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2017 REPORT OF WORK

Project 4264812+14

BLACKWELL and LAURIE TOWNSHIP

Douglas Parker (E34247)

November 15, 2017

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SUMMARY

Project 4264812+14 consists of two unpatented claims (TB4264819 and 4264814) located in Blackwell and Laurie Townships.

The Shebandowan Greenstone Belt is a proven gold and massive sulphide producing belt with past producing mines and numerous gold and base metal occurrences.

Previous work in the area indicates a geological environment favourable to hosting gold deposits (Pistol Lake, Bandore Property, Moss Lake Property, Shabaqua area, Dawson Road Lots, Goldie Prospect, Gold Creek Area), the formation of volcanogenic massive sulphide deposits (Bylund, Finmark, Vanguard and Coldstream Properties) and the deposition of magmatic sulphide orebodies (Inco Shebandowan Mine).

The area has been featured by the Resident Geologist Thunder Bay South in Recommendations for Exploration 2016-2017 and Recommended #1 Gold Exploration Target MNDM Regional Till Sampling 1999 (OFR5993).

The property is underexplored, with only a first pass for gold and VMS, yet a significant database exists which demonstrates favourable potential for hosting economic gold, nickel, copper, PGE and zinc deposits.

Excellent access and infrastructure are advantageous for economic and efficient exploration

From May 4, 2017 to November 15, 2017 a program of field work, analytical work, analysis and report writing was undertaken on the property.

This preliminary exploration program consisted of reconnaissance, an orientation geochemical survey and bedrock stripping and sampling. A very limited budget precluded more detailed work at this time.

Results of this exploration program indicate that gold mineralization is widespread in the project area and that good potential exists for significant base metal mineralization particularly associated with exhalative horizons.

Humus Geochemistry appear to effectively indicate gold, arsenic and zinc within bedrock sources.

Altered volcanic, sedimentary and intrusive rocks with extensive alteration and mineralization (ankerite-silicification-sulphide) associated with gold and other metals were observed throughout the extent of the study area.

The report recommends geological mapping and sampling be undertaken. Additional areas should be prioritized for stripping. All stripped areas should be washed, mapped and sampled. Additional geochemical sampling should be undertaken to cover the remainder of the property. Geophysics including Maxmin and IP would provide improved targeting for diamond drilling.

INTRODUCTION:

Project 4264812+14 consists of two unpatented claims (TB4264819 and 4264814) located in Blackwell and Laurie Townships.

The area hosts numerous significant occurrences, deposits and past and present producers of gold and base metals.

The property is under-explored and has excellent potential for hosting economic gold, nickel, copper, PGE and zinc deposits.

From May 7, 2017 to November 15, 2017 a program of field work, analytical work, analysis and report writing was undertaken on the property. The claim holder supervised all aspects of the project and authored this report.

This preliminary exploration program consisted of reconnaissance, an orientation geochemical survey and bedrock stripping and sampling. A very limited budget precluded more detailed work at this time.

LOCATION:

The project is located in the townships of Blackwell and Laurie, 50 km west of Thunder Bay, 2 km west of Shabaqua Corners in the Thunder Bay Mining Division. (See Location Map)

NTS: 52/A12SW
UTM nad83: Zone 16: 284000E, 5386000N

ACCESS:

Access is best achieved via Highway 11 which crosses north of the property and secondary forestry access roads. The current project area is best accessed from Haner Road which connects to a series of forestry access roads crossing the property. (See Reconnaissance Map)

PROPERTY:

The property consists of two unpatented claims (TB4264819 and 4264814)comprising 25 units approximately 400 ha in area. (See Claim Map)

REGIONAL GEOLOGY:

The project area lies within the western extension of the Abitibi-Wawa-Shebandowan subprovince of the Superior structural province of the Canadian Shield. The volcanic-sedimentary units of this belt are bounded to the south by granitic terrain and to the north by the Quetico subprovince.

The volcanic-sedimentary stratigraphy can be subdivided into the Greenwater Assemblage of Keewatin-age (2710-2722 Ma), the Kashabowie Group (2695-2710 Ma) and the Shebandowan Assemblage of Timiskaming-age (2689-2696 Ma). The Greenwater assemblages are interpreted to have island arc and ocean crustal origins. The Greenwaterl assemblage is extensively homoclinal and youngs to the north. The Shebandowan assemblage is composed of alluvial-fluviatile sediments, alkaline volcanics and associated alkaline intrusives.

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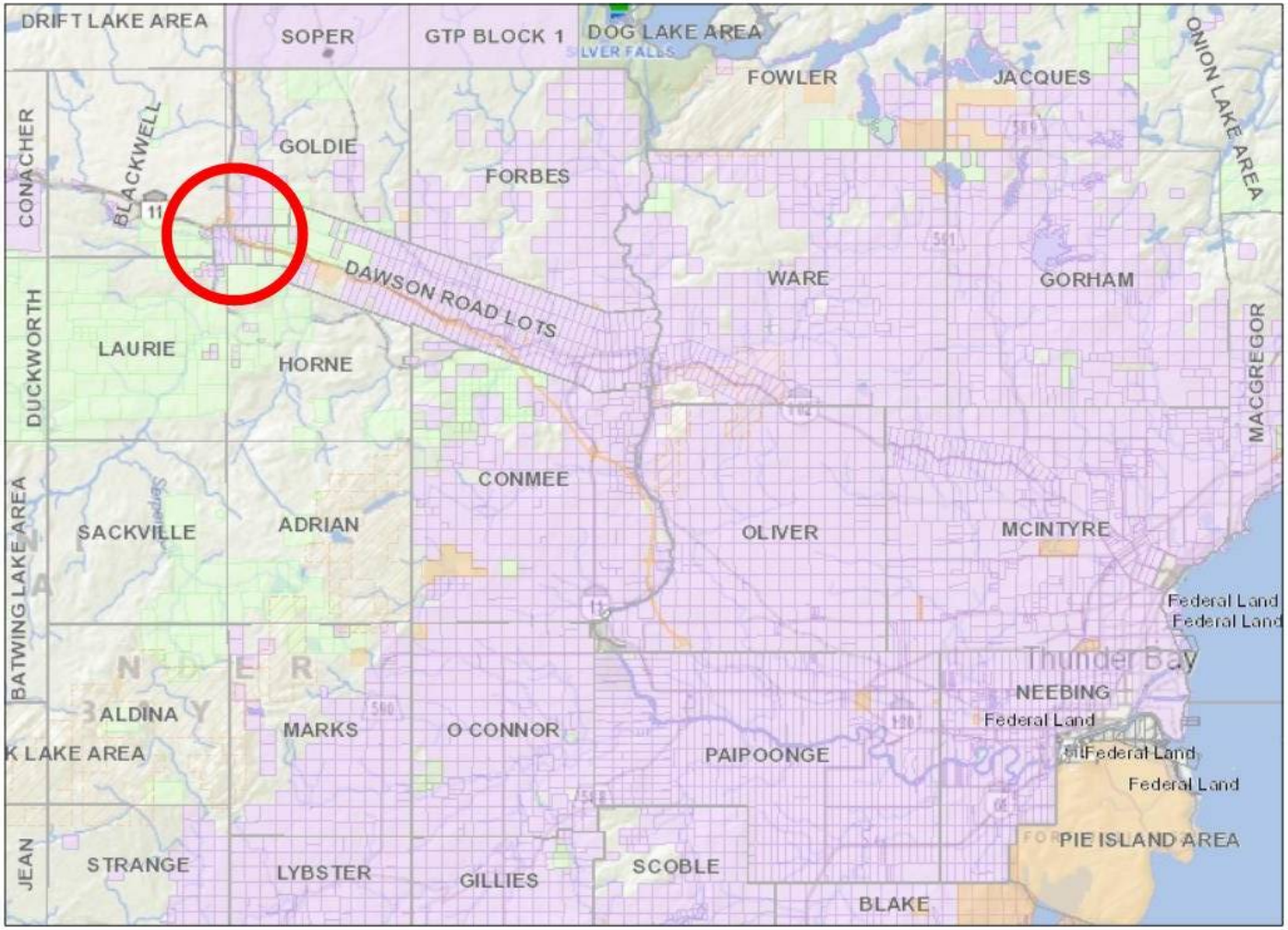
MINISTRY OF NORTHERN DEVELOPMENT AND MINES

CLAIMaps

Notes:

Location Map



Legend

Administration Boundaries
- Mining Divisions
- Resident Geologist District
- Townships and Areas
- UTM Grid
- Geographic Lot Fabric
- Other Federal Land

Mineral Tenure Grid
- OMTG Tenure Grid

Alienations
- Withdrawal
- Notice

Unpatented Claim
- Active
- Reconciled
- Pending

Disposition
- Disposition

Disposition Symbols
- Camp
- Disposition Unknown/Pending
- Freehold Patent Mining Rights Only
- Freehold Patent Surface Rights Only
- Freehold Patent Surface and Mining Rights
- Land Use Permit
- Leasehold Patent Mining Rights Only
- Leasehold Patent Surface Rights Only
- Leasehold Patent Surface and Mining Rights
- License of Occupation Mining Use Only
- License of Occupation Surface Use Only
- License of Occupation Surface and Mining Rights
- License of Occupation Uses Not Specified
- Order in Council
- Tower
- WPLA

Geology Layers
- AMIS Sites
- AMIS Features
- Drill Holes
- Mineral Occurrences

0 15.85 km

Projection: Web Mercator

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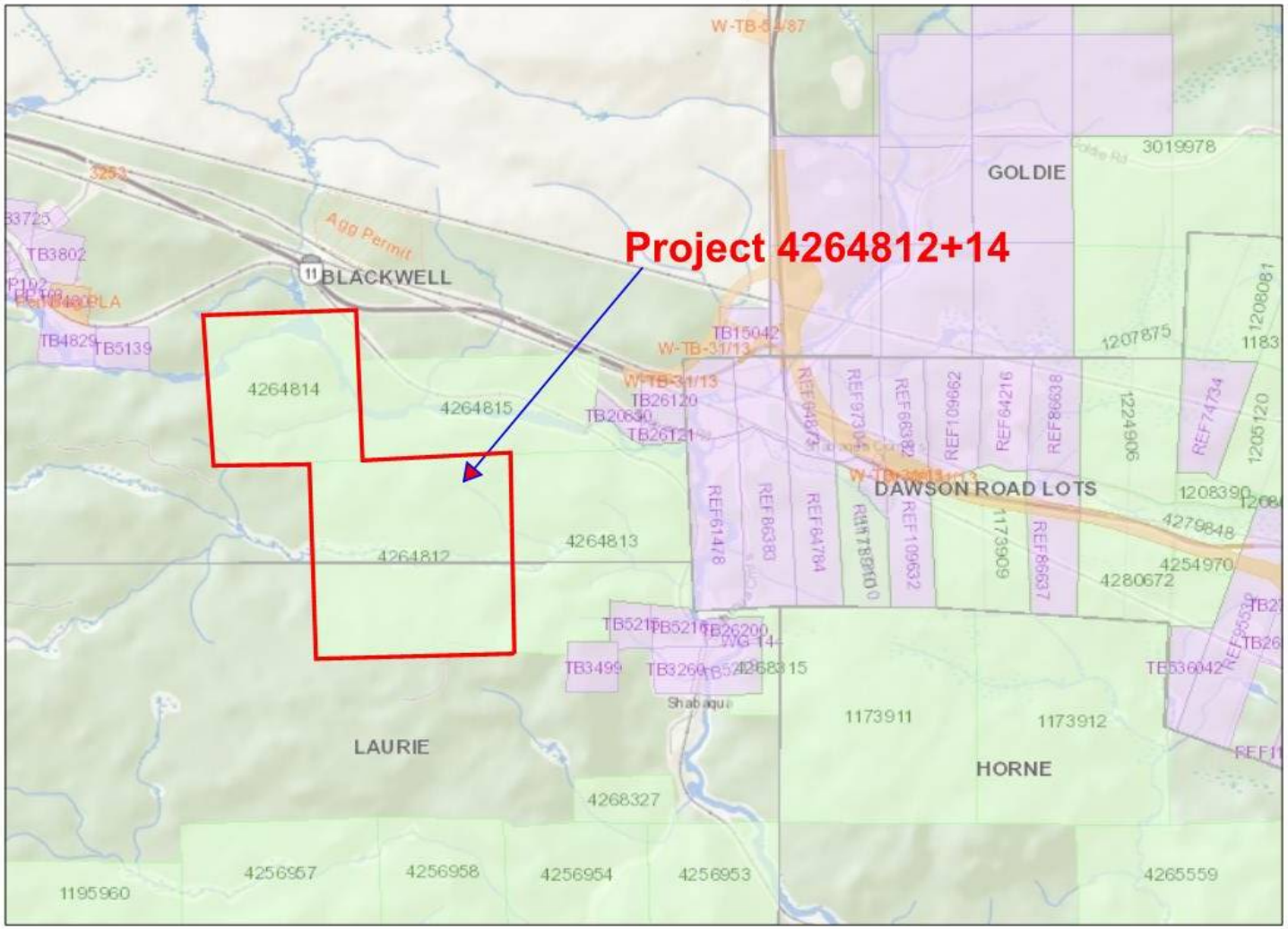
Ontario

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
CLAIMaps

Notes:

Claim Map

Project 4264812+14



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0 2.43 km

Projection: Web Mercator

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The Timiskaming units occupy fault bounded basins within the Keewatin stratigraphy which are interpreted to have formed during regional transpressional deformation at 2700 Ma. Two major regional breaks, the Crayfish Creek and Postans Lake faults, extend in an east west direction across the belt, and define in part major unconformable contacts between Timiskaming and Keewatin assemblages. A third major regional break, the Tinto Lake Fault, extends in a northeast direction across the belt, and defines in part a major unconformable contacts between Timiskaming and Keewatin assemblages.

The Quetico subprovince occurs to the north and consists of a monotonous sequence of turbidites ranging from conglomerate to greywacke to argillite.

Regional metamorphic grade is lower greenschist facies with higher grades up to lower amphibolite facies occurring proximal to intrusive contacts.

This portion of the belt exhibits strong similarities to the Val d'Or, Timmins and Kirkland Lake areas both in geological and tectonic evolution. Geological models based upon the gold deposits related to the Timiskaming environments of the Abitibi are being used as effective guides for exploration in the Shebandowan area. Since the mid 1980's, over 100 new gold occurrences have been discovered in the belt, mostly as a result of surface prospecting, which has brought to light the potential for additional gold discoveries and illustrates the relatively unexplored nature of the belt. The identification of this Timiskaming-type of geological setting and related gold mineralization has resulted in the area being re-named the Matawin Gold Belt by government geologists (Lavigne and Scott, 1994).

MODEL OF GOLD MINERALIZATION:

The Shebandowan area exhibits many of the important elements of a distinct class of gold deposits found within the Abitibi belt. The main characteristics of these gold deposits are their close spatial association with Timiskaming aged felsic to intermediate stocks and dykes, Timiskaming type fluvial-alluvial sedimentary and volcanic rocks, which have intruded 25 to 35 Ma older rocks in unconformable contact along major fault zones. Gold ore bodies occur within composite stocks or along their margins (Beattie, Young-Davidson), adjacent satellite dykes and sills (Ross, Douay No 531, Holt McDermott South zone), and along faults and lithological contacts away from the intrusions (Lightning zone, Douay No. 68) commonly with mafic to ultramafic volcanics and graphitic argillites. Orebodies in such positions are interpreted to represent proximal to distal components of large magmatic hydrothermal systems (Robert, 1997). Ore bodies consist of disseminated sulphides with variably developed stockworks of quartz-carbonate-albite +/- K-feldspar veinlets, within zones of carbonate, albite, sericite and locally K feldspar alteration.

Examples of gold deposits from the area that fit this model include the Pistol Lake Property located 22 km to the west of the project area, the Bandore property 17 km to the west, the Gold Creek Property 13 km to the south and the Tower Property 16 km to the east.

A well-defined model of Archean gold deposits has been developed that has application to this area and is described as follows in "Discover Prospecting an introductory prospecting manual" available from the Ontario Prospectors Association.

The statement "gold is where you find it", has a significant amount of validity. Gold in Archean terrain can be found in virtually any rock type.

Gold is either "primary" that is part of the original rock or "secondary" that is that gold has been added or concentrated in a rock later. Often it is some combination of primary concentration and secondary enrichment that results in the development of significant gold mineralization.

The most favourable host rocks for gold mineralization occur within greenstone belts and include iron-rich rocks such as magnetite-rich iron deposits, gabbros and mafic volcanic rocks. The sulphur in the

hydrothermal solutions reacts with the iron in the rocks to form iron sulphide minerals, such as pyrite. This process stimulates the precipitation of gold, which commonly coats or "plates" the pyrite crystals. Ultramafic, magnesium-rich rocks and carbon-rich, graphitic rocks are also good chemical traps for vein minerals such as gold-bearing veins. Other rock types, such as intermediate to felsic, igneous intrusive rocks, are also closely related to vein deposits. These intrusive rocks may have been sources for hydrothermal fluids that escaped from the intrusions as they cooled and transported minerals and elements into open fractures. This may explain why many vein deposits are spatially associated with intrusive igneous rocks. Many gold vein deposits, for example, occur at or near the margins of felsic intrusions and silver vein deposits are closely related to intrusions of diabase.

Secondary enrichment is almost always a major characteristic of economic Archean gold deposits. Three important factors are often present in secondary enrichment of gold: deformation of rocks (folding and fracturing); hydrothermal processes; and vein development.

The term "hydrothermal" means "hot water". Hydrothermal solutions originate from the dehydration of rocks during compaction and metamorphism; and from cooling, igneous intrusions. The water (seawater, groundwater, rainwater) may also originate on the Earth's surface but percolates downwards into the crust where it is heated and circulated. These fluids are highly mobile and chemically reactive, making them excellent solvents for metals and minerals. Open fractures and porous rocks allow the passage and circulation of these solutions. Vigorous chemical reactions occur between the fluids and minerals in rocks that are exposed along the walls of the fractures. These chemical reactions change the composition of the rocks and the fluids. When the composition of the hot solutions are changed their ability to transport dissolved elements quickly diminishes and metals and minerals are precipitated and deposited in the open fractures. Mineral fillings in open fractures or veins are typical hydrothermal mineral deposits. A typical vein is a mineral deposit which has filled an open fissure solidly from wall to wall. Veins usually have sharply defined boundaries but there may be a complete gradation from the vein into the surrounding wall rocks. The shape and physical character of a vein depends upon the type of fissure it has filled, such as an opening formed by structural deformation, or an original opening in the rock. Veins may be any size and form; they can be found in any rock type; and they may be composed of only one type of mineral or extensive assemblages of minerals. The majority of veins are dominantly composed of quartz and/or carbonate minerals with a wide variety of accessory minerals. Mineralization may be evenly distributed throughout the veins; concentrated along vein-wall rock contacts; or concentrated around rock fragments in the vein. Some mineralization may also extend outwards from the vein into the surrounding wall rocks. Replacement deposits are formed by the deposition of abundant vein minerals in the wall rocks without the formation of veins.

Veins represent mineral fillings of open spaces in rocks. Therefore, they are very closely associated with strongly deformed rocks. Most veins occur in very structurally complicated deformation zones and tectonic breaks that provide an abundance of open spaces for vein development. Veins may be associated with small-scale faults, shear zones, folds structures and fracture systems or large deep-seated fracture and fault systems developed during regional earth movements.

The composition of rocks localize deformation zones and specific types of structures. Felsic rocks, iron formation and small igneous intrusions commonly host fracture systems and brecciated zones. Mafic and ultramafic rocks host shear and fracture zones. Rock contacts between different rock types are also the site of deformation due to the contrast in composition between the rocks.

Vein systems are usually tabular, sub-vertical, structures. The thickness of a vein system is commonly measured in metres and its strike and dip dimensions measured in tens or hundreds of metres. The economically valuable part of the vein may be considerably smaller than the vein itself because the majority of veins are not evenly mineralized. The vein system may also be part of a larger structure consisting of a system of separate shear zones each hosting their own vein systems.

Vigorous chemical reactions occur between hydrothermal fluids and wall rocks as the fluids circulate through open spaces. These chemical reactions promote the precipitation of minerals from the solutions

and change the mineralogical and chemical composition of the wall rocks. The chemical reactions commonly remove and/or add elements to the rocks resulting in the destruction of pre-existing minerals and the formation of new minerals. This effect is called wall rock alteration, which accompanies all mineral deposits formed by hydrothermal fluids. Wall rock alteration is readily visible to the eye and commonly results in discolouration of the rocks and the growth of new minerals. It can also change the physical properties of rocks and make them harder or softer.

In a simple fissure vein the alteration extends parallel to the walls of the fissure and forms an alteration halo around the vein. The halo is relatively uniform in width but can vary according to the size of the vein, or the intensity/amount of fluid movement. If the veins are closely spaced, the alteration halo of one vein may merge with the halos of other veins. The alteration may also be very extensive and widespread affecting a large area of rocks. The type, extent and intensity of the alteration depends upon the chemical, composition of the wall rocks and solutions; temperature and pressure of the mineralizing solutions; the amount of solutions involved; and the size of the open spaces. Rocks that are easily altered, such as mafic and ultramafic rocks, will exhibit intense and extensive alteration. The reverse is true for less chemically reactive rocks, such as felsic, silica-rich rocks. Large structural systems that allowed the passage of enormous quantities of solutions will host extensive vein systems with widespread alteration.

Many vein systems are relatively small and difficult to locate, therefore, recognizing wall rock alteration is important. The alteration that surrounds a vein system may be much more extensive and widespread than the smaller vein system. Therefore, recognition of rock alteration may lead a prospector to the mineralized veins.

Wall rock alteration is not only associated with veins, but occurs with any mineral deposits formed by the circulation of hydrothermal fluids in rocks. Below are descriptions of the more common types of wall rock alteration.

Carbonatization: This involves the formation of carbonate minerals (calcite, ankerite, dolomite) in the wall rocks. This alteration "bleaches" or discolours the rock and gives it a distinctive orange-brown appearance on weathered surfaces and a pale grey or buff colour on fresh surfaces. Small crystals or "rhombs" of carbonate can sometimes be seen in the rocks. Carbonatization is most well developed in intermediate to mafic and ultramafic rocks.

Chloritization: This is the formation of abundant dark green chlorite in wall rocks due to enrichments in magnesium (Mg). Chloritized rocks are soft dark green and schistose. Chloritization is associated with carbonatization and is usually well developed in mafic rocks. It can also occur in very felsic rocks such as rhyolite.

Albitization: This is the formation of albite feldspar in wall rocks due to enrichments in sodium (Na). Albitized rocks are mottled white to grey and may contain small laths of secondary feldspar.

Epidotization: This is caused by the pervasive enrichment of epidote in wall rocks. Epidotized rocks are pale apple green and can be extremely hard with conchoidal fractures. Epidotization is most prominently developed in intermediate to mafic rocks.

Potassic Alteration: This type of alteration is caused by the enrichment of potassium (K) in wall rocks. Minerals that contain high amounts of potassium such as biotite mica, sericite mica and potash feldspar are abundant in potassium-enriched rocks. Rocks containing abundant, fine-grained, biotite may be schistose with a shiny, purple-brown tinge on weathered surfaces. Sericite is very fine-grained, muscovite mica, which is very white and shiny giving the altered rock a platy, schistose texture. Rocks enriched in potash feldspar are commonly pink or pink-orange and may contain laths of feldspar.

Sericitization: As mentioned above, sericitization is a result of potassium enrichment forming sericite mica. Sericite is commonly accompanied by quartz and pyrite. If the sericite is enriched in chromium it

becomes a bright emerald green and is known as fuchsite or mariposite. Sericitization commonly occurs in felsic and sedimentary rocks while green sericite forms in mafic, ultramafic and felsic rocks. Green sericite is commonly associated with carbonate.

Silicification: This alteration occurs when there is a major enrichment of silica (SiO_2) in the wall rocks. Silicified wall rocks are very quartz-rich; have a cherty, porcelain or dull lustre; and are very hard with a conchoidal fracture. Silicification can occur in any rock type.

Sulphidation: This alteration consists of the development of iron sulphides (pyrite, arsenopyrite) in wall rocks due to the addition of sulphur to the iron-rich rocks. The sulphur combines with iron released during the decomposition of iron-rich minerals and forms iron sulphides. Sulphidation commonly occurs in iron-rich, mafic rocks and iron formation.

Many other types of alteration can occur, such as tourmalinitization (development of tourmaline due to enrichments in boron); dolomitization (addition of magnesium to limestone forms dolomite); garnetization (abundant garnet developed in an altered rock). Enrichments of aluminum in rocks commonly form assemblages of aluminum silicate minerals, such as andalusite, sillimanite and kyanite. Other minerals such as biotite, cordierite, chloritoid staurolite and anthophyllite may be formed by the metamorphism of altered rocks with enrichments of aluminum iron and magnesium.

Gold has been mined in various locations across Ontario including Red Lake, Hemlo, Pickle Lake, Beardmore, Geraldton, Kirkland Lake and Timmins. The gold deposits at Timmins, Kirkland Lake, Hemlo and Red Lake are famous world class ore bodies that have produced gold for many years. The Dome Mine in Timmins, for example, has produced gold for over 100 years..

REGIONAL VOLCANIC HOSTED BASE METAL DEPOSIT MODEL (modified from Discover Prospecting)

Mineral concentrations in volcanic rocks are formed by the discharge of hot, hydrothermal Solutions onto the seafloor. Metal-rich, sulphide minerals precipitate from the solutions and accumulate amongst volcanic and sedimentary rocks. These deposits form disseminated, semi-massive and massive, lens-shaped bodies of volcanogenic massive sulphides (VMS) which are a major source of copper, zinc, lead, silver, gold and minor amounts of tin, cadmium, antimony and bismuth. The typical economic deposit consists of several individual massive sulphide lenses that contain 1 to 10 million tonnes of ore grading 2% to 10% combined Cu, Zn and Pb. The largest deposits contain in excess of 100 million tonnes of ore. Deposits tend to occur in clusters and individual deposits occur within a single, specific sequence of rocks.

Massive sulphide deposits form in areas of underwater volcanic activity where seawater is drawn down through fractures in volcanic rocks and heated by cooling igneous intrusions beneath the seafloor. The heated seawater circulates through fractures and reacts with the rocks, leaching out metallic elements. Continued heating causes the solutions to circulate upwards along fractures. The solutions eventually pour out into the sea where metallic sulphide minerals precipitate from the solutions on or near the seafloor (Figure 2).

The form of the massive sulphide deposits range from steep-sided cones to flat, tabular, sheets that accumulate in deep water on the flanks of felsic, volcanoes or in topographic depressions (Figure 3). The most common metallic mineral in a massive sulphide lens is pyrite accompanied by pyrrhotite, chalcopyrite, sphalerite and galena. Chalcopyrite content decreases upward and outward from the base of the massive sulphide lens. A thinly bedded unit of iron-rich chert commonly overlies a sulphide deposit and may extend laterally away from the deposit. In some cases, the massive sulphides are spatially associated with magnetite-hematite and pyrite-pyrrhotite iron deposits (Figure 4).

Volcanogenic massive sulphides can be divided into two types: 1) a Zn-Pb-Cu type associated with intermediate to felsic volcanic flows, felsic quartz-and quartz-feldspar porphyries, felsic pyroclastic rocks

and fine-grained sedimentary rocks; and 2) a Cu-Zn type associated with mafic, volcanic flows and fine-grained sedimentary rocks (Lydon 1984). Deposits of the Cu-Zn type occur where the rocks below the deposit consist of mafic volcanic rocks or their direct sedimentary derivatives, whereas deposits of the Zn-Pb-Cu type occur where the rocks below the deposit consist of felsic volcanic rocks or fine-grained, shaly sedimentary rocks.

Massive sulphide deposits are commonly underlain by a wide and extensive alteration zone (Figure 4) found in rocks that lie below the ore body (footwall rocks). Hot solutions that deposited the sulphides on the seafloor circulated through the rocks and chemically changed them by adding or removing elements during vigorous chemical reactions that occurred between the rocks and the solutions. Most footwall rocks beneath a massive sulphide lens are enriched in magnesium (Mg), iron (Fe), silicon (Si), potassium (K), copper (Cu) and zinc (Zn) and depleted in sodium (Na) and calcium (Ca). The altered rocks contain large amounts of minerals that would not normally occur in unaltered rocks, such as chlorite, sericite, biotite, talc, quartz, iron carbonate and disseminated sulphides. If the altered rocks are metamorphosed they may contain unusual concentrations and assemblages of very coarse-grained minerals, such as anthophyllite, kyanite, cordierite, sillimanite, staurolite, garnet, biotite and sericite. The occurrence of such minerals serves as guides to exploration for volcanogenic massive sulphide deposits.

Volcanogenic massive sulphide deposits occur across Ontario and are mined at the Kidd Creek Mine at Timmins; the Winston Lake Mine near Schreiber; and the Geco Mine at Manitouwadge. Past producers are the South Bay Mine near Red Lake; the Mattabi and Lyon Lake mines near Ignace; and the Temagami Mine at Temagami Lake.

Volcanogenic massive sulphide deposits are found at the Vanguard Property 38 km to the west and were mined at the Coldstream Mine 49 kilometres to the west. The Winston Lake Mine near Schreiber and the Geco Mine at Manitouwadge are both hosted in stratigraphy contemporaneous and comparable to the Burchell Assemblage crossing the Project Area.

REGIONAL MAFIC INTRUSION HOSTED BASE METAL DEPOSIT MODEL (modified from Discover Prospecting)

This Project hosts a geological environment that is similar to many Cu-Ni-PGE mining camps.

A well-defined model of magmatic sulphide deposits has been developed that has application to this area and is described as follows in “Discover Prospecting an introductory prospecting manual” available from the Ontario Prospectors Association.

Iron-nickel-copper sulphide deposits, platinum and chromium deposits are characteristically associated with mafic and ultramafic igneous rocks.

The iron-nickel-copper sulphide deposits consist of massive, semi massive and disseminated pyrrhotite, pentlandite (nickel sulphide) and chalcopyrite (copper sulphide); and contain variable amounts of cobalt, platinum group elements, gold and silver. The deposits generally occur at the base of irregular gabbro intrusions, but may be found in ultramafic intrusive lenses or extrusive flows. The sulphides may also be concentrated in shear zones, and faults within the intrusions or may occur as veins or lenses in country rocks adjacent to the intrusions. Examples of significant iron-nickel-copper sulphide deposits in Ontario are: the complex and enormous deposits at Sudbury; the Shebandowan and Great Lakes Nickel deposits near Thunder Bay; and the Gordon Lake Mine at Rex-Werner lakes north of Kenora.

Chromium and platinum deposits occur in **layered**, sill-like or funnel-shaped, mafic to ultramafic **intrusions**. The layering consists of different rock types formed when various minerals are concentrated and segregated into layers as the intrusion crystallizes. The intrusions consist of layers of ultramafic rocks at the base with more felsic, granitic layers at the top. Individual layers may be a few centimetres to hundreds of metres thick. The chromium and/or platinum mineralization is commonly concentrated in ultramafic, peridotite layers that are rich in olivine. The deposits form tabular, parallel layers with

remarkable lateral continuity. Chromite forms semi massive or massive chromitite seams that contain no sulphide minerals. Platinum group elements are also associated with sulphide minerals (pyrrhotite, chalcopyrite, pentlandite) that comprise less than 5% of the rock. Chromium deposits may also occur as intensely deformed pods or lenses of mineralization in highly deformed and altered ultramafic rocks. The ultramafic rocks are commonly serpentinized sheared and faulted.

Chromium deposits are known to occur in intrusions at Puddy, Obonga and Shebandowan lakes and in the Crystal Lake Gabbro near Thunder Bay; in the Big Trout Lake layered intrusion north of Pickle Lake in Northwestern Ontario; and in the Rex-Werner lakes area north of Kenora.

Platinum is produced at Sudbury and occurs in the Lac Des Illes Intrusion north of Thunder Bay; in the Big Trout Lake Intrusion; and in the Rex-Werner lakes area. Platinum is found in very low or anomalous amounts in many ultramafic intrusions throughout Ontario.

Nickel, Copper, Au and PGE mineralization was mined at the Shebandowan Mine 24 km to the west. A significant Chromium resource was also outlined at the Shebandowan Mine.

PROPERTY GEOLOGY:

The project area is underlain by Archean supracrustal rocks of the Shebandowan greenstone belt.

The supracrustal rocks strike east-west with subvertical dips and form an apparent homoclinal sequence which youngs to the north.

A mixed stratigraphic sequence of Keewatin units (Kashabowie Group) composed of ultramafic to felsic volcanic and intrusive units with narrow chemical and clastic sedimentary units including graphitic argillites, iron formation, chert and sulphidic exhalites occurs in this area. Composite intrusive units intrude the supracrustals.

A pull-apart Timiskaming-like basin occurs to the north of the Keewatin stratigraphy and is composed of clastic sedimentary units (Shebandowan Assemblage).

Deformation zones cross the property with various orientations.

All rock units have been subjected to regional progressive greenschist facies metamorphism.

PROPERTY MINERALIZATION:

1) Gold Mineralization:

Gold mineralization is associated with a series of deformation zones and favourable stratigraphy interpreted and observed to cross the property.

Sericite and carbonate altered volcanic rocks and graphitic argillites occur with sulphide mineralization extensively throughout the property.

Three gold occurrences have been identified on the property:

The Kasper Occurrence hosts assays up to 17.8g/T Au and visible gold associated with quartz veining, iron formation, intrusive units and arsenopyrite. The zone is exposed in 1940's vintage trenches over a strike length of about 600 metres. A series of stripped areas were prepared during this project to improve exposure and facilitate sampling.

The Creek Zone has returned assays up to 11.4 g/T Au in surface exposures and 2.27 g/T Au over 9.13 metres in drilling. Sulphidic exhalites with massive sulphides are inferred by geophysics as occurring over a strike length exceeding 1km.

The South Zone was intersected in a single drill hole testing a 2 km long geophysical anomaly. Sulphidic exhalite with ankerite stringers returned 0.34 g/T Au over 10.75 metres. The zone is exposed in 1980's (?) vintage trenches over a strike length of about 200 metres. A small number of rock samples were analysed during this program which confirm the presence of gold and favourable geology.

Three gold occurrences occur immediately east and north of the property:

The Wedge Zone returned values up to 14.5 g/T Au in surface float and 0.28 g/T Au over 9.5 metres along a strike length of 185 metres as tested by 5 drill holes. The mineralization occurs in carbonate altered ultramafic and alkali units with arsenopyrite.

The Quartz Float occurrence area includes intensely deformed (brittle ductile) and altered (sericite carbonate) volcanic and sedimentary units that occur with extensive komatiitic units. Gold in soil and rock float assay up to 6.2 g/T Au.

The Shabaqua Occurrence is a shear zone in volcanics with anomalous Au, Cu and Zn exposed in old pits as sampled by OGS geologists.

Many significant Gold Prospects are located proximal to the property: Goldie Prospect (Main and Shepherd Zones) is located 5 km to the east, Pistol Lake Property located 22 km to the west of the project area, the Bandore property 17 km to the west, the Gold Creek Property 13 km to the south and the Tower Property 16 km to the east.

2) Base Metal Mineralization:

Felsic volcanic stratigraphy with sulphide bearing exhalite indicates high potential for VMS mineralization on the property.

Extensive Cu and Zn in soil anomalies have been identified in previous soil surveys with zinc anomalies identified in the current program.

Massive sulphide horizons have been intersected in drilling.

Numerous conductive anomalies are likely associated with sulphidic exhalites predominantly graphitic chert argillites.

Regionally, volcanogenic massive sulphide deposits are found at the Vanguard Property 38 km to the west and were mined at the Coldstream Mine 49 kilometres to the west both of which are interpreted to occur in the Kashabowie Group being the same stratigraphy as this property.

The current program returned significant zinc in humus and copper-zinc associated with exhalite horizons.

3) Magmatic Ni-Cu-PGE

Ultramafic units interpreted as the strike extension of the Shebandowan Mine stratigraphy cross the property.

Nickel, Copper, Au and PGE mineralization was mined at the Shebandowan Mine 24 km to the west. A significant Chromium resource was also outlined at the Shebandowan Mine.

PREVIOUS WORK:

1956, Three Brothers Mining drilled five holes for 725 metres north of the Shebandowan River.

1962, Falconbridge Nickel Mines drilled a single 198 metre hole (F-I) in 1956, north of the Shebandowan River.

1976, Noranda completed geological mapping, magnetic surveys, electromagnetic surveys using the CEM system and soil geochemical survey with samples analysed for Cu and Zn. -

1983, Lacana Mining Company carried out geological and a VLF–EM survey. -

1984, Corporate Oil and Gas Co. conducted a reconnaissance geological and soil geochemical survey. -

1988, JET Mining Exploration Inc. completed an airborne magnetic and VLF-EM survey. -

1988, Noranda completed soil geochemical surveys for gold and geological mapping. -

1994, Alan J. Wing conducted prospecting. -

1996, Green Ice Corporation completed geophysical surveys including magnetometer, VLF-EM and IP. -

1997, Battle Mountain Canada Inc. geological mapping and prospecting as well as ground magnetic - surveys were conducted. -

1997, Avalon Resources conducted geological mapping and magnetic surveys and IP surveys -

2003, RJK conducted diamond drilling of 17 core holes totaling 2,690metres. -

RATIONALE:

The Shebandowan Greenstone Belt is a proven gold and massive sulphide producing belt with past producing mines and numerous gold and base metal occurrences.

Work in the area indicates a geological environment favourable to hosting gold deposits (Pistol Lake, Bandore Property, Moss Lake Property, Shabaqua area, Dawson Road Lots, Goldie Prospect, Gold Creek Area), the formation of volcanogenic massive sulphide deposits (Vanguard and Coldstream Properties) and the deposition of magmatic sulphide orebodies (Inco Shebandowan Mine).

The area has been featured by the Resident Geologist Thunder Bay South in Recommendations for Exploration 2016-2017 and Recommended #1 Gold Exploration Target MNDM Regional Till Sampling 1999 OFR5993.

The property is underexplored with only a first pass for gold, VMS, and Ni-Cu-PGE yet previous work has provided a significant database to work from. Previous work indicates the presence of potentially ore grade gold mineralization present at the Kasper Occurrence and the Creek Zone.

Excellent access and infrastructure are advantageous for economic and efficient exploration.

WORK PROGRAM:

From May 4, 2017 to November 15, 2017 a program of field work, analytical work, analysis and report writing was undertaken on the property. Field work was conducted from May 8 to September 2, 2017 and totaled 14 days. The claim holder supervised all aspects of the project and authored this report.

This preliminary exploration program consisted of reconnaissance, an orientation geochemical sampling (humus) and bedrock stripping and sampling. A very limited budget precluded more detailed work at this time.

A geochemical survey, comprised of 77 humus samples, tested the Kasper Occurrence area as well as stratigraphic and geophysical targets. Samples were ashed and analysed by NAA for multi-elements by Actlabs of Thunder Bay. (See Appendix III and IV)

Bedrock stripping was performed in the Kasper Occurrence area with targets selected for ease of equipment access and prospectivity, including reports of significant gold mineralization and visual identification of altered and mineralized float and bedrock. Stripped areas were cleaned, mapped and sampled in a cursory fashion. An excavator (Cat 312 CL with modified dozer blade) was contracted from Belham Limited of Kaministiqua with Stephen Hamer as operator. (See invoice Appendix II 'West Property')

A total of 44 rock samples were analysed by AR-ICP analysis with FA-AA on high grade gold samples by Actlabs of Thunder Bay. (See Appendix III and IV)

RESULTS AND DISCUSSION

Reconnaissance

Access to the north part of the property includes highway 11/17 but the current project area is best accessed by Haner Road, a forestry access road, which crosses the south part of the property. Haner road is currently being used as a forestry haul road and as such the road is currently being maintained. Until late in the season, Haner Road was only accessible from the Gold Creek Road off of the Shebandowan Mine Road to the west. Road improvements to Haner Road over the summer made it accessible from Shabaqua Road thus significantly improving travel time and distance from Thunder Bay. (See Reconnaissance Map)

Off of Haner road, a maze of overgrown haulage trails provide foot, atv and tracked vehicle access to most of the property. The Kasper Occurrence area is best accessed by 4x4 or ATV on bush roads that leave Haner Road to the East of the South Zone (passing the Wedge Zone) and another road west of the Kasper Occurrence in the area of a large aggregate pit.

Much of the property has been logged within the last 20 years. Forestry activities are active on the property. Thick secondary growth, predominantly hardwood, covers most of the cut areas. Mature mixed forest covers the remainder of the property.

In the South Zone area, outcrop exposure is largely confined to a series of excavator dug trenches thought to be prepared by Noranda in the 1980's to investigate zinc and copper in soil anomalies and coincident geophysical anomalies. Here overburden is quite extensive, typically sand and boulders in excess of 1m depth.

In the Kasper Occurrence area a 'whale-back' type of ridge about 750m x 350m composed of relatively thin overburden, typically less than 1 metre of sandy soil topped with humus and displaying numerous exposures of bedrock outcrop.

Claim 4264814

Claim 4264815

5386000

Kasper Occurrence

Wedge Zone

Blackwell Twp

Laurie Twp

Creek Zone

South Zone

Claim 4264812

Claim 4264813

5385000

281000

Haner Road

284000

Road (2 wheel drive)

Road (4 wheel drive)

ATV Trail (overgrown road)

Area of Historic Workings

Area of Reconnaissance

Project/Claim Outline

Project 4264812+14
Reconnaissance
Map

0 Metres 500

November 2017

Douglas P Parker

UTM nad 83 Zone 16

UTM

4264815

4264812

4264813

5386000

283500

284000

Low, Wet, Clay Cover Common

Thick Sandy Overburden Clay Uncommon

Thin Sandy Overburden with Outcrop Common

75 Humus Sample Location with Number

Area of Overburden Stripping 2017

Area of Historic Working

Project 4264812+14
Geochemical Survey
Sample Location Map

0 Metres 100

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UTM

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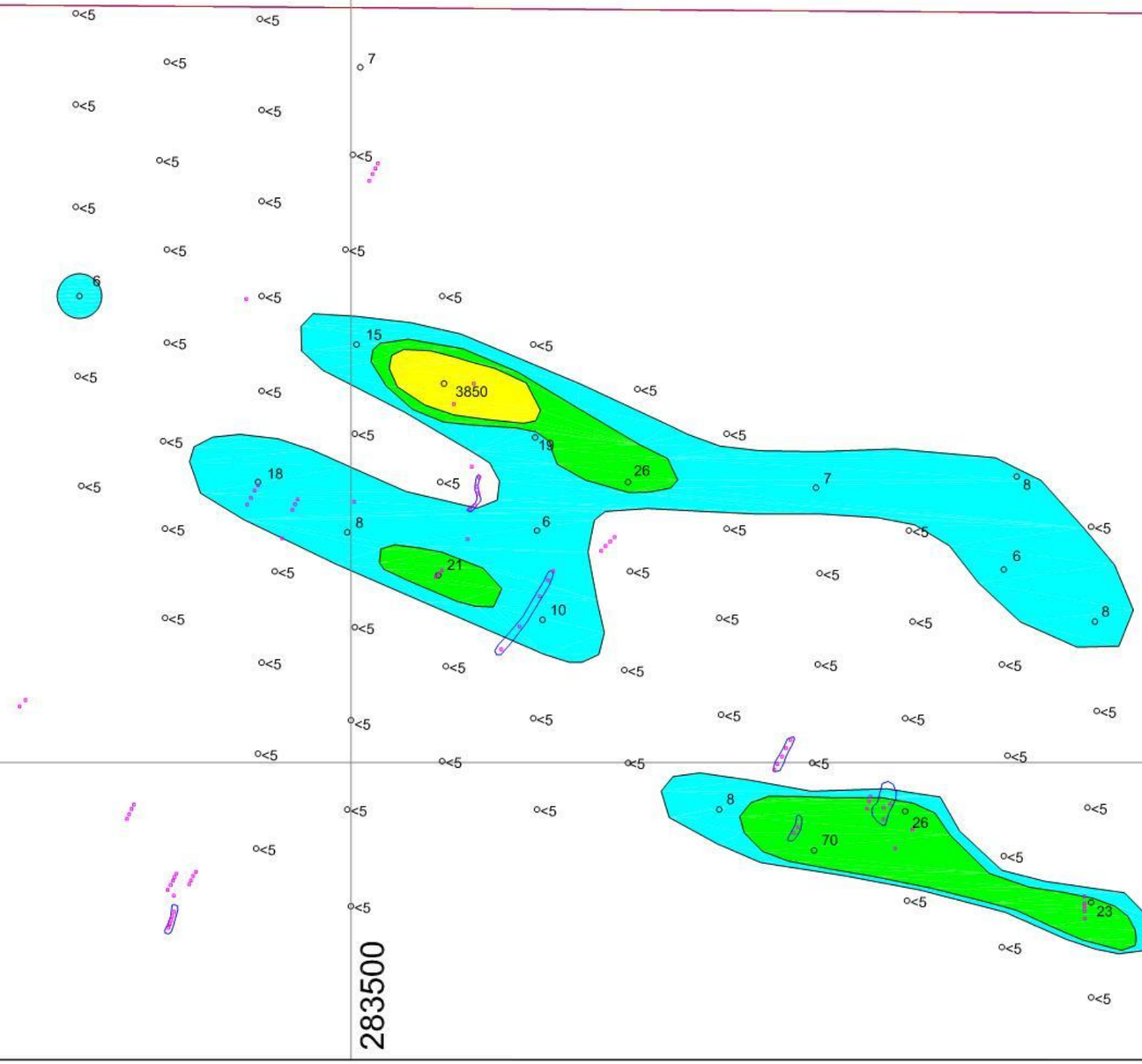
283500

284000



Au in Humus > 100 ppb

Au in Humus 20-100 ppb

Au in Humus 5-19 ppb

75 Humus Sample with Gold ppb

Area of Overburden Stripping 2017

Area of Historic Working

Project 4264812+14
Gold in Humus
Anomaly Map

0 Metres 100

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284000

As in Humus > 500 ppm

As in Humus 21-500 ppm

As in Humus 10-20 ppm

75 Humus Sample with Arsenic ppm

Area of Overburden Stripping 2017

Area of Historic Working

Project 4264812+14
Arsenic in Humus
Anomaly Map

0 Metres 100

November 2017
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UTM nad 83 Zone 16

N

UTM

Initial observations of the bedrock included extensive alteration and mineralization (ankerite, quartz veining and sulphides).

The old workings at the Kasper Occurrence are numerous and were observed over the extent of the area of shallow overburden. The pits and trenches in this area are of the 1940 vintage are hand dug with local blast pits. These workings are very poorly exposed being overgrown and in filled. A series of more recent trenches occur along the southern part of the Kasper area and appear to be excavator dug probably at the same time as the South Zone trenches and likely by Noranda in the 1980's investigating geophysical anomalies for base metals.

It was decided to focus on the Kasper Occurrence area during this project due to the better exposure of outcrop, the more favourable overburden conditions for a geochemical survey and the more prospective nature of the geology.

Geochemical Sampling

Humus sampling was undertaken over the Kasper Occurrence area. (See Geochemical Survey Sample Location Map)

Humus was sampled from the top 10 cm of soil with care taken to avoid leaf litter, pebbles, sand, clay and roots. Humus was placed in a kraft sample bag and marked with a sample number (GPS Waypoint). Notes were taken describing the soil present at the site.

A total of 77 humus samples were collected at 77 sites located by GPS.

Because of the highly variable nature and thickness of the overburden as well as the limited number of samples available to interpret the data for determination of geochemical anomalies, a visual analysis of the data rather than mathematical statistical analysis was preferred. The contoured anomalies displayed on the anomaly maps are considered significantly enriched above background for the elements analysed.

Humus returned gold values up to 3850 ppb and arsenic up to 248 ppm as part of a large well defined anomaly 200 to 250 metres in width and stretching the extent of the survey over 750 metres long. (See Gold in Humus and Arsenic in Humus Maps) Humus also returned anomalous Zn commonly over 1000 ppm and up to 2930 ppm in an extensive but less well defined anomaly which includes the area of the Au-As anomalous zones.

Mechanical Stripping and Rock Sampling

Rock sampling was undertaken in the area of the South Zone . (see Rock Sample Location Map)

At the South Zone, 2 units of graphitic argillite are present in a package of mafic flow units exposed in a series of previously stripped trenches. The volcanic rocks are commonly brecciated, fractured and altered with ankerite, calcite, quartz stringers, an unidentified black mineral on fractures and sulphides. The southernmost argillite is poorly exposed in a series of stripped areas between the trenches. The northern most graphitic argillite is exposed in one trench.

8 rock samples were taken at the South Zone trenches. Most of the samples returned anomalous arsenic up to 446ppm and many of the samples were anomalous in gold with the highest value of 1430ppb being returned from altered volcanic in the area of the northern -most argillite horizon.

Mechanical stripping and rock sampling was undertaken in the area of the Kasper Occurrence. (see Rock Sample Location Map)

36 rock samples were collected from the Kasper area. Gold assays from samples returned up to 20.6 g/T Au with anomalous Arsenic >1% As in some samples. Almost all of the rock samples returned significant gold and arsenic assays.

Mechanical bedrock stripping was performed in 6 locations. The stripped areas are numbered 17- 7 through 12 indicating the year and order of excavation. Overburden thickness was typically 0.5-1 metre in the stripped areas.

The limited budget of the program did not permit systematic mapping or channel sampling of the exposed bedrock.

Sampling was intended to identify the distribution of gold and other metals within specific rock types and structures and associations with alteration and mineralization. Large composite samples, comprised of many small rock chips were taken over the exposed area to represent the geology of that area. Such sampling is referred to as Representative Composite Grabs and are intended to represent a length of sample across strike over the exposed width of the bedrock (i.e. 3 metres across strike over the width of the stripped area).

Selective grabs were taken on occasion to test specific geological features such as quartz veins or sulphide concentration or unmineralized host rocks and are not considered to have a spatial representation.

Stripped Area17-7

Stripped area 17- 7 is approximately 22mx9m (See Detail Map 17-7,8,9)

Geology consists of northwest striking volcanic and sedimentary units dipping subvertically to northward. A cherty sediment and banded iron formation unit is highly fractured, folded and intruded by a fine grained diorite dyke. The dyke strikes northwest and dips about 25 degrees to the north. Sulphide mineralization includes pyrite and arsenopyrite within the chert and iron formation. Ankerite and silicification strongly affect all rocks. Quartz stringers and veins are common. A northwest striking shear zone occurs at the south end of the stripped area.

8 samples were analyzed. Significant gold and arsenic assays were returned with values up to 4830 ppb Au and 4230 ppm As.

Stripped Area17-8

Stripped area 17- 8 is approximately 15mx3m (See Detail Map 17-7,8,9)

Geology consists of northwest striking volcanic and sedimentary units dipping steeply northward. 2 narrow cherty argillite horizons are present. Disseminated pyrite is common up to 5%.

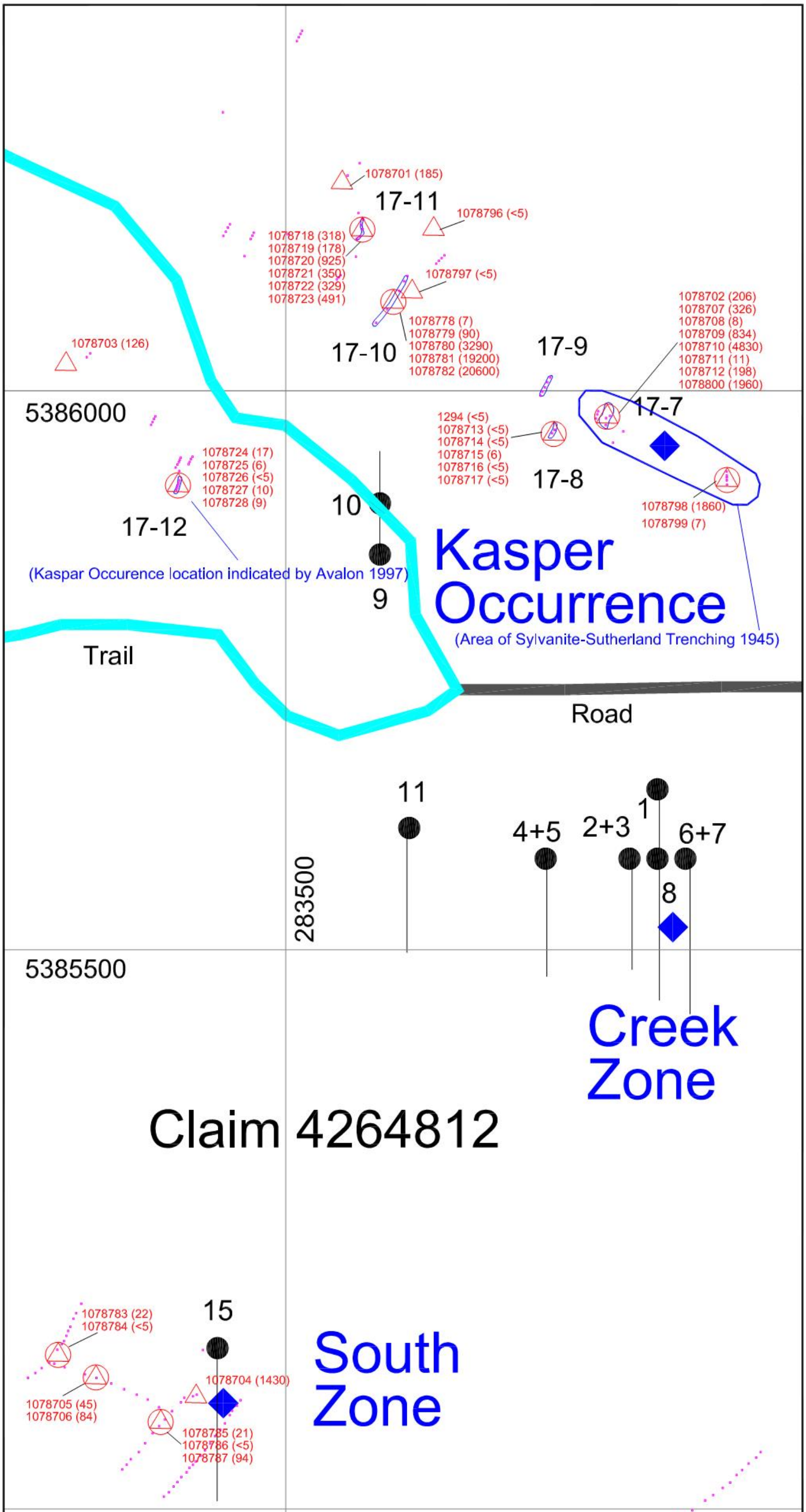
6 samples were analyzed. Gold and arsenic assays were very low however copper and zinc were elevated in most of the samples with values up to 616 ppm Cu and 1620 ppm Zn.

Stripped Area17-9

Stripped area 17- 9 is approximately 21mx3m (See Detail Map 17-7,8,9)

Geology consists of massive fine grained diorite.

No samples were analyzed.


1078701 (185)
17-11
1078796 (<5)
1078718 (318)
1078719 (178)
1078720 (925)
1078721 (350)
1078722 (329)
1078723 (491)
1078797 (<5)
1078778 (7)
1078779 (90)
1078780 (3290)
1078781 (19200)
1078782 (20600)
17-10
17-9
1078702 (206)
1078707 (326)
1078708 (8)
1078709 (834)
1078710 (4830)
1078711 (11)
1078712 (198)
1078800 (1960)
1078703 (126)
5386000
17-7
1294 (<5)
1078713 (<5)
1078714 (<5)
1078715 (6)
1078716 (<5)
1078717 (<5)
17-8
1078724 (17)
1078725 (6)
1078726 (<5)
1078727 (10)
1078728 (9)
10
1078798 (1860)
1078799 (7)
17-12
(Kaspar Occurence location indicated by Avalon 1997)
9
Kasper Occurrence
(Area of Sylvanite-Sutherland Trenching 1945)
Trail
Road
11
4+5
2+3
1
6+7
8
283500
5385500
Creek Zone
Claim 4264812
15
1078783 (22)
1078784 (<5)
1078704 (1430)
1078705 (45)
1078706 (84)
1078735 (21)
1078736 (<5)
1078737 (94)
South Zone
5385000
Area of 2017 Stripping
Rock Sample Location
Mutiple Rock Samples
n (n) Sample# (Au ppb)
Historic Occurrence
Historic Working
Drill Hole
RJK 2003
UTM
Project 4264812+14
Rock Sample
Location Map
0
Metres
100
November 2017
Douglas P Parker
UTM nad 83 Zone 16

17-9

Diorite

5386000

17-7

1078707 (326)
1078708 (8)
1078702 (206)
1078800 (1960)
1078709 (834)
1078710 (4830)
1078711 (11)
1078712 (198)

Diorite

Cherty Sediment, Banded Iron Formation

folded, fractured, minor quartz stringers

ankerite, local heavy pyrite and arsenopyrite

Mafic Volcanic, moderate ankerite

quartz veins and stringers, sheared

Mafic Volcanic

minor chert-argillite

2-3% pyrite

1078713 (<5)
1078714 (<5)
1078701 (<5)
1078715 (6)
1078716 (<5)
1078717 (<5)

5385950

17-8

283700

283800

Rock Sample Number (Au ppb)

Area of Overburden Stripping

Project 4264812+14
Detailed Map
Stripped Areas 17-7+8+9

0 Metres 30

November 2017
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UTM nad 83 Zone 16

5386150

5386100

283500

283650

17-11

Quartz veins up to 1m
in shear zone 040-90
strong ankerite + pyrite
+ arsenopyrite in wall rock

1078723 (491)
1078722 (329)
1078721 (350)
1078720 (925)
1078719 (178)
1078718 (318)

Diorite
massive, moderate ankerite
minor pyrite and arsenopyrite

17-10

Diorite
massive, weak ankerite
minor pyrite and arsenopyrite

1078782 (20600)

Quartz Stringers up to 10cm
in weak fracture zone 040-90
up to 3 m wide, local ankerite
local minor pyrite and arsenopyrite

1078781 (19200)

1078780 (3290)

Graphitic Chert Argillite

1078779 (90)

1078778 (7)

Rock Sample Number (Au ppb)

Area of Overburden Stripping

Project 4264812+14
Detailed Map
Stripped Areas 17-10+11

0 Metres 30

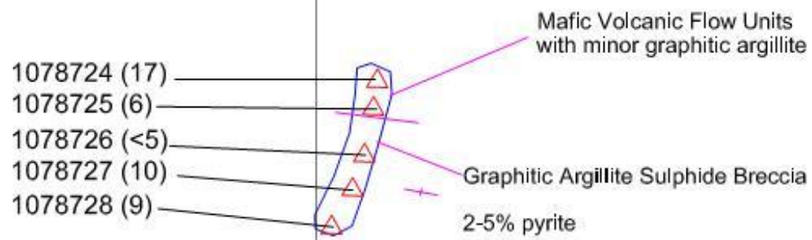
November 2017
Douglas P Parker

UTM nad 83 Zone 16

N UTM

5385950

17-12



5385900

283350

283450

Rock Sample Number (Au ppb)

Area of Overburden Stripping

Project 4264812+14
Detailed Map
Stripped Areas 17-12

0 Metres 30

November 2017
Douglas P Parker

UTM nad 83 Zone 16

Stripped Area17-10 -

Stripped area 17- 10 is approximately 53mx3m (See Detail Map 17-10,11) -

Geology consists of northwest striking (120-130) volcanic and sedimentary units dipping subvertically in - the south part of the stripped area intruded by fine grained diorite to the north. The diorite is massive with - a weak spaced fracture zone striking 040-vertical. About 5% quartz stringers up to 10cm occur within the - fractures and are often accompanied by weak ankerite and sulphide mineralization in the diorite. -

5 samples were analyzed. Significant gold and anomalous arsenic assays were returned from the quartz - stringers with values up to 20600 ppb Au. The volcanic sedimentary units returned elevated copper of - 185 ppm and zinc of 194 ppm Zn. -

Stripped Area17-11 -

Stripped area 17-11 is approximately 22mx3m (See Detail Map 17-10,11) -

Geology consists fine grained diorite that is cut by quartz veins and stringers up to 1 metre in width and - which display very strong ankerite and arsenopyrite alteration in the wall rock. -

6 samples were analyzed. Significant gold and arsenic assays were returned from all samples up to 925 - ppb Au and up to >10,000 ppm As. -

Stripped Area17-12 -

Stripped area 17- 12 is approximately 16mx3m (See Detail Map 17-12) -

Geology consists of east-west striking volcanic and sedimentary units dipping steeply northward. - Graphite, chert and sulphide horizons are common. -

5 samples were analyzed. No significant assays were returned. -

Conclusions and Recommendations

This very limited and preliminary exploration program indicates that gold mineralization is widespread in the project area and that good potential exists for significant base metal mineralization particularly associated with exhalative horizons.

Humus appears to effectively indicate gold and arsenic bedrock sources in areas of shallow overburden where clay horizons are not extensive.

The presence of diorite intrusions appear to be associated with significant gold and arsenic both within the intrusions and along the contacts within the host rocks.

Geological mapping and sampling should be undertaken over the property. Additional areas should be prioritized for stripping. All stripped areas should be washed, mapped and sampled.

Additional geochemical sampling should be undertaken to cover the remainder of the property.

Statement of Qualifications

I, Douglas P. Parker do hereby certify:

I am a resident of 365 Lark Street, Thunder Bay, Ontario, P7B 1P4.

I am a graduate of Lakehead University, Thunder Bay, Ontario with an Honours B.Sc. Degree in Geology (1985) and a Certificate in Environmental Assessment (1995). I am a graduate of Confederation College with a Diploma in Environmental Engineering Technology (1995).

I have been an active prospector and employed as a geologist and technical advisor with government and industry since 1985.

Douglas P. Parker

Nov 15, 2017
Date

APPENDIX I

Selected References

Smyk et al. 2017, Recommendations for Exploration 2016–2017, Ontario Geological Survey, Resident Geologist Program. 84p.

Bajc, A.F. 1999. Results of regional humus and till sampling in the eastern part of the Shebandowan greenstone belt, northwestern Ontario; Ontario Geological Survey, Open File Report 5993, 85p.

Parker, J.R., DISCOVER PROSPECTING: AN INTRODUCTORY PROSPECTING MANUAL, Ontario Prospectors Association, Revised in 2004 by: D.P. Parker and B.V. D'Silva, 203p.

Lavigne, M.J. and Scott, J.F. 1994. Thunder Bay Resident Geologist's District; *in* Report of Activities 1993, Resident Geologists, Ontario Geological Survey, Open File Report 5892, p.129-148.

Additional references to follow.

NTS	#	AFRI	Name (filed under)	Alternate Name	Property Name	NTS (alt)	Twp or Area	Done	WORK_1	WORK_2	WORK_3	WORK_4	WORK_5	WORK_6	WORK_7	Reference #	Work Rpt Number	Update	GeoOntario
52A12NW	004	52A12NW0005	Leishman, D.	Fenwick, K.		52B09SE*	Blackwell Tp.	96-7	GM							2.17075	W9740-00021		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12NW0005
52A12NW	005	52A12NW0006	Avalon Ventures Lt.	Campbell, I.		52B09NE*	Blackwell Tp.	96-7	PRO							2.17242	W9740-00125		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12NW0006
52A12NW	006	52A10SW2001	Miron, W.				Blackwell & Rickaby Tp.	96	PRO	TR						OP96-331		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A10SW2001
52A12SW	005		Brown, A.G.	Three Brothers Mining Co.	Sutherland-Kasper		Blackwell Tp.	45	ASD	PNC	REP							na	
52A12SW	008		Corporate Oil & Gas Ltd.					84	GL	GC								na	
52A12SW	009	52B09SE0106	Corporate Oil & Gas Ltd./Munroe, R./J.	Huston, D./Weenusk, A./Colon			Blackwell, Laurie & Horne Tp.	84	GL	GC	REP	ASD				2.6681			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0106
52A12SW	010	52A12SW0038	Falconbridge Nickel Mines		Sutherland-Kasper Prop.		Blackwell Tp.	62	DD									VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0038
52A12SW	013	52A12SW0028	INCO (International Nickel)	Canadian Nickel Company Ltd.		52B09SE	Blackwell, Laurie & Duckworth Tp.	66 69	DD	GM						63.2255			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0028
52A12SW	015		Katajisto, K.				Blackwell Tp.	70 77										na	
52A12SW	021a-d	52A12SE8103	Monpre Mining Company Ltd.			52B09SE*	Laurie, Horne & Duckworth Tp.	56-74	GL	DD	REP	PNC	ASD			63a.347		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SE8103
52A12SW	026	52B09SE0121	Noranda Expl. Co. Ltd.***				Laurie Tp.	67	DD									VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0121
52A12SW	028	52B09SE0091	Noranda Expl. Co. Ltd.			52B09SE	Laurie	70	GM	GEM						2.478		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0091
52A12SW	029	52B09SE0086	Noranda Expl. Co. Ltd.			52B09SE	Laurie Tp.	79	GM	GEM						2.3117		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0086
52A12SW	030	52B09SE0110	Noranda Expl. Co. Ltd.				Blackwell & Laurie Tp.	76	GL	GC						2.2674		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0110
52A12SW	030	52A12SW0075	Noranda Expl. Co. Ltd.				Blackwell & Laurie Tp.	76	GL	GC	GM	GEM				2.2097		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0075
52A12SW	033	52A12SW0025	Stewart, M.	Lundmark, H.	Sutherland-Kasper Prop.		Blackwell & Laurie Tp.	83	GL	GEM						2.5435		cm	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0025
52A12SW	033	52A12SW0024	Stewart, M.	Lundmark, H.	Sutherland-Kasper Prop.		Blackwell & Laurie Tp.	83	GL	GEM						2.5436		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0024
52A12SW	035	Multiple Links	Three Brothers Expl. Ltd.	Brown, A.			Blackwell Tp.	56	DD									VA	
52A12SW	038	52B09SE0032	Canadian Nickel Co. Ltd.	INCO Gold	Gold Creek Option	52B09SE*	Laurie Tp./Batwing Lk./Duckworth	88	GL	GM	ASD					2.10955		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0032
52A12SW	038	52B09SE8103	Canadian Nickel Co. Ltd.	INCO Gold	Gold Creek Option	52B09SE*	Laurie Tp./Batwing Lk./Duckworth	87	GL	GM	ASD					2.10954		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE8103

52A12SW	039	52B09SE0105	Noranda Expl. Co. Ltd.		Kukkee Option		Laurie & Horne Tp.	85	GL	GEM	GM	REP		GR	SS	2.8676		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0105
52A12SW	042	52B09SE0102	Jet Mining Expl. Inc.	Deperry, W./Nabigon, J.			Blackwell Twp./Laurie Tp.	88	AM	AEM						2.11445			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0102
52A12SW	044	52B09NE0020	Noranda Expl. Co. Ltd.		Mabella Property	52B09SE	Blackwell & Conacher Tp.	88-9	GL	GC	ASD					2.11878		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09NE0020
52A12SW	044	52B09NE0016	Noranda Expl. Co. Ltd.		Mabella Property	52B09SE, 52A12SW	Blackwell & Conacher Tp.	88-9	AEM	AM						2.12264		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09NE0016
52A12SW	045	52B09SE0018	MCS Capital Ltd.	Bumbu, C./Martin, J.A.		52B09SE	Laurie, Blackwell, Conacher & Duck.	89	AM	AEM						2.12327			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0018
52A12SW	047	52B09SE0078	INCO Exploration****		Gold Creek Prop. E./W.	52B09SE*	Laurie & Duckworth Tp.	90	GL	TR	DD	ASD				63.6143			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0078
52A12SW	047	52B09SE0082	Canadian Nickel Co. Ltd.****	INCO Ltd.	Gold Creek East Project		Laurie Tp.	88	GL	GM						2.12117			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0082
52A12SW	049a,b	52B09SE0092	Parres, J.	Tomac, J./OP91-229/230			Laurie & Horne Tp.	91 92	GM	GEM						2.14588			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52B09SE0092
52A12SW	052	52A12SW0003	Wing, A.	Wallace, A./OP94-159			Blackwell Tp.	94	PRO	ASD						2.16425			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0003
52A12SW	053	52A12NW0004	Stewart, M.				Blackwell Tp.	96	PRO	ASD						2.16567			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12NW0004
52A12SW	057	52A12SW0003	Wing, A.J.				Blackwell Tp.	94	PRO	ASD						OP94-159		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0003
52A12SW	059	52A12SW0023	Hackl, Joe/Hackl, Joey	Green Ice Corp.	Moose Calf Property		Laurie Tp.	96	IP	GEM	GM					2.16849			http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0023
52A12SW	067	52A12NW0005	Leishman, D.	Fenwick, K.		52B09SE*	Blackwell Tp.	96-7	GM							2.17075	W9740-00021		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12NW0005
52A12SW	068	52A12SW0045	Avalon Ventures Ltd.	Fenwick, K.			Horne & Dawson Rd. Lots	96-7	GM							2.17535	W9740-00247		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0045
52A12SW	069	52A12NW0006	Avalon Ventures Ltd.	Campbell, I.		52B09NE*	Blackwell Tp.	96-7	PRO							2.17242	W9740-00125		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12NW0006
52A12SW	071	52A12SW0039	Wing, A.	Wallace, A.			Blackwell Tp.	96	GM							2.17036	W9740-00001		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0039
52A12SW	073	52A12NW0007	Stares, S.	Avalon Ventures Ltd.			Blackwell & Laurie Tp.	96-7	GM							2.17670	W9740-00924		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12NW0007
52A12SW	075	52A12SW0048	Wing Res. Inc.				Laurie Tp.	97	GEM	GL	GM	PRO				2.17753	W9740-00941		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0048
52A12SW	077	52A12SW0049	Wing, A./Wing Resources	Wallace, G.	Kaspar Property		Blackwell Tp.	96-7	ASD	GL	IP	PRO				2.17977	W9740-01124		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0049

52A12SW	084	52A12SW0050	Stares, S.		BLT Property	52B09SE	Blackwell & Laurie Tp.	97	ASD	GL	GM	IP	LC	PRO		2.17984	W9740-01111		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0050
52A12SW	096	52A12SW2013	Canadian Nickel Co. Ltd.			52B09SE	Laurie Tp.	98	GEM	GM						2.18829	W9840-00586		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW2013
52A12SW	101	52A12SW2015	Hackl, J. & J.		Moose Calf Property	52B09SE	Laurie Tp.	97	ASD	DD						2.19152	W9940-00002		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW2015
52A12SW	110		Wing, Allan J.		Blackwell Tp. Claims		Blackwell Tp.	1999	PRO							OP99-433		na	
52A12SW	113	52A12SW0075	Noranda Exploration Co. Ltd.		K Group		Blackwell Tp./Lauri Tp.	1978	GL	GC	GM	GEM				2.2097		VA	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW0075
52A12SW	113	52B09SE0110	Noranda Exploration Co. Ltd.		K Group		Blackwell Tp./Lauri Tp.	1978	GL	GC	GM	GEM				2.2674		VA	
52A12SW	123	52A12SW2032	RJK Explorations Ltd.		Wedge Project		Laurie & Blackwell Tp.	2003	DD							2.26643	W0340.01787		http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=52A12SW2032
52A12SW	128	Regional Office	RJK Explorations Ltd.	Hinterland Exploration Ltd.	Wedge Project		Laurie & Blackwell Tps.	2003	ASD	DD	REP					2.28916	W0440.01922	MB	\\Lrcpthbafp00002\ndm_gis\MEI\DigitalAssessment\2_28916\
52A12SW	130	20000000780	RJK Explorations Ltd.	Hinterland Exploration Ltd.	Wedge Project		Laurie & Blackwell Tps.	2003	DD	ASD	REP					2.29751	W0540.00731	MB	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=20000000780
52A12SW	136	20000001186	RJK Explorations Ltd. Hinterland Metals Inc.		Shabaqua Gold Project	52B09SE	Laurie Tp	2005	AEM	AM						2.31635	W0640.00445	MB	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=20000001186
52A12SW	171	20000006401	North American Palladium Ltd. *CD*	Fenwick, K	Sand Lake Property	52B09SE	Laurie Twp.	2011	AM							2.48233	W1140.00952	MB	http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=afri&id=20000006401

APPENDIX II

Mechanical Stripping Invoice and Timesheet

APPENDIX III

Assay Certificates

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-May-17
Invoice No.: A17-05029
Invoice Date: 30-May-17
Your Reference:

Doug Parker
365 Lark St
Thunder Bay on
Canada

ATTN: Doug Parker

CERTIFICATE OF ANALYSIS

1 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)

Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A17-05029**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

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

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1294	< 5	< 0.2	0.9	231	440	3	21	12	334	1.20	3	< 10	< 10	< 0.5	< 2	0.03	14	49	8.25	< 10	2	0.04	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1294	0.81	0.013	0.015	6.21	3	1	1	< 0.01	< 20	9	< 2	< 10	16	< 10	1	9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		32.5	2.9	1210	882	13	43	740	748	0.36	446	< 10	451	0.9	1530	0.87	7	7	24.4	< 10	3	0.03	< 10
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas		3.7	< 0.5	6690	142	301	42	46	74	2.82	108	< 10	47	1.4	9	0.97	13	60	3.09	10	< 1	1.69	44
GXR-4 Cert		4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-6 Meas		0.3	< 0.5	72	1070	1	27	106	126	7.30	223	< 10	889	0.9	< 2	0.15	13	85	6.03	20	3	1.14	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
OREAS 206 Meas	2150																						
OREAS 206 Cert	2197.000																						
SE68 Meas	600																						
SE68 Cert	599																						
1294 Orig	< 5																						
1294 Dup	< 5																						
Method Blank	< 5																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.15	0.059	0.046	0.22	92	1	173	< 0.01	< 20	14	< 2	31	83	178	26	13
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.64	0.141	0.124	1.82	7	6	66	0.13	< 20	< 1	< 2	< 10	82	11	11	9
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.42	0.086	0.034	0.01	5	19	26		< 20	< 1	4	< 10	172	< 10	5	6
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
OREAS 206 Meas																
OREAS 206 Cert																
SE68 Meas																
SE68 Cert																
1294 Orig																
1294 Dup																
Method Blank																
Method Blank	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... *Innovative Technologies*

Date Submitted: 26-May-17
Invoice No.: A17-05265
Invoice Date: 06-Jun-17
Your Reference:

Doug Parker
365 Lark St
Thunder Bay on
Canada

ATTN: Doug Parker

CERTIFICATE OF ANALYSIS

28 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)

Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A17-05265**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

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

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1078701	185	< 0.2	< 0.5	91	1070	< 1	50	< 2	38	1.46	1140	< 10	39	< 0.5	< 2	6.86	29	29	5.80	< 10	3	0.34	< 10
1078702	206	0.2	< 0.5	186	1410	< 1	12	3	43	0.45	893	< 10	< 10	< 0.5	< 2	2.93	4	10	18.0	< 10	< 1	< 0.01	< 10
1078703	126	0.2	< 0.5	84	657	2	45	11	39	0.90	24	< 10	148	< 0.5	< 2	2.62	12	40	2.62	< 10	< 1	0.39	20
1078704	1430	3.3	< 0.5	24	590	216	53	25	15	0.27	113	< 10	38	< 0.5	< 2	1.75	24	54	3.22	< 10	< 1	0.08	18
1078705	45	< 0.2	< 0.5	68	1950	< 1	60	< 2	82	1.20	446	< 10	24	< 0.5	< 2	6.93	31	83	7.15	< 10	2	0.22	< 10
1078706	84	< 0.2	0.7	305	4190	< 1	37	< 2	183	0.89	272	< 10	56	< 0.5	< 2	9.88	20	46	9.75	< 10	1	0.38	< 10
1078707	326	0.4	< 0.5	208	1440	< 1	19	< 2	73	2.29	148	< 10	32	0.8	< 2	1.54	7	24	23.3	< 10	< 1	0.02	< 10
1078708	8	< 0.2	< 0.5	17	495	< 1	5	< 2	38	0.15	24	< 10	17	1.8	< 2	1.65	2	13	18.4	< 10	< 1	0.07	< 10
1078709	834	< 0.2	< 0.5	37	1140	1	14	< 2	35	0.53	2200	< 10	< 10	< 0.5	2	2.71	4	45	14.3	< 10	< 1	< 0.01	< 10
1078710	4830	1.3	< 0.5	86	614	4	21	< 2	42	1.42	4230	< 10	11	< 0.5	< 2	0.36	8	86	8.36	< 10	< 1	0.03	< 10
1078711	11	< 0.2	< 0.5	1	333	7	8	< 2	< 2	0.14	33	< 10	< 10	< 0.5	< 2	0.87	2	107	1.29	< 10	< 1	0.03	< 10
1078712	198	< 0.2	< 0.5	19	1600	4	283	< 2	52	2.22	663	< 10	13	< 0.5	2	2.14	37	676	6.77	< 10	5	0.05	< 10
1078713	< 5	< 0.2	< 0.5	155	734	< 1	38	< 2	178	3.35	3	< 10	53	< 0.5	< 2	0.51	17	86	7.26	10	3	0.17	14
1078714	< 5	< 0.2	1.9	616	208	2	15	5	597	0.34	< 2	< 10	< 10	< 0.5	< 2	0.02	4	41	5.30	< 10	< 1	< 0.01	< 10
1078715	6	< 0.2	0.5	595	679	3	10	2	64	3.24	< 2	< 10	13	< 0.5	< 2	0.18	9	58	13.0	10	4	0.03	< 10
1078716	< 5	< 0.2	0.8	181	318	4	14	7	248	0.70	3	< 10	< 10	< 0.5	< 2	0.02	11	66	5.89	< 10	< 1	0.02	< 10
1078717	< 5	< 0.2	5.4	81	413	5	7	5	1620	0.83	< 2	< 10	< 10	< 0.5	< 2	0.06	2	72	3.54	< 10	< 1	0.02	< 10
1078718	318	< 0.2	< 0.5	93	839	2	39	< 2	52	2.09	3660	< 10	20	< 0.5	4	2.13	30	49	6.92	< 10	< 1	0.14	< 10
1078719	178	< 0.2	< 0.5	58	855	2	23	< 2	40	1.57	2080	< 10	32	< 0.5	< 2	1.02	25	28	5.88	< 10	< 1	0.15	< 10
1078720	925	0.5	< 0.5	207	920	1	26	< 2	47	1.46	> 10000	< 10	28	< 0.5	< 2	3.39	31	11	7.81	< 10	< 1	0.26	< 10
1078721	350	< 0.2	< 0.5	59	471	4	13	< 2	21	0.60	1290	< 10	13	< 0.5	< 2	0.69	15	69	3.53	< 10	2	0.09	< 10
1078722	329	< 0.2	< 0.5	51	956	2	27	< 2	55	1.69	> 10000	< 10	19	< 0.5	3	3.23	34	9	8.75	< 10	< 1	0.16	< 10
1078723	491	0.3	< 0.5	207	1090	< 1	31	< 2	64	2.07	1790	< 10	27	< 0.5	< 2	2.59	35	14	8.38	< 10	3	0.18	< 10
1078724	17	0.5	< 0.5	63	599	< 1	82	11	31	2.74	163	< 10	11	< 0.5	< 2	1.14	26	88	16.9	< 10	< 1	0.16	< 10
1078725	6	0.4	< 0.5	67	771	< 1	77	12	59	3.47	81	< 10	12	< 0.5	< 2	1.90	31	91	15.3	< 10	< 1	0.24	< 10
1078726	< 5	< 0.2	< 0.5	58	1330	< 1	77	< 2	113	3.65	16	< 10	53	< 0.5	< 2	2.69	28	132	6.53	< 10	< 1	0.12	< 10
1078727	10	0.3	< 0.5	53	1020	< 1	72	5	66	3.51	69	< 10	20	< 0.5	2	1.91	29	103	11.6	< 10	2	0.25	< 10
1078728	9	0.2	< 0.5	65	1170	2	85	4	72	3.51	41	< 10	48	< 0.5	< 2	1.33	30	171	8.91	< 10	3	0.33	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1078701	2.52	0.049	0.018	0.48	3	18	91	< 0.01	< 20	< 1	< 2	< 10	54	< 10	7	4
1078702	1.64	0.012	0.052	3.59	7	< 1	27	< 0.01	< 20	6	< 2	< 10	14	< 10	4	6
1078703	0.68	0.126	0.059	0.63	< 2	4	257	< 0.01	< 20	2	< 2	< 10	15	< 10	5	9
1078704	0.48	0.179	0.117	1.53	< 2	4	161	< 0.01	< 20	3	< 2	< 10	7	< 10	6	6
1078705	2.22	0.227	0.028	0.55	< 2	21	65	< 0.01	< 20	< 1	< 2	< 10	53	< 10	8	3
1078706	3.05	0.077	0.018	2.28	9	17	184	< 0.01	< 20	< 1	4	< 10	35	< 10	8	3
1078707	1.62	0.016	0.075	2.72	9	3	18	0.03	< 20	< 1	< 2	< 10	34	< 10	8	16
1078708	0.39	0.020	0.070	0.06	6	< 1	21	< 0.01	< 20	< 1	< 2	< 10	9	< 10	6	6
1078709	2.02	0.012	0.058	2.70	7	1	44	< 0.01	< 20	< 1	< 2	< 10	14	< 10	4	5
1078710	1.18	0.016	0.047	2.27	4	6	10	< 0.01	< 20	< 1	< 2	< 10	49	< 10	3	4
1078711	0.27	0.020	0.030	0.07	< 2	1	13	< 0.01	< 20	< 1	< 2	< 10	6	< 10	1	< 1
1078712	2.88	0.016	0.009	0.03	4	11	35	< 0.01	< 20	< 1	< 2	< 10	68	< 10	6	4
1078713	2.68	0.098	0.063	1.07	3	8	15	0.24	< 20	< 1	< 2	< 10	72	< 10	7	31
1078714	0.25	0.014	0.005	4.47	2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	7	< 10	< 1	4
1078715	2.34	0.023	0.091	0.83	5	3	6	0.05	< 20	< 1	< 2	< 10	36	< 10	4	9
1078716	0.50	0.015	0.007	4.43	3	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	8	< 10	< 1	7
1078717	0.62	0.017	0.017	0.45	< 2	1	2	0.02	< 20	1	< 2	< 10	14	< 10	1	5
1078718	2.03	0.083	0.039	0.50	< 2	20	33	< 0.01	< 20	< 1	< 2	< 10	129	< 10	6	6
1078719	1.05	0.064	0.037	0.41	< 2	16	14	< 0.01	< 20	3	< 2	< 10	102	< 10	6	6
1078720	1.56	0.069	0.050	1.47	7	20	46	< 0.01	< 20	< 1	< 2	< 10	91	< 10	9	12
1078721	0.45	0.043	0.018	0.48	3	8	8	< 0.01	< 20	3	< 2	< 10	45	< 10	4	4
1078722	1.96	0.050	0.061	1.50	8	23	56	< 0.01	< 20	< 1	< 2	< 10	119	< 10	9	10
1078723	1.48	0.059	0.041	0.63	4	23	29	< 0.01	< 20	11	< 2	< 10	258	< 10	7	5
1078724	0.94	0.050	0.037	17.6	6	10	12	0.25	< 20	3	2	< 10	95	< 10	3	17
1078725	1.26	0.063	0.063	12.7	6	10	39	0.30	< 20	< 1	< 2	< 10	111	< 10	5	18
1078726	1.87	0.091	0.075	1.14	8	12	104	0.36	< 20	1	< 2	< 10	139	< 10	7	17
1078727	1.54	0.067	0.061	7.21	5	12	48	0.32	< 20	2	< 2	< 10	115	< 10	7	23
1078728	1.94	0.055	0.048	2.81	3	15	37	0.41	< 20	< 1	< 2	< 10	146	< 10	10	18

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		31.5	2.9	1170	864	12	46	645	720	0.35	412	< 10	373	0.8	1500	0.84	6	6	23.1	< 10	4	0.03	< 10
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas		3.7	< 0.5	6560	145	297	42	45	71	2.79	103	< 10	71	1.4	18	0.97	13	58	3.06	< 10	< 1	1.68	44
GXR-4 Cert		4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-6 Meas		0.3	< 0.5	74	1080	1	25	94	125	7.31	223	< 10	895	0.9	< 2	0.14	13	85	5.80	10	4	1.15	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
SE68 Meas	599																						
SE68 Cert	599																						
OREAS 254 Meas	2660																						
OREAS 254 Cert	2550																						
1078705 Orig		< 0.2	0.5	68	1950	< 1	61	< 2	83	1.19	445	< 10	24	< 0.5	3	6.94	31	83	7.12	< 10	1	0.22	< 10
1078705 Dup		< 0.2	< 0.5	69	1940	< 1	60	< 2	82	1.20	447	< 10	24	< 0.5	< 2	6.93	30	82	7.17	< 10	2	0.22	< 10
1078710 Orig	4750																						
1078710 Dup	4920																						
1078719 Orig		< 0.2	< 0.5	56	850	2	25	< 2	39	1.55	2060	< 10	31	< 0.5	< 2	1.01	25	26	5.84	< 10	< 1	0.15	< 10
1078719 Dup		< 0.2	< 0.5	59	860	2	21	< 2	41	1.60	2100	< 10	33	< 0.5	2	1.03	26	29	5.93	< 10	1	0.15	< 10
1078720 Orig	949																						
1078720 Dup	900																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank	< 5																						
Method Blank	< 5																						

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.14	0.052	0.043	0.21	89	1	175	< 0.01	< 20	13	< 2	28	76	170	25	13
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.62	0.134	0.121	1.79	4	7	69	0.13	< 20	3	< 2	< 10	79	12	11	9
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.42	0.084	0.033	0.01	5	18	27		< 20	4	< 2	< 10	170	< 10	5	5
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
SE68 Meas																
SE68 Cert																
OREAS 254 Meas																
OREAS 254 Cert																
1078705 Orig	2.22	0.227	0.028	0.55	< 2	21	65	< 0.01	< 20	< 1	< 2	< 10	53	< 10	8	3
1078705 Dup	2.22	0.227	0.028	0.55	4	21	64	< 0.01	< 20	< 1	< 2	< 10	53	< 10	8	3
1078710 Orig																
1078710 Dup																
1078719 Orig	1.04	0.061	0.036	0.41	< 2	16	14	< 0.01	< 20	5	< 2	< 10	101	< 10	6	7
1078719 Dup	1.06	0.066	0.037	0.41	5	16	14	< 0.01	< 20	1	< 2	< 10	103	< 10	6	6
1078720 Orig																
1078720 Dup																
Method Blank	< 0.01	0.010	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank																
Method Blank																

Quality Analysis ... *Innovative Technologies*

Date Submitted: 08-Aug-17
Invoice No.: A17-08266
Invoice Date: 29-Aug-17
Your Reference:

Doug Parker
365 Lark St
Thunder Bay ON P7B1P4
Canada

ATTN: Doug Parker

CERTIFICATE OF ANALYSIS

10 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)

Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A17-08266**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

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

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1078778	7	0.2	0.5	185	576	3	47	6	194	2.53	6	< 10	41	< 0.5	< 2	0.78	13	112	5.97	< 10	2	0.21	< 10
1078779	90	0.5	< 0.5	15	1340	< 1	48	< 2	62	2.73	2190	< 10	53	< 0.5	< 2	3.17	30	66	7.13	< 10	< 1	0.30	< 10
1078780	3290	0.4	< 0.5	5	240	3	5	< 2	3	0.18	85	< 10	12	< 0.5	< 2	0.42	1	47	1.26	< 10	< 1	0.03	< 10
1078781	> 5000	3.1	< 0.5	2	681	2	18	< 2	21	1.03	156	< 10	17	< 0.5	< 2	2.17	11	49	2.71	< 10	< 1	0.10	< 10
1078782	> 5000	2.3	< 0.5	57	1010	< 1	35	< 2	47	2.30	697	< 10	28	< 0.5	2	3.32	26	42	6.32	< 10	1	0.19	< 10
1078783	22	< 0.2	< 0.5	71	1740	< 1	105	< 2	79	1.41	229	< 10	60	< 0.5	< 2	5.22	33	66	6.04	< 10	< 1	0.25	< 10
1078784	< 5	< 0.2	< 0.5	138	1660	< 1	142	< 2	85	3.04	111	< 10	38	< 0.5	< 2	5.23	42	111	8.00	< 10	2	0.25	< 10
1078785	21	< 0.2	< 0.5	44	674	3	43	8	125	1.79	89	< 10	74	< 0.5	< 2	0.24	8	55	4.32	< 10	< 1	0.22	< 10
1078786	< 5	< 0.2	< 0.5	82	1750	< 1	86	< 2	112	2.21	90	< 10	38	< 0.5	< 2	5.34	35	66	8.14	< 10	2	0.20	< 10
1078787	94	< 0.2	< 0.5	67	3920	< 1	37	< 2	98	0.65	302	< 10	36	< 0.5	3	7.74	19	35	10.2	< 10	2	0.26	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.03
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FA-GRA
1078778	1.95	0.024	0.024	0.06	3	5	9	0.08	< 20	< 1	< 2	< 10	42	< 10	3	6	
1078779	2.48	0.038	0.040	0.19	4	20	33	< 0.01	< 20	< 1	< 2	< 10	91	< 10	9	4	
1078780	0.11	0.024	0.010	0.06	< 2	1	5	< 0.01	< 20	< 1	< 2	< 10	7	< 10	1	< 1	
1078781	1.36	0.047	0.014	0.10	< 2	8	14	< 0.01	< 20	2	< 2	< 10	45	< 10	4	2	19.2
1078782	2.32	0.046	0.028	0.16	3	18	39	< 0.01	< 20	< 1	< 2	< 10	101	< 10	6	4	20.6
1078783	1.22	0.169	0.022	0.39	2	16	32	< 0.01	< 20	< 1	< 2	< 10	51	< 10	4	2	
1078784	2.24	0.164	0.018	0.11	4	20	43	< 0.01	< 20	< 1	< 2	< 10	104	< 10	5	2	
1078785	0.55	0.037	0.030	0.05	2	4	7	< 0.01	< 20	< 1	< 2	< 10	40	< 10	4	5	
1078786	1.32	0.169	0.056	0.30	3	18	50	< 0.01	< 20	< 1	< 2	< 10	90	< 10	8	3	
1078787	2.34	0.057	0.020	3.95	5	14	136	< 0.01	< 20	< 1	< 2	< 10	28	< 10	7	3	

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		30.1	2.4	1170	829	14	38	611	669	0.37	392	< 10	281	0.9	1490	0.79	5	6	22.2	< 10	4	0.03	< 10
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas		3.8	< 0.5	6240	145	318	39	48	76	2.78	106	< 10	35	1.3	38	0.89	12	55	3.20	10	< 1	1.59	42
GXR-4 Cert		4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-6 Meas		0.3	0.6	71	1060	2	25	93	131	7.41	228	< 10	905	0.8	< 2	0.18	12	80	5.66	20	1	1.14	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
OXN117 Meas																							
OXN117 Cert																							
SdAR-M2 (U.S.G.S.) Meas			5.5	248		15	47	873	842				145	5.2	< 2		13	10		< 10	2		43
SdAR-M2 (U.S.G.S.) Cert			5.1	236.00 00		13	49	808	760				990	6.6	1.05		12.4	49.6		17.6	1.44		46.6
OREAS 214 Meas																							
OREAS 214 Cert																							
OREAS 218 Meas	535																						
OREAS 218 Cert	525																						
OREAS 224 (Fire Assay) Meas	2100																						
OREAS 224 (Fire Assay) Cert	2150																						
1078780 Orig		0.4	< 0.5	7	250	3	5	< 2	4	0.19	92	< 10	13	< 0.5	< 2	0.44	2	47	1.30	< 10	< 1	0.03	< 10
1078780 Dup		0.4	< 0.5	4	229	3	6	< 2	2	0.16	77	< 10	11	< 0.5	< 2	0.40	1	47	1.22	< 10	< 1	0.04	< 10
1078787 Orig	94																						
1078787 Dup	94																						
Method Blank	< 5																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	1	< 5	< 1	< 1	< 2	2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank																							

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.03
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FA-GRA
GXR-1 Meas	0.14	0.054	0.044	0.20	78	1	170	< 0.01	< 20	3	< 2	29	75	160	23	13	
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0	
GXR-4 Meas	1.56	0.136	0.116	1.76	4	6	67	0.13	< 20	< 1	3	< 10	77	12	11	9	
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186	
GXR-6 Meas	0.43	0.090	0.033	0.02	3	20	29		< 20	< 1	< 2	< 10	169	< 10	5	6	
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110	
OXN117 Meas																	7.45
OXN117 Cert																	7.679
SdAR-M2 (U.S.G.S.) Meas						3	22		< 20			< 10	20	< 10	18	7	
SdAR-M2 (U.S.G.S.) Cert						4.1	144		14.2			2.53	25.2	2.8	32.7	259	
OREAS 214 Meas																	2.95
OREAS 214 Cert																	3.03
OREAS 218 Meas																	
OREAS 218 Cert																	
OREAS 224 (Fire Assay) Meas																	
OREAS 224 (Fire Assay) Cert																	
1078780 Orig	0.12	0.026	0.011	0.06	< 2	1	5	< 0.01	< 20	< 1	< 2	< 10	8	< 10	1	< 1	
1078780 Dup	0.10	0.023	0.010	0.06	< 2	1	5	< 0.01	< 20	< 1	< 2	< 10	7	< 10	1	< 1	
1078787 Orig																	
1078787 Dup																	
Method Blank																	
Method Blank	< 0.01	0.011	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank																	< 0.03

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Sep-17
Invoice No.: A17-09546
Invoice Date: 17-Oct-17
Your Reference:

Doug Parker
365 Lark St
Thunder Bay ON P7B1P4
Canada

ATTN: Doug Parker

CERTIFICATE OF ANALYSIS

77 Humus samples were submitted for analysis.

The following analytical package(s) were requested: Code 2C Ash Vegetation INAA(INAAGEO)

REPORT **A17-09546**

Notes:

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
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Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	2	0.5	50	1	0.2	1	1	0.5	0.05	0.5	1	2	2	10	50	5	0.1	0.1	2	300	0.5	0.1
Method Code	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A	ASHIN A
1390	< 5	< 2	9.3	630	9	1.9	31	88	6.3	6.18	3.8	< 1	< 2	6	8350	< 50	159	1.0	16.1	< 2	< 300	< 0.5	10.6
1391	< 5	< 2	17.6	670	10	3.6	27	71	3.3	3.97	5.1	< 1	< 2	< 2	13500	< 50	96	1.2	11.6	< 2	< 300	1.0	6.3
1392	6	< 2	16.6	940	42	5.0	16	48	11.1	2.91	4.4	< 1	< 2	8	7050	< 50	105	7.1	9.8	< 2	< 300	< 0.5	7.6
1393	< 5	< 2	5.8	3460	63	18.3	19	34	6.7	1.96	2.5	< 1	< 2	3	5890	< 50	142	3.4	5.1	< 2	800	< 0.5	3.8
1394	< 5	< 2	18.0	870	82	14.1	25	52	5.6	3.21	3.6	< 1	< 2	3	5500	< 50	145	4.4	10.0	< 2	< 300	< 0.5	6.8
1395	< 5	< 2	5.3	640	5	0.4	37	73	4.5	4.26	5.4	< 1	< 2	< 2	11800	< 50	118	1.0	11.9	< 2	< 300	< 0.5	7.7
1396	< 5	< 2	14.2	1260	42	12.4	30	43	5.1	2.59	3.7	< 1	< 2	4	5000	< 50	56	6.9	6.9	< 2	< 300	< 0.5	6.6
1397	< 5	< 2	8.6	1760	17	5.8	21	50	5.8	3.19	4.4	< 1	< 2	< 2	9810	< 50	124	4.6	9.2	< 2	< 300	< 0.5	6.3
1398	< 5	< 2	10.1	1440	15	4.0	33	68	11.7	4.35	4.3	< 1	< 2	4	10600	< 50	152	4.4	15.4	< 2	< 300	< 0.5	7.2
1399	< 5	< 2	6.0	630	7	3.3	21	63	3.5	3.79	5.2	< 1	< 2	3	15000	< 50	91	1.2	10.6	< 2	< 300	< 0.5	5.2
1400	< 5	< 2	4.4	650	11	4.8	23	56	2.8	3.08	3.8	< 1	< 2	< 2	16700	< 50	77	1.2	9.4	< 2	< 300	< 0.5	3.8
1401	< 5	< 2	3.0	450	4	2.5	19	65	1.1	3.49	3.5	< 1	< 2	< 2	19600	< 50	54	0.3	11.9	< 2	< 300	< 0.5	4.7
1402	< 5	< 2	4.7	620	6	2.2	22	66	2.5	3.83	4.2	< 1	< 2	< 2	16200	< 50	60	0.3	12.8	< 2	< 300	< 0.5	6.1
1403	< 5	< 2	9.7	490	15	7.0	29	71	3.4	3.56	4.4	< 1	< 2	< 2	11900	< 50	85	0.9	12.8	< 2	< 300	< 0.5	4.8
1404	< 5	< 2	8.7	1110	39	16.8	34	57	4.6	2.78	2.5	< 1	< 2	< 2	5440	< 50	63	1.6	10.8	< 2	< 300	< 0.5	4.7
1405	< 5	< 2	12.2	700	28	8.2	45	53	5.2	2.78	3.8	< 1	< 2	6	7500	< 50	52	2.6	10.7	< 2	< 300	< 0.5	6.1
1406	< 5	< 2	6.2	700	9	4.4	26	62	2.0	3.49	3.3	< 1	< 2	4	15900	< 50	85	1.0	11.5	< 2	400	< 0.5	4.6
1407	< 5	< 2	11.9	2220	33	16.8	32	33	11.4	2.06	2.9	< 1	< 2	3	4380	60	57	1.8	5.3	< 2	< 300	< 0.5	4.3
1408	< 5	< 2	21.3	450	6	3.2	18	69	2.5	3.69	4.2	< 1	< 2	< 2	16300	< 50	52	0.3	11.8	< 2	400	< 0.5	3.8
1409	< 5	< 2	3.8	450	4	2.2	18	75	2.6	3.81	5.0	< 1	< 2	< 2	17700	< 50	57	0.3	12.0	< 2	< 300	< 0.5	4.2
1410	< 5	< 2	3.2	460	6	3.0	20	56	1.7	2.76	3.8	< 1	< 2	< 2	13500	< 50	68	0.4	8.8	< 2	< 300	< 0.5	3.2
1411	< 5	< 2	6.8	590	9	2.6	18	53	6.3	3.30	4.5	< 1	< 2	2	8880	< 50	76	1.6	10.3	< 2	< 300	< 0.5	7.0
1412	7	< 2	8.6	1070	22	7.4	51	57	8.5	2.97	4.3	< 1	< 2	4	8660	< 50	98	4.2	8.6	< 2	< 300	< 0.5	5.3
1413	< 5	< 2	3.8	590	5	4.6	21	89	3.4	4.02	4.7	< 1	< 2	3	17200	< 50	68	0.7	11.5	< 2	< 300	< 0.5	4.0
1414	< 5	< 2	3.3	560	6	4.2	22	88	3.5	4.49	4.3	< 1	< 2	< 2	16300	< 50	62	0.5	12.2	< 2	< 300	< 0.5	4.2
1415	15	< 2	14.0	1800	48	7.3	44	56	20.6	3.00	4.1	< 1	< 2	< 2	6240	< 50	166	8.4	8.0	< 2	< 300	< 0.5	6.4
1416	< 5	< 2	12.2	1480	36	11.5	44	59	19.9	2.60	3.7	< 1	< 2	3	6530	< 50	131	5.1	7.2	< 2	< 300	< 0.5	5.8
1417	8	< 2	13.6	1780	55	23.8	57	33	8.6	2.13	2.3	< 1	< 2	< 2	3280	< 50	112	3.0	4.9	< 2	1200	< 0.5	4.4
1418	< 5	< 2	6.7	740	14	6.2	35	72	4.8	3.53	4.8	< 1	< 2	< 2	11800	< 50	66	1.4	8.9	< 2	400	< 0.5	4.3
1419	< 5	< 2	8.2	1140	25	8.8	31	59	11.8	2.60	4.3	< 1	< 2	3	9100	< 50	122	3.7	7.7	< 2	400	1.1	5.6
1420	< 5	< 2	4.7	490	7	4.0	27	102	3.3	3.97	5.0	< 1	< 2	< 2	15100	< 50	85	0.9	11.5	< 2	500	< 0.5	4.3
1421	< 5	< 2	5.0	540	11	4.6	25	79	3.5	4.16	5.1	< 1	< 2	< 2	12200	< 50	99	1.1	11.6	< 2	< 300	< 0.5	6.4
1422	< 5	< 2	8.3	1520	33	9.9	37	65	5.7	4.00	3.7	< 1	< 2	2	8290	< 50	115	2.0	17.6	< 2	< 300	< 0.5	5.4
1423	< 5	< 2	6.3	1100	16	4.1	33	75	8.2	3.99	5.2	< 1	< 2	2	13900	< 50	142	1.3	11.7	< 2	< 300	< 0.5	5.5
1424	21	< 2	31.3	1540	51	10.3	65	44	10.9	2.81	3.1	< 1	< 2	3	5890	< 50	84	2.5	7.8	< 2	600	< 0.5	5.6
1425	< 5	< 2	10.8	1400	16	4.8	23	56	7.0	3.11	4.7	< 1	< 2	4	13800	< 50	98	1.5	9.4	< 2	< 300	< 0.5	5.5
1426	3850	< 2	16.6	1250	24	5.6	28	58	12.4	3.19	4.3	< 1	< 2	< 2	8840	< 50	166	2.8	13.4	< 2	< 300	< 0.5	6.1
1427	< 5	< 2	22.8	1250	11	4.2	19	66	5.1	3.89	4.8	< 1	< 2	2	16000	< 50	88	0.9	12.1	< 2	< 300	0.6	4.6
1428	< 5	< 2	8.6	1480	20	5.4	31	61	11.4	4.23	4.2	< 1	< 2	3	11200	< 50	150	1.6	11.8	< 2	< 300	< 0.5	5.6
1429	19	< 2	22.5	900	12	3.5	90	57	11.3	3.95	5.6	< 1	< 2	< 2	8860	< 50	60	2.9	13.2	< 2	< 300	1.1	8.4
1430	6	< 2	8.4	2180	34	11.4	36	49	9.9	3.07	3.4	< 1	< 2	4	6470	80	129	1.5	7.2	< 2	< 300	< 0.5	4.1

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	2	0.5	50	1	0.2	1	1	0.5	0.05	0.5	1	2	2	10	50	5	0.1	0.1	2	300	0.5	0.1
Method Code	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA
1431	10	< 2	12.3	1020	17	4.0	25	63	9.4	4.13	5.5	< 1	< 2	4	11700	< 50	126	1.7	11.1	< 2	< 300	< 0.5	7.7
1432	< 5	< 2	8.1	710	16	3.4	32	71	5.8	4.46	4.7	< 1	< 2	6	11800	< 50	157	1.1	14.4	< 2	< 300	< 0.5	6.3
1433	< 5	< 2	4.3	520	6	3.3	24	72	2.3	3.33	5.3	< 1	< 2	< 2	17300	< 50	110	1.2	11.2	< 2	300	< 0.5	5.2
1434	< 5	< 2	8.1	470	22	5.7	42	76	7.3	4.85	4.1	< 1	< 2	7	7880	< 50	181	4.1	18.0	< 2	< 300	< 0.5	9.1
1435	< 5	< 2	9.9	1510	47	24.1	31	41	13.4	2.15	2.5	< 1	< 2	< 2	6590	< 50	123	3.7	8.1	< 2	< 300	< 0.5	4.7
1436	< 5	< 2	10.3	490	10	4.9	23	74	3.7	3.88	4.6	< 1	< 2	< 2	15600	< 50	69	1.0	11.3	< 2	< 300	< 0.5	4.3
1437	26	< 2	15.6	790	41	16.9	31	51	12.3	2.66	3.5	< 1	< 2	< 2	6520	< 50	122	3.7	9.8	< 2	< 300	< 0.5	4.5
1438	< 5	< 2	40.2	570	18	6.5	22	78	8.6	3.89	4.8	< 1	< 2	< 2	14900	< 50	84	1.4	11.4	< 2	< 300	< 0.5	5.8
1439	< 5	< 2	13.0	450	12	3.6	31	91	6.3	5.25	3.9	< 1	< 2	< 2	9330	< 50	210	1.3	15.3	< 2	< 300	< 0.5	9.8
1440	< 5	< 2	32.8	420	38	22.0	20	47	5.3	2.90	2.4	< 1	< 2	< 2	3830	< 50	100	3.5	12.5	< 2	< 300	< 0.5	6.7
1441	< 5	< 2	7.1	620	10	3.7	22	76	5.0	3.92	5.9	< 1	< 2	4	15300	120	88	1.7	11.0	< 2	500	< 0.5	6.2
1442	< 5	< 2	4.5	510	9	7.5	23	72	3.8	3.67	5.1	< 1	< 2	< 2	15000	< 50	64	0.7	10.2	< 2	400	< 0.5	4.3
1443	8	< 2	17.6	680	92	21.2	240	42	< 0.5	12.6	< 0.5	1	< 2	9	2340	< 50	50	4.9	12.1	< 2	< 300	< 0.5	5.8
1444	70	< 2	248	650	5	7.0	18	66	2.1	4.31	4.3	< 1	< 2	< 2	19400	< 50	75	0.3	13.4	< 2	400	< 0.5	4.2
1445	< 5	< 2	6.5	910	10	4.7	27	63	3.8	4.08	5.2	< 1	< 2	< 2	14700	< 50	105	0.7	12.1	< 2	< 300	< 0.5	7.1
1446	< 5	< 2	7.2	580	7	2.9	21	68	3.3	4.29	5.3	< 1	< 2	2	17200	< 50	63	0.8	14.5	3	< 300	< 0.5	5.5
1447	< 5	< 2	8.1	670	51	21.3	15	34	6.3	2.25	2.8	< 1	< 2	3	4590	< 50	64	2.4	6.8	< 2	< 300	< 0.5	5.3
1448	7	< 2	66.3	510	47	9.8	19	68	4.7	4.23	4.2	< 1	< 2	5	9600	< 50	114	0.7	15.6	< 2	< 300	< 0.5	9.2
1449	< 5	< 2	4.4	630	8	2.3	23	72	3.5	4.02	5.1	< 1	< 2	< 2	18400	< 50	101	0.5	13.8	< 2	< 300	< 0.5	5.8
1450	< 5	< 2	4.2	750	9	5.4	16	46	4.8	3.15	3.7	< 1	< 2	< 2	13500	< 50	109	0.8	9.1	< 2	< 300	< 0.5	4.8
1451	< 5	< 2	3.9	630	6	4.7	18	63	3.3	4.03	5.8	< 1	< 2	< 2	18800	< 50	100	0.6	13.4	< 2	< 300	< 0.5	4.4
1452	26	< 2	93.0	570	7	3.5	17	69	4.7	5.10	6.3	< 1	< 2	< 2	16700	< 50	74	1.0	16.1	< 2	< 300	< 0.5	6.0
1453	< 5	< 2	3.8	560	7	4.1	16	74	2.8	4.22	4.7	< 1	< 2	< 2	20500	< 50	80	0.6	11.8	< 2	< 300	< 0.5	4.6
1454	< 5	< 2	4.8	740	17	4.9	26	76	3.5	3.25	4.0	< 1	< 2	< 2	12400	< 50	100	2.2	10.0	< 2	300	< 0.5	4.9
1455	< 5	< 2	13.8	1040	23	3.6	23	69	10.1	3.68	4.6	< 1	< 2	7	9890	< 50	93	5.4	10.4	< 2	< 300	< 0.5	6.3
1456	< 5	< 2	9.8	1250	22	5.8	29	59	8.4	2.85	5.1	< 1	< 2	5	9690	< 50	114	6.3	8.9	< 2	< 300	< 0.5	7.2
1457	< 5	< 2	5.8	680	5	2.1	32	86	5.1	4.26	4.2	< 1	< 2	< 2	11700	< 50	139	1.3	11.9	< 2	< 300	< 0.5	5.8
1458	6	< 2	4.6	580	9	1.9	31	87	3.6	4.55	3.7	< 1	< 2	2	13900	< 50	92	1.1	15.7	< 2	< 300	< 0.5	7.2
1459	8	< 2	7.3	1140	45	18.1	8	30	3.0	1.55	1.8	< 1	< 2	< 2	3190	< 50	62	3.9	4.3	< 2	< 300	< 0.5	3.5
1460	< 5	< 2	22.2	570	152	21.6	18	37	1.2	2.26	1.8	< 1	< 2	< 2	2280	< 50	70	4.3	6.0	< 2	< 300	< 0.5	4.5
1461	8	< 2	5.9	580	7	2.1	30	79	3.7	4.23	4.3	< 1	< 2	< 2	13600	< 50	83	1.3	13.5	< 2	< 300	< 0.5	6.7
1462	< 5	< 2	1.8	650	8	3.6	21	81	2.2	3.79	3.7	< 1	< 2	< 2	18100	< 50	63	0.6	12.0	< 2	< 300	< 0.5	3.6
1463	< 5	< 2	10.4	920	16	4.1	38	80	7.9	5.01	4.4	< 1	< 2	< 2	12600	< 50	92	2.0	13.7	< 2	< 300	< 0.5	5.6
1464	23	< 2	18.3	420	7	1.6	27	94	4.4	5.29	4.6	< 1	< 2	3	12000	< 50	41	0.9	13.6	< 2	< 300	< 0.5	4.7
1465	< 5	< 2	6.4	880	11	5.4	22	65	4.2	3.66	4.9	< 1	< 2	5	15200	< 50	103	1.7	11.6	< 2	< 300	< 0.5	6.5
1407B	18	< 2	8.9	1280	38	26.4	37	45	10.5	2.41	2.4	< 1	< 2	< 2	8930	< 50	117	1.4	6.8	< 2	900	< 0.5	3.7

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Unashed Weight	Ashed Weight	% Ash
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	g	g	%
Lower Limit	0.1	1	50	0.1	3	5	0.1	0.01	0.5	0.05	0.05				
Method Code	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	INAA	none	none	none
1390	2.7	< 1	100	30.3	72	28	3.0	1.40	< 0.5	1.36	0.30	1.20	79.5	64.3	80.8
1391	2.0	< 1	130	18.4	45	18	2.0	0.90	< 0.5	1.01	0.19	1.06	73.9	40.4	54.8
1392	3.1	< 1	620	23.9	52	22	2.2	0.90	< 0.5	1.42	0.21	0.802	54.3	7.11	13.1
1393	1.2	< 1	2020	16.5	38	18	1.7	0.60	< 0.5	0.69	< 0.05	0.782	70.1	4.83	6.89
1394	2.2	< 1	430	46.5	98	51	4.3	1.60	< 0.5	1.51	0.07	0.471	50.9	5.01	9.84
1395	2.5	< 1	100	23.1	57	31	2.3	1.00	< 0.5	1.23	0.18	1.12	71.5	60.5	84.5
1396	1.8	< 1	1060	22.0	48	25	2.2	0.80	< 0.5	1.03	0.05	0.435	49.8	4.74	9.52
1397	2.3	< 1	290	20.0	46	19	2.1	0.80	< 0.5	1.20	0.16	0.578	58.9	10.8	18.4
1398	2.1	< 1	370	37.6	84	48	4.2	1.70	0.6	1.71	0.28	0.670	72.0	18.9	26.3
1399	1.5	< 1	100	17.2	42	15	2.0	0.90	< 0.5	1.25	0.16	1.15	71.5	45.5	63.7
1400	1.0	< 1	140	14.5	31	12	1.5	0.70	< 0.5	0.91	0.07	1.34	70.3	36.4	51.8
1401	1.1	< 1	70	14.8	36	13	2.8	0.63	< 0.5	0.96	0.09	1.52	70.5	47.5	67.5
1402	1.9	< 1	140	20.4	51	15	3.7	0.80	< 0.5	1.31	0.15	1.38	72.7	43.1	59.2
1403	1.5	< 1	230	17.5	40	12	3.3	0.74	< 0.5	1.40	0.10	0.863	72.2	24.1	33.4
1404	1.3	< 1	1950	14.8	32	17	2.9	0.46	< 0.5	1.43	< 0.05	0.557	65.8	12.1	18.4
1405	1.1	< 1	690	21.1	43	16	3.5	0.69	< 0.5	1.30	0.08	0.424	62.9	7.48	11.9
1406	1.8	< 1	70	18.2	37	12	2.9	0.63	< 0.5	1.19	0.07	1.08	77.1	30.7	39.8
1407	1.1	< 1	520	15.1	34	15	2.5	0.51	< 0.5	0.95	< 0.05	0.377	49.9	5.06	10.1
1408	1.1	< 1	130	13.6	37	12	2.8	0.63	< 0.5	1.13	0.12	1.22	70.8	35.3	49.8
1409	1.8	< 1	70	13.9	33	11	2.8	0.69	< 0.5	1.13	0.11	1.52	76.8	62.9	81.8
1410	0.5	< 1	70	12.4	29	8	2.0	0.51	< 0.5	0.74	0.08	1.22	71.2	34.1	47.9
1411	2.9	< 1	160	25.8	60	19	4.6	0.80	0.6	1.62	0.20	0.670	58.6	15.3	26.1
1412	1.6	< 1	390	24.8	48	23	2.4	0.40	< 0.5	0.92	0.11	0.527	54.8	10.9	19.9
1413	1.0	< 1	90	14.1	31	12	1.7	0.45	< 0.5	0.79	0.12	1.48	72.7	45.5	62.6
1414	0.9	< 1	110	13.6	28	9	1.7	0.70	< 0.5	0.68	0.14	1.56	72.6	41.0	56.5
1415	3.2	< 1	290	23.8	44	18	2.4	0.70	< 0.5	0.91	0.11	0.382	59.1	5.60	9.48
1416	1.6	< 1	80	27.4	44	19	2.3	1.00	< 0.5	0.75	0.06	0.411	71.5	7.73	10.8
1417	1.9	< 1	1040	18.9	31	22	1.8	0.70	< 0.5	0.75	< 0.05	0.386	63.2	7.77	12.3
1418	1.4	< 1	140	18.2	34	13	1.8	0.70	< 0.5	0.83	0.12	1.04	70.9	27.4	38.6
1419	2.1	< 1	140	24.6	45	25	2.2	0.75	< 0.5	0.92	0.11	0.457	73.4	8.90	12.1
1420	1.0	< 1	110	19.0	39	16	2.1	0.80	< 0.5	0.85	0.11	1.38	70.7	41.8	59.2
1421	1.9	< 1	70	26.0	49	26	3.0	1.02	< 0.5	1.13	0.19	1.01	70.4	36.5	51.8
1422	1.4	< 1	1460	20.5	42	23	3.2	0.54	< 0.5	2.19	< 0.05	0.536	58.0	10.9	18.8
1423	1.3	< 1	330	25.6	42	22	3.3	0.59	< 0.5	1.92	0.12	0.600	72.7	19.0	26.1
1424	1.2	< 1	340	30.7	46	22	3.6	0.54	< 0.5	1.67	< 0.05	0.390	52.8	6.44	12.2
1425	1.4	< 1	120	20.4	34	17	2.6	0.54	< 0.5	1.42	0.06	0.706	68.2	14.9	21.8
1426	2.1	< 1	670	23.5	44	17	3.4	0.29	< 0.5	2.18	0.16	0.422	55.0	5.23	9.51
1427	0.7	< 1	270	20.3	40	20	2.9	0.67	< 0.5	1.59	0.15	0.882	66.4	21.9	33.1
1428	1.3	< 1	280	24.3	45	25	3.5	0.71	< 0.5	1.83	0.08	0.545	60.8	12.7	20.8
1429	2.1	< 1	420	33.5	63	33	5.2	0.84	< 0.5	2.62	0.36	0.504	62.3	17.0	27.4

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Unashed Weight	Ashed Weight	% Ash
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	g	g	%
Lower Limit	0.1	1	50	0.1	3	5	0.1	0.01	0.5	0.05	0.05				
Method Code	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	INAA	none	none	none
1430	2.0	< 1	420	18.0	29	9	2.3	0.29	< 0.5	1.28	< 0.05	0.370	69.7	10.1	14.4
1431	2.0	< 1	240	32.5	55	30	3.6	0.71	< 0.5	1.93	0.16	0.614	69.1	11.2	16.2
1432	1.9	< 1	250	41.4	93	38	6.2	1.42	0.8	2.26	0.27	0.840	70.5	24.9	35.4
1433	1.5	< 1	120	16.8	38	13	2.1	0.75	< 0.5	0.93	0.20	1.36	72.3	50.0	69.1
1434	2.4	< 1	240	79.8	198	96	10.2	2.85	1.3	2.29	0.51	0.628	71.9	22.3	31.1
1435	1.9	< 1	2930	14.9	31	16	1.9	0.70	< 0.5	0.87	< 0.05	0.433	67.6	8.36	12.4
1436	1.2	< 1	150	14.8	34	13	1.9	0.65	< 0.5	0.76	0.12	1.50	72.0	38.7	53.8
1437	0.4	< 1	900	15.1	35	16	2.0	0.50	< 0.5	1.07	< 0.05	0.481	50.2	6.91	13.8
1438	1.6	< 1	390	18.8	47	18	2.4	0.80	< 0.5	0.88	0.17	1.15	72.3	26.6	36.9
1439	2.0	< 1	170	26.8	63	26	3.3	0.95	< 0.5	1.15	0.26	1.23	70.8	44.2	62.5
1440	2.6	< 1	230	93.2	138	105	11.6	3.35	0.9	2.30	0.24	0.457	57.2	9.08	15.9
1441	1.5	< 1	230	18.1	42	20	2.2	0.85	< 0.5	0.88	0.17	1.20	73.6	37.2	50.5
1442	1.1	< 1	550	14.5	33	11	1.7	0.70	< 0.5	0.74	0.09	1.17	70.7	29.8	42.2
1443	1.1	< 1	950	127	418	156	17.5	4.85	2.8	3.33	0.52	0.420	37.1	4.21	11.4
1444	0.8	< 1	210	20.6	36	12	2.8	0.44	< 0.5	1.27	0.05	1.14	57.9	18.1	31.3
1445	1.0	< 1	120	23.3	46	20	3.2	0.47	< 0.5	1.45	0.14	0.889	71.1	31.8	44.8
1446	1.1	< 1	< 50	30.6	59	23	4.7	0.69	< 0.5	1.75	0.19	1.18	71.8	39.9	55.5
1447	1.5	< 1	200	24.9	41	18	3.9	0.44	< 0.5	1.55	< 0.05	0.385	54.7	6.13	11.2
1448	1.4	< 1	130	35.3	60	38	5.8	0.63	< 0.5	2.26	0.20	0.662	70.0	21.7	31.0
1449	1.4	< 1	< 50	22.8	46	19	3.3	0.53	< 0.5	1.64	0.18	1.20	70.2	35.9	51.1
1450	1.1	< 1	140	19.2	35	14	2.5	0.35	< 0.5	1.50	0.14	0.886	56.0	17.1	30.5
1451	1.2	< 1	< 50	25.7	48	21	3.9	0.53	< 0.5	1.74	0.21	1.38	70.3	35.9	51.2
1452	1.4	< 1	100	21.6	43	17	3.6	0.50	< 0.5	1.99	0.22	1.12	72.5	40.3	55.5
1453	0.9	< 1	100	17.0	31	10	2.6	0.38	< 0.5	1.27	0.09	1.44	71.4	41.7	58.4
1454	2.0	< 1	270	17.5	35	13	1.9	0.75	< 0.5	0.68	0.09	0.823	61.4	18.6	30.3
1455	2.5	< 1	270	24.9	52	27	2.7	0.75	< 0.5	1.09	0.18	0.508	71.7	15.1	21.1
1456	2.5	< 1	110	24.2	48	25	2.4	0.85	< 0.5	1.07	0.15	0.503	66.0	16.3	24.7
1457	1.3	< 1	100	17.7	43	13	1.9	0.65	< 0.5	0.73	0.17	1.19	74.3	53.6	72.2
1458	1.4	< 1	90	29.9	69	31	3.7	1.20	< 0.5	1.12	0.27	1.41	71.9	48.2	67.1
1459	0.7	< 1	1420	12.6	24	13	1.5	0.35	< 0.5	0.52	< 0.05	0.371	52.9	3.73	7.05
1460	1.4	< 1	330	15.0	27	25	1.9	0.30	< 0.5	0.72	< 0.05	0.426	58.9	9.11	15.5
1461	1.9	< 1	90	27.3	60	24	3.1	1.05	< 0.5	1.05	0.21	1.17	70.2	47.5	67.6
1462	1.0	< 1	110	12.8	27	11	1.5	0.65	< 0.5	0.68	0.10	1.59	70.3	42.5	60.4
1463	1.7	< 1	210	15.2	38	14	2.2	0.85	< 0.5	0.91	0.11	1.10	70.3	28.5	40.5
1464	1.1	< 1	130	16.9	36	13	2.1	0.70	< 0.5	1.00	0.28	1.37	72.4	47.3	65.3
1465	1.4	< 1	250	25.0	48	21	3.4	0.63	< 0.5	1.91	0.15	0.763	72.1	23.1	32.1
1407B	1.1	< 1	600	20.0	28	16	2.3	0.46	< 0.5	1.13	< 0.05	0.530	59.2	6.81	11.5

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	2	0.5	50	1	0.2	1	1	0.5	0.05	0.5	1	2	2	10	50	5	0.1	0.1	2	300	0.5	0.1
Method Code	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA
Ash AU Meas	57		234	< 50	< 1	0.7	7	16		0.80					730			1.5	2.0				0.6
Ash AU Cert	54.0		224	30.0	0.200	0.700	7.00	15.0		0.760					700			1.60	1.90				0.100
NIST 1632D Meas			5.9	< 50	19	< 0.2	4	14	< 0.5	0.70	0.6	< 1			290	< 50	< 5	0.4	2.8	< 2	< 300		1.4
NIST 1632D Cert			6.20	41.0	18.7	0.150	3.50	14.0	0.590	0.735	0.580	0.0900			300	9.30	8.00	0.461	2.90	1.30	500		1.50
1421 Orig	< 5	< 2	5.6	560	12	4.9	26	80	3.7	4.30	5.3	< 1	< 2	< 2	12600	< 50	107	1.2	12.0	< 2	< 300	< 0.5	6.8
1421 Dup	< 5	< 2	4.5	520	11	4.3	24	77	3.3	4.03	4.8	< 1	< 2	4	11700	< 50	91	1.0	11.2	< 2	< 300	< 0.5	5.9
1453 Orig	< 5	< 2	3.9	570	7	4.3	17	74	3.0	4.25	4.6	< 1	< 2	< 2	20900	< 50	76	0.7	11.8	< 2	< 300	< 0.5	4.7
1453 Dup	< 5	< 2	3.8	540	7	4.0	16	73	2.7	4.18	4.8	< 1	< 2	< 2	20000	< 50	84	0.6	11.9	< 2	< 300	< 0.5	4.4
Method Blank	< 5	< 2	< 0.5	< 50	< 1	< 0.2	< 1	< 1	< 0.5	< 0.05	< 0.5	< 1	< 2	< 2	< 10	< 50	< 5	< 0.1	< 0.1	< 2	< 300	< 0.5	< 0.1

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Lower Limit	0.1	1	50	0.1	3	5	0.1	0.01	0.5	0.05	0.05	
Method Code	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	INAA
Ash AU Meas		1	< 50	2.3	7		0.4	0.10		0.31	0.06	
Ash AU Cert		1.00	22.0	2.20	2.00		0.400	0.100		0.300	0.0500	
NIST 1632D Meas	0.5		< 50		11		1.0	0.11				
NIST 1632D Cert	0.510		12.0		12.0		1.10	0.120				
1421 Orig	1.9	< 1	80	26.7	50	27	3.1	1.05	< 0.5	1.12	0.18	1.01
1421 Dup	1.9	< 1	60	25.3	49	25	2.9	1.00	< 0.5	1.15	0.19	1.00
1453 Orig	0.9	< 1	80	17.3	32	10	2.7	0.41	< 0.5	1.23	0.07	1.46
1453 Dup	1.0	< 1	120	16.6	31	10	2.5	0.35	< 0.5	1.31	0.12	1.42
Method Blank	< 0.1	< 1	< 50	< 0.1	< 3	< 5	< 0.1	< 0.01	< 0.5	< 0.05	< 0.05	1.00

Quality Analysis ... *Innovative Technologies*

Date Submitted: 11-Sep-17
Invoice No.: A17-09817
Invoice Date: 25-Sep-17
Your Reference:

Doug Parker
365 Lark St
Thunder Bay ON P7B1P4
Canada

ATTN: Doug Parker

CERTIFICATE OF ANALYSIS

5 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)

Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A17-09817**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

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

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1078796	< 5	< 0.2	< 0.5	32	676	< 1	22	< 2	49	3.00	< 2	< 10	27	< 0.5	< 2	2.29	20	10	5.13	< 10	< 1	0.05	< 10
1078797	< 5	< 0.2	< 0.5	10	1090	< 1	46	< 2	50	3.79	19	< 10	18	< 0.5	< 2	2.69	32	55	7.95	10	< 1	0.04	< 10
1078798	1860	0.6	< 0.5	7	212	3	7	3	7	0.31	17	< 10	10	< 0.5	< 2	1.15	6	42	1.64	< 10	< 1	0.03	< 10
1078799	7	< 0.2	< 0.5	124	662	< 1	24	< 2	46	2.88	2	11	38	< 0.5	< 2	2.00	24	35	5.63	10	< 1	0.07	< 10
1078800	1960	0.7	0.7	156	917	< 1	13	5	34	0.89	1930	< 10	15	< 0.5	< 2	0.43	4	24	7.80	< 10	< 1	0.06	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1078796	1.86	0.076	0.044	0.04	3	5	35	0.38	< 20	8	5	< 10	136	< 10	16	12
1078797	3.82	0.066	0.045	< 0.01	6	17	28	0.32	< 20	3	< 2	< 10	191	< 10	23	8
1078798	0.26	0.020	0.004	0.26	< 2	1	5	0.02	< 20	2	< 2	< 10	16	< 10	1	2
1078799	2.37	0.137	0.036	0.09	< 2	10	166	0.39	< 20	4	< 2	< 10	146	< 10	20	17
1078800	0.73	0.019	0.034	3.51	4	3	12	< 0.01	< 20	2	< 2	< 10	29	< 10	4	3

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		30.7	2.2	1170	775	13	29	598	691	0.35	397	< 10	469	0.8	1490	0.71	7	6	22.3	< 10	1	0.03	< 10
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas		3.9	< 0.5	6530	136	319	39	41	68	2.81	100	< 10	56	1.4	10	0.86	13	52	3.10	< 10	< 1	1.69	46
GXR-4 Cert		4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-6 Meas		0.4	< 0.5	75	1100	1	27	98	129	7.70	244	< 10	856	0.9	< 2	0.12	13	83	6.13	20	2	1.18	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
SdAR-M2 (U.S.G.S.) Meas			5.3	251		14	46	847	860				140	5.4	< 2		13	9		< 10	2		44
SdAR-M2 (U.S.G.S.) Cert			5.1	236.00 00		13	49	808	760				990	6.6	1.05		12.4	49.6		17.6	1.44		46.6
OREAS 223 (Fire Assay) Meas	1820																						
OREAS 223 (Fire Assay) Cert	1780																						
OREAS 218 Meas	542																						
OREAS 218 Cert	531																						
1078800 Orig		0.7	0.9	157	915	< 1	12	3	34	0.88	1940	< 10	15	< 0.5	< 2	0.43	4	24	7.74	< 10	< 1	0.06	< 10
1078800 Dup		0.6	0.6	155	919	< 1	14	6	34	0.89	1930	< 10	15	< 0.5	2	0.43	4	23	7.86	< 10	< 1	0.06	< 10
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.13	0.053	0.043	0.21	85	< 1	170	< 0.01	< 20	11	< 2	29	73	144	25	13
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.66	0.137	0.123	1.84	3	7	66	0.12	< 20	2	3	< 10	74	13	12	9
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.44	0.085	0.034	0.01	4	19	26		< 20	< 1	7	< 10	172	< 10	5	8
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
SdAR-M2 (U.S.G.S.) Meas						2	22		< 20			< 10	18	< 10	20	7
SdAR-M2 (U.S.G.S.) Cert						4.1	144		14.2			2.53	25.2	2.8	32.7	259
OREAS 223 (Fire Assay) Meas																
OREAS 223 (Fire Assay) Cert																
OREAS 218 Meas																
OREAS 218 Cert																
1078800 Orig	0.72	0.018	0.034	3.49	5	3	12	< 0.01	< 20	1	< 2	< 10	29	< 10	4	3
1078800 Dup	0.73	0.019	0.034	3.52	4	3	12	< 0.01	< 20	2	< 2	< 10	29	< 10	4	3
Method Blank																
Method Blank																
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

APPENDIX IV

Sample Descriptions

UTM						Analyte Sym	Au	As	Cr	Fe	Ni	Zn
NAD83						Unit Symbol	ppb	ppm	ppm	%	ppm	ppm
						Detection Lir	5	0.5	1	0.05	50	50
Samp #	Waypoint	GPS Position	Altitude	Sample Type	*Comments*	Analysis Met	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA	ASHINA
1390	1390	16 U 283355 5386148	435 m	Humus	clay	1390	< 5	9.3	88	6.18	< 50	100
1391	1391	16 U 283353 5386207	436 m	Humus		1391	< 5	17.6	71	3.97	< 50	130
1392	1392	16 U 283354 5386250	430 m	Humus	near o/c	1392	6	16.6	48	2.91	< 50	620
1393	1393	16 U 283352 5386298	427 m	Humus		1393	< 5	5.8	34	1.96	< 50	2020
1394	1394	16 U 283352 5386353	425 m	Humus		1394	< 5	18	52	3.21	< 50	430
1395	1395	16 U 283352 5386402	424 m	Humus	clay	1395	< 5	5.3	73	4.26	< 50	100
1396	1396	16 U 283401 5386376	420 m	Humus		1396	< 5	14.2	43	2.59	< 50	1060
1397	1397	16 U 283397 5386323	428 m	Humus		1397	< 5	8.6	50	3.19	< 50	290
1398	1398	16 U 283401 5386275	439 m	Humus		1398	< 5	10.1	68	4.35	< 50	370
1399	1399	16 U 283401 5386225	436 m	Humus		1399	< 5	6	63	3.79	< 50	100
1400	1400	16 U 283399 5386172	437 m	Humus		1400	< 5	4.4	56	3.08	< 50	140
1401	1401	16 U 283400 5386125	438 m	Humus		1401	< 5	3	65	3.49	< 50	70
1402	1402	16 U 283400 5386077	440 m	Humus		1402	< 5	4.7	66	3.83	< 50	140
1403	1403	16 U 283449 5385953	428 m	Humus	near o/c	1403	< 5	9.7	71	3.56	< 50	230
1404	1404	16 U 283450 5386004	440 m	Humus	near o/c	1404	< 5	8.7	57	2.78	< 50	1950
1405	1405	16 U 283452 5386053	446 m	Humus	near o/c	1405	< 5	12.2	53	2.78	< 50	690
1406	1406	16 U 283459 5386102	444 m	Humus		1406	< 5	6.2	62	3.49	< 50	70
1407B	1407B	16 U 283450 5386150	214 m	Humus		1407B	18	8.9	45	2.41	< 50	600
1407	1407	16 U 283452 5386199	447 m	Humus		1407	< 5	11.9	33	2.06	60	520
1408	1408	16 U 283452 5386250	437 m	Humus		1408	< 5	21.3	69	3.69	< 50	130
1409	1409	16 U 283452 5386301	430 m	Humus	sandy	1409	< 5	3.8	75	3.81	< 50	70
1410	1410	16 U 283452 5386350	426 m	Humus		1410	< 5	3.2	56	2.76	< 50	70
1411	1411	16 U 283451 5386399	422 m	Humus		1411	< 5	6.8	53	3.3	< 50	160
1412	1412	16 U 283505 5386373	417 m	Humus		1412	7	8.6	57	2.97	< 50	390
1413	1413	16 U 283501 5386326	427 m	Humus		1413	< 5	3.8	89	4.02	< 50	90
1414	1414	16 U 283497 5386275	434 m	Humus		1414	< 5	3.3	88	4.49	< 50	110
1415	1415	16 U 283503 5386224	443 m	Humus		1415	15	14	56	3	< 50	290
1416	1416	16 U 283502 5386176	446 m	Humus		1416	< 5	12.2	59	2.6	< 50	80
1417	1417	16 U 283498 5386123	453 m	Humus		1417	8	13.6	33	2.13	< 50	1040
1418	1418	16 U 283502 5386072	448 m	Humus		1418	< 5	6.7	72	3.53	< 50	140
1419	1419	16 U 283500 5386022	445 m	Humus		1419	< 5	8.2	59	2.6	< 50	140
1420	1420	16 U 283498 5385974	436 m	Humus	near o/c	1420	< 5	4.7	102	3.97	< 50	110
1421	1421	16 U 283500 5385922	424 m	Humus		1421	< 5	5	79	4.16	< 50	70
1422	1422	16 U 283549 5386000	445 m	Humus	near o/c	1422	< 5	8.3	65	4	< 50	1460
1423	1423	16 U 283551 5386051	447 m	Humus		1423	< 5	6.3	75	3.99	< 50	330
1424	1424	16 U 283547 5386100	454 m	Humus	near trench	1424	21	31.3	44	2.81	< 50	340
1425	1425	16 U 283548 5386150	455 m	Humus		1425	< 5	10.8	56	3.11	< 50	120

1426	1426	16 U 283550 5386203	456 m	Humus		1426	3850	16.6	58	3.19	< 50	670
1427	1427	16 U 283549 5386250	441 m	Humus		1427	< 5	22.8	66	3.89	< 50	270
1428	1428	16 U 283598 5386224	447 m	Humus		1428	< 5	8.6	61	4.23	< 50	280
1429	1429	16 U 283599 5386174	454 m	Humus		1429	19	22.5	57	3.95	< 50	420
1430	1430	16 U 283600 5386124	454 m	Humus		1430	6	8.4	49	3.07	80	420
1431	1431	16 U 283603 5386076	450 m	Humus	near trench	1431	10	12.3	63	4.13	< 50	240
1432	1432	16 U 283598 5386023	446 m	Humus		1432	< 5	8.1	71	4.46	< 50	250
1433	1433	16 U 283600 5385974	441 m	Humus		1433	< 5	4.3	72	3.33	< 50	120
1434	1434	16 U 283649 5385999	434 m	Humus		1434	< 5	8.1	76	4.85	< 50	240
1435	1435	16 U 283647 5386049	437 m	Humus		1435	< 5	9.9	41	2.15	< 50	2930
1436	1436	16 U 283650 5386102	438 m	Humus		1436	< 5	10.3	74	3.88	< 50	150
1437	1437	16 U 283649 5386150	435 m	Humus	near o/c	1437	26	15.6	51	2.66	< 50	900
1438	1438	16 U 283654 5386200	439 m	Humus		1438	< 5	40.2	78	3.89	< 50	390
1439	1439	16 U 283702 5386176	423 m	Humus	clay	1439	< 5	13	91	5.25	< 50	170
1440	1440	16 U 283702 5386125	423 m	Humus		1440	< 5	32.8	47	2.9	< 50	230
1441	1441	16 U 283698 5386077	426 m	Humus		1441	< 5	7.1	76	3.92	120	230
1442	1442	16 U 283699 5386025	430 m	Humus		1442	< 5	4.5	72	3.67	< 50	550
1443	1443	16 U 283698 5385974	422 m	Humus	wet mossy	1443	8	17.6	42	12.6	< 50	950
1444	1444	16 U 283749 5385952	427 m	Humus		1444	70	248	66	4.31	< 50	210
1445	1445	16 U 283748 5385999	429 m	Humus		1445	< 5	6.5	63	4.08	< 50	120
1446	1446	16 U 283751 5386052	424 m	Humus		1446	< 5	7.2	68	4.29	< 50	< 50
1447	1447	16 U 283752 5386101	420 m	Humus	wet	1447	< 5	8.1	34	2.25	< 50	200
1448	1448	16 U 283750 5386147	418 m	Humus		1448	7	66.3	68	4.23	< 50	130
1449	1449	16 U 283800 5386124	421 m	Humus		1449	< 5	4.4	72	4.02	< 50	< 50
1450	1450	16 U 283802 5386075	419 m	Humus		1450	< 5	4.2	46	3.15	< 50	140
1451	1451	16 U 283798 5386023	426 m	Humus		1451	< 5	3.9	63	4.03	< 50	< 50
1452	1452	16 U 283798 5385973	432 m	Humus	near trench	1452	26	93	69	5.1	< 50	100
1453	1453	16 U 283799 5385925	425 m	Humus	near o/c	1453	< 5	3.8	74	4.22	< 50	100
1454	1454	16 U 283850 5385900	421 m	Humus		1454	< 5	4.8	76	3.25	< 50	270
1455	1455	16 U 283851 5385949	431 m	Humus	near o/c	1455	< 5	13.8	69	3.68	< 50	270
1456	1456	16 U 283853 5386003	426 m	Humus		1456	< 5	9.8	59	2.85	< 50	110
1457	1457	16 U 283850 5386052	421 m	Humus		1457	< 5	5.8	86	4.26	< 50	100
1458	1458	16 U 283851 5386103	413 m	Humus	clay wet	1458	6	4.6	87	4.55	< 50	90
1459	1459	16 U 283858 5386153	417 m	Humus	swamp	1459	8	7.3	30	1.55	< 50	1420
1460	1460	16 U 283898 5386126	415 m	Humus	swamp	1460	< 5	22.2	37	2.26	< 50	330
1461	1461	16 U 283900 5386075	413 m	Humus	clay	1461	8	5.9	79	4.23	< 50	90
1462	1462	16 U 283901 5386027	417 m	Humus	swamp	1462	< 5	1.8	81	3.79	< 50	110
1463	1463	16 U 283896 5385975	424 m	Humus	near o/c	1463	< 5	10.4	80	5.01	< 50	210
1464	1464	16 U 283898 5385924	430 m	Humus	near o/c	1464	23	18.3	94	5.29	< 50	130
1465	1465	16 U 283898 5385873	422 m	Humus		1465	< 5	6.4	65	3.66	< 50	250

UTM NAD83								Analyte Syn Unit Symbol Detection Li	Au ppb 5
Samp #	Waypoint	GPS Position	Improved Relative Position	Altitude	Sample Type	Sample Length	*Mono or multi-lithic, colour, grain size, primary mineralogy, textures, bedding, structure, magnetic* *Alteration, intensity, minerals (sericite (fu), silicic, biotite, chlorite, ankerite, calcite, etc.) str, vn, stwk, fract* *Mineralization, intensity, minerals (VG, py, asp, po, cp, gp, Fe-oxide etc.)*	Analysis Me	FA-AA
	1294	16 U 283736 5385958		435 m	RCG		Chert, rusty, 3% pyrite, rush	1294	< 5
1078701	1270	16 U 283550 5386186		450 m	RCG		Altered Volcanic, 3-5% pyrite + arsenopyrite, ankerite+++, quartz stringers, quartz vein, disseminated calcite, non-magnetic, old pit	1078701	185
1078702	1272	16 U 283790 5385976		433 m	SG		Altered Banded Iron Formation? -sediment, cherty, banded, 5-7% pyrite+arsenopyrite, non-magnetic	1078702	206
1078703	QFPALTANK	16 U 283303 5386024		425 m	RCG		Altered QFP? -volcanic?, 2-3% pyrite, float in area of old pits	1078703	126
1078704	SOUTH TR		283420 5385100	463 m	SG		Altered Volcanic, minor pyrite, ankerite+++, quartz stringers, non-magnetic, old trench	1078704	1430
1078705	SOUTH TR		283330 5385115	463 m	SG		Altered Volcanic, 2-3% pyrite+arsenopyrite, ankerite+++, 5% quartz stringers, fine grained black mineral in narrow bands, non magnetic, old trench	1078705	45
1078706	SOUTH TR		283330 5385115	463 m	SG		Volcanic Breccia, 3-5% pyrite+arsenopyrite, 5% quartz stringers, fine grained black mineral in narrow bands, minor disseminatec calcite, non-magnetic, old trench	1078706	84
1078707	1285	16 U 283786 5385979		431 m	RCG	1m	Altered Banded Iron Formation? -sediment, cherty, banded, 2-3% pyrite+arsenopyrite, minor disseminated calcite, non-magnetic, at contact	1078707	326
1078708	1286	16 U 283787 5385975		435 m	RCG	3m	Altered Banded Iron Formation, rusty, greenish, chert magnetite bands, minor pyrite, minor disseminated calcite, magnetic	1078708	8
1078709	1287	16 U 283788 5385973		436 m	SG	1m	Altered Banded Iron Formation, as above, 2-3% pyrite+arsenopyrite	1078709	834
1078710	1288	16 U 283786 5385971		437 m	RCG	1m	Altered Banded Iron Formation? -sediment, cherty, banded, 5-7% pyrite+arsenopyrite, non-magnetic	1078710	4830
1078711	1289	16 U 283781 5385974		432 m	RCG	0.5m	quartz vein 0.5m, white, marble-like texture, weak disseminated calcite, tr pyrite	1078711	11
1078712	1290	16 U 283786 5385967		431 m	RCG	1m	Altered Volcanic, ankerite+++, 30% quartz stringers, sheared, non-magnetic, 5m east of sample above	1078712	198
1078713	1291	16 U 283738 5385963		430 m	RCG		Volcanic, rusty fractures, 1-2% pyrite, non-magnetic	1078713	< 5
1078714	1292	16 U 283738 5385962		432 m	RCG		Volcanic + Chert, rusty fractures, 2-3% pyrite, non-magnetic, 1m south of sample above	1078714	< 5
1078715	1293	16 U 283738 5385960		433 m	RCG	2m	Volcanic + Chert + Argillite, rusty, minor pyrite, non-magnetic, includes above 2 samples and sample below	1078715	6
1078716	1294	16 U 283736 5385958		435 m	RCG	0.25m	Volcanic + Chert, rusty fractures, 2-3% pyrite, non-magnetic, 2m east of sample at 1295	1078716	< 5
1078717	1295	16 U 283736 5385960		432 m	RCG	0.25m	Volcanic + Chert, rusty fractures, 2-3% pyrite, non-magnetic, 2m west of sample at 1294	1078717	< 5
1078718	1297	16 U 283563 5386135		448 m	RCG	1m	Quartz stringers 30% in ankerite+++, 2-3% pyrite +arsenopyrite in wallrock, northsouth zone along trench	1078718	318
1078719	1298	16 U 283569 5386141		447 m	RCG	1m	Quartz stringers 15% in ankerite+++, 3-5% pyrite+arsenopyrite in wallrock, northsouth zone along trench 5m north of 1297	1078719	178
1078720	1299	16 U 283568 5386142		450 m	SG		Quartz stringers 15% in ankerite+++, 5-7% pyrite+arsenopyrite in wallrock, at sample 1298	1078720	925
1078721	1300	16 U 283567 5386148		453 m	RCG	1m	Quartz stringers 10% in ankerite+++, 3-5% pyrite+arsenopyrite in wallrock, 5m north of 1298	1078721	350
1078722	1301	16 U 283567 5386145		456 m	SG		Quartz stringers 10% in ankerite+++, 7-10% pyrite+arsenopyrite in wallrock	1078722	329
1078723	1302	16 U 283564 5386148		454 m	RCG	1m	Quartz stringers in ankerite+++, 3-5% pyrite+arsenopyrite in wallrock, 5m north of 1300	1078723	491
1078724	1303	16 U 283405 5385922		428 m	SG		Chert + gp Argillite, semi-massive pyrite	1078724	17
1078725	1304	16 U 283404 5385922		427 m	RCG	2m	Chert + Argillite + Volcanic Breccia, rusty, 10% pyrite, north end trench	1078725	6
1078726	1305	16 U 283404 5385920		426 m	RCG	3m	Volcanic Breccia, rusty, 3-5% pyrite, minor disseminated calcite, non-magnetic, continuous with 1304	1078726	< 5
1078727	1306	16 U 283404 5385918		424 m	RCG	5m	Debris Flow, Chert + Argillite + Volcanic Breccia, rusty, 5% pyrite, continuous with 1305	1078727	10
1078728	1307	16 U 283403 5385906		430 m	RCG	5m	Debris Flow, Chert + Argillite + Volcanic Breccia, rusty, 5% pyrite, continuous with 1306, south end trench	1078728	9
1078778	1379	16 U 283581 5386065		440 m	RCG	5m	Graphitic Chert Argillite, weak shearing 315-90, minor quartz stringers.	1078778	7
1078779	1380	16 U 283591 5386073		445 m	RCG		Diorite, gray, massive, fine grained, minor quartz stringers, minor pyrite + arsenopyrite, local weak ankerite and weak to moderate calcite. Quartz veins and stringers represented by next three samples.	1078779	90
1078780	1380	17 U 283591 5386073		446 m	SG		Quartz Vein, white, minor rust.	1078780	3290
1078781	1380	18 U 283591 5386073		447 m	SG		Quartz Vein, white, minor ankerite, 50% altered dioritic wall rock with trace pyrite	1078781	19200
1078782	1380	19 U 283591 5386073		448 m	SG		Quartz Vein, white, 75% altered dioritic wall rock with 1-3 pyrite and arsenopyrite, minor calcite	1078782	20600
1078783	1381	16 U 283300 5385147		452 m	RCG	1m+	Altered Volcanic, local brecciated, ankerite++, minor quartz stringers, 1% pyrite + arsenopyrite, black mineral on fractures, minor calcite.	1078783	22
1078784	1382	16 U 283292 5385131		458 m	RCG	4m	Altered Volcanic, ankerite+, 1-2% pyrite + arsenopyrite, black mineral on fractures, minor calcite	1078784	< 5
1078785	1383	16 U 283387 5385073		462 m	RCG	3m	Graphitic Argillite, minor quartz stringers, rusty, minor calcite.	1078785	21
1078786	1384	16 U 283388 5385081		462 m	RCG	15m	Altered Volcanic, local brecciated with black and gray chert fragments, ankerite+, local minor fucsite, 1-2% pyrite, minor arsenopyrite, black mineral on fractures, minor calcite.	1078786	< 5
1078787	1384	17 U 283388 5385081		463 m	SG		as above, 5-7% pyrite, minor arsenopyrite, ankerite++.	1078787	94
1078796	1474	16 U 283632 5386145		443 m	RCG		Gabbro-Diorite, gray-green, medium graines, equigranular, 2-3mm feldspar and amphible, massive, blocky, trace pyrite	1078796	< 5
1078797	1475	16 U 283613 5386089		446 m	RCG		Diorite, gray-green, massive, fine grained, equigranular, 1mm feldspar and amphible, massive, blocky.	1078797	< 5
1078798	1476	16 U 283893 5385920		435 m	SG		Quartz Vein, float at old trench, white, glassy, massive.	1078798	1860
1078799	1476	17 U 283893 5385920		436 m	SG		Volcanic-Sediment? Float at side of old trench, dark gray, rusty, fractured, trace sulphide	1078799	7
1078800	1477	16 U 283786 5385971		435 m	SG		Sulphidic Chert, white-gray, rusty, 15-20% pyrite + arsenopyrite, minor quartz seams	1078800	1960

RCG = Representative Composite Grab
RG = Representative Grab
SG = Selective Grab
RC = Representative Chip