NI 43-101 TECHNICAL REPORT

ON THE

DUNCAN KERR PROPERTY

LARDER LAKE MINING DIVISION, NORTHEASTERN ONTARIO

FOR

BIG NORTH GRAPHITE CORP.

Prepared by:

Joerg M. Kleinboeck, P.Geo.

Garry J. Clark, P.Geo.

October 14th, 2016

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF PHOTOS

APPENDICES

1. EXECUTIVE SUMMARY

At the request of Big North Graphite Corp. (“BNG”), the authors have completed a geological review of the Duncan Kerr Property (the “Property”) and prepared this technical report (the “Technical Report”) in compliance with NI 43-101, Companion Policy NI43-101CP, and Form 43-101F1.

The authors have prepared this report to provide a summary of scientific and technical data on the Property, including historical exploration activities, and have made recommendations concerning future exploration and development of the Property. This Technical Report is based on exploration and Property information supplied to the author by BNG, Trio Resources AG Inc. (“Trio”), as well as by the review of geological and exploration information available in the public domain. A site visit was completed by Joerg Kleinboeck on September 27th, 2016.

On October 13th, 2016, BNG acquired 100% ownership in two patented mining claims in Coleman Township, 1831NND and 3694NND along with equipment owned by Trio. The claims are located on property parcel PT E 1/2 of N 1/2, Lot 3, Con 4, and SW 1/4 of N 1/2, Lot 3, Con 4 respectively. BNG acquired the assets from Trio for the purchase price of $2,000,000. The purchase by BNG included a cash payment of $125,000 and the issuance of 8,500,000 common shares on the closing date. The cash payment was made in trust and to be used to satisfy secured debts owing on Trio’s assets. An additional $650,000 is to be paid on or before the date that is 9 months following the closing date, and $1,225,000 is to be paid on or before the date that is 24 months following the closing date.

The Property is situated approximately 3 km southeast of the town of Cobalt, Ontario in Coleman Township, Larder Lake Mining Division. The Property consists of 2 contiguous patented mining claims known as Parcels 1831 NND, and 3694 NND, totalling 32.374 ha in area. The Property encompasses the part of the historical mine workings of the Kerr Lake Mine that are located on Parcel 1831 NND, as well as the historical mine workings of the Lawson Mine that are located on Parcel 3694 NND. An estimated total of 32,715,590 oz of Ag have been produced from the Kerr Lake and Lawson Mines (Cunningham, 1963). A well maintained municipal road and power line service the Property. The Property is bounded approximately by UTM NAD83 Z17T coordinates 600901E to 601691E, and 5247333N to 5247875N.

The Property is located within the Cobalt embayment in the Southern Province of the Canadian Shield. The oldest rocks on the Property are Archean mafic volcanics that have been intruded

by several lamprophyre dykes. These rocks have been unconformably overlain by Proterozoic age Huronian sediments. A large south-southeast dipping Nipissing diabase sill intrudes the Archean mafic volcanics and Huronian sediments. This sill is part of a domed Nipissing diabase sheet that is also exposed to the north of the Property. Most of the silver deposits in the Cobalt mining camp are located proximal to the Huronian-Archean unconformity and are spatially associated with the Nipissing diabase sills.

Silver mineralization on the Property has been exploited by several mining operations from 1905 through to the 1960's. An estimated 32,715,590 oz of Ag have been produced from the Kerr Lake and Lawson Mines (Cunningham, 1963). The Property encompasses the historical mine workings of the Kerr Lake Mine that lie on Parcel 1831 NND, as well as the historical mine workings of the Lawson Mine on Parcel 3694 NND. There has not been sufficient exploration work completed by Trio or Big North Graphite to describe significant mineralized zones encountered on the Property.

Exploration potential exists south of the Kerr Lake Mine where the Huronian/Archean unconformity may exist beyond the mine workings. A review of a north-south orientated long section from an unknown source in the Ministry of Northern Development and Mines ("MNDM") government assessment files shows a profile through the Kerr Lake Mine. The interpretation of that section shows the diabase contact becoming very steeply dipping at approximately 70 degrees south. This may have been inferred or implied from geological observations seen on the 2nd level of the Kerr Lake Mine, but in contrast the diabase contact to the west on the Conisil and Lawson Mines has a generally shallow dipping contact at approximately 20 to 30 degrees south-southeast with local areas where the contact dips steeply over a short strike length. Assuming this is the case south of the Kerr Lake Mine, potential may exist for a southern, relatively shallow dipping, extension of the Huronian-Archean unconformity or at the Archean-diabase contact. Silver was mined at the Conisil, Lawson, and Kerr Lake Mines within the diabase near the Archean contact. For example, the Number 3 vein at the Kerr Lake Mine produced over 3 Moz of Ag, and it was hosted in diabase and Archean rocks (Cunningham, 1963).

It is recommended that a GIS (Geographic Information System) compilation be completed prior to commencement of any work programs. Prospecting, geological mapping, and geophysical surveys are recommended to map in the geological contacts and structures on the Property which will assist in the preparation of future work programs. A diamond

drill program is also recommended totaling 1,500 m. The aggregate expenditure of the work programs proposed for 2016 is estimated to be $235,015.

2. INTRODUCTION AND TERMS OF REFERENCE

2.1 Introduction

At the request of Big North Graphite ("BNG"), the authors have prepared this Technical Report to provide a summary of scientific and technical data on the Property. This Technical Report provides a summary and results from exploration work on the Property carried out by previous operators, and publicly available information.

2.2 Terms of Reference

The authors were retained by BNG to carry out an independent technical review of the Property. The review commenced September 27th, and continued to October 14th, 2016.

The author's assignment consisted of:

1) Reviewing and summarizing historical exploration data generated on the Property prior to BNG's acquisition of the Property;
2) Undertaking a site visit to confirm historical and current data;
3) Preparing a technical report on the Property; and
4) Making recommendations for future exploration activities on the Property.

2.3 Sources of Information

The historical exploration information was mostly gathered from the Ontario government databases and from documents provided by BNG and the vendor Trio Resources AG Inc. ("Trio"). Information in regards to the Property and work completed by Trio was provided by Duncan Reid, Trio's Chief Executive Officer.

For geographical reference purposes, all UTM locations used in this Technical Report are using NAD83 Zone 17N projection. Tenure information presented in this Technical Report was valid on the MNDM website on October 2nd, 2016. Other online database sites providing basic geographic information used for this Technical Report, such as topographic contours, digital elevation models, drainage systems and roads, include: http://geogratis.cgdi.gc.ca/ and http://www.geobase.ca/.

2.4 Details of Personal Inspection of the Property

A site visit by Joerg Kleinboeck was completed on September 27th, 2016. The site visit included meeting representatives of BNG and Trio, reviewing the Property and regional geology, viewing the stockpile B, and heavy equipment owned by Trio. The author noticed that stockpile A was not located where shown by Golder's resource estimate report, and that stockpile B has been reshaped at the top. Stockpile C, located inside the building, was not visited. **The authors have not verified the volume or tenure of the stockpiles. No attempt was made to reconcile the Golder Associates Ltd. calculations of volume or tenure that was completed in 2014.**

Photo 1: Stockpile A, Duncan Kerr Property, moved from original location located outside (photograph supplied by Trio).

Photo 2: Stockpile B, Duncan Kerr Property.

Photo 3: Stockpile C, Duncan Kerr Property (photograph supplied by Trio).

2.5 Units and Currency

This Technical Report uses both the Imperial and Metric Systems (System International or "SI") as systems of measure and length. Conversions from the Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent work assessment files now use the SI system but older work assessment files almost exclusively refer to the Imperial System. Metal and mineral acronyms in this Technical Report conform to mineral industry accepted usage.

Conversion factors utilized in this Technical Report include: 1 inch = 2.54 centimetres (cm); 1 pound (lb.) = 0.454 kilograms (kg); 1 foot (ft) = 0.3048 metres (m); 1 mile (mi) = 1.609 kilometres (km); 1 acre (ac) = 0.405 hectares (ha); and, 1 sq mile = 2.59 square kilometres.

Table 1 lists the common abbreviations that are used in this Technical Report. Dollars are expressed in Canadian currency ($) unless otherwise noted. Unless otherwise mentioned, all coordinates in this Technical Report are provided as UTM datum NAD83, Zone 17N.

Table 1: Abbreviations

Abbreviation	Unit or Term
Ag	silver
ASL	above sea level
As	arsenic
Au	gold
Ga	billion years
C	celsius
cm	centimetre
Co	cobalt
CRM	certified reference material
Cu	copper
ft^2	square foot
ft^3	cubic feet
°	degree (degrees)
ddh	diamond drill hole
ft	foot (feet)
g	gram
GIS	Geographic Information System
g/t	gram per tonne
ha	hectare
km	kilometre
km^2	square kilometres
M	metre
mm	millimetre
Moz	million troy ounces
Ma	million years
MNDM	Ministry of Northern Development and Mines
Ni	nickel
NI 43-101	Canadian National Instrument 43-101
oz	ounce(s), Troy ounce(s)
%	percent
PGE's	platinum-group elements
ppb	parts per billion
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
SG	specific gravity
ton	short ton (2,000 pounds)
T	metric tonne (2,000 kg) (2,204.6 pounds)
Zn	zinc

3. RELIANCE ON OTHER EXPERTS

The authors have made every attempt to accurately convey the content of historical geological information, but cannot guarantee either the accuracy, validity, or completeness of the data contained within those files. However, it is believed that these reports were written with the objective of presenting the results of the work performed, without any promotional or misleading intent.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Property is situated approximately 3 km southeast of the town of Cobalt, Ontario in Coleman Township, Larder Lake Mining Division (Figure 1). A well maintained municipal road and power line service the Property. The Property is bounded approximately by UTM NAD83 Z17T coordinates 600901E to 601691E, and 5247333N to 5247875N, and is covered by National Topographic System (NTS) map sheet 31M/5.

4.2 Mineral Dispositions

On October 13th, 2016, BNG acquired 100% ownership in two patented mining claims in Coleman Township, 1831NND and 3694NND (Figure 2). The claims are located on property parcel PT E 1/2 of N 1/2, Lot 3, Con 4, and SW 1/4 of N 1/2, Lot 3, Con 4 respectively (Table 2).

BNG acquired assets from Trio for the purchase price of $2,000,000. The purchase by BNG included a cash payment of $125,000 and the issuance of 8,500,000 common shares on the closing date. The cash payment was made in trust and to be used to satisfy secured debts owing on Trio's assets. An additional $650,000 is to be paid on or before the date that is 9 months following the closing date, and $1,225,000 is to be paid on or before the date that is 24 months following the closing date. The purchase agreement is provided in Appendix I.

At the time of report writing, the authors understand that the patented mining claims are currently held 100% by Trio.

Recent title searches were supplied by Trio. These are provided in Appendix 3. Several liens are registered to the claims. However, in a letter of intent supplied by BNG, a cash payment of $125,000 was to have been made in trust upon the closing date of the purchase agreement, and is to be used to satisfy secured debts on Trio's assets. A review of the Property Index Map is also provided in Appendix 3. Two narrow parcels bisect claims 1831NND and 3694NND. These two parcels, known as 61389-0073 and 61389-0111, are owned by The Temiskaming and Northern Ontario Railway Commission. Trio has entered into discussions with the Ontario Northland Railway Commission to obtain title to these two parcels.

The authors have not sought a formal legal opinion with regard to the ownership status of the claims comprising the Property and have in all aspects of tenure relied on materials made available on the MNDM's website (https://www.mci.mndm.gov.on.ca/claims/clm_mmen.cfm), by BNG, and by Trio. The authors express no opinion as to the ownership status of the Property. Both surface and mineral rights are attached to the patents that comprise the Property as indicated by Trio. The patents are held "Fee Simple", which requires the annual payment of $129.50 Mining Land Tax. Property taxes for the two claims totalled $2,364.18 for 2015. There is an outstanding amount of $5,139.28 that is owed to the Township of Coleman for the 2014 and 2015 taxes.

Table 2: Claim Details

Township	Parcel Number	PIN Number	Claim Type	Claim Size (ha)	Annual Mining Land Taxes
Coleman	1831 NND	61389-0059	Patented	16.187	$64.75
Coleman	3694 NND	61389-0074	Patented	16.187	$64.75

The Ontario Mining Act requires exploration plans and permits for exploration to be undertaken on Crown Lands. Once the application has been received, the MNDM circulates the exploration plan and permit to the Environmental Registry and to Aboriginal communities whose traditional lands may be impacted by the work. The processing periods for exploration plans is 30 days, and 50 days for exploration permits. Consultations with the affected Aboriginal communities identified by the MNDM are recommended. No exploration plan or permit is required to complete exploration work for patented mining claims, thus BNG does not need to apply for early exploration activities.

The authors are unaware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the Property.

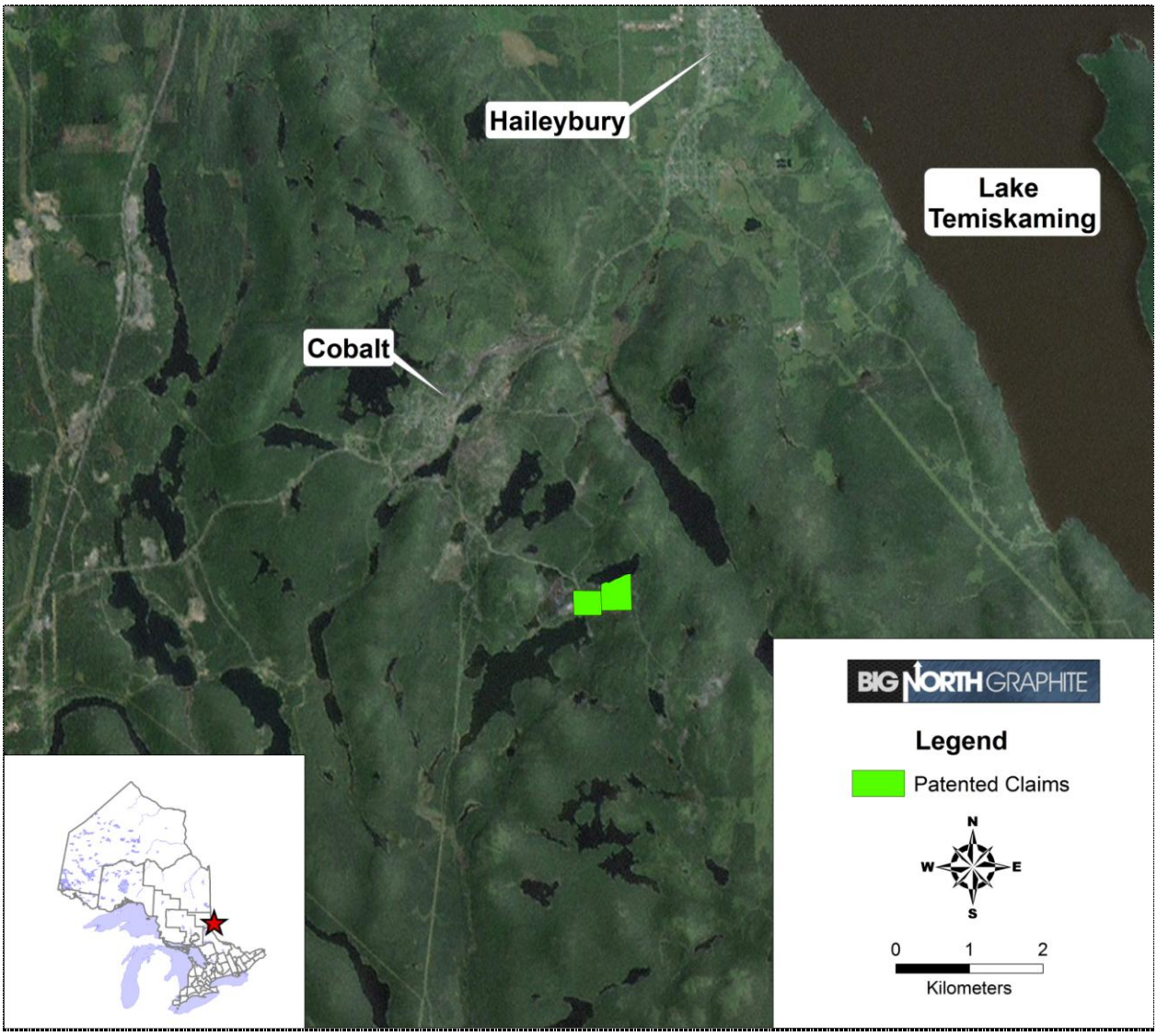

Figure 1: Location of the Duncan Kerr Property, Cobalt, Ontario

4.3 Environmental Liabilities and Permitting

The Property hosts parts of the past producing Kerr Lake Mine which operated intermittently from 1905 through to 1964, and the Lawson Mine which operated intermittently from 1909 through to the 1960's.

BNG is responsible for all environmental and mine hazards located on the Property. The majority of the mine hazards have been addressed, but according to inspection reports, several

hazards still exist on the Property. As well, BNG is responsible for the ongoing maintenance of the remediation efforts such as maintaining fencing, signage, etc. It is recommended that the hazards and environmental liabilities on the property be documented by BNG and inspected on a semi-annual basis. Appendix 2 provides the closure plan that was submitted by Agnico Eagle Mines Ltd. in 1994, and a site inspection report completed by the MNDM in 2014.

An environmental due diligence study should be completed by BNG to identify the nature and extent of any environmental liabilities that may be present on the Property.

5. ACCESS, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Property is located approximately 3 km southeast of the town of Cobalt, Ontario in Coleman Township. A well maintained year-round municipal road and power line service the Property. The Property is bounded approximately by UTM NAD83 Z17T coordinates 600901E to 601691E, and 5247333N to 5247875N.

5.2 Climate

The Property is under the influence of a moist boreal climate. The mean January temperature is -16.4^{o}C; the mean July temperature is 18.1^{o}C. The annual precipitation is approximately 785.1 mm (http://climate.weatheroffice.gc.ca). The beginning of permanent snow cover varies from year to year, sometimes starting in November and lasting until late April.

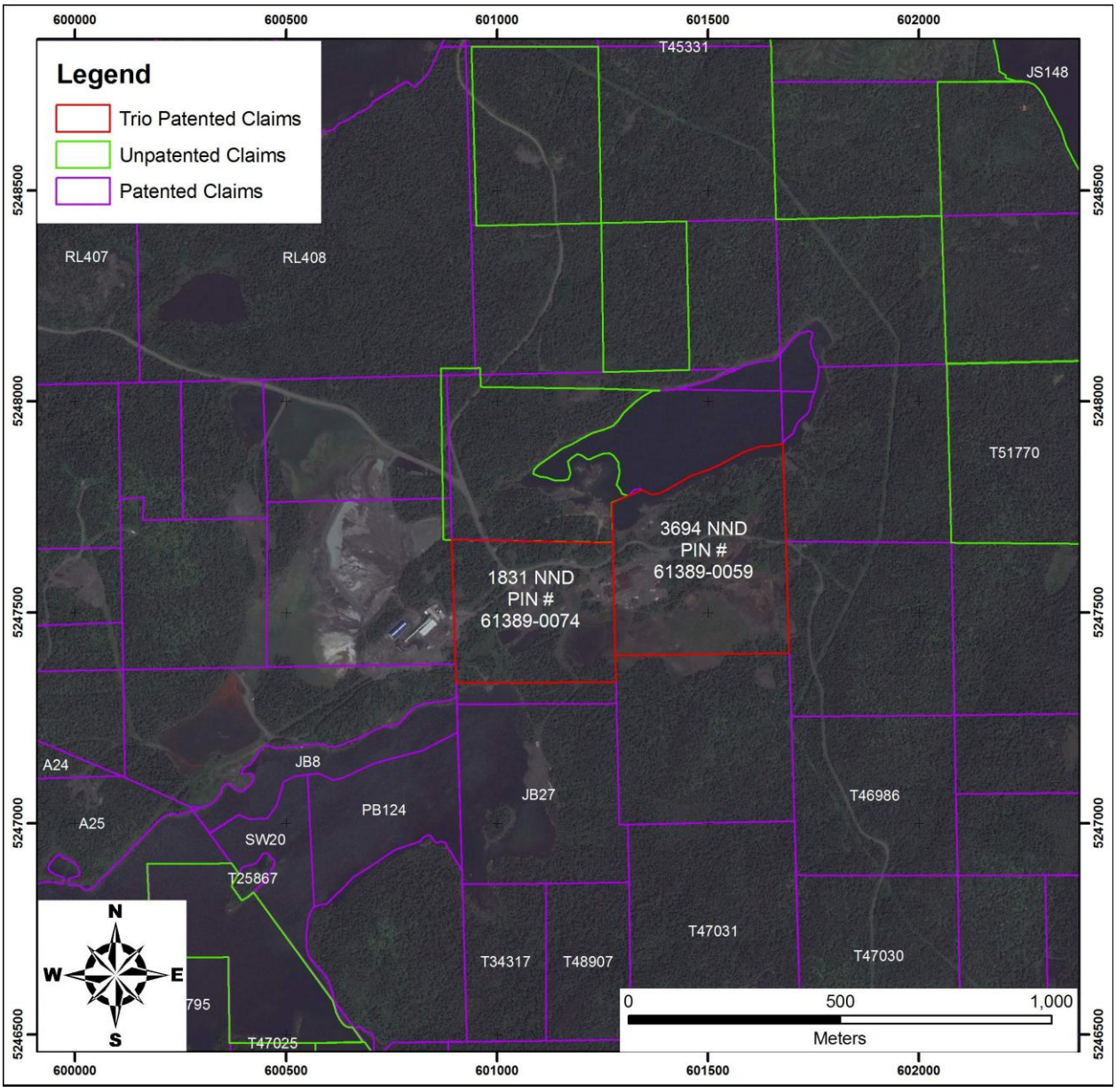

Figure 2: Land Tenure of the Duncan Kerr Property

5.3 Local Resources and Infrastructure

Local resources on the Property consist of an abundance of fresh water, and mixed deciduous and coniferous trees.

Several buildings are present on the Property, including a 4,000 ft^2 partially heated warehouse. The Property is serviced by hydro. Highway 11 is located approximately 10 km to the west of

the Property. Most supplies and services can be found in Temiskaming Shores, Ontario, a city with a population of approximately 10,500.

5.4 Physiography

The physiography is typical of the Precambrian Shield area in northeastern Ontario with general rolling and steep ledges and cliffs with occasional swamps, lakes, and streams. Typical vegetation on the Property consists of a boreal forest with a mixture of coniferous and deciduous trees, including poplars, birch, maple, pine, spruce, alders, and willows. The elevation of the Property is approximately 310 m above sea level and the maximum topographical relief is generally less than 25 m.

6. HISTORY

6.1 Historical Mineral Exploration

Historical exploration in the area of the Property dates back to 1903 with the discovery of silver in Cobalt, Ontario. Silver production of the Cobalt Camp is reported to be 464,853,101 oz (Pressacco, Webster, and Zalnieriunas, 2008).

The Kerr Lake deposit was discovered in 1904, and production commenced in 1905 whereby the Kerr Lake Mine was operated intermittently until it finally closed in 1964. The original Kerr Lake property was comprised of three claims historically referred to as Parcel 1764 NND (under Kerr Lake), 1831 NND, and 4821 NND (referred to as the Kerr Lake fraction). From 1905 through to 1956, 28,502,037 oz of Ag was produced from the three claims (Cunningham, 1963). A total of 8 shafts and were sunk on the Kerr Lake claims, along with one adit that was driven south from the shoreline of Kerr Lake. The main shaft, known as the Number 3 shaft, was sunk to a depth of 550 ft with 9 levels being developed. The underground workings were connected to the Hargrave, Conisil, and Lawson Mines located to the southeast, south, and west respectively.

The Lawson deposit was discovered in 1905 and production commenced at the Lawson Mine in 1909. A total of 4 shafts were sunk on the Lawson claim (Parcel 3694 NND). The deepest shaft, the No 8, was sunk to a depth of approximately 410 ft. All underground workings were

connected and 6 levels were developed. When the mine initially closed in 1919, a total of 4,213,553 oz of Ag had been produced (Cunningham, 1963). From 1922 through to 1944, the Lawson Mine was operated pursuant to several leases. The mine was later re-opened in 1953 and was operated through to 1960 by Silver Miller Mines Ltd. No records of silver production were recorded during this period as the ore was mixed with other Silver Miller ores from the surrounding mines (Cunningham, 1963).

In 1977, St. Joseph Exploration Ltd. constructed the Canadaka Mill on the Lawson claim (parcel 3694NND). It was designed to process up to 500 tons per day, but was estimated to have only processed 350 tons per day. The mill was designed as an ore concentrator by combining gravity and flotation methods to process ore from the company's area mines. The mill was closed in 1980 when the company's mines ceased production.

In 1983, the mill was bought by Sulpetro Minerals Ltd. and was modified to process tailings being mined at the Chambers-Ferland tailings containment area. Milling rates averaged 450 to 500 tons per day. The tailings were deposited to the south of the Main Shaft in a series of three ponds that were formed by damming a small creek flowing from Kerr Lake to Giroux Lake. At the time, the tailings capacity had not been reached and an estimated 500,000 tons of tailings could be added (Anderson, 1993). The mill was later sold prior to Trio's acquisition of the Property.

In 2012, Trio completed 8 short AQ diameter (2.7 cm) diamond drill holes, with the longest drill hole, DK12-07, drilled to a depth of 165.1 ft. The author re-logged four drill holes, DK12-02, DK12-04, DK12-07, and DK12-08 in 2013. No core samples had been submitted for analysis. All four holes that were logged intersected Cobalt series sediments (Figure 5). In diamond drill hole DK12-07, local sections of mineralization consisting of cobaltite +/-silver veinlets up to several mm's in width were intersected. Drill hole DK12-07 was drilled at a vertical inclination, and would have been orientated sub-parallel to the known orientation of the veins on the Property. This is supported by several mineralized fractures that are orientated 0° to the core axis. The diamond drilling program was not conducted to industry standards as outlined by CIM Best Practice guidelines. The author attempted to validate the drill results, and it is the opinion of the author that the results should not be considered reliable.

In 2014, Trio commissioned Golder Associates Ltd. to complete a resource calculation on three above ground stockpiles of crushed rock and mill residual material sourced from the Duncan

Kerr Property (Photos 1, 2, and 3). A total of 6,588 Tonnes grading 761 g/t Ag, 0.08 g/t Au, 0.33% Ni, 0.95% Co, and 5.92% As, was estimated in the indicated category (Thomas, Palmer, 2014)**. The resource estimate is a historical estimate as defined by National Instrument 43-101. . It is important to note that a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and the issuer is not treating the historical estimate as current mineral resources or mineral reserves.There was been no review of the methods and results of this historical resource estimate by a Qualified Person. During the site visit, the author noticed that stockpile A had been moved inside the building, and that stockpile B had been reshaped. Stockpile C was not visited. The authors have not verified the volume or tenure of the stockpiles. No attempt was made to reconcile the Golder Associates Ltd.'s calculations of volume or tenure completed in 2014. Trio has disclosed to the authors that they have spent in excess of $100,000 on the Golder Associates Ltd. Resource Estimate Report and associated work.**

As at the date of this Technical Report, limited historical information was available. It is recommended that on-going efforts be made to locate historical reports that pertain to the Property.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Property is located within the Cobalt Embayment in the Southern Province of the Canadian Shield. Huronian Supergroup sedimentary rocks unconformably overly Archean basement rocks, and are commonly found filling paleo-valleys or troughs in the Archean basement. The Archean rocks are summarized as a steeply dipping sequence of mafic to felsic volcanics, intercalated with cherty and sulphidic interflow sediments, along with intrusions of mafic to ultramafic dykes and sills. Both the Huronian sediments and Archean rocks have been intruded by Proterozoic-aged Nipissing diabase occurring as both sills and dykes (Figure 3).

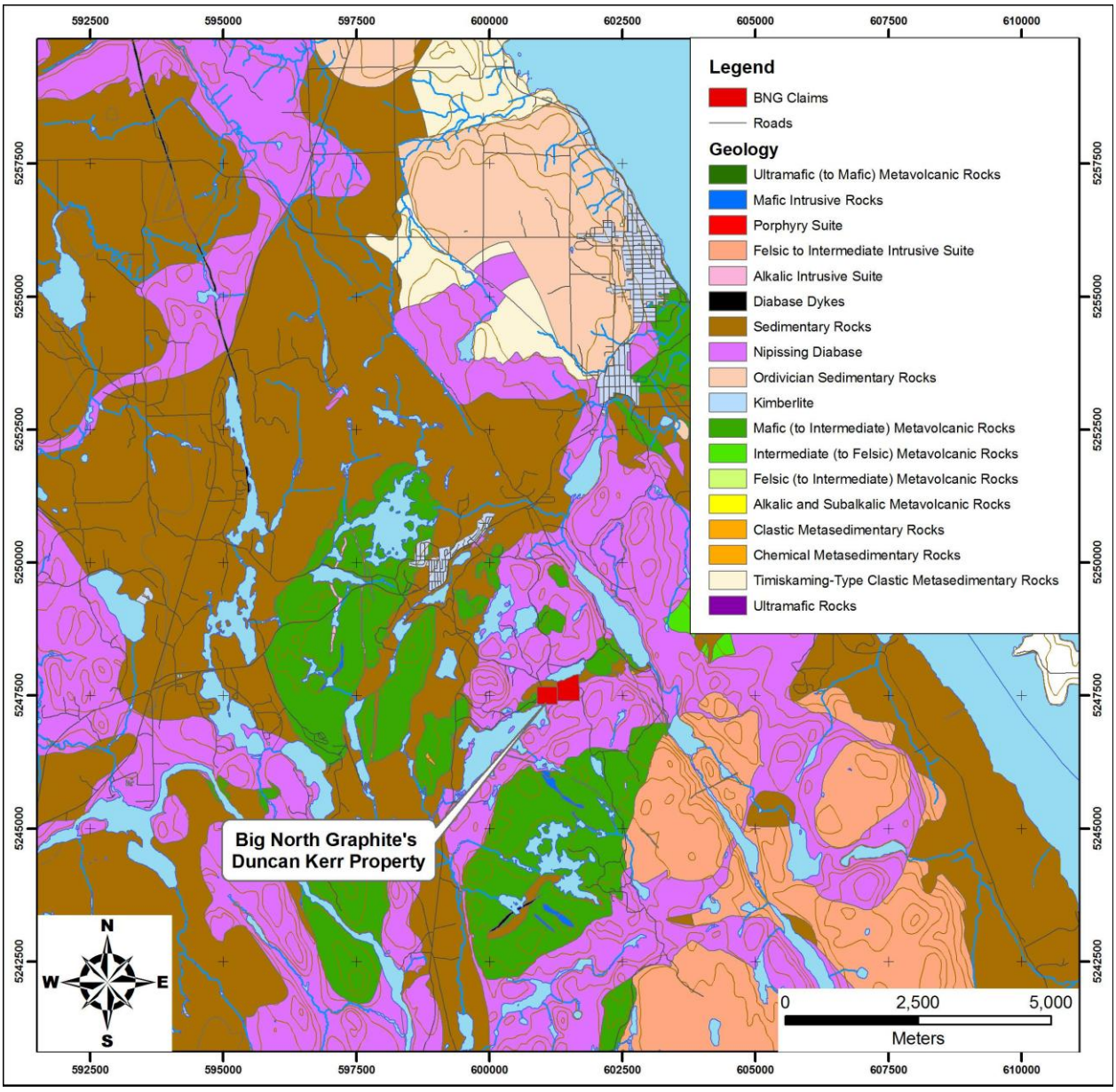

Figure 3: Regional Geology of the Cobalt Area, Ontario (after OGS MRD 282).

7.2 Property Geology

The oldest rocks on the Property are Keewatin-age volcanic rocks that have been overlain by Huronian sediments of Proterozoic age. A large south-southeast dipping Nipissing diabase sill intrudes the Archean mafic volcanics and Huronian sediments. This sill is part of a domed Nipissing diabase sheet that is also exposed to the north of the Property. The current level of erosion has exposed the underlying Cobalt Series sediments and Keewatin volcanic rocks (Figure 4).

Exploration potential exists south of the Kerr Lake Mine where the Huronian/Archean unconformity may exist beyond the mine workings. A review of a north-south orientated long section from an unknown source in the MNDM government assessment files shows a profile through the Kerr Lake Mine. The interpretation of that section has the diabase contact becoming very steeply dipping at approximately 70 degrees south. This may have been inferred or implied from geological observations seen on the 2nd level of the Kerr Lake Mine, but in contrast the diabase contact to the west on the Conisil and Lawson Mines has a generally shallow dipping contact at approximately 20 to 30 degrees south-southeast with local areas where the contact dips steeply over a short strike length. Assuming this is the case south of the Kerr Lake Mine, potential may exist for a southern, relatively shallow-dipping, extension of the Huronian-Archean unconformity or at the Archean-diabase contact. Silver was mined at the Conisil, Lawson, and Kerr Lake Mines within the diabase near the Archean contact.

7.3 Mineralization

Silver mineralization on the Property has been exploited by several mining operations from 1905 through to the 1960's. An estimated 32,715,590 oz of Ag have been produced from the Kerr Lake and Lawson Mines (Cunningham, 1963). The Property encompasses the historical mine workings of the Kerr Lake Mine that lie on Parcel 1831 NND, as well as the historical mine workings of the Lawson Mine on Parcel 3694 NND. There has not been sufficient exploration work completed by Trio or Big North Graphite to describe significant mineralized zones encountered on the Property**.**

8. DEPOSIT TYPES

Most of the silver deposits in the Cobalt Camp are located proximal to the Huronian-Archean unconformity and are spatially associated with the Nipissing diabase sills. The majority of the historical silver production from the Cobalt Camp has been within 200 m of the contacts of the diabase.

The veins hosting the mineralization in the Cobalt Camp are referred to as five-element veins, containing Ni, Co, As, Ag, and Bi. The veins are characteristically open-space filling, and the replacement of wall rock is not extensive. Most veins are directly or indirectly associated with

vertical to sub-vertical fault systems. Veins are commonly completely filled with hydrothermally deposited minerals and pinch and swell from cm to m scale thicknesses.

Mineralization is typically discontinuous along the structure with high-grade ore pockets commonly occurring in the vicinity of vein intersections, or at the intersections of veins with late, shallow-dipping shear zones, and at lithological contacts. Ore minerals occur in a wide variety of forms including massive pods, bands, dendrites, plates, leaves, and zoned rosettes.

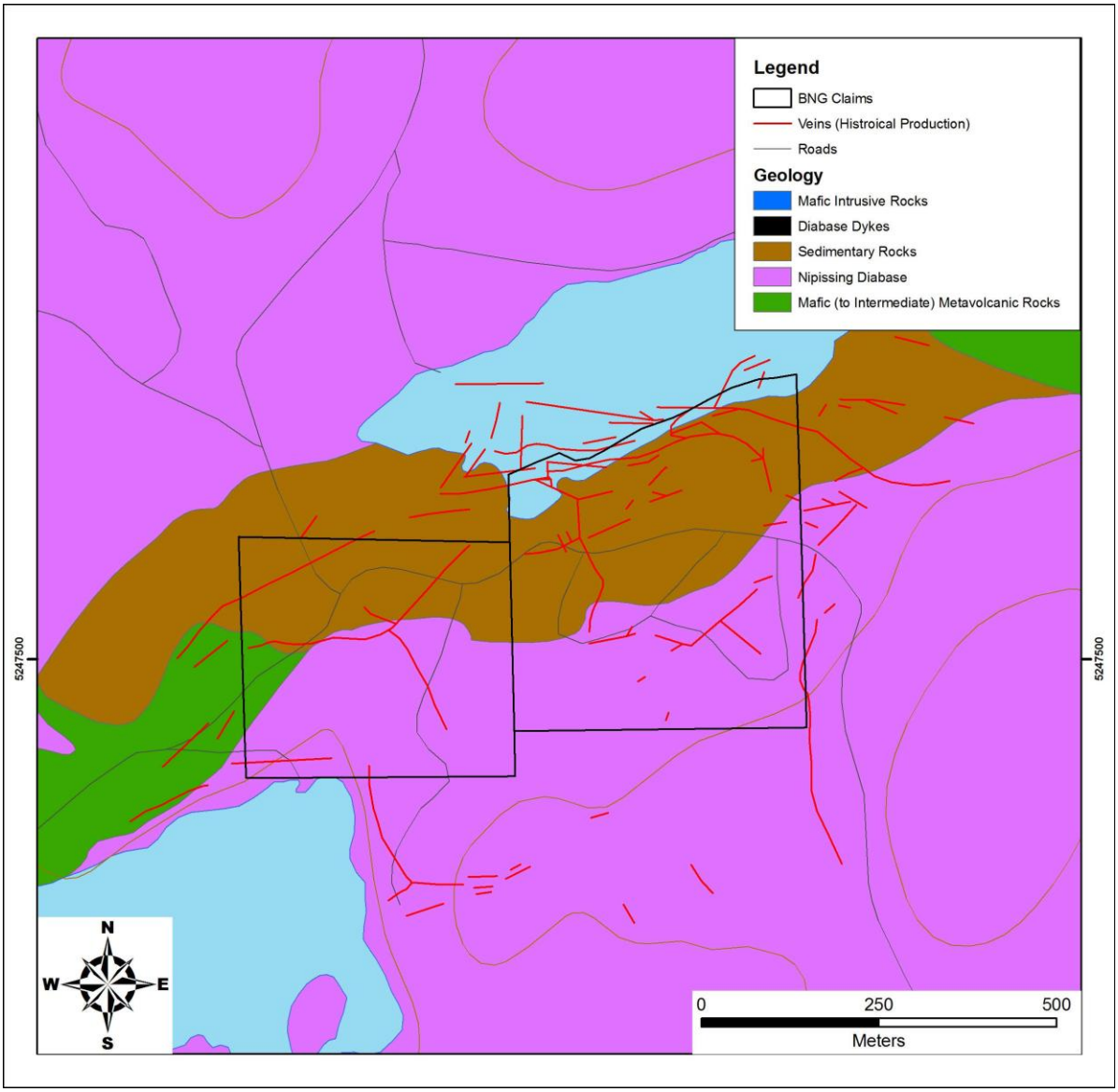

Figure 4: Property Geology with approximate location of historical veins projected to surface (after OGS MRD 282).

9. EXPLORATION

BNG has not completed any exploration activities on the Property.

10. DRILLING

10.1 Historical Drilling

No records of any surface diamond drilling were located from the OGS digital database and through searching through assessment files at the Kirkland Lake Resident Geologist Office. Several underground drill holes were shown on level plan maps.

In 2012, Trio completed 8 short AQ diameter (2.7 cm) diamond drill holes, with the longest drill hole, DK12-07, drilled to a depth of 165.1 ft. No assays were report. In 2013, Mr. Joerg Kleinboeck did review the core in four drill holes, DK12-02, DK12-04, DK12-07, and DK12-08. No core samples were submitted for analysis at the time. The diamond drilling program was not conducted to industry standards as outlined by CIM Best Practice guidelines. At the time, Mr. Joerg Kleinboeck attempted to validate the drill results, and it is the opinion of the author that the results should not be considered reliable.

10.2 Drilling

BNG has not completed any diamond drilling on the Property.

11. SAMPLE PREPARATION, ANALYSES, AND SECURITY

BNG has not carried out any sampling programs on the Property.

12. DATA VERIFICATION

12.1 Historical Data Verification

Historical data verification included a site visit to the former locations of the Kerr Lake and Lawson Mines, as well as the tailings facility. In 2013, the author also reviewed historical maps and reports pertaining to the Property that are located at the Kirkland Lake Resident Geologist Office. The authors believe this information is generally of sufficient accuracy to form the basis of an exploration program on the Property.

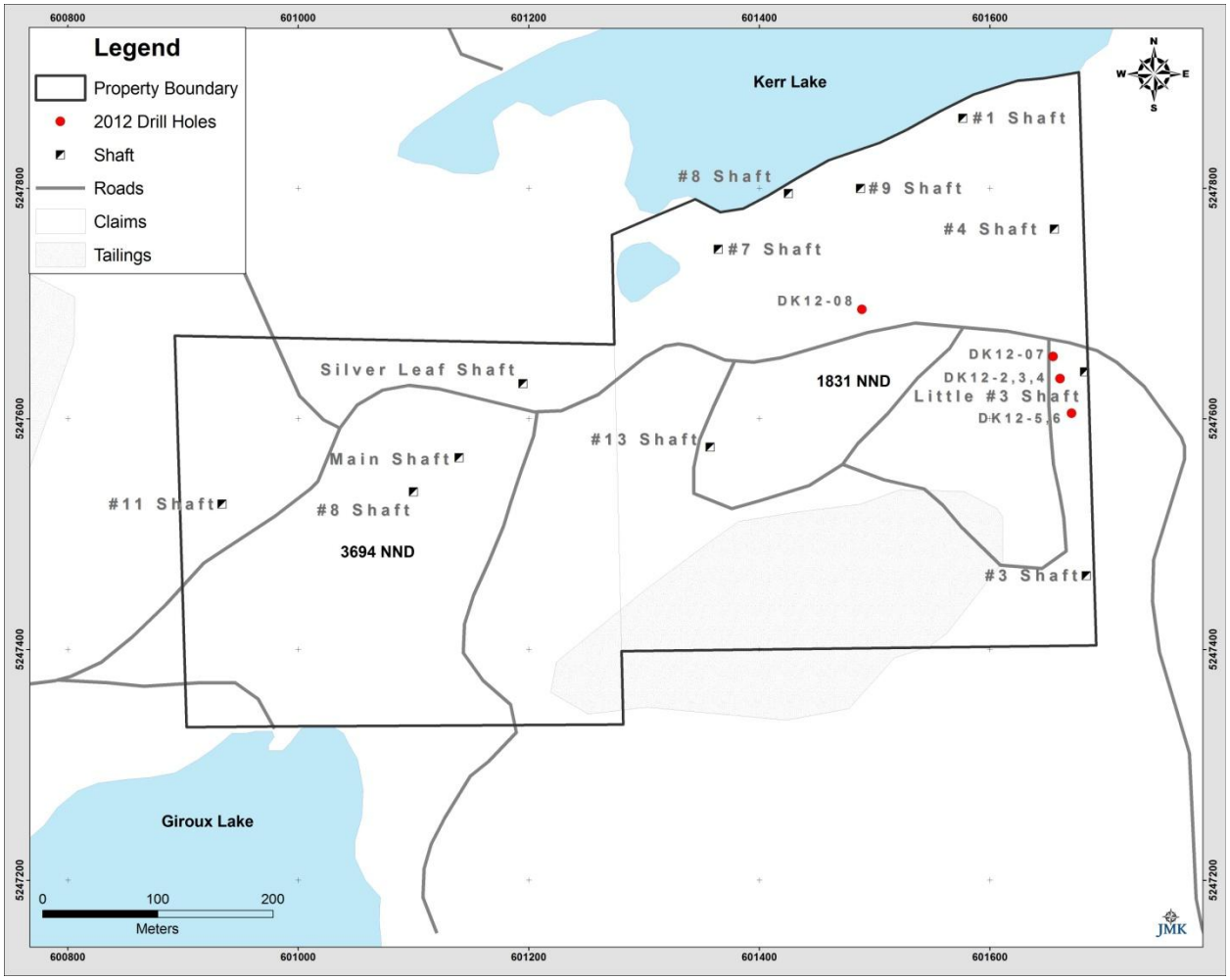

Figure 5: 2012 Diamond drill hole locations.

12.2 Recent Data Verification

The diamond drilling program completed in 2012 by Trio was reviewed by the author in 2013. At the time, the author logged four drill holes, DK12-02, DK12-04, DK12-07, and DK12-08 as part of the technical review at the time. No core samples were submitted for assay. As previously noted, the diamond drilling program was not conducted to industry standards as outlined by CIM Best Practice guidelines. In 2013, the author attempted to validate the diamond drilling results, and it is the opinion of the author that the diamond drilling results should not be considered reliable.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

The Property is at the exploration stage and no metallurgical testing has been carried out.

14. MINERAL RESOURCE ESTIMATES

There has not been sufficient work on the Property to undertake a mineral resource estimate.

15. MINERAL RESERVE ESTIMATES

There is no mineral reserves yet defined on the Property.

16. MINING METHODS

Not applicable.

17. RECOVERY METHODS

Not applicable.

18. PROJECT INFRASTRUCTURE

Not applicable.

19. MARKET STUDIES AND CONTRACTS

Not applicable.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Not applicable.

21. CAPITAL AND OPERATING COSTS

Not applicable.

22. ECONOMIC ANALYSIS

Not applicable.

23. ADJACENT PROPERTIES

The Property hosts parts of the past producing Kerr Lake Mine, and the Lawson Mine, which represent two of the numerous past producing mines that have operated over the past century in the Cobalt Camp. The majority of the mines in the Cobalt Camp contained mineralization similar to that in the Kerr Lake and Lawson Mines.

24. OTHER RELEVANT DATA AND INFORMATION

The author is unaware of any further data or relevant information that could be considered of any practical use in this report.

25. INTERPRETATION AND CONCLUSIONS

Exploration potential exists south of the Kerr Lake Mine where the Huronian/Archean unconformity may exist beyond the mine workings. A review of a north-south orientated long section from an unknown source in the MNDM government assessment files show a profile through the Kerr Lake Mine. The interpretation of that section has the diabase contact becoming very steeply dipping at approximately 70 degrees south. This may have been inferred or implied from geological observations seen on the 2nd level of the Kerr Lake Mine, but in contrast the diabase contact to the west on the Conisil and Lawson Mines has a generally shallow dipping contact at approximately 20 to 30 degrees south-southeast with local areas where the contact dips steeply over a short strike length. Assuming this is the case south of the Kerr Lake Mine, potential may exist for a southern, relatively shallow-dipping, extension of the Huronian-Archean unconformity or at the Archean-diabase contact. Silver was mined at the Conisil, Lawson, and Kerr Lake Mines within the diabase near the Archean contact. For example, the Number 3 vein at the Kerr Lake Mine produced over 3 Moz of Ag and it was hosted in diabase and Archean rocks (Cunningham, 1963).

In regard to the historical resource estimate completed by Golder Associates Ltd., the significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the resource estimate is that there is a possibility that the mineralization within the stockpiles is

not homogeneous or consistent, and additional sampling would be required. As well, there was no attempt made to reconcile the volume or tenure of the stockpiles as reported by Golder Associates Ltd.

26. RECOMMENDATIONS

Subsequent to the research conducted for this Technical Report, and taking into consideration information provided by Trio and BNG, the authors recommend a one phase exploration program:

Phase 1:

1) Creation of a GIS database, including all geological, geophysical and historical information should be completed. This would entail digitization of historical plans and sections, along with the supporting assay data. This will help to assist in the preparation of future work programs along with targeting the most prospective areas on the Property.

3) A surface work program is recommended prior to the commencement of any diamond drilling. This should include geological mapping, prospecting, line cutting, and possible geophysical surveys such as induced polarization, VLF, and magnetometer surveys to assist in identifying diamond drill targets.

4) A 1,500 m diamond drill program is recommended for the Property.

Tables 3 and 4 summarize the budget and recommendations of a one phase exploration program for the Property.

Table 3: Phase 1 Surface Exploration Budget

Personnel costs (GIS compilation)	Unit	Unit cost	Sub-Total
Project Manager/Geologist	10 days	$700/day	$ 7,000
Personnel costs (geological mapping, prospecting)			
Project Manager/Geologist	15 days	$700/day	$10,500
Fixed contract costs	**Unit**	**Unit cost**	**Sub-Total**
Line cutting	5 km	$600/km	$3,000
Magnetometer & VLF Survey	5 km	$400/km	$2,000
Other costs	**Unit**	**Unit cost**	**Sub-Total**
Meals and accommodation	25	$100/day	$2,500
Assays	100	$40	$4,000
Supplies	1	$5,000	$5,000
Reports	1	$6,000	$6,000
		Total:	**$40,000**

Table 4: Phase 1 Diamond Drilling Budget (1,500 m)

Personnel costs (diamond drilling)	Unit	Unit cost	Sub-Total
Project Manager/Geologist	25 days	$700/day	$17,500
Technician	25 days	$300/day	$ 7,500
Fixed contract costs	**Unit**	**Unit cost**	**Sub-Total**
Diamond Drilling (all inclusive)	1,500 m	$85/m	$127,500
Other costs	**Unit**	**Unit cost**	**Sub-Total**
Supplies	1	$5,000	$5,000
Diamond Saw Rental	1 mth	$650	$650
Meals and accommodation	25	$100	$2,500
Assays	250 samples	$40/Sample	$10,000
Report	1	$3,000	$3,000
		Total:	**$ 173,650**

Sub-Total: $213,650
Contingency (10%): $21,365
Total: $235,015

27. DATE AND SIGNATURE PAGE

This report titled “NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario” for Big North Graphite Corp., dated October 14th, 2016, was prepared and signed by the following authors:

Signed by:

“Joerg M. Kleinboeck”

Joerg M. Kleinboeck, P.Geo.

“J. Garry Clark”

J. Garry Clark, P.Geo

28. REFERENCES

Anderson, P. 1993. Cobalt Mining Camp Tailings Inventory, Cobalt, Ontario.

Assessment Files at the Resident Geologist's Office, Kirkland Lake, Ontario.

Ayer, J.A. and Chartrand, J.E. 2011. Geological compilation of the Abitibi greenstone belt; Ontario Geological Survey, Miscellaneous Release—Data 282.

Cunningham, L.J. 1963. Report on the Kerr Lake, Lawson, University, Cleopatra, Silver Hill, and adjoining claims, for Glen Lake Silver Mines Ltd.

http://mindat.org

http://www.trioresources.com

Kissin, S.A., 1993. Five Element (Ni-Co-As-Ag-Bi) Veins, in Ore Deposit Models Vol II., edited by P.A. Sheahan and M.E. Cherry, Geological Association of Canada.

Kleinboeck, J., 2013. NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario, for Trio Resources Ag, Inc.

Knight, C. 1922. Thirty-first Annual Report of the Ontario Department of Mines, Cobalt and South Lorrain Silver Areas, Volume XXXI, Part II.

Ministry of Northern Development and Mines; Geology of Ontario, Assessment File Research Information (AFRI) found at www.geologyontario.mndm.gov.on.ca

Ministry of Northern Development and Mines; Assessment Files at the Resident Geologist's Office, Kirkland Lake, Ontario.

Nichols, R.M. 1988. Archean Geology and Silver mineralization controls at Cobalt, Ontario. CIM bulletin, Vol 81, No. 910.

Ontario Geological Survey, 2006. 1:250,000 Scale Bedrock Geology of Ontario; Ontario Geological Survey, Miscellaneous Release Data 126 revised.

Percival, J.A., Easton, R.M., 2007: Geology of the Canadian Shield in Ontario: An update; Geological Survey of Canada, Open File 5511, Ontario Geological Survey ,Miscellaneous Release Data 216.

Pressacco, R., Webster, C., and Zalnieriunas, R., 2008. Technical Report on the Peterson Lake Property, Coleman Township, Ontario. Prepared for Castle Resources Inc.

Thomas, B, and Palmer, P., 2014. Mineral Resource Estimate of the Duncan Kerr Property Located in Cobalt, Ontario. Report # 13-1118-0049.

CERTIFICATE OF QUALIFIED PERSON

I, Joerg M. Kleinboeck, of 147 Lakeside Dr., North Bay, Ontario do hereby certify that:

1. I am a Consulting Geologist offering geological exploration services to the mineral exploration industry.

2. I hold the following academic qualifications: B.Sc. Geology (2000) Laurentian University.

3. I am a member of the Association of Professional Geoscientists of Ontario (Member #1411).

4. I have worked as a geologist for over 13 years on a variety of exploration properties targeting gold, Ni-Cu-PGE, base metals, diamonds, and industrial minerals.

5. "Technical Report" refers to the report titled “NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario.”, and dated effective October 14th, 2016. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

6. In accordance with section 1.5 of NI 43-101, I am independent of Trio Resources AG, Inc., and Big North Graphite Corp.

7. I have read National Instrument 43-101 and the Technical Report has been prepared in compliance with National Instrument 43-101.

8. I am jointly responsible for sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 25, and 26. I am solely responsible for sections 13 through to 24.

9. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.

10. I last visited the Duncan Kerr Property on September 27th, 2016 for a period of 2 hours.

11. Since 2013, I have occasionally provided geological consulting services to Trio in respect to the Duncan Kerr Property. I have prepared an NI 43-101 report for Trio in 2013. I have also completed GIS data collection and drafting.

Dated this 14th Day of October, 2016

Joerg M. Kleinboeck, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

I, J. Garry Clark, P. Geo. (#0254), do hereby certify that:

1. I am a consulting geologist with an office at 1000 Alloy Dr., Thunder Bay, Ontario.

2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1983. I have been a consulting geologist since 1987 working extensively in Ontario and Quebec but also internationally. I have completed all aspect of gold and base metal exploration from prospecting to resource definition drilling. I have written qualifying property reports for companies such as Rainy River Resources and Parkside Resources.

3. "Technical Report" refers to the report titled “NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario.”, and dated effective October 14th, 2016.

4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0245) and a member Ontario Prospectors Association.

5. I have worked as a Geologist for over 30 years since my graduation from university.

6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.

7. I am jointly responsible for ITEMS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 25, and 26. As a co-author I also reviewed and edited the entire report.

8. I am independent of Big North Graphite, and Trio in regard to transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.

9. I have had no prior involvement with the mineral property that forms the subject of this Technical Report.

10. I have read NI-43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

11. I did not visit the Property.

12. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 14th day of October, 2016.

SIGNED

"J. Garry Clark"

J. Garry Clark, P.Geo.

Appendix I: Purchase Agreement