and WR drive to BLP, Area C, to claims 119875 and 580401, where nine rock samples 884819 – 884827 are collected (Figs. 12, 14). The outcrops are made up of feldspathic gabbro and altered pyroxenite locally forming breccia, with rare (1 – 2 %) sulfides that occur in disseminated form or as remobilized sulfides covering the fracture planes.

October 2, 2022: BM and WR drive to BLP, Area B, to claims 265793 and 580399, where seven rock samples 884828 – 884834 are collected (Fig. 8) The outcrops and/or sub-crops are made up of feldspathic gabbro and altered pyroxenite locally forming breccia, rare (1 – 3 %) sulfides occur in disseminated form or are remobilized to form patinas on the fracture planes.

October 5, 2022: BM and WR check-up, pack and load the samples on the truck, prepare the sample submittal sheets, then travel to Thunder Bay to submit samples to Activation Laboratories for analysis.

October 6, 2022: BM demobilizes, travels from Thunder Bay to Vancouver via Toronto.

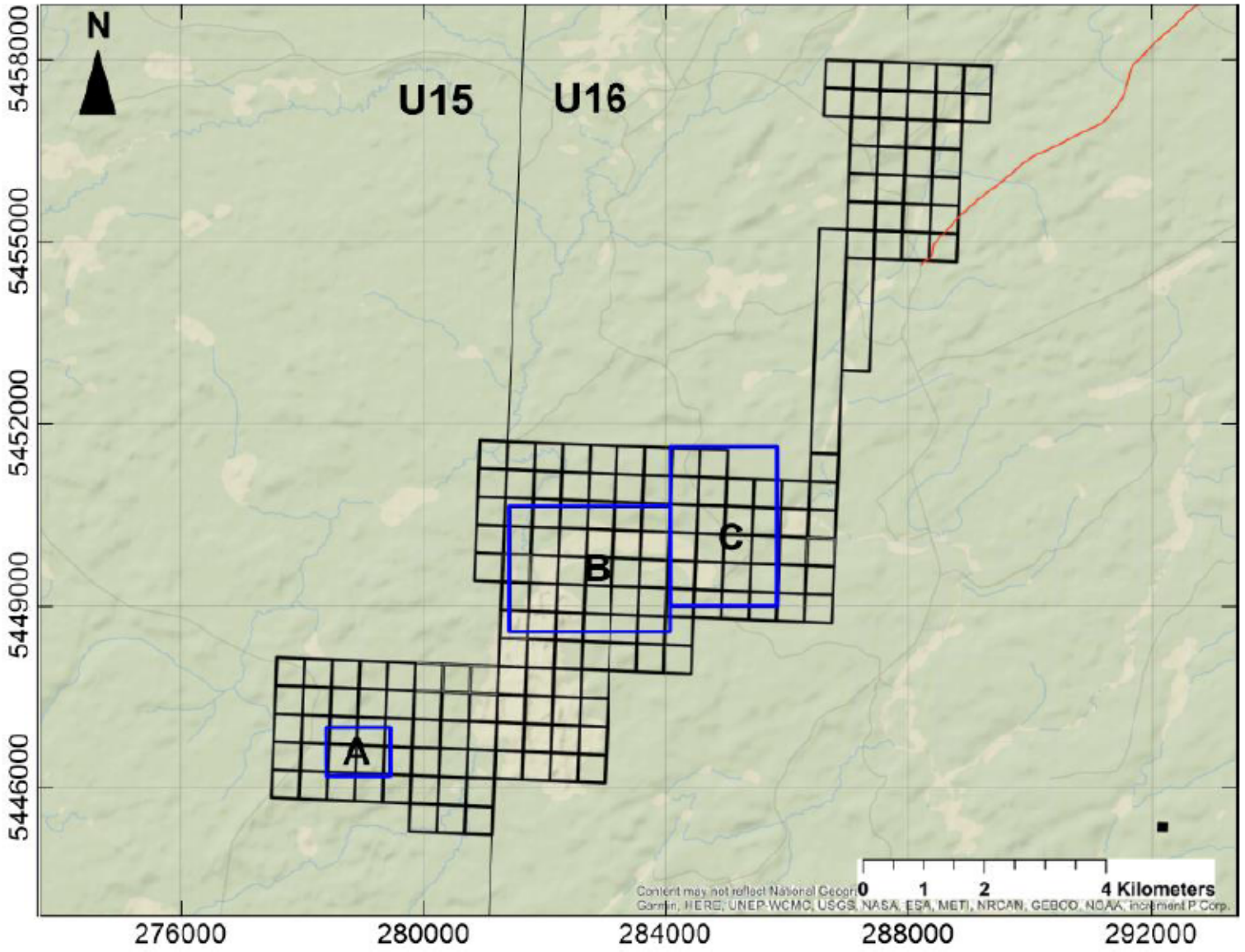

Fig. 4: Buck Lake Claim Block with 2022 fieldwork areas A, B and C.

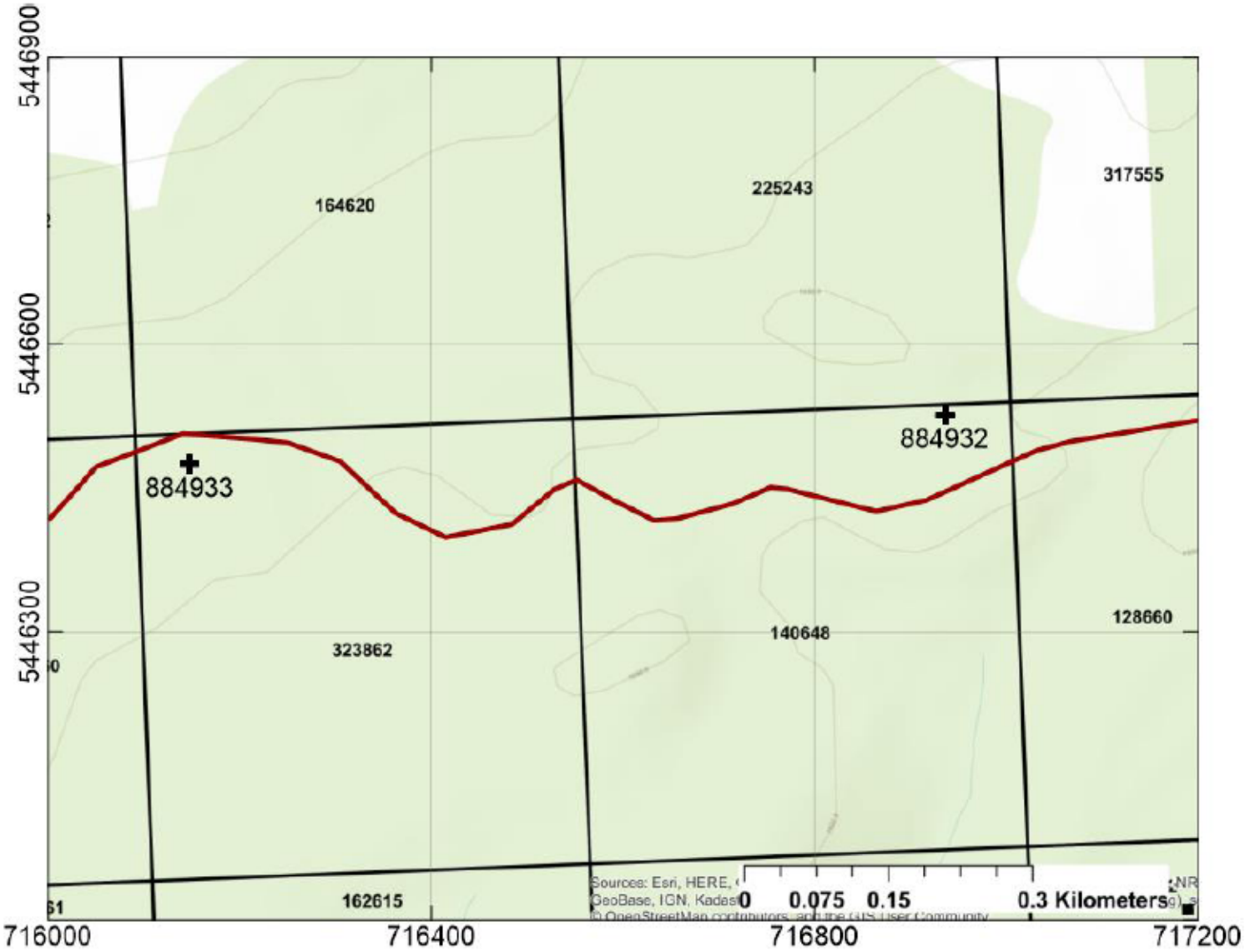

Fig. 5: Area A, Inset A, sample locations (for Legend see Fig. 8).

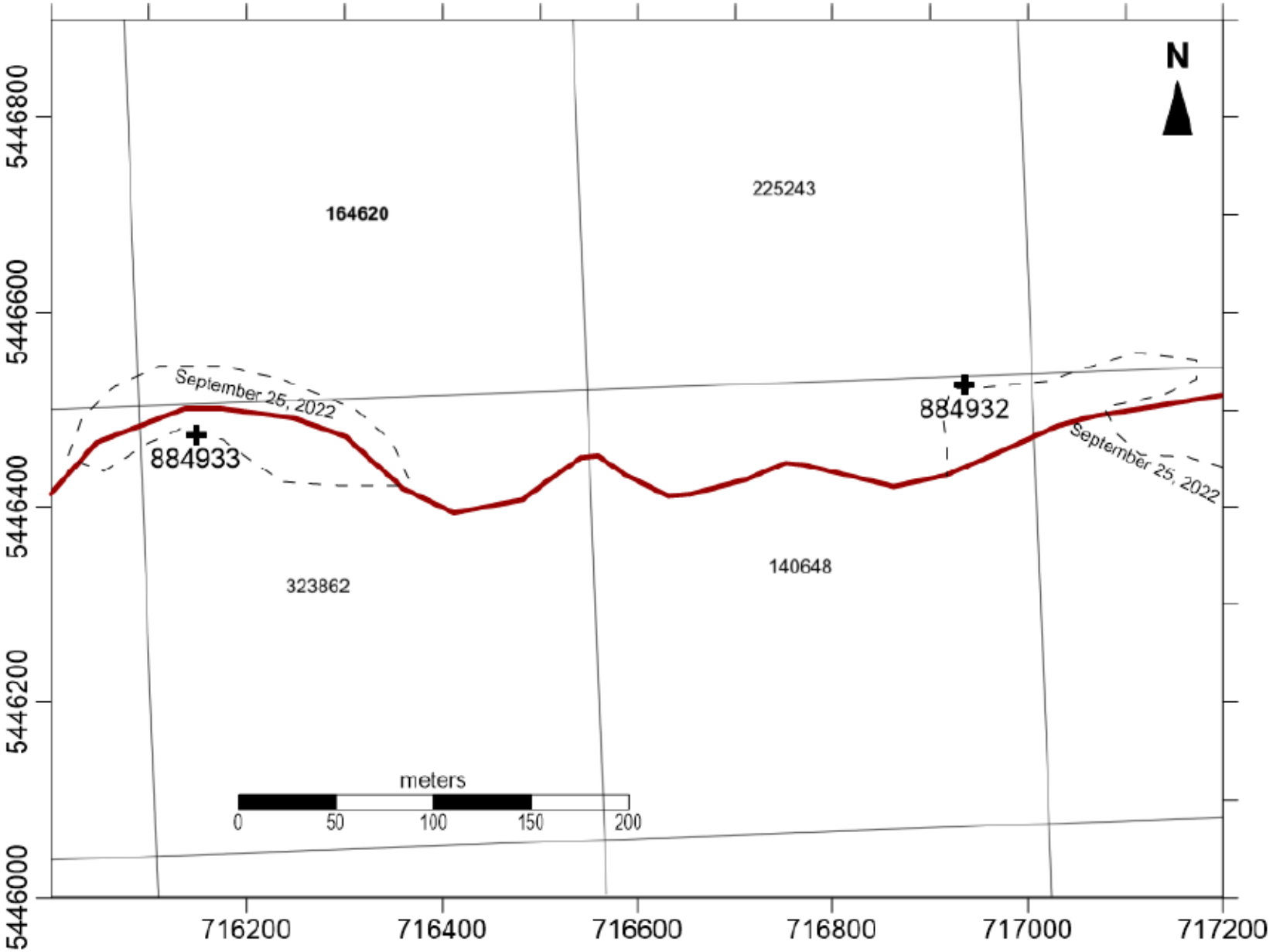

Fig. 6: Area A, Inset A, traverse map (for Legend see Fig. 8).

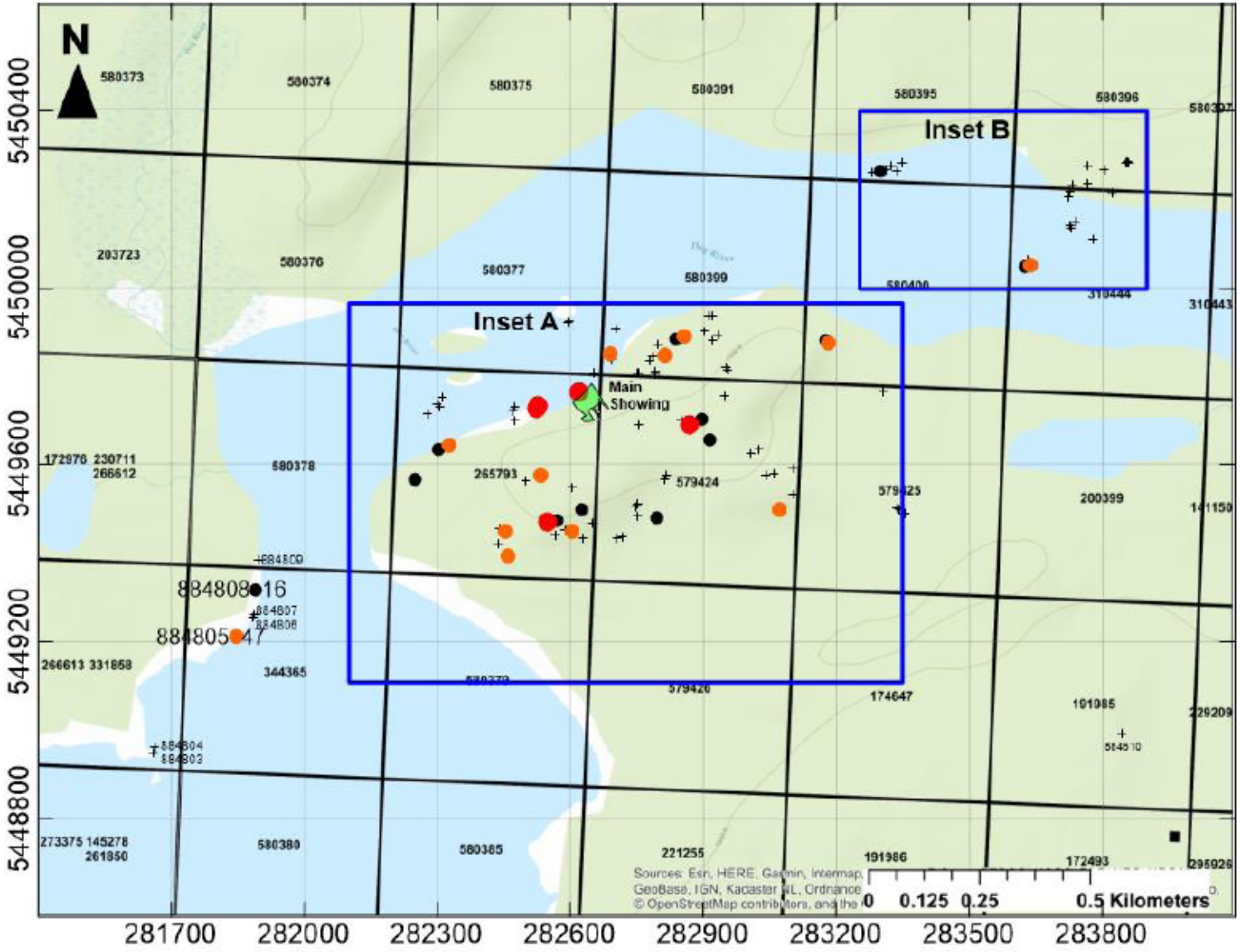

Fig. 7: Area B with Insets A and B (blue rectangles) and sample sites (Legend for sample symbols and Pd+Pt ranges is in Fig. 8).

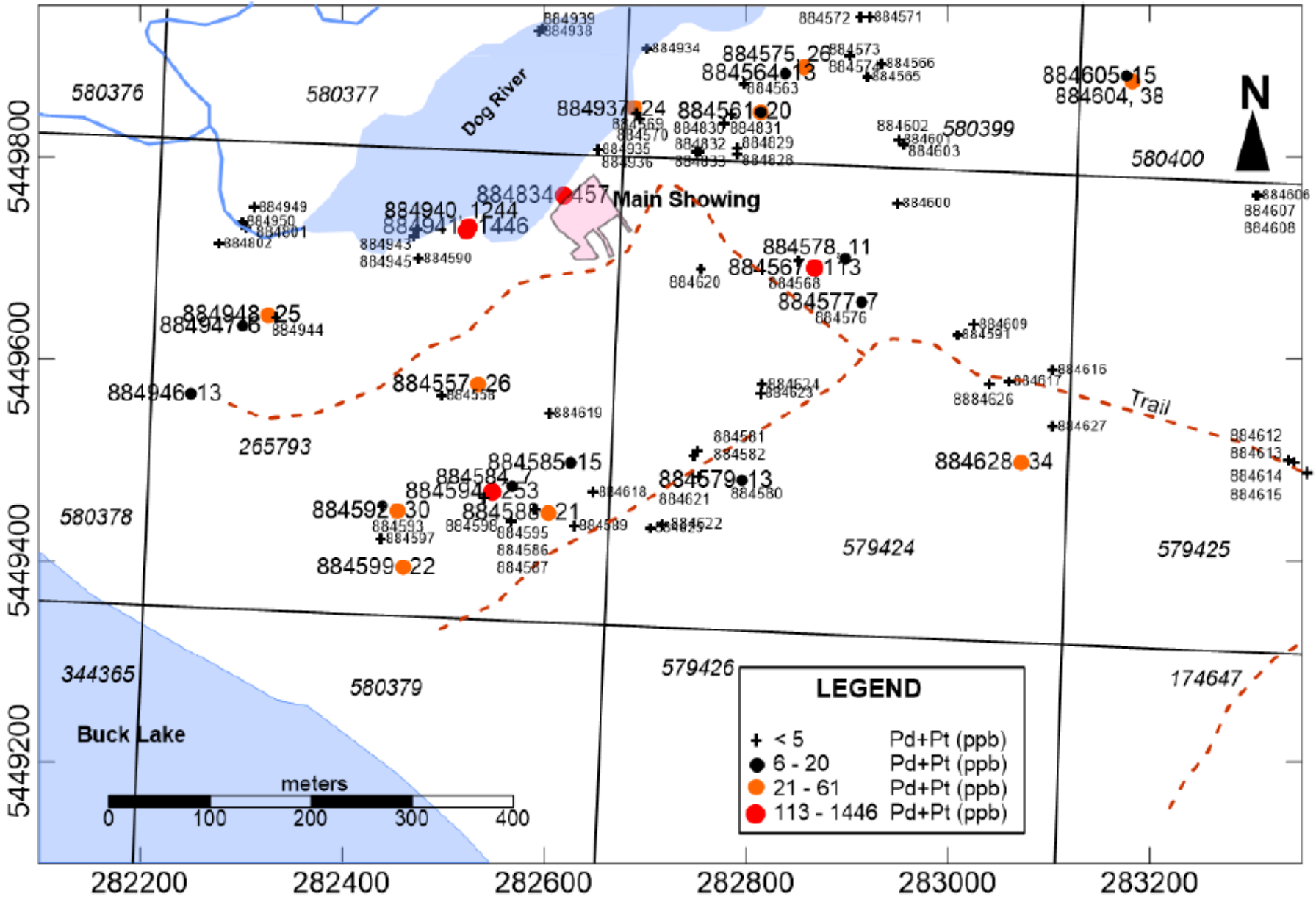

Fig. 8: Area B, Inset A, sample locations with Pd+Pt values (smaller numbers attached to samples with <5 ppb Pd+Pt).

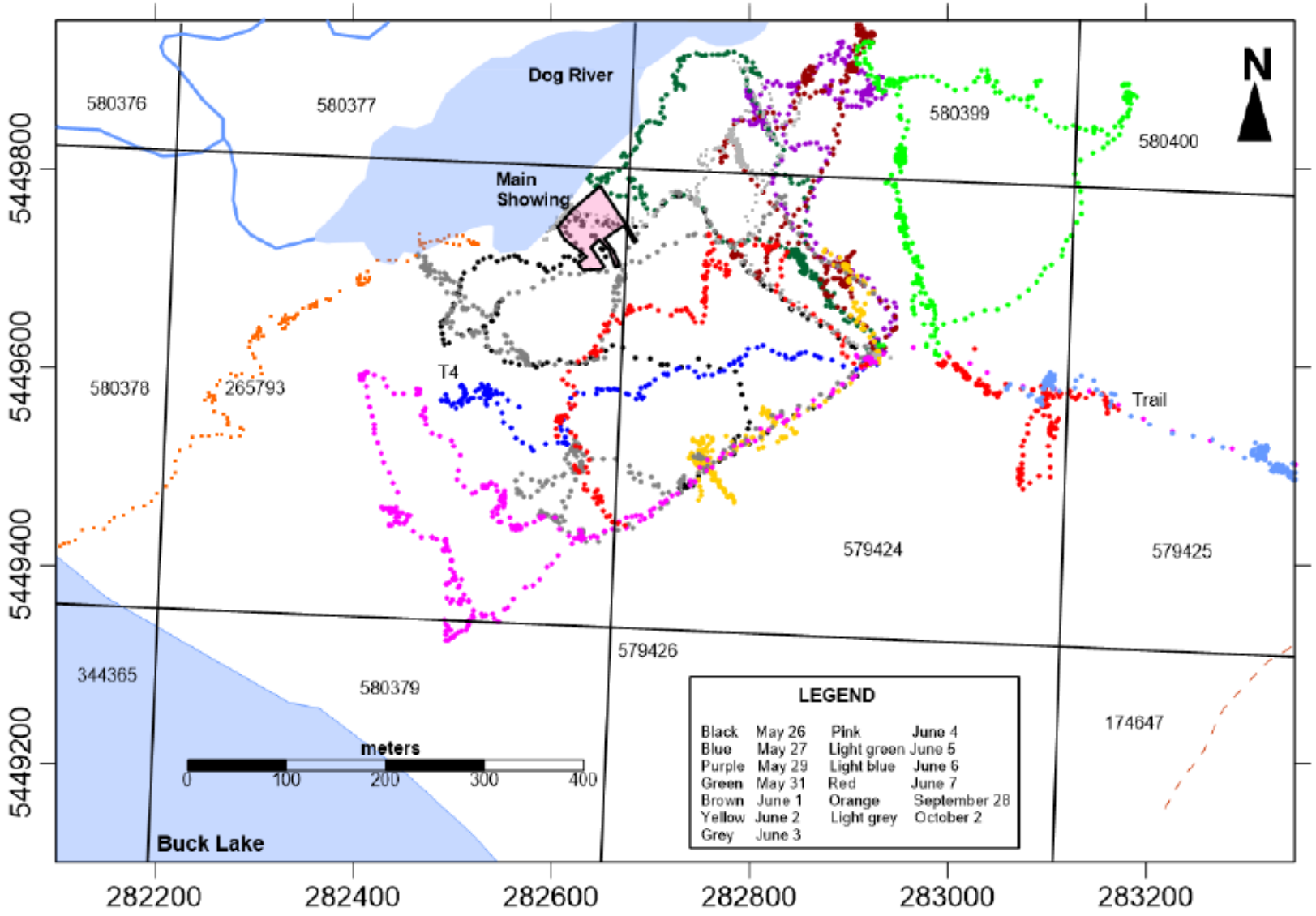

Fig. 9: Area B, Inset A, traverse map (all dates in Legend are for 2022 fieldwork).

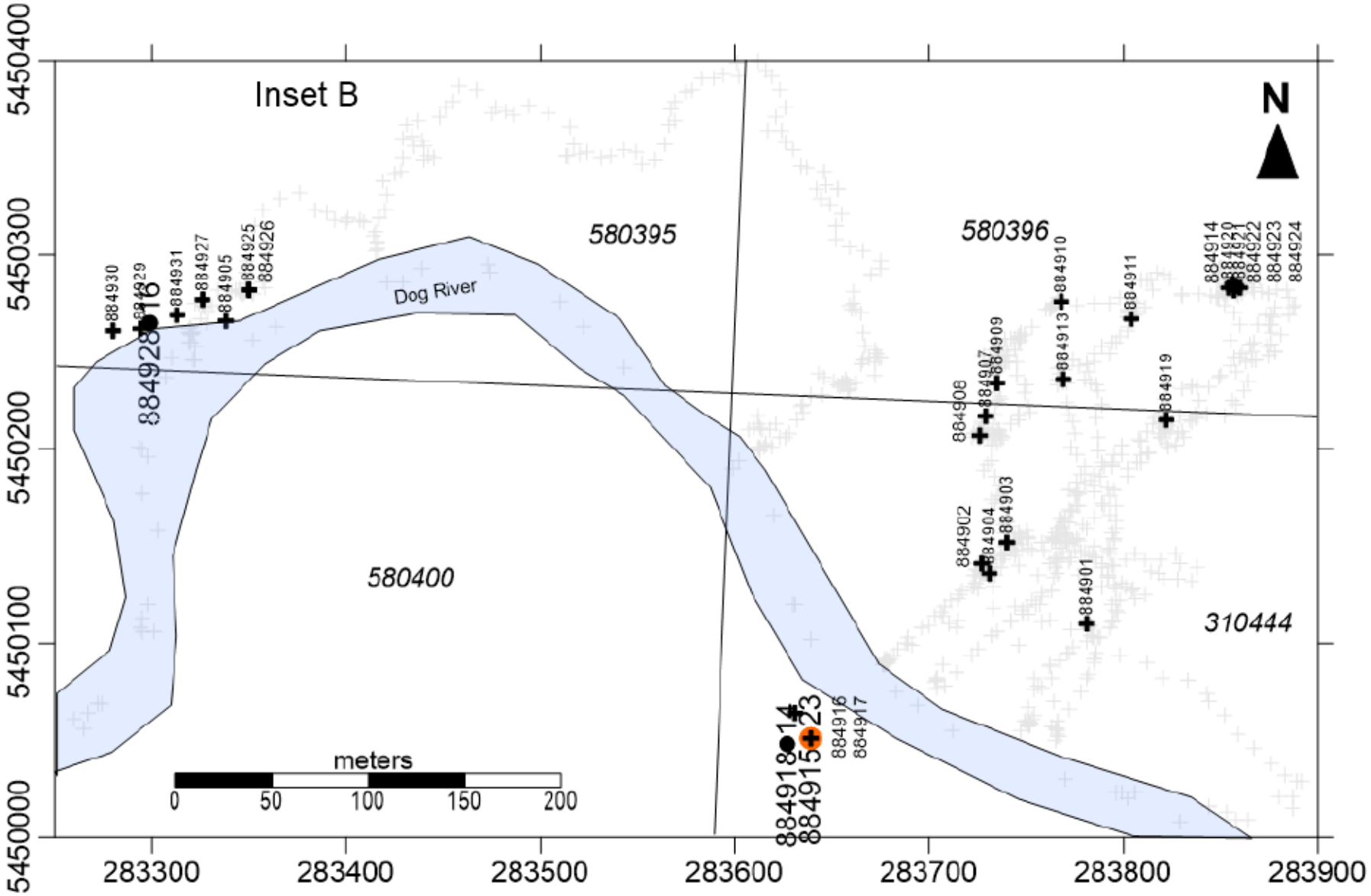

Fig. 10: Area B, Inset B, sample locations (for sample symbols and Pd+Pt ranges see Legend in Fig 8).

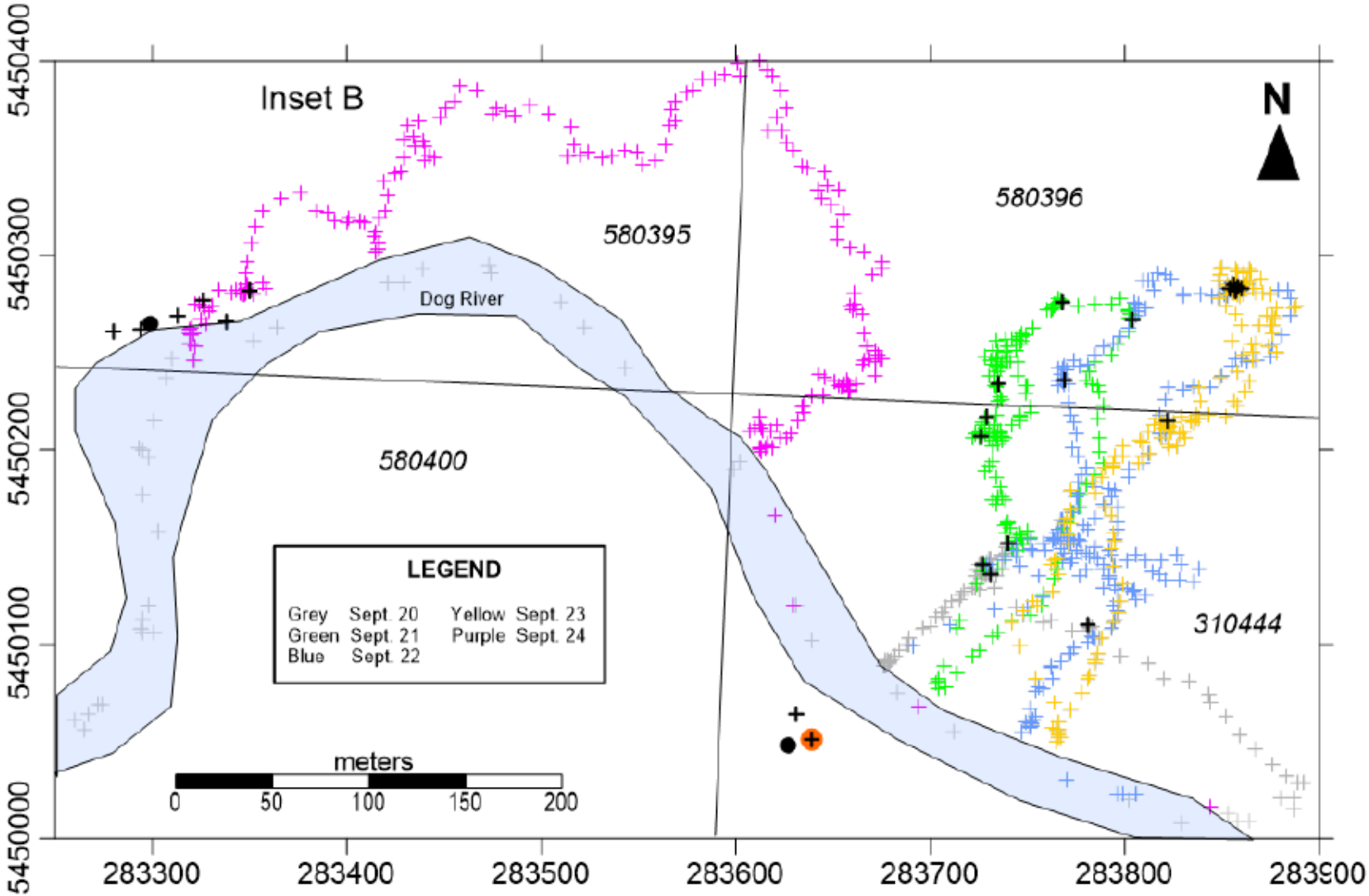

Fig. 11: Area B, Inset B, traverse map (all dates in Legend relate to 2022 fieldwork; for sample symbols and ranges see Legend in Fig. 8).

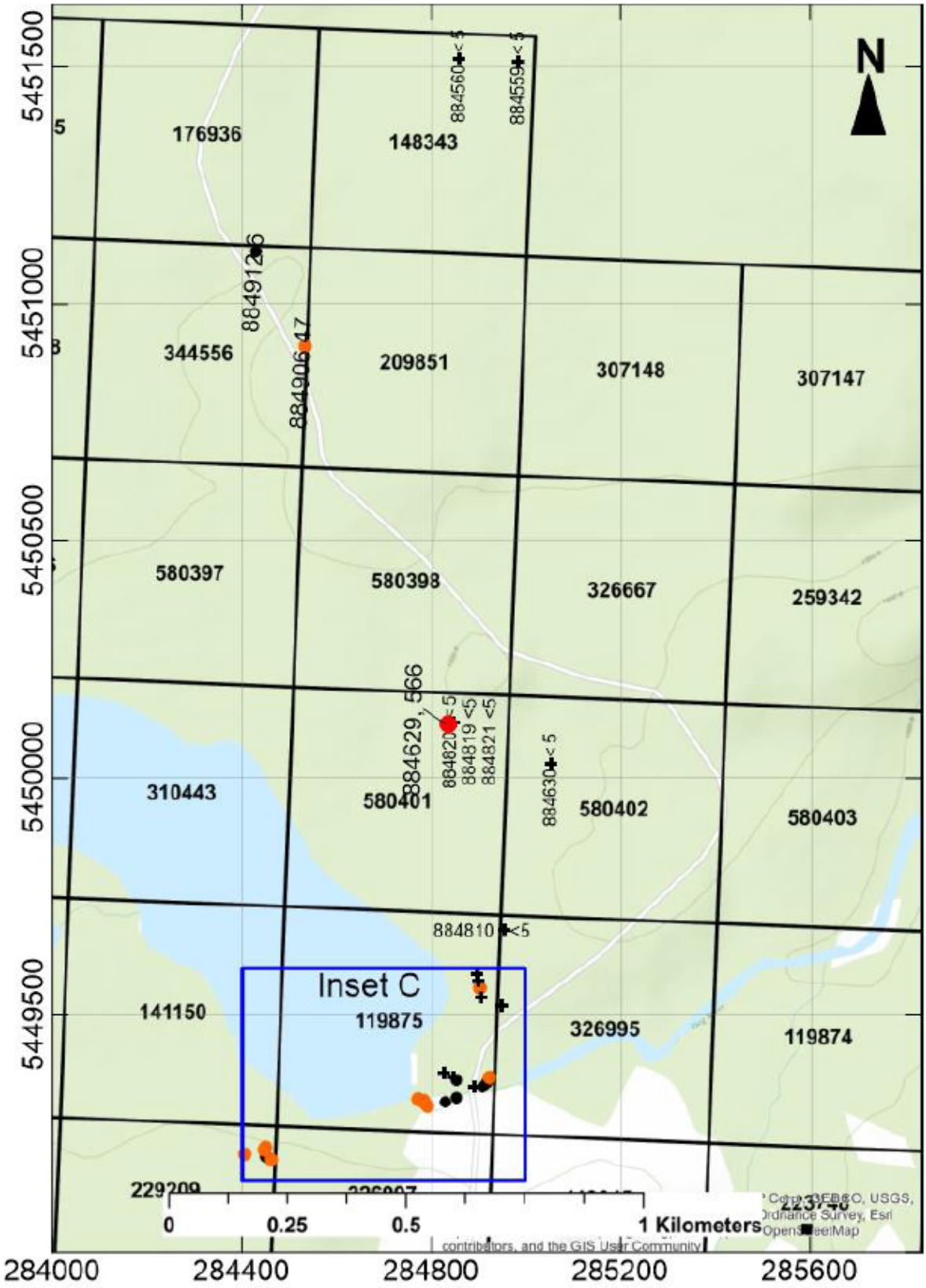

Fig. 12: Area C, sample locations and Inset C (blue rectangle; for sample symbols and ranges see Legend in Fig. 8).

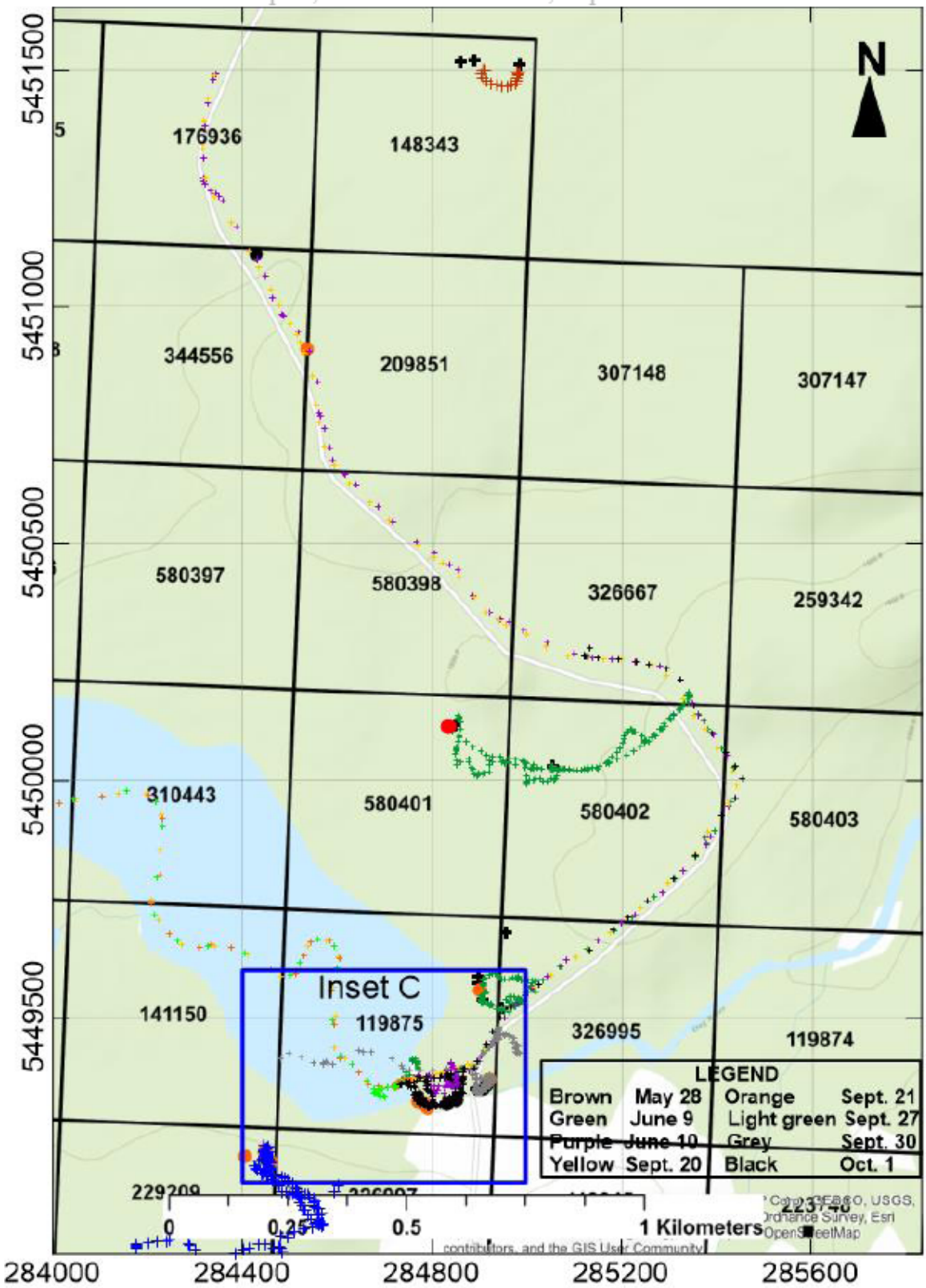

Fig. 13: Area C, traverse map and Inset C (blue rectangle) (all dates in Legend are for 2022 fieldwork).

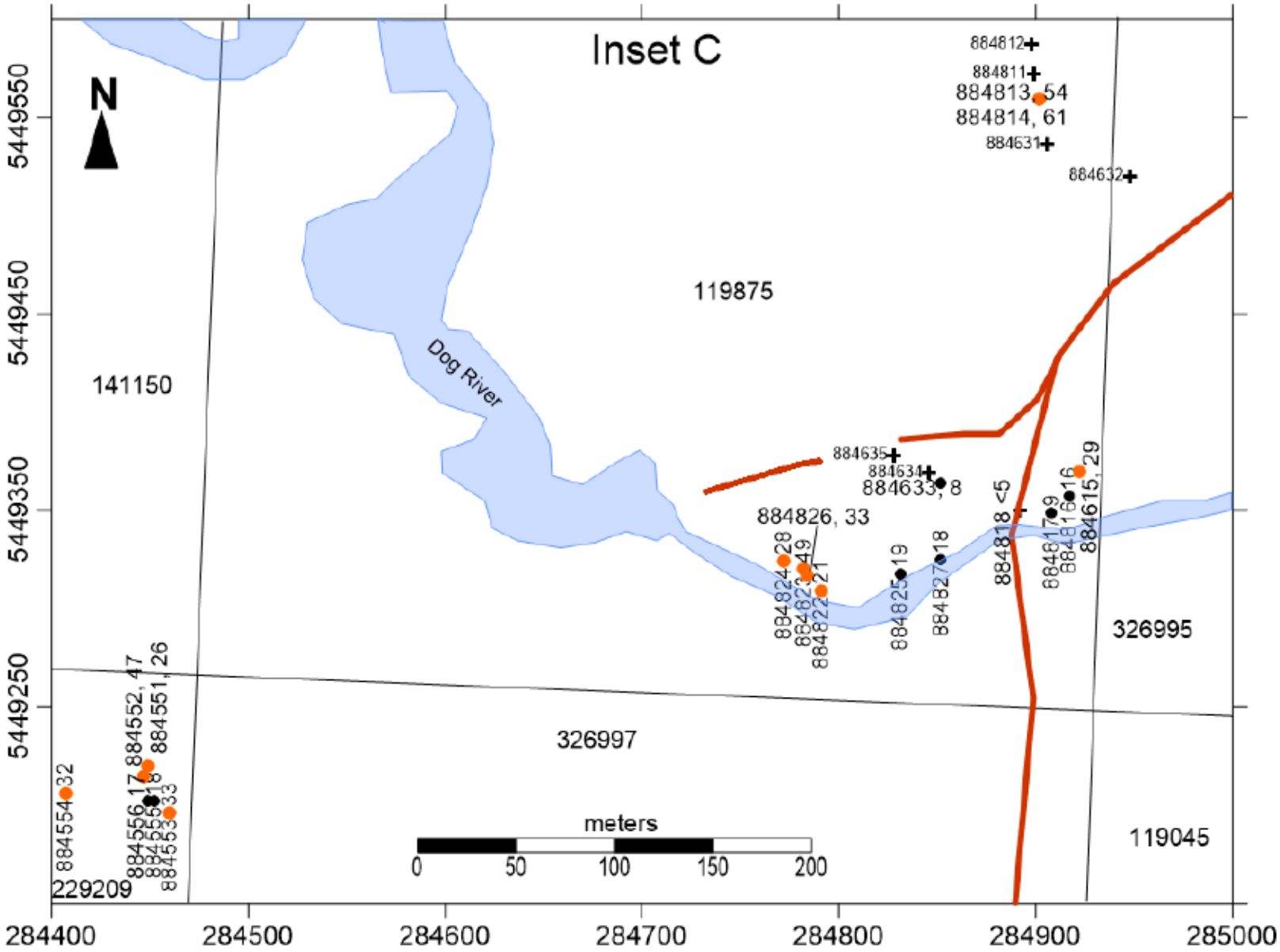

Fig. 14: Area C, Inset C, sample locations with Pd+Pt values (for sample symbols and ranges see Legend in Fig. 8).

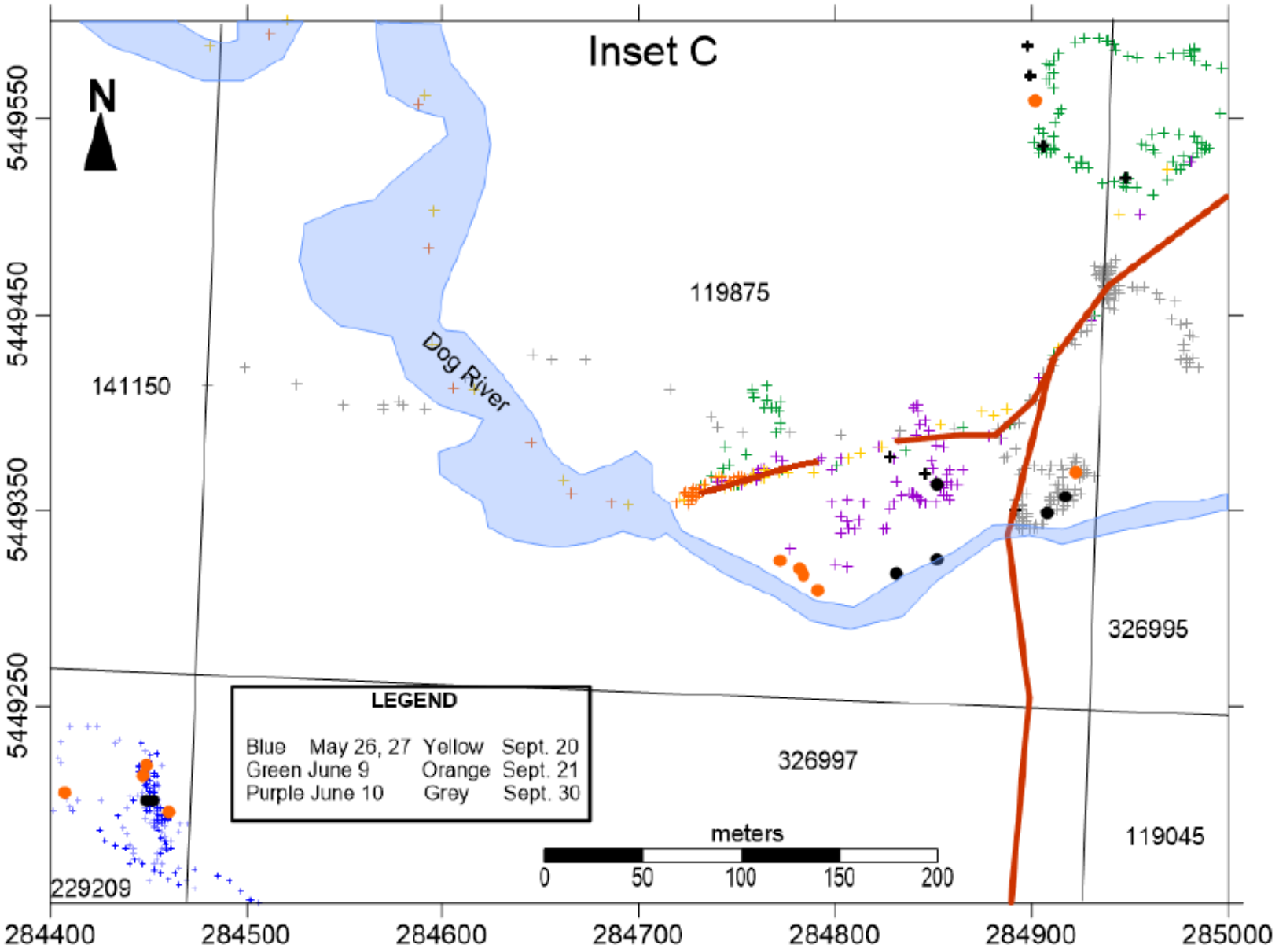

Fig. 15: Area C, Inset C, traverse map (2022 fieldwork; for sample symbols and Pd+Pt ranges see Legend in Fig. 8).

2.2. Sampling Method and Analysis

Rock samples with tags and sample numbers were placed in standard polypropylene bags and closed with flagging tape. The sample sites (Figs. 6, 7, 8, 10, 12 and 14) were recorded using GPS (NAD 83, zones U15 and/or U16), the sample descriptions are in Appendix I. The samples were not modified after collection and the writers personally dispatched samples to Activation Laboratories ("ActLabs") in Thunder Bay for analysis. ActLabs are ISO 17025 and CAN-P-1579 accredited for specific registered tests, and ISO 9001:2008 certified.

The sample preparation includes crushing to 90 % <2 mm, riffle splitting to obtain representative sample (250g), pulverizing and splitting to 95 % < 105 µm. The gold, platinum and palladium are assayed using fire assay and ICP-OES finish. The other elements (full scan) are tested using Agua Regia digestion and AAS or ICP finish, ActLabs' codes 1C-OES FA ICP-OES and 1E3 AR ICP.

Whole rock analyses were made for 85 samples, including four field duplicates. Descriptive statistics and correlation coefficients for selected elements and the whole rock assays are in Tables 1 and 2, the Tables 3 and 4 show the descriptive statistics and correlation coefficients for 168 assays. The values below detection limit ("DL") were replaced by a half DL values to enable calculations.

In order to classify the rock samples and to obtain more insight into their origin, we plotted the selected whole rock assays into the LeBas et al (1986) $SiO_2 - Na_2O+K_2O$ classification plot (Fig. 16), the Al-Fe+Ti-Mg cation plot after Jensen (1976), (Fig. 17) and into Al_2O_3/MgO and Na_2O/MgO plots (Figs.18, 19).

Table 1: Summary statistics (only 84 assays with WR included).

	Pd	*Pt*	*Au*	*Cu*	*Ni*	*Cr*	*SiO2*	*Al2O3*	*Fe2O3(T)*	*MnO*	*MgO*	*CaO*	*Na2O*	*K2O*	*TiO2*	*P2O5*
Count	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
Mean	11.99	7.86	4.20	109.21	99.73	122.55	49.66	15.33	9.64	0.13	8.67	10.07	2.48	0.74	0.65	0.18
St. Error	5.68	2.00	0.37	20.31	9.82	15.55	0.66	0.42	0.36	0.01	0.46	0.26	0.12	0.04	0.04	0.02
Median	2	2	3	54.5	73.5	58	48.4	16.16	9.33	0.1245	7.86	10.595	2.475	0.69	0.5855	0.13
Mode	2	2	3	38	62	9	49.02	16	8.54	0.103	7.96	11.57	2.2	0.56	0.866	0.04
St. Deviation	52.04	18.37	3.37	186.13	89.99	142.56	6.07	3.83	3.33	0.05	4.26	2.40	1.07	0.36	0.39	0.20
S. Variance	2708.3	337.4	11.3	34644.3	8097.7	20323.6	36.9	14.7	11.1	0.0	18.2	5.8	1.1	0.1	0.2	0.0
Kurtosis	68.50	23.45	10.07	21.75	11.16	4.41	8.79	0.33	2.53	3.71	0.32	3.68	0.83	0.24	9.53	6.78
Skewness	8.06	4.76	2.84	4.40	2.79	1.99	2.51	-0.88	0.87	0.91	0.67	-1.22	0.46	0.66	2.52	2.48
Range	458	111	20	1157	537	747	40.68	17.26	19.21	0.3	20.19	16.01	5.57	1.61	2.415	1
Minimum	<5	<5	<2	3	2	3	35.91	4.28	1.43	0.013	0.21	1.37	0.3	0.06	0.071	0.01
Maximum	460	113	21	1160	539	750	76.59	21.54	20.64	0.313	20.4	17.38	5.87	1.67	2.486	1.01

Table. 2: Correlation matrix (only 84 assays with WR included).

	Pd	*Pt*	*Au*	*Cu*	*Ni*	*Cr*	*SiO2*	*Al2O3*	*Fe2O3(T)*	*MnO*	*MgO*	*CaO*	*Na2O*	*K2O*	*TiO2*	*P2O5*
Pd	1.000															
Pt	**0.791**	1.000														
Au	0.185	0.262	1.000													
Cu	-0.029	-0.024	0.509	1.000												
Ni	0.132	0.426	0.354	0.111	1.000											
Cr	0.215	**0.491**	-0.007	-0.087	0.538	1.000										
SiO2	0.018	0.015	-0.239	-0.153	-0.258	-0.122	1.000									
Al2O3	-0.320	-0.535	-0.218	0.138	-0.361	-0.659	-0.113	1.000								
Fe2O3(T)	0.043	0.022	0.270	0.185	-0.020	0.013	-0.607	-0.174	1.000							
MnO	0.180	0.258	0.042	0.021	0.095	0.268	-0.414	-0.494	**0.735**	1.000						
MgO	0.280	0.516	0.131	-0.087	0.603	**0.811**	-0.346	-0.689	0.019	0.388	1.000					
CaO	0.085	0.120	0.166	-0.020	0.267	0.203	**-0.773**	-0.091	0.292	0.370	0.539	1.000				
Na2O	-0.220	-0.374	-0.282	0.008	-0.521	-0.589	0.621	0.529	-0.363	-0.513	**-0.802**	-0.783	1.000			
K2O	-0.179	-0.291	-0.211	0.116	-0.303	-0.412	0.096	0.424	-0.090	-0.106	-0.415	-0.366	0.426	1.000		
TiO2	-0.066	-0.160	-0.025	0.201	-0.307	-0.227	-0.311	0.107	**0.762**	0.548	-0.275	0.009	0.022	0.222	1.000	
P2O5	-0.089	-0.152	-0.230	-0.122	-0.221	-0.180	-0.082	0.057	0.169	0.239	-0.162	-0.130	0.184	0.386	0.250	1.000

Table 3: summary statistics (168 assays)

	Pd	*Pt*	*Au*	*Cu*	*Zn*	*Ni*	*Cr*	*Fe*	*Mg*	*S*
Count	168	168	168	168	168	168	168	168	168	167
Mean	23.17	16.60	4.79	119.08	29.43	114.51	97.62	3.20	1.40	0.36
Standard Error	8.26	5.34	0.30	15.52	1.29	16.12	8.90	0.13	0.04	0.08
Median	2	2	4	58	27	69	55.5	2.765	1.345	0.17
Mode	2	2	4	58	16	67	11	2.69	1.05	0.07
St. Deviation	107.06	69.17	3.83	201.15	16.73	208.96	115.30	1.73	0.56	1.05
Sample Variance	11462.78	4783.86	14.66	40460.32	279.92	43662.43	13293.35	2.99	0.31	1.10
Kurtosis	41.44	47.88	15.60	17.69	19.72	41.89	7.54	4.54	2.93	125.61
Skewness	6.33	6.81	3.53	4.04	3.50	6.13	2.40	1.71	1.07	10.60
Range	879	563	28	1257	144	1818	747	11.54	3.79	12.895
Minimum	<5	<5	<2	3	4	2	3	0.76	0.1	<0.01
Maximum	881	565	29	1260	148	1820	750	12.3	3.89	12.9

Table 4: Correlation matrix (168 assays)

	Pd	*Pt*	*Au*	*Cu*	*Zn*	*Ni*	*Cr*	*Fe*	*Mg*	*S*
Pd	1.000									
Pt	**0.970**	1.000								
Au	0.688	**0.722**	1.000							
Cu	0.608	0.649	**0.740**	1.000						
Zn	-0.148	-0.168	-0.181	0.048	1.000					
Ni	**0.862**	**0.929**	**0.747**	0.665	-0.229	1.000				
Cr	0.184	0.203	0.081	0.040	-0.190	0.300	1.000			
Fe	-0.105	-0.117	0.132	0.152	0.614	-0.133	-0.209	1.000		
Mg	-0.080	-0.066	-0.080	-0.050	0.028	0.081	0.558	-0.036	1.000	
S	0.088	0.093	0.481	0.184	-0.106	0.164	-0.040	0.497	-0.108	1.000

25-49.9 % | 50-75 % | > 75 % | > -50 %

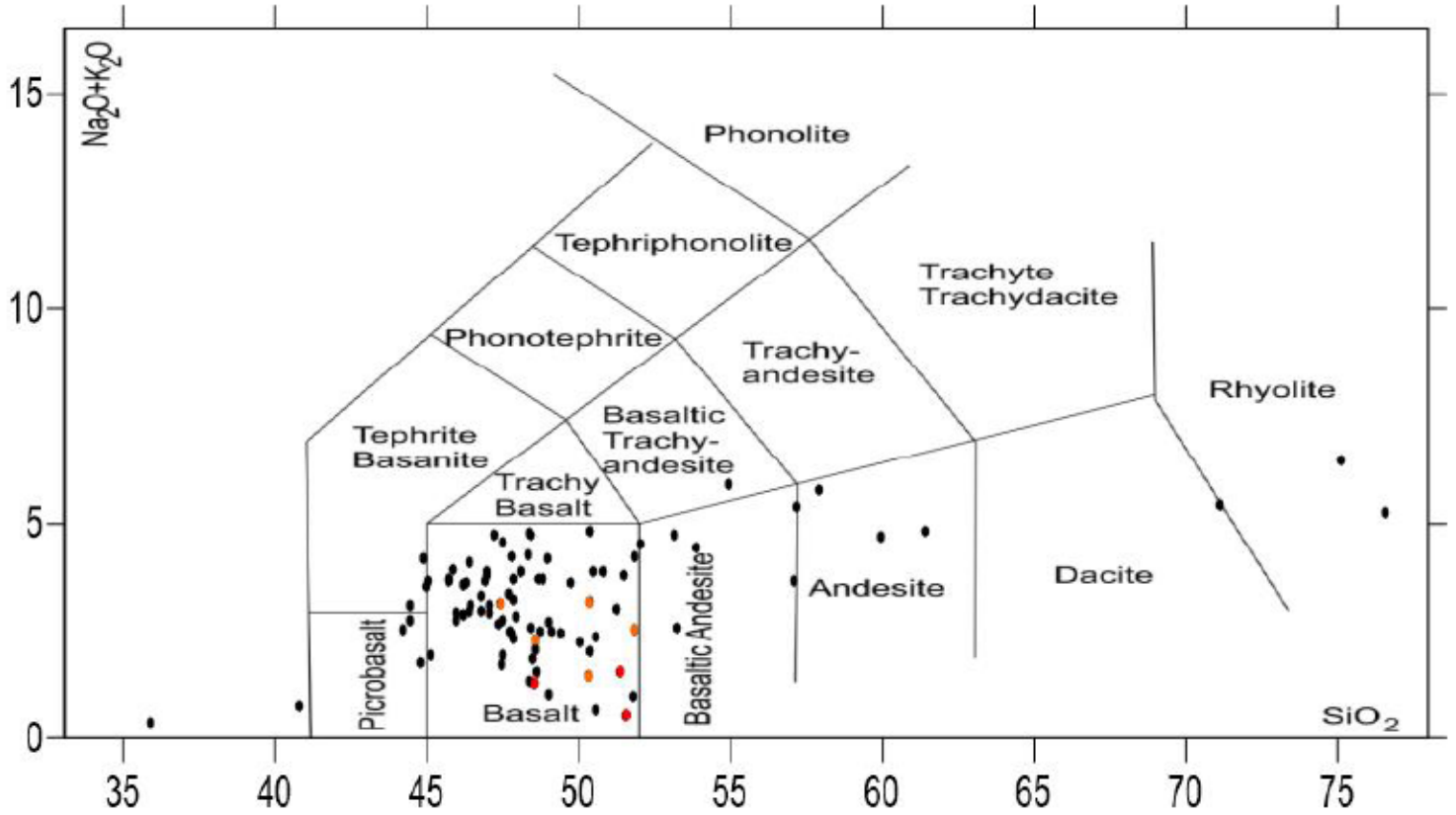

Fig. 16: Classification plot after LeBas et al., (1986), (PGE anomalous samples ranging 113 to 556 ppb Pd+Pt marked red, samples ranging 21 to 47 ppb Pd+Pt marked orange).

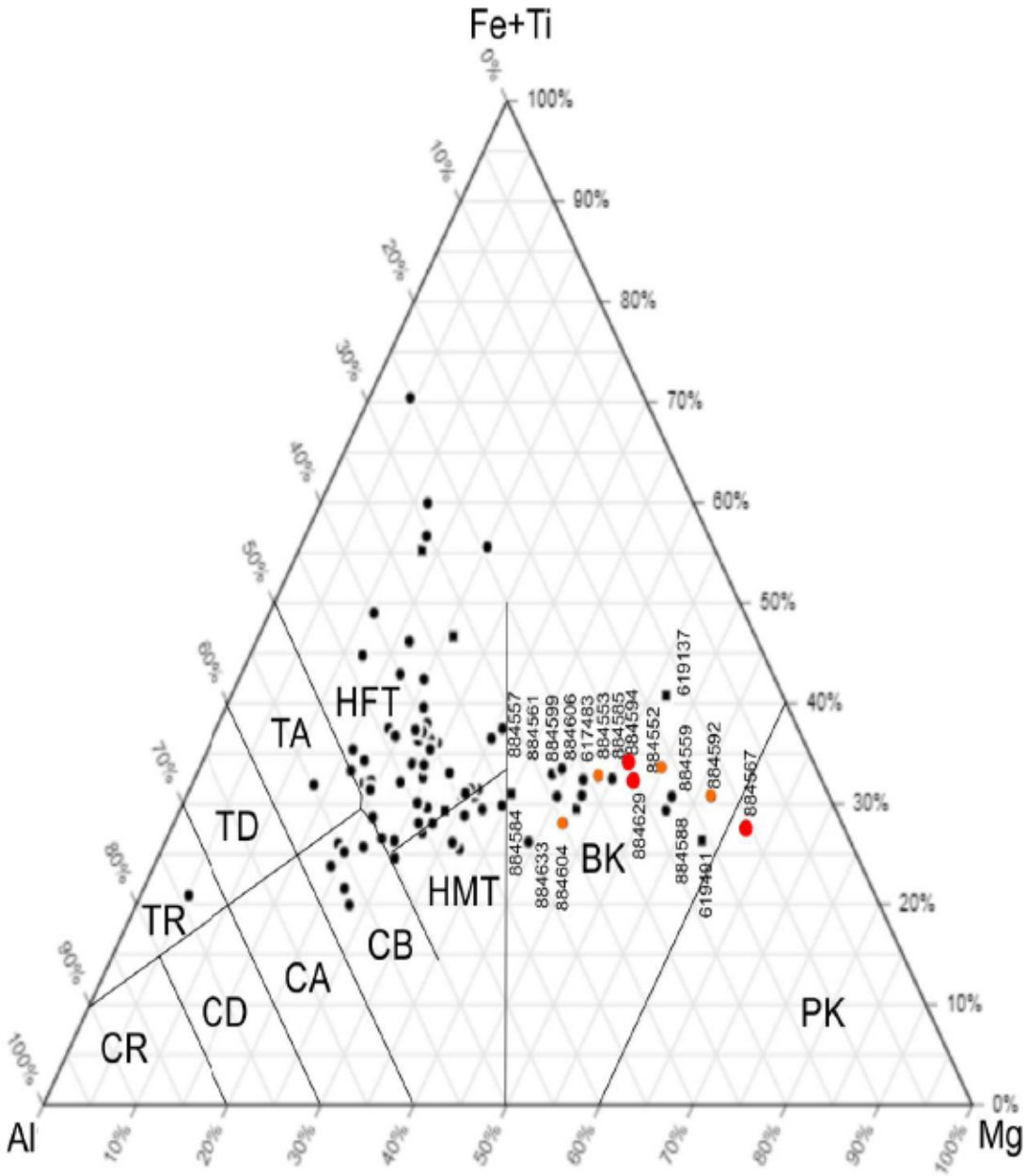

Fig. 17: Whole rock analysis: Al-Fe+Ti-Mg cation plot after Jensen (1976), (C - calc-alkaline; T - tholeiitic; K - komatiitic; P- picritic; R - rhyolite; D - dacite; A - andesite; B - basalt; HF - high Fe; HM - high Mg).

Fig. 17 shows most Pd+Pt-anomalous samples (red and/or orange) fall within the basaltic komatiite field and/or within the picritic komatiite field. These rocks probably belong to portions of the mafic/ultramafic body that were least affected by deuteric, retrograde metamorphic and/or hydrothermal processes.

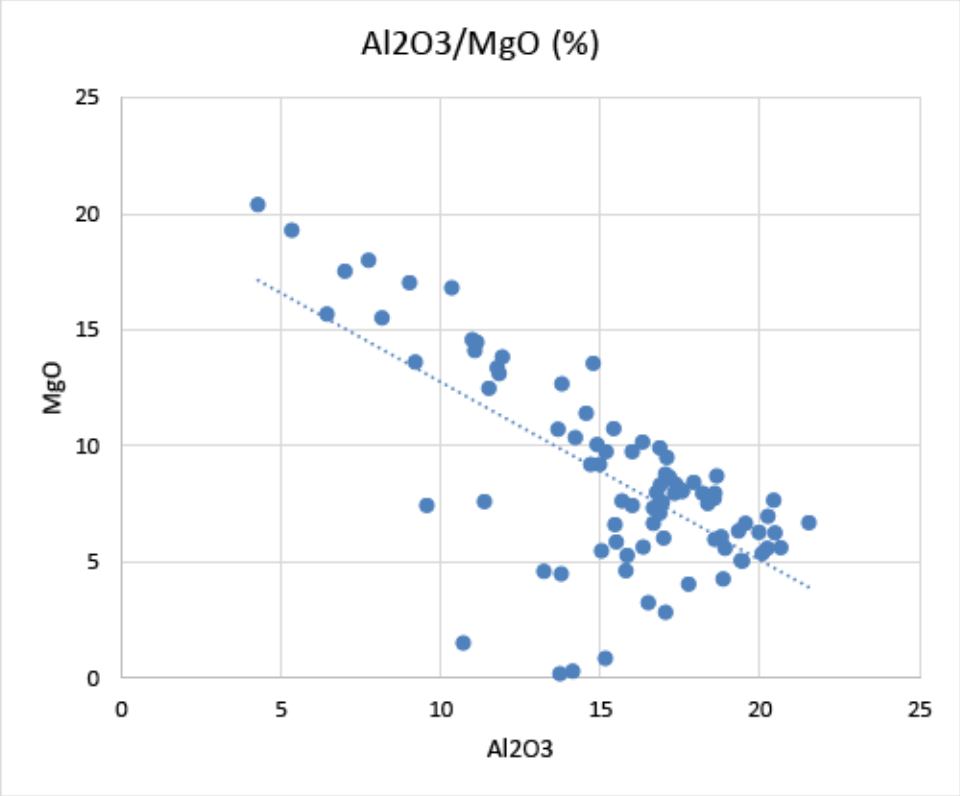

Fig. 18: Al_2O_3 – MgO plot (shows negative correlations between the two oxides).

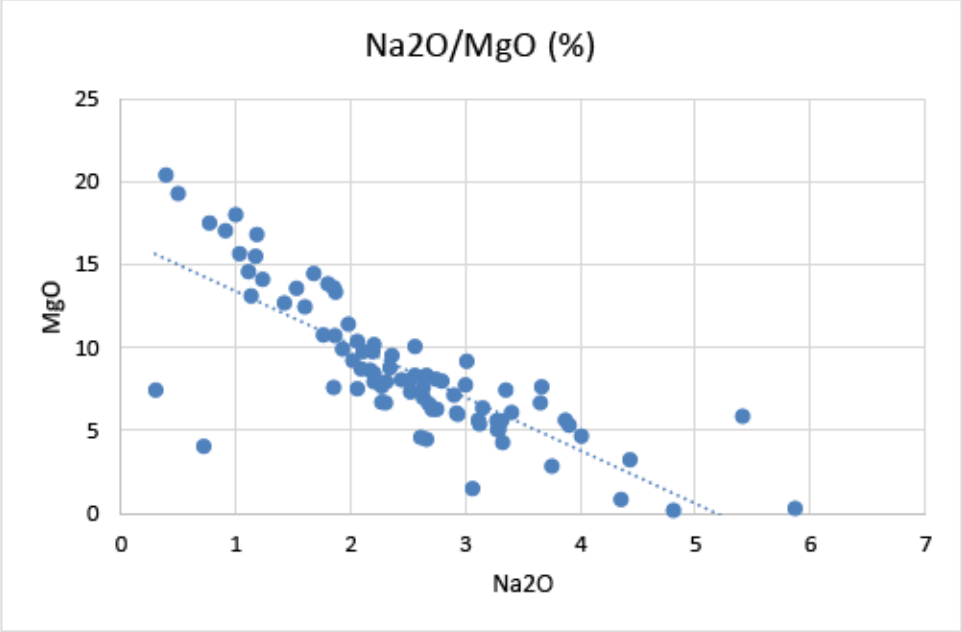

Fig. 19: Na_2O – MgO plot (shows negative correlations between the two oxides).

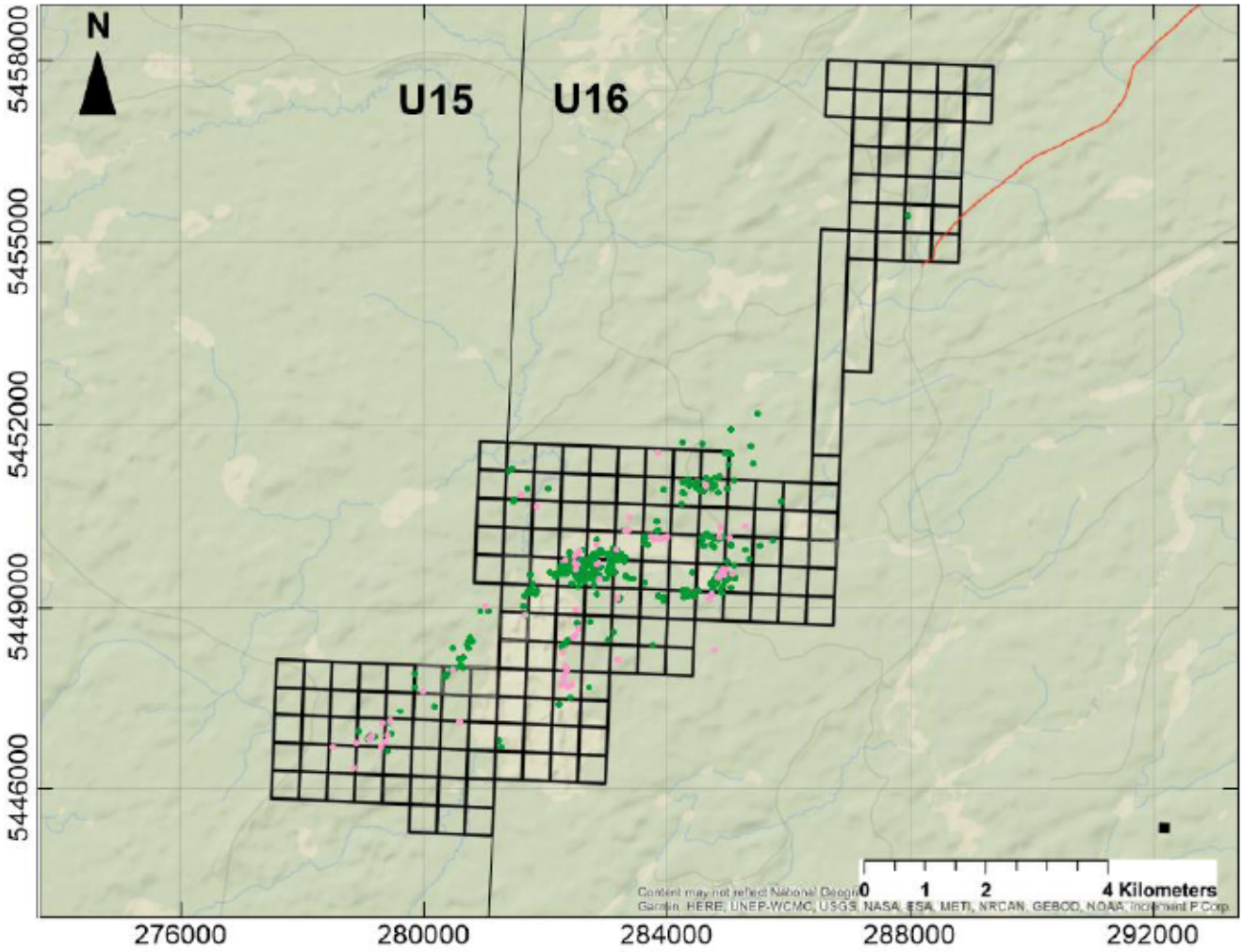

Fig. 20: Distribution of mafic and felsic rocks in the BLP area.

Map in Fig. 20 shows the distribution of mafic and felsic outcrops (felsic dykes/veins included) in the BLP area, compiled from the 2008 through 2022 fieldwork.

Graphs for platinum, palladium, gold, nickel and copper assays are presented in Figs. 21 a, b. and 22 a, b. A few gold values below DL are replaced by a half DL value.

Airborne measured lateral gradient map in Fig. 23 shows the Pd+Pt anomalous to ore-grade samples are frequently located within or at the contacts of negative magnetic anomalies (dark blue) with non-anomalous or felsic rocks. These negative mag anomalies appear to be associated with the deep-seated, northeast and/or southeast striking faults. The former prevail in the western portion and the latter in the eastern portions of the BLP. Inversion modeling indicates that the mafic/ultramafic rocks in the western portion of the BLP extend to a depth of at least 1000 meters, while they extend to a depth at least 2000 meters in the eastern portion of the BLP.

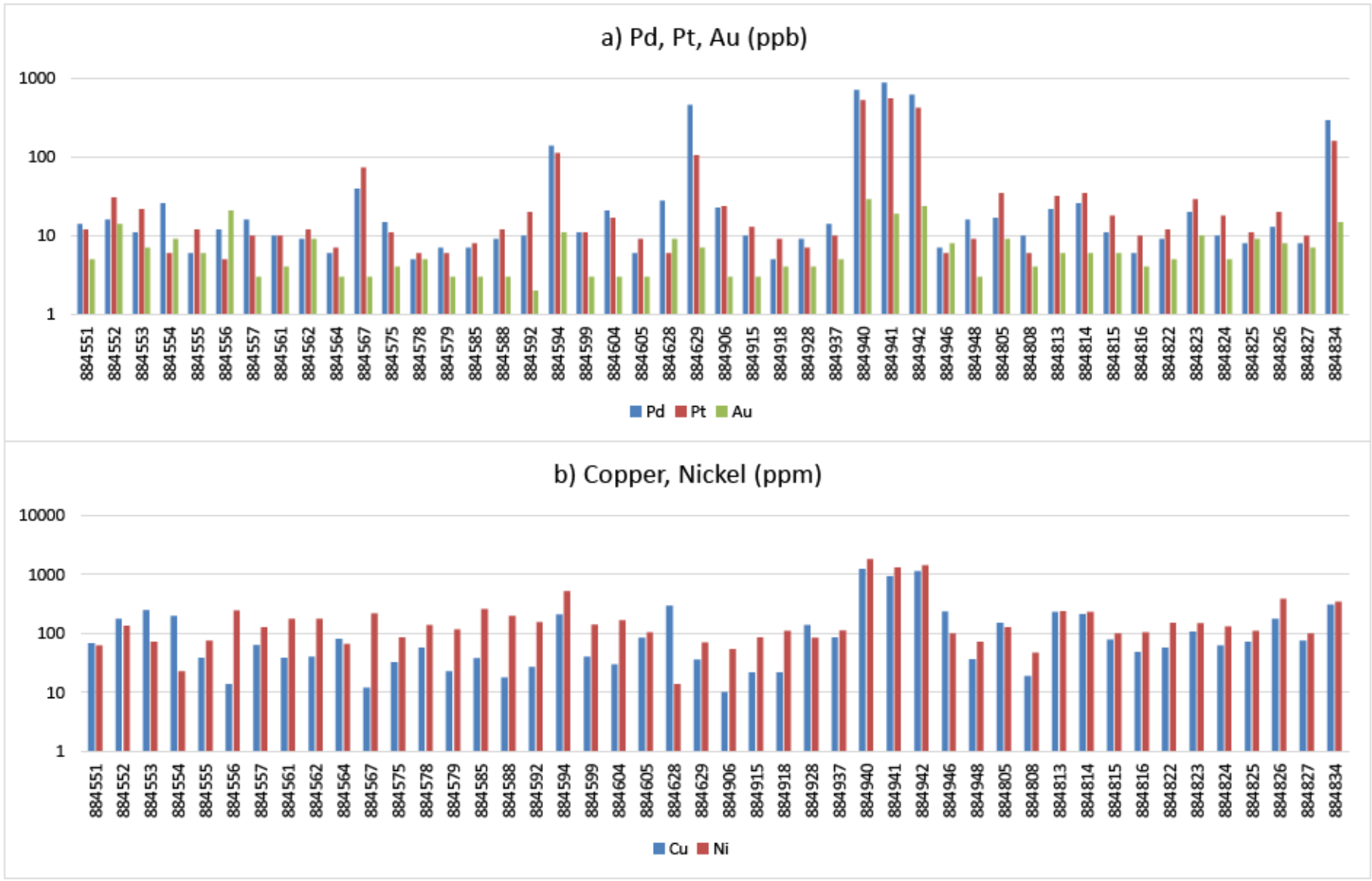

Fig. 21: graphs for a) palladium, platinum and gold; b) copper and nickel; (Pd, Pt, Au assays above DL included only).

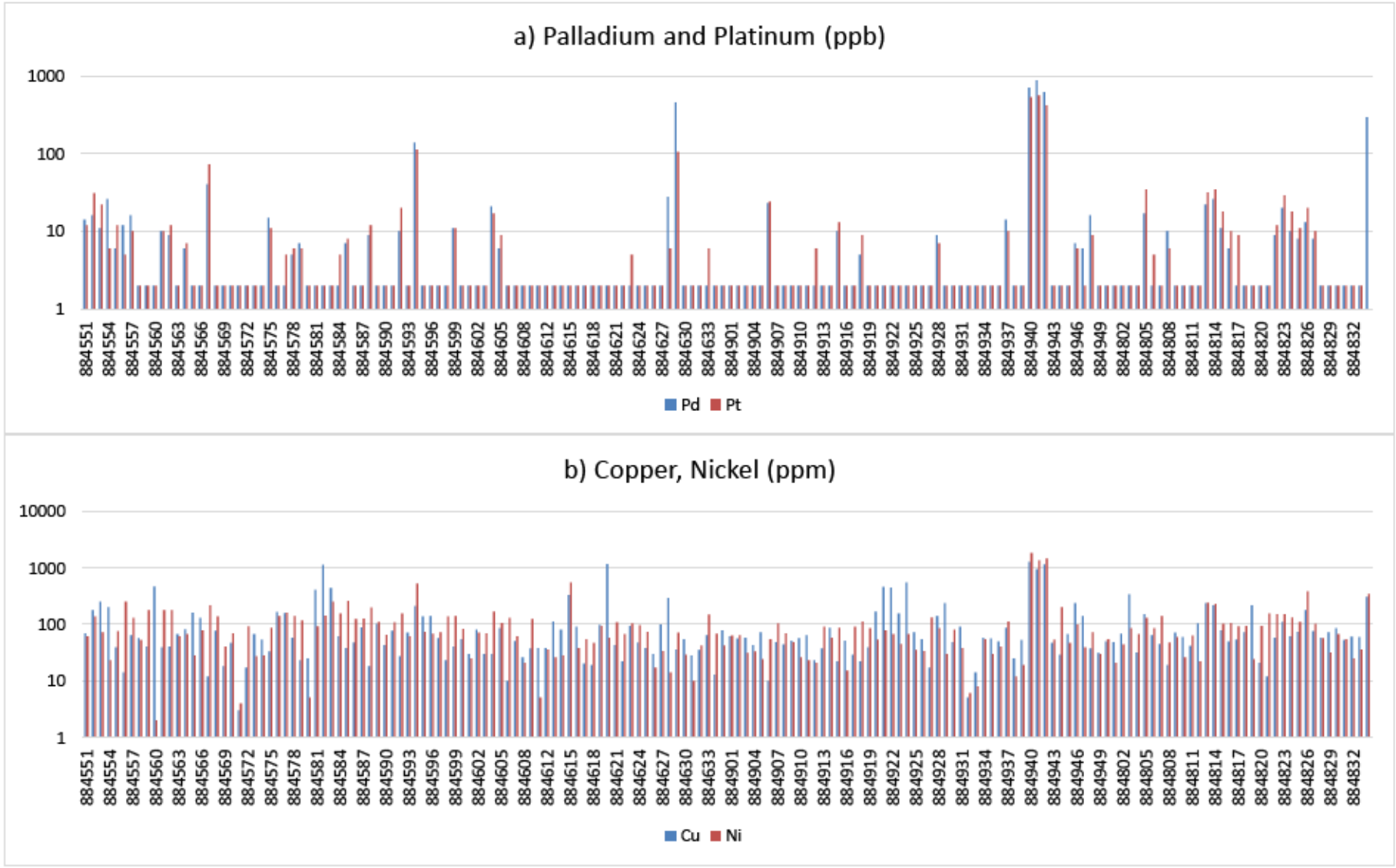

Fig. 22: graphs for a) Pd and Pt; b) copper and nickel; all 168 assays included.

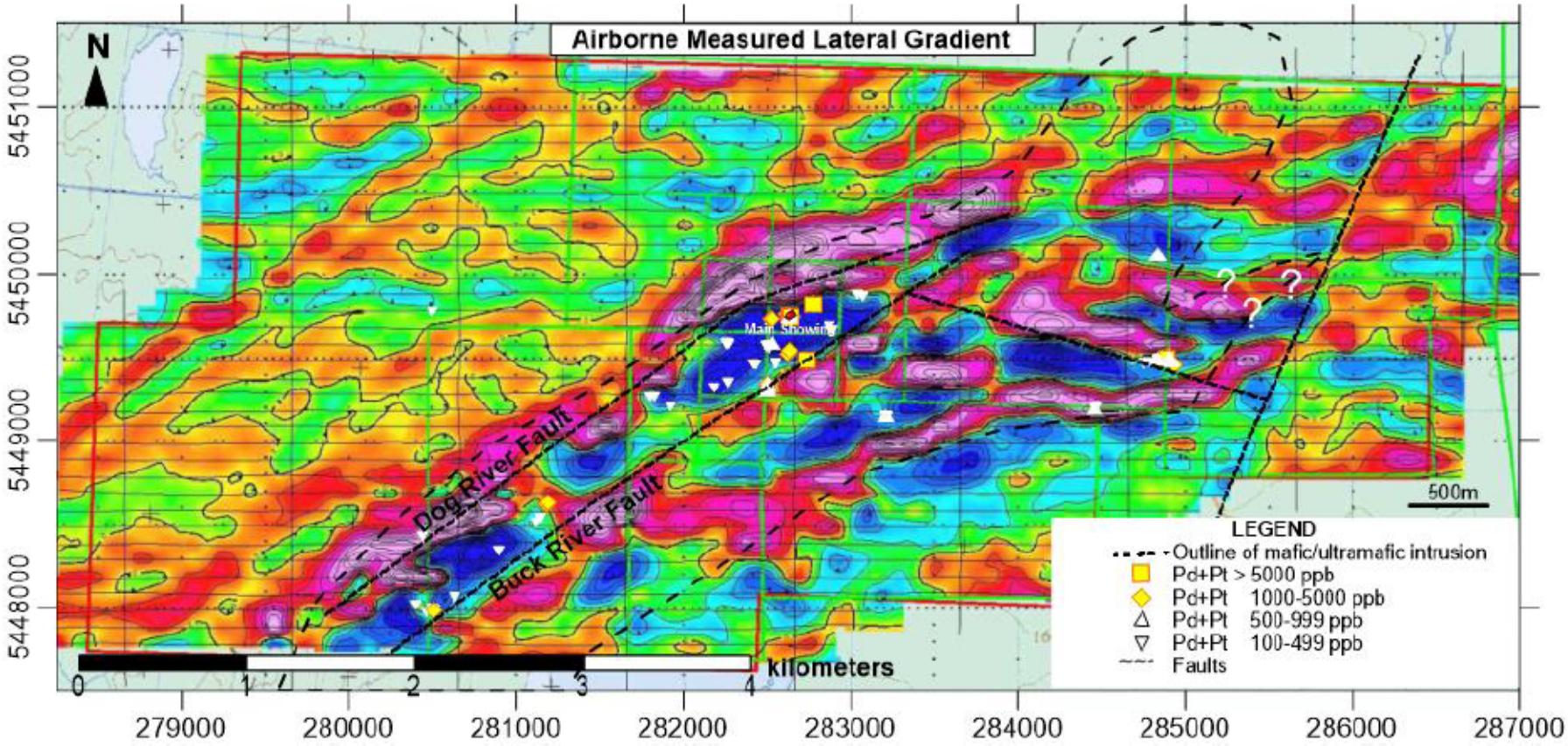

Fig. 23: Airborne measured lateral gradient map with locations of anomalous Pd+Pt samples.

3. QUALITY CONTROL

ActLabs use LIMS program to monitor the analytical progress throughout the laboratory process. All duplicate assays are reported on the certificate of analysis. All data generated for Quality Control standards, blanks and duplicates are retained and used in the validation of results. In order to independently check the laboratory performance we collected seven field duplicate samples during our fieldwork.

QC for Certificate A22-07865 includes the following quality control standards:

PK03 Meas PK03 vs Cert for gold, palladium and platinum;

NIST 694 Meas : NIST 694 Cert; DNC-1 Meas : DNC-1 Cert; SY-4 Meas : SY-4 Cert, BIR-1a Meas : BIR-1a Cert; BCR-2 Meas : BCR-2 Cert; W-2b Meas : W-2b Cert for the whole rock analysis;

GXR-6 Meas : GXR-6 Cert; GXR-6 Meas : GXR-6 Cert; GXR-6 Meas : GXR-6 Cert for 38 elements;

OREAS 98 (Aqua Regia) Meas : OREAS 98 (Aqua Regia) Cert; OREAS 98 (Aqua Regia) Meas : OREAS 98 (Aqua Regia) Cert; OREAS 98 (Aqua Regia) Meas : OREAS 98 (Aqua Regia) Cert; Oreas 96 (Aqua Regia) Meas : Oreas 96 (Aqua Regia) Cert for silver, copper, lead, zinc, bismuth, cobalt, antimony and sulfur;

OREAS 922 (AQUA REGIA) Meas : OREAS 922 (AQUA REGIA) Cert; OREAS 923 (AQUA REGIA) Meas : OREAS 923 (AQUA REGIA) Cert for 34 elements.

OREAS 45f (Aqua Regia) Meas : OREAS 45f (Aqua Regia) Cert for 31 elements.

Ten lab duplicates for gold, palladium and platinum were measured. While gold in all but one duplicate is above detection limit (<2 ppb), palladium and platinum are below DL in all but two originals and/or duplicates. Gold and palladium in duplicate 884552 are by 7.7 % and 6.3 % respectively higher that in the original whereas platinum in the duplicate is by 16.2 % lower than the original.

Nine blanks were measured for palladium, platinum and gold, with all palladiums and platinums below DL, while gold in all is above DL, ranging from 3 to 5 ppb. All blanks for 38 elements except boron and natrium are below DL.

Most blanks for the oxides in the whole rock analyses are below DL except a few that are barely above DL.

QC for Certificate A22-14507 includes the following quality control standards: CDN-PGMS-29 Meas : CDN-PGMS-29 Cert; PK03 Meas : PK03 Cert for gold, palladium and platinum and Oreas 620 (Aqua Regia) Meas : Oreas 620 (Aqua Regia) Cert for 34 elements.

ActLabs measured 8 lab duplicates for gold, palladium and platinum. Gold in duplicate 884937 is by 20 % above the original while gold in the sample 884834 is by 20 % less than the original. Palladium in duplicates is either identical with the originals or up to 4 % above the original. Platinum in duplicate 884816 is by 18.2 % less than the original.

The graphs comparing the field originals with field duplicates are presented in Figs. 24 to 27.

Our review of the assays and quality assurance did not detect any discrepancies although in rare cases the lab duplicates and/or blanks exceed the lab's upper or lower limits or DL. No discrepancies were noted in the field duplicate assays. In conclusion we can state that the Activation Laboratory's assays and quality control for this survey comply with the industry standards and are acceptable for this stage of the project.

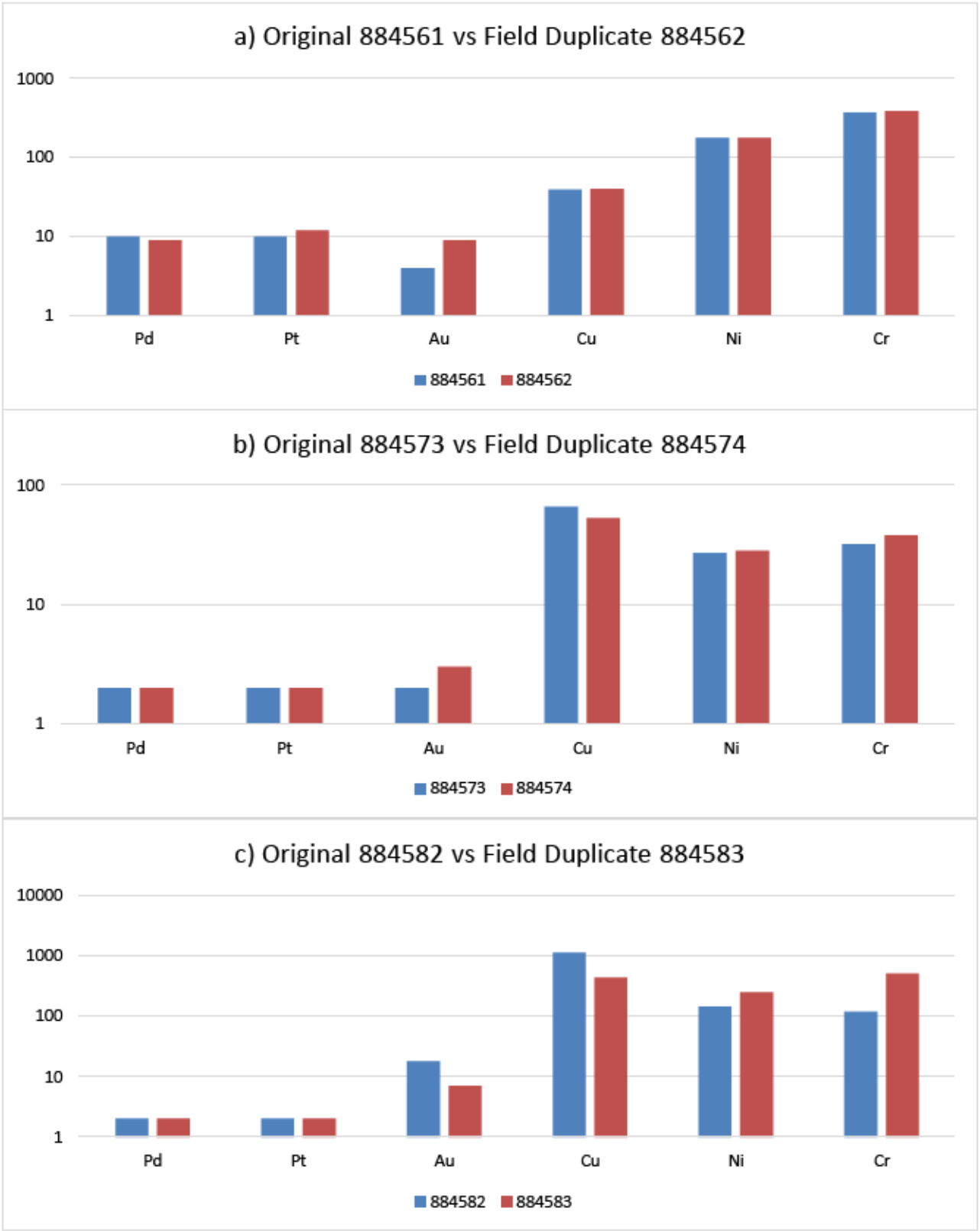

Fig. 24 a, b, c: comparison of elements in original samples vs field duplicate samples.

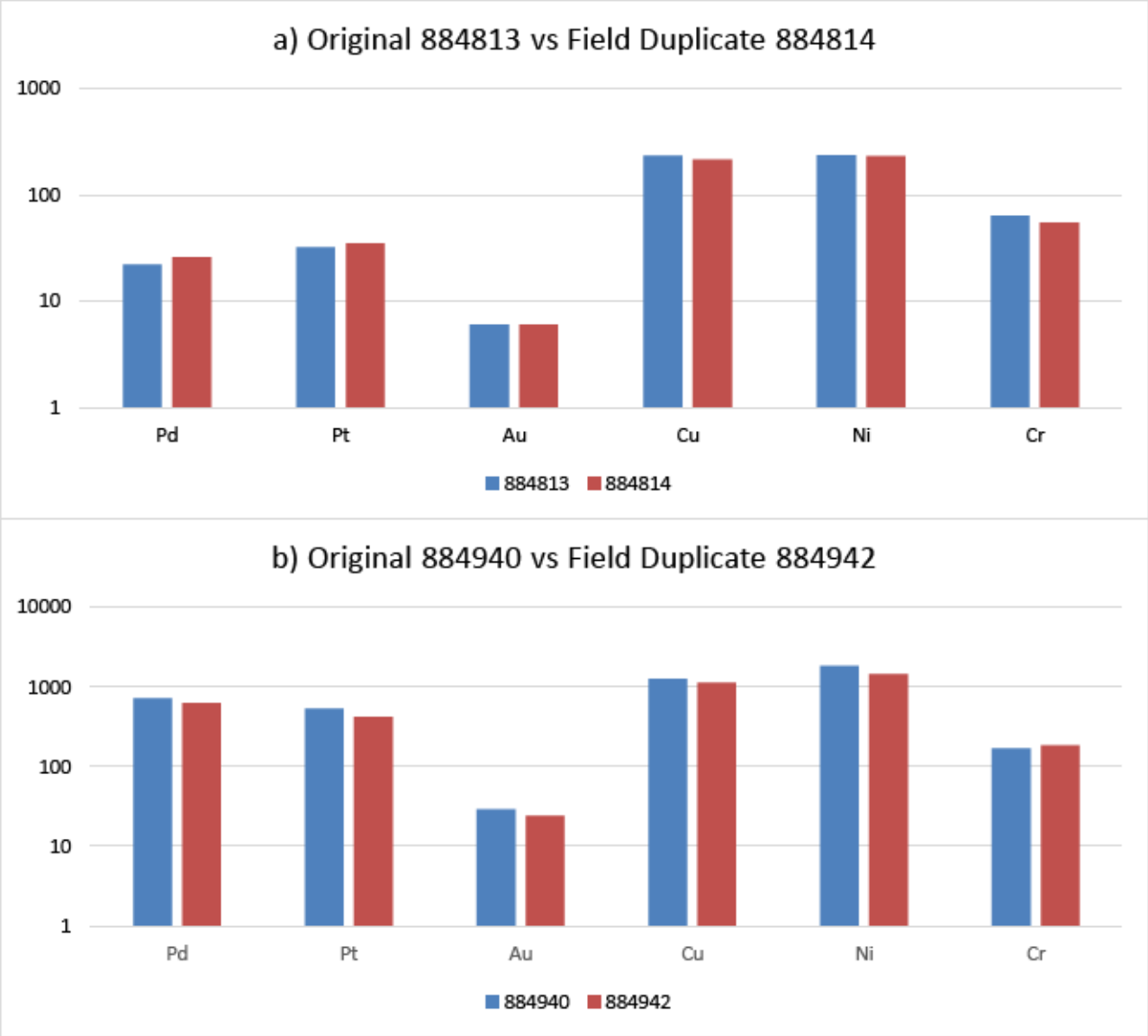

Fig. 25 a, b: comparison of elements in original samples vs field duplicate samples.

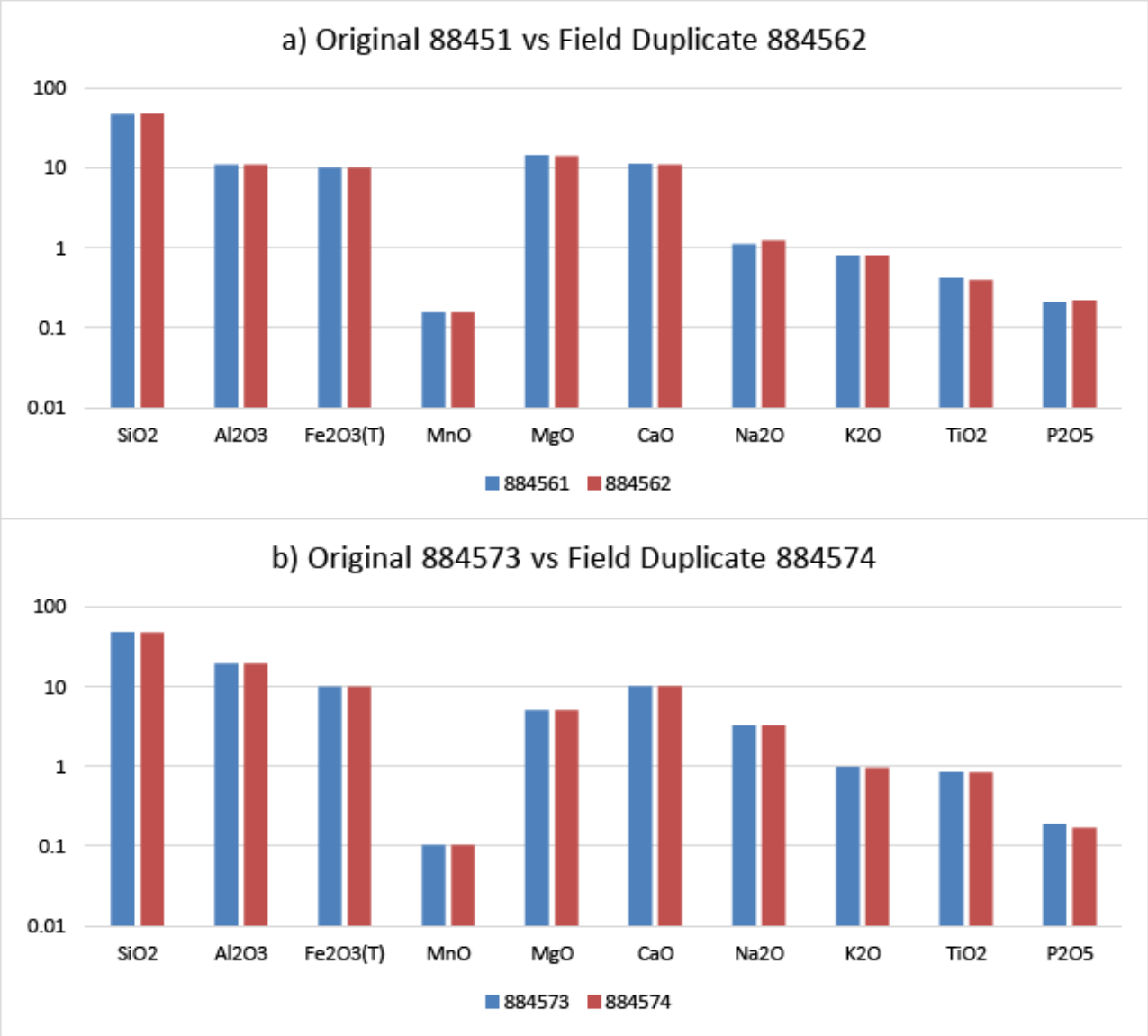

Fig. 26 a, b: comparison of oxides in original samples vs field duplicate samples, whole rock assays.

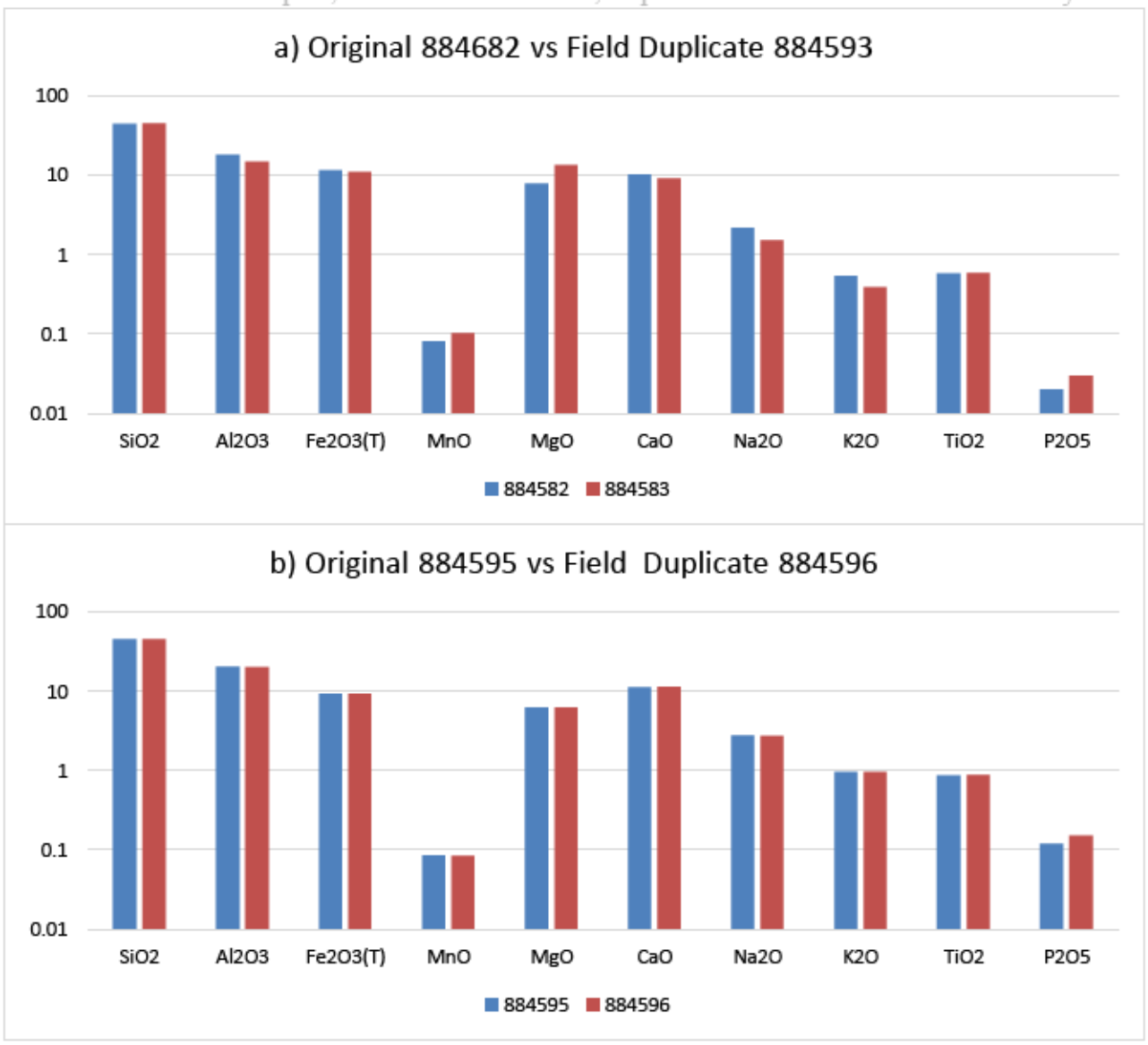

Fig. 27 a, b: comparison of whole rock analyses of oxides in original samples vs field duplicate samples.

4. CONCLUSIONS AND RECOMMENDATIONS

Empire's 2022 fieldwork on the BLP consisted of outcrop mapping and sampling in the western, central and eastern portions of the claim block (Areas A, B and C). In total, 168 rock samples were collected and their locations, descriptions, assay results and traverses are presented in this report. A new high-grade PGE showing was discovered, or rather re-discovered due to very low water level, about 100 meters west of the Main Showing. This showing appears to be located on the Dog River Fault and on the IP conductor that extends from the Main Showing.

Five samples from Area B returned anomalous to ore-grade Pd+Pt ranging from 113 to 1446 ppb and one sample from area C returned 566 ppb Pd+Pt. Several samples from Area B also returned

anomalous copper ranging from 340 to 543 ppm, but no notable PGE values were determined. These samples contain chalcopyrite and malachite, which appear to be the products of re-mobilization and/or supergene processes. Gold values in the non-anomalous PGE samples are generally low ranging from < 2 ppb to 18 ppb. Somewhat higher gold ranging from 19 to 29 ppb was assayed in three Pd+Pt ore-grade samples (884940-884942).

During our previous and recent work we identified several features at the BLP that commonly associate with the PGE-anomalous zones. They include airborne negative mag anomalies, deep-seated faults, breccias and high magnesium mafic/ultramafic volcanic rocks of komatiite and/or high magnesium tholeiite affinity.

When plotting the anomalous to ore-grade PGEs samples collected from 2008 through 2022 on the airborne measured lateral gradient map, the frequent coincidence with negative mag anomalies (shown dark blue in Fig. 23) can be noticed. In the central and western portions of the BLP these anomalies occur within a southwest - northeast trending "corridor" delineated by the Buck Lake and Dog River faults. The largest negative mag anomaly is about 1000 m long by 400 m wide and includes the Main Showing and several other showings with ore-grade Pd, Pt values. The topography of this area is characterized by an elongated bluff rising about 25 m above the Dog River level. The south-westernmost high-grade zone within the "corridor" occurs on the NAP's claims about 2.7 km southwest of the Main Showing. One anomaly, the so-called "Copper showing" lies outside the "corridor", but still within a negative mag anomaly about 700 meters south of the Main Showing. It may be associated with a yet-to-be identified fault parallel to the Buck Lake and Dog River faults.

In the eastern portion of the BLP there is the Bridge Showing PGE anomaly, which appears to associate with a transversal, northwest - southeast trending fault. This fault is also indicated on the VLF-EM map and may be accompanied by sub-parallel splays, with which other two anomalous PGE occurrences are associated, one located about 400 m southeast and another about 750 meters north of the Bridge showing.

Negative magnetic anomalies possibly delineate the areas where magnetite and/or pyrhotite were replaced by non-magnetic sulphides with PGE. Inversion modeling of 2011 and 2018 airborne magnetic data indicates that mafic/ultramafic body extends more than 1000 meters below the surface in the western part, while it extends as much as 2000 meters deep in the eastern part. The historical ground chargeability surveys indicate discontinuous conductors striking northeast – southwest, which could be associated with the sulphidic mineralization. It is yet to be determined, if the reef-style PGE mineralization similar to that in the northern part of the Lac des Iles deposit occurs at BLP.

The late magmatic (deuteric) processes and retrograde metamorphism took place at BLP causing the alteration, recrystallization and formation of hydrous minerals, during which the pyroxenes were amphibolized and/or chloritized, plagioclases were altered to epidote, saussurite and/or

sericite. Biotite and K-feldspar are common in the cross-cutting felsic dykes. At higher crustal levels, hydrothermal processes took place, resulting in the formation of younger sulfides including pyrite, chalcopyrite, molybdenite, scheelite, barite, talc, REE and carbonate minerals.

During the fractional crystallization, the pyroxenes crystallized first at the bottom of the magma chamber, followed by mafic plagioclases, which left the remaining magma more felsic. If immiscible sulfidic magma was present, it would have crystallized near the bottom of the magma chamber to form a reef-like layer. Brecciation of the bottom layers and forceful ascension to higher levels may have occurred during subsequent intrusive and/or tectonic processes. The textures range from coarse grained to aphanitic. A steeply dipping aphanitic layer of basaltic composition occurs at the northern edge of the Main showing. This rock may have been formed from re-melted magma that migrated upwards and cooled down too quickly for the crystals to develop.

If a sulfidic reef existed at the bottom of the magma chamber, it would also have been fragmented during the latter tectonic process and the fragments would migrate in the molten matrix until the crystallization took place. This is indicated by the occurrences of MUM breccia fragments with irregularly distributed pods of sulfidic PGE mineralization. Further processes that took place between the MUM rocks and the felsic magma included contamination of the latter by the mafic material to form "schlieren" – i. e. streaks of darker material commonly occurring in the transitional zone between the MUM and felsics.

Taking these features into consideration, the MUM body at BLP has a potential to contain reef-style PGE mineralization at depth. Based on the mapping, structural studies and reverse modeling of airborne magnetic surveys, foliation in felsic rocks and migmatites, the MUM rocks are steeply dipping and the dip angle is probably to the southeast. The reef-style sulfidic PGE mineralization is expected to be dipping under a similar, i. e. steeply SE dippig angle. However, this model can only be tested by drilling.

Based on the previous and recent work, the BLP resembles the Lac des Iles's (LDI) South Mafic/ultramafic Centre. No orthopyroxene - peridotite ultramafic rocks were found at BLP and no "reef-style" PGE mineralization comparable to North Mafic/ultramafic Centre was encountered at BLP to date. The LDI deposit hosts a unique, steeply dipping High-Grade zone made up of actinolite - chlorite schist with disseminated sulfides and atypical, selective enrichment in palladium relative to platinum with a Pd:Pt ratio about 10 : 1. No such zone was found at the BLP yet and the Pd:Pt ratio is approximately 1.2 : 1. The feature common to LDI and BLP is the pod-like sulfide-rich mineralization present in all rock types, with similar PGE and gangue mineral associations.

In conclusion, the BLP has a potential to contain significant PGE mineralization at depth, however deep core drilling is needed to ascertain its potential. Before this can happen, further surface geochemistry work should be conducted. We recommend further outcrop mapping, stripping of

anomalous areas and systematic rock sampling, including channel sampling. Representative rock samples from the 2004 drill cores should be collected for petrographic and mineralogical studies. A compilation of the geological mapping data and information from the previous fieldwork and a database with the assay results should be completed. The historical ground resistivity and IP surveys and airborne magnetic and VLF-EM surveys should be reviewed and used for further modeling and identification of conductor axes.

Proposed Budget:

Geologist (15 days @ $900/day)	$13,500.00
Prospector (15 days @ $350/day)	$ 5,250.00
Assistant (15 days @ $250/day)	$ 3,750.00
Truck Rentals (15 days @ $70.00/day)	$ 1,050.00
Boat rental (5 days @ $50/day)	$ 250.00
Mob, demob	$ 2,000.00
Accommodation, food	$ 6,750.00
Fuel	$ 500.00
Assays (80 samples)	$ 4,000.00
Miscellaneous	$ 2,000.00
Compilation, digitizing and report	$ 3,905.00
Total	**$42,955.00**

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7. STATEMENT OF QUALIFICATIONS

I, the undersigned Bohumil (Boris) Molak, Ph.D., P.Geo (BC) do hereby certify that:

I am a Professional Geoscientist residing at # 908, 9025 Highland Court, Burnaby, V5A 0A8, B.C., Canada.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (License No. 28600) in good standing.

I graduated from the Comenius University, Czechoslovakia, with a Bachelor of Science (Mag.) in Economic Geology in 1970. From the same university I obtained in 1980 the title Master of Science in Economic Geology (RNDr.) and in 1990 the title Doctor of Philosophy (CSc.). I have practiced my profession continuously since 1970.

Since 1970 I have been involved in the geological, prospecting, exploration and research projects on precious, base and ferrous metals, industrial minerals and hydrocarbons in Czechoslovakia, Canada, Zambia, Cuba, Bulgaria, Guinea, Chile and Argentina.

Since 2003 until present I am a self-employed consulting geologist.

I conducted the fieldwork and litho-geochemical sampling program on the Buck Lake PGE Prospect from May 22 to June 11, 2022 and from September 17 to October 6, 2022.

I am responsible for all sections of this report except the Item 5: In Account With (Exploration Expenses), which was prepared by Xyquest Mining Corp. The sources of all information not based on personal examination are quoted in the report. The information provided by other parties is to the best of my knowledge correct.

As of the date of this Statement I am not aware of any material fact or material change with respect to the subject matter of this report that is not reflected in this report, the omission of which would make the report misleading.

I am independent of Empire Metals Corp.

Dated at Vancouver, BC, Canada, this the 20th day of January, 2023.

8. STATEMENT OF QUALIFICATIONS

I, William J. Richmond do hereby certify that:

I am a Prospector residing at # 413 Lillian Street, Thunder Bay, ON, Canada.

I am a holder of Permanent Prospector's License.

From 1970 to 1991 I completed the courses as follows: Natural Resources Course at Hammarskjold High School, Thunder Bay, Grades 11-12, Geology, Mineralogy; baseline cutting; claim staking; geophysics; mineral prospecting.

From 1988 to 1998 I optioned the following properties: Smiley Lake Property (to John North of Newnorth Exploration, Toronto, ON); Clive Brooks (to Home Ventures, Vancouver, BC); East Dog River Property; Mirage Lake Property.

From 1992 to 1997 I conducted the OPAP programs on the Dog River, Orbit Buck Lake, Mirage Lake and Buck Lake prospects.

I took part in the fieldwork and litho-geochemical sampling program on the Buck Lake PGE Prospect from May 22 to June 11, 2022 and from September 17 to October 6, 2022.

Dated at Thunder Bay, ON, Canada, this the 20th day of January, 2023.

APPENDIX I

Sample Descriptions with Palladium, Platinum and Gold Assays

Tag #	Easting	Northing	Date	Description	Claim #	Pd	Pt	Au
884551	284449	5449220	26-May-22	Gabbroic rock, sulfides ~1 cm on fractres	229209	14	12	5
884552	284447	5449215	26-May-22	Dark gabbroic rock, diss pyrite, chalcopyrite?	229209	16	31	14
884553	284460	5449196	26-May-22	Gabbroic rock, cut by qrtz flsp veinlets, prt, chprt <1cm	229209	11	22	7
884554	284407	5449206	27-May-22	Pyroxenite boulder (0.4 m), strongly magnetic, brown stains	229209	26	6	9
884555	284452	5449202	27-May-22	Pink felsic vein, strikes 30, steeply dipping, pyrite	229209	6	12	6
884556	284449	5449202	27-May-22	Veinlet <2.5 cm wide, massive pyrite, follows a fracture 10/70S	229209	12	5	21
884557	282535	5449575	27-May-22	A ledge, gabbroic rock, cut by felsic vein (55/80SE), pyrite <1cm	265793	16	10	3
884558	282499	5449564	27-May-22	T4 trench, gabbroic rock, cut by felsic vein, diss pyrite	265793	< 5	< 5	4
884559	284985	5451512	28-May-22	Small outcrop, coarse pyroxenite,pink-beige felsic veinlets, rare prt	148343	< 5	< 5	3
884560	284860	5451516	28-May-22	Dark, coarse crystalline gabbro? Some diss prt	148343	< 5	< 5	3
884561	282815	5449845	29-May-22	T9 trenh, massive pyroxenite cut by felsic dyke (60/90), diss prt chprt	580399	10	10	4
884562	282815	5449845	29-May-22	Field duplicate of 884561	580399	9	12	9
884563	282798	5449872	29-May-22	Small outcrop, med gr gabbro, black amphibols, white flsp, diss prt	580399	< 5	< 5	3
884564	282839	5449883	29-May-22	Subcrop, rich prt +/- chprt on fractures	580399	6	7	3
884565	282920	5449879	29-May-22	Ledge, gabbro, 50% flsp, diss sulfides	580399	< 5	< 5	4
884566	282934	5449892	29-May-22	Ledge, partly chloritized gabbro, diss prt, chprt	580399	< 5	< 5	4
884567	282868	5449690	31-May-22	T14, pyroxenite, diss prt +/- chprt 2-3%	579424	40	73	3
884568	282852	5449697	31-May-22	T14, fine gr black gabbro, tiny diss prt often close to felsic veins	579424	< 5	< 5	3
884569	282692	5449843	31-May-22	Ledge at Dog River, mafics, felsics, gabbro, diss prt	580399	< 5	< 5	2
884570	282695	5449838	31-May-22	Mixed mafic/felsic gabbro, diss prt 2-3%	580399	< 5	< 5	3
884571	282922	5449938	1-Jun-22	T11, S end, felsic dyke 7 cm wide, strike 70/90, prt, chprt 2-3 %	580399	< 5	< 5	2
884572	282913	5449939	1-Jun-22	T11, fine gr black gabbro cut by felsic dyke 5cm, prt diss, foms veinlet	580399	< 5	< 5	3
884573	282903	5449900	1-Jun-22	Boulder, sub-crop (?) coarse gr gabbro, plg 30-40%, diss prt, cprt on fract	580399	< 5	< 5	2
884574	282903	5449900	1-Jun-22	Field duplicate of 884573	580399	< 5	< 5	3
884575	282857	5449889	1-Jun-22	Float, fine gr gabbro, and coarse leucogabbro, diss chprt and on fractures	580399	15	11	4
884576	282914	5449656	2-Jun-22	T15 S end, flsp gabbro ±biotite,below fine gr, diss and fract prt, chprt <3%	579424	< 5	< 5	4
884577	282914	5449656	2-Jun-22	T15 S end, flsp gabbro ±biotite,below fine gr, diss and fract prt, chprt <3%	579424	< 5	5	5

884578	282898	5449700	2-Jun-22	Cliffy outcrop, med-coarse and fine gr gabbro, both carry diss prt ± chprt	579424	5	6	5
884579	282796	5449480	2-Jun-22	Mafic contacts felsic, mafic carries diss sulf and on fractures	579424	7	6	3
884580	282796	5449480	2-Jun-22	Felsic rock, diss prt and on fractures	579424	< 5	< 5	3
884581	282748	5449505	2-Jun-22	Sub-crop, boulder felsp gabbro/pyroxenite contact, diss chprt, actinolite	579424	< 5	< 5	9
884582	282752	5449509	2-Jun-22	Sub-crop, felsp gabbro/pyroxenite contact, large chprt, 2-3 cm, actinolite	579424	< 5	< 5	18
884583	282752	5449509	2-Jun-22	Field duplicate of 884582 (small chip for probe)	579424	< 5	< 5	7
884584	282569	5449474	3-Jun-22	Feldspathic gabbro with pyroxenite bands, diss prt, chprt	265793	< 5	5	4
884585	282627	5449497	3-Jun-22	Ledge, dark med gr gabbro, diss prt, chprt	265793	7	8	3
884586	282592	5449451	3-Jun-22	Ledge, mingled pyroxenite - plg cumulates, diss prt, chprt associate with plg	265793	< 5	< 5	3
884587	282590	5449451	3-Jun-22	Ledge extends here, similar rocks, diss prt, larger chprt	265793	< 5	< 5	4
884588	282604	5449448	3-Jun-22	Ledge extends here, chloritized pyroxenite, rare diss prt, chprt	265793	9	12	3
884589	282630	5449435	3-Jun-22	Outcrop, flsp gabbro contacts fine gr gabbro, prt associates with felsic vnlts	265793	< 5	< 5	4
884590	282476	5449699	3-Jun-22	NW end of T5, felspathic, chloritized pyroxenite, fine gr gabbro, diss sulf	265793	< 5	< 5	3
884591	283009	5449624	3-Jun-22	Outcrop, gabbro with diss prt	579424	< 5	< 5	3
884592	282455	5449450	4-Jun-22	SO, chloritized pyroxenite, no flsp, brown stains on fract, one chprt grain	265793	10	20	2
884593	282440	5449455	4-Jun-22	SO, dark fine gr gabbro, thin felsic veins, rare chprt on fractures	265793	< 5	< 5	3
884594	282549	5449469	4-Jun-22	Large scarpy outcrop, prxnt, some plg, diss chprt <1cm	265793	140	113	11
884595	282567	5449440	4-Jun-22	Large outcrop, bottom part, gabbro, plg, large diss chprt 1-2 cm, ~5% sulf	265793	< 5	< 5	4
884596	282567	5449440	4-Jun-22	Field duplicate of 884595	265793	< 5	< 5	4
884597	282439	5449422	4-Jun-22	Outcrop, med gr prxnt, ~20% plg, diss sulf 1-2%	265793	< 5	< 5	5
884598	282541	5449463	4-Jun-22	Outcrop, fine gr prxnt 1-2% diss sulf, gabbro ~50% plg, biotite, qtz, 1-2% sulf	265793	< 5	< 5	3
884599	282460	5449394	4-Jun-22	Outcrop, gabbro ~25% plg, 1-2% diss sulf	265793	11	11	3
884600	282950	5449754	5-Jun-22	Sub-crop, fine gr gabbro, rare diss prt, chprt and on partition planes	579424	< 5	< 5	2
884601	282951	5449817	5-Jun-22	Sub-crop, med gr feldsp gabbro, rare diss prt, chprt and on partition planes	580399	< 5	< 5	< 2
884602	282951	5449817	5-Jun-22	Sub-crop, prxnt grades to plg gabbro, rare chprt on partition planes	580399	< 5	< 5	3
884603	282956	5449812	5-Jun-22	Sub-crop, fine gr gabbro and dark khaki gabbro, rare diss prt, chprt	580399	< 5	< 5	< 2
884604	283182	5449875	5-Jun-22	Large ledge outcrop, chloritized pyroxenite ~10% plg, rare diss prt, chprt	580400	21	17	3
884605	283176	5449880	5-Jun-22	Same large outcrop, chloritized pyroxenite ~10% plg, rare diss prt, chprt	580400	6	9	3
884606	283306	5449762	5-Jun-22	Outcrop, fine gr prxnt 1-2% diss sulf, <20% plg, diss sulf 1-2%	579425	< 5	< 5	< 2
884607	283305	5449762	5-Jun-22	Outcrop, fine gr prxnt, felsic vnlts, 1-2% diss sulf, <20% plg, diss sulf 1-2%	579425	< 5	< 5	3
884608	283305	5449762	5-Jun-22	Outcrop, fine gr prxnt, coated with pie-green mineral, 1-2% diss sulf, <20% plg	579425	< 5	< 5	< 2

884609	283026	5449634	5-Jun-22	Med-gr plg gabbro, 20-30% plg, diss prt 1-2%	579424	< 5	< 5	2
884610	283845	5448992	6-Jun-22	Flat outcrop, granitoids (biotite) with mafic enclaves, diss prt, chprt 3-5%	191985	< 5	< 5	4
884612	283337	5449500	6-Jun-22	Outcrop, granitoids (biot) with mafic enclaves, schlieren, diss prt, chprt 3-5%	579425	< 5	< 5	< 2
884613	283342	5449498	6-Jun-22	Med-gr plg gabbro, diss prt, chprt 2-3%	579425	< 5	< 5	4
884614	283355	5449489	6-Jun-22	Coarse gr gabbro, amphibole laths 1cm, plg 20-30%, diss sulf 2-3%	579425	< 5	< 5	< 2
884615	283354	5449489	6-Jun-22	Sub-crop, med gr gabbro, 20-30% felsp, a chprt vein 1cm thick, select	579425	< 5	< 5	6
884616	283104	5449589	6-Jun-22	Ledge, prxnt and plg rocks, diss prt 2-3% in mafic portion	579424	< 5	< 5	3
884617	283060	5449578	6-Jun-22	Float, breccia, very fine gr black mafic rock, disintefrates, select mafic rock	579424	< 5	< 5	2
884618	282649	5449468	7-Jun-22	Boulder, plg leucogabbro, prt, cprt on fractures, brown stains	265793	< 5	< 5	< 2
884619	282605	5449546	7-Jun-22	Ledge, contact prxnt - med gr gabbro, diss prt chprt 2-3% and on fractures	265793	< 5	< 5	2
884620	282755	5449689	7-Jun-22	Ledge, fine gr prxnt mixed with plg gabbro and felsic, diss prt chprt 2-3%	579424	< 5	< 5	8
884621	282753	5449484	7-Jun-22	Fine gr pyroxenite slab from road side	579424	< 5	< 5	3
884622	282717	5449436	7-Jun-22	Outcrop, med gr gabbro, diss sulf 1-2%	579424	< 5	< 5	< 2
884623	282814	5449566	7-Jun-22	Outcrop, med gr pyroxenite, plg 10-20%, diss sulf 2-3%	579424	< 5	5	3
884624	282816	5449575	7-Jun-22	Outcrop, med gr gabbro, plg 20-30%, diss sulf 1-2%	579424	< 5	< 5	3
884625	282705	5449433	7-Jun-22	Outcrop, med gr gabbro, plg 20-30%, diss sulf 1-2%	579424	< 5	< 5	7
884626	283041	5449575	7-Jun-22	Outcrop, felsic rock contacts med gr gabbro, prt, chprt at contact 2-3%	579424	< 5	< 5	3
884627	283104	5449533	7-Jun-22	Outcrop, mixed brecciated mafics fine gr prxnt enclaves, prt, chprt 2-3%	579424	< 5	< 5	4
884628	283072	5449498	7-Jun-22	Boulder, mafic rock, strongly magnetic	579424	28	6	9
884629	284836	5450113	8-Jun-22	Outcrop, pyroxenite breccia, rare diss prt, chprt	580401	460	106	7
884630	285054	5450031	8-Jun-22	Big boulder on logging road, pyroxenite with diss sulfides	580402	< 5	< 5	3
884631	284906	5449536	8-Jun-22	Ledge, med gr plg gabbro and fine gr gabbro, diss prt, chprt 2-3%	119875	< 5	< 5	< 2
884632	284948	5449520	8-Jun-22	Small ledge, grey gabbro, breaks into thin slabs, diss prt, chprt 2-3%	326995	< 5	< 5	3
884633	284852	5449364	9-Jun-22	Ledge at river edge, coarse plg gabbro with biotite, chlorite, diss prt 1-2%	119875	< 5	6	5
884634	284846	5449369	9-Jun-22	Outcrop, coarse plg pyroxenite, coarse prt, chprt `5%	119875	< 5	< 5	3
884635	284828	5449378	9-Jun-22	Outcrop, coarse plg pyroxenite, diss prt, chprt `1-2%	119875	< 5	< 5	3
884901	283781	5450110	20-Sep-22	Boulders, fine-gr gabbro, sulfides on parting planes	310444	< 5	< 5	7
884902	283727	5450141	20-Sep-22	Outcrop, feldspathic gabbro cut by felsic dykes <30 cm wide, diss prt 1-2%	310444	< 5	< 5	5
884903	283740	5450152	20-Sep-22	Outcrop, feldspathic gabbro cut by felsic dykes, diss prt 1-2%	310444	< 5	< 5	4
884904	283731	5450136	20-Sep-22	Outcrop, fine-gr fldsp gabbro, felsic dykes strike 60, diss sulf	310444	< 5	< 5	3
884905	283338	5450266	20-Sep-22	Float, fldsp gabbro, diss prt 1-2%	580395	< 5	< 5	4

884906	284535	5450911	20-Sep-22	Flat outcrop on road, chloritized gabbro, rare prt, chprt 1-2%	344565	23	24	3
884907	283729	5450217	21-Sep-22	Flat outcrop, gabbro with plg, rare sulf 1-2%	310444	< 5	< 5	4
884908	283726	5450207	21-Sep-22	Outcrop, fine to med gr gabbro with plg, rare sulf 1-2%	310444	< 5	< 5	3
884909	283735	5450234	21-Sep-22	Outcrop, hornblende gabbro, diss sulf 2-3%	580396	< 5	< 5	3
884910	283768	5450276	21-Sep-22	Flat outcrop, mixed mafic/felsic rocks, leucogabbro with plg, rare sulf 1-2%	580396	< 5	< 5	4
884911	283804	5450267	21-Sep-22	Ledge outcrop, very fine gr dark gabbro, rare sulf (cprt ?) 1-2%	580396	< 5	< 5	3
884912	284430	5451112	21-Sep-22	Outcrop, med gr gabbro with plg	344556	< 5	6	3
884913	283769	5450236	22-Sep-22	Large flat outcrop, gabbro with plg, cut by felsic vein, 6-7 cn wide, rare prt	580396	< 5	< 5	4
884914	283858	5450284	22-Sep-22	Cliffy outcrop, very fine to med-coarse plg gabbro, diss sulf 2-3%	580396	< 5	< 5	4
884915	283639	5450051	22-Sep-22	Outcrop, grey med gr gabbro with plg, diss sulf 1-2%	310444	10	13	3
884916	283639	5450051	22-Sep-22	Float, dark melanogabbro contacts leucogabbro, diss sulf 1-2%	310444	< 5	< 5	4
884917	283631	5450064	22-Sep-22	Outcrop, leucogabbro with plg, diss sulf 1-2%	310444	< 5	< 5	4
884918	283627	5450048	22-Sep-22	Float, med gr gabbro, diss sulf 1-2%	310444	5	9	4
884919	283822	5450215	23-Sep-22	Ledge outcrop, gabbro with plg, rare sulf (cprt ?) 1-2%	310444	< 5	< 5	3
884920	283854	5450283	23-Sep-22	Ledge outcrop, varitextured gabbro with plg, diss sulf (cprt ?) 3-5%	580396	< 5	< 5	4
884921	283860	5450283	23-Sep-22	Ledge outcrop, varitextured gabbro with plg, diss sulf (cprt ?) 3-5%	580396	< 5	< 5	6
884922	283857	5450282	23-Sep-22	Ledge outcrop, varitextured gabbro with plg, diss sulf (cprt ?) 3-5%	580396	< 5	< 5	6
884923	283857	5450282	23-Sep-22	Ledge outcrop, varitextured plg gabbro, diss sulf 3-5%, malachite, azurite	580396	< 5	< 5	5
884924	283856	5450285	23-Sep-22	Ledge outcrop, varitextured plg gabbro, diss sulf 3-5%, malachite, azurite	580396	< 5	< 5	7
884925	283350	5450282	24-Sep-22	Scarpy outcrop at river shore, varitextured plg gabbro, diss sulf 3-5%	580395	< 5	< 5	4
884926	283350	5450282	24-Sep-22	Field duplicate of 884925	580395	< 5	< 5	4
884927	283326	5450277	24-Sep-22	Outcrop, varitextured plg gabbro, biotite, chlorite, diss sulf 1-2%	580395	< 5	< 5	3
884928	283299	5450265	24-Sep-22	Outcrop, fine gr gabbro, chloritized, diss sulf 1-2%	580395	9	7	4
884929	283294	5450262	24-Sep-22	Outcrop, med gr gabbro, plagioclases, diss sulf 2-3%	580395	< 5	< 5	4
884930	283280	5450261	24-Sep-22	Outcrop, feldspathic gabbro, 1-2% sulfides dissem and on partings	580395	< 5	< 5	4
884931	283313	5450269	24-Sep-22	Outcrop, feldspathic gabbro, 1-2% sulfides (cprt) on parting planes	580395	< 5	< 5	3
884932	716936	5446526	25-Sep-22	Outcrop, migmatite, folded, gabbro, 1-2% sulfides (cprt) on plg	140648	< 5	< 5	3
884933	716148	5446475	25-Sep-22	Outcrop, migmatite, folded, gabbro, 1-2% sulfides (cprt) on plg	323862	< 5	< 5	2
884934	282702	5449907	26-Sep-22	Boulders exposed because low water level, fine, med gr gabbro, diss sulf 1-2%	580399	< 5	< 5	4
884935	282653	5449807	26-Sep-22	Boulders exposed because low water level, fine, med gr gabbro, diss sulf 1-2%	580377	< 5	< 5	4
884936	282653	5449807	26-Sep-22	Boulders exposed because low water level, fine, med gr gabbro, diss sulf 1-2%	580377	< 5	< 5	4

884937	282689	5449849	26-Sep-22	Boulders exposed because low water level, med gr gabbro, sulf 1-2% on partings	580399	14	10	5
884938	282595	5449924	26-Sep-22	Outcrop barely above water level, med gr gabbro, diss sulf 1-2%	580377	< 5	< 5	4
884939	282599	5449927	26-Sep-22	Outcrop barely above water level, med gr norite gabbro, diss sulf 1-2%	580377	< 5	< 5	4
884940	282523	5449727	26-Sep-22	Oucrop, pyroxenite with pink feldspars, blebby chalcoprt 5-7%	265793	714	530	29
884941	282526	5449731	27-Sep-22	Oucrop, pyroxenite with pink feldspars, blebby chalcoprt 5-7%	265793	881	565	19
884942	282523	5449727	26-Sep-22	Field duplicate of 884940	265793	624	423	24
884943	282475	5449728	27-Sep-22	Outcrop, med gr gabbro with felsic dyke, 2-3% sulf diss and/or on fracture planes	265793	< 5	< 5	4
884944	282335	5449642	27-Sep-22	Outcrop, med gr gabbro contacts felsic dyke, 1-2% diss sulf	265793	< 5	< 5	3
884945	282471	5449721	27-Sep-22	Ledge outcrop, norite gabbro, diss sulf 1-2%	265793	< 5	< 5	4
884946	282251	5449566	28-Sep-22	T1 trench, float, gabbro contacts felsic vein, sulf diss and on fractures	265793	7	6	8
884947	282302	5449633	28-Sep-22	Ledge outcrop, pyroxenite breccia, matrix gabbro and/or aplite, rare sulf diss or on fract	265793	6	< 5	5
884948	282327	5449644	28-Sep-22	Ledge outcrop, pyroxenite breccia, matrix gabbro and/or aplite, rare sulf diss or on fract	265793	16	9	3
884949	282313	5449750	28-Sep-22	Outcrop, feldspathic gabbro, 1-2% diss sulfides	265793	< 5	< 5	4
884950	282301	5449736	28-Sep-22	Outcrop, dark med gr gabbro, 1-2% sulfides diss or on fractures	265793	< 5	< 5	4
884801	282305	5449730	28-Sep-22	Outcrop, med gr plg gabbro, 1-2% diss sulfides	265793	< 5	< 5	4
884802	282278	5449714	28-Sep-22	Outcrop, med gr plg gabbro, 1-2% sulfides diss or on fractures	265793	< 5	< 5	5
884803	281660	5448950	29-Sep-22	Sub-crop, norite cut by thin felsic veinlets, 2-3% sulfides diss or thin veinlets	266613	< 5	< 5	9
884804	281663	5448963	29-Sep-22	Sub-crop, boulder, pyroxenite and gabbro, diss sulf 3-5%	266613	< 5	< 5	5
884805	281846	5449211	29-Sep-22	Outcrop, at lake shore, gabbro, with diss sulfides 2-3%	344365	17	35	9
884806	281883	5449256	29-Sep-22	Outcrop at lake shore, gabbro and pyroxenite, with diss sulfides 2-3%	344365	< 5	5	6
884807	281888	5449260	29-Sep-22	Outcrop, sub-crop at lake shore, pyroxenite, plg gabbro, felsic veinlets, diss sulf 2-3%	344365	< 5	< 5	4
884808	281891	5449317	29-Sep-22	Outcrop, near the lake shore, plg gabbro, diss sulf 2-3%	344365	10	6	4
884809	281895	5449383	29-Sep-22	Outcrop, sub-crop at lake shore, med gr plg, diss sulf 1-2% assocociate with plg	580378	< 5	< 5	4
884810	284956	5449680	30-Sep-22	Outcrop, granitoide with gabbroic enclaves, rare diss sulf and oxidized on fractures 1-2%	326995	< 5	< 5	3
884811	284899	5449572	30-Sep-22	Old trench, fine gr gabbro, rare diss sulf and red-brown flecks after cprt?	119875	< 5	< 5	4
884812	284898	5449587	30-Sep-22	Old trench, plg gabbro, diss to blebby sulfides 3-5%	119875	< 5	< 5	4
884813	284902	5449559	30-Sep-22	Outcrop on road, plg gabbro, diss to blebby sulfides 3-4%	119875	22	32	6
884814	284902	5449559	30-Sep-22	Field duplicate of 884813	119875	26	35	6
884815	284922	5449370	30-Sep-22	Outcrop, chloritized pyroxenite ith plg ~20%, diss prt 1-2%	119875	11	18	6
884816	284917	5449357	30-Sep-22	Outcrop, plg gabbro cut by felsic veinlets, diss sulf 1-2%	119875	6	10	4
884817	284908	5449349	30-Sep-22	Outcrop, plg gabbro, diss sulf 1-2%	119875	< 5	9	4

884818	284892	5449350	30-Sep-22	Outcrop, plg gabbro, diss sulf 1-2%	119875	< 5	< 5	4
884819	284848	5450117	1-Oct-22	Ledge, sub-crop, plg with diss sulfides	580401	< 5	< 5	8
884820	284841	5450111	1-Oct-22	Ledge outcrop, plg with diss sulfides	580401	< 5	< 5	4
884821	284839	5450113	1-Oct-22	Ledge outcrop, mixed plg-altered pyroxenite, loc breccia, diss sulfides	580401	< 5	< 5	3
884822	284791	5449309	1-Oct-22	Outcrop, pyroxenite and plg gabbro, diss sulf 1-2%	119875	9	12	5
884823	284782	5449320	1-Oct-22	Outcrop, pyroxenite and plg gabbro, thin felsic veinlets, diss sulf 1-2%	119875	20	29	10
884824	284772	5449324	1-Oct-22	Outcrop, pyroxenite and plg gabbro, diss sulf 1-2% and on fractures	119875	10	18	5
884825	284831	5449318	1-Oct-22	Outcrop, plg gabbro with diss sulfides 1-2%	119875	8	11	9
884826	284784	5449317	1-Oct-22	Outcrop, plg gabbro with diss sulfides 1-2%	119875	13	20	8
884827	284852	5449325	1-Oct-22	Outcrop, plg gabbro with diss sulfides 2-3%	119875	8	10	7
884828	282791	5449803	2-Oct-22	T8, float, plg gabbro with sulfides 2-3% diss or on fractures	580399	< 5	< 5	4
884829	282791	5449809	2-Oct-22	Sub-crop, contact fine-gr - med gr gabbro, sulf on fracture planes	580399	< 5	< 5	4
884830	282779	5449833	2-Oct-22	Sub-crop at T8, plg gabbro, diss sulf 1-2%	580399	< 5	< 5	4
884831	282785	5449842	2-Oct-22	Sub-crop on old road, plg gabbro, diss sulf 1-2%	580399	< 5	< 5	4
884832	282751	5449805	2-Oct-22	Outcrop, plg gabbro with diss sulfides 2-3%	580399	< 5	< 5	4
884833	282754	5449805	2-Oct-22	Ledge outcrop, plg gabbro with diss sulfides 2-3%	580399	< 5	< 5	4
884834	282619	5449762	2-Oct-22	North edge of Main Showing (scarp), plg gabbro with diss sulf and brown oxidic stains	265793	297	160	15

Abbreviations: bio – biotite; cprt –chalcopyrite; diss sulph–disseminated sulphides; encl-enclaves; FD -field duplicate gr.–grained; LO–large outcrop; plg–plagioclase; prt –pyrite; qtz–quartz; SO - small outcrop; Pd, Pt and Au in ppb, Cu and Ni in ppm.

APPENDIX II

List of Cell Claims

	Legacy Claim Id	Township / Area	Tenure ID	Tenure Type	Anniv. Date
1	4266110	TIB LAKE AREA	326994	BCMC	7/11/2023
2	4266110	TIB LAKE AREA	326995	SCMC	7/11/2023
3	4266110	TIB LAKE AREA	326996	BCMC	7/11/2023
4	4266108	TIB LAKE AREA	336159	SCMC	7/11/2023
5		TIB LAKE AREA	580376	SCMC	7/11/2023
6		TIB LAKE AREA	580378	SCMC	7/11/2023
7		TIB LAKE AREA	580379	SCMC	7/11/2023
8		TIB LAKE AREA	580380	SCMC	7/11/2023
9		TIB LAKE AREA	580385	SCMC	7/11/2023
10		TIB LAKE AREA	580386	SCMC	7/11/2023
11	4241578	TIB LAKE AREA	119875	SCMC	7/24/2023
12	4241578	TIB LAKE AREA	141150	SCMC	7/24/2023
13	4241578	TIB LAKE AREA	191985	SCMC	7/24/2023
14	4241578	TIB LAKE AREA	200399	SCMC	7/24/2023
15	4241578	TIB LAKE AREA	229209	SCMC	7/24/2023
16	4241578	TIB LAKE AREA	310443	SCMC	7/24/2023
17	4241578	TIB LAKE AREA	310444	SCMC	7/24/2023
18	4241578	TIB LAKE AREA	326997	SCMC	7/24/2023
19		TIB LAKE AREA	579424	SCMC	7/24/2023
20		TIB LAKE AREA	579426	SCMC	7/24/2023
21		TIB LAKE AREA	580377	SCMC	7/24/2023
22		TIB LAKE AREA	579425	SCMC	8/27/2023
23		TIB LAKE AREA	580400	SCMC	8/27/2023
24	1238120	TIB LAKE AREA	105521	SCMC	3/15/2023
25	1238122	TIB LAKE AREA	114580	SCMC	3/15/2023
26	1238120	TIB LAKE AREA	125934	SCMC	3/15/2023
27	1238122	TIB LAKE AREA	144612	SCMC	3/15/2023
28	1238121	TIB LAKE AREA	148343	SCMC	3/15/2023
29	1238121	TIB LAKE AREA	157868	SCMC	3/15/2023
30	1238120	TIB LAKE AREA	172592	SCMC	3/15/2023
31	1238120	TIB LAKE AREA	172593	SCMC	3/15/2023
32	1238120	SHARP LAKE AREA,TIB LAKE AREA	172594	SCMC	3/15/2023
33	1238121	TIB LAKE AREA	176936	SCMC	3/15/2023
34	1238122	TIB LAKE AREA	203287	BCMC	3/15/2023
35	1238122	TIB LAKE AREA	203303	BCMC	3/15/2023
36	1238122	TIB LAKE AREA	203304	BCMC	3/15/2023
37	1238121	TIB LAKE AREA	209851	SCMC	3/15/2023
38	1238122	TIB LAKE AREA	211327	BCMC	3/15/2023

39	1238121	TIB LAKE AREA	243545	SCMC	3/15/2023
40	1238120	TIB LAKE AREA	256086	SCMC	3/15/2023
41	1238122	TIB LAKE AREA	259342	SCMC	3/15/2023
42	1238121	TIB LAKE AREA	263115	SCMC	3/15/2023
43	1238120	TIB LAKE AREA	285237	SCMC	3/15/2023
44	1238120	TIB LAKE AREA	293847	SCMC	3/15/2023
45	1238120	TIB LAKE AREA	305971	SCMC	3/15/2023
46	1238122	TIB LAKE AREA	307147	SCMC	3/15/2023
47	1238122	TIB LAKE AREA	307148	SCMC	3/15/2023
48	1238120	TIB LAKE AREA	322475	SCMC	3/15/2023
49	1238120	SHARP LAKE AREA,TIB LAKE AREA	322476	SCMC	3/15/2023
50	1238122	TIB LAKE AREA	326667	SCMC	3/15/2023
51	1238121	TIB LAKE AREA	344556	SCMC	3/15/2023
52		SHARP LAKE AREA,TIB LAKE AREA	580372	SCMC	3/15/2023
53		SHARP LAKE AREA,TIB LAKE AREA	580373	SCMC	3/15/2023
54		TIB LAKE AREA	580374	SCMC	3/15/2023
55		TIB LAKE AREA	580375	SCMC	3/15/2023
56		TIB LAKE AREA	580391	SCMC	3/15/2023
57		TIB LAKE AREA	580395	SCMC	3/15/2023
58		TIB LAKE AREA	580396	SCMC	3/15/2023
59		TIB LAKE AREA	580397	SCMC	3/15/2023
60		TIB LAKE AREA	580398	SCMC	3/15/2023
61		TIB LAKE AREA	580401	SCMC	3/15/2023
62		TIB LAKE AREA	580402	SCMC	3/15/2023
63		TIB LAKE AREA	580403	SCMC	3/15/2023
64		TIB LAKE AREA	580404	SCMC	3/15/2023
65	4281250	SHARP LAKE AREA	133478	SCMC	3/17/2023
66	4281250	SHARP LAKE AREA	133479	SCMC	3/17/2023
67	4281250	SHARP LAKE AREA	164620	SCMC	3/17/2023
68	4281250	SHARP LAKE AREA	178676	SCMC	3/17/2023
69	4281250	SHARP LAKE AREA	185459	SCMC	3/17/2023
70	4281250	SHARP LAKE AREA	225242	SCMC	3/17/2023
71	4281250	SHARP LAKE AREA	245412	SCMC	3/17/2023
72	4281250	SHARP LAKE AREA	245413	SCMC	3/17/2023
73	4281250	SHARP LAKE AREA	318162	SCMC	3/17/2023
74	4274916	SHARP LAKE AREA	108928	BCMC	4/8/2023
75	4274916	SHARP LAKE AREA	120191	SCMC	4/8/2023
76	4274916	SHARP LAKE AREA	148241	SCMC	4/8/2023
77	4274916	SHARP LAKE AREA	149400	SCMC	4/8/2023
78	4274916	SHARP LAKE AREA	176842	BCMC	4/8/2023
79	4274916	SHARP LAKE AREA	176843	SCMC	4/8/2023
80	4274916	SHARP LAKE AREA	184199	BCMC	4/8/2023
81	4274916	SHARP LAKE AREA	263020	SCMC	4/8/2023

82	4274916	SHARP LAKE AREA	281268	BCMC	4/8/2023
83	4274916	SHARP LAKE AREA	317554	SCMC	4/8/2023
84	4274916	SHARP LAKE AREA	317555	SCMC	4/8/2023
85		TIB LAKE AREA	514671	SCMC	4/12/2023
86		TIB LAKE AREA	514681	SCMC	4/12/2023
87		TIB LAKE AREA	514683	SCMC	4/12/2023
88		TIB LAKE AREA	514684	SCMC	4/12/2023
89		TIB LAKE AREA	514686	SCMC	4/12/2023
90		TIB LAKE AREA	514687	SCMC	4/12/2023
91		TIB LAKE AREA	514690	SCMC	4/12/2023
92		TIB LAKE AREA	514692	SCMC	4/12/2023
93		TIB LAKE AREA	514693	SCMC	4/12/2023
94		TIB LAKE AREA	514695	SCMC	4/12/2023
95		TIB LAKE AREA	514699	SCMC	4/12/2023
96		TIB LAKE AREA	514700	SCMC	4/12/2023
97		TIB LAKE AREA	514941	SCMC	4/12/2023
98		TIB LAKE AREA	514942	SCMC	4/12/2023
99		TIB LAKE AREA	514943	SCMC	4/12/2023
100		TIB LAKE AREA	514944	SCMC	4/12/2023
101		TIB LAKE AREA	514945	SCMC	4/12/2023
102		TIB LAKE AREA	514946	SCMC	4/12/2023
103		TIB LAKE AREA	514947	SCMC	4/12/2023
104		TIB LAKE AREA	514948	SCMC	4/12/2023
105		TIB LAKE AREA	514949	SCMC	4/12/2023
106		TIB LAKE AREA	514950	SCMC	4/12/2023
107		TIB LAKE AREA	514951	SCMC	4/12/2023
108		TIB LAKE AREA	514952	SCMC	4/12/2023
109		TIB LAKE AREA	514953	SCMC	4/12/2023
110		TIB LAKE AREA	514954	SCMC	4/12/2023
111		TIB LAKE AREA	514955	SCMC	4/12/2023
112		TIB LAKE AREA	514956	SCMC	4/12/2023
113		TIB LAKE AREA	514957	SCMC	4/12/2023
114		TIB LAKE AREA	514958	SCMC	4/12/2023
115		TIB LAKE AREA	514959	SCMC	4/12/2023
116		TIB LAKE AREA	514960	SCMC	4/12/2023
117	4286109	TIB LAKE AREA	135947	SCMC	4/21/2023
118	4286109	TIB LAKE AREA	168467	SCMC	4/21/2023
119	4286109	TIB LAKE AREA	217269	SCMC	4/21/2023
120	4286109	TIB LAKE AREA	235780	SCMC	4/21/2023
121	4286109	TIB LAKE AREA	283240	SCMC	4/21/2023
122	4286109	TIB LAKE AREA	342874	SCMC	4/21/2023
123	4286109	TIB LAKE AREA	342875	SCMC	4/21/2023
124		TIB LAKE AREA	580390	SCMC	4/21/2023

125	4277659	SHARP LAKE AREA,TIB LAKE AREA	105014	SCMC	4/23/2023
126	4274916	SHARP LAKE AREA,TIB LAKE AREA	108927	BCMC	4/23/2023
127	4277660	TIB LAKE AREA	123945	SCMC	4/23/2023
128	4274916	SHARP LAKE AREA	128660	SCMC	4/23/2023
129	4277659	SHARP LAKE AREA	128661	SCMC	4/23/2023
130	4274916	SHARP LAKE AREA,TIB LAKE AREA	131025	SCMC	4/23/2023
131	4274916	SHARP LAKE AREA	140648	SCMC	4/23/2023
132	4277659	SHARP LAKE AREA	140649	SCMC	4/23/2023
133	4277659	SENGA LAKE AREA,SHARP LAKE AREA	140650	SCMC	4/23/2023
134	4274916	SHARP LAKE AREA,TIB LAKE AREA	146058	SCMC	4/23/2023
135	4274916	SHARP LAKE AREA	146059	SCMC	4/23/2023
136	4277659	SHARP LAKE AREA	146060	SCMC	4/23/2023
137	4277659	SHARP LAKE AREA	146061	SCMC	4/23/2023
138	4277659	SHARP LAKE AREA	146062	SCMC	4/23/2023
139	4277660	TIB LAKE AREA	151840	SCMC	4/23/2023
140	4277660	TIB LAKE AREA	156537	BCMC	4/23/2023
141	4277660	TIB LAKE AREA	156538	SCMC	4/23/2023
142	4277659	SHARP LAKE AREA	162615	SCMC	4/23/2023
143	4277659	SHARP LAKE AREA	162616	SCMC	4/23/2023
144	4277659	SHARP LAKE AREA	175321	SCMC	4/23/2023
145	4274916	SHARP LAKE AREA,TIB LAKE AREA	213071	SCMC	4/23/2023
146	4274916	SHARP LAKE AREA	221901	SCMC	4/23/2023
147	4277659	SENGA LAKE AREA,SHARP LAKE AREA	229880	SCMC	4/23/2023
148	4277659	SHARP LAKE AREA	248869	SCMC	4/23/2023
149	4277660	TIB LAKE AREA	291297	SCMC	4/23/2023
150	4277660	TIB LAKE AREA	304387	SCMC	4/23/2023
151	4277660	TIB LAKE AREA	304388	SCMC	4/23/2023
152	4277659	SENGA LAKE AREA,SHARP LAKE AREA,TIB LAKE AREA	308731	SCMC	4/23/2023
153	4277659	SHARP LAKE AREA	323862	SCMC	4/23/2023
154		TIB LAKE AREA	550421	MCMC	5/27/2023
155		TIB LAKE AREA	550422	MCMC	5/27/2023
156	1174119	TIB LAKE AREA	145278	BCMC	5/31/2023
157	1174119	TIB LAKE AREA	230711	BCMC	5/31/2023
158	1174119	TIB LAKE AREA	331858	BCMC	5/31/2023
159	1173921	TIB LAKE AREA	265793	SCMC	6/29/2023
160	1173925	TIB LAKE AREA	344365	SCMC	6/29/2023
161	4266110	TIB LAKE AREA	119045	SCMC	7/11/2023
162	4266110	TIB LAKE AREA	119874	SCMC	7/11/2023
163	4266104	SHARP LAKE AREA,TIB LAKE AREA	158517	SCMC	7/11/2023
164	4266108	TIB LAKE AREA	172493	SCMC	7/11/2023
165	4266107	TIB LAKE AREA	172494	SCMC	7/11/2023
166	4266104	TIB LAKE AREA	172976	BCMC	7/11/2023
167	4266110	TIB LAKE AREA	183926	BCMC	7/11/2023

168	4266104	SHARP LAKE AREA,TIB LAKE AREA	191027	BCMC	7/11/2023
169	4266108	TIB LAKE AREA	191986	SCMC	7/11/2023
170	4266107	TIB LAKE AREA	193698	BCMC	7/11/2023
171	4266104	TIB LAKE AREA	203723	SCMC	7/11/2023
172	4266107	TIB LAKE AREA	213153	SCMC	7/11/2023
173	4266108	TIB LAKE AREA	221255	SCMC	7/11/2023
174	4266110	TIB LAKE AREA	223748	SCMC	7/11/2023
175	4266107	TIB LAKE AREA	249880	BCMC	7/11/2023
176	4266110	TIB LAKE AREA	261067	SCMC	7/11/2023
177	4266107	TIB LAKE AREA	261850	BCMC	7/11/2023
178	4266110	TIB LAKE AREA	268427	SCMC	7/11/2023
179	4266108	TIB LAKE AREA	295926	SCMC	7/11/2023
180	4266108	TIB LAKE AREA	295927	SCMC	7/11/2023
181	4266108	TIB LAKE AREA	308025	SCMC	7/11/2023
182	4266108	TIB LAKE AREA	308026	SCMC	7/11/2023
183	4241578	TIB LAKE AREA	174647	SCMC	7/24/2023
184	4274916	SHARP LAKE AREA	225243	SCMC	4/8/2024
185		TIB LAKE AREA	580399	SCMC	8/27/2024

APPENDIX III

Assay Certificates

(assays 884611 and 884636 are not from Buck Lake Property)

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-07865
Report Date: 19-Aug-22
Date Submitted: 10-Jun-22
Your Reference: Buck Lake

Xyquest Mining
702-889 W. Pender Street
Vancouver BC V5C 3B2
Canada

ATTN: Mark Patchett

CERTIFICATE OF ANALYSIS

86 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
4B (1-10)	QOP WRA (Major Elements Fusion ICPOES)	2022-07-24 13:53:25

REPORT **A22-07865**

Notes:

Total includes all elements in % oxide to the left of total.

Values which exceed the upper limit should be assayed for accurate numbers.

SCC Accredited LAB
LAB Accrédité CCN
LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Report No.: A22-07865
Report Date: 19-Aug-22
Date Submitted: 10-Jun-22
Your Reference: Buck Lake

Xyquest Mining
702-889 W. Pender Street
Vancouver BC V5C 3B2
Canada

ATTN: Mark Patchett

CERTIFICATE OF ANALYSIS

86 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1C-OES-Tbay	QOP PGE-OES (Fire Assay ICPOES)	2022-07-28 17:19:21
1E3-Tbay	QOP AquaGeo (Aqua Regia ICPOES)	2022-07-25 22:53:44
8-AR Tbay	QOP Assay (Code 8-Assays)	

REPORT **A22-07865**

Notes:

Total includes all elements in % oxide to the left of total.

Values which exceed the upper limit should be assayed for accurate numbers.

SCC Accredited LAB
LAB Accrédité CCN
TM

LabID: 673

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X5
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884551	5	14	12	< 0.2	< 0.5	69	287	< 1	62	< 2	28	2.51	< 2	< 10	109	< 0.5	< 2	3.24	50	38	2.25	< 10	< 1
884552	14	16	31	< 0.2	< 0.5	177	347	< 1	136	< 2	16	1.29	< 2	< 10	102	< 0.5	< 2	2.61	22	58	2.02	< 10	< 1
884553	7	11	22	< 0.2	< 0.5	249	326	< 1	72	< 2	21	1.15	< 2	< 10	54	< 0.5	< 2	2.06	50	58	2.00	< 10	< 1
884554	9	26	6	< 0.2	< 0.5	199	645	< 1	23	< 2	90	2.14	< 2	< 10	37	< 0.5	< 2	1.81	26	17	7.38	10	< 1
884555	6	6	12	0.5	< 0.5	39	174	10	75	3	11	1.49	< 2	< 10	28	< 0.5	< 2	2.01	95	32	3.08	< 10	< 1
884556	21	12	5	4.8	< 0.5	14	158	11	247	10	9	2.19	6	< 10	< 10	< 0.5	21	2.76	896	17	12.3	< 10	< 1
884557	3	16	10	< 0.2	< 0.5	64	389	< 1	128	< 2	26	2.84	< 2	< 10	60	< 0.5	< 2	3.40	24	180	2.29	< 10	< 1
884558	4	< 5	< 5	< 0.2	< 0.5	57	323	< 1	52	< 2	32	3.33	< 2	< 10	143	< 0.5	< 2	3.15	24	32	2.87	10	< 1
884559	3	< 5	< 5	< 0.2	< 0.5	40	403	< 1	176	< 2	26	1.85	< 2	< 10	53	< 0.5	< 2	2.76	34	282	2.73	< 10	< 1
884560	3	< 5	< 5	< 0.2	< 0.5	465	1050	2	2	9	148	0.84	3	< 10	113	0.7	< 2	1.38	22	3	7.84	< 10	< 1
884561	4	10	10	< 0.2	< 0.5	39	384	< 1	177	< 2	21	2.29	< 2	< 10	56	< 0.5	< 2	2.87	30	371	2.69	< 10	< 1
884562	9	9	12	< 0.2	< 0.5	40	399	< 1	178	< 2	23	2.23	< 2	< 10	65	< 0.5	< 2	2.81	29	387	2.82	< 10	< 1
884563	3	< 5	< 5	< 0.2	< 0.5	67	502	< 1	62	< 2	35	4.64	< 2	< 10	62	< 0.5	< 2	4.50	27	61	3.50	10	< 1
884564	3	6	7	< 0.2	< 0.5	82	486	< 1	66	< 2	39	3.75	< 2	< 10	64	< 0.5	< 2	4.12	29	48	3.77	10	1
884565	4	< 5	< 5	< 0.2	< 0.5	161	443	< 1	28	< 2	37	5.97	< 2	< 10	78	< 0.5	< 2	5.02	44	9	5.58	10	< 1
884566	4	< 5	< 5	< 0.2	< 0.5	130	480	< 1	78	< 2	37	3.58	< 2	< 10	67	< 0.5	< 2	3.54	32	89	4.82	10	< 1
884567	3	40	73	< 0.2	< 0.5	12	347	< 1	218	< 2	22	1.00	< 2	< 10	39	< 0.5	< 2	1.40	38	750	1.98	< 10	< 1
884568	3	< 5	< 5	< 0.2	< 0.5	77	234	< 1	137	< 2	17	3.41	< 2	< 10	47	< 0.5	< 2	3.17	20	25	1.60	< 10	< 1
884569	2	< 5	< 5	< 0.2	< 0.5	18	457	< 1	40	< 2	43	1.39	< 2	< 10	55	< 0.5	< 2	1.78	15	106	3.84	< 10	< 1
884570	3	< 5	< 5	< 0.2	< 0.5	46	384	< 1	69	< 2	29	1.77	< 2	< 10	59	< 0.5	< 2	2.23	20	120	3.05	< 10	< 1
884571	2	< 5	< 5	< 0.2	< 0.5	3	92	< 1	4	4	4	0.45	< 2	< 10	121	< 0.5	< 2	0.20	3	10	0.88	< 10	< 1
884572	3	< 5	< 5	< 0.2	< 0.5	17	350	1	92	6	57	3.13	2	< 10	14	0.7	80	1.61	20	216	7.72	10	< 1
884573	2	< 5	< 5	< 0.2	< 0.5	66	414	< 1	27	< 2	39	3.38	3	< 10	56	< 0.5	< 2	3.60	29	32	4.57	10	< 1
884574	3	< 5	< 5	< 0.2	< 0.5	53	417	< 1	28	< 2	37	3.35	< 2	< 10	54	< 0.5	< 2	3.59	25	38	4.61	10	< 1
884575	4	15	11	< 0.2	< 0.5	33	546	< 1	86	< 2	37	3.41	< 2	< 10	58	< 0.5	< 2	3.68	26	178	3.50	< 10	< 1
884576	4	< 5	< 5	< 0.2	< 0.5	164	294	< 1	139	< 2	26	6.06	< 2	< 10	49	< 0.5	< 2	4.67	29	37	2.66	10	< 1
884577	5	< 5	5	< 0.2	< 0.5	156	263	< 1	159	< 2	22	7.24	< 2	< 10	51	< 0.5	< 2	5.35	26	47	2.31	10	< 1
884578	5	5	6	< 0.2	< 0.5	58	309	< 1	139	< 2	26	3.81	< 2	< 10	62	< 0.5	< 2	3.41	25	143	2.22	< 10	< 1
884579	3	7	6	< 0.2	< 0.5	23	576	< 1	117	< 2	45	2.68	< 2	< 10	216	0.6	< 2	3.25	25	217	3.32	< 10	< 1
884580	3	< 5	< 5	0.4	< 0.5	25	97	< 1	5	6	8	0.51	< 2	< 10	59	< 0.5	< 2	0.37	10	9	1.14	< 10	< 1
884581	9	< 5	< 5	0.3	< 0.5	407	248	< 1	92	< 2	22	5.48	< 2	< 10	40	< 0.5	< 2	4.41	72	18	3.27	10	< 1
884582	18	< 5	< 5	1.0	< 0.5	1120	252	< 1	143	< 2	25	4.84	< 2	< 10	17	< 0.5	< 2	3.77	234	118	5.41	< 10	< 1
884583	7	< 5	< 5	0.4	< 0.5	433	302	< 1	247	< 2	28	4.27	< 2	< 10	32	< 0.5	< 2	2.89	110	499	4.77	< 10	< 1
884584	4	< 5	5	< 0.2	< 0.5	61	316	< 1	155	< 2	25	2.17	< 2	< 10	48	< 0.5	< 2	2.57	25	245	2.33	< 10	< 1
884585	3	7	8	< 0.2	< 0.5	38	453	< 1	258	< 2	34	2.45	< 2	< 10	80	< 0.5	< 2	2.98	35	427	3.42	< 10	< 1
884586	3	< 5	< 5	< 0.2	< 0.5	47	247	< 1	123	< 2	21	2.97	< 2	< 10	53	< 0.5	< 2	2.70	27	159	2.15	< 10	< 1
884587	4	< 5	< 5	< 0.2	< 0.5	88	278	< 1	126	< 2	21	3.19	< 2	< 10	46	< 0.5	< 2	2.89	38	126	2.37	< 10	< 1
884588	3	9	12	< 0.2	< 0.5	18	214	< 1	198	2	16	1.18	< 2	< 10	30	< 0.5	< 2	1.14	23	503	1.71	< 10	< 1
884589	4	< 5	< 5	< 0.2	< 0.5	102	169	< 1	109	3	16	4.15	< 2	< 10	44	< 0.5	< 2	3.47	28	44	1.95	10	< 1
884590	3	< 5	< 5	< 0.2	< 0.5	43	249	< 1	65	2	23	2.54	< 2	< 10	74	< 0.5	< 2	2.63	20	78	2.19	< 10	< 1
884591	3	< 5	< 5	< 0.2	< 0.5	77	384	< 1	107	3	34	3.05	< 2	< 10	102	< 0.5	< 2	3.25	29	158	3.20	10	< 1
884592	2	10	20	< 0.2	< 0.5	27	259	< 1	155	< 2	16	0.97	< 2	< 10	23	< 0.5	< 2	1.28	27	445	2.39	< 10	< 1
884593	3	< 5	< 5	< 0.2	< 0.5	71	366	< 1	61	3	31	3.83	< 2	< 10	124	< 0.5	< 2	3.74	28	61	3.45	10	< 1
884594	11	140	113	< 0.2	< 0.5	210	245	< 1	523	2	27	1.88	< 2	< 10	49	< 0.5	< 2	0.79	32	421	2.76	< 10	< 1
884595	4	< 5	< 5	< 0.2	< 0.5	137	263	< 1	74	< 2	24	4.36	< 2	< 10	63	< 0.5	< 2	4.02	31	53	3.51	10	< 1
884596	4	< 5	< 5	< 0.2	< 0.5	140	229	< 1	68	4	22	4.16	< 2	< 10	62	< 0.5	< 2	3.88	31	44	3.27	10	< 1
884597	5	< 5	< 5	< 0.2	< 0.5	57	273	< 1	72	5	27	4.69	< 2	< 10	89	< 0.5	< 2	4.19	22	49	2.29	10	< 1
884598	3	< 5	< 5	< 0.2	< 0.5	23	152	< 1	137	4	18	2.36	< 2	< 10	111	< 0.5	< 2	2.07	21	50	1.48	< 10	< 1
884599	3	11	11	< 0.2	< 0.5	40	229	< 1	141	< 2	16	1.62	< 2	< 10	30	< 0.5	< 2	1.79	26	264	1.83	< 10	< 1
884600	2	< 5	< 5	< 0.2	< 0.5	55	243	< 1	83	4	24	2.95	2	< 10	43	< 0.5	< 2	2.45	27	85	2.88	10	< 1
884601	< 2	< 5	< 5	< 0.2	< 0.5	30	317	< 1	25	4	28	3.12	< 2	< 10	44	< 0.5	< 2	2.89	25	29	3.85	10	< 1

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884602	3	< 5	< 5	< 0.2	< 0.5	80	325	< 1	71	3	30	3.54	< 2	< 10	40	< 0.5	< 2	2.92	27	116	3.21	10	< 1
884603	< 2	< 5	< 5	< 0.2	< 0.5	30	338	< 1	69	3	31	2.49	< 2	< 10	40	< 0.5	< 2	2.49	20	104	2.57	< 10	< 1
884604	3	21	17	< 0.2	< 0.5	30	281	< 1	168	4	30	1.72	< 2	< 10	30	< 0.5	< 2	1.47	23	291	2.18	< 10	< 1
884605	3	6	9	< 0.2	< 0.5	84	355	< 1	105	< 2	28	2.60	< 2	< 10	40	< 0.5	< 2	2.77	29	277	2.89	< 10	< 1
884606	< 2	< 5	< 5	< 0.2	< 0.5	10	225	< 1	129	3	27	1.50	< 2	< 10	32	< 0.5	< 2	1.15	26	301	1.98	< 10	< 1
884607	3	< 5	< 5	< 0.2	< 0.5	50	410	< 1	62	3	43	2.21	< 2	< 10	21	< 0.5	< 2	2.29	25	153	3.88	10	< 1
884608	< 2	< 5	< 5	< 0.2	< 0.5	26	272	< 1	21	3	25	2.13	< 2	< 10	< 10	< 0.5	< 2	2.60	12	53	3.13	10	< 1
884609	2	< 5	< 5	< 0.2	< 0.5	37	253	< 1	124	< 2	23	3.22	< 2	< 10	45	< 0.5	< 2	2.78	22	204	2.10	< 10	< 1
884610	4	< 5	< 5	< 0.2	< 0.5	38	196	< 1	5	4	31	0.90	< 2	< 10	217	< 0.5	< 2	0.31	9	8	1.91	< 10	< 1
884611	3	< 5	< 5	< 0.2	< 0.5	3	153	< 1	1	4	6	0.09	< 2	< 10	81	< 0.5	< 2	0.45	< 1	10	0.57	< 10	< 1
884612	< 2	< 5	< 5	< 0.2	< 0.5	38	504	< 1	36	5	43	3.00	< 2	< 10	467	< 0.5	< 2	3.18	26	31	4.02	10	< 1
884613	4	< 5	< 5	< 0.2	< 0.5	111	384	< 1	26	5	44	2.50	< 2	< 10	52	< 0.5	< 2	3.04	35	14	4.27	10	< 1
884614	< 2	< 5	< 5	< 0.2	< 0.5	80	316	< 1	28	5	33	2.75	< 2	< 10	235	< 0.5	< 2	3.21	26	10	2.86	10	< 1
884615	6	< 5	< 5	< 0.2	< 0.5	332	288	< 1	539	5	31	3.02	< 2	< 10	36	< 0.5	< 2	2.83	62	23	3.26	10	< 1
884616	3	< 5	< 5	< 0.2	< 0.5	89	225	< 1	38	6	41	2.01	< 2	< 10	34	< 0.5	< 2	1.60	48	12	7.53	20	< 1
884617	2	< 5	< 5	< 0.2	< 0.5	20	221	< 1	54	3	20	1.16	< 2	< 10	142	< 0.5	< 2	1.14	14	101	1.78	< 10	< 1
884618	< 2	< 5	< 5	< 0.2	< 0.5	19	185	< 1	46	4	19	1.05	< 2	< 10	140	< 0.5	< 2	0.95	13	84	1.57	< 10	< 1
884619	2	< 5	< 5	< 0.2	< 0.5	97	251	< 1	93	2	21	5.49	< 2	< 10	47	< 0.5	< 2	4.44	26	57	2.67	10	< 1
884620	8	< 5	< 5	< 0.2	< 0.5	1160	409	< 1	58	< 2	42	2.81	< 2	< 10	47	< 0.5	< 2	2.84	35	53	3.56	10	< 1
884621	3	< 5	< 5	< 0.2	< 0.5	43	288	< 1	108	< 2	23	3.60	< 2	< 10	42	< 0.5	< 2	3.34	21	150	2.04	< 10	< 1
884622	< 2	< 5	< 5	< 0.2	< 0.5	22	179	< 1	67	3	22	2.76	< 2	< 10	102	< 0.5	< 2	2.12	16	51	1.77	< 10	< 1
884623	3	< 5	5	< 0.2	< 0.5	94	237	< 1	104	< 2	21	5.06	< 2	< 10	58	< 0.5	< 2	3.89	56	66	2.61	10	< 1
884624	3	< 5	< 5	< 0.2	< 0.5	47	170	< 1	95	< 2	18	4.34	< 2	< 10	35	< 0.5	< 2	3.24	18	86	1.50	< 10	< 1
884625	7	< 5	< 5	< 0.2	< 0.5	38	214	< 1	73	< 2	25	3.12	< 2	< 10	74	< 0.5	< 2	2.36	19	53	1.96	< 10	< 1
884626	3	< 5	< 5	< 0.2	< 0.5	30	367	< 1	17	5	60	2.18	< 2	< 10	82	< 0.5	< 2	1.09	22	9	6.41	20	< 1
884627	4	< 5	< 5	< 0.2	< 0.5	100	288	< 1	34	6	37	2.19	< 2	< 10	54	< 0.5	< 2	2.13	40	16	7.16	20	< 1
884628	9	28	6	< 0.2	< 0.5	294	544	< 1	14	3	71	1.86	< 2	< 10	26	< 0.5	< 2	1.52	19	9	5.87	20	< 1
884629	7	460	106	< 0.2	< 0.5	36	280	< 1	70	3	20	0.95	< 2	< 10	27	< 0.5	< 2	1.47	13	252	1.53	< 10	< 1
884630	3	< 5	< 5	< 0.2	0.5	54	994	< 1	29	8	120	2.05	< 2	< 10	83	< 0.5	< 2	2.86	23	49	7.89	20	< 1
884631	< 2	< 5	< 5	< 0.2	< 0.5	28	419	< 1	10	5	58	1.70	3	< 10	149	< 0.5	< 2	1.42	17	8	4.35	10	< 1
884632	3	< 5	< 5	< 0.2	< 0.5	35	424	< 1	42	4	37	2.49	< 2	< 10	219	< 0.5	< 2	2.81	30	11	3.81	10	< 1
884633	5	< 5	6	< 0.2	< 0.5	64	260	< 1	148	5	21	3.24	< 2	< 10	189	< 0.5	< 2	3.25	31	56	2.16	< 10	< 1
884634	3	< 5	< 5	< 0.2	< 0.5	13	302	< 1	68	4	27	1.66	< 2	< 10	147	< 0.5	< 2	2.10	19	65	2.01	< 10	< 1
884635	3	< 5	< 5	< 0.2	< 0.5	78	376	< 1	42	6	35	1.89	< 2	< 10	238	< 0.5	< 2	2.51	24	35	2.95	< 10	< 1
884636	2	< 5	< 5	< 0.2	< 0.5	3	175	< 1	5	4	30	0.61	2	< 10	235	< 0.5	< 2	0.59	5	9	1.43	< 10	< 1

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO	MgO
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
884551	0.16	16	1.33	0.143	0.120	0.35	< 2	5	130	0.15	< 20	7	< 2	< 10	46	15	6	3	52.03	15.69	6.70	0.104	7.64
884552	0.18	< 10	1.85	0.224	0.059	0.14	< 2	9	108	0.10	< 20	< 1	< 2	< 10	47	< 10	4	6	50.33	6.45	9.56	0.177	15.68
884553	0.14	10	1.57	0.145	0.046	0.49	< 2	8	87	0.11	< 20	3	< 2	< 10	37	< 10	6	7	51.82	9.21	9.26	0.163	13.61
884554	0.08	< 10	0.48	0.500	0.059	< 0.01	3	8	47	0.62	< 20	10	< 2	< 10	578	< 10	14	16	47.42	13.77	19.73	0.227	4.49
884555	0.07	14	0.78	0.121	0.038	1.61	< 2	3	134	0.12	< 20	< 1	< 2	< 10	28	132	3	18	54.94	15.50	7.30	0.077	5.87
884556	< 0.01	< 10	0.61	0.023	0.042	12.9	6	2	286	0.07	< 20	2	2	< 10	29	36	2	9	35.91	9.56	17.10	0.093	7.45
884557	0.16	< 10	1.93	0.267	0.015	0.07	< 2	10	135	0.12	< 20	7	< 2	< 10	66	< 10	4	5	48.46	11.84	8.99	0.147	13.12
884558	0.27	16	1.60	0.203	0.104	0.19	< 2	4	114	0.17	< 20	< 1	< 2	< 10	59	< 10	4	5	50.36	20.23	6.69	0.082	5.61
884559	0.21	< 10	3.48	0.252	0.056	0.04	< 2	12	57	0.12	< 20	5	< 2	< 10	57	< 10	6	6	48.61	7.74	9.05	0.142	18.01
884560	0.50	26	0.33	0.187	0.178	0.04	2	9	18	0.22	< 20	6	< 2	< 10	21	< 10	53	6	53.13	10.72	20.64	0.265	1.52
884561	0.19	< 10	2.62	0.183	0.093	0.14	< 2	10	57	0.09	< 20	< 1	< 2	< 10	57	< 10	4	3	47.52	11.00	10.16	0.157	14.59
884562	0.21	11	2.71	0.173	0.101	0.12	< 2	10	48	0.09	< 20	< 1	< 2	< 10	58	< 10	5	3	48.57	11.08	10.12	0.156	14.13
884563	0.14	< 10	2.07	0.639	0.090	0.16	2	11	261	0.14	< 20	5	< 2	< 10	83	< 10	5	3	45.95	17.17	11.22	0.149	8.66
884564	0.16	< 10	1.87	0.351	0.097	0.30	< 2	10	117	0.16	< 20	2	< 2	< 10	100	< 10	6	6	46.80	16.77	10.90	0.147	8.00
884565	0.21	< 10	2.13	0.745	0.015	0.50	< 2	10	381	0.22	< 20	4	< 2	< 10	178	< 10	5	6	44.43	19.55	11.72	0.104	6.68
884566	0.18	< 10	1.82	0.377	0.036	0.41	< 2	9	117	0.18	< 20	< 1	< 2	< 10	123	< 10	4	7	46.92	16.66	12.04	0.144	7.33
884567	0.07	< 10	2.44	0.070	0.006	0.19	2	7	9	0.04	< 20	< 1	< 2	< 10	37	16	2	5	51.56	4.28	8.27	0.179	20.40
884568	0.09	< 10	1.23	0.355	0.020	0.11	< 2	5	159	0.05	< 20	1	< 2	< 10	27	< 10	2	4	53.24	14.99	6.61	0.112	9.21
884569	0.13	< 10	1.35	0.248	0.061	0.05	< 2	10	45	0.16	< 20	7	< 2	< 10	89	< 10	4	6	57.09	15.05	9.04	0.132	5.49
884570	0.11	< 10	1.27	0.204	0.091	0.18	< 2	6	73	0.11	< 20	3	< 2	< 10	64	< 10	5	5	51.81	16.67	8.54	0.128	6.69
884571	0.08	28	0.10	0.139	0.007	0.07	< 2	< 1	26	0.02	< 20	< 1	< 2	< 10	6	< 10	4	35	76.59	13.73	1.43	0.013	0.21
884572	0.37	18	2.44	0.192	0.091	1.90	4	12	425	0.26	20	9	< 2	< 10	131	< 10	9	21	48.42	16.35	12.73	0.069	5.65
884573	0.17	< 10	1.39	0.382	0.077	0.22	3	6	133	0.22	< 20	3	< 2	< 10	106	< 10	6	7	48.35	19.42	9.92	0.103	5.07
884574	0.16	< 10	1.35	0.392	0.066	0.18	< 2	6	138	0.21	< 20	< 1	< 2	< 10	100	< 10	6	7	47.79	19.45	9.96	0.103	5.05
884575	0.15	< 10	2.29	0.538	0.082	0.09	2	14	184	0.12	< 20	4	< 2	< 10	95	< 10	5	5	47.85	13.68	11.73	0.169	10.74
884576	0.07	< 10	1.59	0.602	0.029	0.19	< 2	4	329	0.07	< 20	2	< 2	< 10	36	< 10	2	2	48.74	18.38	7.16	0.100	7.53
884577	0.09	< 10	1.66	0.774	0.024	0.17	2	3	408	0.05	< 20	4	< 2	< 10	27	< 10	< 1	2	49.02	21.54	5.98	0.085	6.70
884578	0.13	< 10	1.95	0.422	0.029	0.07	< 2	8	165	0.09	< 20	3	< 2	< 10	52	< 10	2	5	47.73	15.42	8.60	0.127	10.75
884579	0.27	28	2.63	0.249	0.162	0.07	< 2	10	122	0.16	< 20	1	< 2	< 10	81	< 10	9	4	48.81	14.91	9.02	0.150	10.07
884580	0.07	16	0.18	0.116	0.013	0.14	< 2	1	45	0.04	< 20	< 1	< 2	< 10	10	< 10	4	20	75.13	14.14	1.64	0.014	0.31
884581	0.11	< 10	1.65	0.695	0.009	0.86	< 2	7	243	0.11	< 20	< 1	< 2	< 10	66	< 10	2	4	47.06	20.26	8.26	0.074	6.97
884582	0.09	< 10	1.75	0.540	0.009	2.74	2	6	206	0.10	< 20	3	< 2	< 10	58	< 10	2	5	44.44	18.21	11.61	0.082	7.96
884583	0.09	< 10	3.05	0.427	0.011	1.09	3	6	155	0.11	< 20	< 1	< 2	< 10	65	< 10	2	5	45.14	14.78	11.11	0.103	13.57
884584	0.12	< 10	1.73	0.236	0.012	0.10	2	7	81	0.09	< 20	2	< 2	< 10	49	< 10	3	6	50.04	11.51	9.61	0.148	12.48
884585	0.20	21	3.89	0.268	0.230	0.10	3	9	89	0.19	< 20	< 1	< 2	< 10	61	< 10	9	5	44.77	10.36	10.59	0.144	16.83
884586	0.09	< 10	1.37	0.284	0.018	0.17	< 2	5	135	0.13	< 20	3	< 2	< 10	56	< 10	3	4	47.09	16.00	8.77	0.117	9.76
884587	0.07	< 10	1.40	0.346	0.022	0.32	< 2	5	155	0.13	< 20	4	< 2	< 10	57	< 10	3	4	47.53	15.19	8.91	0.116	9.77
884588	0.05	< 10	1.82	0.096	0.016	0.08	< 2	5	21	0.05	< 20	3	< 2	< 10	35	< 10	2	6	49.02	7.01	9.20	0.143	17.53
884589	0.07	< 10	0.90	0.506	0.016	0.44	< 2	2	230	0.03	< 20	4	< 2	< 10	27	< 10	1	2	50.49	20.66	6.26	0.083	5.63
884590	0.16	< 10	1.31	0.247	0.062	0.19	< 2	4	90	0.07	< 20	4	< 2	< 10	43	< 10	3	3	48.69	16.88	8.20	0.114	8.32
884591	0.20	11	2.20	0.270	0.106	0.21	< 2	9	111	0.10	< 20	7	< 2	< 10	74	< 10	6	3	46.18	17.08	10.04	0.127	9.52
884592	0.04	< 10	1.77	0.064	0.009	0.08	2	5	15	0.04	< 20	3	< 2	< 10	40	< 10	2	4	50.58	5.33	9.47	0.158	19.29
884593	0.13	< 10	1.78	0.358	0.016	0.15	< 2	7	152	0.10	< 20	7	< 2	< 10	84	< 10	4	4	44.97	18.60	10.40	0.120	7.96
884594	0.10	< 10	2.50	0.084	0.014	0.12	< 2	5	20	0.06	< 20	6	< 2	< 10	40	< 10	2	4	48.53	9.03	11.34	0.166	17.05
884595	0.15	< 10	1.43	0.519	0.046	0.43	< 2	8	229	0.09	< 20	6	< 2	< 10	94	< 10	3	4	45.70	20.47	9.33	0.086	6.27
884596	0.13	< 10	1.28	0.461	0.062	0.43	2	6	225	0.09	< 20	7	< 2	< 10	92	< 10	3	4	45.73	19.98	9.33	0.084	6.29
884597	0.26	< 10	1.80	0.442	0.010	0.09	< 2	6	204	0.08	< 20	8	< 2	< 10	61	< 10	3	3	45.87	20.44	7.61	0.093	7.68
884598	0.21	< 10	1.15	0.132	0.035	0.16	< 2	2	63	0.04	< 20	4	< 2	< 10	23	< 10	2	3	53.89	19.34	4.92	0.070	6.36
884599	0.07	< 10	1.53	0.165	0.023	0.21	< 2	5	61	0.05	< 20	< 1	< 2	< 10	36	< 10	2	5	50.56	11.77	7.98	0.125	13.36

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO	MgO
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
884600	0.10	< 10	1.33	0.399	0.034	0.16	< 2	5	145	0.08	< 20	5	< 2	< 10	71	< 10	3	4	46.46	17.37	10.74	0.124	8.35
884601	0.10	< 10	1.15	0.428	0.049	0.15	< 2	6	156	0.09	< 20	8	< 2	< 10	94	< 10	4	4	48.08	20.07	9.51	0.110	5.39
884602	0.09	< 10	1.35	0.494	0.066	0.15	< 2	7	201	0.08	< 20	6	< 2	< 10	72	< 10	3	3	46.41	17.56	12.01	0.150	8.05
884603	0.10	< 10	1.45	0.348	0.055	0.06	< 2	7	84	0.08	< 20	7	< 2	< 10	57	< 10	4	5	47.69	17.33	9.50	0.141	7.97
884604	0.06	< 10	2.04	0.148	0.097	0.06	3	5	45	0.07	< 20	7	< 2	< 10	41	< 10	3	4	48.56	11.94	10.46	0.176	13.84
884605	0.09	< 10	1.60	0.257	0.040	0.17	< 2	8	108	0.06	< 20	7	< 2	< 10	75	< 10	3	4	47.34	14.23	11.31	0.160	10.38
884606	0.06	16	2.04	0.105	0.146	0.15	< 2	3	38	0.04	< 20	4	< 2	< 10	21	< 10	3	3	50.37	11.14	9.36	0.155	14.48
884607	0.04	< 10	1.39	0.080	0.072	0.16	< 2	6	431	0.12	< 20	8	< 2	< 10	85	< 10	5	5	46.78	15.46	12.56	0.148	6.61
884608	< 0.01	< 10	0.72	0.023	0.077	0.03	< 2	3	686	0.12	< 20	10	< 2	< 10	85	< 10	3	4	40.79	17.76	15.82	0.147	4.05
884609	0.08	< 10	1.63	0.337	0.029	0.12	< 2	6	169	0.08	< 20	7	< 2	< 10	46	< 10	2	4	49.11	14.57	8.65	0.128	11.43
884610	0.50	26	0.52	0.080	0.043	0.22	< 2	3	15	0.10	< 20	7	< 2	< 10	27	< 10	3	6	71.13	15.17	2.98	0.028	0.86
884611	0.03	< 10	0.26	0.026	0.006	< 0.01	< 2	< 1	17	0.02	< 20	< 1	< 2	< 10	4	< 10	4	9	90.55	1.77	0.97	0.026	2.03
884612	0.42	28	2.18	0.304	0.295	0.09	< 2	9	221	0.13	20	10	< 2	< 10	94	< 10	8	5	45.01	16.95	11.03	0.155	7.59
884613	0.31	34	1.67	0.194	0.406	0.58	< 2	6	167	0.12	20	10	< 2	< 10	92	< 10	7	6	47.49	18.92	9.57	0.113	5.59
884614	0.30	33	1.50	0.212	0.393	0.21	< 2	6	207	0.11	< 20	8	< 2	< 10	74	< 10	7	4	46.40	18.60	8.70	0.113	5.99
884615	0.16	15	1.63	0.293	0.079	0.98	< 2	4	269	0.05	< 20	8	< 2	< 10	30	< 10	2	4	47.86	17.57	8.68	0.127	8.09
884616	0.04	< 10	0.87	0.205	0.048	0.46	< 2	3	53	0.07	30	14	< 2	< 10	234	< 10	2	3	46.99	18.86	14.03	0.123	4.29
884617	0.24	15	1.04	0.129	0.067	0.11	< 2	4	50	0.07	< 20	3	< 2	< 10	30	< 10	3	6	59.97	15.84	5.56	0.082	5.31
884618	0.23	17	0.92	0.115	0.060	0.12	< 2	3	44	0.07	< 20	4	< 2	< 10	26	< 10	3	7	61.41	15.81	5.21	0.074	4.65
884619	0.09	< 10	1.67	0.682	0.050	0.19	< 2	7	403	0.11	< 20	4	< 2	< 10	65	< 10	3	4	44.20	18.65	9.70	0.099	8.73
884620	0.10	< 10	1.78	0.118	0.026	0.26	< 2	5	46	0.14	< 20	7	< 2	< 10	84	< 10	4	7	48.38	18.79	8.54	0.105	6.09
884621	0.10	< 10	1.64	0.384	0.070	0.11	< 2	6	215	0.06	< 20	4	< 2	< 10	45	< 10	2	2	46.20	16.32	9.31	0.130	10.17
884622	0.24	< 10	1.40	0.255	0.027	0.06	< 2	3	101	0.05	< 20	6	< 2	< 10	30	< 10	1	3	50.79	18.57	6.68	0.100	7.76
884623	0.11	< 10	1.59	0.557	0.015	0.44	< 2	5	291	0.05	< 20	5	< 2	< 10	55	< 10	1	2	47.92	17.92	8.00	0.103	8.45
884624	0.05	< 10	1.19	0.400	0.029	0.07	< 2	3	252	0.03	< 20	6	< 2	< 10	20	< 10	< 1	2	49.41	16.87	7.54	0.115	9.93
884625	0.16	< 10	1.42	0.319	0.023	0.07	< 2	4	120	0.06	< 20	4	< 2	< 10	33	< 10	1	3	51.25	17.04	7.82	0.113	8.79
884626	0.96	21	1.41	0.173	0.042	0.37	< 2	11	76	0.19	40	11	< 2	< 10	139	< 10	6	12	57.19	17.05	9.69	0.075	2.86
884627	0.08	< 10	0.96	0.263	0.078	0.39	< 2	6	85	0.10	30	13	< 2	< 10	191	< 10	4	6	46.28	16.98	14.93	0.137	6.04
884628	0.10	< 10	0.36	0.403	0.088	< 0.01	< 2	6	42	0.22	30	15	< 2	< 10	288	< 10	18	13	50.35	13.23	17.27	0.227	4.61
884629	0.08	< 10	1.41	0.119	0.031	< 0.01	< 2	9	31	0.05	< 20	7	< 2	< 10	39	< 10	2	5	51.37	8.16	9.50	0.168	15.52
884630	0.30	86	2.05	0.236	0.239	0.08	3	35	21	0.17	40	17	< 2	< 10	136	< 10	51	9	45.93	11.38	18.65	0.313	7.61
884631	0.89	92	1.52	0.129	0.441	0.20	< 2	4	133	0.11	30	12	< 2	< 10	86	< 10	15	3	57.91	16.50	6.78	0.098	3.25
884632	0.16	26	1.57	0.189	0.177	0.18	< 2	8	175	0.11	< 20	11	< 2	< 10	99	< 10	6	3	46.98	16.86	10.93	0.148	7.13
884633	0.31	24	2.03	0.266	0.125	0.20	< 2	5	402	0.05	< 20	4	< 2	< 10	31	< 10	3	1	47.78	13.80	7.62	0.120	12.68
884634	0.17	34	1.56	0.146	0.174	0.12	< 2	6	311	0.08	< 20	9	< 2	< 10	36	< 10	6	3	51.47	14.71	7.58	0.127	9.20
884635	0.24	29	1.70	0.184	0.238	0.12	3	8	157	0.12	< 20	4	< 2	< 10	72	< 10	8	5	48.97	16.00	9.10	0.125	7.46
884636	0.27	33	0.35	0.076	0.045	< 0.01	< 2	2	52	0.14	< 20	4	< 2	< 10	25	< 10	7	9	64.92	17.50	2.12	0.025	0.61

Analyte Symbol	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
884551	9.38	3.66	0.88	0.437	0.26	2.79	99.57	306	549	11	22	120	< 1	96
884552	14.57	1.03	0.41	0.387	0.13	1.37	100.1	162	260	12	47	52	< 1	156
884553	11.05	1.85	0.70	0.394	0.11	2.35	100.5	190	408	13	40	57	< 1	132
884554	9.70	2.66	0.47	2.486	0.14	-0.39	100.7	173	159	27	42	105	< 1	819
884555	7.16	5.41	0.51	0.325	0.09	2.98	100.2	123	549	6	16	82	< 1	73
884556	12.71	0.30	0.06	0.233	0.10	10.59	94.11	33	1114	5	19	31	< 1	87
884557	12.75	1.13	0.71	0.490	0.04	2.45	100.1	192	305	8	42	28	< 1	183
884558	8.79	3.27	1.56	0.632	0.23	2.79	100.2	554	718	7	13	176	< 1	111
884559	12.29	1.00	0.53	0.438	0.14	2.46	100.4	122	151	11	39	53	< 1	136
884560	6.07	3.06	1.66	2.400	0.42	0.41	100.3	510	158	80	29	352	2	48
884561	11.37	1.11	0.81	0.424	0.21	2.58	99.93	171	241	11	38	45	< 1	173
884562	11.00	1.23	0.81	0.395	0.22	2.38	100.1	186	231	11	37	45	< 1	167
884563	12.00	2.17	0.57	0.783	0.22	1.62	100.5	163	483	15	36	50	< 1	229
884564	11.17	2.51	0.81	0.733	0.22	2.52	100.6	219	470	15	35	50	< 1	236
884565	11.29	2.30	0.82	1.047	0.04	2.27	100.3	246	705	11	28	37	< 1	316
884566	10.16	2.52	1.14	0.841	0.09	2.60	100.4	268	462	10	30	38	< 1	237
884567	11.57	0.39	0.16	0.206	0.01	3.00	100.0	53	26	5	43	22	< 1	124
884568	11.40	2.02	0.56	0.250	0.04	1.88	100.3	179	407	5	30	37	< 1	102
884569	8.21	3.30	0.37	0.645	0.14	0.99	100.4	176	481	7	28	61	< 1	156
884570	9.36	3.65	0.58	0.463	0.21	1.91	100.0	241	622	9	23	48	< 1	136
884571	2.40	4.81	0.45	0.071	0.02	0.47	100.2	689	527	4	1	63	1	8
884572	4.46	3.87	0.88	0.630	0.21	6.62	99.89	977	887	11	17	69	2	172
884573	10.17	3.29	0.98	0.850	0.19	2.01	100.3	280	663	12	17	48	< 1	180
884574	10.08	3.28	0.96	0.836	0.17	2.13	99.82	266	667	11	18	45	< 1	177
884575	11.76	1.86	0.47	0.583	0.19	1.33	100.3	130	342	13	43	55	< 1	244
884576	11.40	2.06	0.44	0.378	0.07	2.17	98.42	149	566	5	20	20	< 1	98
884577	11.97	2.27	0.46	0.255	0.06	2.24	100.6	161	694	3	15	17	< 1	71
884578	11.12	1.76	0.74	0.531	0.07	2.11	98.95	200	354	8	35	35	< 1	171
884579	9.84	2.56	1.13	0.557	0.37	2.56	99.97	477	632	16	29	134	1	169
884580	1.37	5.87	0.60	0.091	0.03	0.91	100.1	292	611	4	1	82	1	9
884581	11.45	2.63	0.47	0.597	0.02	2.15	99.96	154	503	6	24	27	< 1	180
884582	10.35	2.20	0.54	0.579	0.02	3.68	99.67	160	459	7	23	34	< 1	164
884583	9.12	1.53	0.39	0.588	0.03	3.59	99.95	114	303	6	23	32	< 1	152
884584	11.52	1.60	0.65	0.478	0.03	2.16	100.2	185	279	9	37	39	< 1	163
884585	11.27	1.18	0.56	0.876	0.50	2.62	99.71	181	226	18	28	112	< 1	153
884586	10.88	2.19	0.74	0.770	0.04	2.38	98.73	224	475	10	31	31	< 1	180
884587	11.32	2.11	0.63	0.669	0.05	2.24	98.53	191	445	9	33	33	< 1	180
884588	11.31	0.77	0.26	0.482	0.04	2.58	98.33	69	91	8	36	32	< 1	143
884589	11.02	3.11	0.75	0.300	0.04	2.17	100.5	181	710	4	15	18	< 1	87
884590	10.58	2.66	1.06	0.514	0.14	2.26	99.42	278	512	9	21	40	< 1	126
884591	10.39	2.36	1.21	0.869	0.25	2.72	100.7	354	517	14	29	55	< 1	204
884592	11.77	0.50	0.17	0.376	0.02	2.91	100.6	49	51	7	41	25	< 1	139
884593	10.79	2.31	1.23	0.787	0.04	2.48	99.70	375	524	12	26	30	< 1	201
884594	9.06	0.91	0.37	0.552	0.04	3.26	100.3	103	144	7	30	28	< 1	159
884595	11.28	2.75	0.95	0.866	0.12	2.44	100.3	239	709	10	28	30	< 1	220
884596	11.45	2.71	0.96	0.880	0.15	2.60	100.2	240	704	11	28	29	< 1	230
884597	10.95	2.27	1.67	0.667	0.02	2.73	100.0	356	553	9	24	32	< 1	174
884598	8.57	3.15	1.31	0.230	0.07	2.54	100.4	431	574	6	13	46	< 1	64
884599	10.99	1.87	0.49	0.426	0.06	2.38	100.0	141	347	7	31	40	< 1	127
884600	10.73	2.56	0.52	0.864	0.08	1.52	99.32	148	485	10	26	31	< 1	205

Analyte Symbol	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
884601	10.21	3.12	0.76	0.690	0.11	1.65	99.70	244	630	10	23	32	< 1	187
884602	10.91	2.44	0.51	0.854	0.16	1.61	100.7	148	469	11	33	29	< 1	219
884603	10.61	2.79	0.56	0.728	0.13	1.36	98.82	138	441	13	27	46	< 1	165
884604	9.69	1.80	0.49	0.696	0.22	2.43	100.3	141	324	9	28	54	< 1	162
884605	11.14	2.06	0.61	0.533	0.10	2.31	100.2	155	410	9	36	34	< 1	231
884606	9.34	1.68	0.34	0.491	0.33	2.80	100.5	131	407	17	21	113	1	109
884607	11.84	2.68	0.28	0.697	0.17	2.33	99.55	71	1571	13	29	39	< 1	233
884608	17.38	0.72	0.06	0.864	0.18	2.41	100.2	20	3354	9	22	24	< 1	314
884609	11.12	1.98	0.51	0.673	0.08	2.17	100.4	162	465	7	29	29	< 1	158
884610	3.23	4.35	1.10	0.301	0.10	0.70	99.93	557	399	2	3	147	< 1	27
884611	2.24	0.10	1.12	0.065	0.02	0.29	99.17	1542	81	5	< 1	61	< 1	5
884612	10.07	2.63	1.05	0.896	0.68	2.35	98.42	720	1273	17	24	81	1	203
884613	9.67	3.31	1.24	0.738	0.93	2.17	99.75	684	1455	13	15	44	< 1	171
884614	10.43	2.93	1.18	0.790	0.87	2.39	98.40	606	1457	16	20	56	1	179
884615	10.12	2.74	0.95	0.345	0.19	2.58	99.26	354	1232	7	16	52	< 1	80
884616	8.64	3.32	0.49	0.929	0.12	1.79	99.57	192	496	5	17	45	< 1	310
884617	7.15	3.90	0.80	0.352	0.15	1.12	100.2	451	891	6	13	81	1	79
884618	6.63	4.01	0.80	0.333	0.14	1.18	100.3	472	878	6	12	86	1	72
884619	12.12	2.09	0.45	1.262	0.14	1.48	98.91	127	607	12	30	38	< 1	223
884620	8.41	3.40	1.39	0.674	0.06	3.52	99.35	341	577	7	21	27	< 1	163
884621	11.57	2.20	0.68	0.609	0.17	2.83	100.2	170	472	10	28	43	< 1	176
884622	10.06	3.00	0.86	0.307	0.07	2.01	100.2	275	641	7	18	24	< 1	90
884623	10.95	2.20	0.64	0.435	0.04	2.80	99.46	193	562	4	24	15	< 1	154
884624	11.26	1.93	0.54	0.306	0.06	2.23	100.2	148	539	5	24	24	< 1	103
884625	10.22	2.34	0.67	0.469	0.06	1.72	100.5	213	446	6	23	31	< 1	123
884626	5.20	3.75	1.65	0.866	0.10	1.28	99.72	662	694	7	15	91	< 1	163
884627	9.29	2.92	0.70	1.091	0.19	1.75	100.3	226	535	10	28	28	< 1	309
884628	9.25	2.61	0.56	1.689	0.21	-0.07	99.92	190	150	34	39	119	< 1	442
884629	11.81	1.17	0.39	0.364	0.08	1.73	100.3	70	166	7	51	34	< 1	160
884630	9.20	1.85	1.07	1.188	0.56	1.60	99.33	205	114	109	82	652	1	269
884631	5.37	4.43	1.36	0.564	1.01	0.98	98.24	1543	2049	14	8	134	1	101
884632	9.87	2.90	0.99	0.761	0.40	2.22	99.20	593	1248	14	27	56	< 1	222
884633	12.19	1.42	1.03	0.344	0.28	2.52	99.77	483	995	8	26	50	< 1	98
884634	9.71	3.01	0.79	0.475	0.36	1.79	99.22	375	1283	14	23	49	< 1	103
884635	9.86	3.35	0.84	0.788	0.51	1.52	98.53	472	1357	16	23	88	1	170
884636	1.73	3.04	8.24	0.349	0.09	0.40	99.02	7789	1183	6	2	99	< 1	24

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
NIST 694 Meas																							
NIST 694 Cert																							
DNC-1 Meas																							
DNC-1 Cert																							
GXR-6 Meas				0.4	< 0.5	68	1070	< 1	24	94	128	6.77	236	< 10	750	0.9	< 2	0.13	14	86	6.02	20	2
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
GXR-6 Meas				0.3	< 0.5	69	1080	< 1	24	92	129	6.77	242	< 10	761	0.9	< 2	0.13	14	87	6.13	20	2
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
GXR-6 Meas				0.4	< 0.5	67	1120	2	25	100	131	6.47	236	< 10	724	0.9	< 2	0.13	13	82	5.73	20	< 1
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
SY-4 Meas																							
SY-4 Cert																							
BIR-1a Meas																							
BIR-1a Cert																							
OREAS 98 (Aqua Regia) Meas				41.7		> 10000				258	1230						10		114				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						93		111				
OREAS 98 (Aqua Regia) Meas				41.9		> 10000				253	1220						19		115				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						93		111				
OREAS 98 (Aqua Regia) Meas				41.2		> 10000				282	1250						135		112				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						92.8		111				
BCR-2 Meas																							
BCR-2 Cert																							
OREAS 922 (AQUA REGIA) Meas				0.7	< 0.5	2160	772	< 1	33	62	270	2.69	5		75	0.7	7	0.41	20	48	5.43	20	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 922 (AQUA REGIA) Meas				0.7	< 0.5	2140	767	< 1	34	62	260	2.71	5		76	0.7	6	0.41	20	48	5.47	10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 922 (AQUA REGIA) Meas				0.8	< 0.5	2210	825	< 1	35	63	268	2.62	5		72	0.7	9	0.41	19	45	5.18	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 923 (AQUA REGIA) Meas				1.6	< 0.5	4240	879	< 1	33	86	343	2.71	5		56	0.7	13	0.41	22	45	6.36	10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
OREAS 923 (AQUA REGIA) Meas				1.5	< 0.5	4330	877	< 1	32	83	348	2.74	7		52	0.7	19	0.41	22	45	6.27	10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 923 (AQUA REGIA) Meas				1.5	< 0.5	4220	889	< 1	31	83	346	2.57	6		55	0.7	22	0.40	21	41	5.87	< 10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
Oreas 96 (Aqua Regia) Meas				11.2		> 10000				86	431						< 2		46				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
Oreas 96 (Aqua Regia) Meas				11.2		> 10000				88	432						9		48				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
Oreas 96 (Aqua Regia) Meas				11.1		> 10000				93	443						52		48				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
OREAS 45f (Aqua Regia) Meas						334	170	< 1	229	18	25	6.61			147	1.1	< 2	0.07	40	376	14.2	40	2
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
OREAS 45f (Aqua Regia) Meas						342	169	< 1	227	18	25	6.59			147	1.1	< 2	0.07	38	374	14.4	40	2
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
OREAS 45f (Aqua Regia) Meas						336	174	< 1	227	13	29	6.45			140	1.1	< 2	0.07	39	354	13.7	20	2
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
W-2b Meas																							
W-2b Cert																							
Oreas 620 (Aqua Regia) Meas				39.9	163	1740	434	9	14	> 5000	> 10000	1.16	47		13	0.7	< 2	1.37	14	17	2.65	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
Oreas 620 (Aqua Regia) Meas				41.3	169	1810	446	9	16	> 5000	> 10000	1.21	48		15	0.7	< 2	1.40	14	22	2.73	10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
Oreas 620 (Aqua Regia) Meas				40.7	165	1790	465	9	15	> 5000	> 10000	1.19	49		11	0.7	5	1.41	14	18	2.60	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
PK03 Meas	5040	6280	4470																				
PK03 Cert	5038.000	6028.000	4291.000																				
PK03 Meas	5090	6180	4430																				
PK03 Cert	5038.000	6028.000	4291.000																				
PK03 Meas	5090	6290	4440																				
PK03 Cert	5038.000	6028.000	4291.000																				
PK03 Meas	5110	6300	4530																				
PK03 Cert	5038.000	6028.000	4291.000																				
PK03 Meas	5180	6300	4490																				
PK03 Cert	5038.0	6028.0	4291.0																				

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
	00	00	00																				
884552 Orig	13	16	33																				
884552 Dup	14	17	28																				
884562 Orig				< 0.2	< 0.5	40	400	< 1	179	< 2	22	2.26	3	< 10	65	< 0.5	< 2	2.83	30	386	2.82	< 10	< 1
884562 Dup				< 0.2	< 0.5	40	398	< 1	177	< 2	23	2.21	< 2	< 10	65	< 0.5	< 2	2.79	29	387	2.81	< 10	< 1
884565 Orig																							
884565 Dup																							
884566 Orig	4	< 5	< 5																				
884566 Dup	4	< 5	< 5																				
884582 Orig	18	< 5	< 5	1.1	< 0.5	1110	251	< 1	144	< 2	25	4.80	< 2	< 10	17	< 0.5	3	3.75	235	117	5.36	10	< 1
884582 Dup	17	< 5	< 5	1.0	< 0.5	1120	253	< 1	142	< 2	25	4.88	< 2	< 10	18	< 0.5	< 2	3.79	233	119	5.46	< 10	< 1
884587 Orig	3	< 5	< 5																				
884587 Dup	4	< 5	< 5																				
884597 Orig				< 0.2	< 0.5	57	274	< 1	71	6	32	4.70	< 2	< 10	88	< 0.5	< 2	4.19	21	49	2.28	10	< 1
884597 Dup				< 0.2	< 0.5	56	271	< 1	72	4	22	4.68	< 2	< 10	89	< 0.5	< 2	4.18	22	49	2.30	10	< 1
884599 Orig																							
884599 Dup																							
884600 Orig	2	< 5	< 5	< 0.2	< 0.5	55	243	< 1	83	4	24	2.95	2	< 10	43	< 0.5	< 2	2.45	27	85	2.88	10	< 1
884600 Split PREP DUP	3	< 5	< 5	< 0.2	< 0.5	54	241	< 1	82	4	24	2.88	< 2	< 10	44	< 0.5	< 2	2.42	26	83	2.83	10	< 1
884605 Orig				< 0.2	< 0.5	84	357	< 1	105	< 2	29	2.61	< 2	< 10	40	< 0.5	< 2	2.77	29	277	2.89	< 10	< 1
884605 Dup				< 0.2	< 0.5	84	353	< 1	105	2	26	2.59	< 2	< 10	40	< 0.5	< 2	2.76	29	277	2.89	< 10	< 1
884606 Orig	2	< 5	6																				
884606 Dup	< 2	< 5	< 5																				
884613 Orig																							
884613 Dup																							
884616 Orig	3	< 5	< 5																				
884616 Dup	3	< 5	< 5																				
884621 Orig	3	< 5	< 5																				
884621 Dup	3	< 5	< 5																				
884624 Orig				< 0.2	< 0.5	46	171	< 1	95	< 2	17	4.31	< 2	< 10	35	< 0.5	< 2	3.24	18	86	1.49	10	< 1
884624 Dup				< 0.2	< 0.5	48	169	< 1	95	2	18	4.37	< 2	< 10	35	< 0.5	< 2	3.24	18	86	1.51	< 10	< 1
884630 Orig	3	< 5	< 5																				
884630 Dup	3	< 5	< 5																				
884636 Orig	2	< 5	< 5	< 0.2	< 0.5	3	175	< 1	5	4	30	0.61	2	< 10	235	< 0.5	< 2	0.59	5	9	1.43	< 10	< 1
884636 Split PREP DUP	3	< 5	< 5	< 0.2	< 0.5	3	177	< 1	4	4	30	0.62	< 2	< 10	229	< 0.5	< 2	0.61	4	10	1.47	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank																							
Method Blank																							
Method Blank	5	< 5	< 5																				
Method Blank	4	< 5	< 5																				
Method Blank	3	< 5	< 5																				
Method Blank	3	< 5	< 5																				
Method Blank	3	< 5	< 5																				
Method Blank	4	< 5	< 5																				
Method Blank	4	< 5	< 5																				
Method Blank	4	< 5	< 5																				

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank	4	< 5	< 5																				

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO	MgO
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
NIST 694 Meas																			11.83	1.88	0.75	0.013	0.34
NIST 694 Cert																			11.2	1.80	0.790	0.0116	0.330
DNC-1 Meas																			46.57	18.42	9.92	0.141	10.18
DNC-1 Cert																			47.15	18.34	9.97	0.150	10.13
GXR-6 Meas	0.99	< 10	0.39	0.103	0.036	0.01	3	20	29		30	13	< 2	< 10	173	< 10	5	8					
GXR-6 Cert	1.87	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110					
GXR-6 Meas	1.00	< 10	0.40	0.105	0.036	0.01	4	20	30		30	11	< 2	< 10	174	< 10	5	8					
GXR-6 Cert	1.87	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110					
GXR-6 Meas	0.98	< 10	0.39	0.095	0.036	0.01	4	19	28		< 20	< 1	< 2	< 10	162	< 10	5	9					
GXR-6 Cert	1.87	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110					
SY-4 Meas																			49.48	20.67	6.21	0.105	0.50
SY-4 Cert																			49.9	20.69	6.21	0.108	0.54
BIR-1a Meas																			47.48	15.34	11.49	0.166	9.74
BIR-1a Cert																			47.96	15.50	11.30	0.175	9.700
OREAS 98 (Aqua Regia) Meas							11																
OREAS 98 (Aqua Regia) Cert							15																
OREAS 98 (Aqua Regia) Meas							14																
OREAS 98 (Aqua Regia) Cert							15																
OREAS 98 (Aqua Regia) Meas							13																
OREAS 98 (Aqua Regia) Cert							15																
BCR-2 Meas																			53.97	13.59	14.10	0.192	3.55
BCR-2 Cert																			54.1	13.5	13.8	0.196	3.59
OREAS 922 (AQUA REGIA) Meas	0.38	35	1.32	0.025	0.066	0.37	2	4	17		40		< 2	< 10	34	< 10	22	4					
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	0.38	35	1.33	0.026	0.066	0.35	< 2	4	17		40		< 2	< 10	34	< 10	21	3					
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	0.39	34	1.31	0.025	0.065	0.37	4	4	16		< 20		< 2	< 10	33	< 10	22	4					
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 923 (AQUA REGIA) Meas	0.33	32	1.43		0.064	0.66	6	4	16		40		< 2	< 10	34	< 10	20	5					
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	0.32	32	1.42		0.062	0.68	3	4	15		40		< 2	< 10	33	< 10	20	4					
OREAS 923	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5					

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO	MgO
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
(AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas	0.32	30	1.38		0.062	0.62	< 2	3	15		< 20		< 2	< 10	32	< 10	19	5					
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5					
Oreas 96 (Aqua Regia) Meas						3.84	6																
Oreas 96 (Aqua Regia) Cert						4.38	4.53																
Oreas 96 (Aqua Regia) Meas						3.97	4																
Oreas 96 (Aqua Regia) Cert						4.38	4.53																
Oreas 96 (Aqua Regia) Meas						3.95	6																
Oreas 96 (Aqua Regia) Cert						4.38	4.53																
OREAS 45f (Aqua Regia) Meas	0.09	< 10	0.17	0.042	0.022	0.02		29	14	0.08	70		< 2	< 10	205		5	16					
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970	7.67		0.120	1.09	217		6.74	30.0					
OREAS 45f (Aqua Regia) Meas	0.09	< 10	0.17	0.043	0.021	0.02		29	15	0.08	70		< 2	< 10	204		5	16					
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970	7.67		0.120	1.09	217		6.74	30.0					
OREAS 45f (Aqua Regia) Meas	0.09	< 10	0.17	0.043	0.021	0.02		26	14	0.11	< 20		< 2	< 10	201		6	17					
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970	7.67		0.120	1.09	217		6.74	30.0					
W-2b Meas																			52.13	15.36	11.00	0.162	6.46
W-2b Cert																			52.4	15.4	10.7	0.163	6.37
Oreas 620 (Aqua Regia) Meas	0.26	24	0.27	0.117	0.030	2.50	46		20		20		< 2	< 10	8	< 10	9	25					
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	0.28	26	0.28	0.121	0.031	2.57	50		21		20		< 2	< 10	9	< 10	9	38					
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	0.28	24	0.27	0.117	0.031	2.48	51		20		< 20		< 2	< 10	9	< 10	9	27					
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57					
PK03 Meas																							
PK03 Cert																							
PK03 Meas																							
PK03 Cert																							
PK03 Meas																							
PK03 Cert																							
PK03 Meas																							
PK03 Cert																							
PK03 Meas																							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO	MgO
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
PK03 Cert																							
884552 Orig																							
884552 Dup																							
884562 Orig	0.21	11	2.72	0.172	0.102	0.12	< 2	10	48	0.09	< 20	< 1	< 2	< 10	57	< 10	5	3					
884562 Dup	0.21	11	2.70	0.174	0.101	0.12	2	10	48	0.09	< 20	2	< 2	< 10	58	< 10	5	3					
884565 Orig																			44.49	19.67	11.73	0.105	6.64
884565 Dup																			44.36	19.43	11.72	0.104	6.73
884566 Orig																							
884566 Dup																							
884582 Orig	0.09	< 10	1.72	0.534	0.009	2.74	2	6	205	0.10	< 20	2	< 2	< 10	58	< 10	2	5	44.31	17.99	11.52	0.082	7.92
884582 Dup	0.09	< 10	1.77	0.546	0.009	2.75	2	6	207	0.10	< 20	3	< 2	< 10	58	< 10	2	5	44.57	18.43	11.71	0.083	8.00
884587 Orig																							
884587 Dup																							
884597 Orig	0.26	< 10	1.80	0.440	0.010	0.09	< 2	6	204	0.08	< 20	10	< 2	< 10	61	< 10	3	3					
884597 Dup	0.26	< 10	1.80	0.443	0.010	0.09	< 2	6	203	0.08	< 20	5	< 2	< 10	62	< 10	3	3					
884599 Orig																			50.42	11.79	8.00	0.125	13.43
884599 Dup																			50.69	11.76	7.96	0.125	13.30
884600 Orig	0.10	< 10	1.33	0.399	0.034	0.16	< 2	5	145	0.08	< 20	5	< 2	< 10	71	< 10	3	4	46.46	17.37	10.74	0.124	8.35
884600 Split PREP DUP	0.10	< 10	1.31	0.402	0.033	0.16	< 2	5	143	0.08	< 20	4	< 2	< 10	70	< 10	3	4	46.85	17.18	10.59	0.124	8.37
884605 Orig	0.09	< 10	1.60	0.256	0.040	0.17	2	8	108	0.06	< 20	5	< 2	< 10	76	< 10	3	5					
884605 Dup	0.09	< 10	1.60	0.258	0.041	0.17	< 2	8	108	0.06	< 20	10	< 2	< 10	74	< 10	3	4					
884606 Orig																							
884606 Dup																							
884613 Orig																			47.20	18.85	9.55	0.113	5.56
884613 Dup																			47.79	19.00	9.58	0.114	5.63
884616 Orig																							
884616 Dup																							
884621 Orig																							
884621 Dup																							
884624 Orig	0.05	< 10	1.19	0.402	0.030	0.07	< 2	3	249	0.03	< 20	6	< 2	< 10	21	< 10	< 1	2					
884624 Dup	0.05	< 10	1.20	0.398	0.029	0.08	< 2	3	254	0.03	< 20	5	< 2	< 10	20	< 10	< 1	2					
884630 Orig																			45.78	11.28	18.55	0.312	7.64
884630 Dup																			46.08	11.48	18.74	0.313	7.59
884636 Orig	0.27	33	0.35	0.076	0.045	< 0.01	< 2	2	52	0.14	< 20	4	< 2	< 10	25	< 10	7	9	64.92	17.50	2.12	0.025	0.61
884636 Split PREP DUP	0.27	35	0.36	0.075	0.048	< 0.01	< 2	2	52	0.14	< 20	6	< 2	< 10	26	< 10	8	9	64.08	17.29	2.16	0.026	0.63
Method Blank	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	< 10	< 0.01	0.008	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	< 10	< 0.01	0.009	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	< 10	< 0.01	0.008	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	< 10	< 0.01	0.008	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank																			0.01	< 0.01	< 0.01	0.003	< 0.01
Method Blank																			0.01	0.01	< 0.01	0.003	< 0.01
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO	MgO
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
NIST 694 Meas	41.23	0.88	0.54		30.00									1647
NIST 694 Cert	43.6	0.860	0.510		30.2									1740
DNC-1 Meas	11.37	1.92	0.23	0.483	0.07			108	142	15	31	43		151
DNC-1 Cert	11.49	1.890	0.234	0.480	0.070			118	144	18.0	31	38		148
GXR-6 Meas														
GXR-6 Cert														
GXR-6 Meas														
GXR-6 Cert														
GXR-6 Meas														
GXR-6 Cert														
SY-4 Meas	8.06	6.96	1.64	0.291	0.13			356	1192	119	1	523	3	7
SY-4 Cert	8.05	7.10	1.66	0.287	0.131			340	1191	119	1.1	517	2.6	8.0
BIR-1a Meas	13.47	1.82	0.02	0.957	0.02			7	109	14	43	14	< 1	336
BIR-1a Cert	13.30	1.82	0.030	0.96	0.021			6	110	16	44	18	0.58	310
OREAS 98 (Aqua Regia) Meas														
OREAS 98 (Aqua Regia) Cert														
OREAS 98 (Aqua Regia) Meas														
OREAS 98 (Aqua Regia) Cert														
OREAS 98 (Aqua Regia) Meas														
OREAS 98 (Aqua Regia) Cert														
BCR-2 Meas	7.17	3.05	1.77	2.239	0.37			706	346	32	33	166		435
BCR-2 Cert	7.12	3.16	1.79	2.26	0.35			683	346	37	33	188		416
OREAS 922 (AQUA REGIA) Meas														
OREAS 922 (AQUA REGIA) Cert														
OREAS 922 (AQUA REGIA) Meas														
OREAS 922 (AQUA REGIA) Cert														
OREAS 922 (AQUA REGIA) Meas														
OREAS 922 (AQUA REGIA) Cert														
OREAS 923 (AQUA REGIA) Meas														
OREAS 923 (AQUA REGIA) Cert														
OREAS 923 (AQUA REGIA) Meas														
OREAS 923 (AQUA REGIA)														

Analyte Symbol	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
Cert														
OREAS 923 (AQUA REGIA) Meas														
OREAS 923 (AQUA REGIA) Cert														
Oreas 96 (Aqua Regia) Meas														
Oreas 96 (Aqua Regia) Cert														
Oreas 96 (Aqua Regia) Meas														
Oreas 96 (Aqua Regia) Cert														
Oreas 96 (Aqua Regia) Meas														
Oreas 96 (Aqua Regia) Cert														
OREAS 45f (Aqua Regia) Meas														
OREAS 45f (Aqua Regia) Cert														
OREAS 45f (Aqua Regia) Meas														
OREAS 45f (Aqua Regia) Cert														
OREAS 45f (Aqua Regia) Meas														
OREAS 45f (Aqua Regia) Cert														
W-2b Meas	11.08	2.25	0.62	1.096	0.13			180	200	19	36	81	< 1	274
W-2b Cert	10.9	2.14	0.626	1.06	0.140			182	190	24.0	36.0	94.0	1.30	262
Oreas 620 (Aqua Regia) Meas														
Oreas 620 (Aqua Regia) Cert														
Oreas 620 (Aqua Regia) Meas														
Oreas 620 (Aqua Regia) Cert														
Oreas 620 (Aqua Regia) Meas														
Oreas 620 (Aqua Regia) Cert														
PK03 Meas														
PK03 Cert														
PK03 Meas														
PK03 Cert														
PK03 Meas														
PK03 Cert														
PK03 Meas														
PK03 Cert														
PK03 Meas														
PK03 Cert														
884552 Orig														

Analyte Symbol	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
884552 Dup														
884562 Orig														
884562 Dup														
884565 Orig	11.29	2.30	0.82	1.054	0.03		100.4	246	716	11	28	37	< 1	315
884565 Dup	11.30	2.30	0.82	1.040	0.04		100.1	246	694	11	28	38	< 1	316
884566 Orig														
884566 Dup														
884582 Orig	10.31	2.19	0.54	0.571	0.03		99.13	159	457	7	23	32	< 1	164
884582 Dup	10.38	2.21	0.54	0.588	0.02		100.2	161	460	7	23	36	< 1	163
884587 Orig														
884587 Dup														
884597 Orig														
884597 Dup														
884599 Orig	11.00	1.87	0.49	0.425	0.06		99.99	141	345	7	31	43	< 1	127
884599 Dup	10.98	1.87	0.49	0.427	0.06		100.0	141	349	7	31	37	< 1	128
884600 Orig	10.73	2.56	0.52	0.864	0.08	1.52	99.32	148	485	10	26	31	< 1	205
884600 Split PREP DUP	10.84	2.55	0.52	0.863	0.08	1.48	99.45	149	490	10	26	31	< 1	208
884605 Orig														
884605 Dup														
884606 Orig														
884606 Dup														
884613 Orig	9.60	3.27	1.23	0.735	0.93		99.20	678	1447	14	15	44	< 1	170
884613 Dup	9.74	3.34	1.26	0.741	0.94		100.3	691	1463	13	15	44	< 1	172
884616 Orig														
884616 Dup														
884621 Orig														
884621 Dup														
884624 Orig														
884624 Dup														
884630 Orig	9.17	1.85	1.06	1.170	0.57		98.97	205	113	108	82	665	1	268
884630 Dup	9.22	1.86	1.07	1.205	0.56		99.70	206	114	109	82	639	1	269
884636 Orig	1.73	3.04	8.24	0.349	0.09	0.40	99.02	7789	1183	6	2	99	< 1	24
884636 Split PREP DUP	1.75	3.02	8.07	0.356	0.08	0.43	97.89	7599	1171	6	2	103	< 1	26
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 0.01	< 0.01	< 0.01	< 0.001	< 0.01			< 2	< 2	< 1	< 1	< 2	< 1	< 5
Method Blank	0.01	0.01	< 0.01	0.001	< 0.01			3	< 2	< 1	< 1	< 2	< 1	< 5
Method Blank														
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Quality Analysis ... *Innovative Technologies*

Report No.: A22-14507
Report Date: 08-Nov-22
Date Submitted: 06-Oct-22
Your Reference: Buck Lake (PGE)

Xyquest Mining
702-889 W. Pender Street
Vancouver BC V5C 3B2
Canada

ATTN: Boris Molak

CERTIFICATE OF ANALYSIS

84 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1C-OES-Tbay	QOP PGE-OES (Fire Assay ICPOES)	2022-10-24 13:11:41
1E3-Tbay	QOP AquaGeo (Aqua Regia ICPOES)	2022-11-02 21:43:31

REPORT **A22-14507**

Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

SCC Accredited LAB Accrédité CCN TM

LabID: 673

CERTIFIED BY:

Rob Hoffman
Region Manager

ACTIVATION LABORATORIES LTD.
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E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884901	7	< 5	< 5	< 0.2	< 0.5	61	337	< 1	63	< 2	25	2.65	< 2	32	36	< 0.5	< 2	2.55	26	90	2.98	< 10	< 1
884902	5	< 5	< 5	< 0.2	< 0.5	56	301	< 1	64	< 2	31	2.50	< 2	30	51	< 0.5	< 2	2.08	20	94	2.69	< 10	< 1
884903	4	< 5	< 5	< 0.2	< 0.5	58	376	< 1	31	< 2	43	2.68	< 2	30	65	< 0.5	< 2	2.17	27	28	4.14	< 10	< 1
884904	3	< 5	< 5	< 0.2	< 0.5	43	315	< 1	33	< 2	30	1.78	< 2	28	59	< 0.5	< 2	1.62	27	7	4.10	< 10	< 1
884905	4	< 5	< 5	< 0.2	< 0.5	72	324	< 1	24	< 2	38	2.94	< 2	29	56	< 0.5	< 2	2.13	33	16	5.85	< 10	< 1
884906	3	23	24	< 0.2	< 0.5	10	136	< 1	55	< 2	10	0.65	< 2	35	15	< 0.5	< 2	0.77	8	187	0.76	< 10	< 1
884907	4	< 5	< 5	< 0.2	< 0.5	48	193	< 1	104	< 2	17	3.52	< 2	28	50	< 0.5	< 2	2.59	20	23	1.59	< 10	< 1
884908	3	< 5	< 5	< 0.2	< 0.5	44	278	< 1	69	< 2	27	2.77	3	29	66	< 0.5	< 2	2.37	20	27	2.40	< 10	< 1
884909	3	< 5	< 5	< 0.2	< 0.5	51	348	< 1	48	< 2	29	2.96	< 2	32	44	< 0.5	< 2	2.56	27	6	3.41	< 10	< 1
884910	4	< 5	< 5	< 0.2	< 0.5	57	317	< 1	26	< 2	32	2.09	< 2	33	45	< 0.5	< 2	1.53	23	17	3.23	< 10	< 1
884911	3	< 5	< 5	< 0.2	< 0.5	64	233	< 1	23	< 2	27	3.14	< 2	30	30	< 0.5	< 2	2.37	21	11	2.64	< 10	< 1
884912	3	< 5	6	< 0.2	< 0.5	23	169	< 1	21	< 2	12	0.82	< 2	31	35	< 0.5	< 2	1.07	8	58	1.00	< 10	< 1
884913	4	< 5	< 5	< 0.2	< 0.5	37	186	< 1	89	< 2	17	3.45	< 2	31	48	< 0.5	< 2	2.64	19	14	1.49	< 10	< 1
884914	4	< 5	< 5	< 0.2	< 0.5	86	380	< 1	58	< 2	27	1.85	< 2	46	33	< 0.5	< 2	2.11	23	144	3.24	< 10	< 1
884915	3	10	13	< 0.2	< 0.5	22	199	< 1	86	< 2	14	1.39	< 2	35	22	< 0.5	< 2	1.56	14	155	1.15	< 10	< 1
884916	4	< 5	< 5	< 0.2	< 0.5	51	287	< 1	15	< 2	43	2.96	< 2	28	89	< 0.5	< 2	2.33	31	5	5.11	< 10	< 1
884917	4	< 5	< 5	< 0.2	< 0.5	29	294	< 1	89	< 2	28	2.87	< 2	29	37	< 0.5	< 2	2.61	33	6	3.47	< 10	< 1
884918	4	5	9	< 0.2	< 0.5	22	195	< 1	111	< 2	11	1.70	< 2	29	35	< 0.5	< 2	1.63	13	160	1.17	< 10	< 1
884919	3	< 5	< 5	< 0.2	< 0.5	39	215	< 1	84	< 2	20	3.34	< 2	29	106	< 0.5	< 2	2.46	16	31	1.67	< 10	< 1
884920	4	< 5	< 5	< 0.2	< 0.5	167	362	< 1	53	< 2	41	1.42	< 2	29	32	< 0.5	< 2	1.76	30	110	4.87	< 10	< 1
884921	6	< 5	< 5	< 0.2	< 0.5	453	394	< 1	78	2	38	1.77	< 2	31	33	< 0.5	< 2	1.81	50	96	5.08	< 10	< 1
884922	6	< 5	< 5	< 0.2	< 0.5	442	420	< 1	67	< 2	36	1.62	< 2	30	32	< 0.5	< 2	1.79	47	85	4.85	< 10	< 1
884923	5	< 5	< 5	< 0.2	< 0.5	153	375	< 1	45	< 2	34	1.52	< 2	29	40	< 0.5	< 2	1.81	22	91	4.33	< 10	< 1
884924	7	< 5	< 5	< 0.2	< 0.5	543	441	< 1	67	< 2	51	2.03	< 2	30	45	< 0.5	< 2	2.00	49	85	7.25	< 10	< 1
884925	4	< 5	< 5	< 0.2	< 0.5	72	338	< 1	35	< 2	30	2.57	< 2	28	67	< 0.5	< 2	2.09	28	11	3.50	< 10	< 1
884926	4	< 5	< 5	< 0.2	< 0.5	55	330	< 1	34	< 2	28	2.71	< 2	28	41	< 0.5	< 2	2.16	28	11	3.48	< 10	< 1
884927	3	< 5	< 5	< 0.2	< 0.5	17	476	< 1	132	< 2	46	3.41	< 2	29	384	< 0.5	< 2	2.95	22	69	3.63	< 10	< 1
884928	4	9	7	< 0.2	< 0.5	139	367	< 1	84	< 2	24	2.75	< 2	28	161	0.5	< 2	2.25	30	153	2.75	< 10	< 1
884929	4	< 5	< 5	< 0.2	< 0.5	235	351	< 1	30	< 2	43	1.94	< 2	31	83	< 0.5	< 2	1.40	36	3	7.04	< 10	< 1
884930	4	< 5	< 5	< 0.2	< 0.5	48	249	< 1	79	3	19	2.19	< 2	32	31	< 0.5	< 2	1.86	23	55	1.99	< 10	< 1
884931	3	< 5	< 5	< 0.2	< 0.5	89	339	< 1	38	< 2	31	2.54	2	28	47	< 0.5	< 2	2.25	30	12	3.61	< 10	< 1
884932	3	< 5	< 5	< 0.2	< 0.5	5	234	< 1	6	< 2	44	0.97	< 2	36	206	< 0.5	< 2	0.29	7	9	2.35	< 10	< 1
884933	2	< 5	< 5	< 0.2	< 0.5	14	303	< 1	8	< 2	49	1.04	< 2	29	144	< 0.5	< 2	0.45	10	15	2.33	< 10	< 1
884934	4	< 5	< 5	< 0.2	< 0.5	58	330	< 1	55	< 2	31	3.20	< 2	24	39	< 0.5	< 2	2.35	26	27	4.76	< 10	< 1
884935	4	< 5	< 5	< 0.2	< 0.5	56	454	< 1	30	< 2	44	2.38	< 2	30	63	< 0.5	< 2	2.35	30	13	5.76	< 10	< 1
884936	4	< 5	< 5	< 0.2	< 0.5	49	424	< 1	40	< 2	35	2.68	< 2	32	36	< 0.5	< 2	2.47	27	26	4.02	< 10	< 1
884937	5	14	10	< 0.2	< 0.5	86	361	< 1	113	< 2	28	2.91	3	30	35	< 0.5	< 2	2.36	40	287	4.20	< 10	< 1
884938	4	< 5	< 5	< 0.2	< 0.5	25	401	< 1	12	< 2	31	1.47	< 2	29	124	< 0.5	< 2	1.14	18	11	3.27	< 10	< 1
884939	4	< 5	< 5	< 0.2	< 0.5	52	404	< 1	19	< 2	33	1.94	< 2	28	54	< 0.5	< 2	1.68	25	17	4.56	< 10	< 1
884940	29	714	530	0.3	< 0.5	1260	141	< 1	1820	< 2	13	0.82	< 2	29	24	< 0.5	< 2	1.28	106	168	2.42	< 10	< 1
884941	19	881	565	0.2	< 0.5	941	186	< 1	1330	< 2	15	1.03	< 2	29	20	< 0.5	< 2	1.54	80	209	2.41	< 10	< 1
884942	24	624	423	< 0.2	< 0.5	1130	163	< 1	1440	< 2	12	0.87	< 2	31	17	< 0.5	< 2	1.55	69	184	2.07	< 10	< 1
884943	4	< 5	< 5	< 0.2	< 0.5	46	330	< 1	53	< 2	37	1.55	< 2	31	220	< 0.5	4	0.90	17	128	3.53	< 10	< 1
884944	3	< 5	< 5	< 0.2	< 0.5	29	225	< 1	199	< 2	18	1.48	< 2	27	39	< 0.5	3	1.48	24	359	1.73	< 10	< 1
884945	4	< 5	< 5	< 0.2	< 0.5	67	246	< 1	46	< 2	26	2.24	< 2	28	43	< 0.5	8	1.96	22	34	2.13	< 10	< 1
884946	8	7	6	< 0.2	< 0.5	234	258	< 1	100	< 2	20	1.39	< 2	28	29	< 0.5	10	1.29	42	153	5.46	< 10	< 1
884947	5	6	< 5	< 0.2	< 0.5	141	277	< 1	39	< 2	24	2.36	< 2	30	38	< 0.5	< 2	2.21	33	31	3.20	< 10	< 1
884948	3	16	9	< 0.2	< 0.5	37	210	< 1	72	< 2	18	1.63	< 2	29	43	< 0.5	< 2	1.89	17	97	1.68	< 10	< 1
884949	4	< 5	< 5	< 0.2	< 0.5	31	303	< 1	30	< 2	22	3.55	< 2	28	41	< 0.5	< 2	2.68	20	10	2.49	< 10	< 1
884950	4	< 5	< 5	< 0.2	< 0.5	49	405	< 1	54	< 2	32	3.69	< 2	30	46	< 0.5	< 2	2.66	23	14	3.04	< 10	< 1
884801	4	< 5	< 5	< 0.2	< 0.5	48	273	< 1	21	< 2	30	2.39	< 2	30	44	< 0.5	< 2	1.86	19	24	2.77	< 10	< 1

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884802	5	< 5	< 5	< 0.2	< 0.5	68	246	< 1	44	< 2	21	4.30	< 2	32	40	< 0.5	< 2	3.01	17	15	1.79	< 10	< 1
884803	9	< 5	< 5	< 0.2	< 0.5	340	313	< 1	85	< 2	25	3.59	< 2	29	49	< 0.5	2	2.84	52	25	5.65	< 10	< 1
884804	5	< 5	< 5	< 0.2	< 0.5	32	237	< 1	66	< 2	16	1.71	< 2	31	26	< 0.5	< 2	1.70	21	150	2.09	< 10	< 1
884805	9	17	35	< 0.2	< 0.5	152	293	< 1	128	< 2	16	1.70	< 2	28	51	< 0.5	< 2	1.99	28	158	2.02	< 10	< 1
884806	6	< 5	5	< 0.2	< 0.5	64	207	< 1	85	< 2	14	3.67	< 2	29	32	< 0.5	2	2.66	18	28	1.52	< 10	< 1
884807	4	< 5	< 5	< 0.2	< 0.5	45	192	< 1	140	< 2	11	1.14	< 2	29	30	< 0.5	5	1.80	25	154	1.58	< 10	< 1
884808	4	10	6	< 0.2	< 0.5	19	185	< 1	47	3	17	1.29	< 2	37	32	< 0.5	< 2	1.47	16	101	1.44	< 10	< 1
884809	4	< 5	< 5	< 0.2	< 0.5	70	303	< 1	59	3	34	3.87	< 2	34	31	< 0.5	< 2	2.95	22	39	2.31	< 10	< 1
884810	3	< 5	< 5	< 0.2	< 0.5	59	276	< 1	26	< 2	53	1.34	< 2	32	206	< 0.5	< 2	1.27	11	19	3.08	< 10	< 1
884811	4	< 5	< 5	< 0.2	< 0.5	41	395	< 1	63	< 2	35	2.67	< 2	26	121	< 0.5	< 2	2.46	24	48	2.95	< 10	< 1
884812	4	< 5	< 5	< 0.2	< 0.5	104	294	< 1	22	< 2	35	1.69	< 2	31	90	< 0.5	< 2	1.94	27	13	4.23	< 10	< 1
884813	6	22	32	< 0.2	< 0.5	233	209	< 1	238	< 2	14	1.73	< 2	31	62	< 0.5	< 2	1.90	30	64	1.43	< 10	< 1
884814	6	26	35	< 0.2	< 0.5	215	172	< 1	230	< 2	11	2.01	< 2	26	58	< 0.5	< 2	2.07	27	55	1.20	< 10	< 1
884815	6	11	18	< 0.2	< 0.5	78	350	< 1	101	3	17	2.25	< 2	30	281	< 0.5	< 2	2.67	20	70	1.60	< 10	< 1
884816	4	6	10	< 0.2	< 0.5	49	472	< 1	105	4	21	1.65	< 2	29	96	< 0.5	< 2	2.02	23	84	1.75	< 10	< 1
884817	4	< 5	9	< 0.2	< 0.5	53	206	< 1	92	< 2	19	1.45	< 2	29	83	< 0.5	< 2	1.94	17	63	1.15	< 10	< 1
884818	4	< 5	< 5	< 0.2	< 0.5	72	478	< 1	93	< 2	23	1.63	< 2	28	81	< 0.5	6	1.98	21	52	1.48	< 10	< 1
884819	8	< 5	< 5	< 0.2	< 0.5	215	238	< 1	24	< 2	29	1.94	< 2	27	50	< 0.5	< 2	1.55	39	8	4.30	< 10	< 1
884820	4	< 5	< 5	< 0.2	< 0.5	21	364	< 1	93	< 2	37	1.88	< 2	29	35	< 0.5	< 2	1.74	22	134	2.42	< 10	< 1
884821	3	< 5	< 5	< 0.2	< 0.5	12	440	< 1	154	< 2	46	1.97	< 2	27	29	< 0.5	< 2	1.71	22	236	2.69	< 10	< 1
884822	5	9	12	< 0.2	< 0.5	58	417	< 1	152	4	18	3.04	< 2	25	238	< 0.5	< 2	2.95	25	89	1.70	< 10	< 1
884823	10	20	29	< 0.2	< 0.5	109	565	< 1	150	< 2	17	1.07	< 2	33	77	< 0.5	< 2	1.73	24	89	1.55	< 10	< 1
884824	5	10	18	< 0.2	< 0.5	62	265	< 1	132	< 2	19	1.29	< 2	30	92	< 0.5	< 2	1.98	25	105	1.65	< 10	< 1
884825	9	8	11	< 0.2	< 0.5	73	376	< 1	110	3	16	2.41	< 2	35	171	< 0.5	< 2	2.64	22	58	1.53	< 10	< 1
884826	8	13	20	< 0.2	< 0.5	177	402	< 1	383	5	22	1.21	< 2	31	133	< 0.5	< 2	1.97	46	204	2.39	< 10	< 1
884827	7	8	10	< 0.2	< 0.5	75	328	< 1	101	5	16	2.49	< 2	31	167	< 0.5	< 2	2.74	21	67	1.68	< 10	< 1
884828	4	< 5	< 5	< 0.2	< 0.5	58	308	< 1	57	< 2	30	3.17	< 2	21	48	< 0.5	< 2	2.43	42	3	7.89	< 10	< 1
884829	4	< 5	< 5	< 0.2	< 0.5	72	339	< 1	32	< 2	33	3.59	< 2	29	84	< 0.5	< 2	2.71	28	11	4.33	< 10	< 1
884830	4	< 5	< 5	< 0.2	< 0.5	84	236	< 1	67	< 2	20	4.89	< 2	29	40	< 0.5	< 2	3.32	27	37	2.31	< 10	< 1
884831	4	< 5	< 5	< 0.2	< 0.5	52	323	< 1	54	< 2	31	3.41	< 2	30	26	< 0.5	< 2	2.84	33	52	4.06	< 10	< 1
884832	4	< 5	< 5	< 0.2	< 0.5	60	315	< 1	25	< 2	43	2.97	< 2	32	89	< 0.5	< 2	2.08	27	12	5.01	< 10	< 1
884833	4	< 5	< 5	< 0.2	< 0.5	59	310	< 1	36	< 2	36	2.88	< 2	31	58	< 0.5	< 2	2.22	23	20	4.68	< 10	< 1
884834	15	297	160	0.3	< 0.5	306	201	< 1	345	< 2	19	1.09	< 2	28	17	< 0.5	< 2	1.26	25	167	2.21	< 10	< 1

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884901	0.11	< 10	1.24	0.273	0.039	0.14	< 2	7	80	0.07	< 20	< 1	< 2	< 10	62	< 10	2	3
884902	0.18	< 10	1.36	0.351	0.082	0.04	< 2	5	108	0.14	< 20	4	< 2	< 10	56	< 10	3	4
884903	0.14	< 10	1.25	0.372	0.068	0.16	< 2	7	111	0.14	< 20	3	< 2	< 10	96	< 10	4	5
884904	0.14	< 10	1.06	0.234	0.052	0.10	< 2	7	49	0.14	< 20	< 1	< 2	< 10	122	< 10	3	5
884905	0.12	< 10	0.96	0.438	0.024	0.20	2	6	121	0.14	< 20	< 1	< 2	< 10	206	< 10	2	5
884906	0.04	< 10	0.70	0.042	0.008	< 0.01	< 2	4	12	0.03	< 20	1	< 2	< 10	22	< 10	< 1	2
884907	0.08	< 10	1.16	0.416	0.038	0.08	< 2	5	190	0.07	< 20	< 1	< 2	< 10	34	< 10	1	3
884908	0.15	< 10	1.34	0.318	0.123	0.09	< 2	5	151	0.11	< 20	6	< 2	< 10	44	< 10	3	3
884909	0.07	< 10	1.15	0.316	0.025	0.18	< 2	6	100	0.10	< 20	< 1	< 2	< 10	96	< 10	2	4
884910	0.10	< 10	0.97	0.265	0.024	0.14	< 2	6	65	0.12	< 20	< 1	< 2	< 10	76	< 10	3	3
884911	0.08	< 10	1.04	0.426	0.015	0.14	< 2	4	134	0.11	< 20	< 1	< 2	< 10	60	< 10	2	3
884912	0.06	< 10	0.77	0.079	0.027	0.01	< 2	5	26	0.06	< 20	2	< 2	< 10	28	< 10	2	2
884913	0.12	< 10	1.08	0.311	0.026	0.06	< 2	4	155	0.07	< 20	2	< 2	< 10	30	< 10	1	2
884914	0.09	< 10	0.99	0.187	0.029	0.20	< 2	9	64	0.16	< 20	3	< 2	< 10	107	< 10	3	4
884915	0.04	< 10	0.99	0.142	0.030	0.05	< 2	4	73	0.08	< 20	< 1	< 2	< 10	32	< 10	1	3
884916	0.21	< 10	1.71	0.233	0.026	0.17	3	6	81	0.27	< 20	7	< 2	< 10	169	< 10	3	4
884917	0.09	11	1.50	0.161	0.118	0.50	< 2	8	108	0.31	< 20	3	< 2	< 10	139	< 10	4	4
884918	0.05	< 10	1.03	0.261	0.033	0.01	< 2	5	111	0.05	< 20	< 1	< 2	< 10	26	< 10	< 1	2
884919	0.17	< 10	1.11	0.411	0.057	0.07	2	4	176	0.10	< 20	< 1	< 2	< 10	37	< 10	2	3
884920	0.07	< 10	0.91	0.176	0.071	0.41	< 2	8	49	0.17	< 20	< 1	< 2	< 10	161	< 10	3	4
884921	0.08	< 10	1.00	0.216	0.039	1.29	< 2	9	62	0.18	< 20	2	< 2	< 10	126	< 10	4	5
884922	0.08	< 10	1.05	0.185	0.029	1.20	< 2	9	56	0.17	< 20	< 1	< 2	< 10	111	< 10	3	6
884923	0.07	< 10	0.74	0.178	0.026	0.32	2	8	48	0.21	< 20	2	< 2	< 10	147	< 10	3	4
884924	0.16	< 10	1.43	0.211	0.043	0.99	3	12	48	0.34	< 20	< 1	< 2	< 10	252	< 10	4	7
884925	0.16	< 10	1.20	0.333	0.026	0.19	< 2	8	79	0.12	< 20	3	< 2	< 10	118	< 10	2	4
884926	0.10	< 10	1.13	0.356	0.027	0.18	< 2	7	90	0.10	< 20	2	< 2	< 10	108	< 10	2	4
884927	1.00	< 10	2.66	0.184	0.022	0.09	2	9	66	0.14	< 20	3	< 2	< 10	81	< 10	3	6
884928	0.69	26	1.75	0.365	0.078	0.27	< 2	7	138	0.16	< 20	< 1	< 2	< 10	63	< 10	4	4
884929	0.37	< 10	1.17	0.216	0.037	0.51	3	9	47	0.27	< 20	< 1	< 2	< 10	234	< 10	4	6
884930	0.07	< 10	1.07	0.214	0.019	0.11	< 2	5	57	0.07	< 20	3	< 2	< 10	54	< 10	1	3
884931	0.12	< 10	1.16	0.260	0.022	0.17	< 2	6	66	0.11	< 20	2	< 2	< 10	113	< 10	2	3
884932	0.51	23	0.52	0.082	0.042	0.14	< 2	3	13	0.18	< 20	2	< 2	< 10	30	< 10	2	2
884933	0.56	14	0.64	0.086	0.060	0.21	< 2	4	15	0.21	< 20	5	< 2	< 10	36	< 10	3	2
884934	0.07	< 10	1.08	0.490	0.021	0.12	< 2	8	120	0.12	< 20	1	< 2	< 10	136	< 10	2	4
884935	0.10	< 10	1.17	0.285	0.190	0.37	< 2	7	92	0.16	< 20	< 1	< 2	< 10	144	< 10	5	6
884936	0.08	< 10	1.28	0.200	0.070	0.23	3	5	77	0.14	< 20	1	< 2	< 10	79	< 10	4	5
884937	0.09	< 10	1.53	0.358	0.015	0.19	3	8	100	0.09	< 20	< 1	< 2	< 10	117	< 10	2	4
884938	0.20	12	0.70	0.165	0.030	0.10	< 2	3	50	0.13	< 20	< 1	< 2	< 10	89	< 10	2	5
884939	0.10	< 10	0.90	0.238	0.021	0.17	< 2	4	61	0.14	< 20	< 1	< 2	< 10	129	< 10	2	3
884940	0.05	< 10	0.90	0.058	0.027	1.30	< 2	4	31	0.05	< 20	2	< 2	< 10	21	< 10	1	4
884941	0.06	< 10	1.05	0.072	0.032	1.19	2	5	32	0.08	< 20	3	< 2	< 10	28	< 10	2	4
884942	0.05	< 10	1.02	0.063	0.029	1.00	< 2	4	30	0.06	< 20	< 1	< 2	< 10	22	< 10	1	4
884943	0.49	15	1.11	0.160	0.022	0.23	< 2	5	25	0.15	< 20	< 1	< 2	< 10	73	< 10	5	4
884944	0.10	< 10	1.63	0.137	0.035	0.09	< 2	4	38	0.08	< 20	< 1	< 2	< 10	31	< 10	2	5
884945	0.08	< 10	1.17	0.238	0.046	0.17	< 2	4	81	0.10	< 20	2	< 2	< 10	42	< 10	2	4
884946	0.07	< 10	1.15	0.168	0.028	1.85	2	5	96	0.10	< 20	2	< 2	< 10	52	< 10	2	4
884947	0.08	< 10	1.05	0.286	0.063	0.66	< 2	6	88	0.14	< 20	2	< 2	< 10	80	< 10	3	5
884948	0.14	< 10	1.01	0.128	0.057	0.11	4	4	37	0.12	< 20	1	< 2	< 10	36	< 10	2	3
884949	0.07	< 10	0.90	0.463	0.032	0.21	< 2	5	156	0.13	< 20	2	< 2	< 10	54	< 10	2	4
884950	0.11	< 10	1.39	0.472	0.025	0.17	3	6	161	0.08	< 20	< 1	< 2	< 10	71	< 10	2	4
884801	0.10	< 10	1.18	0.265	0.048	0.11	< 2	4	72	0.09	< 20	2	< 2	< 10	49	< 10	2	3

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884802	0.08	< 10	1.05	0.547	0.013	0.11	< 2	4	212	0.09	< 20	2	< 2	< 10	30	< 10	2	3
884803	0.11	< 10	1.25	0.375	0.018	1.04	3	7	148	0.20	< 20	2	< 2	< 10	213	< 10	2	5
884804	0.06	< 10	1.08	0.165	0.020	0.22	< 2	6	61	0.15	< 20	4	< 2	< 10	63	< 10	2	6
884805	0.05	< 10	1.05	0.172	0.033	0.27	< 2	6	96	0.08	< 20	2	< 2	< 10	38	< 10	2	5
884806	0.05	< 10	0.84	0.515	0.021	0.35	< 2	2	249	0.04	< 20	< 1	< 2	< 10	19	< 10	< 1	2
884807	0.07	< 10	1.05	0.071	0.032	0.40	< 2	5	40	0.09	< 20	< 1	< 2	< 10	28	41	2	4
884808	0.08	< 10	0.68	0.143	0.025	0.48	< 2	3	62	0.05	< 20	2	< 2	< 10	18	< 10	2	3
884809	0.07	< 10	1.47	0.307	0.048	0.19	3	5	111	0.07	< 20	< 1	< 2	< 10	35	< 10	2	3
884810	0.30	21	1.14	0.118	0.230	0.07	< 2	4	48	0.13	< 20	< 1	< 2	< 10	57	< 10	5	4
884811	0.21	12	1.80	0.388	0.180	0.10	< 2	7	163	0.14	< 20	2	< 2	< 10	61	< 10	4	3
884812	0.14	23	0.91	0.142	0.247	0.40	< 2	4	89	0.14	< 20	2	< 2	< 10	81	< 10	4	4
884813	0.08	15	1.05	0.138	0.074	0.21	< 2	4	183	0.06	< 20	< 1	< 2	< 10	22	< 10	2	3
884814	0.06	14	0.86	0.168	0.069	0.22	< 2	3	272	0.05	< 20	2	< 2	< 10	17	< 10	1	3
884815	0.16	19	1.50	0.174	0.082	0.08	< 2	5	240	0.08	< 20	2	< 2	< 10	29	< 10	2	3
884816	0.10	20	1.83	0.110	0.097	0.11	< 2	6	216	0.11	< 20	< 1	< 2	< 10	32	< 10	3	3
884817	0.09	14	1.33	0.065	0.056	0.04	< 2	4	130	0.07	< 20	< 1	< 2	< 10	21	< 10	2	4
884818	0.12	13	1.34	0.165	0.068	0.10	< 2	4	158	0.08	< 20	< 1	< 2	< 10	24	< 10	3	4
884819	0.30	< 10	1.14	0.190	0.104	0.76	< 2	4	67	0.18	< 20	1	< 2	< 10	85	< 10	3	6
884820	0.11	11	1.52	0.087	0.114	0.08	< 2	4	65	0.16	< 20	2	< 2	< 10	48	< 10	4	4
884821	0.09	17	2.03	0.085	0.182	0.05	< 2	3	48	0.17	< 20	< 1	< 2	< 10	40	< 10	4	5
884822	0.25	20	1.91	0.191	0.081	0.14	< 2	4	411	0.08	< 20	4	< 2	< 10	27	< 10	2	2
884823	0.10	12	1.51	0.090	0.046	0.11	< 2	5	112	0.11	< 20	3	< 2	< 10	28	< 10	2	6
884824	0.13	29	1.84	0.109	0.131	0.07	< 2	6	166	0.11	< 20	< 1	< 2	< 10	33	< 10	3	3
884825	0.16	27	1.52	0.174	0.131	0.13	< 2	5	334	0.09	< 20	2	< 2	< 10	29	< 10	2	1
884826	0.41	18	2.16	0.091	0.108	0.36	2	5	90	0.08	< 20	1	< 2	< 10	32	< 10	2	4
884827	0.29	25	1.64	0.200	0.125	0.16	< 2	4	395	0.10	< 20	3	< 2	< 10	31	< 10	2	2
884828	0.08	< 10	0.96	0.394	0.024	0.26	2	6	165	0.21	< 20	1	< 2	< 10	360	< 10	2	5
884829	0.24	< 10	1.54	0.450	0.062	0.18	2	8	147	0.18	< 20	2	< 2	< 10	114	< 10	4	5
884830	0.10	< 10	1.27	0.507	0.020	0.17	< 2	5	265	0.09	< 20	< 1	< 2	< 10	58	< 10	2	3
884831	0.08	< 10	1.25	0.314	0.017	0.18	2	6	112	0.16	< 20	< 1	< 2	< 10	108	< 10	3	4
884832	0.25	< 10	1.27	0.481	0.140	0.24	< 2	5	171	0.17	< 20	< 1	< 2	< 10	117	< 10	3	5
884833	0.16	< 10	1.35	0.459	0.119	0.12	2	7	165	0.19	< 20	< 1	< 2	< 10	118	< 10	4	6
884834	0.05	< 10	1.14	0.083	0.025	0.35	< 2	5	33	0.11	< 20	1	< 2	< 10	36	< 10	2	5

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 922 (AQUA REGIA) Meas				0.7	< 0.5	2230	773	< 1	34	62	267	2.77	7		73	0.9	7	0.36	20	46	5.36	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 922 (AQUA REGIA) Meas				0.7	< 0.5	2230	775	< 1	35	63	260	2.77	6		74	0.9	10	0.37	20	46	5.34	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 923 (AQUA REGIA) Meas				1.2	< 0.5	4270	861	< 1	31	80	331	2.76	7		58	0.8	13	0.36	22	41	5.99	< 10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
Oreas 96 (Aqua Regia) Meas				10.2		> 10000				88	401						8		47				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
Oreas 96 (Aqua Regia) Meas				10.4		> 10000				91	409						20		48				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
CDN-PGMS-29 Meas	91	702	546																				
CDN-PGMS-29 Cert	88.000	677.000	550.000																				
CDN-PGMS-29 Meas	83	721	604																				
CDN-PGMS-29 Cert	88.000	677.000	550.000																				
Oreas 620 (Aqua Regia) Meas				38.9	161	1800	436	8	15	> 5000	> 10000	1.23	50		13	0.8	2	1.23	14	19	2.74	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
PK03 Meas	5130	6260	4470																				
PK03 Cert	5038.000	6028.000	4291.000																				
PK03 Meas	4990	6160	4390																				
PK03 Cert	5038.000	6028.000	4291.000																				
PK03 Meas	5080	6310	4520																				
PK03 Cert	5038.000	6028.000	4291.000																				
884902 Orig	4	< 5	< 5																				
884902 Dup	5	< 5	< 5																				
884911 Orig				< 0.2	< 0.5	64	232	< 1	23	< 2	27	3.14	< 2	29	30	< 0.5	< 2	2.36	21	11	2.64	< 10	< 1
884911 Dup				< 0.2	< 0.5	64	233	< 1	24	< 2	27	3.14	< 2	31	30	< 0.5	< 2	2.38	21	11	2.64	< 10	< 1
884916 Orig	4	< 5	< 5																				
884916 Dup	4	< 5	< 5																				
884925 Orig				< 0.2	< 0.5	72	339	< 1	36	< 2	30	2.57	< 2	28	67	< 0.5	< 2	2.10	28	11	3.52	< 10	< 1
884925 Dup				< 0.2	< 0.5	71	337	< 1	34	< 2	29	2.57	3	28	66	< 0.5	< 2	2.09	28	11	3.49	< 10	< 1
884932 Orig	3	< 5	< 5																				
884932 Dup	3	< 5	< 5																				

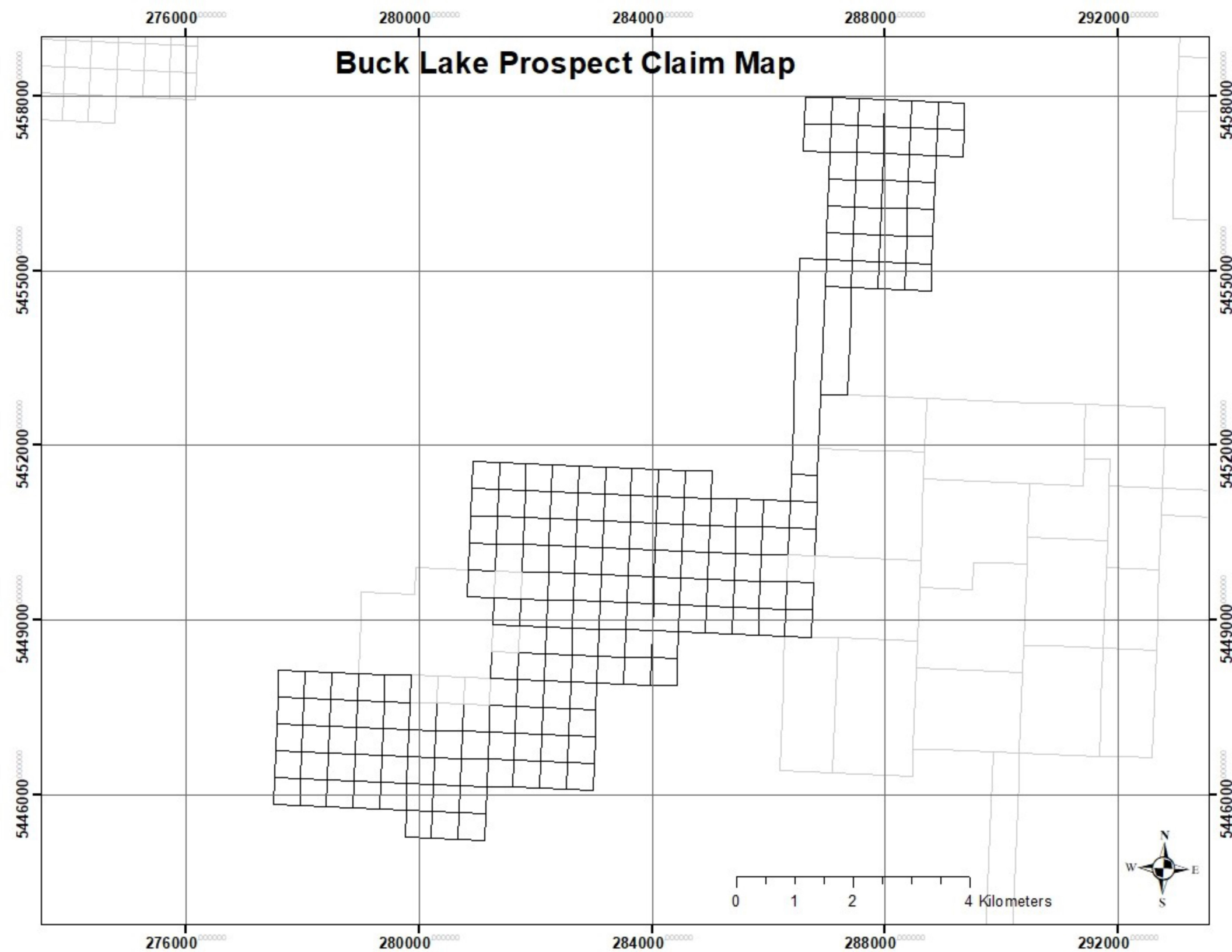
Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884937 Orig	5	14	10																				
884937 Dup	6	14	11																				
884938 Orig				< 0.2	< 0.5	24	399	< 1	12	< 2	31	1.46	< 2	24	124	< 0.5	< 2	1.14	18	10	3.26	< 10	< 1
884938 Dup				< 0.2	< 0.5	25	403	< 1	12	< 2	31	1.47	< 2	34	125	< 0.5	< 2	1.14	18	12	3.29	< 10	< 1
884950 Orig	4	< 5	< 5	< 0.2	< 0.5	49	405	< 1	54	< 2	32	3.69	< 2	30	46	< 0.5	< 2	2.66	23	14	3.04	< 10	< 1
884950 Split PREP DUP	4	< 5	< 5	< 0.2	< 0.5	50	411	< 1	55	< 2	32	3.74	< 2	30	47	< 0.5	< 2	2.66	23	14	3.09	< 10	< 1
884801 Orig				< 0.2	< 0.5	49	275	< 1	21	< 2	30	2.42	< 2	30	44	< 0.5	< 2	1.87	19	25	2.81	< 10	< 1
884801 Dup				< 0.2	< 0.5	47	270	< 1	20	< 2	29	2.36	< 2	30	44	< 0.5	< 2	1.85	18	24	2.73	< 10	< 1
884816 Orig	4	6	11																				
884816 Dup	4	6	9																				
884824 Orig				< 0.2	< 0.5	62	265	< 1	131	< 2	19	1.29	< 2	29	92	< 0.5	< 2	1.98	25	105	1.65	< 10	< 1
884824 Dup				< 0.2	< 0.5	62	266	< 1	134	< 2	18	1.29	< 2	31	92	< 0.5	< 2	1.98	25	105	1.65	< 10	< 1
884828 Orig	4	< 5	< 5																				
884828 Dup	4	< 5	< 5																				
884834 Orig	15	297	160	0.3	< 0.5	306	201	< 1	345	< 2	19	1.09	< 2	28	17	< 0.5	< 2	1.26	25	167	2.21	< 10	< 1
884834 Split PREP DUP	12	309	158	0.3	< 0.5	315	197	< 1	323	< 2	19	1.07	< 2	28	17	< 0.5	< 2	1.23	24	164	2.17	< 10	< 1
Method Blank	5	< 5	< 5																				
Method Blank	4	< 5	< 5																				
Method Blank	3	< 5	< 5																				
Method Blank	3	< 5	< 5																				
Method Blank	4	< 5	< 5																				
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	2	< 2	< 2	< 0.01	< 2	34	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	33	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	30	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	34	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 922 (AQUA REGIA) Meas	0.41	34	1.32	0.020	0.065	0.39	2	4	17		< 20		< 2	< 10	33	< 10	16	4
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	0.41	35	1.30	0.020	0.065	0.38	3	3	17		< 20		< 2	< 10	33	< 10	16	6
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 923 (AQUA REGIA) Meas	0.34	32	1.39		0.062	0.68	3	3	15		< 20		< 2	< 10	32	< 10	14	11
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5
Oreas 96 (Aqua Regia) Meas						3.96	6											
Oreas 96 (Aqua Regia) Cert						4.38	4.53											
Oreas 96 (Aqua Regia) Meas						4.05	6											
Oreas 96 (Aqua Regia) Cert						4.38	4.53											
CDN-PGMS-29 Meas																		
CDN-PGMS-29 Cert																		
CDN-PGMS-29 Meas																		
CDN-PGMS-29 Cert																		
Oreas 620 (Aqua Regia) Meas	0.29	25	0.27	0.117	0.031	2.65	62		20		< 20		< 2	< 10	8	< 10	6	32
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
PK03 Meas																		
PK03 Cert																		
PK03 Meas																		
PK03 Cert																		
PK03 Meas																		
PK03 Cert																		
884902 Orig																		
884902 Dup																		
884911 Orig	0.08	< 10	1.04	0.425	0.015	0.14	< 2	4	134	0.11	< 20	< 1	< 2	< 10	60	< 10	2	3
884911 Dup	0.08	< 10	1.04	0.427	0.015	0.13	< 2	4	134	0.11	< 20	< 1	< 2	< 10	60	< 10	2	3
884916 Orig																		
884916 Dup																		
884925 Orig	0.16	< 10	1.20	0.335	0.026	0.19	3	8	79	0.12	< 20	4	< 2	< 10	119	< 10	2	4
884925 Dup	0.16	< 10	1.19	0.332	0.027	0.19	< 2	8	79	0.12	< 20	2	< 2	< 10	117	< 10	2	4
884932 Orig																		
884932 Dup																		
884937 Orig																		
884937 Dup																		
884938 Orig	0.19	12	0.70	0.164	0.030	0.09	< 2	3	50	0.13	< 20	< 1	< 2	< 10	89	< 10	2	5

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
884938 Dup	0.20	11	0.70	0.166	0.030	0.10	< 2	3	50	0.13	< 20	< 1	< 2	< 10	90	< 10	2	5
884950 Orig	0.11	< 10	1.39	0.472	0.025	0.17	3	6	161	0.08	< 20	< 1	< 2	< 10	71	< 10	2	4
884950 Split PREP DUP	0.11	< 10	1.42	0.476	0.025	0.17	< 2	6	161	0.08	< 20	< 1	< 2	< 10	73	< 10	2	4
884801 Orig	0.10	< 10	1.19	0.265	0.048	0.11	2	4	71	0.09	< 20	2	< 2	< 10	50	< 10	2	3
884801 Dup	0.10	< 10	1.17	0.265	0.048	0.11	< 2	4	72	0.09	< 20	1	< 2	< 10	48	< 10	2	3
884816 Orig																		
884816 Dup																		
884824 Orig	0.13	28	1.83	0.109	0.130	0.07	< 2	6	167	0.11	< 20	1	< 2	< 10	33	< 10	3	3
884824 Dup	0.14	29	1.84	0.110	0.133	0.08	< 2	6	166	0.11	< 20	< 1	< 2	< 10	34	< 10	3	3
884828 Orig																		
884828 Dup																		
884834 Orig	0.05	< 10	1.14	0.083	0.025	0.35	< 2	5	33	0.11	< 20	1	< 2	< 10	36	< 10	2	5
884834 Split PREP DUP	0.05	< 10	1.11	0.081	0.024	0.34	< 2	5	32	0.11	< 20	< 1	< 2	< 10	35	< 10	2	5
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

APPENDIX IV

Buck Lake Prospect Claim Map 1:10,000


Buck Lake Prospect Claim Map
276000
280000
284000
288000
292000
5458000
5455000
5452000
5449000
5446000
0
1
2
4 Kilometers
N
W
E
S

I, Luis Botto with client number 10000052 declare that I am the claim holder of the following claims on which work was performed in the report with submission number 5508.

265793

119875

140648

148343

191985

209851

229209

331858

310444

323862

326995

344365

344556

579424

579425

580377

580378

580395

580396

580399

580400

580401

580402