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GEOPHYSICAL SURVEY AND PROSPECTING REPORT ON THE BUTT TOWNSHIP PROPERTY

BUTT TOWNSHIP, DISTRICT OF NIPISSING, ONTARIO
UTM NAD 83, Z17, 650000mE, 5062000mN

FOR
GRIFTCO CORPORATION & CANOE MINING VENTURES CORP.



Kelly Malcolm, P.Geo.

Generic Geo Inc.

Effective Date: June 3rd, 2023

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1.0 Summary

This assessment on the Butt Township Property (the “Property”) was prepared for Griftco Corporation (“Griftco”) and Canoe Mining Ventures Corp. (“Canoe”) by Kelly Malcolm, P.Ge. of Generic Geo Inc. (the “Writer” or the “Author”); an independent “Qualified Person” under the terms and definitions of NI 43-101.

Griftco Corporation wholly owns the mineral exploration rights for 87 mineral exploration claims comprising the Property and covering approximately 1,961 ha in Butt township, District of Nipissing, Ontario at 79o-5.8’W longitude, 45o-42.5’N latitude (Figure 1). The property is located in the Central Gneiss Belt of the Western Grenville Province comprising primarily of granite gneiss and paragneiss.

The Property was acquired for its potential to host graphite, uranium, REE, niobium (columbium) and tantalum mineralization hosted in pegmatite dykes. The Property lies south of and directly adjacent to the advanced graphite property of G6 Energy Corp, known as the Kearney mine.

The Butt Township Project is an early-stage exploration project. Historical exploration work has identified numerous mineral occurrences of uranium and rare-earth elements. The Kearney graphite mine to the north, as well as low-grade samples of graphite identified during prospecting in 2012, indicates the potential for graphite mineralization in addition to the known pegmatite-hosted uranium and rare-earth mineralization.

During May to June 2022, a MobileMT survey and geophysical report was completed by Expert Geophysics Ltd and delineated three distinct zones of geophysical anomalies. In total 348 flight line kilometers were completed, identifying targets of low resistivity/high conductivity.

A follow-up prospecting program was completed by Dan Patrie Exploration Ltd. This program was successful in collecting a total of 37 samples, targeting the zones delineated by geophysics. Significant mineralization was not identified during this campaign but several samples returned anomalous uranium and rare earth elements.

2.0 Introduction

2.1 Sources of Information

The Author has reviewed and analyzed data provided by the Issuer as well as publicly available assessment reports by previous workers on or in the vicinity of the current Property. The Author has taken reasonable steps to verify the information where possible.

Some of the figures and tables for this report were reproduced or derived from historical reports written on the Property by various individuals, government agencies.

Much of the background information for this assessment report, including historical exploration, regional geology, local geology, neighbouring properties, and accessibility & infrastructure has been derived (often verbatim) from a draft 43-101 report written on the Butt Township Property in 2013 by L.D.S. Winter, P.Ge.

2.2 Property Inspection and Extent of Involvement of Qualified Person

The Author has visited the Property several times on behalf of Griftco, with the most recent visit being in August of 2022. The Author has previously conducted drone magnetometer tests flights on the Property, visited and reviewed available outcrop exposures, and visited the neighbouring Kearney Graphite Mine. The Author has arranged geophysical and geological work to be conducted on the Property on behalf of Griftco. The Author has also written and submitted assessment and technical reports on the Property on behalf of Griftco.

2.3 Definition and Units

Metric units and Canadian dollars are used throughout this report unless otherwise stipulated. Uranium analytical results are reported as percent uranium oxide, U₃O₈. The percentage of graphite/carbon determined by chemical analyses is reported as percent C (g) throughout the report.

3.0 Reliance on Other Experts

This report was prepared by the writer for Griftco and Canoe, and the information, conclusions, opinions and estimates contained herein are based on:

- Some portions of this report, including section's 5.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography, 6.1 Historical Exploration and Development Activities, 6.2 Modern Exploration Activities, and 7.0 Geological Setting and, have been derived (often verbatim) from a draft 43-101 report written on the Butt Township Property in 2013 by L.D.S. Winter, P.Geo.;
- Information available to the writer at the time of preparation of this report provided by the Company or that is in the public domain;
- Assumptions, conditions and qualifications as set forth in this report;
- Data and reports supplied by the client and available from the public domain and;
- Property information available from the public website of the Ontario Ministry of Northern Development Mines.

4.0 Property Description and Location

The Property is comprised of 87 unpatented contiguous mineral exploration claims covering 1,961 ha as listed in Table 1 and as illustrated in Figure 2. The Property is located within the Butt township area. The claims are held in the name of Griftco Corporation.

The Property is located approximately 50 km north-northeast of Huntsville, Ontario at 79°5.8'W longitude, 45°42.5'N latitude and centred at UTM NAD 83, Zone 17 co-ordinates 650000mE; 5062000mN (Figure 1).

Table 1: Butt Township Property Schedule of Claims

Claim #	Type	Status	Anniversary Date	Owner
100314	Claim	Active	2023-06-12	Griftco Corporation
100315	Claim	Active	2023-06-12	Griftco Corporation
100654	Claim	Active	2023-06-12	Griftco Corporation

115793	Claim	Active	2023-06-12	Griftco Corporation
115886	Claim	Active	2023-06-12	Griftco Corporation
115943	Claim	Active	2023-06-12	Griftco Corporation
116953	Claim	Active	2023-06-12	Griftco Corporation
126261	Claim	Active	2023-06-12	Griftco Corporation
127692	Claim	Active	2023-06-12	Griftco Corporation
140555	Claim	Active	2023-06-12	Griftco Corporation
142728	Claim	Active	2023-06-12	Griftco Corporation
142773	Claim	Active	2023-06-12	Griftco Corporation
143381	Claim	Active	2023-06-12	Griftco Corporation
144815	Claim	Active	2023-06-12	Griftco Corporation
155547	Claim	Active	2023-06-12	Griftco Corporation
156915	Claim	Active	2023-06-12	Griftco Corporation
171467	Claim	Active	2023-06-12	Griftco Corporation
172135	Claim	Active	2023-06-12	Griftco Corporation
172136	Claim	Active	2023-06-12	Griftco Corporation
212711	Claim	Active	2023-06-12	Griftco Corporation
222854	Claim	Active	2023-06-12	Griftco Corporation
230212	Claim	Active	2023-06-12	Griftco Corporation
240889	Claim	Active	2023-06-12	Griftco Corporation
258856	Claim	Active	2023-06-12	Griftco Corporation
268143	Claim	Active	2023-06-12	Griftco Corporation
275401	Claim	Active	2023-06-12	Griftco Corporation
275402	Claim	Active	2023-06-12	Griftco Corporation
286930	Claim	Active	2023-06-12	Griftco Corporation
287568	Claim	Active	2023-06-12	Griftco Corporation
296038	Claim	Active	2023-06-12	Griftco Corporation
296237	Claim	Active	2023-06-12	Griftco Corporation
308549	Claim	Active	2023-06-12	Griftco Corporation
311398	Claim	Active	2023-06-12	Griftco Corporation
323480	Claim	Active	2023-06-12	Griftco Corporation
325533	Claim	Active	2023-06-12	Griftco Corporation
533886	Claim	Active	2023-10-26	Griftco Corporation
533887	Claim	Active	2023-10-26	Griftco Corporation
533888	Claim	Active	2023-10-26	Griftco Corporation
533889	Claim	Active	2023-10-26	Griftco Corporation
533890	Claim	Active	2023-10-26	Griftco Corporation
533891	Claim	Active	2023-10-26	Griftco Corporation
533892	Claim	Active	2023-10-26	Griftco Corporation
533893	Claim	Active	2023-10-26	Griftco Corporation

533894	Claim	Active	2023-10-26	Griftco Corporation
533895	Claim	Active	2023-10-26	Griftco Corporation
533896	Claim	Active	2023-10-26	Griftco Corporation
533897	Claim	Active	2023-10-26	Griftco Corporation
533898	Claim	Active	2023-10-26	Griftco Corporation
533899	Claim	Active	2023-10-26	Griftco Corporation
533900	Claim	Active	2023-10-26	Griftco Corporation
533901	Claim	Active	2023-10-26	Griftco Corporation
533902	Claim	Active	2023-10-26	Griftco Corporation
533903	Claim	Active	2023-10-26	Griftco Corporation
533904	Claim	Active	2023-10-26	Griftco Corporation
533905	Claim	Active	2023-10-26	Griftco Corporation
533906	Claim	Active	2023-10-26	Griftco Corporation
533907	Claim	Active	2023-10-26	Griftco Corporation
533908	Claim	Active	2023-10-26	Griftco Corporation
533909	Claim	Active	2023-10-26	Griftco Corporation
533910	Claim	Active	2023-10-26	Griftco Corporation
533911	Claim	Active	2023-10-26	Griftco Corporation
533912	Claim	Active	2023-10-26	Griftco Corporation
533913	Claim	Active	2023-10-26	Griftco Corporation
587540	Claim	Active	2024-05-07	Griftco Corporation
587541	Claim	Active	2024-05-07	Griftco Corporation
587542	Claim	Active	2024-05-07	Griftco Corporation
587543	Claim	Active	2024-05-07	Griftco Corporation
587544	Claim	Active	2024-05-07	Griftco Corporation
587545	Claim	Active	2024-05-07	Griftco Corporation
587546	Claim	Active	2024-05-07	Griftco Corporation
587547	Claim	Active	2024-05-07	Griftco Corporation
587548	Claim	Active	2024-05-07	Griftco Corporation
587549	Claim	Active	2024-05-07	Griftco Corporation
587550	Claim	Active	2024-05-07	Griftco Corporation
587551	Claim	Active	2024-05-07	Griftco Corporation
587552	Claim	Active	2024-05-07	Griftco Corporation
587553	Claim	Active	2024-05-07	Griftco Corporation
587554	Claim	Active	2024-05-07	Griftco Corporation
587555	Claim	Active	2024-05-07	Griftco Corporation
587556	Claim	Active	2024-05-07	Griftco Corporation
587557	Claim	Active	2024-05-07	Griftco Corporation
587558	Claim	Active	2024-05-07	Griftco Corporation
587559	Claim	Active	2024-05-07	Griftco Corporation

587560	Claim	Active	2024-05-07	Griftco Corporation
587561	Claim	Active	2024-05-07	Griftco Corporation
587564	Claim	Active	2024-05-07	Griftco Corporation
587615	Claim	Active	2024-05-07	Griftco Corporation

To the best of the Author’s knowledge, there are no mine workings, tailing ponds or waste rock piles on the Property. There are no recognized important natural features or improvements within the Property boundaries.

The property is located directly adjacent to the provincial Algonquin park, although it does not share any of its land package with the regulated land allotment of the park. There are no recognized environmental liabilities to which the Property is subject.

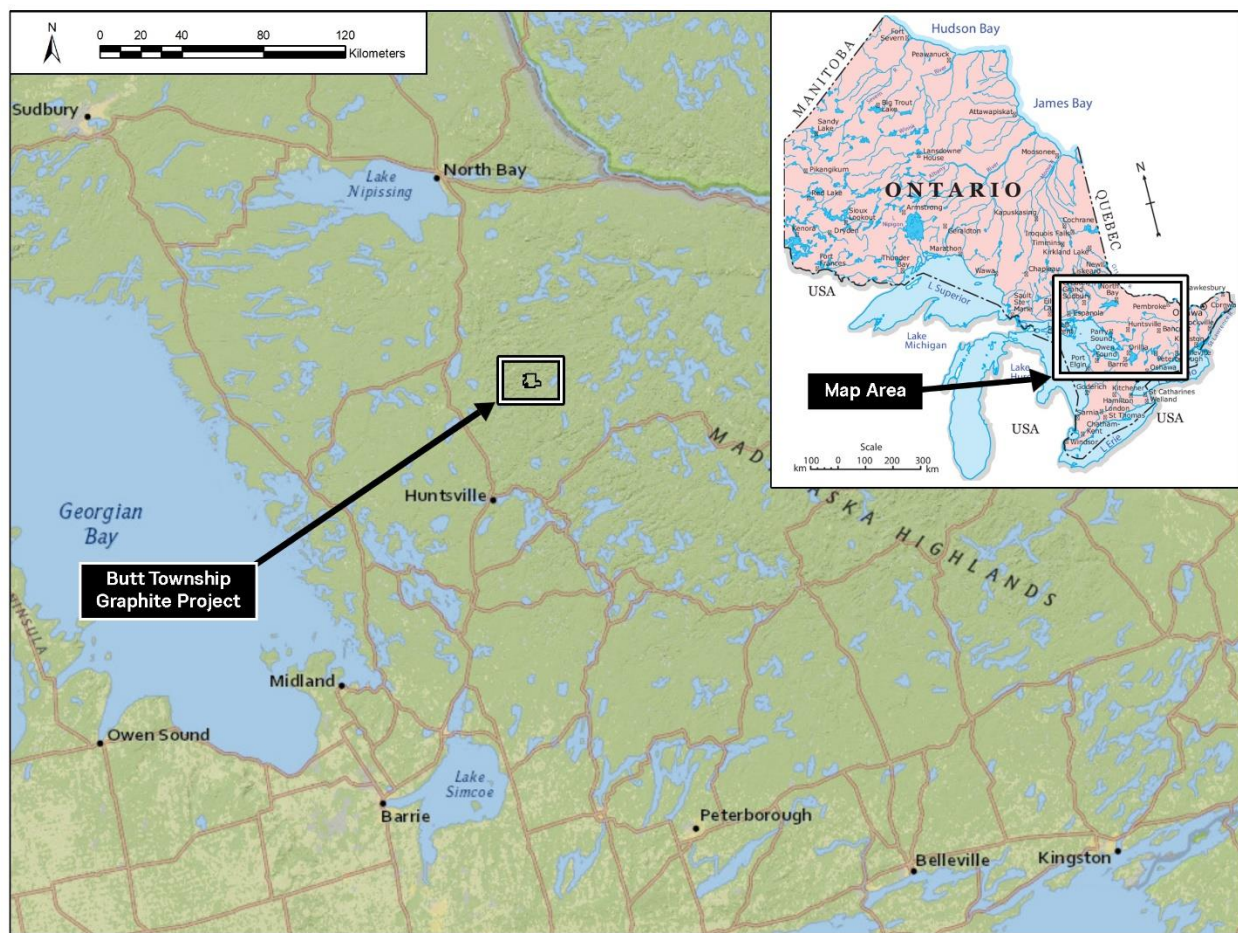


Figure 1: Location of the Butt Township Property.

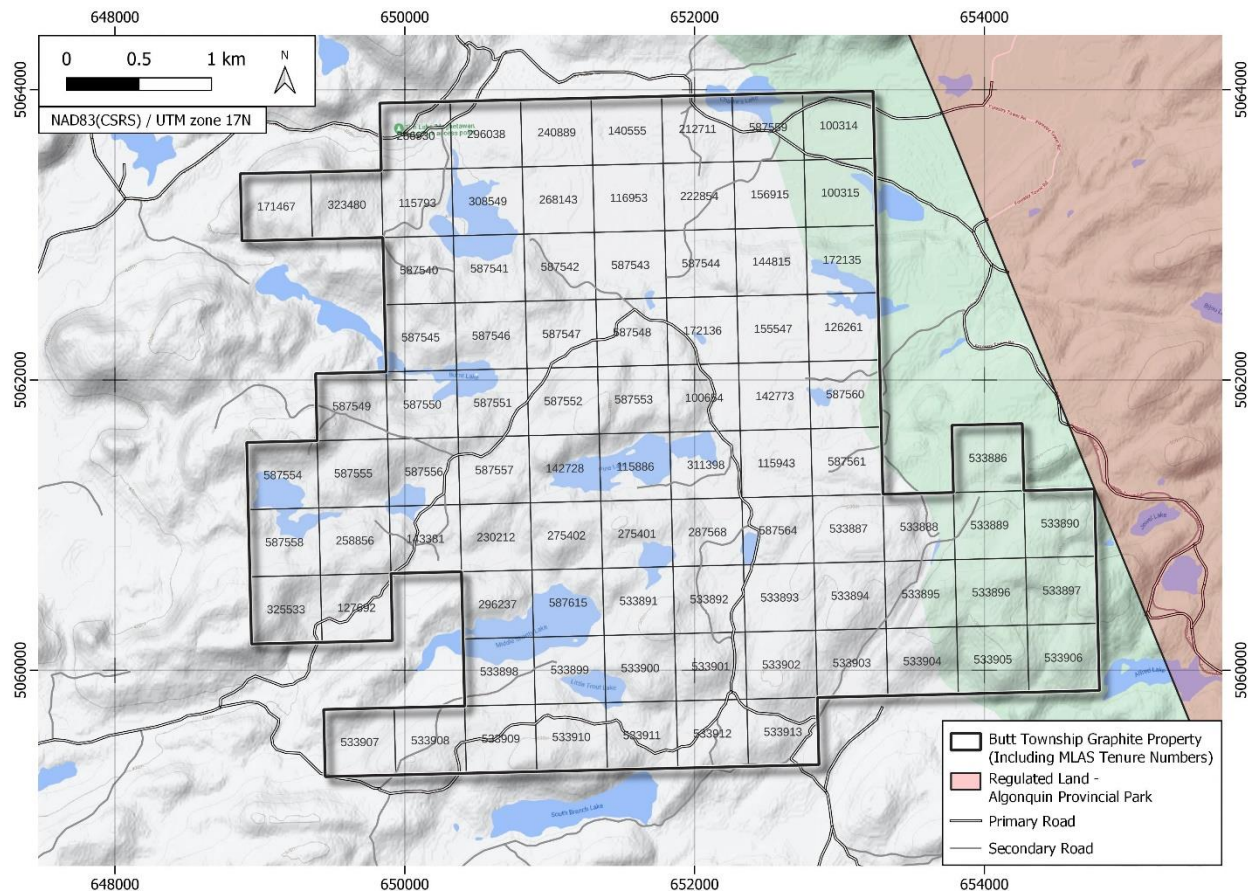


Figure 2: Butt Township Property claim tenure underlain by regional topography.

5.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Access to the Property is by road from Provincial Highway #11 at Elmsdale, Ontario about 25 km north of Huntsville (Figure 1). Huntsville is approximately 200 km by road north of Toronto. From Elmsdale, Provincial Highway 518 leads east to Kearney (10 km) then the road continues north from here an additional 10 km to Sand Lake. From Sand Lake to the Property is about 12 km on the Forestry Tower Road. A number of logging roads provide good access to all sections of the Property (Figures 2 and 3).

Algonquin Park is immediately east of the Property and the Ontario Graphite Limited property is immediately to the north (Figures 2, 3, and 4).

The town of Kearney is approximately 22 km to the southwest of the Property and Huntsville is 35 km by road to the south. The larger town Huntsville can provide meals, accommodation and general services for any exploration work in the area. Sand Lake has a number of lodges that can also provide accommodations closer to the Property.

The Property area has a cool continental climate with an average annual precipitation in the order of 1200 mm per year of which 25% falls as snow and with the annual temperatures being in the range from -16oC to +25oC. Snow accumulations are generally present for a 5-to-6-month period between November and April. In general, the climatic conditions permit exploration work to be carried out at all times of the year.

In some cases, the winter season is more preferable for carrying out geophysical and drilling work in that it provides access to normally swampy areas.

The Property area is typical of Southern Ontario’s Precambrian Shield terrain with the general topography being controlled by underlying bedrock ridges which in part are soil covered. Smaller areas may be cultivated while the remaining area is generally forest covered. Throughout the area, the soil is of a poor quality and only in small areas supports minor agriculture which is largely devoted to grazing of livestock.

Much of the Property is covered with second growth hard wood with some conifers and some open areas of lakes and swamps.

The relief in the area is quite rugged and may be up to 50 metres. The overburden is largely glacial till and glacial outwash deposits, is relatively thin, and appears to average in the order of 1 metre to 5 metres deep. Swampy areas and lakes occupy the low-lying areas between the forested rocky ridges.

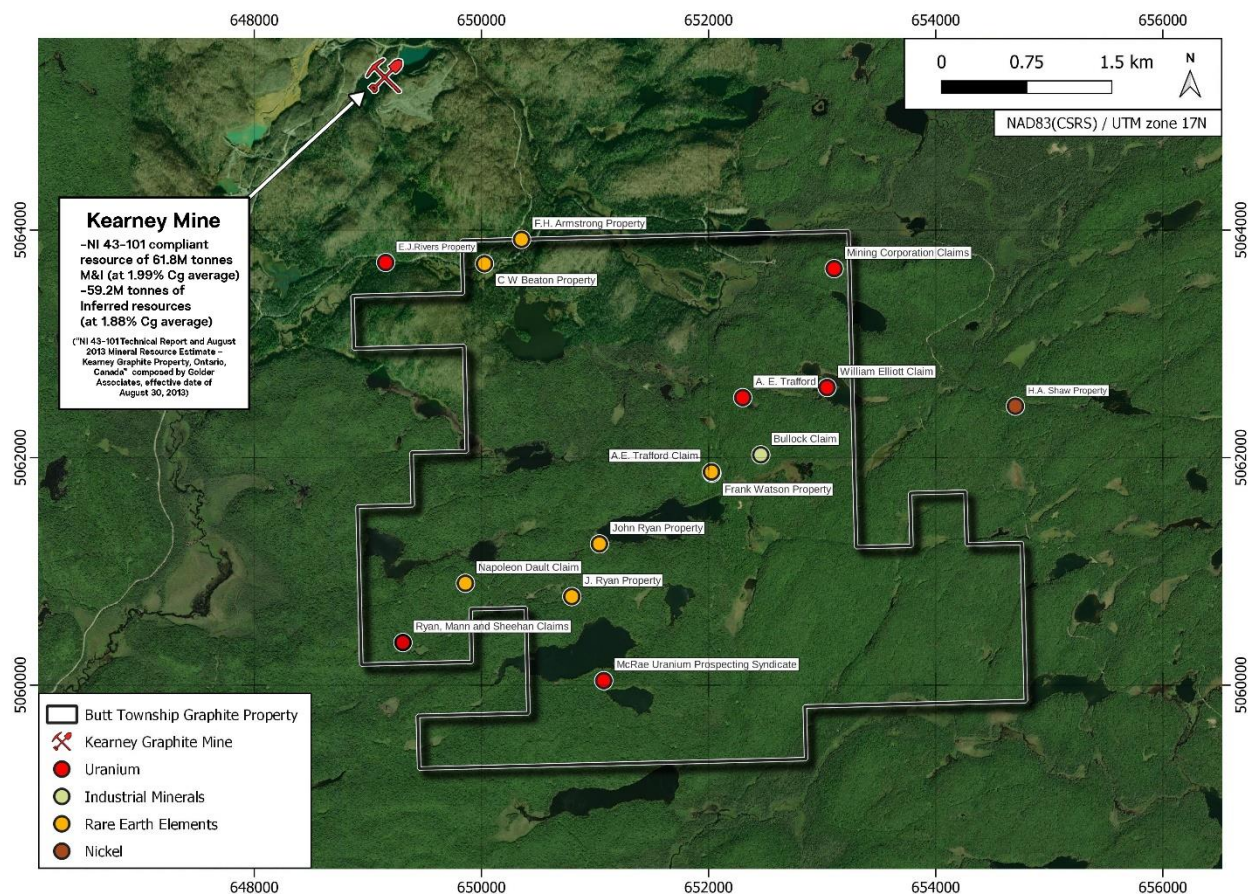


Figure 3: Butt Township Property outline underlain by government air photos. Note the four-season road running along the northern property boundary. Also shown is the location of the Kearney Graphite Mine and related infrastructure.

6.0 History

Ownership history of Butt Township property is summarized as follows:

1919-1955 (Historical Exploration/Individual Land Parcel Staking): Ryan, Mann and Sheehan, Napoleon Dault, J. Ryan, McRae Uranium Prospecting Syndicate, Frank Watson, A.E. Trafford, Bullock, William Elliott, Mining Corporation of Cobalt, F.H. Armstrong, C W Beaton.

1955-Jan 12, 2009: Claims Vacant/Abandoned.

Jan 12, 2009-Jan 8, 2010: Claims consolidated and acquired by Dan Patrie Exploration Ltd.

Jan 8, 2010-Aug 20, 2018: Griftco Corporation purchased the Property from Dan Patrie Exploration Ltd. And assumes ownership

August 20, 2018 to December 31, 2020: Latin American Minerals Inc. (now Sterling Metals Corp.) held an option to acquire the Property. The requirements to acquire the Property went unfulfilled and the Property was returned to Griftco Corp.

Dec 31, 2020 – August 8, 2022: Property held by Griftco Corp.

August 8, 2022-Present: Canoe Mining Ventures enters into a property option agreement with the vendor Griftco, with granted an option to acquire a 100 % interest in the Property.

6.1 Historical Exploration and Development Activities

Note: Much of this section of the report was derived (often verbatim) from a draft 43-101 report written on the Butt Township Property in 2013 for Griftco by L.D.S. Winter, P.Geo.

The Property was acquired for its potential to host graphite and uranium and rare earth element (REE), niobium (columbium) and tantalum mineralization associated with pegmatite dykes as initially reported by Ellsworth (1921) and Knight (1919).

The original discovery of radioactive minerals in Butt Township (Elliott occurrence) was made in 1918 during surface mining for sheet mica within pegmatites. The occurrence is exposed on the shore of a small lake, Mica Lake, in the south half of Lot 13, Con. VII and is described in some detail by both Ellsworth (1921) and Knight (1919).

Knight (1919) reports the following determinations of uranium oxide for radioactive specimen material taken from the Elliott occurrence – Specimen #1 – radioactive mineral (uraninite or pitchblende) – 74.98% uranium oxide. Specimen #2 – feldspar host-rock – 0.42% uranium oxide.

Ellsworth (1921) examined freshly exposed strippings and pits in 1920 and noted that the dyke material consisted of 75% red spar with quartz, the former containing “nuggets of radioactive minerals up to 1 inch (2.5 cm) diameter and probably of complex type”. Needle-like crystals of allanite, commonly ½” (1.25 cm) to 1” (2.5 cm) in length, were readily discernible and Ellsworth mentions the occurrence of abundant lath-shaped allanite crystals up to 10” (25 cm) in length in one pit on lot 2.

Ellsworth also reported that analysis of the coarsely crystalline allanite returned up to 3% U3O8. He also reported “grab samples of deep red spar from the dyke on lots 2 and 3”, #1, 0.26%; #2, 0.37%; #3, 0.45% U3O8 (the latter across a 3' (0.9 m) width in a pit on lot 3).

Two showings of mineralized pegmatitic dyke were reported in lots 6 and 7. Although the exposures are some 1500 feet (457 m) apart, their respective positions are approximately on a common line of strike at about N80oE and thus may indicate a single dyke or two closely parallel occurrences. The showings lie about 1200 m due east of the most easterly outcropping of a dyke to the west, but no direct structural relationship can be inferred.

The eastern showing lies in the creek valley adjacent to a trail and just below a narrow rock-walled defile extending westerly from Pine Lake. A northerly trending diabase dyke, 30' (9 m) to 40' (12.2 m) in width, is exposed on either side of the gorge.

The westerly occurrence, locally termed the “Blue Devil” showing and consisting of a sizable pit sunk on the dip of the dyke (30oN) indicates a highly quartzose vein-dyke, carrying apparent local narrow bands of nearly massive sulphides comprising pyrite, pyrrhotite and a trace of chalcopyrite. No nickel was detected. The footwall side of the occurrence is highly radioactive, and it was reported that a bulk sample from this portion of the pit yielded approximately 3% U3O8 by analysis.

In the north half of lot 10, Con. VI, in the eastern part of the Property, there are a number of narrow pegmatite dykes from 1" (2.5 cm) to 2" (5 cm) in width containing allanite crystals which are designated by Ellsworth (1921) as the Watson location.

In the north half of lot 10, Con. VII, narrow dykes of pegmatite from 1½" (3.8 cm) to 2" (5 cm) in width are reported exposed over short distances, along which scattered radioactive minerals up to ¼" (0.6 cm) diameter are observable. In the south half of lot 11, Con. VII, Ellsworth (1921) describes a pegmatite dyke 8" (20 cm) to 10" (25 cm) in width, exposed for a length of 709' (216 m) trending nearly due north. He noted radioactivity and small brownish crystals believed to be allanite. These showings are reported by Ellsworth under the heading “A.E. Trafford Claim”.

On the north half of lot 13, Con. VII, a pegmatite dyke is said to be exposed for a length of 350' (106.7 m) having an average width of 8" (20 cm). Indications of radioactivity and typical red-alteration colours are mentioned by Ellsworth, but apparently no radioactive minerals were identified. This occurrence appears to strike in a northerly direction.

In a letter dated 19 October 1953, a Mr. Fockler (Fockler, 1953) reports on the discovery of radioactive niobium (columbium) – tantalum – uranium-bearing minerals in Lot 5, Concession IX, Butt Township. The showing was within a group of 27 claims referred to as the Yankee Dam group. The showing is exposed in a waterfall in the Magnetawan River in the northern part of the Property. Fockler describes the showing and samples as follows.

“The immediate locality surrounding the showing is underlain by granitic and mica gneisses of the pre-Huronian complex. The rocks have a Grenville-like appearance and presumably are, in part, paragneissic in origin. North-easterly-trending pegmatite dykes frequently occur with regular vein-like attitude in this locality.

The occurrence reported was discovered by E.J. Rivers through Geiger reconnaissance work conducted in late July 1953. A non-magnetic dark vitreous radioactive mineral was detected in freshly blasted

pegmatitic dyke-rock outcropping as a shelf in the riverbed during a period of low water. Similar material was obtained in a pegmatite exposure along the south bank of the stream, well above water level.

Overall dimensions of the showings are approximately 140 feet (42.7 m) along the streambed by 40 feet (12.2 m) from bank to bank. Exposed vertical thickness of the pegmatite host rock is approximately 30 feet (9.2 m). The attitude of the dyke was not determined; however, it was considered to trend approximately east-west with a low dip to the north. The mineral-bearing portion of the dyke appeared to be flat-lying and to represent a sill-like mass resting on granite gneiss and overlain by mica gneiss. The feeder dyke may have a much steeper dip as evidenced by an associated vertical-dipping narrow dyke which appears to branch north-easterly from the riverbed exposure. The dyke exposure lies approximately 500 feet (152 m) westerly down-stream from the so-called Yankee Dam.

A small specimen of the mineral was submitted to Dr. D.H. Gorman, Department of Mineralogy, University of Toronto, for analysis. In his report, dated August 5, 1953, Dr. Gorman recommended that the specimen material be assayed chemically. A chemical assay made by Heys & Sons, Toronto, August 13, 1953, of the specimen material (approximately $\frac{3}{4}$ " square) yielded the following results:

Uranium oxide	9.75%
Tantalum pentoxide	0.09%
Columbium pentoxide	30.79%

Subsequently, Fockler examined the occurrence with Rivers and obtained approximately 60 pounds of sample and specimen material for further investigation. A portion of this material, comprising 2 samples totalling approximately 30 pounds in weight, was submitted to Heys & Sons for analysis. Neither sample showed any uranium values and only trace amounts of niobium (columbium) and tantalum".

Dr. D.J. Gorman, mineralogist, identified the black, glossy, radioactive mineral as pyrochlore-microlite, a complex niobium (columbium) – tantalum oxide that may contain uranium and rare earth elements (REE).

Fockler (1955) describes the Property as being underlain by granite gneiss and paragneiss which are cut by numerous east-west trending north-dipping pegmatite and basic dykes ranging up to thirty or more feet (9 m) in thickness and possessing remarkable uniformity, both in attitude and composition.

Associated with the pegmatitic dyke-rocks are the various known occurrences of radioactive minerals, comprising uraninite, niobium (columbium)-tantalum bearing pyrochlore-microlite, allanite, ellsworthite and associated hematite, magnetite, limonite and sphene. The pegmatites are characteristically intergrowths of coarsely crystalline pink or red feldspar, white to dark smoky quartz and aggregations of biotite mica. Highly radioactive dyke material invariably exhibits bright red alternation through which the radioactive minerals are interspersed as granules or as clusters of black crystals, some of which attain considerable size.

A radioactive pegmatite dyke of considerable regularity in both strike and thickness traverses the southwestern portion of the Property for a known length of 2200 feet (722 m). The showings lie in lots 2 and 3, Con. VI, Butt Twp. Where observed, the dyke cuts bands of mica gneiss and ranges from 5 feet (1.5 m) to 15 feet (4.6 m) in thickness, with an average width of approximately 10 feet (3 m). Low ground covers probable extensions of this occurrence both easterly and westerly beyond the distance traced by

outcroppings of the dyke. Of the traceable length, approximately 450 feet (137.2 m) is irregularly exposed by strippings and shallow pits put down by early investigators about 1920.

Fockler (1955) summarized his research and observations as follows. “The stakings above described appear to hold good possibilities for the occurrence of deposits of uranium-bearing ore of commercial importance. Within their group, ten separate showings of radioactive mineralization are presently known. Three of these showings have yielded highly significant values in uranium oxide, as stated in an official report of the Ontario Department of Mines. In as much as no diamond drilling has been undertaken on the showings described, the potentialities of the uranium-bearing dykes, while unknown, are considered to be promising”.

To the best of the writer’s knowledge, no significant work has been conducted on the showings reported by Fockler (1955) to the present time and it is considered that Fockler’s conclusions are still appropriate and valid.

6.2 Modern Exploration Activities

Dan Patrie Exploration Ltd. conducted a magnetometer survey using compass and GPS lines in January 2009 (Winter, 2009).

Three follow-up geophysical surveys were also conducted by Dan Patrie Exploration Ltd. on the Property as follows.

- April 2010 (Winter 2010, a); 27 line-km of line cutting, 27 line-km of total field magnetometer survey and 17 line-km of pole-dipole induced polarization (IP) survey with an “a-spacing” of 25 m and n = 1 to 6.
- July 2010 (Winter, 2010, b); 6.3 line-km of pole-dipole IP survey with an “a-spacing” of 25 m and n = 1 to 6.
- December 2011 (Winter, 2012); 9.6 line-km of total field magnetometer survey and 12.5 line-km of pole-dipole IP survey with an “a-spacing” of 25 m and n = 1 to 6.

The 2009 magnetic survey completed showed that the west-central part of the Property is underlain by rock units that appear to form two magnetic domains, one to the northeast and one to the southwest. The domain to the northeast has lower magnetic values generally below 55500 nT while the domain to southwest shows magnetic values generally above 55500 nT to maximum values of about 56200 nT. The boundary between these 2 domains trends 330o and divides this part of the Property approximately in half.

The December 2011 (Winter, 2012) magnetometer survey returned similar results to the earlier survey (Winter, 2009) and within the area surveyed confirmed the presence of two magnetic domains, an area of low magnetic susceptibility to the north and an area of higher magnetic susceptibility to the south. Three general trends or patterns are indicated by the magnetic survey, northwesterly (330o), north-easterly and east-west.

The three IP surveys showed two main areas of anomalous chargeability values, associated with variable resistivities. Anomalous chargeabilities range from in the order of 2 x background to several times background.

The main underlying bedrock units on the Property are generally medium-grained quartz-feldspar-mica-amphibole gneisses, similar to those on the Ontario Graphite Limited property to the north. When the IP chargeability anomalies were originally mapped out, it was thought that they could be due to sulphides and/or graphite in the gneisses, however, on close inspection no sulphides were observed in the gneisses. By elimination, this suggested that graphite could be the mineral producing the IP chargeability response, however, no graphite was obvious in the gneisses because of the considerable mica present.

Between 15 October and 10 November 2012, prospectors conducted a rock sampling program on the Property with the work being concentrated in the survey grids where the IP surveys had identified zones of anomalous chargeabilities, usually with associated moderate to high resistivities. The main rock type through these areas are medium grained, mainly quartz-biotite-garnet (amphibole) gneisses. Due to the proximity of the Ontario Graphite Limited property to the north, it was considered that the chargeability anomalies could be due to disseminated graphite in the gneisses. However, due to the biotite in the gneisses it is difficult to determine visually if flake graphite is present. To evaluate this potential, it was decided to conduct a prospecting and rock sampling program in the grids where the IP anomalies had been identified. Only low graphite, C (g) results were obtained with the highest values being 0.10% C (g) and the average of all samples being 0.04 C (g).

From April 17th to May 2nd, 2021 Pioneer Exploration Consultants Ltd. (Pioneer) completed an airborne magnetic survey using an Unmanned Aerial Vehicle (UAV). This survey was completed to attempt to identify a magnetic contrast between the mineralized pegmatites identified historically and the gneissic basement rocks, and to identify controls on mineralization.

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Property is located within the Kiosk Domain of the Algonquin Terrain of the Central Gneiss Belt of the Western Grenville Province, Ontario. The central Gneiss Belt and the Central Metasedimentary Belt are the 2 major subdivisions of the Grenville Province in Ontario.

The Central Gneiss Belt consists mainly of upper amphibolite and local granulite-facies, quartzo-feldspathic gneisses chiefly of igneous origin with subordinate paragneiss. The dominant structural trend is north-easterly, however, northwesterly trends occur along Georgian Bay. The Central Gneiss Belt consists of a variety of Archean to Mesoproterozoic crustal segments, all of which have been affected by the "Grenville Orogeny". Rocks of 3 main ages are present. North of the French River, reworked Archean and Paleoproterozoic gneisses of the Nipissing Terrane are intruded by Mesoproterozoic (1700 to 1350 Ma) plutonic rocks, with granitic and monzonitic rocks predominant. The bulk of the Central Gneiss Belt (Algonquin and Tomiko terranes) consists of Mesoproterozoic gneisses (1800 to 1600 Ma) intruded by 1500- to 1400-million-year-old granitic and monzonitic plutons that may represent an extension of the Eastern Granite-Rhyolite Province across the Grenville Front. The Parry Sound Terrane consists of mafic to intermediate rocks extracted from the mantle at about 1450 to 1350 Ma.

Distinctive lithotectonic terranes, some further sub-divided into domains, have been identified within the Central Gneiss Belt. The terranes and domains are distinguished by differences in rock types,

internal structure, metamorphic grade, geologic history and locally by geophysical signature. They are bounded by zones of intensely deformed layered rocks traceable for tens of kilometres.

The Algonquin Terrane consists of quartzo-feldspathic gneisses of plutonic and supracrustal origin characterized by a complex pattern of structural domains. Thus, the Algonquin Terrane is an area of Mesoproterozoic, polycyclic rocks, consisting of a number of domains (domains and subdomains). The southern and western parts of the Algonquin Terrane have been subdivided into the Britt, Ahmic, Kiosk, Rosseau, Go Home, Huntsville, Novar, McClintock domains interpreted to represent the lowest portion of a stacked succession of thrust sheets in this region. Large, folded sheets of gneissic granites with primary isotopic ages in the 1500-to-1400-million-year range occur in all these domains. Rocks of this age are common in the Eastern Granite-Rhyolite Province and the Algonquin Terrane and probably represent a section of Mesoproterozoic crust (1800 to 1600 Ma) extensively injected by granitic magmas of the Eastern Granite-Rhyolite Province. (Central Gneiss Belt, Grenville Province, Part 2, Section 19, Geology of Ontario, Easton, 1992).

7.2 Property Geology and Mineralization

The Property which lies within the Kiosk domain, is underlain by mafic, quartzo-feldspathic and metapelitic units (Figure 4) at the amphibolite to granulite grade of metamorphism, some of which are graphite-bearing as on the Ontario Graphite Limited's Property. In turn these units host radioactive pegmatite dykes which host allanite, uraninite, pyrochlore, columbite and other uranium-bearing minerals (Ferguson, 1971; Hewitt, 1967). The radioactive pegmatites occur in an east-northeast-trending structural corridor within the subject Property. The locations of the reported known radioactive/pegmatite showings (21) are summarized in Table 2. Locations of all mineral occurrences (13) located on the property is summarized in Table 3, additional descriptions of mineral occurrences on property is summarized in Table 4.

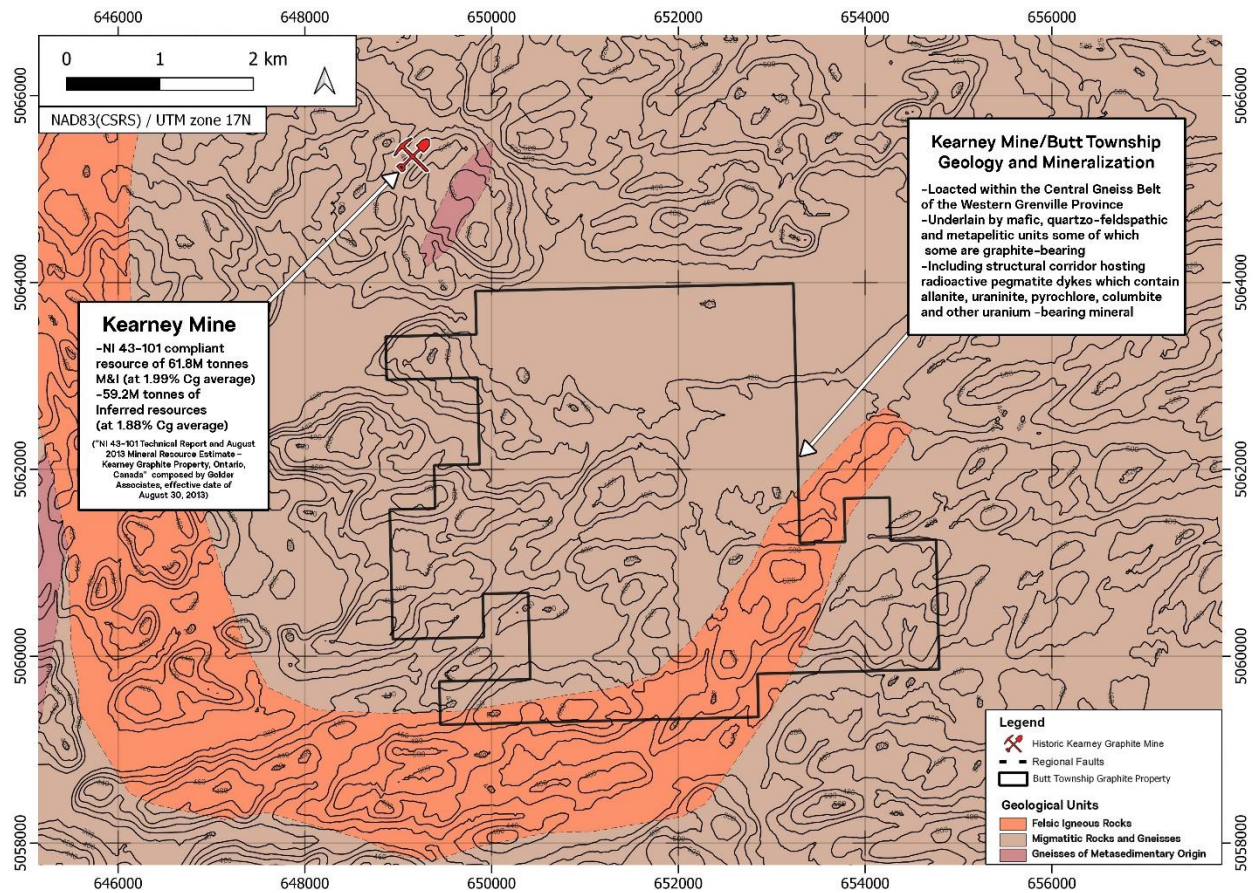


Figure 4: Geology map of the Butt Township Property and surrounding area as mapped by the Ontario Geological Survey

Table 2: Location of known radioactive pegmatite occurrences on the Property

TABLE 2 BUTT PROPERTY, RADIOACTIVE SHOWINGS LOCATIONS; UTM CO-ORDINATES, ZONE 17, NAD 83			
Showing/Site	Northing	Easting	Lot & Con.
1	5063240	648440	Lot 3, Con 9, S½
2	5063460	648720	Lot 4, Con 9, S½
3	5063720	649460	Lot 6, Con 9, S½
4	5063820	649640	Lot 6, Con 9, S½
5	5063760	650000	Lot 7, Con 9, S½
6	5064040	650380	Lot 8, Con 9, S½
7	5061040	648880	Lot 2, Con 7, S½
8	5060280	649000	Lot 1, Con 6, S½
9	5060520	649600	Lot 3, Con 6, S½
10	5060940	649800	Lot 4, Con 6, N½
11	5061740	650000	Lot 5, Con 7, S½
12	5060880	650400	Lot 5, Con 6, S½
13	5061480	651080	Lot 8, Con 6, N½
14	5062560	650740	Lot 8, Con 7, N½
15	5063000	651560	Lot 10, Con 7, N½
16	5062400	651760	Lot 10, Con 7, S½
17	5061940	651880	Lot 10, Con 6, N½
18	5062080	652300	Lot 11, Con 6, N½
19	5062520	652160	Lot 11, Con 7, S½
20	5062580	653060	Lot 13, Con 7, N½
21	5063360	652700	Lot 13, Con 7, S½

Table 3: Location of mineral occurrences on the Property

MDI Identification #	Name	Status	Primary Commodity	Deposit Class	Easting (NAD83 / UTM 17N)	Northing (NAD83 / UTM 17N)
MDI31E11NE00015	Mining Corporation Claims	Discretionary Occurrence	Uranium, Thorium	Pegmatite	653106	5063660
MDI31E11NE00008	Frank Watson Property	Discretionary Occurrence	Cerium, Uranium	Pegmatite	652030	5061862
MDI31E11NE00069	McRae Uranium Prospecting Syndicate	Occurrence	Uranium	Pegmatite	651077	5060038
MDI31E11NE00012	Ryan, Mann and Sheehan Claims	Prospect	Feldspar (Non-Metals), Silica, Cerium, Rare Earth Elements, Mica, Uranium	Pegmatite	649309	5060373
MDI31E11NE00010	J. Ryan Property	Discretionary Occurrence	Thorium Cerium	Pegmatite	650796	5060777
MDI31E11NE00002	William Elliott Claim	Prospect	Uranium, Thorium, Rare Earth Elements	Pegmatite	653044	5062615
MDI31E11NE00017	A.E. Trafford Claim	Discretionary Occurrence	Cerium, Rare Earth Elements	Pegmatite	652026	5061873
MDI31E11NE00019	C W Beaton Property	Discretionary Occurrence	Cerium, Rare Earth Elements	Pegmatite	650027	5063703
MDI31E11NE00007	Bullock Claim	Occurrence	Mica	Pegmatite	652460	5062023
MDI31E11NE00016	A. E. Trafford	Discretionary Occurrence	Cerium, Uranium	Pegmatite	652301	5062526
MDI31E11NE00018	F.H. Armstrong Property	Discretionary Occurrence	Cerium, Rare Earth Elements	Pegmatite	650353	5063917
MDI31E11NE00009	John Ryan Property	Discretionary Occurrence	Cerium, Thorium	Pegmatite	651039	5061240
MDI31E11NE00011	Napoleon Dault Claim	Discretionary Occurrence	Feldspar (Non-Metals), Cerium, MICA	Pegmatite	649859	5060894

Table 4: Descriptions of mineral occurrences on the Property

Occurrence Name	Description (From Ontario Geological Survey – MDI File)
Mining Corporation Claims	The pegmatite dyke is approximately 350 feet long and varies in width from 2 inches to 1 foot, with an average width of 8 inches. Composed of feldspar and smoky quartz in equal amounts with a little scaly black and white mica and abundant garnets and ilmenite. Including some visual indicators of the presence of radioactive minerals in the way of red coloration.
Frank Watson Property	The pegmatite dyke is composed of pink feldspar, quartz and a small amount of black mica. Pegmatite dykes range from 12 to 24 inches in width.
McRae Uranium Prospecting Syndicate	The pegmatite dyke has a Quartz core and is surrounded by radioactive black mica. Grab samples returned values of 0.21%, 0.34%, 0.14%, 0.12% and 0.005% U3O8.
Ryan, Mann and Sheehan Claims	The pegmatite dyke is composed of approximately 75% reddish potassium feldspar and quartz, dyke ranges from 2 to 8 feet in width, with zones of outcropping spanning 3 lots. Historical grab samples returned values of 0.26% U3O8, and 0.37% U3O8 and 0.45% U3O8.
J. Ryan Property	The pegmatite dyke is approximately 3 feet wide and dips 40°NE. Nuggets and grains of radioactive mineral up to 4-inch in diameter occur in two small quartz-feldspar dykes. Composed of 80% pink potash spar mixed with white/smoky quartz and scattered grains of radioactive minerals.
William Elliott Claim	The pegmatite dyke is composed of feldspar, quartz, mica, tourmaline and uraninite (pitchblende). The dyke is 90 feet long by 10 feet wide, and strikes N40°E. Uraninite samples assayed approximately 91.8% U3O8. Rare earth oxides and smoky quartz are reported from the dyke. Grab samples returned values: 79.48% U3O8, 1.56% ThO2, 5.02% REE; 76.87% U3O8, 1.83% ThO2; 43.33% U3O8, 33.42% UO3, 1.23% ThO2; 75.74% U3O8, 1.32% ThO2 and 5.58% REE.
A.E. Trafford Claim	Dyke measures 18 to 24 inches in thickness and dips about 45°NW, it is contained within a coarse, foliated hornblende gneiss. The dyke is composed of medium-grained pink to red feldspar and quartz with white and black mica in books up to 3 or 4 inches in diameter. Some scattered grains of an unidentified radioactive mineral up to ¼ inch.
C W Beaton Property	The dyke is approximately 1-2 feet in width and has been exposed for 15 feet along strike. The dyke is composed of pink spar, quartz and a little altered biotite. Ilmenite, a few small crystals of allanite and some titanite were seen.
Bullock Claim	The dyke is composed almost completely of large solid masses of white quartz and pink potash spar with approximately 10% of a mixture of granular smoky quartz, red feldspar and white mica. With garnets being particularly common in the granular mixture. Additionally, Mica was reportedly extracted from a pit in this area. Microcline crystals up to 8 and 10 inches in size and lengths of 3-4 feet have been observed in the area
A. E. Trafford	The pegmatite dyke is 8-10 feet wide and 70 feet long and strikes N15E. It is composed of coarse-grained feldspar and quartz with abundant black mica. Some small brown crystals, probably allanite and some indications of radioactive minerals were seen.
F.H. Armstrong Property	The pegmatite dyke is 3-4 feet wide and approximately 40 feet long. The dyke showed strong segregation of minerals with 12-18 inches of massive white quartz in the middle and pink potash spar at the edges. Books of altered chloritic biotite up to 2 inches in diameter occur within the feldspar. Magnetite or ilmenite and a few small brownish crystals up to 1 inch long (allanite) were observed.
John Ryan Property	The dyke is 4-10 feet wide and consisting of pink spar with some white and smoky quartz and black mica. Some evidence of the presence of radioactive minerals in the deep red spar and some grains of radioactive material.
Napoleon Dault Claim	The pegmatite dyke appears in a lens shaped style, about 6 feet wide at the thickest part and tapers to nothing at both ends, with the total length of the dyke of 100 feet.

8.0 Deposit Types

The uranium, REE, niobium (columbium) and tantalum mineralization on the Property is hosted by a set of structurally controlled pegmatite dykes trending east-northeast and dipping in the order of 30° north. This type of mineralization is similar to that in the Bancroft area of Ontario approximately 115 km to the east-southeast. In *Geology and Economic Minerals of Canada*, (Douglas, 1970, p. 168) the Bancroft area deposits are described.

“The four production mines of the Bancroft district are in the southwestern part of Grenville Province. The Bancroft area is underlain by three fairly circular masses, called the Cheddar granite, Cardiff complex and Faraday granite; each is about 6 miles (10 km) in diameter and is composed of granite, syenite, gneisses and related rocks. They are separated by metamorphic rocks of various kinds that exhibit a concentric structure. These are mainly marble, paragneiss, para-amphibolite and meta-gabbro. The principal uranium deposits are in bodies of granite and syenite with pegmatitic and metasomatic phases that either cut the wallrocks or replace them. The most favourable rocks were pegmatitic pyroxene granite or syenite, leucogranite and cataclastic quartz-rich granite-pegmatite. All are commonly high in sodium. Many ore shoots were associated with concentrations of mafic minerals and magnetite.

The Bancroft mine is in paragneiss and amphibolite on the east flank of the Cardiff complex. Its ores were in an en echelon swarm of lenticular dykes in a zone half a mile wide (800 m) and 3½ miles (5.8 km) long. The ore minerals were uranothorite and uraninite, the ore averaging about 0.1% U₃O₈. The Faraday mine is in a belt of metagabbro and amphibolite on the south flank of the Faraday granite. The ores were parts of a zone of irregular pegmatitic granite dykes, with metasomatic phases, extending at intervals over about 6000 feet (1800 m). The ore minerals were uraninite and uranothorite, with minor uranophane; ore averaged about 0.1% U₃O₈. The Canadian Dyno mine is in a belt of paragneiss and other rocks on the east flank of the Cheddar granite. The property contains a series of pegmatitic granite dykes only some of which were of ore grade. The ore minerals were uraninite and uranothorite. The Greyhawk mine is in meta-gabbro on the south flank of the Faraday granite. Its ores were in dykes of pegmatitic granite containing uraninite and uranothorite”.

In addition to the pegmatite-hosted mineralization, the Property is considered to host deep metamorphic type graphite mineralization formed as the result of the metamorphism of organic-bearing units at high temperatures and pressures typical of those in the upper amphibolite to granulite grades of metamorphism. As a result of the high temperatures and pressures during metamorphism the sediments are recrystallized and the contained organic matter is converted to crystalline flake graphite.

The units from which low values in C (g)-graphite have been obtained are recrystallized and deformed metasedimentary units. Due to the high temperatures and pressures during metamorphism, folding has resulted and may have caused thickening and thinning of the sedimentary horizons in fold hinge zones and fold limbs respectively. As a result, fold hinge zones may represent areas in which prospecting for concentrations of graphite could be focused.

9.0 Exploration

In May and June of 2022, Expert Geophysics Limited, of Aurora, Canada, was contracted to conduct an airborne passive electromagnetic survey, known as MobileMT, over the entirety of the Butt Township

property in an attempt to identify potential graphitic horizons within the gneissic country rocks as well as identify possible controls on mineralization. Results of this survey are shown in Figures 5 and 6.

Follow-up prospecting was conducted in December 2022 by Dan Patrie Exploration, where a total of 37 grab samples were collected. Samples were collected from multiple different lithologies, targeting both radioactive pegmatite dykes and associated paragneiss targets which have the ability to host flake graphite. Prospecting samples were analyzed for major/trace elements with ICP-MS and also for graphitic carbon using a furnace/IR. Results of the prospecting program are shown in Figures 7 to 12 and discussed below.

9.1 MobileMT Airborne Survey

Survey Specifications and Procedures

The MobileMT electromagnetic (“EM”) survey at Butt Township was flown at a nominal altitude above ground level (AGL) of 150-160 m, although the elevation may vary depending on the treeline. Line spacing is high resolution with a spacing of 100 metres. Navigation was accomplished with GPS with an absolute precision of 2.5 metres or better. EM data was digitized and recorded at 73,728 Hz and processed two times per second, resulting in an EM sample approximately every 11 metres along each flight line. Airborne magnetics were recorded at 10 Hz, resulting in a reading every 2.2 metres along each flight line. Elevation data used to determine ground level for this survey was sourced from Google Earth. A total of 321 line kilometres of airborne data were collected during this survey.

Instrumentation and Software

Airborne Survey System

- MobileMT (Mobile MagnetoTellurics) towed-bird with the 97 m long tow cable
- Geometrics G822A Cesium Magnetometer, installed in a separate towed-bird, sensitivity of 0.001 nT/10 Hz sampling
- EGL PC-104 based Data Acquisition System
- EGL GPS Navigation Computer/Pilot Steering Indicator
- Smartmicro model UMRR-0A Radio Altimeter, 0 – 500 m range

Base Station and Ground Support Instrumentation

- MobileMT Base Station, 4 electric channels for 4 pairs of electrodes, with data logger
- GEM Systems GSM-19 Base Station Magnetometer, (or equivalent model) 0.1 nT sensitivity, with data logger
- A Field Data Processing Workstation and a full suite of software for the quality control and preliminary processing of the airborne geophysical data

Data Processing and Presentation

EM Data Processing

The data recorded by the towed bird sensors (three mutually orthogonal dB/dt components of the EM field) is first merged with the recorded two mutually orthogonal electrical components of electric field on the stationary base station into one file. The program applies the FFT to the records of the merged file and calculates the matrices of the relation between the magnetic and electrical field signals on the different time bases and in the different frequency bands. The module of the determinant of each matrix is a rotation

invariant parameter. The program calculates the apparent conductivity as an output parameter.

The frequency for the data processing will be selected at the beginning of the survey based on the signal strength and the local noise interference. The minimum number of frequencies will be 7 which will include:

- at least 3 frequencies from the Low Frequency range - 25 Hz -100 Hz interval
- at least 2 frequencies from the Middle Frequency range - 100 Hz - 500 Hz interval

Magnetic Data Reduction

Reduction Method

Raw total magnetic field data are recorded at 0.1-second sampling intervals. The following steps are taken to reduce the magnetic field data to magnetic anomaly data.

IGRF Removal

The raw total field magnetics data is first reduced by removal of the Earth's normal magnetic field. To estimate this field, the International Geomagnetic Reference Field (IGRF) formula, updated to the time of the survey, is computed for each data sample location. The IGRF value for each data sample location is then subtracted from the observed raw magnetic data value to produce the total magnetic anomaly value for each data sample.

Removal of Diurnal and Transient Magnetic Events

The Earth's magnetic field is known to vary as a function of time. Time varying magnetic events such as magnetic storm transients and more regular diurnal variations which occur during the acquisition of magnetic data may affect the accuracy of the survey data and distort magnetic anomalies. Separation of the time-dependent variations in the magnetic field from a real geomagnetic anomaly requires an independent estimate of the transient magnetic field events. Base station magnetometer data provides this independent estimate. Base station observations are typically made at the field camp. The base readings are compared to the survey data to determine if the survey data were contaminated by transient effects. If the base magnetic data indicated significant changes in the field, the survey lines are rejected and re-flown.

Data Leveling and Mapping

In the first stage, all of the magnetic data is processed by an adjustment procedure that statistically treats the line data. It is designed to recognize and remove systematic bias and small random errors in the data which can cause survey line mis-ties. Bias errors in the magnetic data arise from changes in the level of the total field.

To remove bias errors, each profile of a given data set in the survey is shifted up or down systematically by an amount such that the sum of the square of the mis-tie errors for that data set over the entire survey network is minimized. The systematic corrections are further constrained such that the sum of the systematic corrections is zero, effectively eliminating DC shifts to the network as a whole. After this systematic adjustment, the remaining intersection mis-ties are studied and removed. This is done by giving each line a reliability weight that depends on the average absolute mis-tie of that line's data at intersections after systematic corrections. The final statistical choice of the data values at each intersection is a

function of the reliability weights of each line for each data set. The random error correction for each data set is prorated between intersections.

After editing the adjusted line data for line pulls and data quality, they are input to a minimum curvature gridding algorithm and a grid is produced.

The final measure of data quality is the ability of the data to map successfully. The coherence of the mappable anomalies and the contour interval that can be maintained without showing excessive noise are better indications of final data quality.

VLF Data

The VLF data will be delivered for selected frequencies, when available, on the best effort basis. The VLF coverage is not guaranteed and depends on the radio transmitters work and the signal strength.

Deliverable Products

Include:

- Low Frequency (one frequency from 25 Hz – 100 Hz interval) apparent conductivity Map
- Middle Frequency (one frequency from 100 Hz – 500 Hz interval) apparent conductivity Map
- High Frequency (one frequency from 500 Hz – 20,000 Hz interval) apparent conductivity Map
- Total Magnetic Intensity Map
- VLF Amplitude Intensity Map
- Digital Elevation Model Map
- Apparent conductivity grids for all extracted frequencies
- Apparent conductivity maps for most informative frequencies (max 8 maps)
- Resistivity Depth slice maps for selected depths (max 5 maps)
- Total Magnetic Intensity (TMI) Map and grid
- Reduced to Pole (RTP) TMI Map and grid (if required)
- Calculated vertical derivative (CVG) of magnetic field (if required)
- Digital Elevation Model Map
- Power Line Monitor Map
- VLF Amplitude Intensity Map

MobileMT Interpretations

The survey identified several conductive zones over the survey area which are observed on resistivity depth slices, apparent conductivity maps corresponding to different frequencies, and on VLF amplitude maps. The conductive anomalies in the high frequencies apparent conductivity and VLF amplitude show near surface conductive zones, and the resistivity-depth slices from the inverted data can be used for the resistivity distribution analysis in depth (figure 7)

There are two distinct domains of electromagnetic response, divided nearly equally along the centre of the project (Figure 5). The strongest EM response occurs in the northwest portion of the Project, which is the most closely spatially related to the Kearney Graphite mine. An intriguing feature of the survey is that the EM response (as seen clearly in the higher frequency maps) does not follow the trends identified in the drone magnetic survey (070 from North), but instead there are several conductors that

trend approximately 300 from North (Figure 6). These conductors may be prospective for graphite mineralization.

The conductive zones mostly are structurally controlled and could correspond to pegmatite dykes. The most conductive targets are prospective for zones of graphite enrichment.

It is recommended that a geophysicist analyze all existing geophysical data, including MobileMT drone magnetics, and the numerous historic IP surveys, and integrate these data with other available geological and geochemical information in order to refine targets and ultimately plan a drill program.

A full synopsis and analysis of the MobileMT data completed by Expert Geophysics is shown in Appendix A.

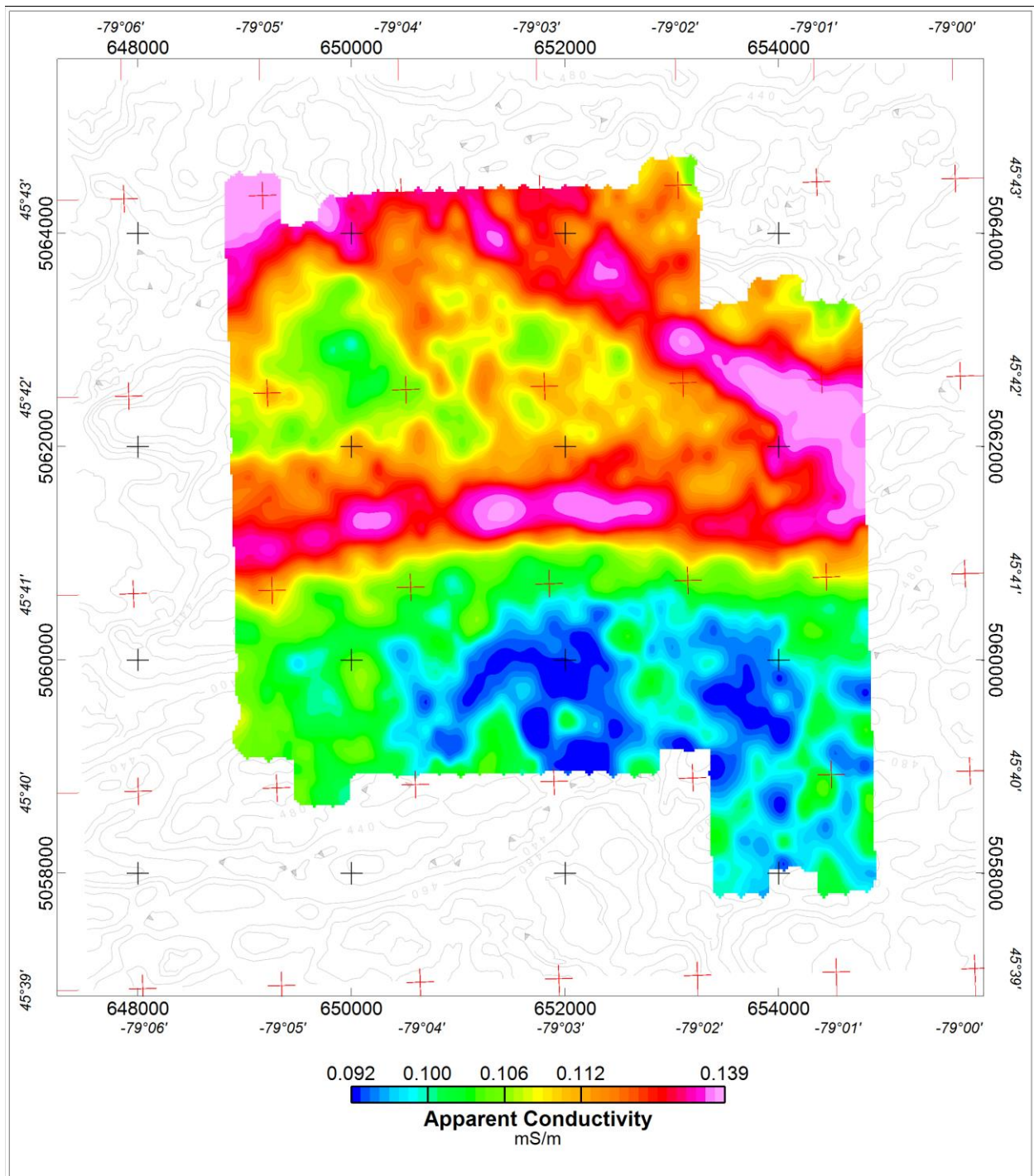


Figure 5: Apparent conductivity map at 138 Hz over the Butt Township Property from the 2022 MobileMT survey. Note the sharp distinction in EM domains from the north to the south, marked by the E-W trending conductor trending across the Property. Also note the strongest conductance response in the northwest portion of the survey area which is spatially related to the Kearney Graphite deposit.

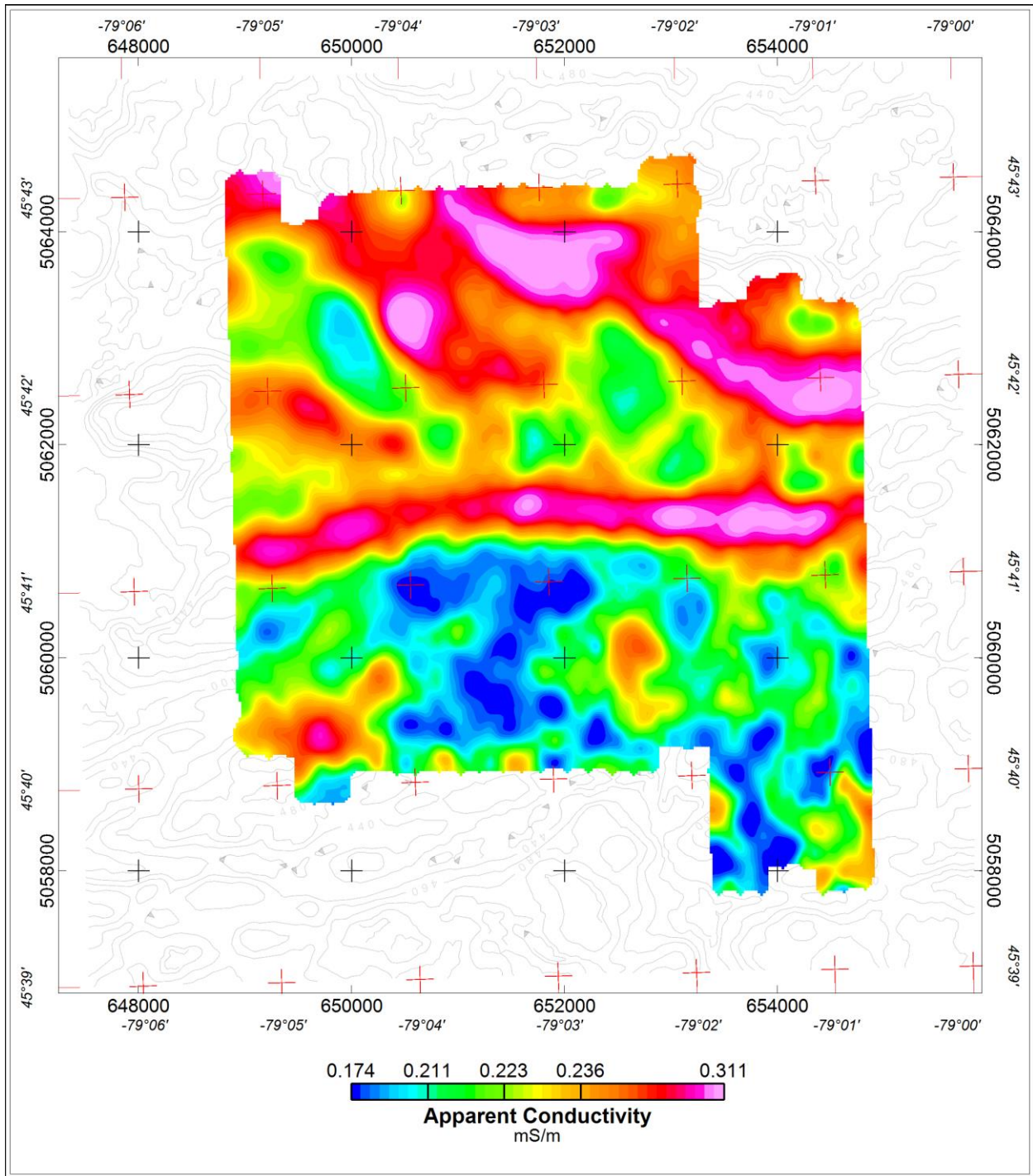


Figure 6: Apparent conductivity at 10768 Hz over the Butt Township Property from the 2022 MobileMT survey. Note the numerous linear (and isolated) areas of high conductance across the project area

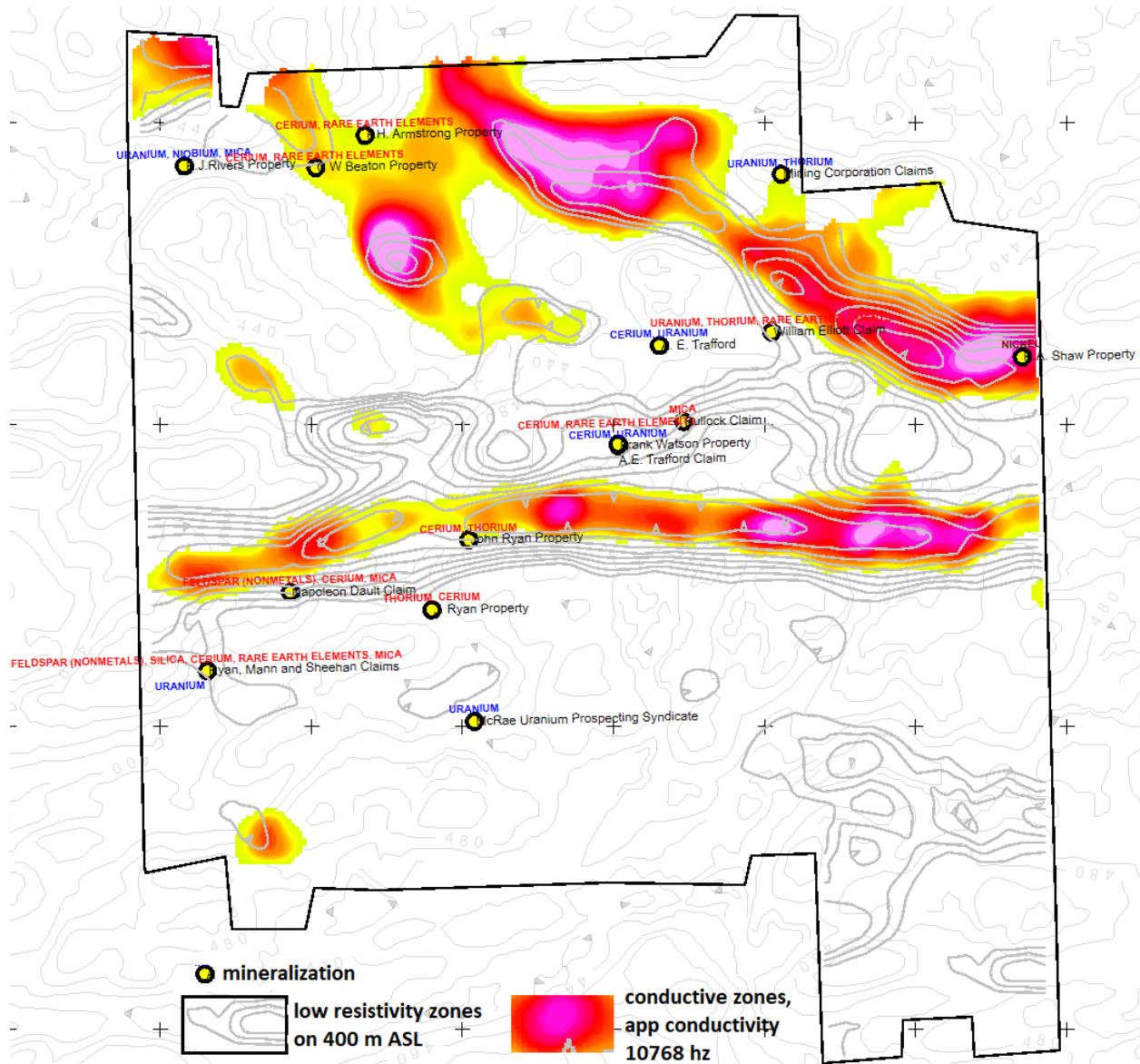


Figure 7: Low resistivity/high conductivity zones with overlapped known mineralization

9.2 Prospecting Program

Prospecting Specifications and Procedures

Outcrop prospecting and grab sampling was completed on the project from December 1st to December 15th 2022 by Dan Patrie Exploration Ltd. Prospecting and stripping efforts were focused on geophysical anomalies, known U-REE showings, and general geological trends.

In total, 37 rock samples were collected in various locations throughout the claim group. The sampling team consisted of five workers from Dan Patrie Exploration Ltd.

Table 5 displays sample locations of rock grab samples and the results of sampling are shown within figures 7-12, with maps displaying percentage of graphitic carbon and elemental assay results of Uranium, Cesium, Tantalum, Niobium and Thorium.

A full synopsis of prospecting work completed by Dan Patrie Exploration Ltd. can be found within Appendix B.

Table 5: Prospecting sample locations, displayed in NAD83(CSRS) / UTM zone 17N

Sample Number	Easting	Northing
GRDEC22-101	653119	5063720
GRDEC22-102	653163	5063721
GRDEC22-103	653031	5063754
GRDEC22-104	652997	5063761
GRDEC22-105	652933	5063767
GRDEC22-201	654717	5061118
GRDEC22-202	654207	5061341
GRDEC22-301	653238	5062270
GRDEC22-302	653187	5062237
GRDEC22-401	653746	5060870
GRDEC22-402	653729	5060844
GRDEC22-403	653701	5060794
GRDEC22-501	652418	5060232
GRDEC22-502	652380	5060176
GRDEC22-601	649139	5060325
GRDEC22-602	649154	5060343
GRDEC22-603	649156	5060344
GRDEC22-604	649177	5060329
GRDEC22-605	649188	5060374
GRDEC22-606	649180	5060398
GRDEC22-607	649117	5060405
GRDEC22-608	649204	5060506
GRDEC22-609	649196	5060512
GRDEC22-701	651023	5059757
GRDEC22-702	651118	5059743
GRDEC22-703	651130	5059746
GRDEC22-704	650594	5059664
GRDEC22-705	650424	5059721
GRDEC22-706	651589	5059442
GRDEC22-801	651010	5062057
GRDEC22-802	651047	5062149
GRDEC22-803	651166	5062240
GRDEC22-804	651696	5062394
GRDEC22-901	649479	5061829
GRDEC22-902	649858	5061617
GRDEC22-903	650424	5061734
GRDEC22-904	650426	5061726

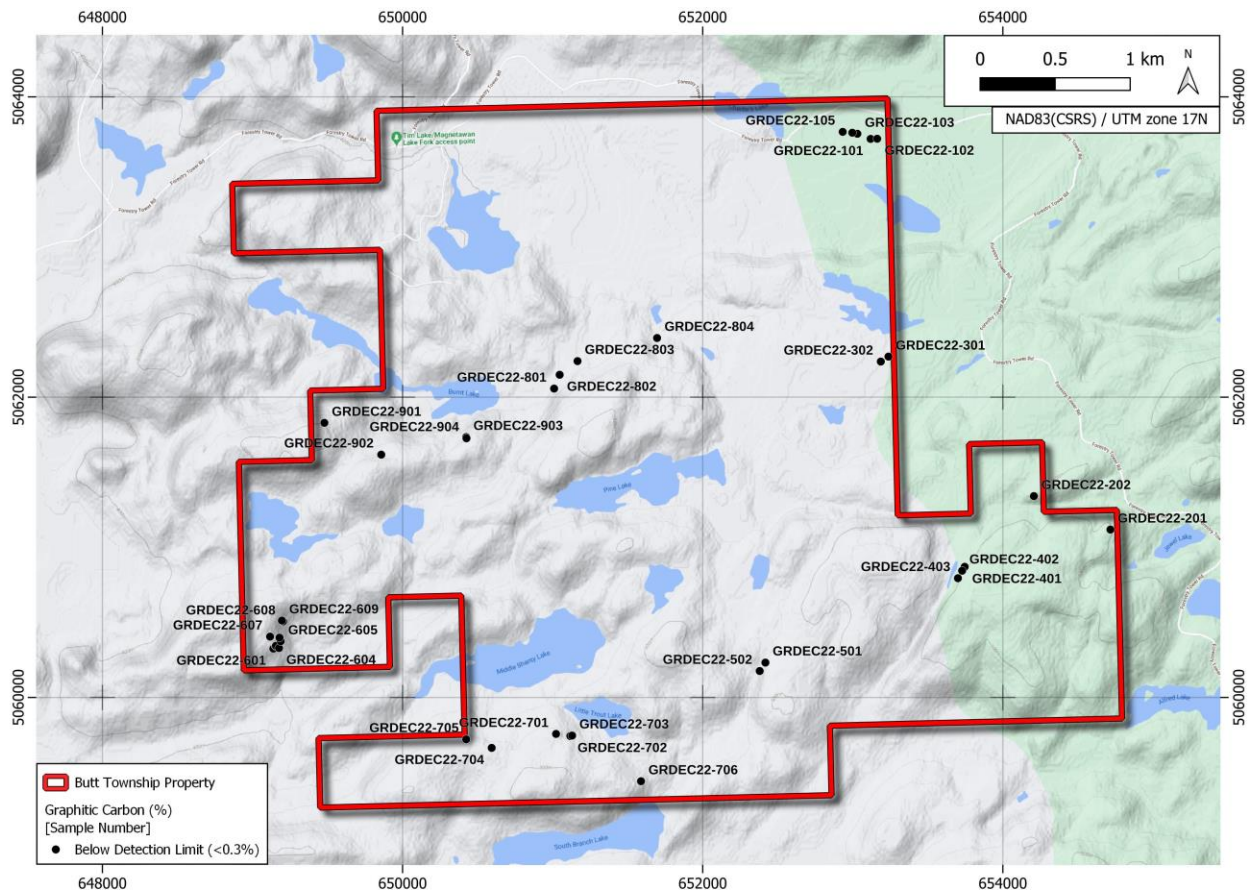


Figure 8: Map of prospecting results for the Butt Township December 2022 sampling program, displaying sample ID numbers and results of Graphitic Carbon (%)

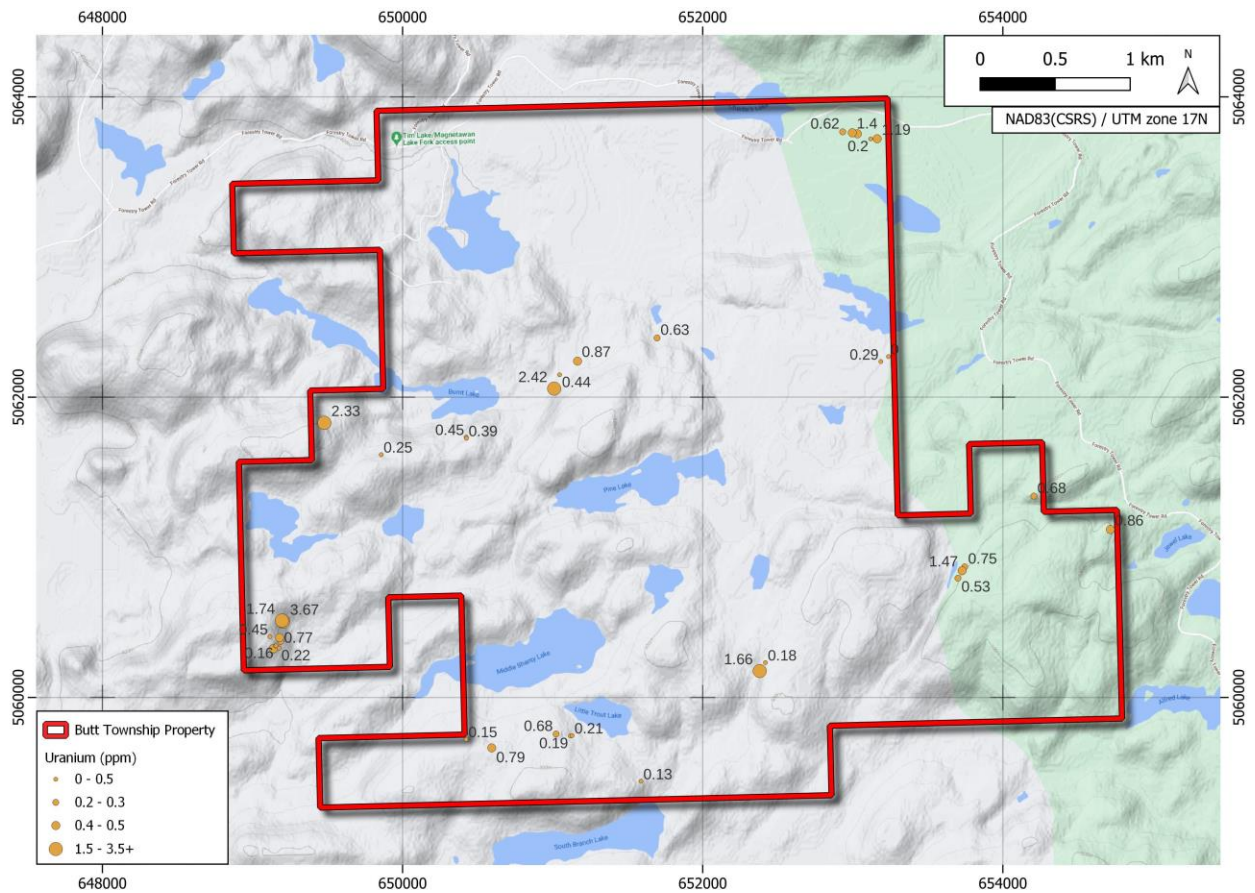


Figure 9: Map of prospecting results for the Butt Township December 2022 sampling program, displaying results of Uranium (ppm)

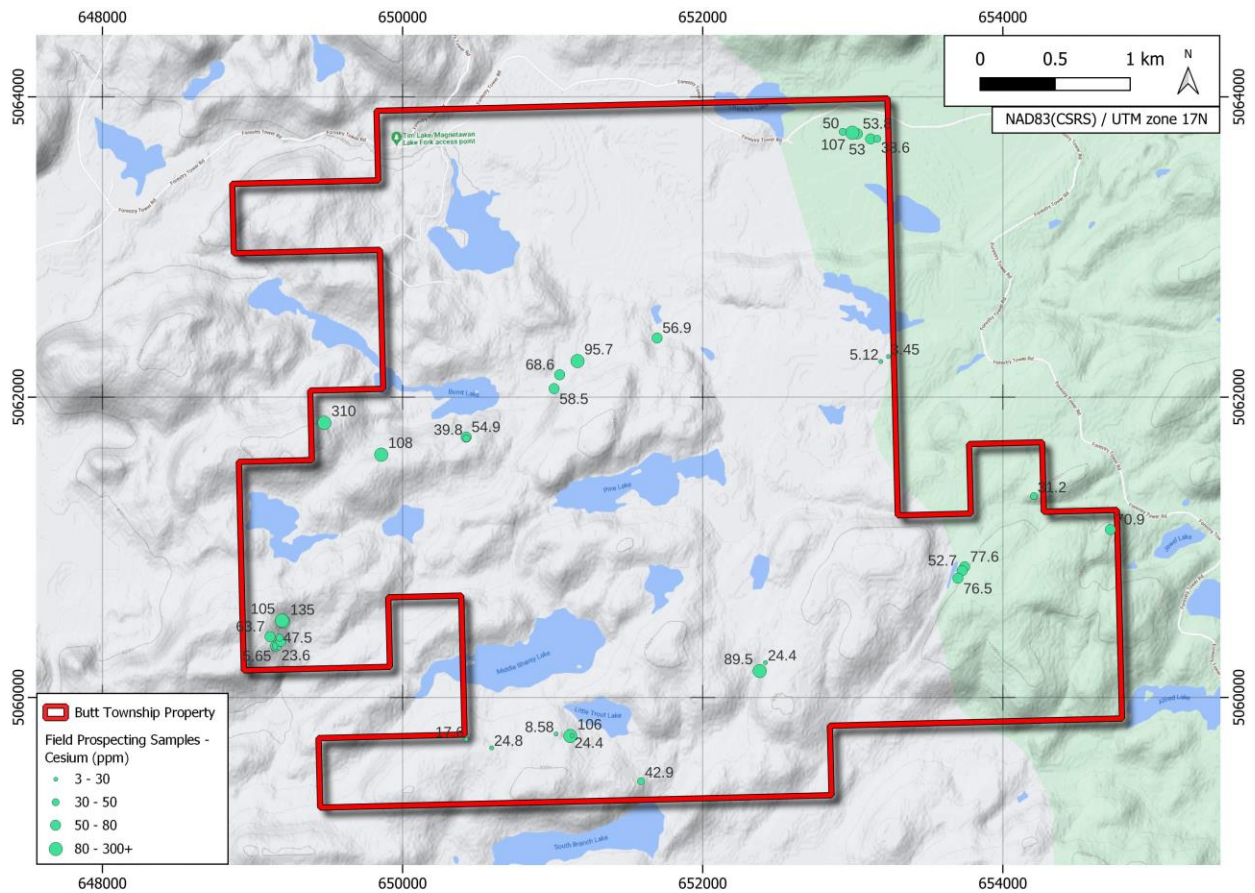


Figure 10: Map of prospecting results for the Butt Township December 2022 sampling program, displaying results of Cesium (ppm)

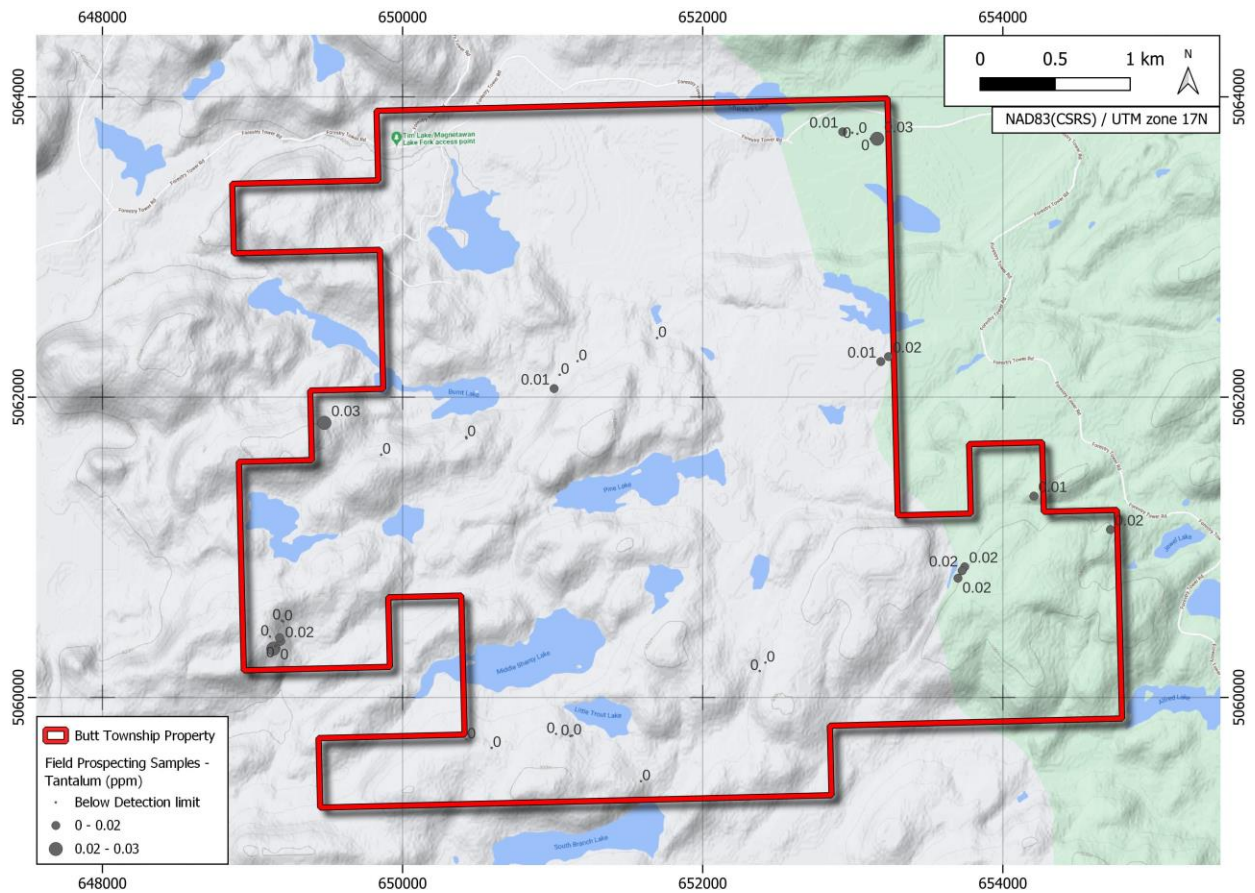


Figure 11: Map of prospecting results for the Butt Township December 2022 sampling program, displaying results of Tantalum (ppm)

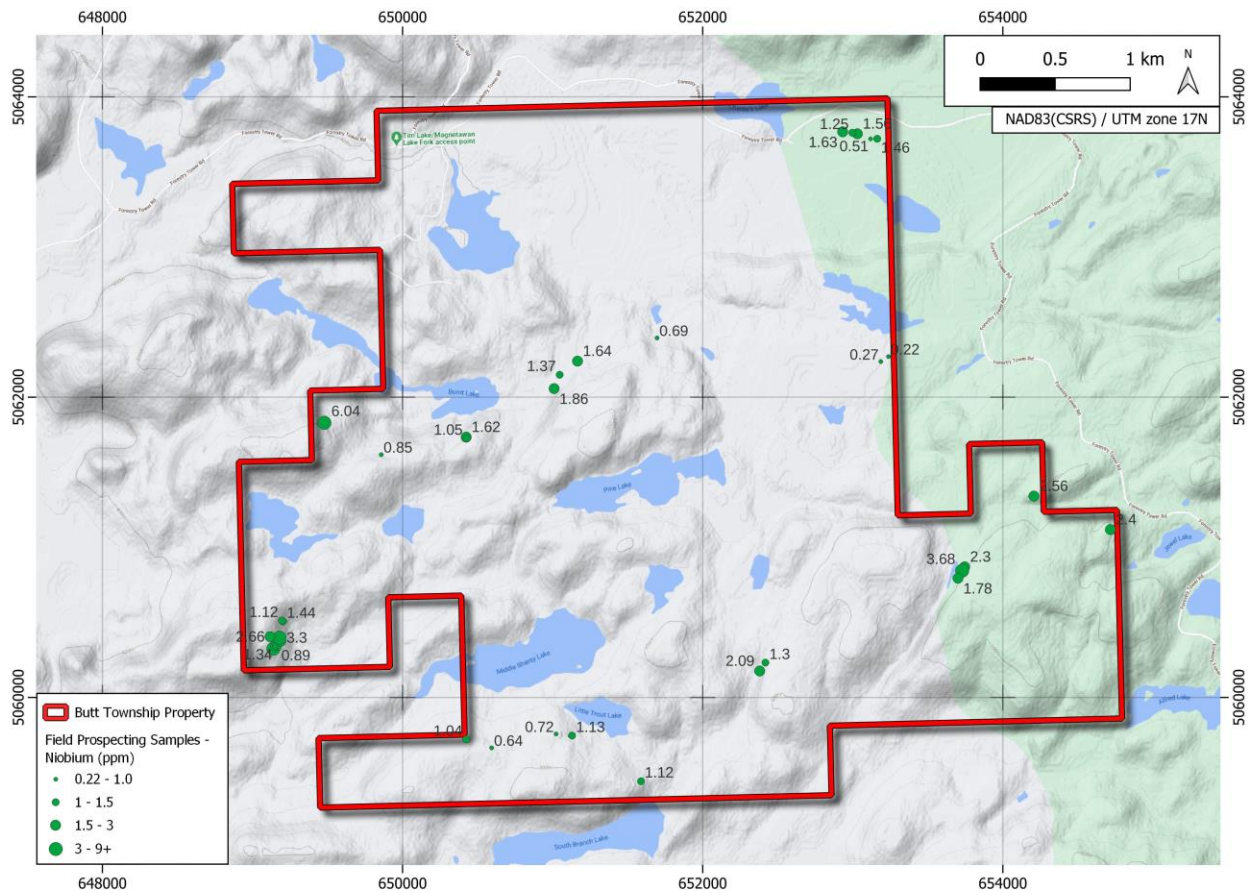


Figure 12: Map of prospecting results for the Butt Township December 2022 sampling program, displaying results of Niobium (ppm)

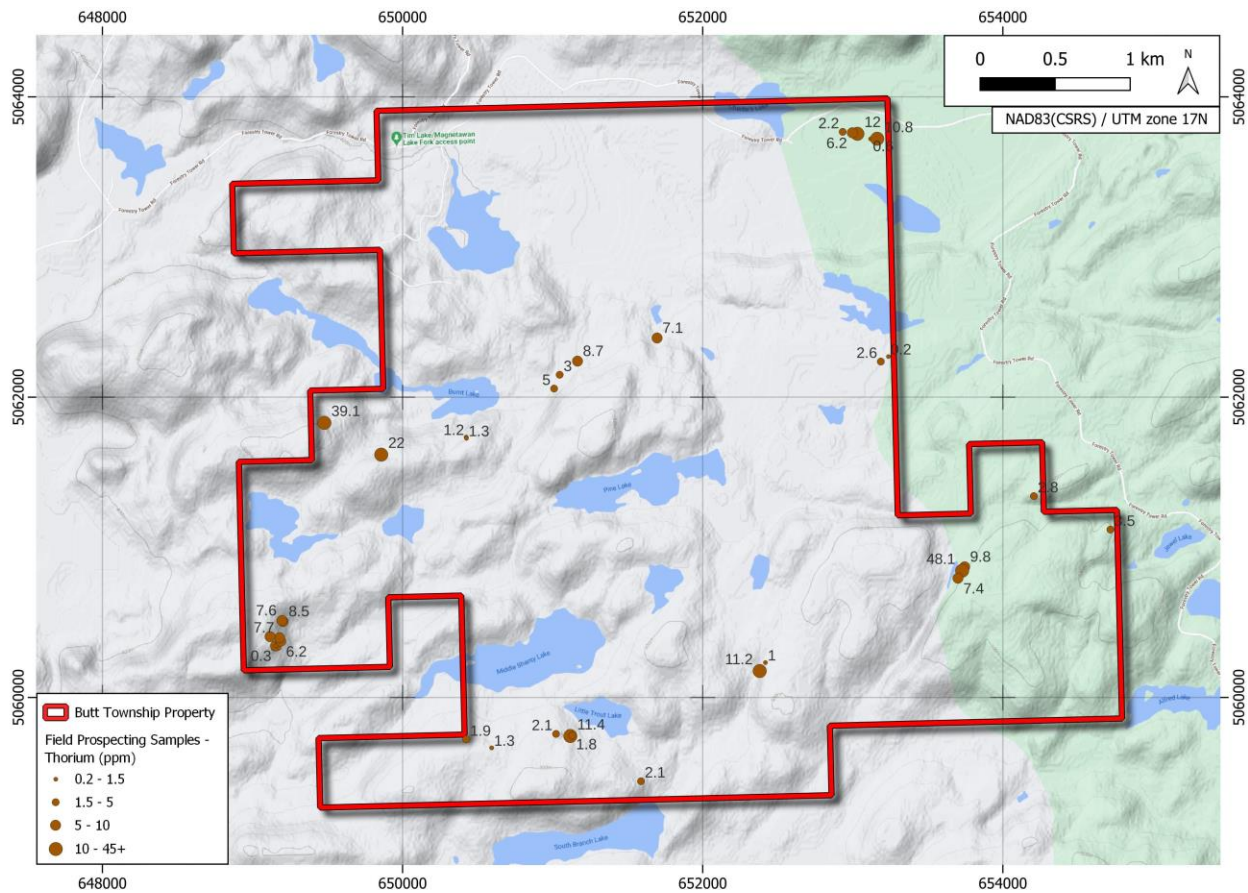


Figure 13: Map of prospecting results for the Butt Township December 2022 sampling program, displaying results of Thorium (ppm)

Dan Patrie Prospecting Interpretations

Sampling was conducted in a number of areas across the project, targeting mainly areas of conductivity or in proximity to known mineralized occurrences. No anomalous graphite was identified, but this may be due to the difficulty of differentiating graphite horizons within biotite paragenisses (with the biotite laterals looking very similar to what graphite would look like). Several samples returned anomalous values of uranium, thorium, and rare earth elements. Grab sample results of several elements of interest are displayed in figures 8-13.

10.0 SAMPLE PREPARATION, ANALYSES AND SECURITY.

Samples collected during the December 2022 prospecting program were analysed by AGAT Laboratories at their facility at 2215 27 Ave NE, Calgary, Alberta, Canada. Prepwork included drying, <5kg crush to 75% passing 2mm, split to 250g and pulverize to 85% passing 75 µm. The subsequent sample was treated with aqua regia digest and ICP/ICP-MS for major/trace elements and analysis of graphitic carbon was conducted by leach-resistive furnace/IR.

The complete summary of assay results is shown within Appendix C.

11.0 DATA VERIFICATION

The Author has reviewed and analyzed data provided by the Issuer as well as publicly available assessment reports by previous workers on or in the vicinity of the current Property. The Author has taken reasonable steps to verify the information where possible.

Some relevant information on the Property presented in this Report is based on data derived from reports written by geologists and/or engineers who may or may not have been “qualified persons” (as defined in NI 43-101). The Author has made every attempt to accurately evaluate and convey the content of those reports, and it is believed that the reports were written with the objective of presenting the results of the work performed, without any promotional or misleading intent. The Author has not verified QAQC data from historical exploration programs. The Author has assumed that the previous historic work followed best practice industry standards in place at the time the work was done. It is the Author’s opinion the historic information and other data provided are reasonable and of sufficient quality to support the conclusions and recommendations reached in this Report.

The Author has visited the Property on several occasions to review access, visit the neighbouring Kearney Mine, and attempt to locate the northern historical mineral occurrences on the Property. No significant mineralization was seen by the author, but significant vegetation growth has occurred since the early to mid 1900’s and the Author did not conduct any significant stripping to identify possible areas of historical pitting and trenching.

The December 2022 prospecting program did not use any specific QAQC measures, owing to the small number of samples collected. The author has relied on the laboratory internal analytical quality control measures to monitor the reliability of assay results.

13.0 Mineral Processing and Metallurgical Testing

No mineral or metallurgical testing was conducted during the completion of exploration activities outlined within this report.

14.0 Mineral Resource Estimates

No mineral resources have been estimated on the Butt Township property.

15.0 ADJACENT PROPERTIES

The reader is cautioned that the Author has not been able to verify the information on the adjacent properties and that the **information on the adjacent properties is not necessarily indicative of the mineralization on the Property.**

The Kearney Mine, now owned by G6 Energy Corp., is contiguous to the north of the Property. The mine was originally constructed in 1989 and operated for a 5-year period during which time it achieved a maximum production rate of 10000 tonnes per year of flake graphite. The plant was on care and maintenance until 2007 when it was taken over by Ontario Graphite Ltd. The plant and site were re-commissioned and re-opened in late 2012. The objective of Ontario Graphite was to produce approximately one million tonnes of ore per year to provide 20000 tonnes of natural, large flake, high-carbon graphite concentrate per year.

A NI 43-101 compliant report titled "NI 43-101 Technical Report and August 2013 Mineral Resource Estimate – Kearney Graphite Property, Ontario, Canada" composed by Greg Greenough, P. Geo, from Golder Associates, effective date of August 30, 2013. Which reports an Indicated Resource of 51,505,894 tonnes of ore grading 2.14% C (g) with a total Inferred Resource of 46,820,908 tonnes averaging 2.00% C (g) (Ontario MNDM Assessment File 20000009078).

Ontario Graphite Ltd. entered a CCAA receivership process with Deloitte Restructuring Inc. on February 12, 2020, and through a reverse vesting order transaction dated February 23, 2022, the Kearney mine project was acquired by G6 Energy Corp. It is unknown what G6 Energy Corp. intends to do with the Kearney mine in the near term.

There are no other significant neighbouring projects near the Property.

16.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data nor information that would make the information contained in this report misleading.

17.0 INTERPRETATIONS AND CONCLUSIONS

The Butt Township Project is an early-stage exploration project in the mining friendly jurisdiction of Ontario, Canada. Historical exploration work has identified numerous mineral occurrences of uranium and rare-earth elements. The Kearney graphite mine to the north, as well as the low-grade samples of graphite identified during prospecting in 2012, indicates the potential for graphite mineralization in addition to the known pegmatite-hosted uranium and rare-earth mineralization. In the opinion of the author, the Butt Township Property represents a property of merit and warrants further exploration and investigation.

The recent aeromagnetic survey undertaken on the Butt Township property resulted in the acquisition of high-resolution magnetic data that should aid in mapping and constraining potentially mineralized geological horizons of interest. Of particular interest and warranting follow-up are 070 from North structures that appear to be correlated with known mineral occurrences and may be helpful in identifying additional potentially mineralized pegmatite bodies. The recent MobileMT passive electromagnetic survey, pending final data and report, shows, at least on a review of the preliminary data, several strong conductors that have the potential to host graphitic mineralization. The prospecting program, although not very successful in identifying high grade mineralization of U-Th-REE or graphite, was moderately successful in identifying some anomalous mineralization.

18.0 RECOMMENDATIONS

Recommendations for future work on the Property include geophysical data compilation and in-depth analysis by a consulting geophysist, including the review of the 2022 MobileMT Survey, 2021 drone magnetic survey and earlier 2009-2011 induced polarization surveys. The focus of this review should be two-fold: a structural and lithological interpretation should be conducted, focusing on potential pegmatites as well as lithological units; and a review of EM conductors and IP anomalies in order to identify potential graphitic horizons.

Further work needs to be completed on prospecting around the geophysically identified pegmatites, as well as the anomalies identified from the EM and IP surveys. Trenching and channel sampling should be conducted on areas of mineralization or unexplained anomalies. An eventual drilling program should be planned on the conductive zones if ground work is unsuccessful at identifying graphite, and all drill core within the paragneisses should be sampled and analyzed for graphite.

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SIGNATURE PAGE

This report titled: "TECHNICAL REPORT ON THE BUTT TOWNSHIP PROPERTY, BUTT TOWNSHIP, DISTRICT OF NIPISSING, ONTARIO" and dated August 9, 2022, was prepared by and signed by the following author:

Signed at Toronto, Ontario
June 3, 2022



" Kelly Malcolm, P.Geo." (signed)
Kelly Malcolm, P.Ge.
Consulting Geologist

CERTIFICATE OF AUTHOR

I, Kelly Malcolm, P. Geo. do hereby certify that:

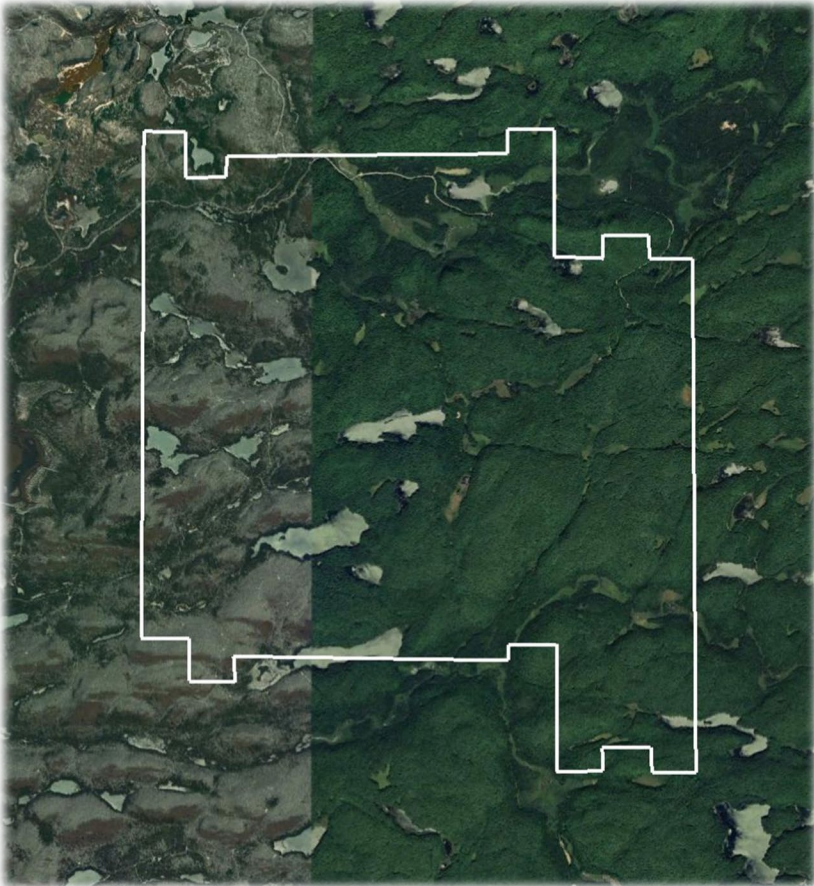
1. I hold the following academic qualifications: h.B.Sc. (Geology) and B.A. Economics from Laurentian University, 2014.
2. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (No. 2864) and a member in good standing.
3. I have worked in the mining and exploration industry for approximately 10 years and have been involved in mineral exploration for base and precious metals throughout multiple provinces in Canada, including Ontario, Quebec, Newfoundland & Labrador and New Brunswick.
4. As a qualified person, I am independent of Griftco Corporation and Canoe Mining Ventures Corporations, as defined in Section 1.5 of NI43-101.
5. I have had prior involvement with the property that is the subject of the Technical Report, including association as an independent QP for two (2) previous NI 43-101 technical reports.
6. I have visited the Butt Township Property several times, most recently on August 19th, 2022 for one day.
7. At the effective date of the technical report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed.
8. I am not aware of any material fact, or change in reported information, in connection with the subject property, not reported or considered by me, the omission of which makes this report misleading.
9. I am the author responsible for the preparation of the Report titled "TECHNICAL REPORT ON THE BUTT TOWNSHIP PROPERTY, BUTT TOWNSHIP, DISTRICT OF NIPISSING, ONTARIO" and dated August 9, 2022.

APPENDIX A – GEOPHYSICAL REPORT

Data Acquisition and Processing Report

Helicopter-borne MobileMT

Electromagnetic & Magnetic survey



Butt Property Block MobileMT Project

in the Nippising District of Northeastern Ontario, Canada
for Griftco Corporation,
by Expert Geophysics Limited.

Address:

16 Mary St., Aurora, Ontario, L4G1G2

Tel: (+1)-647-657-4774 (EGL)

info@expertgeophysics.com

www.expertgeophysics.com

'Expert Geophysics' Job #22044
September, 2022



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1 Executive Summary

Expert Geophysics Limited (EGL) conducted a helicopter-borne **MobileMT** electromagnetic and magnetic survey in the Nipissing District of Northeastern Ontario over the Butt Property for **Griftco Corporation**. Electromagnetic and magnetic geophysical data were acquired using EGL's airborne **MobileMT** system. Please refer to Appendix I for the Company Profile and Appendix II for a description of the **MobileMT** technology.

The purpose of the survey was mapping bedrock structure and lithology, including possible alteration and mineralization zones, observing apparent conductivity corresponding to different frequencies, inverting EM data to obtain the distribution of resistivity with depth, and using VLF EM and magnetic data to study properties of the bedrock units. A total of 2 production flights were flown to complete 348 line-kilometers of the survey over a 32 sq.km area.

The survey was flown using a Eurocopter AC 350 BA+ helicopter, registration C-GHOP, of the aviation company Panorama Helicopters. The survey production flights started on May 28, 2022 and data acquisition was completed on May 29, 2022. The survey operations were conducted from Huntsville, Ontario, Canada.

The survey lines are oriented N-S (0°N) at 100 m spacing, while tie lines are oriented perpendicular to the survey lines and spaced at 1000 m.

The geophysical survey results are presented in the form of digital databases, maps, grids, sections, elevation slices and 3D voxels. The report describes the data acquisition, processing and inversion procedures, equipment and digital data specifications, and basic data analysis.

2 Introduction

This report describes the **MobileMT** airborne electromagnetic and magnetic survey that **Expert Geophysics Limited (EGL, Appendix I)** performed for **Griftco Corporation** during the period from May 28, 2022–May 29, 2022, over the Butt Property located in the Nippising Distribution of Northeastern Ontario. Electromagnetic passive fields and magnetic field data were gathered using the **MobileMT** helicopter-borne system (Appendix II).

The Survey Area section of the report contains a description of the survey area and flight paths. The Field Operations section includes information about the operation flow, the airport and base station locations and flights dates. The Survey Equipment section describes the main and ancillary equipment used for data acquisition. The Data Processing and Deliverables Specifications section consists of main data processing and inversion procedures and final products description. The Survey results discussion section includes basic data analysis and recommendations for further data analysis.

The following table includes a brief reference of the survey specifications (Table 1).

Table 1 – Summary Project Information

Client:	Griftco Corporation
Client contact:	Kelly Malcolm email: kmalcolm@genericgeo.ca
EGL Job Number	#22044
Survey area location:	the Nippising District of Northeastern Ontario
Crew and aircraft location:	Huntsville, Ontario, Canada
Mag Base station location:	NAD83 UTM Zone 17N, 629907m E; 5075705m N
EM Ref station location:	NAD83 UTM Zone 17N, 650192m E; 5066217m N
Block:	Butt Property
Total line kms:	348 line-km
Total Survey Area:	32 sq.km
Traverse line direction/spacing:	0°; 100 m
Tie lines direction/spacing:	90°; 1000 m
Dates flown:	28/05/2022 – 29/05/2022
Helicopter:	Eurocopter AC 350 BA+, C-GHOP, Panorama Helicopters
Average survey speed:	21 m/sec
Average Helicopter terr.clearance:	165 m
Average magnetometer clearance:	88 m
Average EM sensor clearance:	69 m
Coordinates Datum:	NAD83
Coordinates Projection:	UTM Zone 17N, Central Meridian 81° W (Zone 17N)
MobileMT extracted frequencies Hz:	42, 71, 84, 103, 138, 165, 209, 267, 339, 420, 533, 676, 844, 1067, 5382, 6786, 8550, 10768, 13571
VLF extracted frequencies, kHz:	24.00, 25.20

3 Survey Areas and Flight Specifications

The **MobileMT** Butt Property survey area is located in the Nippissing District of Northeastern Ontario (Figure 1).

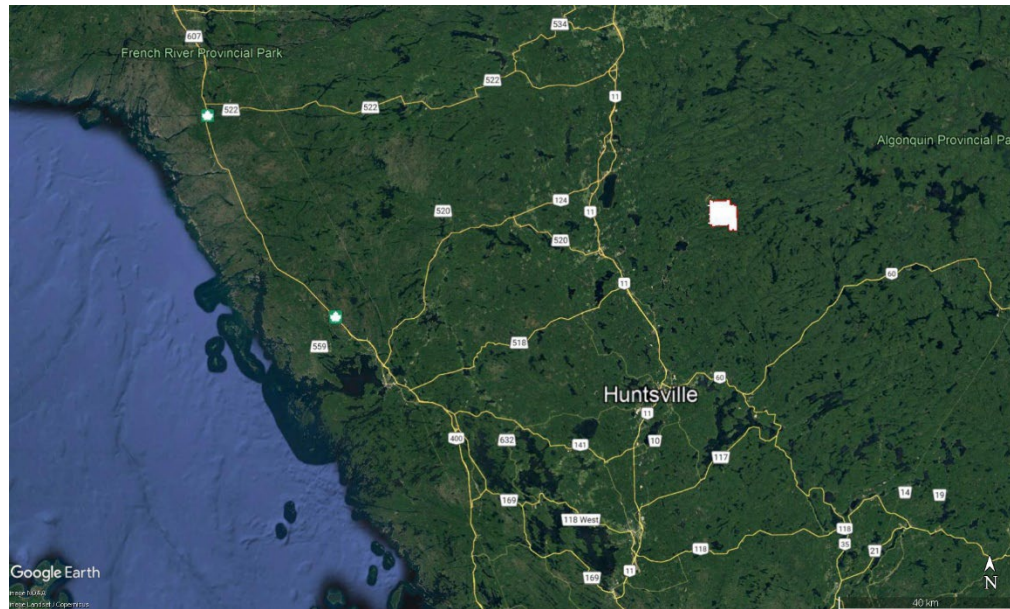


Figure 1 – Survey Area Location with respect to Huntsville city.

The survey was flown with a Eurocopter AC 350 BA+ helicopter, registration C-GHOP, operated by the aviation company Panorama Helicopters.

- Average terrain clearance of the helicopter during the survey was 165 m, at average speed 21 m/sec.
- Average terrain clearance of the magnetometer bird during the survey was 88 m.
- Average electromagnetic sensor terrain clearance 69 m.

3.1 Butt Property

The **MobileMT** Butt Property is located in the Nippissing District of Northeastern Ontario. The flight path over the survey block is presented in Figure 2.

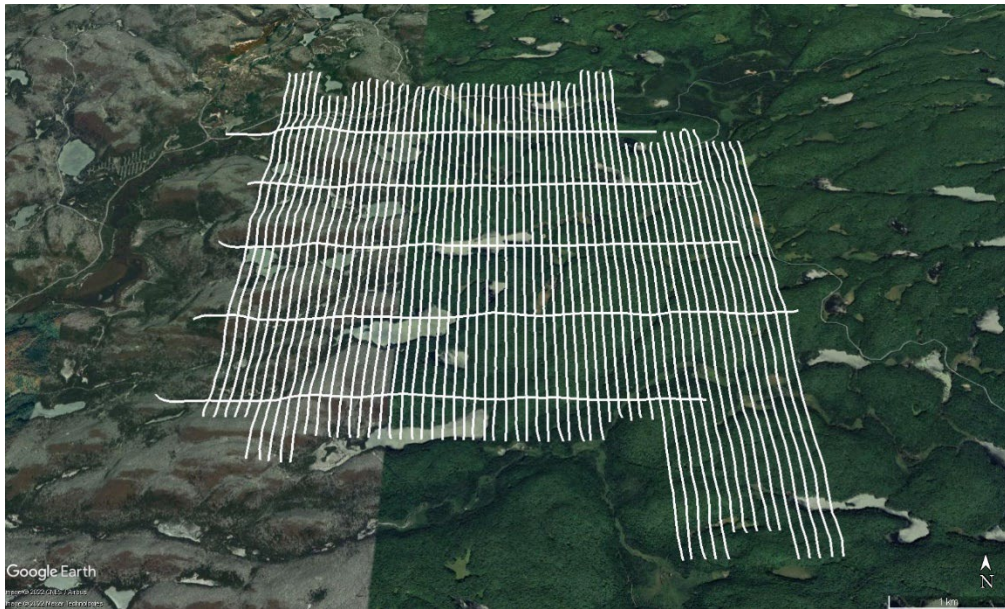


Figure 2 – Butt Property flight path

The "NAD83 /UTM Zone 17N" coordinate system information is displayed in Table 2. The survey flight lines specifications are in Table 3.

Table 2 – Coordinates of the survey block boundary (NAD83,UTM Zone 17N)

Block Boundary			
X	Y	X	Y
650414	5059753	649827	5063907
649440	5059729	649838	5063444
649451	5059266	648865	5063421
652859	5059349	648876	5062958
652847	5059812	649849	5062981
654795	5059860	649871	5062055
654760	5061249	649385	5062044
654273	5061237	649396	5061581
654262	5061699	648909	5061569
653775	5061687	648942	5060180
653787	5061224	649916	5060204
653300	5061213	649905	5060667
653232	5063990	650391	5060678

Table 3 – Flight lines specifications for Butt Property

Line spacing, m	Lines direction	Line numbers	# of lines	Line kms
100 m (traverse)	0°	1000-1580	65	319
1000 m (tie)	90°	8960-9000	5	29
Total			70	348

Line paths with line numbers are presented on the corresponding map of Appendix III

4 Field Operations

4.1 Operations schedule

The survey operations were conducted from Huntsville, Ontario, Canada. The survey was executed in 2 production flights starting on May 28, 2022 and data acquisition was completed on May 29, 2022. A description of the daily survey activities is provided in Table 4.

Table 4 – Operations schedule

Flight	Date	Description of Daily Activities/Line Km Flown (km)
1	2022-05-28	Production flight flown. 164 km
2	2022-05-29	Production flight flown. Acquisition completed. 182 km

4.2 Aircraft parking and base station locations

Locations of the aircraft parking, magnetic base station and MobileMT reference base station are specified in Table 5.

Table 5 – Aircraft parking and base station locations

	Position
Aircraft parking	Huntsville, Ontario, Canada
Mag base station	NAD83 UTM Zone 17N 629907m E; 5075705m N
EM Ref station	NAD83 UTM Zone 17N 650192m E; 5066217m N

4.3 Office and Field Personnel

The following personnel participated in the project support and field operations:

Project Manager: Andrei Bagrianski (EGL);

EGL Operator/Field Crew Chief: Greg Luus (EGL);

EGL Operator: David Veverka (EGL);

DataQC, Processor: Andrei Bagrianski (EGL), Julian Boada (EGL);

Pilots: Bruno Prieur (Panorama Helicopters);

Final data processing, finals producing, report: Alexander Prikhodko (EGL), Aamna Sirohey (EGL),

Farzad Gholamian (EGL).

5 Survey Equipment and Specifications

5.1 Equipment composition

The main instrumentation installed on the **MobileMT** tow-bird:

- Three orthogonal induction coils (1.4 m diameter each) to measure naturally occurring magnetic fields in the frequency range 25 Hz – 20,000 Hz
- Geometrics G822A Cesium Magnetometer, installed in a separate towed-bird, 20 m above the **MobileMT** bird, sensitivity of 0.001 nT/10 Hz sampling
- GPS antenna, installed on the towed-bird with the magnetometer.

The main instrumentation installed on the helicopter:

- EGL PC-104 based Data Acquisition System
- EGL Navigation system with Pilot Steering Indicator
- Smartmicro model UMRR-0A Radio Altimeter, 0 – 500 m range
- GPS antenna, installed on the helicopter tail

Base Stations and Ground Support instrumentation comprises:

- **MobileMT** Ground Base Station, 4-channel (2 channels for signal and 2 channels for reference signal), to measure variations of the electric field in two directions with 4 pairs of electrodes. Electrical line length –100 m each line, direction YX –237 degrees, YZ –199 degrees.
- GEM Systems GSM-19 Base Station Magnetometer, 0.1 nT sensitivity, with data logger;
- A Field Data Processing Workstation and a full suite of software for the quality control and preliminary processing of the airborne geophysical data.

MobileMT VLF specifications:

- VLF-EM System: EGL proprietary digital system
- Model: Matrix Plus
- Manufacturer: EGL
- Antenna: used in the MobileMT three orthogonal coils (x,y,z)
- Primary Sources: up to 4 discrete frequencies (stations)
- Output Parameters: Amplitude (secondary field), vertical and planar ellipticities, azimuth, tilt angle
- Sample Rate: 0.1 second
- Gain: Constant gain setting

- Filtering: No filtering

MobileMT EM specifications:

- Airborne receiver: Three orthogonal induction coils (1.4 m diameter each)
- Airborne shell: Aerodynamic shaped capsule
- Digitizing rate: 73,728 Hz
- Tow cable length: 97 m
- Ground sensors 4 pairs of electrodes
- Electrode separation 100 m
- EM base station line directions 237 °, 199 ° (base station 1);
- Frequency range: 25 Hz – 20,000 Hz
- Output computed parameters: Apparent conductivity for selected frequencies
- Output frequencies: Selectable from 25 Hz – 20,000 Hz depending on signal strength.

Selected frequencies and corresponded frequency gates are in Table 6

Table 6 – Frequency gates extracted from the data (Hz) for the Butt Property.

Start	End	Center
36.1	48.3	42
57.3	76.7	70.8
72.3	96.6	84
91	121.8	102.7
114.7	153.4	138.2
144.5	193.3	165.3
182.1	243.5	209.3
229.4	306.8	267
289	386.6	338.9
364.1	487.1	420.3
458.8	613.7	533.3
578	773.2	676
728.3	974.1	844.3
917.6	1227.3	1067.4
4624.3	6185.3	5381.8
5826.2	7793	6785.5
7340.6	9818.5	8549.7
9248.6	12370.6	10767.6
11652.5	15585.9	13571.4

5.2 The Airborne Magnetometer System

The airborne magnetometer is a state-of-the-art system developed by EGL. It utilizes a Geometrics G822A cesium magnetometer sensor, installed in the towed-bird and the high accuracy Larmor frequency counter developed.

5.3 The Airborne GPS Navigation System

EGL uses a proprietary GPS navigation system utilizing the GPS Receiver with Linx RXM-GNSS-TM GPS Engines. The key features of the GPS Receiver are:

- L1 1575.42MHz, C/A code
- 33-channel satellite tracking
- Position accuracy: 2.5m
- 10 Hz update rate
- Constellation System Support:
 - GPS
 - GLONASS
 - GALILEO
 - QZSS
- DGPS support:
 - (SBAS) Satellite-Based Augmentation System
 - (RTCM) Radio Technical Commission for Maritime Services
 - (WAAS) Wide-Area Augmentation System
 - (EGNOS) European Geo-Stationary Navigation System
 - (MSAS) MTSAT Satellite-Based Augmentation System
 - (GAGAN) GPS-Aided Geo-Augmented Navigation

An EGL Computer/Pilot Steering Indicator is used to compute the flight path grids in real-time onboard the helicopter (Figure 3, Figure 4).



Figure 3 – EGL Navigation Computer, Moving-map Display



Figure 4 – Pilot Steering Indicator and Radio Altimeter Indicator

5.4 Data Acquisition System

The data acquisition system features an EGL PC-104-based data acquisition system. The EGL data acquisition system is an instrument developed by EGL for airborne geophysical data acquisition tasks. It features EGL proprietary technology and software. The EGL data acquisition system simultaneously records data on internal flash disk and displays it on a color LCD display, at a repetition rate of 0.33 sec, for post-flight computer processing. The five main functions fulfilled by the data acquisition system are: 1) system control and monitoring, 2) data acquisition, 3) real-time data processing, 4) navigation, and 5) data playback and analysis.

5.5 Radar-Altimeter

A Smartmicro model UMRR-0A radar altimeter system records the ground clearance to an accuracy of 3% over a range of 0 ft to 1,640 ft (0 to 500 m). The altimeter is interfaced to the navigation system and the data acquisition system with an output repetition rate of 10 Hz and digitally recorded.

5.6 MobileMT ground base station

The MMT Ground Base Station comprises:

- 4 pairs of electrodes, 100 m separation each;
- Line directions 237 °, 199 ° (base station 1);

- EGL PC-104 based Data Acquisition System with a GPS system to record the GPS time together with the electric data;
- A power supply unit.

5.7 MobileMT Magnetometer base station

The Magnetometer Base Station was a GSM-19 Overhauser magnetometer. The base-station magnetometer, with digital recording, operated continuously throughout the airborne data acquisition, with a sampling interval of 1 seconds, and sensitivity of 0.1 nT. The ground and airborne system clocks synchronized using GPS time, to an accuracy of far better than 1 second. At the end of the day's work, the digital data transferred from the base station's data-logger to the FWS. This base station located in a place with low magnetic gradient (less than 2nT/m). The base station sited away from moving steel objects, vehicles or hydro transmission lines to ensure minimum interference and noise levels.

5.8 Field Computer Workstation

The Field Data Processing Workstation (FWS) is a dedicated computer system for use at the technical base in the field. The workstation to be used on this project is designed for use with Geosoft OASIS Data Processing Software. It is also capable of processing and imaging all the geophysical and navigation data acquired during the survey, producing semi-final, preliminary-levelled maps.

The main features of the FWS are:

- Portability;
- Digital Data Verification - flight data quality and completeness were assured by both statistical and graphical means;
- Flight Path Plots - flight path plots quickly generated from the GPS satellite data to verify the completeness and accuracy of a day's flying;
- Versatility - the FWS used in both the field and the office. Data pre-processed in the field uploaded to the computers at the Data Processing Centre to speed up data turnaround;
- Preliminary Maps - the FWS software permitted creation preliminary maps of the electromagnetic and magnetic data during the survey;

- Quality Control – acquired data quickly and efficiently checked for quality in the field on daily basis.

6 Data Processing and Deliverables Specifications

6.1 MobileMT EM Data Processing

The data recorded by the towed bird sensors (three mutually orthogonal dB/dt components of the EM field) is first merged with the two recorded, mutually orthogonal components of the electric field from the stationary base station into one file. A proprietary program, developed by EGL, applies FFTs to the records of the merged file, and calculates the matrices of the relation between the magnetic and electrical field signals for different time bases and in the different frequency bands. The modulus of the determinant of each matrix is a rotation invariant parameter and is used as the main output parameter.

The frequencies extracted for data processing for the surveyed block are based on signal strength and local noise interference. The selected frequencies for the survey are presented in Table 6.

6.2 MobileMT EM data inversions

The 2D inversion of MobileMT EM data was performed for all surveyed lines using MARE2DEM 2021 version program code (Key, K., Owall, J., 2011. *A parallel goal-oriented adaptive finite element method for 2.5-D electromagnetic modelling*. Geophys J Int 186, 137–154; Key, K., 2012. *Is the fast Hankel transform faster than quadrature?* Geophysics 77, F21–F30; Key, K., 2016, MARE2DEM: a 2-D inversion code for controlled-source electromagnetic and magnetotelluric data. Geophysical Journal International, 207(1), 571–588). The software is developed with support of the Electromagnetic Methods Research Consortium at Columbia University.

The main features and benefits of the MARE2DEM code include:

- It is the first goal-oriented adaptive finite element code for MT;
- Uses structured and unstructured model grids (mesh) with fully automatic unstructured mesh generation;
- Efficient inversion of long lines;
- Non-linear inversion using a fast parallel implementation of Occam's method, a regularized Gauss-Newton minimization technique;
- Magnetotelluric (MT) plane waves using total field or scattered field implementations;

- 2.5D EM problem statement (i.e. 3DEM field source in 2D conductive environment);
- Parallel calculation implementation;
- Open-source license and freely available.

The data inversion procedures include:

- Data preparation and its conversion for MARE2DEM input;
- Creation of the model grid (mesh). The grids consisted of approximately 5000-10000 cells for each inverted line (example on Figure 5);
- Inversions;
- Evaluating the results (RMS, data and model comparison), (Figure 6);
- Import the inverted data into Geosoft for database and sections compilation.

The inversions are performed without any constraints with the uniform half space initial model.

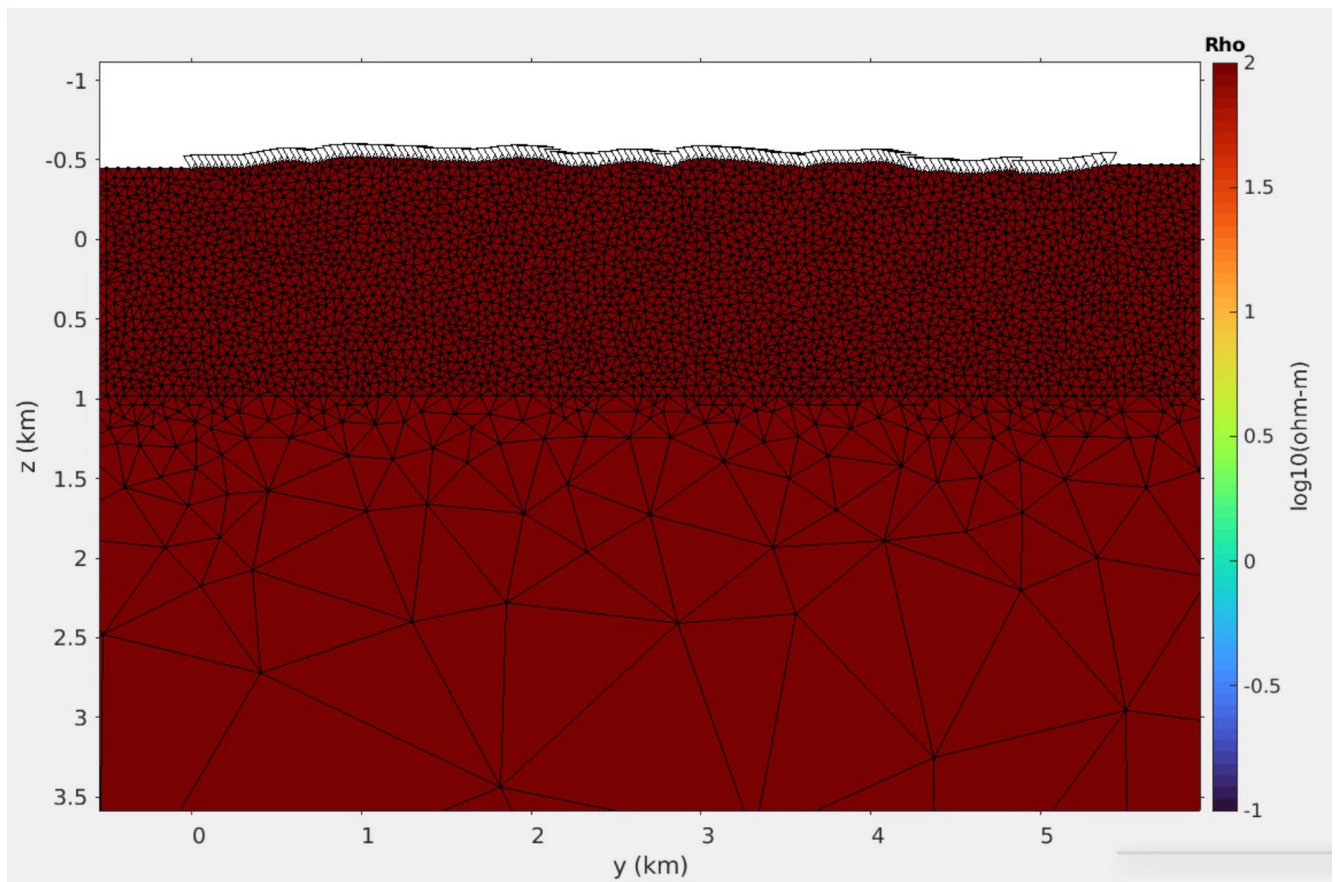


Figure 5 - Input unstructured triangular mesh used for input to 2D inversions. Example provided is for the L1230.

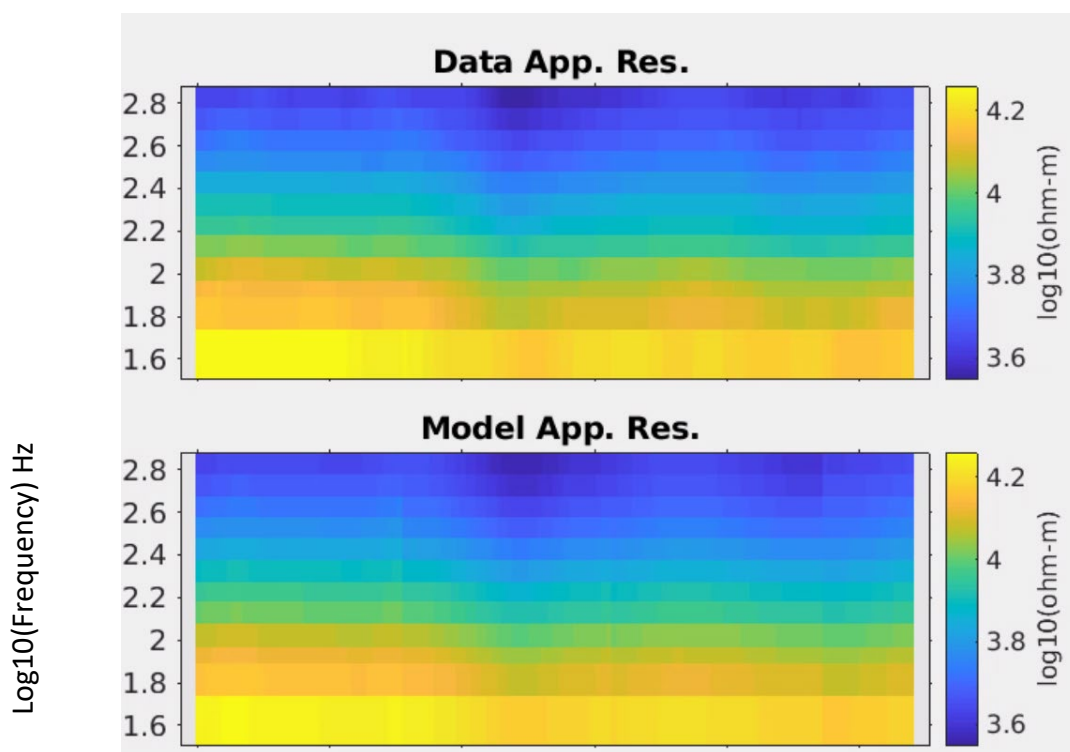


Figure 6 – Pseudo-sections of apparent resistivity: measured, model calculated (from top to bottom) along a survey line.

6.3 Magnetic Data Processing

Raw total magnetic field data are recorded at 0.1-second sampling intervals. The Earth's magnetic field is known to vary as a function of time. Time varying magnetic events such as magnetic storm transients and more regular diurnal variations which occur during the acquisition of magnetic data may affect the accuracy of the survey data and distort magnetic anomalies. Separation of the time-dependent variations in the magnetic field from a real geomagnetic anomaly requires an independent estimate of the transient magnetic field events. Base station magnetometer data provides this independent estimate. The diurnal base station data was analyzed for spikes and spurious sections which were manually removed from the dataset. A 20-point low pass filter was then applied to the diurnal data.

The magnetic data was corrected for diurnal variations, leveled and filtered. Raw magnetic data has initial preprocessing only (spike removal, short gaps interpolated). At the next stage, all the magnetic data is processed by an adjustment procedure that statistically treats the line data. It is designed to recognize and remove systematic bias and small random errors in the data which can cause

survey line mis-ties. Bias errors in the magnetic data arise from changes in the level of the total magnetic field.

To remove bias errors, each profile of a given data set in the survey was shifted up or down systematically by an amount such that the sum of the square of the mis-tie errors for that data set over the entire survey network is minimized. The systematic corrections are further constrained such that the sum of the systematic corrections is zero, effectively eliminating DC shifts to the network as a whole. After this systematic adjustment, the remaining intersection mis-ties were studied and removed. The final statistical choice of the data values at each intersection is a function of the reliability weights of each line for each data set. The random error correction for each data set prorated between intersections. After editing the adjusted line data for line pulls and data quality, they were input to a minimum curvature gridding algorithm and a grid produced.

As an additional product, the calculated vertical gradient of total magnetic intensity (cvg-tmi) was produced.

6.4 VLF Data Processing

VLF-EM data were captured using the MobileMT three components receiver. The instrument is capable of recording amplitude (secondary field), transmitter station azimuth (relative to aircraft orientation), vertical and planar ellipticities and tilt angle for multiple VLF frequencies.

For this project, the following VLF transmitters were monitored:

- Station JXN: Gildeskål, Norway – 16.40 kHz
- Station NWC: Exmouth, Western Australia – 19.80 kHz
- Station NSS: Annapolis, Maryland, USA – 21.40 kHz
- Station HWU: Rosnay, France – 21.75 kHz
- Station NDT: Ebino, Japan– 22.20 kHz
- Station DHO38: Rhaderfehn, Germany– 23.40 kHz
- Station NAA: Cutler, Maine, USA– 24.00 kHz
- Station NLK: Seattle, Washington, USA – 24.80 kHz
- Station NML: LaMoure, ND, USA–25.20 kHz

The 24.00 kHz and 25.20 kHz signals were accepted and presented in the final database.

Processing of the raw amplitude data consisted of the following:

- Mask out any embedded “off-line” data
- Noise reduction filtering using non-linear Naudy filtering
- Initial levelling (mean subtraction)
- Fine levelling (micro-levelling)

The finalized data for accepted frequency(s) were presented as a series of amplitude colour images. High amplitude values correspond to conductive zones.

6.5 Ancillary data processing

Positions and altitudes of the magnetic sensor and EM receiver are derived from data of two GPS antennas (A – on the helicopter, B- on the magnetic sensor bird) and radar-altimeter positioned on the helicopter. A digital terrain model (DTM) channel has been calculated by subtracting the filtered radar-altimeter data from the GPS-A elevation.

6.6 Data Deliverables

EM Database: Butt Property EM presented in Geosoft GDB format

- The database channels description is in the Table 7.

Table 7 – Geosoft 22044_ButtProperty_EM.gdb Data Format

Channel Name	Units	Description
xe:	metres	EM bird UTM Easting NAD83 UTM Zone 17N
ye:	metres	EM bird UTM Northing NAD83 UTM Zone 17N
ze:	meters	EM bird elevation above geoid
gtime:	Sec of the day	GPS time
RdAlt:	metres	helicopter terrain clearance from radar altimeter
alt_e:	Metres	EM bird terrain clearance
DTM:	metres	Digital Elevation Model
PLM:	Units	Powerline monitor
ac_42:	mS/m	Apparent conductivity for freq 42.0 Hz
ac_71:	mS/m	Apparent conductivity for freq 70.8 Hz
ac_84:	mS/m	Apparent conductivity for freq 84.0 Hz
ac_103:	mS/m	Apparent conductivity for freq 102.7 Hz
ac_138:	mS/m	Apparent conductivity for freq 138.2 Hz
ac_165:	mS/m	Apparent conductivity for freq 165.3 Hz
ac_209:	mS/m	Apparent conductivity for freq 209.3 Hz
ac_267:	mS/m	Apparent conductivity for freq 267.0 Hz
ac_339:	mS/m	Apparent conductivity for freq 338.9 Hz
ac_420:	mS/m	Apparent conductivity for freq 420.3 Hz
ac_533:	mS/m	Apparent conductivity for freq 533.3 Hz
ac_676:	mS/m	Apparent conductivity for freq 676.0 Hz
ac_844:	mS/m	Apparent conductivity for freq 844.3 Hz

ac_1067:	mS/m	Apparent conductivity for freq 1067.4 Hz
ac_5382:	mS/m	Apparent conductivity for freq 5381.8 Hz
ac_6786:	mS/m	Apparent conductivity for freq 6785.5 Hz
ac_8550:	mS/m	Apparent conductivity for freq 8549.7 Hz
ac_10768:	mS/m	Apparent conductivity for freq 10767.6 Hz
ac_13571:	mS/m	Apparent conductivity for freq 13571.4 Hz

The EM and MAG databases can be synchronized based on *gtime* channel.

Mag Database: Butt Property Mag presented in Geosoft GDB format

- The database channels description is in the Table 8.

Table 8 – Geosoft 22044_ButtProperty_Mag.gdb Database Format

Channel Name	Units	Description
xm:	metres	mag bird UTM Easting NAD83 UTM Zone 17N
ym:	metres	mag bird UTM Northing NAD83 UTM Zone 17N
zm:	meters	mag bird elevation above geoid
xh:	metres	heli UTM Easting NAD83 UTM Zone 17N
yh:	metres	heli UTM Northing NAD83 UTM Zone 17N
zh:	meters	heli elevation above geoid
gtime:	Sec of the day	GPS time
RdAlt:	metres	helicopter terrain clearance from radar altimeter
alt_m:	metres	mag bird terrain clearance
DTM:	metres	Digital Terrain Model
GPS_B_LAT:	Decimal degrees	Mag bird latitude, WGS84
GPS_B_LON:	Decimal degrees	Mag bird longitude, WGS84
basemag:	nT	Magnetic base station data
Magair:	nT	Measured magnetic field
Magcorr:	nT	Magnetic field corrected for diurnal magnetic field
TMI:	nT	Total magnetic intensity, levelled and microlevelled
CVG_TMI:	nT/m	Calculated vertical derivative of the magnetic field

The EM and MAG databases can be synchronized based on *gtime* channel.

VLF Database: Butt Property VLF presented in Geosoft GDB format

- The database channels description is in Table 9.

Table 9 – Geosoft 22044_ButtProperty_VLF.gdb Database Format

Channel Name	Units	Description
xe:	metres	EM bird UTM Easting NAD83 UTM Zone 17N
ye:	metres	EM bird UTM Northing NAD83 UTM Zone 17N
ze:	meters	EM bird elevation above geoid
gtime:	Sec of the day	GPS time
alt_e:	Metres	EM bird terrain clearance
DTM:	metres	Digital Elevation Model
Amplitude_1:	units	VLF secondary field amplitude for freq 24.00 kHz
Azimuth_1:	degree	transmitter station azimuth (relative to aircraft orientation) for 24.00 kHz

Channel Name	Units	Description
TiltAngle_1:		In-Phase [VLF Tilt] for 24.00 kHz
El_Vert_1:		Quadrature [VLF Vertical Ellipticity] for 24.00 kHz
El_Plan_1:		VLF Planar Ellipticity for 24.00 kHz
Amplitude_2:	units	VLF secondary field amplitude for freq 25.20 kHz
Azimuth_2:	degree	transmitter station azimuth (relative to aircraft orientation) for 25.20 kHz
TiltAngle_2:		In-Phase [VLF Tilt] for 25.20 kHz
El_Vert_2:		Quadrature [VLF Vertical Ellipticity] for 25.20 kHz
El_Plan_2:		VLF Planar Ellipticity for 25.20 kHz

Grids and Maps:

- Refer to Table 10 for summary of grids and maps (Appendix III) which accompany this report.

Table 10 – Lists of Butt Property grids (in Geosoft format) and maps (in Geosoft and PDF formats).

Grids	Maps	Description
DTM:	22044_ButtProperty_DTM	Digital Terrain Model
TMI:	22044_ButtProperty_TMI	Total magnetic intensity
CVG_TMI:	22044_ButtProperty_CVG_TMI	Calculated vertical derivative of the magnetic
VLFamplitude_1:	22044_ButtProperty_VLFamplitude-1	Secondary field VLF amplitude at 24.00 kHz
VLFamplitude_2:	22044_ButtProperty_VLFamplitude-2	Secondary field VLF amplitude at 25.20 kHz
ac_42:	22044_ButtProperty_ac_42	Apparent conductivity for freq 42.0 Hz
ac_71:		Apparent conductivity for freq 70.8 Hz
ac_84:		Apparent conductivity for freq 84.0 Hz
ac_103:		Apparent conductivity for freq 102.7 Hz
ac_138:	22044_ButtProperty_ac_138	Apparent conductivity for freq 138.2 Hz
ac_165:		Apparent conductivity for freq 165.3 Hz
ac_209:		Apparent conductivity for freq 209.3 Hz
ac_267:	22044_ButtProperty_ac_267	Apparent conductivity for freq 267.0 Hz
ac_339:		Apparent conductivity for freq 338.9 Hz
ac_420:		Apparent conductivity for freq 420.3 Hz
ac_533:	22044_ButtProperty_ac_533	Apparent conductivity for freq 533.3 Hz
ac_676:		Apparent conductivity for freq 676.0 Hz
ac_844:		Apparent conductivity for freq 844.3 Hz
ac_1067:		Apparent conductivity for freq 1067.4 Hz
ac_5382:		Apparent conductivity for freq 5381.8 Hz
ac_6786:	22044_ButtProperty_ac_6786	Apparent conductivity for freq 6785.5 Hz
ac_8550:		Apparent conductivity for freq 8549.7 Hz
ac_10768:	22044_ButtProperty_ac_10768	Apparent conductivity for freq 10767.6 Hz
ac_13571:		Apparent conductivity for freq 13571.4 Hz
DepthSliceASL	22044_ButtProperty_ResElev_XXXX	Resistivity Depth Slice from -500-450 m (wrt MSL) with 100m interval

Grids	Maps	Description
ResSec	ResSec_LXXXX	Resistivity Line Sections with full depth range

Voxels:

- #22044_Griftco_InvRes_NAD83.geosoft_voxel – Resistivity-Depth 3D voxel

7 Survey results general analysis and recommendations

A MobileMT airborne survey, including broadband natural electromagnetic fields, the earth's magnetic field, and EM VLF data measurements with precise positioning, has been successfully completed across the MobileMT Butt Property Block. Electromagnetic and magnetic data were collected along: N-S survey lines nominally spaced at 100 m, and E-W tie lines nominally spaced at 1000 m. Electromagnetic readings were taken using an EGL AFMAG&VLF MobileMT system consisting of an airborne three-component magnetic sensor, as well as a base station with two horizontal electric components. A caesium vapour magnetometer in a separate towed-bird was used for collecting measurements of the intensity of the earth's magnetic field.

Regional Geologic Context

The Butt property is located within the Kiosk Domain of the Algonquin Terrain of the Central Gneiss Belt of the Western Grenville Province, Ontario. The central Gneiss Belt and the Central Metasedimentary Belt are the two major subdivisions of the Grenville Province in Ontario. The property is underlain by mafic, quartzo-feldspathic and metapelitic units at the amphibolite to granulite grade of metamorphism, some of which are graphite bearing. In turn, these units host radioactive pegmatite dykes which host allanite, uraninite, pyrochlore, columbite and other uranium-bearing minerals (Ferguson, 1971; Hewitt, 1967).

The property is known to host uranium, REE, niobium (columbium) and tantalum mineralization on the property is hosted by a set of structurally controlled pegmatite dykes trending east, north-east and dipping in the order of 30° north. The bedrock geology of the survey block is presented in the Figure 7. Most graphite mineralization in Canada is located in the Grenville Province of Southern Quebec and Central Ontario (Mackinnon & LeBaron, 1992). The southwestern Grenville Province consists of granitic gneisses, metavolcanic rocks, metasedimentary schists and impure marbles that were deformed and metamorphosed during the Grenville orogen (Rivers et al. 2012). Granitic pegmatites often occur close to the graphite zones (Mackinnon & LeBaron, 1992).

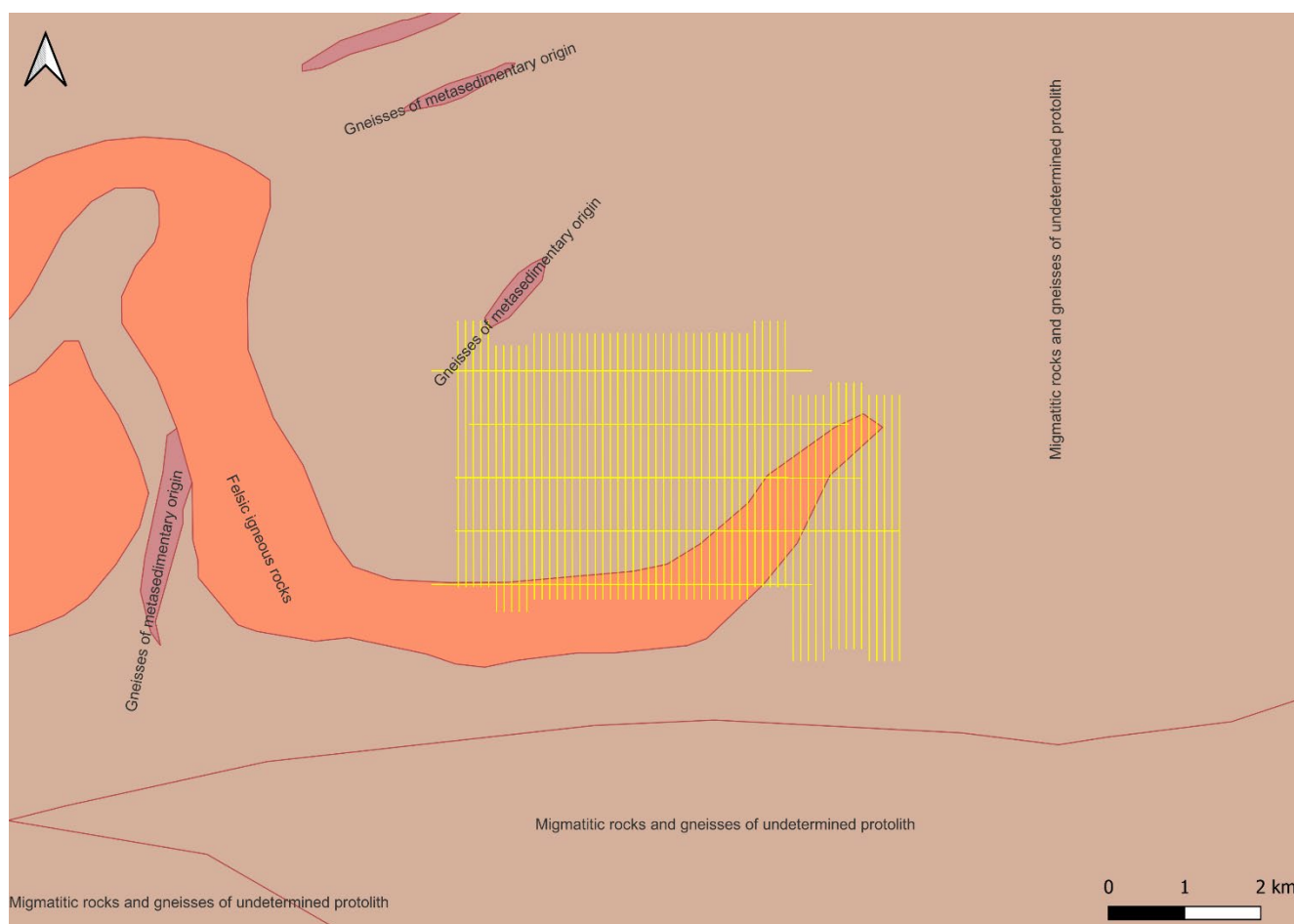


Figure 7 - Bedrock geology in the survey block area
<https://www.geologyontario.mndm.gov.on.ca/ogsearth.html>.

Basic geophysical data analysis

The purpose of the survey was mapping bedrock structures and lithology, including possible alteration and mineralization zones reflected in the electrical and magnetic properties of rocks. The airborne geophysical survey results are presented as apparent conductivity corresponding to different frequencies, resistivity-depth profiles determined from inverting EM data, available VLF EM data, as well as magnetic field data and its derivatives. The report is followed by digital databases, separate for each method, processed and calculated data grids, maps, and resistivity-depth products – elevation slices, sections and a 3D voxel representation. The standard EM data inversion was based on a 2D model.

The electrical properties of the rock assemblages in the survey area are reflected in the distribution of apparent conductivities related to different frequencies and in the inverted resistivity-depth distributions. The apparent conductivity parameter describes an inhomogeneous geoelectrical

environment in terms of a homogeneous earth that would produce the same measurement and refers to the depth relative to total conductance below the measurement station and a specific frequency. In general, depth of investigation increases with decreasing frequency and total conductance. The non-linear and complex relation is solved by inversions of the 'apparent conductivity - frequency' data into 'resistivity – depth' distributions.

The overall resistivity distribution of the surveyed area is presented in the 3D resistivity voxel (Figure 8).

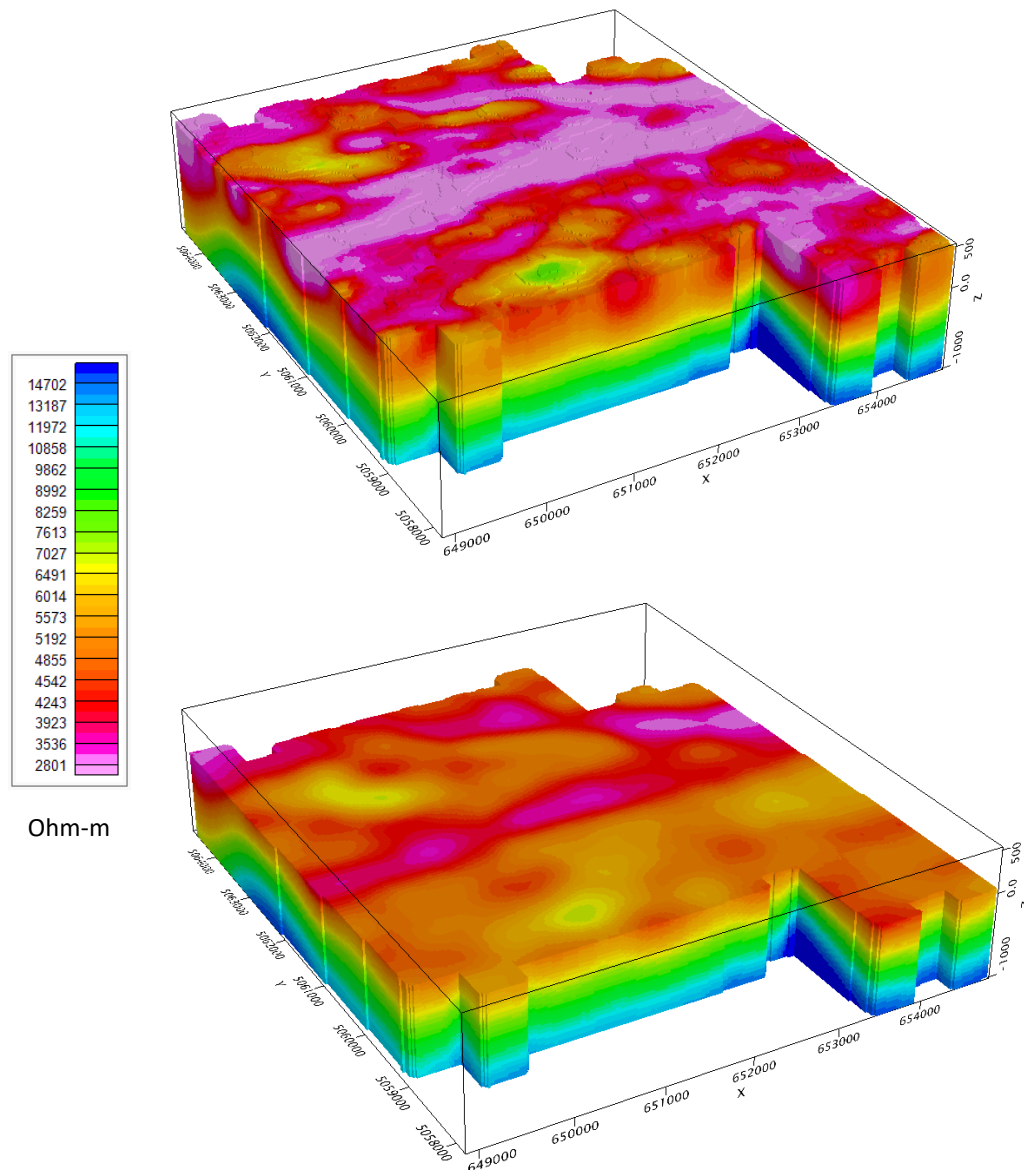


Figure 8 – Resistivity voxel in 3D view of the surveyed area. Top from surface, bottom from 50 m ASL.

There are several conductive zones over the survey area which are observed on resistivity depth slices, apparent conductivity maps corresponded to different frequencies and on VLF amplitude maps. The conductive anomalies in the high frequencies apparent conductivity and VLF amplitude show near surface conductive zones, and the resistivity-depth slices from the inverted data can be used for the resistivity distribution analysis in depth (Figure 9).

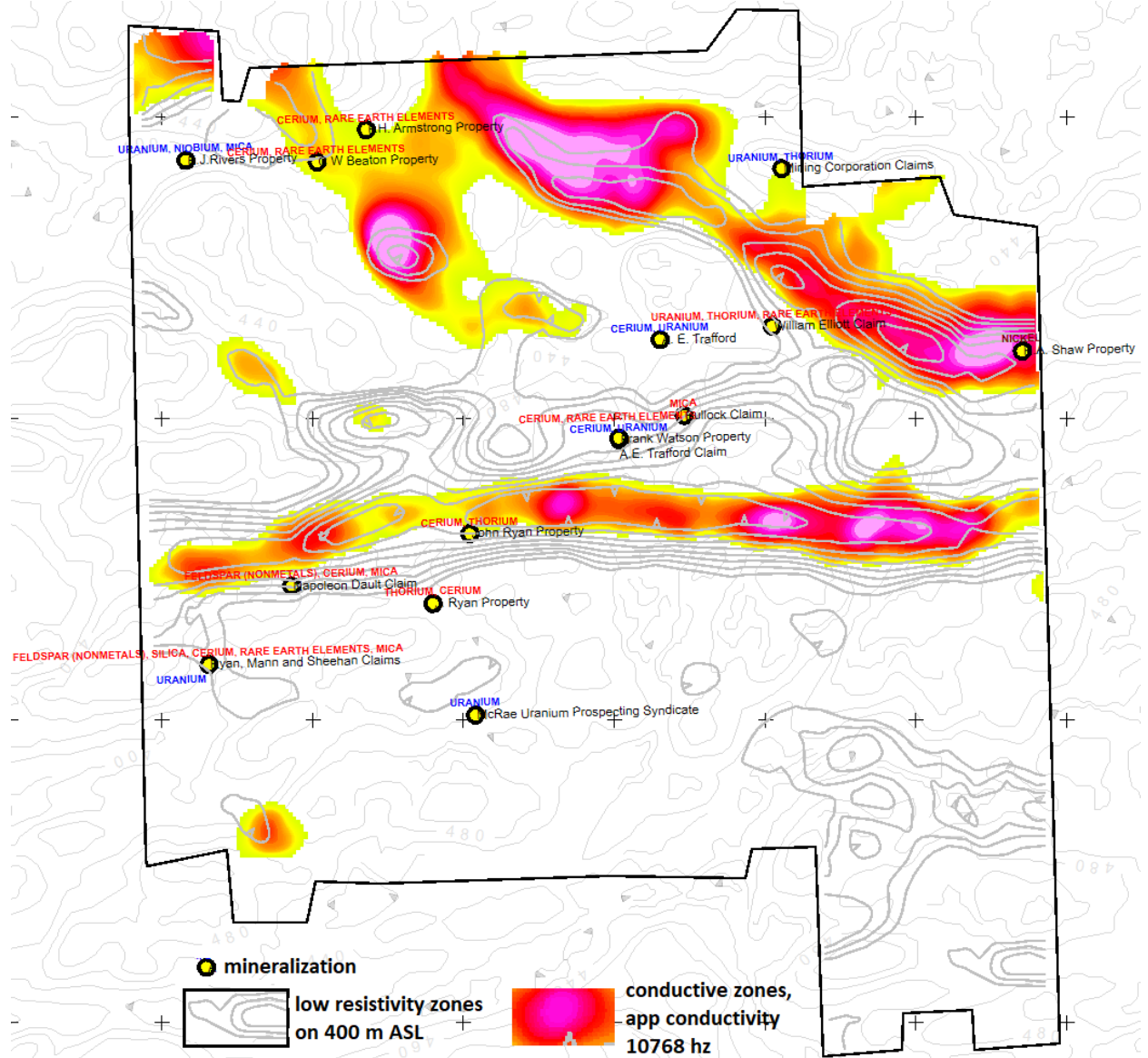


Figure 9 – Low resistivity/high conductivity zones with overlapped known mineralization

The calculated vertical gradient of the total magnetic intensity (cvg-tmi) color grid is presented with contours of VLF amplitude anomalies in Figure 10. Both data, CVG-TMI and VLF are correlated and represent mostly near-surface features on the map.

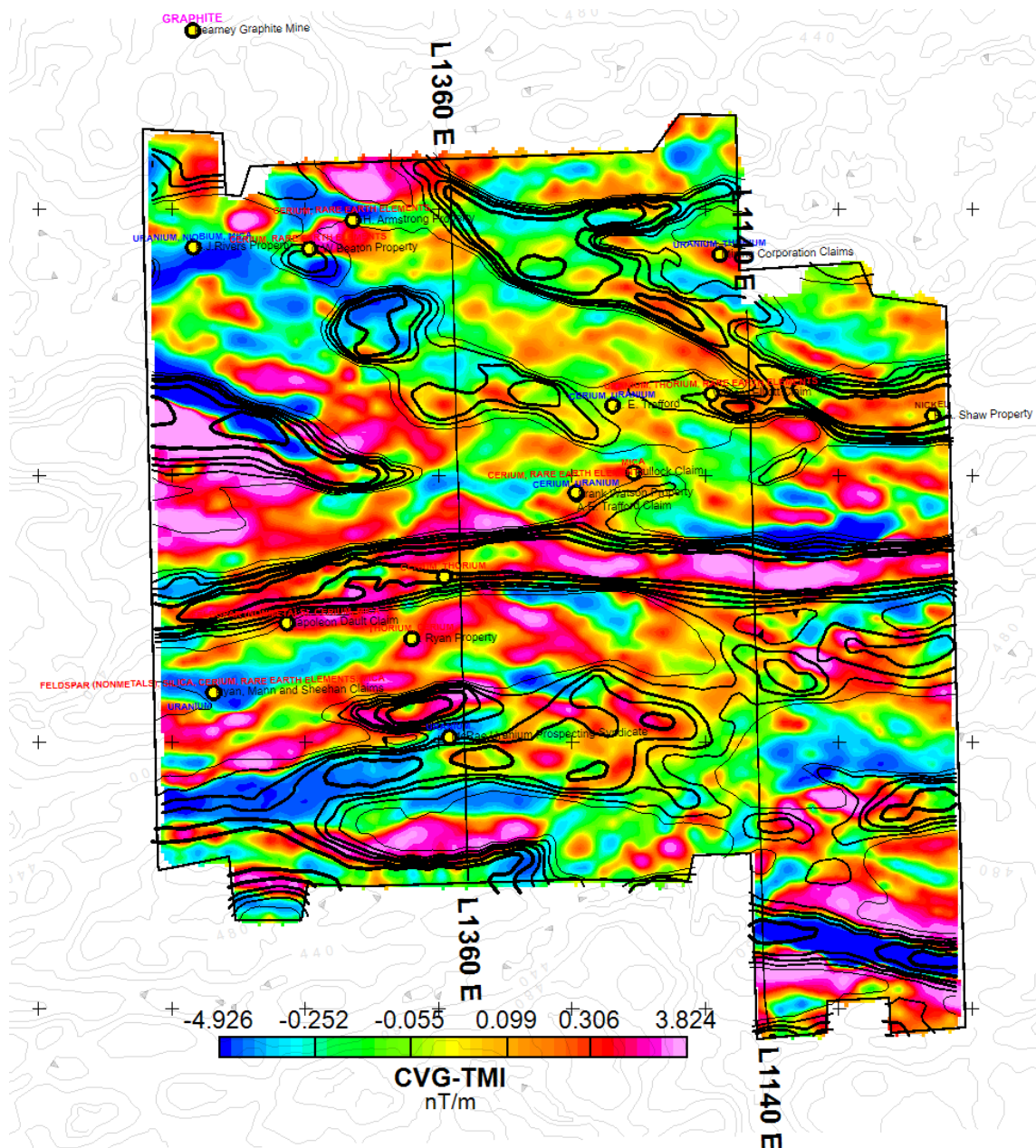


Figure 10 – Calculated vertical gradient of TMI color grid with contours extracted of VLF amplitude

Resistivity sections for two lines, shown in plan view in Figure 10, are included in Figure 11 and Figure 12. Magnetic field distribution and its vertical derivative are presented in corresponded maps following the report and in the Appendix III. Behavior of the resistive and conductive zones with depth are shown in the resistivity sections following the report and, in the following examples.

The lateral and in-depth distribution of the resistive and conductive zones are presented in the resistivity-(ASL) depth slices, and in the VLF-amplitude maps (examples in Appendix III, full set following

in the digital data archive). All pictures in the report are presented as examples, the full set of digital data, voxels, sections, depth slices, grids, and maps are following the report in corresponded files and archives.

The conductive zones mostly are structurally controlled and could correspond to pegmatite dykes. The most conductive places, potentially, can be considered as prospective for zones of graphite enrichment.

It is recommended to analyze all geophysical data, MobileMT EM, VLF and magnetic in relation to an exploration model considered for the surveyed area and integrate these data with other available geological and geochemical information, for refining targets, follow-up ground work and ultimately drilling planning.

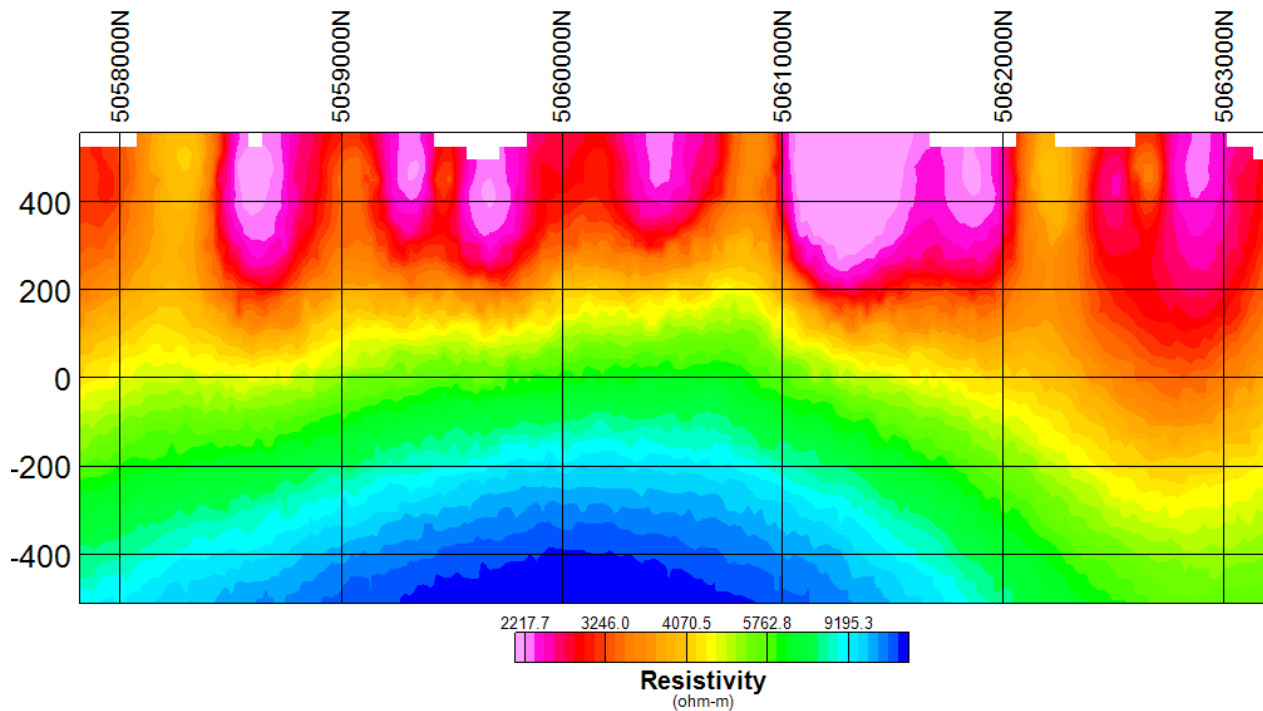


Figure 11 – Resistivity section along the 1140 survey line (in Figure 10)

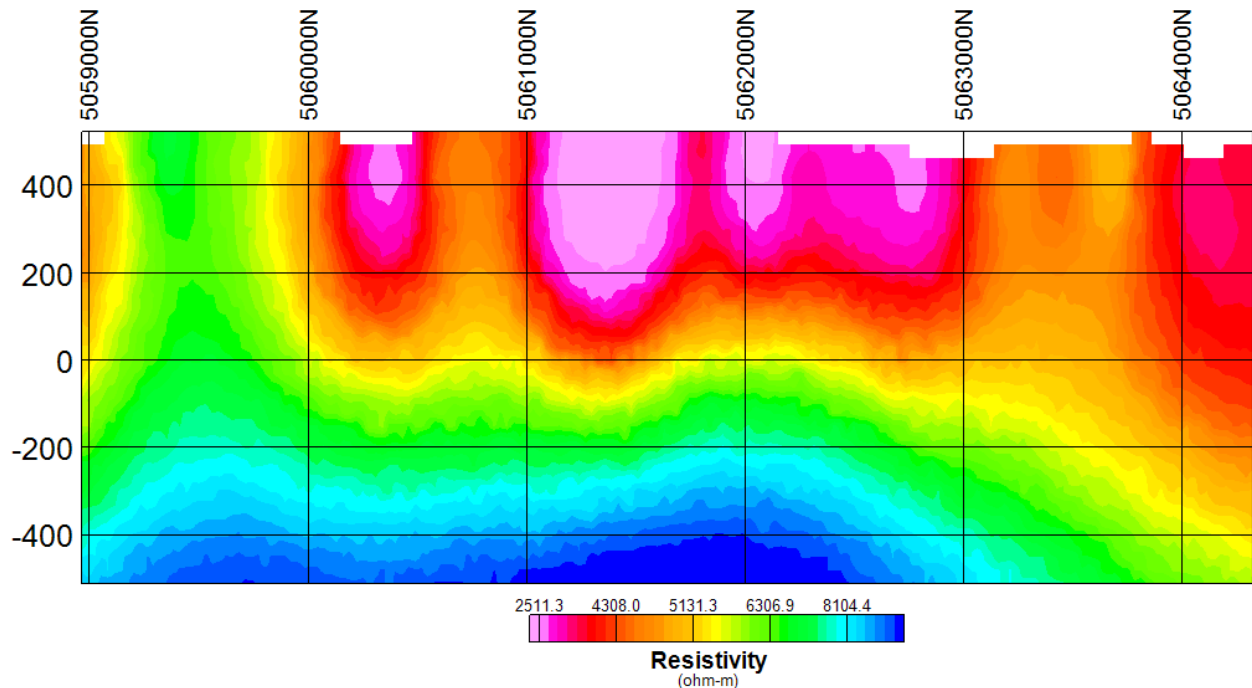


Figure 12 - Resistivity section along the 1360 survey line (in Figure 10)

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Alexander Prikhodko, Ph.D., P.Geo



September 12, 2022

MobileMT Job#22044 for Griftco Corporation.



Appendix I

Company Profile

About us

Expert Geophysics Limited is based in Toronto, Canada.

President and founder, **Andrei Bagrianski**, Ph.D., P.Geo., has over 35 years of professional experience in the acquisition, processing, and interpretation of airborne and ground geophysical data for a wide range of applications. From 2002 to 2016, he was Chief Operating Officer and General Manager at Geotech Ltd. Andrei has been directly involved in contracting, organizing, and supervising hundreds of airborne geophysical surveys on all continents except Antarctica. Andrei has extensive international field work experience that includes projects in Australia, Brazil, Bolivia, Colombia, Ecuador, Peru, Botswana, Malawi, South Africa, Libya, USA, Canada, Russia, Kazakhstan, and India.

Petr Kuzmin, Ph.D., the designer of the **MobileMT** system, has over 40 years of experience in the development of ground and airborne TDEM, MT, and IP methods, equipment, and software. Working for Geotech Ltd., Canada, from 2000 until 2009, Dr. Kuzmin was the principal designer of the award winning systems VTEM, ZTEM, and AirMt. Since 2009, Dr. Kuzmin has completed a number of successful developments: ground AFMAG, ultra-fast airborne TD (HiRes), airborne VLF system, an airborne navigation system, a high accuracy magnetometer counter, and the MobileMT. Dr. Kuzmin holds a doctorate in Geophysics, has authored nearly 20 patents, and published over 40 technical papers.

Vice President and Chief Geophysicist, **Alexander Prikhodko**, Ph.D. in geoscience, P.Geo., Executive MBA, has previously held Chief Geophysicist position, for 10 years, in a gold-platinum mining company extensively used in its mineral exploration programs borehole, ground and airborne geophysics. He has been associated with the airborne geophysics industry since 2005 (Aeroquest Limited and Geotech Ltd.) holding management positions as Regional General Manager, Data Interpretation Manager, Director of Geophysics and working on exploration projects for diverse commodities in regions over the world. He is an author and co-author of many publications dedicated to airborne EM. In 2019 he was awarded Barlow Medal for Best Geological Paper published in CIM publications (Canadian Institute of Mining, Metallurgy and Petroleum).

Services

Expert Geophysics Limited specializes in airborne geophysical surveys with advanced electromagnetic systems. **EGL** offers surveying with **Mobile MagnetoTellurics (MobileMT)**, the most advanced generation of airborne AFMAG technologies. The patent pending **MobileMT** technology utilizes naturally occurring electromagnetic fields in the frequency range of 25 Hz – 30 000 Hz. The **MobileMT** technology is the product of extensive experience in developing equipment and signal/data processing algorithms for natural electromagnetic fields measurement.

MobileMT combines the latest advances in electronics, airborne system design, and sophisticated signal processing techniques.

Appendix II MobileMT electromagnetic technology

MobileMT (Mobile MagnetoTellurics) is a newly developed approach to electromagnetic data acquisition from synchronized a towed three component inductive magnetic sensor and grounded two orthogonal electric lines. The system is designed and implemented in order to overcome existing limitations of airborne techniques based on passive electromagnetic fields principles and, ultimately, for improving exploration efficiency.

MobileMT is a passive airborne electromagnetic technique that records magnetic (in the air) and electric (on the ground) fields generated by natural sources in the audio frequency range. The natural electromagnetic primary field sources for MobileMT are considered with frequencies ranging from 25 Hz to 30 kHz (ELF+VLF). The exploration system includes two pairs of grounded electric wire lines, one of them is for reference signal, and moving three-component inductive coil system softly suspended and with low-noise signal amplifiers for magnetic field measurements (dB/dt) in three orthogonal directions. A crucial element of the technology is the capability of aerial acquisition magnetotelluric data in four decades frequency band. Field data are acquired using stationary orthogonal pairs of electrical field sensors (grounded wire dipoles) and towed magnetic field detectors (three orthogonal induction coils).

In order to continue evolution of the airborne electromagnetic passive fields technology and in comparison with the last AFMAG development (Bob Lo, 2009) the current development is focused on:

- Expanding measured frequencies range into high end to complement deep exploration with near surface, shallow and medium depth of investigation;
- Increasing sensitivity and reducing system noise level to provide with data at low natural electromagnetic fields signal conditions especially in the range of the last hundred – first thousands Hz frequencies band where the field spectral density is lowest (dead-band);
- Providing ability to recover electrical properties differences between geological boundaries of any direction, including and between horizontal and vertical boundaries;
- Increasing spatial and frequency data resolution;
- Measuring of elements of admittance-type transfer functions of the magnetotelluric field.

Theory and Method

Some part of the thunderstorm energy is converted into electromagnetic fields that are propagated in the ionosphere-Earth interspace. These electromagnetic fields and the currents induced by these fields in the subsurface are used in audiomagnetotelluric prospecting to measure the electrical resistivity of geological environment.

Measuring telluric currents induced by the natural electromagnetic fields in the subsurface on the ground synchronised with measuring the magnetic components of the natural audio frequency electromagnetic fields in the air and mutual processing both airborne and ground data (Figure 1) is a way to improve the quality and increase informative of the measured airborne data. In practice the reference fields may be measured by inductive coils or grounded electric lines (Labson et al., 1985). To obtain accurate signal of the natural field spectrum and eliminate noise spectra of sensors we use electrical field measurements at the base station. One of the reasons of choosing electrical components for reference is capacity to control the natural signal strength in the wire lines. Each electrical field component on the base station is registered independently from two sensors, signal and reference, which is utilized to eliminate the data bias distortions (Labson et al., 1985). This technical solution is critically helpful in periods of weak natural field signals in some frequency bands.



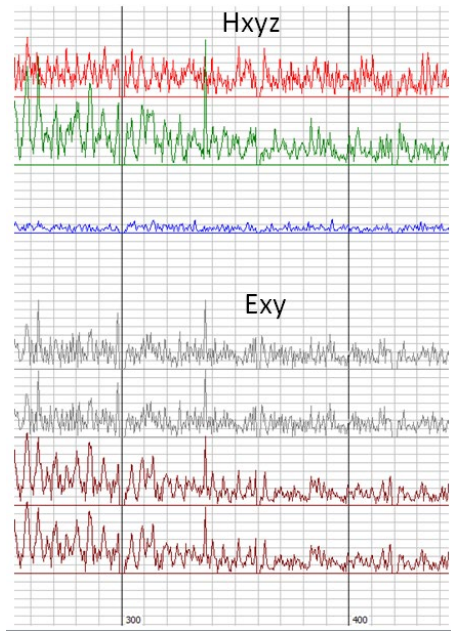


Figure 1. A section of time series of Exy and Hxyz data

Exploiting signals of two horizontal electric components along with three magnetic components we can process them with the magnetotellurics response functions based on linear relations between components of the electric and magnetic fields. In general, processing of the field data is based on the Larsen and Chave robust remote-reference method (Chave et al., 1987; Larsen, 1989). The data processing program merges the stationary measured electrical two horizontal components and the moving orientation irrelevant receiver of three magnetic field components into one file. The program applies FFT technique to the recordings and calculates the matrixes of the relations between the electric and magnetic signals (six admittances) on the different time bases and in different frequency bands. In the result of modular computation of the matrixes determinants, as rotation invariant parameters, we calculate apparent conductivity in mS/m as a parameter of EM mapping. The rotation invariant parameters are free from the receiver motion distortions. The admittances (**Y**) are represented as the electric field horizontal vectors projection into the space of the magnetic field three components. In other words, the combined system measures combination of tensor and scalar (rotational invariant) components as the transfer function of a total magnetic field, through the three orthogonal directions measurements of an airborne receiver, to the two orthogonal horizontal directions of electric field measured at a ground base location. Generalizing the Weiss-Parkinson relationship (Berdichevsky and Zhdanov, 1984), such as that measured three orthogonal magnetic field components (**Hxyz**) are linearly related to the horizontal electric fields measured on the ground (**Exy**, reference), with adoption it to the admittances domain (**Y**):

$$\begin{bmatrix} Hx \\ Hy \\ Hz \end{bmatrix} = \begin{bmatrix} Y_{xx} & Y_{xy} \\ Y_{yx} & Y_{yy} \\ Y_{zx} & Y_{zy} \end{bmatrix} \begin{bmatrix} Ex \\ Ey \end{bmatrix} \quad (1)$$

Solutions of the equations are obtained by averaging over a number of closely spaced frequencies (Table below).

An example of frequency windows used for harmonics averaging. Base 15 Hz, Gates ratio 2.

N	Window, Hz		
	start	end	mid
1	15	30	23
2	30	68	49
3	68	135	101
4	135	270	203
5	270	540	405
6	540	1080	810
7	1080	2160	1620
8	2160	4320	3240
9	4320	8640	6480
10	8640	17280	12960
11	17280	28800	23040

The windowing way is flexible and can be optimized depending on signals, cultural noise and an exploration task.

H (magnetic) and E (electric) components time series data, fully synchronized, digitized and recorded at 73,728 Hz frequency, is converted from time to frequency domain using FFT technique. The complex data spectrums (field examples in 2 and 3) is expressed in apparent conductivity (σ) equivalent to its real part:

$$\sigma = \mu\omega|\mathbf{Y}^2| \quad (2)$$

where \mathbf{Y} is the determinant of the corresponded matrix in (1); $\mathbf{Y}^2 = \text{im}(\mathbf{Y}^2)/\text{re}(\mathbf{Y}^2)$; μ is the magnetic permeability of free air and ω is the angular frequency.

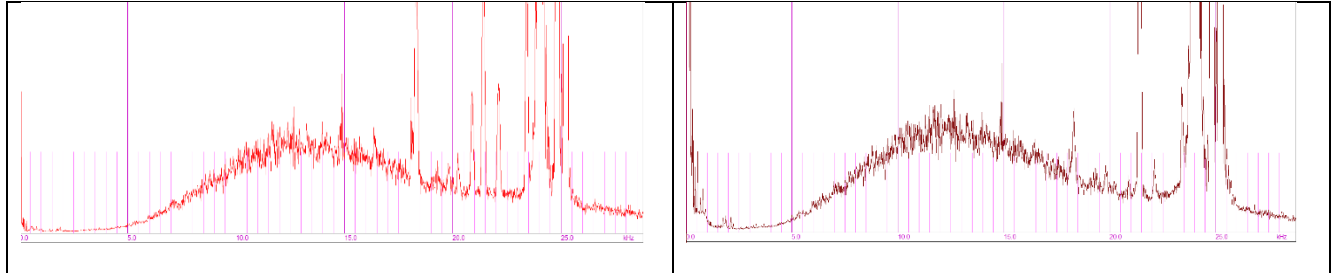


Figure 2 Airborne magnetic X-coil spectrum up to 30,000 Hz range (left) with the corresponding electric X-line 1 spectrum (right)

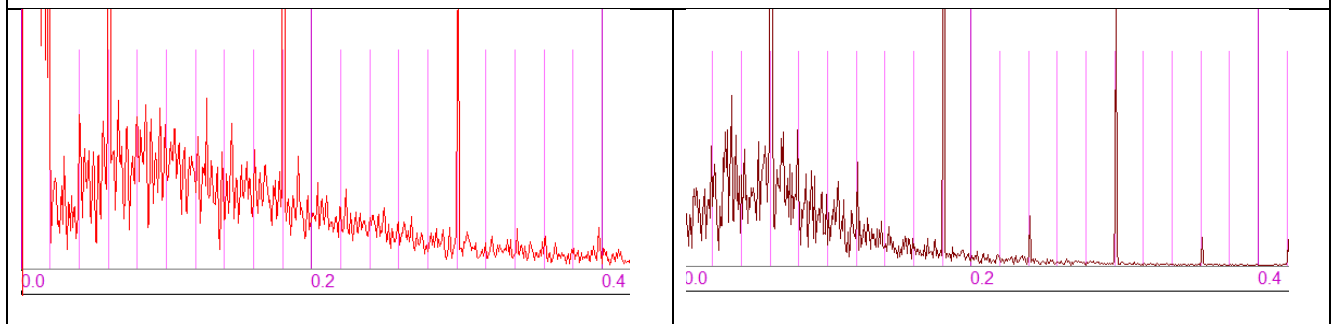


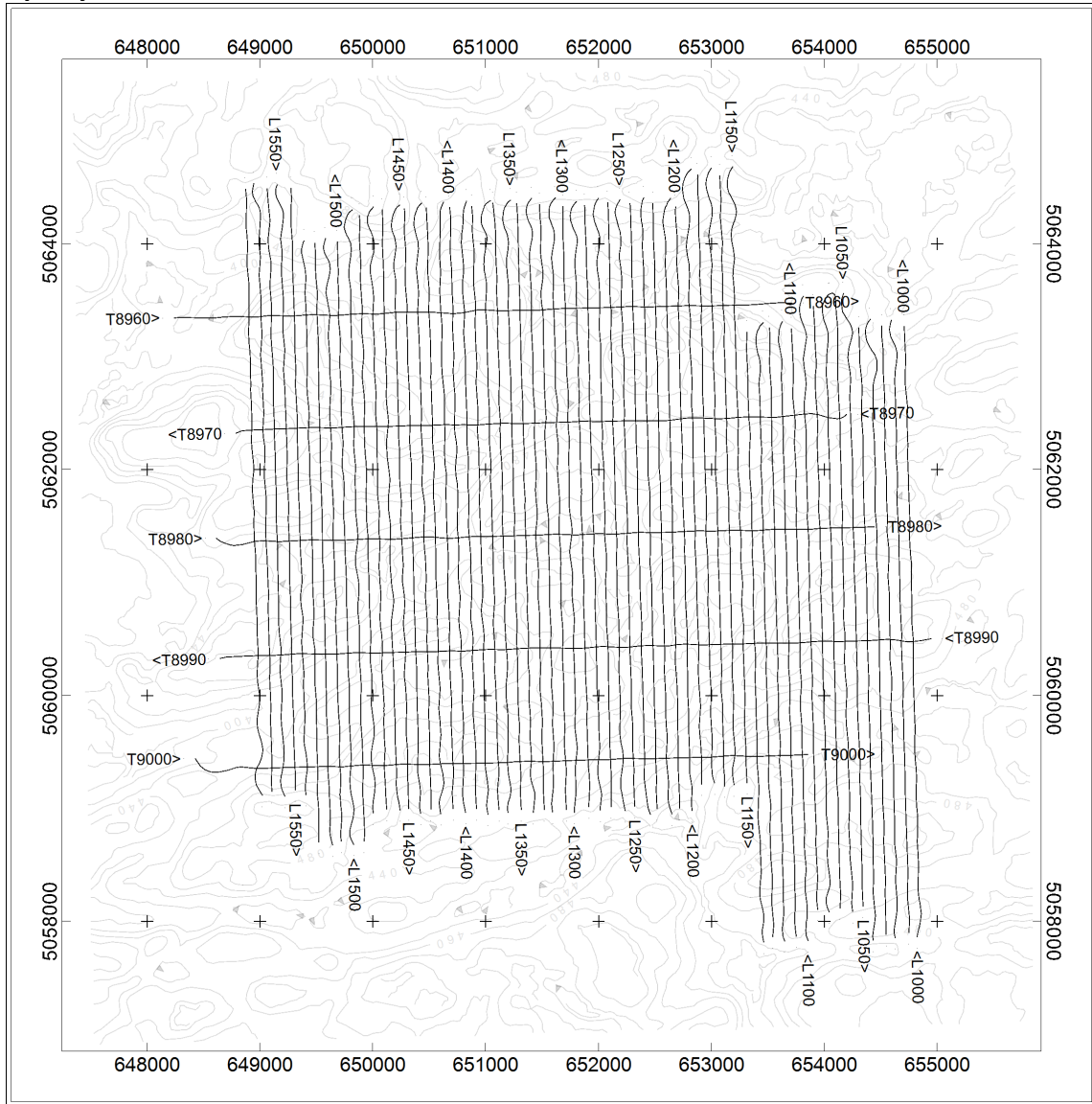
Figure 3 Airborne magnetic X-coil spectrum up to 400 Hz range (left) with the corresponding electric X-line 1 spectrum (right)

References

- Berdichevsky, M.N., and M.S. Zhdanov (1984), *Advanced theory of deep geomagnetic sounding*: Elsevier.
- Chave, A. D., Thomson, D. J., and Ander, M. E. (1987), On the Robust Estimation of Power Spectra, Coherences, and Transfer Functions: *Journal of Geophysical Research*, **92**, 633-648.
- Labson, V.F., A.Becker, H.F.Morrison, and U.Conti (1985), Geophysical exploration with audio frequency natural magnetic fields: *Geophysics*, **50**, 656-664.
- Larsen, J. C. (1989), Transfer functions: smooth robust estimates by least-squares and remote reference methods: *Geophysical Journal International*, **99**, 645-663.
- Lo, B., J. Legault, P.Kuzmin (2009), Z-TEM (airborne AFMAG) tests over unconformity uranium deposits. Extended Abstract 20th International Geophysical Conference and Exhibition, Adelaide, South Australia.

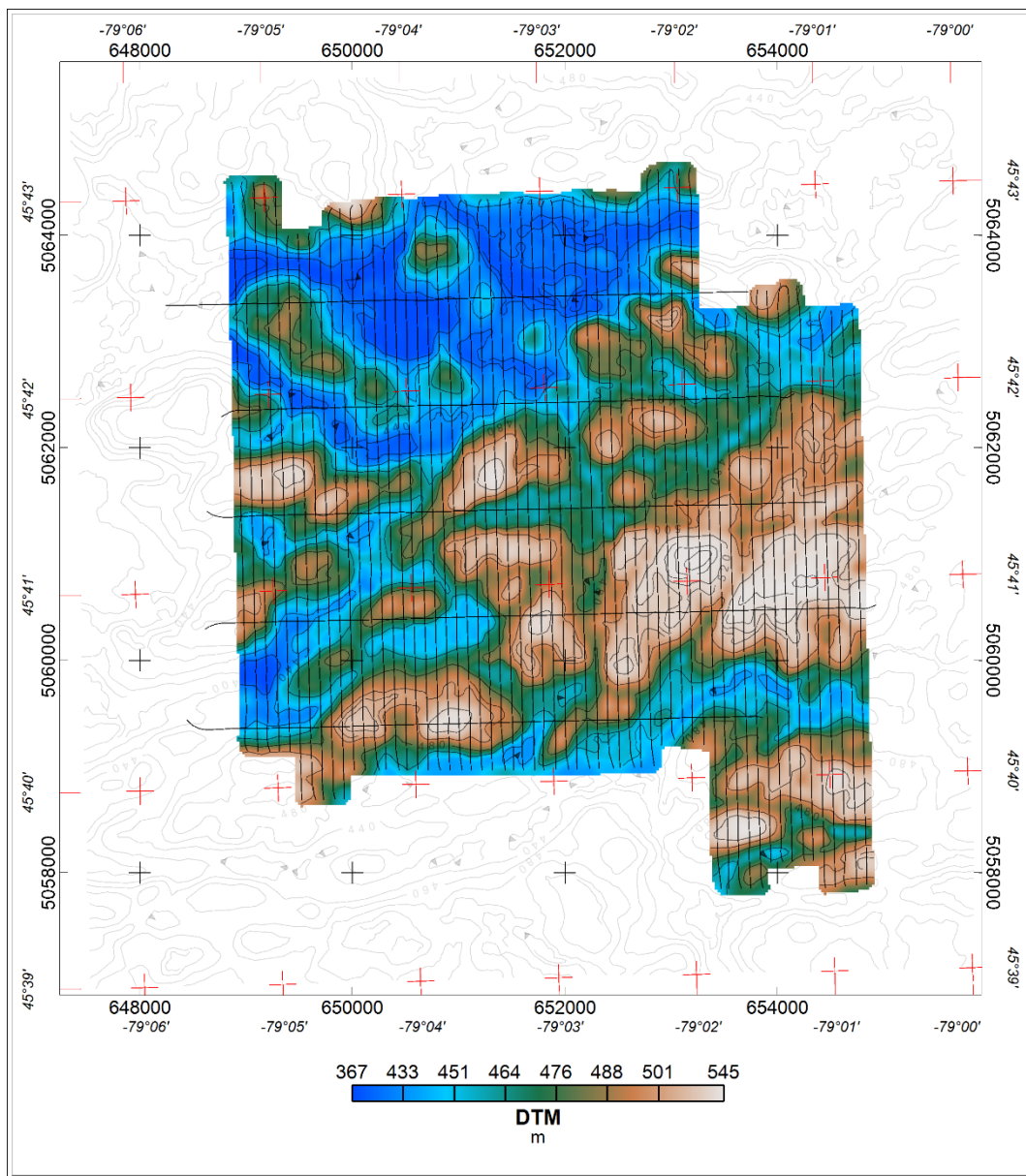
Appendix III MobileMT maps images¹

Butt Property Block

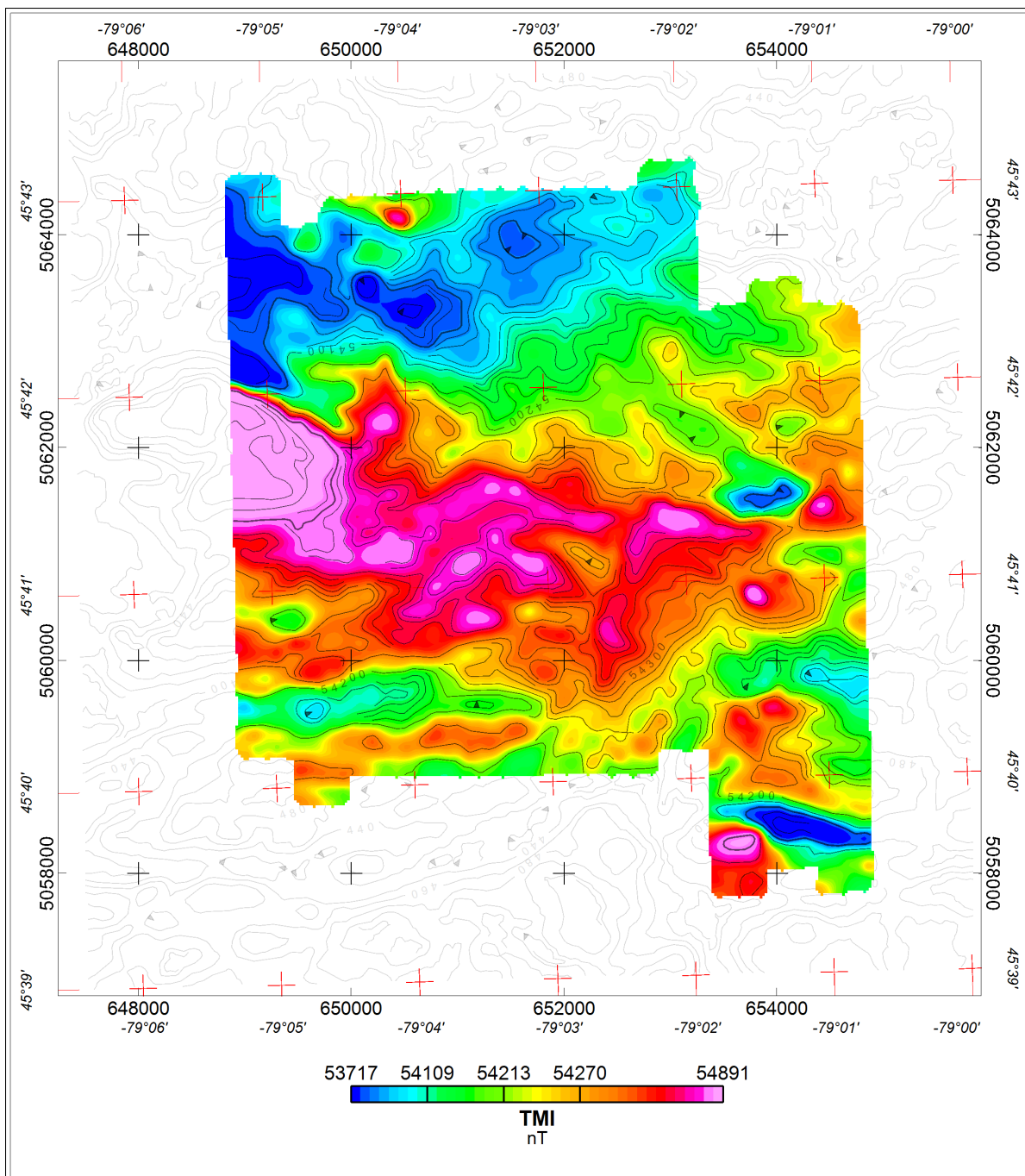


Flight path map

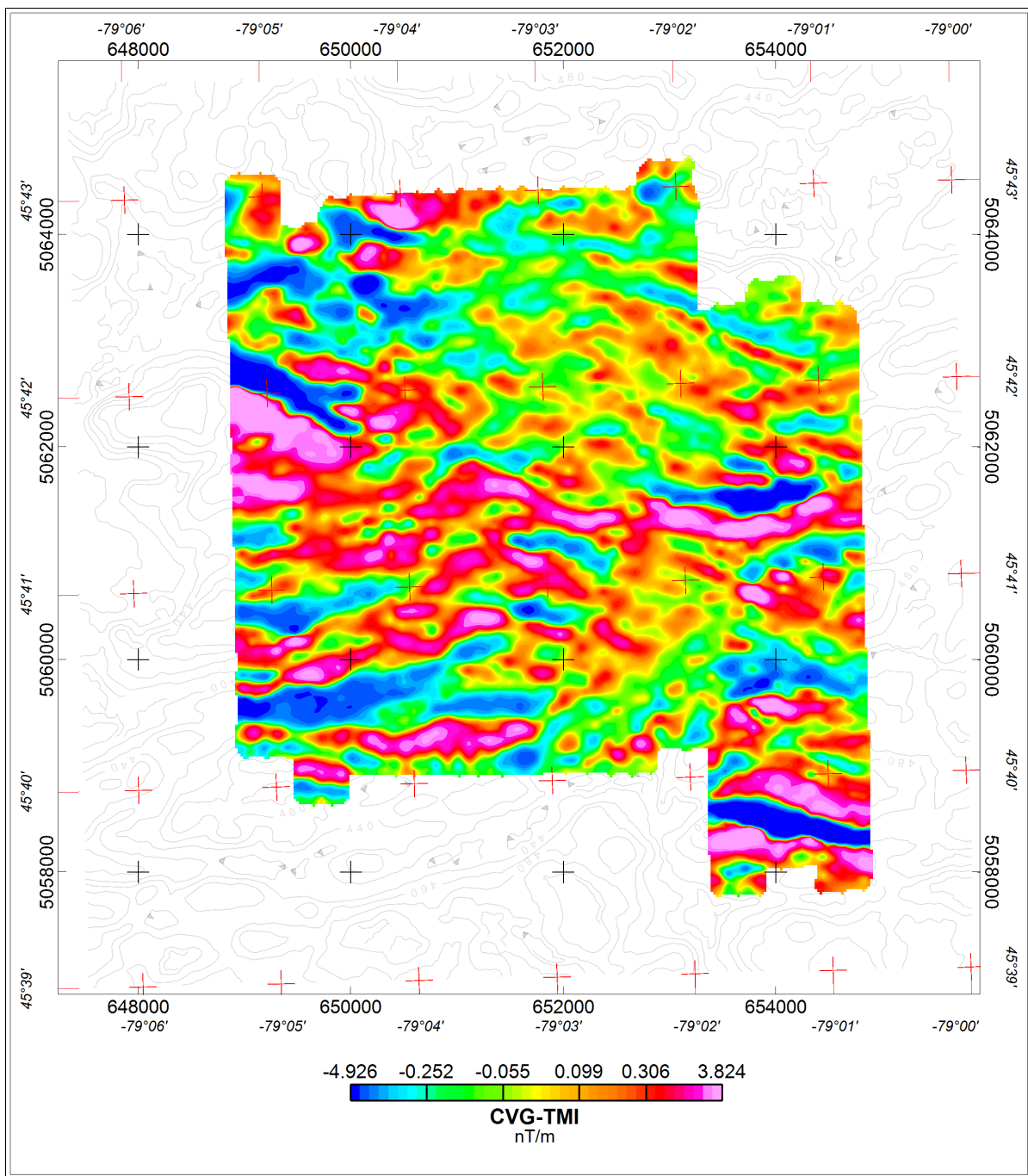
¹ Only selected maps are presented in the Appendix. A full set of maps is following the report in geosoft and pdf formats.



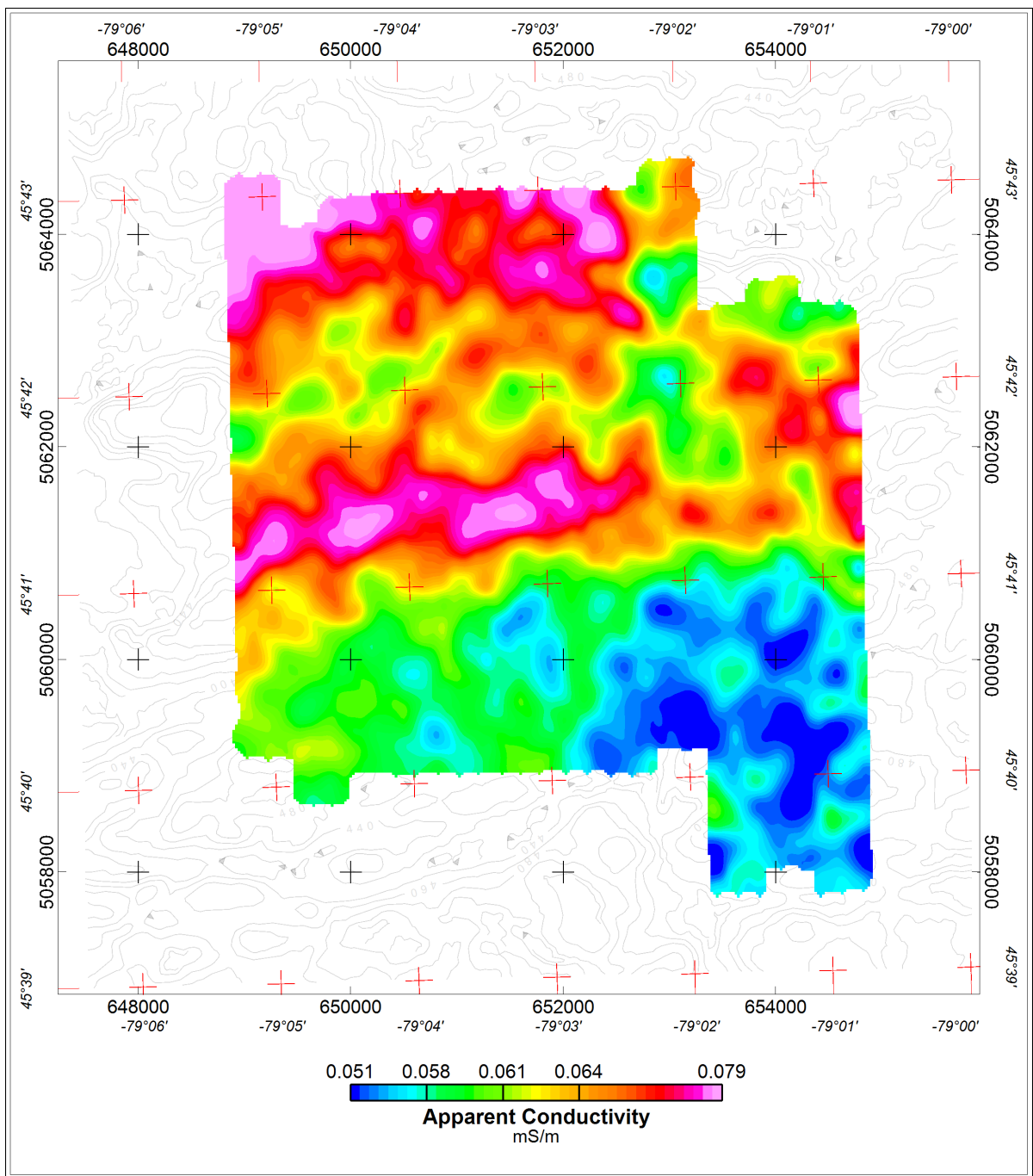
Digital Terrain Model (DTM)



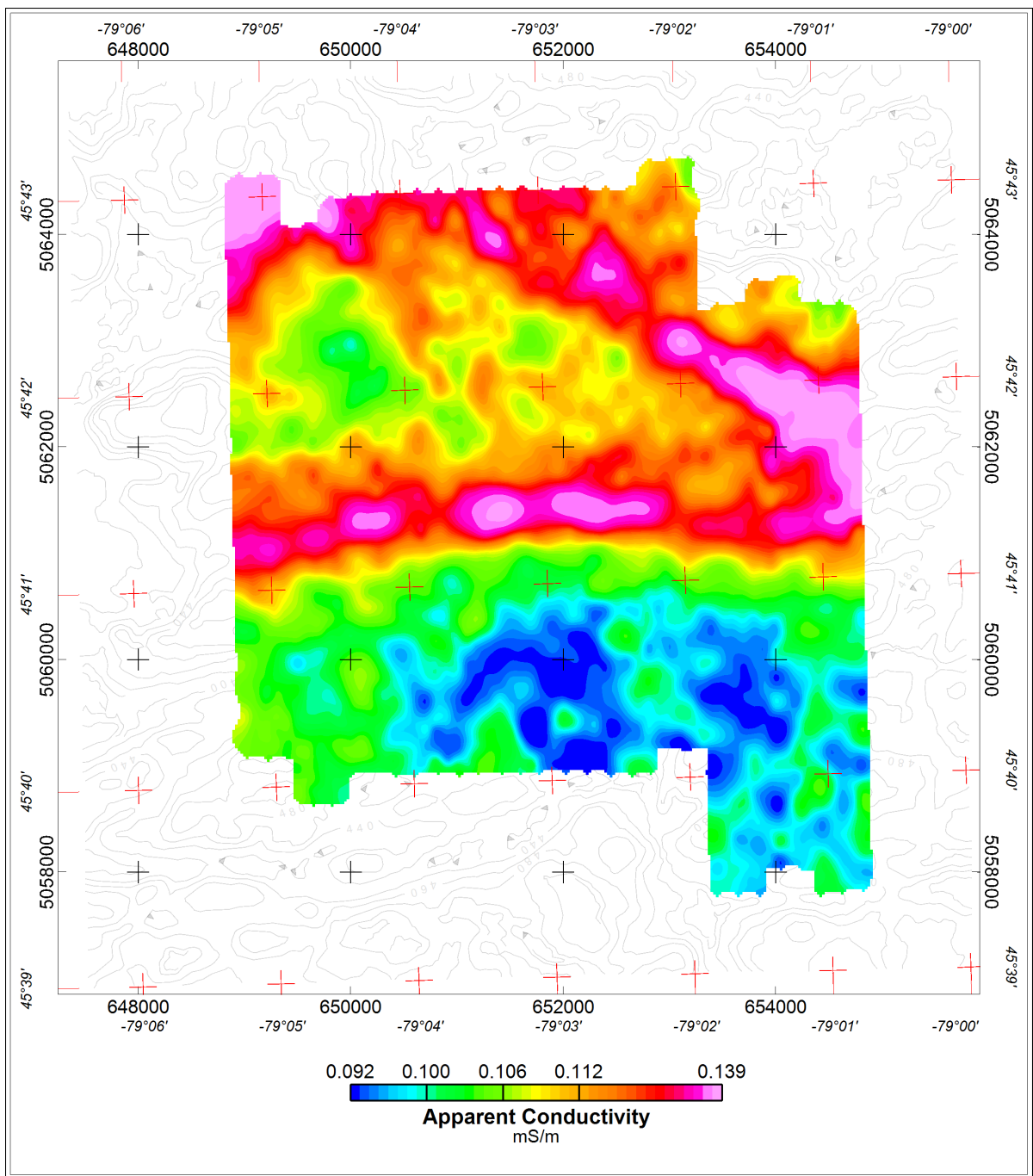
Total Magnetic Intensity Map (TMI)



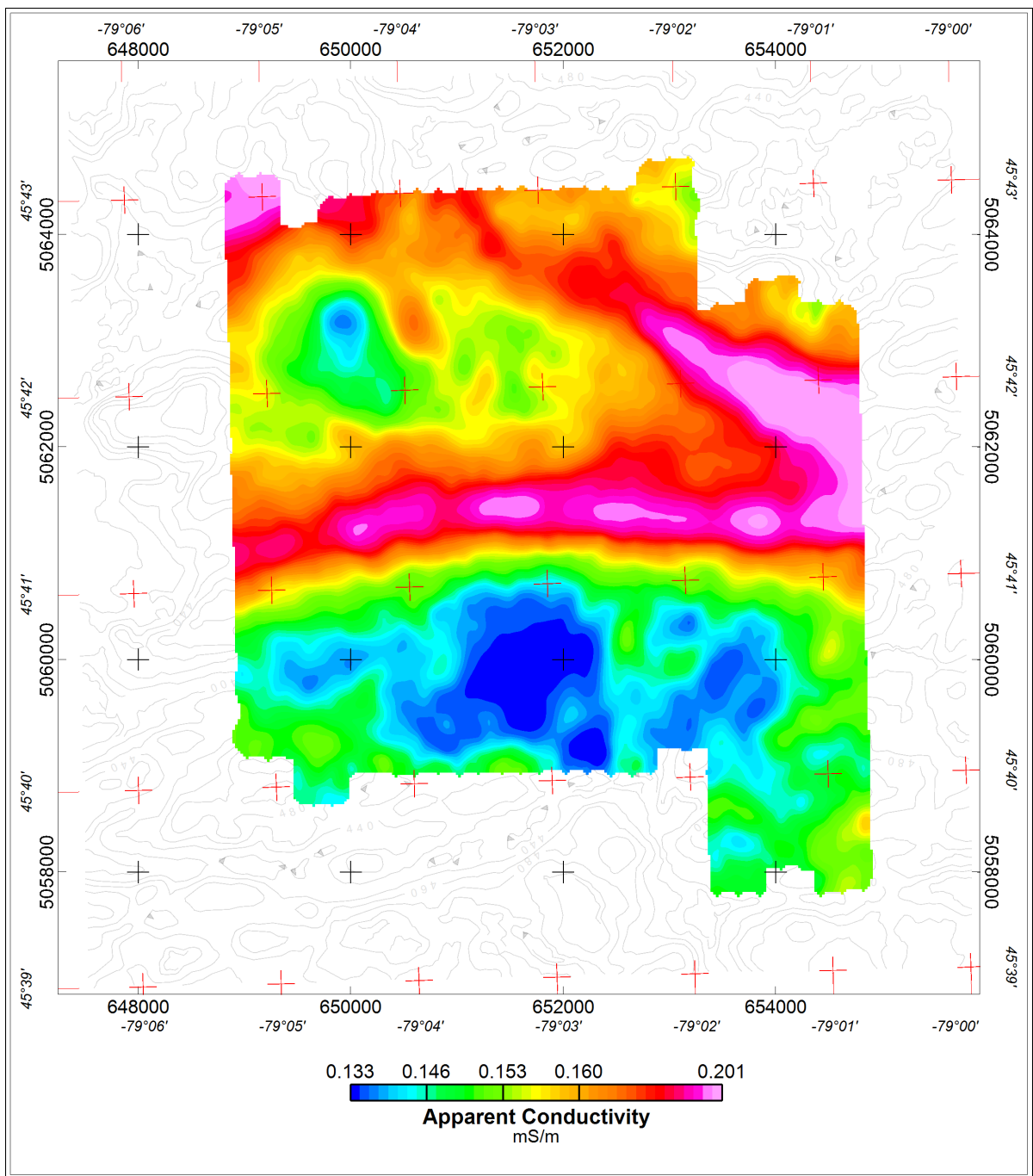
Calculated Vertical Derivative Map of magnetic field (CVG-TMI)



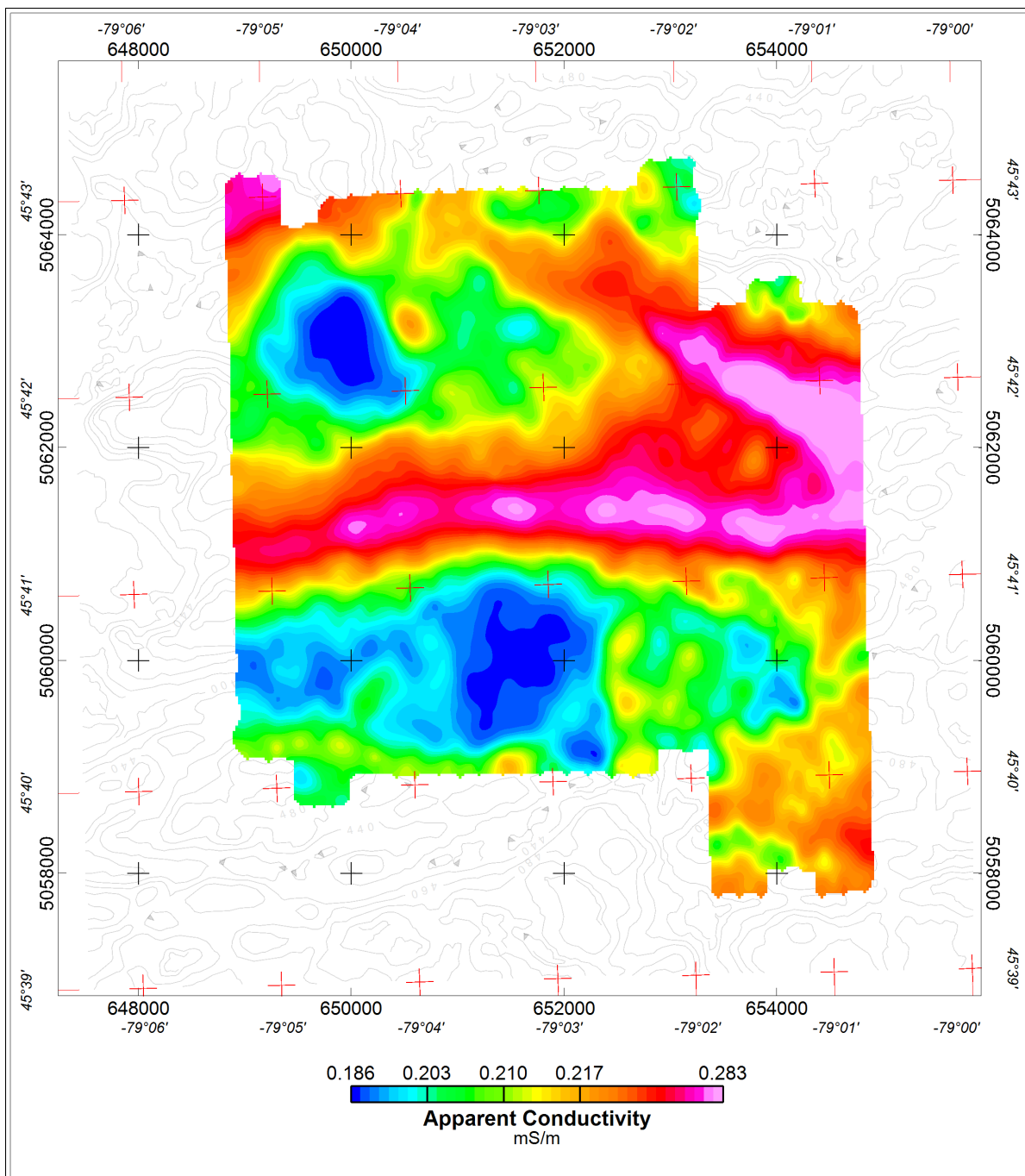
Apparent conductivity (42 Hz)



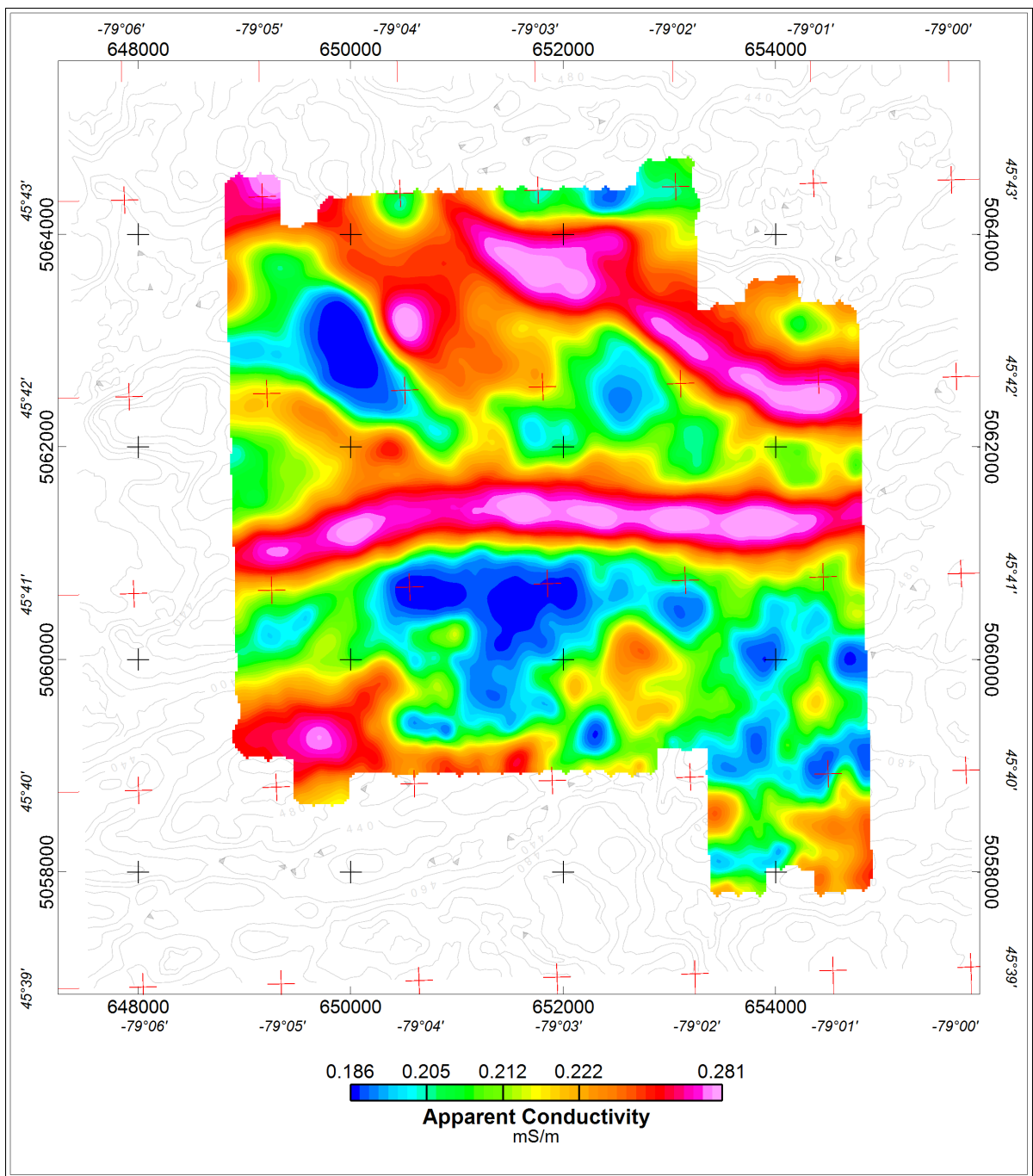
Apparent conductivity (138 Hz)



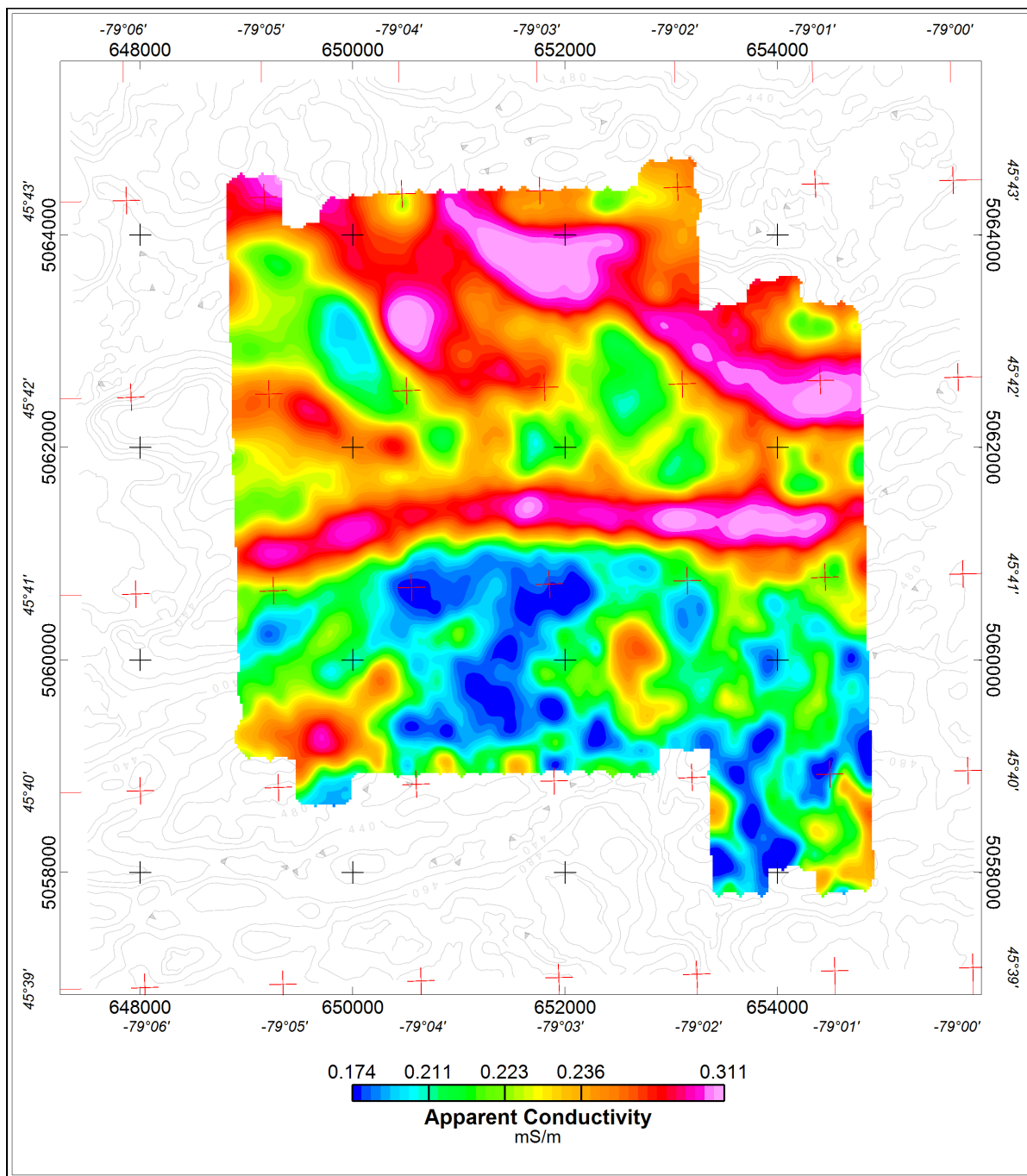
Apparent conductivity (267 Hz)



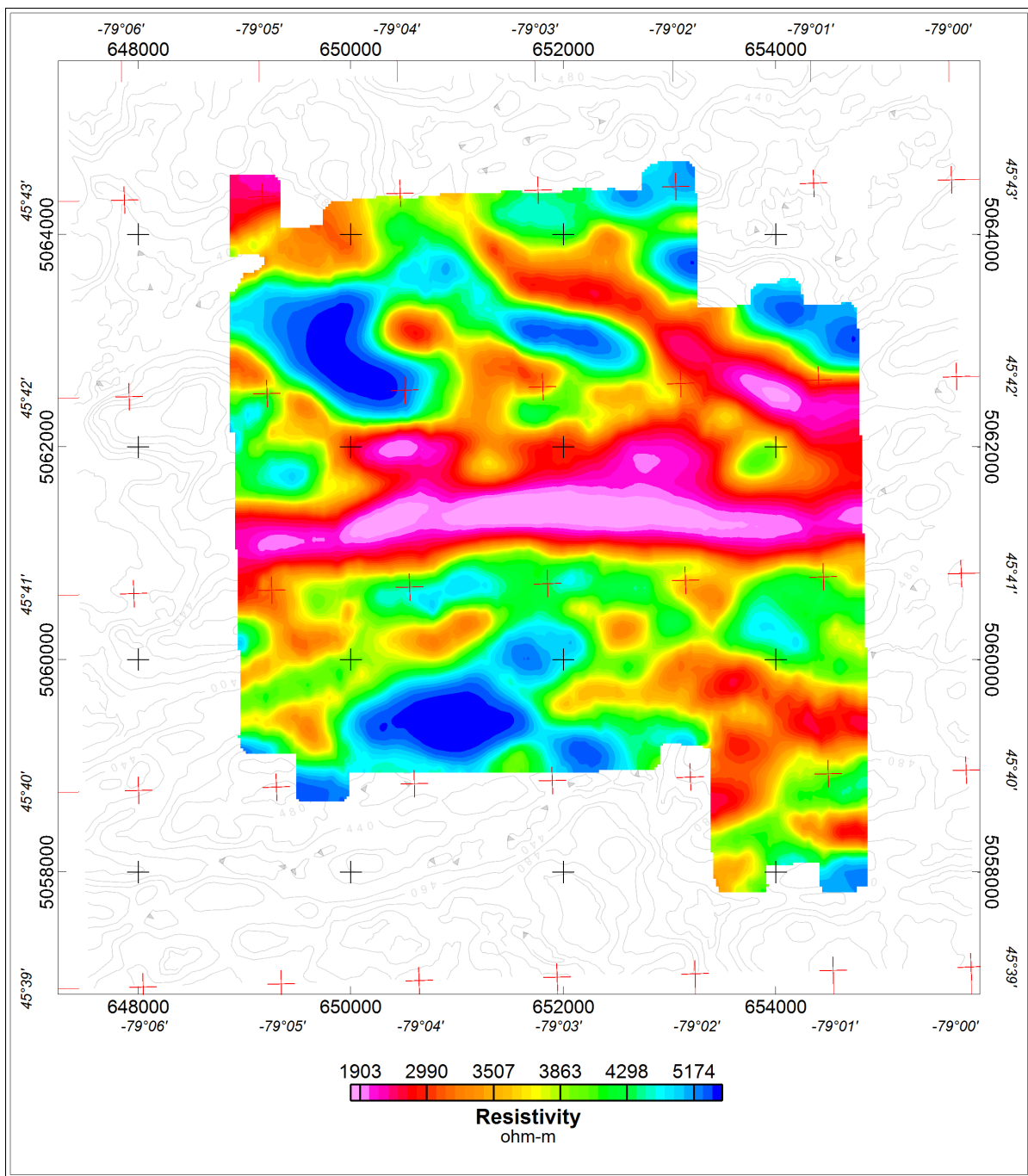
Apparent conductivity (533 Hz)



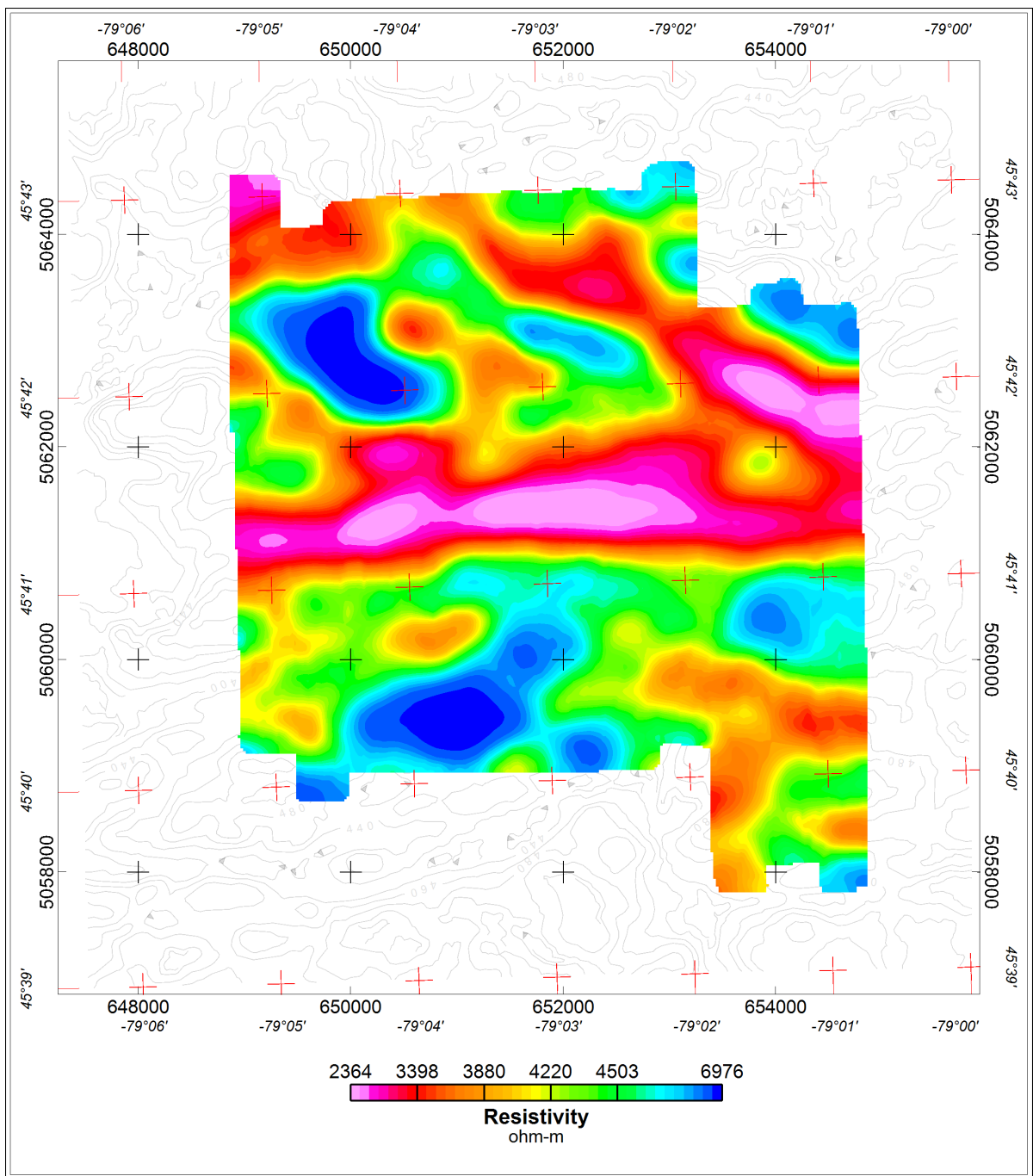
Apparent conductivity (6786 Hz)



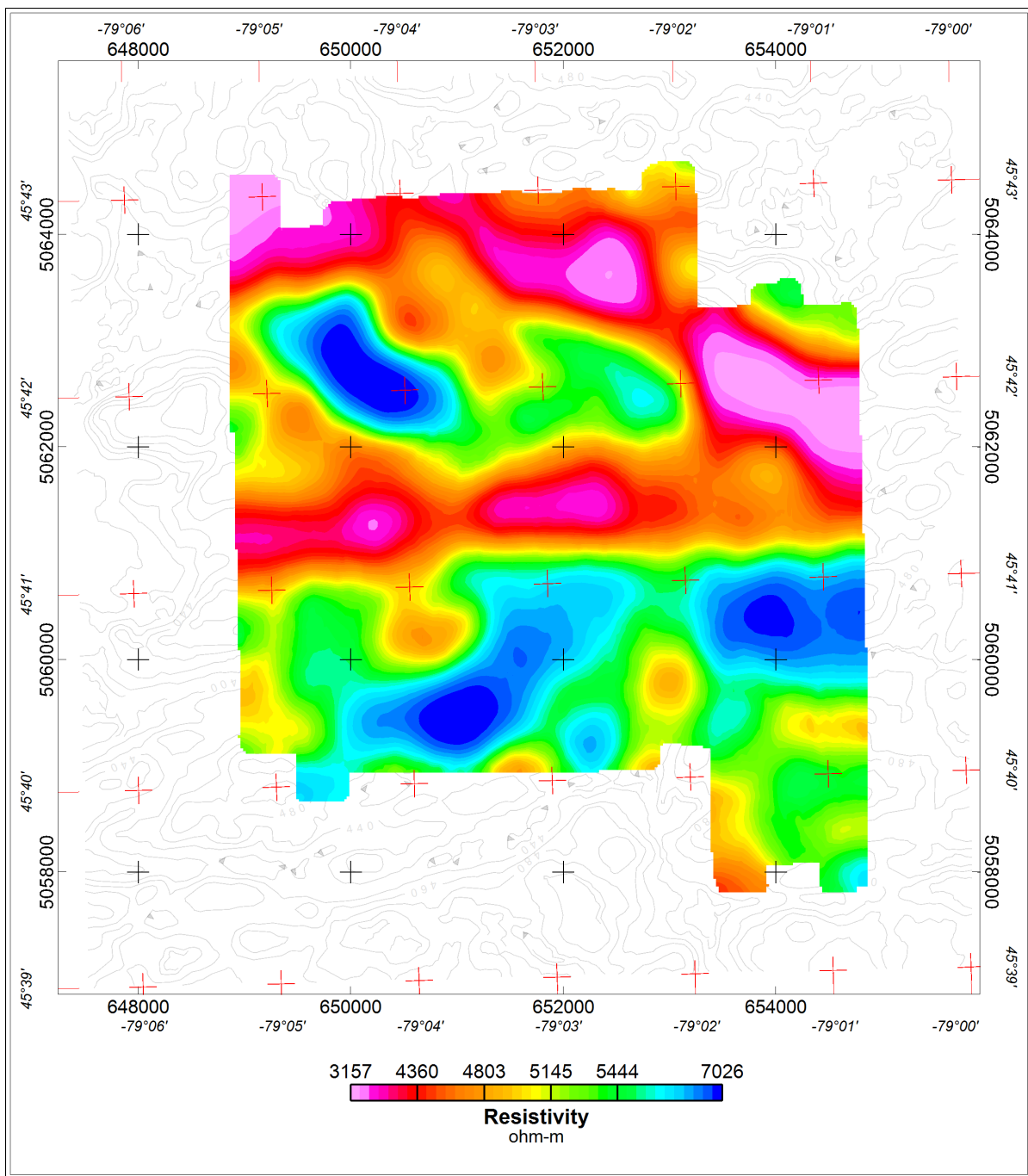
Apparent conductivity (10768 Hz)



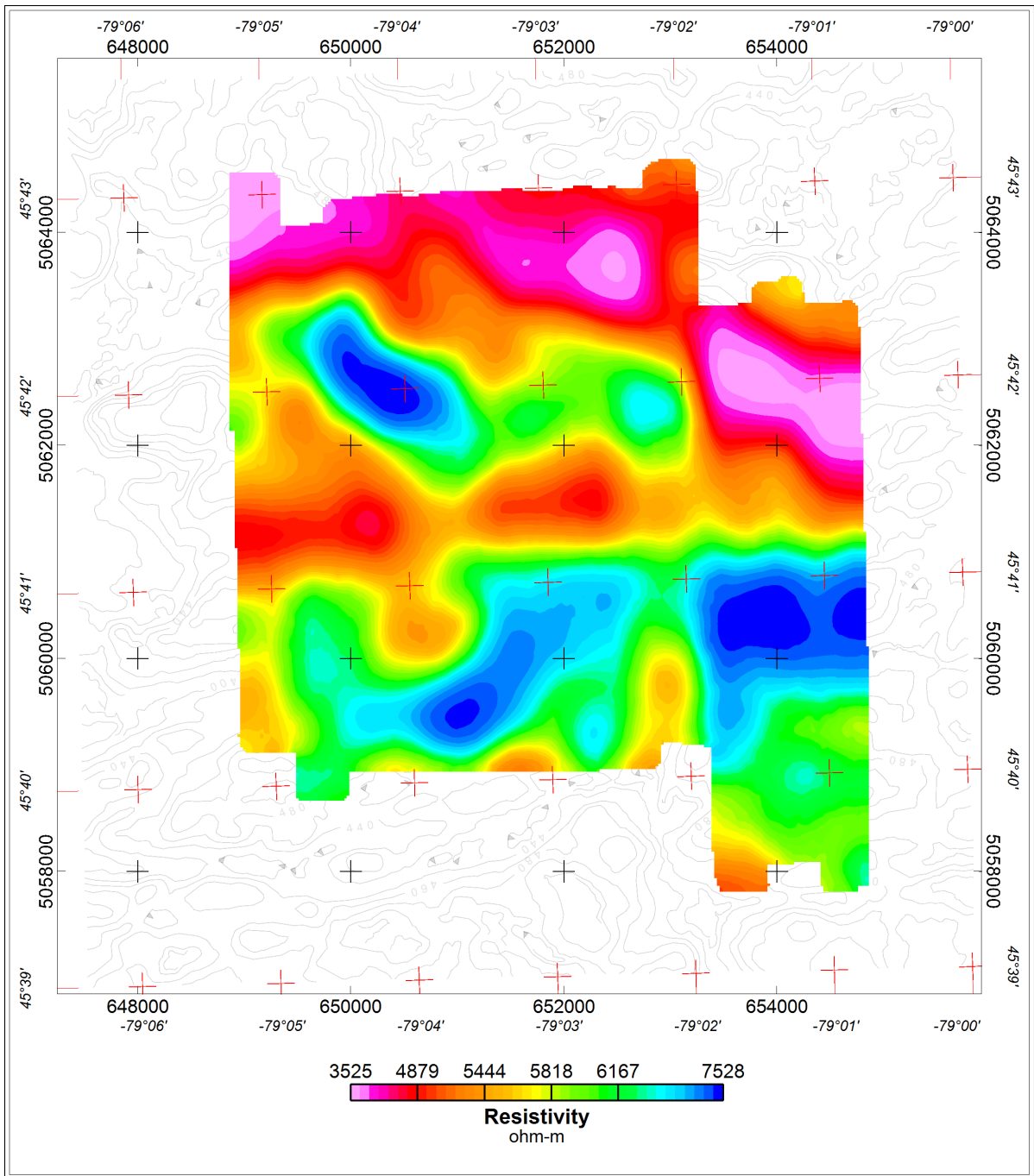
Resistivity at elevation of 400 m ASL (determined through inversions)



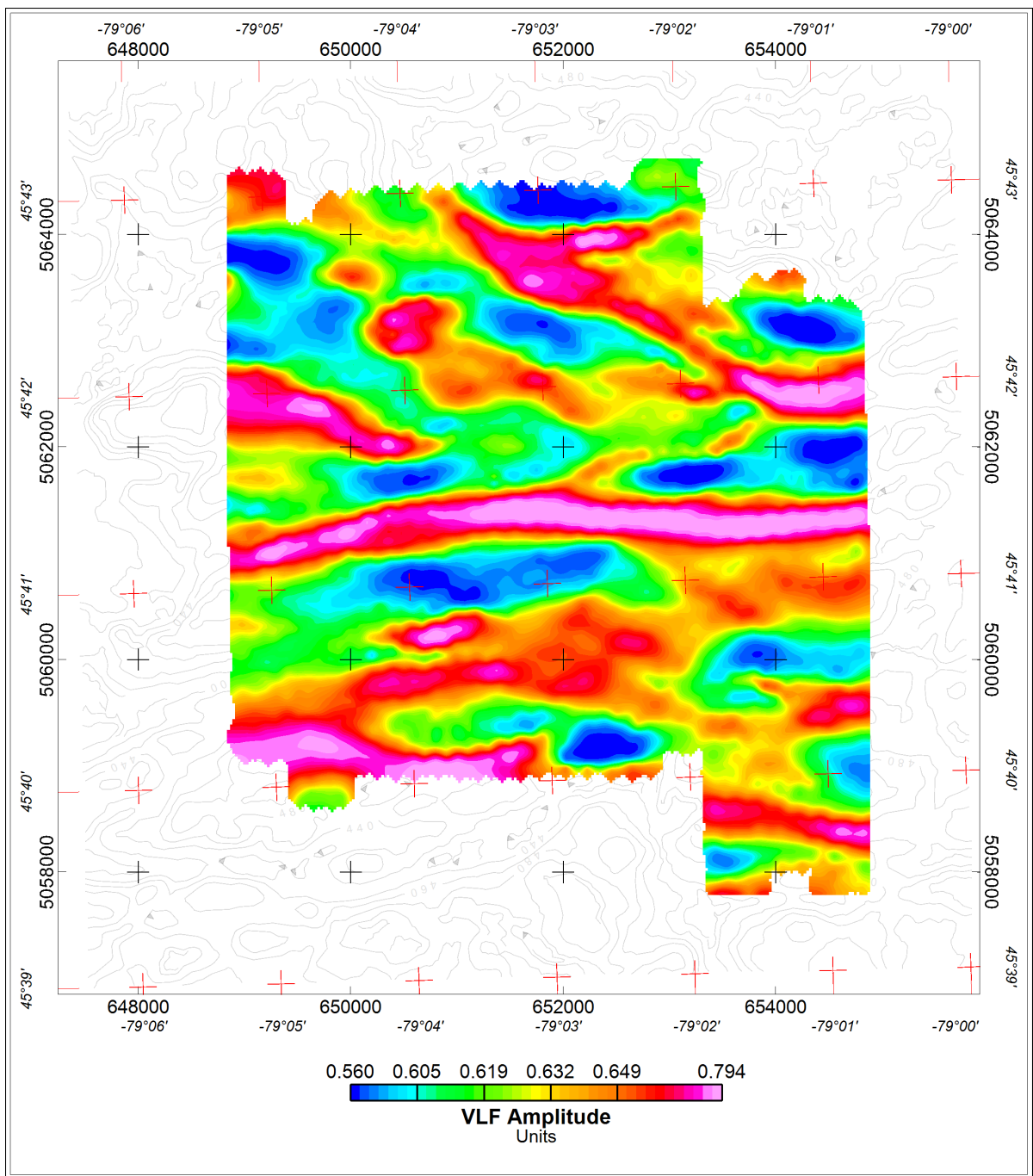
Resistivity Elevation at 200 m ASL



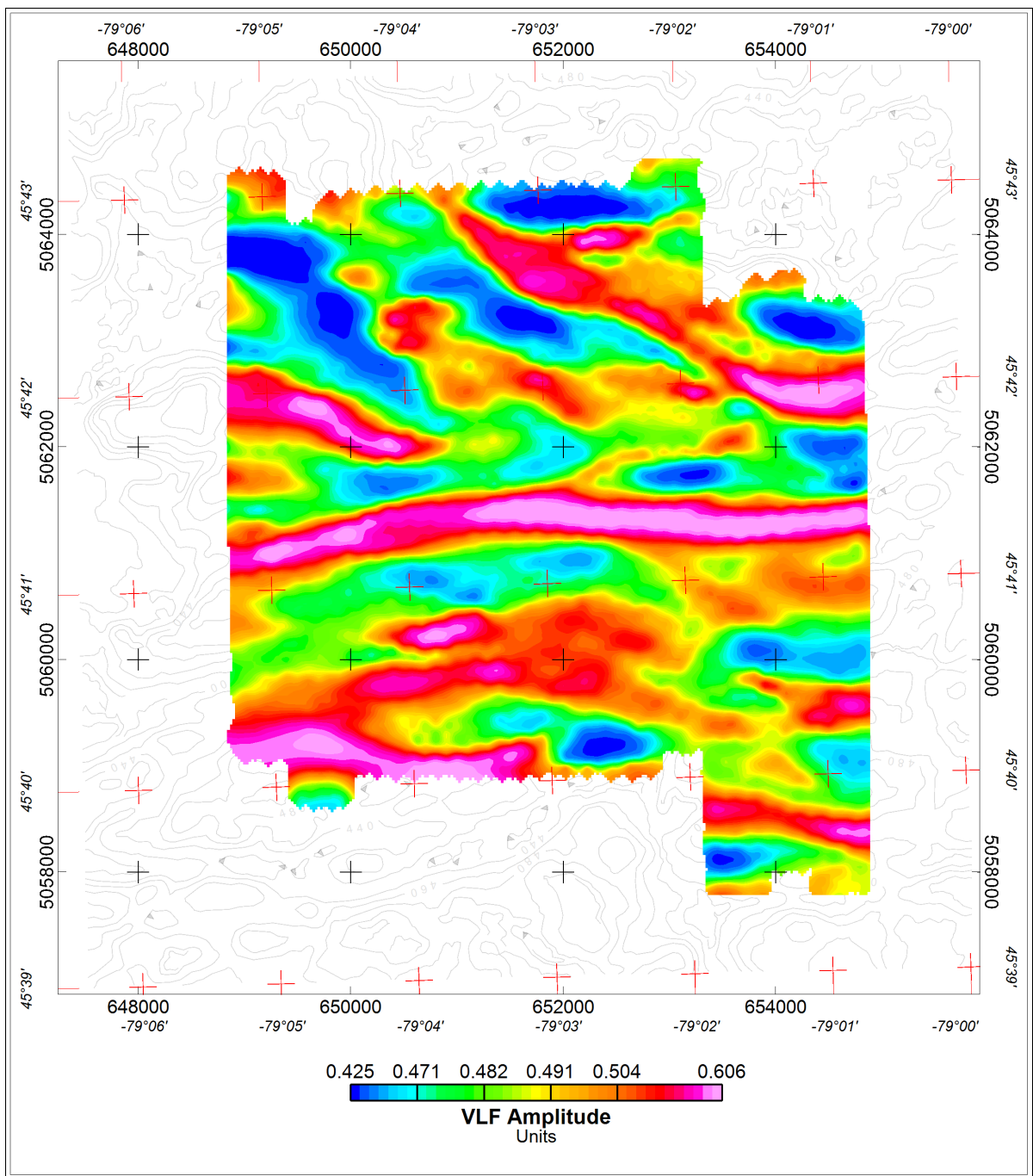
Resistivity Elevation at 0 m ASL



Resistivity Elevation at -100 m ASL



VLF Amplitude Map (24.00 kHz)



VLF Amplitude Map (25.20 kHz)

APPENDIX B – PROSPECTING REPORT

February 8th 2023

Prospecting Samples Report

**Work Performed by
Dan Patrie Exploration Ltd.
On Behalf of**

Griftco Corporation

In

**Butt Township
Southern Ontario Mining Division**

Brent Patrie

Dan Patrie Exploration Ltd.

P.O Box 45,

Massey, Ontario

POP 1P0

705-869-7507

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Page 10 - Regional Property Map (**Figure 1**)

Page 11 - Property Access (**Figure 2**)

Page 12 - Claim Map (**Figure 3**)

Page 13 - Sampling Map (**Figure 4**)

Page 14 - Sample List (**Table 2**)

Report Authors, Contributors & Qualifications

C. Brent Patrie – 30+years Exploration & Geophysics Management

Gabriel Roy – 16+years Exploration & Geophysics, Mapping & Data Management

Introduction

Griftco Corporation holds a series of claims within the central area of Butt Township. Rock sampling was conducted within the claim group consisting of 87 contiguous single-cell mining claims (Figure 1, Table 1).

December 1st to December 15th 2022. Dan Patrie Exploration Ltd. carried out rock sampling as shown in (Figure 4). The following report is a summary of the work carried out and the results obtained.

Location and Access

The Project is located within the central western area of Butt Township (Mining District of Southern Ontario at NTS NAD 83, UTM Zone 17 T, 651630mE, 5061800mN) approximately 42km north east of Huntsville, Ontario (Figure 1).

The property can be reached by road from Emsdale, Ontario (Figure 2). Travelling eastbound from Emsdale, the work location is accessed via HWY 518 following the Sand Lake road, thru Kerney, Ontario, and the Forestry Tower road for a distance of approximately 30km to reach the general area of the Griftco project boundaries. From this location a series of logging roads and trails are used to navigate the area.

Regional Geology & Historical Work

Butt Township is located in the mining district of Southern Ontario, Canada. The geology of the township is characterized by rocks of the Grenville Province, which are some of the oldest rocks in North America.

The Grenville Province is a complex sequence of metamorphic rocks that formed during the Proterozoic Era, between 1.2 and 1.0 billion years ago. The rocks in Butt Township are primarily composed of gneisses, schists, and granites, which have undergone extensive deformation and metamorphism.

The gneisses and schists in Butt Township are typically high-grade rocks that have experienced significant recrystallization and deformation. These rocks often exhibit well-developed foliation, indicating that they were subjected to high-pressure deformation. The granites in the area are typically coarse-grained and consist of feldspar, quartz, and mica.

In terms of mineralization, Butt Township is historically known for its gold, silver, and copper deposits. These deposits are often associated with quartz veins that cut through the gneisses and schists. The gold deposits in the area are typically low-grade, but there have been some significant discoveries, such as the Kerr-Addison Mine, which produced over 11 million ounces of gold.

More recently, uranium, rare earth minerals and graphite exploration has become an important focus in the township, with several significant graphite deposits discovered, including the Kearney Graphite Mine.

Overall, the geology of Butt Township is characterized by high-grade metamorphic rocks of the Grenville Province, which host significant mineral deposits, including gold, silver, copper, and graphite. The area remains geologically prospective, and there is potential for the discovery of additional mineral deposits.

Uranium and rare-earth bearing pitchblende was discovered on the Property in the early 1900's. The Property lies within the Kiosk geological domain and is underlain by mafic, quartzo-feldspathic, and metapelitic geological units. These various geological units host radioactive granitic pegmatite dikes which contain minerals such as allanite, uraninite, pyrochlore, columbite, and other rare earth and uranium-bearing minerals.

Recent target-generation exploration work has been completed on the Property, including magnetometer and induced polarization geophysical surveys, geological mapping, and prospecting. The Property has never been drilled, but numerous historical trenching and small-scale mining operations have occurred on the Project. Advanced prospects on the Property include: the William Elliot & Mica Lake prospects, discovered in 1919 from which highly selective grab samples returned up to 79.5 % U₃O₈ along with high-grade rare earth elements; the Ryan, Mann and Sheehan prospect, discovered in 1921 from which selective grab samples returned up to 0.45 % U₃O₈ over a 3 foot chip sample; the E.J Rivers prospect, discovered in 1953 from which selective grab samples returned values of up to 9.75 % U₃O₈ along with high-grade rare earth elements. In addition, the Property is contiguous with Ontario Graphite's Kearney Mine property.

Graphite exploration in Butt Township, Ontario, Canada has a relatively short history compared to other minerals such as gold and silver. However, there have been several significant graphite deposits discovered in the area.

The first known graphite occurrence in the township was discovered in 1876 by the Geological Survey of Canada, which reported a vein of graphite over a kilometer long and up to 2 meters wide. However, it was not until the 1950s and 60s that more systematic exploration began, resulting in the discovery of several additional graphite deposits.

One of the most significant graphite deposits in Butt Township is the Kearney Graphite Mine, now owned by Ontario Graphite Ltd. The deposit was first discovered in 1986 by a junior exploration company, and

subsequent drilling confirmed the presence of high-grade graphite. The mine was in operation from 1989 to 1994 and produced over 100,000 tonnes of graphite.

In recent years, interest in graphite exploration has increased due to the growing demand for graphite in lithium-ion batteries used in electric vehicles and other applications. Several exploration companies have conducted geophysical surveys, sampling and drilling programs in the area, there are several potential graphite deposits that are still in the early stages of exploration.

The geological setting of Butt Township is favorable for the formation of graphite deposits. The area is underlain by rocks of the Grenville Province, which is known to host graphite deposits. The graphite occurs in association with gneisses and schists, and the deposits are often high grade and of large tonnage.

Overall, the historical mineral exploration of graphite in Butt Township has been relatively limited compared to other minerals, but the area has proven to be a significant graphite-producing region, with the potential for additional discoveries in the future.

References:

Geological Survey of Canada. 2010. Geology of the Abitibi Belt and Grenville Province, Superior Province, Ontario and Quebec. Geological Survey of Canada, Open File 6473.

Sutcliffe, R.H., 1990. Geology of the Larder Lake-Kirkland Lake area, Ontario Geological Survey, Report 235.

Ontario Geological Survey. 2014. Mineral Deposits of Southern Ontario: Vol. 1 - Metal Deposits. Ontario Geological Survey, Open File Report 6254.

Geophysical Survey Report on the Butt Township Property, Butt Township, District of Nipissing, Ontario, for Dan Patrie Exploration Ltd., Prepared by: L.D.S. Winter, P.Geo., 23 January 2012.

Work Performed & Personnel

Dan Patrie Exploration Ltd was contracted by Griftco Corporation to conduct grass roots prospecting and sampling within the claim group held by Griftco Corporation in Butt Township. The work was performed from December 1st 2022 to December 15th 2022.

Five DPE employees, Brent Patrie (Sudbury, Ontario) Gabriel Roy (Smooth Rock Falls, Ontario), Justin Abramson (Sudbury, Ontario), and Nathan Murray (Sudbury, Ontario), Brad Lemay (Sudbury, Ontario) were tasked with locating outcrops and collecting rock samples within the Griftco Corporation claim group.

Due to an early unexpected snowfall locating and uncovering potential areas of interest became slightly more laborious, limiting the capabilities of achieving the expected sample numbers within the allotted work period.

In total 37 rock samples were collected in various locations throughout the claim group using existing geophysical survey maps, and historical sampling results to pin point areas of interests. The sampling map Figure 4 represents the sample locations and GPS tracking conducted by the DPE employees.

Results & Recommendations

Table 1 – Griftco Corporation Claims List

Township / Area	Tenure ID	Anniversary Date
BUTT	100314	12-Jun-2023
BUTT	100315	12-Jun-2023
BUTT	100654	12-Jun-2023
BUTT	115793	12-Jun-2023
BUTT	115886	12-Jun-2023
BUTT	115943	12-Jun-2023
BUTT	116953	12-Jun-2023
BUTT	126261	12-Jun-2023
BUTT	127692	12-Jun-2023
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BUTT	142773	12-Jun-2023
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BUTT	155547	12-Jun-2023
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BUTT	172135	12-Jun-2023
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BUTT	533891	26-Oct-2023
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BUTT	533893	26-Oct-2023
BUTT	533894	26-Oct-2023

Township / Area	Tenure ID	Anniversary Date
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Figure 1 – Regional Property Map

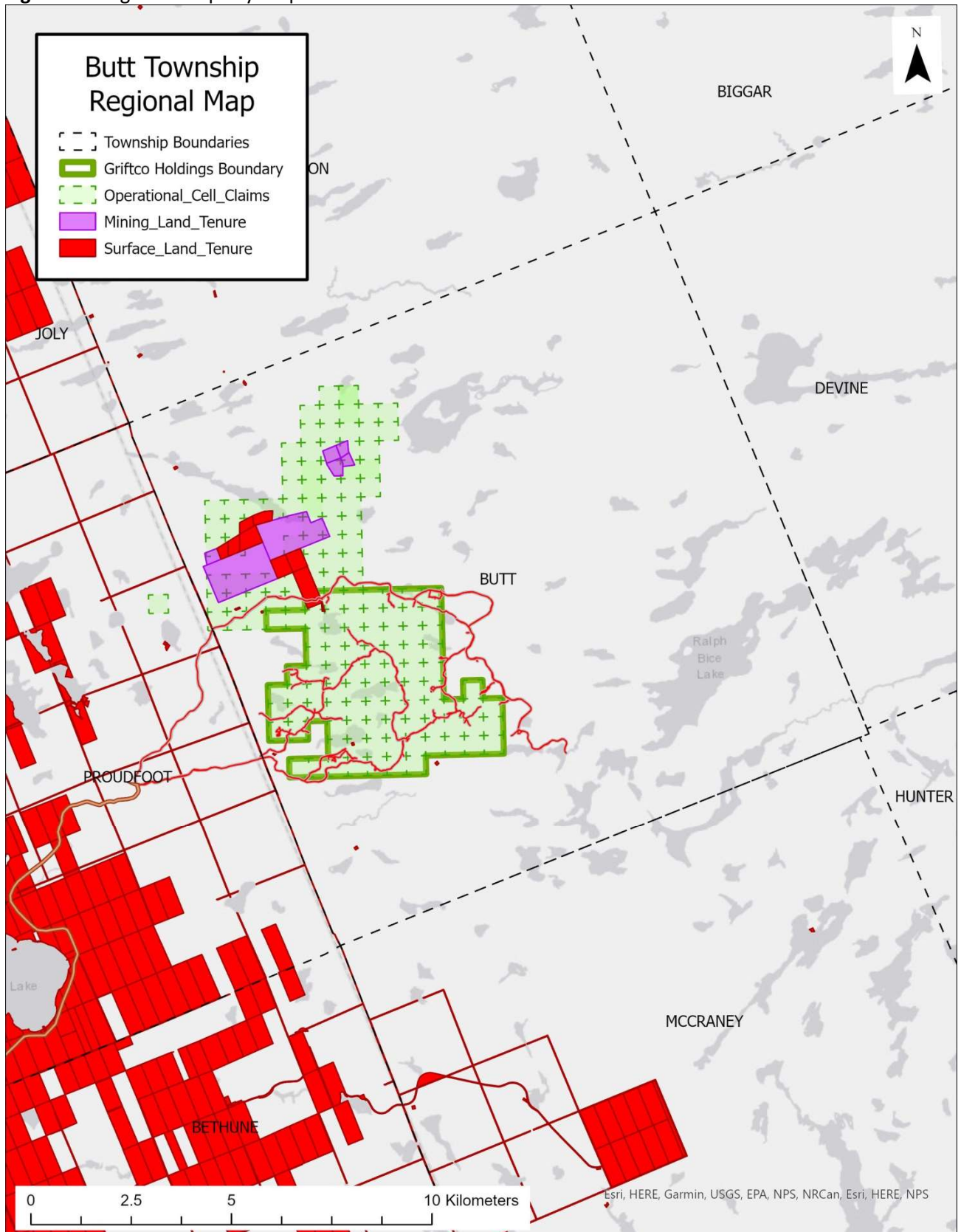


Figure 2 – Butt Twp. Access Map

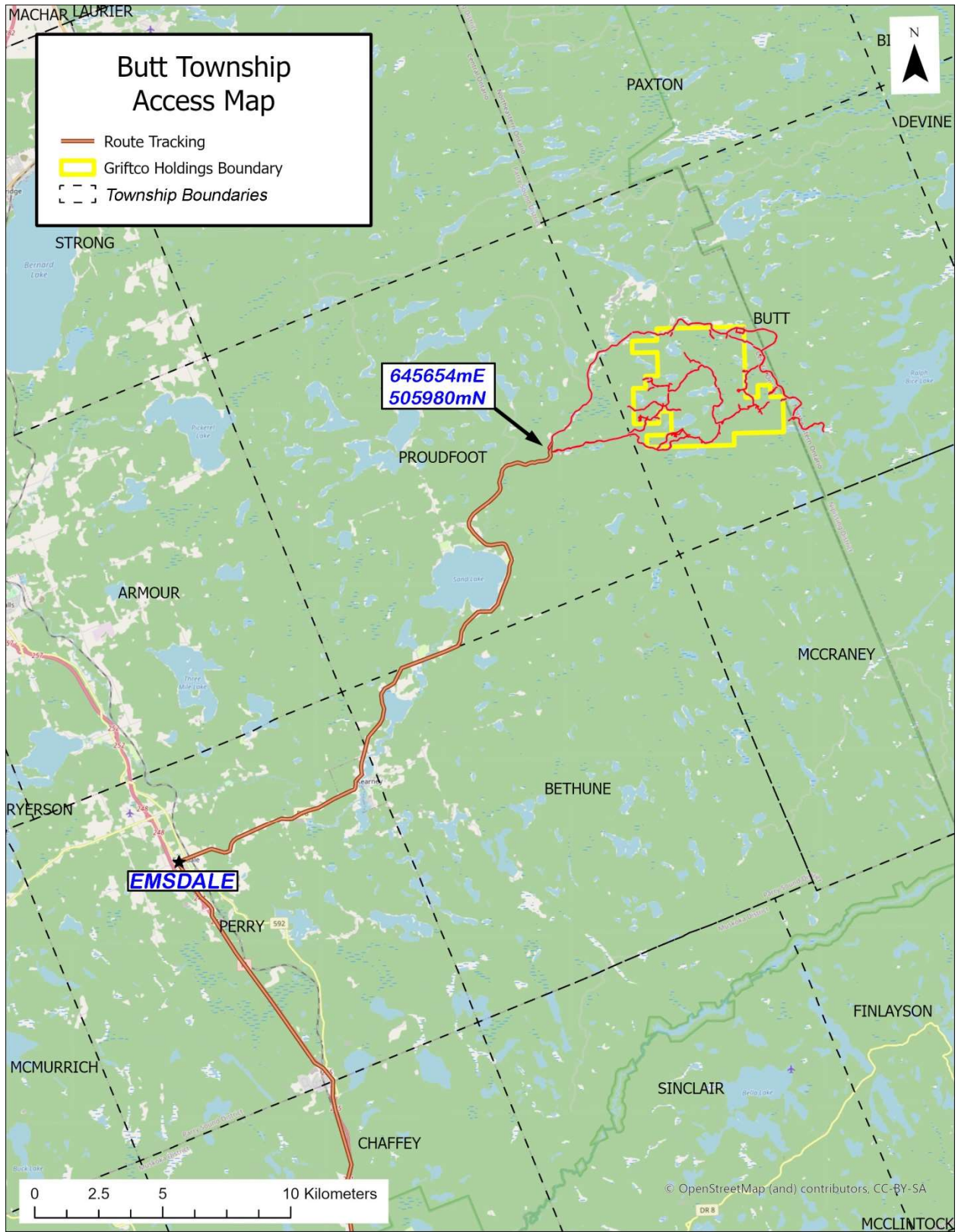


Figure 3 – Griftco Corporation Claim Map

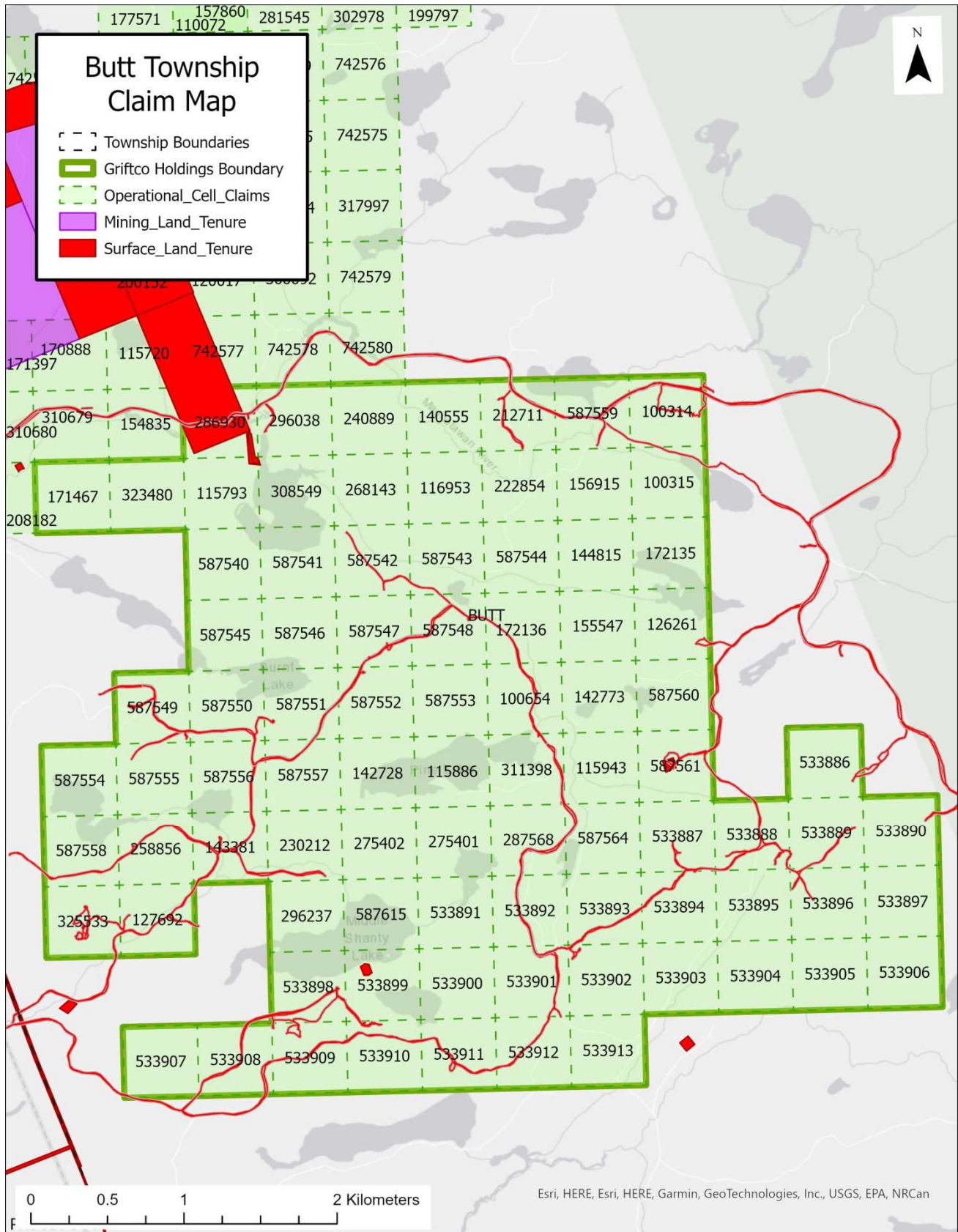


Table 2 – Sample List

Prefix	Sample ID	Easting	Northing
GRDEC22	101	653119	5063720
GRDEC22	102	653163	5063721
GRDEC22	103	653031	5063754
GRDEC22	104	652997	5063761
GRDEC22	105	652933	5063767
GRDEC22	201	654717	5061118
GRDEC22	202	654207	5061341
GRDEC22	301	653238	5062270
GRDEC22	302	653187	5062237
GRDEC22	401	653746	5060870
GRDEC22	402	653729	5060844
GRDEC22	403	653701	5060794
GRDEC22	501	652418	5060232
GRDEC22	502	652380	5060176
GRDEC22	601	649139	5060325
GRDEC22	602	649154	5060343
GRDEC22	603	649156	5060344
GRDEC22	604	649177	5060329
GRDEC22	605	649188	5060374
GRDEC22	606	649180	5060398
GRDEC22	607	649117	5060405
GRDEC22	608	649204	5060506
GRDEC22	609	649196	5060512
GRDEC22	701	651023	5059757
GRDEC22	702	651118	5059743
GRDEC22	703	651130	5059746
GRDEC22	704	650594	5059664
GRDEC22	705	650424	5059721
GRDEC22	706	651589	5059442
GRDEC22	801	651010	5062057
GRDEC22	802	651047	5062149
GRDEC22	803	651166	5062240
GRDEC22	804	651696	5062394
GRDEC22	901	649479	5061829
GRDEC22	902	649858	5061617
GRDEC22	903	650424	5061734
GRDEC22	904	650426	5061726



CLIENT NAME: AGAT CLIENT ON, ON

ATTENTION TO: Kelly Malcolm

PROJECT:

AGAT WORK ORDER: 23T989532

SOLID ANALYSIS REVIEWED BY: Jeffrey Xiong, Lab Team Lead

DATE REPORTED: Mar 28, 2023

PAGES (INCLUDING COVER): 20

Should you require any information regarding this analysis please contact your client services representative at (403) 291-4682

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
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Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

2215 27 Ave NE
 CALGARY, ALBERTA
 CANADA T2E 7M4
 TEL (403)291-4682
 FAX (403)291-4688
<http://www.agatlabs.com>

CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(200-026) Sample Login Weight (CGY)

DATE SAMPLED: Jan 19, 2023

DATE RECEIVED: Jan 19, 2023

DATE REPORTED: Mar 28, 2023

SAMPLE TYPE: Rock

Sample ID (AGAT ID)	Analyte: Unit: RDL:	Sample Login Weight kg
GRDEC22-101 (4703367)		3.71
GRDEC22-102 (4703368)		1.63
GRDEC22-103 (4703369)		1.99
GRDEC22-104 (4703370)		2.86
GRDEC22-105 (4703371)		2.30
GRDEC22-201 (4703372)		1.88
GRDEC22-202 (4703373)		1.84
GRDEC22-301 (4703374)		2.58
GRDEC22-302 (4703375)		2.25
GRDEC22-401 (4703376)		2.59
GRDEC22-402 (4703377)		2.92
GRDEC22-403 (4703378)		2.84
GRDEC22-501 (4703379)		2.70
GRDEC22-502 (4703380)		2.19
GRDEC22-601 (4703381)		2.36
GRDEC22-602 (4703382)		1.63
GRDEC22-603 (4703383)		2.72
GRDEC22-604 (4703384)		3.03
GRDEC22-605 (4703385)		2.82
GRDEC22-606 (4703386)		2.37
GRDEC22-607 (4703387)		2.63
GRDEC22-608 (4703388)		2.43
GRDEC22-609 (4703389)		2.38
GRDEC22-701 (4703390)		1.37
GRDEC22-702 (4703391)		2.00
GRDEC22-703 (4703392)		2.25
GRDEC22-704 (4703393)		3.61
GRDEC22-705 (4703394)		2.25
GRDEC22-706 (4703395)		3.50
GRDEC22-801 (4703396)		1.75
GRDEC22-802 (4703397)		2.95

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

2215 27 Ave NE
 CALGARY, ALBERTA
 CANADA T2E 7M4
 TEL (403)291-4682
 FAX (403)291-4688
<http://www.agatlabs.com>

CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(200-026) Sample Login Weight (CGY)

DATE SAMPLED: Jan 19, 2023 DATE RECEIVED: Jan 19, 2023 DATE REPORTED: Mar 28, 2023 SAMPLE TYPE: Rock

Sample ID (AGAT ID)	Analyte:	Sample Login Weight	Unit:
RDL:		kg	
GRDEC22-803 (4703398)		3.52	
GRDEC22-804 (4703399)		2.49	
GRDEC22-901 (4703400)		2.66	
GRDEC22-902 (4703401)		2.71	
GRDEC22-903 (4703402)		1.89	
GRDEC22-904 (4703403)		4.05	

Comments: RDL - Reported Detection Limit
 Analysis performed at AGAT Calgary (unless marked by *)
 Insufficient Sample : IS
 Sample Not Received : SNR

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023					DATE REPORTED: Mar 28, 2023					SAMPLE TYPE: Rock				
Analyte:	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	
Unit:	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	
RDL:	0.01	0.01	0.1	0.005	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5	0.05	
GRDEC22-101 (4703367)	0.07	1.13	0.7	<0.005	<5	370	0.48	<0.01	0.87	0.07	53.0	18.1	467	0.21	
GRDEC22-102 (4703368)	0.04	1.20	1.1	0.771	<5	225	0.22	0.04	0.38	0.05	38.6	16.2	532	3.20	
GRDEC22-103 (4703369)	0.02	0.71	0.5	<0.005	<5	127	0.26	<0.01	0.15	0.03	53.8	7.4	535	0.79	
GRDEC22-104 (4703370)	0.01	1.23	1.1	<0.005	<5	442	0.39	0.03	0.13	0.03	107	18.0	467	2.64	
GRDEC22-105 (4703371)	0.03	1.39	0.7	<0.005	<5	412	0.46	0.01	0.84	0.05	50.0	17.8	511	1.99	
GRDEC22-201 (4703372)	0.03	1.34	0.9	2.49	<5	489	0.44	0.01	0.75	0.06	70.9	14.8	565	1.01	
GRDEC22-202 (4703373)	0.01	1.45	0.8	<0.005	<5	558	0.25	0.02	0.40	0.02	31.2	11.8	575	1.55	
GRDEC22-301 (4703374)	0.02	2.06	0.3	0.762	<5	67	0.15	<0.01	1.43	0.04	3.45	16.4	425	0.08	
GRDEC22-302 (4703375)	0.02	3.25	0.4	<0.005	<5	145	0.23	0.02	2.12	0.05	5.12	17.9	381	0.49	
GRDEC22-401 (4703376)	0.02	1.72	0.8	0.568	<5	414	0.10	0.07	0.26	0.05	77.6	18.0	710	2.27	
GRDEC22-402 (4703377)	0.13	2.19	0.8	<0.005	<5	619	0.12	0.11	0.17	0.03	52.7	8.8	672	4.07	
GRDEC22-403 (4703378)	0.03	2.68	1.2	<0.005	<5	1290	0.10	0.03	0.26	0.04	76.5	36.7	785	4.54	
GRDEC22-501 (4703379)	0.03	1.70	0.7	<0.005	<5	598	0.36	0.01	0.82	0.07	24.4	24.4	490	1.17	
GRDEC22-502 (4703380)	0.02	2.03	0.8	<0.005	13	767	0.23	0.03	0.50	0.03	89.5	22.8	215	1.46	
GRDEC22-601 (4703381)	0.02	2.63	0.4	<0.005	<5	174	1.31	0.03	0.02	0.07	5.65	12.9	321	6.30	
GRDEC22-602 (4703382)	0.02	0.94	0.6	<0.005	<5	204	0.18	<0.01	0.18	0.02	63.6	9.0	550	0.54	
GRDEC22-603 (4703383)	0.12	0.95	0.8	<0.005	<5	108	0.46	0.01	0.81	0.11	46.6	26.0	499	0.33	
GRDEC22-604 (4703384)	0.03	1.54	0.5	<0.005	6	347	0.67	0.02	0.59	0.06	23.6	17.3	362	0.74	
GRDEC22-605 (4703385)	0.04	0.99	1.0	<0.005	<5	173	0.22	0.09	0.20	0.06	72.1	10.2	451	1.18	
GRDEC22-606 (4703386)	0.12	1.44	0.7	<0.005	<5	556	0.63	0.15	0.15	0.02	47.5	9.0	572	2.61	
GRDEC22-607 (4703387)	0.08	1.20	0.7	0.460	<5	290	0.30	0.12	0.16	0.02	63.7	5.9	453	1.10	
GRDEC22-608 (4703388)	0.04	1.05	1.1	<0.005	9	306	0.26	0.06	0.03	0.02	135	3.5	405	1.76	
GRDEC22-609 (4703389)	0.03	0.37	1.1	<0.005	<5	82	0.31	0.04	0.03	0.02	105	3.0	483	1.10	
GRDEC22-701 (4703390)	0.04	1.19	0.4	<0.005	<5	50	0.47	0.11	1.54	0.09	8.58	18.4	461	0.28	
GRDEC22-702 (4703391)	0.01	0.27	0.7	<0.005	<5	41	0.10	<0.01	0.03	0.02	106	2.4	385	0.10	
GRDEC22-703 (4703392)	0.02	0.62	0.5	<0.005	<5	108	0.25	0.02	0.07	0.03	24.4	10.7	452	0.35	
GRDEC22-704 (4703393)	0.03	2.62	0.5	<0.005	<5	258	0.85	0.06	1.97	0.06	24.8	22.1	499	0.77	
GRDEC22-705 (4703394)	0.08	0.68	0.5	<0.005	<5	139	0.14	0.03	0.35	0.04	17.6	15.8	533	0.16	
GRDEC22-706 (4703395)	0.05	1.17	0.5	<0.005	<5	212	0.44	<0.01	1.03	0.08	42.9	18.6	273	0.19	
GRDEC22-801 (4703396)	0.02	2.17	0.6	<0.005	<5	440	0.56	0.09	0.32	0.06	58.5	23.4	568	6.46	
GRDEC22-802 (4703397)	0.02	1.48	0.7	<0.005	<5	689	0.43	0.03	0.40	0.06	68.6	12.6	457	0.92	
GRDEC22-803 (4703398)	0.07	0.49	0.8	<0.005	<5	92	<0.05	0.02	0.02	0.01	95.7	1.6	384	0.13	

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023					DATE REPORTED: Mar 28, 2023					SAMPLE TYPE: Rock				
Analyte:	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	
Unit:	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	
RDL:	0.01	0.01	0.1	0.005	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5	0.05	
GRDEC22-804 (4703399)	0.12	1.04	0.7	0.123	<5	218	0.10	0.02	0.05	0.03	56.9	4.6	434	1.15	
GRDEC22-901 (4703400)	0.04	0.46	2.0	0.302	<5	103	0.44	0.11	0.13	0.05	310	5.8	368	0.93	
GRDEC22-902 (4703401)	0.03	0.48	0.6	<0.005	<5	96	0.10	0.01	0.30	0.04	108	8.9	433	1.13	
GRDEC22-903 (4703402)	0.13	1.16	0.6	0.232	<5	309	0.34	0.03	0.27	0.03	54.9	15.7	398	0.59	
GRDEC22-904 (4703403)	0.05	1.30	0.5	<0.005	<5	372	0.45	0.16	0.86	0.13	39.8	16.4	373	1.38	

Certified By:



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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023					DATE REPORTED: Mar 28, 2023					SAMPLE TYPE: Rock				
Analyte:	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	
RDL:	0.5	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05	0.01	
GRDEC22-101 (4703367)	39.4	4.50	<0.05	0.26	0.23	0.03	0.058	0.41	26.8	17.0	1.18	418	3.71	0.13	
GRDEC22-102 (4703368)	25.6	2.58	<0.05	0.16	0.13	0.03	0.038	0.66	16.7	15.1	1.19	211	5.32	0.11	
GRDEC22-103 (4703369)	12.8	1.71	<0.05	0.13	0.05	0.03	0.017	0.46	24.3	14.5	0.55	190	4.09	0.05	
GRDEC22-104 (4703370)	11.4	3.03	<0.05	0.40	0.11	0.02	0.097	0.66	46.5	22.4	1.13	345	3.76	0.07	
GRDEC22-105 (4703371)	45.0	2.98	<0.05	0.21	0.23	0.03	0.047	0.78	20.2	9.0	1.27	343	4.20	0.15	
GRDEC22-201 (4703372)	32.7	3.16	<0.05	0.34	0.22	0.03	0.057	0.77	28.7	10.2	0.98	318	4.99	0.12	
GRDEC22-202 (4703373)	20.2	3.71	2.01	0.18	0.09	0.02	0.038	1.08	14.1	18.1	0.94	230	5.59	0.08	
GRDEC22-301 (4703374)	33.5	1.58	5.89	0.07	0.04	0.21	0.008	0.05	2.0	3.2	0.63	220	3.19	0.30	
GRDEC22-302 (4703375)	26.1	1.37	5.80	<0.05	0.03	0.17	0.005	0.23	2.9	7.6	0.74	223	2.80	0.53	
GRDEC22-401 (4703376)	20.0	3.90	<0.05	0.27	0.08	0.46	0.055	1.30	20.3	9.6	1.19	523	6.26	0.04	
GRDEC22-402 (4703377)	42.3	5.90	0.78	0.22	0.06	0.13	0.070	1.90	19.6	6.1	1.86	206	12.8	0.05	
GRDEC22-403 (4703378)	26.5	5.82	<0.05	0.29	0.04	0.11	0.052	2.47	33.1	10.6	2.53	254	6.07	0.07	
GRDEC22-501 (4703379)	20.2	4.01	3.54	0.16	0.20	0.09	0.050	0.98	10.2	10.5	1.38	352	3.99	0.14	
GRDEC22-502 (4703380)	8.4	4.67	<0.05	0.28	0.11	0.09	0.043	1.12	44.5	22.4	1.00	230	2.10	0.15	
GRDEC22-601 (4703381)	14.7	5.64	36.7	0.09	0.21	0.08	0.608	2.19	4.4	41.6	1.41	1290	2.84	0.04	
GRDEC22-602 (4703382)	14.4	2.32	<0.05	0.13	0.03	0.07	0.024	0.70	19.5	10.4	0.80	240	4.09	0.05	
GRDEC22-603 (4703383)	154	5.76	<0.05	0.20	0.14	0.07	0.053	0.38	16.1	5.5	0.86	413	4.31	0.11	
GRDEC22-604 (4703384)	13.5	3.34	3.72	0.12	0.07	0.07	0.043	0.74	11.3	23.1	1.59	485	3.03	0.09	
GRDEC22-605 (4703385)	10.2	2.29	<0.05	0.19	0.08	0.17	0.055	0.78	26.5	16.9	0.87	408	3.64	0.06	
GRDEC22-606 (4703386)	37.3	3.85	<0.05	0.17	0.11	0.16	0.081	1.17	23.2	17.4	1.23	452	4.60	0.06	
GRDEC22-607 (4703387)	27.8	3.03	<0.05	0.20	0.06	0.14	0.057	0.83	29.7	19.7	1.06	467	4.39	0.06	
GRDEC22-608 (4703388)	19.0	2.52	<0.05	0.37	0.19	0.13	0.084	0.67	64.8	15.5	0.62	373	3.87	0.04	
GRDEC22-609 (4703389)	13.4	1.38	<0.05	0.28	0.13	0.11	0.024	0.22	48.3	7.6	0.20	157	3.89	0.03	
GRDEC22-701 (4703390)	31.7	3.08	3.65	0.14	0.42	0.12	0.026	0.27	3.6	4.1	1.27	602	3.00	0.32	
GRDEC22-702 (4703391)	3.8	0.95	<0.05	0.25	0.09	0.09	0.009	0.09	47.1	5.1	0.20	261	2.98	0.04	
GRDEC22-703 (4703392)	17.3	3.26	1.16	0.07	0.04	0.09	0.031	0.28	9.6	14.5	0.44	369	3.67	0.06	
GRDEC22-704 (4703393)	15.3	3.40	5.55	0.13	0.14	0.08	0.036	0.62	11.2	13.7	1.31	294	4.22	0.21	
GRDEC22-705 (4703394)	207	2.91	0.31	0.11	0.06	0.07	0.028	0.21	8.0	1.7	0.48	178	4.40	0.09	
GRDEC22-706 (4703395)	61.9	5.19	<0.05	0.19	0.15	0.08	0.043	0.45	16.3	3.9	1.04	422	2.45	0.15	
GRDEC22-801 (4703396)	5.4	3.98	<0.05	0.25	0.26	0.08	0.047	1.79	33.3	32.5	2.60	1010	3.64	0.08	
GRDEC22-802 (4703397)	5.1	3.11	<0.05	0.21	0.05	0.07	0.044	1.09	28.7	24.1	1.30	688	3.68	0.07	
GRDEC22-803 (4703398)	29.1	1.35	<0.05	0.26	0.08	0.06	0.052	0.35	45.8	7.9	0.28	220	3.15	0.05	

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023					DATE REPORTED: Mar 28, 2023					SAMPLE TYPE: Rock				
Analyte:	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	
RDL:	0.5	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05	0.01	
GRDEC22-804 (4703399)	20.3	2.61	<0.05	0.16	0.04	0.07	0.053	0.87	25.8	13.6	0.56	533	5.00	0.05	
GRDEC22-901 (4703400)	6.1	2.60	<0.05	0.68	0.17	0.27	0.040	0.39	142	8.5	0.34	178	3.23	0.04	
GRDEC22-902 (4703401)	14.4	1.75	<0.05	0.19	0.07	0.20	0.015	0.17	34.6	2.3	0.39	200	3.29	0.11	
GRDEC22-903 (4703402)	140	2.96	<0.05	0.15	0.10	0.19	0.040	0.87	22.2	16.6	0.90	492	3.38	0.07	
GRDEC22-904 (4703403)	38.9	4.60	<0.05	0.18	0.12	0.16	0.043	0.83	16.3	9.6	1.18	587	3.13	0.13	

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023							DATE REPORTED: Mar 28, 2023				SAMPLE TYPE: Rock			
Analyte:	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	
Unit:	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
RDL:	0.05	0.5	0.001	0.1	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	
Sample ID (AGAT ID)															
GRDEC22-101 (4703367)	0.51	19.8	0.146	2.8	12.2	0.002	0.04	<0.05	8.9	<0.2	1.2	19.3	<0.01	0.05	
GRDEC22-102 (4703368)	1.46	43.6	0.046	2.4	57.8	0.001	0.02	<0.05	5.8	<0.2	1.2	15.4	0.03	0.04	
GRDEC22-103 (4703369)	1.56	20.7	0.050	1.7	37.9	<0.001	<0.01	<0.05	2.6	<0.2	1.1	11.8	<0.01	<0.01	
GRDEC22-104 (4703370)	1.25	34.5	0.024	2.0	57.7	0.001	0.02	<0.05	7.3	<0.2	3.0	5.1	<0.01	0.02	
GRDEC22-105 (4703371)	1.63	28.8	0.090	1.8	63.9	0.001	0.04	<0.05	10.2	0.2	1.5	20.8	0.01	0.04	
GRDEC22-201 (4703372)	2.40	23.8	0.115	1.8	51.6	0.001	0.04	<0.05	10.0	<0.2	1.4	20.4	0.02	0.03	
GRDEC22-202 (4703373)	2.56	19.9	0.126	2.3	89.9	0.002	0.02	<0.05	6.6	<0.2	2.0	10.4	0.01	0.03	
GRDEC22-301 (4703374)	0.22	37.2	0.013	1.4	2.2	<0.001	0.07	<0.05	3.7	<0.2	0.3	189	0.02	0.03	
GRDEC22-302 (4703375)	0.27	34.0	0.027	2.1	18.8	<0.001	0.07	<0.05	2.3	<0.2	0.3	211	0.01	0.02	
GRDEC22-401 (4703376)	2.30	33.4	0.061	2.4	89.4	0.002	0.02	<0.05	11.7	<0.2	0.9	3.9	0.02	0.11	
GRDEC22-402 (4703377)	3.68	22.0	0.059	4.8	115	0.002	0.13	<0.05	10.7	4.8	1.1	14.2	0.02	1.91	
GRDEC22-403 (4703378)	1.78	53.9	0.059	2.3	132	0.002	0.02	<0.05	10.5	<0.2	1.0	6.5	0.02	0.06	
GRDEC22-501 (4703379)	1.30	34.9	0.070	1.7	54.2	0.001	0.03	<0.05	8.4	<0.2	1.0	10.8	<0.01	<0.01	
GRDEC22-502 (4703380)	2.09	19.6	0.029	2.7	55.3	<0.001	0.02	<0.05	5.4	<0.2	1.8	40.8	<0.01	0.04	
GRDEC22-601 (4703381)	9.74	16.6	<0.001	3.1	269	<0.001	0.01	<0.05	43.8	<0.2	16.4	12.0	0.03	0.02	
GRDEC22-602 (4703382)	1.90	19.9	0.071	1.4	48.7	<0.001	<0.01	<0.05	3.8	<0.2	1.0	9.7	<0.01	0.04	
GRDEC22-603 (4703383)	1.34	33.3	0.133	3.0	23.8	0.003	0.03	<0.05	10.6	0.3	1.3	12.8	<0.01	0.40	
GRDEC22-604 (4703384)	0.89	24.7	0.146	1.6	42.6	<0.001	0.02	<0.05	8.4	<0.2	0.8	16.7	<0.01	0.07	
GRDEC22-605 (4703385)	2.32	24.2	0.066	2.0	62.9	0.001	0.01	<0.05	7.1	<0.2	1.9	10.0	0.02	0.06	
GRDEC22-606 (4703386)	3.30	19.3	0.096	4.3	77.9	0.004	0.10	<0.05	10.0	0.5	2.6	14.7	0.02	0.19	
GRDEC22-607 (4703387)	2.66	12.1	0.093	2.5	50.8	0.013	0.29	<0.05	9.3	0.9	1.9	11.6	<0.01	0.14	
GRDEC22-608 (4703388)	1.44	12.1	0.020	3.8	50.4	<0.001	0.02	<0.05	7.9	0.6	1.7	5.8	<0.01	0.21	
GRDEC22-609 (4703389)	1.12	12.8	0.017	2.5	13.4	<0.001	<0.01	<0.05	1.4	<0.2	0.6	6.2	<0.01	0.16	
GRDEC22-701 (4703390)	0.72	34.8	0.048	2.2	8.5	0.001	0.03	<0.05	11.7	<0.2	0.8	9.2	<0.01	0.02	
GRDEC22-702 (4703391)	0.41	10.7	0.013	1.9	4.8	<0.001	<0.01	<0.05	1.2	<0.2	0.8	3.5	<0.01	<0.01	
GRDEC22-703 (4703392)	1.13	19.1	0.014	1.6	13.9	<0.001	<0.01	<0.05	3.0	<0.2	1.8	4.5	<0.01	<0.01	
GRDEC22-704 (4703393)	0.64	36.1	0.105	3.2	42.4	0.001	0.08	<0.05	8.5	<0.2	1.1	37.1	<0.01	0.28	
GRDEC22-705 (4703394)	1.04	19.3	0.043	1.9	8.6	0.004	0.18	<0.05	4.0	0.4	1.1	8.6	<0.01	0.18	
GRDEC22-706 (4703395)	1.12	26.1	0.131	1.7	26.2	0.001	0.03	<0.05	9.7	<0.2	1.4	21.2	<0.01	0.07	
GRDEC22-801 (4703396)	1.86	70.3	0.061	2.1	145	0.002	<0.01	<0.05	9.7	<0.2	1.6	7.8	0.01	0.02	
GRDEC22-802 (4703397)	1.37	17.8	0.153	1.2	51.2	<0.001	<0.01	<0.05	7.4	<0.2	1.5	17.8	<0.01	0.01	
GRDEC22-803 (4703398)	1.64	9.7	0.018	3.6	21.9	<0.001	0.01	<0.05	3.7	<0.2	1.7	6.6	<0.01	0.17	

Certified By: _____



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

2215 27 Ave NE
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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023							DATE REPORTED: Mar 28, 2023				SAMPLE TYPE: Rock			
Analyte:	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	
Unit:	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
RDL:	0.05	0.5	0.001	0.1	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	
Sample ID (AGAT ID)															
GRDEC22-804 (4703399)	0.69	13.2	0.031	5.6	58.6	0.007	0.10	<0.05	6.1	0.3	2.0	5.9	<0.01	0.36	
GRDEC22-901 (4703400)	6.04	12.3	0.057	2.4	34.4	0.001	<0.01	<0.05	2.9	<0.2	2.3	11.3	0.03	<0.01	
GRDEC22-902 (4703401)	0.85	26.0	0.062	1.9	15.1	<0.001	0.01	<0.05	2.7	<0.2	0.5	10.1	<0.01	0.04	
GRDEC22-903 (4703402)	1.62	19.8	0.106	1.3	34.4	0.002	0.03	<0.05	4.1	<0.2	1.2	16.8	<0.01	0.12	
GRDEC22-904 (4703403)	1.05	14.7	0.195	2.2	48.0	0.001	0.03	<0.05	7.5	<0.2	1.2	26.5	<0.01	0.05	

Certified By:



Certificate of Analysis

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023						DATE REPORTED: Mar 28, 2023				SAMPLE TYPE: Rock	
Analyte:	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Pd	Pt	
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
RDL:	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	0.005	0.01	
GRDEC22-101 (4703367)	0.6	0.207	0.08	0.20	145	0.25	21.0	56.5	3.7	0.032	<0.01	
GRDEC22-102 (4703368)	10.8	0.232	0.36	1.19	76.1	0.37	7.63	48.0	3.0	0.013	<0.01	
GRDEC22-103 (4703369)	12.0	0.152	0.21	0.92	43.0	0.29	4.64	48.3	1.1	0.006	<0.01	
GRDEC22-104 (4703370)	6.2	0.259	0.37	1.40	101	0.29	15.7	66.3	3.3	0.025	<0.01	
GRDEC22-105 (4703371)	2.2	0.330	0.38	0.62	116	0.29	15.0	68.9	4.1	0.035	<0.01	
GRDEC22-201 (4703372)	3.5	0.342	0.30	0.86	98.7	0.33	18.9	71.4	4.5	0.032	<0.01	
GRDEC22-202 (4703373)	2.8	0.415	0.50	0.68	104	0.36	12.1	83.6	2.1	0.025	<0.01	
GRDEC22-301 (4703374)	0.2	0.075	0.03	<0.05	57.5	0.22	1.46	26.9	1.0	0.019	<0.01	
GRDEC22-302 (4703375)	2.6	0.074	0.10	0.29	28.4	0.21	1.18	23.8	0.8	0.020	<0.01	
GRDEC22-401 (4703376)	9.8	0.454	0.50	0.75	173	27.2	19.3	97.4	2.2	0.034	<0.01	
GRDEC22-402 (4703377)	48.1	0.660	0.67	1.47	209	0.81	5.12	130	1.2	0.009	<0.01	
GRDEC22-403 (4703378)	7.4	0.816	0.80	0.53	311	0.66	5.43	140	1.0	0.009	<0.01	
GRDEC22-501 (4703379)	1.0	0.396	0.28	0.18	107	0.32	7.23	89.2	3.3	0.018	<0.01	
GRDEC22-502 (4703380)	11.2	0.423	0.25	1.66	144	0.57	5.25	70.2	3.3	0.014	<0.01	
GRDEC22-601 (4703381)	0.3	0.582	1.75	1.10	76.4	0.44	3.77	414	3.1	0.009	<0.01	
GRDEC22-602 (4703382)	6.6	0.245	0.28	0.16	55.7	0.30	4.11	51.4	1.1	0.012	<0.01	
GRDEC22-603 (4703383)	1.1	0.246	0.16	0.24	268	0.28	16.5	71.1	2.0	0.030	<0.01	
GRDEC22-604 (4703384)	0.7	0.277	0.26	0.22	120	0.64	10.2	66.4	1.3	0.020	<0.01	
GRDEC22-605 (4703385)	6.2	0.231	0.39	0.60	55.0	0.44	16.6	78.1	1.4	0.036	<0.01	
GRDEC22-606 (4703386)	7.7	0.333	0.54	0.77	109	0.40	8.05	85.8	3.7	0.028	<0.01	
GRDEC22-607 (4703387)	7.7	0.304	0.37	0.45	73.2	0.32	13.7	63.8	2.1	0.024	<0.01	
GRDEC22-608 (4703388)	8.5	0.156	0.29	3.67	41.6	0.65	18.6	108	7.7	0.025	<0.01	
GRDEC22-609 (4703389)	7.6	0.038	0.07	1.74	16.5	0.67	11.8	27.0	6.4	0.019	<0.01	
GRDEC22-701 (4703390)	2.1	0.198	0.07	0.68	96.5	0.72	13.5	43.6	9.1	0.020	<0.01	
GRDEC22-702 (4703391)	11.4	0.015	0.02	0.19	10.6	0.20	9.79	21.3	2.7	0.015	<0.01	
GRDEC22-703 (4703392)	1.8	0.118	0.08	0.21	84.8	0.28	4.33	50.7	1.7	0.009	<0.01	
GRDEC22-704 (4703393)	1.3	0.315	0.25	0.79	163	0.25	7.82	66.6	2.4	0.017	<0.01	
GRDEC22-705 (4703394)	1.9	0.153	0.05	0.15	78.2	0.26	3.66	31.2	1.5	<0.005	<0.01	
GRDEC22-706 (4703395)	2.1	0.274	0.13	0.13	243	0.13	11.6	53.4	2.3	0.024	<0.01	
GRDEC22-801 (4703396)	5.0	0.340	0.81	2.42	98.2	0.52	17.0	149	6.6	0.030	<0.01	
GRDEC22-802 (4703397)	3.0	0.264	0.29	0.44	84.9	0.32	14.7	91.5	1.2	0.026	<0.01	
GRDEC22-803 (4703398)	8.7	0.102	0.13	0.87	12.9	0.19	7.87	35.1	2.7	0.013	<0.01	

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

DATE SAMPLED: Jan 19, 2023	DATE RECEIVED: Jan 19, 2023				DATE REPORTED: Mar 28, 2023				SAMPLE TYPE: Rock			
Analyte:	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Pd	Pt	
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
RDL:	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	0.005	0.01	
Sample ID (AGAT ID)												
GRDEC22-804 (4703399)	7.1	0.230	0.34	0.63	40.4	0.22	5.95	116	1.2	0.008	<0.01	
GRDEC22-901 (4703400)	39.1	0.108	0.19	2.33	68.1	0.44	31.5	34.4	4.2	0.048	<0.01	
GRDEC22-902 (4703401)	22.0	0.104	0.09	0.25	47.8	0.24	4.45	28.7	1.3	0.009	<0.01	
GRDEC22-903 (4703402)	1.2	0.228	0.21	0.45	65.0	0.25	13.6	68.2	2.8	0.024	<0.01	
GRDEC22-904 (4703403)	1.3	0.316	0.31	0.39	139	0.24	11.1	101	1.8	0.022	<0.01	

Comments: RDL - Reported Detection Limit
 4703367-4703403 Au determination by this method is semi-quantitative due to small sample size.
 Analysis performed at AGAT Calgary (unless marked by *)
 Insufficient Sample : IS
 Sample Not Received : SNR

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

2215 27 Ave NE
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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-109) Graphitic Carbon (Furnace IR Finish) (CGY)

DATE SAMPLED: Jan 19, 2023

DATE RECEIVED: Jan 19, 2023

DATE REPORTED: Mar 28, 2023

SAMPLE TYPE: Rock

Analyte: Graphitic C

Unit: %

Sample ID (AGAT ID) RDL: 0.3

GRDEC22-101 (4703367)	<0.3
GRDEC22-102 (4703368)	<0.3
GRDEC22-103 (4703369)	<0.3
GRDEC22-104 (4703370)	<0.3
GRDEC22-105 (4703371)	<0.3
GRDEC22-201 (4703372)	<0.3
GRDEC22-202 (4703373)	<0.3
GRDEC22-301 (4703374)	<0.3
GRDEC22-302 (4703375)	<0.3
GRDEC22-401 (4703376)	<0.3
GRDEC22-402 (4703377)	<0.3
GRDEC22-403 (4703378)	<0.3
GRDEC22-501 (4703379)	<0.3
GRDEC22-502 (4703380)	<0.3
GRDEC22-601 (4703381)	<0.3
GRDEC22-602 (4703382)	<0.3
GRDEC22-603 (4703383)	<0.3
GRDEC22-604 (4703384)	<0.3
GRDEC22-605 (4703385)	<0.3
GRDEC22-606 (4703386)	<0.3
GRDEC22-607 (4703387)	<0.3
GRDEC22-608 (4703388)	<0.3
GRDEC22-609 (4703389)	<0.3
GRDEC22-701 (4703390)	<0.3
GRDEC22-702 (4703391)	<0.3
GRDEC22-703 (4703392)	<0.3
GRDEC22-704 (4703393)	<0.3
GRDEC22-705 (4703394)	<0.3
GRDEC22-706 (4703395)	<0.3
GRDEC22-801 (4703396)	<0.3
GRDEC22-802 (4703397)	<0.3
GRDEC22-803 (4703398)	<0.3

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T989532

PROJECT:

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CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-109) Graphitic Carbon (Furnace IR Finish) (CGY)

DATE SAMPLED: Jan 19, 2023

DATE RECEIVED: Jan 19, 2023

DATE REPORTED: Mar 28, 2023

SAMPLE TYPE: Rock

Sample ID (AGAT ID)	Analyte: Graphitic C	Unit: %	RDL: 0.3
GRDEC22-804 (4703399)			<0.3
GRDEC22-901 (4703400)			<0.3
GRDEC22-902 (4703401)			<0.3
GRDEC22-903 (4703402)			<0.3
GRDEC22-904 (4703403)			<0.3

Comments: RDL - Reported Detection Limit
Analysis performed at AGAT Calgary (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Certified By:



CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

Parameter	REPLICATE #1				REPLICATE #2											
	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD								
Ag	4703384	0.03	0.02	NA	4703403	0.05	0.05	1.1%								
Al	4703384	1.54	1.59	3.5%	4703403	1.30	1.34	2.4%								
As	4703384	0.5	0.5	0.1%	4703403	0.5	0.5	8.2%								
Au	4703384	<0.005	<0.005	NA	4703403	<0.005	<0.005	0.0%								
B	4703384	<5	<5	NA	4703403	<5	<5	NA								
Ba	4703384	347	355	2.2%	4703403	372	378	1.7%								
Be	4703384	0.67	0.72	7.7%	4703403	0.45	0.33	31.6%								
Bi	4703384	0.02	0.02	NA	4703403	0.16	0.16	0.4%								
Ca	4703384	0.59	0.64	7.5%	4703403	0.86	0.87	1.5%								
Cd	4703384	0.06	0.06	7.8%	4703403	0.13	0.14	8.6%								
Ce	4703384	23.6	24.9	5.3%	4703403	39.8	40.6	1.9%								
Co	4703384	17.3	17.8	3.0%	4703403	16.4	16.5	1.0%								
Cr	4703384	362	367	1.5%	4703403	373	382	2.4%								
Cs	4703384	0.74	0.74	0.3%	4703403	1.38	1.39	1.3%								
Cu	4703384	13.5	14.0	3.7%	4703403	38.9	39.0	0.3%								
Fe	4703384	3.34	3.49	4.4%	4703403	4.60	4.71	2.4%								
Ga	4703384	3.72	3.86	3.5%	4703403	<0.05	<0.05	NA								
Ge	4703384	0.12	0.15	26.9%	4703403	0.18	0.21	NA								
Hf	4703384	0.07	0.08	NA	4703403	0.12	0.13	5.6%								
Hg	4703384	0.07	0.06	17.0%	4703403	0.16	0.14	13.5%								
In	4703384	0.043	0.044	2.4%	4703403	0.043	0.044	1.9%								
K	4703384	0.74	0.77	3.1%	4703403	0.83	0.84	1.5%								
La	4703384	11.3	11.9	5.4%	4703403	16.3	16.7	2.7%								
Li	4703384	23.1	23.5	1.6%	4703403	9.6	9.7	1.1%								
Mg	4703384	1.59	1.65	3.7%	4703403	1.18	1.21	1.9%								
Mn	4703384	485	512	5.3%	4703403	587	594	1.2%								
Mo	4703384	3.03	3.04	0.5%	4703403	3.13	3.27	4.4%								
Na	4703384	0.13	0.14	5.6%	4703403	0.13	0.13	2.7%								
Nb	4703384	0.89	0.90	0.7%	4703403	1.05	1.02	2.8%								
Ni	4703384	24.7	26.0	4.8%	4703403	14.7	14.9	0.8%								
P	4703384	0.146	0.150	3.2%	4703403	0.195	0.199	1.9%								



CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

Pb	4703384	1.6	1.7	4.7%	4703403	2.2	2.3	2.6%								
Rb	4703384	42.6	43.8	2.9%	4703403	48.0	48.9	1.9%								
Re	4703384	<0.001	<0.001	NA	4703403	0.001	0.001	NA								
S	4703384	0.02	0.02	3.1%	4703403	0.03	0.03	1.7%								
Sb	4703384	<0.05	<0.05	NA	4703403	<0.05	<0.05	NA								
Sc	4703384	8.4	8.7	3.6%	4703403	7.5	7.7	1.9%								
Se	4703384	<0.2	<0.2	NA	4703403	<0.2	<0.2	NA								
Sn	4703384	0.8	0.8	NA	4703403	1.2	1.3	2.5%								
Sr	4703384	16.7	17.8	6.8%	4703403	26.5	27.5	3.6%								
Ta	4703384	<0.01	<0.01	NA	4703403	<0.01	<0.01	NA								
Te	4703384	0.07	0.09	25.0%	4703403	0.05	0.03	NA								
Th	4703384	0.7	0.8	13.3%	4703403	1.3	1.3	3.2%								
Ti	4703384	0.277	0.295	6.3%	4703403	0.316	0.328	3.8%								
Tl	4703384	0.26	0.27	3.9%	4703403	0.31	0.32	2.0%								
U	4703384	0.22	0.23	2.3%	4703403	0.39	0.40	3.3%								
V	4703384	120	126	4.3%	4703403	139	141	1.4%								
W	4703384	0.64	0.67	4.2%	4703403	0.24	0.25	NA								
Y	4703384	10.2	10.7	4.7%	4703403	11.1	11.3	2.2%								
Zn	4703384	66.4	68.4	2.9%	4703403	101	103	1.8%								
Zr	4703384	1.3	1.4	NA	4703403	1.8	1.9	NA								
Pd	4703384	0.020	0.025	NA	4703403	0.022	0.017	NA								
Pt	4703384	<0.01	<0.01	NA	4703403	<0.01	<0.01	NA								

(283-109) Graphitic Carbon (Furnace IR Finish) (CGY)

Parameter	REPLICATE #1				REPLICATE #2											
	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD								
Graphitic C	4703367	<0.3	<0.3	NA	4703392	<0.3	<0.3	NA								



CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

(283-074) Aqua Regia Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)

Parameter	CRM #1 (Ref.OREAS 45h)				CRM #2 (Ref.OREAS 501d)				CRM #3 (Ref.OREAS 86)				CRM #4 (Ref.OREAS 45h)			
	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Ag	0.1	0.1														
Al					2.0	2.0										
As	8.4	9.8														
Au	39.4	45.2											39.4	43.2		
Ba	271	281														
Be	0.9	0.8														
Bi	0.1	0.1														
Ca					0.6	0.6										
Cd									0.3	0.3						
Ce									4.0	4.6			18.4	18.7		
Co									467	528						
Cr					48.5	50.2										
Cs	1.2	1.3											1.2	1.3		
Cu									5320	5970						
Fe					3.2	3.1										
Ga									4.6	5.0						
Ge									0.2	0.2						
Hf									0.1	0.1			0.9	1.1		
Hg	0.0	0.1														
In									0.0	0.0						
K					0.9	0.9										
La									1.8	2.2			8.9	9.1		
Li									2.8	2.3						
Mg					0.8	0.7										
Mn					310	331										
Mo	0.9	1.1														
Na	0.0	0.0														
Ni									12100	12600						
P					0.1	741							180	199		
Pb									4.2	4.8			10.2	10.5		
Rb									4.5	4.9						



CLIENT NAME: AGAT CLIENT ON

ATTENTION TO: Kelly Malcolm

Li	40.8	37.5															
Mg	0.8	0.8															
Mn	310	337															
Mo	93.0	103															
Na	0.1	0.2															
Ni	20.0	22.3															
Rb	94.0	96.5															
S	0.4	0.4															
Sb	1.6	1.6															
Sc	8.0	7.6															
Sn	3.5	3.6															
Te	0.2	0.2															
Ti	0.3	0.3															
U	3.3	3.7															
V	65.0	66.7															
Zn	86.0	86.2															

(283-109) Graphitic Carbon (Furnace IR Finish) (CGY)

Parameter	CRM #1 (Ref.GGC-07)				CRM #2 (Ref.GGC-09)													
	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits										
Graphitic C	0.130	0.115			2.41	2.43												



Method Summary

CLIENT NAME: AGAT CLIENT ON
 PROJECT:
 SAMPLING SITE:

AGAT WORK ORDER: 23T989532
 ATTENTION TO: Kelly Malcolm
 SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Sample Login Weight	MIN-12009		PREPARATION
Ag	MIN-283-12010/MIN-283-12026		ICP-MS
Al	MIN-283-12010/MIN-283-12025		ICP/OES
As	MIN-283-12010/MIN-283-12026		ICP-MS
Au	MIN-200-12018		ICP-MS
B	MIN-283-12010/MIN-283-12025		ICP/OES
Ba	MIN-283-12010/MIN-283-12026		ICP-MS
Be	MIN-283-12010/MIN-283-12026		ICP-MS
Bi	MIN-283-12010/MIN-283-12026		ICP-MS
Ca	MIN-283-12010/MIN-283-12025		ICP/OES
Cd	MIN-283-12010/MIN-283-12026		ICP-MS
Ce	MIN-283-12010/MIN-283-12026		ICP-MS
Co	MIN-283-12010/MIN-283-12026		ICP-MS
Cr	MIN-283-12010/MIN-283-12025		ICP/OES
Cs	MIN-283-12010/MIN-283-12026		ICP-MS
Cu	MIN-283-12010/MIN-283-12026		ICP-MS
Fe	MIN-283-12010/MIN-283-12025		ICP/OES
Ga	MIN-283-12010/MIN-283-12026		ICP-MS
Ge	MIN-283-12010/MIN-283-12026		ICP-MS
Hf	MIN-283-12010/MIN-283-12026		ICP-MS
Hg	MIN-283-12010/MIN-283-12026		ICP-MS
In	MIN-283-12010/MIN-283-12026		ICP-MS
K	MIN-283-12010/MIN-283-12025		ICP/OES
La	MIN-283-12010/MIN-283-12026		ICP-MS
Li	MIN-283-12010/MIN-283-12026		ICP-MS
Mg	MIN-283-12010/MIN-283-12025		ICP/OES
Mn	MIN-283-12010/MIN-283-12025		ICP/OES
Mo	MIN-283-12010/MIN-283-12026		ICP-MS

Method Summary

CLIENT NAME: AGAT CLIENT ON

AGAT WORK ORDER: 23T989532

PROJECT:

ATTENTION TO: Kelly Malcolm

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Na	MIN-283-12010/MIN-283-12025		ICP/OES
Nb	MIN-283-12010/MIN-283-12026		ICP-MS
Ni	MIN-283-12010/MIN-283-12026		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-283-12010/MIN-283-12026		ICP-MS
Rb	MIN-283-12010/MIN-283-12026		ICP-MS
Re	MIN-283-12010/MIN-283-12026		ICP-MS
S	MIN-283-12010/MIN-283-12025		ICP/OES
Sb	MIN-283-12010/MIN-283-12026		ICP-MS
Sc	MIN-283-12010/MIN-283-12026		ICP-MS
Se	MIN-283-12010/MIN-283-12026		ICP-MS
Sn	MIN-283-12010/MIN-283-12026		ICP-MS
Sr	MIN-283-12010/MIN-283-12026		ICP-MS
Ta	MIN-283-12010/MIN-283-12026		ICP-MS
Te	MIN-283-12010/MIN-283-12026		ICP-MS
Th	MIN-283-12010/MIN-283-12026		ICP-MS
Ti	MIN-283-12010/MIN-283-12025		ICP/OES
Tl	MIN-283-12010/MIN-283-12026		ICP-MS
U	MIN-283-12010/MIN-283-12026		ICP-MS
V	MIN-283-12010/MIN-283-12025		ICP-MS
W	MIN-283-12010/MIN-283-12026		ICP-MS
Y	MIN-283-12010/MIN-283-12026		ICP-MS
Zn	MIN-283-12010/MIN-283-12026		ICP-MS
Zr	MIN-283-12010/MIN-283-12026		ICP-MS
Pd	MIN-200-12018		ICP-MS
Pt	MIN-200-12018		ICP-MS
Graphitic C	MIN-283-12002	ASTM E1915-07a	LECO