Ontario

We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l'accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez nous contacter.

Plato Gold Corp.

PIC RIVER PGM PROPERTY

WORK REPORT OF THE

June 26th to August 8th

EXPLORATION PROGRAM ON

THE PIC RIVER PGM PROPERTY,

MARATHON AREA, ONTARIO

THUNDER BAY MINING DIVISION

NORTHWESTERN ONTARIO, CANADA

NTS 42D/15H

For

Plato Gold Corp.

1240 Bay Street, Suite 800

Toronto, Ontario M5R 2A7

J. Camier, M.Sc., P.Geo.
Senior Project Geologist
Emerald Geological Services
Timmins, Ontario

December 04, 2022

-TABLE OF CONTENTS-

-APPENDICES-

-MAPS-

-LIST OF FIGURES-

-LIST OF PHOTOPLATES-

-LIST OF TABLES-

1.0 -SUMMARY-

Between June 26th and August 8th, 2022, Emerald Geological Services of Timmins, Ontario, was contracted by Plato Gold Corp., of Toronto, Ontario, to carry out prospecting on their Pic River PGM property located in the Foxtrap Lake area, Grain Township in the Marathon area of Ontario. The Pic River property consists of 111 contiguous unpatented claims to the north, west and southeast of the Little Pic River, approximately 21 kilometers northwest of the town of Marathon, Ontario.

The campsite for the project was located approximately 7 kilometers north of the property claim line and travel to and from work areas was by All-Terrain Vehicle (Quad). An old forestry logging road was used to access the property and had to be cleared prior to the work commencing. Eight days of brush cutting were required to clear the old forestry access road to the Little Pic River and Glory Creek on the south side of the property.

Once access was established, prospecting of the property began off this road. A total of 18 traverses including 3 helicopter traverses was completed during this program. The summer exploration program began by first prospecting the highest Electromagnetic (EM) priority targets as per Plato Gold Corp.'s request. The main target model used was prospecting for Platinum Group Metals (PGM) of platinum-palladium-copper (Pt-Pd-Cu) along the Coldwell Complex which is believed to extend westward from Generation Mining's property in the east onto Plato Gold's Pic River property to the west.

Numerous Time-Domain electromagnetic (TDEM) targets were selected by Plato Gold for inspection in the field. Three main target anomaly areas (Anomaly 29, 38, and 34-35-36) were selected for ground proofing. These EM anomalies were followed by numerous foot traverses on the ground searching for rock outcroppings that could be sampled for geochemical analyses.

A total of 115-man days was spent following EM targets and prospecting, as well as the collecting of Soil-Gas-Hydrocarbon (SGH) soil sampling.

It was found that the majority of the ground between the topographic highs was covered in thick glacial overburden consisting of silt, clays, sand and, boulders. The majority of the EM anomalies followed were found within and parallel to runoff ravines and streams; however, no outcrops along the erosional open cuts of the ravines could be found.

The northern section of the property was discovered to be comprised predominantly of granitoid rocks consisting largely of foliated tonalite intermixed with monzo-granodiorite, Quartz-syenite, and Amphibolite-Quartz Syenite. Rocks in the southern section of the property consist of a medium- to coarse-grained gabbroic intrusion with phases of feldspar (plagioclase) phyric gabbro intruding into foliated monzo-granodiorite and non-foliated syenite.

At total of 51 grab samples were collected from outcrop, including 3 samples from large angular float boulders. The rock grab samples were collected mostly from the south-central area of the claims east of Glory Creek and west of Little Pic River. All samples including two inserted QA samples were sent to Activation Laboratories in Thunder Bay, Ontario.

A program of Cu-Au Soil Gas Hydrocarbon (SGH) sampling was also completed to test its viability in the south portion of the property close to where gabbroic rocks outcropped. A total of 50 SGH samples were

collected on two parallel transect lines approximately 75m apart. Each sample station was approximately 25m apart as recorded by GPS. The SGH samples were sent to the Actlabs assay facility in Ancaster, Ontario for analyses. The results of which suggest one zone within the soil sampling area to be possibly anomalous with Au-Cu.

Two boat traverses of the Little Pic River through the east-central and southeast portion of the claims was accomplished after flying a boat and motor in by helicopter from a location near the campsite. From the river transects two walking traverses were conducted, the first from the west shore of the river along a steep cliff face, and the second from the east shore of the river inland towards the east. Additionally, two more helicopter supported traverses were completed in areas where access was difficult to obtain due to walking distance from access points and the crossing of the Little Pic River.

2.0 -INTRODUCTION-

Emerald Geological Services of Timmins, Ontario, was contracted by junior exploration company Plato Gold Corp., of Toronto, Ontario, and Rudolph Wahl of Marathon, Ontario, to carry out PGM prospecting on their Pic River PGM property located in the Foxtrap Lake area, Grain Township in the Marathon area of Ontario between June 26th and August 8th, 2022.

2.1 PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Pic River PGM Property (property) consists of 111 contiguous unpatented claims to the west and southeast of the Little Pic River, located approximately 21 kilometers northwest of the town of Marathon, Ontario. The property can be accessed via Highway 17 (Trans-Canada Highway) at the Dead Horse Creek turnoff approximately 25 kilometers west of Marathon, by turning north on the Dead Horse Creek Road and travelling for 18 kilometers along this secondary forestry access road, before turning northeast onto the Jackpine Lake Road, then travelling for 10 kilometers to the turn off for the single-track Vein Lake Road West. Then following the Vein Lake Road West eastward for 5 kilometers before turning south off this road onto a partially overgrown single-track road to the campsite approximately 3 kilometers to the south. From the campsite, an All-Terrain Vehicle (ATV-Quad) is required to travel the road south to the northern property claim line approximately 7 kilometers south from camp along an old overgrown forestry access road that had to be cleared of overgrowth in order to access the property. This trail continues south for another 5 kilometers and turns west ending at the steep embankment of Glory Creek, several hundred meters north of the Little Pic River. Rocks from the old bridge pilons are visible on the west shore of the deep and muddy creek. The entire trail within the claims was completely overgrown and had to be cleared for 5 kilometers in order to provide ATV-Quad access to the southern section of the property north of the Little Pic River. The entire old forestry access trail from the campsite through the claims to Glory Creek is approximately 12 kilometers and had several deep ravine crossings.

2.2 CLIMATE, RESOURCES, LOCAL INFRASTRUCTURE AND PHYSIOGRAPHY

The climate for the property claims and the Little Pic River area is typical of Northern Ontario, with cold winters and warm summers. The proximity to Lake Superior modifies the climate of the area to some degree creating a microclimate for the area with higher than usual snowfall during winter months for northern Ontario and slightly milder winter temperatures than that usually found away from the large lake's influence. Average precipitation records over the last nearly 40 years, records an average precipitation of approximately 50mm in February to a high of 92mm in September. Average recorded temperatures over the same 40-year range records an average high of 14°C in late summer to a low of -13°C in mid-winter (White, 2022; https://weatherspark.com).

2.3 PERSONNEL

The EGS team consisted of three EGS employed prospectors, Bobby Lowndes, Al Zawadski, and Doug Kekaway; headed by EGS Senior Project Geologist J. Camier, M.Sc., P.Geo.

Tom Savage of Superior Geospatial provided drafting and GIS support.

3.0 -GEOLOGY-

The Pic River PGM property is located in the Marathon area along the northeast shore of Lake Superior (Map 1 General Location; Map 2 Regional Location). The property occurs within the Superior Province in Ontario, within the Wawa-Abitibi Terrane inside the eastern end of the Archean-aged Western Schreiber-Hemlo Greenstone Belt and the younger mid Proterozoic-aged, circa 1.108-1.094 Ga, Coldwell Complex Intrusion (Heaman and Machado, 1992 and Heaman et al., 2007). The Wawa-Abitibi Terrane, circa 2.95 to 2.68 Ga, is a typical Archean greenstone-granite terrane consisting of primitive ultramafic to felsic volcanic rocks and associated metasedimentary rocks, intruded and enclosed by granitoid rocks. The sub-circular Coldwell Complex (CC) is the largest alkaline intrusive complex in North America (Walker et al. 1993) and has a diameter of approximately 25 km and a surface area of about 580 km^2.

3.1 REGIONAL GEOLOGY

The Pic River PGM property is contained within the northern section of the Port Coldwell Alkalic Complex. This complex occurs at the juncture of the Mid-Continent Rift (Figure 1, Mid-Continental Rift Geology) with a major northeast-trending curvilinear transcurrent fault, termed the Trans-Superior Tectonic Zone (TSTZ). This intersection is thought to mark the initial northward extending triple junction or "failed arm" of the Mid-Continental rift. The Port Coldwell Complex (Figure 2) lies directly on the extension of the northeast-trending Thiel Fault, mapped by magnetic and gravity methods at the bottom of Lake Superior. The Thiel Fault is an important structure in the rift acting as an accommodation zone bounding half grabens of structural alternating polarity. It is thought that the Thiel Fault joins the Big Bay/Ashburton Bay Fault, and offsets the western part of the Port Coldwell complex. Based on remote sensing, airborne magnetic interpretations and, geological mapping, it has been interpreted the TSTZ structural corridor is extrapolated 130 km northeast of the Coldwell complex to the Chipman Lake Alkalic Complex. Mapped surface expressions of the structure include the Boomerang Lake Fault east of the Killala Lake Alkalic Complex and the Chipman Lake Fault that offsets the western part of the Chipman Lake Complex (Rosatelli and Maitland, 2003). The airborne magnetic data (Figure 3) clearly defines a number of linear magnetic anomalies representative of the Coldwell and Chipman alkalic suite of intrusions. These intrusions all lie in close proximity to the faults that partially defines the TSTZ. The linear and spatial distribution of the complexes suggests that this structural corridor has acted as an extensional fault zone during the rifting event.

3.2 PROPERTY GEOLOGY

The geology of the Pic River PGM property consists of sporadic exposures of granitoid and intrusive gabbroic and diabase outcrops that are exposed primarily in topographic highs. The majority of the claims group is covered in a thick overburden of glacial silts, clays and sands that are overlain by a thin veneer of black soils and humus. Numerous drainage gullies and ravines crisscross the area between the outcrop exposures in areas of topographic highs, but very little outcroppings occur in these runoff ravines. Outcrops occurring along the Little Pic River are generally low lying and exposed only in a few locales along river banks, which for the most part are steep clay embankments.

Observed outcrops on the property consisted of foliated tonalite and monzo-granodiorite which occur in the northwest area of the claims group and extend to the Glory Creek and Little Pic River confluence. Here the outcrops are comprised of alternating tonalite to monzo-granodiorite bodies intruded by wide (>10m) dykes of fine- to medium-grained gabbro supporting minor to trace sulphides of pyrite and pyrrhotite. These outcrops form steep to vertical cliff faces with steep talus slopes at the bases of the cliffs.

In the central portion of the claims syenite and nephaline syenite outcrops occur forming steep ridges of topographic highs with glacial silts and clay filled valleys that drain towards the river between the ridges. Along the west shore of the Little Pic River syenite outcroppings form steep cliffs and clay covered talus slopes. Some of the syenite was found to contain large swaths of tourmaline-amphibole + K-feldspar pegmatites forming large semi-rounded bodies within the syenite groundmass of possible hydrothermal pods (PhotoPlate 1). A contact between the syenite and foliated tonalite to monzo-granodiorite was observed along a bench in the cliffs (PhotoPlate 2). Several low outcroppings along the river banks were found to be fine-grained magnetic diabase dykes intruding into medium-grained magnetic granodiorite (PhotoPlate 3) and occasional low-lying outcrops of foliated tonalite.

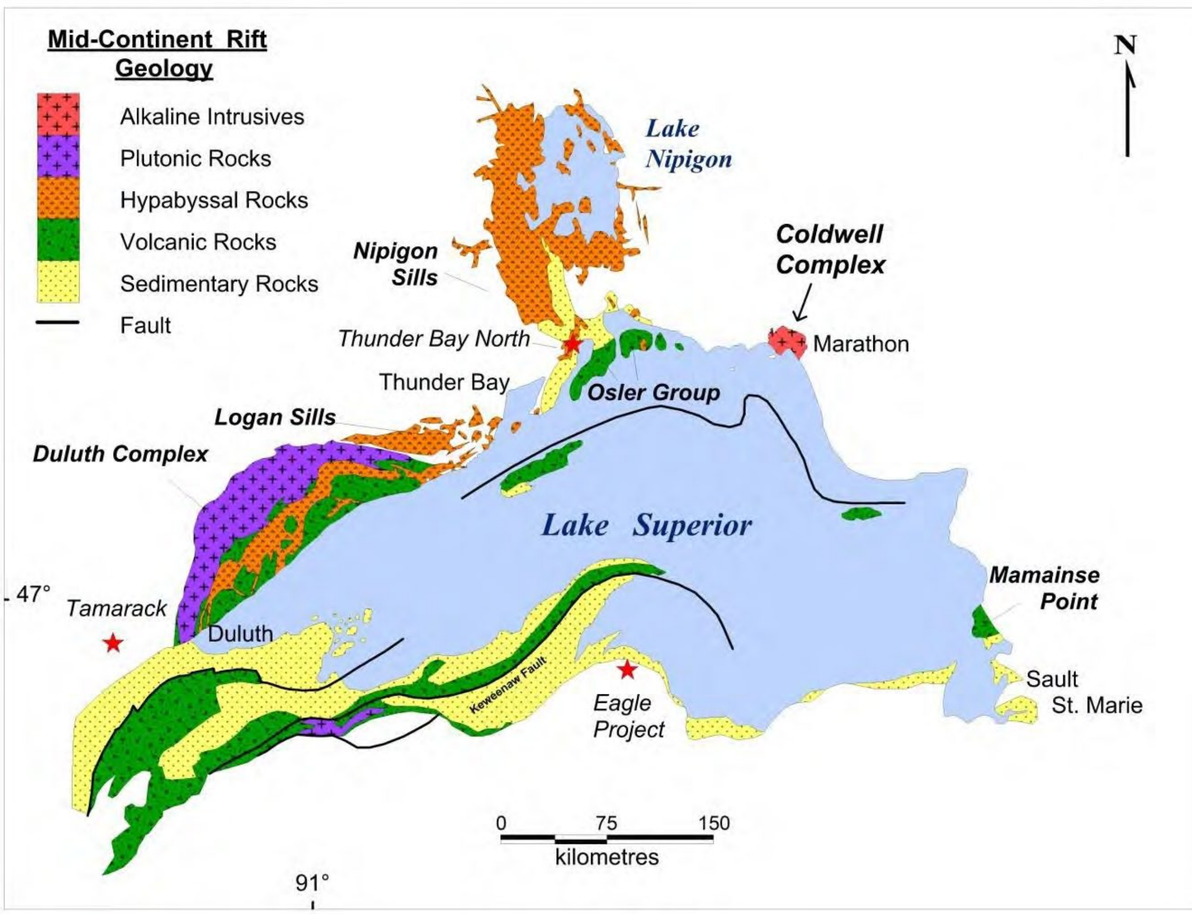


Figure 1: Proterozoic Geology, Lake Superior Region (Modified after Gignac et al. 2021, from Generation Mining Limited Feasibility Study Technical Report, March 23, 2021; White, 2022).

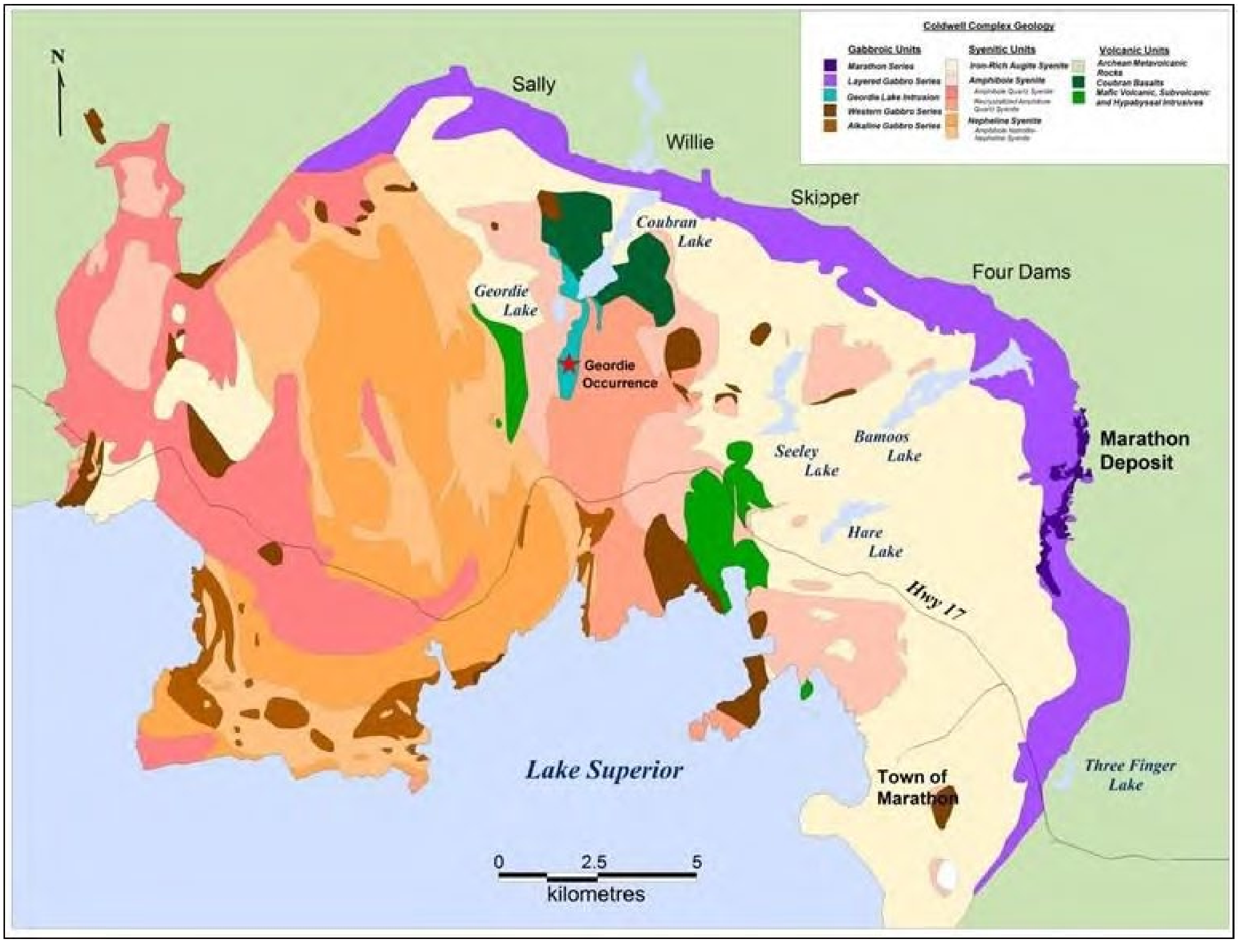


Figure 2: Geology of the Coldwell Complex. (Geology modified after Walker et al. (1993); Source: Marathon PGM Corp. (2010)).

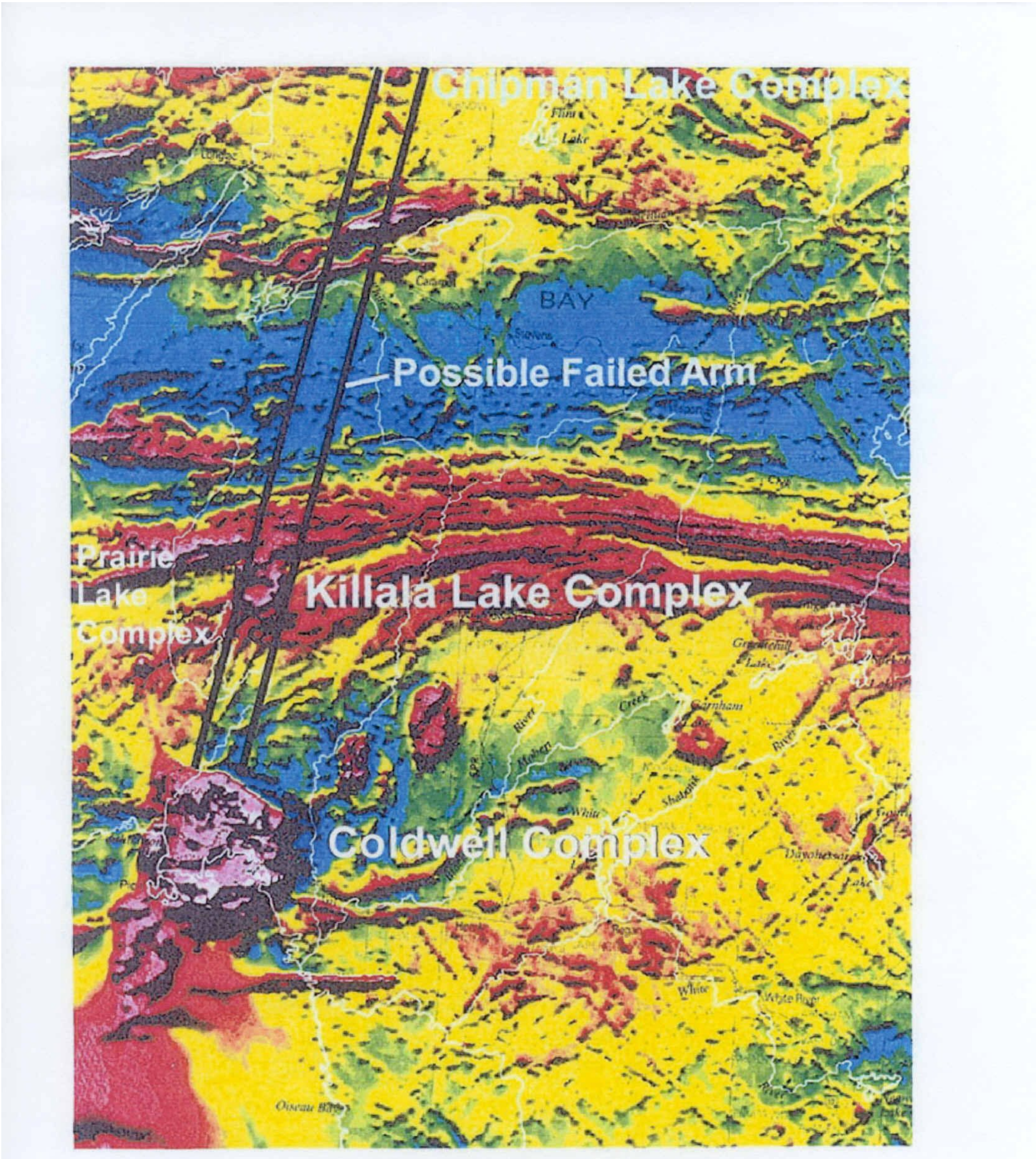


Figure 3: GSC aeromagnetic map illustrating the Coldwell Complex at the interpreted failed arm of the Mid-Continental Rift in Lake Superior (Rosatelli and Maitland, 2003).

PhotoPlate 1: POI-JC-027_NW (NAD83 Zn16 532,514E 5,415,644N) outcropping of tourmaline-amphibole and K-feldspar pods within syenite outcrops along the Little Pic River. Pods were found to have sporadic weak to moderate magnetism, with magnetite occurring as an accessory mineral. No sulphides were observed within the pods.

PhotoPlate 2: POI-JC-026 (NAD83 Zn16 532,517E 5,415,658N) Foliated Tonalite to monzo-granodiorite in contact with pink non-foliated syenite occurring midway up a cliff face on a bench on the west side of the Little Pic River in Claim 584710.

PhotoPlate 3: POI-JC-029_E (NAD83 Zn16 532,645E 5,415,356N) Medium- to coarse-grained massive granodiorite, moderately to strongly magnetic, outcropping along the east bank of the Little Pic River.

4.0 -EXPLORATION HISTORY-

Exploration in the surrounding the claims area and over the claims group has seen quite a bit of activity beginning in the early 1950's and probably earlier, although no information was found in the Ontario Assessment File database. However, that does not preclude no prospecting work was previously done in the claims group area.

4.1 PIC RIVER PGM CELL-CLAIMS

The Pic River PGM property claims are located in the Foxtrap Lake Area and Grain Township approximately 21 km northwest of the town of Marathon along the north shore of Lake Superior (Map 2). These amount to a total of 111 staked mining claims listed below in Table 1 (Map 3).

Table 1: Pic River PGM Claim Numbers (Map 3):

569694, 569702, 569696, 569704, 569699, 569693, 569703, 569697, 569698, 569701, 569695, 569700, 584711, 584710, 584709, 584708, 584707, 584712, 568896, 568895, 568894, 568893, 568892, 568891, 568890, 568889, 568888, 568887, 568886, 568885, 568884, 568883, 568882, 568881, 568880, 568879, 568878, 568877, 568875, 568874, 568873, 568876, 566403, 566402, 566401, 566400, 566399, 566398, 566397, 566396, 566395, 566394, 564450, 564449, 564448, 564447, 564446, 564445, 564444, 564443, 564442, 564441, 564440, 564417, 564416, 564415, 564414, 564413, 564412, 564411, 564410, 564402, 564401, 564400, 564399, 564398, 564397, 564396, 564395, 564394, 564393, 564392, 564391, 564390, 564389, 564388, 564387, 564386, 564385, 564384, 564383, 564382, 564381, 564380, 564379, 564378, 564377, 564376, 564375, 564374, 564373, 564372, 564371, 564370, 564369, 564368, 564367, 564366, 564365, 564364, 564363

4.2 DETAILED DESCRIPTION OF HISTORICAL WORK

The following is a detailed listing of historical work as found in the Ontario Assessment File Database, with excerpts from White's, 2022, report on '*2021 AIRBORNE GEOPHYSICAL SURVEY REPORT PIC RIVER PGM PROJECT FOXTRAP LAKE AREA, GRAIN TOWNSHIP MARATHON AREA THUNDER BAY MINING DIVISION NORTHWESTERN ONTARIO, CANADA NTS 42D/15H'* for Plato Gold Corp.

No assessment files pre-1950 was found in the database for the claims group.

1950 – 1970's: Excerpt in italics from White, 2022: *'Nepheline syenite, an industrial mineral product, was targeted for extraction during the 1950s to 1970s at three locations within the Coldwell Complex: Red Sucker Cove, Port Coldwell and Pic Island. Other notable rare metal and rare earth element occurrences are located within the Dead Horse Creek and McKellar Diatremes in the western metamorphic-contact-aureole of the Coldwell Complex (Sage, 1982, 1987, 1995). Smyk et al. (1993) of the OGS reported assays ranging up to 11.6% Zr, 0.6% Be, 2.5% Th, 250 ppm Sc, 1850 ppm Y, 300 ppm Nb, 903 to 1004 ppm and 4600 ppm U.'*

1954: AFN 42DNW0026; Foxtrap Lake Area; McCannell, J.D.; work performed for Caral Mining Company Limited; Report on Magnetic, Electrical Resistivity and Geological Reconnaissance Surveys Conducted over Two Groups of Claims of Caral Mining Company Limited, Township 79, Port Arthur Mining Division, Ontario. Geophysical magnetometer surveys and geological reconnaissance.

1959-1965: AFN 42D16NW0022 and AFN 42D16NW8368; Martinet Lake Area; Smith, J.C.; work performed for Lakehead Mines Ltd. (formerly Head of the Lakes Iron Limited, changed in 1963) and Denison Mines; Diamond drilling, 106 drillholes, total 22,281 feet of 7/8inch core.

1964: AFN 42D15NE0005; Foxtrap Lake Area; Irbe, J.G.; Diamond drilling 272.0 feet.

1984: AFN 42D16NW0018; Wullie Lake Area; Esson, Don W., Bell Geological Services Inc., for Parlake Resources Ltd.; 'Report on Geological Reconnaissance of Parlake Resources Limited Property Wullie Lake Area, District of Thunder Bay, NTS 42D/16'. Geological reconnaissance and mapping.

1985: AFN 42E01NW0100; Islealone and Killala Lake areas, NTS 42D/E; Carriere, D.R.; work performed for Noranda Exploration Company, Limited; Airborne VLF-EM geophysical survey covered 1360-line kilometers.

1986: AFN 42E01SE0007; Islealone and Killala Lake areas, NTS 42D/15,16, 42E/1,2; Bello, A. Dal, and Carriere, D.R.; work performed for Noranda Exploration Company, Limited; geophysical max-min and magnetometer surveys as well as geological mapping and sampling.

1993: Open File Report 5868; E.C. Walker et al (1993) of the Ontario Geological Survey (OGS), Precambrian Geology of the Coldwell Alkalic Complex. Geological mapping by the OGS.

2002: AFN 42D15NE2001; Foxtrap Lake area. Work performed by BHP World Expl Inc and McVicar Minerals Ltd. joint venture; Airborne electromagnetic and airborne magnetometer, prospecting, blasting and trenching two areas titled Little Pic River East and Little Pic River West.

2002: Excerpt in italics from White, 2022 (: *'In the central portion of the Coldwell Complex, L.E.H. Ventures Incorporated reported a resource from four mineralized zones within the Geordie Lake Pd-Cu Property. In 2002 independent consultants for the company, Giroux and Stanley Consultants, estimated an Indicated Resource of 24.4 Mt averaging 0.326% Cu, 0.537 g Pd/t, 0.007% Co, 0.011% Ni, 0.030 g Pt/t, 2.52 g Ag/t and 0.04 g Au/t and an Inferred Resource of 5.4 Mt averaging 0.36% Cu, 0.626 g Pd/t, 0.007% Co, 0.012% Ni, 0.04 g Pt/t, 3.04 g Ag/t and 0.05 g Au/t (NI 43-101 compliant).'*

2003: AFN 42D15NE2002; Foxtrap Lake area; Work performed by BHP World Expl. Inc and McVicar Minerals Ltd. joint venture; work consisted of geological prospecting and geochemical analyses.

2003: AFN 42D15NE2003; Foxtrap Lake area; Work performed by BHP World Expl. Inc and McVicar Minerals Ltd. joint venture; work consisted of geological prospecting and geochemical analyses.

2006: AFN 20003177, 20003178, 20003179; Killala Lake Area, NTS 42E/01-02, 42D/15-16; Boileau, Pierre; work performed by Dianor Resources Inc.; geophysical ground magnetic surveys.

2007: Excerpt in italics from White, 2022: '*Marathon PGM controlled the most advanced Cu-PGM+Au project within the Coldwell Complex. Mineralization occurs in the Two Duck Lake Gabbro, located on the eastern margin of the Coldwell Complex. During this period, the company completed a diamond drilling program consisting of 180 holes totaling 40,000 m (Marathon PGM Corporation, news release, October 24, 2007). Results from a fence of drill holes (M-07-403, 405, 406, 410, & 417) collared outside the western margin of the known resource at the time, intersected wide intervals of mineralization up to 120 m, grading 0.97 g/t PGM+Au and 0.35% Cu (ibid). Resource estimates completed in early 2007, by P&E Mining*

Consultants Incorporated for Marathon PGM, reported a Measured Resource of 39.2 Mt containing 1.6 Moz of PGM+Au and 285 Mlb of Cu and Indicated Resource of 28.9 Mt containing 1.1 Moz of PGM+Au and 178 Mlb of Cu (NI 43-101 compliant). Benton Resources Bermuda property was located along the northwest strike extension of the Marathon PGM deposit. The company completed 66 diamond drill holes totaling close to 10,000 m, covering a strike length of 15 km. Highlights from drill holes BO-07-48 and BO-07-54, returned assays grading up 1.91 g/t PGM, 0.31% Cu over 33 m and 2.19 g/t PGM, 0.31% Cu over 23.5m respectively (Benton Resources Inc., news release, September 10, 2007). In the central portion of the Coldwell Complex, L.E.H. Ventures Incorporated reported a resource from four mineralized zones within the Geordie Lake Pd-Cu Property. In 2002 independent consultants for the company, Giroux and Stanley Consultants, estimated an Indicated Resource of 24.4 Mt averaging 0.326% Cu, 0.537 g Pd/t, 0.007% Co, 0.011% Ni, 0.030 g Pt/t, 2.52 g Ag/t and 0.04 g Au/t and an Inferred Resource of 5.4 Mt averaging 0.36% Cu, 0.626 g Pd/t, 0.007% Co, 0.012% Ni, 0.04 g Pt/t, 3.04 g Ag/t and 0.05 g Au/t (NI 43-101 compliant).'

2008: AFN 20004798; Geotech Ltd., February, 2008; *'Report on a Helicopter-borne VTEM Versatile Time Domain Electromagnetic Geophysical Survey, Coldwell Complex Area, Ontario, Canada.'* Work completed for Pacific North West Capital Corp. Vancouver, BC; a total of 3221 line-kilometers flown between October 22nd and December 14th, 2007.

2008: AFN 20004806 and 20004807; Wallgren, Peter, April, 2008; *'Report of Work Prospecting and Lake Bottom Geochemical Sampling Survey on the Coldwell Project, Thunder Bay Mining Division, Ontario, Canada'*. Work completed for Pacific North West Capital Corp., Vancouver, BC; staking of 91 mineral claims, a lake sediment sampling program collected 523 samples, and a prospecting sampling program with a total of 120 rock samples collected and assayed.

2009: AFN 20007723; Wahl, Rudolph, January, 2009; *'Prospecting Report on Geological Mapping and Lithogeochemical Sampling Killala Lake South Property, Thunder Bay Mining Division, District of Thunder Bay, Ontario, NTS 42D 15 NE'*. Work completed for prospector Rudolph Wahl, Marathon, Ontario; work completed between May 4th and September 19th, 2009; consisting of general prospecting, geological mapping and rock sampling with 8 samples collected and sent for assay.

2021: AFN 200000020120; Siriunas, John M., September 17, 2021: '*Summary Exploration Report (2021) on the Marathon, Ontario Properties NTS 42D/09, 42D/15, 42D/16 Thunder Bay Mining Division, Thunder Bay District, Ontario, Canada.'* Completed was for Sienna Resources Inc., Vancouver, B.C. as prepared by Caracle Creek International Consulting Inc., Sudbury, Ontario. Work completed was a summary report on the Marathon, Ontario Properties; which summarized the ground geological exploration activity carried out by Caracle Creek between the 16th and 27th of August, 2021.

2021: AFN 200000020130; White, Gerald D., February 14, 2022; '*2021 Airborne Geophysical Survey Report Pic River PGM Project Foxtrap Lake Area, Grain Township Marathon Area Thunder Bay Mining Division Northwestern Ontario, Canada NTS 42D/15H; Work completed by Prospectair Geosurveys on October 27 and 28, 2021 For Plato Gold Corp. 1240 Bay Street, Suite 800 Toronto, Ontario M5R 2A7.'* work completed was a High-Resolution Heliborne Magnetic (MAG) and Time-Domain Electromagnetic (TDEM) Survey carried out by Prospectair Geosurveys for Plato Gold Corp. and Rudolf Wahl on the Pic River PGM Property from October 27th to October 28th, 2021.

2022: Prospecting of the Pic River PGM property by Emerald Geological Services of Timmins, Ontario, between June 26th to August 8th, 2022, for Plato Gold Corp. (This report).

5.0 -2020 EXPLORATION PROGRAM -

Emerald Geological Services of Timmins, Ontario, was contracted by Plato Gold Corp., of Toronto, Ontario, to carry out prospecting on their Pic River PGM property located in the Foxtrap Lake area, Grain Township in the Marathon area between June 26th and August 8th, 2022. The Pic River PGM property consists of 111 contiguous unpatented claims to the west and southeast of the Little Pic River, approximately 21 kilometers northwest of the town of Marathon, Ontario (Map 2 and 3).

5.1 INTRODUCTION

The campsite for the project was located approximately 7 kilometers north of the property claim line and travel to and from work areas was by ATV and foot traverse (Map 3). An old forestry logging road was used to access the property, but had to be cleared of brush and blow-down prior to the work commencing. Eight days of brush cutting and clearing were required to open the old forestry road for ATV-Quad access to the Little Pic River and Glory Creek on the south side of the property.

Once access was enabled prospecting of the property began off the road by foot traverses. Targeting of the areas to receive the highest priority is presented in the prospecting index map, Map 4. The crew first prospected the highest EM priority targets as per Plato Gold Corp.'s request. The main target model was Pt-Pd-Cu (PGM) along the Coldwell Complex located in the southern portion of the property, which extended from Generation Mining's property in the east onto Plato Gold's Pic River property in the west and exposed as medium- to coarse-grained gabbroic rock. As well as prospecting, Soil-Gas-Hydrocarbon (SGH) soil sampling was undertaken to determine if it was feasible for the property due to the areas of thick glacial overburden and is discussed below.

The prospecting program entailed the investigating of EM anomalies as outlined in priority target areas provided by Plato Gold (Map 4 Index), prospecting and sampling outcrops within accessible claims, as well as prospecting along the Little Pic River and to the southeast of the Little Pic River looking for gabbroic outcroppings and granitoid rocks in the south, central and northern section of the claims group; and, the testing of Soil Gas Hydrocarbon (SGH) soil sampling. At total of 51 rock grab samples were collected by the EGS crews from outcrop while on traverse, including 3 samples from large angular float boulders found in the southern area of the claims. Rock samples, locations and descriptions are found in Appendix I (rock sample table); and, Points of Interest (POI) is presented in Appendix II (POI table). Assay results and Actlabs assay certificates from rock grab samples, plus two QA sample standards, are presented in Appendix III. Traverse lines and sample sites are presented in Maps 5, 6 and 7. All rock samples were sent to Activation Laboratories in Thunder Bay for preparation and analyses. A program of Soil Gas Hydrocarbon sampling was also undertaken with 50 samples collected. The Actlabs SGH report is presented in Appendix IV.

A total of 115-man days was spent following EM targets and prospecting on the property (Map 4 Index) with a daily log presented in Appendix V. A Helicopter log is presented in Appendix VI; and, a Statement of Expenditures is found in Appendix VII.

5.2 RESULTS

Prospecting traverse tracks over the claims is presented in Maps 5 through 7. It was quickly determined the majority of the ground between the topographic highs was covered in thick glacial overburden, consisting of silts, clays, sandy clays and boulders, as well as dense vegetation. The bulk of the EM anomalies that were followed were found within, and parallel to, runoff ravines and streams. Unfortunately, no outcrops along these ravines could be found. It was quickly determined that outcroppings only occurred along steep to moderate topographic highs.

In the northern section of the property, it was found that outcrops consisted predominantly of granitoid rocks consisting largely of foliated tonalite, granodiorite and monzo-granodiorite determined by Walker (1993) to be of Archean age, with un-foliated intrusions of quartz-syenite, and amphibolite-quartz syenite interpreted by Walker (1993) as being of Proterozoic age. Observed rocks in the south-central section of the property in claim 566395 consisted of a medium- to coarse-grained intrusive gabbro with phases of feldspar (plagioclase) phyric gabbro intruding into foliated tonalite to monzo-granodiorite rock. This gabbro formed a topographic high with steep cliffs between the Little Pic River in the southeast and Glory Creek in the west. Two traverses, one on July 15th and the other on July 26th, sampled this gabbroic outcrop which supported trace to 1%, locally Py, Po and very trace Cpy (Map 5; Appendix I).

A program of Cu-Au Soil Gas Hydrocarbon (SGH) sampling was completed to test its viability in the south portion of the property close to where the gabbroic rocks outcrop in an area of thick glacial overburden (Map 8). A total of 50 SGH samples were collected on two parallel lines with approximate 75m separation between the transect lines and, sample stations at 25m interval separations (PhotoPlate's 4 and 5; Map 8). Each line collected a total of 25 samples.

PhotoPlate's 4 and 5: SGH sample number's 416063 and 416070.

A table of sample numbers, GPS locations and descriptions are presented in Table 2. The results of the SGH program suggest one area that is possibly anomalous in Au-Cu as presented in the SGH report from Actlabs found in Appendix IV.

SGH Sample No.	Easting_X	Northing_Y	Elevation_M	EPE_M	Date	Anomaly Strength	Description Notes
416051	531873	5414244	215	6	28-Jul-22	620.01	Black soils 10cm deep over brown sandy clays; poor GPS coverage under dense canopy and cloudy sky
416052	531912	5414243	220	7	28-Jul-22	No anomaly	6cm of black soil and humus over brown sandy clays; poor GPS coverage under canopy and cloudy sky
416053	531934	5414237	225	7	28-Jul-22	630.01	7cm of black soil and humus over brown sandy clays; poor GPS coverage under canopy and cloudy sky
416054	531957	5414248	228	6	28-Jul-22	No anomaly	5cm of dark brown soil over brown sandy clay
416055	531976	5414251	223	6	28-Jul-22	640.01	Dark brown soils 7cm deep over brown sandy clays
416056	532008	5414254	223	6	28-Jul-22	No anomaly	7cm reddish brown to dark brown soil over brownish gray sandy clays
416057	532029	5414259	229	5	28-Jul-22	650.01	7cm of dark brown soil over tannish brown sandy clays
416058	532055	5414271	233	6	28-Jul-22	No anomaly	7cm black soils of tannish brown sandy clays
416059	532071	5414283	235	5	28-Jul-22	660.01	6cm light to medium brown soils over tannish brown sandy clays
416060	532089	5414288	235	5	29-Jul-22	No anomaly	5cm of dark brown soils over red sandy soil then tan coloured clay
416061	532107	5414312	238	5	29-Jul-22	No anomaly	8cm of dark brown soil with reddish brown sandy soil over tan coloured clay
416062	532129	5414315	238	6	29-Jul-22	670.01	10cm of brown soil over tannish brown sandy clays
416063	532161	5414332	234	6	29-Jul-22	No anomaly	Dark brown soils 7cm deep over brown sandy clays
416064	532178	5414351	239	6	29-Jul-22	680.01	Dark brown soils 7cm deep over tan sandy clays
416065	532188	5414375	232	7	29-Jul-22	No anomaly	8cm of dark brown soil over tan coloured sandy clay
416066	532209	5414386	228	6	29-Jul-22	No anomaly	10cm dark brown soil over reddish brown sandy clays
416067	532232	5414406	224	6	29-Jul-22	690.01	10cm of dark brown soils and humus over brown sandy clay and tan clay
416068	532245	5414418	210	5	30-Jul-22	No anomaly	10cm of dark brown soil over tannish gray sandy clays
416069	532267	5414438	211	5	30-Jul-22	No anomaly	3cm of dark brown soil over tan clay in area of spring runoff and flooding
416070	532286	5414452	214	5	30-Jul-22	700.01	Dark brown shallow soil 3cm thick over tannish gray clay in flooding area
416071	532307	5414466	211	5	30-Jul-22	No anomaly	Brown soils at base of cedar stand in tannish gray clay covered flats in area of spring flooding
416072	532326	5414474	210	5	30-Jul-22	710.01	10cm thick dark brown soils over brownish gray clays
416073	532343	5414486	210	5	30-Jul-22	No anomaly	10cm of medium brown soil over tannish gray sandy clays
416074	532362	5414502	208	5	30-Jul-22	No anomaly	6cm of light brown soil over tannish gray sandy clays
416075	532376	5414515	206	6	30-Jul-22	720.01	brownish gray sandy clay on side of river bank no soils
416076	531833	5414324	215	5	31-Jul-22	No anomaly	On the old road that crossed Glory Creek, fine gravel and soils over rip rap and
416077	531863	5414320	212	5	31-Jul-22	No anomaly	10 cm of dark brown soils over tannish gray clay
416078	531892	5414322	224	5	31-Jul-22	No anomaly	10cm of dark brown soils over tannish gray clays
416079	531920	5414328	232	5	31-Jul-22	No anomaly	10cm of dark brown soils over tannish gray clays
416080	531939	5414331	231	5	31-Jul-22	No anomaly	15cm of blackish brown soil over tannish gray clays
416081	531968	5414337	231	5	31-Jul-22	No anomaly	15cm of blackish brown soil over tannish gray clays
416082	531990	5414342	232	5	31-Jul-22	No anomaly	15cm of blackish brown soil over tannish gray clays
416083	532011	5414350	233	7	31-Jul-22	No anomaly	8cm of dark brown soil over tan coloured sandy clay
416084	532036	5414360	235	6	31-Jul-22	No anomaly	15cm of blackish brown soil over tannish gray clays
416085	532056	5414368	234	8	31-Jul-22	No anomaly	10cm of dark brown soils over tannish gray clays
416086	532077	5414383	239	8	31-Jul-22	No anomaly	7cm of dark brown soil over tannish brown sandy clays
416087	532090	5414393	232	5	31-Jul-22	No anomaly	4cm of brown soils over light tan clay
416088	532111	5414413	236	5	31-Jul-22	No anomaly	8cm of dark brown soils over tannish gray clays
416089	532139	5414430	236	5	31-Jul-22	No anomaly	10cm of dark brown soils over tannish gray clays
416090	532156	5414449	236	6	30-Jul-22	No anomaly	6cm of brown soil over tannish gray clay
416091	532171	5414466	236	7	30-Jul-22	No anomaly	5cm of light brown soil over tannish gray clay
416092	532191	5414485	231	7	30-Jul-22	No anomaly	10cm of dark brown soil over tannish gray sandy clays
416093	532203	5414505	225	8	30-Jul-22	No anomaly	10cm of dark brown soil over tannish gray clays
416094	532222	5414518	221	8	30-Jul-22	No anomaly	10cm of brown soil over tannish brown sandy clays
416095	532241	5414533	225	7	30-Jul-22	No anomaly	10cm of dark brown soil over tannish gray clays
416096	532265	5414545	228	6	30-Jul-22	No anomaly	15cm of blackish brown soil over tannish gray clays
416097	532287	5414555	223	6	30-Jul-22	No anomaly	10cm of dark brown soil over tannish gray clays
416098	532306	5414564	218	7	30-Jul-22	No anomaly	6cm of brown soil over tannish gray clay
416099	532323	5414581	212	6	30-Jul-22	No anomaly	6cm of brown soil over tannish gray clay on side of steep hill towards river
416100	532331	5414593	206	6	30-Jul-22	No anomaly	River edge of clay banks with thin 2-3cm light brown soils over the clay

Table 2: The Actlabs report of the SGH soil sample results is presented in Appendix IV.

Several helicopter traverses were completed in areas where access was difficult to obtain due to terrain and walking distance from access points. The helicopter flight map traverses are presented in Map 8, and the helicopter log is found in Appendix VI. A total of 5.9 hours of helicopter time was used over three days on August 2nd, 4th, and 5th. Helicopter landing areas were also scouted out by helicopter and GPS coordinates were collected, as well as any outcrops spotted from the air that could be accessed by ATV and foot traverses.

The first transect of the Little Pic River occurred on August 2nd (Map 6). This included slinging the boat and motor into the Little Pic River to a grassy landing site location east of Claim 564379; picking up and inserting the crew at the landing site; and, cutting a trail to drag the boat and motor to the river's edge in order to access the river. The crew then boated down the river to a spot where the team could conduct foot traverses onto claims 584707 and 584710.

On August the 4th the helicopter dropped off one crew at the boat landing site to conduct a longer river traverse and later foot traverse into claims 564448, 564410 and 564416. The second crew was dropped off by helicopter east of the claims boundary in a swampy clearing used for a landing pad located off the claims. The crew then conducted a long foot traverse into claims 564414 and 564417 (Map 5).

A third, final helicopter supported traverse was conducted on August 5th, inserting the two crews at a helicopter landing pad in claim 564391 (Map 7). One crew traversed to the north in claim 564391, then turned east to claim 564390, before returning to the helicopter pad. The second crew traversed south into claim 564373 then east into claim 564369 before returning to the helicopter pad. The northern crew followed an old claim line for several hundred meters before turning east towards a topographic high. This traverse found tonalite to monzo-granodiorite outcrops extending up to 30 meters above to a point where they could not climb higher. Traversing to the east the crew intersected a fine-grained diabase intrusion that formed a contact between the tonalite and monzo-granodiorite and a medium-grained gabbro intrusion. The gabbro formed a talus debris slope, which the crew climbed an collected a sample, before encountering a 15m cliff face and having to retreat downslope. The crew then began the traverse back to the helicopter landing site.

The second crew traversed south before turning eastwards towards a topographic high. The crew traversed the topographic high transecting numerous quartz veins which were sampled that crosscut the host tonalite outcrops they encountered. They also encountered and sampled, a gabbro unit that was directly south of the first crew's gabbro, which may very well be the same dyke unit.

The final traverse of the summers program was conducted from the trail in claims 564399 and 564387. The crew found a gabbro dyke that crosscut the foliated tonalite to monzo-granodiorite and metasedimentary outcroppings, which formed a steep topographic high. Five samples were collected on this traverse, four from outcrop and one sample from a gabbro float.

6.0 -DISCUSSION OF RESULTS AND RECOMMENDATIONS-

A total of 51 rock samples were collected from outcrop and sent for assay along with two QA standards (OREAS 200 and CDN-BL-10 blank) to Activation Laboratories in Thunder Bay during this first phase of investigations on the Pic River PGM claims. The grab sample table is presented in Appendix 1, and Actlabs assay certificates and results are presented in Appendix III. The target model for the prospecting program was PGE-rich Coldwell Complex gabbro's, similar to what has been found on Generation Mining's ground immediately to the east of the claims block and, to determine if any of the mineralized gabbro's extend onto Plato Gold's Pic River property.

6.1 DISCUSSION OF RESULTS

A complete spreadsheet list of the rock grab samples is listed in Appendix I, with descriptions of rock types sampled, as well as locations of the sampling listed in NTS NAD83 Zn 16 coordinates.

At first glance, the assay results seem less than encouraging from the outcrops sampled. Nevertheless, the results are very similar to what has been recorded in the past as reported in assessment report AFN 42D15NE2002 from samples collected by Clark Everleigh Consulting's investigations for the McVicar Minerals Ltd./BHP Billiton joint venture. However, there were some surprising results in the recent sampling. Only two samples indicated any enrichment in Pt-Pd, samples B796252 and B796366. In sample B796252 collected from a diabase outcrop in which Pt assayed at 14ppb and Pd assayed at 16ppb, with Cu assaying at 186ppm. Sample B796366, collected from a gabbro outcrop yielded assay results for Pt at 11ppb and Pd at 13ppb, while Cu assayed 62ppm.

Assay results for Au in all samples collected were at, near, or below average continental crustal abundance between 3ppb and 7ppb; however, one assay result from sample B796369 collected from a gabbro outcrop was slightly elevated in Au at 15ppb.

What was very surprising in the assay results where elevated Ba occurring in 20 samples that assayed greater than Actlabs detection threshold of 1000ppm. However, this could be attributed to Ba-enrichment during metamorphic processes.

Several other Cu assay results were found to be slightly elevated; sample B796372 collected from a gabbro float assayed at 411ppm Cu; sample B796352 collected from a metasedimentary float assayed at 292ppm Cu; and, sample B796371 collected from gabbro float assayed at 228ppm Cu. Only two samples were elevated slightly in Ni, gabbro sample B796260 assayed 136ppm Ni; and, sample B796358 taken from a brecciated fault zone assayed 116ppm Ni.

The SGH results from the soil sampling found in Actlabs SGH report in Appendix IV, suggests that a possible Cu-Au anomaly occurs in the soils as interpreted from the results presented in the SGH report. Because the bedrock in the area is covered in a thick veneer of glacial silts, clays and gravels it may be possible that the SGH anomaly may be a buried glacial erratic boulder in the overburden. However, this still needs to be investigated further by conducting further SGH soil sampling lines that extend over the anomaly, preferably in perpendicular lines that cross over the suspected anomaly.

Prospecting the EM anomalies was less than successful in determining the reasons for the anomalies, as no outcrop was found over any of the EM anomalies; which, for the most part appeared to follow drainage ravines in the thick glacial overburden. That does not mean there are no actual anomalies beneath the overburden, it just implies that the teams were not able to physically verify the anomalies existence because of the thick overburden. Based on the depth of the erosional banks of some of the ravines crossed, it may be very detrimental to try and mechanically trench to the subcrop. It may therefore require soil sampling programs using either 'A' or 'B' horizons, or SGH soil sampling, and even MMI sampling in order to verify if a prospective target exists in subcrop. Or, possibly a combination of several methods of these soil sampling techniques in order to determine if an actual target exists below the overburden before a trenching or drill program is even contemplated.

6.2 RECOMMENDATIONS

Due to the scarcity of outcroppings over the EM anomalies and thickness of the glacial overburden covering the ground between topographic highs, another approach methodology is recommended on the west side of the Little Pic River. That approach should be a program of soil sampling using either 'A', 'B', SGH sampling, or MMI sampling. For the most part it was observed, outcrops only occur in the topographic highs within the claims group. These outcrops were comprised primarily of granitoid rocks consisting of foliated tonalite to locally differentiated monzo-granodiorite, to non-foliated and variably altered syenite as originally reported by Walker, et al., 1993, and subsequent workers. Gabbro outcrops do occur in the south-central section of the claims near the confluence of the Little Pic River and Glory Creek but were not observed to contain the mineralization as found to the east on Generation Mining's ground. Further investigations into this gabbro should be conducted and combined with the results found by McVicar/BHP as reported in their 2003 42D15NE2002 assessment report.

Due to the long travel times by ATV-Quad to access various sections of the property from the old logging road, and difficulty in working the property because of thick vegetation, dead fall and long foot traverses in uneven terrain, it may be prudent to cut more helicopter landing pads and set up remote fly-camp sites in various sections of the property. This would allow several teams to work the ground more effectively by having several remote campsites in selected areas to work from, instead of using one base camp to work the entire property. This would also allow access to the claims on the west side of Glory Creek, which could not be crossed due to the thick soft clay banks and muddy creek bottom, and lack of possible helicopter landing sites.

The crew brought in a boat and motor by trailer, which was then flown by helicopter to the Little Pic River to be used for access along the Pic. It was found that the banks are for the most part very steep and slick with clay making it somewhat difficult to climb. There were very few locations observed along the river which were not steep. It is suggested the previously mentioned Helicopter supported fly camps would make accessing those sections of the claims easier than if by trying to access the claims from the river.

Again, prospecting the EM anomalies in the glacial terrain was less than effective, as no outcrop was found over any of the EM anomalies investigated, which appeared for the most part to follow drainage ravines in the thick glacial overburden between topographic highs. That does not conclude there are no anomalies beneath the overburden, it just implies that the teams were not able to physically verify the anomalies genuineness because of the lack of outcroppings.

Based on the observed depth of some of the ravines it may be very detrimental to try to mechanically trench to subcrop. It is therefore suggested that a program of soil sampling using either 'A' horizon, 'B' horizon, or SGH, and even MMI soil sampling, be undertaken in order to validate if any prospective target exists beneath the overburden in subcrop. Or, possibly a combination of several methods of soil sampling in order to determine if actual targets exist below the overburden.

7.0 -STATEMENT OF QUALIFICATIONS-

Authors Certificate

I, Wm. John Camier, M.Sc., P.Geo, of 530 Banting Drive, Winnipeg, Manitoba, R3K 1C7 do hereby certify that as the author of *Pic River PGM Property Work Report of the June 26th to August 8th Exploration Program on the Pic River PGM Property, Marathon Area, Ontario, Thunder Bay Mining Division, Northwestern Ontario, Canada NTS 42D/15H* technical report prepared for, and on behalf of Plato Gold Corp., 1240 Bay Street, Suite 800, Toronto, Ontario M5R 2A7, dated November 28, 2022, do hereby make the following statements:

1) That I am an independent geological consultant retained by Emerald Geological Services of Timmins, Ontario in the capacity of Senior Project Geologist, which was contracted:

   Plato Gold Corp.
   1240 Bay Street, Suite 800
   Toronto, Ontario
   M5R 2A7

2) That I have graduated with a Bachelor of Science, Specialist Degree in Geology (1996) from Brandon University, Brandon, Manitoba. In addition, that I have obtained a Master of Science in Economic Geology from the University of Western Ontario (2002), London, Ontario.

3) That I am a member in good standing of the Association of Professional Geoscientists of Ontario (PGO), membership number 1722.

4) That I am a member in good standing in my home Province of the Association of Professional Engineers and Geoscientist of Manitoba (EGM), member number 21844.

5) That I have worked as a geologist since my graduation from Brandon University for a total of 26 years since my graduation from Brandon University in 1996, and in the mining and geological field since 1988.

6) That I have read National Instrument 43-101 (NI 43-101) and Form 43-101F, and certify that by reason of my education, affiliation with two professional associations (as defined in NI 43-101) and past relevant work experience that I was qualified to write this report.

7) That I am responsible for the writing of the *Pic River PGM Property Work Report of the June 26th to August 8th Exploration Program on the Pic River PGM Property, Marathon Area, Ontario, Thunder Bay Mining Division, Northwestern Ontario, Canada NTS 42D/15H* and was under contract to Emerald Geological Services who was contracted by Plato Gold Corp. of Toronto,

Ontario to conduct the work and relied solely on the material provided to me by Plato Gold Corp. representatives.

8) That I worked on, and supervised the work on Plato Gold Corp. Pic River PGM Project property from July 9th to August 8th 2022.

9) That I hold no shares or interests in Plato Gold Corp., and am independent of the issuer applying all of the tests as per NI 43-101.

10) That I consent to the filing of this Technical Report with any stock exchange and other regulatory authority by Plato Gold Corp. for assessment work credit filings with GAO, regulatory purposes, and including electronic publication in the public company files on their websites accessible by the public.

11) I also certify that I have prepared this Technical Report and have read the written disclosure being filed and do not have any reason to believe that there are any misrepresentations in the information contained within this Technical Report.

Dated this 29 Day of November, 2022.

Signature of Author

PROFESSIONAL GEOSCIENTIST
W. J. CAMIER
PRACTISING MEMBER
1722
ONTARIO

W. J. Camier, M.Sc., P.Geo. (APGO, APEGM)

Name of Author

Author's Professional Stamp

(APGO)

8.0 - REFERENCES-

Gignac, L., Murphy, P., Champagne, A., Hall, C., Puritch, E., Barry, J., Brown, F., Burga, D., Mackie, B.W., Pitman, P. and Raponi, T. 2021. Feasibility Study, Marathon Palladium and Copper Project, Ontario, Canada; Prepared by G Mining Services Inc. For Generation Mining Limited, 826p.

Heaman, L.M, Easton, R.M, Hart, T.R., MacDonald, C.A., Hollings, P. and Smyk, M. 2007. Further Refinement to the Timing of Mesoproterozoic Magmatism, Lake Nipigon Region, Ontario, Canadian Journal of Earth Sciences, 44(8): 1055-1086.

Heaman L.M. and Machado N., 1992: Timing and Origin of Mid-continent Rift Alkaline Magmatism, North America: Evidence from the Coldwell Complex, Contributions to Mineralogy and Petrology, v. 110, p. 289-303.

Michael Rosatelli, McVicar Minerals Ltd., Todd Maitland, Clark Exploration Consulting, 2003. Foxtrap Lake Property Grain and Walsh Townships and Foxtrap lake Area NTS 42D/15. Found in MNDEM AFN 42D15NE2002.

Walker, E.C., Sutcliffe, R.H., Shaw, C.S.J., Shore, G.T., and Penczak, R.S. 1993. Precambrian geology of the Coldwell Alkalic Complex; Ontario Geological Survey, Open File Report 5868, 30p.

Weather Spark: (https://weatherspark.com/y/14897/Average-Weather-in-Marathon-Canada-Year-Round).

White, Gerald D., 2022. 2021 Airborne Geophysical Survey Report Pic River PGM Project Foxtrap Lake Area, Grain Township Marathon Area, Thunder Bay Mining Division Northwestern Ontario, Canada NTS 42D/15H. Found in MNDEM AFN 20000020130: 2021.

-APPENDICES-

Appendix I: Grab sample list and assays (Assay Certificates in Appendix III).

Sample number	Sample type	Date	Year	Sampler	Purpose	Area	Sub Project	Claim-Cell	Source	Grid	Easting	Northing	Elevation m	Numeric Rock Code	Rock Code	Rock Type	Description	Photo_direction	Py_%	Py_style	Po_%	Po_style	Cpy_%	Cpy_style	Assay Certificate	Sample_Number	Pd_ppb
B796251	Grab	7/14/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531968	5414515	242	10a	GAB	Gabbro	Coldwell Complex gabbro, fine- to medium-grained displaying moderate to strong magnetism; typical gabbro texture (salt and pepper); unit is on contact with a crosscutting medium-grained syenite	NW			trace	diss			A22-11425	B796251	< 1
B796252	Grab	7/14/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531972	5414529	237	9	DIA	Diabase	Fine-grained dark gray to black diabase dyke trending west, strongly magnetic (compass did not work); no apparent sulphides	NW							A22-11425	B796252	16
B796253	Grab	7/14/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531974	5414537	239	10a	GAB	Gabbro	Coldwell Complex gabbro, medium-grained displaying strong magnetism; typical gabbro texture (salt and pepper); a 2-3mm wide veinlet of Cpy-Bn-Po crosscuts the unit; unit is massive	N			trace	aggregate in veinlet	trace	veinlet	A22-11425	B796253	< 1
B796254	Grab	7/14/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	532000	5414474	236	10a	GAB	Gabbro	Coldwell Complex gabbro, medium- to coarse-grained strongly magnetic, with trace Po; typical gabbro texture (salt and pepper); a 2-3mm wide flat lying veinlet of milky blue quartz	W			trace	grains			A22-11425	B796254	< 1
B796255	Grab	7/15/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	532001	5414533	225	10a	GAB	Gabbro	Medium- to Coarse-grained, strongly magnetic gabbro with very trace disseminations of Po; unit supports subangular to subrounded inclusions of chloritized mafic metavolcanic rocks up to 15cm diameter	W			very trace	grains and occasional aggregates			A22-11425	B796255	< 1
B796256	Grab	7/15/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531990	5414529	239	10a	GAB	Gabbro	Medium- to coarse-grained gabbro supporting 0.5% Po plus Cpy as granular aggregates; unit supports numerous subangular inclusions of mafic metavolcanic rock; unit is crosscut wit 5-7cm wide anastomosing syenitic veins that trend in a westerly direction, strong magnetism deviates the compass	W			0.5	grains and occasional aggregates			A22-11425	B796256	< 1
B796257	Grab	7/15/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531927	5414551	238	10a	GAB	Gabbro	Coarse-grained gabbro with defined layering from emplacement; unit is intermixed with Kfspr metasomatic alteration from intrusive syenitic dyking trace disseminated grains and small aggregates of Po + Cpy	W			trace	diss	trace	diss and aggregates	A22-11425	B796257	1
B796258	Grab	7/15/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531879	5414554	239	10a	GAB	Gabbro	Strongly magnetic medium-grained gabbro crosscut by fine-grained dark gray to black diabase dyke and anastomosing syenitic dykes; trace Po and lesser Cpy as grains and disseminated aggregates in groundmass and as grains within some Ca-rich plagioclase; diabase dyke strikes ~270-280 degrees and dips 45 degrees N; magnetism to strong for compass to get accurate readings; syenite dykes are anastomosing	S			trace	diss	very trace	diss	A22-11425	B796258	< 1
B796259	Grab	7/15/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531834	5414551	273	10a	GAB	Gabbro	Coarse-grained gabbro with trace Po and Cpy in groundmass as disseminated aggregates	W			trace	diss	trace	diss	A22-11425	B796259	< 1
B796260	Grab	7/15/2022	2022	JC/AZ	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531781	5414556	217	10a	GAB	Gabbro	Medium- to coarse-grained strongly magnetic gabbro with no apparent sulphides	N							A22-11425	B796260	1
B796261	Grab	7/26/2022	2022	JC/DK	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531954	5414475	243	10a	GAB	Gabbro	Fine-grained to medium-grained, strongly magnetic gabbro with trace Po	NW			trace	diss			A22-11425	B796261	< 1
B796262	Grab	7/26/2022	2022	JC/DK	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531910	5414463	240	10a	GAB	Gabbro	Medium-grained to locally coarse-grained gabbro supporting trace disseminated Po; unit is strongly magnetic	N			trace	diss			A22-11425	B796262	2
B796263	Grab	7/26/2022	2022	JC/DK	Assay	Glory Creek	Pic River	566395	Outcrop	NAD83 / UTM Zone16N	531912	5414522	256	10a	GAB	Gabbro	Medium-grained strongly magnetic gabbro with trace disseminated Po	NW			trace	diss			A22-11425	B796263	< 1
B796264	Grab	8/2/2022	2022	JC/AZ	Assay	Little Pic River	Pic River	584707	Float	NAD83 / UTM Zone16N	532704	5415720	195	10a	GAB	Gabbro	Angular gabbro boulder on island in the river; boulder supported trace Po and 5-7% Mt	N			trace	diss			A22-11425	B796264	< 1
B796265	Grab	8/2/2022	2022	JC/AZ	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532566	5415684	237	10d	SYN	Syenite	5mm smoky gray quartz vein crosscutting syenite and supports trace Py along vein walls	NW	0.5	diss					A22-11425	B796265	< 1
B796266	Grab	8/2/2022	2022	JC/AZ	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532525	5415630	242	10d	SYN	Syenite	Large coarse-grained tourmaline crystals with interstitial Kfspr grains in a hydrothermal pod within the syenite	NW							A22-11425	B796266	< 1
B796267	Grab	8/2/2022	2022	JC/AZ	Assay	Anomaly 29	Pic River	584710	Outcrop	NAD83 / UTM Zone16N	532612	5415716	236		FLT	Fault	Annealed fault zone with limonite-goethite staining on surface, fault supports angular mafic breccia fragments in a quartz lattice work and friable micaceous fault matrix, minor white oxide on surface of the fault; possible sulphide pits within the fragments and the matrix	NW	0.5	diss					A22-11425	B796267	< 1
B796351	Grab	7/26/2022	2022	JC/DK	Assay	Glory Creek	Pic River	566395	Float	NAD83 / UTM Zone16N	531916	5414484	270	5b	SED	Metasediments	Rusty stained metasedimentary float rock		1	diss					A22-11425	B796351	< 1
B796352	Grab	7/26/2022	2022	JC/DK	Assay	Glory Creek	Pic River	566395	Float	NAD83 / UTM Zone16N	531916	5414486	270	5b	SED	Metasediments	Rusty stained metasedimentary float rock		1	diss					A22-11425	B796352	< 1
B796353	Grab	8/2/2022	2022	DK	Assay	Anomaly 29	Pic River	584707	Float	NAD83 / UTM Zone16N	532576	5415704	236		BX	Fault Breccia	Float breccia below fault zone		1	diss					A22-11425	B796353	1
B796354	Grab	8/2/2022	2022	DK	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532581	5415698	227		BX	Fault Breccia	Float breccia below fault zone		1	diss					A22-11425	B796354	1
B796355	Grab	8/2/2022	2022	DK	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532592	5415695	234		FLT	Fault	1% Py in a 2m wide annealed fault zone		1	diss					A22-11425	B796355	< 1
B796356	Grab	8/2/2022	2022	DK	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532591	5415699	233		FLT	Fault	1% Py in a 2m wide annealed fault zone		1	diss					A22-11425	B796356	< 1
B796357	Grab	8/2/2022	2022	DK	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532600	5415696	232		FLT	Fault	1% Py in a 2m wide annealed fault zone		1	diss					A22-11425	B796357	< 1
B796358	Grab	8/2/2022	2022	DK	Assay	Anomaly 29	Pic River	584707	Outcrop	NAD83 / UTM Zone16N	532621	5415740	227		FLT	Fault	1% Py in a 2m wide annealed fault zone with biotite matrix		1	diss					A22-11425	B796358	3
B796359	Grab	8/3/2022	2022	DK	Assay	Anomaly 29	Pic River	584710	Outcrop	NAD83 / UTM Zone16N	532430	5415590	253	10a	GAB	Gabbro	Gabbro with trace Py		0.1	diss					A22-11425	B796359	< 1

Appendix I: Grab sample list and assays (Assay Certificates in Appendix III).

Sample number	Sample type	Date	Year	Sampler	Purpose	Area	Sub Project	Claim-Cell	Source	Grid	Easting	Northing	Elevation m	Numeric Rock Code	Rock Code	Rock Type	Description	Photo_direction	Py_%	Py_style	Po_%	Po_style	Cpy_%	Cpy_style	Assay Certificate	Sample_Number	Pd_ppb
B796360	Grab	8/3/2022	2022	DK	Assay	Anomaly 29	Pic River	584710	Outcrop	NAD83 / UTM Zone16N	532452	5415613	251	10a	GAB	Gabbro	Gabbro with trace Py		0.1	diss					A22-11425	B796360	< 1
B796268	Grab	8/3/2022	2022	AZ	Assay	Anomaly 29	Pic River	584710	Outcrop	NAD83 / UTM Zone16N	532403	5415599	263	10a	GAB	Gabbro	gabbro with trace Py		0.1	diss					A22-11425	B796268	< 1
B796269	Grab	8/3/2022	2022	AZ	Assay	Anomaly 29	Pic River	584710	Outcrop	NAD83 / UTM Zone16N	532403	5415599	263	10d	SYN	Syenite	Pink syenite with framboidal Py along fracture walls		0.5	diss					A22-11425	B796269	< 1
B796361	Grab	8/4/2022	2022	DK	Assay	Anomaly 38	Pic River	564414	Outcrop	NAD83 / UTM Zone16N	533011	5413791	284	10a	GAB	Gabbro	Coarse-grained gabbro with 1% Py		1	diss					A22-11425	B796361	6
B796362	Grab	8/4/2022	2022	DK	Assay	Anomaly 38	Pic River	564414	Outcrop	NAD83 / UTM Zone16N	533083	5413819	276	10a	GAB	Gabbro	Gabbro with trace Py		0.1	diss					A22-11425	B796362	< 1
B796363	Grab	8/4/2022	2022	DK	Assay	Anomaly 38	Pic River	564414	Outcrop	NAD83 / UTM Zone16N	533013	5413791	284	10a	GAB	Gabbro	Coarse-grained gabbro with 1% Py		1	diss					A22-11425	B796363	5
B796364	Grab	8/4/2022	2022	DK	Assay	Anomaly 38	Pic River	564414	Outcrop	NAD83 / UTM Zone16N	532956	5413792	303	10d	SYN	Syenite	Syenite granite with 1% Py		1	diss					A22-11425	B796364	< 1
B796365	Grab	8/4/2022	2022	DK	Assay	Anomaly 38	Pic River	564414	Outcrop	NAD83 / UTM Zone16N	532939	5413788	307	10d	SYN	Syenite	Syenite granite with 1% Py		1	diss					A22-11425	B796365	< 1
B796366	Grab	8/4/2022	2022	DK	Assay	Anomaly 38	Pic River	564414	Outcrop	NAD83 / UTM Zone16N	532837	5413816	318	10a	GAB	Gabbro	Coarse-grained gabbro with 1% Py		1	diss					A22-11425	B796366	13
B796270	Grab	8/4/2022	2022	JC/AZ	Assay	Anomaly 38	Pic River	564410	Outcrop	NAD83 / UTM Zone16N	532725	5414548	245	9	DIA	Diabase	Diabase with trace Cpy and Py along fracture surfaces	S	0.5	diss					A22-11425	B796270	< 1
B796367	Grab	8/5/2022	2022	DK	Assay	Anomaly 34,35,36	Pic River	564369	Outcrop	NAD83 / UTM Zone16N	530505	5416739	285	10a	GAB	Gabbro	Coarse-grained gabbro with trace Py		0.1	diss					A22-11425	B796367	< 1
B796368	Grab	8/5/2022	2022	DK	Assay	Anomaly 34,35,36	Pic River	564369	Outcrop	NAD83 / UTM Zone16N	530523	5416747	283	10a	GAB	Gabbro	Coarse-grained gabbro with trace Py		1	diss					A22-11425	B796368	< 1
B796271	Grab	8/5/2022	2022	JC/AZ	Assay	Anomaly 34,35,36	Pic River	564390	Outcrop	NAD83 / UTM Zone16N	532725	5414548	295	10a	GAB	Gabbro	Fine-grained gabbro with trace Py/Cpy	NE	0.1	diss			0.1	diss	A22-11425	B796271	< 1
B796369	Float	8/6/2022	2022	DK, AZ, BL	Assay	Anomaly 34,35,36	Pic River	564390	Outcrop	NAD83 / UTM Zone16N	531642	5417710	305	10a	GAB	Gabbro	Coarse-grained gabbro with trace Py		0.1	diss					A22-11425	B796369	1
B796370	Float	8/6/2022	2022	DK, AZ, BL	Assay	Anomaly 34,35,36	Pic River	564390	Outcrop	NAD83 / UTM Zone16N	531523	5417762	312	5b	SED	Metasediments	Float sheared metasediments blotchy rust								A22-11425	B796370	< 1
B796371	Float	8/6/2022	2022	DK, AZ, BL	Assay	Anomaly 34,35,36	Pic River	564390	Outcrop	NAD83 / UTM Zone16N	531605	5417702	306	10a	GAB	Gabbro	Coarse-grained gabbro		0.1	diss					A22-11425	B796371	4
B796372	Float	8/6/2022	2022	DK, AZ, BL	Assay	Anomaly 34,35,36	Pic River	564390	Outcrop	NAD83 / UTM Zone16N	531603	5417701	306	10a	GAB	Gabbro	Coarse-grained gabbro		0.1	diss					A22-11425	B796372	6
B796272	QA Blank																Quality Control Blank CDN-BL-10								A22-11425	B796272	< 1
B796273	QA Std																Quality Control Standard OREAS 200								A22-11425	B796273	1

Appendix I: Grab sample list and assays (Assay Certificates in Appendix III).

Sample number	Sample Type	Date	Year	Sampler	Purpose	Area	Sub Project	Claim-Cell	Source	Grid	Easting	Northing	Elevation m	Numeric Rock Code	Rock_Code	Rock_Type	Description	Photo_direction	Py_%	Py_style	Po_%	Po_style	Cpy_%	Cpy_style	Assay Certificate	Sample_Number	Pd_ppb
796301	Grab	04-08-2022	2022	BL	Assay	Anomaly 38	Pic River	564414	Outcrop	UTM Zone 16 Nad 83	533107	5413832	271	8GD	GRD	Granite	Granite/Mafic.1%PY	W	1						A22-11425	B796301	< 1
796302	Grab	04-08-2022	2022	BL	Assay	Anomaly 38	Pic River	564414	Outcrop	UTM Zone 16 Nad 83	533087	5413819	276	2	MV	Mafic	Mafic/.5%PY	W	0.5						A22-11425	B796302	< 1
796303	Grab	04-08-2022	2022	BL	Assay	Anomaly 38	Pic River	564417	Outcrop	UTM Zone 16 Nad 83	532915	5413796	309	10a	GAB	Gabbro	Gabbro/Course Grain/1%PY	N	1						A22-11425	B796303	< 1
796304	Grab	05-08-2022	2022	BL	Assay	Annomaly 34,35,36	Pic River	564369	Outcrop	UTM Zone 16 Nad 83	530494	5416743	274	8GD	QV	Quartz	Quartz Vein/10cm wide/Epidote/Granite host	W							A22-11425	B796304	< 1
796305	Grab	05-08-2022	2022	BL	Assay	Annomaly 34,35,36	Pic River	564369	Outcrop	UTM Zone 16 Nad 83	530508	5416747	280	10a	GAB	Gabbro	Gabbro/Course Grain/.2%PY	N	0.2						A22-11425	B796305	< 1
796306	Grab	05-08-2022	2022	BL	Assay	Annomaly 34,35,36	Pic River	564369	Outcrop	UTM Zone 16 Nad 83	530511	5416751	281	10a	GAB	Gabbro	Gabbro/Course Grain/1%PY	W	1						A22-11425	B796306	< 1
796307	Grab	05-08-2022	2022	BL	Assay	Annomaly 34,35,36	Pic River	564369	Outcrop	UTM Zone 16 Nad 83	530496	5416780	265	10a	GAB	Gabbro	Gabbro/Course Grain/.2%PY	W	0.2						A22-11425	B796307	< 1
796308	Grab	06-08-2022	2022	BL/AZ	Assay	Annomaly 34,35,36	Pic River	564399	Float	UTM Zone 16 Nad 83	531640	5417715	298	10a	GAB	Gabbro	Gabbro/Course Grain/.2%PY/Float-4mx2mx2m	N	0.2						A22-11425	B795308	< 1

Appendix I: Grab Appendix I: Grab sample list and assays (Assay Certificates in Appendix III).

Sample number	Pt_ppb	Au_ppb	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_%	Ga_ppm	K_%	Mg_%	Li_ppm	Mn_ppm	Mo_ppm	Na_%	Ni_ppm	P_%	Pb_ppm	Sb_ppm	S_%	Sc_ppm	Sr_ppm	Te_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm
B796251	< 1	3	0.3	8.62	< 3	> 1000	2	< 2	4.55	< 0.3	22	51	11	6.22	24	2.23	2.86	15	1080	< 1	3.06	22	0.192	6	< 5	0.02	19	1270	8	0.54	< 5	< 10	143	< 5	26	112	92
B796252	14	4	0.7	7.81	< 3	985	3	4	6.76	< 0.3	48	41	186	10.7	20	1.51	3.06	32	1870	1	2.43	43	0.407	9	< 5	0.08	15	1380	5	0.67	< 5	< 10	218	< 5	30	121	193
B796253	< 1	3	< 0.3	7.75	< 3	941	2	< 2	4.37	< 0.3	25	17	39	6.81	22	1.57	2.46	26	1180	< 1	3.68	14	0.314	6	< 5	0.07	13	1370	13	0.55	< 5	< 10	132	< 5	22	127	54
B796254	< 1	3	< 0.3	8.25	< 3	> 1000	2	< 2	5.05	< 0.3	25	37	32	6.97	23	2.11	2.59	23	1210	< 1	3.04	25	0.179	8	< 5	0.11	14	1430	6	0.34	< 5	< 10	145	< 5	26	130	64
B796255	< 1	3	0.3	9.14	4	> 1000	2	< 2	4.18	< 0.3	19	120	18	5.7	23	2.36	2.47	20	1080	< 1	3.66	64	0.231	7	< 5	0.03	11	1560	11	0.48	< 5	< 10	113	< 5	21	115	113
B796256	< 1	3	< 0.3	8.93	< 3	> 1000	1	< 2	3.45	< 0.3	25	17	20	7.9	25	1.97	2.57	29	967	< 1	3.52	12	0.336	12	< 5	0.07	11	1900	14	0.41	< 5	< 10	124	< 5	17	135	93
B796257	1	6	< 0.3	7.83	< 3	> 1000	1	< 2	4.07	< 0.3	20	70	22	4.08	18	3.2	2.97	17	970	< 1	2.77	87	0.227	11	< 5	0.04	11	1860	8	0.23	< 5	< 10	80	< 5	20	105	22
B796258	< 1	3	< 0.3	9.09	< 3	> 1000	1	< 2	3.8	< 0.3	18	58	22	4.35	21	2.43	2.58	11	881	2	3.84	57	0.288	9	< 5	0.05	10	2230	5	0.45	< 5	< 10	89	< 5	17	90	111
B796259	< 1	3	< 0.3	9	< 3	> 1000	3	< 2	4.21	< 0.3	26	9	41	7.3	24	2.4	2.53	20	1150	< 1	3.76	9	0.326	8	< 5	0.19	16	1490	10	0.54	< 5	< 10	156	< 5	28	164	49
B796260	3	3	0.4	6.62	< 3	> 1000	1	< 2	5.21	< 0.3	25	214	8	7.17	18	3.32	4.16	25	1470	< 1	1.67	136	0.427	11	< 5	0.02	23	988	7	0.62	< 5	< 10	102	< 5	29	148	112
B796261	< 1	3	< 0.3	8.73	5	874	2	3	4.71	< 0.3	30	59	24	7.16	23	1.95	3.1	35	1010	< 1	2.93	34	0.252	7	< 5	0.07	21	1350	10	0.66	< 5	< 10	205	< 5	27	117	72
B796262	2	3	0.4	8.8	< 3	> 1000	2	< 2	6.7	< 0.3	24	78	39	6.8	22	2.64	3.07	18	1240	< 1	2.6	48	0.259	11	< 5	0.05	16	2050	19	0.62	< 5	< 10	193	< 5	23	117	180
B796263	< 1	3	< 0.3	8.71	5	> 1000	3	< 2	4.1	< 0.3	19	23	15	6.01	22	1.72	2.12	23	1100	< 1	4	15	0.282	14	< 5	0.12	12	1430	8	0.42	< 5	< 10	105	< 5	22	121	85
B796264	< 1	3	< 0.3	7.01	< 3	714	2	< 2	1.98	< 0.3	16	26	8	4.45	24	1.17	2.56	26	886	< 1	4.08	15	0.242	4	< 5	0.05	6	995	10	0.51	< 5	< 10	115	< 5	8	92	75
B796265	< 1	3	< 0.3	6.22	4	444	1	< 2	6.05	< 0.3	52	106	34	7.81	17	1.04	6.49	25	1120	< 1	1.84	91	0.078	5	< 5	0.02	49	329	10	0.21	< 5	< 10	117	< 5	24	96	20
B796266	< 1	4	< 0.3	6.38	< 3	466	1	< 2	6.07	< 0.3	52	109	36	7.85	18	1.06	6.49	25	1130	< 1	1.92	90	0.08	< 3	< 5	0.02	49	348	4	0.25	< 5	< 10	110	< 5	24	96	21
B796267	< 1	3	0.5	7.22	< 3	498	2	< 2	3.25	0.3	19	168	51	3.93	18	1.37	3.06	17	1010	2	3.14	79	0.094	8	< 5	0.72	15	616	5	0.29	< 5	< 10	106	< 5	16	108	135
B796351	< 1	4	< 0.3	7.29	5	834	1	< 2	1.73	< 0.3	4	26	19	2.61	12	1.65	0.52	3	722	2	3.11	12	0.037	< 3	< 5	0.04	7	195	< 2	0.15	< 5	< 10	30	< 5	16	40	52
B796352	< 1	4	0.4	4.23	< 3	172	< 1	< 2	1.81	< 0.3	19	16	292	7.49	15	1.34	1.08	15	1340	2	1.04	11	0.041	4	< 5	1.17	7	157	2	0.19	< 5	< 10	23	< 5	11	31	45
B796353	1	4	< 0.3	8.07	< 3	> 1000	1	< 2	1.12	< 0.3	22	104	39	3.88	20	2.64	1.85	33	697	< 1	1.99	71	0.069	14	< 5	< 0.01	12	515	3	0.18	< 5	< 10	68	< 5	10	110	65
B796354	1	3	0.4	4.98	4	> 1000	1	< 2	0.46	0.4	24	159	43	3.52	20	2.37	1.71	38	777	< 1	1.91	80	0.071	14	< 5	< 0.01	9	269	6	0.34	< 5	< 10	123	< 5	5	117	101
B796355	< 1	4	2.1	8.94	70	232	7	< 2	3.78	< 0.3	< 1	4	20	3.71	27	2.85	0.1	37	672	7	4.27	2	0.036	7	22	1.19	< 4	277	< 2	0.08	< 5	< 10	< 2	9	28	33	741
B796356	< 1	3	0.7	9.66	80	> 1000	4	< 2	2.64	< 0.3	12	22	22	3.8	25	2.84	1	27	526	2	4.29	15	0.153	< 3	< 5	0.39	6	1100	4	0.34	< 5	< 10	76	8	19	54	293
B796357	< 1	3	2.4	9.5	8	220	12	< 2	1.7	0.4	< 1	4	9	4.81	27	3.37	0.22	109	1330	5	3.71	1	0.037	41	< 5	0.06	< 4	96	< 2	0.08	< 5	< 10	< 2	< 5	36	216	768
B796358	3	3	0.6	8.75	< 3	459	1	< 2	1.76	< 0.3	34	158	85	6.16	24	2.89	2.63	38	864	3	2.22	116	0.093	10	< 5	0.84	25	387	3	0.5	< 5	< 10	180	< 5	16	117	141
B796359	< 1	3	< 0.3	7.36	11	446	1	< 2	5.19	0.4	48	31	33	8.27	21	0.97	5.34	26	1130	< 1	2.55	42	0.048	4	7	0.15	41	464	7	0.6	< 5	< 10	204	< 5	23	88	35

Appendix I: Grab Appendix I: Grab sample list and assays (Assay Certificates in Appendix III).

Sample number	Pt_ppb	Au_ppb	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_%	Ga_ppm	K_%	Mg_%	Li_ppm	Mn_ppm	Mo_ppm	Na_%	Ni_ppm	P_%	Pb_ppm	Sb_ppm	S_%	Sc_ppm	Sr_ppm	Te_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm
B796360	< 1	4	< 0.3	6.79	< 3	352	< 1	< 2	6.28	< 0.3	75	27	142	8.99	18	0.87	7.14	22	1010	< 1	1.64	74	0.016	4	< 5	0.36	61	368	12	0.34	< 5	< 10	132	< 5	24	80	16
B796268	< 1	4	< 0.3	8.15	4	111	4	< 2	0.78	< 0.3	43	17	36	7.42	23	1.34	6.76	108	760	3	2.8	25	0.111	72	< 5	0.26	29	84	6	0.61	< 5	< 10	181	< 5	22	231	72
B796269	< 1	5	3.9	9.33	25	139	23	< 2	1.22	< 0.3	3	7	8	2.93	35	0.68	0.28	12	239	24	6.64	< 1	0.047	172	17	0.35	< 4	291	3	0.12	< 5	< 10	5	7	43	44	1370
B796361	6	7	0.7	7.86	4	> 1000	2	< 2	6.94	< 0.3	42	38	71	8.6	17	2.03	3.88	13	1550	1	2.31	70	0.489	8	< 5	0.12	20	1090	6	0.7	< 5	< 10	199	6	28	170	236
B796362	< 1	4	< 0.3	7.75	< 3	> 1000	3	< 2	4.78	0.3	28	12	67	7.91	24	3.2	2.31	20	1610	2	2.12	7	0.417	10	< 5	0.28	16	854	5	0.38	< 5	< 10	170	31	43	117	98
B796363	6	5	0.6	7.27	5	> 1000	2	< 2	6.89	< 0.3	41	33	70	8.16	17	1.67	3.94	18	1500	1	1.88	71	0.448	4	< 5	0.04	21	1040	7	0.64	< 5	< 10	196	< 5	27	183	222
B796364	< 1	3	0.7	6.2	8	> 1000	3	< 2	3.29	0.4	20	48	18	6.03	18	2.06	2.27	18	1630	1	3.38	20	0.161	8	< 5	0.4	7	792	10	0.35	< 5	< 10	89	< 5	11	184	228
B796365	< 1	3	0.9	8.87	4	> 1000	5	< 2	2.29	< 0.3	3	11	14	4.43	20	2.72	0.35	17	584	4	4.41	2	0.149	4	7	0.33	< 4	586	15	0.33	< 5	< 10	6	< 5	23	30	340
B796366	11	6	0.4	8.04	4	> 1000	3	< 2	5.37	< 0.3	30	5	62	7.82	19	2.23	1.77	19	1620	1	2.85	24	0.252	11	< 5	0.02	7	1200	4	0.4	< 5	< 10	165	< 5	24	137	169
B796270	1	4	0.6	7.54	< 3	> 1000	2	3	5.86	< 0.3	43	46	127	10.1	18	1.53	2.82	24	1820	< 1	2.41	41	0.383	13	< 5	0.06	22	912	11	0.74	< 5	< 10	252	< 5	30	162	171
B796367	< 1	4	< 0.3	6.97	7	243	< 1	< 2	5.78	< 0.3	60	24	61	8.67	17	0.72	6.04	16	992	< 1	1.8	38	0.023	< 3	< 5	0.14	49	371	2	0.3	9	< 10	175	< 5	21	75	20
B796368	< 1	3	< 0.3	6.63	< 3	167	< 1	2	5.7	< 0.3	70	10	71	13.3	22	0.51	5.9	13	1100	< 1	1.72	22	0.012	< 3	< 5	0.44	51	357	5	0.52	< 5	< 10	445	< 5	25	97	38
B796271	< 1	3	< 0.3	4.85	< 3	141	< 1	< 2	1.4	< 0.3	10	14	134	5.68	14	1.64	0.68	14	1180	2	1.26	4	0.04	11	< 5	0.4	7	129	4	0.19	< 5	< 10	23	< 5	10	24	67
B796369	< 1	15	< 0.3	6.4	< 3	288	< 1	< 2	6.18	< 0.3	64	38	135	9.95	17	1.03	6.79	23	1080	< 1	1.65	70	0.026	7	< 5	0.16	86	417	7	0.55	< 5	< 10	481	< 5	18	67	26
B796370	< 1	3	< 0.3	8.35	3	429	1	< 2	2.78	< 0.3	7	14	9	1.27	20	2.7	0.49	19	350	1	2.03	15	0.063	8	< 5	0.04	5	108	< 2	0.25	< 5	< 10	41	< 5	7	14	110
B796371	5	3	< 0.3	7.23	< 3	103	< 1	< 2	6.64	< 0.3	38	24	228	10.9	20	0.36	3	10	2990	< 1	1.36	32	0.059	5	< 5	0.52	41	159	4	0.4	< 5	< 10	198	< 5	39	121	51
B796372	6	4	0.7	7.28	< 3	88	< 1	< 2	5.55	< 0.3	49	82	411	12.1	19	0.3	3.12	10	3020	< 1	1.47	57	0.033	4	< 5	1.26	38	143	11	0.46	< 5	< 10	213	< 5	37	131	105
B796272	< 1	4	0.4	4.14	< 3	179	< 1	< 2	1.78	< 0.3	20	30	284	7.52	13	1.37	1.07	15	1270	2	0.99	13	0.043	6	< 5	1.15	7	158	5	0.19	< 5	< 10	23	< 5	11	31	45
B796273	< 1	331	0.4	7.25	141	333	1	2	5.35	< 0.3	38	171	106	7.87	19	0.85	3.62	8	1410	2	2.08	122	0.133	< 3	< 5	0.25	18	382	5	0.65	< 5	< 10	114	< 5	19	102	94

Appendix I: Grab Appendix I: Grab sample list and assays (Assay Certificates in Appendix III).

Sample number	Pt_ppb	Au_ppb	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_%	Ga_ppm	K_%	Mg_%	Li_ppm	Mn_ppm	Mo_ppm	Na_%	Ni_ppm	P_%	Pb_ppm	Sb_ppm	S_%	Sc_ppm	Sr_ppm	Te_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm
796301	< 1	3	< 0.3	8.48	< 3	> 1000	2	< 2	4.51	0.4	19	21	5	3.94	21	1.95	1.1	11	1060	< 1	3.24	14	0.187	12	< 5	0.04	9	988	5	0.34	< 5	< 10	76	< 5	18	145	48
796302	< 1	3	0.4	8.36	< 3	> 1000	2	< 2	4.03	< 0.3	29	8	11	7.88	16	2.09	2.18	19	1600	1	3.44	7	0.498	8	< 5	0.1	6	1440	4	0.58	< 5	< 10	100	< 5	28	99	145
796303	< 1	3	< 0.3	5.39	< 3	686	2	< 2	7.5	< 0.3	41	105	28	10.2	25	1.34	6.44	25	1890	< 1	0.99	37	0.378	10	< 5	0.06	40	526	7	0.63	< 5	< 10	231	< 5	61	154	45
796304	< 1	3	< 0.3	0.11	< 3	< 7	< 1	< 2	0.05	< 0.3	< 1	22	1	0.37	< 1	0.01	0.03	1	100	1	0.06	2	0.002	< 3	< 5	< 0.01	< 4	17	< 2	< 0.01	< 5	< 10	3	< 5	< 1	2	< 5
796305	< 1	3	< 0.3	7.18	< 3	289	< 1	3	5.73	< 0.3	62	4	69	12.5	23	0.67	5.19	11	1110	< 1	1.82	6	0.038	< 3	< 5	0.14	35	422	10	0.75	< 5	< 10	390	< 5	20	101	56
796306	< 1	3	< 0.3	7.25	< 3	271	< 1	< 2	5.91	< 0.3	65	10	82	13.5	24	0.83	5.67	13	1080	< 1	1.95	10	0.023	7	< 5	0.53	40	440	5	0.31	11	< 10	319	< 5	20	108	44
796307	< 1	3	< 0.3	5.95	< 3	256	< 1	5	6.5	< 0.3	62	184	66	8.82	17	0.77	6.93	10	979	< 1	1.8	142	0.022	< 3	< 5	0.13	38	399	16	0.93	< 5	< 10	386	< 5	20	67	36
796308	< 1	3	< 0.3	5.57	< 3	373	< 1	< 2	7.21	< 0.3	53	67	56	7.26	15	1.15	7.1	22	1180	< 1	1.49	72	0.035	4	< 5	0.01	70	391	14	0.32	< 5	< 10	293	< 5	16	58	38

Appendix II: Points of Interest (POI) Pic River PGM Project.

POI_#	Date	Easting	Northing	Elevation	Description	Photo
POI-JC-001	10-Jul-22	531669	5416949	259	Whitish to pinkish white coarse-grained monzonite with 15-20% mafic minerals (bio-amph) set in a groundmass of white albitic plagioclase and minor pink Kfspr and quartz grains	Yes - E
POI-JC-002	11-Jul-22	531659	5416842	267	Whitish to pinkish white coarse-grained monzonite with 15-20% mafic minerals (bio-amph) set in a groundmass of white albitic plagioclase and minor pink Kfspr and quartz grains	No
POI-JC-003	11-Jul-22	531738	5416499	279	Typical granitic body, coarse-grained, comprised of Kfspr-Plag (albite)-Quartz with intergranular constituents of Bio+Mt+Amp +/- Gt (almandine)	Yes - E
POI-JC-004	11-Jul-22	531504	5416254	268	Coarse-grained to medium-grained granite comprised of Kfspr+Plag (albite)+Quartz grains with minor interstitial Bio+Amph; locally plagioclase appears to be greater than Kfspr; unit supports angular inclusions of mafic rock consisting of Bio-Amph +/- Mt	Yes - SE
POI-JC-005	16-Jul-22	531985	5414737	235	Target anomaly in a dry creek bed, no outcrop or boulders, just dirt, glacial clay and thick vegetation in dense forest	No
POI-JC-006	16-Jul-22	532081	5414709	234	No outcrop in target area, just thick glacial overburden, dirt and thick vegetation in dense forest	No
POI-JC-007	16-Jul-22	532177	5414684	232	No outcrop in target area, just thick glacial overburden, dirt and thick vegetation in dense forest	No
POI-JC-008	16-Jul-22	532287	5414698	219	Side of steep hill covered in thick vegetation in dense forest and glacial overburden; no outcrop	No
POI-JC-009	16-Jul-22	532219	5414583	229	No outcrop in target area, just thick glacial overburden, dirt and thick vegetation in dense forest	No
POI-JC-010	16-Jul-22	532180	5414501	223	No outcrop in target area, just thick glacial overburden as observed along dried creek beds, dirt and thick dense vegetation in dense forest	Yes - N
POI-JC-011	16-Jul-22	533118	5414581	230	No outcrop along side of creek gulley in thick vegetation in dense forest and glacial overburden; could not cross gulley because of steep clay embankments on both sides	No
POI-JC-012	16-Jul-22	532034	5414606	237	No outcrop in thick glacial overburden and vegetation in dense forest	No
POI-JC-013	17-Jul-22	531881	5414822	234	No out crop in thick glacial overburden of clays topped with 5-7cm black hummus soils in thick vegetation and dense forest	Yes - W
POI-JC-014	17-Jul-22	531830	5414556	239	Side of steep hill covered in thick vegetation and dense forest and thick glacial overburden; no outcrop	No
POI-JC-015	17-Jul-22	531784	5414807	242	No out crop in thick glacial overburden of clays topped with 5-10cm black hummus soils in thick vegetation and dense forest	Yes - E
POI-JC-016	17-Jul-22	531679	5414770	235	No outcrop exposed in thick glacial overburden and dense vegetation and forest	No
POI-JC-017	17-Jul-22	531580	5414701	236	No outcrop in clearing on top of ridge with steep erosional sides over thick clay glacial overburden in dense vegetation and forest	No
POI-JC-018	17-Jul-22	531533	5414686	221	No outcrop exposed along side of runoff dry creek bed just thick glacial clays and overburden	No
POI-JC-019	17-Jul-22	531482	5414726	228	No outcrop exposed along erosional ravine beside dry runoff creek bed, just thick glacial clays covered by dense vegetation and forest	Yes - NE
POI-JC-020	17-Jul-22	531430	5414672	227	South facing steep slope below ridge in thick glacial overburden above a deep erosional ravine in thick vegetation and forest; no outcrop exposed along the slope	No
POI-JC-021	17-Jul-22	531321	5414716	227	Side of steep benched hill with no outcrop; thick glacial clay overburden covered by dense vegetation and forest	No

Appendix II: Points of Interest (POI) Pic River PGM Project.

POI-JC-022	17-Jul-22	531285	5414745	211	No outcrop south of dried runoff creek bed above Glory creek, just thick glacial clay overburden under dense vegetation and forest	No
POI-JC-023	17-Jul-22	531369	5414765	241	No outcrop observed just thick glacial clays forming steep ravines with runoff dry creek beds of thick muds and clays surrounded by dense vegetation and forest	No
POI-JC-024	26-Jul-22	531960	5414506	239	Monzo-syenite with biotite altered segregations of mafic derived rock	No
POI-JC-025	2-Aug-22	532566	5415687	233	Syenite granite, medium- coarse-grained locally, non magnetic with possible nephaline elongated acicular crystals at 1%; biotite at 15%, Plag at 25%, Kfspr at 45%; and interstitial to groundmass quartz at 15%	Yes - W
POI-JC-026	2-Aug-22	532517	5415658	244	Foliated tonalite to monzo-granodiorite with fine-grained syenite crosscutting sinuous dyke striking in a westerly direction; unit exposed along a cliff face	Yes - NW
POI-JC-027	2-Aug-22	532514	5415644	241	Medium- to coarse-grained tourmaline with interstitial Kfspr with a weakly magnetic groundmass	Yes - NW
POI-JC-028	4-Aug-22	532680	5415415	201	Fine-grained diabase dyke with clear acicular needles of medium-grained actinolite; unit is strongly magnetic	No
POI-JC-029	4-Aug-22	532645	5415356	203	Coarse-grained massive granodiorite, moderately to strongly magnetic; 20% bio-mt, 20-25% quartz, 55-60% albitic plagioclase	Yes - E
POI-JC-030	4-Aug-22	532202	5415012	203	Fine-grained brownish black diabase, moderately to strongly magnetic	No
POI-JC-031	4-Aug-22	532674	5414410	234	No outcrop over anomaly area, glacial silts and clays	No
POI-JC-032	4-Aug-22	532697	5414408	424	Pink syenite, generally fine-grained with coarser-grained sections that contain 20-25% Mt; unit is a north trending cliff face, faint slickensides suggest vertical fault face with footwall to the west	Yes - E
POI-JC-033	4-Aug-22	532729	5414430	258	No outcrop over anomaly area, thick overburden of glacial silts and clays; on the steep side of the hill a small outcrop of medium- to coarse-grained moderately to strongly magnetic granodiorite occurs with subrounded xenoliths of mafic rock up to 60cm diameter	No
POI-JC-034	4-Aug-22	532770	5414423	256	Granodiorite, medium- to coarse-grained, strongly magnetic; subrounded xenoliths of mafic rock up to 30cm in diameter	No
POI-JC-035	4-Aug-22	532827	5414480	253	Strongly magnetic granodiorite, medium- to coarse-grained, massive	No
POI-JC-036	4-Aug-22	532879	5414550	252	No outcrop over the anomaly	No
POI-JC-037	4-Aug-22	532930	5414615	255	No outcrop, flat old growth forest floor	No
POI-JC-038	4-Aug-22	532772	5414579	248	Granodiorite intermixed with syenite dykes; unit is moderately magnetic	No
POI-JC-039	4-Aug-22	532731	5414570	239	East contact between a medium- to coarse-grained granodiorite and fine-grained black diabase; strike of contact is 133/90; diabase is strongly magnetic while the granodiorite is moderately magnetic	Yes - S
POI-JC-040	4-Aug-22	542721	5414556	238	Western contact between the diabase and the granodiorite; apophyses of diabase intrude into the granodiorite; dye is 30m wide	No
POI-JC-041	5-Aug-22	530010	5417260	255	No outcrop in area along claim line that malachite showing is reported to occur; all EM anomalies in area are following wet clay filled gullies	No
POI-JC-042	5-Aug-22	530189	5417337	267	Fine- to medium-grained pink syenite, massive, non magnetic	No
POI-JC-043	5-Aug-22	530309	5417266	388	Fine- to medium-grained pink syenite, massive, non magnetic	No
POI-JC-044	5-Aug-22	530447	5417238	295	Talus slope comprised of gabbro breccia fragments of various sizes intermingled with syenite breccias	Yes - E

Appendix II: Points of Interest (POI) Pic River PGM Project.

POI-JC-045	5-Aug-22	530458	5417234	298	Diabase dyke crosscutting syenite striking 332deg, dipping 62N	No

POI_#	Date	Easting	Northing	Elevation	Description	Photo
POI-BL-001	18-Jul-22	531531	5415568	250	No outcrop dense Birch forest	No
POI-BL-002	18-Jul-22	531576	5415521	250	No outcrop dense Birch forest	No
POI-BL-003	18-Jul-22	531481	5415524	250	No outcrop start of Cedar swamp	No
POI-BL-004	18-Jul-22	531428	5415521	250	No outcrop Cedar Swamp	No
POI-BL-005	18-Jul-22	531379	5415501	250	No outcrop Cedar Swamp	No
POI-BL-006	18-Jul-22	531282	5415500	250	No outcrop Cedar Swamp	No
POI-BL-007	18-Jul-22	531228	5415494	250	No outcrop Cedar Swamp	No
POI-BL-008	18-Jul-22	531228	5415455	250	No outcrop Cedar Swamp	No
POI-BL-009	18-Jul-22	531181	5415441	250	No outcrop Cedar Swamp	No
POI-BL-010	18-Jul-22	531130	5415439	250	No outcrop Cedar Swamp	No
POI-BL-011	18-Jul-22	531530	5415349	250	No outcrop dense Birch forest	No
POI-BL-012	19-Jul-22	531328	5415935	251	No outcrop-poplar trees-shrubs-ferns	No
POI-BL-013	19-Jul-22	531231	5415920	254	No outcrop-poplar/birch trees-shrubs	No
POI-BL-014	19-Jul-22	531131	5415964	253	No outcrop-poplar/birch trees-shrubs	No
POI-BL-015	19-Jul-22	531081	5415953	258	Granite outcrop	No
POI-BL-016	19-Jul-22	531029	5415932	262	Granite outcrop	No
POI-BL-017	19-Jul-22	530984	5415918	260	Granite outcrop	No
POI-BL-018	19-Jul-22	530926	5415938	248	No outcrop-poplar/birch/balsam trees-shrubs	No
POI-BL-019	19-Jul-22	530828	5415878	252	No outcrop-poplar/birch/balsam trees-shrubs	No
POI-BL-020	19-Jul-22	530882	5415854	244	No outcrop-birch/balsam trees-shrubs	No
POI-BL-021	19-Jul-22	530926	5415805	244	No outcrop-birch/balsam/pine trees-shrubs	No
POI-BL-022	19-Jul-22	530880	5415698	250	No outcrop-birch/balsam/poplar trees-shrubs	No
POI-BL-023	19-Jul-22	530827	5415624	249	No outcrop-birch/balsam/poplar trees-shrubs	No
POI-BL-024	19-Jul-22	530783	5415599	244	No outcrop-birch/balsam/poplar trees-shrubs	No
POI-BL-025	19-Jul-22	530729	5415686	235	No outcrop-balsam/poplar trees-shrubs	No
POI-BL-026	19-Jul-22	530680	5415665	220	No outcrop-balsam/poplar trees-shrubs	No
POI-BL-027	20-Jul-22	531230	5415691	252	No outcrop-Flat-Birch/poplar/balsam-shrubs	No
POI-BL-028	20-Jul-22	531181	5415723	247	No outcrop-Flat-Birch/poplar/balsam-shrubs	No
POI-BL-029	20-Jul-22	531130	5415657	247	No outcrop-Flat-Birch/poplar/balsam-shrubs	No
POI-BL-030	20-Jul-22	531082	5415643	255	No outcrop-Flat-Birch/poplar/balsam-shrubs	No
POI-BL-031	20-Jul-22	530980	5415619	259	No outcrop-Flat-Spruce/poplar/balsam-shrubs	No
POI-BL-032	20-Jul-22	530634	5415451	212	No outcrop-Hillside-spruce/willow-shrubs	No
POI-BL-033	20-Jul-22	530679	5415432	218	No outcrop-Hillside-spruce/poplar-shrubs	No
POI-BL-034	20-Jul-22	530728	5415431	223	No outcrop-Hillside-spruce/poplar-shrubs	No
POI-BL-035	20-Jul-22	530784	5415426	227	No outcrop-Hillside-spruce/willows-shrubs	No
POI-BL-036	20-Jul-22	530829	5415464	231	No outcrop-Hillside-spruce/spruce/balsam-shrubs	No
POI-BL-037	20-Jul-22	530882	5415500	249	No outcrop-Flat-poplar/willow-shrubs	No
POI-BL-038	20-Jul-22	530930	5415532	252	No outcrop-Flat-mountain ash/willow-shrubs	No
POI-BL-039	20-Jul-22	530980	5415455	255	No outcrop-Flat-birch/poplar-shrubs	No
POI-BL-040	20-Jul-22	531033	5415487	254	No outcrop-Flat-balsam/willows/poplar-shrubs	No
POI-BL-041	20-Jul-22	531084	5415495	251	No outcrop-Flat-spruce-moss	No
POI-BL-042	21-Jul-22	532233	5416534	253	No outcrop-Hillside-clay creek-poplar/willows/balsam-shrubs	No
POI-BL-043	21-Jul-22	532277	5416583	257	No outcrop-hillside-poplar/mountain ash/balsam-shrubs	No
POI-BL-044	21-Jul-22	532331	5416503	254	No outcrop-hillside-poplar/balsam-shrubs	No
POI-BL-045	21-Jul-22	532380	5416571	258	No outcrop-Flat-birch/balsam/poplar-shrubs	No
POI-BL-046	21-Jul-22	532432	5416506	261	No outcrop-Flat-birch/balsam/poplar-shrubs	No
POI-BL-047	21-Jul-22	532478	5416547	254	No outcrop-Flat-birch/alders/poplar-shrubs	No
POI-BL-048	21-Jul-22	532529	5416527	250	No outcrop-Flat-birch/alders/poplar-shrubs	No
POI-BL-049	21-Jul-22	532577	5416560	251	No outcrop-Flat-poplar/balsam-shrubs-moss	No
POI-BL-050	21-Jul-22	532679	5416607	248	No outcrop-hillside-poplar/balsam-shrubs	No
POI-BL-051	21-Jul-22	532683	5416620	244	No outcrop-hillside-clay creek-poplar/balsam/spruce-shrubs	No
POI-BL-052	21-Jul-22	532727	5416573	251	No outcrop-hillside-poplar/balsam/spruce-shrubs	No
POI-BL-053	21-Jul-22	532781	5416519	255	No outcrop-Flat-balsam/birch-shrubs	No

Appendix II: Points of Interest (POI) Pic River PGM Project.

POI-BL-054	21-Jul-22	532836	5416568	250	No outcrop-hillside-poplar/alders/spruce-shrubs	No
POI-BL-055	21-Jul-22	532877	5416564	248	No outcrop-Flat-poplar-shrubs	No
POI-BL-056	21-Jul-22	532934	5416513	243	No outcrop-hillside-poplar-balsam-shrubs	No
POI-BL-057	21-Jul-22	532680	5416425	250	No outcrop-Flat-Alders/birch-shrubs	No
POI-BL-058	21-Jul-22	532630	5416362	246	No outcrop-Hillside-poplar/alders/balsam-shrubs	No
POI-BL-059	21-Jul-22	532780	5416329	234	No outcrop-Hillside-poplar/alders/balsam-shrubs	No
POI-BL-060	21-Jul-22	532734	5416314	229	No outcrop-Hillside-clay creek-alders-shrubs	No
POI-BL-061	21-Jul-22	531877	5416161	228	No outcrop-hillside-poplar/birch/alders-shrubs	No
POI-BL-062	21-Jul-22	532833	5416113	229	No outcrop-flat-poplar/spruce/birch-shrubs	No
POI-BL-063	22-Jul-22	530280	5417063	259	No outcrop-hillside-balsam/poplar-shrubs	No
POI-BL-064	22-Jul-22	530232	5417073	249	No outcrop-flat-poplar-shrubs	No
POI-BL-065	22-Jul-22	530182	5417047	247	No outcrop-hillside-poplar/alders/spruce-shrubs	No
POI-BL-066	22-Jul-22	530131	5417040	250	No outcrop-flat-poplar/spruce-shrubs	No
POI-BL-067	22-Jul-22	530080	5417066	247	No outcrop-flat-poplar/spruce-shrubs	No
POI-BL-068	22-Jul-22	530028	5417134	245	No outcrop-flat-poplar/spruce/alder-shrubs	No
POI-BL-069	22-Jul-22	529976	5417126	244	No outcrop-flat-poplar/spruce/alders-shrubs	No
POI-BL-070	22-Jul-22	529932	5417170	242	No outcrop-hillside-poplar/alder-shrubs	No
POI-BL-071	22-Jul-22	529879	5417192	241	No outcrop-hillside-poplar/alder-shrubs	No
POI-BL-072	23-Jul-22	532377	5414518	206	enter of Little Pic River-clay banks-spruce/birch/cedar-shrubs a	No
POI-BL-073	23-Jul-22	532327	5414475	210	No outcrop-flat-cedar/alders/birch-shrubs	No
POI-BL-074	23-Jul-22	532283	5414453	209	No outcrop-flat-clay-cedar/alders/birch-shrubs	No
POI-BL-075	23-Jul-22	532230	5414406	209	No outcrop-hillside-cedar/birch/balsam-shrubs	No
POI-BL-076	23-Jul-22	532178	5414350	226	No outcrop-flat-cedar/birch/balsam-shrubs	No
POI-BL-077	23-Jul-22	532130	5414315	228	No outcrop-flat-cedar/birch/balsam-shrubs	No
POI-BL-078	23-Jul-22	532077	5414281	230	No outcrop-flat-cedar/birch/balsam-shrubs	No
POI-BL-079	23-Jul-22	532039	5414261	231	No outcrop-flat-cedar/birch/balsam-shrubs	No
POI-BL-080	23-Jul-22	531978	5414250	217	No outcrop-hillside-poplar/spruce/balsam/alders-shrubs	No
POI-BL-081	23-Jul-22	531932	5414243	221	No outcrop-hillside-poplar/spruce/balsam/alders-shrubs	No
POI-BL-082	23-Jul-22	531877	5414243	210	No outcrop-hillside-poplar/spruce/balsam/alders-shrubs	No
POI-BL-083	25-Jul-22	531628	5416613	253	No outcrop-flat-Black spruce swamp-mossy-shrubs	No
POI-BL-084	25-Jul-22	531583	5416609	252	No outcrop-flat-Black spruce swamp-mossy-shrubs	No
POI-BL-085	25-Jul-22	531528	5416590	256	No outcrop-flat-Black spruce swamp-mossy-shrubs	No
POI-BL-086	25-Jul-22	531481	5416573	253	No outcrop-flat-Black spruce swamp-mossy-shrubs	No
POI-BL-087	25-Jul-22	531430	5416581	247	No outcrop-flat-birch/alders-shrubs	No
POI-BL-088	25-Jul-22	531379	5416572	246	No outcrop-hillside-balsam/spruce-shrubs	No
POI-BL-089	25-Jul-22	531332	5416556	251	No outcrop-flat-spruce/balsam/shrubs	No
POI-BL-090	25-Jul-22	531278	5416538	248	No outcrop-flat-poplar/balsam/shrubs	No
POI-BL-091	25-Jul-22	531228	5416548	251	No outcrop-flat-clay-alders-shrubs	No
POI-BL-092	25-Jul-22	531176	5416519	250	No outcrop-flat-balsam/alders-shrubs	No
POI-BL-093	25-Jul-22	531127	5416472	250	No outcrop-flat-balsam/alders-shrubs	No
POI-BL-094	25-Jul-22	531082	5416436	262	No outcrop-flat-open area-balsam/alders-shrubs-tall grass	No
POI-BL-095	25-Jul-22	531033	5416355	258	No outcrop-flat-poplar/birch/alders	No
POI-BL-096	25-Jul-22	530979	5416345	252	No outcrop-hillside-poplar/spruce/alders-shrubs	No
POI-BL-097	25-Jul-22	530938	5416330	252	No outcrop-Hillside-poplar/spruce/alders-shrubs	No
POI-BL-098	25-Jul-22	531085	5416281	246	No outcrop-Hillside-poplar/spruce/alders-shrubs	No
POI-BL-099	25-Jul-22	531184	5416223	243	No outcrop-hillside-balsam/birch-shrubs	No

Quality Analysis ... *Innovative Technologies*

Appendix III

Report No.:	**A22-11425**
Report Date:	**18-Oct-22**
Date Submitted:	**11-Aug-22**
Your Reference:	**Pic River**

Emerald Geological Services
222 Emerald St
Timmins ON P4R 1N3
Canada

ATTN: Bruce MacLachlan

CERTIFICATE OF ANALYSIS

53 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1C-Exp	QOP PGE ICP-MS (Fire Assay-ICPMS)	2022-09-22 15:29:18

REPORT **A22-11425**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

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

We recommend reanalysis by fire assay Au, Pt, Pd Code 8 if values exceed upper limit.

SCC Accredited LAB
LAB Accrédité CCN TM

LabID: 266

CERTIFIED BY:

Rob Hoffman
Region Manager

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

Report No.: **A22-11425**
Report Date: **18-Oct-22**
Date Submitted: **11-Aug-22**
Your Reference: **Pic River**

Emerald Geological Services
222 Emerald St
Timmins ON P4R 1N3
Canada

ATTN: Bruce MacLachlan

CERTIFICATE OF ANALYSIS

53 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1F2-Tbay	QOP Total (Total Digestion ICPOES)	2022-10-14 12:49:59

REPORT **A22-11425**

Notes:

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

We recommend reanalysis by fire assay Au, Pt, Pd Code 8 if values exceed upper limit.

SCC Accredited LAB
LAB Accrédité CCN TM

LabID: 673

CERTIFIED BY:

Rob Hoffman
Region Manager

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	Pd	Pt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	Mg	Li	Mn	Mo	Na	Ni
Unit Symbol	ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppm
Lower Limit	1	1	2	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	0.01	0.01	1	1	1	0.01	1
Method Code	FA-MS	FA-MS	FA-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
B796251	< 1	< 1	3	0.3	8.62	< 3	> 1000	2	< 2	4.55	< 0.3	22	51	11	6.22	24	2.23	2.86	15	1080	< 1	3.06	22
B796252	16	14	4	0.7	7.81	< 3	985	3	4	6.76	< 0.3	48	41	186	10.7	20	1.51	3.06	32	1870	1	2.43	43
B796253	< 1	< 1	3	< 0.3	7.75	< 3	941	2	< 2	4.37	< 0.3	25	17	39	6.81	22	1.57	2.46	26	1180	< 1	3.68	14
B796254	< 1	< 1	3	< 0.3	8.25	< 3	> 1000	2	< 2	5.05	< 0.3	25	37	32	6.97	23	2.11	2.59	23	1210	< 1	3.04	25
B796255	< 1	< 1	3	0.3	9.14	4	> 1000	2	< 2	4.18	< 0.3	19	120	18	5.70	23	2.36	2.47	20	1080	< 1	3.66	64
B796256	< 1	< 1	3	< 0.3	8.93	< 3	> 1000	1	< 2	3.45	< 0.3	25	17	20	7.90	25	1.97	2.57	29	967	< 1	3.52	12
B796257	1	1	6	< 0.3	7.83	< 3	> 1000	1	< 2	4.07	< 0.3	20	70	22	4.08	18	3.20	2.97	17	970	< 1	2.77	87
B796258	< 1	< 1	3	< 0.3	9.09	< 3	> 1000	1	< 2	3.80	< 0.3	18	58	22	4.35	21	2.43	2.58	11	881	2	3.84	57
B796259	< 1	< 1	3	< 0.3	9.00	< 3	> 1000	3	< 2	4.21	< 0.3	26	9	41	7.30	24	2.40	2.53	20	1150	< 1	3.76	9
B796260	1	3	3	0.4	6.62	< 3	> 1000	1	< 2	5.21	< 0.3	25	214	8	7.17	18	3.32	4.16	25	1470	< 1	1.67	136
B796261	< 1	< 1	3	< 0.3	8.73	5	874	2	3	4.71	< 0.3	30	59	24	7.16	23	1.95	3.10	35	1010	< 1	2.93	34
B796262	2	2	3	0.4	8.80	< 3	> 1000	2	< 2	6.70	< 0.3	24	78	39	6.80	22	2.64	3.07	18	1240	< 1	2.60	48
B796263	< 1	< 1	3	< 0.3	8.71	5	> 1000	3	< 2	4.10	< 0.3	19	23	15	6.01	22	1.72	2.12	23	1100	< 1	4.00	15
B796264	< 1	< 1	3	< 0.3	7.01	< 3	714	2	< 2	1.98	< 0.3	16	26	8	4.45	24	1.17	2.56	26	886	< 1	4.08	15
B796265	< 1	< 1	3	< 0.3	6.22	4	444	1	< 2	6.05	< 0.3	52	106	34	7.81	17	1.04	6.49	25	1120	< 1	1.84	91
B796266	< 1	< 1	4	< 0.3	6.38	< 3	466	1	< 2	6.07	< 0.3	52	109	36	7.85	18	1.06	6.49	25	1130	< 1	1.92	90
B796267	< 1	< 1	3	0.5	7.22	< 3	498	2	< 2	3.25	0.3	19	168	51	3.93	18	1.37	3.06	17	1010	2	3.14	79
B796268	< 1	< 1	4	< 0.3	8.15	4	111	4	< 2	0.78	< 0.3	43	17	36	7.42	23	1.34	6.76	108	760	3	2.80	25
B796269	< 1	< 1	5	3.9	9.33	25	139	23	< 2	1.22	< 0.3	3	7	8	2.93	35	0.68	0.28	12	239	24	6.64	< 1
B796270	< 1	1	4	0.6	7.54	< 3	> 1000	2	3	5.86	< 0.3	43	46	127	10.1	18	1.53	2.82	24	1820	< 1	2.41	41
B796271	< 1	< 1	3	< 0.3	4.85	< 3	141	< 1	< 2	1.40	< 0.3	10	14	134	5.68	14	1.64	0.68	14	1180	2	1.26	4
B796272	< 1	< 1	4	0.4	4.14	< 3	179	< 1	< 2	1.78	< 0.3	20	30	284	7.52	13	1.37	1.07	15	1270	2	0.99	13
B796273	1	< 1	331	0.4	7.25	141	333	1	2	5.35	< 0.3	38	171	106	7.87	19	0.85	3.62	8	1410	2	2.08	122
B796351	< 1	< 1	4	< 0.3	7.29	5	834	1	< 2	1.73	< 0.3	4	26	19	2.61	12	1.65	0.52	3	722	2	3.11	12
B796352	< 1	< 1	4	0.4	4.23	< 3	172	< 1	< 2	1.81	< 0.3	19	16	292	7.49	15	1.34	1.08	15	1340	2	1.04	11
B796353	1	1	4	< 0.3	8.07	< 3	> 1000	1	< 2	1.12	< 0.3	22	104	39	3.88	20	2.64	1.85	33	697	< 1	1.99	71
B796354	1	1	3	0.4	4.98	4	> 1000	1	< 2	0.46	0.4	24	159	43	3.52	20	2.37	1.71	38	777	< 1	1.91	80
B796355	< 1	< 1	4	2.1	8.94	70	232	7	< 2	3.78	< 0.3	< 1	4	20	3.71	27	2.85	0.10	37	672	7	4.27	2
B796356	< 1	< 1	3	0.7	9.66	80	> 1000	4	< 2	2.64	< 0.3	12	22	22	3.80	25	2.84	1.00	27	526	2	4.29	15
B796357	< 1	< 1	3	2.4	9.50	8	220	12	< 2	1.70	0.4	< 1	4	9	4.81	27	3.37	0.22	109	1330	5	3.71	1
B796358	3	3	3	0.6	8.75	< 3	459	1	< 2	1.76	< 0.3	34	158	85	6.16	24	2.89	2.63	38	864	3	2.22	116
B796359	< 1	< 1	3	< 0.3	7.36	11	446	1	< 2	5.19	0.4	48	31	33	8.27	21	0.97	5.34	26	1130	< 1	2.55	42
B796360	< 1	< 1	4	< 0.3	6.79	< 3	352	< 1	< 2	6.28	< 0.3	75	27	142	8.99	18	0.87	7.14	22	1010	< 1	1.64	74
B796361	6	6	7	0.7	7.86	4	> 1000	2	< 2	6.94	< 0.3	42	38	71	8.60	17	2.03	3.88	13	1550	1	2.31	70
B796362	< 1	< 1	4	< 0.3	7.75	< 3	> 1000	3	< 2	4.78	0.3	28	12	67	7.91	24	3.20	2.31	20	1610	2	2.12	7
B796363	5	6	5	0.6	7.27	5	> 1000	2	< 2	6.89	< 0.3	41	33	70	8.16	17	1.67	3.94	18	1500	1	1.88	71
B796364	< 1	< 1	3	0.7	6.20	8	> 1000	3	< 2	3.29	0.4	20	48	18	6.03	18	2.06	2.27	18	1630	1	3.38	20
B796365	< 1	< 1	3	0.9	8.87	4	> 1000	5	< 2	2.29	< 0.3	3	11	14	4.43	20	2.72	0.35	17	584	4	4.41	2
B796366	13	11	6	0.4	8.04	4	> 1000	3	< 2	5.37	< 0.3	30	5	62	7.82	19	2.23	1.77	19	1620	1	2.85	24
B796367	< 1	< 1	4	< 0.3	6.97	7	243	< 1	< 2	5.78	< 0.3	60	24	61	8.67	17	0.72	6.04	16	992	< 1	1.80	38
B796368	< 1	< 1	3	< 0.3	6.63	< 3	167	< 1	2	5.70	< 0.3	70	10	71	13.3	22	0.51	5.90	13	1100	< 1	1.72	22
B796301	< 1	< 1	3	< 0.3	8.48	< 3	> 1000	2	< 2	4.51	0.4	19	21	5	3.94	21	1.95	1.10	11	1060	< 1	3.24	14
B796302	< 1	< 1	3	0.4	8.36	< 3	> 1000	2	< 2	4.03	< 0.3	29	8	11	7.88	16	2.09	2.18	19	1600	1	3.44	7
B796303	< 1	< 1	3	< 0.3	5.39	< 3	686	2	< 2	7.50	< 0.3	41	105	28	10.2	25	1.34	6.44	25	1890	< 1	0.99	37
B796304	< 1	< 1	3	< 0.3	0.11	< 3	< 7	< 1	< 2	0.05	< 0.3	< 1	22	1	0.37	< 1	0.01	0.03	1	100	1	0.06	2
B796305	< 1	< 1	3	< 0.3	7.18	< 3	289	< 1	3	5.73	< 0.3	62	4	69	12.5	23	0.67	5.19	11	1110	< 1	1.82	6
B796306	< 1	< 1	3	< 0.3	7.25	< 3	271	< 1	< 2	5.91	< 0.3	65	10	82	13.5	24	0.83	5.67	13	1080	< 1	1.95	10
B796307	< 1	< 1	3	< 0.3	5.95	< 3	256	< 1	5	6.50	< 0.3	62	184	66	8.82	17	0.77	6.93	10	979	< 1	1.80	142
B796369	1	< 1	15	< 0.3	6.40	< 3	288	< 1	< 2	6.18	< 0.3	64	38	135	9.95	17	1.03	6.79	23	1080	< 1	1.65	70
B796370	< 1	< 1	3	< 0.3	8.35	3	429	1	< 2	2.78	< 0.3	7	14	9	1.27	20	2.70	0.49	19	350	1	2.03	15
B796371	4	5	3	< 0.3	7.23	< 3	103	< 1	< 2	6.64	< 0.3	38	24	228	10.9	20	0.36	3.00	10	2990	< 1	1.36	32

Analyte Symbol	Pd	Pt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	Mg	Li	Mn	Mo	Na	Ni
Unit Symbol	ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppm
Lower Limit	1	1	2	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	0.01	0.01	1	1	1	0.01	1
Method Code	FA-MS	FA-MS	FA-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
B796372	6	6	4	0.7	7.28	< 3	88	< 1	< 2	5.55	< 0.3	49	82	411	12.1	19	0.30	3.12	10	3020	< 1	1.47	57
B795308	< 1	< 1	3	< 0.3	5.57	< 3	373	< 1	< 2	7.21	< 0.3	53	67	56	7.26	15	1.15	7.10	22	1180	< 1	1.49	72

Analyte Symbol	P	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
B796251	0.192	6	< 5	0.02	19	1270	8	0.54	< 5	< 10	143	< 5	26	112	92
B796252	0.407	9	< 5	0.08	15	1380	5	0.67	< 5	< 10	218	< 5	30	121	193
B796253	0.314	6	< 5	0.07	13	1370	13	0.55	< 5	< 10	132	< 5	22	127	54
B796254	0.179	8	< 5	0.11	14	1430	6	0.34	< 5	< 10	145	< 5	26	130	64
B796255	0.231	7	< 5	0.03	11	1560	11	0.48	< 5	< 10	113	< 5	21	115	113
B796256	0.336	12	< 5	0.07	11	1900	14	0.41	< 5	< 10	124	< 5	17	135	93
B796257	0.227	11	< 5	0.04	11	1860	8	0.23	< 5	< 10	80	< 5	20	105	22
B796258	0.288	9	< 5	0.05	10	2230	5	0.45	< 5	< 10	89	< 5	17	90	111
B796259	0.326	8	< 5	0.19	16	1490	10	0.54	< 5	< 10	156	< 5	28	164	49
B796260	0.427	11	< 5	0.02	23	988	7	0.62	< 5	< 10	102	< 5	29	148	112
B796261	0.252	7	< 5	0.07	21	1350	10	0.66	< 5	< 10	205	< 5	27	117	72
B796262	0.259	11	< 5	0.05	16	2050	19	0.62	< 5	< 10	193	< 5	23	117	180
B796263	0.282	14	< 5	0.12	12	1430	8	0.42	< 5	< 10	105	< 5	22	121	85
B796264	0.242	4	< 5	0.05	6	995	10	0.51	< 5	< 10	115	< 5	8	92	75
B796265	0.078	5	< 5	0.02	49	329	10	0.21	< 5	< 10	117	< 5	24	96	20
B796266	0.080	< 3	< 5	0.02	49	348	4	0.25	< 5	< 10	110	< 5	24	96	21
B796267	0.094	8	< 5	0.72	15	616	5	0.29	< 5	< 10	106	< 5	16	108	135
B796268	0.111	72	< 5	0.26	29	84	6	0.61	< 5	< 10	181	< 5	22	231	72
B796269	0.047	172	17	0.35	< 4	291	3	0.12	< 5	< 10	5	7	43	44	1370
B796270	0.383	13	< 5	0.06	22	912	11	0.74	< 5	< 10	252	< 5	30	162	171
B796271	0.040	11	< 5	0.40	7	129	4	0.19	< 5	< 10	23	< 5	10	24	67
B796272	0.043	6	< 5	1.15	7	158	5	0.19	< 5	< 10	23	< 5	11	31	45
B796273	0.133	< 3	< 5	0.25	18	382	5	0.65	< 5	< 10	114	< 5	19	102	94
B796351	0.037	< 3	< 5	0.04	7	195	< 2	0.15	< 5	< 10	30	< 5	16	40	52
B796352	0.041	4	< 5	1.17	7	157	2	0.19	< 5	< 10	23	< 5	11	31	45
B796353	0.069	14	< 5	< 0.01	12	515	3	0.18	< 5	< 10	68	< 5	10	110	65
B796354	0.071	14	< 5	< 0.01	9	269	6	0.34	< 5	< 10	123	< 5	5	117	101
B796355	0.036	7	22	1.19	< 4	277	< 2	0.08	< 5	< 10	< 2	9	28	33	741
B796356	0.153	< 3	< 5	0.39	6	1100	4	0.34	< 5	< 10	76	8	19	54	293
B796357	0.037	41	< 5	0.06	< 4	96	< 2	0.08	< 5	< 10	< 2	< 5	36	216	768
B796358	0.093	10	< 5	0.84	25	387	3	0.50	< 5	< 10	180	< 5	16	117	141
B796359	0.048	4	7	0.15	41	464	7	0.60	< 5	< 10	204	< 5	23	88	35
B796360	0.016	4	< 5	0.36	61	368	12	0.34	< 5	< 10	132	< 5	24	80	16
B796361	0.489	8	< 5	0.12	20	1090	6	0.70	< 5	< 10	199	6	28	170	236
B796362	0.417	10	< 5	0.28	16	854	5	0.38	< 5	< 10	170	31	43	117	98
B796363	0.448	4	< 5	0.04	21	1040	7	0.64	< 5	< 10	196	< 5	27	183	222
B796364	0.161	8	< 5	0.40	7	792	10	0.35	< 5	< 10	89	< 5	11	184	228
B796365	0.149	4	7	0.33	< 4	586	15	0.33	< 5	< 10	6	< 5	23	30	340
B796366	0.252	11	< 5	0.02	7	1200	4	0.40	< 5	< 10	165	< 5	24	137	169
B796367	0.023	< 3	< 5	0.14	49	371	2	0.30	9	< 10	175	< 5	21	75	20
B796368	0.012	< 3	< 5	0.44	51	357	5	0.52	< 5	< 10	445	< 5	25	97	38
B796301	0.187	12	< 5	0.04	9	988	5	0.34	< 5	< 10	76	< 5	18	145	48
B796302	0.498	8	< 5	0.10	6	1440	4	0.58	< 5	< 10	100	< 5	28	99	145
B796303	0.378	10	< 5	0.06	40	526	7	0.63	< 5	< 10	231	< 5	61	154	45
B796304	0.002	< 3	< 5	< 0.01	< 4	17	< 2	< 0.01	< 5	< 10	3	< 5	< 1	2	< 5
B796305	0.038	< 3	< 5	0.14	35	422	10	0.75	< 5	< 10	390	< 5	20	101	56
B796306	0.023	7	< 5	0.53	40	440	5	0.31	11	< 10	319	< 5	20	108	44
B796307	0.022	< 3	< 5	0.13	38	399	16	0.93	< 5	< 10	386	< 5	20	67	36
B796369	0.026	7	< 5	0.16	86	417	7	0.55	< 5	< 10	481	< 5	18	67	26
B796370	0.063	8	< 5	0.04	5	108	< 2	0.25	< 5	< 10	41	< 5	7	14	110
B796371	0.059	5	< 5	0.52	41	159	4	0.40	< 5	< 10	198	< 5	39	121	51

Analyte Symbol	P	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
B796372	0.033	4	< 5	1.26	38	143	11	0.46	< 5	< 10	213	< 5	37	131	105
B795308	0.035	4	< 5	0.01	70	391	14	0.32	< 5	< 10	293	< 5	16	58	38

Analyte Symbol	Pd	Pt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	Mg	Li	Mn	Mo	Na	Ni
Unit Symbol	ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppm
Lower Limit	1	1	2	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	0.01	0.01	1	1	1	0.01	1
Method Code	FA-MS	FA-MS	FA-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
OREAS 98 (4 Acid) Meas				41.6					48			122		> 10000									
OREAS 98 (4 Acid) Cert				45.1					97.2			121		148000.0									
OREAS 98 (4 Acid) Meas				43.1					22			126		> 10000									
OREAS 98 (4 Acid) Cert				45.1					97.2			121		148000.0									
PK2 Meas	5680	4580	4640																				
PK2 Cert	5918	4749	4785																				
PK2 Meas	5520	4550	4340																				
PK2 Cert	5918	4749	4785																				
OREAS 904 (4 Acid) Meas				0.7	6.58	98	213	11	5	0.05		98	58	6400	6.87	17	2.82	0.61	16	455	1	0.04	49
OREAS 904 (4 Acid) Cert				0.551	6.30	98.0	194	7.86	4.05	0.0460		83.0	54.0	6120	6.68	16.7	3.31	0.556	16.7	410	2.12	0.0340	40.1
OREAS 904 (4 Acid) Meas				0.7	6.51	92	209	10	< 2	0.05		98	61	6430	6.84	18	2.79	0.61	16	427	< 1	0.04	49
OREAS 904 (4 Acid) Cert				0.551	6.30	98.0	194	7.86	4.05	0.0460		83.0	54.0	6120	6.68	16.7	3.31	0.556	16.7	410	2.12	0.0340	40.1
OREAS 904 (4 Acid) Meas				0.5	6.47	93	191	10	< 2	0.05		93	63	6130	6.60	17	2.63	0.58	15	472	2	0.04	45
OREAS 904 (4 Acid) Cert				0.551	6.30	98.0	194	7.86	4.05	0.0460		83.0	54.0	6120	6.68	16.7	3.31	0.556	16.7	410	2.12	0.0340	40.1
SBC-1 Meas						24	566	3	< 2		0.9	21	87	34		26			161		1		81
SBC-1 Cert						25.7	788.0	3.20	0.70		0.40	22.7	109	31.0		27.0			163		2		83
SBC-1 Meas						26	584	3	< 2		0.8	20	79	30		26			160		1		79
SBC-1 Cert						25.7	788.0	3.20	0.70		0.40	22.7	109	31.0		27.0			163		2		83
SBC-1 Meas						23	747	3	< 2		< 0.3	22	92	41		27			156		2		86
SBC-1 Cert						25.7	788.0	3.20	0.70		0.40	22.7	109	31.0		27.0			163		2		83
CDN-PGMS-27 Meas	1890	1190	4620																				
CDN-PGMS-27 Cert	2000	1290.00	4800																				
CDN-PGMS-27 Meas	1850	1190	4540																				
CDN-PGMS-27 Cert	2000	1290.00	4800																				
OREAS 96 (4 Acid) Meas				11.3					6			51		> 10000									
OREAS 96 (4 Acid) Cert				11.5					26.3			49.9		39300									
OREAS 96 (4 Acid) Meas				11.2					27			51		> 10000									
OREAS 96 (4 Acid) Cert				11.5					26.3			49.9		39300									
OREAS 923 (4 Acid) Meas				1.9	7.25	7	449	3	22	0.50	0.8	23	74	4390	6.53	20	2.54	1.79	31	956	< 1	0.32	37
OREAS 923 (4 Acid) Cert				1.60	7.29	7.61	434	2.42	21.4	0.473	0.420	23.1	71.0	4230	6.43	20.3	2.51	1.69	31.4	950	0.930	0.324	35.8
OREAS 923 (4 Acid) Meas				1.8	7.47	6	457	3	16	0.49	0.4	24	79	4490	6.46	21	2.50	1.77	29	1010	< 1	0.32	44
OREAS 923 (4 Acid) Cert				1.60	7.29	7.61	434	2.42	21.4	0.473	0.420	23.1	71.0	4230	6.43	20.3	2.51	1.69	31.4	950	0.930	0.324	35.8
OREAS 247 (4 Acid) Meas				2.5	6.48	3160	514	3	< 2	0.90	0.7	13	89	44	3.35	16	2.68	1.30	31	392	< 1	0.48	49
OREAS 247 (4				2.16	6.08	3510	550	2.23	0.580	0.826	0.0650	12.0	97.0	42.2	3.32	16.3	2.45	1.22	31.8	360	1.76	0.499	45.9

Analyte Symbol	Pd	Pt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	Mg	Li	Mn	Mo	Na	Ni
Unit Symbol	ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppm
Lower Limit	1	1	2	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	0.01	0.01	1	1	1	0.01	1
Method Code	FA-MS	FA-MS	FA-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Acid) Cert																							
OREAS 247 (4 Acid) Meas				2.4	5.85	3100	414	2	< 2	0.93	< 0.3	13	106	41	3.14	15	2.21	1.24	29	361	< 1	0.45	48
OREAS 247 (4 Acid) Cert				2.16	6.08	3510	550	2.23	0.580	0.826	0.0650	12.0	97.0	42.2	3.32	16.3	2.45	1.22	31.8	360	1.76	0.499	45.9
OREAS 247 (4 Acid) Meas				2.4	6.30	3230	546	3	< 2	0.89	< 0.3	13	101	43	3.31	16	2.58	1.29	30	424	< 1	0.49	49
OREAS 247 (4 Acid) Cert				2.16	6.08	3510	550	2.23	0.580	0.826	0.0650	12.0	97.0	42.2	3.32	16.3	2.45	1.22	31.8	360	1.76	0.499	45.9
OREAS 620 (4 Acid) Meas				39.9	7.04	42	81	3	< 2	1.69	161	15	26	1810	2.97	23	0.47	0.36	18	444	8	1.86	21
OREAS 620 (4 Acid) Cert				38.5	6.72	50	2500	2	2	1.60	163	12	22	1730	2.94	24	2.6	0.34	20	440	9	1.94	15
OREAS 620 (4 Acid) Meas				40.6	7.18	41	71	3	< 2	1.72	164	14	25	1820	3.02	24	1.13	0.36	19	465	8	1.86	16
OREAS 620 (4 Acid) Cert				38.5	6.72	50	2500	2	2	1.60	163	12	22	1730	2.94	24	2.63	0.34	20	440	9	1.94	15
B796253 Orig				< 0.3	9.03	< 3	966	2	< 2	4.47	< 0.3	25	17	39	6.97	23	1.66	2.55	27	1180	< 1	3.75	15
B796253 Dup				< 0.3	6.46	4	916	2	2	4.28	< 0.3	25	18	39	6.65	22	1.48	2.37	26	1190	< 1	3.61	14
B796261 Orig	< 1	< 1	3																				
B796261 Dup	< 1	< 1	3																				
B796269 Orig				3.9	9.43	24	141	23	< 2	1.23	< 0.3	3	7	8	2.98	35	0.69	0.28	12	246	24	6.79	< 1
B796269 Dup				4.0	9.23	26	137	23	< 2	1.21	< 0.3	3	6	7	2.88	35	0.67	0.27	12	232	23	6.49	2
B796271 Orig	< 1	< 1	3																				
B796271 Dup	< 1	< 1	3																				
B796358 Orig	3	3	3																				
B796358 Dup	3	3	4																				
B796363 Orig				0.7	7.40	4	> 1000	2	3	7.00	0.3	41	32	72	8.33	17	1.68	4.01	18	1530	2	1.92	72
B796363 Dup				0.5	7.15	6	> 1000	2	< 2	6.79	< 0.3	40	34	69	8.00	17	1.66	3.87	18	1470	1	1.84	70
B796302 Orig	< 1	< 1	3																				
B796302 Dup	< 1	< 1	3																				
B795308 Orig	< 1	< 1	3	< 0.3	5.57	< 3	373	< 1	< 2	7.21	< 0.3	53	67	56	7.26	15	1.15	7.10	22	1180	< 1	1.49	72
B795308 Split PREP DUP	< 1	< 1	3	< 0.3	5.53	< 3	366	< 1	< 2	7.16	0.3	54	65	55	7.25	14	1.16	7.03	22	1170	< 1	1.48	71
B795308 Orig	< 1	< 1	3																				
B795308 Dup	< 1	< 1	3																				
Method Blank	< 1	< 1	3																				
Method Blank	< 1	< 1	3																				
Method Blank	< 1	< 1	3																				
Method Blank	< 1	< 1	3																				
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	9	< 1	< 0.01	< 1	< 0.01	< 0.01	< 1	10	< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	6	< 1	< 0.01	< 1	< 0.01	< 0.01	< 1	6	< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	7	< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	8	< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	6	< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	7	< 1	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1
Method Blank				< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	4	3	< 0.01	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1

Analyte Symbol	P	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
OREAS 98 (4 Acid) Meas		304	< 5	16.1										1320	
OREAS 98 (4 Acid) Cert		345	20.1	15.5										1360	
OREAS 98 (4 Acid) Meas		320	< 5	16.1										1360	
OREAS 98 (4 Acid) Cert		345	20.1	15.5										1360	
PK2 Meas															
PK2 Cert															
PK2 Meas															
PK2 Cert															
OREAS 904 (4 Acid) Meas	0.102	14	< 5	0.07	12	31			< 5	< 10	73	< 5	36	29	116
OREAS 904 (4 Acid) Cert	0.0980	10.6	1.48	0.0630	11.2	27.2			0.520	8.43	76.0	2.12	31.5	26.3	171
OREAS 904 (4 Acid) Meas	0.097	10	< 5	0.07	12	30			< 5	< 10	70	< 5	35	29	88
OREAS 904 (4 Acid) Cert	0.0980	10.6	1.48	0.0630	11.2	27.2			0.520	8.43	76.0	2.12	31.5	26.3	171
OREAS 904 (4 Acid) Meas	0.096	20	< 5	0.06	11	30			< 5	< 10	87	< 5	32	27	74
OREAS 904 (4 Acid) Cert	0.0980	10.6	1.48	0.0630	11.2	27.2			0.520	8.43	76.0	2.12	31.5	26.3	171
SBC-1 Meas		28	< 5		20	185		0.52	< 5	< 10	185	6	32	183	113
SBC-1 Cert		35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186	134.0
SBC-1 Meas		28	< 5		19	183		0.52	< 5	< 10	185	5	32	185	111
SBC-1 Cert		35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186	134.0
SBC-1 Meas		31	< 5		20	189		0.51	< 5	< 10	224	< 5	31	192	114
SBC-1 Cert		35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186	134.0
CDN-PGMS-27 Meas															
CDN-PGMS-27 Cert															
CDN-PGMS-27 Meas															
CDN-PGMS-27 Cert															
OREAS 96 (4 Acid) Meas		93	< 5	4.33										450	
OREAS 96 (4 Acid) Cert		101	5.09	4.19										457	
OREAS 96 (4 Acid) Meas		96	< 5	4.30										458	
OREAS 96 (4 Acid) Cert		101	5.09	4.19										457	
OREAS 923 (4 Acid) Meas	0.065	78	< 5	0.74	13	44		0.43	< 5	< 10	83	7	27	351	127
OREAS 923 (4 Acid) Cert	0.0630	83.0	1.29	0.691	13.1	43.0		0.405	0.860	3.06	91.0	4.85	26.4	345	116
OREAS 923 (4 Acid) Meas	0.065	94	< 5	0.74	13	46		0.43	< 5	< 10	99	10	26	356	127
OREAS 923 (4 Acid) Cert	0.0630	83.0	1.29	0.691	13.1	43.0		0.405	0.860	3.06	91.0	4.85	26.4	345	116
OREAS 247 (4 Acid) Meas	0.047	32	369	0.77	12	105		0.39	< 5	< 10	61	< 5	19	89	124
OREAS 247 (4	0.0480	31.9	3300	0.714	11.4	96.0		0.390	0.800	2.53	82.0	7.88	13.1	86.0	125

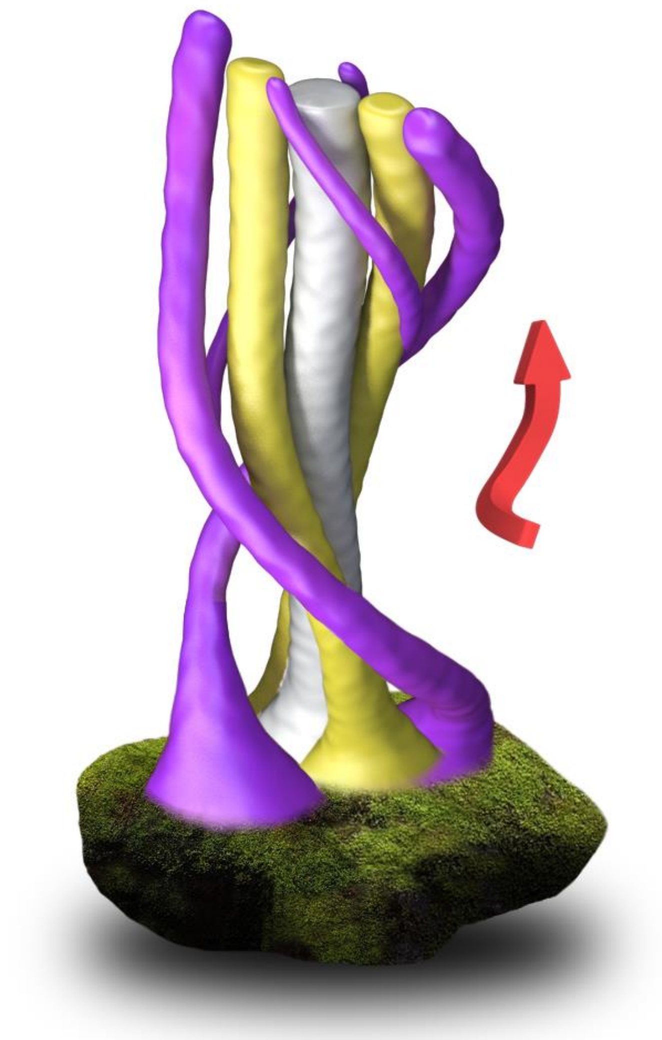
Analyte Symbol	P	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Acid) Cert															
OREAS 247 (4 Acid) Meas	0.043	30	253	0.73	11	98		0.35	< 5	< 10	64	< 5	18	95	131
OREAS 247 (4 Acid) Cert	0.0480	31.9	3300	0.714	11.4	96.0		0.390	0.800	2.53	82.0	7.88	13.1	86.0	125
OREAS 247 (4 Acid) Meas	0.047	30	277	0.73	12	102		0.38	< 5	< 10	72	< 5	18	87	120
OREAS 247 (4 Acid) Cert	0.0480	31.9	3300	0.714	11.4	96.0		0.390	0.800	2.53	82.0	7.88	13.1	86.0	125
OREAS 620 (4 Acid) Meas	0.036	> 5000	7	2.54	5	121		0.16	6	< 10	24	< 5	13	> 10000	204
OREAS 620 (4 Acid) Cert	0.035	7740	80	2.47	5	131		0.14	2	4	21	2	12	31500	202
OREAS 620 (4 Acid) Meas	0.037	> 5000	12	2.57	6	118		0.17	< 5	< 10	25	< 5	14	> 10000	208
OREAS 620 (4 Acid) Cert	0.035	7740	76	2.47	5	131		0.14	2	4	21	2	12	31500	202
B796253 Orig	0.317	6	< 5	0.07	17	1450	17	0.48	< 5	< 10	119	< 5	30	128	48
B796253 Dup	0.311	6	< 5	0.06	9	1290	10	0.63	< 5	< 10	145	< 5	15	126	60
B796261 Orig															
B796261 Dup															
B796269 Orig	0.048	176	18	0.36	< 4	294	2	0.12	< 5	< 10	5	6	44	45	1380
B796269 Dup	0.047	169	17	0.35	< 4	288	3	0.12	6	< 10	6	8	43	44	1350
B796271 Orig															
B796271 Dup															
B796358 Orig															
B796358 Dup															
B796363 Orig	0.462	3	7	0.05	22	1070	8	0.70	< 5	< 10	203	< 5	28	184	235
B796363 Dup	0.433	4	< 5	0.04	21	1010	7	0.59	< 5	< 10	189	< 5	27	182	209
B796302 Orig															
B796302 Dup															
B795308 Orig	0.035	4	< 5	0.01	70	391	14	0.32	< 5	< 10	293	< 5	16	58	38
B795308 Split PREP DUP	0.034	5	< 5	0.01	69	387	8	0.31	< 5	< 10	288	< 5	16	58	37
B795308 Orig															
B795308 Dup															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 0.001	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Appendix IV

3D - SGH

"A SPATIOTEMPORAL GEOCHEMICAL HYDROCARBON INTERPRETATION"

EMERALD GEOLOGICAL SERVICES
PIC RIVER SGH PROJECT



41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

(This page purposely left blank)

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH – SOIL GAS HYDROCARBON
Predictive Geochemistry

for

EMERALD GEOLOGICAL SERVICES

PIC RIVER SGH SOIL SURVEY

** Jeff Brown,*

Activation Laboratories Ltd

(- author)*

Dale Sutherland (- originator)

EVALUATION OF SAMPLE DATA – EXPLORATION FOR: "COPPER" and "GOLD" TARGETS

THE SGH COPPER AND GOLD INTERPRETATION TEMPLATES ARE USED FOR THIS REPORT

Workorders: A22-11423

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Executive Summary

It is important to read the Report Preface on the next page as an introduction to the report. For more detail the Overview section on page 8 could also be read.

The Pic River project area had 50 samples collected in 2 transects with 25m sample spacing and 75m between them. These samples were received by Actlabs. After sorting and drying in our walk-in temperature controlled drying room and subsequent sieving, the samples were made available to the Organics Laboratory for analysis. Samples were extracted and analyzed by Gas Chromatography coupled with Mass Spectrometry (GC/MS). The data was processed and initial mapping completed. After review and interpretation of this project site, a second set of SGH Class maps was developed. The background SGH information, site interpretation and final maps were then entered into the SGH Interpretation Report.

The customized section for the Pic River Survey starts on page 15. In the author's opinion, SGH appeared to perform well in terms of response, however additional infill sampling may be required to better define the mineralization and help potentially locate a redox zone if it exists.

Note that some exploration companies submit this report intact to government assessors as proof of work on their claim. Be aware that the SGH data is not attached to this report, it is supplied separately as an Excel spreadsheet. Government assessors will also have to be supplied with this data.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

PREFACE

THIS "STANDARD" SGH INTERPRETATION REPORT:

The purpose of this Soil Gas Hydrocarbon (SGH) interpretation "Standard Report" is to ensure that clients and other potential reviewers of the results have a good understanding of this organic, deep penetrating geochemistry. As SGH provides such a large data set and is not interpreted in the same way as an inorganic geochemical method, the provision of this interpretation and report enables the user to realize the results in a timely fashion and capitalizes on years of research and development since the inception of SGH in 1996 combined with the knowledge obtained by Activation Laboratories through the interpretation of SGH data from over 1,100 surveys for a wide variety of target types in various lithologies from many geographical locations. Although referenced today as a "nano-technology", the analysis of SGH has not changed since inception. The report is compulsory as it is the only known organic geochemistry that, in spite of the name, uses "non-gaseous" semi-volatile organic compounds interpreted using a forensic signature approach. Many different sample types can be used in the same survey. Interpretation is based solely on SGH data and does not include the consideration from any other geochemistry (inorganic), geology, or geophysics that may exist related to the survey area(s). This report can also provide evidence of project maintenance. To keep the price to a minimum and to provide as short a turnaround time as practically possible, usually only one SGH Pathfinder Class map is illustrated in a "Standard Report" with an applied interpretation although several other SGH Pathfinder Class maps are used and referenced. Definitions of certain terms or phrases used in this report can be found in Appendix A.

The interpretation in this report has used the results from some of the research with SGH in recent years which has focused on the potential that the SGH data is able to further dissect and understand the relationships between the chemical Redox conditions in the overburden the development of an electrochemical cell and its affect in shaping the upward migration of geochemical anomalies. This has resulted in the development by Activation Laboratories of a new enhanced model of the Electrochemical/ Redox Cell theory originated by Govett (1976) that was further developed to the model by Hamilton (2004, 2007). The new enhanced model developed by Sutherland (2011) takes the general anomalies expected by the Hamilton model to a higher level of detail and specificity. This has resulted in a more confident level of interpretation which has been referenced as 3D-SGH or **3D-"Spatiotemporal Geochemical Hydrocarbons (SGH)"**. This model was formally introduced at the International Applied Geochemistry Symposium (IAGS) organized by The Association of Applied Geochemists that took place in Rovaniemi, Finland, in August 2011. This new level of understanding of the expected anomaly types that can be observed with SGH provides a new level of quality control in the interpretation process as the symmetry of SGH anomalies can assure the interpreter which anomalies are as a result of a buried target. With the enhanced 3D-SGH interpretation that was introduced in 2012, we also mark the beginning of the ability to make some statements regarding the possible depth to mineralization for some projects as we dissect the Redox cell relative to the new Electrochemical Cell theory. The cover of this report is an artist's rendering of the pathways of different classes of Spatiotemporal Geochemical Hydrocarbons which migrate through the overburden. This model is used as the new 3D-SGH interpretation approach.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

DISCLAIMER

This "SGH Interpretation Report" has been prepared to assist the user in understanding the development and capabilities of this Organic based Geochemistry. The interpretation of the Soil Gas Hydrocarbon (SGH) data is in reference to a template or group of SGH classes of compounds specific to a type of mineralization or target that is chosen by the client (i.e. the template for petroleum, gold, copper, VMS, uranium, etc.). The various templates of SGH Pathfinder Classes that together define the forensic identification signature for a wide range of commodity target types; Gold, Nickel, VMS, SEDEX, Uranium, Cu-Ni-PGE, IOCG, Base Metal, Polymetallic, and Copper, as well as for Kimberlites, Coal Seam, Wet Gas and Oil Play, have been developed through years of research and have been further refined from review of case studies and orientation studies has proven to be able to also address a wide range of lithologies. Even with 20+ years of development and experience with SGH, Activation Laboratories Ltd. cannot guarantee that the templates used are applicable to every type of target in every type of environment. The interpretation in this report attempts to identify an anomaly that has the best SGH signature in the survey for the type of mineralization or target chosen by the client. However, this interpretation is not exhaustive and there may be additional SGH anomalies that may warrant interest. It should not be viewed due to the generation of this SGH report, that Activation Laboratories Ltd. has the expertise or is in the business of interpreting any other type of geochemical data as a general service. As the author was trained by the originator of the SGH geochemistry, who has researched and developed this exploration tool since 1996, and has produced similar interpretations using SGH data for over 1,000 surveys, he is the best qualified person to prepare this interpretation as assistance to clients wishing to use this SGH geochemistry. Activation Laboratories Ltd. can offer assistance in general suggestions for sampling protocols and in sample grid design; however we accept no responsibility to the appropriateness of the samples taken. Activation Laboratories Ltd. has made every attempt to ensure the accuracy and reliability of the information provided in this report. Activation Laboratories Ltd. or its employees do not accept any responsibility or liability for the accuracy, content, completeness, legality, or reliability of the information or description of processes contained in this report. The information is provided "as is" without a guarantee of any kind in the interpretation or use of the results of the SGH geochemistry. The client or user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using any information or material contained in this report or using data from the associated spreadsheet of results.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Cautionary Note Regarding Assumptions and Forward Looking Statements

The statements and target rating made in the Soil Gas Hydrocarbon (SGH) interpretive report or in other communications may contain or imply certain forward-looking information related to the quality of a target or SGH anomaly.

Statements related to the rating of a target are based on comparison of the SGH signatures derived by Activation Laboratories Ltd. through previous research on known case studies. The rating is not derived from any statistics or other formula. The rating is a subjective value on a scale of 0 to 6 relative to the similarity of the SGH signature reviewed compared to the results of previous scientific research and case studies based on the analysis of surficial samples over known ore bodies. No information on the results from other geochemical methods, geophysics, or geology is usually available as additional information for the interpretation and assignment of a rating value unless otherwise stated. References to the rating should be viewed as forward-looking statements to the extent that it involves a subjective comparison to known SGH case studies. As with other geochemical methods, an implied rating and the associated anticipated target characteristics may be different than that actually encountered if the target is drilled tested or the property developed. Activation Laboratories Ltd. may also make a scientifically based prediction in this interpretive report to an area that might be used as a drill target. Usually, the nearest sample is identified as an approximation to a "possible drill target" location. This is based only on SGH results and is to be regarded as a guide based on the current state of this science.

Unless otherwise stated, Activation Laboratories Ltd. has not physically observed the exploration site and has no prior knowledge of any site description or details or previous test results. Actlabs makes general recommendations for sampling and shipping of samples. Unless stated, the laboratory does not witness sampling, does not take into consideration the specific sampling procedures used or factors such as; the season of sampling, sample handling, packaging, or shipping methods. The majority of the time, Activation Laboratories Ltd. has had no input into sampling survey design. Where specified Activation Laboratories Ltd. may not have conducted sample preparation procedures as it may have been conducted at the client's assigned laboratory external to Actlabs. Although Actlabs has attempted to identify important factors that could cause actual actions, events or results to differ scientifically which may impact the associated interpretation and target rating from those described in forward-looking statements, there may be other factors that cause actions, events or results that are not anticipated, estimated or intended. In general, any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance are not statements of historical fact. These "scientifically based educated theories" should be viewed as "forward-looking statements".

Readers of this interpretive report are cautioned not to place undue reliance on forward-looking information. Forward looking statements are made based on scientific beliefs, estimates and opinions on the date the statements are made and for the interpretive report issued. The Company undertakes no obligation to update forward-looking statements or otherwise revise previous reports if these beliefs, estimates and opinions, future scientific developments, other new information, or other circumstances should change that may affect the analytical results, rating, or interpretation. Actlabs nor its employees shall be liable for any claims or damages as a result of this report, any interpretation, omissions in preparation, or in the test conducted. This report is to be reproduced in full, unless approved in writing.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBON (SGH) GEOCHEMISTRY – OVERVIEW

In the search for gas, oil, minerals and elements, geologists require tools to assess the location and potential quantity of minerals and ores. In the past people looked at the landscape to find the deposit. Similar landscapes indicate similar mineral and metal deposits. This is searching on a macro level, while geochemistry is searching on a micro level. Surficial materials requires many minerals and elements, so surficial materials can contain indications of the presence of minerals and elements.

SGH is a deep penetrating geochemistry that involves the analysis of surficial samples from over potential mineral or petroleum targets. The analysis involves the testing for 162 hydrocarbon compounds in the C5-C17 carbon series range applicable to a wide variety of sample types. These hydrocarbons have been shown to be residues from the decomposition of bacteria and microbes that feed on the target commodity as they require inorganic elements to catalyze the reactions necessary to develop hydrocarbons and grow cells in their life cycle. Specific classes of hydrocarbons (SGH) have been successful for delineating mineral targets found at over 950 metres in depth. Samples of various media have been successfully analyzed i.e., soil (any horizon), sand, till, drill core, rock, peat, humus, lake-bottom sediments and even snow. After preparation in the laboratory, the SGH analysis incorporates a very weak leach, essentially aqueous, that only extracts the surficial bound hydrocarbon compounds and those compounds in interstitial spaces around the sample particles. These are the hydrocarbons that have been mobilized from the target depth. SGH is unique and should not be confused with other hydrocarbon tests or traditional analyses that measure C1 (Methane) to C5 (Pentane) or other gases. Thus, in spite of the name, SGH does not analyze for any hydrocarbons that are actually gaseous at room temperature and SGH can also be used to analyze for hydrocarbons in sample types other than soil. SGH is also different from other soil hydrocarbon tests that thermally extracts or desorbs all of the hydrocarbons from the whole soil sample. This test is less specific as it does not separate the hydrocarbons and thus does not identify or measure the responses as precisely. These tests also do not use a forensic approach for identification. In SGH, the hydrocarbons in the sample extract are separated by high resolution capillary column gas chromatography and then detected by mass spectrometry to isolate, confirm, and measure the presence of only the individual hydrocarbons that have been found to be of interest from initial research and development and from performance testing especially from two Canadian Mining Industry Research Organization (CAMIRO) projects (97E04 and 01E02).

Over the past 20+ years of research, Activation Laboratories Ltd. has developed an in-depth understanding of the unique SGH signatures associated with different commodity targets. Using a forensic approach we have developed target signatures or templates for identification, and the understanding of the expected geochromatography that is exhibited by each class of SGH compounds. In 2004 we began to include an SGH interpretation report delivered with the data to enable our clients to realize the complete value and understanding of the SGH results in a short time frame and provide the benefits to them from past research sponsored by Actlabs, CAMIRO, OMET and other industrial sponsors. In 2011, a new model of Electrochemical/Redox Cell theory was proposed and the new 3D-SGH interpretation approach based on this theory was incorporated in 2012 on a routine basis for SGH interpretation reports.

SGH has attracted the attention of a large number of Exploration companies. In the above mentioned initial research projects the sponsors have included (in no order): Western Mining Corporation, BHP-Billiton, Inco, Noranda, Outokumpu, Xstrata, Cameco, Cominco, Rio Algom, Alberta

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Geological Survey, Ontario Geological Survey, Manitoba Geological Survey and OMET. Further, beyond this research, Activation Laboratories Ltd. has interpreted the SGH data for over 1,000 targets from clients since January of 2004. In both CAMIRO research projects over known mineralization, client orientation studies, and in exploration projects over unknown targets, SGH has performed exceptionally well. As an example, in the first CAMIRO research project that commenced in 1997 (Project 97E04), there were 10 study areas that were submitted blindly to Actlabs. These study sites were specifically selected since other inorganic geochemical methods were unsuccessful at illustrating anomalies related to the target. Although Actlabs was only provided with the samples and their coordinates, SGH was able to locate the blind mineralization with exceptional accuracy in 9 of the 10 surveys. In 2007, shortly after providing SGH interpretation reports, SGH was credited in helping locate previously unknown mineralization, e.g. Golden Band Resources drilled an SGH anomaly and discovered a significant vein containing "visible" gold. (www.goldenbandresources.com) SGH has been very successful and mining companies have repeatedly used SGH on several reports. Of those clients that try this SGH Geochemistry, over 90+% have continued to use this technique as repeat clients. SGH has helped discover a large number of new deposits, however many clients have kept this to themselves as a competitive strategy.

SOIL GAS HYDROCARBON SURVEY DESIGN AND SAMPLING

Summary: See Appendix C for more details

In summary, the best conditions for the sample type and survey design include:

- Fist sized samples are usually retrieved from a shallow dug hole in the 15 to 40 cm range of depth.
- Different sample types can be taken even "within" the same survey or transect, data leveling is rarely required. SGH is highly effective in areas of very difficult terrain. The Golden Rule is to always take a sample.
- Samples should be evenly spaced in a grid or as a second choice, in a series of transects with sample lines spaced at a ratio of up to 4:1 (line spacing: sample spacing).
- A minimum of 50 sample "locations" is recommended with one-third over the target and one-third on each side of the target into background if this can be predicted. More samples representing a larger area is preferred in order to optimize data contrast.
- If very wet, samples can be drip dried in the field. No special preservation is required for shipping.
- Relative or UTM sample location coordinates are required to allow interpretation.

SAMPLE PREPARATION AND SGH ANALYSIS

Summary: See Appendix D for more details

Upon receipt at Activation Laboratories:

- The samples are air-dried at a relatively low temperature of 40°C.
- The samples are then sieved and the -80 mesh sieve fraction (<177 microns, although different mesh sizes can be used at the preference of the exploration geologist) is collected.
- The collected "pulp" is packaged in a Kraft paper envelope and transferred from our sample preparation department to our Organic Geochemical department also located in our World Headquarters in Ancaster, Ontario, Canada.
- Each sample is then extracted, compounds separated by gas chromatography and detected by mass spectrometry at a *Reporting Limit* of one part-per-trillion (ppt).
- The results of the SGH analysis is reported in raw data form in an Excel spreadsheet as "semi-quantitative" concentrations without any additional statistical modification.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH DATA QUALITY

Summary: See Appendix E for more details

Reporting Limit:

- The Excel spreadsheet of concentrations for the hydrocarbons monitored is in units of ppt as "parts-per-trillion" which is equivalent to nanograms/kilogram (ng/Kg). The reporting limit of 1 ppt represents a value of approximately 5 times the standard deviation of low level analysis. Essentially all background noise has already been eliminated. All data reported should be used in geochemical mapping. Actual detectable levels can be significantly < 1 ppt.

Laboratory Replicate Analysis:

- An equal aliquot of a random sample is analyzed as a laboratory replicate.
- Due to the large amount of data, the estimate of method variability is reported as the percent coefficient of Variation (%CV).
- A laboratory replicate analysis is reported at a frequency of 1 for every 15 samples analyzed.
- The variability of field duplicate samples are similarly reported if identified.

Historical SGH Precision:

- Although the SGH analysis reports results at such trace ppt concentration levels, the average %CV for laboratory replicates is excellent at an average of 8% within a range of ±4%.
- Field duplicates have historically been 3 to 5% higher than laboratory replicates.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH DATA INTERPRETATION

Summary: See Appendix F for more details

SGH Interpretation and Report:

- Due to the very large data set provided by the SGH analysis, this interpretation report is provided to offer guidance in regards to the results of this geochemistry for the survey.
- In our interpretation procedure, we separate the 162 compound results into 19 SGH sub-classes. These classes include specific alkanes, alkenes, Thiophenes, aromatic, and polyaromatic compounds. The concentrations of the individual hydrocarbons within a class are simply summed. None of these compounds are gaseous at room temperature.
- At this time the magnitude of the hydrocarbon class data has not been proven to imply a higher grade or quantity of the mineralization if present.
- A "geochemical anomaly threshold value" should not be calculated for SGH data as any background or noise has already been filtered out through the use of a Reporting Limit instead of some type of detection limit.
- SGH hydrocarbon data should never be interpreted individually. Interpretation must always use a compound class.
- Multiple SGH Classes are compared. Multiple SGH Classes that have been associated with the presence of specific mineralization are called SGH Pathfinder Classes that together represent the forensic signature or fingerprint identification that is associated with a specific type of mineralization or petroleum play.
- The anomalies of each class are compared as to their geochromatographic dispersion and ability to vector to a common location that may be referenced as a potential drill target.
- The agreement and behaviour between SGH Pathfinder Classes for a type of target, as a template of Classes, is compared against SGH research and orientation studies. The quality of agreement is expressed as an SGH Rating of confidence that the SGH anomalies of the survey being interpreted are similar to the behaviour of these classes over known mineralization.
- The interpretation is customized for the project survey by the Author. The SGH Rating and Interpretation is subjective and based on the experience from 1,000+ SGH survey interpretations. The interpretation is not conducted or assisted by any computerized process.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH CHARACTERISTICS

Summary: See Appendix G for more details

SGH Characteristics:

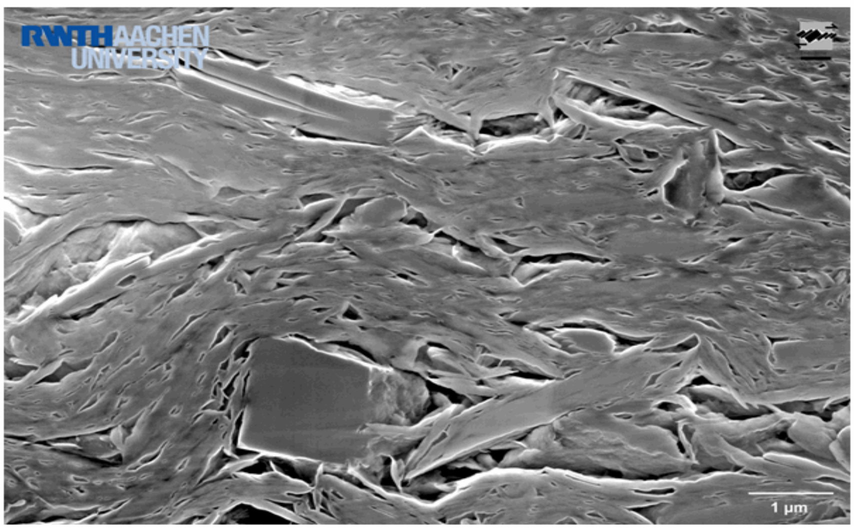
- The pattern of SGH anomalies are usually of high contrast and easily observed.
- SGH is able to illustrate exceptionally symmetrical anomalies in spite of exotic overburden and barriers such as permafrost, shale and basalt caps, previously thought to be impenetrable.
- Inorganic geochemistry can illustrate anomalies of metals that have been mobilized by surficial physical processes. As SGH is essentially "blind" to the inorganic content of a sample, SGH anomalies illustrate the true source of mineralization as it is not affected by the effects of terrain or from mobilized cover such as from glacial transport.
- As SGH hydrocarbons are essentially non-polar, highly symmetrical anomalies are observed. As such symmetry is rare in geochemistry this provides a higher level of confidence to the interpretation that is reflected by a higher SGH Rating Score in comparison to known case studies.
- SGH can be analyzed on samples collected in different seasons or adjacent years. The combined data most often does not require any data leveling.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

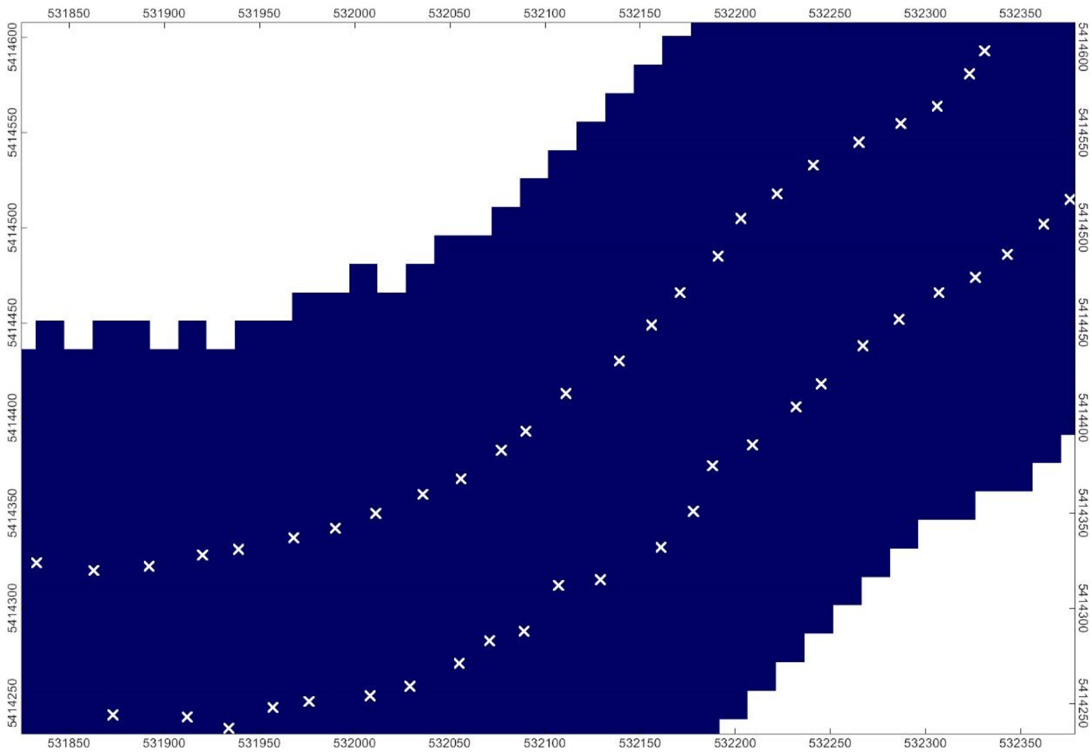
SGH INTERPRETATION – LATEST ENHANCEMENTS

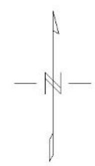
SGH continues to be developed even after 18 years since inception. Although the sample preparation and analysis has stayed the same, in the last 10 years in particular it is the interpretation and understanding of the SGH data and the intricacies of the SGH signatures that have been more refined. In the last 4 years this understanding has extended to the ability to make some prediction of depth from just the use of this geochemistry. A "first" for a geochemistry that is unique to SGH. Today the latest SGH development is the introduction of the concept of the "transparent overburden". The basis of this ability is the understanding that SGH is a Nano-geochemistry. The term "Nano" is not only used to describe the capability in detecting "Nano" quantities of these hydrocarbon based bacterial decomposition products, with the ability to detect 1 nanogram per kilogram (ng/Kg or 1 part-per-trillion), but "Nano" also describes the size of the hydrocarbon compounds detected which are typically < 1 micron in size. These relatively non-polar hydrocarbons are far smaller in size than inorganic oxides and sulphides. This difference is the reason why SGH anomalies are reliable vertical projections of mineral and/or petroleum based targets. This SGH Nano-geochemistry thus makes even the most exotic overburden "transparent". The SEM (Scanning Electron Microscope) image below illustrates the large number of micron sized pore spaces in "Boom Clay", specific high density clay, used to cap deep chambers of high hazard and radioactive wastes. To SGH, this is just a sieve that these hydrocarbons are able to still migrate through by Nano-Capillary action. Inorganic oxides and sulphide anomalies from targets below such complex overburden may be laterally displaced as they must rely on faults and shears in order to migrate to the surface.



This new understanding of the rationale of why SGH anomalies are so reliable in their vertical projection of the location of mineralization and in the ability to so accurately delineate shallow and deep mineralization has further lead to the ability to use SGH to review different layers of the overburden as it relates to the mineral target due to the wide molecular weight range of the SGH Nano-geochemistry. Another factor that aids in this review of layers, much like peeling back the layers of a sweet-onion, is the understanding of weathering processes in the 5 metres near the surface that includes the Vadose zone.

This report is based on the SGH results from the analysis of a total of 50 soil samples from the Pic River survey. The survey can be described as 2 transects with sample spacing of approximately 25m and the distance between the transects being approximately 75m. The samples were shipped to Actlabs Global Headquarters, then prepared for analysis. Sample coordinates were provided for mapping of the SGH results for these samples in UTM format. A sample location map is shown below.





41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH INTERPRETATION - EMERALD GEOLOGICAL SERVICES
QUALITY ASSURANCE – PIC RIVER SGH SOIL SURVEY

Note that the associated SGH results are presented in a separate Excel spreadsheet. This data is semi-quantitative and is presented in units of pg/g or *parts-per-trillion* (ppt) as the concentration of specific hydrocarbons in the sample. The number of samples submitted for this survey is at the recommended minimum to use SGH as an exploration tool. SGH has been proven to discriminate between false mobilized soil anomalies and is able to actually locate the source target deposition. SGH is a deep-penetrating geochemistry and has been proven to locate Copper, Gold, VMS, and other types of mineralization as well as for petroleum targets at several hundred metres below the surface irrespective of the type of overburden. Note that the SGH data is only reviewed for the particular target deposit type requested, in this case for the presence of copper and gold. It is assumed that there is only one potential target. If known, in surveys with several complex geophysical targets, to obtain the best interpretation the client should indicate that there are possibly multiple targets. The possibility of multiple geophysical targets should be known due to potential overlap and increased complexity of the resulting geochromatographic anomalies, which could alter the interpretation as to which targets are mineralized or not.

The overall precision of the SGH analysis for the samples at the Pic River SGH Soil Survey was excellent as demonstrated by the 4 samples taken from this survey which were used for laboratory replicate analysis and were randomized within the analytical run list. The average Coefficient of Variation (%CV) of the replicate results for the samples in this survey was **9.2%** which represents an excellent level of analytical performance especially at such low parts-per-trillion concentrations.

The location of **Field Duplicate samples was not identified from the Pic River SGH Soil Survey.** It is typically observed that the variability of field duplicates are 5% to 8% CV higher than for laboratory duplicates of random samples taken from the survey. Note that the SGH geochemistry does not detect all organic hydrocarbons present in the samples.

No other statistics were used on the data for this report for mapping or interpretation purposes aside from the use of a Kriging trending algorithm in the GeoSoft Oasis Montaj mapping software. **This interpretation is based only on the analytical results provided by the SGH Nano-Geochemistry from this submission of samples for the Pic River survey samples.** A template or group of SGH Pathfinder Classes that have been found to be associated with buried Copper and Gold targets was used as the basis for the interpretation of these areas. The final interpretation is customized and conducted by the author. Although the term "template" or "signature" appears in this SGH Report, a computerized interpretation is not used.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH INTERPRETATION - SGH TARGET PATHFINDER CLASS MAPS

The maps shown in plan and in 3D views in this report are SGH "Pathfinder Class maps" for targeting various chemical classes of hydrocarbon flux signatures related to Copper and gold type targets. This report may have been expanded by the author to include additional SGH information that may help understand the structure of the findings if present at the Pic River survey area. The maps shown represent the simple summation of several individual hydrocarbon compound concentrations that are grouped from within the same organic chemical class. SGH Pathfinder Class maps have been shown to be robust as they are each described using from 4 to 14 chemically related SGH compounds (unless otherwise stated) which are simply summed to create each chemical class map. Thus, each map has a higher level of confidence as it is not illustrating just one compound measurement.

The Copper and Gold templates of SGH Pathfinder Classes uses primarily low and medium molecular weight classes of hydrocarbon compounds. At least three Pathfinder Class maps, associated with the SGH signature developed must be present to begin to be considered for assignment of a good rating relative to the SGH performance in case studies over known Copper and Gold types of mineralization (some of these maps might not be shown in this report). These SGH classes must also concur and support a consistent interpretation in relation to the expected geochromatographic characteristics of the Pathfinder Class. The *overall* SGH interpretation Rating has even a higher level of confidence as it further implies the consensus between at least three SGH pathfinder classes. A combination of these SGH Pathfinder Classes potentially defines the signature of a target at depth if present. Each of the SGH Pathfinder Class maps shown in this report is a specific *portion* of the SGH signature relative to the presence of Copper and Gold as described. Each pathfinder class map is still just one of the Pathfinder Class maps used in the interpretation template for Copper and Gold. Additional interpretation information which may contain additional SGH Pathfinder Class maps is available as a Supplementary Report at an additional price (see Appendix H).

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Note that any concentration value in the accompanying Excel spreadsheet greater than the "Reporting Limit" of 1 ppt is important data and has been able to depict mineralization or petroleum plays at depth under cover in other projects. The majority of the variability or noise has already been eliminated; additional filtering will adversely affect any interpretation. Note again that a Kriging trending algorithm has been applied to the mapping routine in the Geosoft Oasis Montaj software in the development of the SGH Class maps. SGH concentrations are in some way probably related to the amount of mineralization or petroleum resource present, which probably defines the characteristics or quantity of the biofilm(s) in contact with the target, as well as being related to the depth to the target. SGH results have also been shown to correlate well with geophysical measurements such as magnetic anomalies and those of CSAMT.

The SGH Class maps are the plot of the sums of the particular hydrocarbon class in parts-per-trillion concentration. The dark blue areas of these maps represent very low or non-detect values or areas where no samples were taken. For plotting purposes the values at the Reporting Limit are plotted as one-half of this filtering, or one-half of 1.0 ppt. The hotter colours represent higher concentrations of the sum of the class with the highest values being purple in colour. The lowest concentrations that may be at 0.5 ppt, are shown in blue.

SGH is a "deep penetrating" geochemistry but also works well for deep targets as well as relatively shallow targets. Targets shallower than about 3 to 5 metres (or potentially outcrop) will have a reduced SGH signal due to interaction with atmospheric conditions and samples taken right at surface outcrops will have even weaker signals due to a higher degree of weathering from various environmental processes on these volatile and semi-volatile organic hydrocarbons.

In the interpretation of SGH data there are several goals. In order of importance they are:

- Review for the presence of Redox Cells
- Vector to the location of a mineral target
- Delineate the mineral target
- Identify the type of mineral target
- Describe the features of the possible mineral target
- See if there is information on the basement structure
- Predict a drill target
- Predict the possible depth to the mineral target

Not every goal is expected to be able to be achieved with each SGH data set or survey.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

A22-11423 – EMERALD GEOLOGICAL SERVICES
PIC RIVER SGH SOIL SURVEY
SGH INTERPRETATION RATING AND CLARIFICATION

Often a geochemistry such as SGH is used as an economical exploration investigation tool to provide more information on an exploration target as some geological body or help prioritize some geophysical target. Such occurrences are in general expected to change the chemistry of the immediate overburden which in turn is expected to result in a chemical anomaly as detected in surficial samples. The author believes that it is important to convey to the client the presence of an anomaly even if there is only part of the SGH signature present that may be related to the mineral signature or template requested. In other words, the anomaly illustrated in the report may not be representative of the mineralization sought as only a part of the SGH signature is present, but the anomaly may confirm the presence of some geological or geophysical target which may be valuable to the client for comparison with other data. In addition it would confirm the ability and sensitivity of SGH to show geological or geophysical occurrences. Example: A well defined rabbit-ear anomaly on an SGH Pathfinder Class map in a report, even though it may have a lower rating of 2.0 or 3.0, may illustrate to the exploration geologist that SGH does agree that there is some geological body at depth that is changing the chemistry and forming a Redox cell in the overburden. However the SGH forensic signature Rating indicates that there is a lower confidence that the "identification" of that body is likely to be say Gold (if the SGH Gold template is requested). This information would provide a confirmation that a target does exist, however if the SGH Rating indicates that the target has a lower level of confidence then the target does not have the forensic signature of the mineralization sought. SGH would thus provide a savings to the exploration program and divert focus to potentially other targets having a higher confidence in the SGH identification Rating for Gold in this example.

Thus, the SGH rating must always be considered in conjunction with the SGH Pathfinder Class map(s) shown in the report. It is this rating that provides an insight into the authors' complete interpretation and is a measure of the confidence and to what degree the complete SGH signature compares with the SGH results from over case studies of similar known deposits. Unfortunately, the interpretation of a visual, as the SGH map provided, is so ingrained in humans that the reader may erroneously disregard the author's subjective rating to a large degree. As of November 25, 2011, the author now highlights the rating directly on the page having the plan view of the SGH Pathfinder Class map chosen to be illustrated. Thus to the reader of the report, the authors Rating is actually **MORE IMPORTANT** than the readers instinctive interpretation of just the one map provided. Again, SGH should not be used in isolation from other site information, and that a Rating of 4.0 is when, in the authors' estimation, a signature only starts to have a good identification relative to that type of mineralization, and that the survey may warrant further study although it is not a specific recommendation to drill test the anomaly. As the SGH interpretation is represented by a signature, the SGH Pathfinder Class map(s) illustrated in reports is always only "PART" of the specific SGH signature or template that the client requests (i.e. for Gold, etc.). No one SGH map can represent the complete signature due to the different amounts of spatial dispersion of the anomalies that are expected for the variety of SGH chemical classes within each signature. Thus the author selects the one SGH Class Map relative to the mineralization requested that best represents an anomaly that estimates the overall signature found in the survey.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

A22-11423 – EMERALD GEOLOGICAL SERVICES – PIC RIVER
SGH "REDOX" INTERPRETATION

As a general comment in regard to the SGH results at the Pic River SGH Soil Survey, the SGH data in general had good signal strength and the SGH Class maps in this report are quite good in contrast. It's important to not think of contrast with SGH as Signal:Noise as by using a "Reporting Limit" the noise has already been completely or nearly completely removed.

One of the first steps in the interpretation of the spatial aspect of SGH data is to locate potential Redox conditions in the overburden. Redox conditions have been well known to be related to blind mineral or petroleum targets; however, Redox conditions can also be attributed to other geological bodies that are of no particular interest. SGH signatures have been shown to be able to differentiate between these targets. SGH has been described by the Ontario Geological Survey of Canada (OGS) as a "Redox Cell locator". Redox Cells can be related to the presence of bacteriological activity related to mineralization but also may be related to the presence of geological bodies such as Granite Gneiss, Dunite, etc. Recently SGH has been shown to be far more sensitive to depicting Redox conditions than even measurements using pH or ORP tests. It is important to understand that; not only is SGH a Redox cell locator, but due to the forensic signature of mineralization used in the interpretation process, SGH can discriminate mineral targets and other target types from geological bodies, other magnetically detected targets, mineralized versus non-mineralized conductors, cultural effects, etc. even in surveys over highly difficult or exotic terrain that often requires the collection of multiple sample types. In the interpretation it is not necessary to detect a Redox cell if mineralization is within approximately 30 metres of the surface as this would be insufficient depth to develop a dispersion halo anomaly. Many SGH surveys for Gold, Petroleum, and other mineral and petroleum based targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Segmented-Nested-Halo", and "Rabbit-Ear" or "Segmented Halo" type anomalies are all typically observed within the SGH data set from the effect of Redox cells that have developed over mineralization and their interaction with Redox conditions and the electromotive forces produced by the subsequent Electrochemical Cell. Different types of anomalies have also been associated with the depth to the target. The types of anomalies developed have been recently explained by the use of the 3D-SGH model of interpretation. The highly symmetrical anomalies illustrated by SGH data closely follow the expected self-organizing patterns of neutral species within an electrochemical cell in recent experiments in physics laboratories. The highly symmetrical anomalies are also able to be observed as the Nano-sized dimensions of these organic hydrocarbons are much smaller than inorganic oxides and sulphides. Thus the SGH hydrocarbons can migrate through the Nano-sized fissures of even clay, basalt, and permafrost caps by means of Nano-capillary action. The simple fact that the SGH anomalies are geometrically symmetrical and not random further improves the confidence of SGH interpretations.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

A22-11423 – EMERALD GEOLOGICAL SERVICES
PIC RIVER SGH SOIL SURVEY
SGH "COPPER and GOLD" INTERPRETATION

With the submission of only two sample lines, there is little confidence in confidently identifying the presence of Redox Cells. Copper and Gold mineralization though does not necessarily have associated Redox Cells, especially when the mineralization is quite shallow in depth. Although there are "rabbit-ear" anomaly formations, you can only say that it might be showing the presence of a Redox Cell as it may be showing two parallel veins of mineralization. Remember that signals near the edges of the survey or at the ends of transects can appear to be higher due to the Kriging trending algorithm applied for mapping. For this reason, these anomalies may not be interpreted.

SGH is a more powerful exploration tool by maximizing the overall spatial contrast of the survey to observe specific hydrocarbon signatures that can vector to and identify buried mineralization. This survey has enough samples for interpretation. A regularly spaced grid is much more beneficial. owever, the survey design does not allow for the full capabilities of 3D-SGH. As well as the symmetry it seeks to provide the optimum confidence in predicting the presence of Gold or other mineralization and the pathfinders that describe the SGH signature for "buried or blind" targets. In this way the survey at the Pic River survey does not lend itself to 3D-SGH

These SGH Class maps are only a portion of the SGH Copper and Gold signature used in each interpretation. There is not any one SGH Class map that can, as a single map, be reliably used to interpret the presence of Copper or Gold or any other type of mineralization. Again, as signals or anomalies due to any analytical, sample preparation, or sampling procedure "noise" have been removed through the use of the Reporting Limit filter, any SGH anomaly on this Pathfinder Class Map has a high probability of being real data. The SGH Pathfinder Class maps shown are highly sensitive in illustrating strong results for Copper and Gold based on previous research and case studies. Other SGH Classes at the Pic River survey also agrees with the interpretation shown in the following pages.

This portion of the SGH hydrocarbon signatures is predicted to be associated with Copper and Gold targets as the detection of those hydrocarbon residues produced by the decomposition of microbes and bacteria from the life cycle death phase that have been feeding on Copper and Gold. These residues have subsequently migrated to the surface as a flux of different classes of hydrocarbons or decomposition products. During migration to the surface, dispersion away from the mineralization is expected. The distance of dispersion is dependent on the principle of geochromatography that is in generally related to the average molecular weight of the class. It has been found that the complexity of the overburden does not affect the geochromatographic dispersion of the SGH classes of this Nano-Geochemistry, unless a situation is encountered such as that of a "major" fault that may result in a very slight deflection of this path. This is the basis of the 3D-SGH interpretation as the relatively neutral hydrocarbons that SGH detects are spatially observed as very symmetrical anomalies (as presented by the creator at the IAGS conference in Finland in 2011 and further at the IAGS conference in New Zealand in November of 2013 and Tucson Arizona in 2015).

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

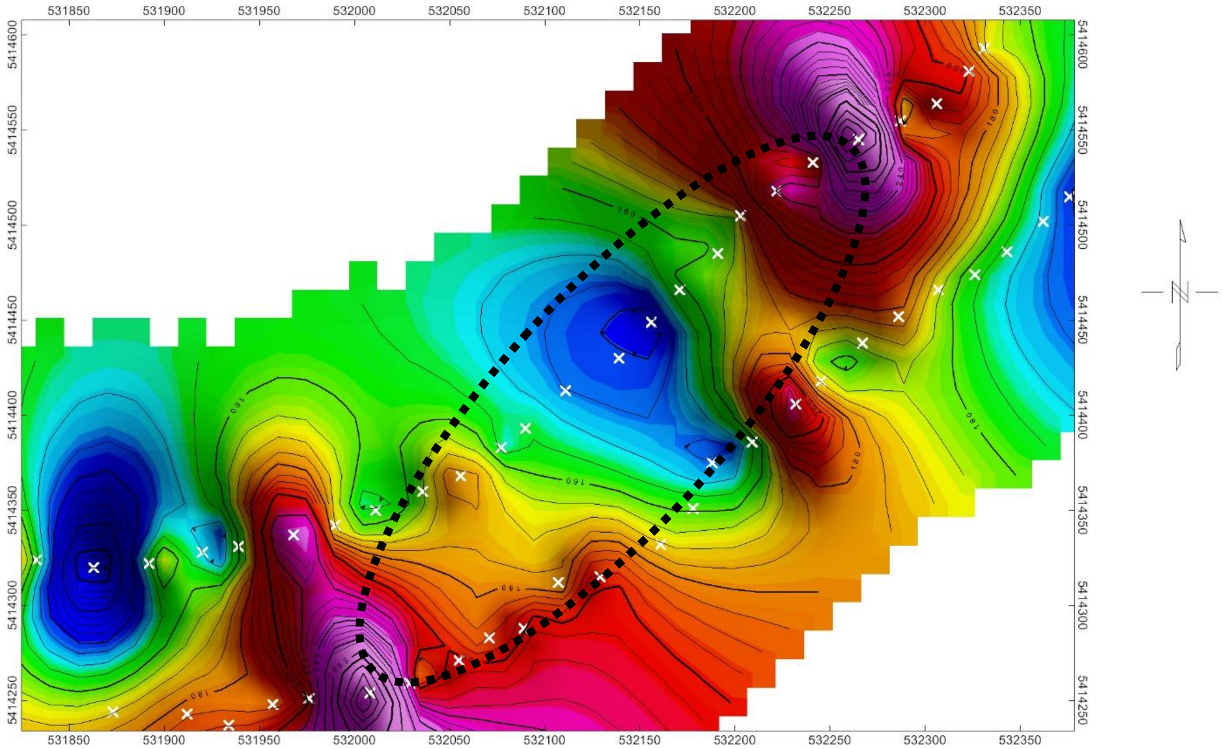
Page 23 of this report, and in 3D-view on page 24, shows the anomalies from one of the most reliable SGH Pathfinder Class in predicting the presence of Copper Mineralization. This map illustrates what appears to be a rabbit-ear anomaly. Additional sampling may be required to better define the mineralization. We believe that mineralization might exist at these locations as a vertical projection beneath these anomalies. Other SGH Pathfinder Class Maps associated with the presence of Copper mineralization (not shown in this report) lend support to this interpretation of this anomaly at the Pic River SGH survey.

Again, the prediction of this anomaly for Copper mineralization is based only on SGH.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

SGH "COPPER" PATHFINDER CLASS MAP

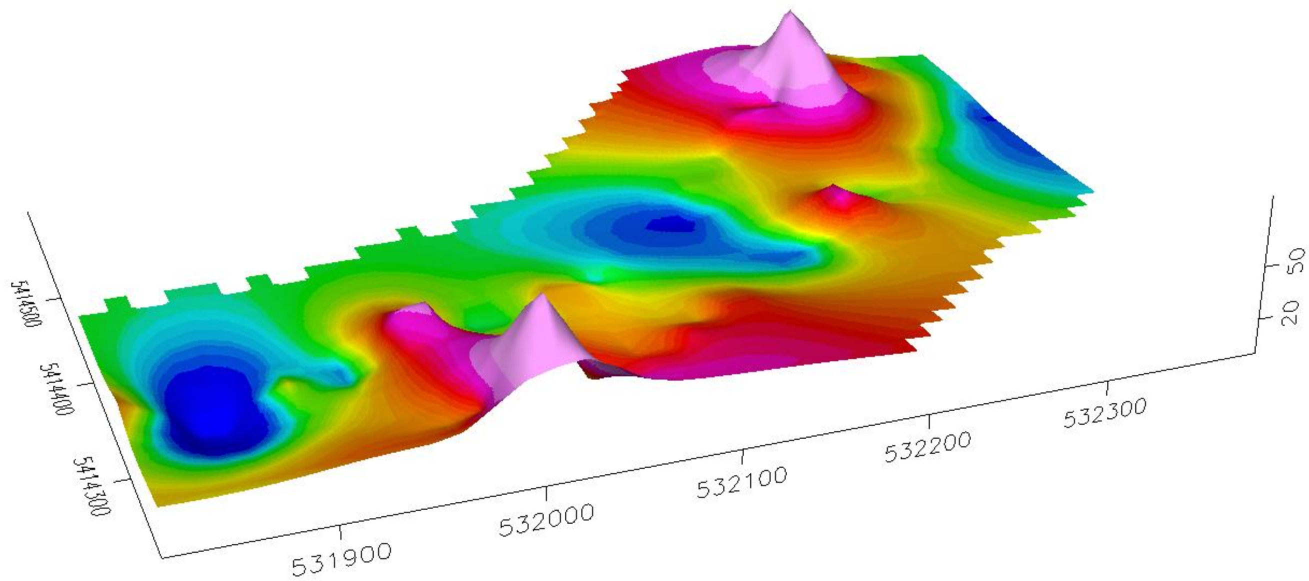


POTENTIAL COPPER MINERALIZATION - BLACK OUTLINE

<u>SGH SIGNATURE RATING RELATIVE TO "COPPER" = 4.0 OF 6.0</u>

GEOSOFT®

A22-11423 – EMERALD GEOLOGICAL SERVICES – PIC RIVER
SGH "COPPER" PATHFINDER CLASS MAP



Results represent only the material tested. Actlabs is not liable for any claim/damage from the use of this report in excess of the test cost. Samples are discarded in 90 days unless requested otherwise. This report is only to be reproduced in full.

A22-11423 – EMERALD GEOLOGICAL SERVICES – PIC RIVER
SGH GOLD INTREPRETATION

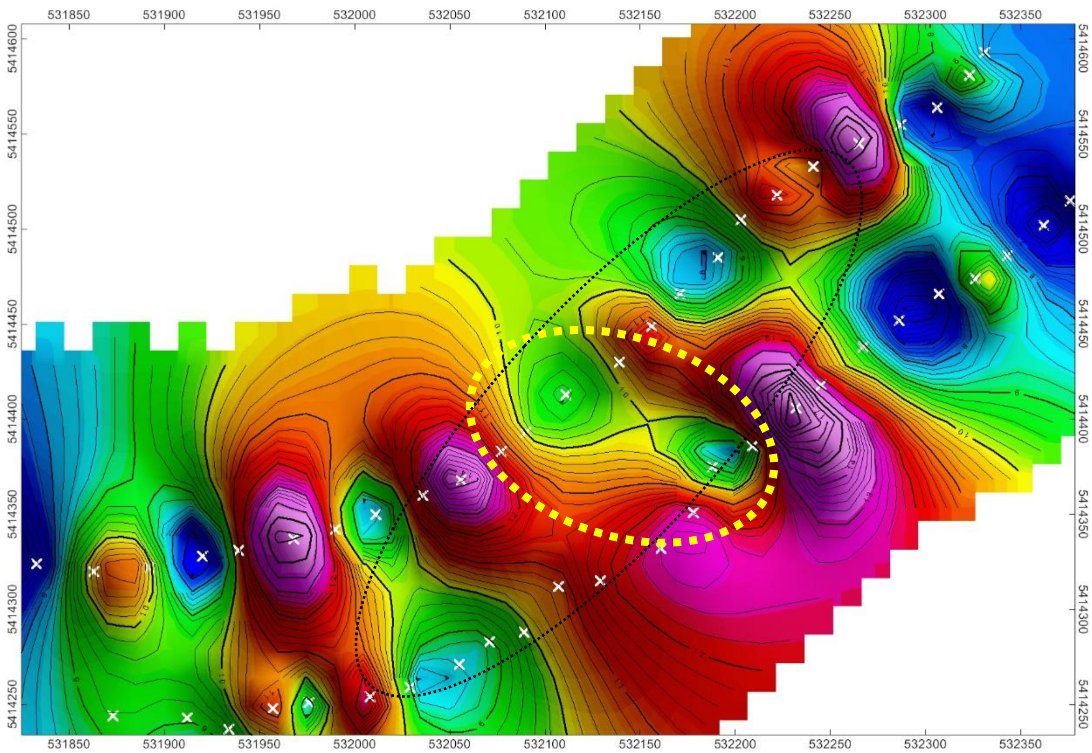
Page 26 of this report, and in 3D-view on page 27, shows the anomaly from one the most reliable SGH Pathfinder Classes in predicting the presence of Gold Mineralization. This map illustrates what appears to be a halo anomaly, outlined in yellow, near the center of the copper anomaly. The black copper anomaly oval has been placed on the gold map for reference. Additional sampling may be required to better define the predicted gold mineralization. We believe that mineralization might exist at this location as a vertical projection beneath this anomaly. Other SGH Pathfinder Class Maps associated with the presence of Gold mineralization (not shown in this report) support this interpretation of this anomaly at the Pic River SGH Survey.

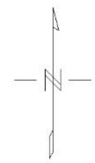
Again, the prediction of this anomaly for Gold mineralization is based only on SGH.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

A22-11423 – EMERALD GEOLOGICAL SERVICES – PIC RIVER
SGH "GOLD" PATHFINDER CLASS MAP





POTENTIAL GOLD MINERALIZATION – YELLOW OUTLINE

<u>SGH SIGNATURE RATING RELATIVE TO "GOLD" = 4.0 OF 6.0</u>

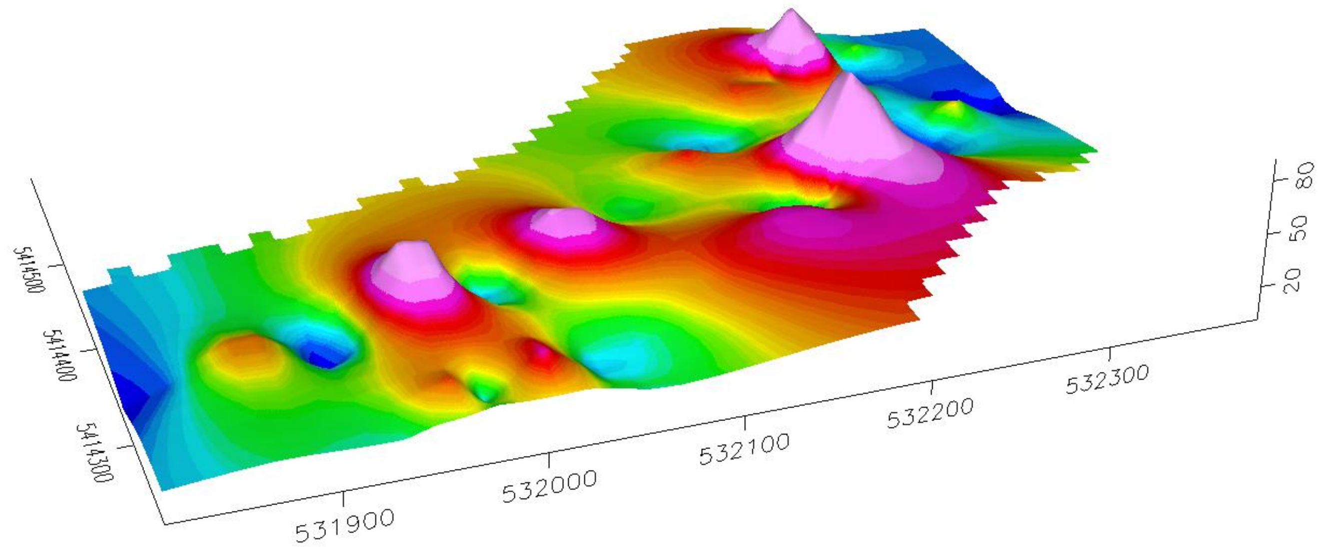
GEOSOFT

Results represent only the material tested. Actlabs is not liable for any claim/damage from the use of this report in excess of the test cost. Samples are discarded in 90 days unless requested otherwise. This report is only to be reproduced in full.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

A22-11423 – EMERALD GEOLOGICAL SERVICES – PIC RIVER
SGH "GOLD" PATHFINDER CLASS MAP



Results represent only the material tested. Actlabs is not liable for any claim/damage from the use of this report in excess of the test cost. Samples are discarded in 90 days unless requested otherwise. This report is only to be reproduced in full.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

PIC RIVER SGH SOIL SURVEY - SGH INTERPRETATION FOR THE PRESENCE OF MINERALIZATION

The interpretation of the SGH data on pages 23 and 26 relative to the presence of Copper and Gold mineralization at the Pic River survey may be based on the makeup of SGH signatures with the possible presence of mineralization.

In general, SGH is not a perfect confirmatory technique for inorganic chemistry's. Inorganic methods will show the highest anomalies for outcrops at surface whereas the SGH sensitivity is reduced at this point due to further degradation by environmental exposure to sun, rain, UV, etc. This reduction may not be seen on the maps provided due to normalization to the highest response in the map overall. SGH predicts whether the mineralization is present at subcrop or deeper portions relative to the mineralized structure.

The subjective SGH confidence rating for this survey assigned to the anomaly in general on these maps where the anomalies coincide on their location is on average 4.0 on a scale of 6.0. This Rating means that, based only on SGH, that there is a good chance that mineralization may be present. Note, as the SGH Rating is one of confidence, in our judgment an assignment of a Rating of 0.0 cannot be given out. From client feedback in recent years, a few grass roots exploration surveys that have been interpreted with an SGH Confidence Rating of 4.0 (±0.5) have been drill tested and have had successful mineralization intersections. However, the frequency of success is much more prevalent for those targets that have associated SGH Rating Scores of ≥5.0.

The SGH Ratings shown on pages 23 and 26 in this and all SGH reports are based on a scale of 6.0, in 0.5 increments, with a value of 6.0 being the best. The SGH Ratings discussed in relation to mineralization represents the similarity of these SGH results with other SGH case studies and orientation studies over known mineralization. Theses SGH signatures or templates have been constantly refined and enhanced since inception and has been proven to be effective and reliable. The SGH templates are based on the interpretation from over 1,100 interpretations of surveys in many different geographical regions and from a wide variety of lithologies. The degree of confidence in the SGH Rating only starts to be "good" at a level of 4.0. A Rating of 4.0 or more is an indication that this SGH Nano-Geochemistry predicts that the zone(s) described may warrant more work or more consideration.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Any identification of a drill target is not an explicit recommendation by Activation Laboratories Ltd. to drill test the associated location or SGH anomaly. A drill target is implied to ensure that the reader is aware of the location having the highest confidence of being the location of the vertical projection of mineralization, based only on SGH data. This is also not a recommendation for vertical drilling. Vertical drilling may not be the best approach to test the SGH anomaly in this area although SGH anomalies are very much a vertical projection of the target at depth regardless of the makeup of the overburden. Activation Laboratories Ltd. has no experience in actual exploration drilling techniques. Other geological, geochemical and/or geophysical information should also be considered.

It must be remembered that other SGH Class maps not shown in this report have also been reviewed to support the interpretation shown. To deduce the most scientifically sound interpretation of the SGH surveys, the client should use a combination of the SGH results shown in this report with additional geochemical, geophysical, and geological information to possibly obtain a more confident and precise target location. This is not a statement to convey some lower level of confidence in SGH results. This statement is made to recognize the proper use and interpretation of any scientific data. Whenever possible, multiple methods should always be employed so that any decisions do not rely on any one technique.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

In general, the number of samples was adequate to show what the author believes to be valuable information at the Pic River survey. Our recommendation states to use a minimum of 50 sample locations to be taken with at least 2 or 3 samples taken within 1 metre of a location as field duplicates. Survey designs that use a regular grid are very powerful tools although a 4:1 ratio as spacing between transects: spacing of samples along transects has also had excellent results with SGH. There is a recommendation for infill sampling on this survey to potentially better define the mineralization and help locate a redox zone if it exists. Additional infill samples should be able to be easily added to the current data set without data leveling 90+% of the time. As the interpretation is difficult for surveys having less than 50 sample locations and the corresponding confidence is significantly lower, surveys with less than 50 sample locations may not be accepted and may be returned to the client at their expensive. We believe a survey with less than 50 sample locations is not beneficial or cost effective to the client.

GENERAL RECOMMENDATIONS FOR ADDITIONAL OR IN-FILL SAMPLING FOR SGH ANALYSIS

In general, if the client decides that in-fill sampling may be warranted, to obtain the best results from additional sampling for SGH it is usually recommended that sample locations from the original survey within, or bordering, the area of interest be re-sampled rather than just combining new sample results with the sample data from the initial survey. Although several SGH surveys have previously been easily and directly, combined without data leveling, it cannot be guaranteed that data leveling will not be required. It has been found that data leveling is more apt to be required should the new samples be collected under significantly different environmental conditions than during the initial sample survey, i.e. summer collection versus winter collection

The process of data leveling adds a minimum of 3 to 5 days of work to conduct the additional data evaluation, develop additional plots of the results, conduct new interpretations, and additional report descriptions. Results from data leveling is also always considered "an approximation", thus the confidence in a combined interpretation will be lower than the interpretation from samples collected during one excursion to the field and submitted as one survey. An additional cost will be invoiced should data leveling operations be required if the client requests that two SGH data sets be interpreted and reported together. Thus re-sampling a few of the original sample locations will provide a faster turnaround time for results and provide more accurate and confident surveys for evaluation and aid in deciding specific drill targets.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Date Received at Actlabs: August 11, 2022

Date Analysis Complete: August 29, 2022

Interpretation Report: September 12, 2022

EMERALD GEOLOGICAL SERVICES

222 Emerald St.

Timmins, Ontario

P4R 1N3

Attention: Bruce MacLachian

RE: Your Reference: Pic River

Activation Laboratories Workorder: A22-11423

CERTIFICATE OF ANALYSIS

This Certificate applies to the associated Excel Spreadsheet of Hydrocarbon results combined with the discussion and SGH Pathfinder Class maps of the data shown in this report.

50 Samples were analyzed for this submission.

Sample preparation –Actlabs Ancaster – SGH-1: Drying at 40°C and Sieving with -80 mesh collected

Interpretation relative to Copper and Gold targets was requested.

The following analytical package was requested and analyzed at Actlabs Ancaster Canada:

Analysis Code SGH – Soil Gas Hydrocarbon Geochemistry using High Resolution Gas Chromatography/Mass Spectrometry (HRGC/MS)

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

REPORT/WORKORDER: A22-11423

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at the time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of the material submitted for analysis.

Notes: The SGH – Soil Gas Hydrocarbon Geochemistry is a semi-quantitative analytical procedure to detect and measure 162 hydrocarbon compounds as the organic signature in the sample material collected from a survey area. It is not an assay of Mineralization but is a predictive geochemical tool used for exploration. This certificate pertains only to the SGH data presented in the associated Microsoft Excel spreadsheet of results.

Mr. Dale Sutherland, is the creator of the SGH and OSG organic geochemical methods. He is a Chartered Chemist (C.Chem.) and Forensic Scientist specializing in organic chemistry. He is a member of the Association of the Chemical Profession of Ontario, the Association of Applied Geochemists, the International Association of GeoChemistry, the Ontario Prospectors Association, the Association for Mineral Exploration British Columbia, the Geochemical Society Association, the Ontario Petroleum institute, the Chemical Institute of Canada, and the Canadian Society for Chemistry, as well as having memberships in several national and international Forensic associations. He is not a professional geologist.

CERTIFIED BY:

Jeff Brown
Organics Supervisor
Activation Laboratories Ltd.

APPENDIX "A"

List of terms

1. **SGH** – "SOIL GAS HYDROCARBON" GEOCHEMISTRY – a Predictive Geochemistry, used for delineate buried inorganic mineral deposits and organic petroleum plays. This is the original name used to describe this geochemistry since inception in 1996. Code SGH is still used when submitting samples.
2. **3D-SGH**- "3D- SPATIAL TEMPORAL GEOCHEMICAL HYDROCARBONS - the method of interpreting SGH and OSG results based on the Redox/Electrochemical Cell model developed by Activation Laboratories Ltd. in 2011.
3. **Redox cell**- an area of oxidation-reduction reactions or exchange of electrons that is produced over geological bodies, mineralization and petroleum based plays.
4. **Electrochemical cell**- the effect of adjacent chemically reduced areas and chemically oxidized areas as a Redox cell produces a electrical gradient that obeys the physics of a typical Electrochemical cell.
5. **Anthropogenic contamination-** the introduction of impurities/compounds of the same type as those that are being analyzed by human actions that could lead to erroneous results.
6. **Background areas**- the area around a mineral deposit that is beyond the effect of the Redox cell formed over geological bodies or exploration targets. Sampling is required into background areas to produce data that has sufficient contrast to illustrate and differentiate anomalies associated with exploration targets.
7. **Background subtracted**- A sample taken some distances away as to not contain any elements of the target being analyzed.
8. **Biofilm**- a layer of microorganisms and microbe and their related secretions and decomposition products, in this case found to inhabit mineral deposits .
9. **Biomarker**- a compound used as an indicator of a biological state. In this case a biological substance used to indicate the presence of a mineral deposit.
10. **Blind mineralization** – buried mineralization that shows no physical indication of its existence at the surface
11. **Compound** – used synonymously with the term hydrocarbon in this report
12. **Compound chemical class** – a group of hydrocarbons that are similar in size, structure, and molecular weight such that their chemical characteristics, such as water solubility, partition coefficients, vapour pressures, etc. are similar
13. **Cultural activities** – human initiated processes that may affect the physical and chemical characteristics at the earth's surface
14. **Delineating targets**- indicate the position or outlines of an exploration target as a vertical projection of the target at depth.
15. **Geochemical anomalies** – inorganic element or organic hydrocarbon measurements that are significantly different than the average low level measurements or background in a survey i.e. the needle in a haystack is an anomaly
16. **Dispersion patterns** – the movement/ spreading of something. In this context the spatial arrangements of hydrocarbons caused by their movements to the surface from some depth.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

17. **Exploration tool** – a geological, geophysical or geochemical method that attempts to illustrate data in exploration activities that may indicate the presence of mineralization or petroleum plays.
18. **Fit for purpose**- this method is ideal for its intended use.
19. **Forensic signature**- a grouping or pattern found to identify a substance having multiple characteristics with a high degree of specificity.
20. **High specificity**- as in being very specific to the mineralization.
21. **Anomalies**- this is the spatial representation of data that illustrates a high or low response as well as the combined spatial shape of anomalous data from several neighbouring samples in a survey that can form anomalies described as Rabbit-Ear, Halo, Segmented-halo, nested-halo, etc.
22. **Inorganic geochemistry** – the measurement of inorganic elements in a survey of near surface samples as a tool for exploration
23. **Data leveling** – a technique that attempts to normalize the data sets obtained between two or more sampling programs. The results of data leveling is always considered as an approximation.
24. **Lithologies-** the characteristics and classifications of rock.
25. **Locations-** the physical/ geographical position or coordinates of samples in a survey.
26. **Noise-** interference in a measurement which is independent of the data signal.
27. **Nugget effect-** Anomalously high precious metal assays resulting from the analysis of samples that may not adequately represent the composition of the bulk material tested due to non-uniform distribution of high-grade nuggets in the material to be sampled. (Webster's online dictionary)
28. **Organic geochemistry-** the Soil Gas Hydrocarbon geochemistry (SGH), or now more accurately named as Spatiotemporal Geochemical Hydrocarbons, is the analysis to detect specific organic, or carbon based, hydrocarbon compounds in a sample. The Organo-Sulphur Geochemistry (OSG) is the analysis to detect specific organic compounds that have sulphur joined to carbon in its molecular structure.
29. **Percent Coefficient of Variation (%CV)** – a measure of data variability
30. **Project maintenance** – an activity where the associated cost is applied to the exploration, advancement, and/or operation of activities associated with a particular claim
31. **Rating-** a value given to the overall confidence in the SGH results
32. **Real (in relation to data)-** any rational or irrational number
33. **Reporting Limit –** minimum concentration of an analyte that can be accurately measured for a given analytical method.
34. **Sample matrix-** the components of a sample other than the analyte.
35. **Sample type** – soil, till, humus, lake bottom sediment, sand, snow, etc.
36. **Semi-quantitative-** yielding an approximation of the quantity or amount of a substance
37. **SGH anomalies** ("Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo")
38. **SGH Pathfinder** (class map/compounds)
39. **SGH template** – a set of hydrocarbon classes that together form a geochemical signature that has been associated with the presence of a particular type of mineralization the majority of the time
40. **Surficial bound hydrocarbons** –
41. **Surficial samples-** a sample from near the earth's surface.
42. **Survey-** the area, position, or boundaries of a region to be analyzed, as set out by the client.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

43. **Project-** a planned undertaking
44. **Transect-** A straight line or narrow section through an object or across a section of land.
45. **Target-** Target refers to the ore body of interest

    Target signature: the unique characteristics that identify the target.

    Target type:

    i.e. Gold, Nickel, Copper, Uranium, SEDEX, VMS, Lithium Pegmatites, IOCG, Silver, Ni-Cu-PGE, Tungsten, Polymetallic, Kimberlite as well as Coal, Oil and Gas.
46. **Threshold-** level or point at which data is accepted as significant or true.
47. **Total measurement error-** An estimate of the error in a measurement. Based on either limitation of the measuring instruments or from statistical fluctuations in the quantity being measured.
48. **Visible (in terms of signature**)- the portion shown in a chart or map

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

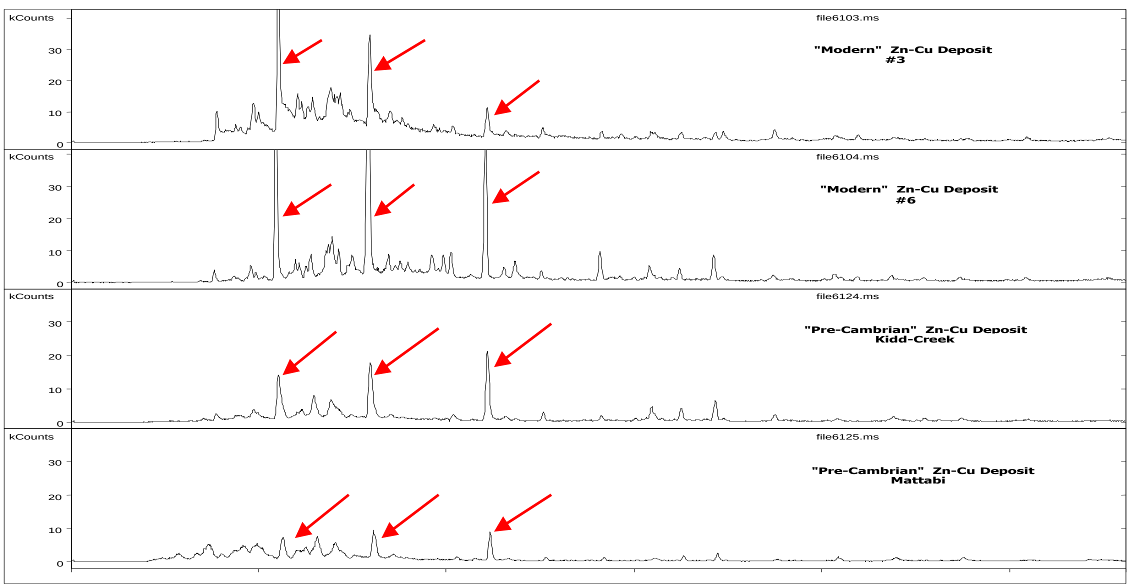
E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

APPENDIX "B"

EXAMPLE OF AN SGH FORENSIC GEOCHEMICAL SIGNATURE EXAMPLE SHOWN FOR A VMS TARGET

The following analyses examine the Volcanic Massive Sulphide (VMS) deposit in various known locations. These analyses show how the gas chromatography indicates the reality of deposits. For all the profiles in this section, the red arrows indicate the signature of the VMS, which have all been found by organic geochemistry. These forensic geochemical signatures are shown to be consistent for similar target areas; therefore, the analyses are reliable indicators for the presence of VMS.

One of the first experiments in 1996 in the development of the SGH analysis was to observe if an SGH response could be obtained directly from an ore sample. From office shelf specimens, small rock chips were obtained which were then crushed and milled. The fine pulp obtained was then subjected to the SGH analysis. These shelf specimen samples were from well known VMS deposits of the Mattabi deposit from the Archean Sturgeon Lake Camp in Northwestern Ontario and from the Kidd Creek Archean volcanic-hosted copper-zinc deposit. Even these specimen samples contain a geochemical record of the hydrocarbons produced by the bacteria that had been feeding on these deposits at depth. As a comparison, SGH analysis were similarly conducted on modern-day VMS ore samples taken from a "black smoker" hydrothermal volcanic vent from the deep sea bed of the Juan de Fuca Ridge where high concentrations of microbial growth was also known to exist. The raw data profiles as GC/MS Total Ion Chromatograms are shown below to illustrate the *"visible"* portion of the VMS signature obtained from the SGH analysis.

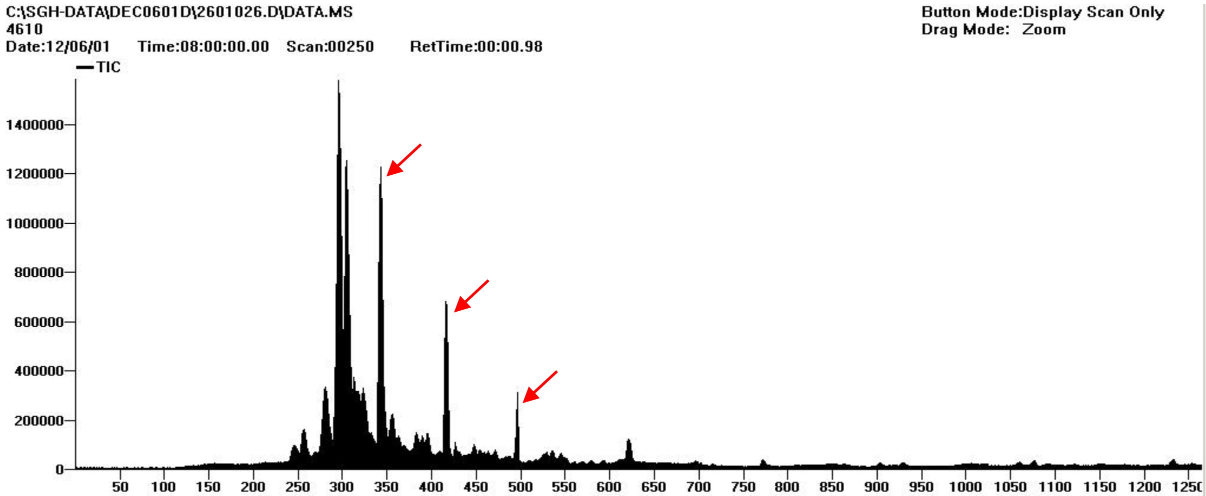


The above profiles are:

- First profile: Samples from modern day "black smokers"
- Second profile: Samples from modern day "black smokers"
- Third profile: Samples from Pre-Cambrian Zn-Cu Kidd Creek deposit
- Fourth profile: Samples from Mattabi deposit

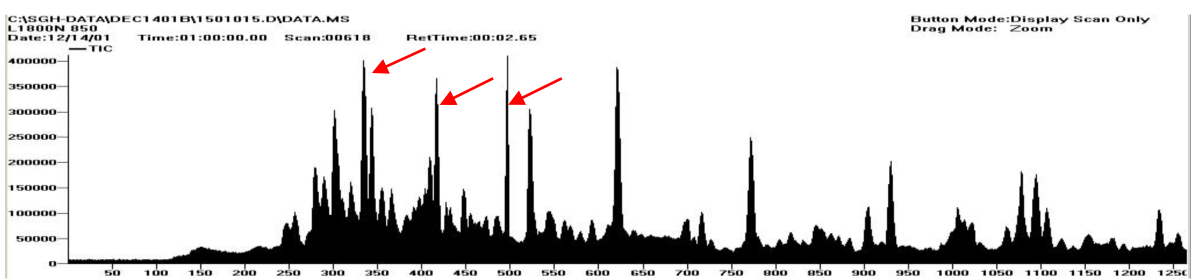
The red arrows point to three compounds that are a *portion* of the SGH signature for VMS type deposits. This visible portion of the VMS signature of hydrocarbons can easily be seen in the analysis of each of these four samples.

The next question in our early objectives was to see if this SGH signature could also be observed in *surficial soil samples* that had been taken over VMS deposits. Through our research projects, soil samples were obtained from over the Ruttan Cu-Zn VMS deposit near Leaf Rapids, Manitoba and located in the Paleoproterozoic Rusty Lake greenstone belt. The profile obtained, as observed in the raw GC/MS chromatogram, is shown in this next image below:



The three compounds indicated by the red arrows represent the same *visible portion* of the VMS signature observed from the modern day black smoker samples and the ore samples taken from the Mattabi and Kidd Creek, even though this soil was taken from over a different VMS deposit in a geographically different area. Is this coincidence?

Another soil sample was obtained from Noranda's Gilmour South base-metal occurrence in the Bathurst Mining camp in northern New Brunswick. As shown below, this sample contained a very complex SGH signature, however the visible portion of the VMS signature as indicated by the red arrows is still observed as in the black smoker, Mattabi and Kidd Creek ore samples.



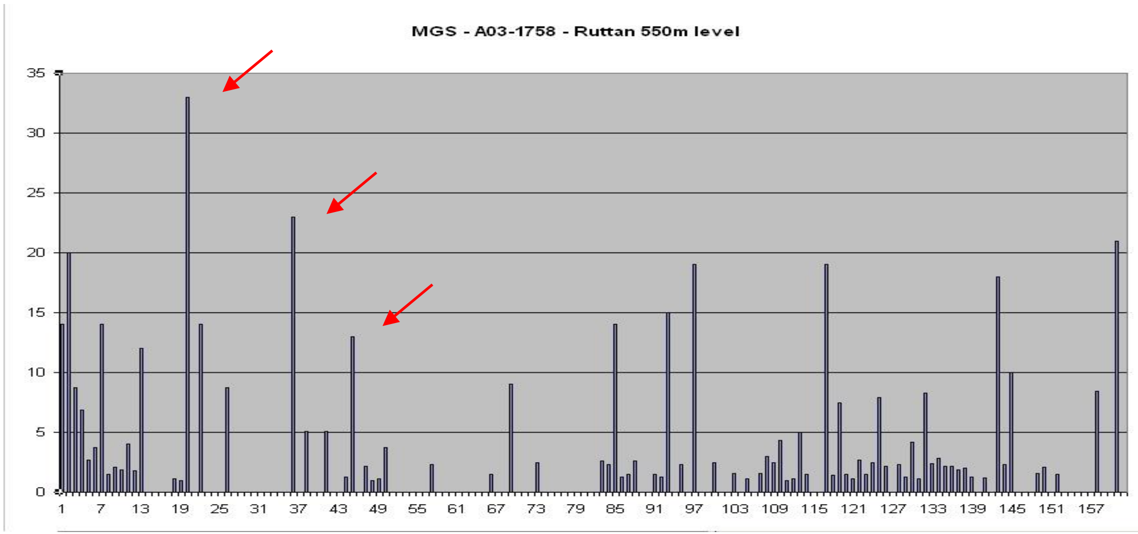
In research conducted by the Ontario Geological Survey, this same portion of the SGH signature was also observed over the VMS deposit at Cross Lake in Ontario. **Note that the visible signature shown as the three compounds indicated by the red arrows is only a small portion of the**

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

complete SGH VMS signature. The full VMS signature is made up of at least three groups, as three organic chemical classes, that together contain at least 35 of the individual SGH hydrocarbons.

The chromatograms shown on the preceding page from the GC/MS analysis are not used directly in the interpretation of SGH data. As we are only interested in a specific list of 162 hydrocarbons, the mass spectrometer and associated software programs specifically identifies the hydrocarbons of interest, runs calculations using relative responses to a short list of hydrocarbons used as standards, and develops an Excel spreadsheet of semi-quantitative concentration data to represent the sample. Thus the SGH results for a sample, like that observed in ore from the Ruttan, are filtered to obtain the concentrations for the specific 162 hydrocarbons. A simple bar graph drawn from the Excel spreadsheet of the hydrocarbons and their concentrations results in a DNA like *forensic SGH signature* as shown below. The portion discussed hear as the "visible" SGH VMS signature in the GC/MS chromatograms, is again shown by the red arrows.

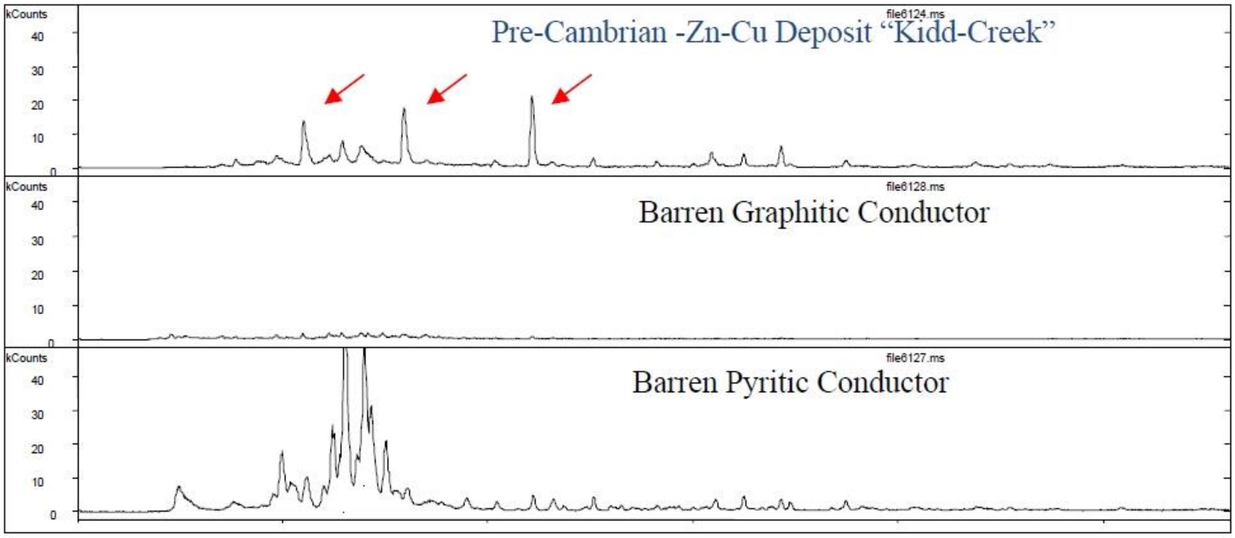


Through the work done in the SGH CAMIRO research projects, it was observed that the hydrocarbon signature produced by the SGH technique appeared to also be able to be used to differentiate barren from ore-bearing conductors. This was explored further through the submission and analysis of specific specimen samples that represented a barren pyritic conductor and a barren graphitic conductor.

The GC/MS chromatograms from these two specimens are compared to that obtained from the Kidd-Creek ore as shown below. This diagram conclusively shows that the SGH signatures obtained from the two types of barren conductors are completely different than that obtained by SGH over VMS type ore. SGH is thus able to differentiate between ore-bearing conductors and barren conductors as **the Forensic SGH Geochemical signature is different**.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com



SGH has been described by the Ontario Geological Survey of Canada (OGS) as a "REDOX cell locator". Many SGH surveys for Gold and other mineral targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo" type SGH anomalies are all typically observed from the effect of REDOX cells that have developed over deposits. REDOX cells are also related to the presence of bacteriological activity.

The VMS template of SGH Pathfinder Classes uses low and medium weight classes of hydrocarbon compounds. Again, at least three Pathfinder Class group maps, associated with the SGH signature for VMS, must be present to begin to be considered for assignment of a good rating. The Pathfinder Class anomalies in these maps must logically concur and support a consistent interpretation in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area.

The interpretation development history for VMS SGH Pathfinder Class map(s) shown in this report is similar to the development history for other target types. The reader should not draw a conclusion that SGH is used only for sulphide based mineralization as some of the most intense SGH anomaly has been associated with Kimberlites where sulphides are essentially not present.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

APPENDIX "C"

SOIL GAS HYDROCARBON SURVEY DESIGN AND SAMPLING

Sample Type and Survey Design: It is highly recommended that a ***minimum*** of 50 sample "locations" is preferred to obtain enough samples into background areas on both sides of *small* suspected targets (wet gas plays, Kimberlite pipes, Uranium Breccia pipes, veins, etc.). SGH is not interpreted in the same way as inorganic based geochemical method. SGH must have enough samples over both the target and background areas in order to fully study the dispersion patterns or geochromatography of the SGH classes of compounds. Based on our minimum recommendation of at least 50 sample locations we further suggest that all samples be *evenly spaced* with about one-third of the samples over the target and one-third on each side of the target in order for SGH to be used for exploration. Targets other than gas plays, pipes, dykes or veins usually require additional samples to represent both the target and background areas.

SGH has been shown to be very robust to the use of different sample types even "within" the same survey or transect. Research has illustrated that it is far more important to the ultimate interpretation of the results to take a complete sample transect or grid than to skip samples due to different sample media. The most ideal natural sample is still believed to be soil from the "Upper B-Horizon", however excellent results can also be obtained from other soil horizons, humus, peat, lake-bottom sediments, and even snow. The sampling design is suggested to use evenly spaced samples from 15 metres to 200 metres and line spacing from 50 metres to 500 metres depending on the size and type of target. A 4:1 ratio is suggested, however, larger orientation surveys have also been successful. Ideally even large grids should have one-third of the samples over the target and two-thirds of the samples into anticipated background areas. This will allow the proper assessment of the SGH geochromatographic vectoring and background site signature levels with minimal bias. Individual samples taken at significant distances from the main survey area to represent background are not of value in the SGH interpretation as SGH results are not background subtracted. Samples can be drip dried in the field and do not need special preservation for shipping and has been specifically designed to avoid common contaminants from sample handling and shipping. SGH has also been shown to be robust to cultural activities even to the point that successful results and interpretation has been obtained from roadside right-of-ways. In conclusion, the conditions for the sample type and survey design include:

- Fist sized samples are retrieved from a shallow dug hole in the 15-40 cm range of depth.
- Different sample types can be taken even "within" the same survey or transect, data leveling is rarely ever required. SGH is highly effective is areas of very difficult terrain. The Golden Rule is to always take a sample.
- Samples should be evenly spaced in a grid or a series of transects with sample lines spaced at a ratio of up to 4:1 (line spacing: sample spacing).
- A minimum of 50 sample "locations" is recommended with one-third over the target and one-third on each side of the target into background if this can be predicted. This provides the opportunity of optimal data contrast.
- If very wet, samples can be drip dried in the field.
- No special preservation is required for shipping.

APPENDIX “D”

SAMPLE PREPARATION AND ANALYSIS

Upon receipt at Activation Laboratories the samples are air-dried in isolated and dedicated environmentally controlled rooms set to 40°C. The dried samples are then sieved. In the sieving process, it is important that compressed air is not used to clean the sieves between samples as trace amounts of compressor oils “may” poison the samples and significantly affect some target signatures. Solvents such as Acetone, Methanol, and Hexane cannot be used at any time for cleaning sample containers or sampling apparatus ie. Cleaning sieves between samples. The use of solvents at this time severely reduces the response of the hydrocarbons measured. At Activation Laboratories a vacuum is used to clean the sieve between each sample. The -80 mesh sieve fraction (<177 microns, although different mesh sizes can be used at the preference of the exploration geologist) is collected and packaged in a Kraft paper envelope and transferred from our sample preparation department to our Organics Geochemical department also in our World Headquarters in Ancaster, Ontario, Canada. Each sample is then extracted, separated by gas chromatography and analyzed by mass spectrometry using customized parameters enabling the highly specific detection of the 162 targeted hydrocarbons at a *reporting limit* of one part-per-trillion (ppt). This trace level limit of reporting is critical to the detection of these hydrocarbons that, through research, have been found to be related at least in part to the breakdown and release of hydrocarbons from the death phase of microbes directly interacting with a deposit at depth. The hydrocarbon signatures are directly linked to the deposit type, which is used as a food source. The hydrocarbons that are mobilized and metabolized by the microbes are released in the death phase of each successive generation. Very few of the hydrocarbons measured are actually due to microbe cell structure, or hydrocarbons present or formed in the genesis of the deposit or from anthropogenic contamination. The results of the SGH analysis is reported in raw data form in an Excel spreadsheet as “semi-quantitative” concentrations without any additional statistical modification.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

APPENDIX "E"
SGH DATA QUALITY
Reporting Limit

The SGH Excel spreadsheet of results contains the raw unaltered concentrations of the individual SGH compounds in units of "part-per-trillion" (ppt). The reporting of these ultra low levels is vital to the measurement of the small amounts of hydrocarbons now known to be leached/metabolized and subsequently released by dead bacteria that have been interacting with the ore at depth. To ensure that the data has a high level of confidence, a "reporting limit" is used. The reporting limit of 1 ppt actually represents a level of confidence of approximately 5 standard deviations where SGH data is assured to be "real" and non-zero. Thus in SGH the use of a reporting limit automatically removes site variability, and there is no need to further background subtract any data as the reporting limit has already filtered out any site background effects. Thus we recommend that all data that is equal to or greater than 2 ppt should be used in any data review. It is important to review all SGH data as low values that may be the centre of halo anomalies and higher values as apical anomalies or as halo ridges are all important.

Laboratory Replicate Analysis

A laboratory replicate is a sample taken randomly from the submitted survey being analyzed and are not unrelated samples taken from some large stockpile of bulk material. In the Organics laboratory an equal portion of this sieved sample, or pulp, is taken and analyzed in the same manner using the Gas Chromatography/Mass Spectrometer. The comparison of laboratory replicate and field duplicate results for chemical tests in the parts-per-million or even parts-per-billion range has typically been done using an absolute "relative percent difference (RPD)" statistic which is an easy proxy for error estimation rather than a more complete analysis of precision as specified by Thompson and Howarth. An RPD statistic is not appropriate for SGH results as the reporting limit for SGH is *1 part-per-trillion*. Further, *SGH is a semi-quantitative technique* and was not designed to have the same level of precision as other less sensitive geochemistry's as it is only used as an exploration tool and not for any assay work. SGH is also designed to cover a wide range of organic compounds with an unprecedented 162 compounds being measured for each sample. In order to analyze such a wide molecular weight range of compounds, sacrifices were made to the variability especially in the low molecular weight range of the SGH analysis. The result is that the first fifteen SGH compounds in the Excel spreadsheet is expected to exhibit more imprecision than the other 147 compounds. An SGH laboratory replicate is a large set of data for comparison even for just a few pairs of analyses. Precision calculations using a Thompson and Howarth approach should only be used for estimating error in individual measurements, and not for describing the average error in a larger data set. In geochemical exploration geochemists seek concentration patterns to interpret and thus rigorous precision in individual samples is not required because the concentrations of many samples are interpreted collectively. For these reasons recent and independent research at Acadia University in Canada promote that a percent Coefficient of Variation (%CV) should be used as a universal measurement of relative error in all geochemical applications. As SGH results are a relatively large data set for nearly all submissions, %CV is a better statistic for use with SGH. By using %CV, the concentration of duplicate pairs is irrelevant because the units of concentration cancel out in the formation of the coefficient of variation ratio. For SGH, the %CV is calculated on all values ≥ 2 ppt. These values are averaged and represent a value for each pair of replicate analysis of the sample. All of the %CV values for the replicates are then averaged to

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

report one %CV value to represent the overall estimate of the relative error in the laboratory sub-sampling from the prepared samples, and any instrumental variability, in the SGH data set for the survey. Actlabs' has successfully addressed the analytical challenge to minimize analytical variability for such a large list of compounds. Thus as SGH is also interpreted as a signature and is solely used for exploration and not assay measurement, the data from SGH is *"fit for purpose"* as a geochemical exploration tool.

Historical SGH Precision

In the general history of geochemistry, studies indicate that a large component of total measurement error is introduced during the collection of the initial sample and in sub-sampling, and that only a subordinate amount of error in the result is introduced during preparation and analysis. A historical record encompassing many projects for SGH, including a wide variety of sample types, geology and geography, shows that the consistency and precision for the analysis of SGH *is excellent* with an overall precision of 6.8% Coefficient of Variation (%CV). When last calculated, this number had a range of a maximum of 12.4% CV, a minimum of 3.0% CV, with a standard deviation of 1.6%, in a population made up of over 400 targets (over 45,000 samples) interpreted since June of 2004. Again the precision of 6.8% CV included all of the sample types as soil from different horizons, peat, till, humus, lake-bottom sediments, ocean-bottom sediments, and even snow. When field duplicates have been revealed to us, we have found that the precision of the field duplicates are in the range of about 9 to 12 %CV. As SGH is interpreted using a combination of compounds as a chemical "class" or signature, the affect of a few concentrations that may be imprecise in a direct comparison of duplicates is not significant. Further, projects that have been re-sampled at different times or seasons are expected to have different SGH concentrations. The SGH anomalies may not be in exactly the same position or of the same intensity due to variable conditions that may have affected the dispersion of different pathfinder classes. However, the SGH "signature" as to the presence of the specific mix of SGH pathfinder classes will definitely still exist, and will retain the ability to identify the deposit type and vector to the same target location.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

APPENDIX "F"
SGH DATA INTERPRETATION

SGH Interpretation Report

All SGH submissions must be accompanied by relative or UTM coordinates so that we may ensure that the sample survey design is appropriate for use with SGH, and to provide an SGH interpretation with the results. In our interpretation procedure, we separate the results into 19 SGH sub-classes. These classes include specific alkanes, alkenes, thiophenes, aromatic, and polyaromatic compounds. Note that none of the SGH hydrocarbons are "gaseous" at room temperature and pressure. The classes are then evaluated in terms of their geochromatography and for coincident compound class anomalies that are unique to different types of mineralization. Actlabs uses a six point scale in assigning a subjective rating of similarity of the SGH signatures found in the submitted survey to signatures previously reviewed and researched from known case studies over the same commodity type. Also factored into this rating is the appropriateness of the survey and amount of data/sample locations that is available for interpretation. This rating scale is described in detail in the following section.

SGH PATHFINDER CLASS MAGNITUDE

The magnitude of any individual concentration or that of a hydrocarbon class *does not imply* that the data is of more importance or that mineralization is of higher quantity or grade. SGH interpretation must use the review of the combination of specific hydrocarbon classes to make any interpretation.

GEOCHEMICAL ANOMALY THRESHOLD VALUE

In the interpretation of "inorganic" geochemical data one of the determinations to be made is to calculate a "Threshold" value above which data is considered anomalous. This is done on an element by element basis. In the interpretation of this "organic" geochemical data this determination is done differently. The determination of a threshold value is not calculated for each hydrocarbon compound. The determination of a threshold value is also a concentration below which geochemical data is considered as "noise" for the purposes of geochemical interpretation. As discussed, SGH uses a "Reporting Limit" instead of some type of Detection Limit. The amount of noise that is already eliminated in the data, as below the Reporting Limit of 1 part-per-trillion (shown in the data spreadsheet as "-1" as "not-detected at a Reporting Limit of 1 ppt") is equivalent to approximately 5 standard deviations of variability. *To thus calculate an additional Threshold Value is a loss of real and valuable data.* Further, in the interpretation of SGH data, individual compounds are not considered (unless explicitly mentioned in the report). The interpretation of SGH data is exclusively conducted by "compound chemical class" which is the sum of four to fourteen individual hydrocarbons in the same organic chemical class as these compounds naturally have the same chemical properties that ultimately define their spatial dispersion characteristics in their rise from a mineral target through the overburden. This combined class is more reliable than the measurement of any one compound. SGH also eliminates the need for a Threshold value determination above the Reporting Limit due to the "high specificity" of the specific hydrocarbons and the classes they form. Each of the hydrocarbons has been hand selected due to their lower probability of being found in general surface soils. Further, only those classes where the majority of the compounds are detected above the Reporting Limit are considered in the interpretation. This defines the SGH geochemistry as having less geochemical noise due to the use of a reporting limit and as having higher confidence in the use of groups (classes) of data instead of

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

individual compounds. However the most important aspect of interpretation is the use of a forensic signature. At least three specific "Pathfinder" classes, based on the combinations or template of classes we have developed, must be present to define the hydrocarbon signature to confidently predict the presence of a specific type of mineral target. *Do not calculate another Threshold value*. **Fact:** It has been proven many times that important SGH anomalies that depict mineralization at depth can exist even with data at 3 ppt.

Mobilized Inorganic Geochemical Anomalies

It is important to note that SGH is essentially "blind" to any inorganic content in samples as only *organic* compounds as hydrocarbons are measured. Thus inorganic geochemical surface anomalies that have migrated away from the mineral source, and thus may be interpreted and found to be a false target location, is not detected and does not affect SGH results. This fact is of great advantage when comparing the SGH results to inorganic geochemical results. If there is agreement in the location of the anomalies between the organic and inorganic technique, such as Actlabs' Enzyme Leach, a significant increase in confidence in the target location can be realized. If there is no agreement or a shift in the location of the anomalies between the techniques, the inorganic anomaly may have been mobilized in the surficial environment.

The Nugget Effect

As SGH is "blind" to the inorganic content in the survey samples, any concern of a "nugget effect" will not be encountered with SGH data. A "nugget effect" may be of a concern for other inorganic geochemical methods from surveys over copper, gold, lead, nickel, etc. type targets.

SGH DATA LEVELING

The combination of SGH data from different field sampling events has rarely required leveling in order to combine survey grids. The only circumstances that have occasionally required leveling has been the combination of samples that are very fine in texture, thus having a combined large surface area to samples of peat that may be in nearby areas. Even after maceration of the peat and in using the maximum size of sample amenable to this test method, peat samples have a significantly lower surface area. Peat samples have only required leveling in one survey in the last 500 SGH interpretations.

In only the last year it has been observed that SGH data *may* require leveling when different field sampling events have significantly different soil temperature. It has been documented that only when "soil" samples are taken from "frozen" ground that data leveling may be required as frozen sample act as a frozen cap to the hydrocarbon flux and may collect a higher concentration of hydrocarbon compounds compared to sampling during seasons where the samples are not frozen. Only two surveys have required leveling in the last 500 SGH interpretations.

The author has taken introductory training in the leveling of geochemical data. If leveling is required, both data sets are reviewed in terms of maximum, minimum and average values for each SGH Pathfinder Class intended for use in the interpretation. Data is sectioned into quartiles and each section is assigned specific leveling factors that are then applied to one data set. It should be noted that any type of data leveling is an approximation.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

APPENDIX "G"
SGH RATING SYSTEM DESCRIPTION

To date SGH has been found to be successful in the depiction of buried mineralization for Gold, Nickel, VMS, SEDEX, Uranium, Cu-Ni-PGE, IOCG, Base Metal, Tungsten, Lithium, Polymetallic, and Copper, as well as for Kimberlites, Coal Seam, Wet Gas and Oil Plays. SGH data has developed into a dual exploration tool. From the interpretation, a vertical projection of the predicted location of the target can be made as well as a statement on the rating of the comparability of the identification of the anticipated target type to that from known case studies, as an example: if the client anticipates the target to be a Gold deposit, what is the rating or comparability that the target is similar to the SGH results over a Gold deposit in Nunavut, shear hosted and sediment hosted deposits in Nevada, or Paleochannel Gold mineralization in Western Australia.

- **A rating of "6"** is the highest or best rating, and means that the SGH classes most important to describing a Gold related hydrocarbon signature are all present and consistently vector to the same location with well defined anomalies. To obtain this rating there also needs to be other SGH classes that when mapped lend support to the predicted location.
- **A rating of "5"** means that the SGH classes most important to describing a Gold signature are all present and consistently describe the same location with well defined anomalies. The SGH signatures may not be strong enough to also develop additional supporting classes.
- **A rating of "4"** means that the SGH classes most important to describing a Gold signature are mostly present describing the location with well defined anomalies. Supporting classes may also be present.
- **A rating of "3"** means that the SGH classes most important to describing a Gold signature are mostly present and describe the same location with fairly well defined anomalies. Some supporting classes may or may not be present.
- **A rating of "2"** means that some of the SGH classes most important to describing a Gold signature are present but a predicted location is difficult to determine. Some supporting classes may be present
- **A rating of "1"** is the lowest rating, and means that one of the SGH classes most important to describing a Gold signature is present but a predicted location is difficult to determine. Supporting classes are also not helpful.

The SGH rating is directly and significantly affected by the survey design. Small data sets, especially if significantly <50 sample locations, or transects/surveys that are geographically too short *will automatically receive a lower rating no matter how impressive an SGH anomaly might be*. When there is not enough sample locations to adequately review the SGH class geochromatography, or when the sample spacing is inadequate, or if the spacing is highly variable such that it biases the interpretation of the results, then the confidence in the interpretation of any geochemistry is adversely affected. The SGH rating is not just a rating of the agreement between the SGH pathfinder classes for a particular target type; it is a rating of the overall confidence in the SGH results from this particular survey. The interpretation is only based on the SGH results without any information from other geochemical, geological or geophysical information unless otherwise specified.

HISTORY & UNDERSTANDING

The subjective SGH rating system has been used since 2004 when Activation Laboratories started providing an SGH Interpretation Report with every submission for SGH analysis to aid our clients in understanding this organic geochemistry and ensuring that they obtain the best results for their

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

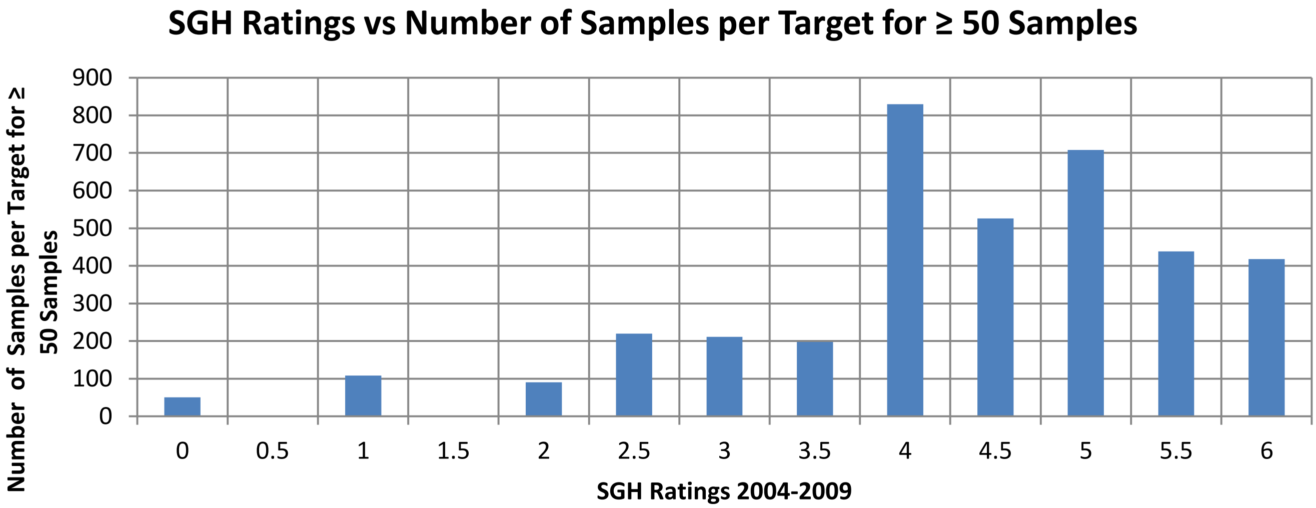
E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

surveys. As explained in the previous section, the SGH rating is not just a rating of how definitive an SGH anomaly is, and it is not based just on the map(s) provided in this report. It is a rating of "confidence in the interpreted anomaly" from the combination of:

- (i) are the expected SGH Pathfinder Classes of compounds present from the template for this target type (one Pathfinder Class map is shown in the report, at least three must be present to adequately describe the correct signature for a particular target),
- (ii) how well do these SGH Pathfinder Classes agree in describing a particular area,
- (iii) how well does this agreement compare to SGH case studies over known targets of that type,
- (iv) how well is the interpreted anomaly defined by the survey (i.e. a single transect does not provide the same confidence as a complete grid of samples), and
- (v) is there at least a minimum of 50 sample locations in the survey so that there may be an adequate amount of data to observe the geochromatography of the different SGH Pathfinder Class of compounds.

The question often arises by clients as to the frequency of a rating, e.g. "how often is a rating of 5.0 given in an interpretation". To better understand this we present this review of the history of the SGH rating program since 2004 and some of the underlying situations that can affect the historical rating charts. Originally it was recommended that a minimum of 35 sample location be used for small target exploration, however it was quite quickly realized that this is often insufficient and at least 50 sample locations were required. In 2007 the rating scale was refined to include increments of 0.5 units rather than just integer values from 0 to 6.

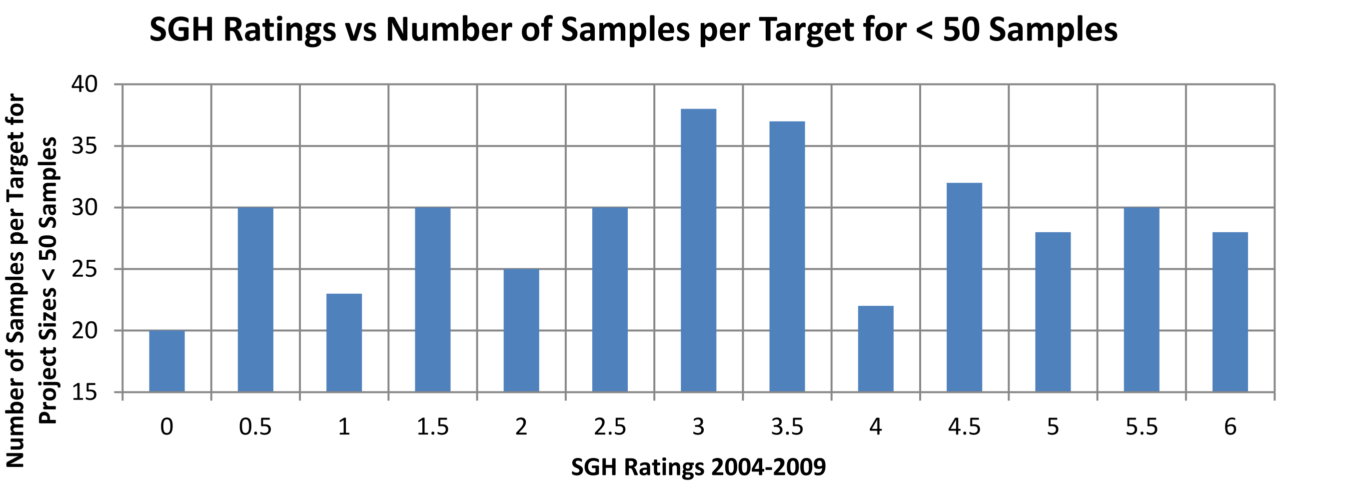
A rating frequency may be biased high as most clients conduct an orientation study over a known target, thus several of these projects result in high ratings. Note that, at this time, the rating is not said to be linked to grade of a deposit or depth to the target. Even in exploration surveys clients tend to submit samples over more promising targets due to knowledge of the geology and prior geochemical or geophysical results. As shown in the following chart, projects with SGH data from 200 or more sample locations have a higher level of confidence in the interpretation as the geochromatography of the SGH Pathfinder Classes of compounds can be more completely observed and reviewed.



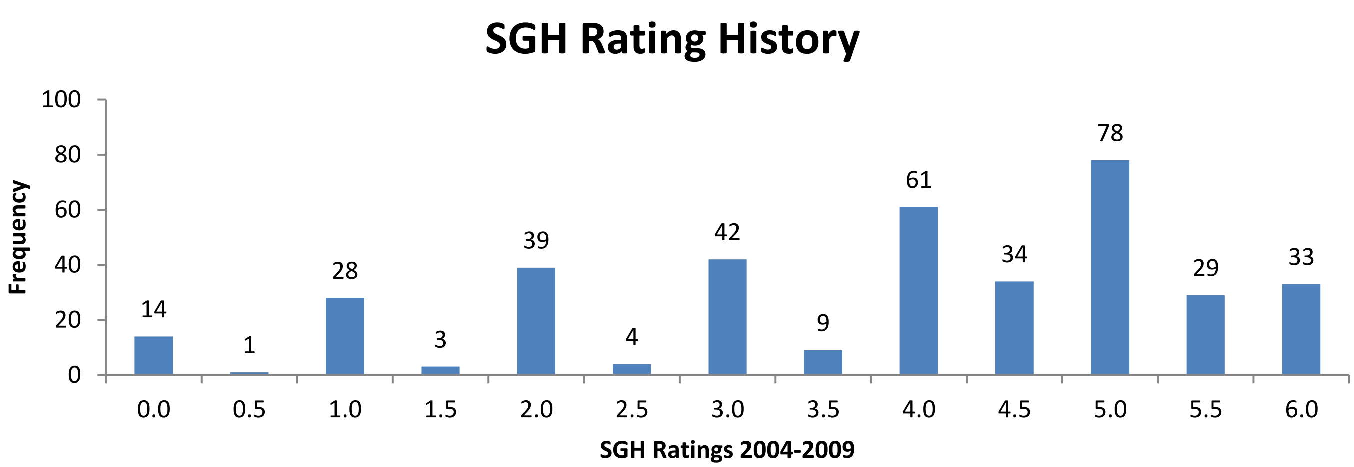
41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

The rating frequency may be biased low as research projects often include a bare minimum of samples to reduce costs. Research projects may also be over targets known to be difficult to depict with geochemistry. Multiple targets in close vicinity in a survey may result in a low bias as the Pathfinder Class geochromatography is more difficult to deconvelute. Ratings may also be biased low if less than the recommended 50 sample locations are submitted as indicated by the following chart. This chart also illustrates that there is no interpretation bias to a particular rating value.



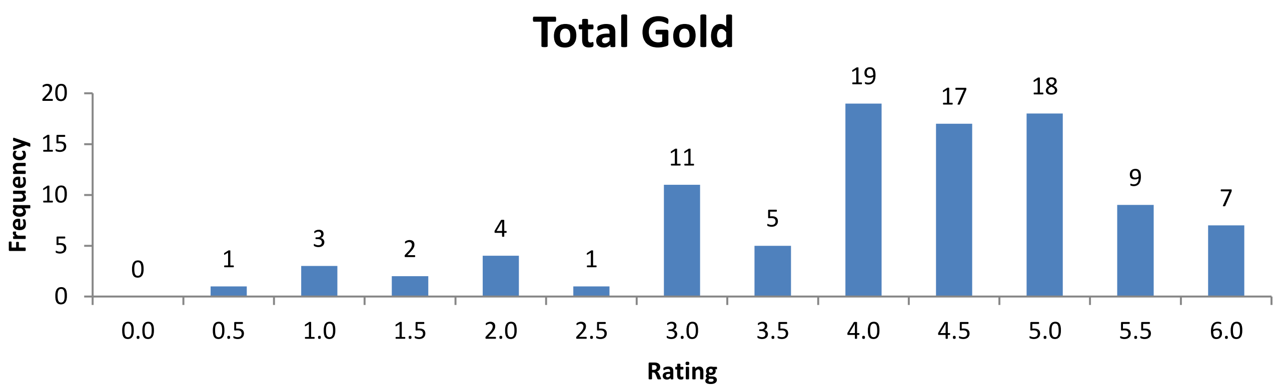
The overall rating frequency for over 400 targets from January 2004 to December 2009 is shown in the chart below illustrating that surveys over more promising targets are most often submitted for best use of research or exploration dollars. It also indicates that the 0.5 increments were less frequent as they started in 2007.



41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

More specific for SGH interpretation for Gold targets, the overall rating frequency for 97 targets from January 2004 to December 2009 is shown in the chart below that also illustrates that surveys over more promising Gold targets are most often submitted for best use of research or exploration dollars.



41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

APPENDIX "H"

NOTE: THERE IS NEW PRICING FOR THE SGH GEOCHEMISTRY

SAMPLE PREPARATION: CODE SGH-1 - $4.50 per sample

INTERPRETATION FOR ONE COMMODITY TARGETS: Included in the price of analysis of $50.40 per sample

INTERPRETATION FOR MULTI-COMMODITY TARGETS: i.e. VMS, SEDEX, Polymetallic, IOCG, IOCGU, Cu-Au-Porphyry, etc. – add additional price of $500 is applied to cover the additional time in interpretation.

"ADDITIONAL INTERPRETATIONS": ($ 525.00) - if within 60 days after delivery of the report.

The SGH data can be interpreted multiple times in comparison to a variety of SGH templates developed for exploration for different mineral targets or petroleum plays. The samples do not have to be reanalyzed. This can be addressed as a separate section of a report or as a separate report based on the client's wishes. The price is per survey area, e.g. if there are two projects in a submission, perhaps a North area and South area, and both survey areas are to be interpreted for say Gold and Copper, the first interpretation is included in the SGH analysis price, the second interpretation for each area would be priced at $525 per area, thus a total of $1050.

41 Bittern St. ● Ancaster, ON ● L9G 4V5 ● CANADA ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: SGH@actlabs.com ● Web Site: www.actlabs.com

Appendix V: Plato Gold Work Days - Pic River PGM Project

Day/Month 2022	John Camier	Bobby Lowndes	Al Zawadski	Doug Kakeeway	Work Done
26-Jun		1			Mob equipment in
27-Jun		1			Mob equipment in and start to set up camp
28-Jun		1			Finish setting up camp
29-Jun		1		1	Road clearing
30-Jun		1		1	Road clearing
1-Jul		1		1	Road clearing
2-Jul		1		1	Road clearing
3-Jul		1		1	Road clearing
4-Jul		1		1	Road clearing
5-Jul		1		1	Road clearing
6-Jul		1		1	Road clearing
7-Jul		1		1	Road clearing
8-Jul		1	1	1	Road clearing / Al travel day to camp
9-Jul	1	1	1		Road clearing
10-Jul	1		1		cutting trail/prospecting
11-Jul	1		1		cutting trail/prospecting
12-Jul	1		1		cutting trail/prospecting
13-Jul	1		1		cutting trail/prospecting
14-Jul	1		1		cutting trail/prospecting
15-Jul	1		1		Prospecting - 6 sx's
16-Jul	1		1		Prospecting targets
17-Jul	1	1	1		Prospecting targets
18-Jul	1	1	1		Prospecting targets
19-Jul	1	1	1		Prospecting targets
20-Jul	1	1	1	1	Rain day; camp chores and prospecting
21-Jul	1	1	1	1	Prospecting targets
22-Jul		1	1	1	Prospecting targets
23-Jul		1		1	Prospecting targets
24-Jul	1	1		1	Prospecting targets
25-Jul	1	1		1	Prospecting targets
26-Jul	1	1		1	Prospecting targets / Bobby travel day
27-Jul	1			1	Rain day, intermittent rain showers, sunny periods and thunderstorms

Appendix V: Plato Gold Work Days - Pic River PGM Project

Day/Month 2022	John Camier	Bobby Lowndes	Al Zawadski	Doug Kakeeway	Work Done
28-Jul	1			1	Collected 9 SGH samples and got caught in torrential rainfall, returned to camp
29-Jul	1			1	Raining in the morning; SGH sampling in the afternoon; collected 8 samples
30-Jul	1			1	Collected 19 SGH soil samples
31-Jul	1			1	Finished SGH sampling
1-Aug	1	1	1	1	Prospecting targets
2-Aug	1	1	1	1	Started helicopter and river work, John, Al and Doug
3-Aug	1	1	1	1	No flying, Al and Doug in Field, John working on data and sample prep
4-Aug	1	1	1	1	Flew to boat launch and mapped along the river to a take out and traversed encountering syenite, granodiorite and diabase which was sampled; Doug and Bobby flew to a different pad and traversed onto a topo high collecting 6 samples
5-Aug	1	1	1	1	Flew into anomaly 34,35,36 and Doug and Bobby traversed to the south then east to topo high collecting 8 samples form gabbro with trace Po-Py; Al and John traversed to the north and east to cliffs observed from the air collecting one sample from a gabbro with trace Cpy, Po and Py
6-Aug	1	1	1	1	Al, Bobby and Doug in Field, John office/data entry and prep for Gerry White's visit
7-Aug	1	1	1	1	Gerry's visit to review work and pack camp
8-Aug	1	1	1	1	Pack up camp and De-Mob out
9-Aug				1	Doug travel day to Thunder Bay
Individual Days Total:	**29 days**	**32 days**	**23 days**	**31 days**	**115 Total Man Days**

Appendix VI: Plato Gold Corp. Pic River PGM Project Helicopter Days

Month/2022	Day	Hours	Location
2-Aug	1	2.2	Pic River
4-Aug	2	2.1	Pic River
5-Aug	3	1.6	Pic River
	Total Hours:	5.9	

Appendix VII

STATEMENT of EXPENDITURES

The following is a breakdown of expenditures related to the 2022 field program on the Pic River PGM Property.

Labour:

Preparation, field work, travel

Labour	$ 72,300.00

Prepare maps etc.

Drafting & digitizing	$ 2,541.00

Report Writing

Report Writing	$ 3,150.00

Associated Costs:

Meals & Groceries	$ 2,468.82
Field Supplies	$ 1,259.75
Ground Transportation (4512km x $0.55/km)	$ 2,481.60
Camp Rental	$ 10,250.00
ATV Rental	$ 7,200.00
Generator & ATV Gas	$ 930.16
House Rental	$ 525.00
Helicopter	$ 22,950.00

Analytical Costs:

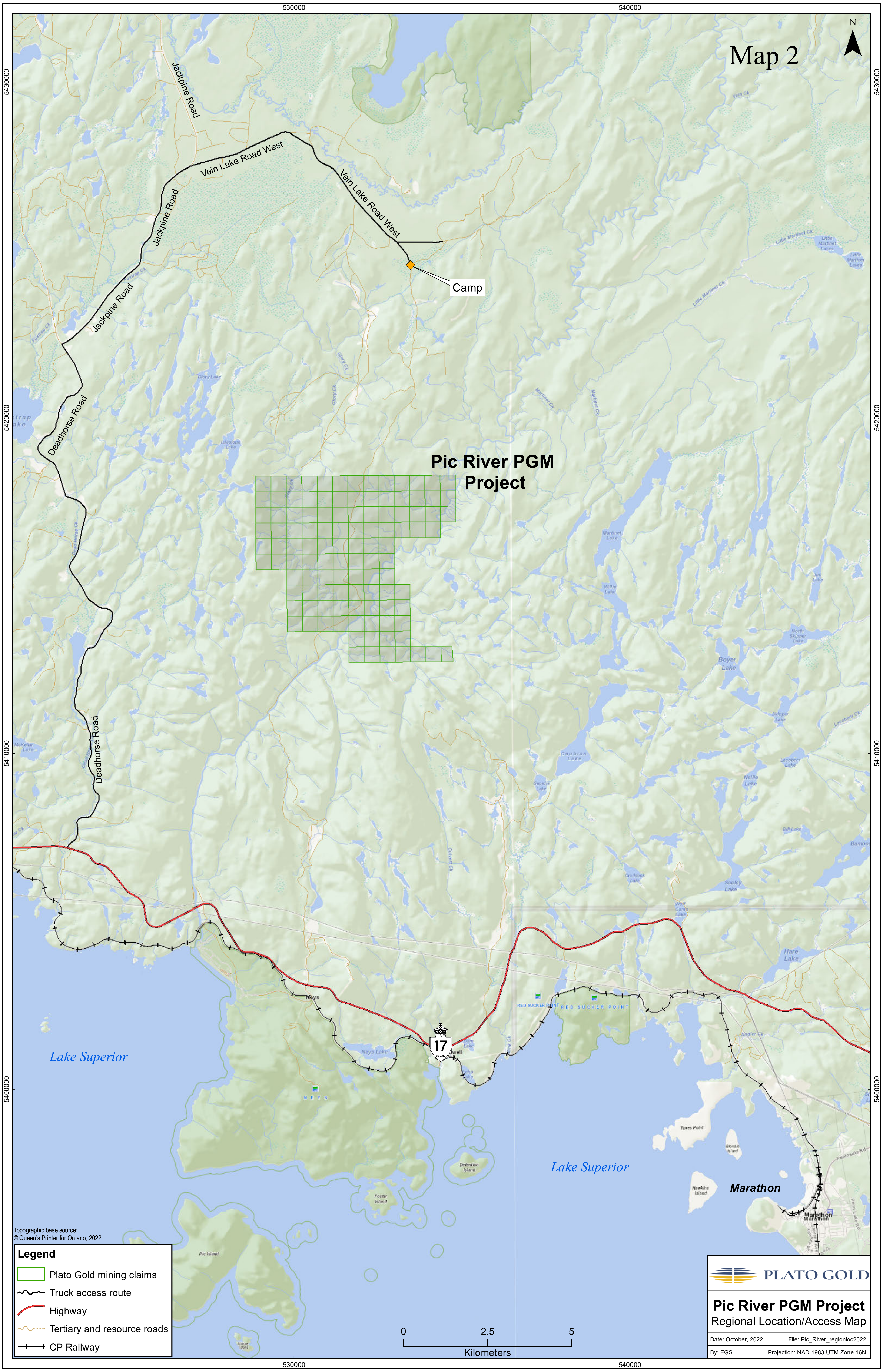
Act Labs (51 rock - grab samples)	$ 2,920.50
Act Labs (50 SGH soil samples)	$ 3,270.00

TOTAL EXPENDITURES	**$ 132,246.83**

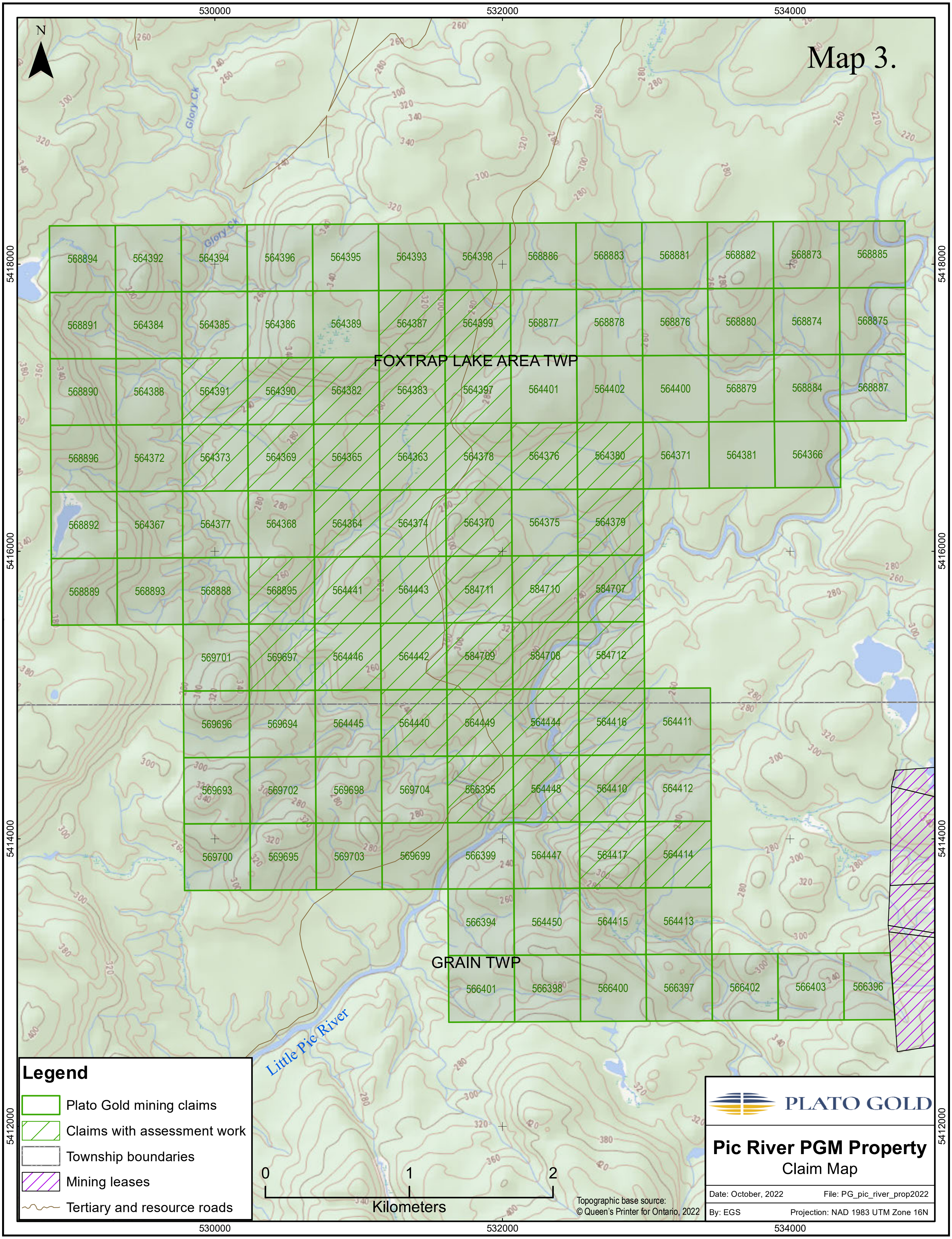
	Expenditures per Cell		
Cell No.	Rock Grab Samples	SGH Soil Samples Collected per Cell	Expenditure per Cell
564444		2	$ 2,627.00
564448		29	$ 38,091.00
566395	15	19	$ 44,536.00
584707	9		$ 11,748.00
584710	5		$ 6,527.00
564414	8		$ 10,443.00
564410	1		$ 1,305.00
564369	6		$ 7,832.00
564390	5		$ 6,527.00
564399	1		$ 1,305.00
564417	1		$ 1,305.00
Total	**51**	**50**	**$ 132,246.00**

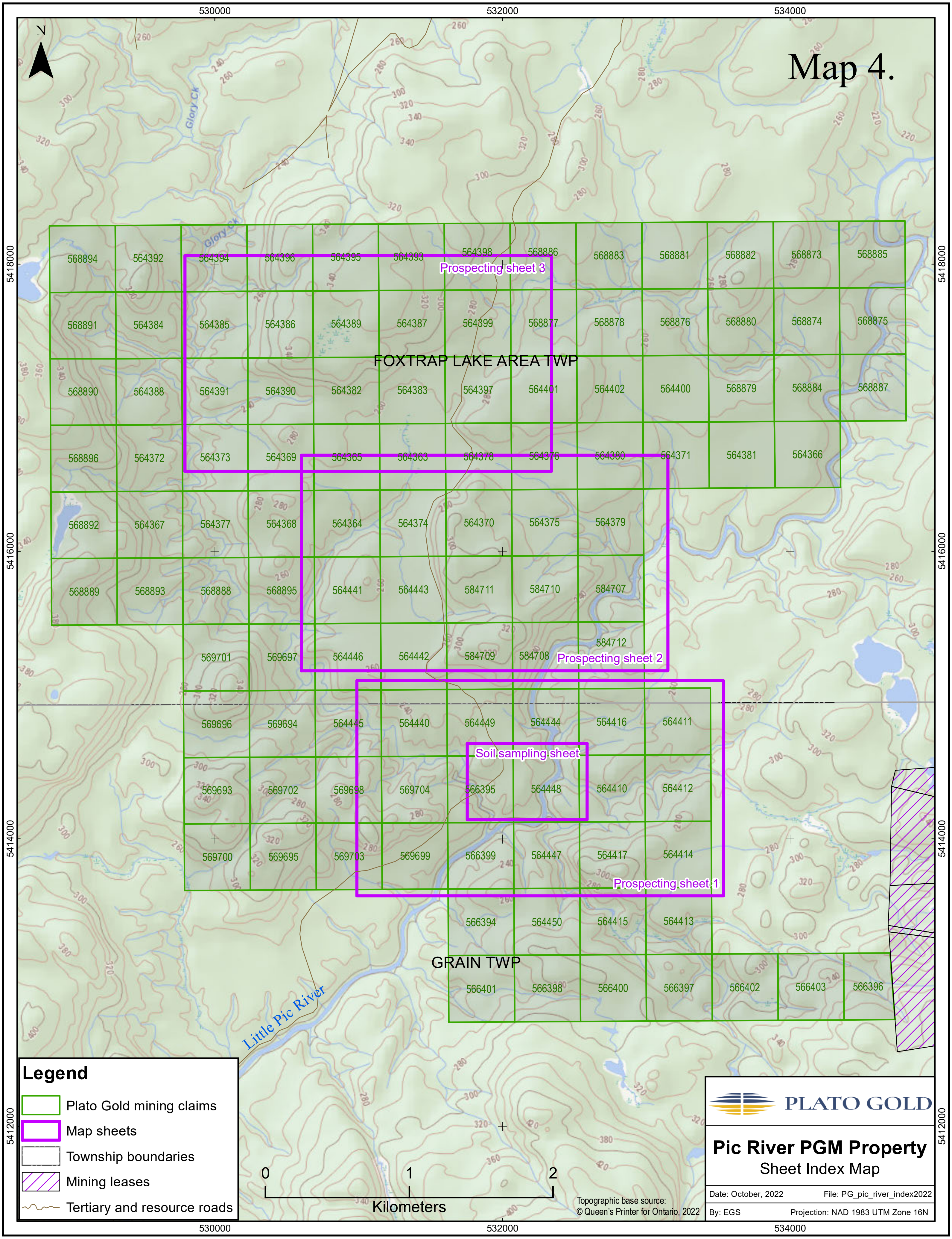
-MAPS-


Map 1.
N
Manitoba
Quebec
Ontario
Red Lake
Kenora
Sioux Lookout
Dryden
Nakina
Geraldton
Pic River PGM Project
Thunder Bay
Marathon
Wawa
Timmins
Kirkland Lake
Sault Ste. Marie
Sudbury
Ottawa
Toronto
0 90 180
Kilometers
PLATO GOLD
Pic River PGM Project
General Location Map
Date: October, 2022
Name: EGS
File: ontloc_Pic_River_2022



Map 2
N
530000
540000
5430000
5420000
5410000
5400000
Jackpine Road
Vein Lake Road West
Camp
Deadhorse Road
Pic River PGM Project
Lake Superior
Marathon
Neys
17
Topographic base source:
© Queen's Printer for Ontario, 2022
Legend
Plato Gold mining claims
Truck access route
Highway
Tertiary and resource roads
CP Railway
0
2.5
5
Kilometers
PLATO GOLD
Pic River PGM Project
Regional Location/Access Map
Date: October, 2022
File: Pic_River_regionloc2022
By: EGS
Projection: NAD 1983 UTM Zone 16N


Map 3.
N
530000
532000
534000
5418000
5416000
5414000
5412000
FOXTRAP LAKE AREA TWP
GRAIN TWP
Glory Ck
Little Pic River
568894 564392 564394 564396 564395 564393 564398 568886 568883 568881 568882 568873 568885
568891 564384 564385 564386 564389 564387 564399 568877 568878 568876 568880 568874 568875
568890 564388 564391 564390 564382 564383 564397 564401 564402 564400 568879 568884 568887
568896 564372 564373 564369 564365 564363 564378 564376 564380 564371 564381 564366
568892 564367 564377 564368 564364 564374 564370 564375 564379
568889 568893 568888 568895 564441 564443 584711 584710 584707
569701 569697 564446 564442 584709 584708 584712
569696 569694 564445 564440 564449 564444 564416 564411
569693 569702 569698 569704 566395 564448 564410 564412
569700 569695 569703 569699 566399 564447 564417 564414
566394 564450 564415 564413
566401 566398 566400 566397 566402 566403 566396
Legend
Plato Gold mining claims
Claims with assessment work
Township boundaries
Mining leases
Tertiary and resource roads
0 1 2
Kilometers
Topographic base source:
© Queen's Printer for Ontario, 2022
PLATO GOLD
Pic River PGM Property
Claim Map
Date: October, 2022
File: PG_pic_river_prop2022
By: EGS
Projection: NAD 1983 UTM Zone 16N

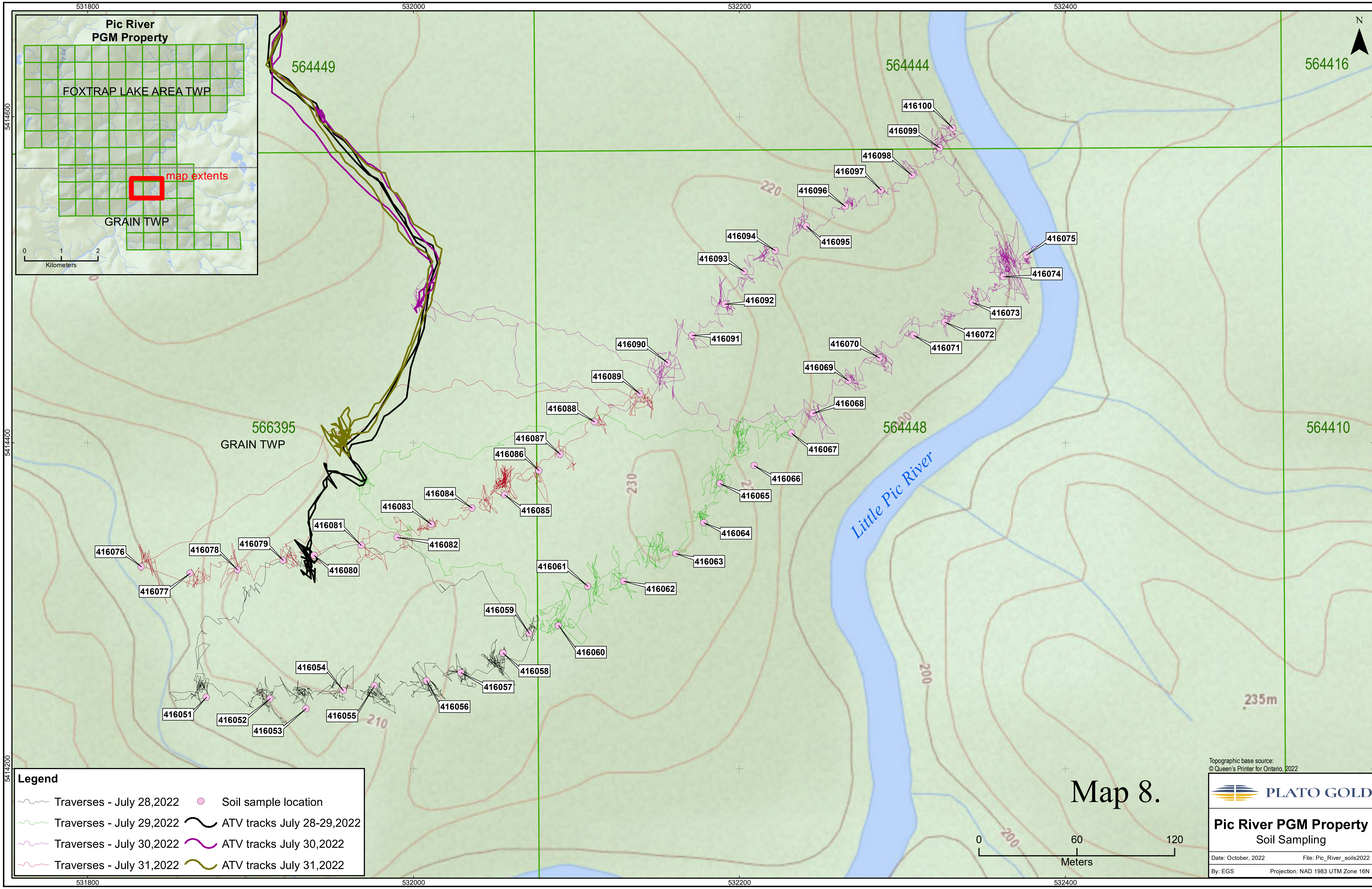


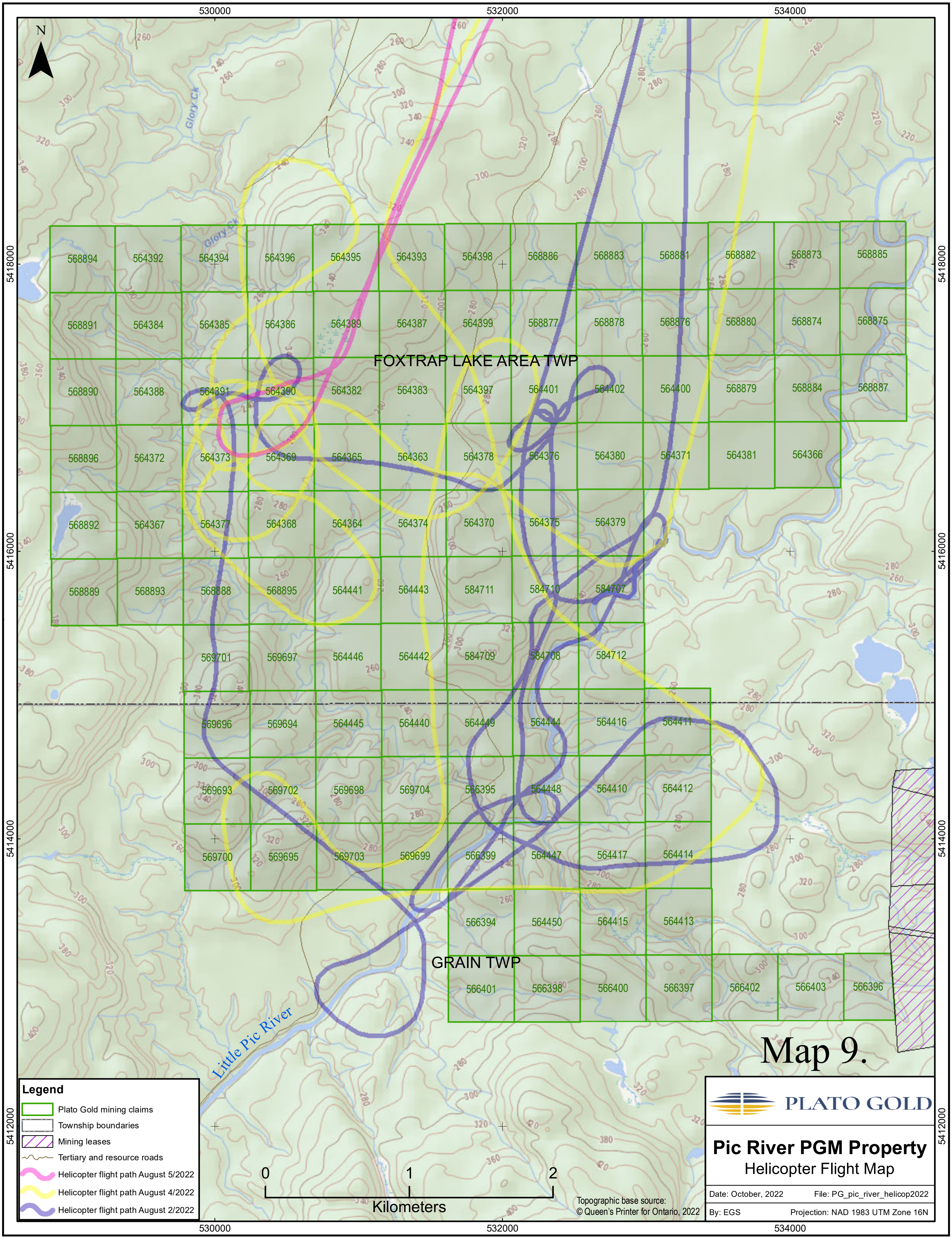
Map 4.
N
530000
532000
534000
5418000
5416000
5414000
5412000
Prospecting sheet 3
Prospecting sheet 2
Prospecting sheet 1
Soil sampling sheet
FOXTRAP LAKE AREA TWP
GRAIN TWP
Glory Ck
Little Pic River
568894
564392
564394
564396
564395
564393
564398
568886
568883
568881
568882
568873
568885
568891
564384
564385
564386
564389
564387
564399
568877
568878
568876
568880
568874
568875
568890
564388
564391
564390
564382
564383
564397
564401
564402
564400
568879
568884
568887
568896
564372
564373
564369
564365
564363
564378
564376
564380
564371
564381
564366
568892
564367
564377
564368
564364
564374
564370
564375
564379
568889
568893
568888
568895
564441
564443
584711
584710
584707
569701
569697
564446
564442
584709
584708
584712
569696
569694
564445
564440
564449
564444
564416
564411
569693
569702
569698
569704
566395
564448
564410
564412
569700
569695
569703
569699
566399
564447
564417
564414
566394
564450
564415
564413
566401
566398
566400
566397
566402
566403
566396
Legend
Plato Gold mining claims
Map sheets
Township boundaries
Mining leases
Tertiary and resource roads
0
1
2
Kilometers
Topographic base source:
© Queen's Printer for Ontario, 2022
PLATO GOLD
Pic River PGM Property
Sheet Index Map
Date: October, 2022
File: PG_pic_river_index2022
By: EGS
Projection: NAD 1983 UTM Zone 16N


Legend
Plato Gold mining claims
Township boundaries
Tertiary and resource roads
Points of interest
Soil sample location
Grab sample location
Boat travel August 4/2022
Traverses August 4/2022
Traverses July 16/2022
Traverses July 23/2022
Traverses July 17/2022
Traverses July 26/2022
Traverses July 15/2022
Traverses July 14/2022
Helicopter Paths
Helicopter flight path August 4/2022
Helicopter flight path August 2/2022
N
FOXTRAP LAKE AREA TWP
Pic River PGM Property
map extents
GRAIN TWP
Kilometers
key map
FOXTRAP LAKE AREA TWP
GRAIN TWP
various ATV tracks
various ATV tracks
Glory Creek
Little Pic River
564442
584709
584708
584712
564445
564440
564449
564444
564416
564411
569698
569704
566395
564448
564410
564412
569703
569699
566399
564447
564417
564414
566394
564450
564415
Map 5.
0
100
200
Meters
Note:
The traverses and sample numbers associated with soil sampling, can be found on the soil sampling map sheet.
PLATO GOLD
Pic River PGM Property
Sampling and Prospecting Map 1
Topographic base source:
© Queen's Printer for Ontario, 2022

FOXTRAP LAKE AREA TWP
map extents
Pic River PGM Property
GRAIN TWP
Kilometers
key map
Legend
Plato Gold mining claims
Township boundaries
Tertiary and resource roads
Points of interest
Grab sample location
Boat travel August 2/2022
Boat travel August 4/2022
Traverses July 21/2022
Traverses July 25/2022
Traverses July 19/2022
Traverses July 20/2022
Traverses July 18/2022
Traverses August 3/2022
Traverses August 2/2022
Helicopter Paths
Helicopter flight path August 2/2022
Helicopter flight path August 4/2022
564365
564363
564378
564376
564380
564371
564364
564374
564370
564375
564379
564368
568895
564441
564443
584711
584710
584707
569697
564446
564442
584709
584708
584712
FOXTRAP LAKE AREA TWP
various ATV tracks
Little Pic River
Meters
N
531000
532000
533000
Map 6.
Topographic base source:
© Queen's Printer for Ontario, 2022
PLATO GOLD
Pic River PGM Property
Sampling and Prospecting Map 6
Date: October, 2022
File: PG_pic_river_prospect 2
By: EGS
Projection: NAD 1983 UTM Zone 16N


Legend
Plato Gold mining claims
Township boundaries
Tertiary and resource roads
Points of interest
Grab sample location
Traverses July 10/2022
Traverses July 21/2022
Traverses July 25/2022
Traverses August 6/2022
Traverses August 5/2022
Traverses July 22/2022
Traverses August 5/2022
Helicopter Paths
Helicopter flight path August 2/2022
Helicopter flight path August 4/2022
Helicopter flight path August 5/2022
564394
564396
564395
564393
564398
564385
564386
564389
564387
564399
568877
FOXTRAP LAKE AREA TWP
564391
564390
564382
564383
564397
564401
564373
564369
564365
564363
564378
564376
Various ATV tracks
map extents
FOXTRAP LAKE AREA TWP
Pic River PGM Property
GRAIN TWP
Kilometers
key map
0
100
200
Meters
Map 7.
PLATO GOLD
Pic River PGM Property
Sampling and Prospecting Map 7


Pic River
PGM Property
FOXTRAP LAKE AREA TWP
map extents
GRAIN TWP
0 1 2
Kilometers
564449
564444
564416
566395
GRAIN TWP
564448
564410
Little Pic River
416051
416052
416053
416054
416055
416056
416057
416058
416059
416060
416061
416062
416063
416064
416065
416066
416067
416068
416069
416070
416071
416072
416073
416074
416075
416076
416077
416078
416079
416080
416081
416082
416083
416084
416085
416086
416087
416088
416089
416090
416091
416092
416093
416094
416095
416096
416097
416098
416099
416100
220
230
210
200
235m
531800
532000
532200
532400
5414600
5414400
5414200
N
Legend
Traverses - July 28,2022
Traverses - July 29,2022
Traverses - July 30,2022
Traverses - July 31,2022
Soil sample location
ATV tracks July 28-29,2022
ATV tracks July 30,2022
ATV tracks July 31,2022
Map 8.
0 60 120
Meters
Topographic base source:
© Queen's Printer for Ontario, 2022
PLATO GOLD
Pic River PGM Property
Soil Sampling
Date: October, 2022
File: Pic_River_soils2022
By: EGS
Projection: NAD 1983 UTM Zone 16N



Map 9.
PLATO GOLD
Pic River PGM Property
Helicopter Flight Map
Date: October, 2022
File: PG_pic_river_helicop2022
By: EGS
Projection: NAD 1983 UTM Zone 16N
Legend
Plato Gold mining claims
Township boundaries
Mining leases
Tertiary and resource roads
Helicopter flight path August 5/2022
Helicopter flight path August 4/2022
Helicopter flight path August 2/2022
0
1
2
Kilometers
Topographic base source:
© Queen's Printer for Ontario, 2022
N
530000
532000
534000
5418000
5416000
5414000
5412000
FOXTRAP LAKE AREA TWP
GRAIN TWP
Little Pic River
Glory Ck
568894 564392 564394 564396 564395 564393 564398 568886 568883 568881 568882 568873 568885
568891 564384 564385 564386 564389 564387 564399 568877 568878 568876 568880 568874 568875
568890 564388 564391 564390 564382 564383 564397 564401 564402 564400 568879 568884 568887
568896 564372 564373 564369 564365 564363 564378 564376 564380 564371 564381 564366
568892 564367 564377 564368 564364 564374 564370 564375 564379
568889 568893 568888 568895 564441 564443 584711 584710 584707
569701 569697 564446 564442 584709 584708 584712
569696 569694 564445 564440 564449 564444 564416 564411
569693 569702 569698 569704 566395 564448 564410 564412
569700 569695 569703 569699 566399 564447 564417 564414
566394 564450 564415 564413
566401 566398 566400 566397 566402 566403 566396