

**Technical Report
On the
Echum Property**

Bruyere, Dolson and Echum Townships
Sault Ste. Marie Mining Division
Ontario, Canada

Prepared for:

**Kingsview Minerals
Ltd.**

Suite 510 - 580 Hornby Street
Vancouver, British Columbia, Canada,
V6C 3B6

Prepared by:

Robert. G Komarechka, P.Geo.

Bedrock Research Corp.

545 Granite Street

Sudbury, Ontario, Canada, P3C 2P4

April 23, 2021

SIGNATURE PAGE

This report titled

“Technical Report on the Echum Property, Bruyere, Dolson and Echum Townships, Sault Ste. Marie Mining Division, Ontario, Canada”,

Project Location

Latitude: 48.18° North; Longitude 84.17° West

and dated

April 23, 2021,

was prepared for

**Kingsview Minerals
Ltd.**

Suite 510, 580 Hornby Street, Vancouver, British Columbia, Canada
V6C 3B6

and signed by the author,

Robert Komarechka, P.Geo.

Dated at

April 23, 2021
Sudbury Ontario Canada

April 23, 2021
“Robert G. Komarechka”



TABLE OF CONTENTS

| | |
|---|-----------|
| Item 1: Summary | 5 |
| Item 2: Introduction | 8 |
| 2.1 Units and Currency | 9 |
| Item 3: Reliance on Other Experts | 11 |
| Item 4: Property Description and Location | 13 |
| Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography | 19 |
| Item 6: History | 20 |
| 6.1 History from MNDM MDI Records..... | 20 |
| 6.2 History from MNDM Assessment Records..... | 20 |
| 6.3 History from RMC Technical Report..... | 26 |
| Item 7: Geological Setting and Mineralization | 32 |
| 7.1 Regional Geology | 32 |
| 7.2 Property Geology and Mineralization | 33 |
| Item 8: Deposit Types..... | 38 |
| Item 9: Exploration | 38 |
| Item 10: Drilling..... | 43 |
| Item 11: Sample Preparation, Analysis and Security | 46 |
| Item 12: Data Verification..... | 46 |
| Item 13: Mineral Processing and Metallurgical Testing | 46 |
| Item 14: Mineral Resource | 46 |
| Item 15: Mineral Reserve Estimates..... | 47 |
| Item 16: Mining Methods | 47 |
| Item 17: Project Infrastructure..... | 47 |
| Item 18: Market Studies and Contracts | 47 |
| Item 19: Environmental Studies, Permitting and Social or Community Impact | 47 |
| Item 20: Capital and Operating Costs | 47 |
| Item 21: Economic Analysis | 47 |
| Item 22: Adjacent Properties | 47 |
| Item 23: Other Relevant Data and Information..... | 49 |
| Item 24: Interpretation and Conclusions | 50 |

| | |
|---|-----------|
| Item 25: Recommendations | 53 |
| 25.1 Proposed Budget..... | 54 |
| Item 26: References | 55 |
| Item 27: Certificate of Qualifications | 58 |
| Appendices..... | 60 |

LIST OF TABLES

| | |
|---|-----------|
| Table 1. List of Acronyms | 9 |
| 1a Measurement Conversion Factors..... | 9 |
| 1b List of Units..... | 10 |
| Table 2. Echum Property Claims | 14 |
| Table 3: RMC Sample Assays > 0.1 g/t Au | 27 |
| Table 4: RMC 2016 Diamond Drill Hole Locations | 29 |
| Table 4: RMC 2016 Significant Diamond Drill Hole Intersections | 29 |
| Table 6. Significant Diamonds Retrieved from RMC's Property | 48 |
| Table 7. Proposed Budget | 54 |

TABLE OF FIGURES

| | |
|--|-----------|
| Figure 1. Echum Property Location | 11 |
| Figure 2. Property Location with Other Properties in the Region | 12 |
| Figure 3. Echum Property Claims | 13 |
| Figure 4. Historic Assessment Trench Sketch | 23 |
| Figure 5. RMC 2016 Sample Locations | 28 |
| Figure 6. RMC 2016 Drill Hole Locations | 30 |
| Figure 7. Regional Geology | 32 |
| Figure 8. Property Geology and Occurrences | 34 |
| Figure 9: Echum Geotech Total Magnetic Intensity Map | 44 |
| Figure 10: Echum Geotech VTEM Map, Claim Outline and Occurrences | 45 |

Appendices

| | |
|---|------------|
| Appendix 1: Kingsview Property Acquisition Agreement | I |
| Appendix 2: Field Site Visit..... | II |
| Appendix 3: Geotech VTEM Mag Survey..... | III |
| Appendix 4: Echum and Dolson Twp Geology Map..... | IV |
| Appendix 5: Bruyere Twp. Geology Map..... | V |

Item 1: Summary

Bedrock Research Corp. of Sudbury, Ontario was contracted by Kingsview Minerals Ltd. (“KML”), to review historic data for the Echum Property (the “Property”), identify its merits, propose an appropriate exploration program and budget for exploration on the Property, and prepare a Technical Report (the “Report”) compliant with NI 43-101 and suitable for the purposes of a non-offering prospectus.

The Property is located in Bruyere, Dolson and Echum Townships within the Sault Ste. Marie Mining Division of Ontario, Canada, approximately 54 km ENE of the Town of Wawa. The center of the Property is located at approximately 48.18° North Latitude and 84.17° West Longitude or in NAD 83 UTM co-ordinates, Zone 16U, 710500mE and 534100mN, The Property is located in the Chapleau MNR District.

The Property is comprised of 130 unpatented single unit mineral claims (the Claims) with a total approximate area of 2,800 hectares and further described in Table 1. The Property was acquired by way of a property acquisition agreement dated November 18, 2020 from 12185849 Canada Inc. a corporation incorporated under the federal laws of Canada (“CanadaCorp”) owner of the Claims, currently shown on the Ontario government’s Mineral Land Acquisition System (MLAS) records as being held by Steven Anderson as agent. These Claims and others were sold to KML in return for 5,100,000 shares of KML. See Appendix 1 for the Agreement on this.

The Property is located in the southeastern part of the Wawa Greenstone Belt which consists of early Precambrian rock that extends inland from the northeastern margin of Lake Superior to as far as Missanabi Lake. This metavolcanic – metasedimentary belt is intruded by stocks of mafic to ultramafic bodies of different ages. On the Property the predominant rocks are a sequence of southeast striking mafic volcanics to the east and intermediate volcanics to the west separated by a band of metasedimentary rocks. Massive granodiorite/granite occurs along the eastern edge of the Property. Mafic (gabbro) intrusives are also located on the Property along the east side of the metasedimentary band. Ultramafic rock and kimberlite dykes are also present outside around the southeast, south and east of the property. Numerous mineral occurrences of gold and base metals have been documented on the Property. The 4 known mineralized zones that occur on the Property include: the Ballard Lake Showing (Au), the Davies Lead Occurrence (Pb, Au), the Davies Gold Occurrence (Au) and the M.P.D. Showing (Zn, Cu). There are no mineral resources or mineral reserves within the Property boundaries.

RT Minerals Corp. (“RMC”) in work on the Ballard Lake Property exploring for gold mineralization gave a detailed summary of previous activity on this area. This work and earlier work on the Property is described in their Technical Report of 2017¹. Their initial diamond drilling focused on historical gold mineralization returning anomalous gold values as well as IP anomalies. The diamond drilling intersected alkali ultramafic

¹ Cullen, D., Clark Garry, 2017.

dikes interpreted to be potentially associated to deep crustal or mantle tapping conduits. These conduits are claimed to be verified by the alkali ultramafic and kimberlite rocks located within the claim block. A description of the work conducted by RMC is found in Item 6.3 of this report.

KML commissioned a field-site visit of the Property in November 2020 by this author. This visit confirmed the work undertaken on the Davies Gold Property by RT Minerals and samples were collected. A helicopter airborne VTEM and magnetometer survey was conducted in March 2021. This survey discovered a significant multichannel VTEM anomaly near the MPD zinc copper occurrence outside the main magnetic anomaly. The magnetometer survey also encountered several negative circular anomalies about the diameter of typical kimberlites.

A significant amount of diamond exploration has been undertaken on and around the Echum Property. Between 2006 and 2008, Chalice Diamond Corp. (“Chalice Diamond”) and its predecessor Golden Chalice Resources Inc. (“Golden Chalice” or “GCR”) staked and acquired an extensive land package that eventually covered 170,000 hectares within an area stretching 75 km long by 35 km wide in the Wawa – Missanabie region, and covering the current Property of KML. During this period, extensive exploration programs were carried out on various parts of KML’s Property. Diamondiferous kimberlite has been found just outside the Property along the southeast and along the south boundary of the Property. The Fletch Diamond kimberlite occurs several hundreds of metres outside the southwest Property boundary and the Geodex No. 2 dike occurs within 100 m outside of the south Property boundary. Map 7 shows the Property geology and these occurrences.

The most significant diamond discoveries to come from the area to date (**all outside of the Echum Property**) have come from two younger dykes containing multiple phases of kimberlite (Chalice Diamond Corp. 2008). The two dykes are known as the GC-1 (in the Mantle Lake Property occurrence area) and the Fletch. The dykes are reported to have been traced for up to 600 metres along strike and are said to be still open in both directions. The dykes range from 0.5 to over 5 metres in width, with subvertical dips. The diamonds retrieved from these dykes were recovered by caustic fusion.

The discovery of diamond bearing rocks nearby in 3 locations **outside of the Echum Property** indicates the potential for additional diamond discoveries is significant.

The author does not recognize any significant risks or uncertainties that would prevent the continued exploration of the Property for gold, base metals or diamond mineralization.

The author concludes that the work completed to date indicates the Property has potential to host economic concentrations of gold, base metals and diamonds.

A 2 phase \$350,000 2 year exploration program is proposed consisting of:

Phase 1: Year 1 - \$150,000 for localized compilation, prospecting/geological mapping, line-cutting/IP and initial diamond drilling

Phase 2: Year 2 – \$200,000 for more diamond drilling

There is an extensive volume of data from previous operators of the present claims. The available data needs to be correlated into a clean interactive database providing targets locations to be reviewed in the field and provide direction for the exploration program. Concurrent to this, geological mapping and prospecting can commence to field locate and verify known mineral occurrences

Ground geophysics should be completed to determine the extent and attitude of known targets to help refine trenching and diamond drilling locations.

Petrological work may be required of any potential kimberlite samples encountered to define the rock type and mineral chemistry. This will assist in the determination of any potential of diamondiferous targets.

Item 2: Introduction

Bedrock Research Corp. of Sudbury, Ontario was contracted by Kingsview Minerals Corp. (“KMC”), to review historic data for the Echum Property (the “Property”), identify its merits, propose an appropriate exploration program and budget for gold exploration on the property, and prepare a Technical Report (the “Report”) compliant with NI 43-101 and suitable for the purposes of a financing document for KMC. A significant amount of data in this report was obtained from a previous Technical Report “ prepared in April 2017 by Cullen, D. & Clark G. of Clark Exploration Inc.

In addition to the information reviewed from the earlier NI 43-101 report the principle sources of information for this Technical Report are:

- Assessment Files available at the Ontario Ministry of Northern Development and Mines (MNDM) Assessment File Research Image Database (AFRI) retrieved from <http://www.geologyontario.mndm.gov.on.ca>.
- Mineral deposits information available at the MNDM Mineral Deposit Inventory (MDI) Database retrieved from <http://www.geologyontario.mndm.gov.on.ca>.
- Government maps and reports available at the MNDM Ontario Geological Survey Publications (OGS PUB) Database retrieved from <http://www.geologyontario.mndm.gov.on.ca>.
- Mining claims information available at the MNDM Mining Lands Administration System (MLAS) databases retrieved from <http://www.mndm.gov.on.ca/en/mines-and-minerals/applications/mining-lands-administration-system-mlas-map-viewer>
- RT Minerals Corp. corporate information and news releases retrieved from <http://www.KMLcorp.com>.
- Site Visit data from the site Visit report conducted on Nov 14-16, 2020 by the author Robert Komarechka and his assistant Cecil Johnson.
- Airborne Geophysical Preliminary VTEM Data Report completed by Geotech on March 2021 on behalf of KML.

The author of this report, R. G. Komarechka, visited the Property with prospector Cecil Johnson on November 14 and 16, 2020. During the visit quad access to the Davies Gold Occurrence was obtained, and despite snow cover, the sites of stripping and sampling of this occurrence were located, photographed and examined, with 5 selected grab samples being collected. These samples have not yet been submitted for assay. Appendix 2 gives a summary of this visit.

2.1 Units & Currency

Units of measure used in this report are in the metric system, unless stated otherwise. Currencies outlined in the report are in Canadian dollars unless otherwise stated.

For locations East longitude and North latitude are given in decimal degree form, as noted. Directions of strike for structural features are given in degrees of the compass and departure from north. Co-ordinates used, unless otherwise stated, are in NAD 83 UTM Zone 16U.

Table 1: List of Acronyms

| Acronyms | Term |
|-------------------|---|
| AFRI | Assessment File Report Index, Ontario |
| KIM | Kimberlite Indicator Minerals |
| KML | Kingsview Minerals Ltd. |
| MLAS | Mining Lands Acquisition System, Ontario |
| MNDM | Ministry of Northern Development and Mines, Ontario |
| MRE | Mineral resource estimate |
| n/a | Not applicable |
| N/A | Not available |
| NAD 83 | North American Datum of 1983 |
| nd | Not determined |
| NI 43-101 | National Instrument 43-101 |
| NSR | Net smelter return |
| NTS | National Topographic System |
| QA | Quality assurance |
| QA/QC | Quality assurance/quality control |
| QC | Quality control |
| QP | Qualified person (as defined in National Instrument 43-101) |
| Regulation 43-101 | National Instrument 43-101 |
| SD | Standard deviation |
| SG | Specific gravity |
| Twp. | Township |
| UTM | Universal Transverse Mercator coordinate system |
| VTEM | Versatile Time Domain Electromagnetic |
| VMS | Volcanogenic Massive Sulphide |
| P.Geol. | Professional Geologist (Ontario) |
| P.Eng. | Professional Engineer (Ontario) |
| Prof. | Professional |
| Geol. | Geological |

Table 1a: Conversion Factors for Measurements

| Imperial Unit | Multiplied by | Metric Unit |
|------------------------------|----------------------|--------------------|
| 1 inch | 25.4 | mm |
| 1 foot | 0.3048 | m |
| 1 acre | 0.405 | ha |
| 1 ounce (troy) | 31.1035 | g |
| 1 pound (avdp) | 0.4535 | kg |
| 1 ton (short) | 0.9072 | t |
| 1 ounce (troy) / ton (short) | 34.2857 | g/t or 1ppm |

Table 1b: List of Units

| Symbol | Unit |
|-------------------|--|
| % | Percent |
| C\$ | Canadian dollar |
| \$/t | Dollars per metric ton |
| ° | Angular degree |
| °C | Degree Celsius |
| µm | Micron (micrometre) |
| cm | Centimetre |
| cm ³ | Cubic centimetre |
| ft | Foot (12 inches) |
| g | Gram |
| Ga | Billion years |
| g/cm ³ | Gram per cubic centimetre |
| g/t | Gram per metric ton (tonne) |
| h | Hour (60 minutes) |
| ha | Hectare |
| k | Thousand (000) |
| kg | Kilogram |
| km | Kilometre |
| L | Litre |
| lb | Pound |
| M | Million |
| m | Metre |
| m ³ | Cubic metre |
| Mtpa | Million ton per year |
| Ma | Million years |
| my | Million years |
| masl | Metres above mean sea level |
| mm | Millimetre |
| Moz | Million (troy) ounces |
| Mt | Million metric tons |
| oz | Troy ounce |
| oz/t | Ounce (troy) per short ton (2,000 lbs) |
| opt | Ounce (troy) per short ton (2,000 lbs) |
| ppb | Parts per billion |
| ppm | Parts per million (1 gm/tonne) |
| t | Metric tonne (1,000 kg) |
| ton | Short ton (2,000 lbs) |
| tr | trace |
| US\$ | American dollar |
| wt% | Weight percent |
| y | Year (365 days) |
| yd ³ | Cubic yard |
| Au | Gold |
| Ag | Silver |
| Cu | Copper |
| Pb | Lead |
| Zn | Zinc |

Item 3: Reliance on Other Experts

The author has relied on previous exploration reports as referenced in Section 27.0 References. These reports may or may not have been completed by qualified persons as defined by NI 43-101. After reviewing the reports and associated data the author is satisfied the data presented is accurate.

For the purposes of this report the author has relied on ownership information provided by KML as well as claim information taken from the web site of the Ontario Ministry of Northern Development and Mines.



Figure 1: Echum Property Location - modified from figure 1 from Clark G., & Cullen D. 2017.

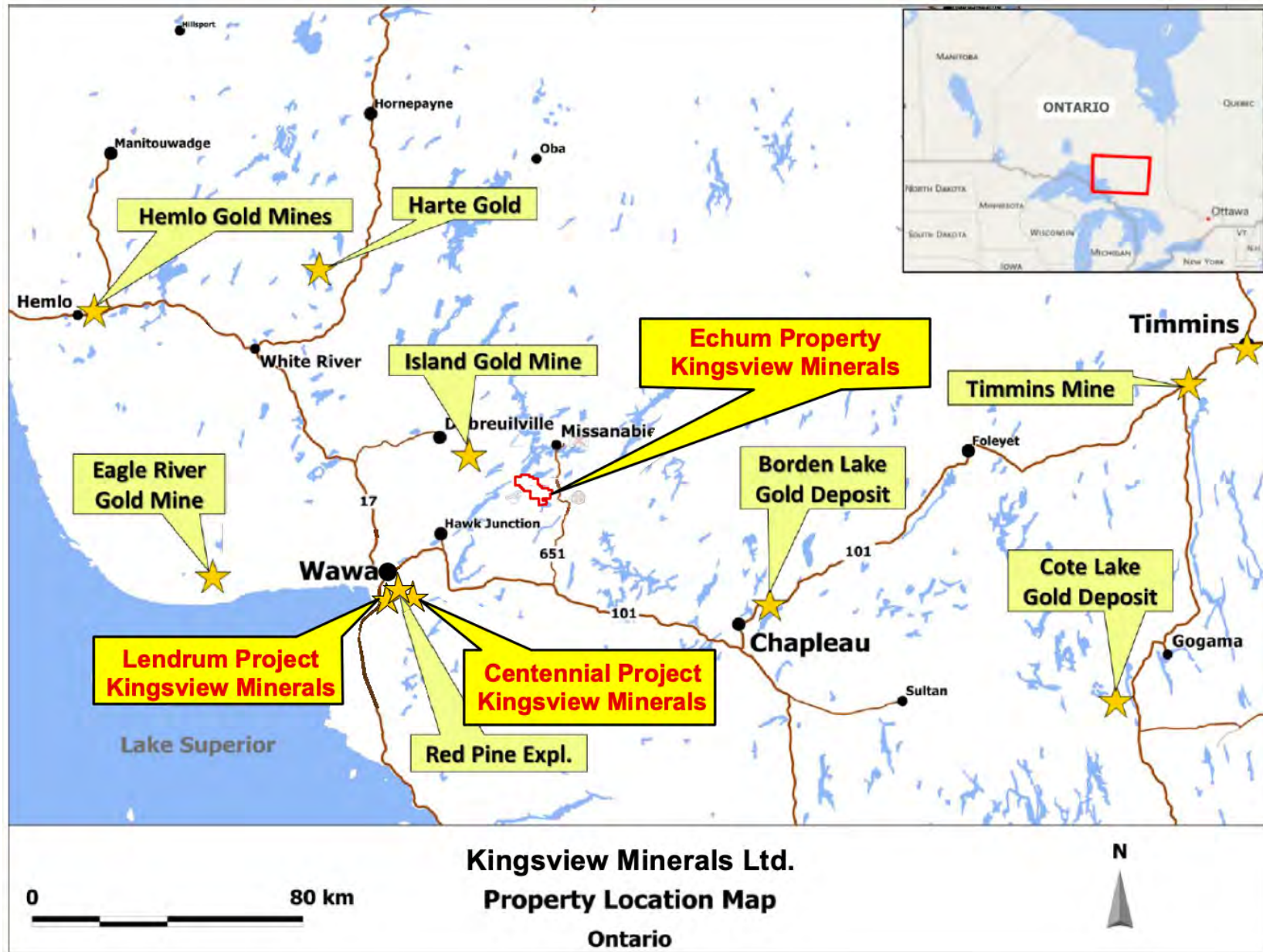


Figure 2: Property Location with Other Properties in the Region modified from figure 2 from Clark G., Cullen D. 2017.

Item 4: Property Description and Location

The Echum Lake Property is located in Bruyere, Dolson and Echum Townships within the Sault Ste. Marie Mining Division of Ontario approximately 54 km ENE of the Town of Wawa (see Figure 1 and Figure 2). The center of the Property is located at approximately 48.18° North Latitude and 84.13° West Longitude or in NAD 83 UTM co-ordinates, Zone 16U, 710500mE and 534100mN. The Property is comprised of 130 unpatented single unit mineral claims with an approximate total area of 2,800 hectares. The Property was acquired by way of a Share Exchange Agreement dated November 13, 2020 from 12185849 Canada Inc. The share agreement was for the acquisition of 5,100,000 issued and outstanding common shares of 1218549 Canada Inc. for 5,100,000 shares of KML. As a result of the Share Exchange Agreement, KML now holds a 100% interest in the Echum Property, as well as other properties, and is the sole shareholder of 12185849 Canada Inc. which has now become a subsidiary of KML. There were no carry-forward of any royalties or encumbrances on the Echum Property. The Echum Claims are shown in Table 1 and Figures 3 and 4. A copy of the Exchange Agreement can be found in Appendix 1.

The 4 known mineralized zones occurring on the Echum Property include: the Ballard Lake Showing (Au), Davies Lead Occurrence (Pb, Au), Davies Gold Occurrence (Au), and the M.P.D. Showing (Zn, Cu). There are no mineral resources or mineral reserves within the Echum Property boundaries. Figure 4 shows these occurrence relative to the Echum Property.

To the extent known, there are no environmental liabilities to which the Property is subject.

The Ontario Mining Act requires an Exploration Permit or Plans for exploration on Crown Lands. The permit and plans are obtained from the MNM. The processing periods are 50 days for a permit and 30 days for a plan while the documents are reviewed by MNM and presented to the Aboriginal communities whose traditional lands will be impacted by the work. The author has been informed by KML that the permits required to carry out the proposed work on the Property have been obtained. The issuance of these permits will allow the proposed work to be undertaken.

The government of Ontario requires expenditures of \$400 per year per unit for mining claims, prior to expiry, to keep the claims in good standing for the following year. The report must be submitted by the expiry date of the claims to retain them.

Note that a special circumstance extension has been obtained for some of these claims as highlighted in yellow in Table 1.

Table 2: Echum Property Claims

| No. | Claim No. | Township/Area | Date Recorded | Due Date | Work/yr Required | Unit Size |
|-----|-----------|---------------|---------------|-------------|------------------|-----------|
| 1 | 544780 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 2 | 544781 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 3 | 544782 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 4 | 544783 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 5 | 544784 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 6 | 544785 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 7 | 544786 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 8 | 544787 | ECHUM | 2019-Mar-06 | 2021-Mar-06 | \$400 | 1 |
| 9 | 587931 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 10 | 587932 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 11 | 587935 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 12 | 587936 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 13 | 587938 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 14 | 587941 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 15 | 587942 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 16 | 587944 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 17 | 587947 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 18 | 587949 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 19 | 587950 | ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 20 | 613098 | ECHUM | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 21 | 613099 | ECHUM | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 22 | 613100 | ECHUM | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 23 | 613101 | ECHUM | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 24 | 615157 | ECHUM | 2020-Oct-10 | 2022-Oct-10 | \$400 | 1 |
| 25 | 615158 | ECHUM | 2020-Oct-10 | 2022-Oct-10 | \$400 | 1 |
| 26 | 587927 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 27 | 587928 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 28 | 587929 | DOLSON/ | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 29 | 587930 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 30 | 587933 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 31 | 587934 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 32 | 587937 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 33 | 587939 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 34 | 587940 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 35 | 587943 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 36 | 587945 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 37 | 587946 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 38 | 587948 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 39 | 587951 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |

Table 2: Echum Property Claims (continued)

| No. | Claim No. | Township/Area | Date Recorded | Due Date | Work/yr Required | Unit Size |
|-----|-----------|----------------|---------------|-------------|------------------|-----------|
| 40 | 587952 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 41 | 587953 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 42 | 587954 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 43 | 587955 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 44 | 587956 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 45 | 587957 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 46 | 587958 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 47 | 587959 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 48 | 587960 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 49 | 587961 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 50 | 587962 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 51 | 587963 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 52 | 587964 | DOLSON/ECHUM | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 53 | 587965 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 54 | 587966 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 55 | 587967 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 56 | 587968 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 57 | 587969 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 58 | 587970 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 59 | 587971 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 60 | 587972 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 61 | 587973 | DOLSON | 2020-May-11 | 2022-May-11 | \$400 | 1 |
| 62 | 613175 | DOLSON | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 63 | 613177 | DOLSON | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 64 | 613178 | DOLSON | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 65 | 613179 | DOLSON | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 66 | 613180 | DOLSON | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 67 | 613086 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 68 | 613088 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 69 | 613089 | DOLSON/ECHUM | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 70 | 613090 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 71 | 613094 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 72 | 613095 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 73 | 613096 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 74 | 613097 | DOLSON | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 75 | 613082 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 76 | 613083 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 77 | 613084 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 78 | 613085 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |

Table 2: Echum Property Claims (continued)

| No. | Claim No. | Township/Area | Date Recorded | Due Date | Work/yr Required | Unit Size |
|-----|-----------|----------------|---------------|-------------|------------------|-----------|
| 79 | 613087 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 80 | 613091 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 81 | 613092 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 82 | 613093 | DOLSON/BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 83 | 613174 | DOLSON/BRUYERE | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 84 | 613176 | DOLSON/BRUYERE | 2020--Sep-24 | 2022-Sep-24 | \$400 | 1 |
| 85 | 613036 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 86 | 613037 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 87 | 613038 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 88 | 613039 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 89 | 613040 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 90 | 613041 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 91 | 613042 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 92 | 613043 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 93 | 613044 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 94 | 613045 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 95 | 613046 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 96 | 613047 | BRUYERE | 2017-Mar-01 | 2022-Sep-22 | \$400 | 1 |
| 97 | 613048 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 98 | 613049 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 99 | 613050 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 100 | 613051 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 101 | 613052 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 102 | 613053 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 103 | 613054 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 104 | 613055 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 105 | 613056 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 106 | 613057 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 107 | 613058 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 108 | 613059 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 109 | 613060 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 110 | 613061 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 111 | 613062 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 112 | 613063 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 113 | 613064 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 114 | 613065 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 115 | 613066 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 116 | 613067 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 117 | 613068 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |
| 118 | 613069 | BRUYERE | 2020-Sep-22 | 2022-Sep-22 | \$400 | 1 |

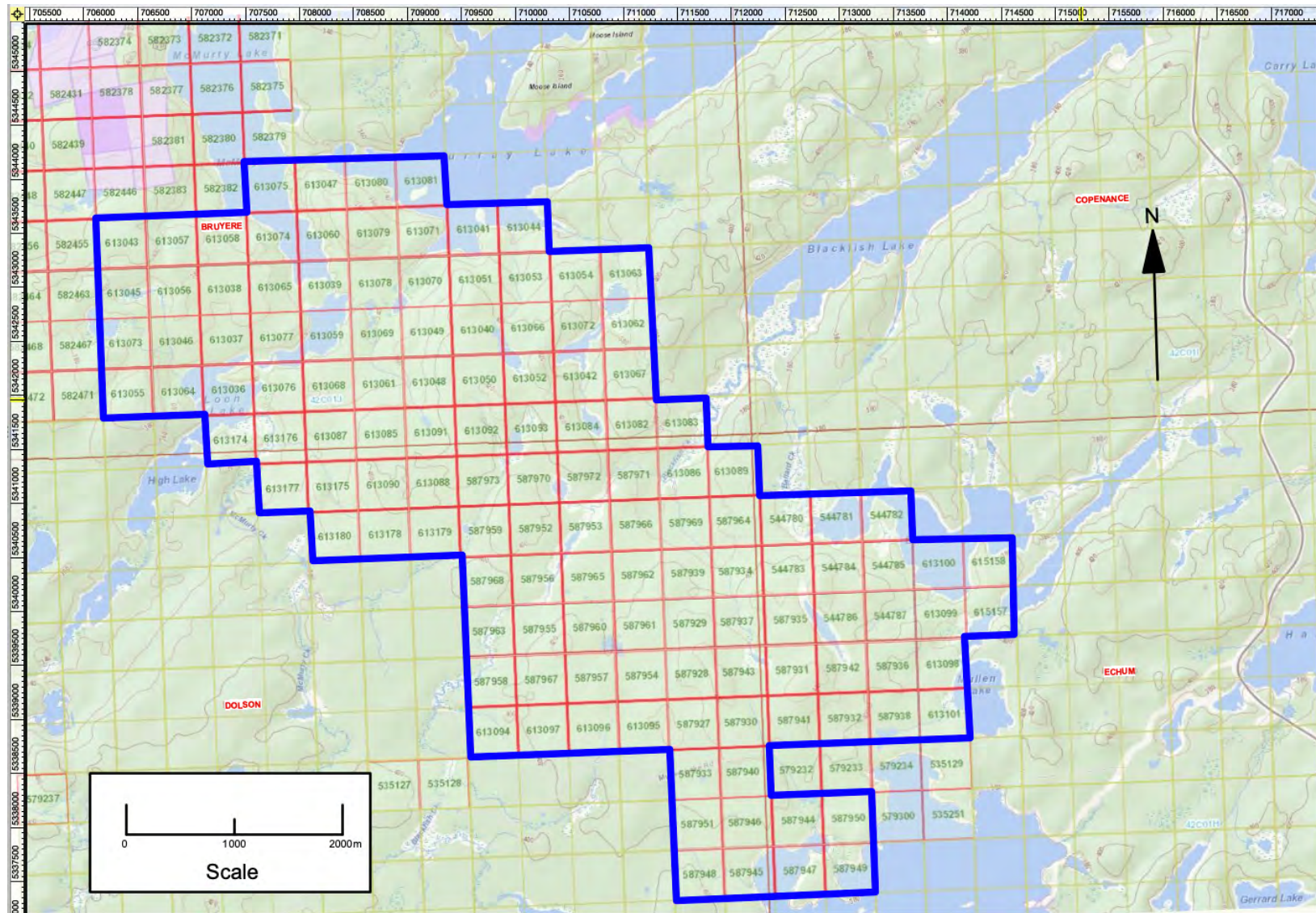


Figure 3. Echum Property Claims (outlined in blue) – Sault Ste Marie Mining Division, Ontario - information from MLAS NAD 83 Zone 16U.

Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography

Access to the Property is by vehicle along Highway 651. Highway 651 is reached by travelling 64 km east from Wawa along Highway 101, or 72 km west from Chapleau along Highway 101. From Highway 101 travel north along Highway 651 for 29 km to an access road heading westward to a tourist camp on Matchinameigus Lake. About 3 km from Highway 651 along this road, a quad trail continues westward and allows access to the south portion of the Property. The north part of the property is lake accessible. The Canadian Pacific Railway's Toronto to western Canada main line is located about 4 km to the east of the Property and passes through the village of Missinabie to the north. A powerline also exists along Hwy 651 servicing Missinabie.

The Wawa Municipal Airport is located 3.1 km south southwest of Wawa along Highway 17. It is a Registered Airport and consists of one asphalt runway, which is 1,350 metres long by 30 metres wide. The airport provides service for many business and personal aircrafts, including Fire Services, Air Ambulance, chartered flights, and private aircrafts (Wawa, 2016).

The climate is humid continental climate (Köppen climate classification Dfb) with four distinct seasons. Winters are cold and summers are warm with extremes in the range of -41° C in January and 33° C in July. The ground is snow covered generally from late November to late April. At the nearby Town of Wawa, the 1981 to 2010 monthly daily average temperature ranges from -14° C for January to 15° C for July; the yearly average rainfall is 708 mm with a highest monthly average of 122 mm for September; the yearly average snowfall is 319 cm with a highest monthly average of 80 cm for December; and the highest average monthly snow depth is 58 cm for February (Government of Canada, 2016). Given this climate range, exploration and mining development activities can be carried out at all times of the year.

Forestry, tourism and mining are the main industries in the area. The Town of Wawa is 55 km to the WSW with a population in 2011 of 2,975 people (Statistics Canada, 2016). The Wawa area has a long mining history and a number of mines and exploration projects are presently active. Mining personnel, equipment, and supplies are readily available in Ontario and Quebec within numerous communities including Wawa, Timmins, Kirkland Lake, Sudbury and Rouyn-Noranda. There is sufficient water and land within the Property boundaries to carry out exploration programs, and develop and operate a mine and milling complex. Electricity to supply a mining operation is available from high voltage power lines in the area.

The Property is hilly with a range of elevations between 330 and 430 metres above sea level. Steep ridges exist locally. The Property is forested with spruce, pine, poplar and birch being the dominant species.

Item 6: History**6.1: History from MNDM Mineral Deposits Inventory Echum Property****Ballard Lake Occurrence;**

MDI Number: MDI42C01NE00027; **Deposit Name:** BALLARD LAKE SHOWING

- 1988, LONGHURST OCCURRENCE - 1979, DAVIES GOLD-SILVER

OCCURRENCE – 1973; **Deposit Status:** OCCURRENCE;

1973: J. Davies - stripping, trenching, prospecting. 1979: G. Longhurst -

prospecting. 1980: Noranda Exploration Ltd. - ground geophysics. 1988: Anglo

Porcupine Gold Exploration Ltd. - soil survey, trenching, mapping, airborne

geophysics. 1998: 2973090 Canada Ltd. - prospecting, IP survey.

Davies Lead Occurrence

MDI Number: MDI42C01NE00031; **Deposit Name:** DAVIES LEAD

OCCURRENCE – 1973; **Deposit Status:** OCCURRENCE;

1973: J. Davies - stripping, trenching, prospecting. 1988: Anglo Porcupine Gold

Exploration Ltd. - soil survey, trenching, mapping, airborne geophysics. 1998:

2973090 Canada Ltd. - prospecting, IP survey.

Davies Gold Occurrence

MDI Number: MDI42C01NE00006; **Deposit Name:** DAVIES GOLD-1973 **Deposit**

Status: OCCURRENCE;

1973: J. Davies - prospecting, stripping. 1988: Anglo Porcupine Mines Ltd. - soil

survey, trenching, stripping, mapping, sampling. 1998: 2973090 Canada Inc. -

prospecting, IP survey, mapping. Minor stripping was also done earlier in 1962.

M.P.D. Showing

MDI Number: MDI42C01NE00037; **Deposit Name:** M.P.D. SHOWING – 1988;

Deposit Status: DISCRETIONARY OCCURRENCE;

1988: Tenoga Consultants Inc. - mapping, ground geophysics, stripping, airborne geophysics.

6.2: History from MNDM Reports and Assessment Files Echum Property

Note: in the references listed below the terms “AFRI File” and AFRO ID” refer to the assessment report’s identification numbers for the files as found in the MNDM’s Assessment File Research Image Database (AFRI) retrieved from <http://www.geologyontario.mndm.gov.on.ca>.

Due to the large number of reports submitted for assessment in the MNDM’s Assessment File Research Image Database by Chalice Diamond/Golden Chalice, many of which are airborne geophysics reports or only partly cover KML’s Property; they have not all been listed in the “References” (Item 26 of this report). The author has examined the reports and believe that the pertinent information is presented in this Report.

1953 to 1956: A series of airborne magnetic and electromagnetic, and ground electromagnetic surveys were conducted on the Dalton Project of Frobisher Ltd. in Dolson Twp. The target of these surveys was iron formation. This work was undertaken just to the west of the VLF anomaly and most of the Echum Property. **AFRI File: 42C01NE8667.**

1956: Belmine Exploration Limited, Report #13. Diamond drill program 5 holes totaling 2,035.9 feet (620.5 m), Dolson Twp. No location maps available in report. **AFRI file: 42C0NE0422.**

1961 to 1962: Algoma Central Railway report covers geology of Ballard Lake area and mentions that on the south shore of Ballard Lake at the west end some trenching was done in 1961 near the contact of the volcanics with the northern granite. **AFRI file: 42C01NE8814.**

1973: Davies, J. completed manual stripping and trenching of a gold-silver occurrence south of the river at the west end of Ballard Lake. A quartz vein, average width of 5 inches (12.7 cm) was traced for approximately 500 feet (152.4 m). The vein occurs in a band of schist, average width of 2 feet (0.6 m), at the contact of granite and greenstone. Gold and silver is associated with chalcopyrite and galena of which there are small amounts scattered in the vein. **AFRI file: 42C01NE8814.**

1980: Noranda Exploration Co. Ltd. completed magnetic and VLF surveys over a gold-silver showing near the west end of Ballard Lake. The showing is described as a single narrow vein with an average width of 0.5 to 1.5 feet (0.15 to 0.46m) that is exposed for 500 feet (152.4 m) along the contact between granite and mafic volcanics. The vein is weakly mineralized with pyrite, galena, silver, and gold. The volcanics immediately adjacent the contact areas approximate amphibolite schist. The report states that a few weak conductors were outlined by the survey; however, no survey maps or data are included. Conclusions and recommendations by Noranda: due to low and erratic assay results, combined with the narrow size of the vein, the property warrants no further work by Noranda. **AFRI file: 42C01NE0409.**

1983: Tundra Gold Mines Ltd. conducted an airborne magnetic, electromagnetic and VLF-EM survey over the Matchinameigus Lake area, covering a portion of KML's Property in Echum and Copenace Twps. A total of 84 line miles (135.18 line km) were flown, with a number of conductors identified. **AFRI File: 42C01NE0400.**

1988: Anglo Porcupine Gold Exploration Ltd. performed an airborne magnetometer and VLF survey undertaken by Dighem. They also completed geological mapping, soil geochemistry and trenching. The program cut 23 trenches across the Ballard Lake Shear Zone (along granite-volcanic contact)

over a strike length of 3,300 feet (1 km). Shearing was traced over 1000 feet (304 m) with widths ranging from 5 to 60 feet (1.5 to 18.3 m) continuing west to under a swamp and eastward to the lake.

A number of isolated soil anomalies, both precious and base metals were outlined by the soil geochemistry, including a Cu, Zn, Ni anomalous zone along a gabbro contact. Follow up work was recommended but not carried out. **AFRI file: 42C01NE0424.**

1988: M.P.D. Consulting Ltd. carried out a prospecting and mapping program on a claim block covering the northeast corner of Dolson Twp. and the south-central part of Bruyere Twp. Contained entirely within the Echum Property. Thirty samples were collected during the program for whole rock analysis as well as assay for Au, As, Cu and Zn, with the highest gold assay being 54 ppb (.054g/t) The highest Cu value being sample #418 with 2,510 ppm (0.2%) Cu along with 278 ppm (0.0278%) Zn. The highest zinc value being 490 ppm (0.0490%) Zn in sample 417. These samples were described as mafic volcanics with quartz veining and strong ankerite alteration. The assessment files do not contain a complete map and so the location is stated as discretionary as plotted on the OGS map for Dolson Twp. This location is approximately 500 m. south of the VTEM anomaly.

Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property. AFRI File: 42C01SE0410.

1988: Tenoga Consultants Ltd. undertook trenching and sampling on three areas in the vicinity of the MPD Showing. Unfortunately the poor map quality of data on file with the assessment office does not allow a better locate. Iron formation with gossanous rusty fractures with semi-massive sulphides of pyrite and chalcopyrite were reported in a cherty brecciated matrix within intermediate volcanics striking about 120° in trench 24W, 1+20S. Historical assays were recorded in this trench as shown in Figure 4 below. The highest copper assay being 2,066 ppm (0.2%) Cu with 1,537 ppm (0.15%) Zn over 3 feet (0.9 m)

In trench 24W, 8+60S-10+80S the highest copper value obtained was 1379 ppm (0.1379 %) Cu with 582 ppm (0.0582 %) Zn, 92 ppm (0.0092 %) Pb, 3.3 ppm Ag and over 5.5 feet and 19.9 ppb Au over 5.5 feet. In trench 27W, 7+00S to 9+00S the highest zinc value was 1,225 ppm Zn, with 701 ppm Cu, 82 ppm Pb, 1.5 ppm (1.5 g/t) Ag and 38 ppb (0,038) Au over 1 foot. All samples were collected within an area of 100 x 300 feet (30.5 to 92 metres).

Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property. AFRI File: 42C08SE5003

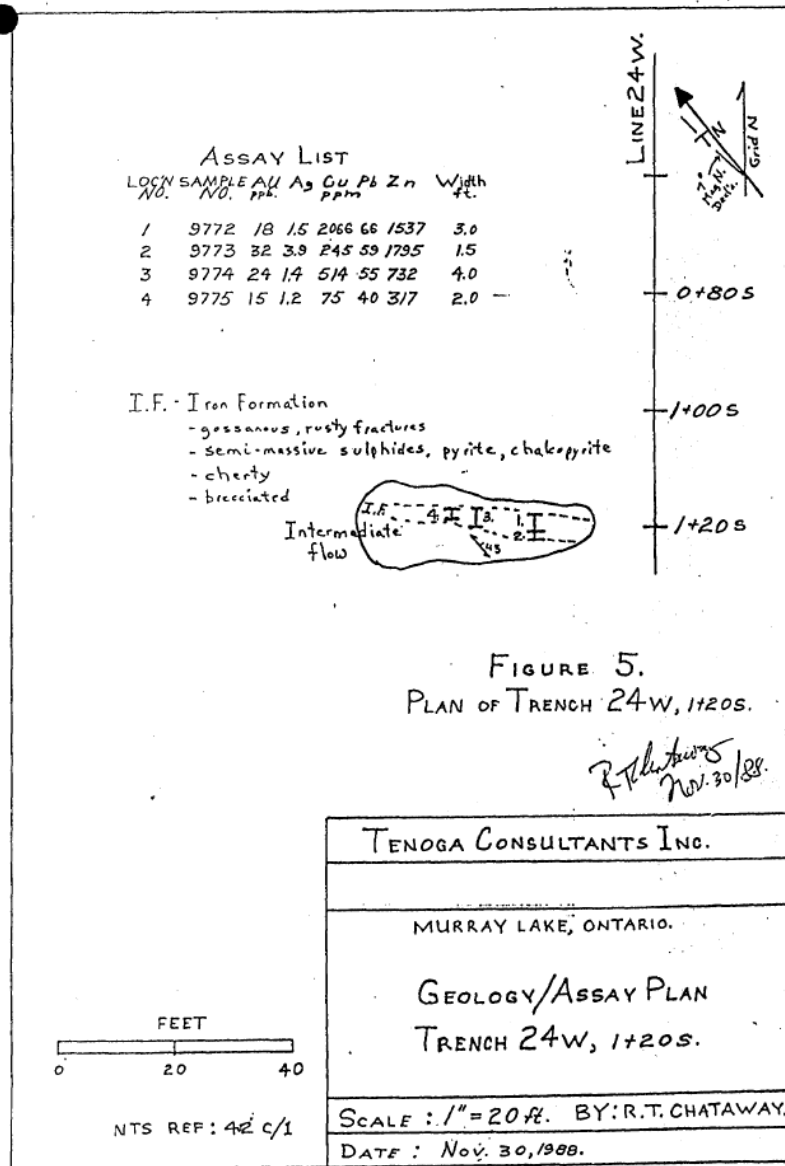


Figure 4. Assessment trench sketch from AFRI File 42C08SE5003

1988: Tenoga Consultants Ltd. conducted ground magnetic and VLF surveys over a block of claims in the northeast corner of Dolson Twp. and the southeast corner of Bruyere Twp. A small MaxMin II test survey was also done over several lines to test the validity of an airborne response. The surveys were reported to be successful in locating and outlining the general structures of the property as well as several areas of major cross structure. More follow-up geophysics was recommended, as well detailed mapping and possibly a soil geochemical survey over areas of interest. This work was conducted on the Echum Property just to the east, outside of the recently discovered VTEM anomaly by KML. (Burton J. A. 1988) **AFRI File: 42C01NW0001.**

1997: C. Clement conducted prospecting, sampling, panning, hand stripping and dug a small pit on claims straddling the border of Dolson and Bruyere Twps. About 1.75 km southwest of the MPD Showing as shown on Figure 8 Most of the assays from a total of 20 samples were insignificant; however, three assays from panned samples assayed 3.403 oz/ton (116.67 g/t), 0.602 oz/ton (20.64 g/t) and 0.383 oz/ton (13.13 g/t) gold. It should be noted that panning would have concentrated the gold in the samples. **Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property. AFRI File: 42C01NE2001.**

1998: D.R. Healey., 2973090 Canada Inc. completed an OPAP exploration program that included line cutting, Induced Polarization (gradient) geophysical surveys, mapping and prospecting. Of the 64 bedrock samples collected along a significant shear structure (the Ballard Lake Shear Zone) assay results ranged from 0.01 – 7.48 g/t Au. The 7.48 g/t Au samples was from a 0.52 m chip sample collected from the Davies Gold Occurrence. Numerous IP chargeability (gradient) anomalies were located along the shear structure. A diamond drill program was recommended but not carried out. **Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property. AFRI file: 42C01NE2002.**

2000 - 2001: M. Tremblay and crew carried out a prospecting, sampling and power stripping program on their Matchinameigus - Fletch Property. Part of the southwest portion of the Echum Property was covered by this program. This work included sampling and geotechnical work by K. Kivi of Kennecott Canada, P. Jones and A Muirhead of Southernera Resources and sampling and microprobe analysis by R. Barnett of R.L. Barnett Geological.

The work discovered nine new kimberlite occurrences, three of which underwent microprobe analysis, which indicated the presence of large populations of high Cr chromite in the diamond inclusion field at all three locations. **Note that none of these kimberlites occur on the Echum Property but the Fletch Kimberlite Occurrence is located less than 1 kilometre southwest from the Echum Property. AFRI File: 42C01NE2005.**

2002-3: Geodex Minerals Ltd. optioned the Matchinameigus - Fletch Property from M. Tremblay and J. Robert and conducted an exploration program of prospecting and sampling covering part of the Echum Property. Five samples were collected from four of the kimberlites, and sent to Kennecott Canada's lab in Thunder Bay for caustic fusion digestion and diamond analysis. Two micro-diamonds were recovered from two different samples, indicating that at least some of the kimberlite dykes on the property were diamondiferous, and the results were described as encouraging. Note that none of these kimberlites occur on the Echum Property but the Fletch Kimberlite Occurrence is located less than 1 kilometre southwest from the Echum Property and the diamondiferous Geodex

No. 2 dyke is less than 100 m to the south of the Echum Property. See Figure 8 **AFRI File: 42C01NE2006.**

2006 to 2008: Chalice Diamond Corp. (and their predecessor Golden Chalice Resources Inc. (“GCR”)): Between 2006 and 2008, Chalice Diamond/Golden Chalice staked and acquired an extensive land package that eventually covered 170,000 hectares within an area stretching 75 km long by 35 km wide in the Wawa – Missanabie region, and covered parts of the current Echum Property of KML. NAD 83 UTM zone 17 and zone 16 co-ordinates were used. No diamondiferous kimberlites were reported on the Echum Property.

Work carried out on the properties consisted of prospecting, sampling and power stripping, as well as sampling and geotechnical work by K. Kivi of Kennecott Canada, P. Jones and A. Muirhead of Southernera Resources and sampling and microprobe analysis by R. Barnett of R.L. Barnett Geological and R. Dues of Band-Ore Resources.

Of interest was a Geotech helicopter VTEM and Magnetometer survey, part of which covered the Echum Property. This survey was flown along N-S lines 75 metres apart and shows the VTEM anomaly in the area of the MPD showing. As this survey was flown along N-S lines the anomaly did not show as prominent as the more recent Geotech survey of KML and was not further investigated by GCR. **AFRI File: 20000000060**

Linecutting and detailed ground magnetometer surveys were also conducted in 2007 on target areas to better define the shape and extent of any potential kimberlitic rocks. No areas were targeted on the area of the current Echum Property. **AFRI File: 20000002578,**

2007: Laidlaw undertook a magnetometer survey on the Fletch occurrence as well as a till sample report, just outside the Echum Property. **AFRO ID: 2.34543 and 2.34709.**

Due to the large number of reports submitted for assessment in the MNM’s Assessment File Research Image Database by Chalice Diamond/Golden Chalice, many of which are airborne geophysics reports or only partly cover KML’s Property, they have not all been listed in the “References” section (Item 26 of this report). The author has examined the reports and believe that the pertinent information is presented in this Report.

2010: Chalice Diamond Corp. an assessment Report on Lake Bottom Sediment Survey in Meath, Rennie, Bader, Dolson, Echum, Copenace and Marsh Townships; *by Stone, G.* was done over Ballard Lake. Three minor anomalous readings 6.0 ppb (0.006 g/t) 0.4 ppb (0.0004 g/t) and 0.4 ppb (0.0004 g/t) Au were recorded. **AFRO ID: 2.44566.**

6.3 History from RT Minerals Technical Report April 25, 2017

Note: The following information was extracted from “**Technical Report on the Ballard Lake Property Bader, Bruyere, Collishaw, Copenace, Echum, Dolson, Long and Marsh Townships, Sault Ste. Marie Mining Division Ontario Canada, Prepared for RT Minerals by D. Cullen, P.Geo. and J. Garry Clark, P. Geo. April 25th, 2017.**”

Stripping, Sampling and Assaying Program 2016

Manual stripping, power stripping and sampling were completed by RMC in June 2016. Assaying was done by Swastika Laboratories of Swastika, Ontario.

The program was carried out to test for gold mineralization along the contact of the granodiorite stock and metavolcanics south of Ballard Lake. Historical work reported gold values along the contact within a zone referred to as the Ballard Lake Shear Zone that is characterized by ribbon banded schists, quartz veining and sulphides (galena, chalcopyrite and pyrite).

Manual and power stripping of overburden was carried out in 11 areas (A to J) on claims 4260532 and 4260533. Areas A, B, C, D, E, H and J occur along the main shear at the granodiorite and metavolcanic contact. Areas F, G and I occur south of the main shear away from the granodiorite and metavolcanic contact. Manual stripping at areas B, C, D and E involved removing moss, brush and small trees with a grub hoe and human power. Power stripping of overburden using an excavator occurred at areas A, F, G, H, I and J. The overburden stripped was generally less than 30 cm thick, up to 1 metre thick, and consisted of a thin layer of organics over glacial till. Areas A, F, and G were washed using a pressure pump and hose. Areas H, I and J were partially swept using a Stihl power broom. Granite, diorite, volcanics, schist, gabbro, felsic dykes, quartz veins and diabase dykes were noted across the work areas. Trace to 5% pyrite was observed in some of the quartz veins/stringers and schists, minor disseminated pyrite occurs in some of the felsic dykes. The shears are dark green ribbon banded schists generally from 1 metre to 3 metres wide. The schists often enclose 0.2 to 1 metre wide quartz vein(s) that pinch and swell along strike. The shears and veining generally strike NE-SW to ENE-WSW with vertical to steep north dips. The work areas and sample locations are shown in Figure 5 below.

Bedrock sampling consisted of channel sampling, chip sampling and grab sampling. A total of 64 bedrock samples were taken and assayed for gold. The assay results ranged from <0.01 to 7.48 g/t Au.

Thirty seven samples were taken from channels cut in bedrock using a gas powered channel saw with 14” (35.56 cm) diamond impregnated blade. The channels were approximately 5 cm wide and 5 cm deep. The samples were broken out of the channels using hammer and chisel. Twelve bedrock chip samples were broken out of bedrock using hammer and chisel. Fifteen bedrock

grab samples were broken from bedrock using a hammer. The samples were placed in individual plastic sample bags with sample tags and sealed with plastic ties. The samples were securely stored and transported to Swastika Laboratories for analysis using standard fire assay techniques.

Areas A, B, C, D, E, H, and J returned assays greater than 0.1 g/t Au. Assays greater than 1.0 g/t Au were returned from samples taken from areas A, D, H, and J. The highest assay of 7.48 g/t Au over 0.52 metre chip sample came from Area H. Areas F, G and I returned insignificant assays. Samples with Au assays greater than 0.1 g/t Au are located in Figure 5 and shown in Table 3 below.

Table 3: RMC Sample Assays > 0.1 g/t Au

| Sample # | Au g/t | Area | Sample Type | Description | From (m) | To (m) | Width (m) | UTM Z 16 Nad 83 | |
|----------|--------|--------|-------------|--|----------|--------|-----------|-----------------|---------|
| | | | | | | | | East | North |
| 63357 | 0.28 | Area A | Channel | Chlorite schist, sheared, 30% irregular white quartz vein | 1 | 2 | 1 | 712713 | 5340631 |
| 63358 | 1.32 | Area A | Channel | White complex quartz vein 70%, strike 310 deg azimuth, steep dip, chlorite schist 30%, trace to 10% pyrite in quartz and schist | 2 | 3 | 1 | 712713 | 5340629 |
| 63359 | 0.13 | Area A | Channel | Chlorite schist 65%, irregular folded felsic dyke 30%, quartz stringers 5% | 3 | 4 | 1 | 712712 | 5340629 |
| 63362 | 0.1 | Area A | Channel | White complex quartz vein 85%, strike 310 deg azimuth, steep dip, chlorite schist 15% | 6 | 6.4 | 0.4 | 712711 | 5340627 |
| 63363 | 0.4 | Area A | Channel | Chlorite schist 90%, quartz 10% | 6.4 | 7.3 | 0.9 | 712710 | 5340626 |
| 63365 | 0.14 | Area B | Channel | White quartz vein 60% with 1 to 5% pyrite, strike 320 deg azimuth, steep dip, chlorite schist 20% with trace to 1% pyrite, 20% granite with trace pyrite | 1 | 2 | 1 | 712578 | 5340723 |
| 63367 | 0.24 | Area C | Channel | White quartz vein, strike 335 deg azimuth, steep dip to north, trace to 1% pyrite, trace malachite | 0 | 0.7 | 0.7 | 712560 | 5340758 |
| 63372 | 1.51 | Area D | Channel | Quartz vein 30%, strike 330 deg azimuth, steep dip, chlorite schist 40%, felsic dykes 30%, trace to 3% pyrite | 0.8 | 1.5 | 0.7 | 712556 | 5340761 |
| 63373 | 0.42 | Area E | Channel | Quartz vein, strike 330 deg azimuth, steep dip, 1 to 5% pyrite | 0 | 0.9 | 0.9 | 712553 | 5340767 |
| 63395 | 1.24 | Area H | Chip | Chlorite mica schist, no visible sulphides | 0.95 | 1.18 | 0.23 | 713588 | 5340345 |
| 63396 | 0.15 | Area H | Chip | Chlorite mica schist 90%, quartz vein 10%, no visible sulphide | 1.18 | 1.53 | 0.35 | 713588 | 5340344 |
| 63397 | 7.48 | Area H | Chip | White quartz vein at 300 deg azimuth, steep dip, rusty patches, 3 to 6% pyrite | 1.53 | 2.05 | 0.52 | 713588 | 5340344 |
| 63398 | 0.39 | Area H | Chip | Chlorite mica schist, no visible sulphides | 2.05 | 2.65 | 0.6 | 713587 | 5340343 |
| 74713 | 0.31 | Area J | Chip | White quartz vein 25% at 290 deg azimuth, steep dip, and weathered wall rock chlorite schist 75% with trace to 10% medium to coarse grained pyrite | 0 | 1 | 1 | 713304 | 5340441 |
| 74754 | 2.38 | Area H | Grab | qtz vein with pyrite (galena?sphalerite?) | | | | 713589 | 5340343 |
| 74755 | 1.52 | Area J | Grab | bull qtz with gobs of galena | | | | 713306 | 5340440 |

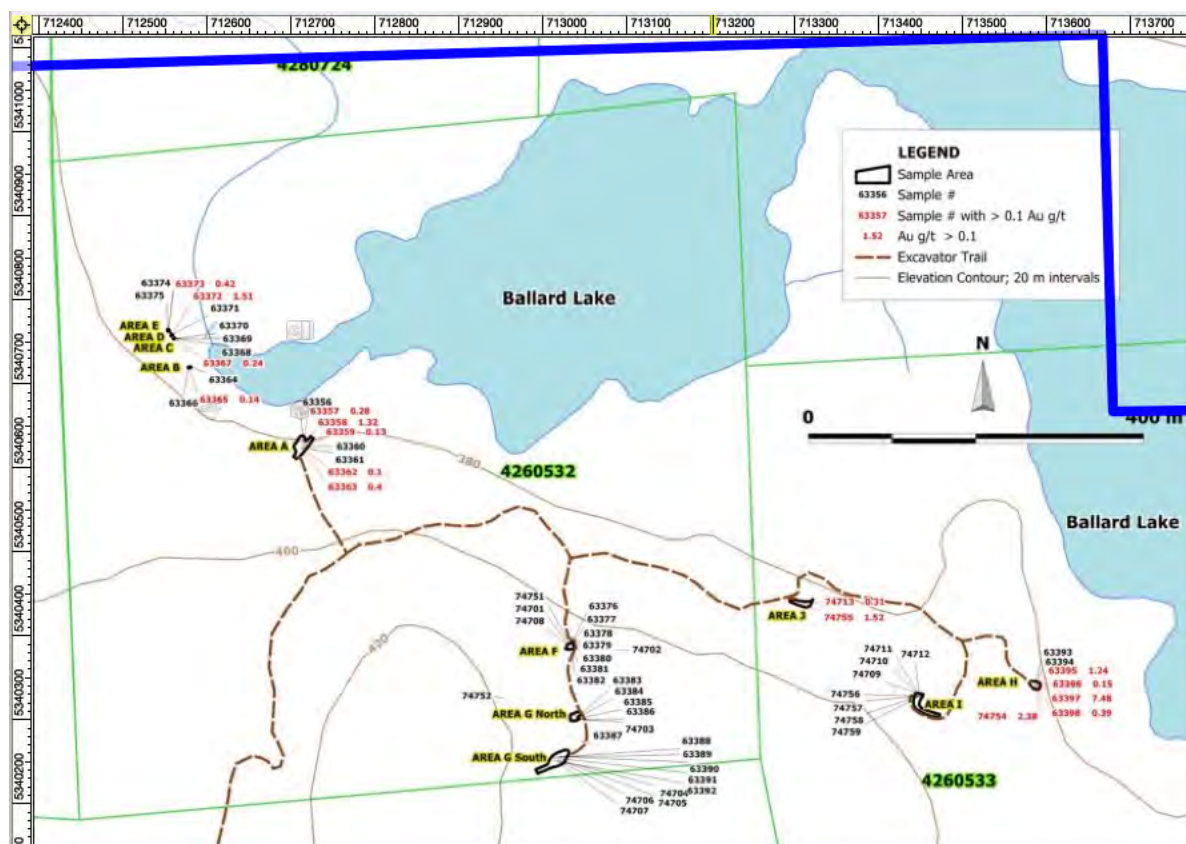


Figure 5. RMC. 2016 Sample Locations Green lines show historic claimlines of RT Minerals Corp. Blue lines show current Echum Property outline. Co-ordinates in NAD83 Zone 16U. (Modified from Figure 4 of Cullen, D., Clark Garry, 2017.)

During September and October 2016, RMC completed 435 metres of diamond drilling in three holes on claim 4260533. One hundred and thirty one samples of split drill core were shipped to Swastika Laboratories Ltd. for gold assay and multi-element analysis. The diamond drilling program was designed to test for gold mineralization within and adjacent to the Ballard Lake Shear Zone.

All three holes targeted historical IP chargeability anomalies, BA-16-01 and BA-16-02 targeted the Ballard Lake Shear Zone, BA16-02 undercut the assumed location of a historical soil anomaly, and BA-16-01 undercut a gold showing that assayed up to 7.48 g/t Au at surface. All drill holes were drilled at 20 degree azimuth, -45 degree dip and spotted and referenced to UTM grid Zone 16 NAD 83 by hand held GPS.

The drill hole locates and significant intersections are listed in Table 4 and 5 respectively and their location on a map is shown in Figure 6.

George Downing Estate Drilling Ltd. of Grenville-sur-la-Rouge, Quebec, provided contract drilling for the program. The drill holes were all NQ with excellent core recoveries at close to 100%.

Table 4: RMC 2016 Diamond Drill Hole Locations

| DDH ID | Length m | Azimuth | Dip | East Nad 83 Z 16 | North Nad 83 Z 16 |
|----------|-------------|---------|-----|------------------|-------------------|
| BA-16-01 | 150 | 20 | -45 | 713571 | 5340275 |
| BA-16-02 | 150 | 20 | -45 | 713437 | 5340302 |
| BA-16-03 | 135 | 20 | -45 | 713378 | 5340447 |

The assay results were low with the highest assay of 0.33 g/Mt Au over 1.0 metre from 89.0 to 90.0 metres in drill hole BA-16-01. Alkali ultramafic dikes were penetrated in all three drill holes; several dykes up to 5.3 metres wide in BA-16-01, three dykes to 24.6 metres wide in BA-16-02, two dykes to 1.7 metres wide in BA-16-03. Significant intersections are shown in Table 5 below.

Table 5: RMC 2016 Significant Intersections

| DDH ID | From (m) | To (m) | Interval (m) | Significant Intersection |
|----------|----------|--------|--------------|--------------------------|
| BA-16-01 | 26.3 | 31.6 | 5.3 | Alkali Ultramafic Dike |
| BA-16-01 | 89 | 90 | 1 | 0.33 g/t Au |
| BA-16-01 | 112.6 | 113.6 | 1 | Alkali Ultramafic Dike |
| BA-16-01 | 123.1 | 126.8 | 3.7 | Alkali Ultramafic Dike |
| BA-16-01 | 129 | 130 | 1 | Alkali Ultramafic Dike |
| BA-16-02 | 31.7 | 44.2 | 12.5 | Alkali Ultramafic Dike |
| BA-16-02 | 99.4 | 124 | 24.6 | Alkali Ultramafic Dike |
| BA-16-03 | 25.1 | 26.8 | 1.7 | Alkali Ultramafic Dike |
| BA-16-03 | 57.8 | 59.3 | 1.5 | Alkali Ultramafic Dike |

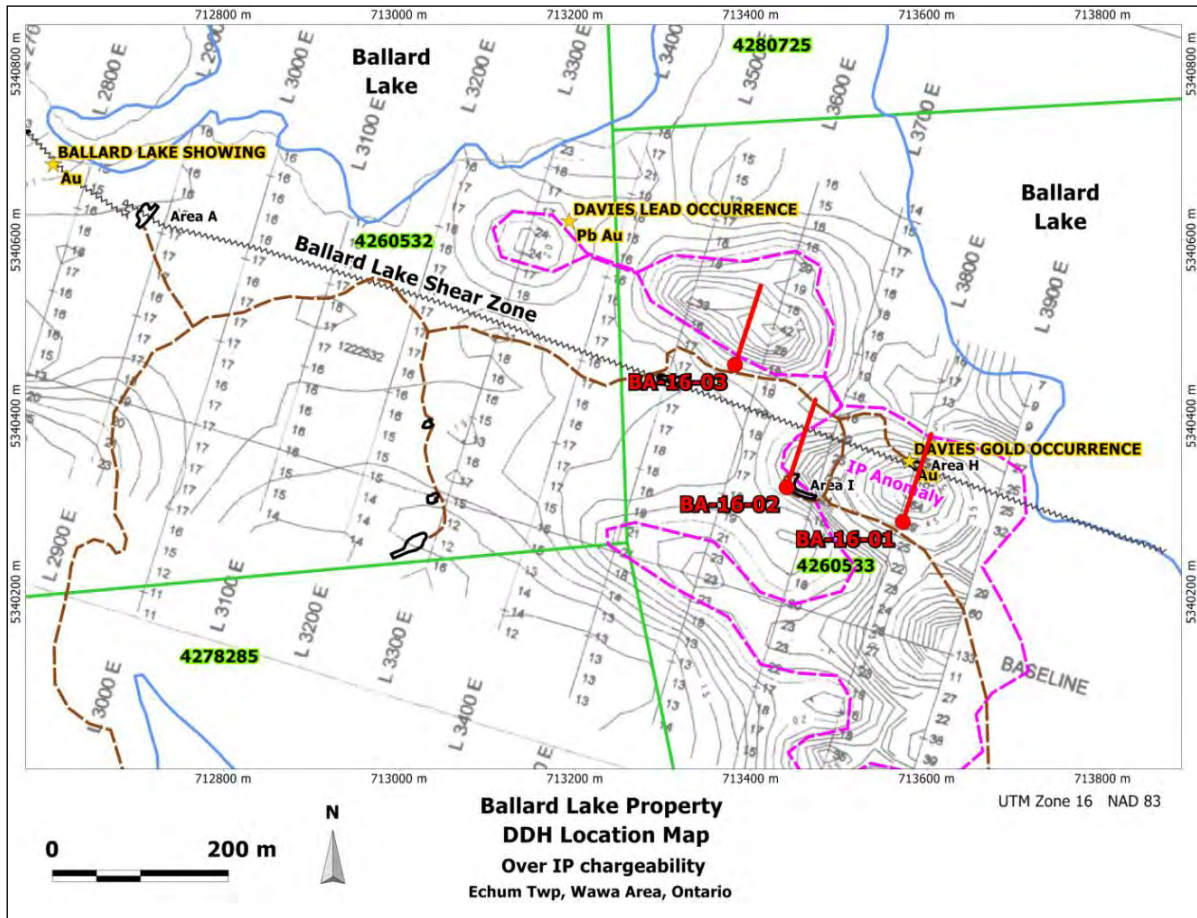


Figure 6. RT Minerals Corp. 2016 Drill Hole Locations showing the earlier claim fabric held by RT Minerals Corp. (from Figure 5 of Cullen, D., Clark Garry, 2017.)

RMC Program 2016 Sample Security, Storage and Shipment

Samples were collected by personnel under contract to RMC. Rock samples were taken from bedrock and placed in individual plastic sample bags with a sample tag and sealed with locking plastic ties. The sealed sample bags were in turn placed in shipping bags, which were also sealed with locking plastic ties. The bags were kept in a locked vehicle during the sampling and delivered by truck to Swastika Laboratories (Swastika) in Swastika, Ontario.

Sample Preparation and Assay Procedures

Rock samples were submitted for analysis to Swastika in Swastika, Ontario. All 64 rock samples submitted to Swastika were assayed for gold.

Swastika Laboratories Ltd. has been accredited by CALA in meeting the requirements of ISO/IEC 17025:2005 for the following scope of tests: gold by fire assay with gravimetry finish, gold by fire assay with flame atomic absorption

spectroscopy finish (FAAS), gold by fire assay with microwave plasma atomic emission spectroscopy finish (MP-AES), silver, copper and nickel by aqua regia digestion and FAAS finish. Swastika regularly participates in the PTP-MAL (Proficiency Testing Program for Mineral Analysis Laboratories) round robin laboratory program provided by Natural Resources Canada for minerals containing gold, platinum, palladium, silver, copper, lead, zinc, cobalt and nickel.

All samples were delivered to Swastika Lab by an RT Minerals employee and handed over to the laboratory personnel. RT Minerals employees, officers, directors or associates had no involvement beyond the delivery of the samples for analysis.

Swastika procedures for sample preparation and assaying of the samples: drying of samples at 80°C in a forced air circulation system, crushing to > 80% passing 1700 microns using low chrome steel jaw plates, splitting samples using a rotary splitter to obtain test samples and replicates, pulverizing to >90% passing 107 microns using low chrome steel bowl sets.

Fire assaying was performed on a 29.167 gram sample drawn from the pulp. The gold bead was assayed using atomic absorption spectrometry technique. Gold values are reported on the certificates in g/t with a lower detection limit of 0.01 g/t.

Internal quality control procedures by Swastika consisted of standards, blanks and duplicate samples. Standards and blanks were inserted at a rate of one standard every 25 samples, and one blank every 25 samples. Six of the samples were re-assayed on the original pulp. Swastika reported the results of the internal quality control data on the final certificates.

A review of the duplicate samples submitted by Swastika indicates that the sample variance is similar to that of nugget type Au deposit.

RMC Drilling Program 2016

The drill core from the 2016 program was logged and sampled by personnel under contract to RT Minerals, under the supervision of K. Kivi, P. Geo, who acted as the Qualified Person. The work was carried out in a secure building, with the sampled core being split, sealed in plastic sample bags and rice bags, and stored under lock and key. The samples were shipped by Manitoulin Transport directly to Swastika Labs in Swastika, Ontario.

The sample preparation and assay procedures employed by Swastika, as well as quality control programs, were the same as described above for the "Stripping, Sampling and Assaying Program 2016".

Item 7: Geological Setting and Mineralization

7.1 Regional Geology

The Property is located in the southeastern part of the Wawa Greenstone Belt which consists of early 2.89 to 2.70 billion-year-old, Precambrian rock that extends inland from the northeastern margin of Lake Superior eastward to as far as Missanabi Lake, terminating along the western contact of the Kapuskasing Horst structural zone of migmatized rock. In the area of study this metavolcanic – metasedimentary belt is intruded by stocks of mafic to ultramafic bodies of different ages.

The volcanic unit is composed of predominantly basaltic flows overlain by more felsic flow units of dacitic composition and its pyroclastic equivalent. The granitic units found in the belt are foliated to gneissic granodiorite and trondhjemite.

Gold, silver, zinc, copper and iron mineralization are the common associated metallic occurrences found in the belt. Recently diamondiferous kimberlite and lamprophyre rocks have been recognized in the southeastern part of the Wawa Greenstone belt.

Several gold properties are found around the northwest periphery of the same granite-granodiorite batholith that occurs along the east side of the Property. Figure 7 below shows the regional geology.

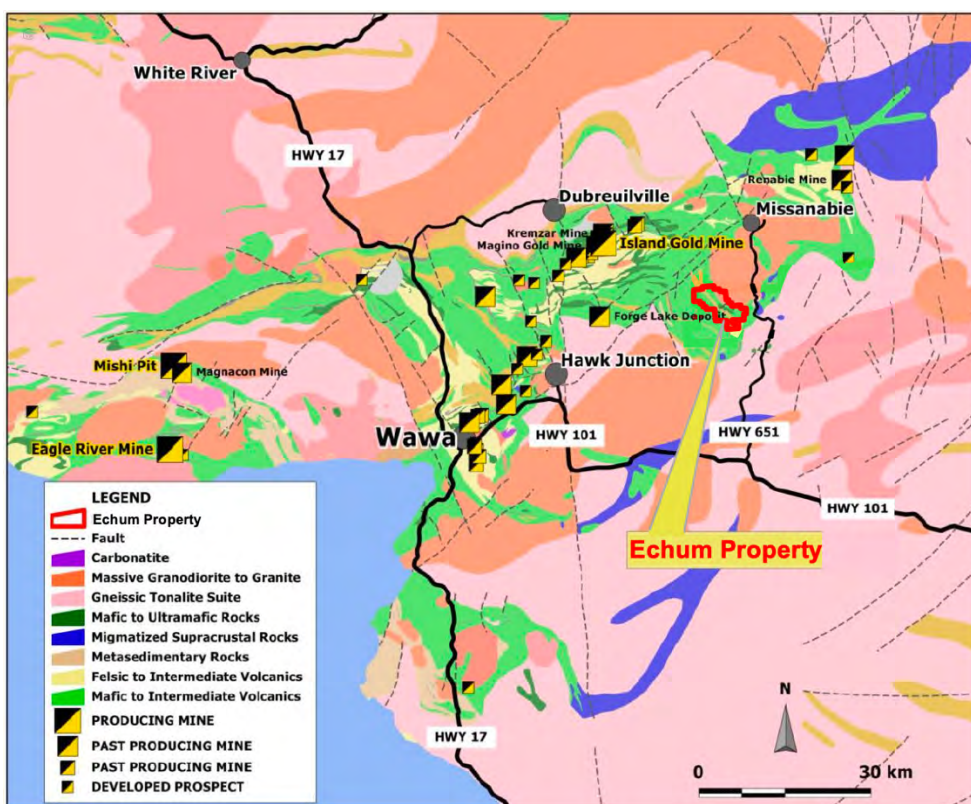


Figure 7. Regional Geology (from Figure 8 of Cullen, D., Clark Garry, 2017.)

7.2 Property Geology and Mineralization

On the Property the predominant rocks are a southeast striking sequence of mafic volcanics to the east and intermediate volcanics to the west separated by a band of metasedimentary rocks. Massive granodiorite/granite occurs along the eastern edge of the Property. Mafic (gabbro) intrusives are also located on the Property along the east side of the metasedimentary band. Ultramafic rock and kimberlite dykes are also present outside around the southeast, south and east of the property. Numerous mineral occurrences of gold and base metals have been documented on the Property. The 4 known mineralized zones that occur on the Property include: the Ballard Lake Showing (Au), the Davies Lead Occurrence (Pb, Au), the Davies Gold Occurrence (Au) and the M.P.D. Showing (Zn, Cu). Diamondiferous kimberlite has been found within several kilometres outside of the Property boundary. There are no mineral resources or mineral reserves within the Property boundaries.

The 3 gold occurrences on the Property are in mafic volcanics near the eastern contact of granodiorite to the northeast and associated with the 120°-150° striking, steeply dipping, Ballard Lake Shear. See Figures 6 and 8.

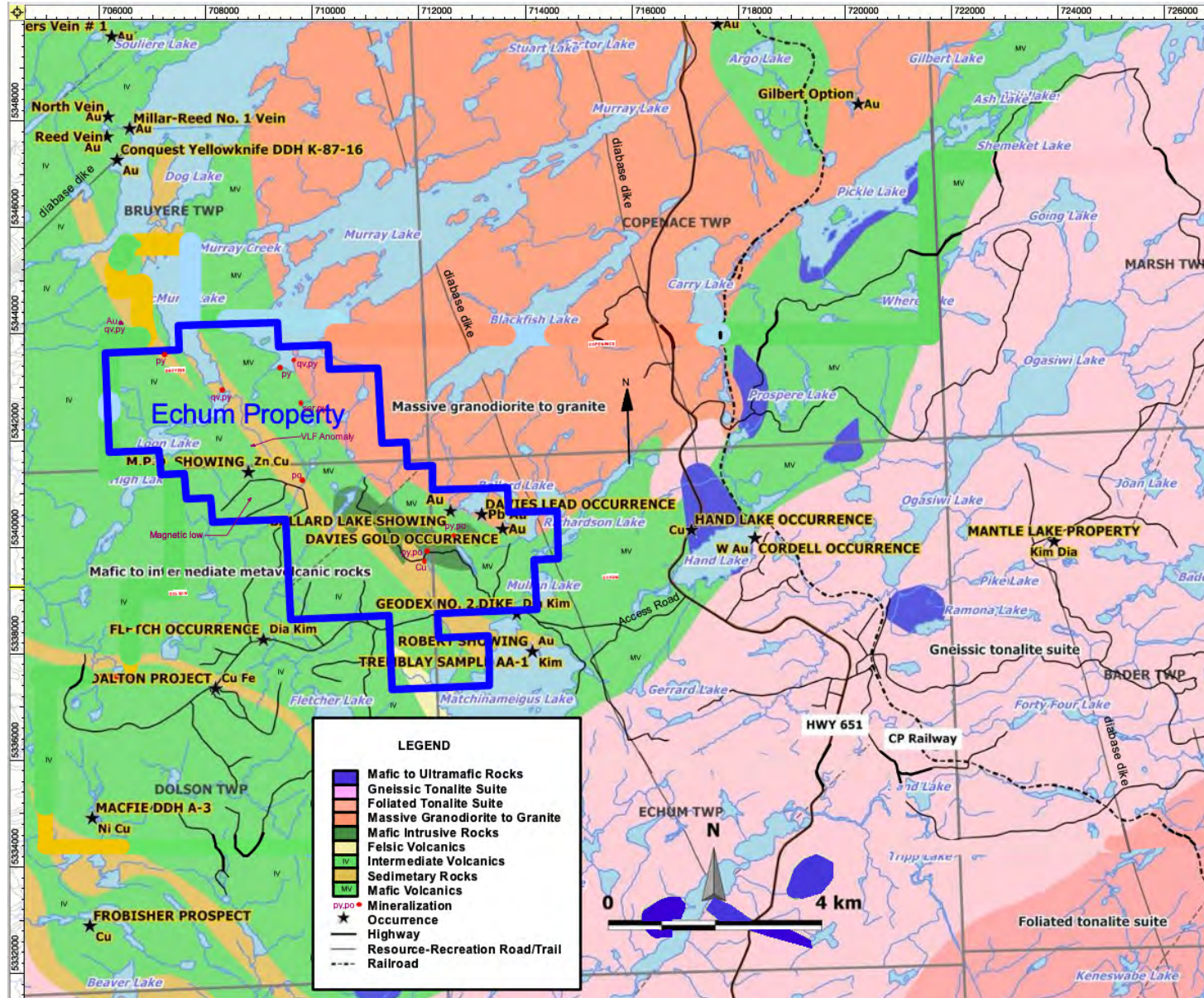


Figure 8: Property Geology and Occurrences: Map modified from Downes M.J., 1978 and Walker, J. 2018: Co-ordinates are shown in NAD 83 Zone 16U

Ballard Lake Showing

The site is accessible by driving north along highway 651 to the Matchinameigus Lake turnoff. Drive SW along this road about 1.1 km to the fork and then take the westward quad trail branch for 2.5 km. to a northward quad trail. Take this northward trail for 100 m to a fork in the trail. Take the left northwest branch of the trail and then travel approximately 1.5 km to the north end of a narrow lake. The occurrence lies approximately 700 m to the north along an old drill trail. See Figures 6 and 7.

Descriptions from MDI42C01NE00027 & AFRI File: 42C01NE024: The vein occurs along the contact between the Murray Lake batholith to the northwest and the surrounding mafic metavolcanic rocks. The showing consists of a series of quartz veins and stringers, ranging between 0.25 in to 4 feet (0.64 cm to 1.22 m) in width. The veins are predominantly bull white with minor pyrite and iron oxide. Pockets of galena and chalcopyrite mineralization occur, and are interpreted to occur in noses of S-folds. The veins are enclosed in a biotite-amphibolite schist. Grab samples collected by Davies in 1973 returned the following assays: 2.23 oz/t (76.46 g/t) Au, 7.37 oz/t (252.69 g/t) Ag; 3.2 oz/t (109.71 g/t) Au, 7.8 oz/t (267.43 g/t) Ag; 7.49 oz/t (256.80 g/t) Au, 12.91 oz/t (442.63 g/t) Ag. Grab samples collected by Longhurst returned the following assays: 0.22 oz/t (07.54 g/t) Au, 0.42 oz/t (14.39 g/t) Ag; 1.62 oz/t (55.54 g/t) Au, 5.16 oz/t (176.91 g/t) Ag; 0.95 oz/t (32.57 g/t) Au, 8.22 oz/t (281.14 g/t) Ag; 0.61 oz/t (20.91 g/t) Au, 1.70 oz/t (58.29 g/t) Ag; 0.17 oz/t (5.83 g/t) Au, 0.56 oz/t (19.20 g/t) Ag; 0.68 oz/t (23.31 g/t) Au, 1.90 oz/t (65.14 g/t) Ag. A sample of the wall rock gave an assay of 0.01 oz/t (0.34 g/t) Au and 0.03 oz/t (1.03 g/t) Ag. Grab samples collected by Noranda returned assays ranging from tr to 0.24 oz/t (8.23 g/t) Au and tr to 0.70 oz/t (24 g/t) Ag. Samples collected by Anglo Porcupine returned values of 0.035 oz/t (1.20 g/t) Au over 3.7 ft (1.13 m); 0.516 oz/t (17.69 g/t) Au over 1.4 ft (0.43 m); 0.098 oz/t (3.36 g/t) Au over 1.2 ft (0.37 m). The best assays obtained from grab samples collected in 1998 were: 0.96 g/t Au, 3.1 ppm (3.1 g/t) Ag; 2.43 g/t Au, 6.8 ppm (6.8 g/t) Ag. **Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property.**

The 1988 assessment report of Anglo Porcupine Gold Exploration Ltd. AFRI File 42C01NE0424 gives a good description of the geology and mineralization encountered in their extensive stripping program as referenced below:

“The Ballard Lake Gold Showing shear zone is composed of a series of quartz stringers, 4 feet to ¼ inch (1.22 m to 0.64 cm) in width. The veins are predominantly bull white with minor pyrite and iron oxide. In trenches 3, 7, 12, and 13, pockets of galena chalcopyrite mineralisation was found. These isolated pockets occurred in noses of S folds. Good gold and silver values were always obtained where galena was present.

The veins are enveloped by ribbon banded mica schist varied in width from 5 to 60 feet (1.52 to 18.29 m). Anomalous gold values occurred when the shear was

pyritized and riddled with numerous quartz veinlets.

As trenching moved further west along the shear, quartz veining and sulphide mineralisation decreased, subsequently gold mineralisation decreased. Ironically the size of the shear zone increased (widths over 60 feet (18.29 m) in trench 16).

Trench 17 exposed a series of east-west striking S shaped veins. The cross cutting structure was the first place quartz veining was uniform over appreciable lengths greater than 100 feet (30.48 m). The mica schist envelope was heavily laden with iron oxide (+/- 20%) and pyrite (+/- 5%). Quartz veins were sparsely mineralized with chalcopyrite and pyrite. Interbanded with the quartz were seams and wisps of red granite. Fresh broken samples give a garlic smell and always coincided with sections where a soft, pale yellow mineral was present. Subsequent rock samples returned high barite content (up to 1651 ppm Ba). Another sample taken from trench 17 contained bismuthinite. Gold values were only slightly higher than background.

Trenching across the Ballard Lake shear was unable to locate gold mineralization in sufficient quantity to justify any further work on the exposed areas. However shearing characteristics, size and degree of deformation, could easily host an economic deposit.”

It should be noted that one trench sample in the above program assayed 17.6 g/t Au. Unfortunately the on-line assessment files did not show a map giving the exact location of the trenches and sampling.

From the work undertaken by RMC in 2017, the best sample collected from The Ballard Lake showing gave 1.51 g/t Au over 1.5 m from a chloritized biotite schist.² More details on that exploration work can be found in Item 6.3 of this report.

Davies Lead Occurrence

Access Description: The site is accessible by driving north along highway 651 to the Matchinameigus Lake turnoff. Drive SW along this road about 1.1 km to the fork and then take the westward quad trail branch for 2.5 km. to a northward quad trail. Take this northward trail for 100 m to a fork in the trail. Take the right fork and continue northward 1.75 km to the Davies Gold Occurrence workings then continue 800 m westward along old drill trails to the Lead Gold Occurrence. See Figures 5 and 8.

From MDI42C01NE00031 & Davies (1973), AFRI # 42C01NE8814: A gossan-like structure or intrusion in granite, could be a dyke. Attracted by lead stains (carbonate). Showing of very fine grains of galena in some pieces of rock. Sample selected for a quality assay showed 1.71% Pb and tr Ag. Extent of the occurrence was not determined.

² Cullen D., Clark Garry, 2017.

Davies Gold Occurrence

Access Description: The site is accessible by driving north along highway 651 to the Matchinameigus Lake turnoff. Drive SW along this road about 1.1 km to the fork and then take the westward quad trail branch for 2.5 km. to a northward quad trail. Take this northward trail for 100 m to a fork in the trail. Take the right fork and head northward for about 1.7 km to the various exploration workings. See Figures 5 and 8.

From MDI42C01NE00006: The occurrence consists of quartz lenses within a sheared mafic metavolcanic. The zone has been traced for approximately 200 feet (60.96m). The shear lies close to the contact between the southern edge of the Murray Lake granodiorite and the surrounding mafic metavolcanic rocks to the west.

Grab samples collected by Davies in 1973 returned 1.55 oz/t (53.14 g/t) Au, 0.01 oz/t (0.34 g/t) Au and 0.2 oz/t (0.20 g/t) Au. The best assay was associated with galena. Grab samples collected in 1998 returned assays of 7.58 g/t Au and 35.8 ppm Ag.

Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property.

M.P.D. Showing

Access Description: The site is most easily accessed by helicopter. Alternatively, the site is accessible by boat from the south end of Dog Lake via McMurty Lake or possible access by old winter logging roads in the area. See Figures 8 and 10.

The geology of the area consists of metasediments to the east with the showing located just west of the metasedimentary contact in intermediate volcanics. Both the metasediments and the intermediate volcanics strike in a southeasterly direction. A gabbroic body is located about 2 kilometres to the southwest and from the strong response on the TMI map (see Figure 9 and 10) it may extend further northward. A strong prominent multichannel VTEM anomaly is found about 500 metres north of the MPD Showing. Note that the location of the M.P.D. Showing is discretionary, meaning its actual location has not been verified on the ground by MNM.

From MDI42C01NE00037: *“The best assays returned from iron formation were 2066 ppm (0.2%) Cu), 1537 ppm (0.15%) Zn over 3 ft. The mineralized zone occurs in metavolcanic rock and is characterized by quartz and epidote veining, massive to disseminated sulphides and moderate to strong ankerite alteration. The quartz veins vary in width from 4 to 100 cm and are moderately to strongly iron stained. Epidote veining consists of stringers and small veins not exceeding 2 cm in width.”* A. Wilson OGS 07/23/2001. **Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property.**
AFRI File: 42C01SE0410

From work conducted by M.P.D in 1988. Thirty samples were collected during the program for whole rock analysis as well as assay for Au, As, Cu and Zn, with the

highest gold assay being 54 ppb (0.054 g/t). The highest Cu value being sample #418 with 2,510 ppm (0.20%) Cu along with 278 ppm (.028% Zn). The highest zinc value being 490 ppm (0.490 %) Zn in sample 417. These samples were described as mafic volcanics with quartz veining and strong ankerite alteration. The assessment files do not contain a complete map and so the location is stated as discretionary as plotted on the OGS map for Dolson Twp. This location is approximately 500 m. south of the VTEM anomaly. **Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property. AFRI File: 42C01SE0410.**

Also in 1988 Tenoga Consultants Ltd. undertook trenching and sampling on three areas in the vicinity of the MPD Showing. Unfortunately the poor map quality of data on file with the assessment office does not allow a better locate. Iron formation with gossanous rusty fractures with semi-massive sulphides of pyrite and chalcopyrite were reported in a cherty brecciated matrix within intermediate volcanics striking about 120° in trench 24W, 1+20S. Historical assays were recorded in this trench as shown in Figure 4. The highest copper assay being 2,066 ppm (0.21%) Cu with 1,537 ppm (0.15%) Zn over 3 feet (0.91 m).

In trench 24W, 8+60S-10+80S the highest copper value obtained was 1379 ppm (0.138%) Cu with 582 ppm (0.058%) Zn, 92 ppm (0.009%)Pb, 3.3 ppm (3.3 g/t) Ag and over 5.5 feet (1.67 m) and 19.9 ppb (0.02 g/t) Au over 5.5 feet (1.68m). In trench 27W, 7+00S to 9+00S the highest zinc value was 1,225 ppm (0.1%) Zn, with 701 ppm (.07%) Cu, 82 ppm (0.008%) Pb, 1.5 ppm (1.5 g/t) Ag and 38 ppb (0.04%) Au over 1 foot. All samples were collected within an area of 100 x 300 feet (30.5 to 92 metres). **Note the above historic assays have not been confirmed by a qualified person and do not represent any economic resource on the Property. AFRI File: 42C08SE5003**

Item 8 Deposit Types

The main mineral deposit types being investigated and explored for on this Property are:

- 1) auriferous greenstone-hosted quartz-carbonate vein deposits,
- 2) possible Cu, Zn volcanogenic massive sulphides (VMS) and
- 3) possible diamond mineralization.

1) Auriferous greenstone-hosted quartz-carbonate vein deposits

These deposits occur as quartz and quartz-carbonate veins, with valuable amounts of gold and silver, in faults and shear zones located within deformed terranes of ancient to recent greenstone belts commonly metamorphosed at greenschist facies.

“The greenstone-hosted quartz-carbonate vein deposits correspond to structurally controlled complex epigenetic deposits characterized by simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins. These veins are hosted by moderately to steeply dipping, compressional brittle-ductile shear

zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. The deposits are hosted by greenschist to locally amphibolite-facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth (5-10 km). The mineralization is syn- to late deformation and typically post-peak greenschist-facies or syn-peak amphibolite-facies metamorphism. They are typically associated with iron-carbonate alteration. Gold is largely confined the quartz-carbonate vein network but may be present in significant amounts within iron-rich sulphidized wall-rock selvages or within silicified and arsenopyrite-rich replacement zones.” (Dubé and Gosselin, 2007, pg. 49-73).

2) Volcanogenic Massive Sulphide (VMS) deposits

“Volcanogenic massive sulfide VMS deposits also known as volcanic associated, volcanic hosted and volcano sedimentary hosted massive sulfide deposits are major sources of zinc, copper, lead, silver and gold and significant sources for cobalt, tin, selenium manganese, cadmium, Indium, bismuth, tellurium, gallium and germanium. They typically occur as lenses of polymetallic massive sulfide that form at or near the seafloor in submarine volcanic environments, and are classified according to base metal content, gold content or host rock lithology. As of 2007, there are close to 350 known VMS deposits in Canada and over 800 known worldwide. Historically they account for 27% of Canada's copper production, 49% of zinc, 20% of its lead, 40% of its silver and 3% of its gold. They are discovered in submarine volcanic terrains that range in age from 3.4 Ga to actively forming deposits in modern seafloor environments. The most common feature among all types of VMS deposits is that they are formed in extensional tectonic settings, including both oceanic sea floor spreading and arc environments. Most ancient VMS deposits that are still preserved in the geological record formed mainly in oceanic and continental nascent-arc, rifted arc, and back-arc settings. Primitive bimodal mafic volcanic-dominated oceanic rifted arc and bimodal felsic-dominated siliciclastic continental back-arc terranes contain some of the world's most economically important VMS districts. Most but not all, significant VMS mining districts are defined by deposit clusters formed within rifts or calderas. Their clustering is further attributed to a common heat source that triggers large-scale subsea floor fluid convection systems. These subvolcanic intrusions may also supply metals to the VMS hydrothermal system through magmatic devolatilization as a result of large-scale fluid flow. VMS mining districts are commonly characterized by extensive semi-conformable zones of hydrothermal alteration that intensifies into zones of discordant alteration in the intermediate footwall and hanging wall of individual deposits. VMS camps can be further characterized by the presence of thin but areally extensive, units of ferruginous chemical sediment formed from exhalation of fluids and distribution of hydrothermal particulates.” (Galley, Alan G., et al, 2007, pg. 141-161).

3) Diamond Mineralization

In reviewing descriptions of **Diamond Mineralization** the author believes that the description by Hava (2007) completed for Chalice Diamonds (Buckle, J. 2008) best describes the potential deposits in the area of the report:

“Widely recognized models for economic, diamond-bearing deposits include kimberlite and lamproite-hosted types (Kjarsgaard, 1996). Spatially associated with kimberlites (also orangeites in South Africa) are erosion-derived, unconsolidated and consolidated diamond-bearing sediments, placers and paleoplacers, respectively. Prior to 1960 more than 80% of diamonds were derived from the latter, "secondary" diamond deposits. By 1990 more than 75% of diamonds were derived from the former or "primary" diamond deposits.

The model is further qualified by other constraints and by evolving scientific understanding. Only 1% of kimberlite pipes – better recognized for their higher gem quality diamond content – are economic deposits. Lamproites have only been recently scientifically accepted as a separate diamondiferous host. Until 1984 the single richest source of industrial grade or poor quality gemstones, the Argyle AK-1 mine in Australia, was believed to be kimberlitic. Other diamond bearing lamproites and lamprophyres in Australia and Canada may be considered as unusual, but unusual in the context of evolving scientific understanding of all diamond-bearing rocks.

Common to exploration of diamond deposits are a number of keys, indicators and geological regimes. While statistical significance (error) of keys and indicators may not be stated, let alone quantified, these tend to be focused on a multiplicity of characteristics observed for the primary, kimberlite class of deposit. Because of the rare frequency of diamond in host rocks, "indicator" minerals may be correlated with improved diamond potential of a host or a wider exploration target, for example. Without statistical measures (significance, power of test), such correlations may be spurious. As a consequence, it is generally understood that "Kimberlite indicator minerals (KIM)" and diamond indicator minerals (silicate and oxide inclusions in diamonds and minerals from diamond-bearing mantle xenoliths) are not fully positive or negative indicators or counter indications for kimberlites. Such indicator minerals may also be found in other rock types that either: a) contain no diamonds (strictly measured sense) or b) in rock types where diamonds are not normally observed (e.g. ultramafic lamprophyres). Nevertheless KIM's have been used with some success in conjunction with geophysical methods, broader geological models to screen wide areas for follow-up exploration, sampling and further scientific studies.

Specific suites of minerals and geochemical analyses may likewise be suggested for lamproites ("lamproite indicator mineral suite") and lamprophyres. These must be viewed in the context of limitations for KIM's with respect to better studied kimberlites. Spessartite dikes (lamprophyre with hornblende or pyroxene phenocrysts and sodium plagioclase in groundmass), the initial target of Wawa-area exploration from 1993, are non-magnetic and do not contain pyrope garnet nor chrome diopside. Pyrope and chrome diopside are two

commonly used indicators for kimberlites exploration. Ilmenites of variable composition (some of Mg-ilmenite, kimberlitic field composition); low Mg, high Cr, Zn-rich chromite and actinolite, among the heavy minerals in <0.177 mm till sample fraction, have at least been used to define areas of spessartite dyke occurrences for further evaluation (of diamond content). Such dikes contain elevated concentrations of Ni and Cr and are also enriched in Ba, Co, V, Ca, Fe, and Mg relative to the surrounding rocks. Geochemical analysis of till show that elevated concentrations of Ni and Cr above and down-ice from known lamprophyre dikes (Gleeson and Thomas, 2000).

For the present purpose, only the broadest characteristics of primary deposits will be outlined. Diamonds are widely understood as xenocrysts. These are crystals grown in, and later preserved in, contrasting geological (physicochemical) conditions- e.g. interpreted >150 km deep, high temperature, high pressure, mantle-type conditions v.s. interpreted shallower, lower temperature, lower pressure, crustal-type; intrusive, explosive to atmospheric conditions. Other xenocrysts, xenoliths (other minerals and rocks variably preserved in a contrasting condition); breccias (melts with included mantle and crustal rocks); tuffistic breccias (dominantly in kimberlite diatreme facies); pyroclastics (tuffs, breccia; primary or resedimented); and weathered, *in-situ* materials are variously associated with, or contain preserved diamond crystals. Where not well preserved or obliterated diamonds may be irregular, recrystallized, resorbed (from octahedral to tetrahedral crystal system with possible weight loss); or may be completely converted to crystalline graphite, CO or CO₂ gases. While replacement of early-formed minerals by late (deuteric) and some easily weathered minerals is common, diamond is resistant to weathering.

The host rock is generally a magnesian or ultrabasic (to mafic and intermediate for lamproites, lamprophyres). These are CO₂, H₂O volatile-rich rocks which also contain an abnormally high amount of potassium oxide or potassium-bearing mineralogy (ultra-, perpotassic, potassic) in relation to other, more common magnesian igneous rocks. Other mineralogical, oxide, element and trace element ratios; mineral zoning, xenolith types, rock textures and crystal sizes are variously employed in great detail to distinguish sub-types of kimberlites, lamproites and lamprophyres.

Compositional characteristics are generally weighed with interpreted geological settings or observed deposit morphologies. Thus kimberlites are restricted to continental shield areas; are focused in Archean cratons (economic deposits); may be found in clusters of two to twenty pipes; and can be in larger fields in order of 50km. Linear and arcuate trends related to major crustal fracture zones are believed to be indicative, but rift valley structures are counter-indicative.

Settings for diamondiferous lamproites are not as distinct. These may be found in stable Archean cratons. granitic basement rocks

or in various associations with major fracture zones, lithospheric weaknesses, orogenic belts, rifts and grabens. Ages for related intrusion events range from Middle Proterozoic to Eocene for kimberlites and to Late Pleistocene for lamproites. In keeping with the understanding of diamonds as xenocrysts, diamonds themselves are believed to have formed from the Early Archean to the Proterozoic i.e. potentially millions to billions of years earlier than the host rock in which it is disseminated.

Kimberlite and other diamond host morphologies are described in various zones or facies. Usually cone-shaped, steep-sided diatremes filled with tuffistic breccias are featured in kimberlites. If not later eroded, these may be accompanied above by crater facies, resedimented, volcanoclastic and pyroclastic rocks. With increasing depth diatremes constrict to diamond-poor root zones. Hypabyssal feeder dikes, blows (enlarged dikes) and sills may be thin (metre scale) or may be absent from the root zone of the system. Diatreme and hypabyssal feeder dyke facies may be absent from rare, mainly pyroclastic-filled, shallow-dipping to horizontal, crater facies systems.

In lamproites, diamonds are found mainly in typically, champagne-glass to funnel-shaped "vent" structures, and to a lesser extent, dikes. Vents may be filled with lapilli and ash tuff, autobrecciated and massive lamproite intrusive phases.

Lamproite lavas, if present, are not diamond-bearing. Lamprophyres, while unusual with respect to broader igneous rock groups and related classification systems, are not unusual as late associates of granitoid magmatism.

Lamprophyres can be categorized into heterolithic or polymict breccias; volcanic, subvolcanic, hypabyssal and dike facies with varying fragment or matrix content, morphology and composition. A summary of observed and interpreted characteristics follows:

Heterolithic or polymict breccias- mainly mafic and felsic volcanic rocks as clast-supported breccia within matrix-supported breccia; matrix-supported breccia with <5% fragments and coated lithic fragments; sand to boulder-sized (to 9 metres) fragments; matrix dominated by actinolite but locally chlorite and biotite are dominant; juvenile magmatic fragments or rims on other clasts in breccia

a) volcanic facies- lapilli and ash-sized fragments, medium to thickly bedded, pyroclastic airfall deposits; angular to sub-angular supracrustal fragments (normally Archean in Wawa deposits); some hypabyssal fragments, rare lower crustal to upper mantle xenoliths

b) subvolcanic intrusive breccia facies ("debris flows" in industry nomenclature)- observed intrusive relationships; high proportion of fragments; close proximity to volcanic facies; i) with supracrustal fragments ii) with crustal fragments iii) with interpreted, lower crustal to upper mantle xenoliths.

Item 9: Exploration

Exploration by KML since its acquisition of the property in the fall of 2020 has included a field site visit by the author and a helicopter airborne VTEM and magnetometer survey.

Field Site Visit November 2020

The author of this report, R. G. Komarechka, visited the Property with prospector Cecil Johnson on November 14 and 16, 2020. During the visit quad access to the Davies Gold Occurrence was obtained, and despite snow cover, some of the sites of stripping and sampling of this occurrence were located, photographed and examined, with 5 selected grab samples being collected. Assays from these samples have not yet been submitted.

An interesting observation was noted with biotite, disseminated quartz and pyrite along the contact of the quartz veins with the host mafic volcanics. This may be suggestive of some hydrothermal alteration of the host rock. Samples were collected of this biotite rich rock but no analysis has yet been done. Appendix 2 gives a summary of this visit.

VTEM and Magnetometer Survey

A VTEM and magnetometer helicopter survey was conducted by Geotech over the Echum Property from January to February 2021. The survey and system specifications of this survey are shown in Appendix 3.

Preliminary results of this survey were released in March 2021. A total magnetic intensity map is shown below. In addition, an interpretive map showing a VTEM B-Field Z Component Profiles of Time Gates 0.220-7.036ms over the Total Magnetic Intensity is displayed along with the known occurrences on the Property. Appendix 3 gives further information on this survey.

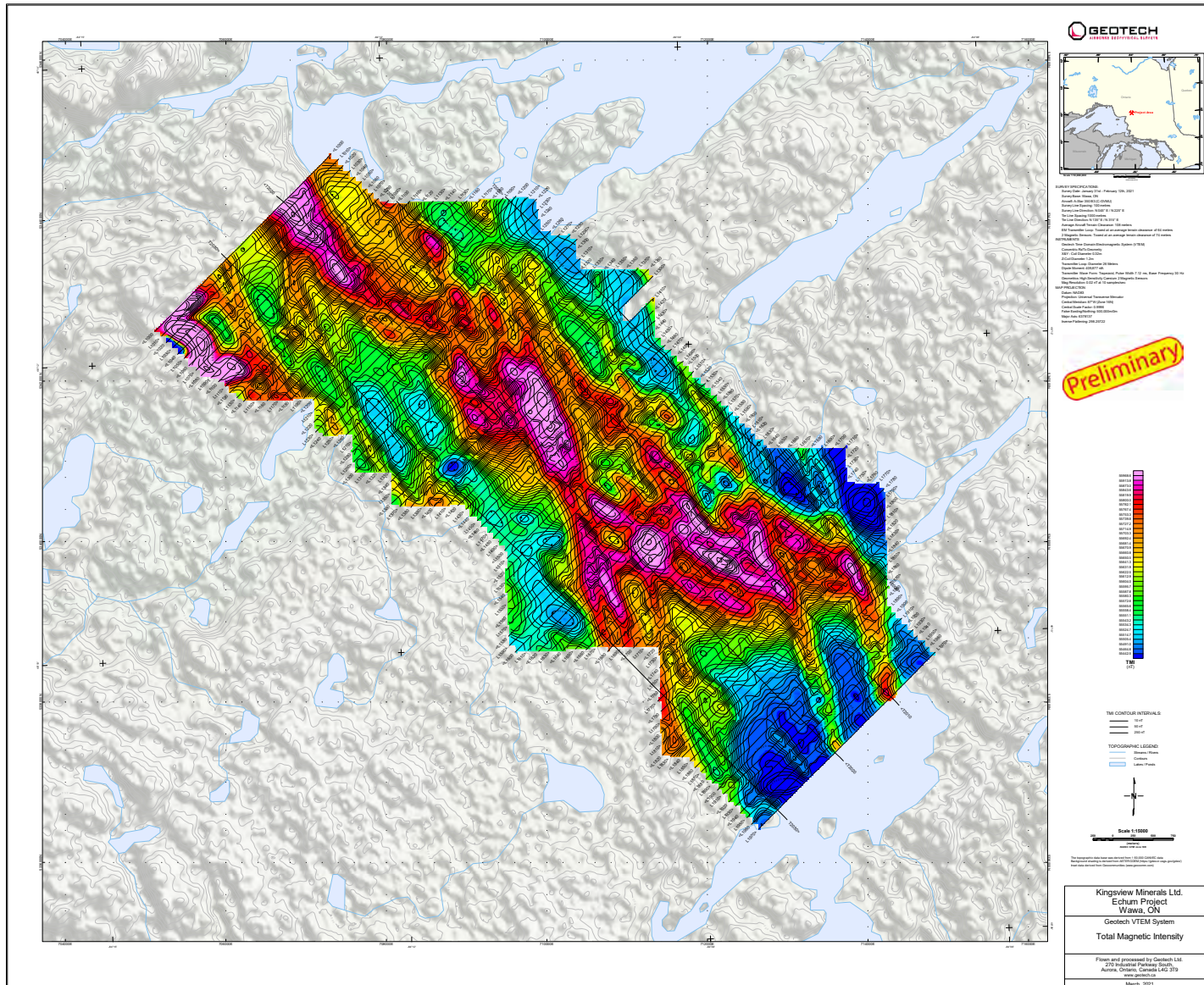


Figure 9: Echum TMI Map: From 2021 Geotech helicopter Survey. Co-ordinates are shown in NAD 83 Zone 16U

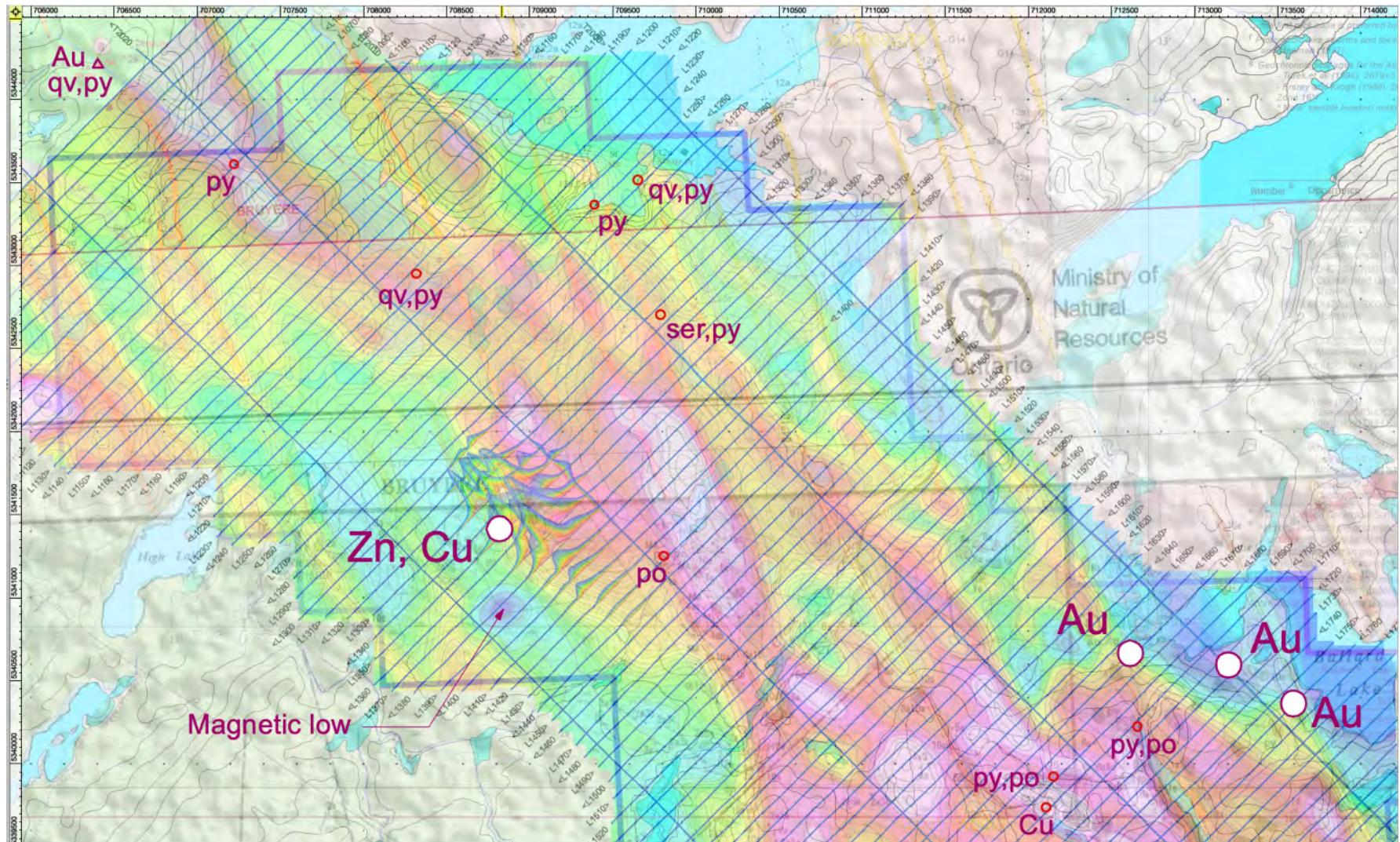


Figure 10: Echum North VTEM Bz Field Map: From 2021 Geotech helicopter Survey. Co-ordinates are shown in NAD 83 Zone 16

Item 10: Drilling

Not applicable as no drilling has been undertaken by KML on the Property.

Item 11: Sample Preparation, Analysis and Security

Five selected grab rock samples were collected by the author and his assistant Cecil Johnson during the site visit in November 2020 while under contract to KML. Rock samples were taken from bedrock and placed in individual plastic sample bags with a sample tag and sealed with black electrical tape. The sealed sample bags were also labeled with the sample number and in turn placed in a labeled shipping rice bags, which were also sealed with black electrical tape. This bag was hand delivered to the office facilities of Bedrock Research Corp and are currently kept in secure locked facilities. At this time these samples are awaiting further authorization for sampling. No analysis of these samples, aside from field observations, have been undertaken at the time of this report. Appendix 2 gives a summary of this site visit.

Sample Preparation and Assay Procedures

Not applicable at this time.

Quality Control Programs

Not applicable at this time.

Item 12: Data Verification

The data presented in this report has come primarily from the Ontario Ministry of Northern Development and Mines (MNDM) Mining Lands Acquisition System (MLAS) and assessment files available at the Assessment File Research Image Database (AFRI) retrieved from <http://www.geologyontario.mndm.gov.on.ca>. The Author can verify that the information has been presented accurately as reported in those files and reports.

There were no limitations placed on the Author in conducting the verification of the data or the Property visit. Some of the data relied upon predates National Instrument 43-101 and was therefore not completed by qualified persons. The author is of the opinion that these data sets were adequate for the completion of the technical report.

Item 13: Mineral Processing and Metallurgical Testing

KML has not yet done any mineral processing studies or metallurgical testing on the Property.

Item 14: Mineral Resource

There is no mineral resource defined on the Property.

Item 15: Mineral Reserve Estimates

Not applicable.

Item 16: Mining Methods

Not applicable.

Item 17: Project Infrastructure

Not applicable.

Item 18: Market Studies and Contracts

Not applicable.

Item 19: Environmental Studies, Permitting and Social or Community Impact

Not applicable.

Item 20: Capital and Operating Costs

Not applicable.

Item 21: Economic Analysis

Not applicable.

Item 22: Adjacent Properties**Gold Properties**

Regarding gold mines, the nearest 3 gold mines in the area are: the past producing Renabie Mne, located about 30 km northeast of the Property, with 3,600,000 tons (3657768.9 tonnes) produced averaging 0.23 o/t (7.89 g/t) Au³, the past producing Forge Lake Deposit located about 22 km to the west and the current producer, Island Gold Mine operated by Alamos Gold Inc., located about 25 km to the northwest of the Property. All these 3 past and current producers are located outside the Property. Figure 7 shows the location of the above properties.

Of interest are 2 other Au properties, the Nudulamia and the Braminco with

³ Watts, Griffis and Mcquat, 1974

known reserves of Au and located a few kilometers from the Renabie Mine. All 3 of these properties occur outside of the Property along the same granitic batholith contact as the 3 known gold occurrences on the Echum Property.

VMS Properties

VMS mineralization in the area is found in The Shihan deposit (MDI4205NW00021). This is a developed prospect with reserve of Zn, Cu and Ag, located 6.5 km northwest from the Renabie Mine.

Several occurrences of gold, kimberlite, diamonds and base metals are found in the adjacent area around and outside of the Property as shown in Figure 8. These occurrences have had only rudimentary exploration that has not yet identified any economic mineralization.

Diamond Occurrences

The most significant diamond discoveries to come from the Property to date have come from two younger dykes containing multiple phases of kimberlite (Chalice Diamond Corp. 2008). The two dykes are known as the GC-1 (in the Mantle Lake Property occurrence area, as listed in Table 6 below) and the Fletch. The dykes are reported to have been traced for up to 600 metres along strike and are said to be still open in both directions. The dykes range from 0.5 to over 5 metres in width, with sub-vertical dips. The diamonds retrieved from these dykes are listed below, and were recovered by caustic fusion. An additional diamondiferous occurrence, the Geodex No. 2 dike, just south of the Property, is also described below along with 2 other nearby kimberlite occurrences, all outside of the Property.

**Table 6: Significant Diamonds Retrieved from RMC's Property
Outside of the Echum Property**

| Sample No. | Number of Diamonds | Sample Weight (kg) | Location |
|-------------------|---------------------------|---------------------------|----------------------|
| 78743 | 2 | 6.36 | Fletch occurrence |
| 79292 | 3 | 27.5 | Fletch occurrence |
| 81228 | 1 | 10.15 | Fletch occurrence |
| 81230 | 2 | 7.47 | Fletch occurrence |
| 81231 | 16 | 91.36 | Mantle Lake Property |

Fletch Occurrence

From MDI42C01NE00038: The outcrop is low and rubbly on the north side of the road, and can be traced to the south side of the road by following a boulder train. The kimberlite is dark green to black on weathered surface and contains mantle xenoliths as well as supracrustal inclusions. The surrounding intermediate metavolcanics appear to be tuffaceous and strongly deformed. Geodex Minerals recovered a microdiamond from a 7.8 kg sample of the dike in 2002. Microprobe analysis of the dike has yielded Cr₂O₃ values up to 70.00 wt%.

Geodex No. 2 Dike

From MDI42C01NE0004: A single microdiamond was recovered from a 5.3 kg sample collected by Geodex in 2002. This dike is located less than 100 m from the southern boundary of the Echum Property.

Tremblay Sample AA-1

From MDI42C01NE00039: Probe data indicates that the chromites within the kimberlite are high chromium in content and approximately 45% of the grains analyzed plot in the diamond inclusion field.

Item 23: Other Relevant Data and Information

The author is unaware of any further data or relevant information that could be considered of any practical use in this Report. The author is not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Item 24: Interpretation and Conclusions

In November 2020 the author, on behalf of KML, conducted a field-site visit to the Davies Gold Occurrence and collected 5 samples from the Property. See details in Item 9 and in Appendix 2 of this report. In addition, a helicopter airborne VTEM and magnetometer survey was conducted in March 2021 for KML by Geotech Ltd. See Figures 9 and 10. Details on this survey can be found in Appendix 3.

From the author's field-site visit, in the area of the Davies Gold Occurrence it was observed that in several areas of auriferous quartz veins there was a frequent association with a biotite, quartz, pyrite alteration zone along the mafic volcanic contact. Gold has been associated with secondary chloritized and carbonate altered within zones of carbonate metasomatism and K-loss where pre-existing biotite has reacted to produce chlorite, muscovite and Fe–Mg carbonates. Gold precipitation is intimately associated with biotite breakdown where calcite is locally absent⁴. Examples include the Junction Gold deposit, Kambalda, Western Australia, Detour Lake Ontario, and the nearby Borden Mine.

The review of previous gold exploration work of RMC on the Ballard Lake Property revealed that the initial diamond drilling focused on historical gold mineralization returning anomalous gold values. The diamond drilling intersected alkali ultramafic dikes interpreted to be potentially associated to deep crustal or mantle tapping conduits. These conduits are verified by the alkali ultramafic and kimberlite rocks located within the claim block. Some chloritized biotite schist samples collected on the Property proximal to the auriferous quartz veins have been noted to have gold values exceeding 1 gm/t. See Table 3. The occurrence of gold hosted in mica schist adjacent to the granite-granodiorite contact was recognized earlier by Davies. The location of these quartz veins and parallel biotite alteration zones appear to be associated with the northwest-southeast striking Ballard Lake Shear Structure near the contact with the mafic volcanics and the granite-granodiorite intrusion to the east. Gold assays as high as 7.58 g/t Au were returned from grab samples along this structure as well as several IP chargeability anomalies.⁵ More detailed mapping of this shear zone is required to determine any internal en-echelon or deformed structures along with pyrite and galena concentrations that may be associated with further tenures of gold mineralization. Interestingly, this same granitic batholith contact, along its east side, also hosts the Renabie, Nudulama and Braminco gold deposits approximately 29 km to the east⁶.

Based on the above, further study of the quartz veining, associated chloritized biotite and structure, should be undertaken, especially along northwest–southeast structural trends near the granitic batholith for further gold potential.

The recent 2021 preliminary Geotech VTEM survey results showed several weak

⁴ Pearce, Mark A. 2015

⁵ Healey, D.R. 1998

⁶ Anglo Porcupine Gold Exploration Ltd. 1990 42C01NE0424

conductors on the property and one prominent strong B-Field Z component multichannel conductive response up to several hundred metres wide and extending over 1,200 metres along strike near the western contact of the sedimentary rocks with the intermediate volcanics to the west near the north boundary of a later gabbroic intrusion. See Figure 8. Grab samples collected along the west side of this EM anomaly at the M.P.D. Showing by Frobisher Limited, in their 1956 search for iron, yielded assays of 0.07% Cu over 7 feet (2.13 metres) and 0.06% Cu over 5.5 feet (1.67 metres). An iron formation was suggested in this area but a strong magnetic signature is somewhat lacking over the whole conductor. Interestingly, the earlier geophysical surveys of this area failed to cover this anomaly, although Chalice Diamond Corp.'s 2008 VTEM survey did pick up the anomaly, however, due to the east-west orientation of the survey, the intensity and size of the anomaly was subdued. Furthermore the assessment files in this area on the Property yielded numerous occurrences of Cu, Zn and Pb in ratios more typical of VMS style mineralization. Silicification and brecciation in intermediate volcanics was also noted. A nearby gabbro to the southwest was also shown on the geologic maps which, in this author's opinion, could have been a heat source for potential VMS mineralization.

As a result of this strong VTEM anomaly 3D modelling is now being undertaken by Alan King of Geoscience North to determine potential drill targets and suggested possible outcrop areas. This area should be prospected further for its VMS potential as Chalice Diamond Corp. did not examine this anomaly.

Recent mapping (2018) by the OGS in the southern portions of Bruyere township and on the Echum Property has revealed 5 showings of pyrite, in some cases associated with quartz veins or sericite on the Echum Property. See Figure 10. The 2 western-most occurrences of these are found along a northwest trending fault that continues northwestward off the Echum Property for about a kilometer to another occurrence of quartz veins with pyrite that assayed 482.9 ppb Au. It is highly recommended that these recently located quartz, pyrite, sericite occurrences be further prospected and sampled and the significance of the northwest shears and faults regarding gold emplacement.

Chalice Diamond (Golden Chalice) completed extensive exploration targeting a search for potential diamond bearing rocks in the area outside surrounding and on the Echum Property. The exploration was comprised of airborne geophysics followed by ground exploration that defined ultramafic and kimberlite targets. The exploration completed identified an extensive list of potential diamond bearing targets. From this work, 3 locations of diamond bearing dikes, the Mantle Lake Property located 9 km west of the Echum Property, the Fletch Property located 500 m west of the Echum Property and the Geodex No. 2 dike, less than 100 m to the south of the Echum Property were located. all of these diamondiferous dikes were **outside of the present Property**. See Figure 8 for their location. The discovery of diamond bearing rocks in three locations, **outside the east, outside the south and the west sides of the property**, indicates the significant potential for diamond discoveries on the Property. In this regard the recent magnetometer survey commissioned by KML has identified an isolated circular magnetic low on

the Echum Property in an area 3 km north of the diamondiferous Fletch Occurrence, of a diameter typical of a kimberlite pipe, that should be investigated, as kimberlites can have a strong magnetic remanent component that can produce a negative anomaly. Several other isolated magnetically negative anomalies of similar size have also been identified on the Property as shown in Figure 9. A strike orientation of 126° was noted on the Fletch Property which matches the strike of many recessive lineaments on the property.

It should be mentioned that a significant portion of the property has not been fully examined as indicated by the magnetic response and the lithology as shown on the earlier geologic maps of the area. The presence of high strength magnetic intensity in some areas may indicate unmapped mafic rocks.

The author does not recognize any significant risks or uncertainties that would prevent the continued exploration of the Property for gold, base metals or diamond mineralization.

The author concludes that the work completed to date indicates the Property has potential to host economic concentrations of gold, base metals and possibly diamonds.

Item 25: Recommendations

A 2 phase \$350,000 2 year exploration program is proposed consisting of:

Phase 1: Year 1 - \$150,000 for localized compilation, prospecting/geological mapping, line-cutting/IP and initial diamond drilling and a

Phase 2: Year 2 – \$200,000 primarily for more diamond drilling

Phase 1: Year 1 Program

A significant amount of work has been undertaken on this Property by previous operators. This data is primarily found in the assessment files, some of the older data is of very poor quality, unreadable and even missing. In many cases this data extends over areas much larger than the current Property. It would be of value to retrieve and tabulate all of this data on a clean interactive georeferenced database providing target locations to be reviewed in the field and provide direction for the exploration program. While this was done for this report some details were missing. Concurrent to this, prospecting can commence to field locate and verify known occurrences and examinations. This work should include the 3D modelling of the strong VTEM target discovered in the recent Geotech VTEM survey to assist locating potential outcrops and diamond drill holes.

An initial prospecting program should focus on the gold occurrences along Ballard Lake to determine their spatial relationship to the Ballard Lake Shear, the distribution of auriferous quartz veins, further assaying of the adjacent biotite-chlorite alteration and confirmation of further outcrops in the area. In addition prospecting should be undertaken to examine the newly discovered pyrite and sericitized areas located in the north of the Property found in the 2018 OGS mapping of Bruyere township. Prospecting should also be undertaken in the area of the VTEM anomaly and past Zn-Cu mineralization to find any evidence of outcropping base metal and possible VMS mineralization. Finally, the area of the circular low magnetic anomaly located about 1km south of the VTEM anomaly. This area should be prospected for any outcrop or float of kimberlite rocks.

Ground geophysics should be completed to determine the extent and attitude of known targets to help refine trenching and diamond drilling locations. Undertaking localized IP surveys in areas of potential Au mineralization is recommended prior to drilling.

Extensive petrological work is required of all potential kimberlite samples to define the rock types and chemistry. This will assist in the determination of the potential of diamondiferous targets.

An initial 250 metre diamond program would focus on testing the blind (overburden, swamp and lake covered) targets defined in previous and new IP work and the testing of the Ballard Lake shear zone.

This integrated exploration program will allow the determination of the potential of the various targets and allow for scoping and focus of further exploration.

Phase 2: Year 2 Program

Based on positive results of Phase 1, a Phase 2 Program will be undertaken to follow up on areas of merit as outlined in the proposed expense budget as shown below. Some stripping may also be undertaken if warranted.

25.1 Proposed Budget**Table 7: Budget**

| Activity Phase 1 | Estimate |
|--|---------------------|
| Compilation and VTEM Target Modeling | 5,000.00 |
| Local Prospecting and Sampling (2 people) (all inclusive) 10 days @ \$1,500 / day | 15,000.00 |
| Local Geological Mapping and Sampling (2 people) (all inclusive) 10 days @ \$2,000 / day | 20,000.00 |
| Local Geophysics (IP and Linecutting) | 40,000.00 |
| Analysis and Petrology | 10,000.00 |
| Preliminary Diamond Drilling (all inclusive) 250 metres @ \$200 / metre | 50,000.00 |
| Contingencies | 10,000.00 |
| TOTAL | \$150,000.00 |

| Activity Phase 2 | Estimate |
|---|---------------------|
| Local Prospecting and Sampling (2 people) (all inclusive) 5 days @ \$1,500 / day | 7,500.00 |
| Local Geological Mapping and Sampling (2 people) (all inclusive) 5 days @ \$2,000 / day | 10,000.00 |
| Analysis and Petrology | 20,000.00 |
| Diamond Drilling (all inclusive) 750 metres @ \$200 / metre | 150,000.00 |
| Contingencies | 12,500.00 |
| TOTAL | \$200,000.00 |

Item 26: References

Note: in the references listed below the terms “AFRI File” and AFRO ID” refer to the assessment report’s identification numbers for the files as found in the MNDM’s Assessment File Research Image Database (AFRI) retrieved from <http://www.geologyontario.mndm.gov.on.ca>.

Due to the large number of reports submitted for assessment in the MNDM’s Assessment File Research Image Database by Chalice Diamond/Golden Chalice, many of which are airborne geophysics reports or only partly cover KML’s Property, they have not all been listed in the “References” section (Item 26). The author has examined the reports and believe that the pertinent information is presented in this Report.

Algoma Central Railway, 1962. Untitled Report; AFRI file: 42C01NE8814.

Belmine Exploration Limited, 1956. Untitled assessment submission to MNDM; AFRI file: 42C01NE0422.

Buckle, J., 2008. National Instrument 43-101 F1 Technical Report for Chalice Diamond Corp.; Chapleau Diamond Project, Properties in the Area of Chapleau, Ontario, Canada.

Burton, J.A., 1988. Geological Report on the Property of M.P.D. Consulting Limited, Dolson and Bruyere Townships, Sault Ste. Marie Mining Division, Ontario; AFRI File: 42C01NW0001.

Chalice Diamond Corp., 2008. Chalice Diamond Corp. News Release, February 26, 2008.

Clement, C., 1997. Untitled assessment submission to MNDM; AFRI File: 42C01NE2001.

Cullen, D., Clark Garry, 2017. Technical Report on the Ballard Lake Property, Bader, Bruyere, Collishaw, Copenace, Echum, Dolson, Long and Marsh Townships, Sault Ste. Marie Mining Division, Ontario, Canada, prepared for RT Minerals Corp.

Davies, J., 1973. Untitled Report. AFRI file: 42C01NE8814

Downes, M.J. 1983. Matchinameigus Lake, Ontario Geological Survey Map 2483, Precambrian Geology Series, Scale 1 inch to ½ mile, geology 1978.

Dubé, B., and Gosselin, P., 2007. Greenstone-hosted quartz-carbonate vein deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 49-73.

Frobisher Ltd., 1953 to 1956. Numerous Reports on Geophysical Surveys. AFRI File: 42C01NE8667.

- Frobisher Ltd., 1956: Assessment Report on Diamond Drilling for Frobisher Ltd. AFRI File: **42C01NE0413**.
- Galley, Alan G., Hannington, Mark D. and Jonasson Ian R., 2007. Volcanogenic Massive Sulphide Deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 141-161.
- Geodex Minerals Ltd., 2003. Assessment Report on the Fletch – Matchinameigus Diamond Property, Dolson and Echum Townships, Sault Ste. Marie Mining District, Ontario; NTS 42 C/1. AFRI File: 42C01NE2006.
- Gleeson, C.F. and Thomas R.D., 2000. Use of Till Geochemistry and Mineralogy to Outline Areas Underlain by Diamondiferous Spessartite Dikes near Wawa, Exploration and Mining Geology, Canadian Institute of Mining, Metallurgy & Petroleum.
- Grant, J.C., 1989. Geophysical Report on the Murray Lake Project, Bruyere and Dolson Townships, Sault Ste. Marie Mining Division, Missinabie, Ontario. AFRI File: 42C01NW0001.
- Healy, D.R., 1998, OPAP exploration program for 2973090 Canada Inc. AFRI file: 42C01NE2002.
- Keast, T., 1998. 1998 OPAP Final Submission for the Ballard Lake Project, Dolson and Echum Townships, Sault Ste. Marie, NTS 42 C/1. AFRI File: 42C01NE2002.
- Kingsview Minerals Ltd., 2021. Preliminary Report on a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM™ Plus) and Horizontal Magnetic Gradiometer Geophysical Survey on the Echum Property, Dolson, Bruyer and Echum Townships, Sault Ste. Marie Mining District, Ontario; Geotech Airborne Geophysical Surveys.
- Kingsview Minerals Ltd., 2020. Summary of Work, Ballard Lake Area Site Visit Report by Robert G. Komarechka, P.Geo. and Cecil Johnson, prepared on December 16, 2020.
- Kjasgaard, B.A., 1996. Kimberlite-hosted diamond: in Geology of Canadian Mineral Deposit Types, Geology Survey of Canada, Geology of Canada.
- Government of Canada, 2016. Canadian Climate Normals; Retrieved from http://climate.weather.gc.ca/climate_normals/index_e.html.
- Laidlaw, J., 2007a. Assessment Report, Magnetometer Survey on the Fletch Occurrence Property in Dolson Township, Claims 4209205, 1233360 and 3015681; for Golden Chalice Resources. AFRO ID: 2.34543.

- Laidlaw, J., 2007b. Assessment Report, Till Sample Survey in Abbey, Addison, Bader, Collishaw, Copenace, Dolson, Echum, Lang, Marsh, Stover and West Townships; *for* Golden Chalice Resources. AFRO ID: 2.34709.
- Ontario Geological Survey, 2006. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release—Data 126 – Revised.
- Ontario Geological Survey, 2016. Mineral Deposit Inventory; Ontario Geological Survey, Mineral Deposit Inventory (February 2016 update), online database.
- Patrie, D., 1995. Assessment submission to MNDM. AFRI File: 42C01NE0004.
- Scott, F., 1983. Report on Combined Helicopter-Borne Magnetic, Electromagnetic, and VLF-EM Survey of Matchinameigus Lake Area *for* Tundra Gold Mines Ltd. *by* Aerodat Limited. AFRI File: 42C01NE0400.
- Pearce, Mark A: White, Alistair J. R.: Fisher, Louse A.: Hough, Robert M.: Cleverley, James S., 2015, Gold Deposition Caused by Carbonation of Biotite During Late-Stage Fluid Flow, Elsevier Lithos, Vol 239, Dec, 15, 2015, pages 114-127.
- Slack, J., 1988. Geological and Soil Geochemistry 1988 Exploration Program on Anglo Porcupine Gold Exploration Ltd., Echum and Dolson Twp. Property. AFRI File: 42C01NE0424.
- Statistics Canada, 2016. Census Program; Retrieved from <http://www12.statcan.gc.ca/census-recensement/index-eng.cfm>.
- Stone, G., 2010. Assessment Report, Lake Bottom Sediment Survey in Meath, Rennie, Bader, Dolson, Echum, Copenace and Marsh Townships; *for* Chalice Diamond Corp. AFRO ID: 2.44566.
- Tremblay, M.A., 2002c. Report of Work, Matchinameigus and Fletch Properties, Dolson and Echum Townships, Sault Ste. Marie Mining Division, Northern Ontario. AFRI File: 42C01NE2005.
- Watts, Griffis and McQuat Limited, 1974. Report on Rengold Mines Limited (The Former Renabie Mine) AFRI File: 42B05NW0044
- Wakeford, J.A., 1980. Property Examination Report, G. Longhurst Au-Ag Property, Echum Twp., Sault Ste. Marie Mining Division. AFRI File: 42C01NE0409
- Walker, J. 2018. Precambrian Geology Bruyer Township, Michipicoten Greenstone Belt, Map P.3820, Scale 1:20,000, Ontario Geological Survey.
- Wawa, 2016. A Place to Live, Work, & Play; Retrieved from <http://www.wawa.cc>
- Wilck, C., 2007. Assessment Report, Magnetometer Survey on the Bruyere, Dolson, Lang, Marsh, Rennie Township Properties, Sault Ste. Marie Mining Division, Northeastern Ontario; *for* Chalice Diamond Corp. AFRI File: 20000002578.

Item 27: Certificate of Qualifications**CERTIFICATE OF AUTHOR – ROBERT G. KOMARECHKA**

I, Robert G. Komarechka P.Geo, (PGO No.1150), P.Geo. (APEGA No. M39059), of 545 Granite Street, Sudbury, Ontario, do hereby certify with respect to ‘The Technical Report NI 43-101 on the Echum Property in Bruyere, Dolson and Echum Townships, Sault Ste Marie Mining Division, Ontario, Canada’, (the “Technical Report”) with an effective date of April 23, 2021, and a signature date of April 23, 2021, prepared for Kingsview Minerals Ltd., that:

1. I am an independent consulting professional geoscientist operating under the name of Bedrock Research Corp. with an office located at 545 Granite Street, Sudbury, Ontario, Canada, P3C 2P4.
2. I graduated from Laurentian University in Sudbury with a B.Sc. (1978) with a major in Geology and have practiced my profession for 41 years since graduation with government, academia, and the private sector with both major and junior companies. During this time I have been involved in oil and gas exploration, wellsite geology, mineral exploration, mineral property acquisitions and evaluations, drill program management, field crew supervision and mine management. Commodities have included gold, silver, platinum group metals, base metals, uranium, diamonds, lithium, graphite, industrial minerals, dimension stone, aggregate and high purity silica. This work has been conducted in most provinces of Canada, United States (Montana, Arizona, Nevada, Idaho, Kentucky and Maine), Mexico, Peru and Spain.
3. I am a registered practicing professional member in good standing with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) since 1985 with P.Geol. membership number M39059.
4. I am a registered practicing professional member in good standing with the Geoscientists of Ontario (PGO) since 2004 with P.Geo. membership number 1150.
5. I am a registered Fellow in good standing of the Canadian Gemmological Association since graduation as a Gemmologist in 1990.
6. I personally examined and studied the literature of government and corporate reports on the property of Kingsview Minerals Ltd. I am familiar with the project area and have visited the property on November 14 and 16, 2020.
7. I have knowledge of the geology and mineralization in this general area having participated in the geological examination and core logging of 30,000 m of core from the area of the Island Gold Mine about 25 km to the northeast and outside of this property. That work led to the reopening of that mine.
8. I have had no prior or subsequent involvement with the property that is the subject of the Technical Report.
9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
10. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101. I do not own, directly or indirectly, nor am I under an agreement, arrangement or understanding or expect to acquire any securities of

Kingsview Minerals Ltd. or any affiliated entity of the Company. I hold no interest, directly or indirectly, in the mineral properties that are the subject of the forgoing report or in any adjacent mineral properties nor do I expect to receive any direct or indirect interest in the Property.

11. I have read the definition of “qualified person” set out in National Instrument 43-101/Regulation 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101 on this Technical Report.
12. I am responsible for the preparation of all Sections of “The Technical Report”
13. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.

Signed this 23 day of April, 2021 in Sudbury, Ontario, Canada

Robert G. Komarechka, P.Geo., (PGO No. 1150)

Effective Date: April 23, 2021

Signed Date: April 23, 2021



Appendices

Appendix 1
Kingsview Property Acquisition Agreement

SHARE EXCHANGE AGREEMENT

THIS SHARE EXCHANGE AGREEMENT is made as of the 13th day of November, 2020 and is

AMONG

THE PERSONS IDENTIFIED ON SCHEDULE A TO THIS AGREEMENT AS THE SELLERS,

(together, the “**Sellers**”)

AND

12185849 CANADA INC., a corporation incorporated under the federal laws of Canada

(“**CanadaCorp**”)

AND

KINGSVIEW MINERALS LTD., a corporation incorporated under the laws of the Province of British Columbia

(“**Kingsview**”)

RECITALS:

- A. CanadaCorp has an aggregate of five million one hundred (5,100,000) issued and outstanding common shares.
- B. Kingsview is a corporation incorporated under the laws of the province of British Columbia.
- C. The Sellers are the registered and beneficial owners of an aggregate of all of the issued and outstanding shares of CanadaCorp representing five million one hundred thousand (5,100,000) common shares in the capital of CanadaCorp, (the “**Purchased Shares**”).
- D. The Sellers wish to sell to Kingsview, and Kingsview wishes to purchase from the Sellers, all of the Purchased Shares on the terms and conditions set forth in this Agreement.
- E. Upon completion of the transactions contemplated in this Agreement, Kingsview will be the sole shareholder of CanadaCorp resulting in CanadaCorp becoming a wholly owned subsidiary of Kingsview.

IN CONSIDERATION of the premises and mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the parties hereto, the parties agree with one another as follows:

- 1.1 *Definitions.* Whenever used in this Agreement, the following words and terms will have the respective meanings ascribed to them below:
 - 1.1.1 “**Agreement**” means this Share Exchange Agreement, all of the Schedules to this Share Exchange Agreement and all instruments supplemental to or in amendment or confirmation of this Share Exchange Agreement.
 - 1.1.2 “**Assets**” means both the list of Material Contracts of CanadaCorp as evidenced in Schedule B of this Agreement and the Property Portfolio of CanadaCorp as evidenced in Schedule C of this Agreement.
 - 1.1.3 “**Closing**” means the completion of the purchase and sale of the Purchased Shares pursuant to this Agreement.
 - 1.1.4 “**Closing Date**” means November 13, 2020

CC
SC
ML
BA
DM
SV

- 1.1.5 “**Closing Time**” means 10:00 a.m. (Toronto time) on the Closing Date or such other time as the parties may agree as the time at which the Closing will take place.
- 1.1.6 “**Damages**” has the meaning given in Section 6.1.
- 1.1.7 “**Encumbrance**” means any lien, pledge, hypothecation, charge, mortgage, security interest, encumbrance, claim, infringement, interference, option, right of first refusal, pre-emptive right, community property interest or restriction of any nature (including any restriction on the voting of any security, any restriction on the transfer of any security or other asset, any restriction on the receipt of any income derived from any asset, any restriction on the use of any asset and any restriction on the possession, exercise or transfer of any other attribute of ownership of any asset).
- 1.1.8 “**Governmental Authority**” means any federal, provincial, state, municipal, county or regional government or governmental authority, domestic or foreign and includes any department, commission, board, administrative agency or regulatory body thereof.
- 1.1.9 “**Material Contracts**” means the exhaustive list and form of all executed agreements to which CanadaCorp is a party to, as evidenced in Schedule B.
- 1.1.10 “**Material Adverse Effect**” means, in respect of CanadaCorp and Sellers, any change, event, effect or occurrence that is, individually or in aggregate, material and adverse to the business, properties, assets, liabilities (including any contingent liabilities that may arise through outstanding, pending or threatened litigation or otherwise), capitalization, condition (financial or otherwise), operations or results of operations of that Party and its subsidiaries and material joint ventures taken as a whole, other than any change, effect, event or occurrence:
- (a) relating to the general economic conditions, global political conditions or securities markets in general;
 - (b) relating to any of the principal markets served by CanadaCorp’s business generally or shortages or price changes with respect to metals or other products used or sold by CanadaCorp
 - (c) relating to changes in currency exchange rates;
 - (d) relating to any generally applicable change in applicable laws or regulations (other than orders, judgments or decrees against CanadaCorp any of its Subsidiaries and material joint ventures) or in accounting standards; or
 - (e) attributable to the announcement or pendency of this Agreement, or otherwise contemplated by or resulting from the terms of this Agreement;
- 1.1.11 “**Kingsview Shares**” means the common shares in the capital of Kingsview as they are presently constituted.
- 1.1.12 “**CanadaCorp Shares**” means the common shares in the capital of CanadaCorp as they are presently constituted.
- 1.1.13 “**Payment Shares**” has the meaning given in Section 2.2.
- 1.1.14 “**Person**” includes an individual, corporation, partnership, joint venture, trust, unincorporated organization, the Crown or any agency or instrumentality thereof or any other juridical entity.

- 1.1.15 “**Property Portfolio**” means the list of properties and their mineral claims as evidenced in Schedule C of this Agreement.
- 1.1.16 “**Purchase Price**” has the meaning given in Section 2.2.
- 1.1.17 “**Purchased Shares**” has the meaning given in the recitals above.
- 1.1.18 “**Subsidiary**” (“Subsidiaries” in the plural) means, with respect to a specified body corporate, any body corporate of which more than 50% of the outstanding shares ordinarily entitled to elect a majority of the board of directors thereof (whether or not shares of any other class or classes will or might be entitled to vote upon the happening of any event or contingency) are at the time owned directly or indirectly by such specified body corporate and will include any body corporate, partnership, joint venture or other entity over which it exercises direction or control.
- 1.2 *Gender and Number.* In this Agreement, words importing the singular include the plural and vice versa and words importing gender include all genders.
- 1.3 *Article and Section Headings.* Article and Section headings contained in this Agreement are included solely for convenience, are not intended to be full or accurate descriptions of the content of any Article or Section and will not be considered to be part of this Agreement.
- 1.4 *Schedules.* The following Schedules are an integral part of this Agreement:
Schedule A – The Sellers, Purchased Shares and Payment Shares
Schedule B – Material Contracts of CanadaCorp
Schedule C – List of Property Portfolio
- 1.5 *Arm’s Length.* For purposes of this Agreement, Persons are not dealing “at arm’s length” with one another if they would not be considered to be dealing at arm’s length with one another for purposes of the *Income Tax Act* (Canada), as amended.
- 1.6 *Statutory Instruments.* Unless otherwise specifically provided in this Agreement, any reference in this Agreement to any law, by law, rule, regulation, order, act or statute of any government, Governmental Authority or other regulatory body will be construed as a reference to those as amended or re-enacted from time to time or as a reference to any successor thereof.

2. PURCHASE AND SALE

- 2.1 *Purchased Shares.* Upon and subject to the terms of this Agreement, the Sellers agree to sell, assign and transfer, free and clear of all Encumbrances, and Kingsview agrees to purchase, all of the Purchased Shares, as at the Closing Time on the Closing Date, in accordance with subsection 2.3.1 below.
- 2.2 *Purchase Price.* The aggregate purchase price (the “**Purchase Price**”) payable by Kingsview to the Sellers for the Purchased Shares shall be the issuance to the Sellers of an aggregate of 5,100,000 Kingsview Shares (the “**Payment Shares**”) as fully paid and non-assessable. The Payment Shares will be allocated among the Sellers as set forth in Schedule A.
- 2.3 *Acknowledgements and Agreements of the Sellers.* Each of the Sellers acknowledges and agrees as follows with respect to the sale of the Purchased Shares and the receipt of the Payment Shares by such Seller pursuant to this Agreement:

CC
SC
ML
ME
DA
DM

- 2.3.1 Effective as at the Closing Time (i) the Sellers shall be deemed to have sold, assigned and transferred the Purchased Shares to Kingsview, (ii) Kingsview shall be delivered one or more share certificates registered as directed by Kingsview representing the total number of CanadaCorp Purchased Shares, (iii) the Payment Shares shall be issued to the Sellers, allocated among the Sellers pursuant to section 2.2 above, and evidenced by certificates delivered to the Sellers representing the Payment Shares, and (iv) any certificates representing the Purchased Shares held by the Sellers shall be cancelled and thereafter shall be of no further force or effect.
- 2.3.2 Such Seller has been independently advised as to the applicable hold periods imposed in respect of the Payment Shares by the securities legislation in the jurisdiction in which such Seller resides, and such Seller confirms that no representation has been made respecting the applicable hold periods for the Payment Shares and that such Seller is aware of the risks and other characteristics of the Payment Shares and of the fact that such Seller may not resell the Payment Shares except in accordance with applicable securities legislation and regulatory policy until expiry of the applicable hold periods and compliance with the other requirements of applicable law. Such Seller acknowledges that the certificates representing the Payment Shares will contain legends denoting the applicable resale restrictions, if any, and such Seller will not resell the Payment Shares except in accordance with the provisions of applicable securities legislation.
- 2.3.3 Such Seller has been advised that no prospectus has been filed in connection with the issuance and granting of the Payment Shares and as the Payment Shares are being issued and granted to the Sellers pursuant to exemptions from the prospectus requirements of applicable securities laws:
- (a) most of the civil remedies applicable to the issuance and granting of securities by way of prospectus provided for in such laws are not available to such Seller;
 - (b) such Seller may not receive information that would be provided if no such exemptions were available; and
 - (c) Kingsview is relieved of certain obligations in respect of offerings by way of prospectus which would otherwise apply under applicable securities laws.

3. REPRESENTATIONS AND WARRANTIES

- 3.1 *Representations and Warranties of CanadaCorp.* CanadaCorp represents, warrants and covenants to Kingsview as follows, and acknowledges that Kingsview is relying on these representations, warranties and covenants in entering into this Agreement and in completing the transactions contemplated hereby:
- 3.1.1 Organization and Good Standing – CanadaCorp is duly incorporated or organized and validly existing under the federal laws of Canada.
- 3.1.2 Bankruptcy – No bankruptcy, liquidation, winding up, insolvency or receivership proceedings have been instituted or are pending against CanadaCorp, and CanadaCorp is able to satisfy its liabilities as they become due.
- 3.1.3 Due Authorization – CanadaCorp has all necessary power, authority and capacity to enter into this Agreement and to perform its obligations under this Agreement. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of CanadaCorp.

CC
SC
ML
DM
ME
BT
DA

- 3.1.4 Authorized and Issued Capital – The authorized capital of CanadaCorp consists of an unlimited number of common shares and an unlimited number of special shares, issuable in series, of which 5,100,000 CanadaCorp Shares have been validly issued and are outstanding as fully paid and non-assessable. The Sellers are the registered owners of all of the Purchased Shares and the Purchased Shares are held by them as set out in Schedule A.
- 3.1.5 Enforceability of Obligations – This Agreement constitutes a valid and binding obligation of CanadaCorp enforceable against CanadaCorp in accordance with its terms, provided that enforcement may be limited by bankruptcy, insolvency, liquidation, reorganization, reconstruction and other similar laws generally affecting enforceability of creditors' rights and that equitable remedies such as specific performance and injunction are in the discretion of the court from which they are sought.
- 3.1.6 Subsidiaries – CanadaCorp does not have any Subsidiaries.
- 3.1.7 Material Contracts – the material contracts listed in *Schedule B: Material Contracts* constitute all material contracts of CanadaCorp. Each of the CanadaCorp Material Contracts is in full force and effect, unamended and there exists no default warranty claim or other obligation or liability or event, occurrence, condition or act which with the giving of notice, lapse of time or the happening of any other event or condition, would become a default or give rise to a warranty claim or other obligation or liability thereunder. CanadaCorp has not violated or breached, in any material aspect any terms or conditions of any Material Contract which it is a party to and all the covenants to be performed by any party thereto have been fully and properly performed.
- 3.1.8 Property Portfolio - CanadaCorp has good and marketable title to its properties and is the registered holder and owner of all of the claims detailed and affixed to this Agreement in Schedule C.
- 3.1.9 Business Compliance - CanadaCorp has conducted and is conducting business in compliance in all material respects with all applicable laws, regulations, bylaws, ordinances, regulations, rules, judgements, decrees and orders of each jurisdiction in which its business is carried on in.
- 3.1.10 No Litigation – There are no actions or suits or other legal proceedings currently pending against CanadaCorp or threatened against CanadaCorp which individually or in aggregate have or could reasonably be expected to have a Material Adverse Effect on CanadaCorp.
- 3.2 *Representations and Warranties of the Sellers:* Each Seller severally (and not jointly or jointly and severally) makes the following representations and warranties to Kingsview and acknowledges that Kingsview is relying on such representations and warranties in entering into this Agreement and in completing the transactions contemplated under this Agreement:
- 3.2.1 The Purchased Shares – Such Seller is the legal and beneficial owner of the number of Purchased Shares shown as held by such Seller on Schedule A and on Closing Kingsview will acquire good and marketable title to such Purchased Shares free and clear of all Encumbrances.
- 3.2.2 Litigation (Shares) – There is no suit, action, litigation, arbitration proceeding or governmental proceeding, including appeals and applications for review, in progress, pending or threatened against such Seller relating to the Purchased Shares.

CC
SC
ML
DM
ME
BT
DA

- 3.2.3 Enforceability of Obligations – When executed and delivered, this Agreement will constitute valid and legally binding obligations enforceable against such Seller in accordance with its terms subject, however, to limitations with respect to enforcement imposed by law in connection with bankruptcy or similar proceedings and to the extent that equitable remedies such as specific performance and injunction are in the discretion of the court from which they are sought.
- 3.2.4 Residence – Such Seller is resident in the jurisdiction set out opposite its name on Schedule A.
- 3.2.5 Corporate Seller – If the Seller is a corporation:
- (a) it is duly incorporated or organized and validly existing in its jurisdiction of incorporation and is in good standing with respect to the filing of annual reports; and
 - (b) it has all necessary power, authority and capacity to enter into this Agreement and to perform its obligations under this Agreement; and the execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of such Seller.
- 3.3 *Representations and Warranties of Kingsview.* Kingsview hereby represents, warrants and covenants to CanadaCorp and the Sellers as follows and acknowledges that CanadaCorp and the Sellers are relying on these representations, warranties and covenants in entering into this Agreement and in completing the transactions contemplated under this Agreement:
- 3.3.1 Organization and Good Standing – Kingsview is duly incorporated or organized and validly existing under the laws of the Province of British Columbia, Canada.
- 3.3.2 Bankruptcy – No bankruptcy, insolvency or receivership proceedings have been instituted or are pending against Kingsview and Kingsview is able to satisfy its liabilities as they become due.
- 3.3.3 Capacity to Carry on Business – Kingsview has all necessary corporate power, authority and capacity to own its Assets and to carry on its business as presently owned and carried on by it and Kingsview is duly licensed, registered and qualified as a corporation to do business and is in good standing in each jurisdiction in which the nature of its business makes such qualification necessary.
- 3.3.4 Due Authorization – Kingsview has all necessary power, authority and capacity to enter into this Agreement and to perform its obligations under this Agreement. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of Kingsview.
- 3.4 *Survival.* The representations, warranties and covenants made by the parties in sections 3.1, 3.2, and 3.3 shall terminate (and be of no further force or effect) after the Closing Time.

4. COVENANTS

4.1 *Covenants of CanadaCorp, and the Sellers.* Until the earlier of the Closing Time or the termination of this Agreement in accordance with its terms, each of the Sellers and CanadaCorp severally (and not jointly or jointly and severally) hereby covenants and agrees with Kingsview as follows:

4.1.1 *Necessary Consents.* The Sellers and CanadaCorp shall use commercially reasonable efforts to obtain all approvals or consents as are required to complete the transactions contemplated by this Agreement, including those of the directors and shareholders of CanadaCorp or any applicable Governmental Authority;

4.1.2 *Satisfaction of Conditions Precedent.* Each of the Sellers and CanadaCorp shall use commercially reasonable efforts to satisfy or cause to be satisfied the conditions precedent to the transactions contemplated herein which are within his, her or its control.

4.1.3 *All other Actions.* The Sellers and CanadaCorp shall cooperate fully with Kingsview, and will use all commercially reasonable efforts to assist Kingsview in its efforts to complete the transactions contemplated by this Agreement, unless such cooperation and efforts would subject the Sellers or CanadaCorp to any extraordinary cost or liability or would be in breach of any applicable statutory or regulatory requirements.

4.1.4 *Material Changes.* CanadaCorp shall promptly advise Kingsview in writing of any event, change or development that has or is reasonably expected to have an adverse effect in respect of the CanadaCorp or the transactions contemplated hereunder.

4.2 *Covenants of Kingsview.* Kingsview hereby covenants and agrees with the Sellers and CanadaCorp as follows:

4.2.1 *Necessary Consents.* Kingsview shall use commercially reasonable efforts to obtain all approvals or consents as are required to complete the transactions contemplated by this Agreement, including those of the directors and shareholders of Kingsview, or any applicable Governmental Authority.

4.2.2 *All other Actions.* Kingsview shall cooperate fully with the Sellers and CanadaCorp and will use all commercially reasonable efforts to assist the Sellers and CanadaCorp in their efforts to complete the transactions contemplated by this Agreement, unless such cooperation and efforts would subject Kingsview to any extraordinary cost or liability or would be in breach of any applicable statutory or regulatory requirements.

5. CONDITIONS PRECEDENT

5.1 *Conditions Precedent for the Benefit of Kingsview.* The obligation of CanadaCorp to complete the transactions contemplated by this Agreement are subject to the satisfaction of, or compliance with, at or before the Closing Time, each of the following conditions precedent (each of which is hereby acknowledged to be inserted for the exclusive benefit of Kingsview and may be waived by it in whole or in part):

5.1.1 *Truth of Representations and Warranties –* The representations and warranties of CanadaCorp and the Sellers contained in this Agreement will be true and correct on and as of the Closing Date.

CC
SC
ML
ME
BT
DM
SA

- 5.1.2 Covenants and Agreements – Each of CanadaCorp and the Sellers will have satisfied and complied with all covenants and agreements in this Agreement agreed to be performed or caused to be performed by him, her or it on or before the Closing Time.
 - 5.1.3 Consents – All consents, approvals, orders and authorizations of or from Governmental Authorities required in connection with the completion of the transactions contemplated by this Agreement will have been obtained on or before the Closing Time on terms and conditions satisfactory to CanadaCorp, including the conditional approval of the listing of the Payment Shares.
 - 5.1.4 No Material Adverse Effect – No Material Adverse Effect (nor any condition, event or development involving a prospective Material Adverse Effect) shall have occurred in the Business, Assets, operations, capital or financial condition of Kingsview.
 - 5.1.5 Board Representation – CanadaCorp will have tendered any resignations should they be requested by Kingsview’s Board of Directors and are to be delivered by CanadaCorp directors and officers at Closing.
- 5.2 *Waivers.* Each of the parties on his, her or its behalf, may waive any condition for his, her or its benefit in this Agreement, in whole or in part, without prejudice to any right of rescission or any other right in the event of the non-fulfilment of any other condition or conditions. A waiver will only be binding if it is in writing.

6. INDEMNIFICATION

- 6.1 *Indemnification by Kingsview.* Kingsview agrees to indemnify and save harmless CanadaCorp from and against any and all losses, debts, obligations, liabilities, expenses, costs and damages (including reasonable legal fees) (collectively, the “**Damages**”) suffered or incurred by CanadaCorp as a result of any breach of, or untruth of, any of the covenants, warranties or representations contained in section 3.3 and 4.2 of this Agreement.
- 6.2 *Indemnification by CanadaCorp.* CanadaCorp agrees to indemnify and save harmless Kingsview from and against any and all Damages suffered or incurred by Kingsview as a result of any breach of, or untruth of, any of the covenants, warranties or representations contained in section 3.1, or 4.1 of this Agreement.

7. CLOSING ARRANGEMENTS

- 7.1 On the Closing Date, CanadaCorp and the Sellers shall deliver, or cause to be delivered, to Kingsview such documents as may reasonably be required to perfect the transactions contemplated by this Agreement and Kingsview shall deliver, or cause to be delivered, to CanadaCorp and the Sellers such documents as may reasonably be required to perfect the transactions contemplated by this agreement.

8. NOTICES

- 8.1 *Delivery of Notice.* Any notice, direction or other instrument required or permitted to be given by any party under this Agreement will be in writing and will be sufficiently given if delivered personally or by courier, or transmitted by fax or email means during the transmission of which no indication of failure of receipt is communicated to the sender:

CC
SC
ML
1/3
ME
BA
DM
SV

in the case of CanadaCorp and the Sellers:

12184849 Canada Inc.
1780 Coyote Ridge Rd.
Crystal Falls, Ontario P0H 1L0
Attention: Steve Anderson
Email: visionexploration@persona.ca

in the case of Kingsview:

Kingsview Minerals Ltd.
Suite 810-789 West Pender Street
Vancouver, British Columbia V6C 1H2
Attention: Gary Handley
Email: gary@venexcapital.com

- 8.2 *Receipt of Notice.* Any such notice, direction or other instrument, if delivered personally, will be deemed to have been given and received on the date on which it was received at such address and, if sent by fax or email, will be deemed to have been given and received on the date of transmission in accordance with this Section.

9. POWER OF ATTORNEY

- 9.1 Each of the Sellers hereby severally and irrevocably appoints CanadaCorp as their attorney to take any action that is required and hereby authorizes any director or officer of CanadaCorp, on behalf of CanadaCorp, to sign any documents on their behalf, including without limitation, for the purposes of all Closing matters and deliveries of documents and to do and cause to be done all such acts and things as may be necessary or desirable in connection with the transactions contemplated hereunder, including the sale, assignment and transfer of the Purchased Shares to Kingsview. Without limiting the generality of the foregoing, CanadaCorp may, on behalf of itself and the Sellers, extend the Time of Closing, modify or waive such conditions as are contemplated herein, negotiate, settle and deliver the final forms of this Agreement and any other documents that are necessary or desirable to give effect to the transactions contemplated herein.

10. GENERAL PROVISIONS

- 10.1 *Entire Agreement.* This Agreement, including all the Schedules hereto, together with the agreements and other documents to be delivered pursuant hereto, constitutes the entire agreement among the parties pertaining to the subject matter hereof and supersedes any and all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties and there are no warranties, representations or other agreements among the parties in connection with the subject matter hereof except as specifically set forth herein and therein.
- 10.2 *Costs and Expenses.* Each of Kingsview, CanadaCorp and the Sellers agrees that it will pay their own fees and expenses and all applicable taxes thereon in connection with the purchase and sale of the Purchased Shares and the transactions contemplated by this Agreement.
- 10.3 *Confidentiality.* Until the Closing Time, and in the event of the termination of this Agreement without consummation of the transactions contemplated by this Agreement, for a period of one year from the date of this Agreement, each party to this Agreement will keep confidential any information obtained from the other parties, provided that a party may disclose

CC
SC
ML
ME
DA
DM
DA

confidential information (i) to those of its representatives and professional advisors who have a need to know the information in connection with providing advice with respect to this Agreement and the transactions contemplated thereby if such representatives and advisors commit to protect such information in a manner consistent herewith or (ii) if such disclosure is required by law or over Governmental Authority or (iii) if such information has been made public other than as a result of a breach of this Section. If this Agreement is terminated without consummation of the transactions contemplated thereby, promptly after such termination all documents, work papers and other written material obtained from a party in connection with this Agreement and not theretofore made public (including all copies and photocopies thereof), shall be returned to the party that provided such material.

10.4 *Independent Legal Advice.* CanadaCorp and the Sellers hereby acknowledges and agrees that:

- a) He/she/it has had an opportunity to obtain independent legal advice before entering into this Agreement;
- b) He/she/it fully understands the advantages and disadvantages of obtaining such independent legal advice;
- c) He/she/it understands the respective rights and obligations of the parties under, and the nature and consequences of, this Agreement; and
- d) He/she/it is signing this Agreement voluntarily.

10.5 *Waiver.* The failure of a party in any one or more instances to insist on strict performance of any of the terms this Agreement or to exercise any right or privilege arising under it will not preclude it from requiring by reasonable notice that any other party duly perform its obligations or preclude it from exercising such a right or privilege under reasonable circumstances, nor will waiver in any one instance of a breach be construed as an amendment of this Agreement or waiver of any later breach.

10.6 *Assignment.* None of the parties will assign, transfer, charge or otherwise encumber the benefit (or any part thereof) or the burden (or any part thereof) of this Agreement without the prior written consent of the other parties, such consent not to be unreasonably withheld.

10.7 *Further Assurances.* Each of the parties hereto will from time to time at the request of any of the other parties hereto and without further consideration, execute and deliver all such other additional assignments, transfers, instruments, notices, releases and other documents and will do all such other acts and things as may be necessary or desirable to assure more fully the consummation of the transactions contemplated hereby.

10.8 *Time.* Time will be of the essence of this Agreement.

10.9 *Amendment.* This Agreement may be amended or varied only by agreement in writing signed by each of the parties. Unless the context otherwise so requires, a reference to this Agreement includes a reference to this Agreement as amended or varied from time to time.

10.10 *Severability.* Unless otherwise provided, each and every covenant, representation or warranty of the Sellers contained herein is several (and not joint or joint and several).

10.11 *Severability.* If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability will attach only to such provision or part thereof and the remaining part of such provision and all other provisions hereof will continue in full force and effect.

CC
SC
ML
1/15
ME
BA
DM
SV

- 10.12 *Governing Law.* This Agreement will be governed by and interpreted in accordance with the laws from time to time in force in the Province of British Columbia and each of the parties hereby attorns to the non-exclusive jurisdiction of the courts of the Province of Ontario, sitting in Toronto.
- 10.13 *Benefit of Agreement.* This Agreement will enure to the benefit of and be binding upon each of the parties hereto who is a corporation and their respective successors and permitted assigns and upon each of the parties hereto who is an individual and their respective executors, personal representatives, heirs, successors and permitted assigns.
- 10.14 *Counterparts.* This Agreement may be executed in as many counterparts as are necessary. It will be binding on each party when each party hereto has signed and delivered one such counterpart. Delivery may be made by facsimile or other electronic transmission. When a counterpart of this Agreement has been executed by each party, all counterparts together will constitute one agreement.

THE PARTIES, intending to be contractually bound, have executed this Agreement as of the date and year first above written.

12185849 CANADA INC.

Per: Steven Anderson 18 / 11 / 2020
Name: Steve Anderson
Title: CEO

KINGSVIEW MINERALS LTD.

Per: Gary Handley 17 / 11 / 2020
Name: Gary Handley
Title: CEO & Director

[The remainder of this page is intentionally left blank]

SELLERS

2060014 CANADA INC.

By: Steve Anderson

Steven Anderson 18 / 11 / 2020

(Authorized Signatory)

DON MCHOLDINGS LIMITED.

By: Don Mckinnon

DM 18 / 11 / 2020

(Authorized Signatory)

7806221 CANADA INC.

By: Anthony Durkacz

Anthony Durkacz 04 / 12 / 2020

(Authorized Signatory)

2254022 ONTARIO LTD.

By: Philip Black

Philip Black 18 / 11 / 2020

(Authorized Signatory)

Max Lawson 17 / 11 / 2020

MAX LAWSON

Mike England 20 / 11 / 2020

MIKE ENGLAND

Gilbert Clement 18 / 11 / 2020

Gilbert Clement

Clifford Clement 18 / 11 / 2020

Clifford Clement

[The remainder of this page is intentionally left blank]

SCHEDULE A

THE SELLERS, PURCHASED SHARES AND PAYMENT SHARES

| CanadaCorp Shareholders | Shareholder Address | Number of Purchased Shares held | Number of Payment Shares to be Received |
|----------------------------|---------------------|---------------------------------------|---|
| 2060014 Ontario Inc. | | 1,750,000 | 1,750,000 |
| Don McHoldings Limited | | 1,750,000 | 1,750,000 |
| 7806221 Canada Inc. | | 500,000 | 500,000 |
| 2254022 Ontario Ltd. | | 500,000 | 500,000 |
| Max Lawson | | 200,000 | 200,000 |
| Mike England | | 200,000 | 200,000 |
| Gilbert Clement | | 100,000 | 100,000 |
| Clifford Clement | | 100,000 | 100,000 |
| TOTAL | | 5,100,000 | 5,100,000 |

SCHEDULE B

MATERIAL CONTRACTS LIST AND FORM ATTACHED

SCHEDULE C

Property Portfolio

Echum Project

| | | |
|--------------|--------------|--------------|
| Claim 544780 | Claim 544781 | Claim 544782 |
| Claim 544783 | Claim 544784 | Claim 544785 |
| Claim 544786 | Claim 544787 | |
| Claim 587927 | Claim 587928 | Claim 587929 |
| Claim 587930 | Claim 587931 | Claim 587932 |
| Claim 587933 | Claim 587934 | Claim 587935 |
| Claim 587936 | Claim 587937 | Claim 587938 |
| Claim 587939 | Claim 587940 | Claim 587941 |
| Claim 587942 | Claim 587943 | Claim 587944 |
| Claim 587945 | | |
| Claim 587947 | Claim 587948 | Claim 587949 |
| Claim 587950 | Claim 587951 | Claim 587952 |
| Claim 587953 | Claim 587954 | Claim 587955 |
| Claim 587956 | Claim 587957 | Claim 587958 |
| Claim 587959 | Claim 587960 | Claim 587961 |
| Claim 587962 | Claim 587963 | Claim 587964 |
| Claim 587965 | Claim 587966 | Claim 587967 |
| Claim 587968 | Claim 587969 | Claim 587970 |
| Claim 587971 | Claim 587972 | Claim 587973 |
| Claim 613036 | Claim 613037 | Claim 613038 |
| Claim 613039 | Claim 613040 | Claim 613041 |
| Claim 613042 | Claim 613043 | Claim 613044 |
| Claim 613045 | Claim 613046 | Claim 613047 |
| Claim 613048 | Claim 613049 | Claim 613050 |
| Claim 613051 | Claim 613052 | Claim 613053 |
| Claim 613054 | Claim 613055 | Claim 613056 |
| Claim 613057 | Claim 613058 | Claim 613059 |
| Claim 613060 | Claim 613061 | Claim 613062 |
| Claim 613063 | Claim 613064 | Claim 613065 |
| Claim 613066 | Claim 613067 | Claim 613068 |
| Claim 613069 | Claim 613070 | Claim 613071 |
| Claim 613072 | Claim 613072 | Claim 613073 |
| Claim 613075 | Claim 613076 | Claim 613077 |
| Claim 613078 | Claim 613079 | Claim 613080 |
| Claim 613081 | Claim 613082 | Claim 613083 |
| Claim 613084 | Claim 613085 | Claim 613086 |
| Claim 613087 | Claim 613088 | Claim 613089 |
| Claim 613090 | Claim 613091 | Claim 613092 |
| Claim 613093 | Claim 613094 | Claim 613095 |
| Claim 613096 | Claim 613097 | Claim 613098 |
| Claim 613099 | Claim 613100 | Claim 613101 |
| Claim 613174 | Claim 613175 | Claim 613176 |
| Claim 613177 | Claim 613178 | Claim 613179 |
| Claim 613180 | | |
| Claim 615157 | Claim 615158 | |

SCHEDULE C

Centennial Project

Claim 118692

Claim 129121

Claim 230396

Claim 277652

Claim 289840

Claim 338051

Claim 552499

Claim 552500

Claim 555160

Lendrum Project

Claim 119631

Claim 128620

Claim 133950

Claim 152161

Claim 156360

Claim 159079

Claim 165696

Claim 175798

Claim 192626

Claim 210161

Claim 210161

Claim 221714

Claim 221830

Claim 228988

Claim 228989

Claim 232442

Claim 232443

Claim 258398

Claim 260307

Claim 269157

Claim 276166

Claim 276167

Claim 287947

Claim 287948

Claim 295527

Claim 295528

Claim 296550

Claim 312121

Claim 320737

Claim 320738

Claim 323444

Claim 324836

Claim 324999

Claim 336315

Claim 566916

Claim 580407

Claim 580408

Claim 580409

Claim 580410

Claim 588264

Claim 588487

| | |
|--------------------------------|--|
| TITLE | Purchase Agreement Kingsview |
| FILE NAME | 2020-11-13 - Shar... - Kingsview.docx |
| DOCUMENT ID | 96712c15da67bdc4f71a818e2aebc208a4004dda |
| AUDIT TRAIL DATE FORMAT | DD / MM / YYYY |
| STATUS | ● Completed |

Document history

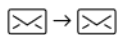


SENT

17 / 11 / 2020

17:34:47 UTC

Sent for signature to Steve Anderson (visionexploration@persona.ca), Don Mckinnon (mckinnon241@gmail.com), Anthony Durkacz (anthony@firstrepubliccapital.com), Larry Salo (northerndrilling@gmail.com), MAX LAWSON (max.lawson19@icloud.com), GILBERT CLEMENT (visionexploration@persona.ca), CLIFFORD CLEMENT (visionexploration@persona.ca), Mike England (mike@engcom.ca) and Gary Handley (gary@venexcapital.com) from wafae@venexcapital.com
IP: 75.98.202.169


 EMAIL
CHANGED

17 / 11 / 2020

17:38:23 UTC

max.lawson19@icloud.com was changed to maxlawson19@icloud.com after requester reassignment.
IP: 75.98.202.169



VIEWED

17 / 11 / 2020

17:39:26 UTC

Viewed by Gary Handley (gary@venexcapital.com)
IP: 75.98.202.169






| | |
|--------------------------------|--|
| TITLE | Purchase Agreement Kingsview |
| FILE NAME | 2020-11-13 - Shar... - Kingsview.docx |
| DOCUMENT ID | 96712c15da67bdc4f71a818e2aebc208a4004dda |
| AUDIT TRAIL DATE FORMAT | DD / MM / YYYY |
| STATUS | ● Completed |

Document history

| | | |
|---|---------------------------------------|--|
|  SIGNED | 17 / 11 / 2020 17:41:08 UTC | Signed by Gary Handley (gary@venexcapi.com) IP: 75.98.202.169 |
|  VIEWED | 17 / 11 / 2020 18:01:11 UTC | Viewed by MAX LAWSON (maxlawson19@icloud.com) IP: 69.158.246.194 |
|  VIEWED | 17 / 11 / 2020 20:29:25 UTC | Viewed by Larry Salo (northerndrilling@gmail.com) IP: 208.101.109.228 |
|  SIGNED | 17 / 11 / 2020 20:46:44 UTC | Signed by MAX LAWSON (maxlawson19@icloud.com) IP: 69.158.246.194 |
|  VIEWED | 18 / 11 / 2020 13:07:33 UTC | Viewed by Don Mckinnon (mckinnon241@gmail.com) IP: 24.138.174.26 |
|  SIGNED | 18 / 11 / 2020 13:11:46 UTC | Signed by Don Mckinnon (mckinnon241@gmail.com) IP: 24.138.174.26 |

| | |
|--------------------------------|--|
| TITLE | Purchase Agreement Kingsview |
| FILE NAME | 2020-11-13 - Shar... - Kingsview.docx |
| DOCUMENT ID | 96712c15da67bdc4f71a818e2aebc208a4004dda |
| AUDIT TRAIL DATE FORMAT | DD / MM / YYYY |
| STATUS | ● Completed |

Document history

| | | |
|---|---------------------------------------|--|
|  SIGNED | 18 / 11 / 2020 15:34:05 UTC | Signed by Larry Salo (northerndrilling@gmail.com) IP: 208.101.109.228 |
|  VIEWED | 18 / 11 / 2020 19:27:32 UTC | Viewed by Steve Anderson (visionexploration@persona.ca) IP: 70.49.89.225 |
|  SIGNED | 18 / 11 / 2020 19:30:39 UTC | Signed by Steve Anderson (visionexploration@persona.ca) IP: 70.49.89.225 |
|  VIEWED | 18 / 11 / 2020 19:31:06 UTC | Viewed by GILBERT CLEMENT (visionexploration@persona.ca) IP: 70.49.89.225 |
|  VIEWED | 18 / 11 / 2020 19:31:06 UTC | Viewed by GILBERT CLEMENT (visionexploration@persona.ca) IP: 70.49.89.225 |
|  SIGNED | 18 / 11 / 2020 19:32:45 UTC | Signed by GILBERT CLEMENT (visionexploration@persona.ca) IP: 70.49.89.225 |

| | |
|--------------------------------|--|
| TITLE | Purchase Agreement Kingsview |
| FILE NAME | 2020-11-13 - Shar... - Kingsview.docx |
| DOCUMENT ID | 96712c15da67bdc4f71a818e2aebc208a4004dda |
| AUDIT TRAIL DATE FORMAT | DD / MM / YYYY |
| STATUS | ● Completed |

Document history

| | | |
|--|---------------------------------------|--|
|  VIEWED | 18 / 11 / 2020 19:33:00 UTC | Viewed by CLIFFORD CLEMENT (visionexploration@persona.ca) IP: 70.49.89.225 |
|  SIGNED | 18 / 11 / 2020 19:35:26 UTC | Signed by CLIFFORD CLEMENT (visionexploration@persona.ca) IP: 70.49.89.225 |
|  VIEWED | 20 / 11 / 2020 17:17:19 UTC | Viewed by Mike England (mike@engcom.ca) IP: 70.68.81.247 |
|  SIGNED | 20 / 11 / 2020 17:20:07 UTC | Signed by Mike England (mike@engcom.ca) IP: 70.68.81.247 |
|  VIEWED | 20 / 11 / 2020 19:51:13 UTC | Viewed by Anthony Durkacz (anthony@firstrepubliccapital.com) IP: 72.143.195.240 |
|  SIGNED | 04 / 12 / 2020 22:00:06 UTC | Signed by Anthony Durkacz (anthony@firstrepubliccapital.com) IP: 99.224.77.23 |
|  COMPLETED | 04 / 12 / 2020 22:00:06 UTC | The document has been completed. |

Appendix 2

Field Site Visit - Amended Report
Nov. 16, 2020

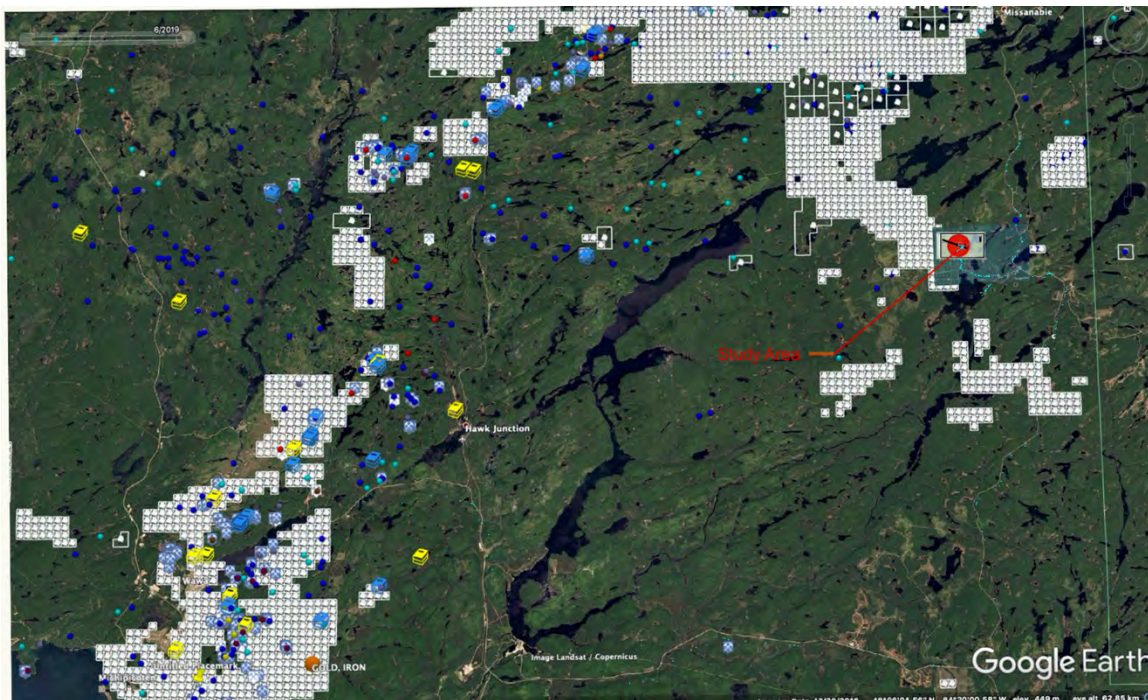
Amended Summary of Work
Ballard Lake Area Site Visit
 by
Robert G. Komarechka P.Geo. & Cecil Johnson
 Prepared on Dec. 16, 2020

Summary of Field Activity

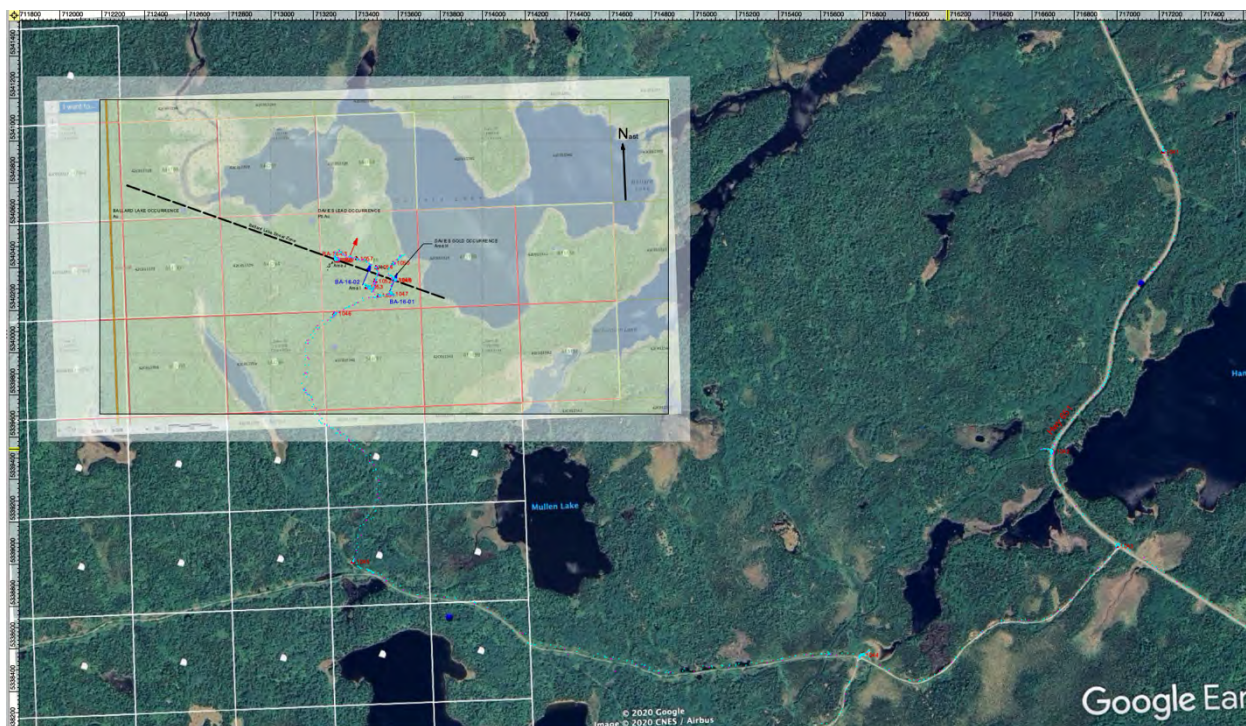
| | | |
|----|-------------------------------------|---|
| 1 | PROSPECTING JOURNAL | |
| 2 | | |
| 3 | Wednesday, November 11, 2020 | Travel |
| 4 | Bob K. | In Sudbury, working on geology maps, NI43-101 and other data from D. McKinnon -2 hrs |
| 5 | | |
| 6 | Thursday, November 12, 2020 | Travel |
| 7 | Bob K. | Plan trip, did a presentation to Cecil on the property & planned program -2 hrs |
| 8 | | |
| 9 | Friday, November 13, 2020 | Travel/Purchase Camp Supplies |
| 10 | Bob K. / Cecil J. | Organize gear and drive to Wawa |
| 11 | | |
| 12 | Saturday, November 14, 2020 | Echum |
| 13 | Bob K. / Cecil J. | Departed Wawa @8:05AM and drove to Echum township. Located access trails and new road. Trails were heavily overgrown and required quad access. Departed to Sudbury to pick up a quad, changed a flat tire with the spare, got new tire and returned after midnight to Wawa. |
| 14 | | |
| 15 | Sunday, November 15, 2020 | Rain Day: Preparing Prospecting Data |
| 16 | Bob K. / Cecil J. | Heavy rain, replaced spare tire on truck. Reviewed data on sites and prepared maps for Echum and Camoflage and Centennial Areas. |
| 17 | | |
| 18 | Monday, November 16, 2020 | Echum |
| 19 | Bob K. / Cecil J. | Sample Location A2-A15 light snow. Drove to the Echum Property and west along a quad trail to the Ballard Lake Area and located Targets H, I & J. Collected 4 samples E5105165-E5105169. |
| 20 | | |

Limited access and snow cover limited examination of the whole area so work was focused on the Ballard Lake Area. A total of 5 selected grab samples were collected from this site.

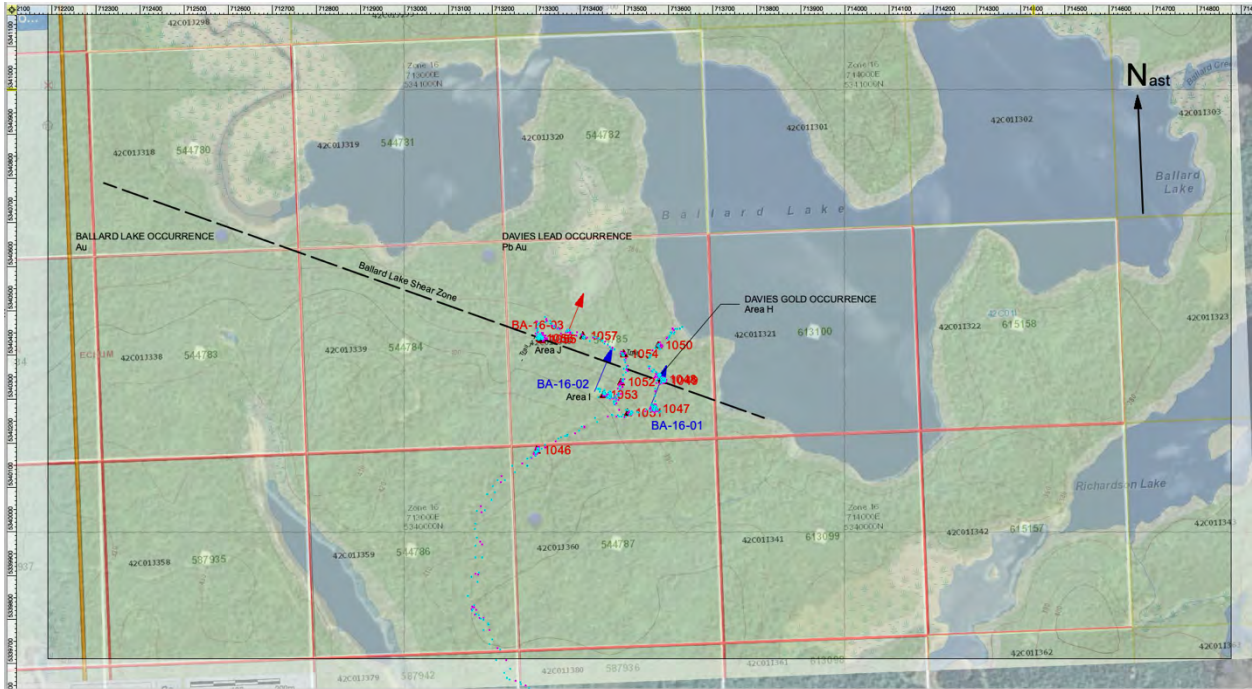
Review of the field data collected and this brief Summary of Work was prepared over several days ending on Dec.16, 2020.



Location Map showing the study area and claims



Area of Ballard Lake Area Investigated Co-ordinates in NAD 83 UTM Zone 16U



Detail of area investigated showing waypoints, tracklogs and various data. Blue drillholes were not located, the red hole was located in the field. Co-ordinates in NAD 83 UTM Zone 16U

Location of samples collected

| Sample # | Waypoint | UTM | Easting | Northing | Type | Taken By | Date | Target Area | Comment |
|----------|----------|-----|---------|----------|-------------|----------|------------|--------------|---|
| E5105165 | 1048 | 16U | 505377 | 5969381 | Select Grab | Cecil J. | 2020-11-16 | Echum H Area | Biotite rich (70%) Gneiss |
| E5105166 | 1049 | 16U | 505530 | 5969225 | Select Grab | Cecil J. | 2020-11-16 | Echum H Area | Quartz Vein / 5% pyrite |
| E5105167 | 1055 | 16U | 505695 | 5969667 | Select Grab | Cecil J. | 2020-11-16 | Echum J Area | Abundant biotite alteration |
| E5105168 | 1056 | 16U | 505143 | 5969293 | Select Grab | Cecil J. | 2020-11-16 | Echum J Area | Biotite alteration with quartz and pyrite |
| E5105169 | 1056 | 16U | 505142 | 5969293 | Select Grab | Cecil J. | 2020-11-16 | Echum J Area | Ribbon qtz / biotite at qtz contact |

Comments

The Ontario Government’s MDI Locate for the Davies Gold Occurrence appears to be inaccurate. A site visit to the MDI co-ordinates would confirm this.

The area map of earlier work trail system from RT Mineral’s Technical Report is slightly different from the site visit as the main entry trail comes from the east side via a quad trail.



Looking eastward toward samples E105165 and E105166 in water filled stripped Area H. November 16, 2020.



WP 1056: Area J - Sample E5105168 closeup of biotite, quartz, pyrite alteration of mafic volcanic host rocks, found along the Ballard Lake Shear adjacent to quartz veining.

Appendix 3
Geotech Preliminary Helicopter VTEM & Magnetometer Survey



VTEM™ Plus

PRELIMINARY REPORT ON A HELICOPTER-BORNE VERSATILE
TIME DOMAIN ELECTROMAGNETIC (VTEM™ Plus) AND
HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

MARCH 2021

PROJECT: ECHUM PROJECT
LOCATION: WAWA, ON
FOR: KINGSVIEW MINERALS LTD.
SURVEY FLOWN: JANUARY - FEBRUARY 2021
PROJECT: GL200223

Geotech Ltd.
270 Industrial Parkway South
Aurora, ON Canada L4G 3T9

Tel: +1 905 841 5004
Web: www.geotech.ca
Email: info@geotech.ca



TABLE OF CONTENTS

| | |
|---|----|
| EXECUTIVE SUMMARY..... | 3 |
| 1. INTRODUCTION..... | 4 |
| 1.1 General Considerations..... | 4 |
| 1.2 Survey and System Specifications..... | 5 |
| 1.3 Topographic Relief and Cultural Features..... | 6 |
| 2. DATA ACQUISITION..... | 7 |
| 2.1 Survey Area..... | 7 |
| 2.2 Survey Operations..... | 7 |
| 2.3 Flight Specifications..... | 8 |
| 2.4 Aircraft and Equipment..... | 8 |
| 2.4.1 Survey Aircraft..... | 8 |
| 2.4.2 Electromagnetic System..... | 8 |
| 2.4.3 Full Waveform VTEM™ Sensor Calibration..... | 12 |
| 2.4.4 Horizontal Magnetic Gradiometer..... | 12 |
| 2.4.5 Radar Altimeter..... | 12 |
| 2.4.6 GPS Navigation System..... | 12 |
| 2.4.7 Digital Acquisition System..... | 12 |
| 2.5 Base Station..... | 13 |
| 3. PERSONNEL..... | 14 |
| 4. DATA PROCESSING AND PRESENTATION..... | 15 |
| 4.1 Flight Path..... | 15 |
| 4.2 Electromagnetic Data..... | 15 |
| 4.3 Horizontal Magnetic Gradiometer Data..... | 17 |
| 5. DELIVERABLES..... | 18 |
| 5.1 Survey Report..... | 18 |
| 5.2 Maps..... | 18 |
| 5.3 Digital Data..... | 19 |
| 6. CONCLUSIONS AND RECOMMENDATIONS..... | 22 |

LIST OF FIGURES

| | |
|--|----|
| Figure 1: Survey location..... | 4 |
| Figure 2: Survey area location map on Google Earth..... | 5 |
| Figure 3: Echum Project flight paths over a Google Earth Image..... | 6 |
| Figure 4: VTEM™ Transmitter Current Waveform..... | 8 |
| Figure 5: VTEM™plus System Configuration..... | 11 |
| Figure 6: Z, X and Fraser filtered X (FFx) components for “thin” target..... | 16 |

LIST OF TABLES

| | |
|--|----|
| Table 1: Survey Specifications..... | 7 |
| Table 2: Survey schedule..... | 7 |
| Table 3: Off-Time Decay Sampling Scheme..... | 9 |
| Table 4: VTEM™ System Specifications..... | 11 |
| Table 5: Acquisition Sampling Rates..... | 13 |
| Table 6: Geosoft GDB Data Format..... | 19 |
| Table 7: Geosoft database for the VTEM waveform..... | 21 |

APPENDICES

| | | |
|----|---|----|
| A. | Survey Location Maps..... | A1 |
| B. | Survey Survey Area Coordinates | B1 |
| C. | Geophysical Maps | C1 |
| D. | Generalized Modelling Results of the VTEM System..... | D1 |
| E. | TAU Analysis | E1 |
| F. | TEM Resistivity Depth Imaging (RDI) | F1 |

EXECUTIVE SUMMARY

ECHUM PROJECT WAWA, ON

Between January 31st and February 12th, 2021, Geotech Ltd. carried out a helicopter-borne geophysical survey over the Echum Project near Wawa, ON.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM™ Plus) system and a horizontal magnetic gradiometer with two caesium sensors. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 380 line-kilometres of geophysical data were acquired during the survey.

In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The preliminary processed survey results are presented as the following maps:

- Electromagnetic stacked profiles of the B-field Z Component
- Electromagnetic stacked profiles of dB/dt Z Component
- B-Field Z Component Channel grid
- dB/dt Z Component Channel grid
- Fraser Filtered X Component Channel grid
- Total Magnetic Intensity (TMI)

Digital data include electromagnetic and magnetic products, plus ancillary data including the waveform.

The survey report describes the procedures for data acquisition, equipment used, processing, image presentation and the specifications for the preliminary digital data set.

1. INTRODUCTION

1.1 GENERAL CONSIDERATIONS

Geotech Ltd. performed a helicopter-borne geophysical survey over the Echum Project near Wawa, ON (Figure 1 & Figure 2).

Gary Handley represented Kingsview Minerals Ltd. during the data acquisition and data processing phases of this project.

The geophysical surveys consisted of helicopter borne EM using the versatile time-domain electromagnetic (VTEM™) plus system with Full-Waveform processing. Measurements consisted of Vertical (Z) and In-line Horizontal (X & Y) components of the EM fields using an induction coil and a horizontal magnetic gradiometer using two caesium magnetometers. A total of 380 line-km of geophysical data were acquired during the survey.

The crew was based out of Wawa, ON (Figure 2) for the acquisition phase of the survey. Survey flying started on February 1st and was completed on February 10th, 2021.

Data quality control and quality assurance, and preliminary data processing were carried out on a daily basis during the acquisition phase of the project. Final data processing followed immediately after the end of the survey. Final reporting, data presentation and archiving will be completed in April 2021.



Figure 1: Survey location

1.2 SURVEY AND SYSTEM SPECIFICATIONS

The survey area is located approximately 46 km northeast of Wawa, ON (Figure 2).



Figure 2: Survey area location map on Google Earth.

The Echum Project survey area was flown in a southwest to northeast ($N 45^{\circ} E$ azimuth) direction with traverse line spacings of 100 metres, as depicted in Figure 3. Tie lines were flown perpendicular to traverse lines at 1000 metre line spacings. For more detailed information on the flight spacings and directions, see Table 1.

1.3 TOPOGRAPHIC RELIEF AND CULTURAL FEATURES

Topographically, the survey area exhibits relief with elevations ranging from 330 to 461 metres over an area of 34 square kilometres (Figure 3).

There are several lakes, rivers, and streams within the Echum Project area, along with visible signs of culture such as roads.

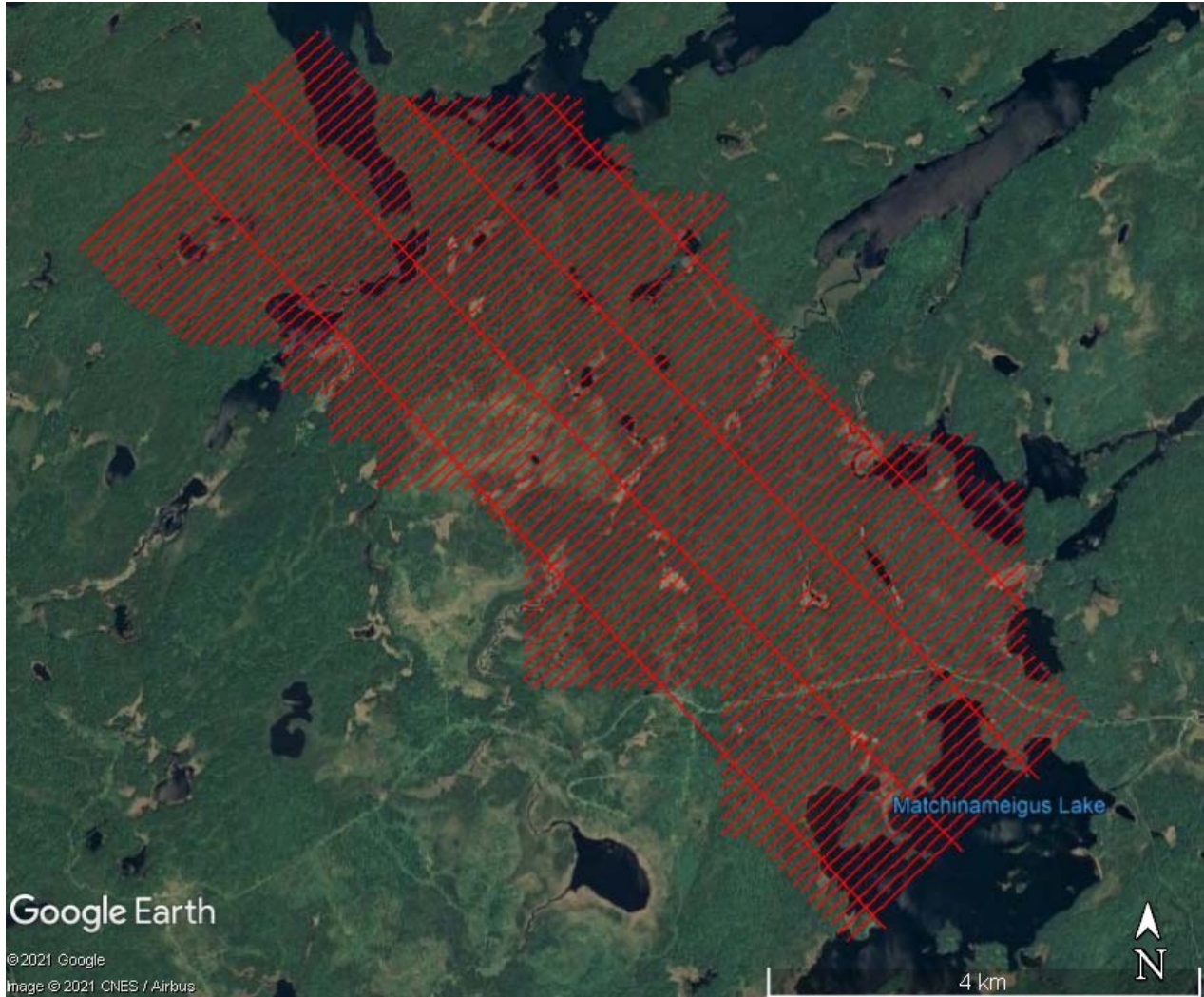


Figure 3: Echum Project flight paths over a Google Earth Image.

2. DATA ACQUISITION

2.1 SURVEY AREA

The survey area (see Figure 3 and Appendix A) and general flight specifications are as follows:

Table 1: Survey Specifications

| Survey block | Line spacing (m) | Area (km ²) | Planned ¹ Line-km | Actual Line-km | Flight direction | Line numbers |
|---------------|------------------|-------------------------|------------------------------|----------------|------------------|---------------|
| Echum Project | Traverse: 100 | 34 | 366 | 380 | N045°E / N225°E | L1000 – L1970 |
| | Tie: 1000 | | | | N135°E / N315°E | T2000 – T2030 |
| Total | | 34 | 366 | 380 | | |

Survey area boundaries co-ordinates are provided in Appendix B.

2.2 SURVEY OPERATIONS

Survey operations were based out of Wawa, ON from January 31st to February 12th, 2021. The following table shows the timing of the flying.

Table 2: Survey schedule

| Date | Comments |
|--------|---------------------------------------|
| 31-Jan | Mobilization to Wawa, local logistics |
| 01-Feb | Production Flight - 96 km flown |
| 02-Feb | Production Flight - 15 km flown |
| 03-Feb | Production Flight - 125 km flown |
| 04-Feb | Weather day |
| 05-Feb | Weather day |
| 06-Feb | Weather day |
| 07-Feb | Production Flight - 44 km flown |
| 08-Feb | Weather day |
| 09-Feb | Weather day |
| 10-Feb | Production Flight - 90 km flown |
| 11-Feb | Commence Demobilization |
| 12-Feb | Demobilization |

¹ Note: Actual Line kilometres represent the total line kilometres in the final database. These line-km normally exceed the Planned Line-km, as indicated in the survey NAV files.

2.3 FLIGHT SPECIFICATIONS

During the survey, the helicopter was maintained at a mean altitude of 108 metres above the ground with an average survey speed of 78 km/hour. This allowed for an actual average Transmitter-receiver loop terrain clearance of 64 metres and a magnetic sensor clearance of 74 metres.

The on-board operator was responsible for monitoring the system integrity. He also maintained a detailed flight log during the survey, tracking the times of the flight as well as any unusual geophysical or topographic features.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer. The data were then uploaded via ftp to the Geotech office in Aurora for daily quality assurance and quality control by qualified personnel.

2.4 AIRCRAFT AND EQUIPMENT

2.4.1 SURVEY AIRCRAFT

The survey was flown using a Eurocopter Aerospatiale (A-Star) 350 B3 helicopter, registration C-GVMU. The helicopter is owned and operated by Geotech Aviation Ltd. Installation of the geophysical and ancillary equipment was carried out by a Geotech Ltd. crew.

2.4.2 ELECTROMAGNETIC SYSTEM

The electromagnetic system was a Geotech Time Domain EM (VTEM™ Plus) full receiver-waveform streamed data recorded system. The “full waveform VTEM system” uses the streamed half-cycle recording of transmitter and receiver waveforms to obtain a complete system response calibration throughout the entire survey flight. VTEM with the serial number 18 had been used for the survey. The VTEM™ transmitter current waveform is shown diagrammatically in Figure 4.

The VTEM™ Receiver and transmitter coils were in concentric-coplanar and Z-direction oriented configuration. The receiver system for the project also included coincident-coaxial X & Y-direction coils to measure the in-line dB/dt and calculate B-Field responses. The Transmitter-receiver loop was towed at a mean distance of 44 metres below the aircraft as shown in Figure 5.

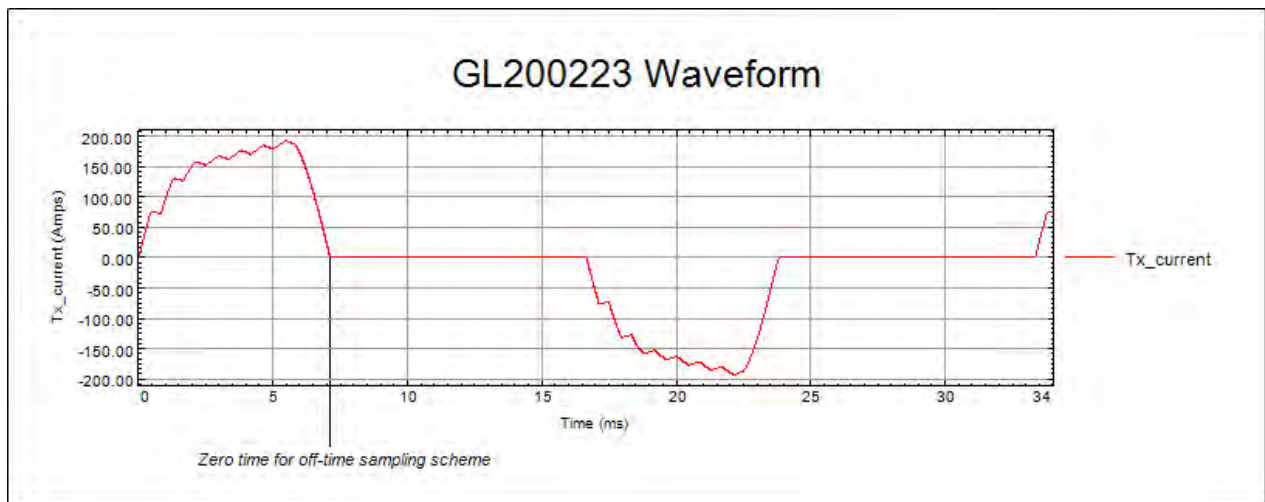


Figure 4: VTEM™ Transmitter Current Waveform

The VTEM™ decay sampling scheme is shown in Table 3 below. Forty-three time measurement gates were used for the final data processing in the range from 0.021 to 8.083 msec. Zero time for the off-time sampling scheme is equal to the current pulse width and is defined as the time near the end of the turn-off ramp where the dI/dt waveform falls to 1/2 of its peak value.

Table 3: Off-Time Decay Sampling Scheme

| VTEM™ Decay Sampling Scheme | | | | |
|-----------------------------|-------|-------|--------|-------|
| Index | Start | End | Middle | Width |
| Milliseconds | | | | |
| 4 | 0.018 | 0.023 | 0.021 | 0.005 |
| 5 | 0.023 | 0.029 | 0.026 | 0.005 |
| 6 | 0.029 | 0.034 | 0.031 | 0.005 |
| 7 | 0.034 | 0.039 | 0.036 | 0.005 |
| 8 | 0.039 | 0.045 | 0.042 | 0.006 |
| 9 | 0.045 | 0.051 | 0.048 | 0.007 |
| 10 | 0.051 | 0.059 | 0.055 | 0.008 |
| 11 | 0.059 | 0.068 | 0.063 | 0.009 |
| 12 | 0.068 | 0.078 | 0.073 | 0.010 |
| 13 | 0.078 | 0.090 | 0.083 | 0.012 |
| 14 | 0.090 | 0.103 | 0.096 | 0.013 |
| 15 | 0.103 | 0.118 | 0.110 | 0.015 |
| 16 | 0.118 | 0.136 | 0.126 | 0.018 |
| 17 | 0.136 | 0.156 | 0.145 | 0.020 |
| 18 | 0.156 | 0.179 | 0.167 | 0.023 |
| 19 | 0.179 | 0.206 | 0.192 | 0.027 |
| 20 | 0.206 | 0.236 | 0.220 | 0.030 |
| 21 | 0.236 | 0.271 | 0.253 | 0.035 |
| 22 | 0.271 | 0.312 | 0.290 | 0.040 |
| 23 | 0.312 | 0.358 | 0.333 | 0.046 |
| 24 | 0.358 | 0.411 | 0.383 | 0.053 |
| 25 | 0.411 | 0.472 | 0.440 | 0.061 |
| 26 | 0.472 | 0.543 | 0.505 | 0.070 |
| 27 | 0.543 | 0.623 | 0.580 | 0.081 |
| 28 | 0.623 | 0.716 | 0.667 | 0.093 |
| 29 | 0.716 | 0.823 | 0.766 | 0.107 |
| 30 | 0.823 | 0.945 | 0.880 | 0.122 |
| 31 | 0.945 | 1.086 | 1.010 | 0.141 |
| 32 | 1.086 | 1.247 | 1.161 | 0.161 |
| 33 | 1.247 | 1.432 | 1.333 | 0.185 |
| 34 | 1.432 | 1.646 | 1.531 | 0.214 |
| 35 | 1.646 | 1.891 | 1.760 | 0.245 |
| 36 | 1.891 | 2.172 | 2.021 | 0.281 |
| 37 | 2.172 | 2.495 | 2.323 | 0.323 |
| 38 | 2.495 | 2.865 | 2.667 | 0.370 |

| VTEM™ Decay Sampling Scheme | | | | |
|-----------------------------|-------|-------|--------|-------|
| Index | Start | End | Middle | Width |
| Milliseconds | | | | |
| 39 | 2.865 | 3.292 | 3.063 | 0.427 |
| 40 | 3.292 | 3.781 | 3.521 | 0.490 |
| 41 | 3.781 | 4.341 | 4.042 | 0.560 |
| 42 | 4.341 | 4.987 | 4.641 | 0.646 |
| 43 | 4.987 | 5.729 | 5.333 | 0.742 |
| 44 | 5.729 | 6.581 | 6.125 | 0.852 |
| 45 | 6.581 | 7.560 | 7.036 | 0.979 |
| 46 | 7.560 | 8.685 | 8.083 | 1.125 |

Z Component: 4 - 46 time gates
X Component: 20 - 46 time gates
Y Component: 20 - 46 time gates

Table 4: VTEM™ System Specifications

| Transmitter | Receiver |
|---|---|
| <ul style="list-style-type: none"> • Transmitter loop diameter: 26 m • Number of turns: 4 • Effective Transmitter loop area: 2123.7 m² • Transmitter base frequency: 30 Hz • Peak current: 193.0 A • Pulse width: 7.12 ms • Waveform shape: Bi-polar trapezoid • Peak dipole moment: 409,877 nIA • Average transmitter-receiver loop terrain clearance: 64 metres | <ul style="list-style-type: none"> • X-Coil diameter: 0.32 m • Number of turns: 245 • Effective coil area: 19.69 m² • Y-Coil diameter: 0.32 m • Number of turns: 245 • Effective coil area: 19.69 m² • Z-Coil diameter: 1.2 m • Number of turns: 100 • Effective coil area: 113.04 m² |

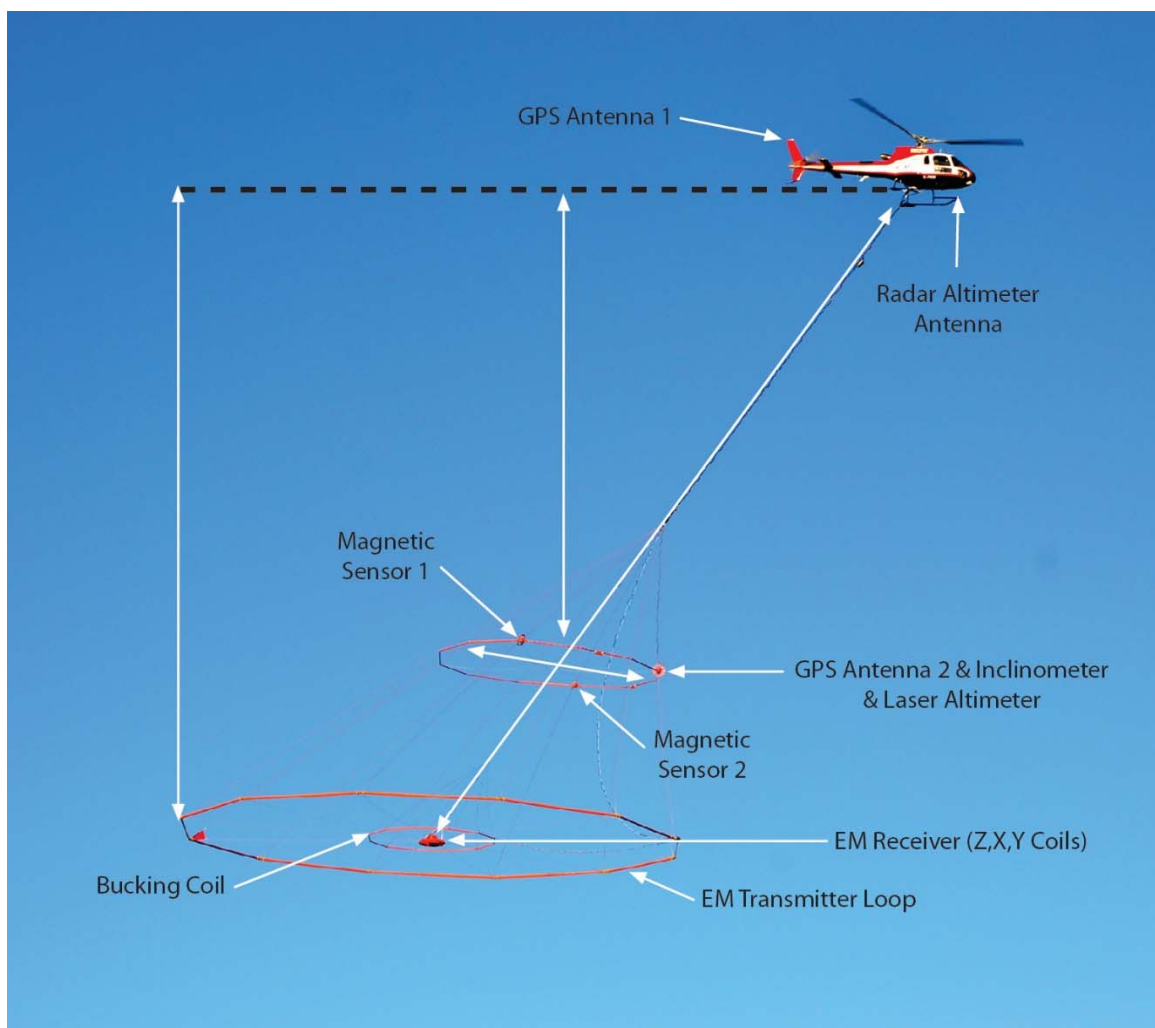


Figure 5: VTEM™plus System Configuration.

2.4.3 FULL WAVEFORM VTEM™ SENSOR CALIBRATION

The calibration is performed on the complete VTEM™ system installed in and connected to the helicopter, using special calibration equipment. This calibration takes place on the ground at the start of the project prior to surveying.

The procedure takes half-cycle files acquired and calculates a calibration file consisting of a single stacked half-cycle waveform. The purpose of the stacking is to attenuate natural and man-made magnetic signals, leaving only the response to the calibration signal.

This calibration allows the transfer function between the EM receiver and data acquisition system and the transfer function between the current monitor and data acquisition system to be determined. These calibration results are then used in VTEM full waveform processing.

2.4.4 HORIZONTAL MAGNETIC GRADIOMETER

The horizontal magnetic gradiometer consists of two Geometrics split-beam field magnetic sensors with a sampling interval of 0.1 seconds. These sensors are mounted 12.5 metres apart on a separate loop, 10 metres above the Transmitter-receiver loop. A GPS antenna and Gyro Inclinator is installed on the separate loop to accurately record the tilt and position of the magnetic gradiometer.

2.4.5 RADAR ALTIMETER

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit (Figure 5).

2.4.6 GPS NAVIGATION SYSTEM

The navigation system used was a Geotech PC104 based navigation system utilizing a NovAtel's WAAS (Wide Area Augmentation System) enabled GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and a NovAtel GPS antenna mounted on the helicopter tail (Figure 5). As many as 11 GPS and two WAAS satellites may be monitored at any one time. The positional accuracy or circular error probability (CEP) is 1.8 m, with WAAS active, it is 1.0 m. The coordinates of the survey area were set-up prior to the survey and the information was fed into the airborne navigation system. The second GPS antenna is installed on the additional magnetic loop together with Gyro Inclinator.

2.4.7 DIGITAL ACQUISITION SYSTEM

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. The data type and sampling interval as provided in Table 5

Table 5: Acquisition Sampling Rates

| Data Type | Sampling |
|-----------------|----------|
| TDEM | 0.1 sec |
| Magnetometer | 0.1 sec |
| GPS Position | 0.2 sec |
| Radar Altimeter | 0.2 sec |
| Inclinometer | 0.1 sec |

2.5 BASE STATION

A combined magnetometer/GPS base station was utilized on this project. A Geometrics Caesium vapour magnetometer was used as a magnetic sensor with a sensitivity of 0.001 nT. The base station was recording the magnetic field together with the GPS time at 1 Hz on a base station computer.

The base station magnetometer sensor was installed in a secured location away from electric transmission lines and moving ferrous objects such as motor vehicles. The base station data were backed-up to the data processing computer at the end of each survey day.

3. PERSONNEL

The following Geotech Ltd. personnel were involved in the project.

FIELD:

| | |
|------------------|--------------------------|
| Project Manager: | Adrian Sarmasag (Office) |
| Data QC: | Marta Orta |
| Crew chief: | Daniel Zatingh |
| Operator: | n/a |

The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Geotech Aviation Ltd.

| | |
|----------------------|------------|
| Pilot: | Rob Girald |
| Mechanical Engineer: | n/a |

OFFICE:

| | |
|------------------------------|----------------------------|
| Preliminary Data Processing: | Marta Orta |
| Final Data Processing: | Zihao Han |
| Data QA/QC: | Emily Data Jean Legault |
| Reporting/Mapping: | Emily Data |

Processing and Interpretation phases were carried out under the supervision of Emily Data & Jean M. Legault, M.Sc.A, P.Eng, P.Geo – Chief Geophysicist. The customer relations were looked after by Paolo Berardelli.

4. DATA PROCESSING AND PRESENTATION

Data compilation and processing were carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Ltd.

4.1 FLIGHT PATH

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the NAD83 Datum, UTM Zone 16N coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x, y positions from the navigation system. Positions are updated every second and expressed as UTM easting's (x) and UTM northing's (y).

4.2 ELECTROMAGNETIC DATA

The Full Waveform EM specific data processing operations included:

- Half cycle stacking (performed at time of acquisition).
- System response correction.
- Parasitic and drift removal.

A three-stage digital filtering process was used to reject major spheric events and to reduce noise levels. Local spheric activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major spheric events.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 15 metres. This filter is a symmetrical 1 sec linear filter.

The results are presented as stacked profiles of EM voltages for the time gates, in linear - logarithmic scale for the B-field Z component and dB/dt responses in the Z and X components. B-field Z component time channels recorded at 0.880 milliseconds after the termination of the impulse is also presented as a colour image. Calculated Time Constant (TAU) with Calculated Vertical Derivative contours is presented in Appendix C and E.

VTEM™ has three receiver coil orientations. Z-axis coil is oriented parallel to the transmitter coil axis and both are horizontal to the ground. The X-axis coil is oriented parallel to the ground and along the line-of-flight. The Y-axis coil is oriented parallel to the ground and perpendicular to the line-of-flight. The combination of the X, Y and Z coils configuration provides information on the position, depth, dip, and thickness of a conductor. Generalized modeling results of VTEM data, are shown in Appendix D.

In general X-component data produce cross-over type anomalies: from “+ to -” in flight direction of flight for “thin” sub vertical targets and from “- to +” in direction of flight for “thick” targets. Z component data produce double peak type anomalies for “thin” sub vertical targets and single peak for “thick” targets.

The limits and change-over of “thin-thick” depends on dimensions of a TEM system (Appendix D, Figure D-16).

Because of X component polarity is under line-of-flight, convolution Fraser Filter (Figure 6) is applied to X component data to represent axes of conductors in the form of grid map. In this case positive FF anomalies always correspond to “plus-to-minus” X data crossovers independent of the flight direction.

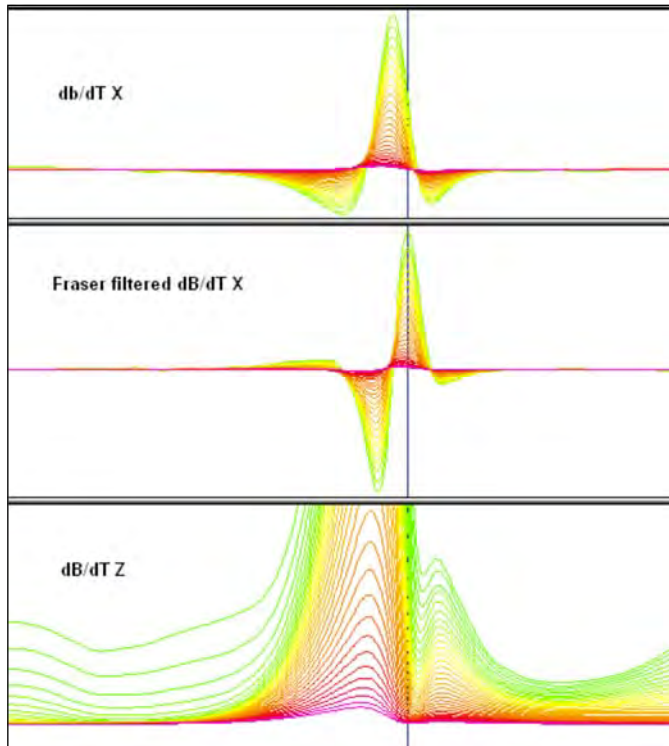


Figure 6: Z, X and Fraser filtered X (FFx) components for “thin” target.

4.3 HORIZONTAL MAGNETIC GRADIOMETER DATA

The horizontal gradients data from the VTEM™Plus are measured by two magnetometers 12.5 m apart on an independent bird mounted 10m above the VTEM™ loop. A GPS and a Gyro Inclinometer help to determine the positions and orientations of the magnetometers. The data from the two magnetometers are corrected for position and orientation variations, as well as for the diurnal variations using the base station data.

The position of the centre of the horizontal magnetic gradiometer bird is calculated from the GPS utilizing in-house processing tool in Geosoft. Following that total magnetic intensity is calculated at the center of the bird by calculating the mean values from both sensors. In addition to the total intensity advanced processing is done to calculate the in-line and cross-line (or lateral) horizontal gradient which enhance the understanding of magnetic targets. The in-line (longitudinal) horizontal gradient is calculated from the difference of two consecutive total magnetic field readings divided by the distance along the flight line direction, while the cross-line (lateral) horizontal magnetic gradient is calculated from the difference in the magnetic readings from both magnetic sensors divided by their horizontal separation.

Two advanced magnetic derivative products, the total horizontal derivative (THDR), and tilt angle derivative and are also created. The total horizontal derivative or gradient is defined as:

$THDR = \sqrt{H_x^2 + H_y^2}$, where H_x and H_y are cross-line and in-line horizontal gradients.

The tilt angle derivative (TDR) is defined as:

$TDR = \arctan(V_z/THDR)$, where THDR is the total horizontal derivative, and V_z is the vertical derivative.

Measured cross-line gradients can help to enhance cross-line linear features during gridding.

5. DELIVERABLES

5.1 SURVEY REPORT

The survey report describes the data acquisition, processing, and final presentation of the survey results. The survey report is provided in two paper copies and digitally in PDF format.

5.2 MAPS

Final maps were produced at scale of 1:15,000 for best representation of the survey size and line spacing. The coordinate/projection system used was NAD83 Datum, UTM Zone 16N. All maps show the flight path trace and topographic data; latitude and longitude are also noted on maps.

The preliminary results of the survey are presented as EM profiles, a late-time gate gridded EM channel, and a colour magnetic TMI contour map.

- Maps at 1:15,000 in Geosoft MAP format, as follows:

| | |
|-----------------------|--|
| GL200223_15k_dBdt: | dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale. |
| GL200223_15k_BField: | B-field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale. |
| GL200223_15k_BFz30: | B-field Z Component Channel 30, Time Gate 0.880 ms colour image. |
| GL200223_15k_SFz35: | VTEM dB/dt Z Component Channel 35, Time Gate 1.760 ms colour image |
| GL200223_15k_SFxFF30: | Fraser Filtered dB/dt X Component Channel 30, Time Gate 0.880 ms colour image. |
| GL200223_15k_TMI: | Total Magnetic Intensity (TMI) colour image and contours. |

- Maps are also presented in PDF format.
- The topographic data base was derived from 1:50,000 CANVEC data. Background shading is derived from ASTER GDEM (<https://gdex.cr.usgs.gov/gdex/>). Inset data is from Geocommunities (www.geocomm.com)
- A Google Earth file *GL200223_Kingsview.kmz* showing the flight path of the block is included. Free versions of Google Earth software from: <http://earth.google.com/download-earth.html>

5.3 DIGITAL DATA

Two copies of the data and maps on DVD were prepared to accompany the report. Each DVD contains a digital file of the line data in GDB Geosoft Montaj format as well as the maps in Geosoft Montaj Map and PDF format.

- DVD structure.

Data contains databases, grids and maps, as described below.
 Report contains a copy of the report and appendices in PDF format.

Databases in Geosoft GDB format, containing the channels listed in Table 6.

Table 6: Geosoft GDB Data Format

| Channel name | Units | Description |
|--------------|------------------------|--|
| X | metres | Easting NAD83 Zone 16N |
| Y | metres | Northing NAD83 Zone 16N |
| Longitude | Decimal Degrees | WGS84 Longitude data |
| Latitude | Decimal Degrees | WGS84 Latitude data |
| Z | metres | GPS antenna elevation |
| Zb | metres | EM bird elevation |
| Radar | metres | Helicopter terrain clearance from radar altimeter |
| Radarb | metres | Calculated EM transmitter-receiver loop terrain clearance from radar altimeter |
| DEM | metres | Digital Elevation Model |
| Gtime | Seconds of the day | GPS time |
| Mag1L | nT | Measured Total Magnetic field data (left sensor) |
| Mag1R | nT | Measured Total Magnetic field data (right sensor) |
| Basemag | nT | Magnetic diurnal variation data |
| Mag2L | nT | Diurnal corrected magnetic field left mag |
| Mag2R | nT | Diurnal corrected magnetic field right mag |
| SFz[4] | pV/(A*m ⁴) | Z dB/dt 0.021 millisecond time channel |
| SFz[5] | pV/(A*m ⁴) | Z dB/dt 0.026 millisecond time channel |
| SFz[6] | pV/(A*m ⁴) | Z dB/dt 0.031 millisecond time channel |
| SFz[7] | pV/(A*m ⁴) | Z dB/dt 0.036 millisecond time channel |
| SFz[8] | pV/(A*m ⁴) | Z dB/dt 0.042 millisecond time channel |
| SFz[9] | pV/(A*m ⁴) | Z dB/dt 0.048 millisecond time channel |
| SFz[10] | pV/(A*m ⁴) | Z dB/dt 0.055 millisecond time channel |
| SFz[11] | pV/(A*m ⁴) | Z dB/dt 0.063 millisecond time channel |
| SFz[12] | pV/(A*m ⁴) | Z dB/dt 0.073 millisecond time channel |
| SFz[13] | pV/(A*m ⁴) | Z dB/dt 0.083 millisecond time channel |
| SFz[14] | pV/(A*m ⁴) | Z dB/dt 0.096 millisecond time channel |
| SFz[15] | pV/(A*m ⁴) | Z dB/dt 0.110 millisecond time channel |
| SFz[16] | pV/(A*m ⁴) | Z dB/dt 0.126 millisecond time channel |
| SFz[17] | pV/(A*m ⁴) | Z dB/dt 0.145 millisecond time channel |
| SFz[18] | pV/(A*m ⁴) | Z dB/dt 0.167 millisecond time channel |
| SFz[19] | pV/(A*m ⁴) | Z dB/dt 0.192 millisecond time channel |
| SFz[20] | pV/(A*m ⁴) | Z dB/dt 0.220 millisecond time channel |
| SFz[21] | pV/(A*m ⁴) | Z dB/dt 0.253 millisecond time channel |
| SFz[22] | pV/(A*m ⁴) | Z dB/dt 0.290 millisecond time channel |

| Channel name | Units | Description |
|--------------|------------------------|--|
| SFz[23] | pV/(A*m ⁴) | Z dB/dt 0.333 millisecond time channel |
| SFz[24] | pV/(A*m ⁴) | Z dB/dt 0.383 millisecond time channel |
| SFz[25] | pV/(A*m ⁴) | Z dB/dt 0.440 millisecond time channel |
| SFz[26] | pV/(A*m ⁴) | Z dB/dt 0.505 millisecond time channel |
| SFz[27] | pV/(A*m ⁴) | Z dB/dt 0.580 millisecond time channel |
| SFz[28] | pV/(A*m ⁴) | Z dB/dt 0.667 millisecond time channel |
| SFz[29] | pV/(A*m ⁴) | Z dB/dt 0.766 millisecond time channel |
| SFz[30] | pV/(A*m ⁴) | Z dB/dt 0.880 millisecond time channel |
| SFz[31] | pV/(A*m ⁴) | Z dB/dt 1.010 millisecond time channel |
| SFz[32] | pV/(A*m ⁴) | Z dB/dt 1.161 millisecond time channel |
| SFz[33] | pV/(A*m ⁴) | Z dB/dt 1.333 millisecond time channel |
| SFz[34] | pV/(A*m ⁴) | Z dB/dt 1.531 millisecond time channel |
| SFz[35] | pV/(A*m ⁴) | Z dB/dt 1.760 millisecond time channel |
| SFz[36] | pV/(A*m ⁴) | Z dB/dt 2.021 millisecond time channel |
| SFz[37] | pV/(A*m ⁴) | Z dB/dt 2.323 millisecond time channel |
| SFz[38] | pV/(A*m ⁴) | Z dB/dt 2.667 millisecond time channel |
| SFz[39] | pV/(A*m ⁴) | Z dB/dt 3.063 millisecond time channel |
| SFz[40] | pV/(A*m ⁴) | Z dB/dt 3.521 millisecond time channel |
| SFz[41] | pV/(A*m ⁴) | Z dB/dt 4.042 millisecond time channel |
| SFz[42] | pV/(A*m ⁴) | Z dB/dt 4.641 millisecond time channel |
| SFz[43] | pV/(A*m ⁴) | Z dB/dt 5.333 millisecond time channel |
| SFz[44] | pV/(A*m ⁴) | Z dB/dt 6.125 millisecond time channel |
| SFz[45] | pV/(A*m ⁴) | Z dB/dt 7.036 millisecond time channel |
| SFx[20] | pV/(A*m ⁴) | X dB/dt 0.220 millisecond time channel |
| SFx[21] | pV/(A*m ⁴) | X dB/dt 0.253 millisecond time channel |
| SFx[22] | pV/(A*m ⁴) | X dB/dt 0.290 millisecond time channel |
| SFx[23] | pV/(A*m ⁴) | X dB/dt 0.333 millisecond time channel |
| SFx[24] | pV/(A*m ⁴) | X dB/dt 0.383 millisecond time channel |
| SFx[25] | pV/(A*m ⁴) | X dB/dt 0.440 millisecond time channel |
| SFx[26] | pV/(A*m ⁴) | X dB/dt 0.505 millisecond time channel |
| SFx[27] | pV/(A*m ⁴) | X dB/dt 0.580 millisecond time channel |
| SFx[28] | pV/(A*m ⁴) | X dB/dt 0.667 millisecond time channel |
| SFx[29] | pV/(A*m ⁴) | X dB/dt 0.766 millisecond time channel |
| SFx[30] | pV/(A*m ⁴) | X dB/dt 0.880 millisecond time channel |
| SFx[31] | pV/(A*m ⁴) | X dB/dt 1.010 millisecond time channel |
| SFx[32] | pV/(A*m ⁴) | X dB/dt 1.161 millisecond time channel |
| SFx[33] | pV/(A*m ⁴) | X dB/dt 1.333 millisecond time channel |
| SFx[34] | pV/(A*m ⁴) | X dB/dt 1.531 millisecond time channel |
| SFx[35] | pV/(A*m ⁴) | X dB/dt 1.760 millisecond time channel |
| SFx[36] | pV/(A*m ⁴) | X dB/dt 2.021 millisecond time channel |
| SFx[37] | pV/(A*m ⁴) | X dB/dt 2.323 millisecond time channel |
| SFx[38] | pV/(A*m ⁴) | X dB/dt 2.667 millisecond time channel |
| SFx[39] | pV/(A*m ⁴) | X dB/dt 3.063 millisecond time channel |
| SFx[40] | pV/(A*m ⁴) | X dB/dt 3.521 millisecond time channel |
| SFx[41] | pV/(A*m ⁴) | X dB/dt 4.042 millisecond time channel |
| SFx[42] | pV/(A*m ⁴) | X dB/dt 4.641 millisecond time channel |
| SFx[43] | pV/(A*m ⁴) | X dB/dt 5.333 millisecond time channel |
| SFx[44] | pV/(A*m ⁴) | X dB/dt 6.125 millisecond time channel |
| SFx[45] | pV/(A*m ⁴) | X dB/dt 7.036 millisecond time channel |

| Channel name | Units | Description |
|--------------|---|---|
| SFx[46] | $\text{pV}/(\text{A}\cdot\text{m}^4)$ | X dB/dt 8.083 millisecond time channel |
| SFy | $\text{pV}/(\text{A}\cdot\text{m}^4)$ | Y dB/dt data for time channels 20 to 46 |
| BFz | $(\text{pV}\cdot\text{ms})/(\text{A}\cdot\text{m}^4)$ | Z B-Field data for time channels 4 to 46 |
| BFx | $(\text{pV}\cdot\text{ms})/(\text{A}\cdot\text{m}^4)$ | X B-Field data for time channels 20 to 46 |
| BFy | $(\text{pV}\cdot\text{ms})/(\text{A}\cdot\text{m}^4)$ | Y B-Field data for time channels 20 to 46 |
| PLM | | 60 Hz power line monitor |

Electromagnetic B-field and dB/dt Z component data is found in array channel format between indexes 4 – 46, and X & Y component data from 20 – 46, as described above.

- Database of the VTEM Waveform “GL200223_Waveform.gdb” in Geosoft GDB format, containing the following channels:

Table 7: Geosoft database for the VTEM waveform

| Channel name | Units | Description |
|--------------|--------------|---|
| Time | milliseconds | Sampling rate interval, 5.2083 microseconds |
| Tx_Current | amps | Output current of the transmitter |

6. CONCLUSIONS AND RECOMMENDATIONS

A helicopter-borne versatile time domain electromagnetic (VTEM™plus) horizontal magnetic gradiometer geophysical survey has been completed over the Echum Project near Wawa, ON, on behalf of Kingsview Minerals Ltd.

The total area coverage is 34 km² and the total survey line coverage is 380 line kilometres over a single block. The principal sensors included a Time Domain EM system, and a horizontal magnetic gradiometer system with two caesium magnetometers. Results have been presented as stacked profiles, and contour colour images at a scale of 1:15,000. A formal interpretation has not been included in this study.

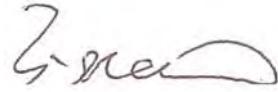
The Echum project is located in the southeastern Wawa Greenstone Belt. The bedrock geology and exploration history of the property are not fully known by the authors. Based on the geophysical results obtained, a number of geophysical anomalies have been identified across the survey area. Magnetically, the block features a NW-SE trending band of more strongly magnetic rocks that extends through the center and more weakly magnetic rocks on the northeast, southwest and southeast edges. The central magnetic horizon contains at least two distinct lineament trends : one group striking in the NNW direction, the other in NW directions. The NW oriented features appear truncated by the NNW bodies, likely a reflection of complex structural geology. The conductive signatures are less complex, with a prominent, strong NW oriented zone of moderate to high conductivity occurring on the southwest flank of the magnetic horizon between L1310 and L1440 and appearing to feature multiple conductives bodies. Based on the EM profiles the source of most of the EM anomalies are steep to sub-vertical dipping, thin to thick conductors, with top depths of about 50 metres. Depths of investigation (DOI) vary between 200-+500m across the property.

The Echum property is known to be prospective for shear-hosted gold-silver-lead and polymetallic zinc-copper mineralization is also present (www.kingsviewminerals.ca). It is likely that both the resistivity and the magnetic information are of exploration importance. We therefore recommend that EM anomaly picking and Maxwell plate modeling of EM anomalies be performed with test drill hole parameters planning prior to ground follow up and drill testing. More advanced 1D layered earth modeling of the EM data will prove useful in highlighting weakly anomalous resistive and conductive features of interest, both in plan and in cross-section, for targeting shear-hosted gold. Magnetic CET structural and lineament analysis as well as 3D MVI magnetic inversions will be useful for mapping structure, alteration, and lithology in 2D-3D space across the property. We recommend that more advanced, integrated interpretation be performed on these geophysical data and these results further evaluated against the known geology for future targeting.

Respectfully submitted².



Marta Orta
Geotech Ltd.



Zihao Han
Geotech Ltd.



Jean M. Legault, M.Sc.A, P.Eng, P.Geo
Geotech Ltd.



Emily Data
Geotech Ltd.

April 2021.

² Final data processing of the EM and magnetic data were carried out by Zihao Han, from the offices of Geotech Ltd. in Aurora, Ontario, under the supervision of Emily Data & Jean M. Legault, M.Sc.A., P.Eng, P.Geo – Chief Geophysicist.

APPENDIX A

SURVEY AREA LOCATION MAP



Overview of the Survey Area

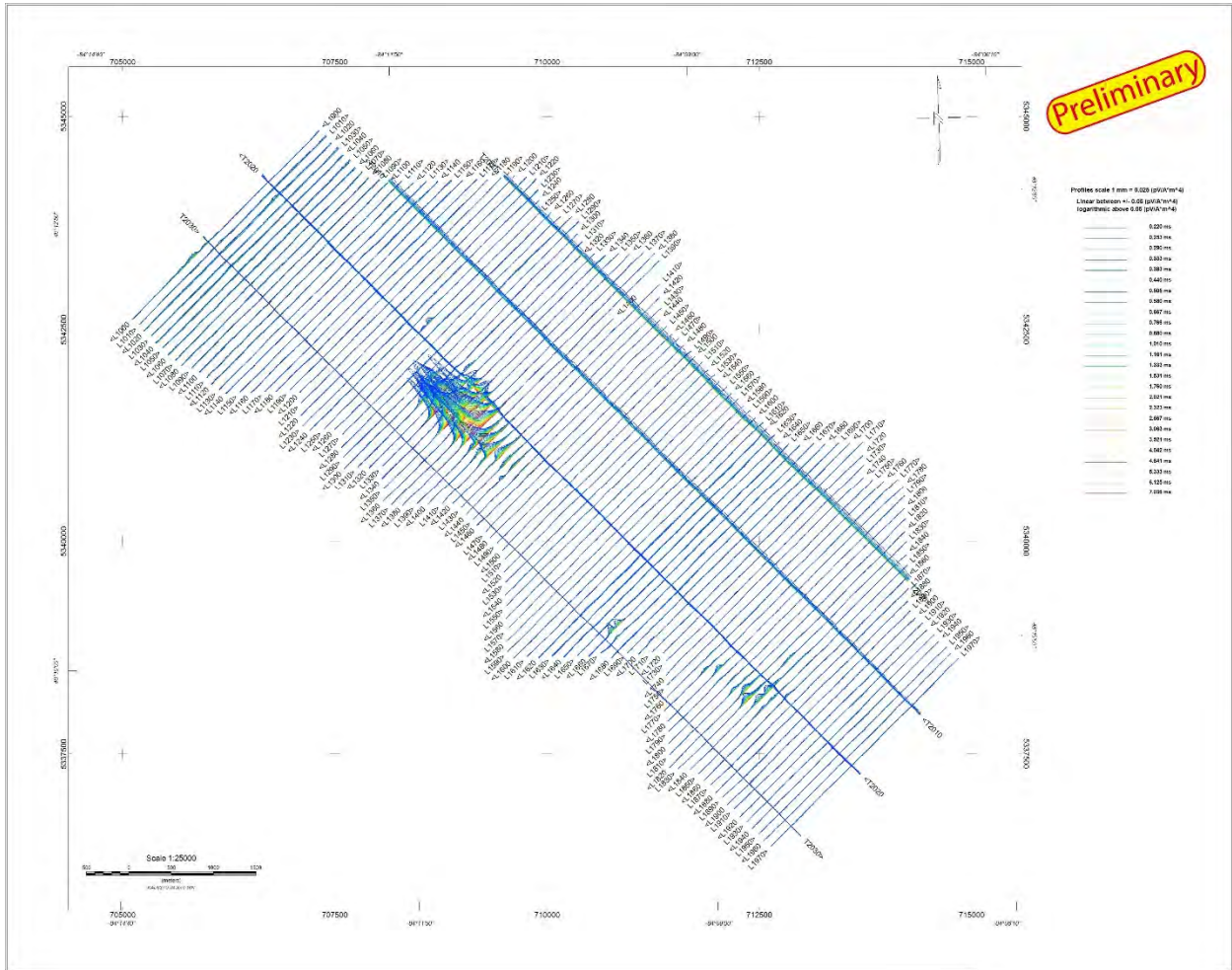
APPENDIX B

SURVEY AREA COORDINATES

(NAD83 UTM Zone 16N)

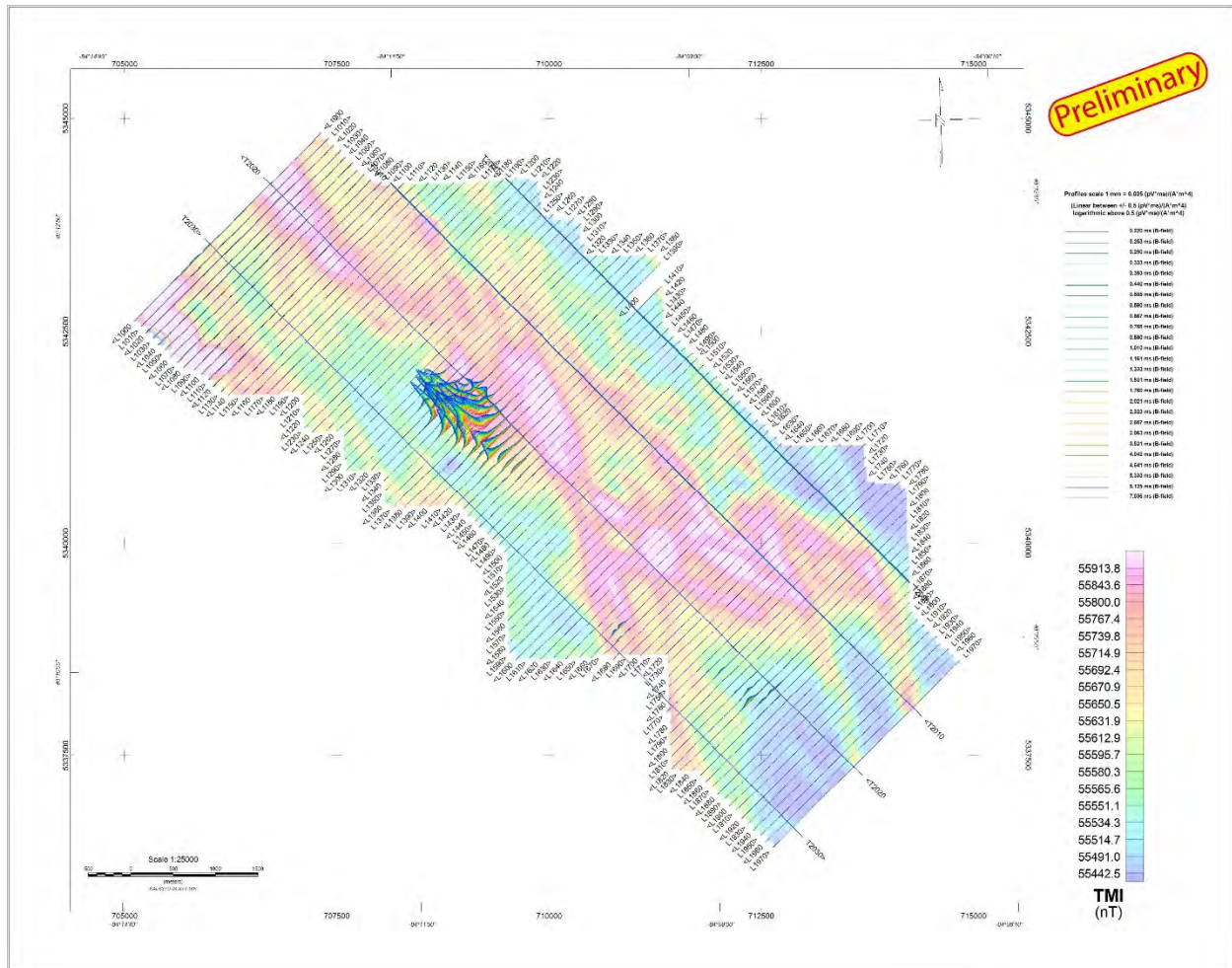
| X | Y |
|--------|---------|
| 705098 | 5342660 |
| 707289 | 5344861 |
| 707923 | 5344271 |
| 709903 | 5344324 |
| 709903 | 5343875 |
| 710388 | 5343840 |
| 710449 | 5343417 |
| 711303 | 5343426 |
| 711338 | 5342555 |
| 712738 | 5341181 |
| 713732 | 5341199 |
| 713750 | 5340759 |
| 714190 | 5340750 |
| 714243 | 5339157 |
| 714859 | 5338647 |
| 712614 | 5336393 |
| 711761 | 5337300 |
| 711373 | 5337326 |
| 711382 | 5338682 |
| 709507 | 5338620 |
| 709472 | 5339896 |
| 708988 | 5340451 |
| 708029 | 5340451 |
| 708029 | 5340900 |
| 707509 | 5340891 |
| 707501 | 5341322 |
| 707104 | 5341331 |
| 707096 | 5341762 |
| 706215 | 5341745 |

APPENDIX C - GEOPHYSICAL MAPS¹

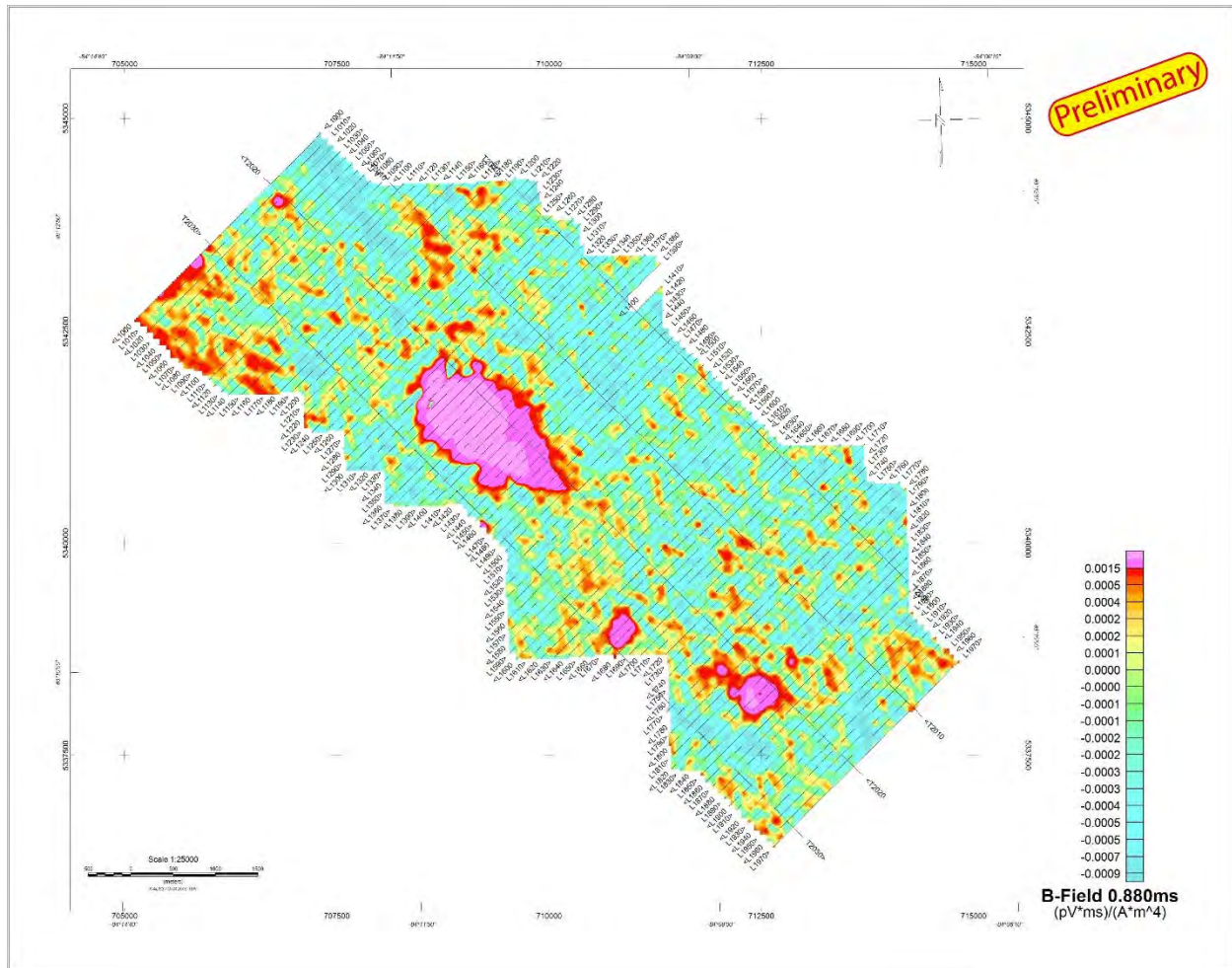


dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms

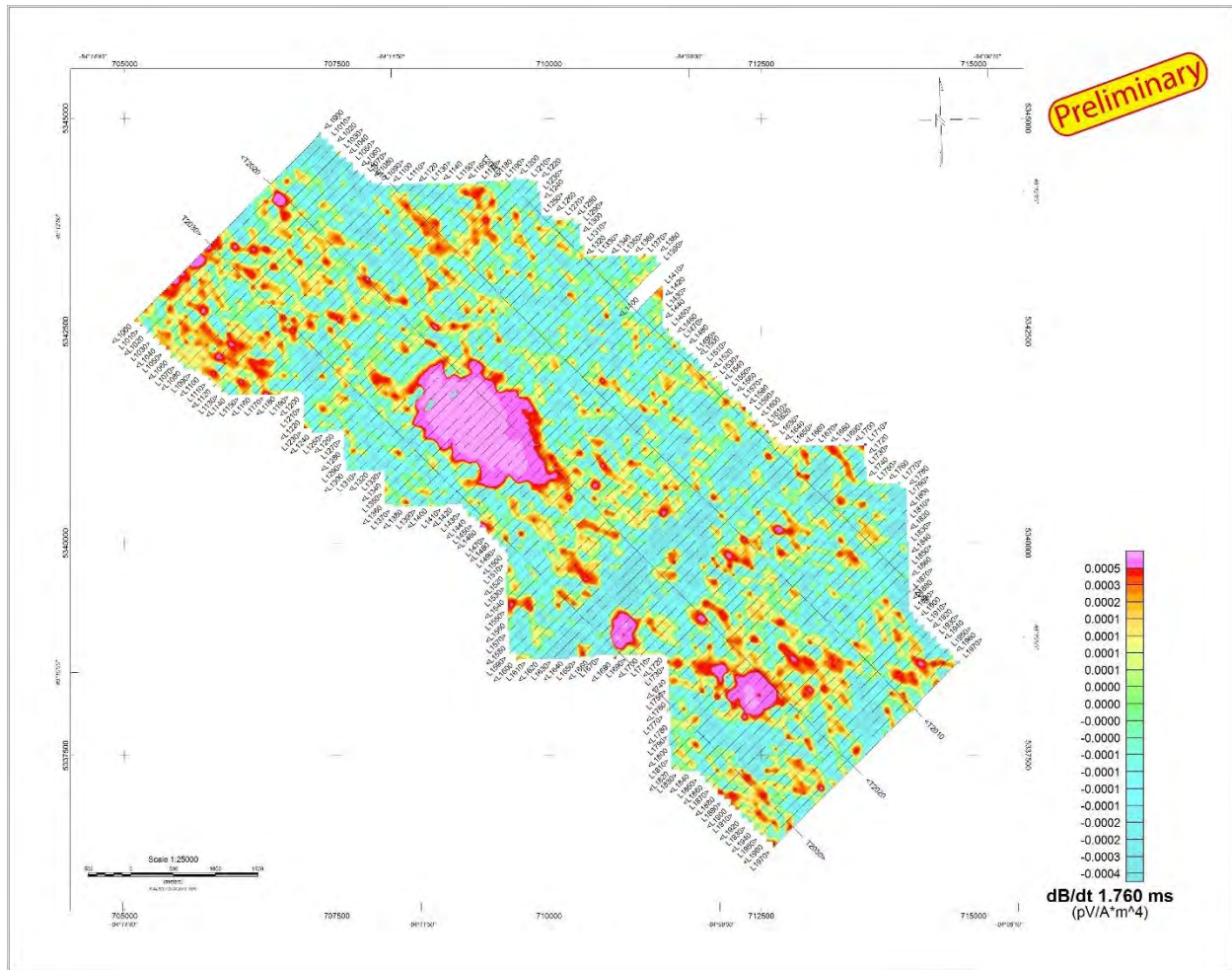
¹ Complete full size geophysical maps are also available in PDF format located in the final data maps folder



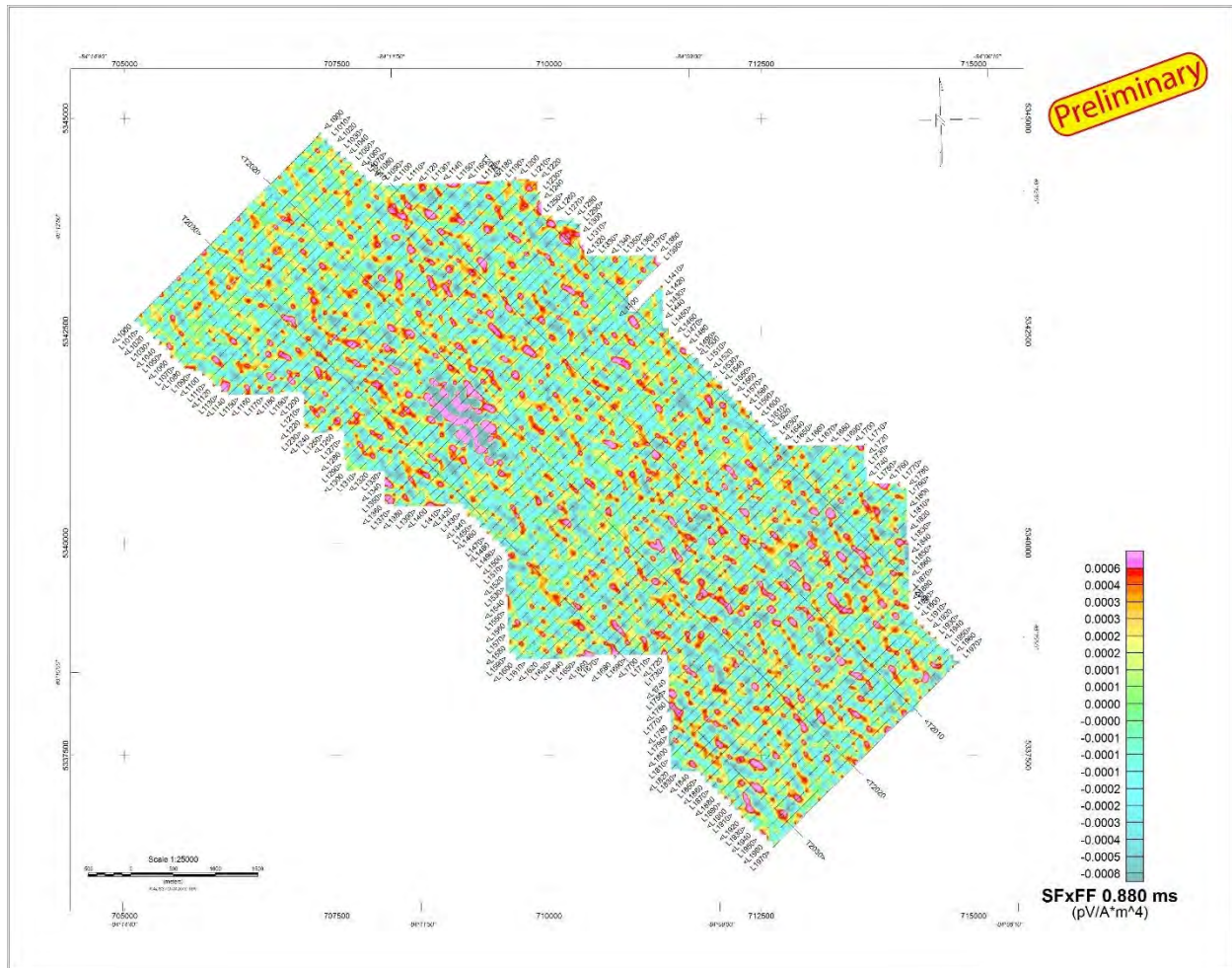
B-field profiles Z Component, Time Gates 0.220 – 7.036 ms over TMI colour image



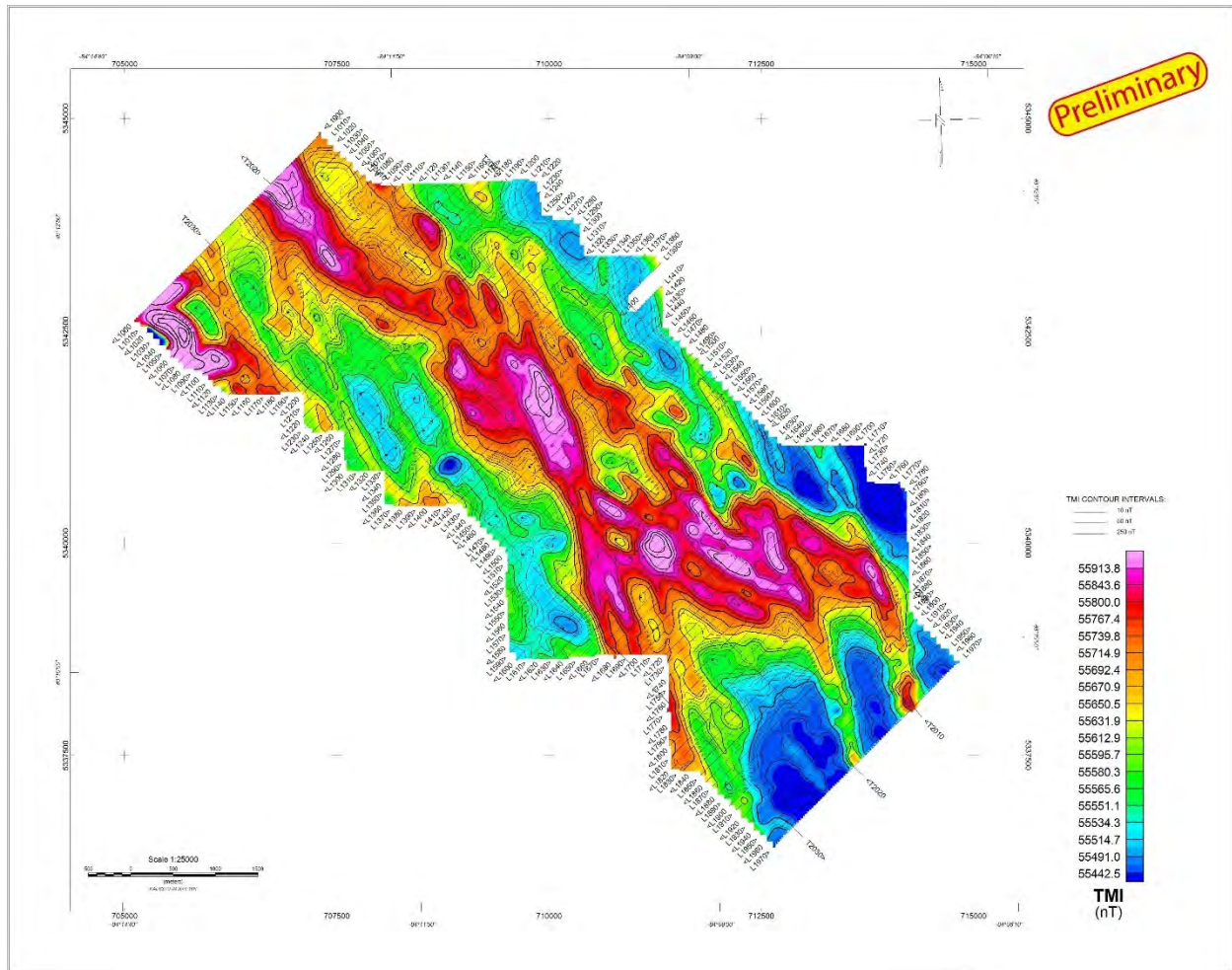
B-field Z Component Channel 30, Time Gate 0.880 ms colour image



VTEM dB/dt Z Component Channel 35, Time Gate 1.760 ms colour image



Fraser Filtered dB/dt X Component Channel 30, Time Gate 0.880 ms colour image



Total Magnetic Intensity (TMI) colour image and contours

APPENDIX D

GENERALIZED MODELING RESULTS OF THE VTEM SYSTEM INTRODUCTION

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a transmitter loop that produces a primary field. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end.

During turn-on and turn-off, a time varying field is produced (dB/dt) and an electro-motive force (emf) is created as a finite impulse response. A current ring around the transmitter loop moves outward and downward as time progresses. When conductive rocks and mineralization are encountered, a secondary field is created by mutual induction and measured by the receiver at the centre of the transmitter loop.

Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

A set of models has been produced for the Geotech VTEM™ system dB/dT Z and X components (see models D1 to D15). The Maxwell™ modeling program (EMIT Technology Pty. Ltd. Midland, WA, AU) used to generate the following responses assumes a resistive half-space. The reader is encouraged to review these models, so as to get a general understanding of the responses as they apply to survey results. While these models do not begin to cover all possibilities, they give a general perspective on the simple and most commonly encountered anomalies.

As the plate dips and departs from the vertical position, the peaks become asymmetrical.

As the dip increases, the aspect ratio (Min/Max) decreases and this aspect ratio can be used as an empirical guide to dip angles from near 90° to about 30° . The method is not sensitive enough where dips are less than about 30° .

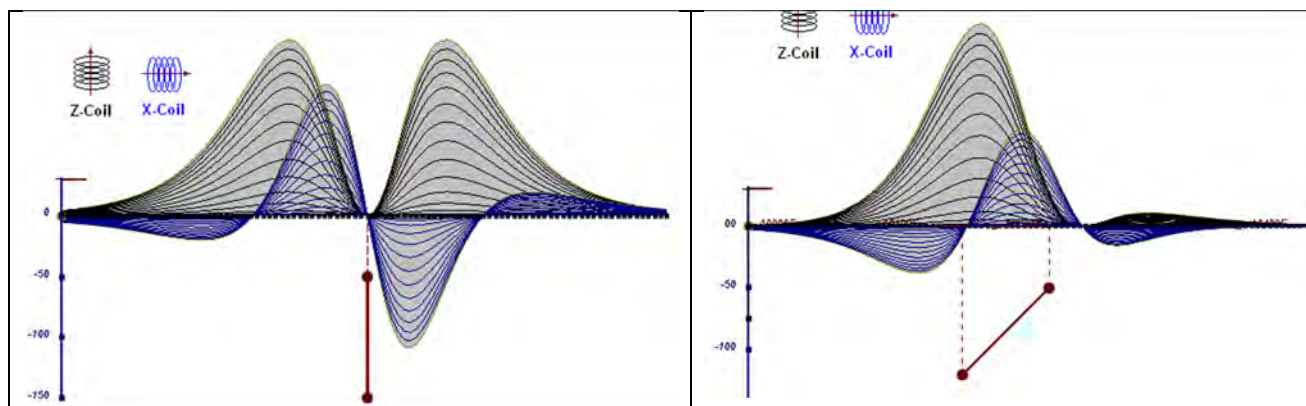


Figure D-1: vertical thin plate

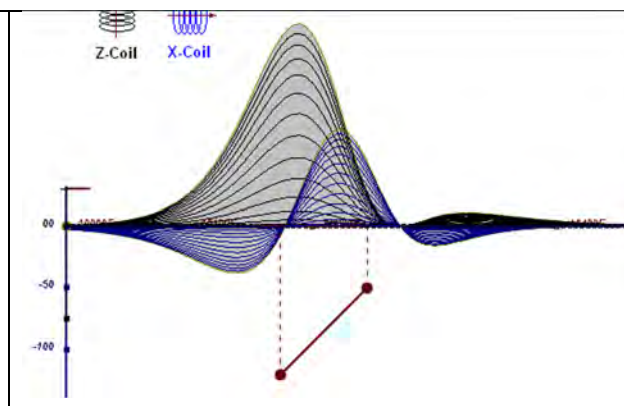


Figure D-2: inclined thin plate

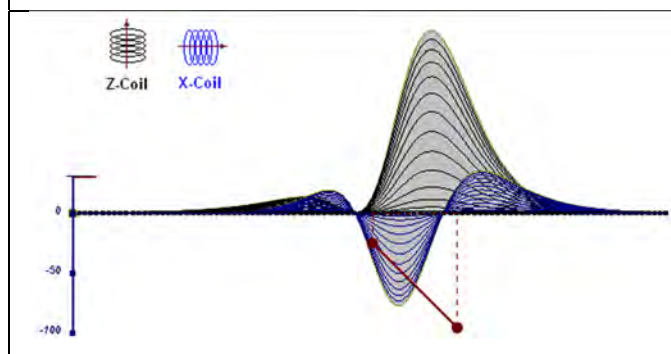


Figure D-3: inclined thin plate

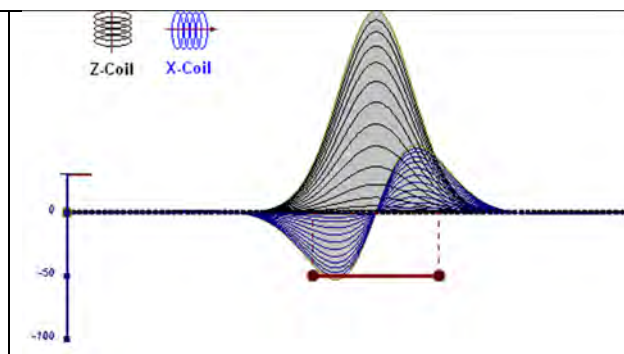


Figure D-4: horizontal thin plate

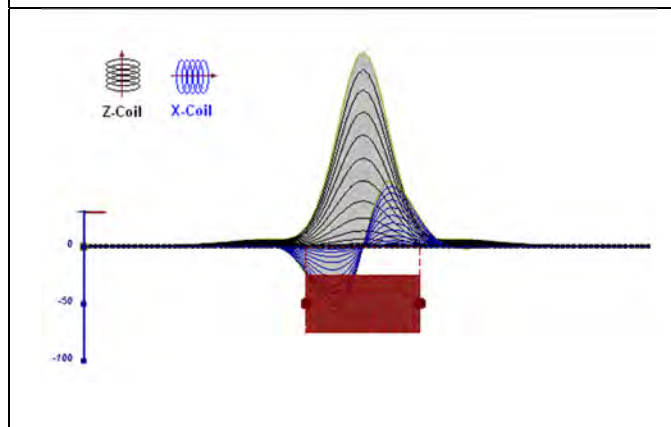


Figure D-5: horizontal thick plate (linear scale of the response)

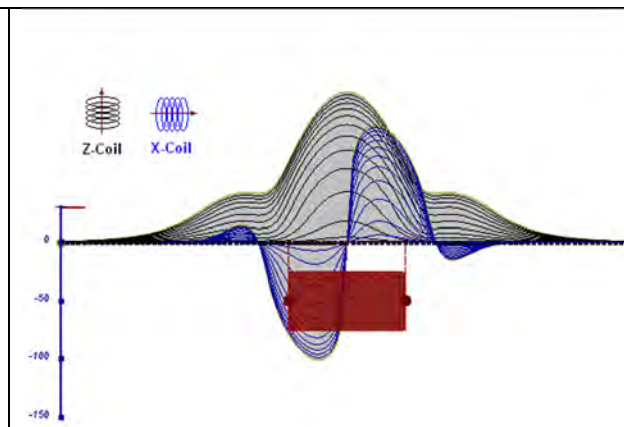


Figure D-6: horizontal thick plate (log scale of the response)

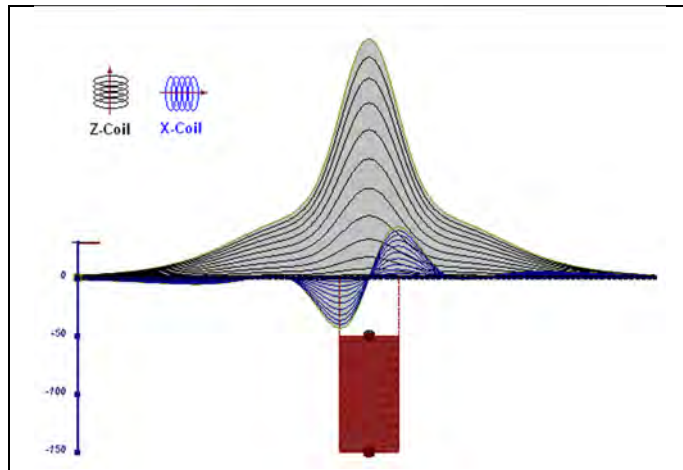


Figure D-7: vertical thick plate (linear scale of the response). 50 m depth

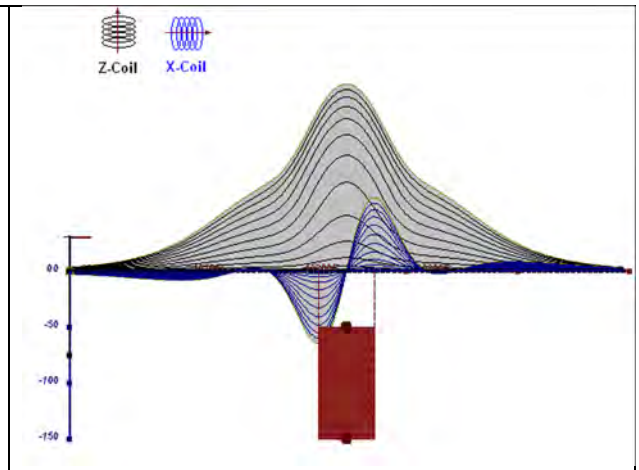


Figure D-8: vertical thick plate (log scale of the response). 50 m depth

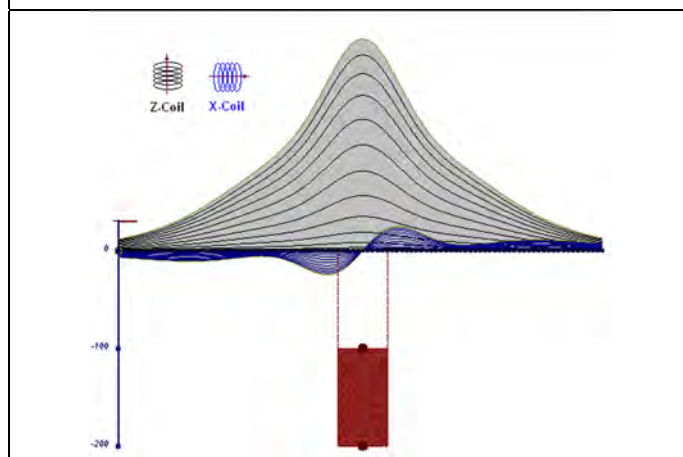


Figure D-9: vertical thick plate (linear scale of the response). 100 m depth

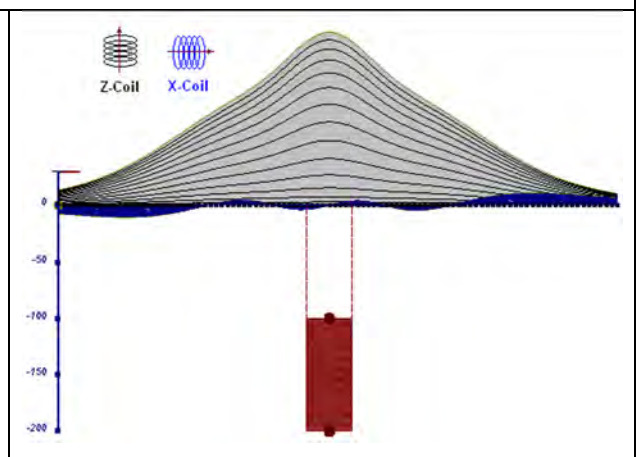


Figure D-10: vertical thick plate (linear scale of the response). Depth / horizontal thickness=2.5

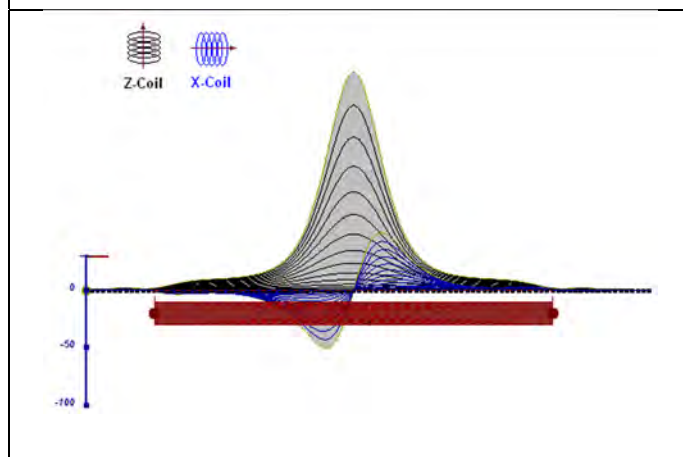


Figure D-11: horizontal thick plate (linear scale of the response)

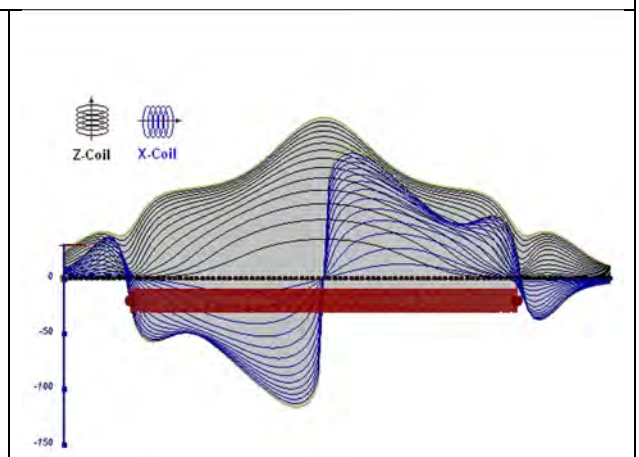


Figure D-12: horizontal thick plate (log scale of the response)

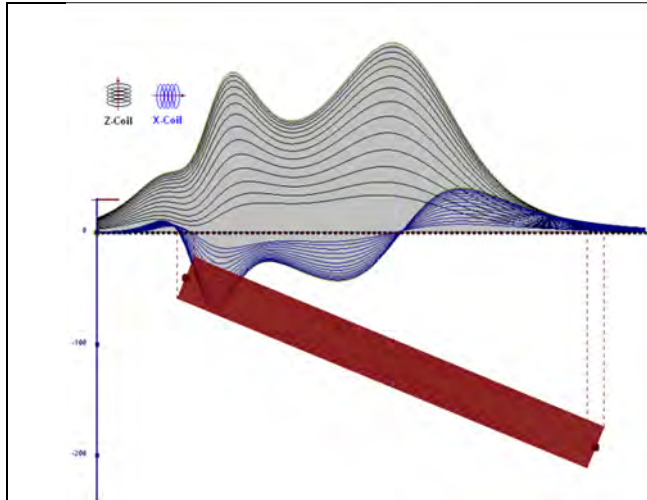


Figure D-13: inclined long thick plate

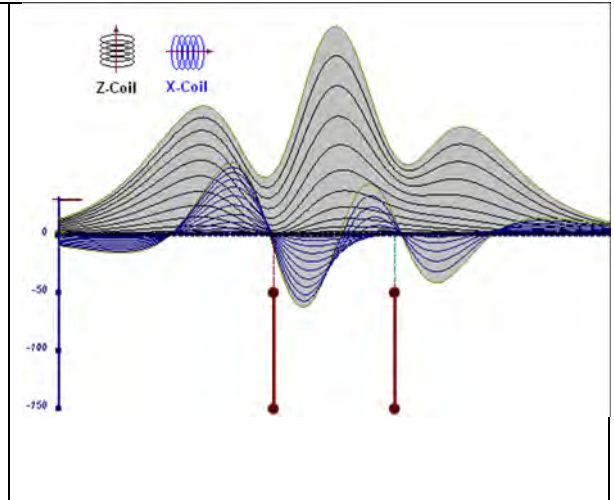


Figure D-14: two vertical thin plates

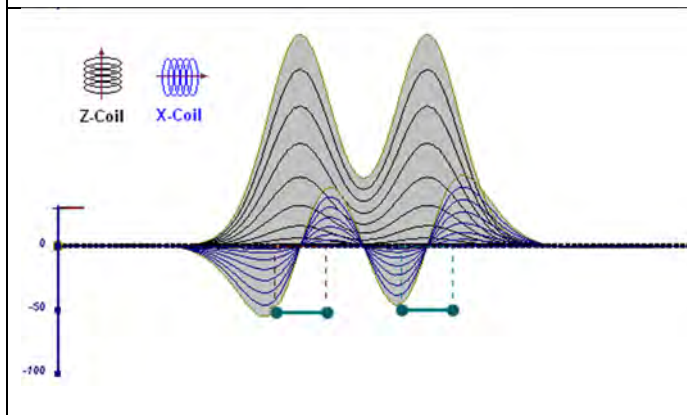


Figure D-15: two horizontal thin plates

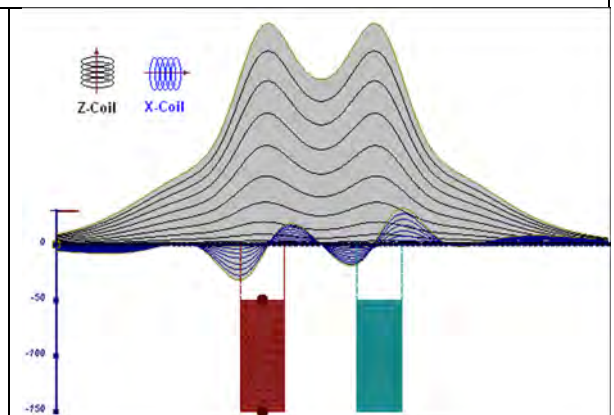


Figure D-16: two vertical thick plates

The same type of target but with different thickness, for example, creates different form of the response:

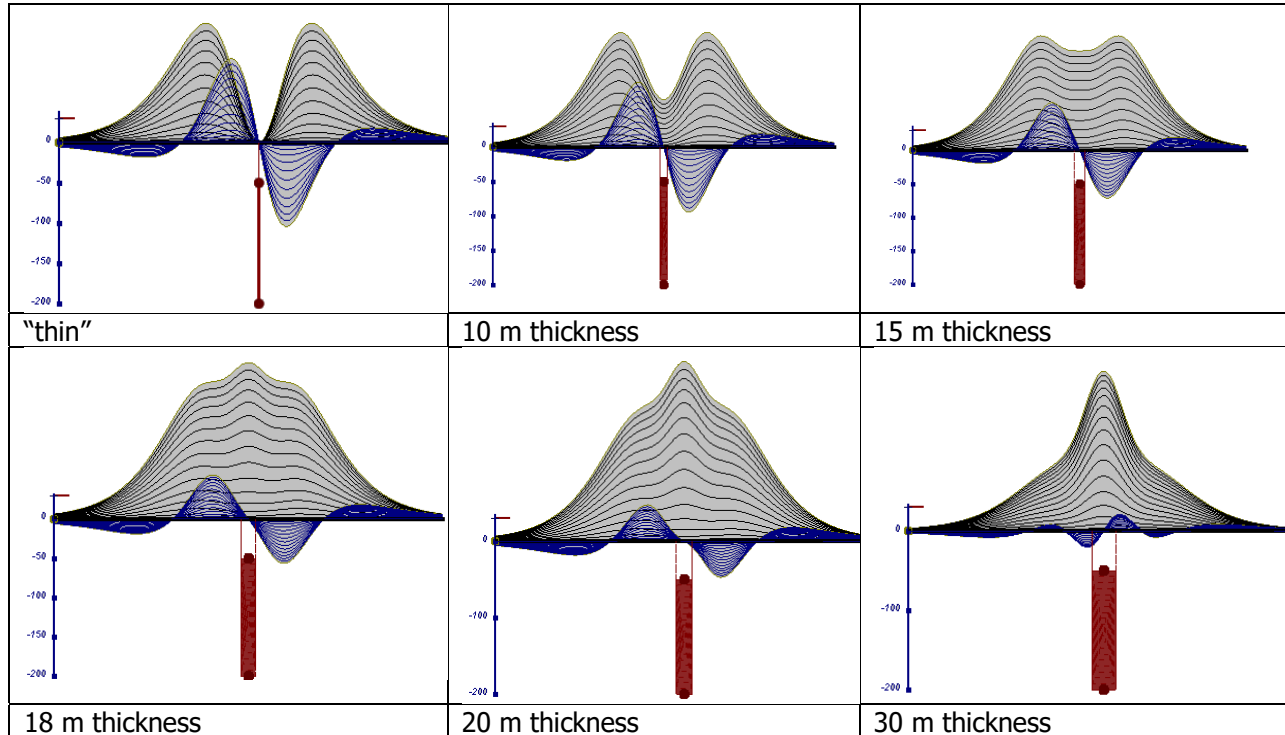


Figure D-17: Conductive vertical plate, depth 50 m, strike length 200 m, depth extends 150 m.

Alexander Prikhodko, PhD, P.Geol
Geotech Ltd.

September 2010

APPENDIX E

EM TIME CONSTANT (TAU) ANALYSIS

Estimation of time constant parameter¹ in transient electromagnetic method is one of the steps toward the extraction of the information about conductances beneath the surface from TEM measurements.

The most reliable method to discriminate or rank conductors from overburden, background or one and other is by calculating the EM field decay time constant (TAU parameter), which directly depends on conductance despite their depth and accordingly amplitude of the response.

THEORY

As established in electromagnetic theory, the magnitude of the electro-motive force (emf) induced is proportional to the time rate of change of primary magnetic field at the conductor. This emf causes eddy currents to flow in the conductor with a characteristic transient decay, whose Time Constant (Tau) is a function of the conductance of the survey target or conductivity and geometry (including dimensions) of the target. The decaying currents generate a proportional secondary magnetic field, the time rate of change of which is measured by the receiver coil as induced voltage during the Off time.

The receiver coil output voltage (e_0) is proportional to the time rate of change of the secondary magnetic field and has the form,

$$e_0 \propto (1 / \tau) e^{-(t/\tau)}$$

Where,

$\tau = L/R$ is the characteristic time constant of the target (TAU)

R = resistance

L = inductance

From the expression, conductive targets that have small value of resistance and hence large value of τ yield signals with small initial amplitude that decays relatively slowly with progress of time. Conversely, signals from poorly conducting targets that have large resistance value and small τ , have high initial amplitude but decay rapidly with time¹ (Fig. E1).

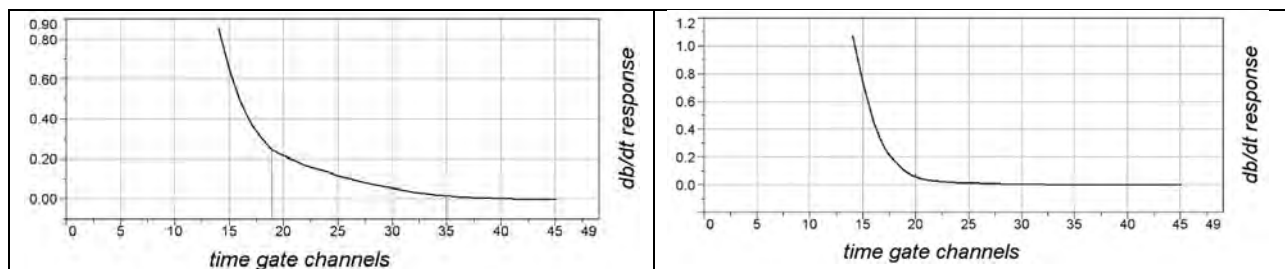


Figure E-1: Left – presence of good conductor, right – poor conductor.

¹ McNeill, JD, 1980, "Applications of Transient Electromagnetic Techniques", Technical Note TN-7 page 5, Geonics Limited, Mississauga, Ontario.

EM Time Constant (Tau) Calculation

The EM Time-Constant (TAU) is a general measure of the speed of decay of the electromagnetic response and indicates the presence of eddy currents in conductive sources as well as reflecting the “conductance quality” of a source. Although TAU can be calculated using either the measured dB/dt decay or the calculated B-field decay, dB/dt is commonly preferred due to better stability (S/N) relating to signal noise. Generally, TAU calculated on base of early time response reflects both near surface overburden and poor conductors whereas, in the late ranges of time, deep and more conductive sources, respectively. For example early time TAU distribution in an area that indicates conductive overburden is shown in Figure 2.

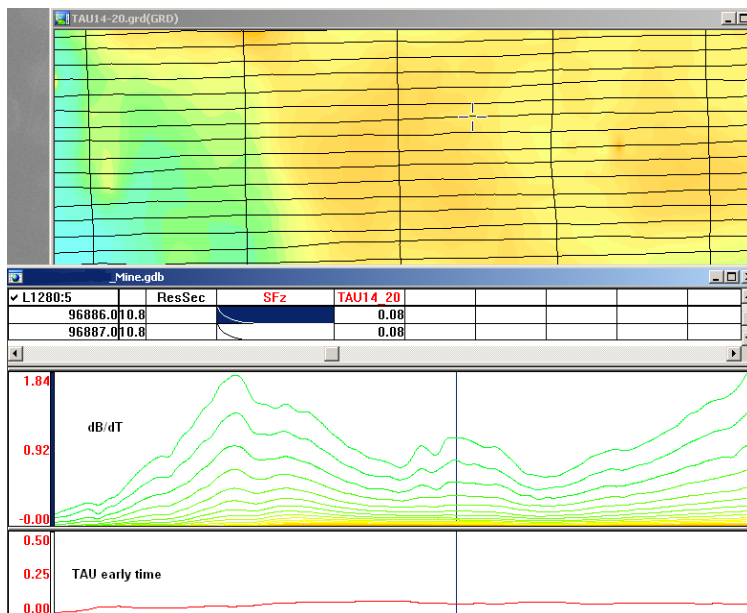


Figure E-2: Map of early time TAU. Area with overburden conductive layer and local sources.

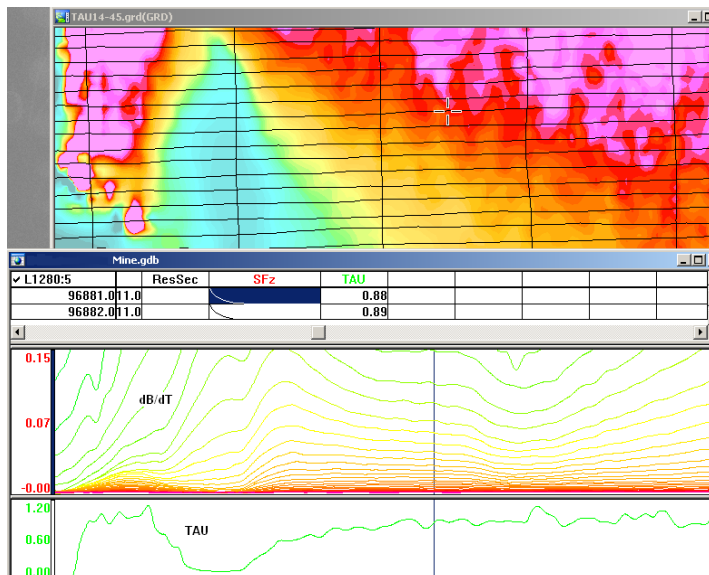


Figure E-3: Map of full time range TAU with EM anomaly due to deep highly conductive target.

There are many advantages of TAU maps:

- TAU depends only on one parameter (conductance) in contrast to response magnitude;
- TAU is integral parameter, which covers time range and all conductive zones and targets are displayed independently of their depth and conductivity on a single map.
- Very good differential resolution in complex conductive places with many sources with different conductivity.
- Signs of the presence of good conductive targets are amplified and emphasized independently of their depth and level of response accordingly.

In the example shown in Figure 4 and 5, three local targets are defined, each of them with a different depth of burial, as indicated on the resistivity depth image (RDI). All are very good conductors but the deeper target (number 2) has a relatively weak dB/dt signal yet also features the strongest total TAU (Figure 4). This example highlights the benefit of TAU analysis in terms of an additional target discrimination tool.

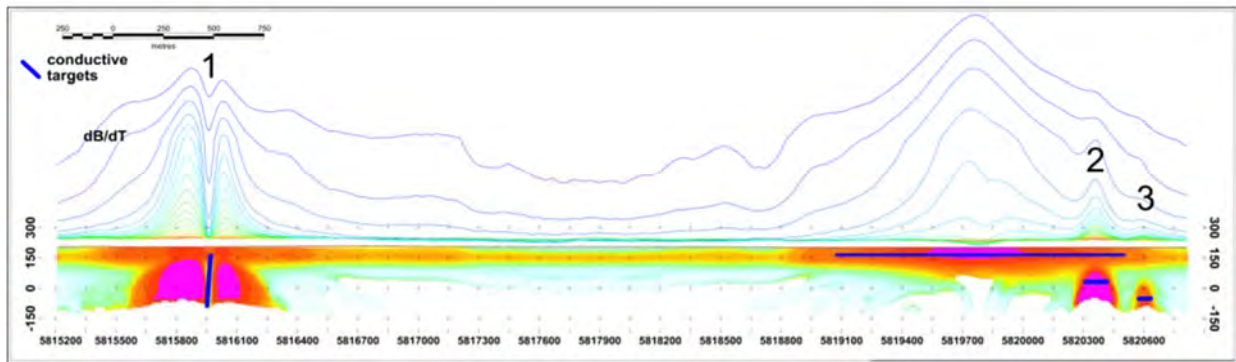


Figure E-4: dB/dt profile and RDI with different depths of targets.

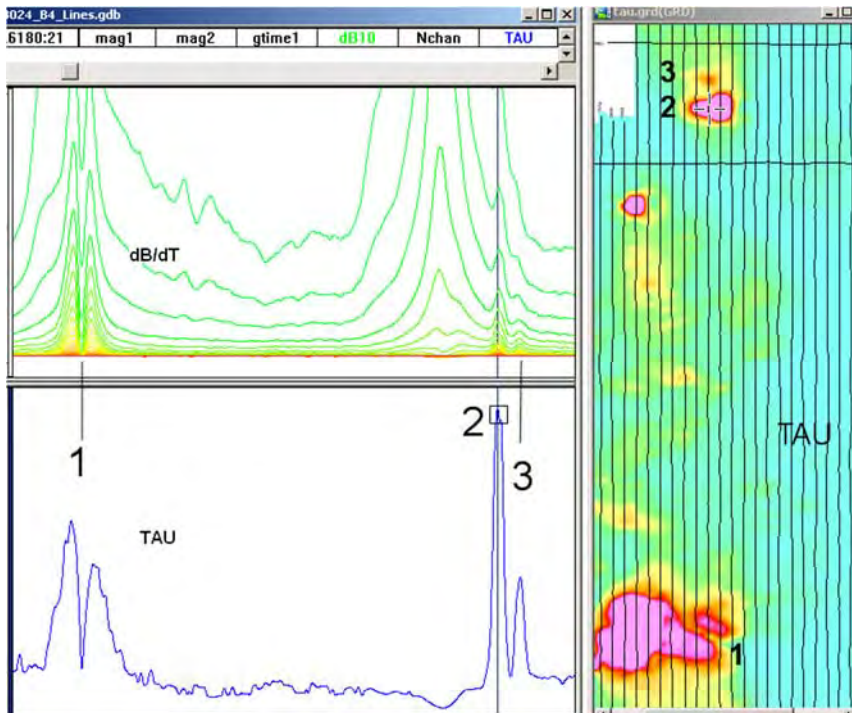


Figure E-5: Map of total TAU and dB/dt profile.

The EM Time Constants for dB/dt and B-field were calculated using the “sliding Tau” in-house program developed at Geotech2. The principle of the calculation is based on using of time window (4 time channels) which is sliding along the curve decay and looking for latest time channels which have a response above the level of noise and decay. The EM decays are obtained from all available decay channels, starting at the latest channel. Time constants are taken from a least square fit of a straight-line (log/linear space) over the last 4 gates above a pre-set signal threshold level (Figure F6). Threshold settings are pointed in the “label” property of TAU database channels. The sliding Tau method determines that, as the amplitudes increase, the time-constant is taken at progressively later times in the EM decay. Conversely, as the amplitudes decrease, Tau is taken at progressively earlier times in the decay. If the maximum signal amplitude falls below the threshold, or becomes negative for any of the 4 time gates, then Tau is not calculated and is assigned a value of “dummy” by default.

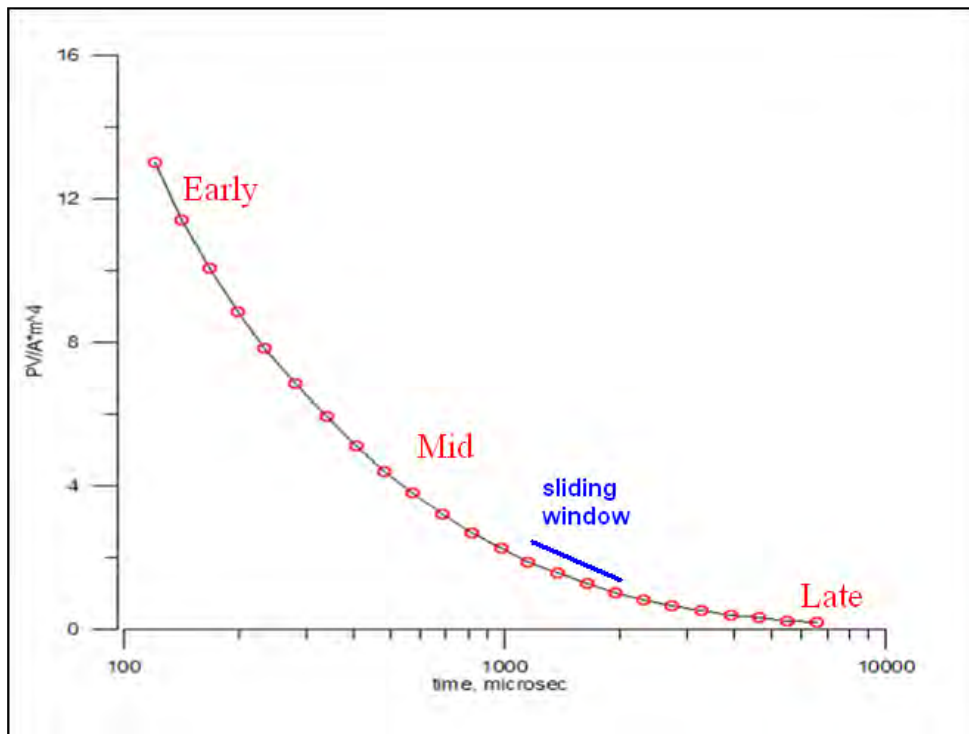


Figure E-6: Typical dB/dt decays of Vtem data

Alexander Prikhodko, PhD, P.Geo
Geotech Ltd.

September 2010

² by A.Prikhodko

APPENDIX F

TEM RESISTIVITY DEPTH IMAGING (RDI)

Resistivity depth imaging (RDI) is a technique used to rapidly convert EM profile decay data into an equivalent resistivity versus depth cross-section, by deconvolving the measured TEM data. The used RDI algorithm of Resistivity-Depth transformation is based on the scheme of the apparent resistivity transform of Maxwell A. Meju (1998)¹ and TEM response from a conductive half-space. The program is developed by Alexander Prikhodko and is depth calibrated based on forward plate modeling for VTEM system configuration (Fig. 1-10).

RDIs provide reasonable indications of conductor relative depth and vertical extent, as well as accurate 1D layered-earth apparent conductivity/resistivity structure across VTEM flight lines. Approximate depth of investigation of a TEM system, image of secondary field distribution in half-space, effective resistivity, initial geometry and position of conductive targets is the information obtained on the basis of the RDIs.

Maxwell forward modeling with RDI sections from the synthetic responses (VTEM system).

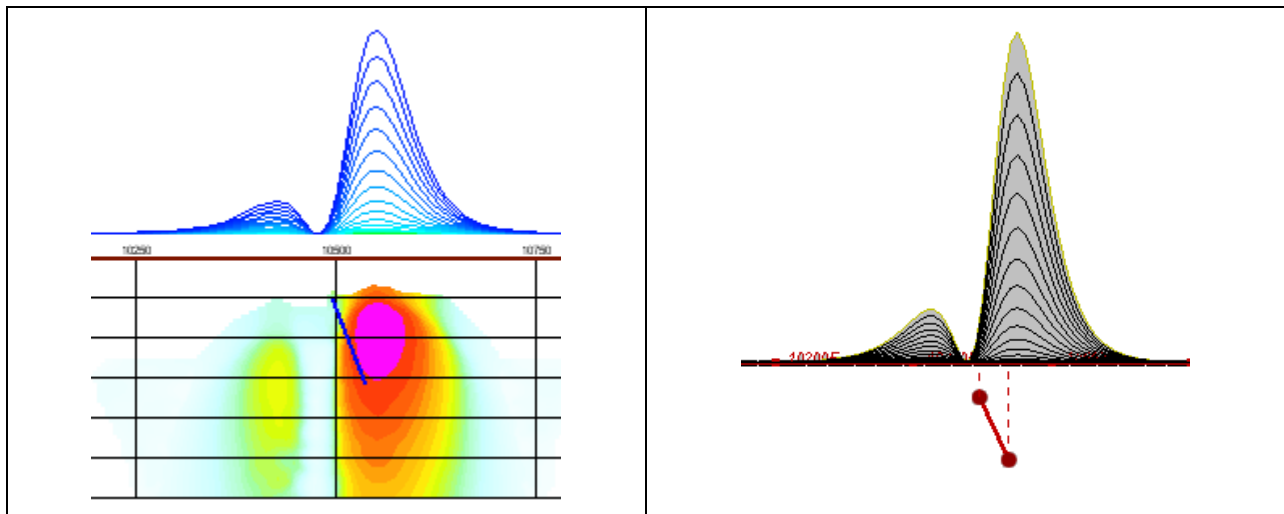


Figure F-1: Maxwell plate model and RDI from the calculated response for a conductive "thin" plate (depth 50 m, dip 65 degree, depth extend 100 m).

¹ Maxwell A. Meju, 1998, Short Note: A simple method of transient electromagnetic data analysis, *Geophysics*, **63**, 405–410.

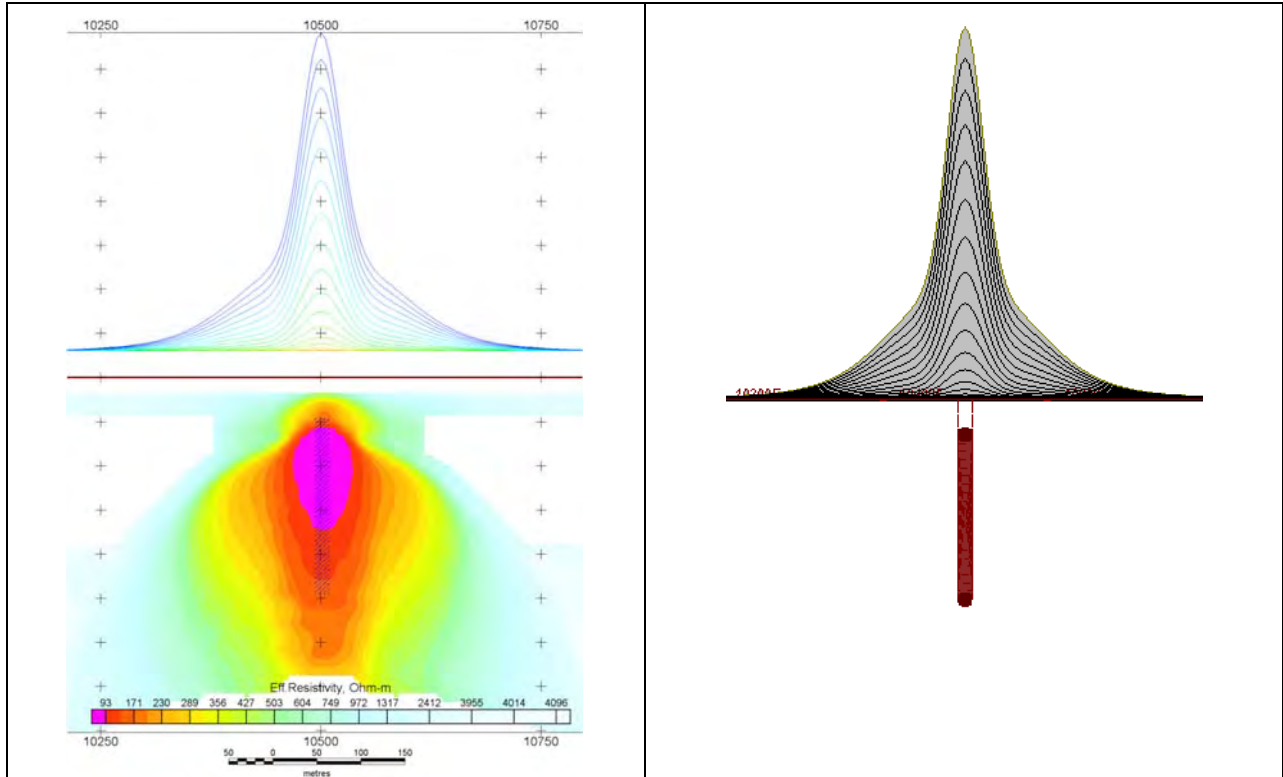


Figure F-2: Maxwell plate model and RDI from the calculated response for "thick" plate 18 m thickness, depth 50 m, depth extend 200 m).

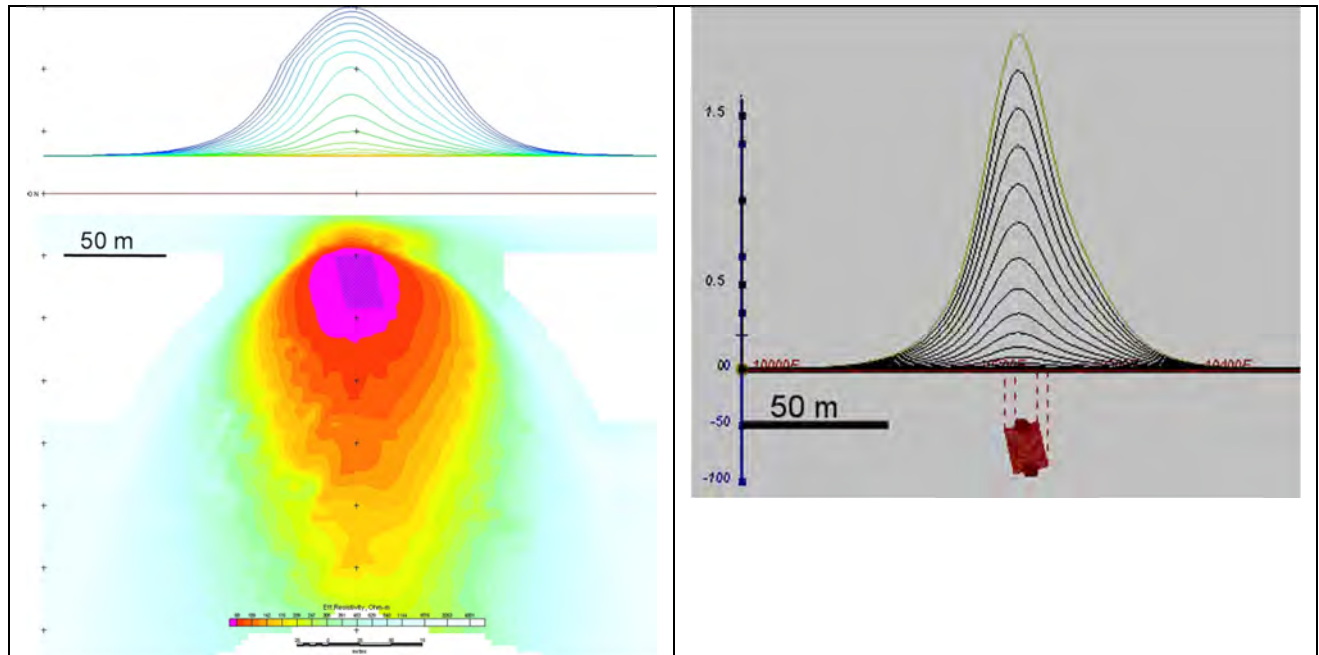


Figure F-3: Maxwell plate model and RDI from the calculated response for bulk ("thick") 100 m length, 40 m depth extend, 30 m thickness

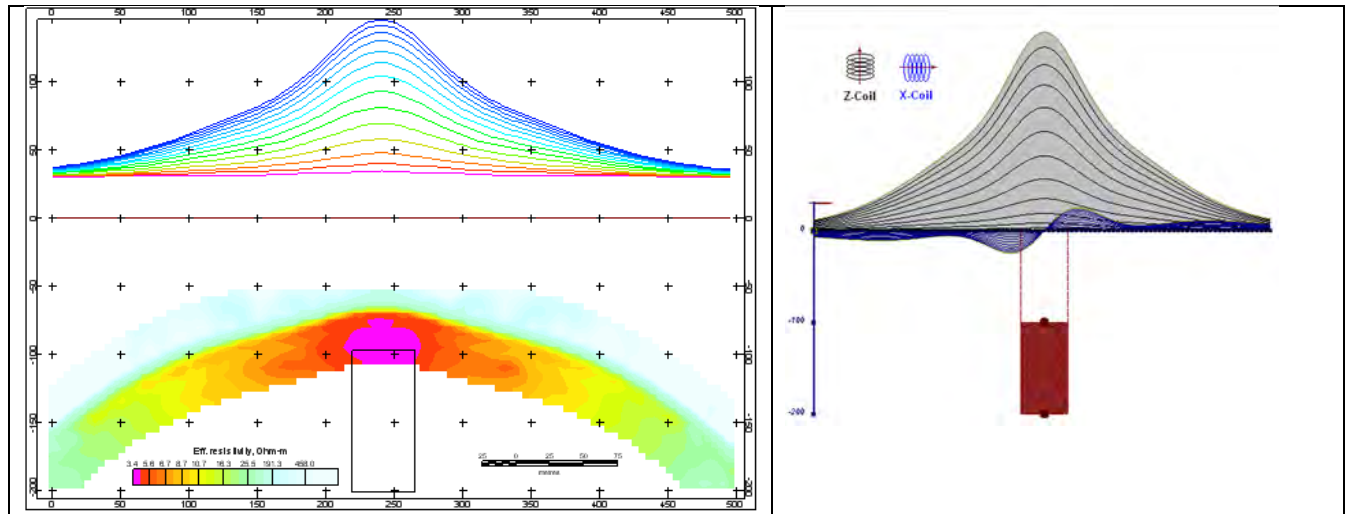


Figure F-4: Maxwell plate model and RDI from the calculated response for "thick" vertical target (depth 100 m, depth extend 100 m). 19-44 chan.

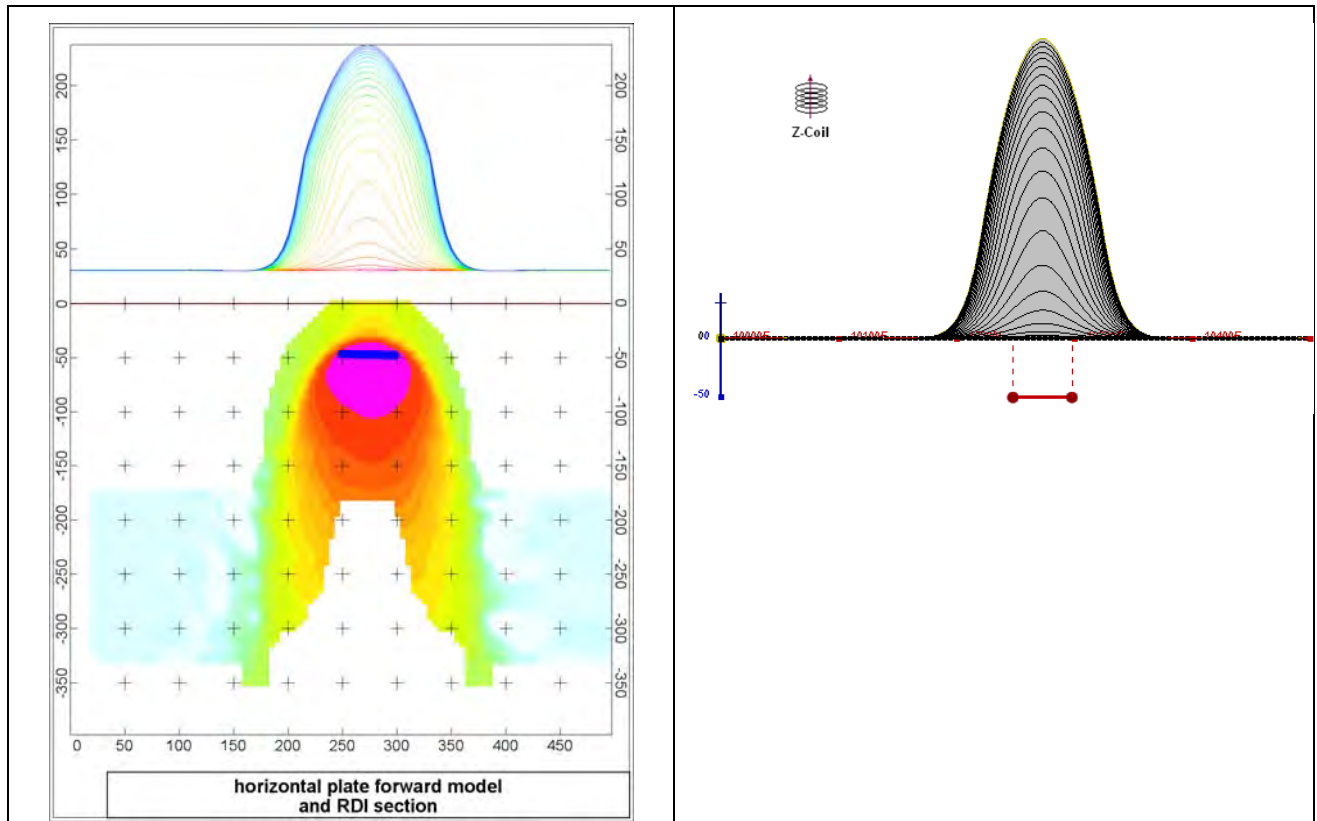


Figure F-5: Maxwell plate model and RDI from the calculated response for horizontal thin plate (depth 50 m, dim 50x100 m). 15-44 chan.

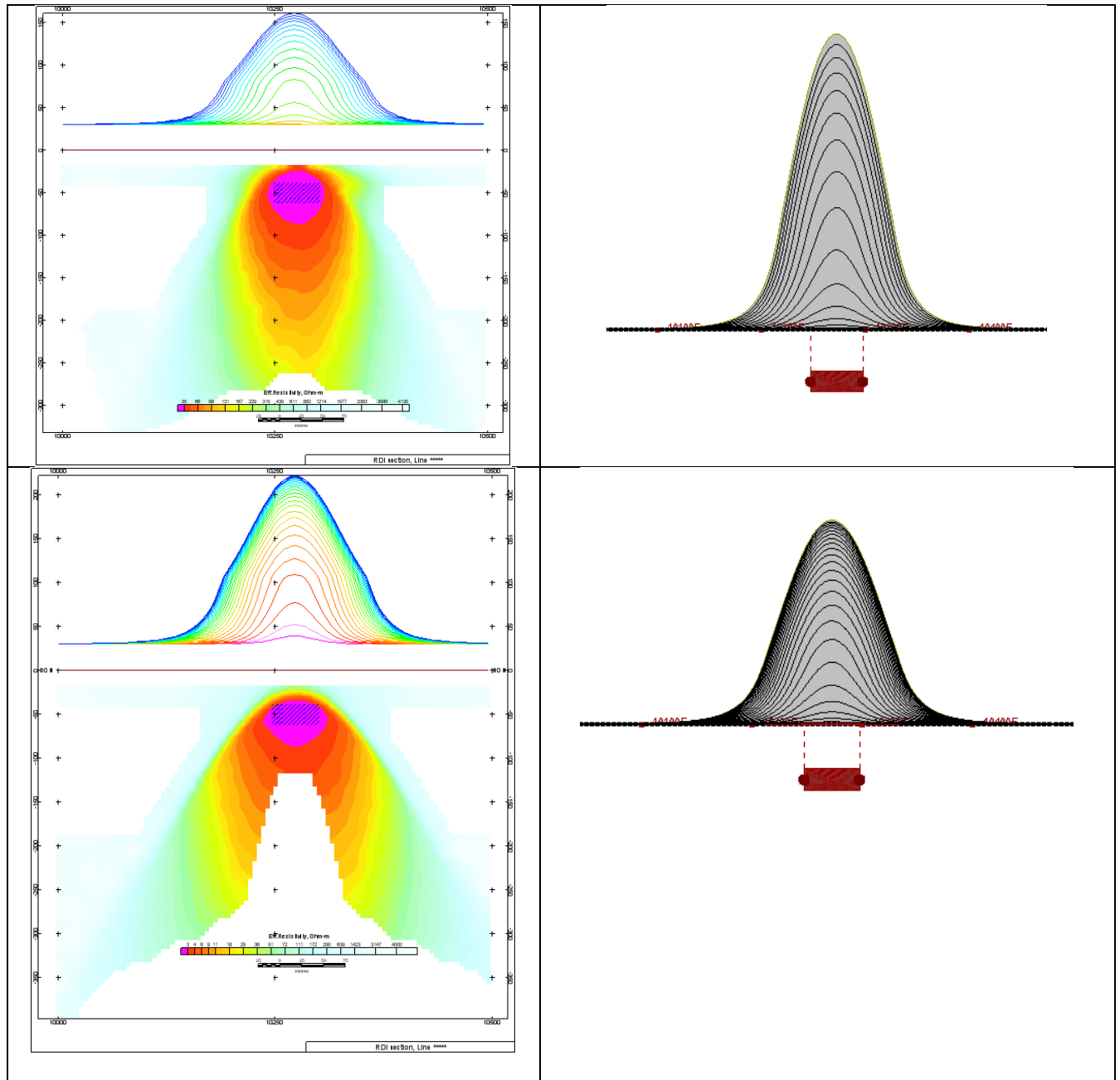


Figure F-6: Maxwell plate model and RDI from the calculated response for horizontal thick (20m) plate – less conductive (on the top), more conductive (below).

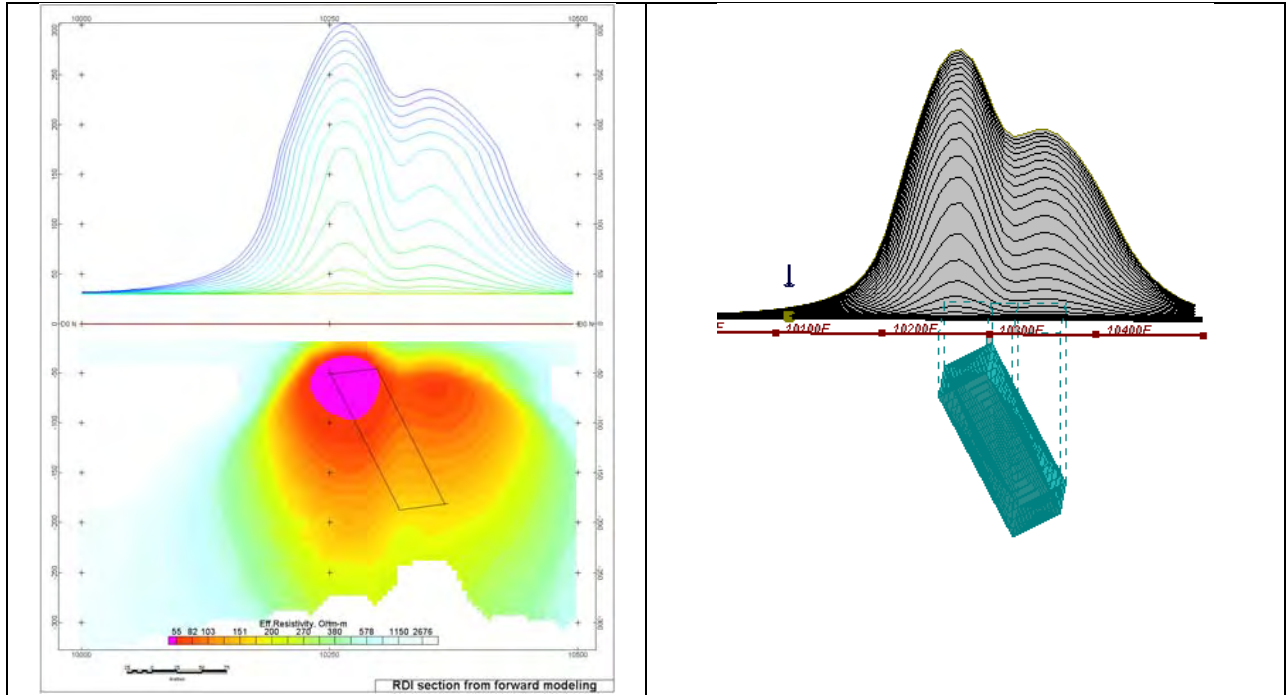


Figure F-7: Maxwell plate model and RDI from the calculated response for inclined thick (50m) plate. Depth extends 150 m, depth to the target 50 m.

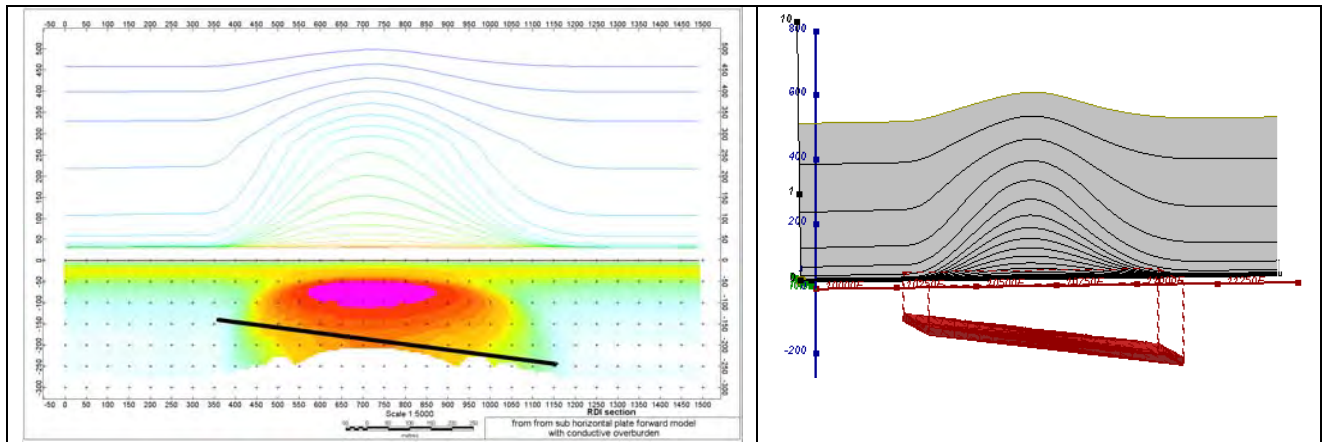


Figure F-8: Maxwell plate model and RDI from the calculated response for the long, wide and deep subhorizontal plate (depth 140 m, dim 25x500x800 m) with conductive overburden.

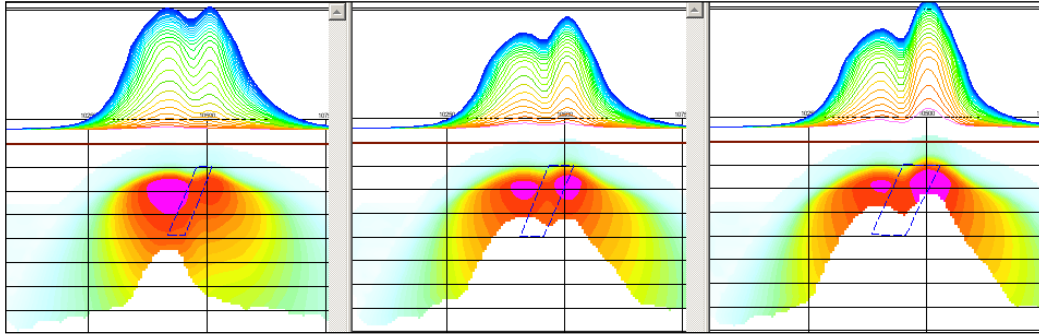


Figure F-9: Maxwell plate models and RDIs from the calculated response for "thick" dipping plates (35, 50, 75 m thickness), depth 50 m, conductivity 2.5 S/m.

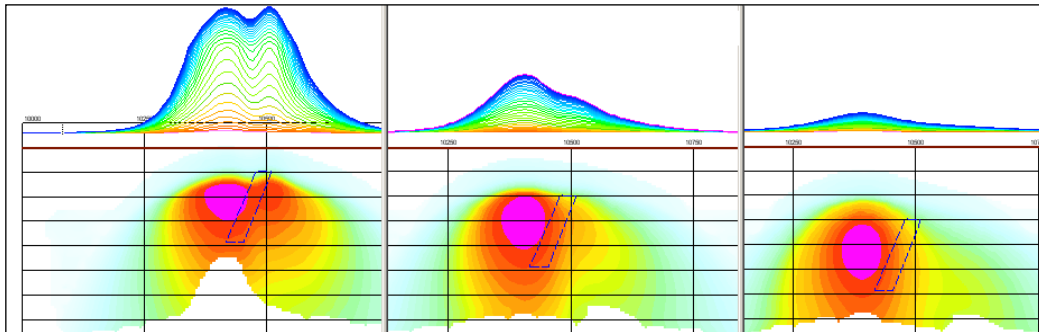


Figure F-10: Maxwell plate models and RDIs from the calculated response for "thick" (35 m thickness) dipping plate on different depth (50, 100, 150 m), conductivity 2.5 S/m.

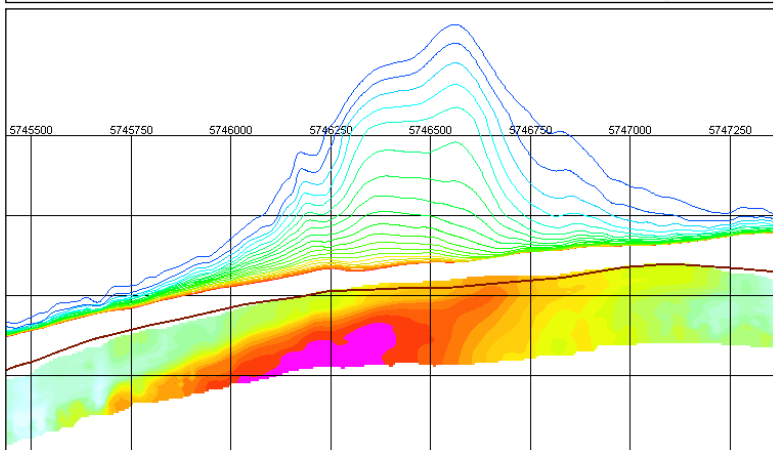
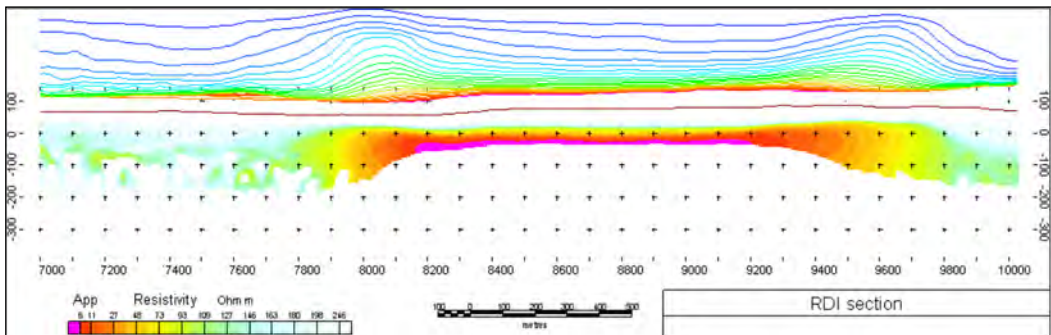
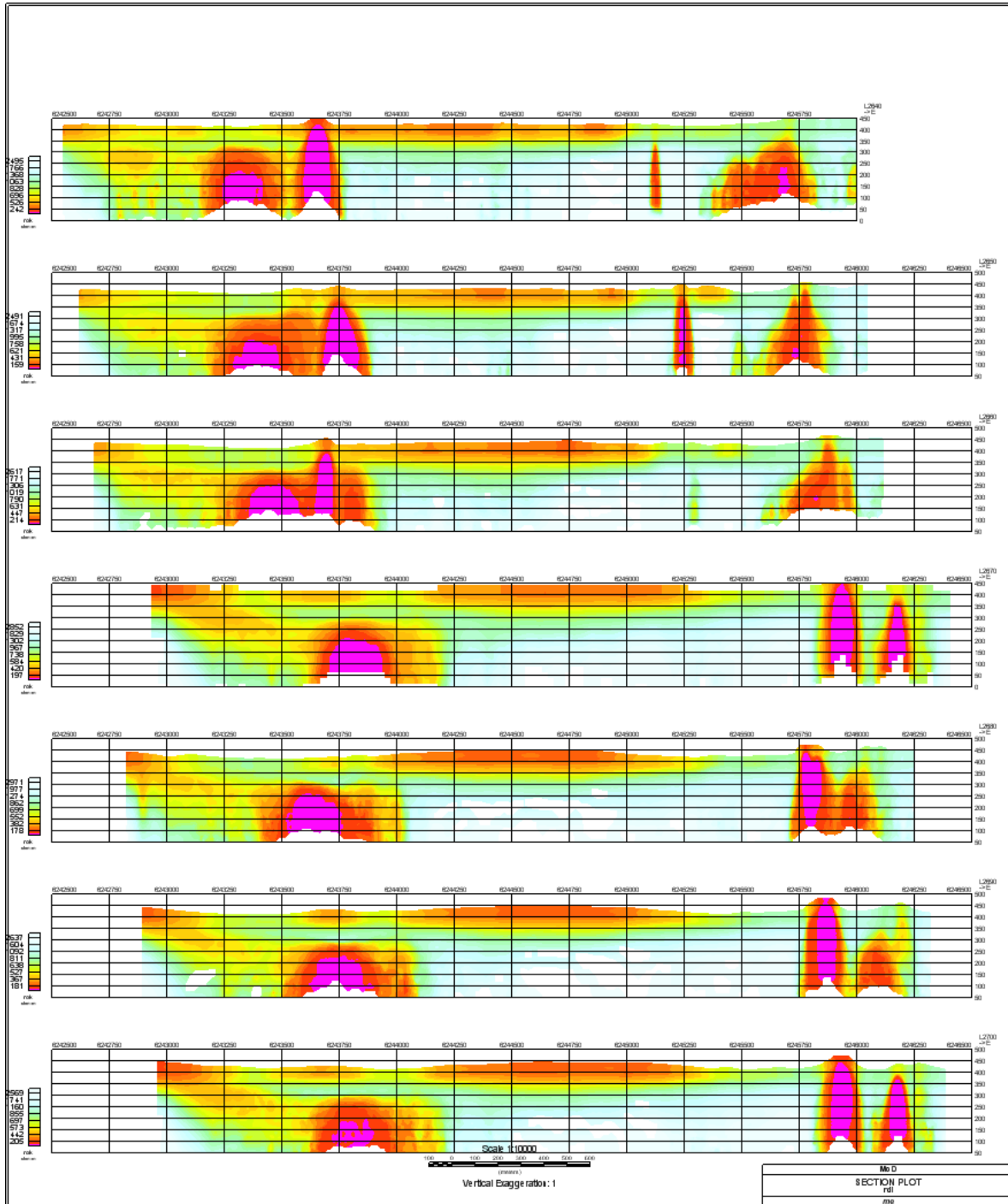


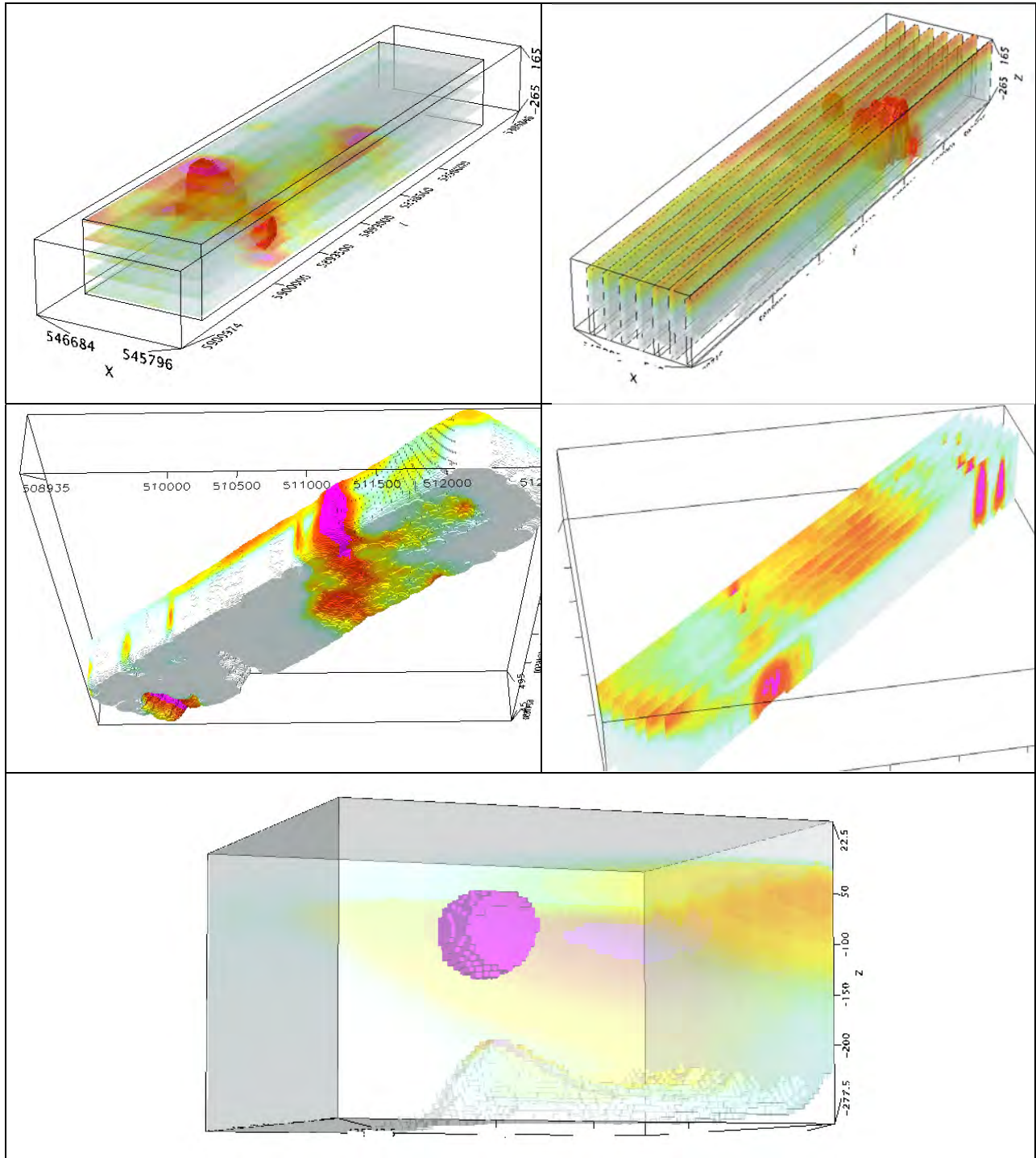
Figure F-11: RDI section for the real horizontal and slightly dipping conductive layers

FORMS OF RDI PRESENTATION

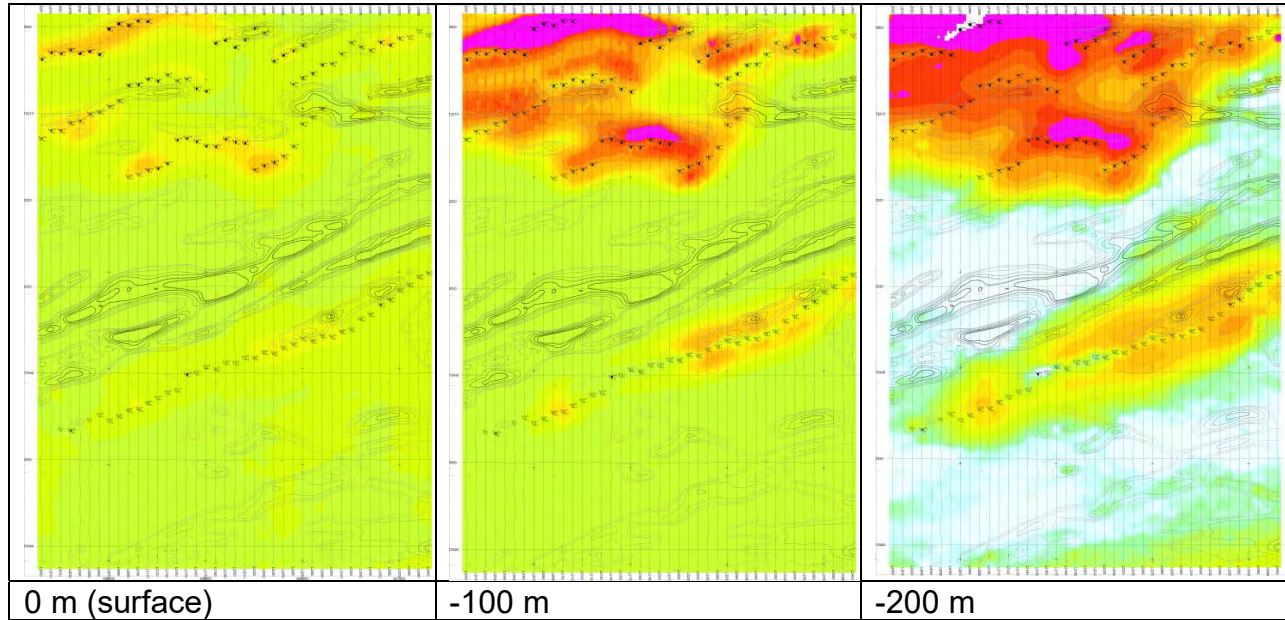
PRESENTATION OF SERIES OF LINES



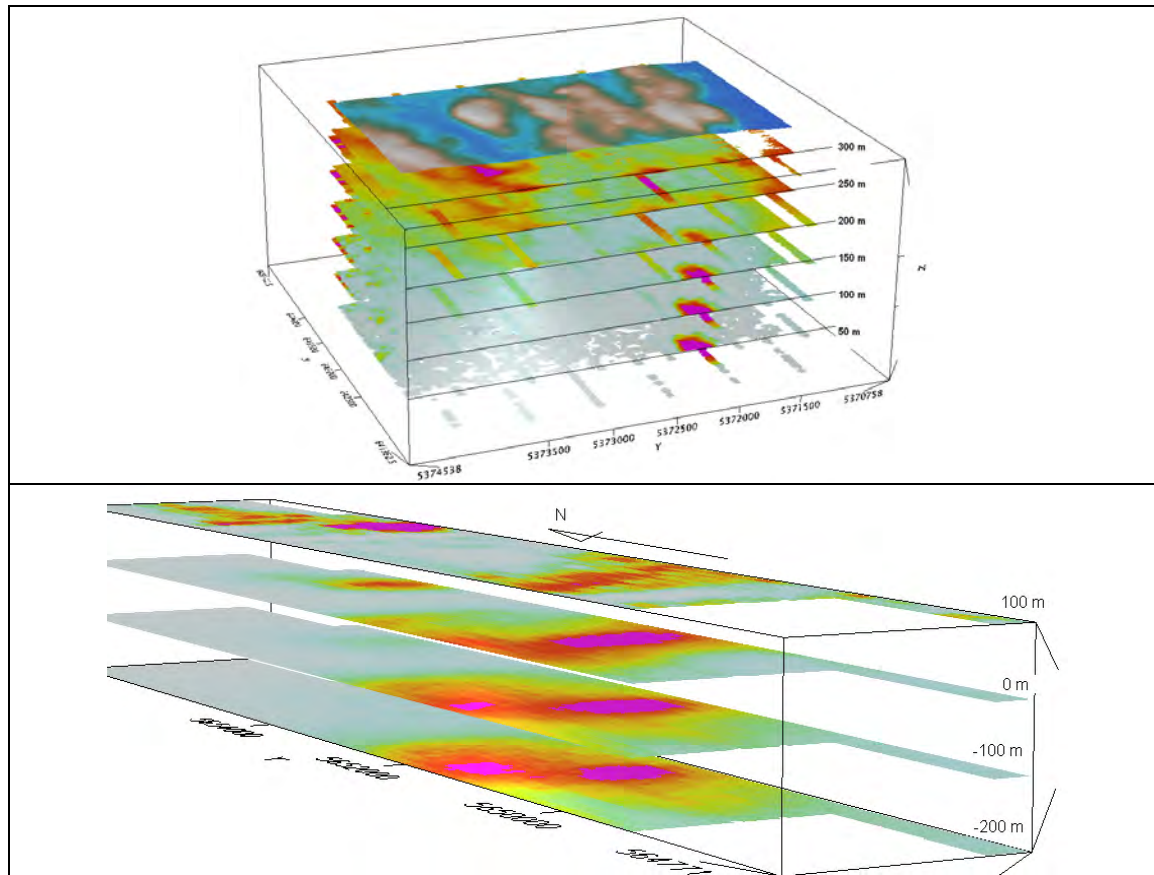
3D PRESENTATION OF RDIS



APPARENT RESISTIVITY DEPTH SLICES PLANS:

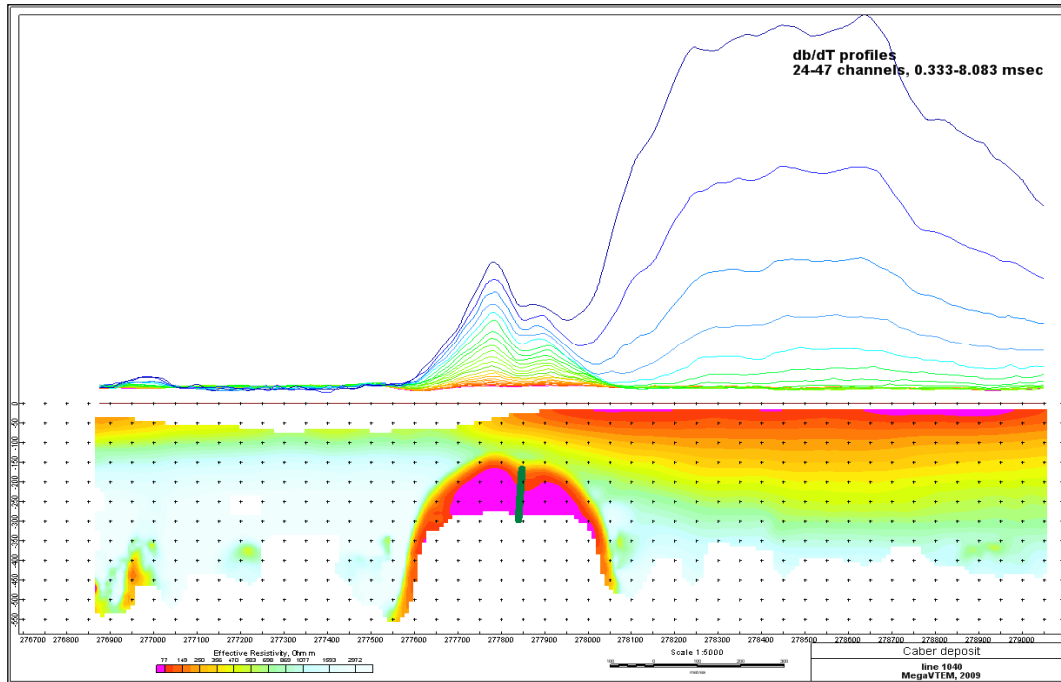


3D VIEWS OF APPARENT RESISTIVITY DEPTH SLICES:

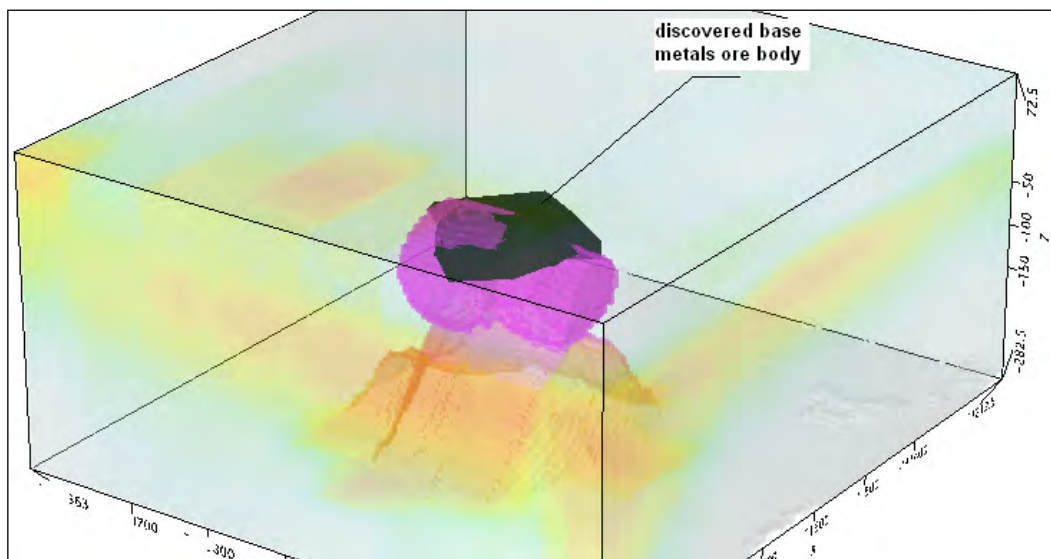


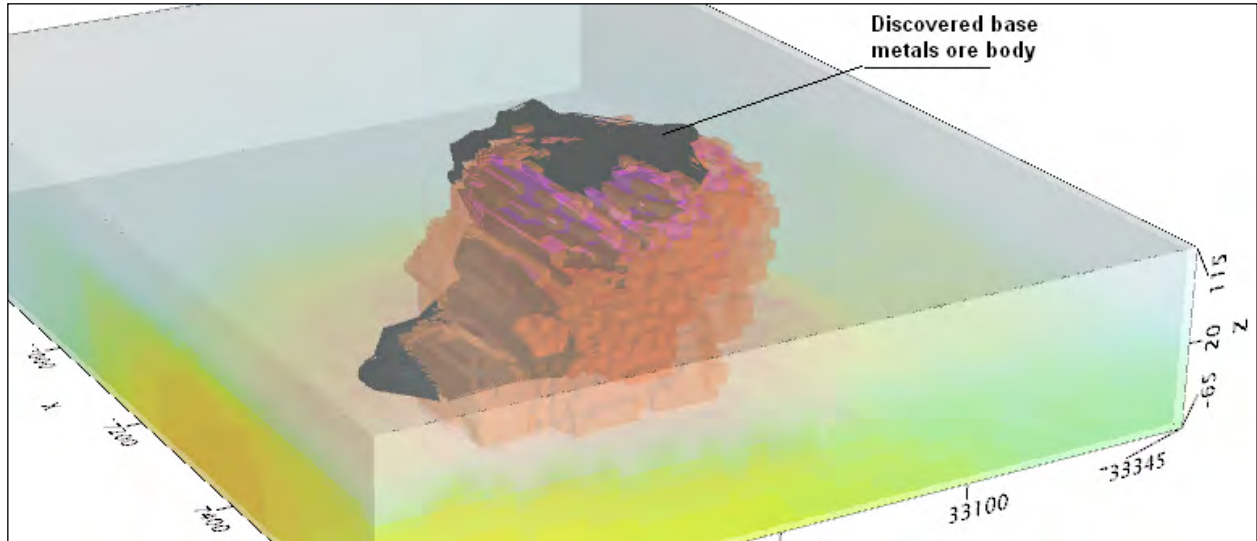
REAL BASE METAL TARGETS IN COMPARISON WITH RDIS:

RDI section of the line over Caber deposit ("thin" subvertical plate target and conductive overburden).



3D RDI VOXELS WITH BASE METALS ORE BODIES (MIDDLE EAST):





Alexander Prikhodko, PhD, P.Ge
Geotech Ltd.
April 2011

Appendix 4
OGS Geology Map 2483
Matchinameigus Lake
Echum & Dolson Townships

SYMBOLS

- Glacial striae. Glacial fluting or drumlin.
- Esker.
- Bedrock (small outcrop, area of outcrop).
- Bedding, horizontal.
- Bedding, top unknown; (inclined, vertical).
- Bedding, top indicated by arrow; (inclined, vertical, overturned).
- Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned).
- Bedding, top (arrow) from cross bedding; (inclined, vertical, overturned).
- Bedding, top (arrow) from relationship of cleavage and bedding; (inclined, overturned).
- Lava flow, top (arrow) from pillows shape and packing. Lava flow, top in direction of arrow.
- Direction of paleocurrent.
- Schistosity; (horizontal, inclined, vertical).
- Gneissosity; (horizontal, inclined, vertical).
- Foliation; (horizontal, inclined, vertical).
- Banding; (horizontal, inclined, vertical).
- Lineation with plunge.
- Geological boundary; (observed, position interpreted, deduced from geophysics).
- Magnetic contour value in gammas. Magnetic attraction.
- Fault; (observed, assumed). Spot indicates down throw side, arrows indicate horizontal movement.
- Lineament.
- Jointing; (horizontal, inclined, vertical).
- Drag folds with plunge.
- Anticline, syncline, with plunge.
- Drill hole; (vertical, inclined, projected vertically, projected up dip). Overburden shown.
- Location of sample.
- Vein, vein network. Width in inches or feet.
- Radioactivity.
- Swamp.
- Motor road. Provincial highway number encircled where applicable.
- Other road. Trail, portage, winter road.
- International or Provincial boundary.
- County, District, Regional or District Municipal Boundary, with mile post.
- Municipal Boundary, (City, Town, Improvement District, Incorporated Township), with milepost.
- Township, Indian Reserve, Meridian, Base Line, Provincial Park, with milepost. (Surveyed, unsurveyed).
- Mining property, surveyed. Mineral deposit or mining property, unsurveyed.
- Surveyed line.
- Unsurveyed line.

All boundary and survey lines are approximate position only.
Some symbols may not occur on this map.

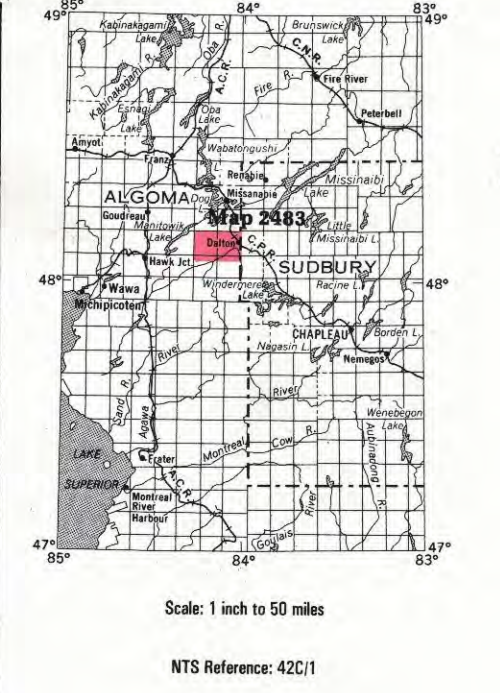
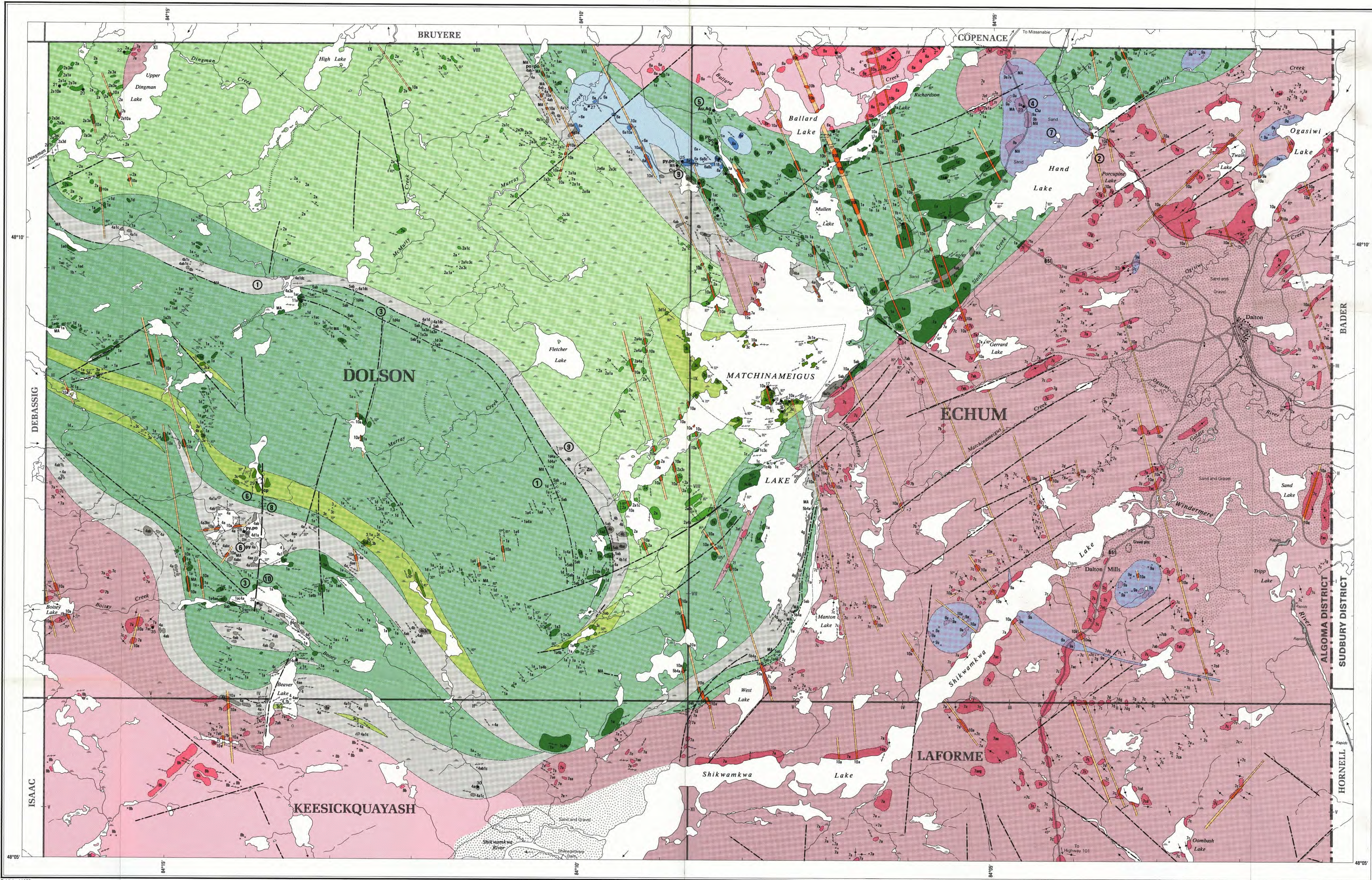
PROPERTIES, MINERAL DEPOSITS

1. Balmain Exploration Ltd., [1956].
 2. Cordell Gold Mines Ltd., [1952].
 3. Frohisher Ltd., [1957].
 4. Hand Lake occurrence.
 5. Longhurst, G.
 6. MacEwan Explorations Ltd., [1955].
 7. Miller, H.J. [1970].
 8. Multi-Minerals Ltd., [1966].
 9. Ontario Syndicate, The., [1971].
 10. Talsman Mines Ltd., [1968].
- Information current to December 31, 1978.
Former properties on ground now open for staking are only shown if exploration data is available. A date in square brackets indicates last year of exploration activity. For further information see report.

SOURCES OF INFORMATION

Geology by M.J. Downes and assistants, Ontario Geological Survey, 1978.
Geology is not tied to surveyed lines.
Files of the Resident Geologist's office, Sault Ste. Marie. Maps and files of the Algoma Central Railway, Lands and Forest Division, Sault Ste. Marie. Files of the Assessment Research office, Ontario Geological Survey, Toronto.
Aeromagnetic map (OGS-GSC) 2206G.
Preliminary maps (OGS) P 2302 and P 2303, Matchinameigus Lake (west and east halves), scale 1:15 840, issued 1978.
Cartography by P.A. Wisbey and assistants, Surveys and Mapping Branch, 1982.
Basemaps derived from maps of the Forest Resources Inventory, Surveys and Mapping Branch.
Magnetic declination in the area was approximately 6° 45' West in 1978.

Parts of this publication may be quoted if credit is given. It is recommended that reference to this map be made in the following form:
Downes, M.J.
1983: Matchinameigus Lake, Ontario Geological Survey Map 2483, Precambrian Geology. Series, scale 1 inch to 1/2 mile, geology 1978.

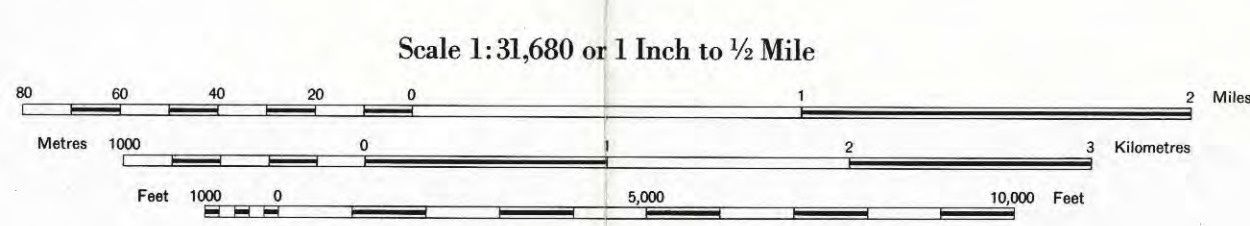


LEGEND

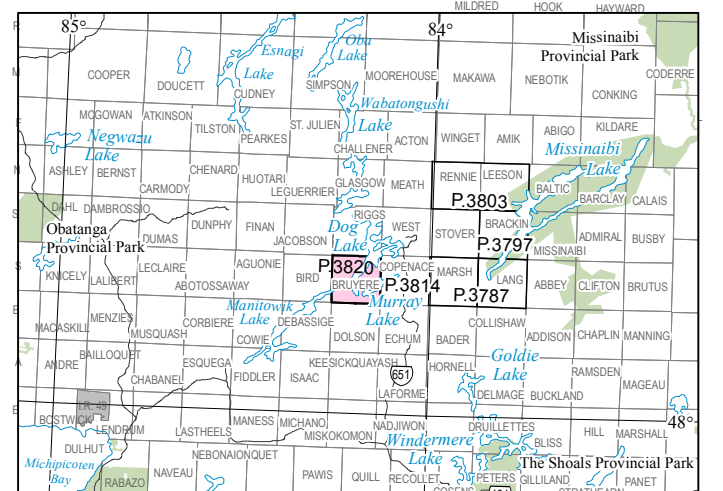
- PHANEROZOIC**
- CENOZOIC***
- QUATERNARY**
- PLEISTOCENE AND RECENT
 - Clay, sand, gravel, silt, fill and swamp deposits.
 - UNCONFORMITY
- PRECAMBRIAN***
- LATE PRECAMBRIAN**
- ULTRAMAFIC INTRUSIVE ROCKS**
 - 116 Lamprophyre (kimberlitic affinity).
 - 115 Mica peridotite; serpenitized.
- INTRUSIVE CONTACT**
- MAFIC INTRUSIVE ROCKS**
 - 10 Unsubdivided.
 - 10a Quartz diabase.
 - 10b Porphyritic quartz diabase.
- INTRUSIVE CONTACT**
- MIDDLE PRECAMBRIAN**
- ULTRAMAFIC TO MAFIC INTRUSIVE ROCKS**
 - 9 Unsubdivided.
 - 9a Pyroxenite, hornblende pyroxenite.
 - 9b Mica peridotite.
- INTRUSIVE CONTACT**
- EARLY PRECAMBRIAN**
- FELSIC INTRUSIVE ROCKS**
- LATE FELSIC INTRUSIVE ROCKS**
 - 8 Unsubdivided.
 - 8a Granodiorite (massive).
 - 8b Quartz monzonite (weakly foliated).
 - 8c Felsic dikes, apfite.
- INTRUSIVE CONTACT**
- EARLY FELSIC INTRUSIVE ROCKS**
 - 7 Unsubdivided.
 - 7a Migmatic granitic rocks (biotite-quartz-feldspar-gneisses).
 - 7b Quartz monzonite.
 - 7c Trondhjemite, granodiorite.
 - 7d Hornblende-trondhjemite.
 - 7e Diorite (border phase).
 - 7f Agmatic migmatite.
 - 7g Amphibolite.
 - 7h Quartzo-feldspathic schist (metasedimentary paleosome character).
- INTRUSIVE CONTACT**
- MAFIC INTRUSIVE ROCKS**
 - 6 Unsubdivided.
 - 6a Metagabbro.
- INTRUSIVE CONTACT**
- METAVOLCANICS AND META-SEDIMENTS***
- CHEMICAL METASEDIMENTS***
 - 5 Unsubdivided.
 - 5a Chert.
 - 5b Magnetite ironstone.
- CLASTIC METASEDIMENTS***
 - 4 Unsubdivided.
 - 4a Wacke.
 - 4b Siltstone.
 - 4c Arkose.
 - 4d Dolostone.
 - 4e Phyllite.
 - 4f Conglomerate.
 - 4g Quartz-plagioclase-biotite schist.
- FELSIC METAVOLCANICS***
 - 3 Unsubdivided.
 - 3a Massive flows.
 - 3b Porphyritic flows.
 - 3c Tuff.
 - 3d Lapilli-tuff, lapillistone.
 - 3e Crystal tuffs.
- INTERMEDIATE METAVOLCANICS**
 - 2a Andesitic to dacitic tuffs.
- MAFIC METAVOLCANICS***
 - 1 Unsubdivided.
 - 1a Massive to foliated flows.
 - 1b Pillowed flows.
 - 1c Tuff, crystal tuff.
 - 1d Chertic schist.
 - 1e Amygdaloidal flows.

*Unconsolidated deposits. Cenozoic deposits are represented by the lighter coloured and uncoloured parts of the map.
*Bedrock geology. Outcrops and inferred extensions of each rock unit are shown respectively in deep and light lines of the same colour. Where in places a formation is too narrow to show in colour and must be represented in black, a short black bar appears in the appropriate block.
*No age relationships are inferred by the order of the rock units within these groups.
*Rocks grouped under these headings are not necessarily all the same age.

Ontario Geological Survey
Map 2483
MATCHINAMEIGUS LAKE
ALGOMA DISTRICT



Appendix 5
OGS Geology Map P3820
Bruyere Township



Location Map
1 cm equals 15 km

SOURCES OF INFORMATION

Digital base map information derived from the Land Information Ontario Warehouse. Land Information Ontario, Ministry of Natural Resources and Forestry, scale 1:20 000, with modifications by staff of the Ministry of Northern Development and Mines.

Mapping conducted using UTM co-ordinates in North American Datum 1983 (NAD83), Zone 16.

Compiled geology, geochronology and geophysical interpretation derived from:
Assessment files, Resident Geologists' office, Sault Ste. Marie.

Occurrences information modified from the Mineral Deposit Inventory (Ontario Geological Survey 2017).

Fraser, M.J. and Krogh, T.E. 1986. U-Pb zircon ages of late internal plutons of the Abitibi and eastern Wawa subprovinces, Ontario and Quebec, in Current Research, Part A, Geological Survey of Canada, Paper 86-1A, p.43-48.

Heaman, L.M. 1997. Global mafic magmatism at 2.45 Ga: Remnants of an ancient large igneous province? *Geology*, v.25, p.299-302.

Ontario Geological Survey 2002a. Ontario airborne geophysical surveys, magnetic data, grid data, Geosoft[®] format, Kapuskasing-Chapleau area, Ontario Geological Survey, Geophysical Data Set 10405—Revised.

Ontario Geological Survey 2002b. Ontario airborne geophysical surveys, magnetic data, profile data, Geosoft[®] format, Kapuskasing-Chapleau area, Ontario Geological Survey, Geophysical Data Set 10405—Revised.

Ontario Geological Survey 2003a. Ontario airborne geophysical surveys, magnetic and electromagnetic data, grid and profile data, Geosoft[®] format, Wawa area, Ontario Geological Survey, Geophysical Data Set 1009b.

Ontario Geological Survey 2003b. Single master gravity and aeromagnetic data for Ontario, Geosoft[®] format, Ontario Geological Survey, Geophysical Data Set 1036.

Ontario Geological Survey 2011. Ontario airborne geophysical surveys, magnetic and electromagnetic data, grid and profile data (ASCIL and Geosoft[®] formats) and vector data, Miguire River-Missinabi Lake area—Purchased data, Ontario Geological Survey, Geophysical Data Set 1237.

Ontario Geological Survey 2017. Mineral Deposit Inventory, Ontario Geological Survey, Mineral Deposit Inventory (February 2017 update), online database.

Osmani, L.A. 1991. Proterozoic mafic dike swarms in the Superior Province of Ontario; Chapter 17 in *Geology of Ontario*, Ontario Geological Survey, Special Volume 4, Part 1, p.661-681.

Turek, A., Heather, K.B., Sage, R.P. and Van Schmus, W.R. 1996. U-Pb zircon ages for the Missanabi-Renabie area and their relation to the rest of the Michipicoten greenstone belt, Superior Province, Ontario, Canada, *Precambrian Research*, v.76, p.191-211.

Walker, J. and Robichaud, L. 2018. *Precambrian Geology of Copenace Township, Michipicoten Greenstone Belt*, Ontario Geological Survey, Preliminary Map P.3814, scale 1:20 000.

White, M.V.W. 1984. Report of 1984 diamond drilling program on Kingswood Explorations Limited Dog Lake property in Bruyere Township, unpublished report, Sault Ste. Marie Resident Geologist's office, assessment file AFRIR 42C08SE026, 73p.

Geology is not tied to survey lines.
Magnetic declination, for centre of map area, is approximately 87.04° W in 2018.

Metric conversion factor 1 foot = 0.3048 m.

Users of OGS products are encouraged to contact those Aboriginal communities whose traditional territories may be located in the mineral exploration area to discuss their project.

LEGEND^{abcde}

PHANEROZOIC
CENOZOIC
QUATERNARY

PLEISTOCENE AND RECENT
Unconsolidated sandy fill, glaciofluvial sand and gravel
UNCONFORMABLE CONTACT

PRECAMBRIAN
PROTEROZOIC
PALEOPROTEROZOIC

16 Mafic Intrusive Rocks^f (Pukaskwa dike swarm) (circa 2150 Ma)
15 Leucogabbro, northeast-trending dikes
15f Corona texture on pyroxene
14 Mafic Intrusive Rocks^f (Matachewan dike swarm) (2473 to 2454 Ma)
14a Gabbro, north-northwest-trending dikes
14a Plagioclase phenocryst

INTRUSIVE CONTACT

13 Felsic Intrusive Rocks
12 Intermediate to Felsic Intrusive Rocks (2679±5 Ma)^g to 2684±5±2.7 Ma)^g
12a Foliated to massive, biotite, medium-grained tonalite, locally granodioritic to granitic
12a Granite
12a Granodiorite
12a Tonalite
12a Quartz feldspar porphyry
12a Pegmatitic

11 Intermediate to Felsic Intrusive Rocks
10 Intermediate to Felsic Intrusive Rocks

9 Intermediate to Felsic Intrusive Rocks
9a Quartz diorite
9a Tonalite
9a Feldspar phenocryst

8 Intermediate to Mafic Intrusive Rocks
8a Gabbro
8a Diorite
8f Quartz diorite
8r Corona texture on pyroxene

7 Ultramafic Intrusive Rocks
7f Pyroxenite

INTRUSIVE CONTACT

6 Clastic Metasedimentary Rocks
6c Siltstone and/or mudstone

5 Chemical Metasedimentary Rocks

4 Felsic Metavolcanic Rocks
4a Tuff

3 Intermediate to Felsic Metavolcanic Rocks
3a Massive flows
3d Vesicular flows
3k Feldspar phenocryst

2 Mafic Metavolcanic Rocks
2a Massive flows
2b Pillow flows
2d Vesicular flows
2k Plagioclase phenocryst
2z Coarse grained

1 Ultramafic Metavolcanic Rocks

^a This legend is based only on field investigations and is subject to change based on geochronological or geochemical data. All Precambrian rocks have been subjected to regional metamorphism; many non-metamorphic terms are used for the sake of brevity and where the protolith is established is established by the author.
^b This legend corresponds as closely as possible with legends used on adjacent maps (e.g., Walker and Robichaud 2018). Not all map units are present on this map.
^c The letter 'D' preceding a code refers to data compiled from drill hole records under "Sources of Information".
^d The letter 'G' preceding a code refers to data interpreted from aeromagnetic geophysical surveys listed under "Sources of Information".
^e Rock codes designated with "f" (e.g., 8a2a) indicate that the observed outcrop displays characteristics that belong to either rock type, but the first rock code is preferred by the author.
^f Proterozoic dike swarms and their ages are based on Osmani (1991) and Heaman (1997).
^g Geochronological ages for the Ash Lake pluton are based on Turek et al. (1996): 2679±5 Ma (717254E 535671N, Zone 16); - Fraser and Krogh (1986): 2684±5±2.7 Ma (717270E 5347190N, Zone 16).
^h Note sample location outside the map area.

SYMBOLS

- Outcrop (observed)
- Area of outcrop (observed)
- Geological contact (interpreted)
- Geological contact: interpreted from geophysical data (trend only)
- Fault; unknown generation (interpreted)
- Fold; antiform, unknown generation (trend only, interpreted)
- Foliation; unknown generation (trend only, inclined, vertical)
- Axial plane of fold; S-symmetry, unknown generation (trend only)
- Axial plane of fold; Z-symmetry, unknown generation (inclined)
- Fracture; unknown displacement, unknown generation (vertical)
- Ductile shear; unknown displacement, unknown generation (trend only, inclined)
- Igneous contact; unsubsided (trend only, inclined)
- Igneous contact; dike (trend only, inclined, vertical)
- Joint (inclined)
- Vein; shear type, unknown generation (trend only)
- Vein; extensional, unknown generation (trend only, inclined, horizontal)
- Diamond-drill hole collar location
- Mineral occurrence, with commodity
- Mineral occurrence (number corresponds with "Occurrences" list)
- Geochronology sample location (number corresponds with Table 1)
- Administrative boundary
- Roads (trails)

ABBREVIATIONS^a

- amp amphibole
- Au gold
- bt biotite
- cal calcite
- chl chlorite
- ep epidote
- hem hematite
- ser sericite
- kfs potassium feldspar
- ilm ilmenite
- mag magnetite
- py pyrite
- qtz quartz
- epi epidote
- ser sericite

^a Abbreviations indicate mineralization or observed mineralogy. Abbreviations may be used on the map or in the legend.

CREDITS

Geological mapping by J. Walker and assistants during the summer of 2017.
Preparation of geophysical imagery by D.R.B. Rainsford.
Digital drafting and preparation of GIS product by S.A. Evers and J. Walker.
Cartographic production by R. Corcoran.
Editing by M.G. Easton.

Corresponding digital data for this map area are available from the following Ontario Geological Survey publication:
Walker, J. 2018. *Geological and geochemical data from Bruyere Township, Michipicoten greenstone belt*, Ontario Geological Survey, Geophysical Data Set 10405—Revised.

Every possible effort has been made to ensure the accuracy of the information presented on this map; however, the Ontario Ministry of Northern Development and Mines does not assume liability for errors that may occur. Users should verify critical information.

Information from this publication may be quoted if credit is given. It is recommended that reference to this map be made in the following form:
Walker, J. 2018. *Precambrian geology of Bruyere Township, Michipicoten greenstone belt*, Ontario Geological Survey, Preliminary Map P.3820, scale 1:20 000.

OCCURRENCES^a

| Number ^b | Occurrence | Commodity | Best Historical Value | Host Units |
|---------------------|---|-----------|----------------------------|---|
| 1 | MDI00000001302 New Dimension Resources DDM MC-13-19 This study (assay, sample 17JW426) | Au | 15.391 g/t Au | Quartz veins in mafic metavolcanic rocks |
| 2 | MD42C08SW00188 Consolidated Lundmark No. 1 showing | Au | 0.563 oz/t Au ^c | Quartz veins in altered pillowed mafic metavolcanic rocks |
| 3 | MD42C08SE00092 North Vein | Au | 2.38 oz/t Au | Subparallel quartz-carbonate veins within mafic metavolcanic rocks |
| 4 | MD42C08SE00093 Miller-Reed No. 1 vein | Au | 2.66 oz/t Au | Shear zone located at the contact between vesiculated mafic metavolcanic rocks and gabro |
| 5 | MD42C01NE00002 Miller-Reed property | Au | 1.44 oz/t Au | Quartz vein within gabro near the margin of a granodiorite intrusion |
| 6 | White (1984) (see also MD42C01NE00002) Kingswood DDH K-1-84 | Au | 0.818 oz/t Au | Shear zone cutting through zones of vesiculated mafic metavolcanic rocks and gabro |
| 7 | White (1984) (see also MD42C01NE00002) Kingswood DDH K-4-84 | Au | 2.61 g/t Au | Well-silicified zone with abundant quartz; 5–10% very fine-grained sulphides as disseminations and fine bands |
| 8 | This study (assay, sample 17JW138) | Au | 482.9 ppb Au ^d | Sericite-quartz fault breccia |

^a Source: Ontario Geological Survey (2017), unless otherwise indicated.
^b "Number" indicates the occurrence location on the map. Discrepancies may occur in the location of the MDI points. Users should verify critical locations.
^c Assay value is based on gravimetric fire assay analysis performed during 2018 at the Geoscience Laboratories, Ontario Geological Survey, Sudbury. For complete analysis, see Walker (2018).
^d Assay value is based on analysis by lead fire-assay quantified by inductively coupled plasma mass spectrometry performed during 2018 at the Geoscience Laboratories, Ontario Geological Survey, Sudbury. For complete analysis, see Walker (2018).
Abbreviations: MDI, Mineral Deposit Inventory; g/t, gram per tonne; ppb, parts per billion; oz, ounces; oz/t, ounce per ton.

Table 1. Geochronological result for a sample collected in Bruyere Township.

| Number ^a | Eastings ^b | Northings ^b | Rock Type | Age (Ma) | Source |
|---------------------|-----------------------|------------------------|--------------------------|-----------|------------|
| 1 | 707128 | 535037 | Felsic metavolcanic rock | no zircon | This study |

^a "Number" indicates the location on the map.
^b Locations provided as UTM co-ordinates in North American Datum 1983 (NAD83), Zone 16.

