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GEOCHEMICAL REPORT ON THE BUCK LAKE PGE PROSPECT, NORTHWESTERN ONTARIO, CANADA

Thunder Bay Mining Division

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

for

Empire Rock Minerals Inc.
702-889 West Pender St.
Vancouver, B.C.
V6C 3B2

by

Bohumil (Boris) Molak, PhD., P. Geo (BC) & William J. Richmond

March 13, 2017

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SUMMARY

The platinum group element ("PGE") Buck Lake Prospect ("BLPGE") is situated approximately 110 km northwest of Thunder Bay in Northwestern Ontario. The prospect consists of 24 contiguous mining claims (157 claim units) covering about 3,150 hectares. The PGE mineralization is hosted by mafic to ultra-mafic intrusive rocks of Archean age.

In October 2016, Empire Rock Minerals Inc. continued to explore the central and northern portions of the BLPGE by outcrop mapping and sampling. In total, 28 chip samples were collected and submitted to an accredited laboratory in Thunder Bay for assays.

Apart from the Main Showing, anomalous PGE values were obtained from the outcrops situated in the eastern portion of the BLPGE. Further work is warranted and should include outcrop mapping, stripping of anomalous areas, systematic sampling and re-interpretation of the historical geophysical and geochemical data.

1. INTRODUCTION

This report has been prepared at the request of Empire Rock Minerals Inc.[1] ("Empire") who retained the writers on October 18, 2016 to conduct prospecting and litho-geochemical sampling on the BLPGE and to prepare a report for filing. The first writer is a consulting geologist residing in Vancouver, BC, and a Professional Geoscientist with over forty years of experience in mineral exploration. He, together with the second writer conducted the field program on the BLPGE from October 20 to 28, 2016. 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 BLPGE is situated in Northwestern Ontario, approximately 110 kilometers north of Thunder Bay, within the Tib and Sharp Lake Townships, Thunder Bay Mining Division (Figs. 1, 2). The property straddles the UTM zones U15 and U16 (NAD83), its eastern part being centered at N49°09'43.3'' latitude and W89°58'53.3'' longitude, the UTM coordinates 282650 E and 5449750 N (U16) and the southwestern part being centered at about 717900E, 5446700N (U15), on the Map Sheet NTS 52 H/4.

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 new logging roads serving various parts of the property. Some parts of the prospect are accessible by boat along the Dog River and from Buck Lake. The western part of the claim block can be accessed via Sideen Road and a network of newly cut logging roads.

[1] Most recent name is Empire Metals Corp.

1.2. The Claims

The BLPGE consists of 24 mineral claims (157 claim units) covering approximately 31.5 sq. kms (3,150 ha). The claim information as of March 5, 2017 is listed in Table 1 below:

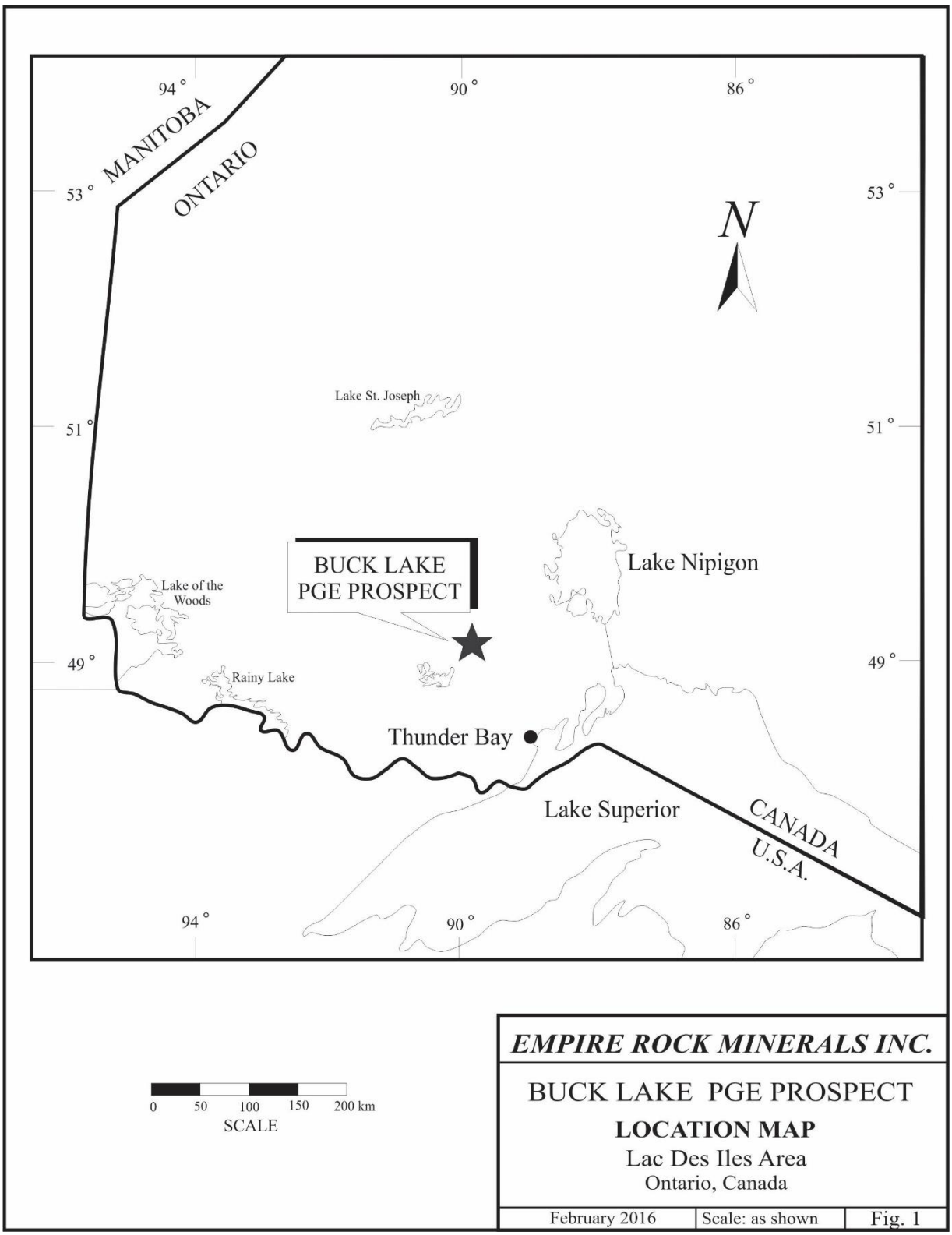
Table 1: claim status

Claim No.	Township	Units	Due date	Recorded Holder	Reserve
TB1173921	Tib Lake	1	10-Jun-2018	Richmond W. J.	74,127
TB1173922	Tib Lake	1	10-Jun-2018	Richmond W. J.	2,920
TB1173925	Tib Lake	1	29-Jun-2018	Richmond W. J.	16,017
TB1173926	Tib Lake	1	29-Jun-2022	Richmond W. J.	27,212
TB1174119	Tib Lake	2	31-May-2017	Richmond W. J.	6,135
TB1174120	Tib Lake	1	31-May-2018	Richmond W. J.	71
TB1195849	Tib Lake	1	27-Aug-2017	Richmond W. J.	20.083
TB4266104	Tib Lake	4	11-Jul-2017	Richmond W. J.	0
TB1237739	Tib Lake	1	01-Jun-2018	Richmond W. J.	0
TB1238120	Tib Lake	10	15-Mar-2018	Richmond W. J.	0
TB1238121	Tib Lake	8	15-Mar-2018	Richmond W. J.	22749
TB1238122	Tib Lake	16	15-Mar-2017	Richmond W. J.	0
TB4241577	Tib Lake	2	24-Jul-2018	Houghton F. A.	0
TB4241578	Tib Lake	12	24-Jul-2018	Houghton F. A.	21,734
TB4241579	Tib Lake	1	24-Jul-2019	Houghton F. A.	8,495
TB4266108	Tib Lake	15	11-Jul-2017	Houghton F. A.	4,207
TB4266109	Tib Lake	1	11-Jul-2018	Houghton F. A.	0
TB4266110	Tib Lake	12	11-Jul-2017	Houghton F. A.	16,718
TB4266107	Tib Lake	6	11-Jul-2017	Houghton F. A.	760
TB4274916	Sharp Lake	15	08-Apr-2017	Richmond W. J.	5,981
TB4277659	Sharp Lake	16	23-Apr-2017	Richmond W. J.	0
TB4277660	Tib/Sharp Lake	6	23-Apr-2017	Richmond W. J.	1,520
TB4282208	Tib Lake	12	27-Jul-2017	Richmond W. J.	2,942
TB4282209	Tib Lake	12	27-Jul-2017	Richmond W. J.	7,599
Total		**157**			

1.3. Topography, Vegetation and Local Resources

Topographic relief is moderately flat ranging from 465 meters to 490 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. Small cliffs and elongated, north-east south-west stretching 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 º C and cold, snowy winters, with minimum temperature of - 40 º 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.


94 °
90 °
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MANITOBA
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N
Lake St. Joseph
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BUCK LAKE
PGE PROSPECT
Lake Nipigon
Lake of the
Woods
49 °
Rainy Lake
Thunder Bay
Lake Superior
CANADA
U.S.A.
0 50 100 150 200 km
SCALE
EMPIRE ROCK MINERALS INC.
BUCK LAKE PGE PROSPECT
LOCATION MAP
Lac Des Iles Area
Ontario, Canada
February 2016
Scale: as shown
Fig. 1

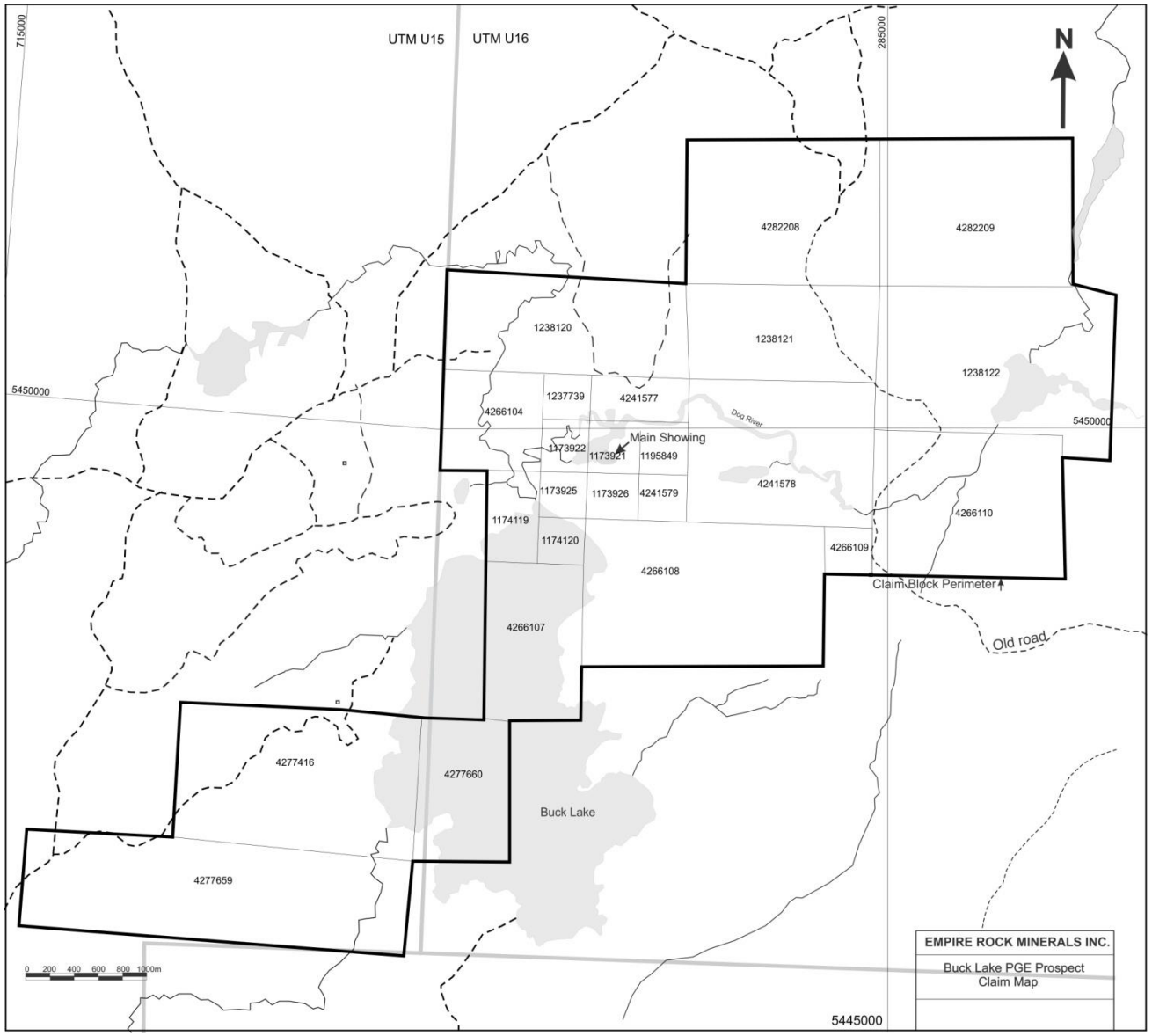

Fig. 2: Buck Lake PGE prospect, claim map (this map at 1:10000 is attached as Appendix III).

The 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. Patchy areas of thick willow bushes are common and usually represent slightly lower elevated areas grow 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 main 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.

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 BLPGE to Home Ventures Ltd., and the fieldwork continued with 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. Anomalous to significant PGE values were detected in various parts of their claims and geological similarities with the the Lac des Iles complex were identified (Osmani, 2001).

The Ontario Geological Survey conducted an airborne magnetic and electromagnetic survey covering the area including 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 its name to Buck Lake Ventures Ltd. ("Buck") and in a joint venture with LMX Resources Ltd. continued to explore the BLPGE. The work included outcrop mapping, grab, chip and humus sampling, overburden stripping, trenching and channel sampling. A grid was set up with a baseline running on azimuth 45 º and perpendicular lines spaced 100 meters. Soil sampling was conducted and litho-geochemical samples taken from the outcrops. 18 trenches were dug, but only 6 of them 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 each intersected PGE anomalous zones with values ranging up to 285 ppb platinum and 264 ppb palladium.

Encouraging NAP's results and geological similarities with the Lac des Iles Intrusion prompted Buck to conduct a drill-program to test the presumed breccia pipe mineralization at the Main Showing. The drilling comprised 14 holes ranging in depth from 49 to 250 meters, ten of which sunk into the Main Showing ("MS") and the rest into 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. The best values included 0.32 ppm platinum and 0.49 ppm palladium in hole DDH-1. One drill hole sunk into a coincident IP - magnetic anomaly about 400 meters southwest of the MS encountered anomalous 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. Ultra then continued to work the claims in the following years using geochemical and airborne geophysical surveys (Molak, 2009, 2010, 2011, 2014, Molak & Richmond, 2015, 2016, Barrie, 2011). In 2011, 51% of the BLPGE was acquired briefly by Goldbank Mining Corp. ("Goldbank") but Goldbank ceded that percentage back to Ultra in 2014. In 2015 Ultra changed its name to Empire Rock Minerals Inc. ("Empire") and W. J. Richmond staked five claims TB4274916, 4277659, 4277660, 4282208 and 4282209 on behalf of Empire. On February 20, 2017, the Empire's name changed to Empire Metals Corp.

1.5. Regional Geology

The BLPGE is located in the Wabigoon Subprovince of Northwestern Ontario, within an Archean granite/gneiss terrain. 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 and comprise the Lac des Iles Intrusion, the Tib Lake Intrusion, the Buck Lake Intrusion, the Dog River Intrusion, the Shelby Lake Intrusion, the Demars Lake Intrusion, the Wakinoo Lake Intrusion and the Taman Lake Intrusion. The largest of them, the Lac des Iles Intrusive Complex, hosts the Lac des Iles PGE deposit. 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 clinopyroxene-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 features 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 Bouger gravity anomalies (Gupta and Sutcliffe 1990).

The economic palladium mineralization at the Lac des Iles Intrusive Complex is hosted by various rocks ranging from leucogabbro to pyroxenite that show complicated textures, such as brecciation, magma mingling, and pods and veins of pegmatite. The monolithic to heterolithic magmatic breccia comprises up to 90% angular to subrounded pyroxenitic clasts in a gabbroic matrix, which indicates a forceful intrusion of the gabbroic magma into a layered ultra-mafic body. Economically important High-Grade zone has much higher concentrations of Pd than any other rocks and do not show correlations between sulfur and precious and base metals. Furthermore, the rocks are intensely and pervasively altered to actinolite, talc, anthophyllite, hornblende, chlorite, sericite, calcite and quartz suggesting a sub-solidus enrichment of Pd and mobility of sulphur. The lack of apparent fluid pathways within the High-Grade zone and the distribution of the zone are consistent with the enrichment of Pd at high temperatures by fluids that originated from the mafic magmas.

The early leucocratic rocks are barren and much of the palladium was introduced by late melanocratic magmas. The concentrations of sulfur correlate positively with base metals, PGE and gold and the sulfide grains commonly show exsolution textures. The evidence suggests a magmatic origin of PGE mineralization and the origin of PGE minerals from the immiscible sulfide melt in the parental magma (Hinchey et al., 2005).

1.6. Local Geology

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. 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 BLPGE shows energetic, mafic and felsic magma intrusions forming conformable and cross-cutting dykes and veins, breccias and magma-mingling textures. Pegmatite dykes appear to be the latest intrusive phases and quartz veins are the products of hydrothermal activity. The rocks are affected by auto-metamorphic (deuteric) alterations including amphibolization, epidotization, zoisitization, feldspathization, biotitization and chloritization The following rock-forming minerals were reported: diopside pyroxene, pargasitic amphibole, actinolite, plagioclases ranging from oligoclase to bytownite, biotite (eastonite), epidote zoisite, chlorite, apatite, ilmenite, titanite, rutile and calcite (Molak and Richmond, 2015, 2016).

Disseminated, blebby and vein-style sulphidic ± PGE mineralization occurs mainly in varied textured pyroxenitic and gabbroic rocks. The most common sulphidic minerals are pyrite, pyrrhotite (?) and chalcopyrite and magnetite is a common oxide. The subordinate minerals are pentlandite, millerite, scheelite, ilmenite and barite and PGE minerals form minute inclusions in chalcopyrite. The following minerals were identified kotulskite, telargpalite (?) and an unnamed Pb-Ag-Fe-Cu alloy (or a sulphosalt?), BiTeS. The late, re-mobilized, vein-style to lentiform, hydrothermal, sulpidic mineralization associated with the quartz and/or calcite locally contains rare PGE ± Bi, Mo, W inclusions (Molak & Richmond, 2015).

2. LITHO-GEOCHEMICAL SAMPLING AND PROSPECTING

The Empire's fieldwork on the BLPGE continued in October 2016 by prospecting and outcrop mapping and sampling in two areas designated as A and B (Figs. 3, 5 to 10). These areas are covered by claims TB1173921, TB1173922, TB1173925, TB1173926, TB1238120, TB1238121, TB1238122, TB4241578, TB4266104, TB4282208 and TB4282209. The rationale of the survey was mainly to locate and sample the new outcrops exposed by recent logging operations, to cover to-date non-searched areas and to check on the previously obtained anomalous values. A total of 28 chip samples were collected from outcrops and their locations are shown in Figs. 3, 5 to 7 and descriptions are in Appendix I. Two samples were taken for the whole rock analysis. Traverse maps are shown in Figs. 4, 8, 9 and 10 and the legend to Figures is in Fig. 11.

2.1. Itinerary

October 20, 2016: Geologist B. B. Molak (BM) arrives to Thunder Bay from Vancouver, BC.

October 21, 2016: BM meets with W. J. Richmond (WR) in Thunder Bay to prepare materials and supplies for the fieldwork and they drive to Uppsala where accommodation is provided. Regional Resident Geologist arrives from Thunder Bay and together they tour the Main Showing and the area adjoining to the south (Area A) on the claims 1173921 and 1173926. Two chip

samples (295051 and 295052) were taken (Fig. 5). The rocks are of mafic/ultramafic and amphibole gabbro composition, with estimated 1 to 5 % disseminated sulphides.

October 23, 2016: BM and WR prospect the area B on the claims 4241578, 1238121 and 4282209. The outcrops range from granitoids to mafic/ultramafic rocks. Three chip samples (295056 to 295058) were taken (Figs. 4, 7, 10).

October 24, 2016: WR and BM prospect the area B on the claims 1238122 and 4282209. The outcrops are made up of mafic/ultramafic rocks ranging from various gabbroic rocks and pyroxenites and granitoids, felsic and dyke rocks. Three chip samples (295059 to 295061) taken (Figs. 4, 7, 10). The rocks contain 1 to 5 % disseminated sulphides.

October 25, 2016: WR and BM prospect north-western portions of area A (claims 1238120, 4266104) and collect three rock chip samples (295062 to 295064). Disseminated and fracture plane sulphides range from 1 to 2 % of the rock volume. A sample 295064 of an aphanitic rock of unknown origin from the Main Showing was taken for the whole rock analysis (Figs. 4, 5, 8).

October 26, 2016: WR and BM prospect the area A east of the Main Showing (claims 1173921, 1173925 and 1173926) and collect 9 chip and float samples (295065 to 295073) from the escarpment (Figs. 5, 6, 8).

October 27, 2016: WR and BM prospect the area A (claims 1173922, 1173925). A total of 8 chip samples (295074 to 295081) collected from an escarpment along the Dog River shore. The samples include vari-textured, ultra-mafic rocks, locally with plagioclase and felsic dykes are exposed (Figs. 5, 6, 8). Sulphidic disseminations range from 1 to 5 %.

October 28, 2016: WR and BM load the samples and gear onto truck and drive to Thunder Bay. The samples are submitted to Accurassay Laboratories for analysis.

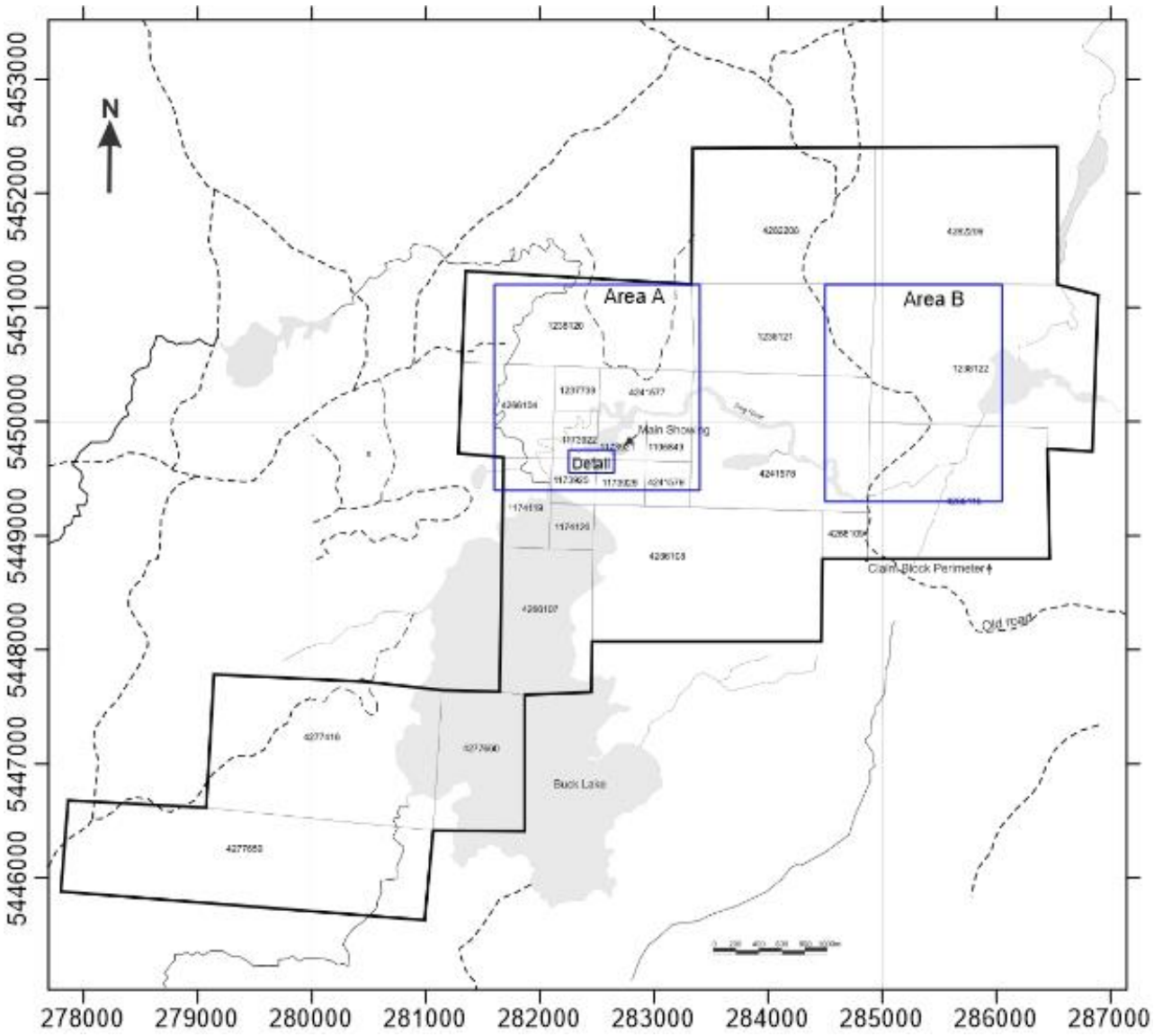

Fig. 3: BLPGE claim block, October 2016 exploration areas A and B.

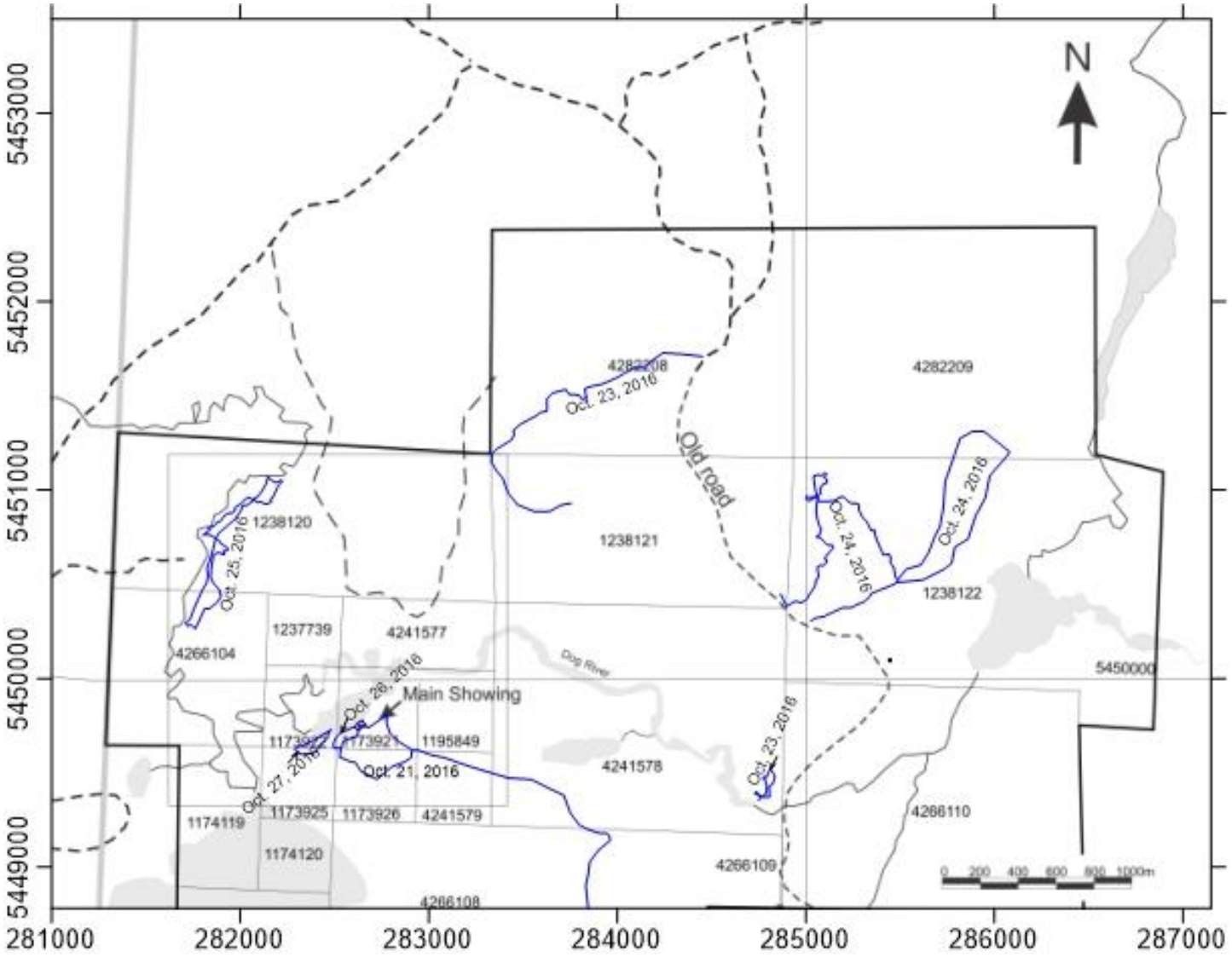

Fig. 4: Traverse map.

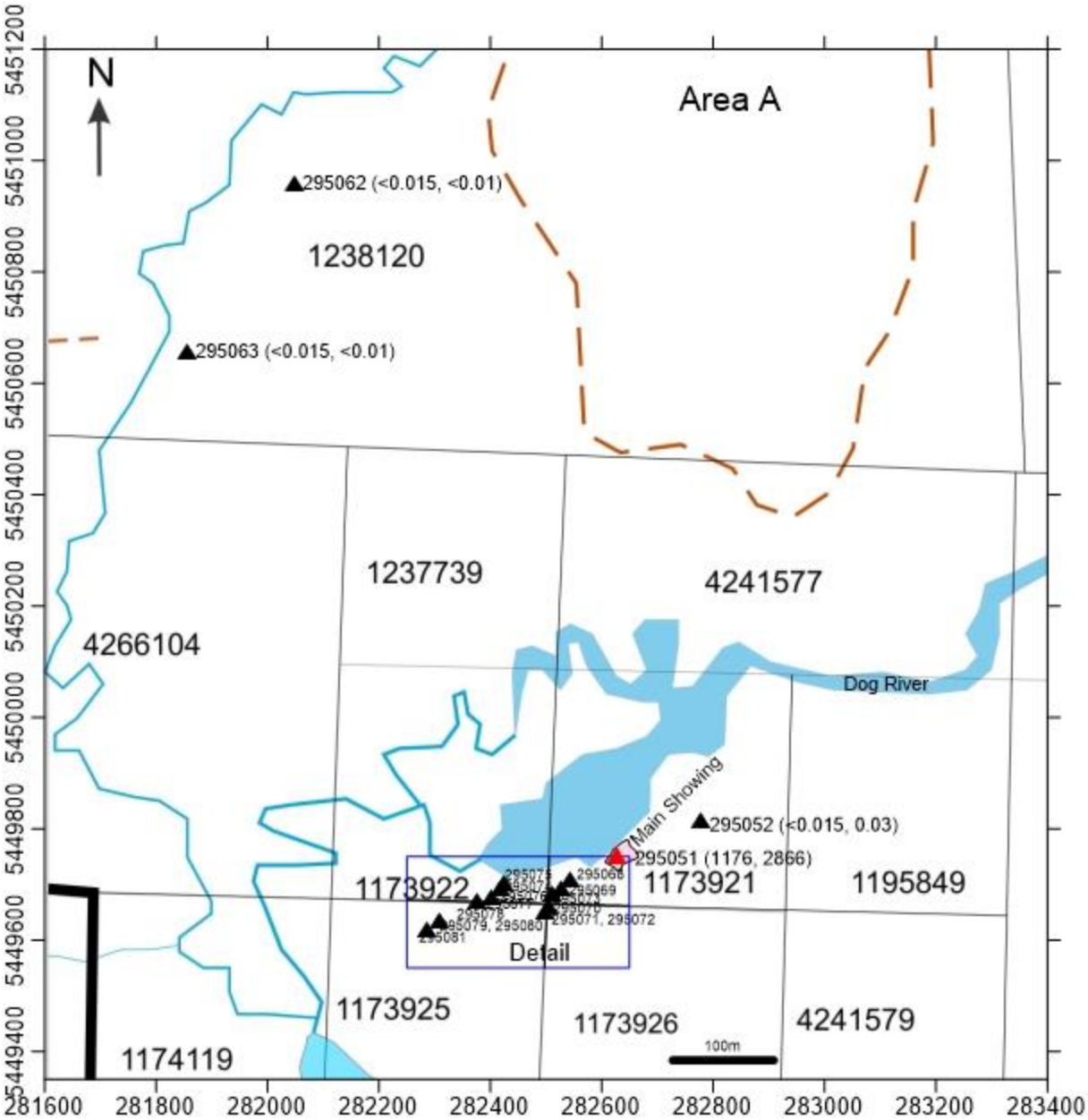

Fig. 5: Area A, samples with Pt, Pd values (in brackets).

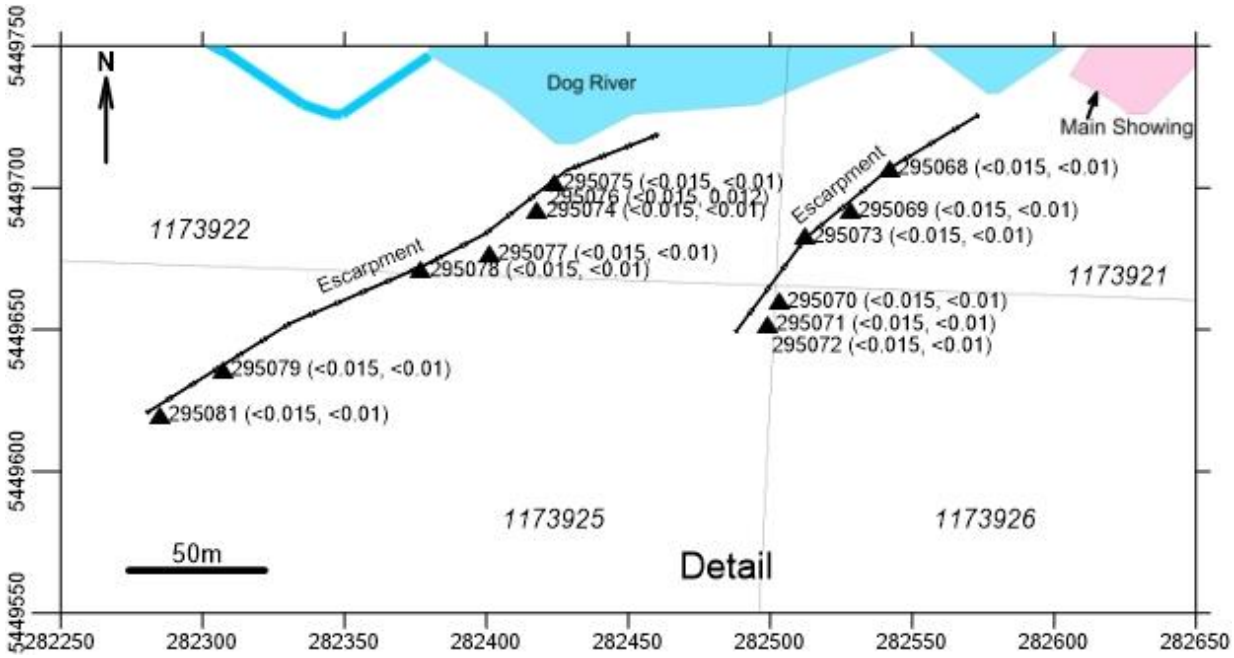

Fig. 6: Area A (detail), samples with Pt, Pd values (in brackets, in ppb).

2.2. Sampling Method and Analysis

The chip and float samples were placed in standard polypropylene bags, provided with tags with sample numbers and closed with flagging tape. The sample sites (Figs. 5 to 7) were recorded using GPS (NAD 83, zone 16) (Appendix I). The samples were not modified after collection and the writers personally dispatched the samples to Accurassay Laboratories ("Accurassay") in Thunder Bay.

Accurassay is ISO 17025:1999 accredited and its quality system complies with international standards. The protocol for sample preparation involves drying, crushing, splitting, pulverizing and matting. If necessary, the samples are placed in a drying oven prior to preparation (approximately 50 º C) until dry. The entire samples are then crushed using a TM Engineering Rhino Jaw crusher to -10 mesh. Approximately 500 gram sub-sample is split using a Jones Riffle Splitter and pulverized using a TM Engineering ring and puck pulverizer with 500 gram bowls to 90 % - 150 mesh (105 microns). The bowls are cleaned with silica sand between each sample. Pulverized samples are matted to ensure homogeneity.

For flame AAS determinations of platinum, palladium and gold a preliminary concentration by fire assay is used. The protocol for fire assay involves weighing, fluxing, fusion and cupellation. A 30 gram sample mass is used, but may be changed to accommodate for sample chemistry. Each furnace load has 24-26 samples and every 10^{th} has a blank and QC standard.

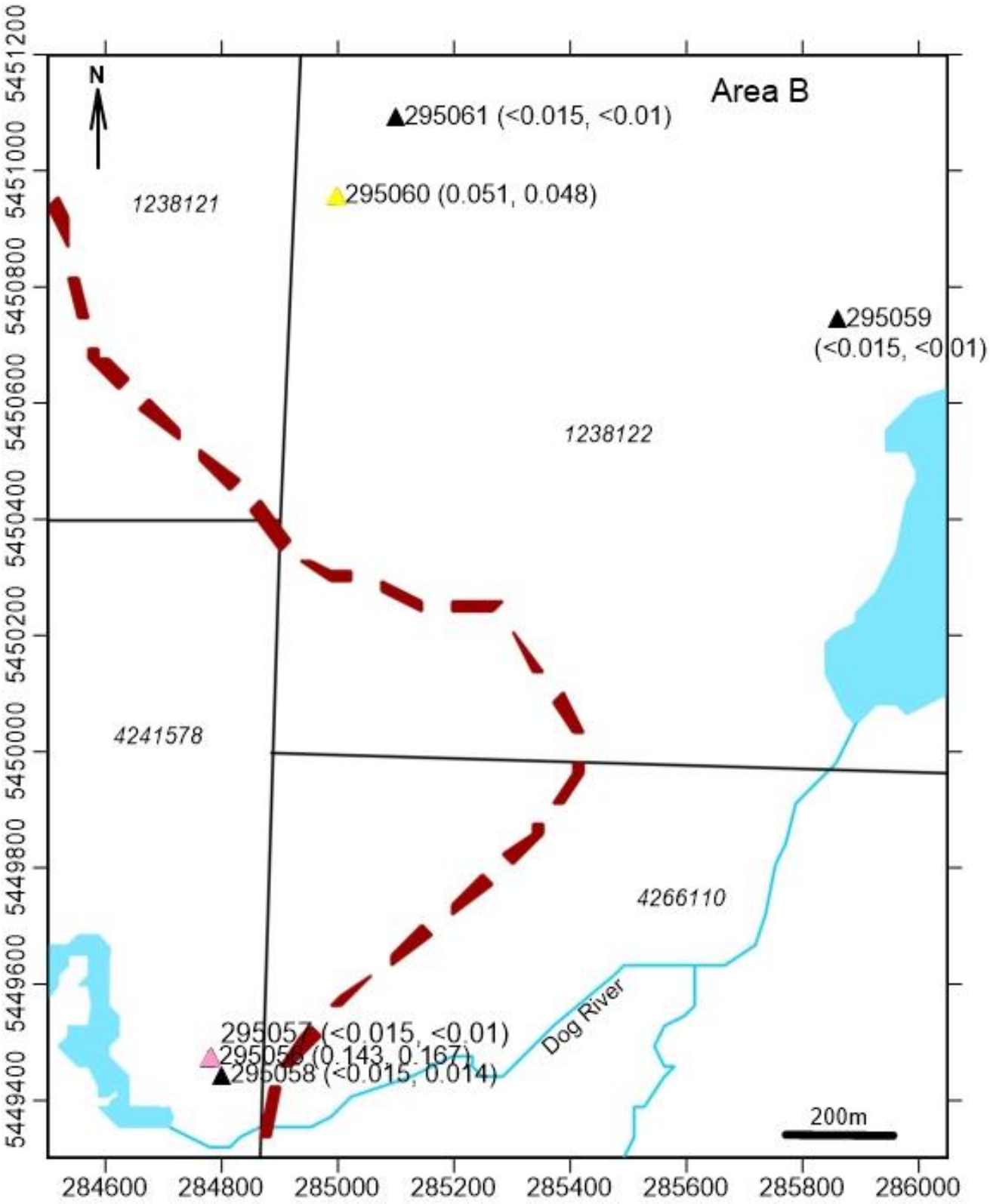

Fig.7: Area B, samples with Pt, Pd values (in brackets, in ppb).

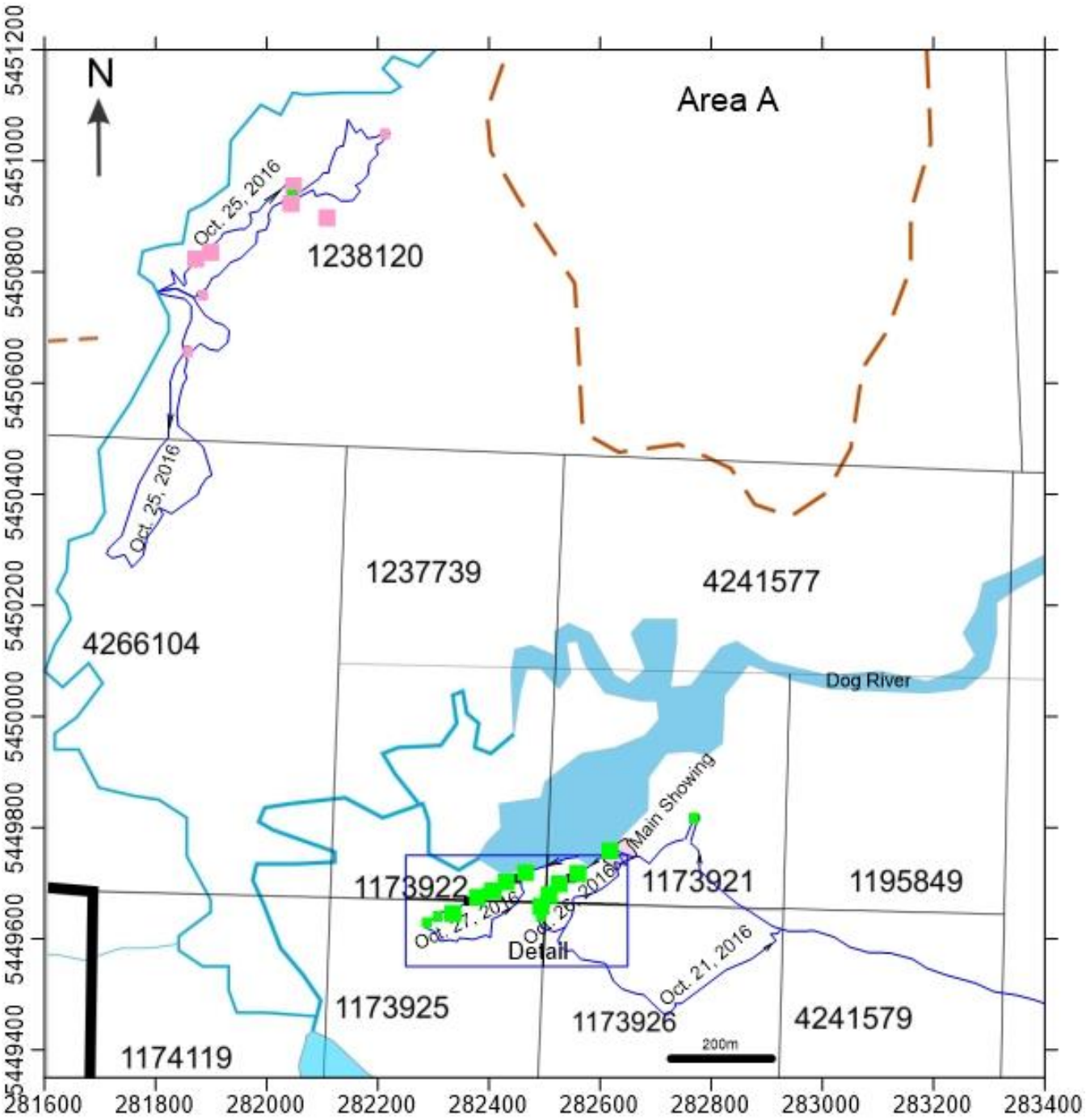

Fig. 8: Traverses and outcrops.

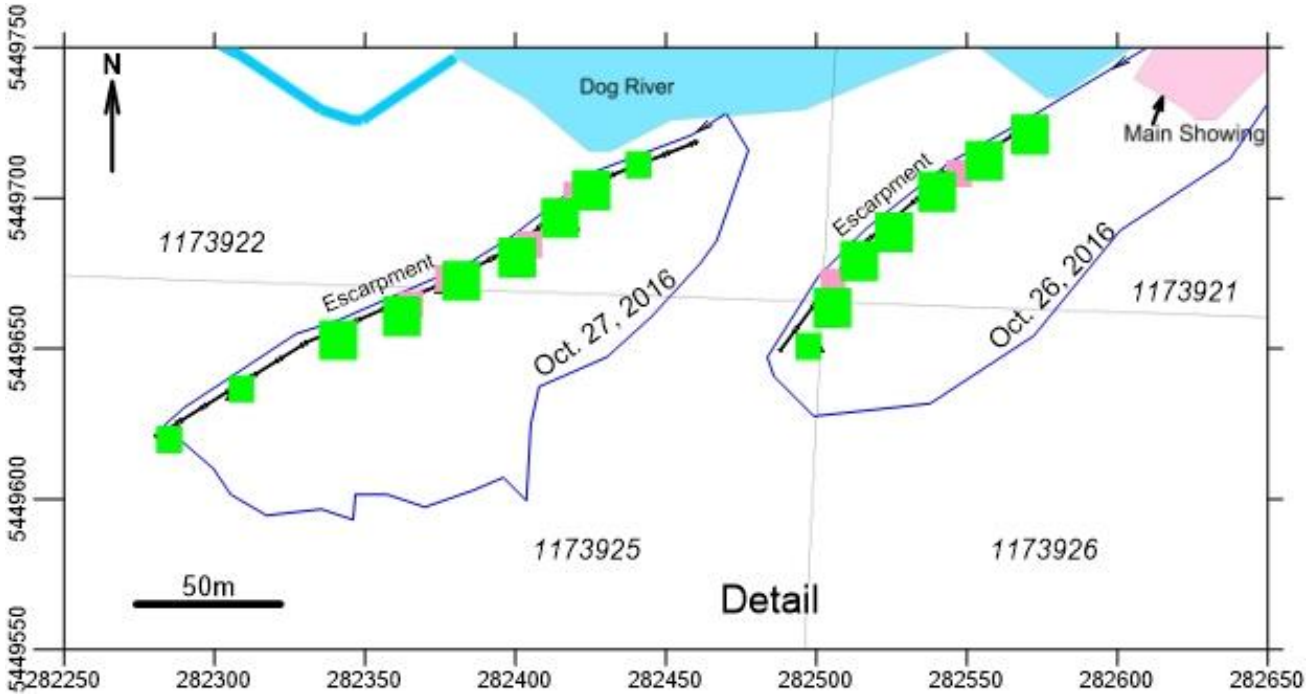

Fig. 9: traverses and outcrops (detail).

The samples from this survey did not require any preliminary treatment and could be mixed directly with the assay flux and fused. Currently, Accurassay uses a premixed flux. The samples are fused for 1 ¼ hour at 1000 º C and 20 – 50 gram lead buttons are cupelled at 1000 º C for 50 minutes, then digested using nitric and hydrochloric acids and bulked up with distilled water. All samples have a final volume of 5 ml.

Atomic absorption spectrometry is conducted using a Varian AA240FS with manual sample introduction for the determination of gold, platinum and palladium. The same instrument with an auto-sampler attachment is used for the analysis of copper and nickel.

Nineteen out of 26 assays for Pt, Pd and Au had gold, platinum and palladium values below detection limits ("DL"). Four had the palladium from 0.012 to 0.03 ppm Pd, while gold and platinum in them are both below DL. The remaining three samples included one selective chip from the Main Showing, which returned 4.042 ppm Pt+Pd and 0.118 gold and two anomalous samples ranging from 0.037 to 0.143 Pt and 0.167 to 0.048 Pd from the Area B. The gold in them is below DL.

Accurassay tested two original samples 295060 and 295072 by assaying their repeats. The former (295060) had the platinum and palladium above DL, while the latter had both below DL. The 295060 repeat was by 27.5% lower in platinum and by 2.1% lower in palladium than its original.

Two whole rock analyses were made and used for the rock classification. The relevant oxides were converted to elements and plotted onto a ternary classification diagram (Fig. 12) after Jensen (1976). Other oxides were used for plotting onto the diagram (Fig. 13) after Le Bas et al. (1986).

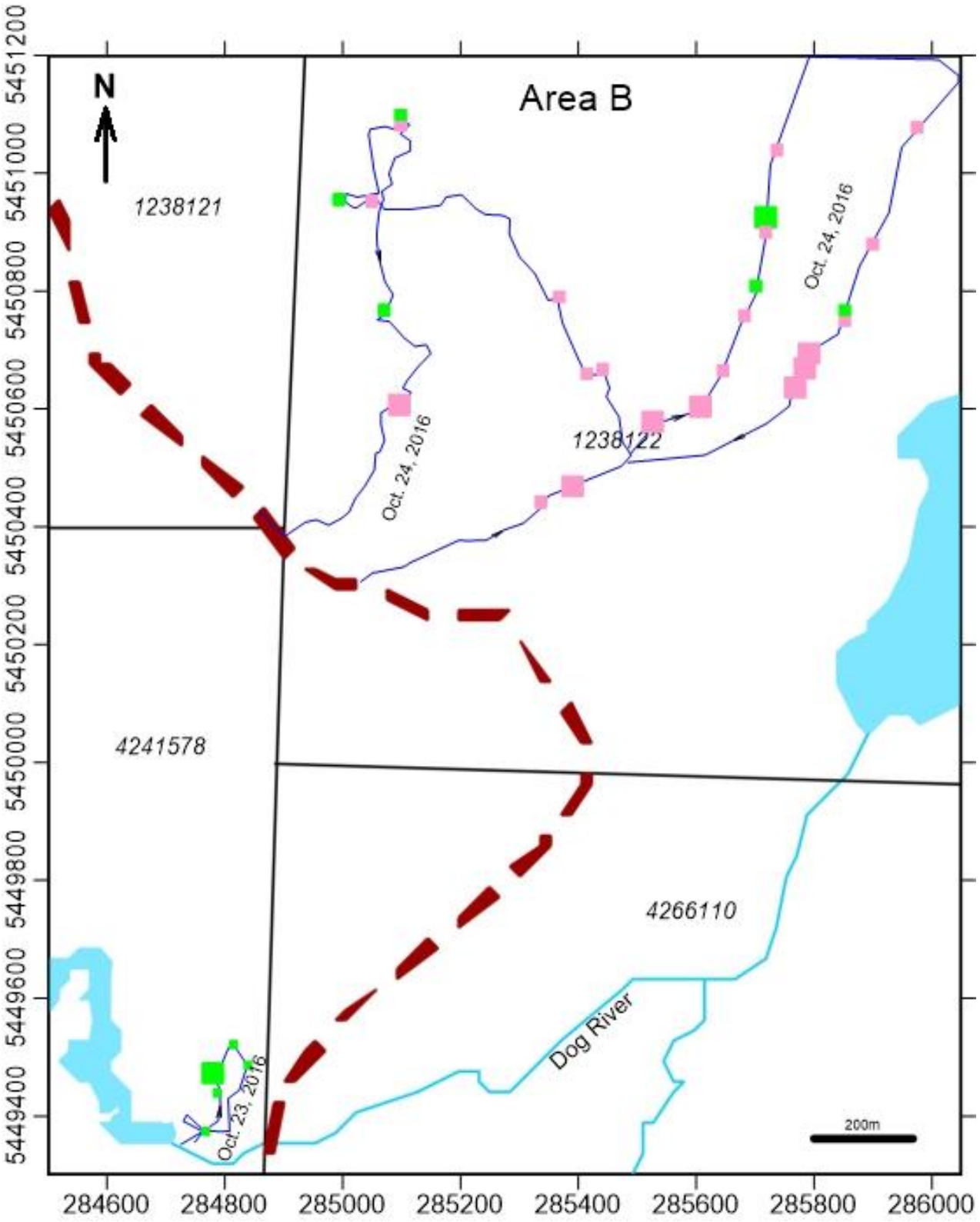

Fig. 10: traverses and outcrops.

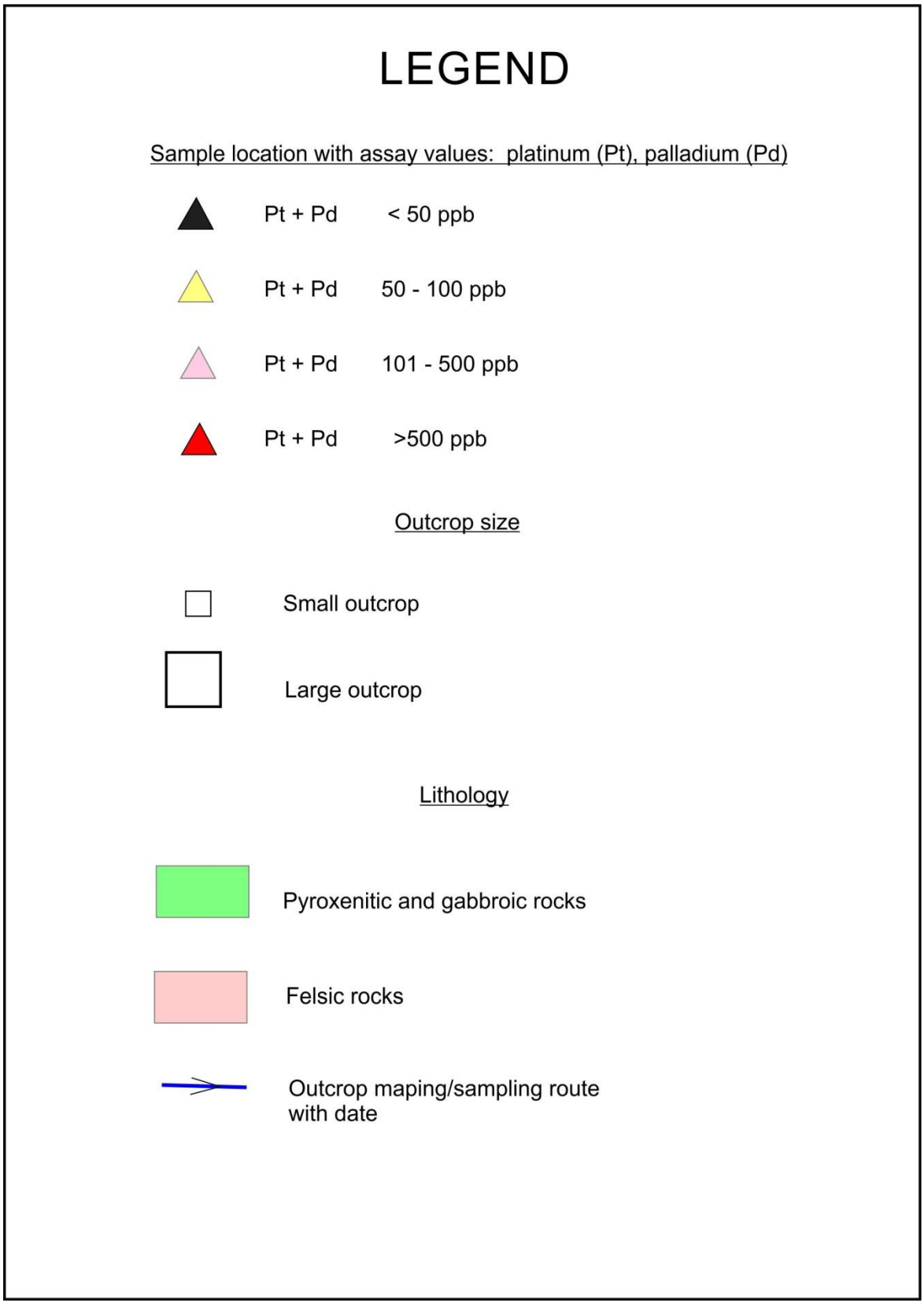

Fig. 11: Legend to Figs. 5 to 10 and to Appendix.

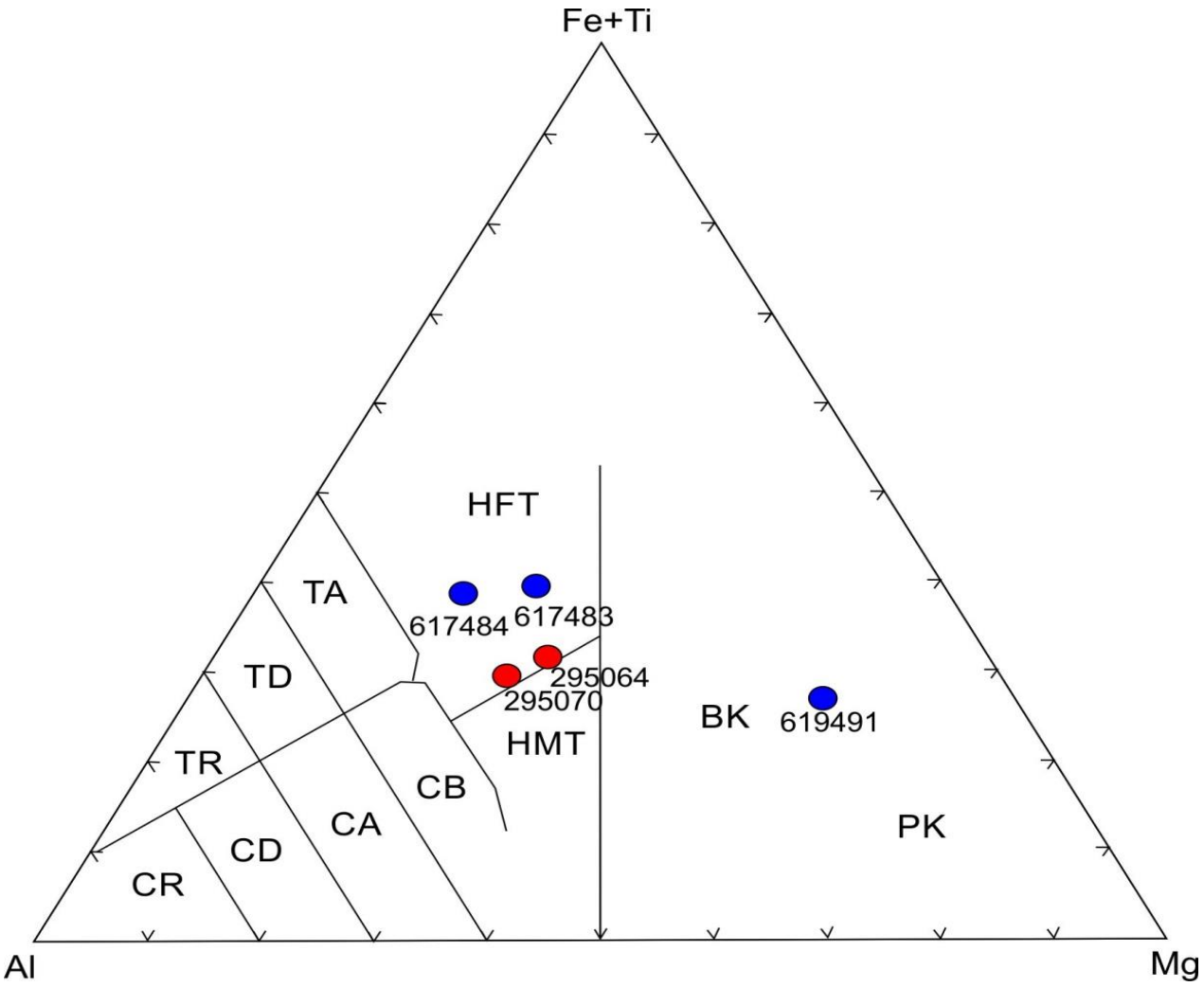

Fig. 12: Whole rock analysis: Al-Fe+Ti-Mg cation plot (samples 295064, 295070 - red circles from the Main Showing and area; also shown are three 2015 pyroxenitic and gabbroic rock plots from BLPGE (blue circles)); fields from Jensen (1976), C - calc-alkaline; T - tholeiitic; K - komatiitic; P - picritic; R - rhyolite; D - dacite; A - andesite; B - basalt; HF - high Fe; HM - high Mg.

As shown, both, the aphanitic rock from the Main Showing (295064) and the fine grained gabbro from the nearby escarpment (295070) fall within the high iron tholeiite field, close to the high magnesium tholeiite domain (Fig. 12). These rocks appear to have been altered in a process that involved magnesium enrichment. The other two samples made of pyroxenite (617483) and gabbro (617484) are also classified as high iron tholeiites, but are less Mg-enriched than the previous ones.

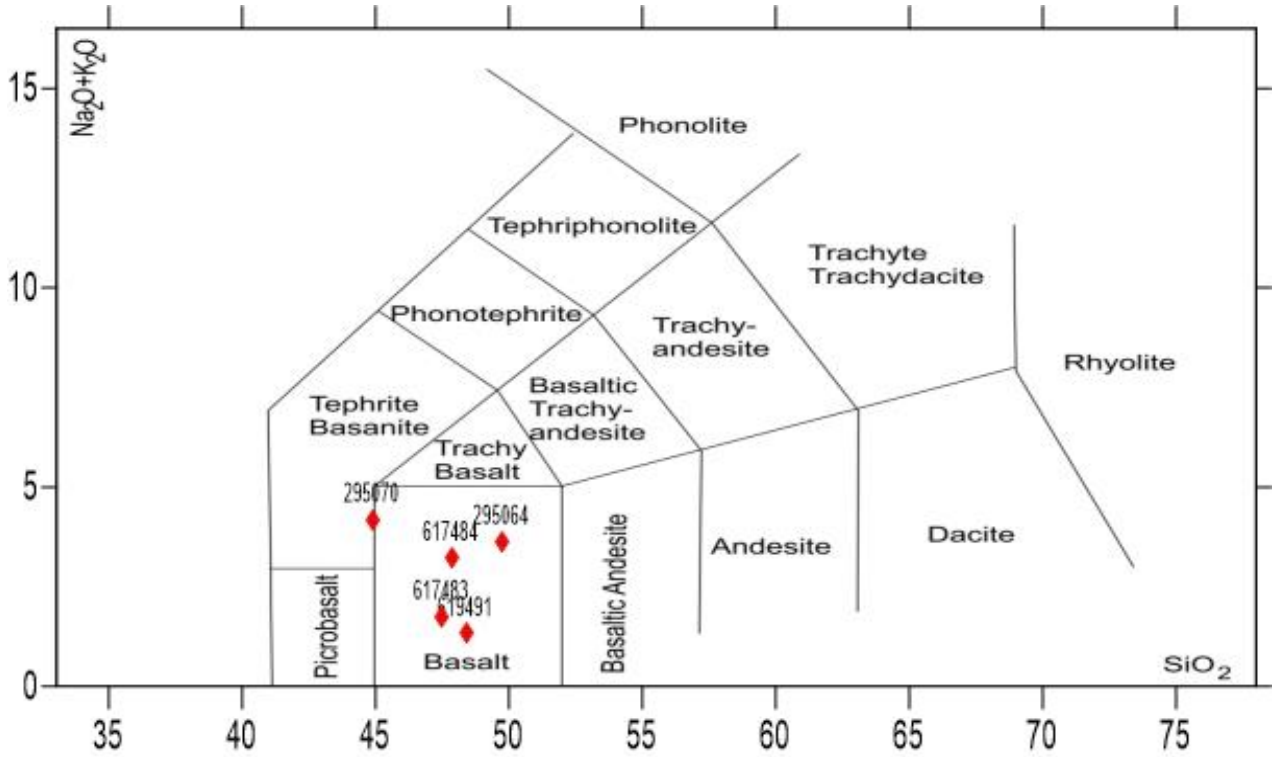

Fig. 13: Classification diagram (after LeBas et al., 1986; all 2015, 2016 WR samples included).

3. Quality Control

Accurassay's calibration standards for gold, platinum, palladium, copper and nickel are made from 1000 ppm certified stock solution. Quality Control check solutions are made up from separately purchased 1000 ppm certified stock solutions and are read after the standards and periodically throughout the analysis.

Laboratory reports are produced using Accurassay' LIMS program. 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. For each quality control standard control charts are produced to monitor the performance of the laboratory. Warning lines on the chart are set at ± 2 standard deviations, and control lines are set at ± 3 standard deviations. Any data that fall between the ± 2 or ± 3 lines requires 10% of the samples in that batch to be re-assayed and have their values compared with the previous set of results. Results will be accepted as long as the standards for each batch of samples fall within the ± 2 standard deviation lines. Any data falling outside the ± 3 standard deviation lines will result in the rejection of all results and re-assay of the entire batch.

On the final report, for the QC they are reporting the mean and the standard deviation for each element as determined through round robin analysis.

Accurassay reports all QC points to the client, pass or fail for the transparency reasons as no QC should be 100% accurate all of the time. However, for each failed QC point there is a corresponding passing QC point in the final report that is re-assayed prior to the final report being certified. Accurassay QC system states that for any QC data point that falls inside 2 standard

deviations the associated data is considered valid. They have set out warning limits at 2 standard deviations and control limits at 3 standard deviations. When a QC point falls outside the 2 SD mark but within 3 SD, 10% of the original assay load is re-assayed and the values for the re-assays are reviewed to ensure the original data matches the re-assay data. If it does not match the entire batch is re-assayed. Also, for any QC point that falls outside the 3 SD mark the original data is discarded and the entire batch of samples is immediately re-assayed and is not released to the client.

Two repeats were assayed for the original samples 295060 and 295072. Au, Pt and Pd in 295072 were below DL and the graph for 295060 is in Fig. 14. As shown, Pt value in the repeat is substantially lower (by 27. 5 %) than the original, while palladium in the repeat is compatible with the original.

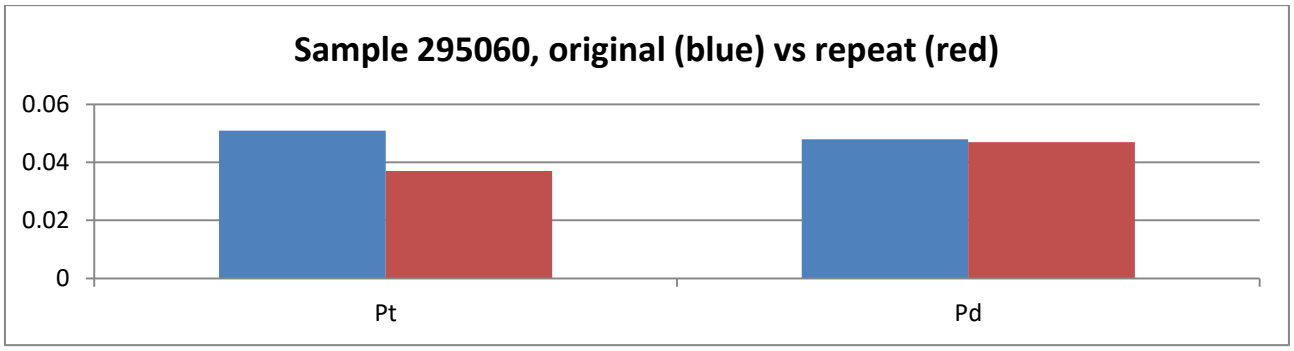

Fig. 14: Original vs repeat, Pt and PD in sample 295060.

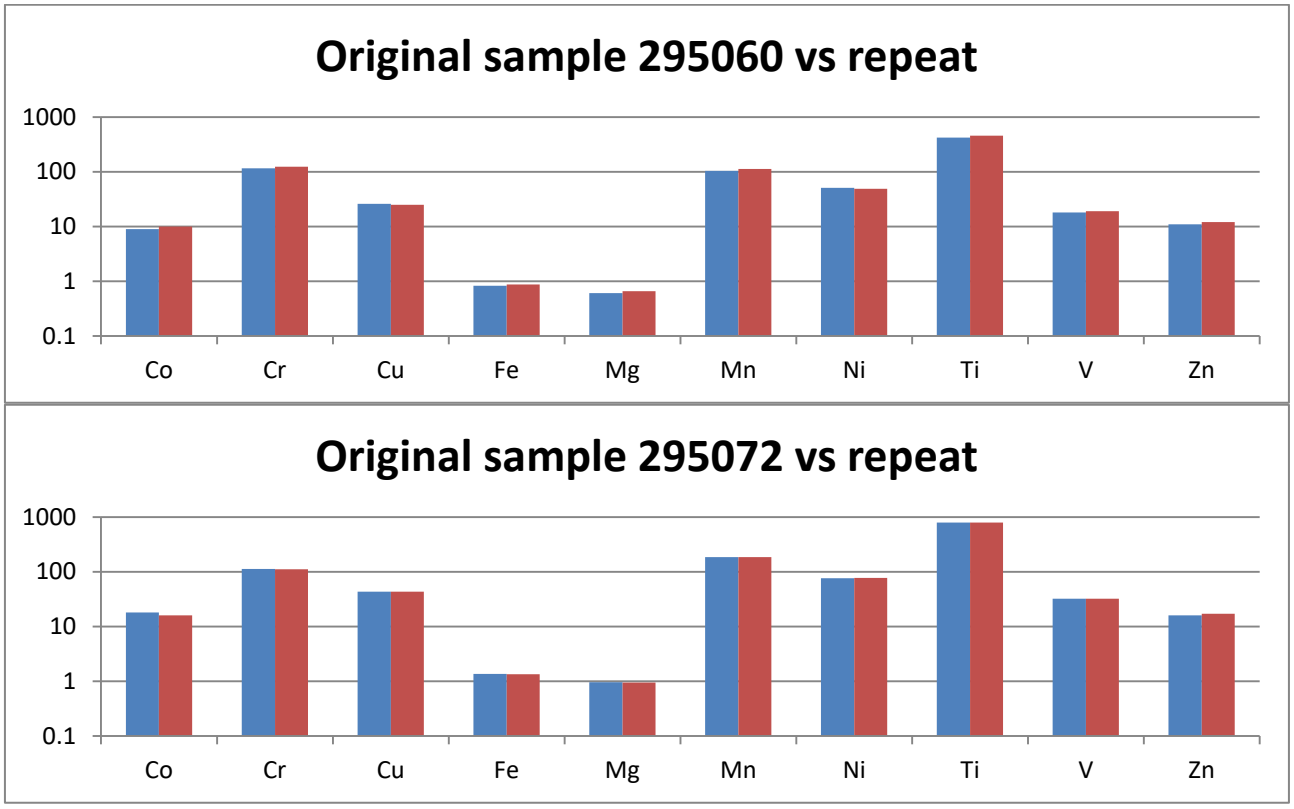

Fig. 15, a, b: original vs repeat assays for selected elements (vertical axes at logarithmic scale).

Selected other elements in the original vs repeats assays 295060 and 295072 (Fig. 15 a, b) show very good reproducibility.

The AP10 standard was used for this survey and the certified values for it with one standard deviation were created by Round Robin Analysis between Accurassay Laboratories and 4 Canadian SCC accredited commercial laboratories are as follows: Au 318 ± 42 ppb, Pt, 346 ± 18 ppb, and Pd 6090 ± 310 ppb. To evaluate standards in house, Accurassay creates control charts to 95% CI using the mean ± 2SD. For this survey, the QC performance for AP10 standard (Table 2) was measured thrice and all fall within ± 1 standard deviation.

Table 2: QC for AP10 standard

Standard	Element	QC performance	Mean	St. deviation
AP10	Au	0.327	0.318	0.042
AP10	Pd	5.99	6.07	0.31
AP10	Pt	0.333	0.346	0.018

As for the whole rock analysis, the oxides in the repeat 295064 are nearly identical with the original (Fig. 16).

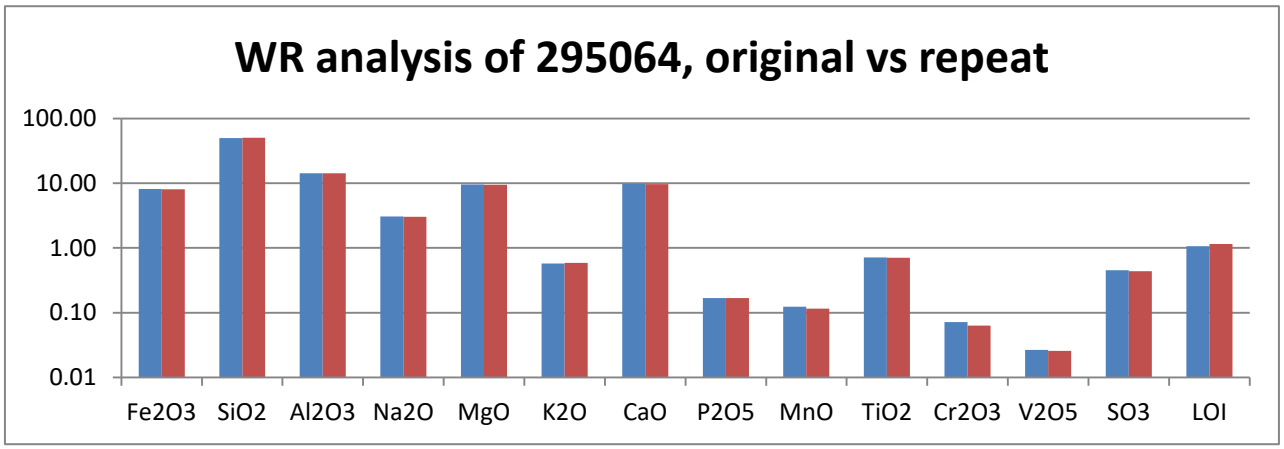

Fig. 16: Whole rock analysis of 295064, original vs repeat (vertical axis at logarithmic scale).

In conclusion we can state that Accurassay's assays and quality control for this survey comply with the industry standards and are sufficient for this stage of the project. Majority of the assays are below DL and those with the PGE above DL have the repeats compatible with their originals. There is one exception though, in which the repeat Pt value is by 27.5 % lower than its original. The AP10 standard was within the ± 1 SD. Thus, the assays are reasonably reproducible and acceptable for this stage of the project. The company may in the future, when the prospect proceeds into a higher stage of exploration, request the laboratory to apply different procedures and/or stricter measures to improve the analytical reproducibility for the PGE.

3. CONCLUSIONS AND RECOMMENDATIONS

Empire's 2016 fieldwork consisted of outcrop mapping, sampling and logging in the central, northwestern and northeastern portions of the BLPGE. The focus was on to-date non-explored areas

where recent logging operations exposed new outcrops. Additional rationale was to confirm the anomalous PGE values detected in the previous surveys. A total of 28 chip and float samples were collected and submitted for chemical analysis. Chip samples from two locations situated in the area B returned anomalous PGE values ranging from 0.051 to 0.143 ppm platinum and 0.048 to 0.167 ppm palladium, respectively. The assays confirm the ratio Pt:Pd remain close to 1:2.

The whole rock analysis of two rock samples indicates the rocks have an affinity to high iron tholeiite. Both rocks appear to have been subjected to alteration involving Mg-enrichment.

Empire's October 2016 field program provided further valuable information on the BLPGE mineralization. Further outcrop mapping, stripping of anomalous areas and systematic sampling is recommended. A compilation and re-interpretation of the historical ground and airborne geophysical and geochemical data should be continued and used as a guide for further work.

Proposed Budget:

Geologist (20 days @ $600/day)	$12,000.00
Prospector (20 days @ $350/day)	$ 7,000.00
Assistant (20 days @ $250/day)	$ 5,000.00
Truck Rentals (20 days @ $70.00/day)	$ 1,400.00
Boat rental (5 days @ $50/day)	$ 250.00
Mob, demob	$ 1,000.00
Accommodation, food	$ 3,500.00
Gas	$ 500.00
Assays (100 samples)	$ 3,500.00
Miscellaneous	$ 2,000.00
Compilation, digitizing and report	$ 4,000.00
Total	**$40,150.00**

IN ACCOUNT WITH

XYQUEST MINING CORP.

Suite 702 • 889 West Pender Street • Vancouver BC • V6C 3B2 • Tel. 604.683.3288

Empire Metals Corp.
702-889 West Pender Street
Vancouver, BC V6C 3B2

March 10, 2017
Account #2017-006
GST#896269297

Re: Buck Lake Exploration (October 2016 Field Work)

	Days	Fees per Day	Amount
Senior Geologist, Dr. Bohumil B. Molak, PGeo			
Field work	8	$ 900.00	$ 7,200.00
Logistics, preparation, travel, mobilization and demobilization	2	$ 900.00	1,800.00
Research on area, investigate technical disclosures, general research, report preparation	5	$ 800.00	4,000.00
			$ 13,000.00
Prospector, William Richmond			
9 days @ $450/day			$ 4,050.00
			$ 4,050.00
Assays (28 samples - Accurasay Lab Bill)			$ 1,399.96
Expenses:			
Airfare			$ 759.52
Accommodation (9 days @ $100/day)			900.00
Food (Meals, Groceries, etc. - 9 days @ $100 / day)			900.00
Boat Renteal (3 days @ $75/day)			225.00
Car Rental (9days @ $100/day, 150km @ $0.35/Km per day)			1,372.50
Fuel/ Transportation charges			271.79
Expense Administration Fee and Office Charge			664.32
Total Expenses			$ 5,093.13
Digitization, Preliminary Exploration Report (at 10% of costs)			$ 2,354.31
Subtotal			$ 25,897.40
GST			$ 1,294.87
Total			**$ 27,192.27**

This is our account herein

XYQUEST MINING CORP.

• INTEREST OF 2% PER MONTH, COMPOUNDED MONTHLY,
OR 26.8% PER ANNUM CHARGED ON OVERDUE ACCOUNTS

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6. STATEMENT OF QUALIFICATIONS

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

I am a Professional Geoscientist residing at # 704, 6689 Willingdon Avenue, Burnaby, V5H 3Y8, 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, Bulgaria, Zambia, Cuba, Guinea, Canada, Chile and Argentina.

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

I conducted the litho-geochemical sampling program on the Buck Lake PGE Prospect from October 20 to 28, 2016.

I am responsible for all sections of this report except the Item 4 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 Rock Minerals Inc.

Dated at Vancouver, BC, Canada, this the 13th day of March, 2017.

7. 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 litho-geochemical sampling program on the Buck Lake PGE Prospect from October 21 to 28, 2016.

Dated at Thunder Bay, ON, Canada, this the 13th day of March, 2017.

APPENDIX I

Sample Description with Gold, Platinum and Palladium Assays (in ppm)

#	Easting	Northing	Description	Pt	Pd	Au
295051	282627	5449751	Main Showing, selective sample, rich in sulphidic mineralization	1.176	2.866	0.118
295052	282779	5449816	Float, gabbro, diss sulph <2%	<0.015	0.03	<0.005
295056	284781	5449474	SO, gabbro and pyroxenite, plg, diss. sulph. <2 %, one sulph 1 cm	0.143	0.167	<0.005
295057	284779	5449473	SO, gabbro, 40-50% plg, diss. sulph. 3-5 %, one sulph grain 2.5 cm	<0.015	<0.01	<0.005
295058	284801	5449443	SO, altered pyroxenite, plg 10-20%, rare biotite, diss. sulph <2%	<0.015	0.014	<0.005
295059	285861	5450744	SO, biotite granitoide, diss. sulph <2%	<0.015	<0.01	<0.005
295060	284998	5450957	LO, altered pyroxenite, plg nests and veinlets, 2-3% diss. sulp.	0.051	0.048	<0.005
295061	285100	5451092	LO, gabbro, 20-30% plg, <2% diss sulph.	<0.015	<0.01	<0.005
295062	282049	5450959	SO, fine - med. gr gabbro (?), folded, abundant biotite, Fe-ox infiltrations	<0.015	<0.01	<0.005
295063	281857	5450657	LO, beige med gr. aplite, diss. sulph and on fracture plane	<0.015	<0.01	<0.005
295064	282611	5449753	Main Showing edge, green aphanitic rock of unknown origin (WR)			
295065	282536	5449704	LO, altered pyroxenite, plg nests, ± biotite, ±chlorite, 2-3% diss. Sulp.	<0.015	0.016	<0.005
295066	282512	5449689	LO, fine, med. varitextured gabbro, 40-50% plg, amphibole (actin), sulph diss., 0.5 mm veinlets	<0.015	<0.01	<0.005
295067	282515	5449686	LO, fine, med. varitextured gabbro, pyrox. encl., amphibole (actin), sulph diss.& fracture planes	<0.015	<0.01	<0.005
295068	282542	5449707	SO, pale color, feldspathic, smokey qrtz, streaky biotite, sulph. associated with biotite	<0.015	<0.01	<0.005
295069	282528	5449692	LO, varitextured gabbro, pyroxenite enclaves, sulph. diss. or thin veinlets 0.3 mm	<0.015	<0.01	<0.005
295070	282503	5449660	LO, fine gr gabbro (?) WR			
295071	282499	5449652	LO, fine gr. gabbro and felsic rocks form matrix to pyroxenite enclaves <2% diss sulph.	<0.015	<0.01	<0.005
295072	282502	5449651	LO, fine gr. gabbro and felsic rocks form matrix to pyroxenite enclaves <2% diss sulph.	<0.015	<0.01	<0.005
295073	282512	5449683	LO, actinolite amphibole, plg ~50% gabbro, diss pyrite ~2 %	<0.015	<0.01	<0.005
295074	282418	5449692	LO, fine gr gabbro (?), diss sulph and thin veinlets (0.5 mm)	<0.015	<0.01	<0.005
295075	282424	5449702	LO, mingled pyroxenite, felsic dykelets, diss sulph 2-3 %	<0.015	<0.01	<0.005
295076	282415	5449690	LO, pyroxenite and gabbro, felsic dykelets, pink plg (40%) breccia, prt, cprt <5%	<0.015	0.012	<0.005
295077	282401	5449677	LO, gabbro, felsic dykelets, pink plg (40%) diss prt, cprt <5%	<0.015	<0.01	<0.005
295078	282377	5449671	LO, altered pyroxenite, pink flsp 20-30%, diss sulph 2-3%	<0.015	<0.01	<0.005
295079	282307	5449636	LO, gabbro ~30% plg diss sulph 2-3 %	<0.015	<0.01	<0.005
295080	282307	5449636	LO, feldspathic leucogabbro (?) diss sulph and on fracture planes	<0.015	<0.01	<0.005
295081	282285	5449620	LO, coarse gr gabbro, diss sulph <5%	<0.015	<0.01	<0.005

Abbreviations: cprt –chalcopyrite; diss sulph–disseminated sulphides; encl-enclaves; gr.–grained; LO–large outcrop; plg–plagioclase; prt –pyrite; qtz–quartz; SO–small outcrop.

APPENDIX II

Assay Certificates

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Wednesday, November 9, 2016

Final Certificate

Empire Rock Minerals
702-889 W Pender Street
Vancouver, BC, CAN
V6C3B2
Email: bmolak@hotmail.com

Date Received: 10/28/2016
Date Completed: 11/09/2016
Job #: 201642231
Reference:
Sample #: 31

Acc #	Client ID	Au g/t (ppm)	Pt g/t (ppm)	Pd g/t (ppm)
228006	295051	0.118	1.176	2.866
228007	295052	<0.005	<0.015	0.030
228008	295053	<0.005	<0.015	<0.01
228009	295054	<0.005	<0.015	<0.01
228010	295055	<0.005	<0.015	<0.01
228011	295056	<0.005	0.143	0.167
228012	295057	<0.005	<0.015	<0.01
228013	295058	<0.005	<0.015	0.014
228014	295059	<0.005	<0.015	<0.01
228015	295060	<0.005	0.051	0.048
228016	295060 Dup	<0.005	0.037	0.047
228017	295061	<0.005	<0.015	<0.01
228018	295062	<0.005	<0.015	<0.01
228019	295063	<0.005	<0.015	<0.01
228020	295065	<0.005	<0.015	0.016
228021	295066	<0.005	<0.015	<0.01
228022	295067	<0.005	<0.015	<0.01
228023	295068	<0.005	<0.015	<0.01
228024	295069	<0.005	<0.015	<0.01
228025	295071	<0.005	<0.015	<0.01
228026	295072	<0.005	<0.015	<0.01
228027	295072 Dup	<0.005	<0.015	<0.01
228028	295073	<0.005	<0.015	<0.01
228029	295074	<0.005	<0.015	<0.01
228030	295075	<0.005	<0.015	<0.01

APPLIED SCOPES: ALP1, ALPG1, ALXR1, ALAR1

Validated By:
Jason Moore, VP Operations, Assayer

Certified By:
Jason Moore, VP Operations, Assayer

Authorized By:
Derek Demianiuk, VP Quality

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Wednesday, November 9, 2016

Final Certificate

Empire Rock Minerals
702-889 W Pender Street
Vancouver, BC, CAN
V6C3B2
Email: bmolak@hotmail.com

Date Received: 10/28/2016
Date Completed: 11/09/2016
Job #: 201642231
Reference:
Sample #: 31

Acc #	Client ID	Au g/t (ppm)	Pt g/t (ppm)	Pd g/t (ppm)
228031	295076	<0.005	<0.015	0.012
228032	295077	<0.005	<0.015	<0.01
228033	295078	<0.005	<0.015	<0.01
228034	295079	<0.005	<0.015	<0.01
228035	295080	<0.005	<0.015	<0.01
228036	295081	<0.005	<0.015	<0.01
228037	295064			
228038	295064 Dup			
228039	295070			

APPLIED SCOPES: ALP1, ALPG1, ALXR1, ALAR1

Validated By:
Jason Moore, VP Operations, Assayer

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Reference:
Sample #: 31

Control Standards

QC Type	Element	QC Performance (ppm)	Mean (ppm)	Std Dev (ppm)
AP10	Au	0.327	0.318	0.042
AP10	Pd	5.990	6.070	0.310
AP10	Pt	0.333	0.346	0.018

APPLIED SCOPES: ALP1, ALPG1, ALXR1, ALAR1

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Sample #: 31

Acc #	Client ID	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
228006	295051	4	0.74	30	40	8	<2	<1	0.86	<4	445	146	4812	6.85	0.04	<10	0.89	153	2	0.06	10554	107	2	<5	24	0.02	<10	13	276	<2	17	<10	<2	54
228007	295052	<1	1.54	3	39	32	<2	<1	1.66	<4	19	42	94	1.74	0.08	<10	0.79	185	3	0.19	87	967	7	6	<1	0.03	<10	69	611	<2	39	<10	3	17
228008	295053	<1	1.14	<2	35	9	<2	<1	1.10	<4	23	37	531	2.94	0.01	25	0.65	295	5	0.03	61	293	7	<5	<1	0.04	<10	82	1265	4	25	<10	2	21
228009	295054	<1	0.77	23	37	14	<2	<1	0.23	<4	10	37	44	4.56	0.38	28	0.43	458	4	0.08	32	342	<1	<5	4	0.02	<10	9	1122	<2	35	<10	2	51
228010	295055	<1	0.44	22	34	11	<2	<1	0.20	<4	17	48	56	3.65	0.20	18	0.19	186	4	0.07	31	209	<1	<5	5	0.02	<10	9	1029	<2	26	<10	<2	15
228011	295056	<1	2.47	15	39	73	<2	<1	2.61	<4	17	25	92	0.84	0.07	<10	0.58	121	2	0.25	94	444	10	8	16	0.02	<10	359	261	<2	9	<10	<2	10
228012	295057	<1	3.23	<2	35	304	<2	6	2.76	<4	22	22	46	1.55	0.30	11	1.04	166	4	0.30	66	809	15	<5	<1	0.03	<10	393	578	<2	25	<10	<2	23
228013	295058	<1	1.59	9	39	175	<2	<1	1.88	<4	16	60	86	1.24	0.19	<10	0.90	138	2	0.17	90	1218	7	<5	14	0.02	<10	224	550	<2	21	<10	2	13
228014	295059	<1	1.32	<2	38	313	<2	<1	0.61	<4	13	50	92	2.46	0.77	12	0.84	236	5	0.11	24	495	1	6	<1	0.02	<10	16	1491	<2	46	<10	2	51
228015	295060	<1	0.55	<2	37	32	<2	<1	0.49	<4	9	115	26	0.83	0.08	<10	0.61	104	2	0.06	51	187	3	<5	<1	0.02	<10	7	421	<2	18	<10	<2	11
228016D	295060	<1	0.58	9	34	30	<2	<1	0.56	<4	10	123	25	0.87	0.08	<10	0.66	112	2	0.06	49	188	<1	<5	8	0.02	<10	8	453	<2	19	<10	<2	12
228017	295061	<1	1.88	3	34	166	<2	3	1.64	<4	18	15	31	2.02	0.25	11	1.14	213	4	0.14	20	156	<1	6	16	0.02	<10	55	1636	<2	74	<10	3	29
228018	295062	<1	1.00	13	37	34	<2	<1	1.25	<4	11	57	98	3.09	0.22	<10	0.54	347	5	0.14	12	423	<1	<5	13	0.03	<10	11	1845	<2	79	<10	6	26
228019	295063	<1	0.38	<2	36	50	<2	<1	0.17	<4	<1	31	12	0.84	0.15	10	0.12	<100	5	0.10	2	168	<1	<5	<1	0.01	<10	14	511	2	8	<10	<2	17
228020	295065	<1	0.73	10	32	28	<2	3	0.87	<4	14	111	23	1.33	0.08	<10	0.82	150	2	0.06	61	571	2	8	11	0.02	<10	17	502	<2	17	<10	2	19
228021	295066	<1	1.71	<2	36	71	<2	<1	1.64	<4	26	29	84	2.56	0.17	<10	0.90	200	2	0.24	46	788	6	9	<1	0.03	<10	70	814	<2	59	<10	3	32
228022	295067	<1	1.95	<2	32	40	<2	<1	1.89	<4	24	52	56	2.13	0.13	<10	1.05	212	1	0.24	67	540	<1	<5	<1	0.03	<10	65	693	<2	43	<10	2	29
228023	295068	<1	0.61	6	39	47	<2	<1	0.44	<4	3	34	23	1.83	0.09	<10	0.28	<100	6	0.09	4	268	<1	<5	9	0.02	<10	19	368	12	28	<10	<2	7
228024	295069	<1	2.32	<2	36	117	<2	1	2.08	<4	23	26	79	2.44	0.24	11	1.09	231	1	0.26	53	603	9	7	<1	0.03	<10	88	825	<2	57	<10	3	32
228025	295071	<1	1.80	15	34	87	<2	<1	2.43	<4	23	24	116	2.03	0.28	12	0.87	159	<1	0.10	44	1001	2	6	6	0.03	<10	39	943	<2	59	<10	2	24

PROCEDURE CODES: ALP1, ALPG1, ALXR1, ALAR1, ALNiAR2

Certified By: Jason Moore, VP Operations, Assayer

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ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

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Vancouver, BC, CAN
V6C3B2
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Job #: 201642231
Reference:
Sample #: 31

Acc #	Client ID	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
228026	295072	<1	1.10	10	40	40	<2	<1	1.27	<4	18	112	43	1.36	0.11	<10	0.96	185	2	0.13	76	840	<1	5	3	0.03	<10	34	793	<2	32	<10	2	16
228027D	295072	<1	1.10	11	34	40	<2	3	1.27	<4	16	111	43	1.35	0.11	<10	0.95	184	2	0.13	77	822	2	<5	9	0.03	<10	34	790	<2	32	<10	2	17
228028	295073	<1	1.85	2	39	57	<2	<1	1.97	<4	22	42	58	2.42	0.14	<10	0.91	190	3	0.20	41	683	7	5	<1	0.02	<10	59	1019	<2	60	<10	2	22
228029	295074	<1	1.49	6	36	81	<2	<1	1.65	<4	25	45	93	2.27	0.24	11	1.11	237	2	0.16	61	1395	2	<5	20	0.03	<10	41	1144	<2	51	<10	3	32
228030	295075	<1	1.14	19	36	88	<2	65	1.31	<4	16	96	28	1.44	0.20	<10	0.78	150	4	0.10	58	712	8	6	9	0.02	<10	25	800	<2	28	<10	2	13
228031	295076	<1	0.57	<2	38	17	<2	<1	0.85	<4	14	276	23	1.05	0.06	<10	0.98	118	1	0.08	174	188	7	<5	12	0.02	<10	18	314	<2	16	<10	<2	23
228032	295077	<1	1.56	6	37	73	<2	<1	1.67	<4	37	45	167	2.12	0.19	18	1.23	172	2	0.11	115	1687	<1	<5	3	0.02	<10	37	1341	<2	44	<10	4	22
228033	295078	<1	1.79	8	39	62	<2	9	1.89	<4	20	39	63	1.67	0.21	15	1.22	190	<1	0.13	106	198	<1	<5	14	0.02	<10	41	1217	<2	48	<10	3	26
228034	295079	<1	1.50	5	35	38	<2	<1	1.51	<4	23	22	93	3.32	0.09	10	0.70	160	3	0.16	19	477	9	<5	3	0.03	<10	38	953	<2	83	<10	2	25
228035	295080	<1	1.02	<2	36	31	<2	<1	1.47	<4	12	54	84	2.78	0.08	11	0.74	164	2	0.11	19	3855	<1	<5	1	0.02	<10	32	784	<2	69	<10	3	24
228036	295081	<1	1.22	14	40	57	<2	2	1.44	<4	21	86	111	1.92	0.16	11	0.86	158	2	0.12	47	1817	4	5	11	0.03	<10	28	817	<2	42	<10	2	17
228037	295064																																	
228038D	295064																																	
228039	295070																																	

PROCEDURE CODES: ALP1, ALPG1, ALXR1, ALAR1, ALNiAR2

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Date Received: 10/28/2016
Date Completed: 11/09/2016
Job #: 201642231
Reference:
Sample #: 31

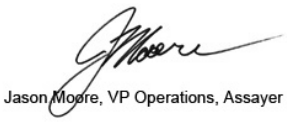
Acc #	Client ID	Fe203 %	Si02 %	Al203 %	Na20 %	Mg0 %	K20 %	Ca0 %	P205 %	Mn0 %	Ti02 %	Cr203 %	V2O5 %	SO3 %	L0I %	Mass Balance %
228037	295064	8.11	49.73	14.28	3.05	9.51	0.57	9.81	0.17	0.12	0.71	0.07	0.03	0.45	1.06	97.67
228038Dup	295064	8.07	50.05	14.18	3.02	9.45	0.59	9.68	0.17	0.12	0.71	0.06	0.03	0.44	1.15	97.71

Control Std Certified

	Fe203 %	Si02 %	Al203 %	Na20 %	Mg0 %	K20 %	Ca0 %	P205 %	Mn0 %	Ti02 %	Cr203 %	V2O5 %	SO3 %	L0I %	Mass Balance %
NIST SR 690	95.58	3.71	0.18	0.00	0.18	0.00	0.20	0.03	0.23	0.02	0.00	0.00	0.00	0.00	100.13
NIST SR 692	85.18	10.14	1.41	0.01	0.46	0.04	0.02	0.09	0.00	0.04	0.00	0.00	0.00	2.50	99.89

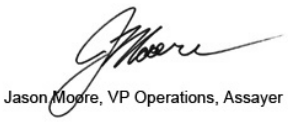
APPLIED SCOPES: ALP1, ALPG1, ALXR1, ALAR1

Validated By:



Jason Moore, VP Operations, Assayer

Certified By:



Jason Moore, VP Operations, Assayer

Authorized By:

Derek Demianiuk, VP Quality

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APPENDIX III

Claim Map 1:10,000

715000

UTM U15

UTM U16

285000

N

4282208

4282209

1238120

1238121

1238122

5450000

1237739

4241577

4266104

Dog River

5450000

Main Showing

1173922

1173921

1195849

1173925

1173926

4241579

4241578

4266110

1174119

1174120

4266109

4266108

Claim Block Perimeter

4266107

Old road

4274916

4277660

Buck Lake

4277659

0 200 400 600 800 1000m

5445000

EMPIRE ROCK MINERALS INC.

Buck Lake PGE Prospect
Claim Map