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INDUCED POLARIZATION SURVEY - CONFIGURATION

 **OREVISION IP**

LOGISTICS AND INTERPRETATION REPORT

PREPARED FOR



GOLDEN PERIMETER PROJECT

TIMMINS GOLD CAMP, ONTARIO, CANADA

DECEMBER 2020



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TABLE OF CONTENTS

1. Research Objectives	1
2. Implemented Solution	3
3. Geophysical Interpretation	7
4. Conclusions and Recommendations.....	10
Appendix A: Fieldwork Site.....	13
Appendix B: Technical Specifications.....	17
Appendix C: Data Processing and Deliverables	19
Appendix D: References.....	19

LIST OF TABLES

Table 1. OreVision® Drilling Targets on the Golden Perimeter Project.....	11
Table 2. Claim Numbers and Holders.....	15
Table 3. Exploration History	15
Table 4. Quality Statistics – OreVision®.....	19
Table 5. Maps Produced	22

LIST OF FIGURES

Figure 1. Bedrock geology of the Golden Perimeter Project with geophysical grid lines and an inferred fault.	2
Figure 2. To the left, conventional IP pseudosections. To the right, OreVision® IP pseudosections demonstrating the increased depth of investigation.....	4
Figure 3. A conventional IP survey allows the detection of the roof of this body buried at 50 m depth (top vertical section). OreVision® also allows to define the vertical extension (bottom section).....	4
Figure 4. OreVision® can detect a very deep source even below another.....	5
Figure 5. Demonstration of the efficiency of increasing the factor "n" versus the spacing "a" to see deeper.	5
Figure 6. Receiver ElrecPRO and SwitchPRO 240 from IRIS Instruments, automatically performing a series of several thousand compliance tests.....	6
Figure 7. Modelled Overburden Layer.....	7
Figure 8. Interpreted Fault Plane.....	8
Figure 9. Plan View of the Resistivity at 50 m (above sea level) with Analytic Signal Contours	9
Figure 10. General location of the Golden Perimeter Project.	13
Figure 11. Mineral claims and OreVision® survey coverage over the Golden Perimeter Project.....	16
Figure 12. Transmitted signal across C1 – C2.	17
Figure 13. Linear windows (1 s pulse).....	18



1. RESEARCH OBJECTIVES

During the period of October 28th to November 12th, 2020, a Time Domain Resistivity / Induced Polarization survey was completed using Abitibi Geophysics' OreVision® array. This survey was conducted on behalf of HighGold Mining Inc. on its Golden Perimeter Project located within the world-class mining camp of Timmins, Ontario.

The property is located in the southwestern Abitibi Greenstone Belt ("Abitibi"), which is host to many world-class gold, volcanogenic massive sulfide and nickel-copper-platinum group element deposits. The Abitibi stratigraphy consists of volcanic, sedimentary and intrusive rock believed to have formed in arc and back arc environments and later deformed during continental collision. Strata are generally steeply dipping and divided by east-trending faults.

Many prolific gold camps are structurally controlled and spatially related to the Porcupine Destor Fault Zone, which is the main structural feature in the region. The fault zone is approximately 450 kilometers long and extends from west of Timmins, Ontario to east of Val d'Or, Quebec and has an area of influence up to 10 kilometers wide.

The Golden Perimeter West property is approximately 7km south of the Porcupine Destor Fault zone and approximately 3km east of the Mattagami Fault. Though little outcrop exists on the property, it is interpreted to be underlain by mafic and ultramafic volcanic rocks of the Tisdale Group and the granodioritic Adams Pluton to the south. Prospecting on the property has identified minor outcrops of granodiorite and quartz monzonite dykes, lamprophyre dykes intruding mafic and ultramafic volcanics that are locally contorted and highly deformed with trace pyrite-chalcopyrite content. Recent airborne magnetic survey several NNW striking faults with unknown offset.

The geologic environment of the Golden Perimeter Property has the potential to host economic mineralization in the form of:

- Intrusion-associated disseminated gold/sulfide and stockwork mineralization (e.g. Malartic district, Quebec)
- Hydrothermal gold mineralization with intrusion centered quartz-vein arrays (e.g. Dome and Hollinger-McIntyre, Timmins, Ontario)
- Iron formation-associated gold, as identified in Deloro Group calc-alkaline basalts (e.g. Carshaw Deposit)
- Komatiite-hosted Ni sulphide mineralization, as found in the McWatters and Redstone mines to the southeast of the Property.

Current exploration work is targeting primarily calc-alkaline intrusion-associated gold deposits (Robert, 2001; Hart and Goldfarb, 2005). In these deposits, gold mineralization is typically associated with stockwork zones of quartz-albite–K-feldspar veinlets and intervening disseminated pyrite in altered monzonite or syenite porphyry.

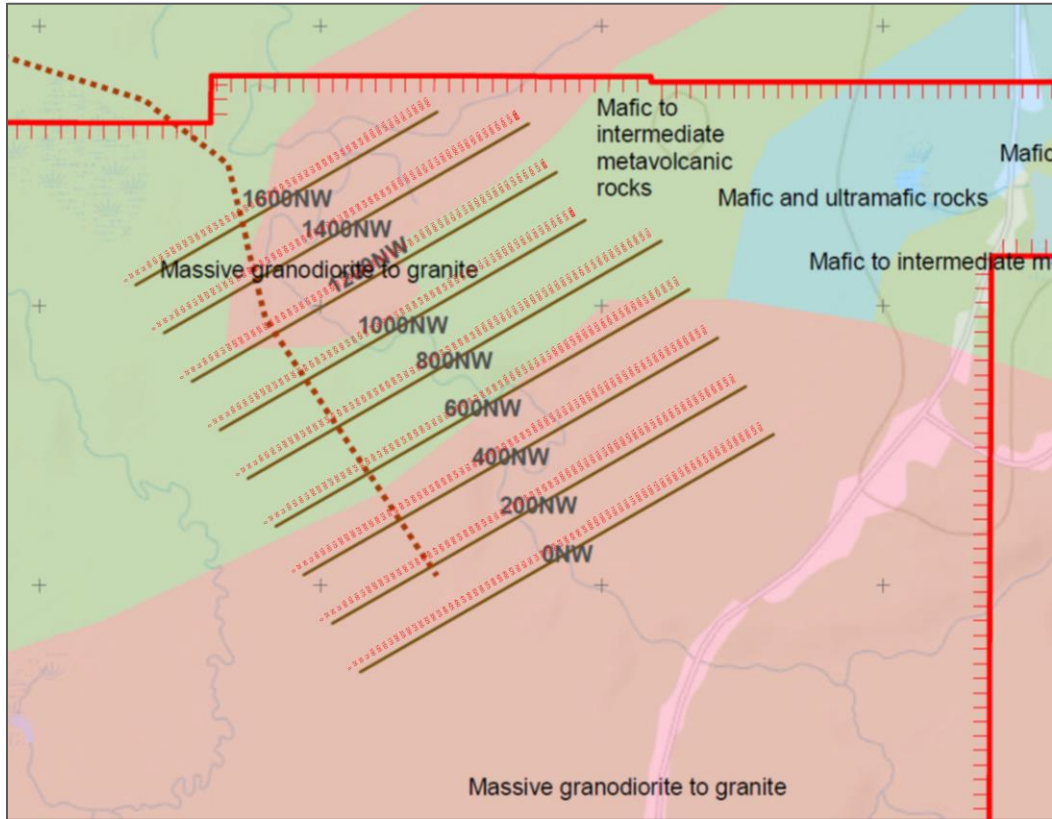


Figure 1. Bedrock geology of the Golden Perimeter Project with geophysical grid lines and an inferred fault.

*Geological information provided by HighGold Mining Inc.



2. IMPLEMENTED SOLUTION

The basic field implementation of IP is simple. An electrical current (**I**) is sent through the ground, via a pair of current electrodes (C_1 - C_2). The primary voltage difference ΔV_p between two potential electrodes (P_1 - P_2) allows for the determination of the **apparent resistivity**, ρ_a of the subsurface. The apparent resistivity is expressed in ohm-m (Ωm) and is proportional to the difficulty of the electric current to circulate in the ground. In the absence of a solid metallic conductor, the resistivity will be largely dependant on the porosity of the rocks. The following geological phenomena will act on the resistivity of the rock formations:

<u>Decrease</u>	<u>Increase</u>
Clay weathering	Carbonation
Fracturing	Silicification
Shearing	Sericitization
Metamorphism	Albitization
Dissolution	Compaction
Saltwater	Metamorphism

The electrical current (**I**) will also charge the surface of the metallic minerals with the ions present in the groundwater, like little batteries in the ground. Once the current (**I**) is switched off, those batteries will discharge. The receiver records that weak secondary voltage difference ΔV_s decaying with time between the two potential electrodes (P_1 - P_2). The **chargeability** is the measure of this IP effect and is proportional to the total surface of metallic minerals in the subsurface rocks in contact with groundwater, just like lead plates in acid in a car battery. The secondary voltage ΔV_s is normalized by the primary voltage difference ΔV_p and by the acquisition time interval; the chargeability is therefore expressed in mV/V. In order to produce an anomaly, the grains do not need to be connected together, unlike electromagnetic (EM) methods.

Resistivity / induced polarization surveys are therefore very useful in mineral exploration to detect:

- Occurrences of disseminated sulphides (as low as 0.5%) to which gold, silver, copper, molybdenum, etc. could be associated. When disseminated in a silicified, carbonated sericitized or albitized rock, the apparent resistivity will rise above the level of the other host rocks, facilitating the interpretation of these occurrences.
- Semi-massive to massive, non-conductive clusters (rich in sphalerite, silicified or electrically discontinuous).
- Massive clusters that do not offer good coupling with EM fields (vertical cylinder or small lenses).



The main disadvantage of IP surveys is that other chargeable minerals exist, such as graphite, clay minerals and some oxides. From a geological point of view, IP responses are almost never uniquely interpretable. The power of the IP technique can also be greatly diminished by the presence of a conductive overburden layer covering the basement rock. The OreVision® approach fills this gap while offering many advantages over conventional methods:

- Improved penetration through conductive overburden.
- Greater depth of investigation (2 to 4 times higher than conventional techniques, Figure 2).
- Better near surface resolution.
- Increased definition of the vertical extent of sources (Figure 3).

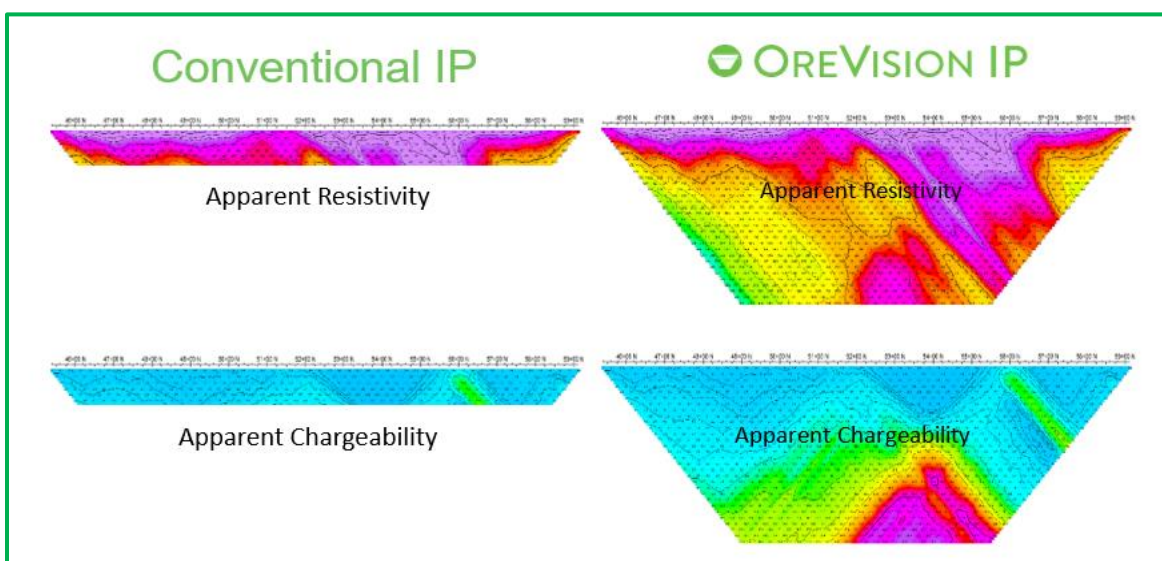


Figure 2. To the left, conventional IP pseudosections. To the right, OreVision® IP pseudosections demonstrating the increased depth of investigation.

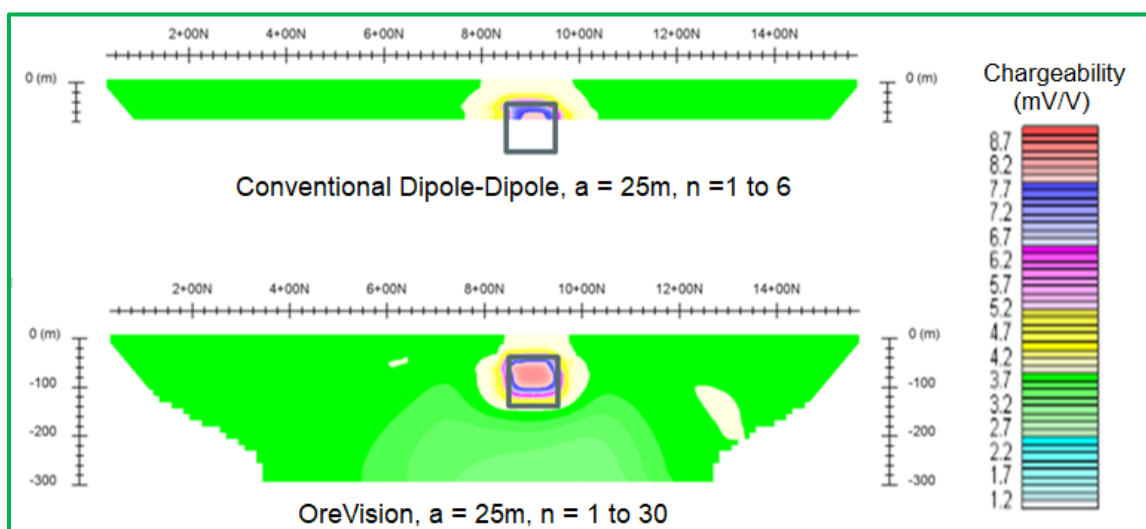


Figure 3. A conventional IP survey allows the detection of the roof of this body buried at 50 m depth (top vertical section). OreVision® also allows to define the vertical extension (bottom section).



- Enhanced discrimination of one source overlying another (Figure 4).

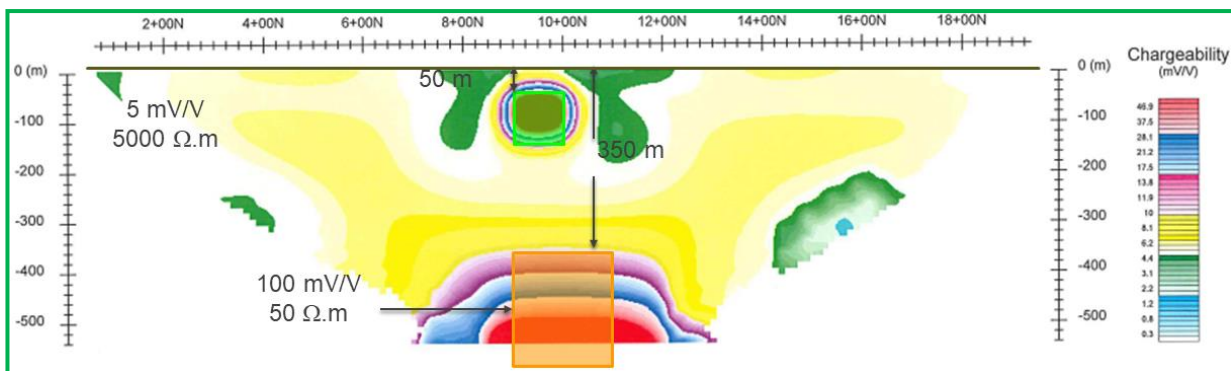


Figure 4. OreVision® can detect a very deep source even below another.

- Higher data density, providing comprehensive coverage.
- More reliable 3D data inversions, allowing accurate drill targets to be delivered.

The OreVision® system was designed with the following consideration in mind. Figure 5 compares the difference in resolution between increasing the "n" factor versus using larger "a" spacings. For a body buried at 200 m depth, the top section shows the inefficiency of 200 m "a" spacings with "n" factors 1-6. The middle section shows a very weak response, below the normal noise level, with an "a" spacing of 100 m. The bottom section shows that this same body is easily detected with "a" spacings of 25 m and "n" factors from 1 to 30.

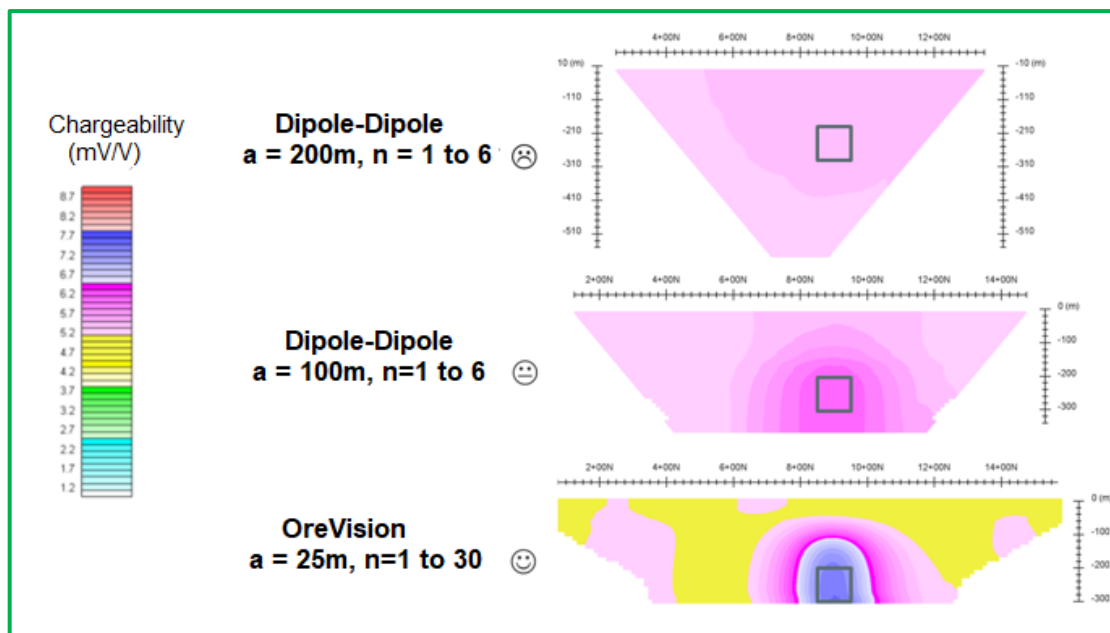


Figure 5. Demonstration of the efficiency of increasing the factor "n" versus the spacing "a" to see deeper.



To achieve this degree of resolution, the following technological advances have been made:

- The development of a special 24-conductors cable with triple electrical insulation that ensures faultless measurements.
- The design and construction of an electronic switch (up to 240 channels) for automatic addressing of measuring electrodes, without numbering or connection errors (Figure 6).

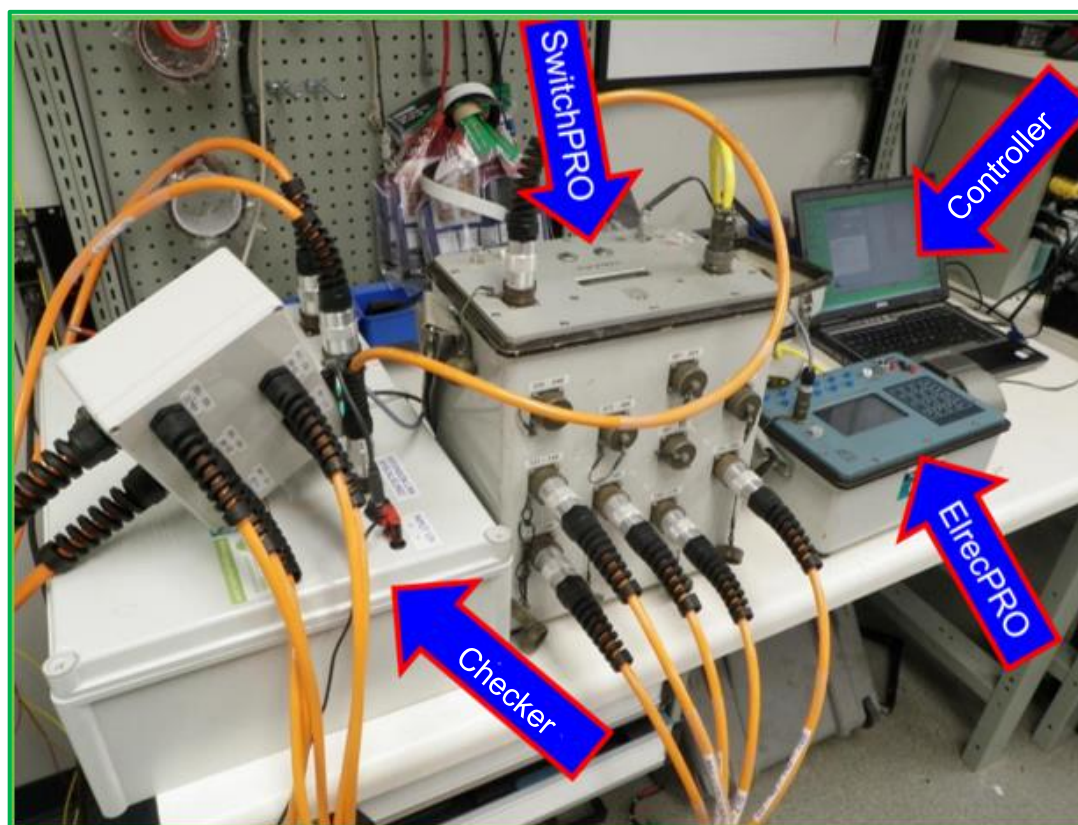


Figure 6. Receiver ElrecPRO and SwitchPRO 240 from IRIS Instruments, automatically performing a series of several thousand compliance tests.

- The development by our partner IRIS Instruments of a powerful transmitter (13 A) that is transportable by a single operator.
- The optimization of our current injection method to maximize the signal-to-noise ratio.
- The streamlining of field operations allowing productivity like that of conventional approaches, therefore at a comparable price.
- The implementation, on a cloud platform, of a powerful algorithm that allows us to perform 3D inversions with less approximation than conventional solutions.

Abitibi Geophysics carried out an induced polarization survey using its proprietary OreVision® technology as commissioned by HighGold Mining Inc. An "a" spacing of 25 m and "n" spacing of 1 to 30 were used. This survey achieved a depth of investigation of 300 m.



3. GEOPHYSICAL INTERPRETATION

The OreVision® survey, performed along the nine profiles (L 0+00N to L 16+00N) was successful in mapping the resistivity and chargeability properties of the geological formations lying within the Golden Perimeter property.

The Golden Perimeter project area is composed of a thick layer of overburden which is conductive and non-chargeable. This layer is also overlain in some portions with a layer of clay which is even more conductive and highly chargeable. This greatly affected the measured apparent values of both the resistivity and chargeability data. The overburden was modelled and used to constrain the inversion to mitigate the masking effect. The modelled overburden layer is displayed in Figure 7.

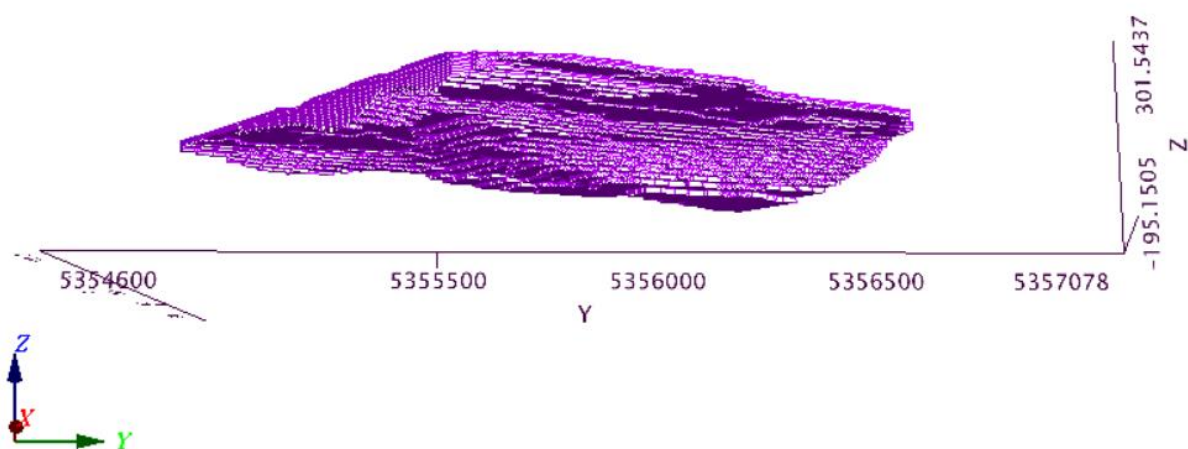


Figure 2. Modelled Overburden Layer

Quality control (QC) performed on the collected OreVision® data validated 92.7% of the recorded readings. The validated data were subjected to 3D inversion using the latest VOXI Earth Modelling technology (cloud-based inversion software service) from Geosoft which converts surface Resistivity/IP measurements into a 3-D realistic voxel model, from which True-Depth Sections are then extracted.

In DC-IP modelling, VOXI software solves two inverse problems. The DC potentials are first inverted to recover the spatial distribution of electrical resistivities, and then the chargeability data are inverted to recover the spatial distribution of polarizable sources. The purpose of the inversion process is to convert the apparent Chargeability and Resistivity measurements into realistic Earth Models.

Recovered resistivity/chargeability models are intended to better characterize the position, geometry and physical parameters of the highlighted polarizable and resistive/conductive sources. Plan view contour maps of resistivity (8.2) and chargeability (8.3) as well as vertical sections were produced.



Two additional parameters were calculated from these two Earth Models:

- The Gold Index which highlights zones of high resistivity and chargeability.
- The Metal Factor which highlights zones of low resistivity and high chargeability.

The Gold Index is presented on all the extracted vertical sections and horizontal (plan) maps (8.6), while the Metal Factor is presented only on the horizontal (plan) maps (8.4). The reader is requested to consult Appendix C (page 20) for the meaning of these two parameters.

□ RESISTIVITY

The resistivity inversion was constrained using a conductive overburden layer of 50 to 100 Ωm .

The surveyed area contains two NNW trending resistive bodies. Both display resistivities between 4000 and 8000 Ωm which is considerably higher than the surrounding rocks which have resistivities between 400 and 2000 Ωm . The resistive trends are well defined on a line per line basis and were mostly resolved with the deep sounding measurements (n-spacing between 15 to 30). These two resistivity bodies are shown in blue on the Geophysical Interpretation Map (10.0) and are defined by resistivities greater than 5000 Ωm . The conductive bodies (<1000 Ωm) are delineated in magenta.

The SW end of the survey area resolved the previously inferred fault from the Ontario Geological Survey's (OGS) regional geological map. The resistivity model displays a sharp contrast from resistive on the hanging wall of the fault to conductive on the footwall. The interpreted fault plane is displayed in Figure 8. This interpreted fault plane's intersection with the surface is located approximately 200 m SW of the OGS's inferred fault path

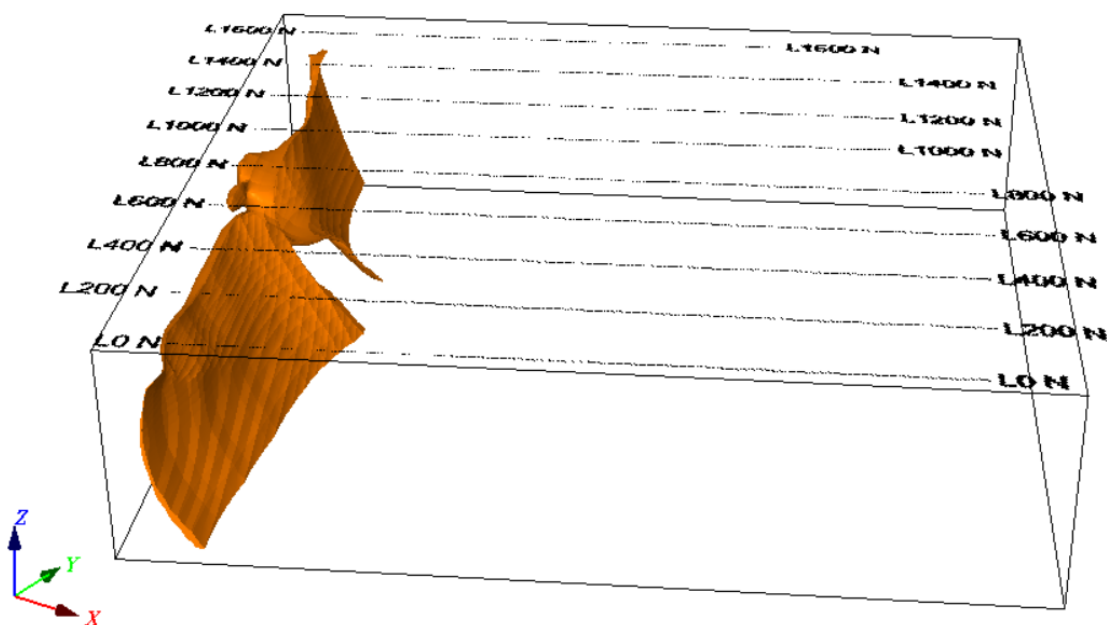


Figure 3. Interpreted Fault Plane



A weakly conductive zone is detected on the hanging wall of the fault zone at the NW end of the grid. However, this response is poorly defined as the overburden in this portion of the grid is at its thickest, extending down to more than 125 m below the surface.

In the middle portion of the survey grid, a structural feature is detected along the fault zone, which directly correlates with the position of the ring-like magnetic anomaly. Figure 9 displays the analytic signal of the magnetic data above the detected structural feature.

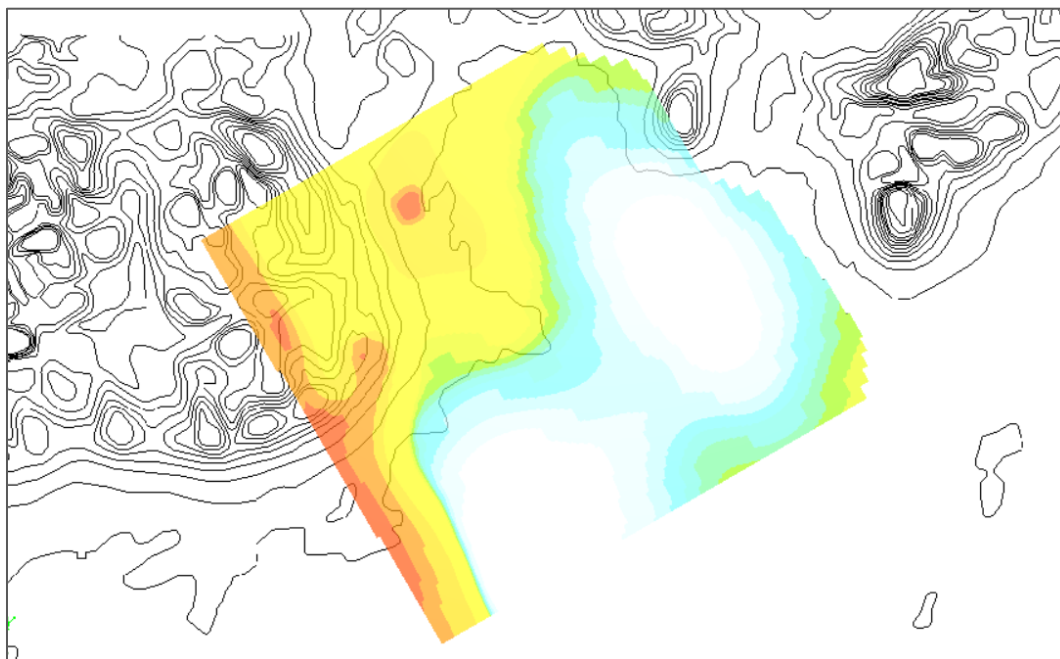


Figure 4. Plan View of the Resistivity at 50 m (above sea level) with Analytic Signal Contours

□ *CHARGEABILITY*

The chargeability inversion was constrained using a non-chargeable overburden layer of 0-1 mV/V. The OreVision® survey detected three chargeability anomalies:

GDP-01 is located on the hanging wall of the fault zone at its NW end. This anomaly displays the strongest chargeability values displayed over the survey area. It is well defined in L 14+00E and L 16+00E. This sources geophysical signature and correlation with the airborne magnetic anomaly make it a first priority target.

GDP-02 on the SE end of the fault zone has the chargeability and resistivity high signature that is typical of disseminated sulphide targets.

GDP-03 is a ring-like chargeability feature that surrounds the high resistivity body on the NE end of the survey grid. The response is not well defined as its northernmost end is cut by the end of the survey lines and its portion at the center of the survey grid is masked by the sand layers.



4. CONCLUSIONS AND RECOMMENDATIONS

The OreVision® survey has allowed us to identify three (3) distinctive polarizable axes within the Golden Perimeter Project. Using the available geological information, we have reviewed the priority and the importance attached to these IP targets.

□ *RECOMMENDATIONS*

○ *PROSPECTING*

No chargeable sources appear to be close enough to surface for prospecting. The surveyed area is entirely covered with a thick (>10 m) layer of overburden.

○ *DRILLING*

A drilling program has been recommended to test some of the chargeable axes (targets) outlined in this report.

Table 1 lists the proposed drill holes and their characteristics as well as the location and description of the associated targets. These initial holes should be planned to intersect the centres of the chargeability targets as outlined on the interpreted depth sections.

○ *SURVEY EXTENSION*

This survey has identified interesting anomalies near the edges of the survey grid. It is recommended that additional survey lines be added to the northwest of the survey grid to fully delineate the extents of target GDP-01.



Table 1. OreVision® Drilling Targets on the Golden Perimeter Project

DRILL HOLE (Priority_Source)	Type / Target Interest	Location of the Target			Proposed DDH			Target Visual
		Line	Station	Elevation (to Center - m)	Station	Az. (°)	Dip (°)	Chargeability
1_GDP-01	High chargeability target Located along a possible fault zone Associated with a magnetic anomaly	16+00N	3+00E	0	3+75E	240	-65	
2_GDP-02	Chargeable and highly resistive target Follows the projection of a possible fault zone Likely associated with disseminated sulphides	2+00N	4+00E	120	4+75E	240	-65	



The author is confident that the Golden Perimeter Project offers potential for discovering new mineralized zones and that the drillholes recommended for the investigation of the anomalous sources identified by the present survey will be positive.

However, our knowledge of the property's geology is not as thorough as the geologist of HighGold Mining Inc. Our interpretation and recommendations are mainly based on the observed geophysical responses.

To maximize the outcome of the present results, HighGold Mining Inc. should ensure all available geoscience information are compiled, assess and, if necessary, redefine the priority and nature of the recommendations proposed in this report.

Respectfully submitted,
Abitibi Geophysics Inc.

Marc Auclair, G.I.T.,
Geophysicist

Pam Coles, P.Geo.,
Chief Geophysicist
PGO # 2612

PC/si



APPENDIX A: FIELDWORK SITE

- ❑ *PROJECT ID* **Golden Perimeter (West Block)**
(Our reference: **20NT063-P2**)

- ❑ *CLIENT ADDRESS* 800 West Pender Street, Suite 320
Vancouver, British Columbia
V6C 2V6

- ❑ *CLIENT REPRESENTATIVE* **Conor McKinley**
Senior Geologist – Manager (Timmins Projects)
CMcKinley@highgoldmining.com

- ❑ *LOCATION* **Timmins Area, Ontario, Canada**
NAD83 / UTM zone 17N: 474 400 mE, 5 355 500 mN
NTS sheet: 42A/06

- ❑ *NEAREST SETTLEMENT* Timmins: Approximately 15 km north of the survey area

- ❑ *ACCESS* The survey area is accessed from downtown Timmins by traveling approximately 16km south on Pine St and 1km northwest along a minor gravel road.

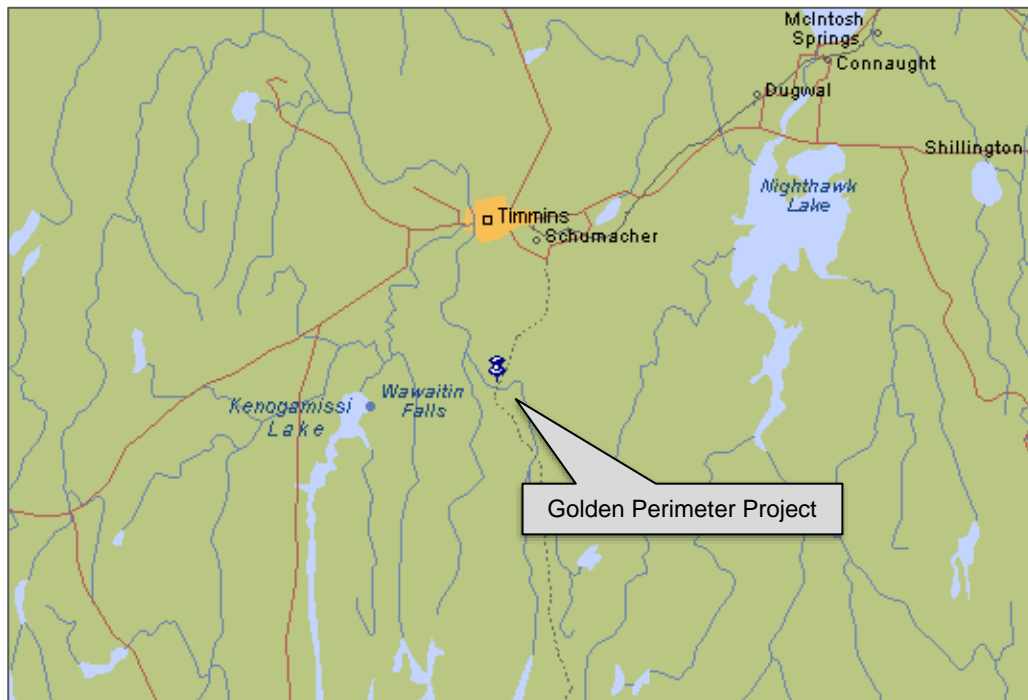


Figure 5. General location of the Golden Perimeter Project.



Appendix A: Fieldwork Site (continued)

- CULTURAL FEATURES* No cultural features other than the access road have been identified.

- GEOMORPHOLOGY* The survey grid is in a region of moderate topographic relief. Elevations range from approximately 275 m to 330 m above sea level. Hydrographically, a serpentine river crosses the entirety of the survey lines. The survey area is covered with an uneven layer of overburden (soil) with portions consisting primarily of clay/silt. There is little to no outcropping areas. The trees on this property have been cut down for logging likely in the past 10 to 15 years. Regrowth of soft wood; mostly spruce trees is now predominant.

- SECURITY AND ENVIRONMENT* As part of the Abitibi Geophysics Inc. EHS program, crew members received first aid training and were provided with the safety equipment and specialized training for the induced polarization technique.

No incidents were reported during this project.

- SURVEY GRID* The OreVision® survey covered 9 lines (L 0+00N to L 16+00N) ranging in length from 1250 m to 1725 m and spaced every 200 m. This grid has no lines cut; all field positioning is based on handheld GPS localization.

- COORDINATE SYSTEM* Local datum: NAD83
Projection type: Universal Transverse Mercator (UTM)
Zone: 17N



□ CLAIM NUMBERS

Table 2. Claim Numbers and Holders.

Claim	Township	Claim Holder
513001	Price	David Meunier
513002	Adams, Price	David Meunier
513003	Adams, Price	David Meunier
513004	Adams	David Meunier
513006	Price	David Meunier
512869	Price	David Meunier
512874	Price	David Meunier
512875	Price	David Meunier
512888	Price	David Meunier
512889	Adams, Price	David Meunier
512976	Price	David Meunier
512977	Price	David Meunier
512978	Price	David Meunier
512979	Price	David Meunier
512983	Price	David Meunier
512984	Price	David Meunier
512985	Adams, Price	David Meunier
512988	Price	David Meunier
512989	Price	David Meunier
512991	Price, Ogden	David Meunier
512992	Price, Ogden	David Meunier
512993	Price	David Meunier

□ PREVIOUS WORK

Table 3. Exploration History

Years	Company/Prospector	Activity
2005 - 2006	J.E. Croxall and R. De Carle	Reconnaissance prospecting and rock sampling. Two reconnaissance MMI (Mobile Metal Ion) surveys.
2006 - 2007	Lake Shore Gold	One diamond drill hole (392m) to follow up on soil anomaly. No significant alteration, veining or mineralization was intersected.
2010 - 2011	Mainstream Minerals	Geophysical survey including 25 line kms Induced Polarization and 57 line kms line cutting and magnetometer survey.
2010 - 2011	J.E. Croxall	Overburden stripping in north-central Price Twp done in fall 2010 and outcrop cleaning, mapping, blasthole drilling and minor sampling in spring and fall 2011.
2019	HighGold Mining Inc.	Airborne magnetic geophysical survey (378 line km)



Appendix A: Fieldwork Site (continued)

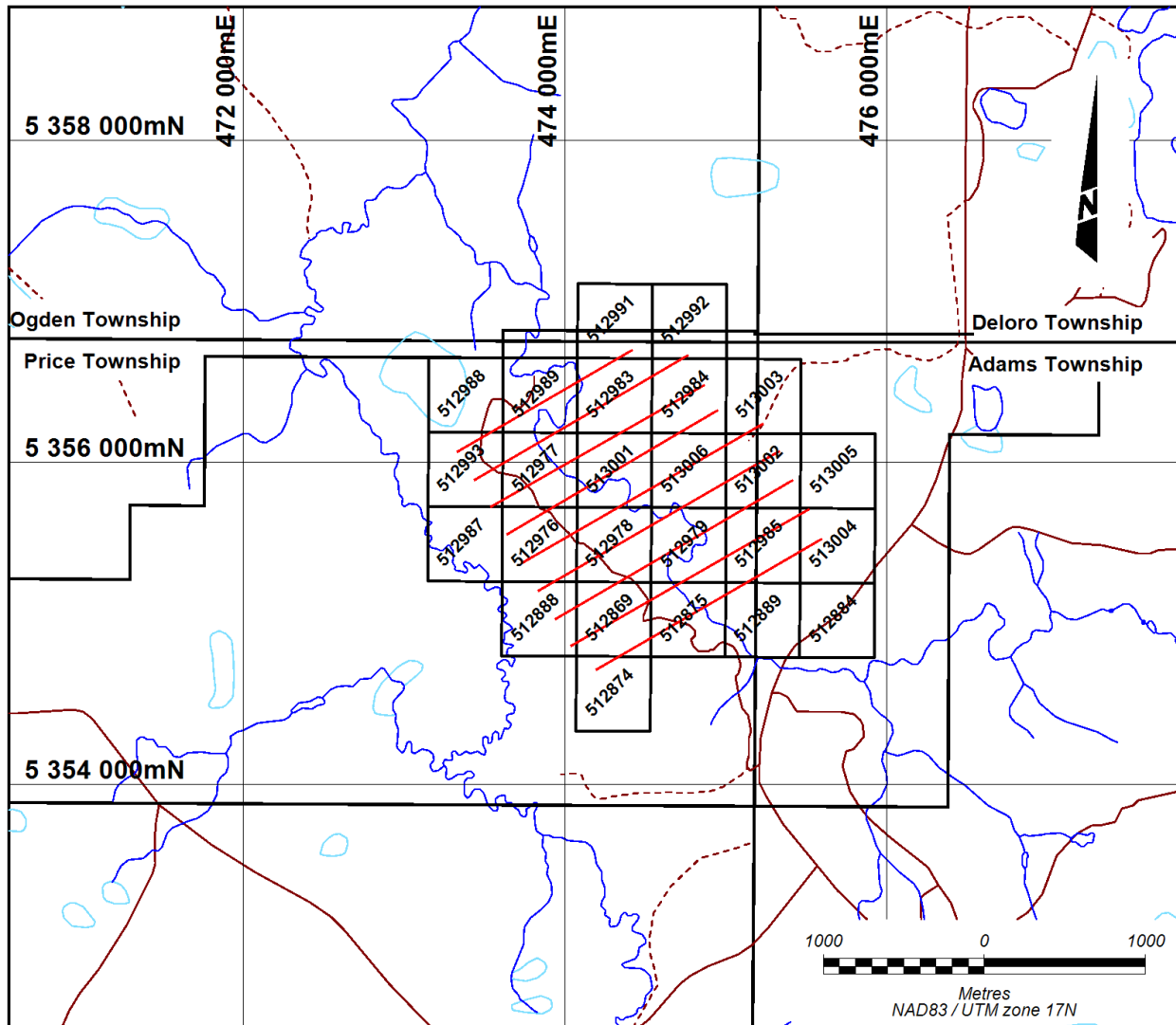


Figure 6. Mineral claims and OreVision® survey coverage over the Golden Perimeter Project.



APPENDIX B: TECHNICAL SPECIFICATIONS

- ❑ *TYPE OF SURVEY* **OreVision®** Time Domain Resistivity / Induced Polarization
"a" = 25 m / "n" = 1 to 30

- ❑ *PERSONNEL*

David Paquin-Larivière Kevin Vaillancourt Eric Vallerand Guillaume-Olivier Poirier Pierre-Olivier St-Onge Samuel Demeules-Cals Matthew Beacock Carole Picard, Tech. Marc Auclair, G.I.T.	Crew Chief and Rx Operator Rx Operator Rx Operator Field Assistant Field Assistant Field Assistant Field Assistant Mapping Technician QC, Processing, Interpretation & Report	Pam Coles, P.Geo. Final Quality Control and Validation of Product Conformity
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- ❑ *DATA ACQUISITION* October 29th to November 11th, 2020
(14 days)

- ❑ *SURVEY COVERAGE* **14.3 km**

- ❑ *IP TRANSMITTERS (TX)* **IRIS Instruments TIPIX, s/n: 14 and 15**
Maximum output: up to 2.2 kW or **13 A** or 1800 V
Power supply: Honda 2000 VA
Electrodes: shape memory alloy
Resolution: 1 mA on output current display
Waveform: bipolar square wave with 50% duty cycle
Pulse duration: 1 second

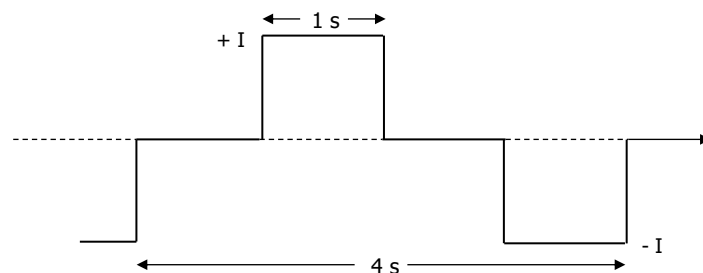


Figure 7. Transmitted signal across C1 – C2.



Appendix B: Technical Specifications (continued)

❑ IP RECEIVERS (RX)

IRIS Elrec-PRO with integrated SwitchPRO: s/n 478 and 488
Electrodes: shape memory alloy

V_P Primary voltage measurement:

- ✧ Input impedance: 100 MΩ
- ✧ Resolution: 1 μV
- ✧ Typical accuracy: **0.2%**

M_a Apparent chargeability measurement:

- ✧ Resolution: 0.01 mV/V
- ✧ Typical accuracy: 0.4%
- ✧ Linear sampling mode: 20-time slices (M₁ to M₂₀)
- ✧ All gates are normalized with respect to a standard decay curve for QC in the field.

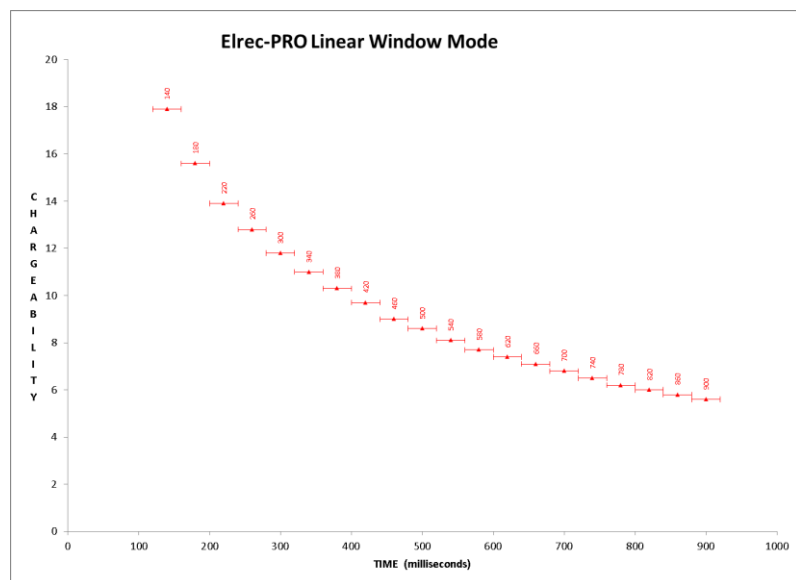


Figure 8. Linear windows (1 s pulse).

❑ APPARENT RESISTIVITY CALCULATION

$$\rho_a = 2 \cdot \pi \cdot \frac{V_p}{I} \cdot n \cdot (n + 1) \cdot a \quad (\Omega \cdot m)$$

Cumulative error: 5% max, mainly due to GPS chaining accuracy.



APPENDIX C: DATA PROCESSING AND DELIVERABLES

☐ QUALITY CONTROL (RECORDS AVAILABLE UPON REQUEST)

Before the survey:

- ✓ Transmitter and motor generator were checked for maximum output using calibrated loads.
- ✓ Receiver was checked using the Abitibi Geophysics SIMP™ certified and calibrated V_p and M_a signal simulator.

During data acquisition:

- ✓ Rx and Tx cable insulation were verified every morning.
- ✓ Data was reviewed using **InteractiveAnomaly**® allowing a daily, thorough monitoring of data quality and survey efficiency.
- ✓ Sufficient pulses were stacked: a minimum of 8 pulses for every reading.
- ✓ A minimum of 6 current electrodes and saltwater were used at each station.

At the Base of Operations:

- ✓ Field QCs were inspected and validated.
- ✓ Each IP decay curve was analyzed with our proprietary Geosoft GX, **InteractiveAnomaly**®. The gates that were rejected were not included in the calculation of the plotted M_a .

The first step in processing OreVision® data is quality control. To ensure consistent and efficient quality control Abitibi Geophysics has developed **InteractiveAnomaly**®. This Geosoft GX analyses the normalized decay curve for each reading within the data set. Only readings that successfully pass quality control will be used to calculate the final chargeability.

☐ QUALITY STATISTICS

Table 4. Quality Statistics – OreVision®

Golden Perimeter Project	
Average contact resistance across Rx dipole (P_1 - P_2)	7.6 kΩ
Average injected current to Tx dipole (C_1 - C_2)	1322 mA
Average V_p measured across Rx dipole (P_1 - P_2)	110 mV
Observed windows found to fit a pure electrode polarization relaxation curve	93 %
Average deviation of the validated, normalized windows with respect to the mean chargeabilities.	0.23 mV/V



Appendix C: Data Processing and Deliverables (continued)

□ *VOXI 3D INVERSION*

Apparent resistivity and chargeability values were inverted using VOXI DC-IP 3D algorithm from Geosoft. This algorithm supports all electrode configurations and a full suite of measurements with intelligent defaults and advanced parameter options.

- Supported time-domain IP and resistivity measurements include voltage, apparent chargeability, peak chargeability, phase, metal factor, and percent frequency effect.
- Supported electrode configurations include conventional line surveys, offset line surveys and full 3D arrays.
- Efficient inversion and accurate discretization options for variable finite volume and adaptive tetrahedral finite element mesh geometries.
- Reduce noise and improve data misfit in the result with effective pairing of both L1 and L2 model norms.

VOXI IP algorithm solves two inverse problems. The DC potentials are first inverted to recover the spatial distribution of electrical resistivities, and, secondly, the apparent chargeability data are inverted to recover the spatial distribution of polarizable particles in the rocks.

The VOXI software generates detailed 3D voxel models of resistivity or conductivity and chargeability. The resulting models can assist in interpreting and targeting regions for mineral (sulphide-gold mineralization, silicified/carbonatized alteration zones, quartz vein style mineralization, etc.) and environmental applications.

□ *LIMITATIONS OF THE 3D INVERSION TECHNIQUE*

Inversions cannot create information that is not already in the raw data set (pseudosections), i.e., the limitations of the technique and array that was used will still prevail. However, noise is efficiently rejected, near-surface effects are easily identified and complex responses, such as two adjoining sources, a wide body, or a dipping geological contact, are well resolved.

In the absence of hard constraining data about the subsurface geometry of the mineralization and considering the non-uniqueness of the geophysical inversion methods, any recovered electrical distribution is only one of an infinite number of possible distributions that could explain the observed data.



Appendix C: Data Processing and Deliverables (continued)

- ❑ *METAL FACTOR* The Metal Factor has been calculated from the recovered resistivity / chargeability dataset as follows:

$$(\text{chargeability} / \sqrt{\text{resistivity}}) \times 1000.$$

It highlights regions of low resistivity and high chargeability which are amenable to hosting disseminated sulphides associated with gold in sheared or faulted environments, and/or semi-massive to massive sulphide occurrences. Although the Metal Factor can be helpful in the search for conductive and chargeable zones, it should be interpreted with caution, particularly in areas with moderate background chargeability and variable resistivity, as conductive zones with moderate background chargeability may yield a high. The resistivity and chargeability data should always be consulted prior to drawing any conclusions from the Metal Factor.

The Metal Factor *Maps* (8.4) display the results of this calculation.

- ❑ *GOLD INDEX* From the recovered resistivity / chargeability dataset acquired from the VOXI DC-IP inversion, the Gold Index has been calculated as follows:

$$(\text{Chargeability}^2 \times \text{Resistivity} / 1000).$$

This highlights regions of high resistivity and chargeability which are amenable to hosting disseminated sulphides associated silicified/carbonatized alteration zones. Although the Gold Index can be helpful in the search for resistive and chargeable zones, it should be interpreted with caution, particularly in areas with moderate background chargeability and variable resistivity as a resistive zone with moderate background chargeability may yield a high. The resistivity and chargeability data should always be consulted prior to drawing any conclusions from the Gold Index. This technique does not highlight conductive, chargeable zones that may also be of interest. The Gold Index is included with the vertical sections for each line.

The Gold Index *Maps* (8.6) display the results of this calculation.

- ❑ *DIGITAL DATA* The maps, pseudosections and true depth sections are delivered in the Oasis Montaj map file and PDF formats on DVD-Rom. The maps are also delivered in the PNG, MapInfo, GeoTIFF, DXF and ArcView file formats.

A copy of all survey acquisition data (ASCII text format), processed data (Geosoft Montaj databases) and the inversion voxels are also delivered on DVD-ROM.



Appendix C: Data Processing and Deliverables (continued)

Table 5. Maps Produced

Map Number	Description	Scale
OreVision® Survey		
Golden Perimeter		
9 Plates Lines 0+00E to 16+00E	Vertical Sections with calculated <i>Gold Index</i>	1:10 000
	Colour Apparent Resistivity & Chargeability Pseudosections (PDF format only)	1:5000
8.2_150	Inverted Resistivity at an Elevation of 150 m (Ohm-m)	1:5000
8.2_75	Inverted Resistivity at an Elevation of 75 m (Ohm-m)	1:5000
8.2_0	Inverted Resistivity at an Elevation of 0 m (Ohm-m)	1:5000
8.3_150	Inverted Chargeability at an Elevation of 150 m (mV/V)	1:5000
8.3_75	Inverted Chargeability at an Elevation of 75 m (mV/V)	1:5000
8.3_0	Inverted Chargeability at an Elevation of 0 m (mV/V)	1:5000
8.4_150	Calculated Metal Factor at an Elevation of 150 m	1:5000
8.4_75	Calculated Metal Factor at an Elevation of 75 m	1:5000
8.4_0	Calculated Metal Factor at an Elevation of 0 m	1:5000
8.6_150	Calculated Gold Index at an Elevation of 150 m	1:5000
8.6_75	Calculated Gold Index at an Elevation of 75 m	1:5000
8.6_0	Calculated Gold Index at an Elevation of 0 m	1:5000
10.0	Geophysical Interpretation	1:5000

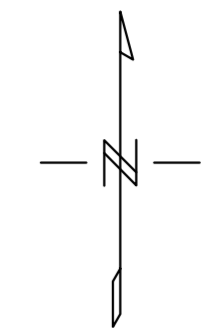
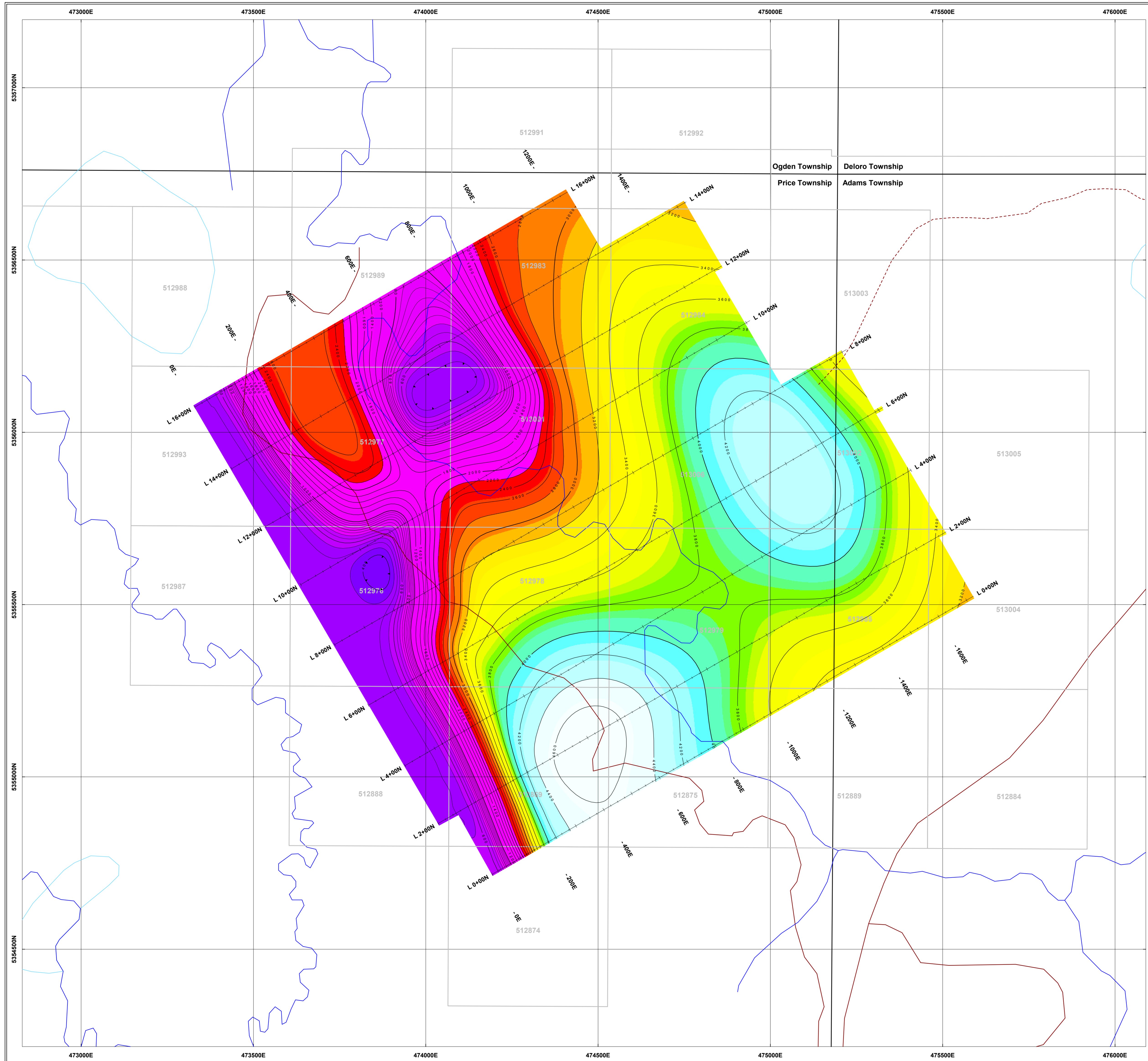
Vertical sections are bound, and colour maps are inserted in pouches at the end of this report. Our Quality Control System requires every final map to be inspected by at least two qualified persons before being approved and included within a final report.



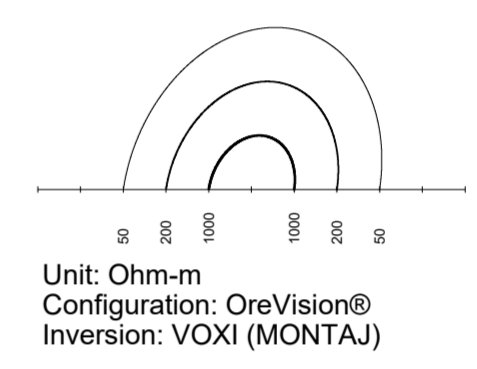
Appendix D: References

Hart, C.J.R. and Goldfarb, R.J. (2005). Distinguishing Intrusion-Related from Orogenic Gold Systems: New Zealand Minerals Conference Proceedings, Australasian Institute of Mining and Metallurgy, Melbourne, Victoria, pp.125–133.

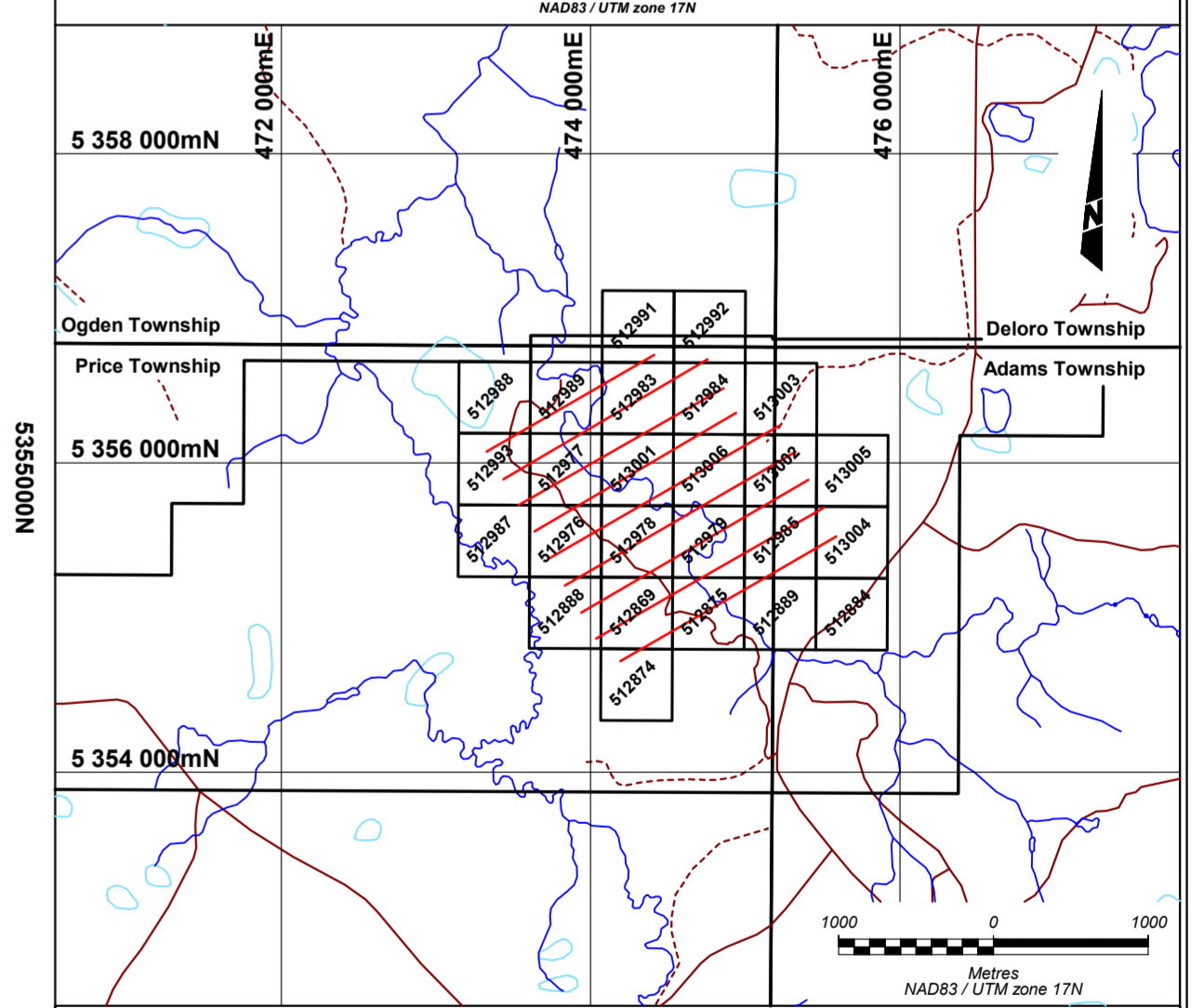
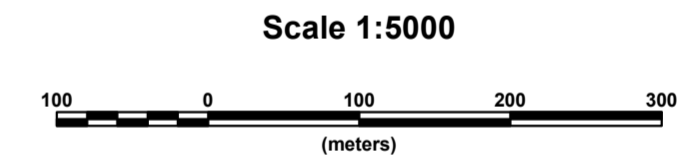
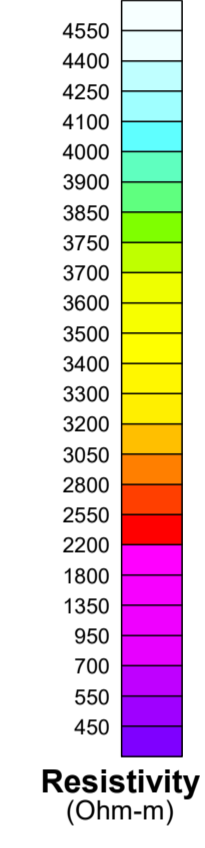
Robert, F. (2001). Syenite Associated Disseminated Gold Deposit in the Abitibi Greenstone Belt, Canada: Mineralium Deposita v. 36, pp. 503–516.



Legend
Resistivity Contours



Unit: Ohm-m
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



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Golden Perimeter Project
Price & Adams Townships, Ontario

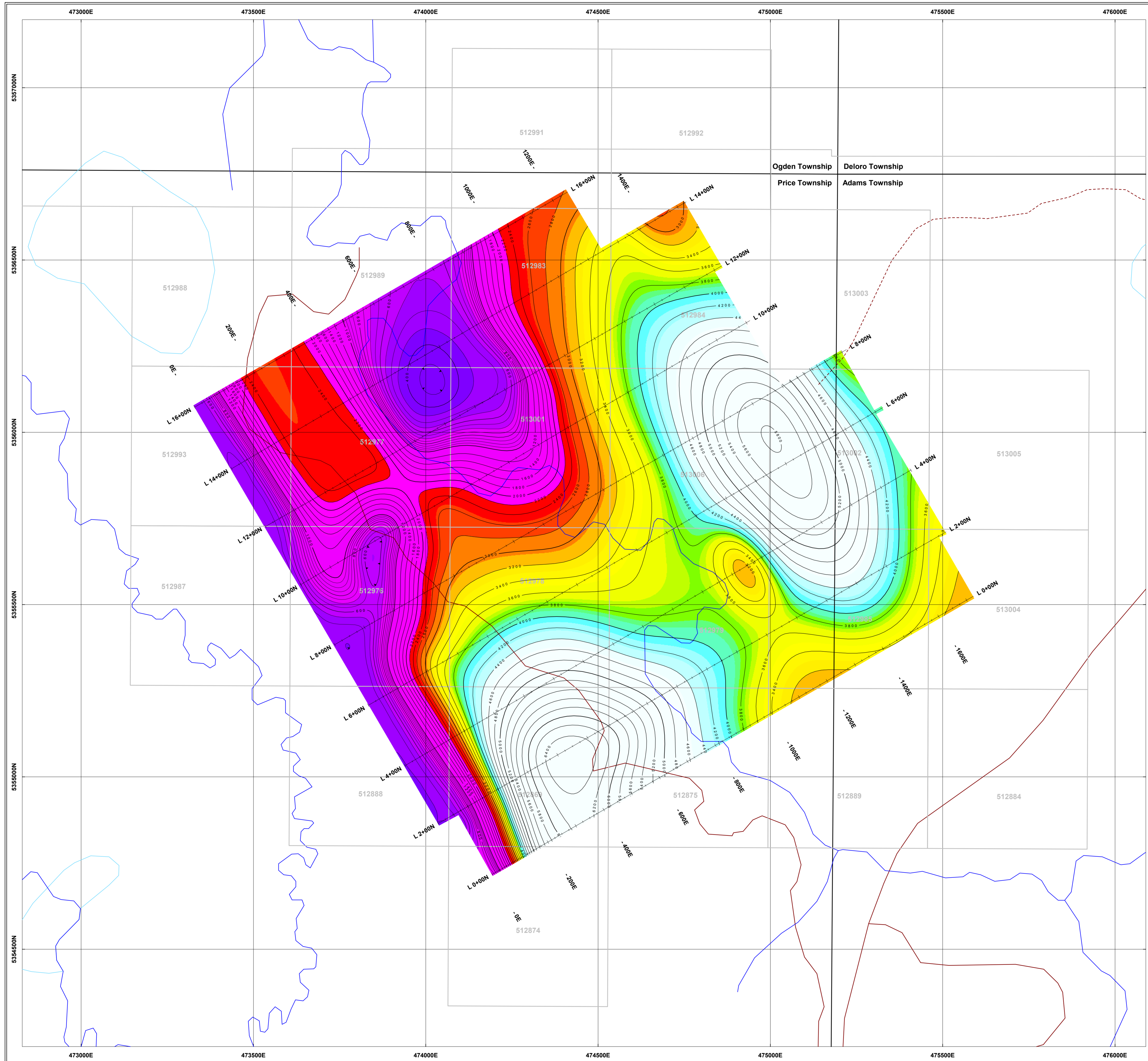
OreVision® Survey
Inverted Resistivity at an Elevation of 0 m
(Ohm-m)



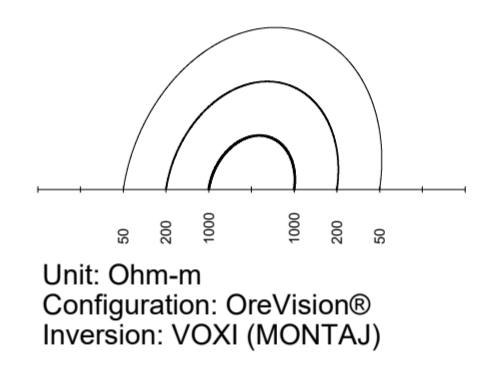
Interpreted by: M. Auclair, G.I.T. 2020/12
Surveyed by: Abitibi Geophysics Inc. 2020/10
Verified by: P. Coles, P.Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



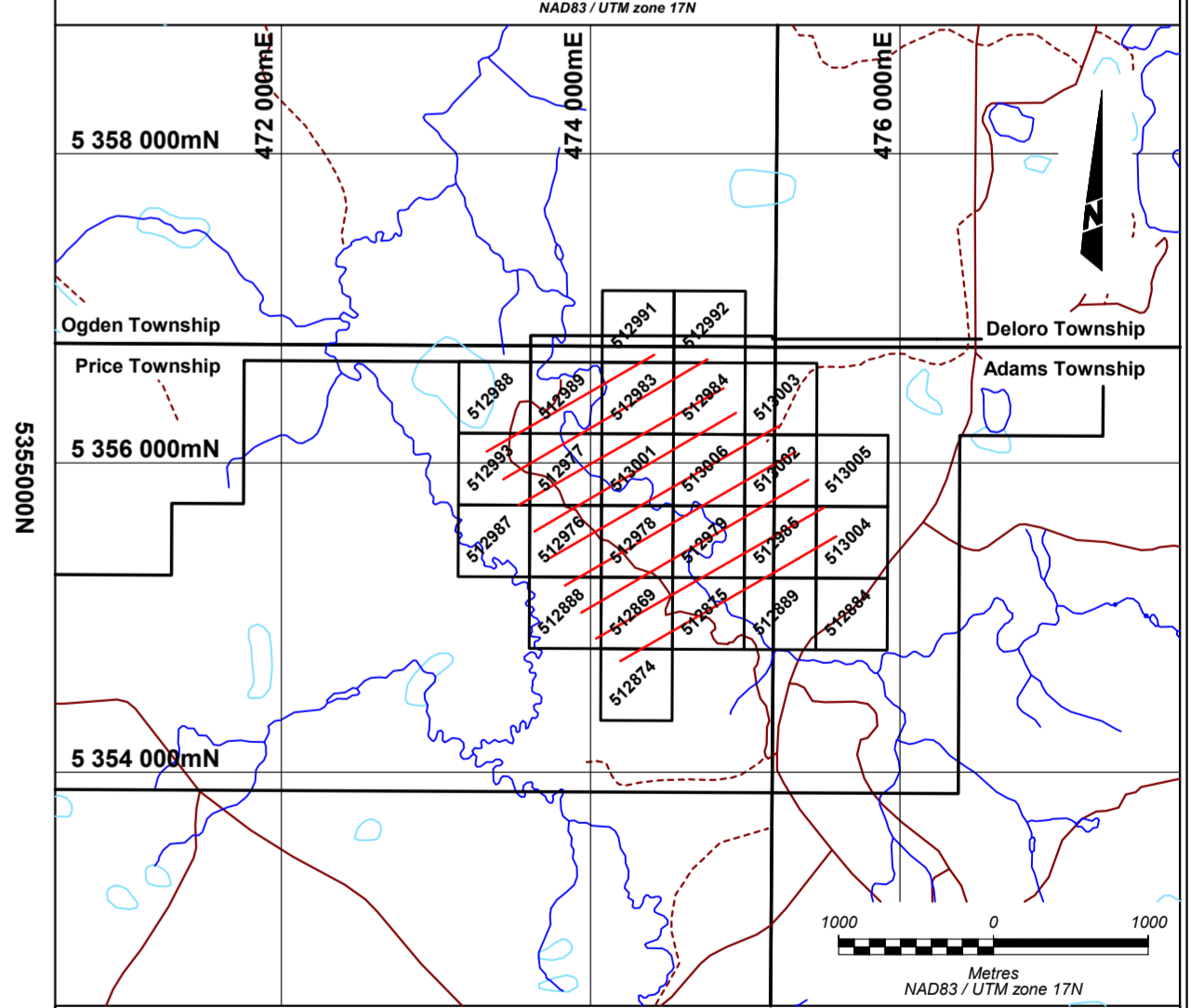
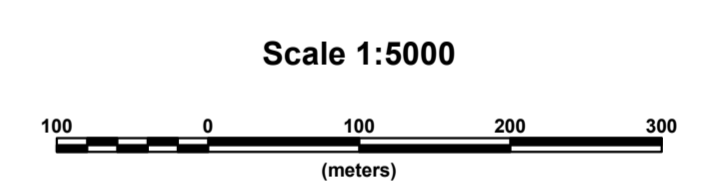
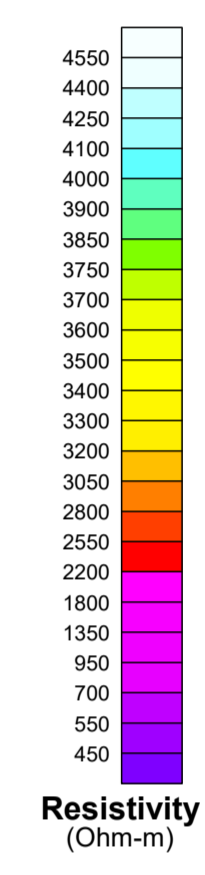
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Legend
Resistivity Contours

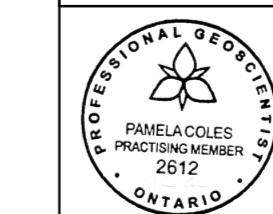


Unit: Ohm-m
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



HighGold Mining Inc.
Golden Perimeter Project
Price & Adams Townships, Ontario

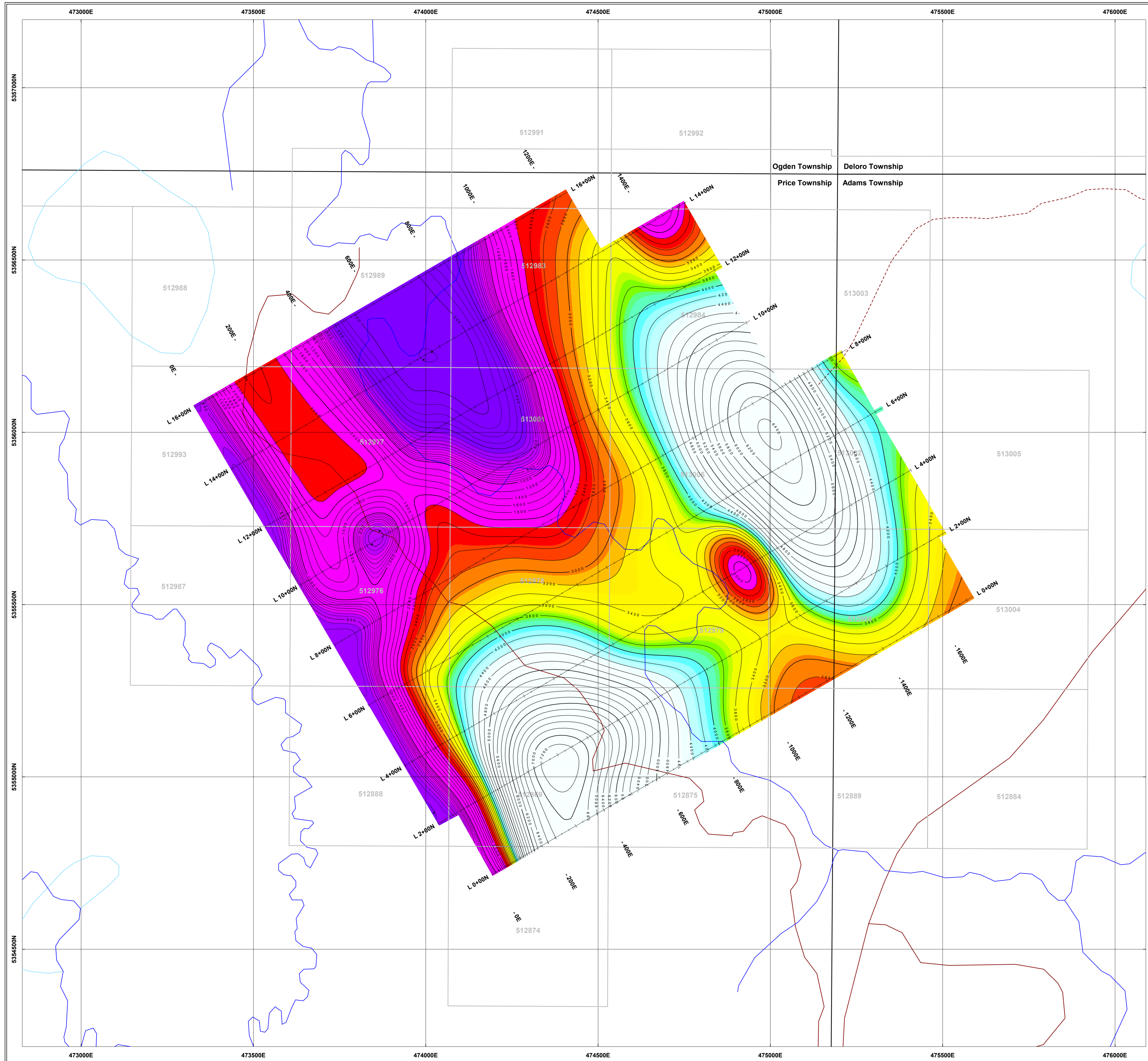
OreVision® Survey
Inverted Resistivity at an Elevation of 75 m
(Ohm-m)



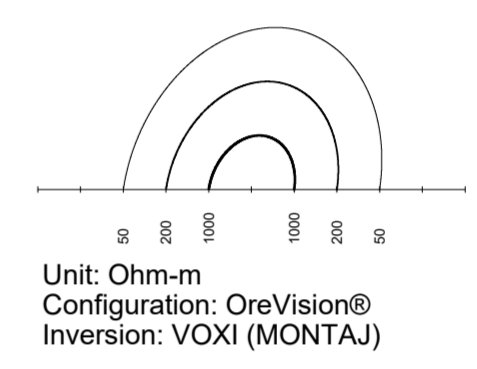
Interpreted by: M. Auclair, G.I.T. 2020/12
Surveyed by: Abitibi Geophysics Inc. 2020/10
Verified by: P. Coles, P.Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



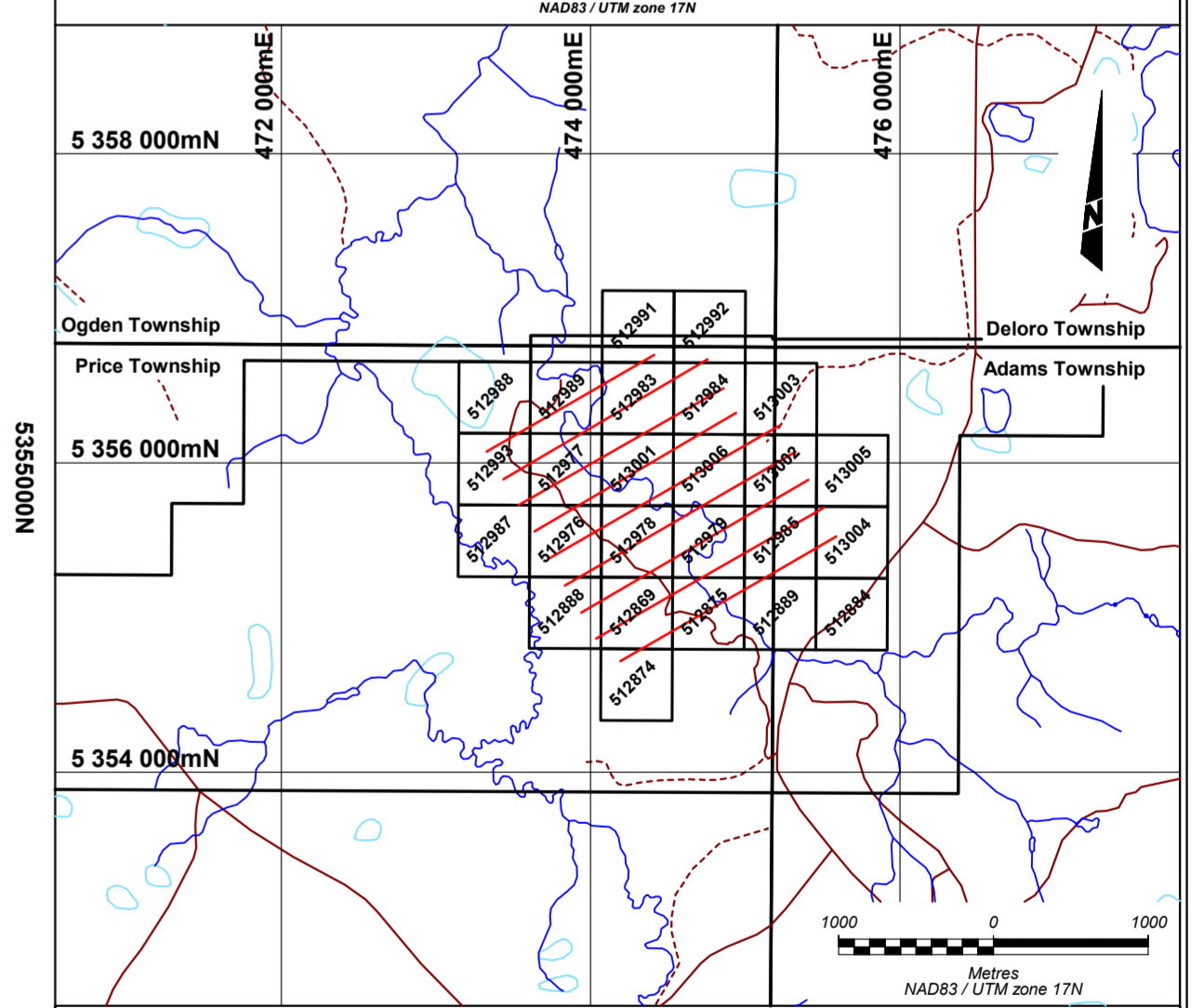
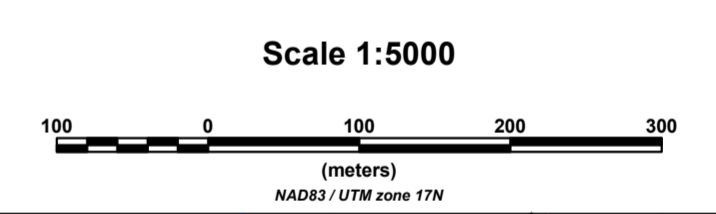
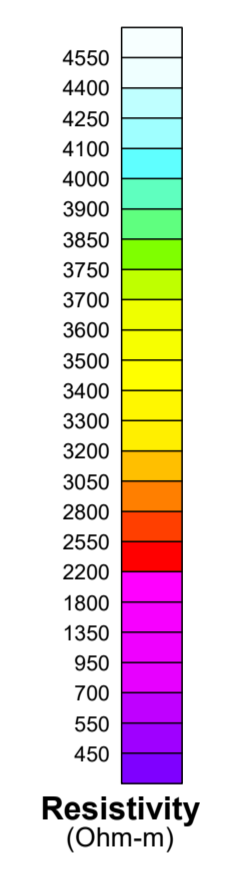
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Map no: 8.2_75



Legend
Resistivity Contours

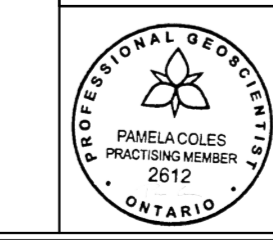


Unit: Ohm-m
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



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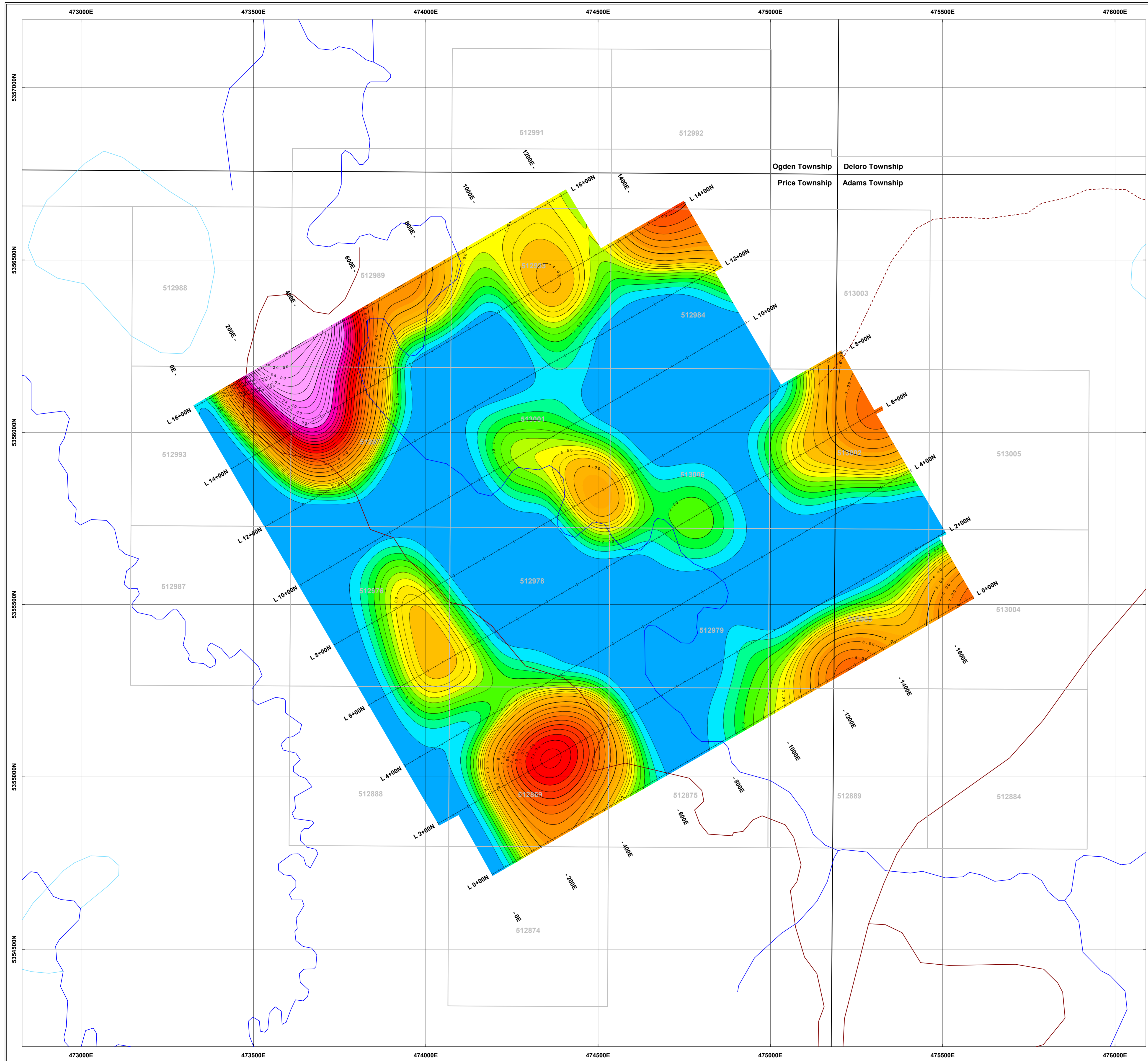
OreVision® Survey
Inverted Resistivity at an Elevation of 125 m
(Ohm-m)



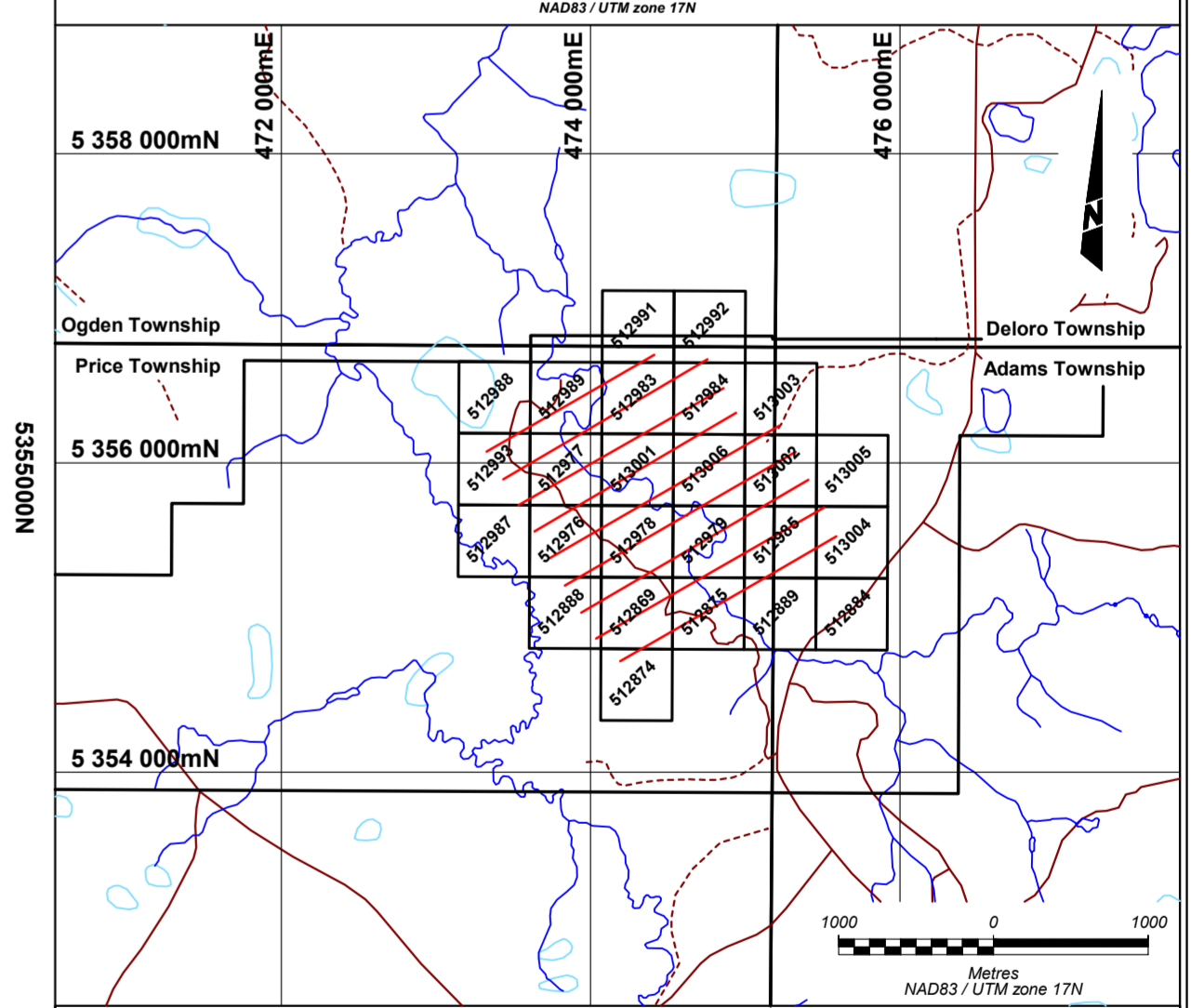
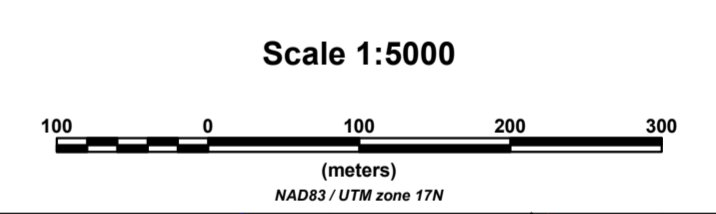
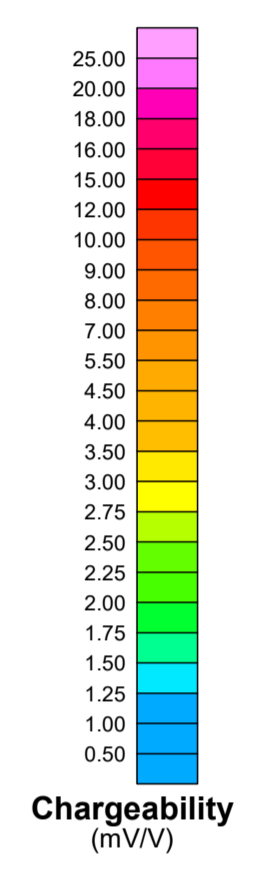
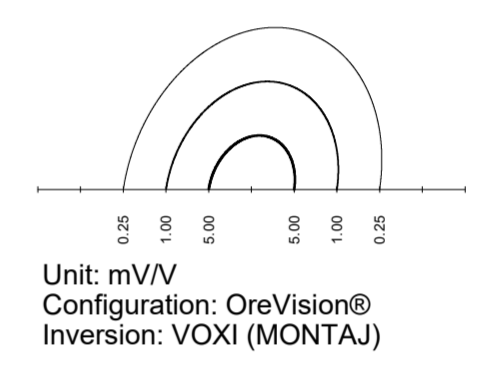
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Surveyed by: Abitibi Geophysics Inc. 2020/10
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Reference map: 42A/06
Project no: 20NT063-P2



Scale 1:5000
Map no: 8.2_125



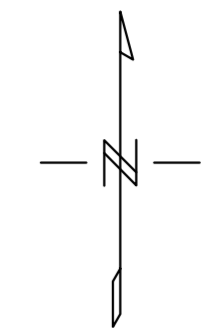
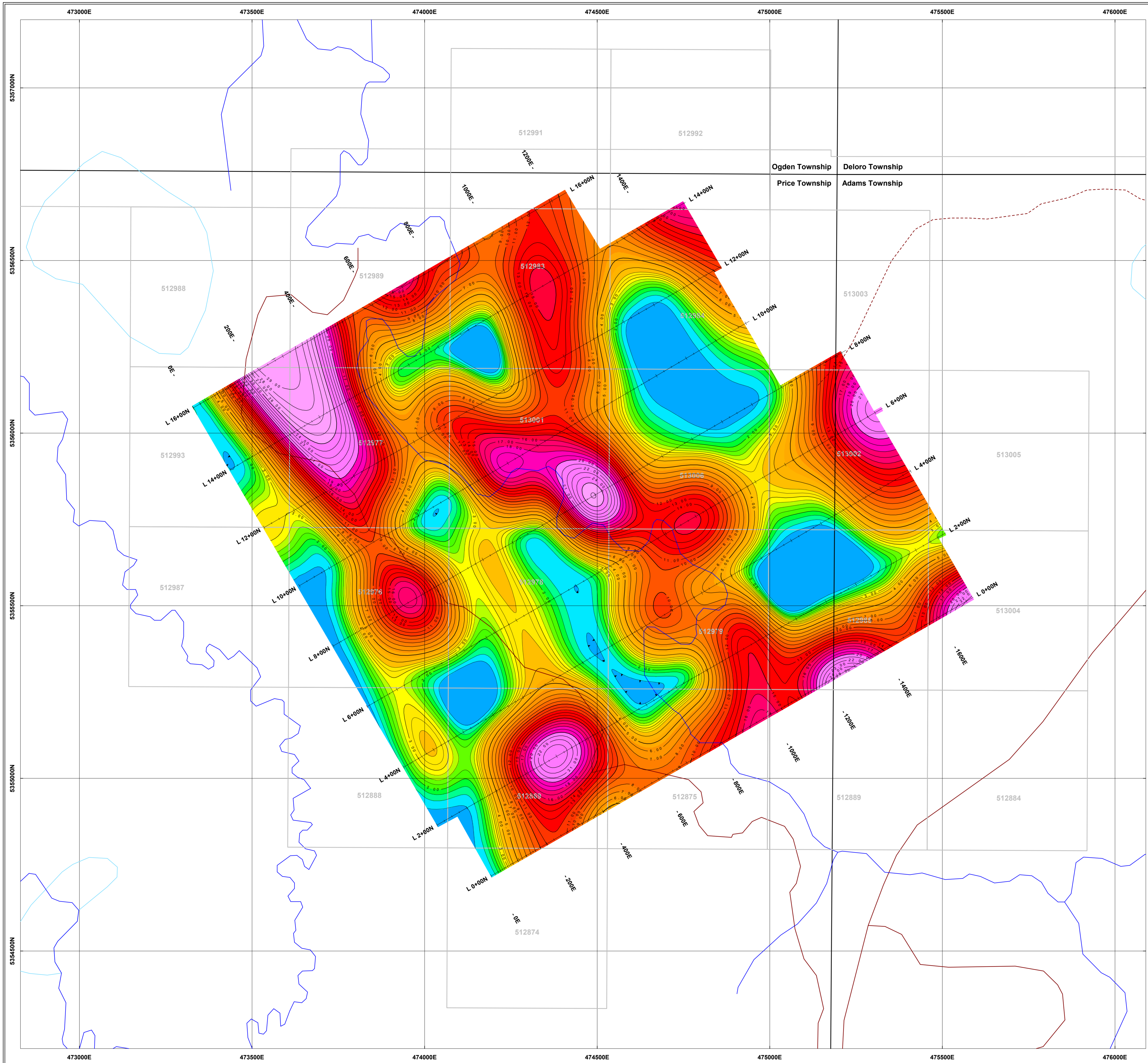
Legend
Chargeability Contours



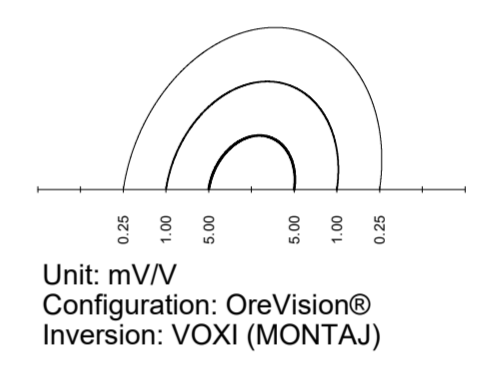
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Golden Perimeter Project
Price & Adams Townships, Ontario

OreVision® Survey
Inverted Chargeability at an Elevation of 0 m
(mV/V)

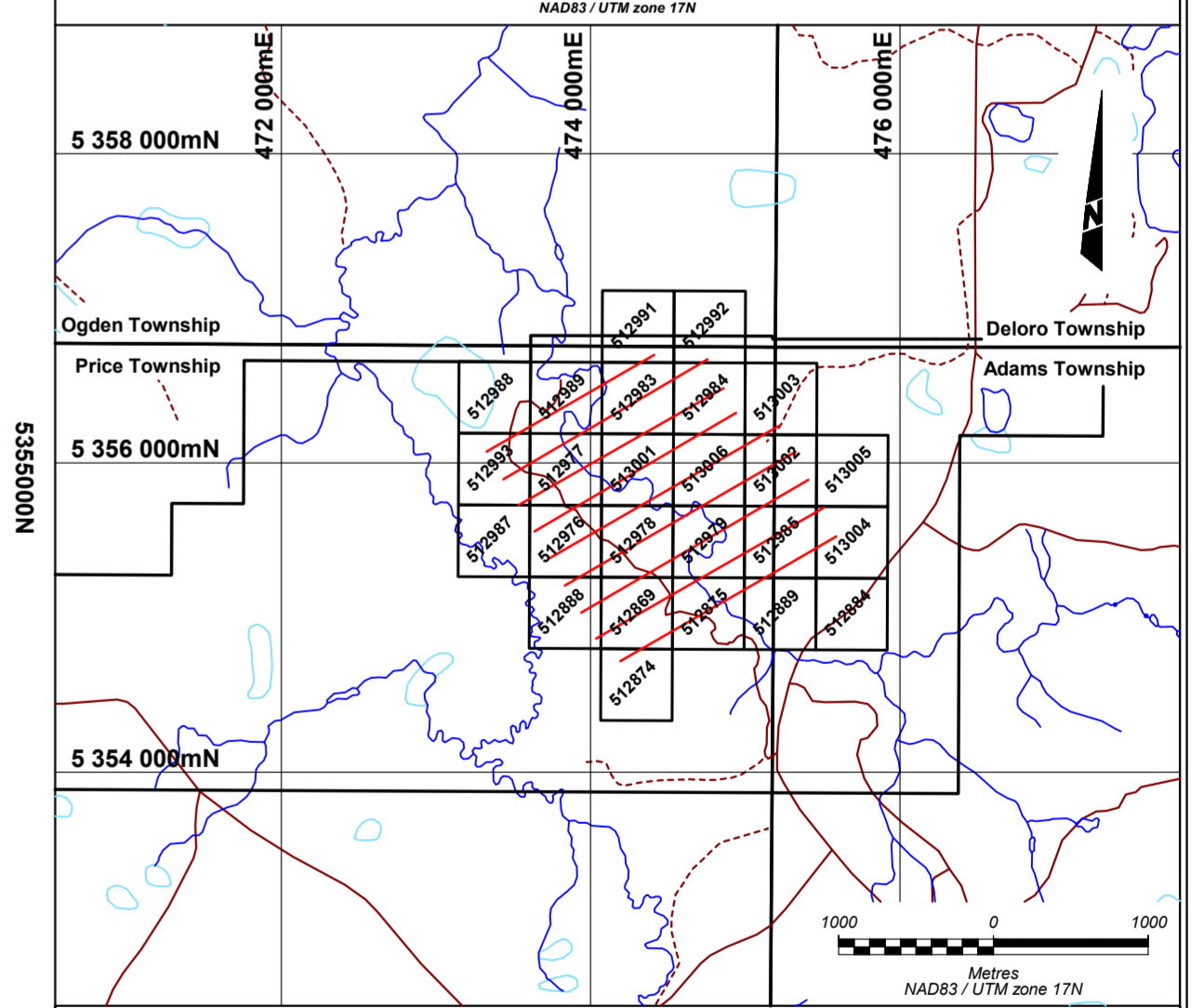
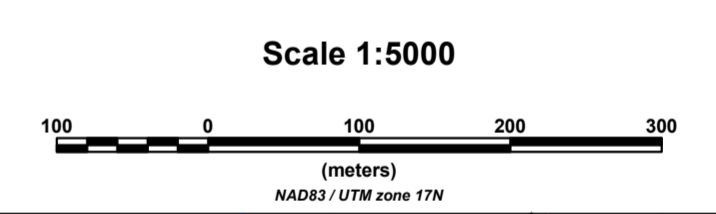
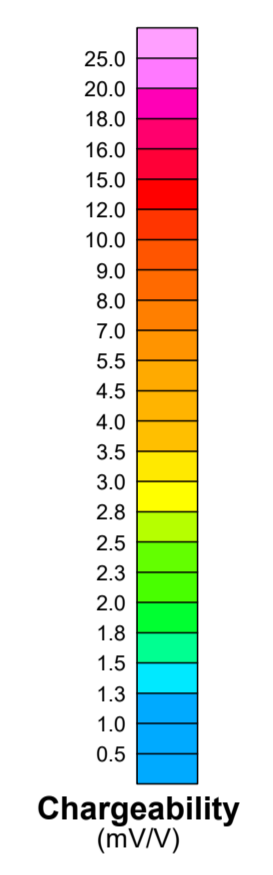
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	Verified by: P. Coles, P. Geo.	2020/12	
	Reference map: 42A/06	Scale 1:5000	
Project no: 20NT063-P2	Map no: 8.3_0		



Legend
Chargeability Contours

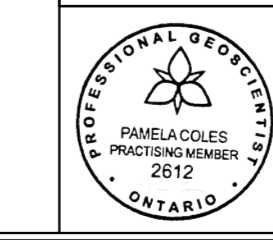


Unit: mV/V
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



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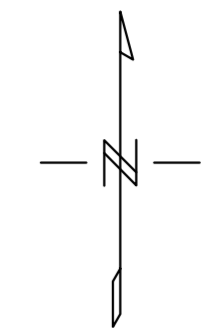
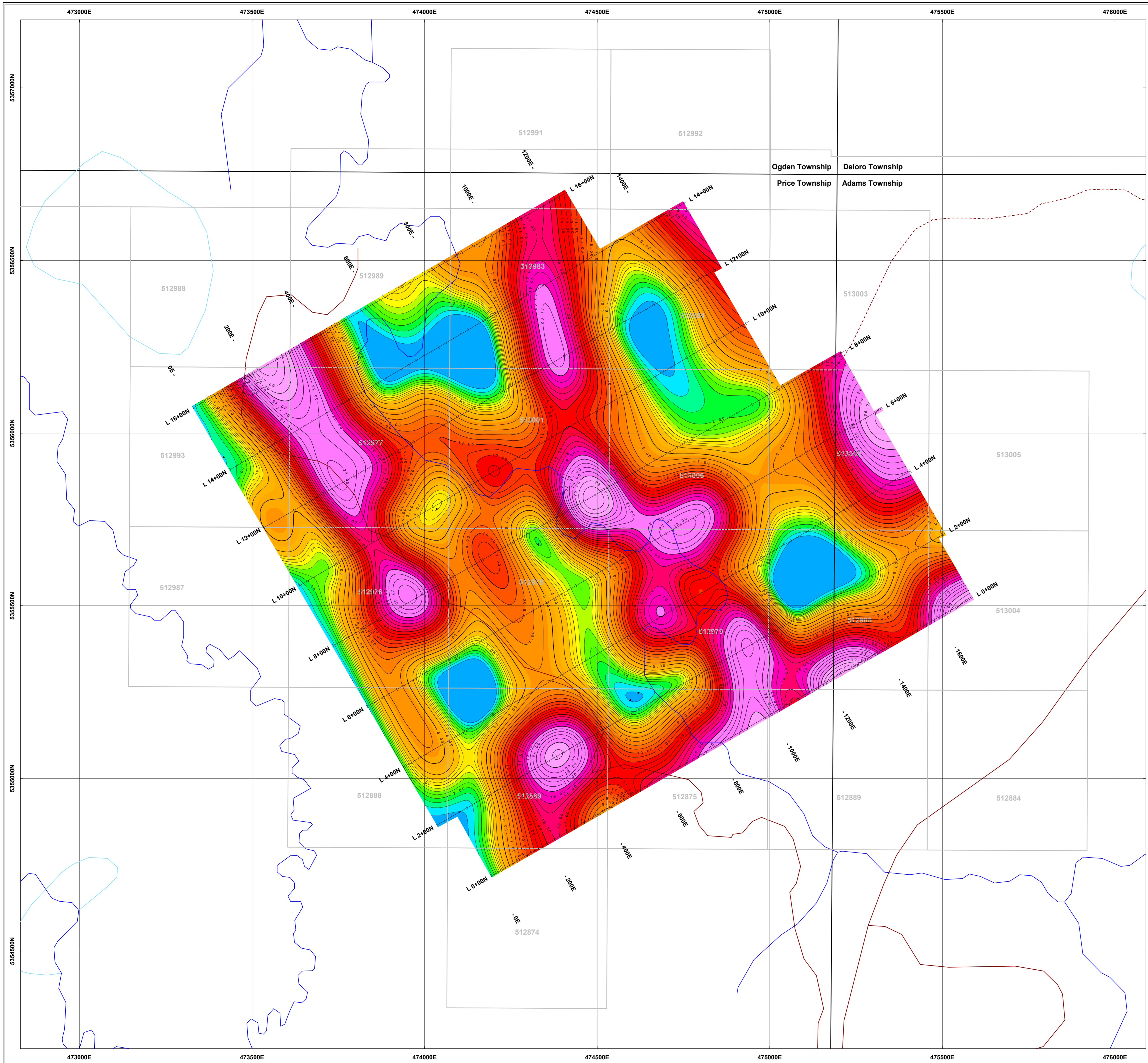
OreVision® Survey
Inverted Chargeability at an Elevation of 75 m (mV/V)



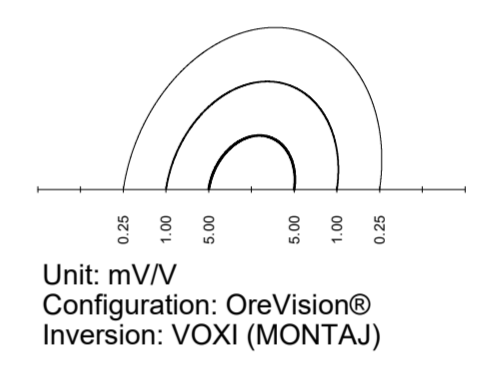
Interpreted by: M. Auclair, G.I.T. 2020/12
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Verified by: P. Coles, P.Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



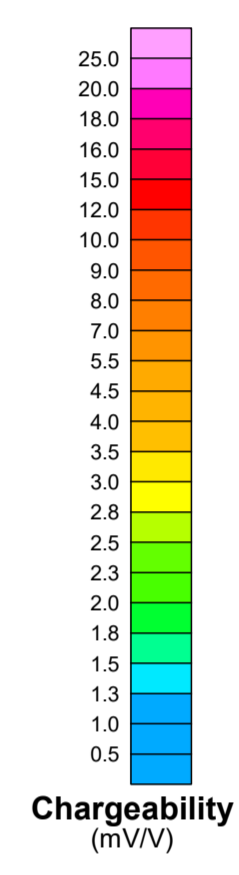
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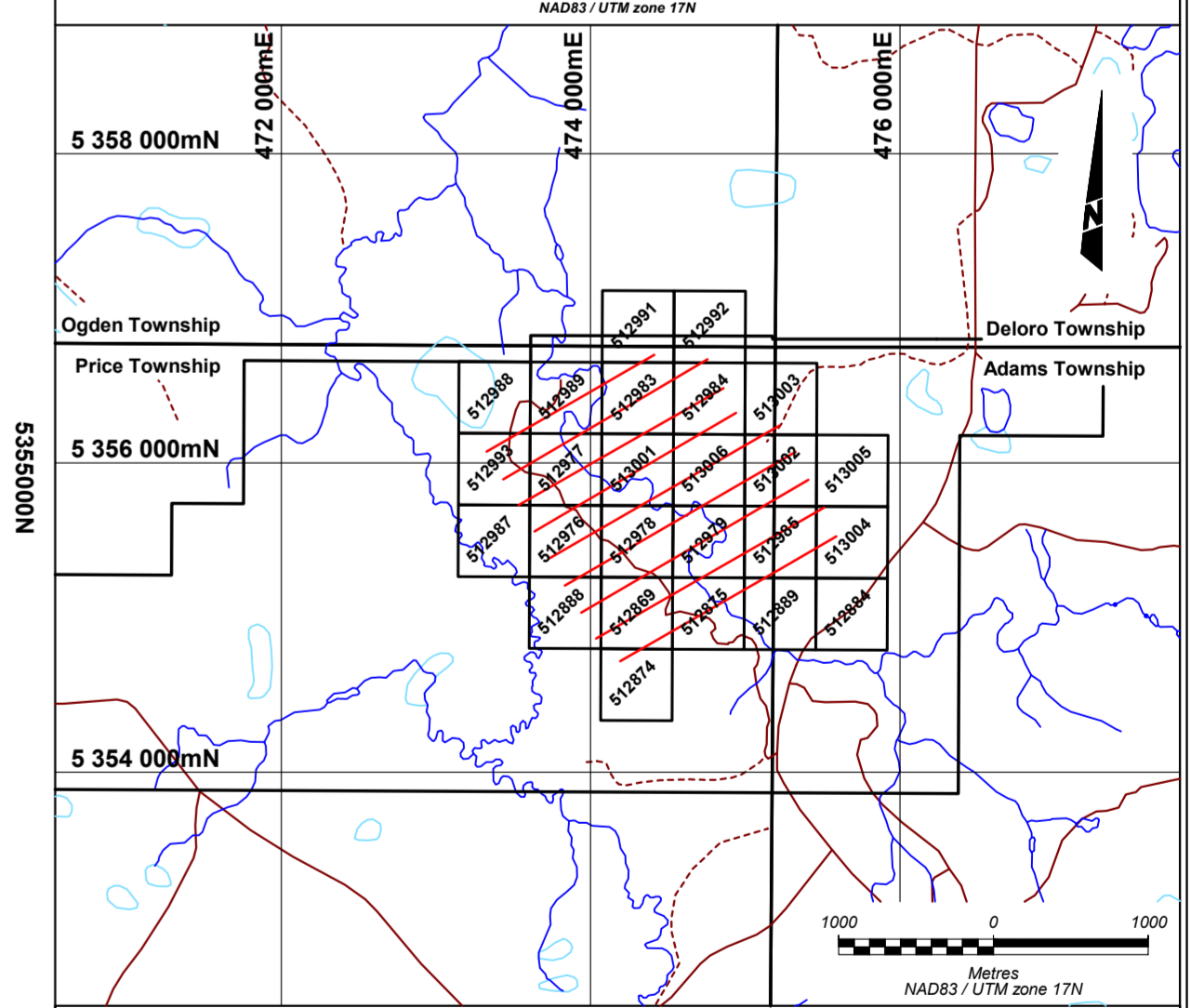
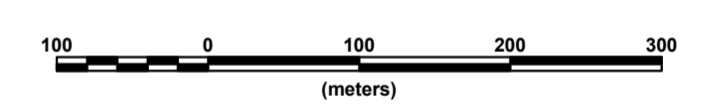
Legend
Chargeability Contours



Unit: mV/V
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

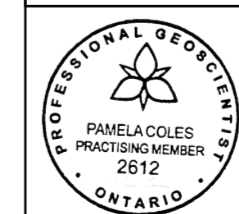


Scale 1:5000



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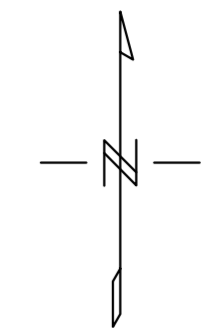
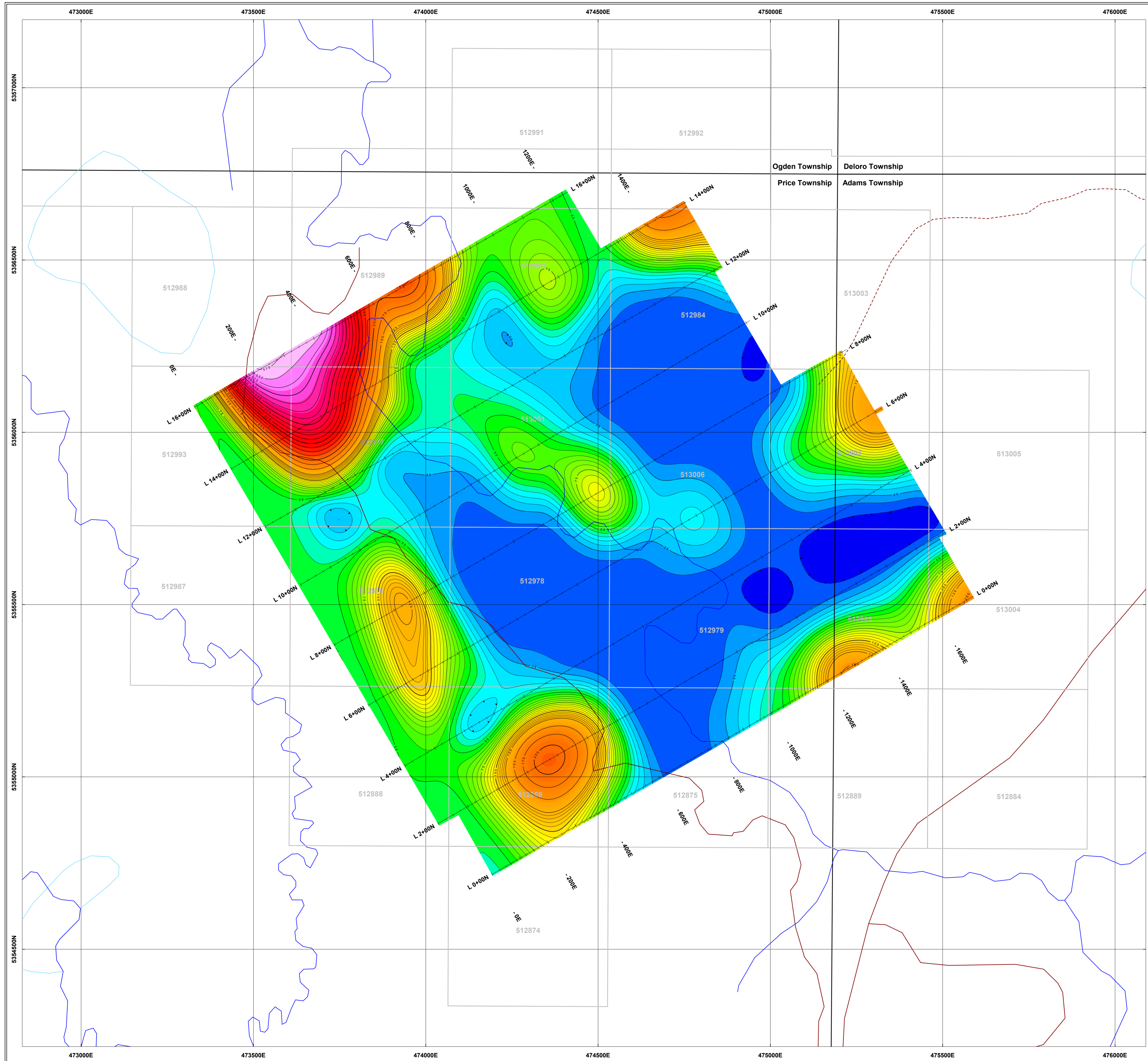
OreVision® Survey
Inverted Chargeability at an Elevation of 125 m
(mV/V)



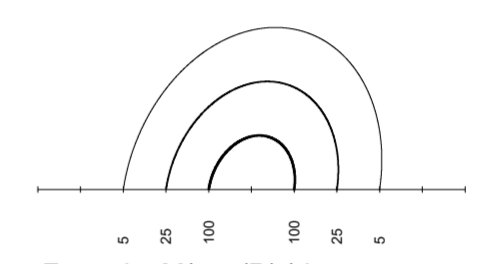
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 Surveyed by: Abitibi Geophysics Inc. 2020/10
 Verified by: P. Coles, P.Geo. 2020/12
 Reference map: 42A/06
 Project no: 20NT063-P2

Scale 1:5000
Map no: 8.3_125

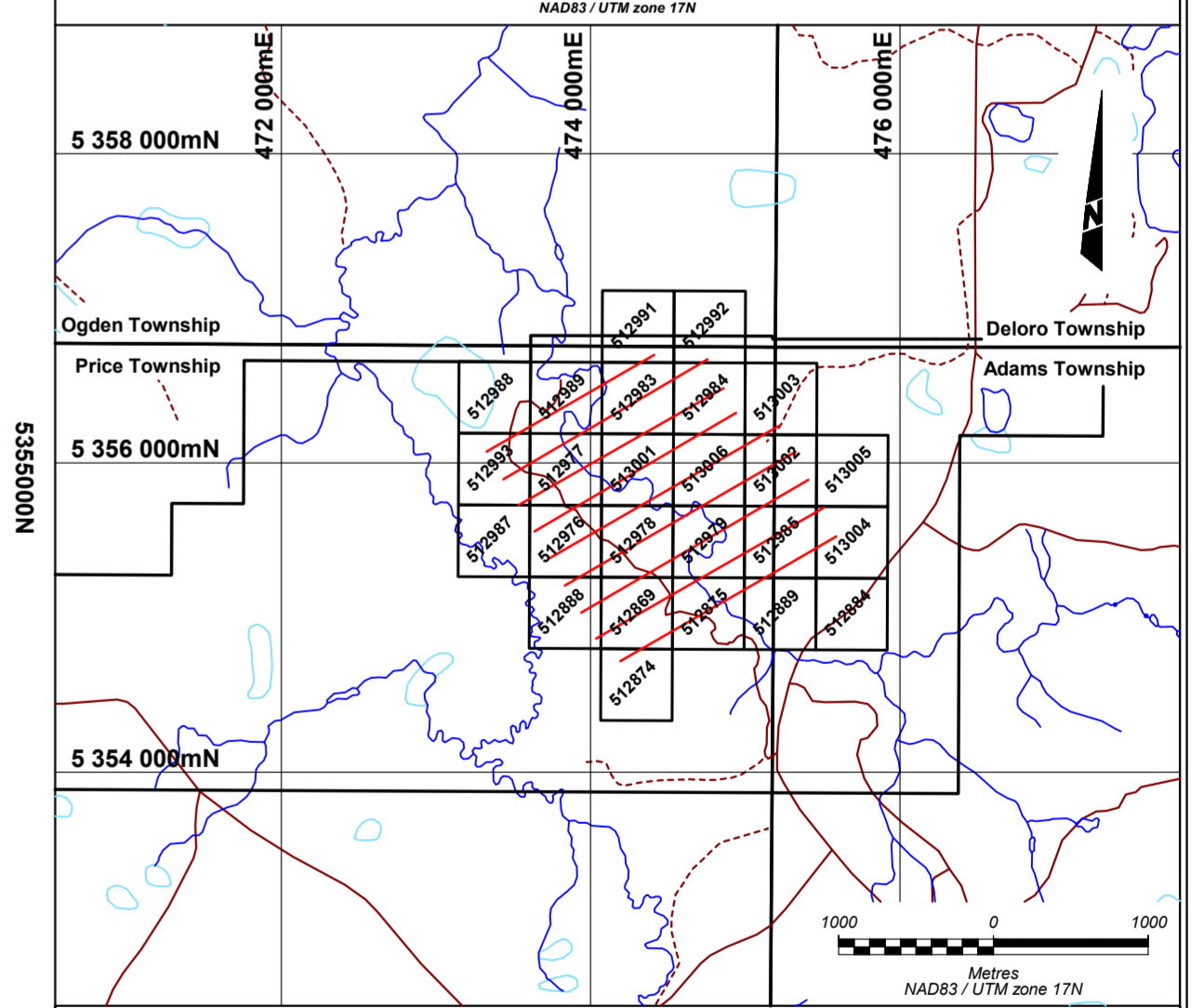
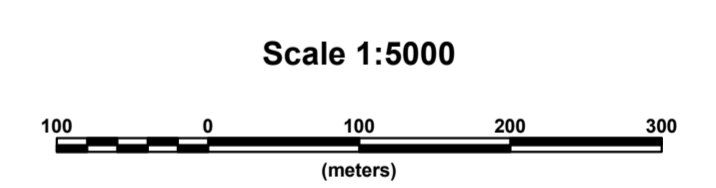
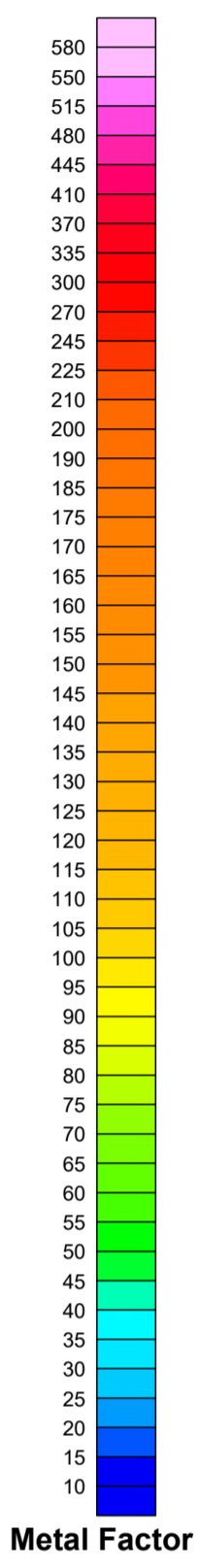




Legend
Metal Factor Contours

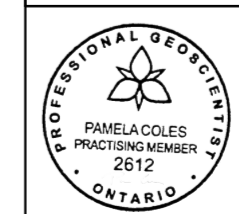


Formula: $M/\text{sqrt}(R) * k$
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



HighGold Mining Inc.
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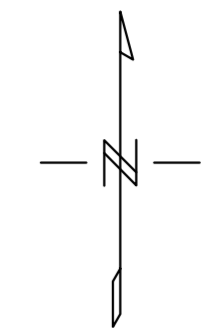
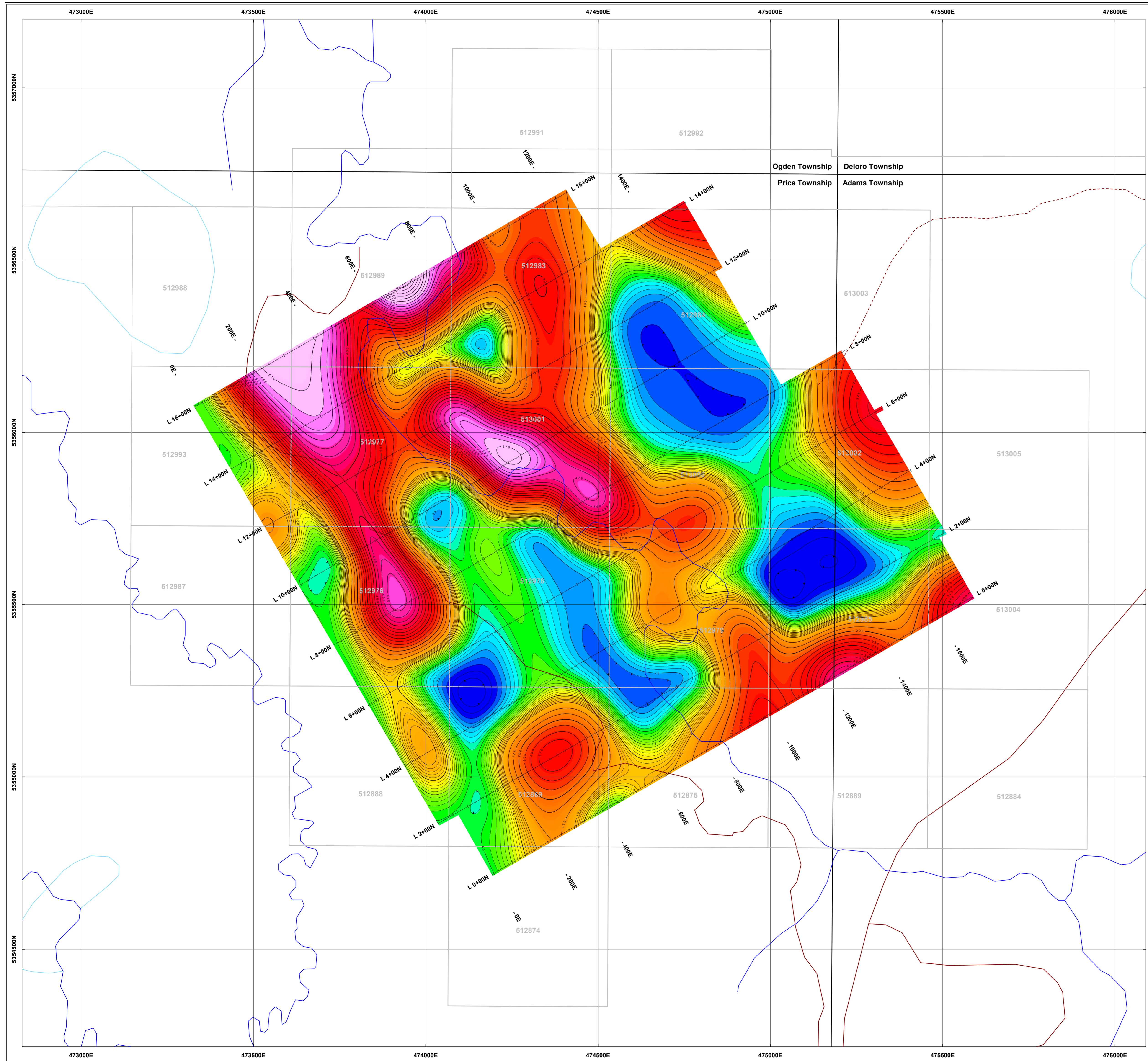
OreVision® Survey
Calculated Metal Factor at an Elevation of 0 m



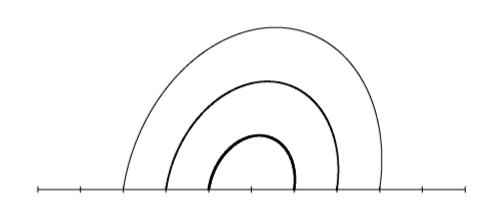
Interpreted by: M. Auclair, G.I.T. 2020/12
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Project no: 20NT063-P2



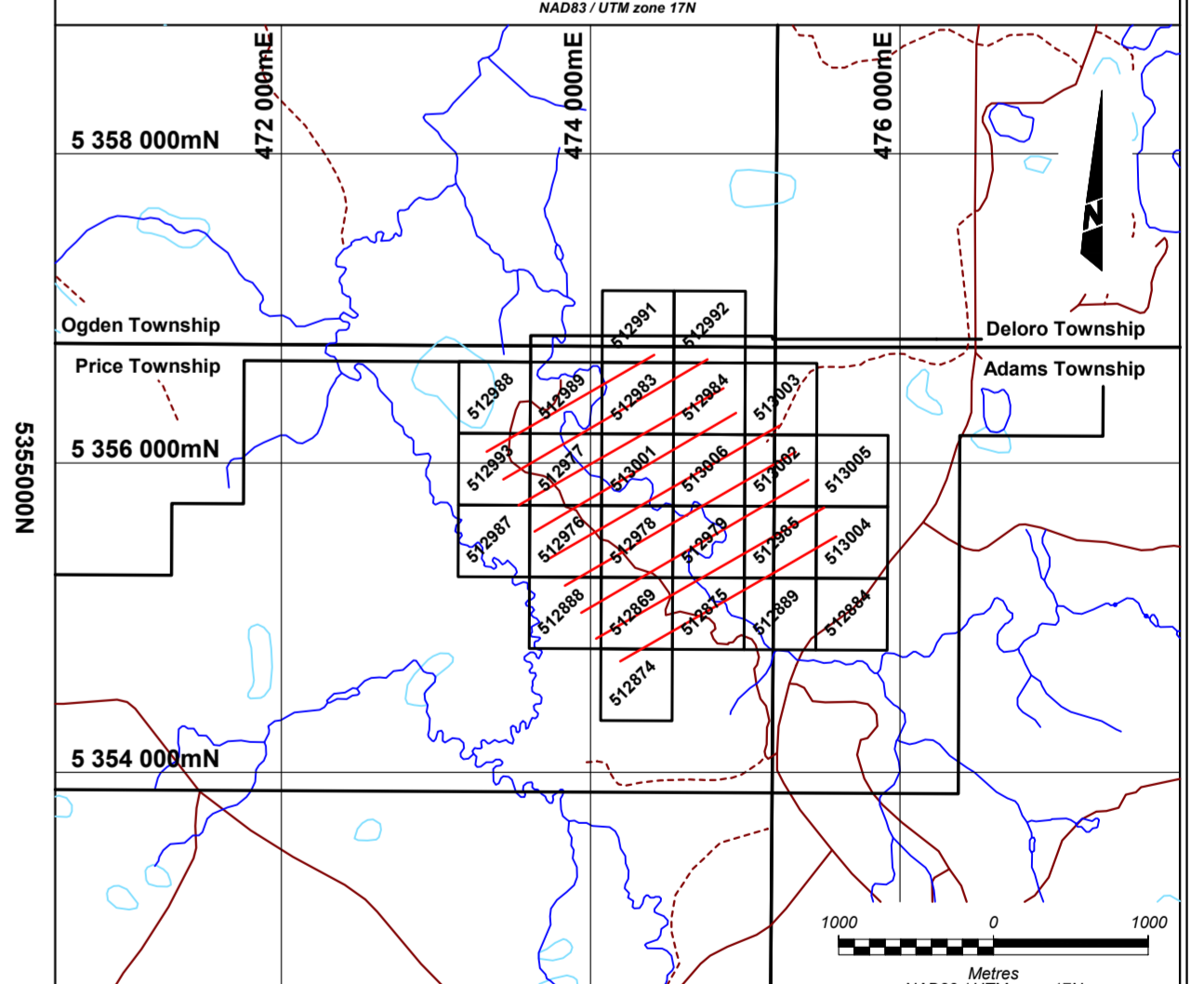
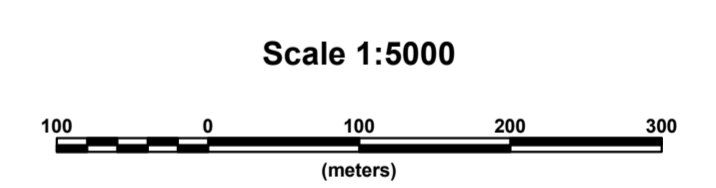
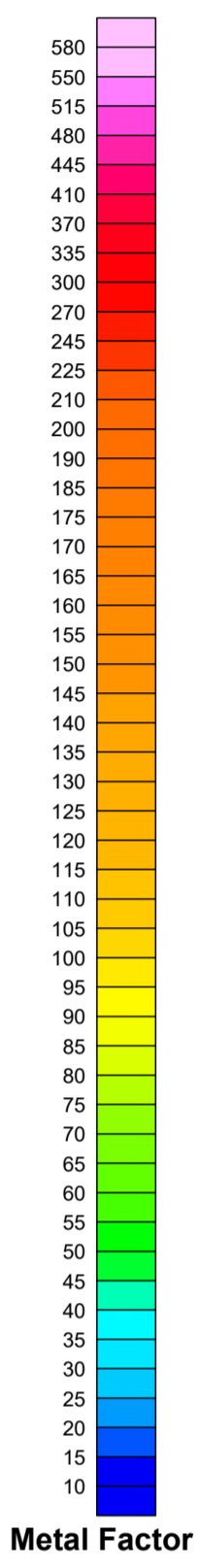
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Legend
Metal Factor Contours

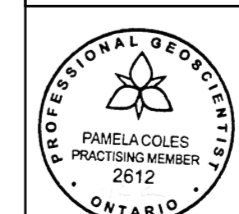


Formula: $M/\text{sqrt}(R) * k$
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



HighGold Mining Inc.
Golden Perimeter Project
Price & Adams Townships, Ontario

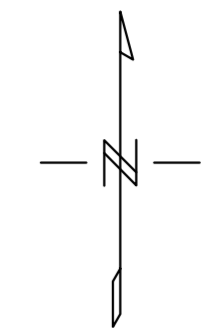
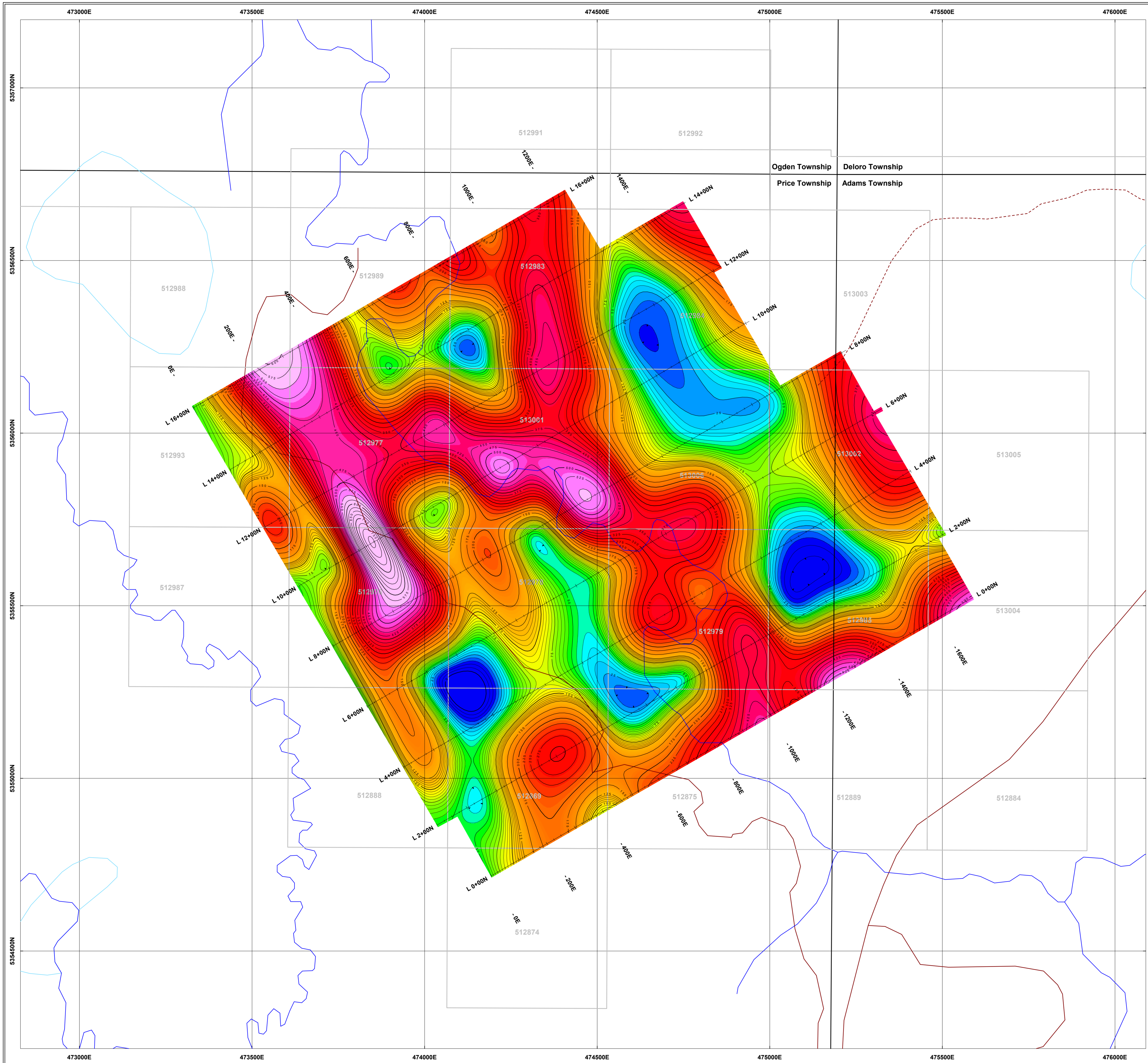
OreVision® Survey
Calculated Metal Factor at an Elevation of 75 m



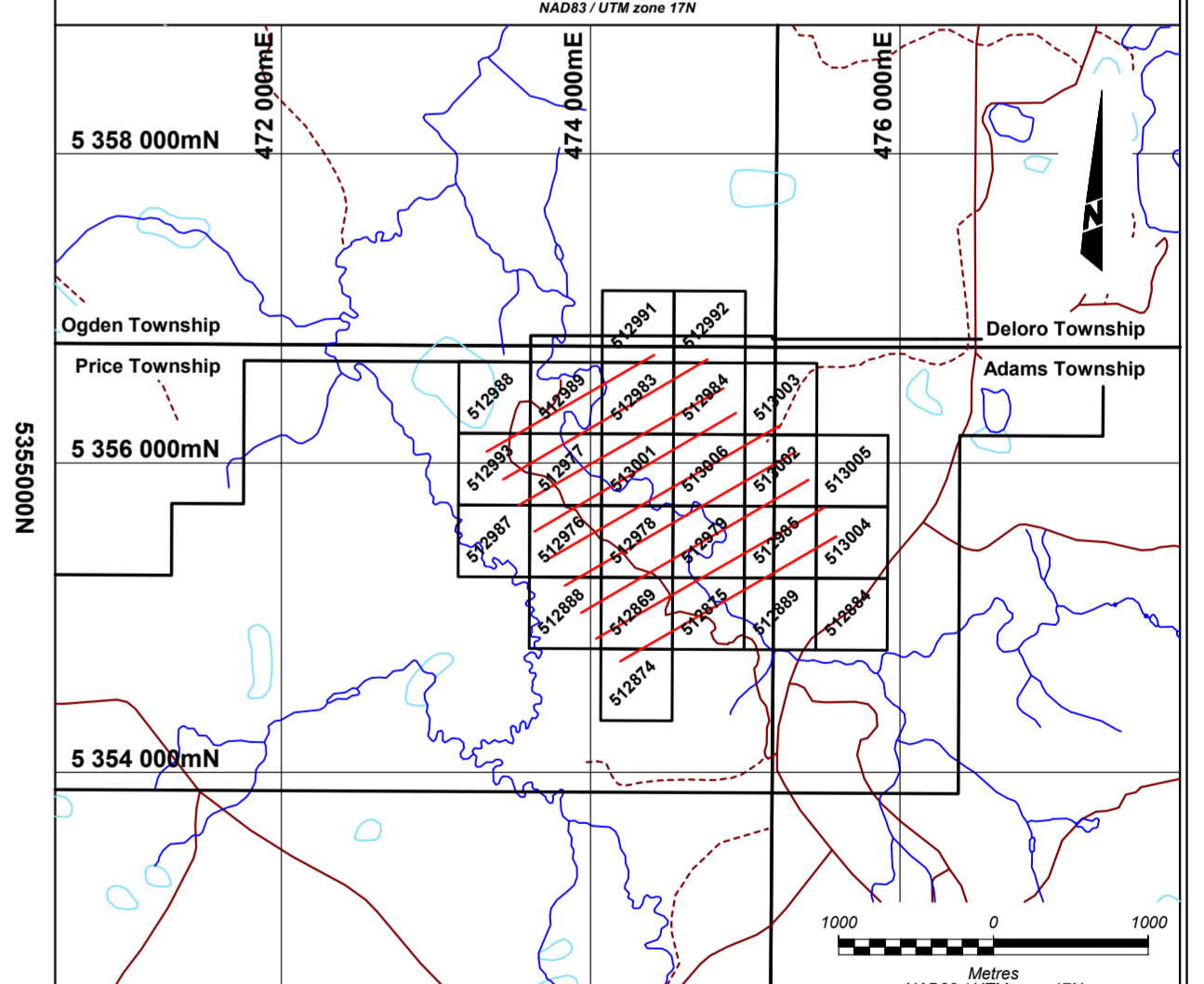
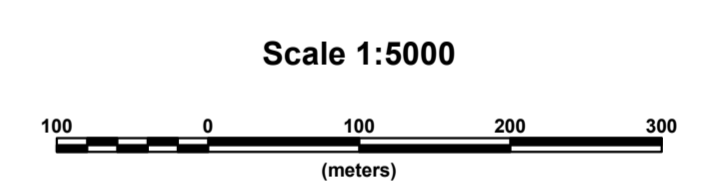
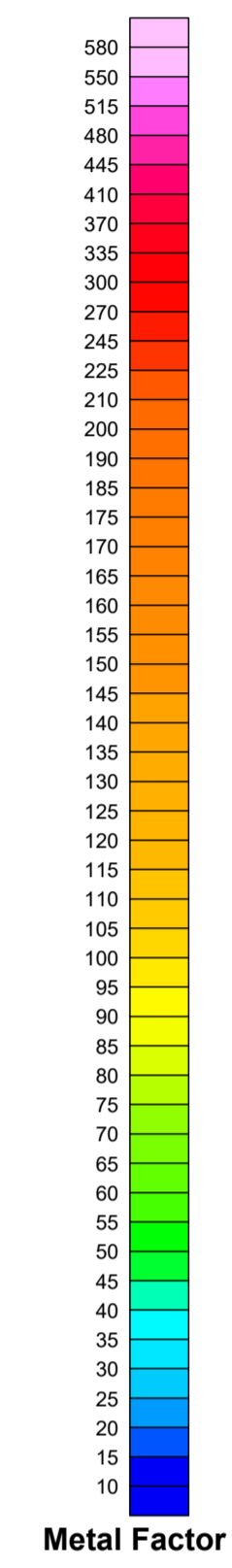
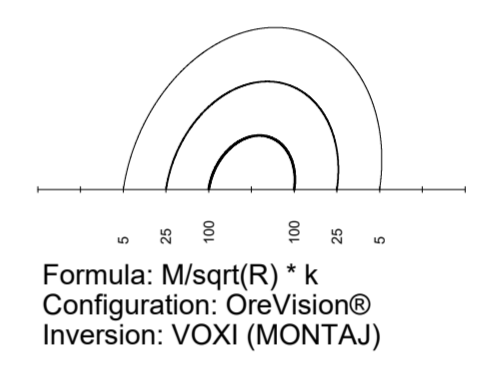
Interpreted by: M. Auclair, G.I.T. 2020/12
Surveyed by: Abitibi Geophysics Inc. 2020/10
Verified by: P. Coles, P. Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



Scale 1:5000
Map no: 8.4_75

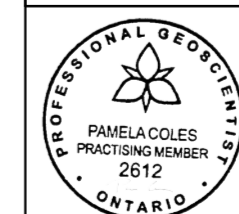


Legend
Metal Factor Contours



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Golden Perimeter Project
Price & Adams Townships, Ontario

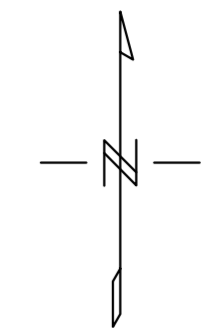
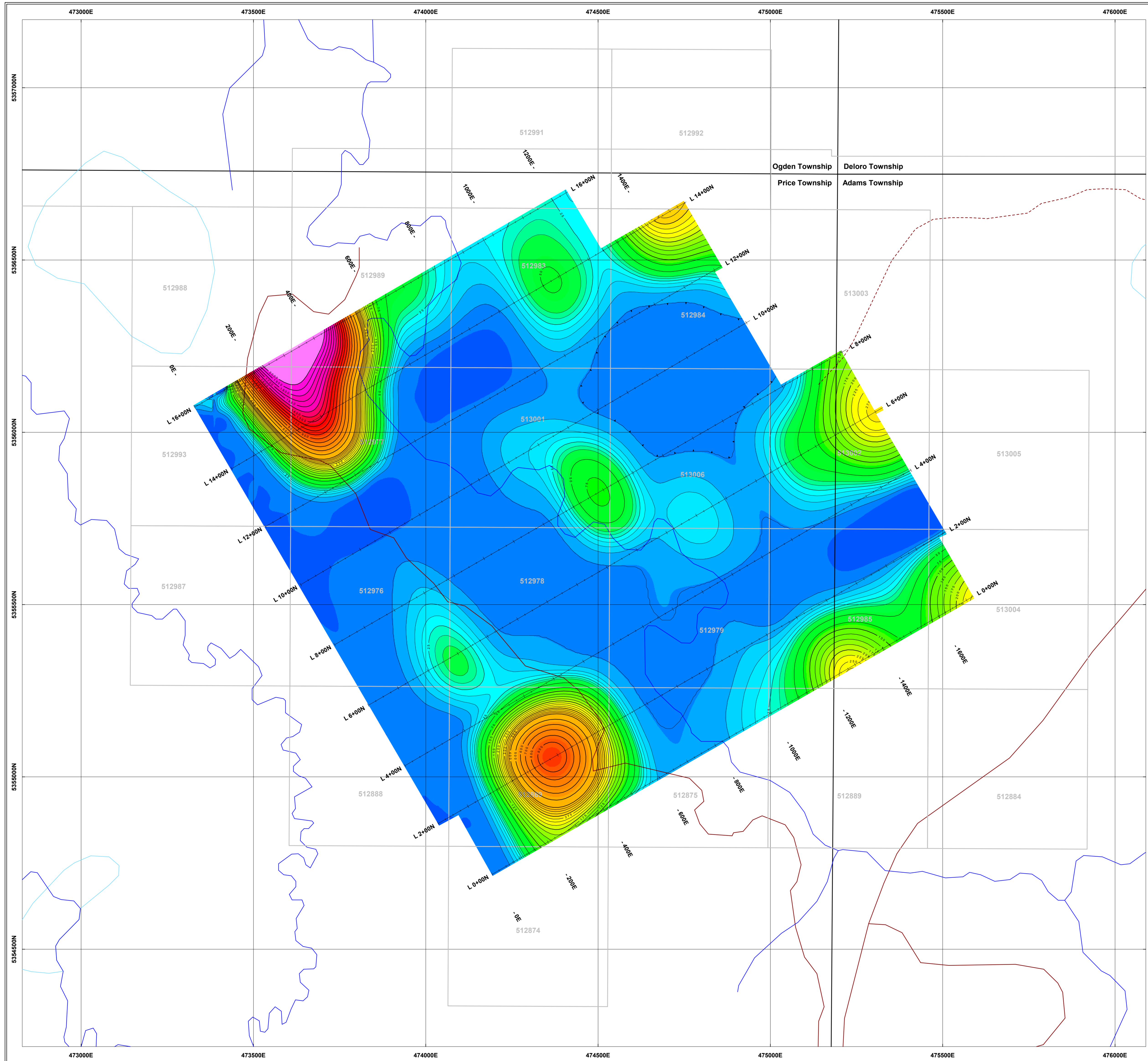
OreVision® Survey
Calculated Metal Factor at an Elevation of 125 m



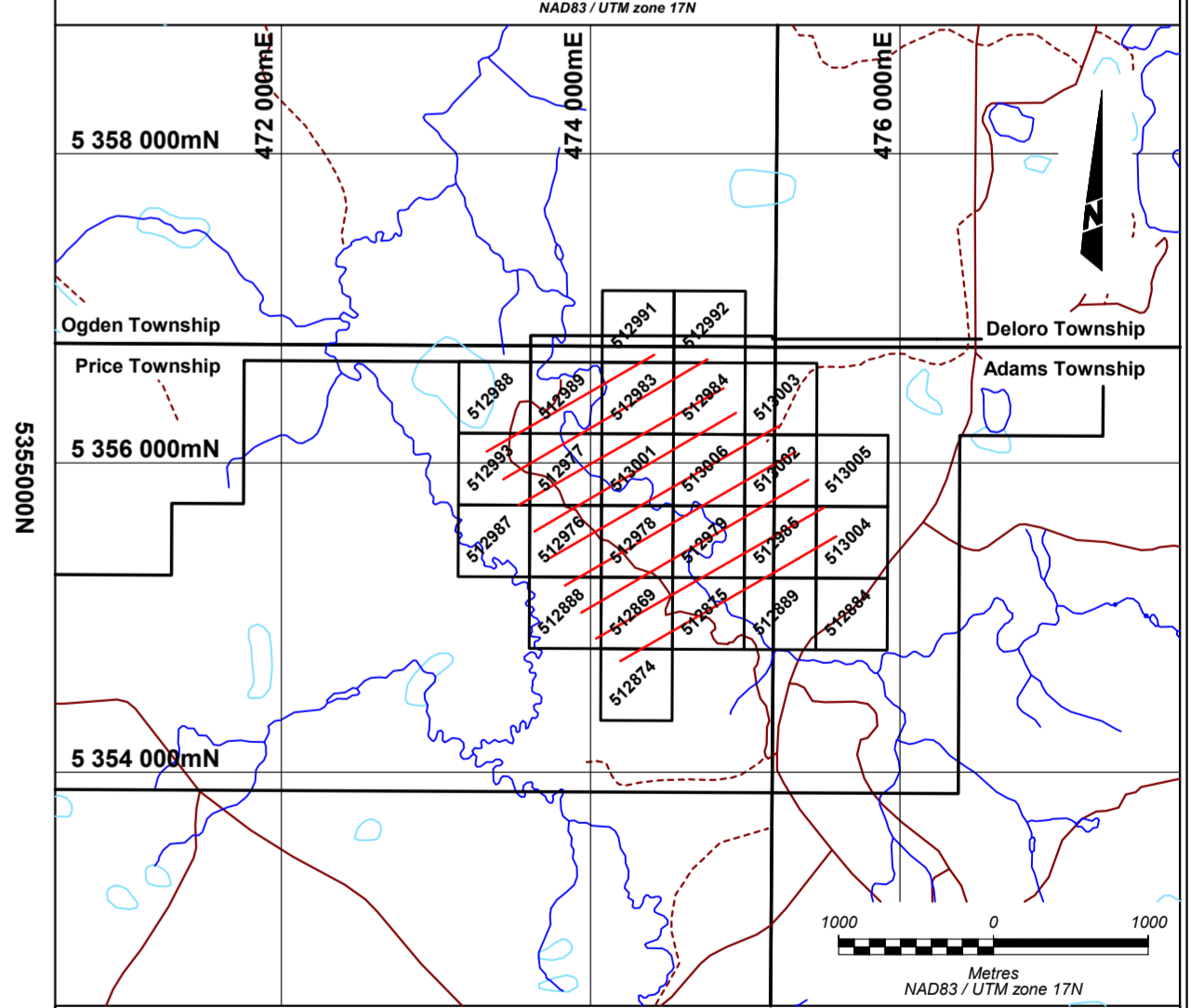
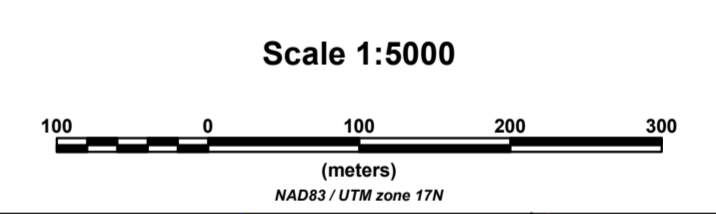
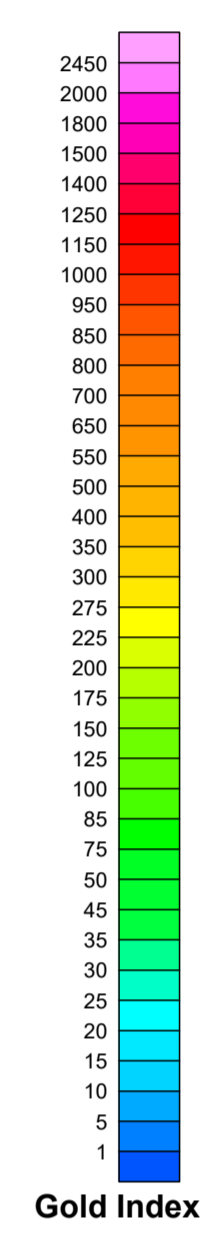
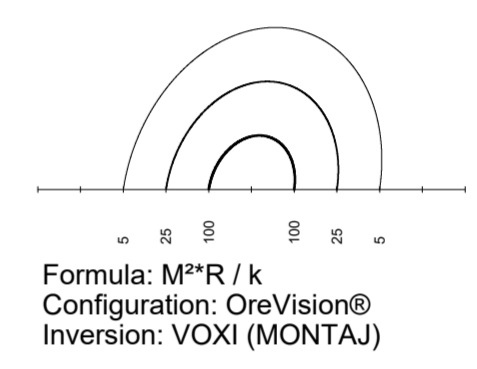
Interpreted by: M. Auclair, G.I.T. 2020/12
Surveyed by: Abitibi Geophysics Inc. 2020/10
Verified by: P. Coles, P.Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



Scale 1:5000
Map no: 8.4_125

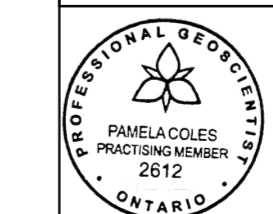


Legend
Gold Index Contours



HighGold Mining Inc.
Golden Perimeter Project
Price & Adams Townships, Ontario

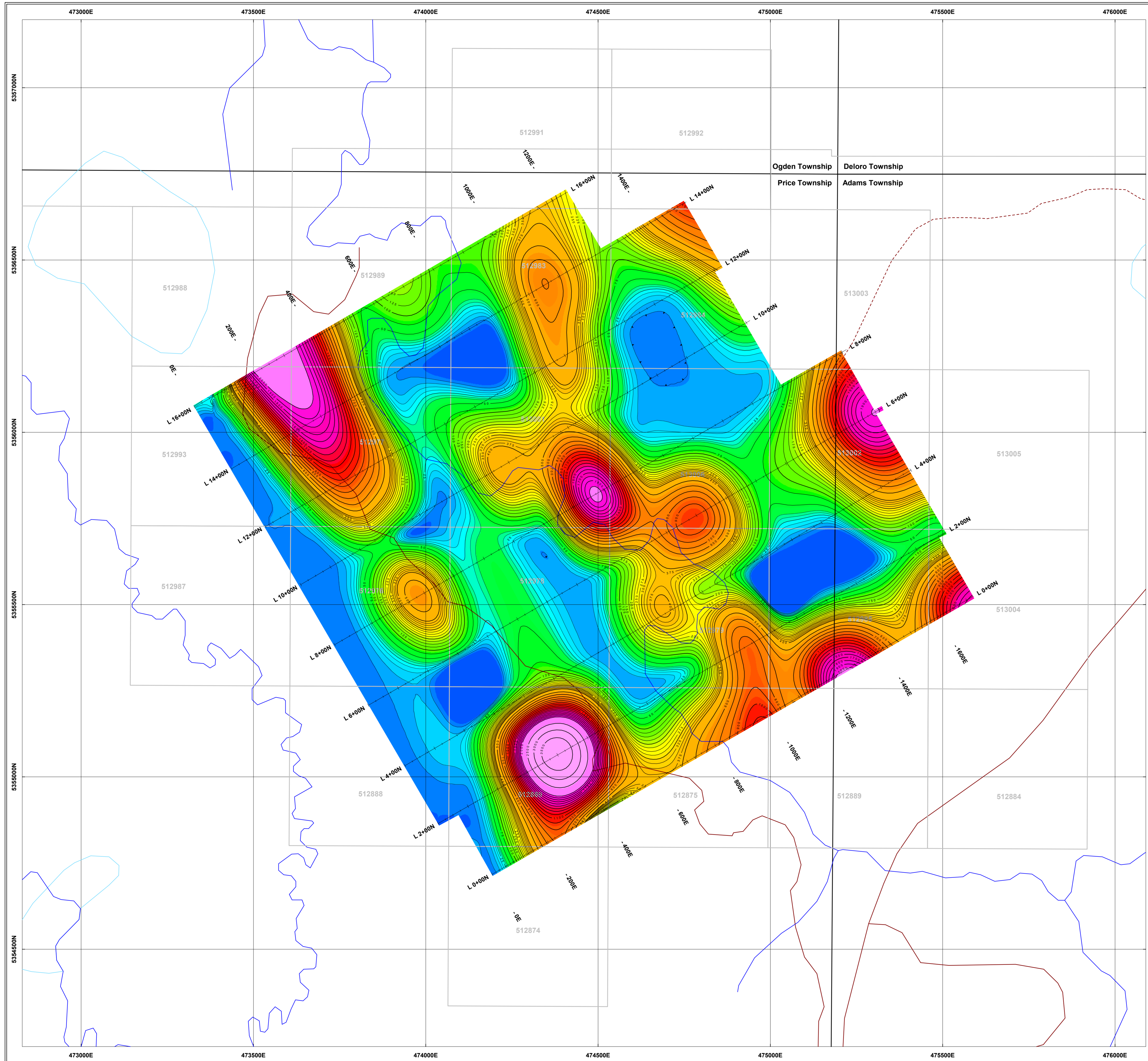
OreVision® Survey
Calculated Gold Index at an Elevation of 0 m



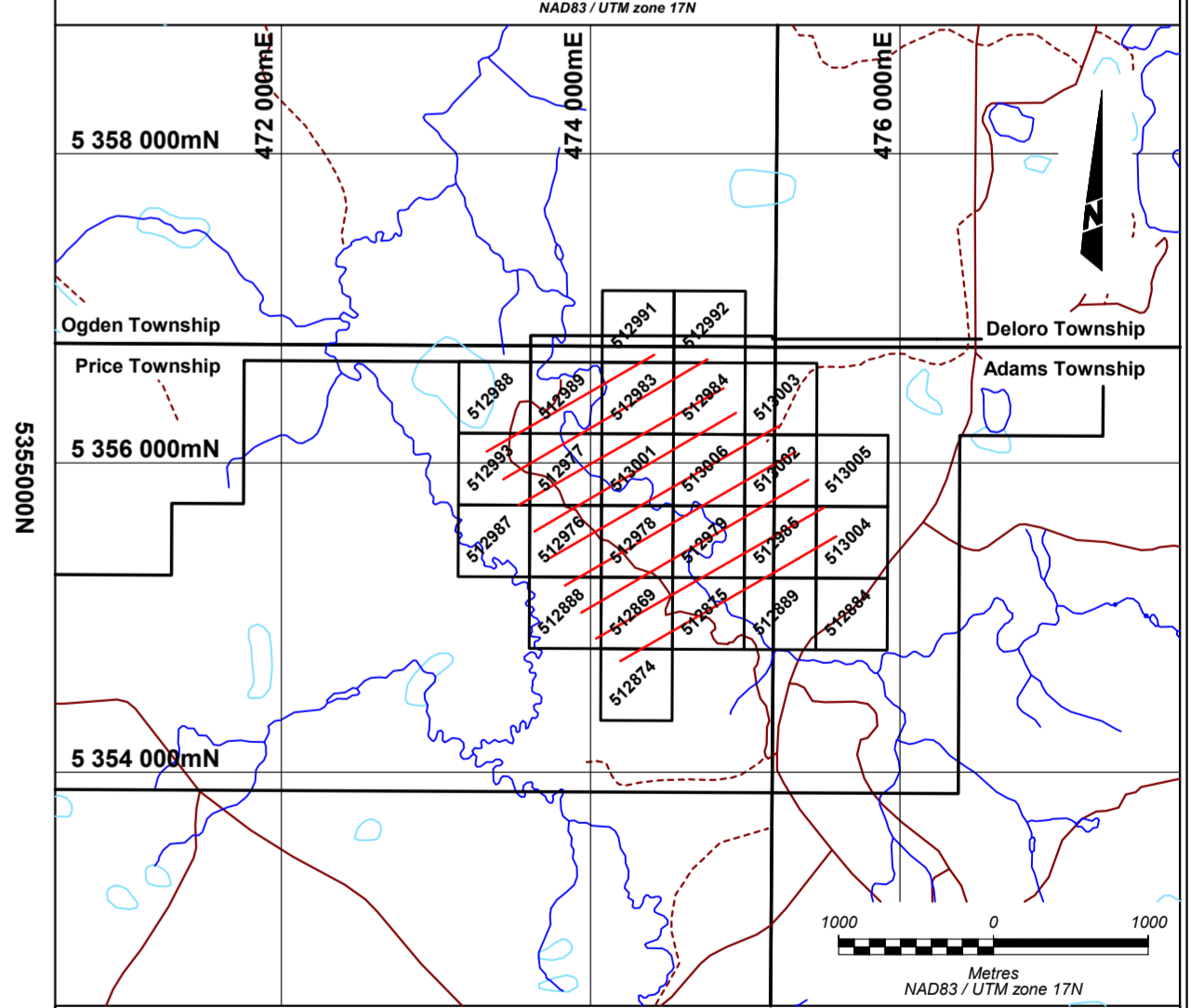
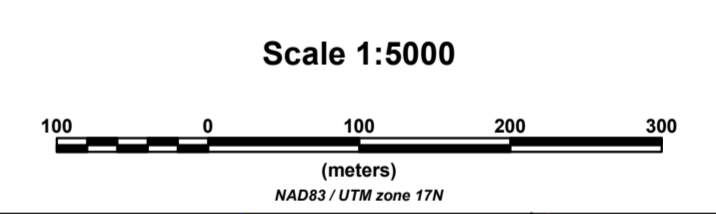
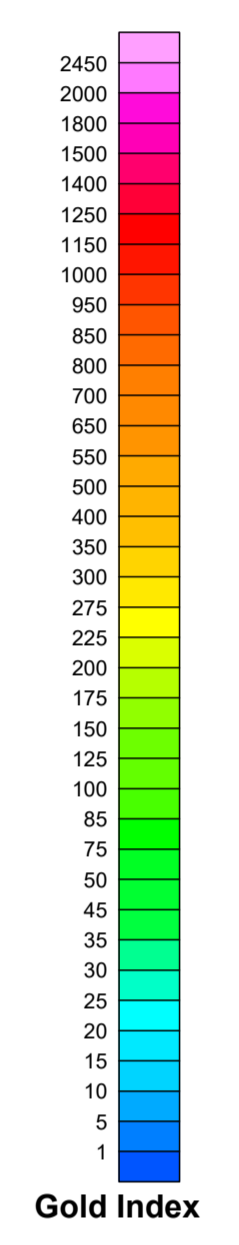
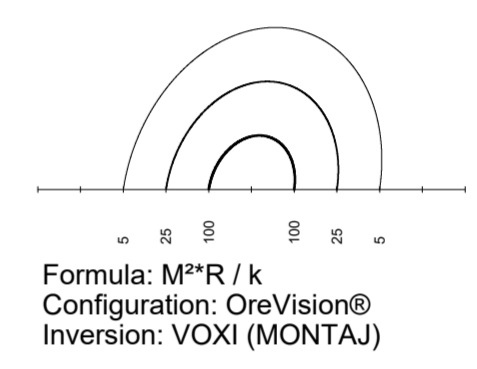
Interpreted by: M. Auclair, G.I.T. 2020/12
Surveyed by: Abitibi Geophysics Inc. 2020/10
Verified by: P. Coles, P.Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



Scale 1:5000
Map no: 8.6_0



Legend
Gold Index Contours



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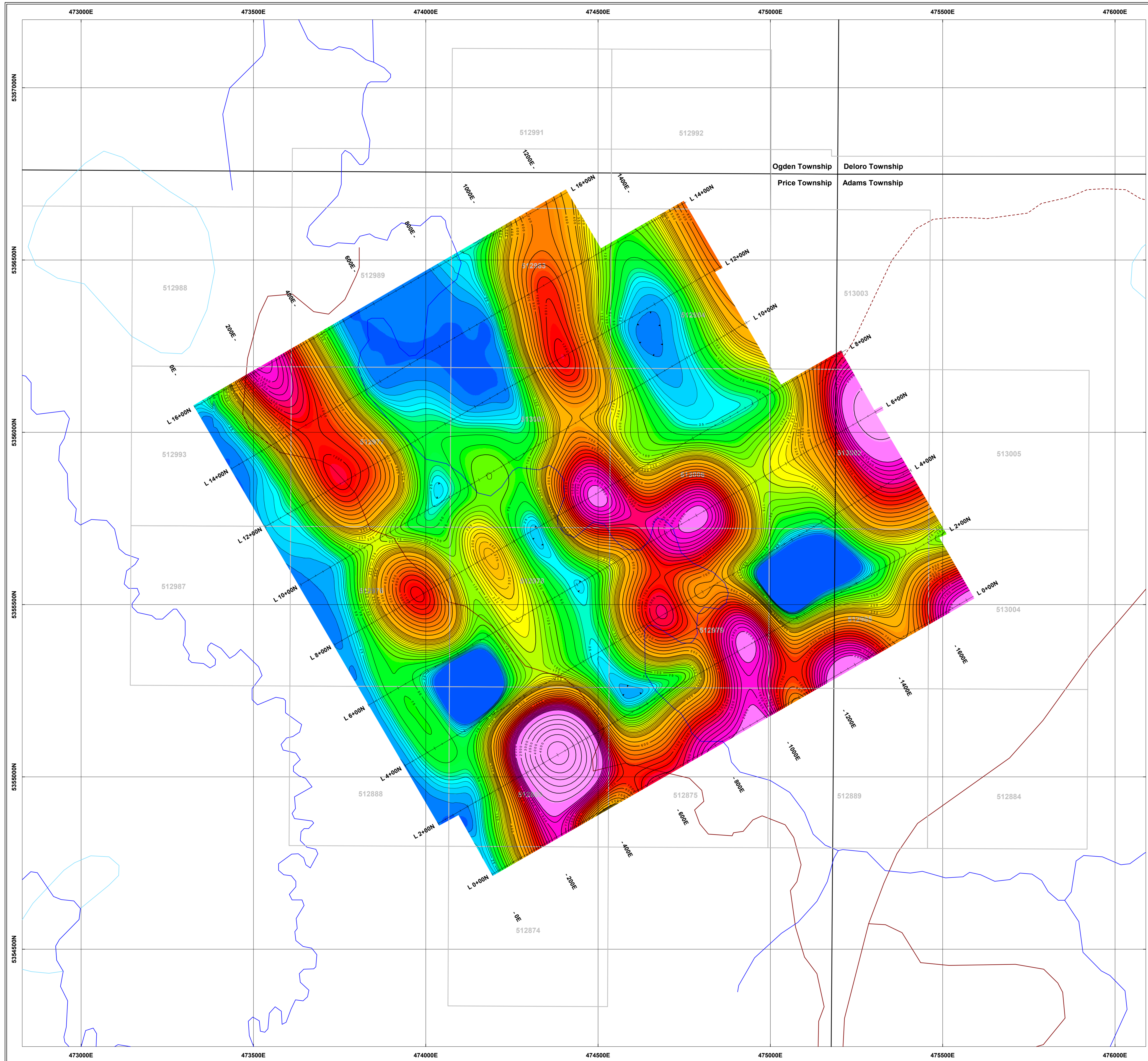
OreVision® Survey
Calculated Gold Index at an Elevation of 75 m



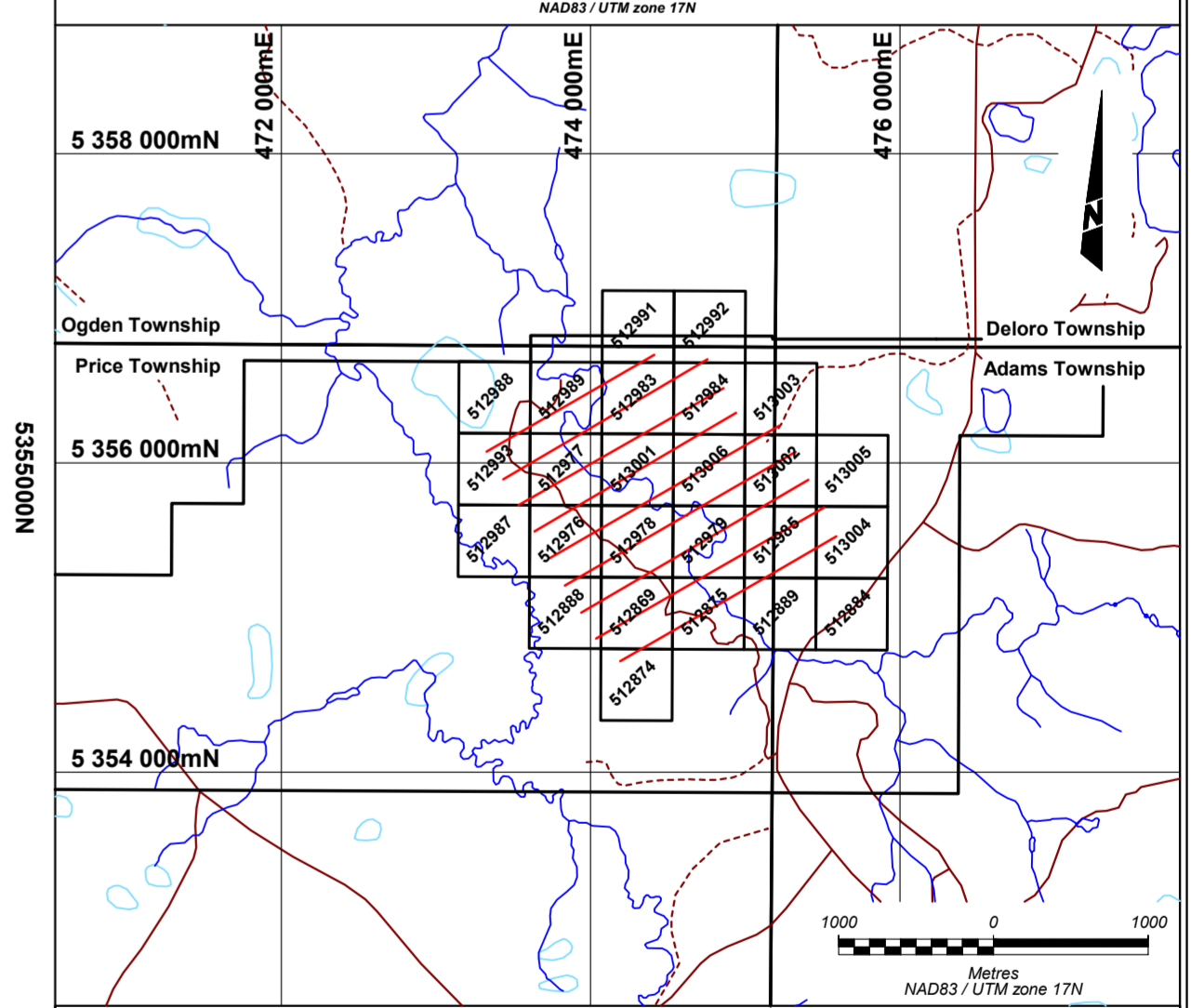
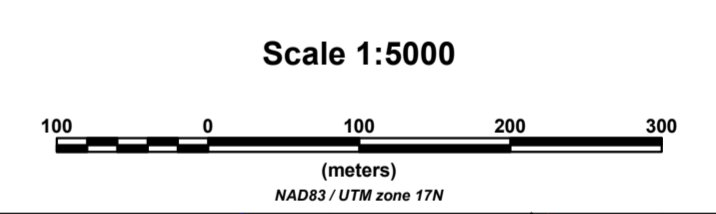
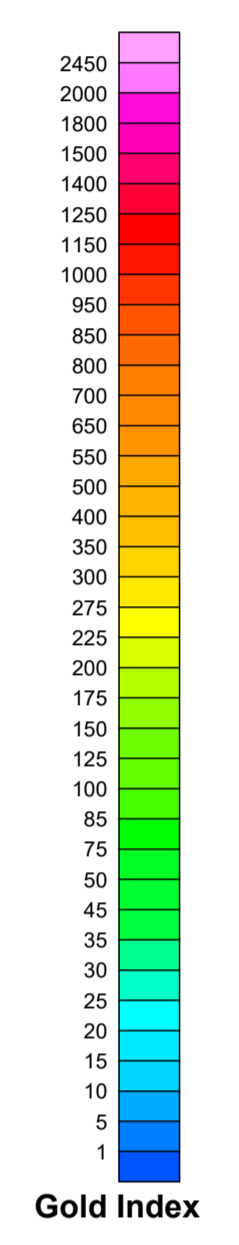
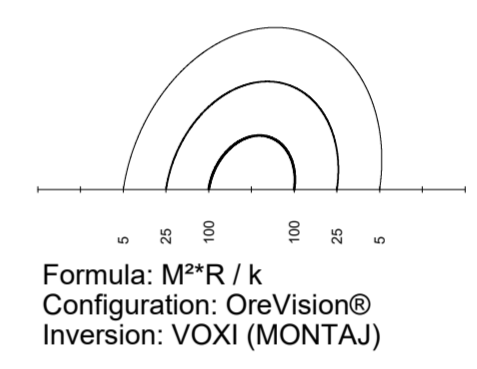
Interpreted by: M. Auclair, G.I.T. 2020/12
Surveyed by: Abitibi Geophysics Inc. 2020/10
Verified by: P. Coles, P.Geo. 2020/12
Reference map: 42A/06
Project no: 20NT063-P2



Scale 1:5000
Map no: 8.6_75



Legend
Gold Index Contours



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Price & Adams Townships, Ontario

OreVision® Survey
Calculated Gold Index at an Elevation of 125 m

	Interpreted by: M. Auclair, G.I.T.	2020/12	
	Surveyed by: Abitibi Geophysics Inc.	2020/10	
	Verified by: P. Coles, P. Geo.	2020/12	
	Reference map: 42A/06	Scale 1:5000	
	Project no: 20NT063-P2	Map no: 8.6_125	

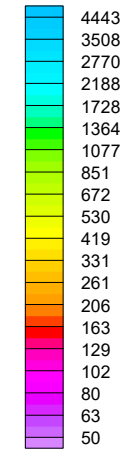


OreVision® Survey

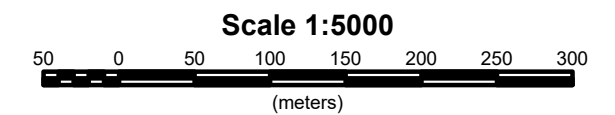
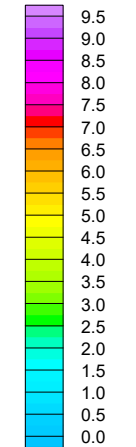
(a = 25 m / n = 1 to 30)

Line 0+00N

Resistivity
(Ohm-m)



Chargeability
(mV/V)

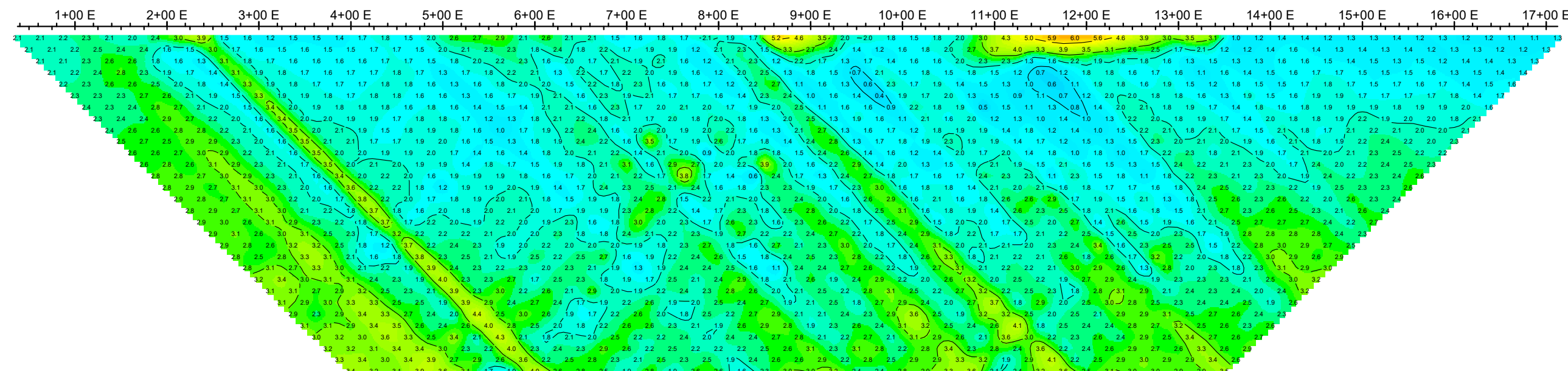
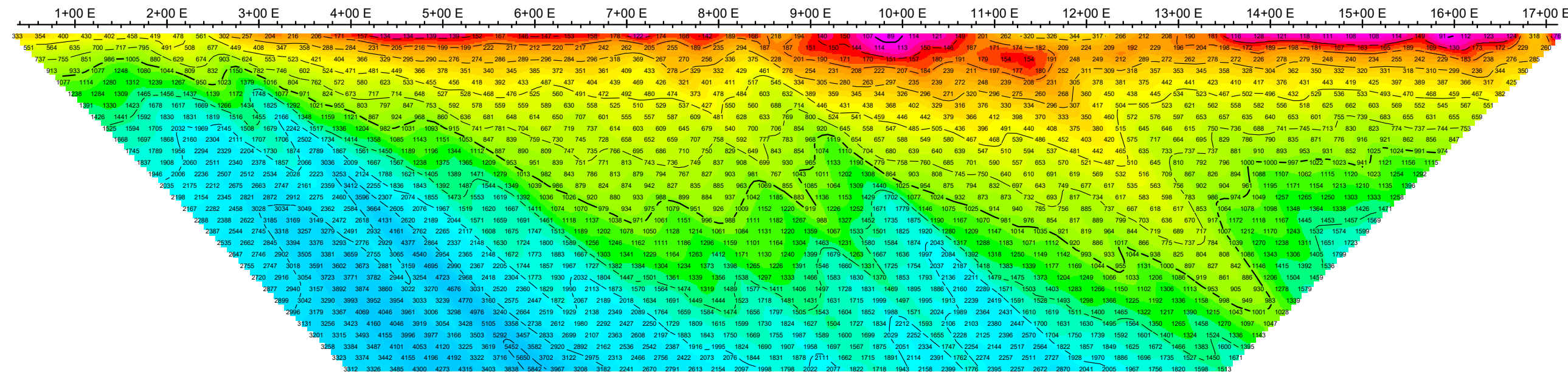


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Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2

Line 0+00N

Abitibi Geophysics Inc.



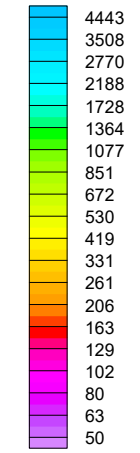


OreVision® Survey

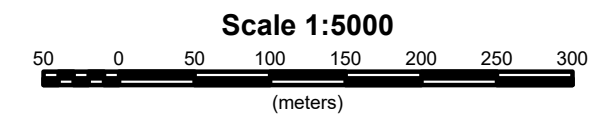
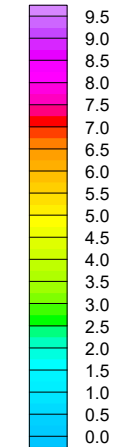
(a = 25 m / n = 1 to 30)

Line 2+00N

Resistivity
(Ohm-m)



Chargeability
(mV/V)

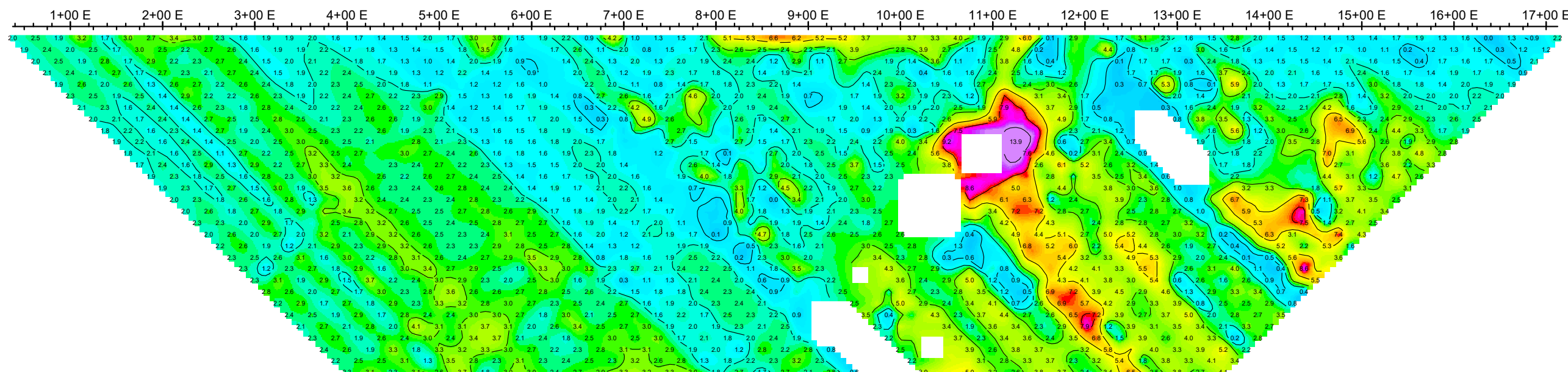
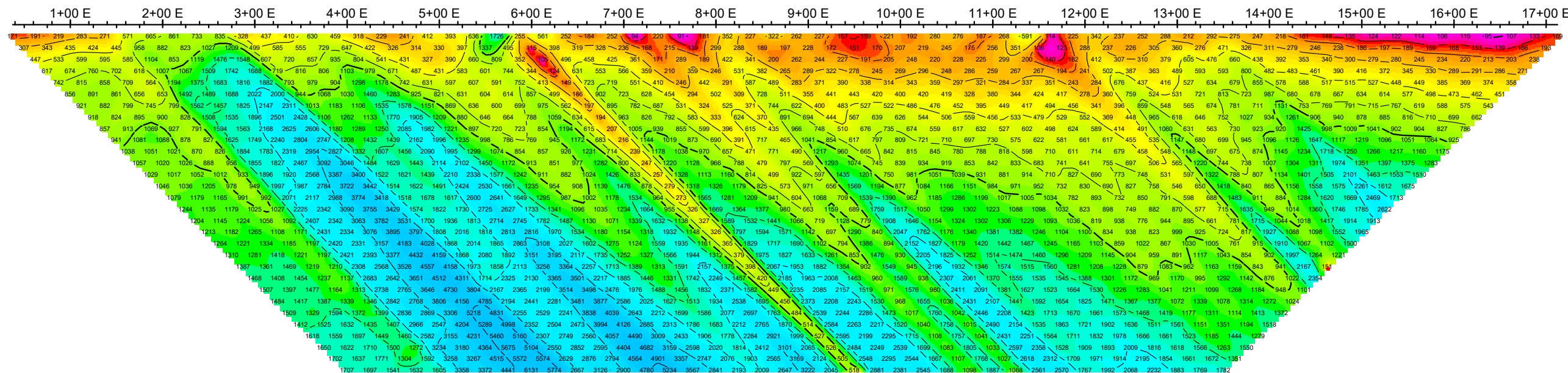


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Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2

Line 2+00N

Abitibi Geophysics Inc.

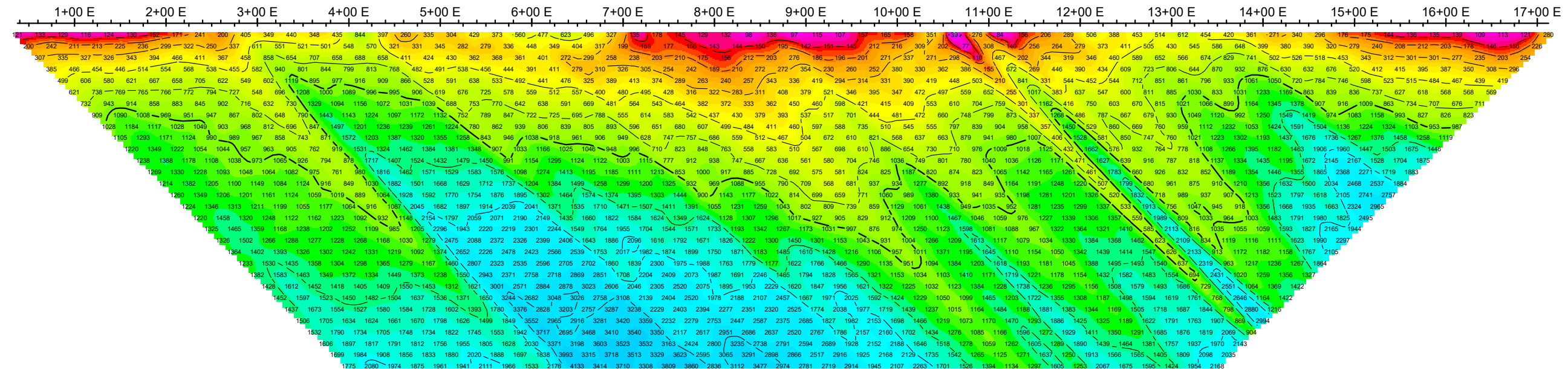




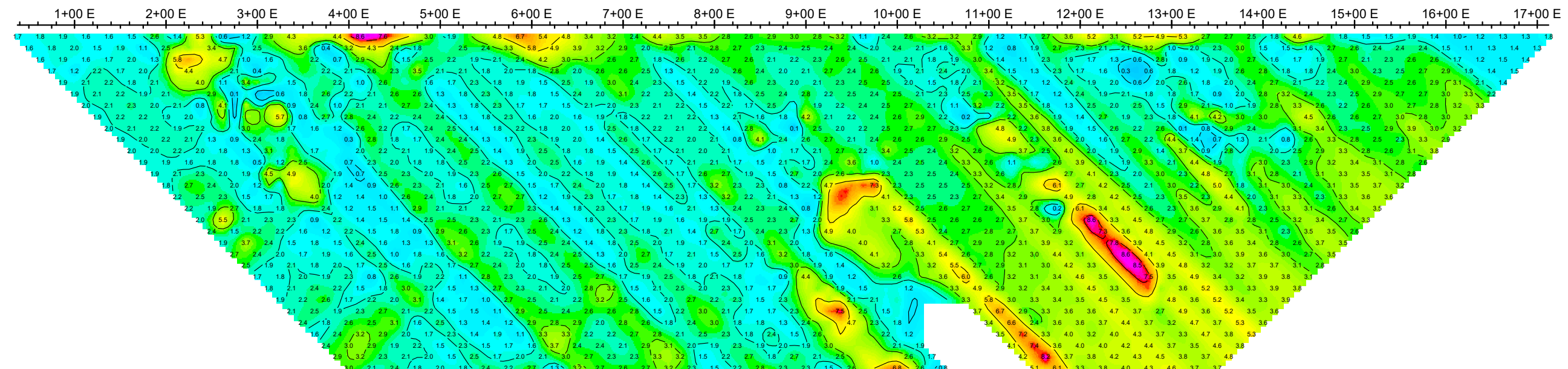
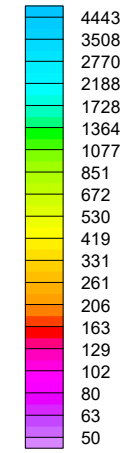
OreVision® Survey

(a = 25 m / n = 1 to 30)

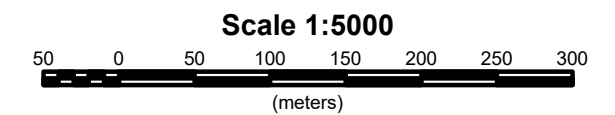
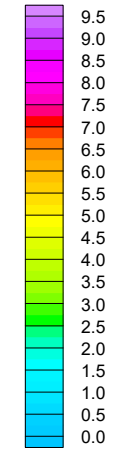
Line 4+00N



Resistivity
(Ohm-m)



Chargeability
(mV/V)



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Golden Perimeter Project
Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2

Line 4+00N

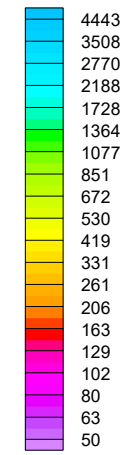
Abitibi Geophysics Inc.



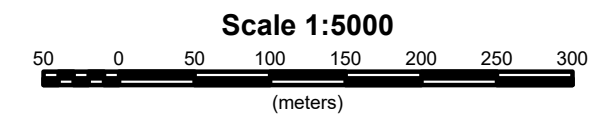
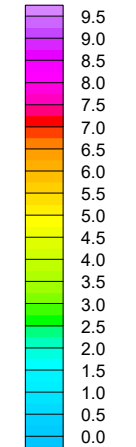
OreVision® Survey
(a = 25 m / n = 1 to 30)

Line 6+00N

Resistivity
(Ohm-m)



Chargeability
(mV/V)

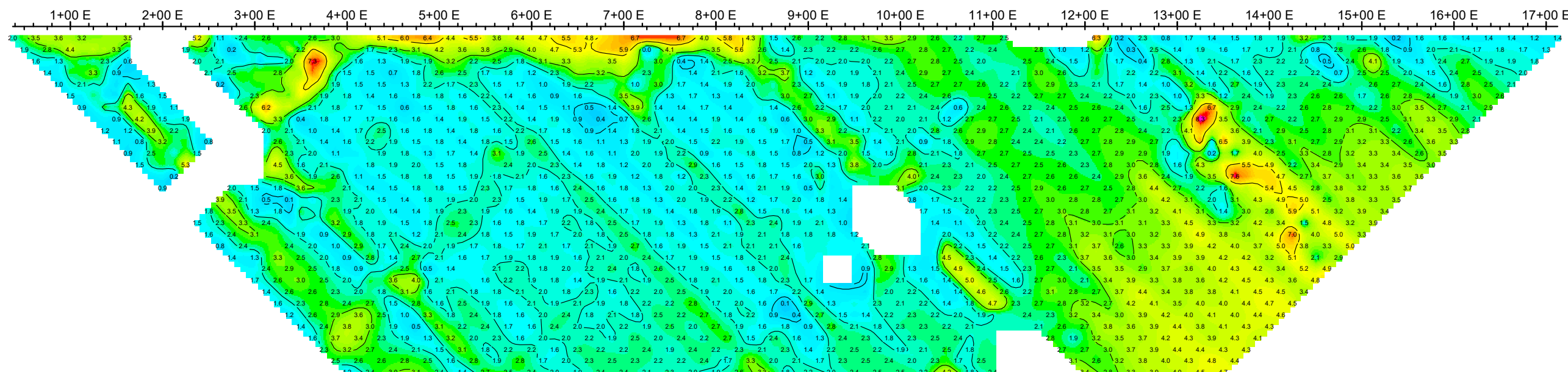
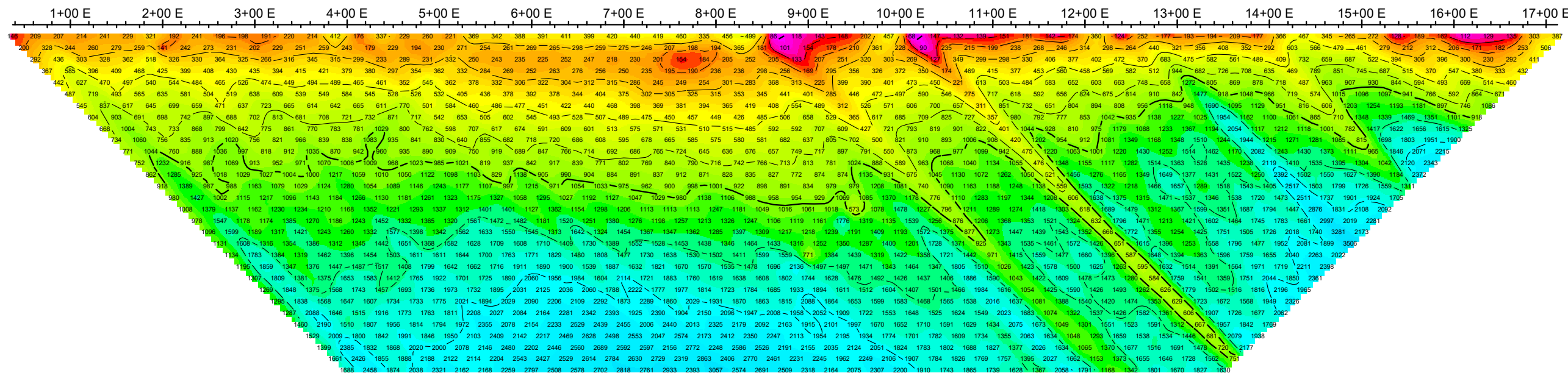


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Ontario, Canada

Project no: 20NT063-P2

Line 6+00N

Abitibi Geophysics Inc.

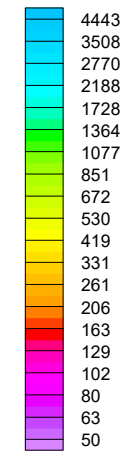




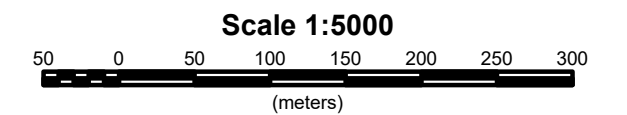
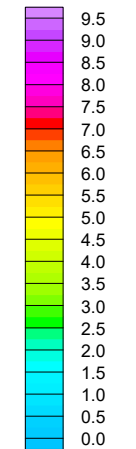
OreVision® Survey (a = 25 m / n = 1 to 30)

Line 8+00N

Resistivity
(Ohm-m)



Chargeability
(mV/V)

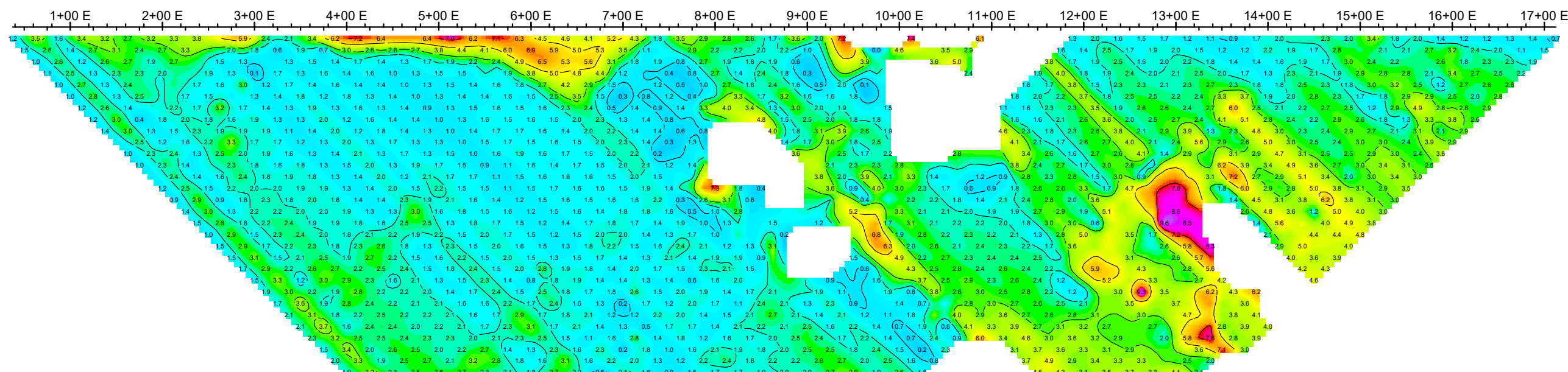
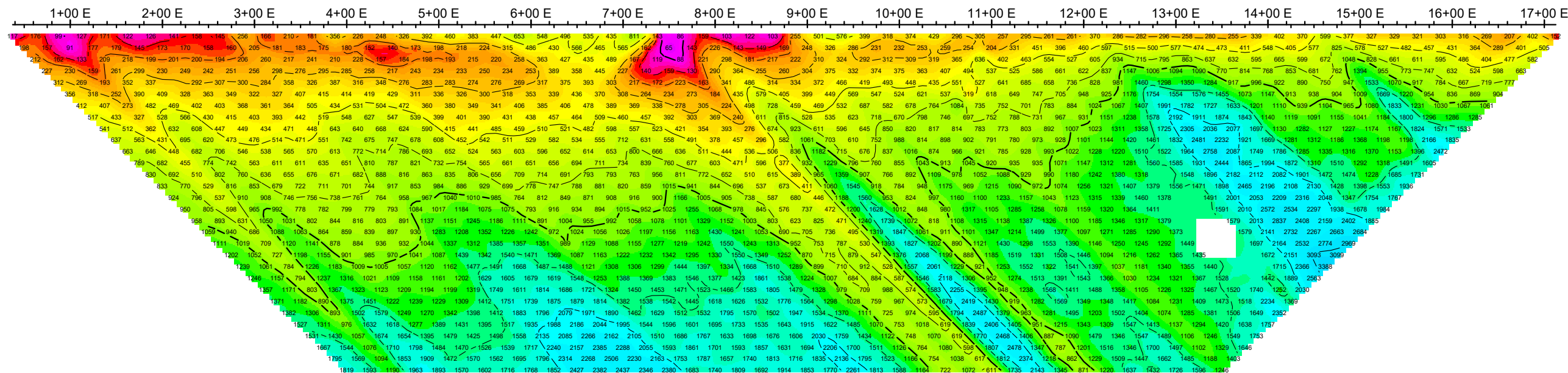


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Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2

Line 8+00N

Abitibi Geophysics Inc.

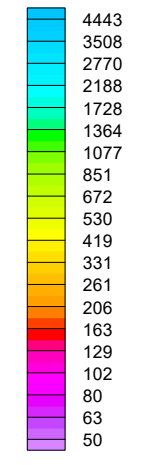




OreVision® Survey (a = 25 m / n = 1 to 30)

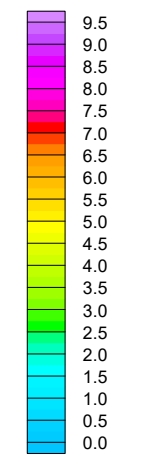
Line 10+00N

Resistivity
(Ohm-m)

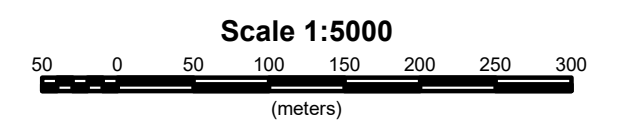


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Chargeability
(mV/V)



n=1
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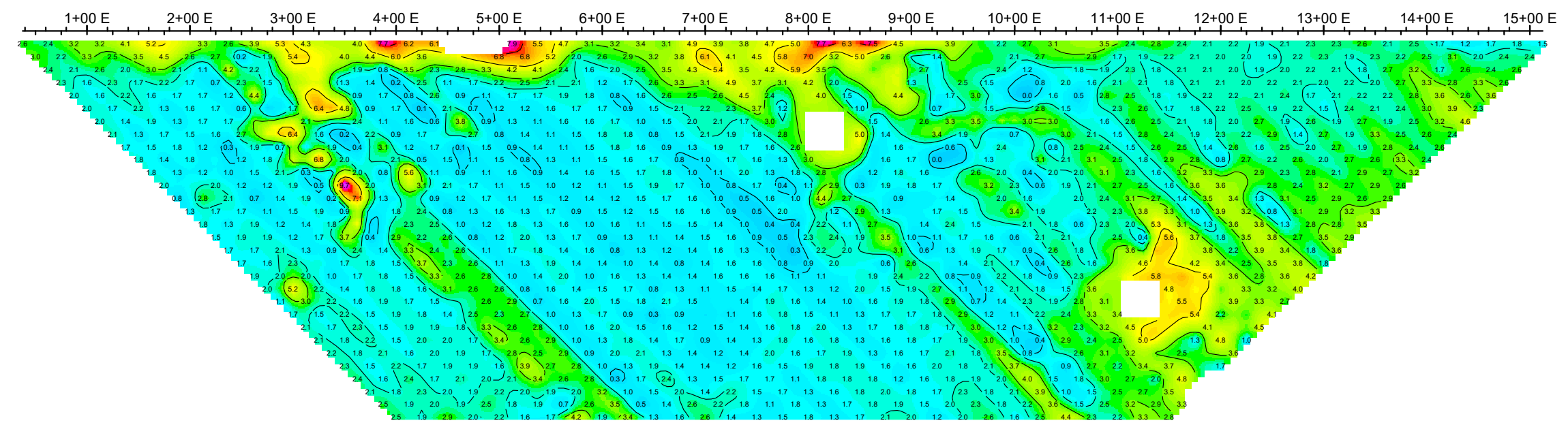
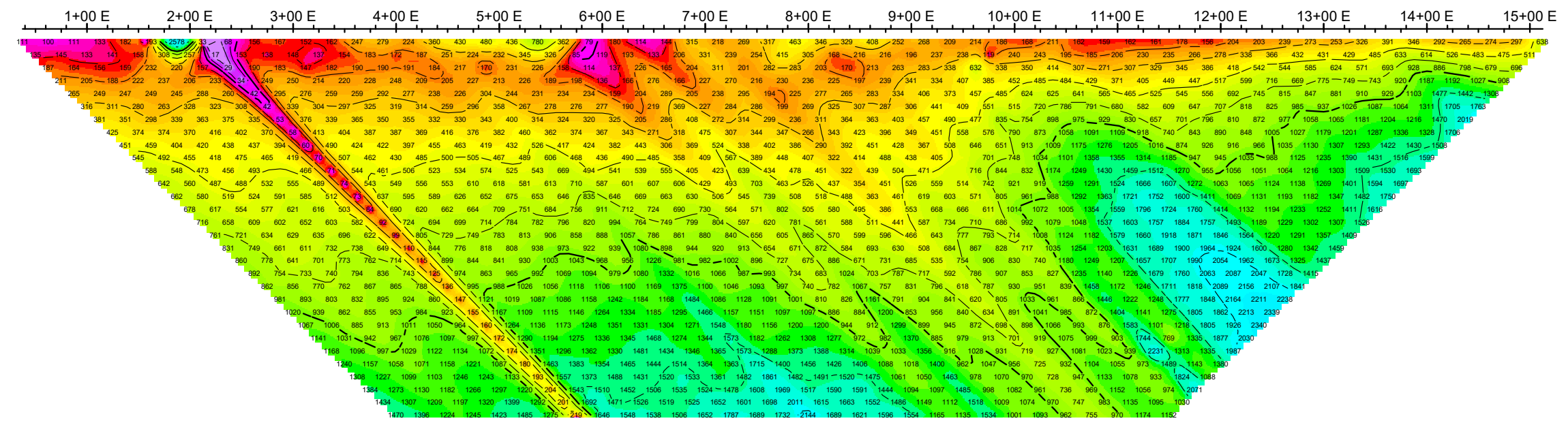
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Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2

Line 10+00N

Abitibi Geophysics Inc.

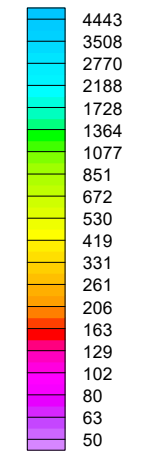




OreVision® Survey (a = 25 m / n = 1 to 30)

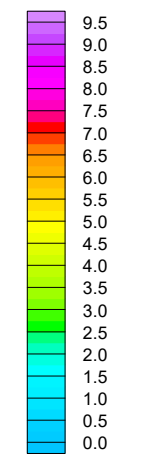
Line 12+00N

Resistivity
(Ohm-m)

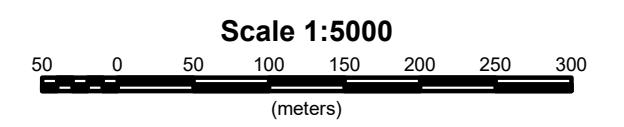


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n=30

Chargeability
(mV/V)



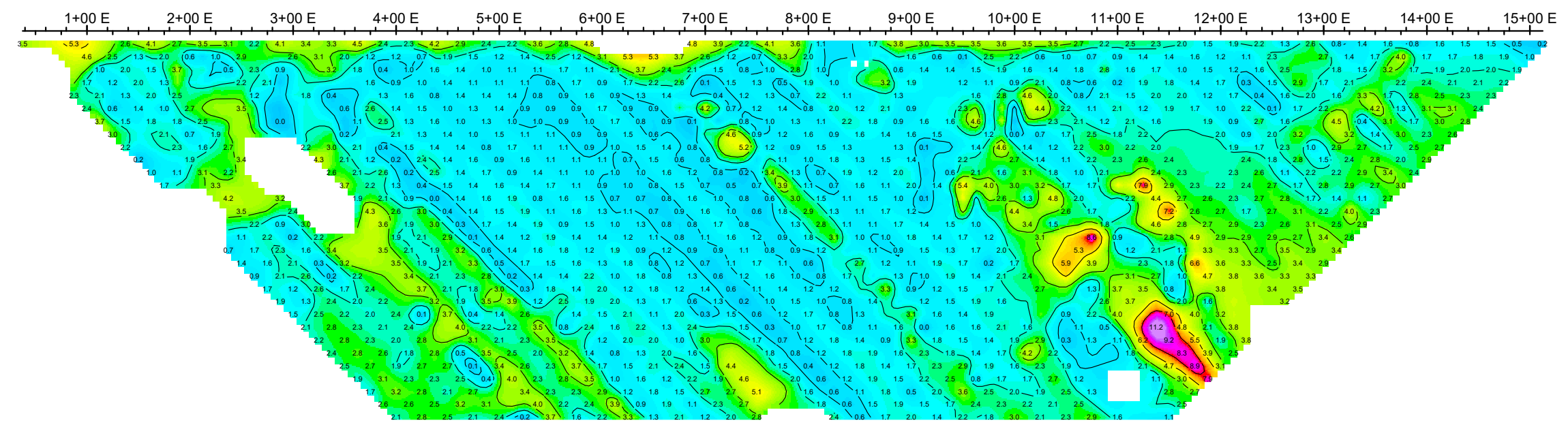
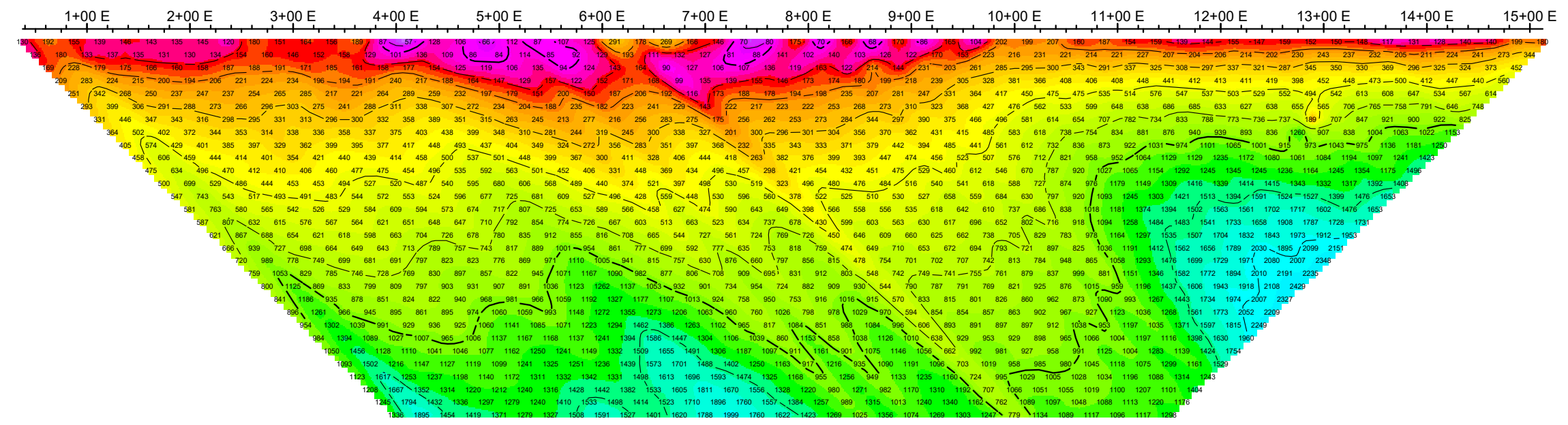
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Golden Perimeter Project
Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2 Line 12+00N

Abitibi Geophysics Inc.



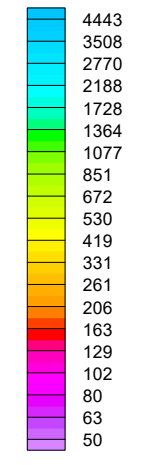


OreVision® Survey

(a = 25 m / n = 1 to 30)

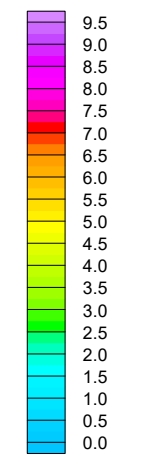
Line 14+00N

Resistivity
(Ohm-m)

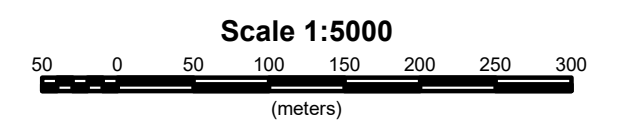


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n=30

Chargeability
(mV/V)



n=1
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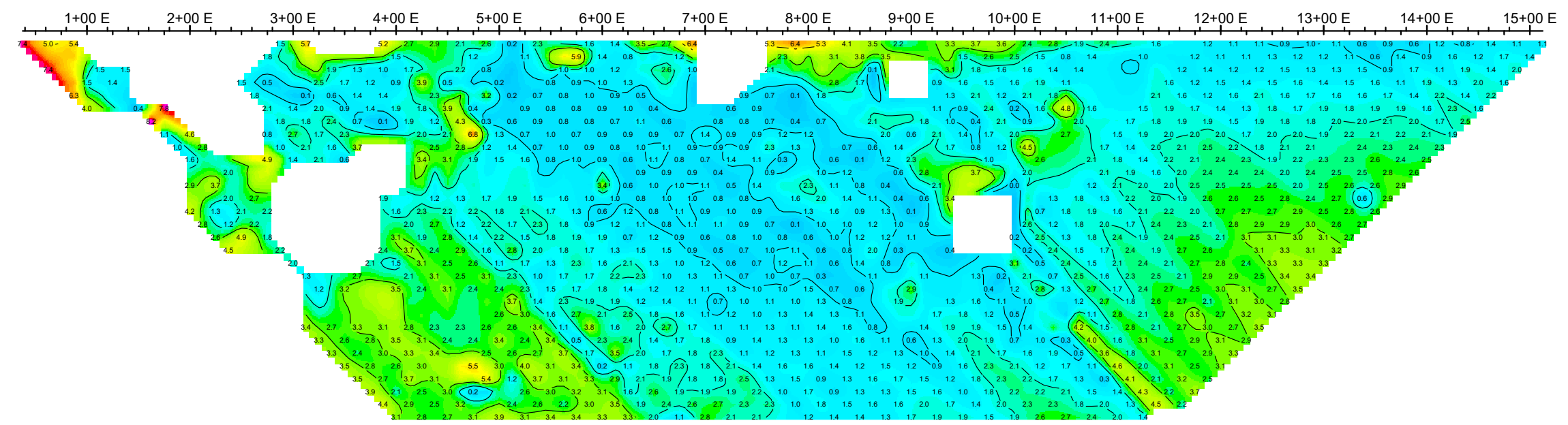
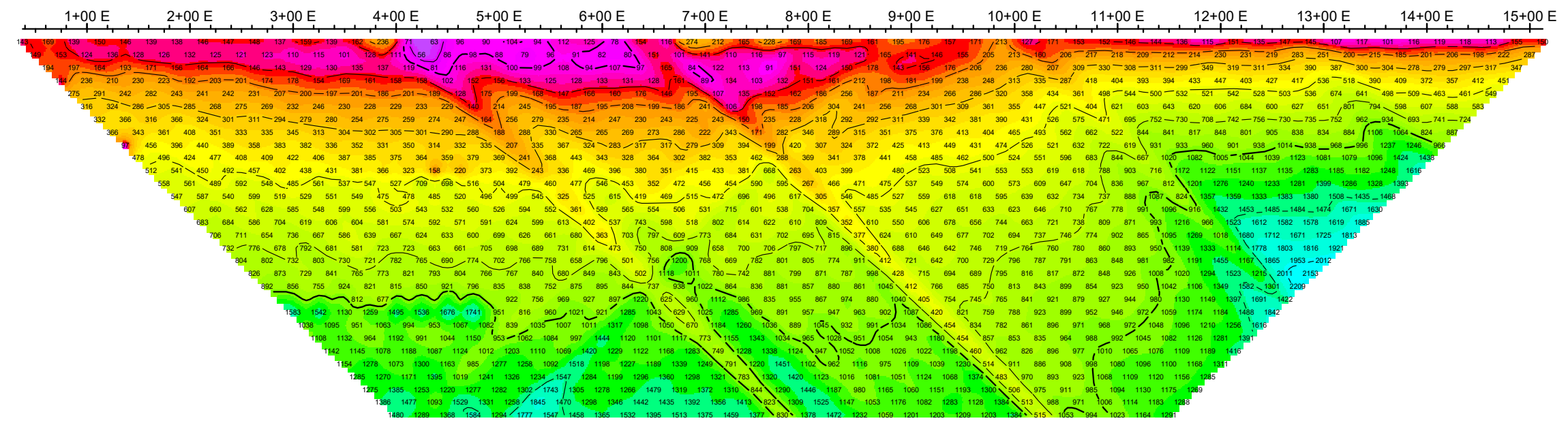
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Price & Adams Townships
Ontario, Canada

Project no: 20NT063-P2

Line 14+00N

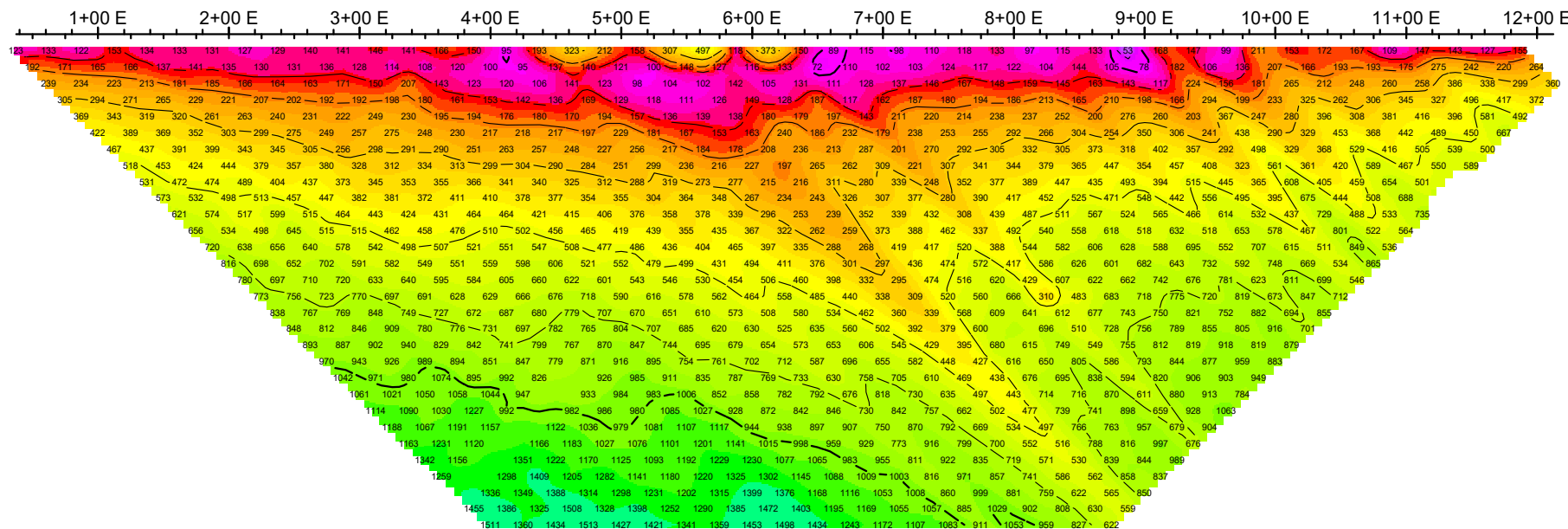
Abitibi Geophysics Inc.





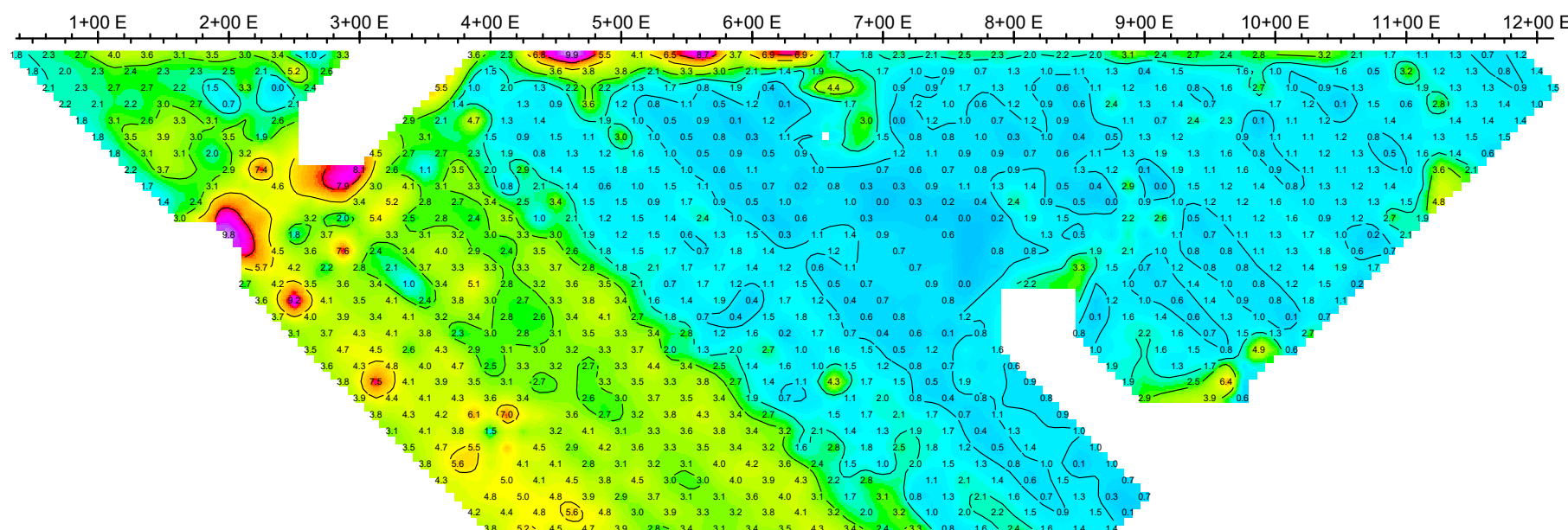
OreVision® Survey
(a = 25 m / n = 1 to 30)

Line 16+00N



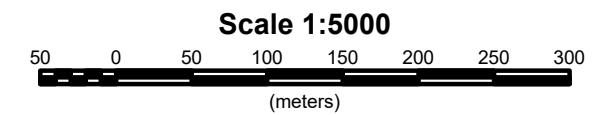
Resistivity
(Ohm-m)

- n=1
- n=2
- n=3
- n=4
- n=5
- n=6
- n=7
- n=8
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- n=10
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- n=21
- n=22
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- n=24
- n=25
- n=26
- n=27
- n=28
- n=29
- n=30



Chargeability
(mV/V)

- n=1
- n=2
- n=3
- n=4
- n=5
- n=6
- n=7
- n=8
- n=9
- n=10
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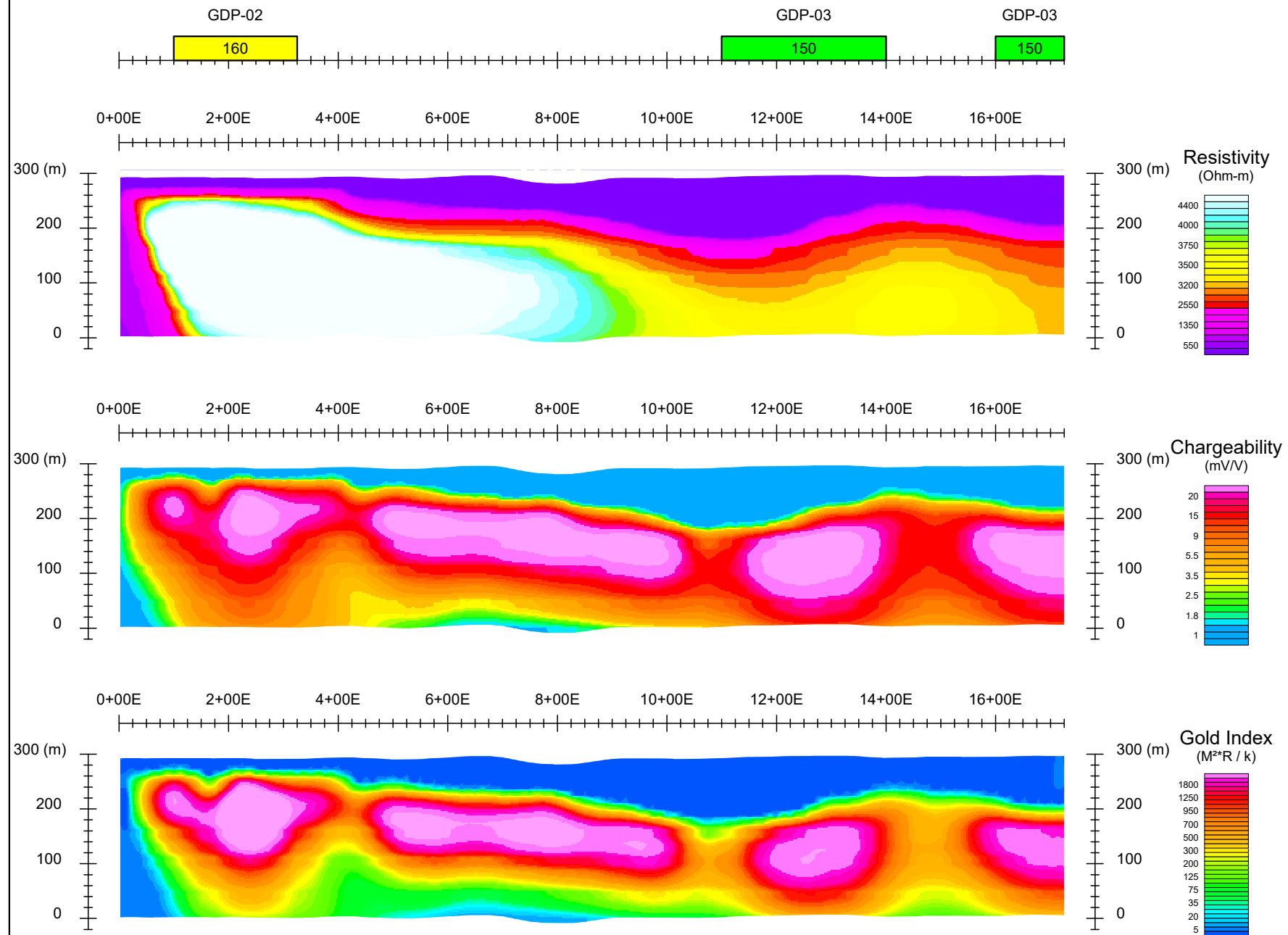


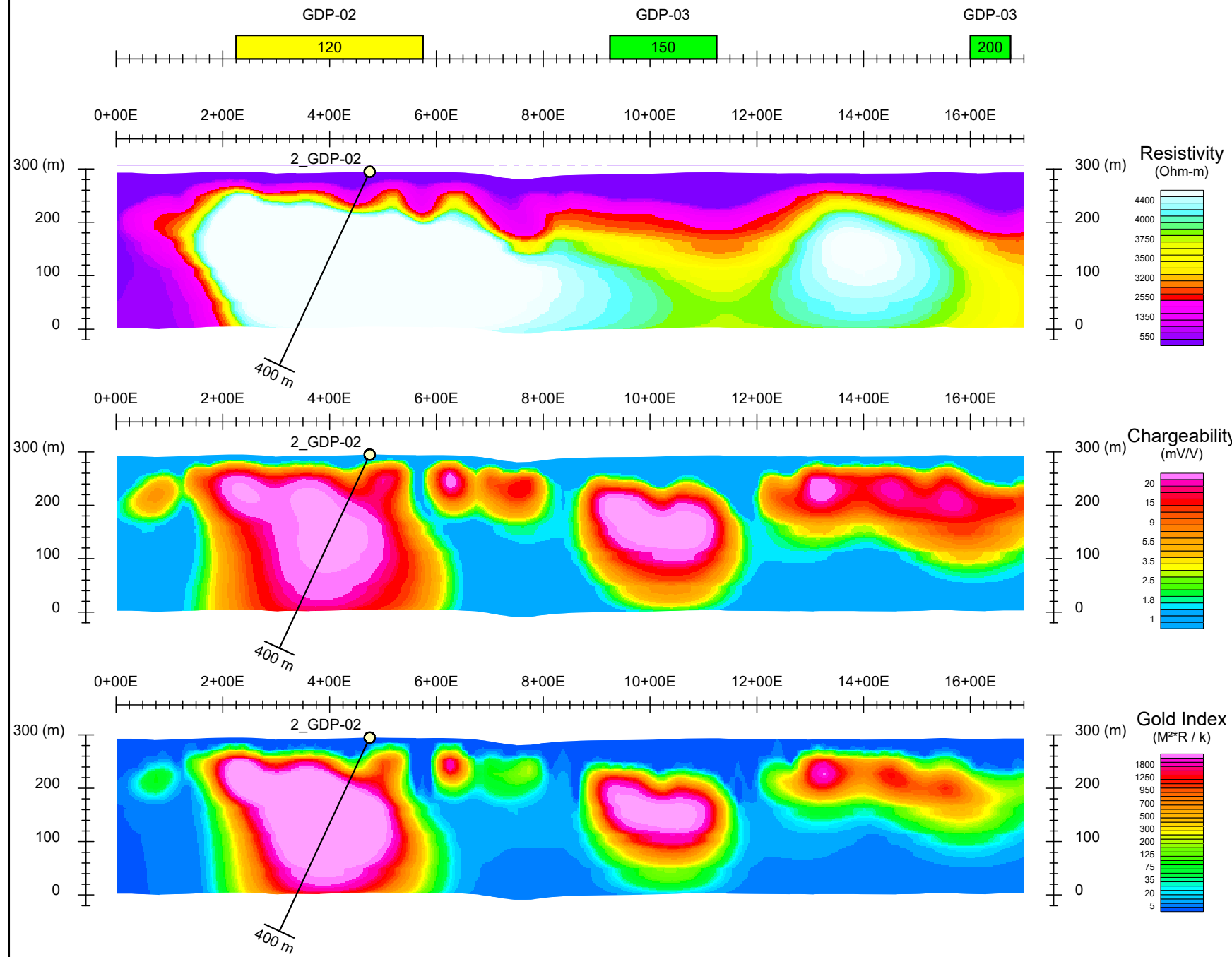
HighGold Mining Inc.
Golden Perimeter Project
Price & Adams Townships
Ontario, Canada

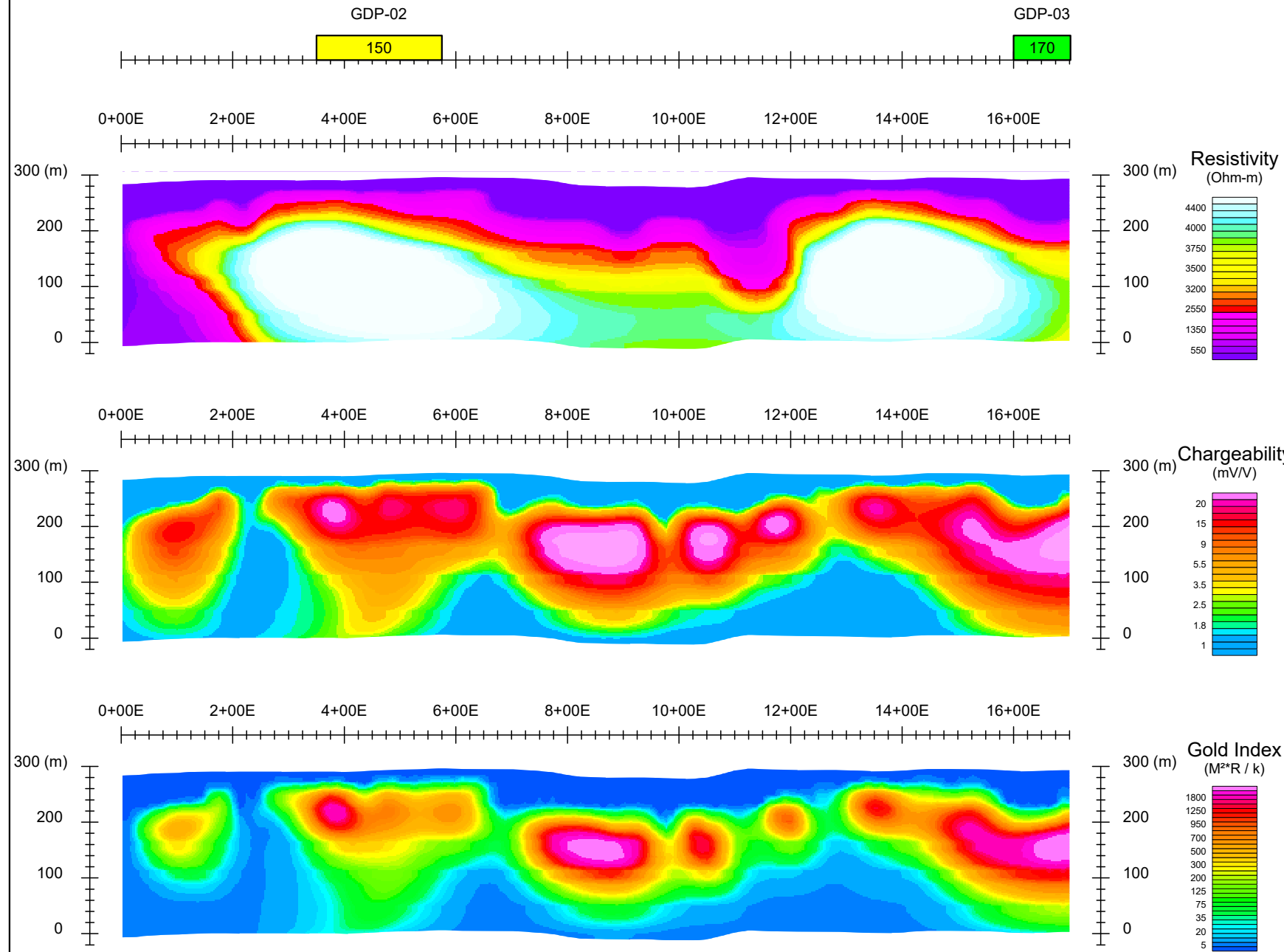
Project no: 20NT063-P2

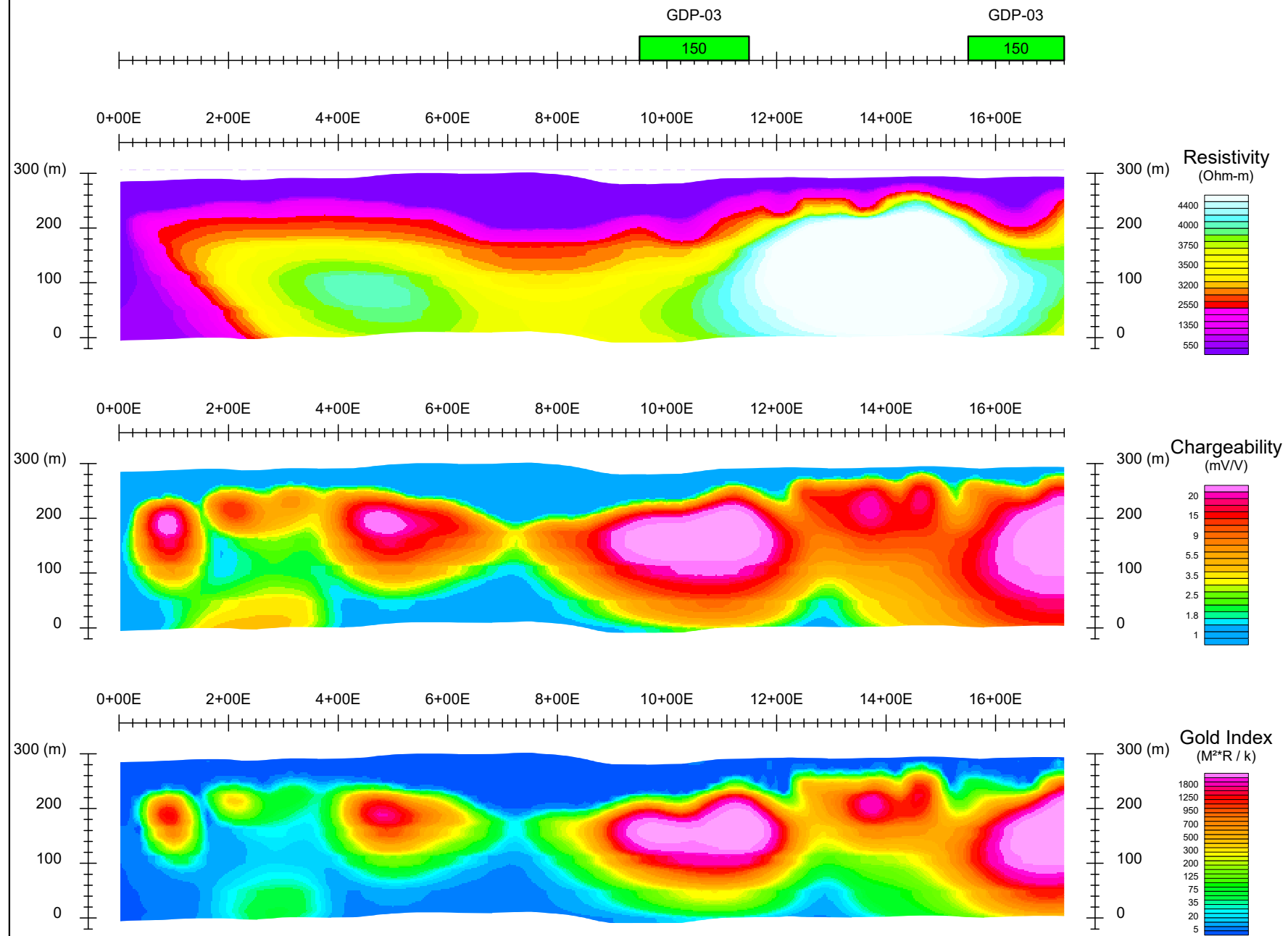
Line 16+00N

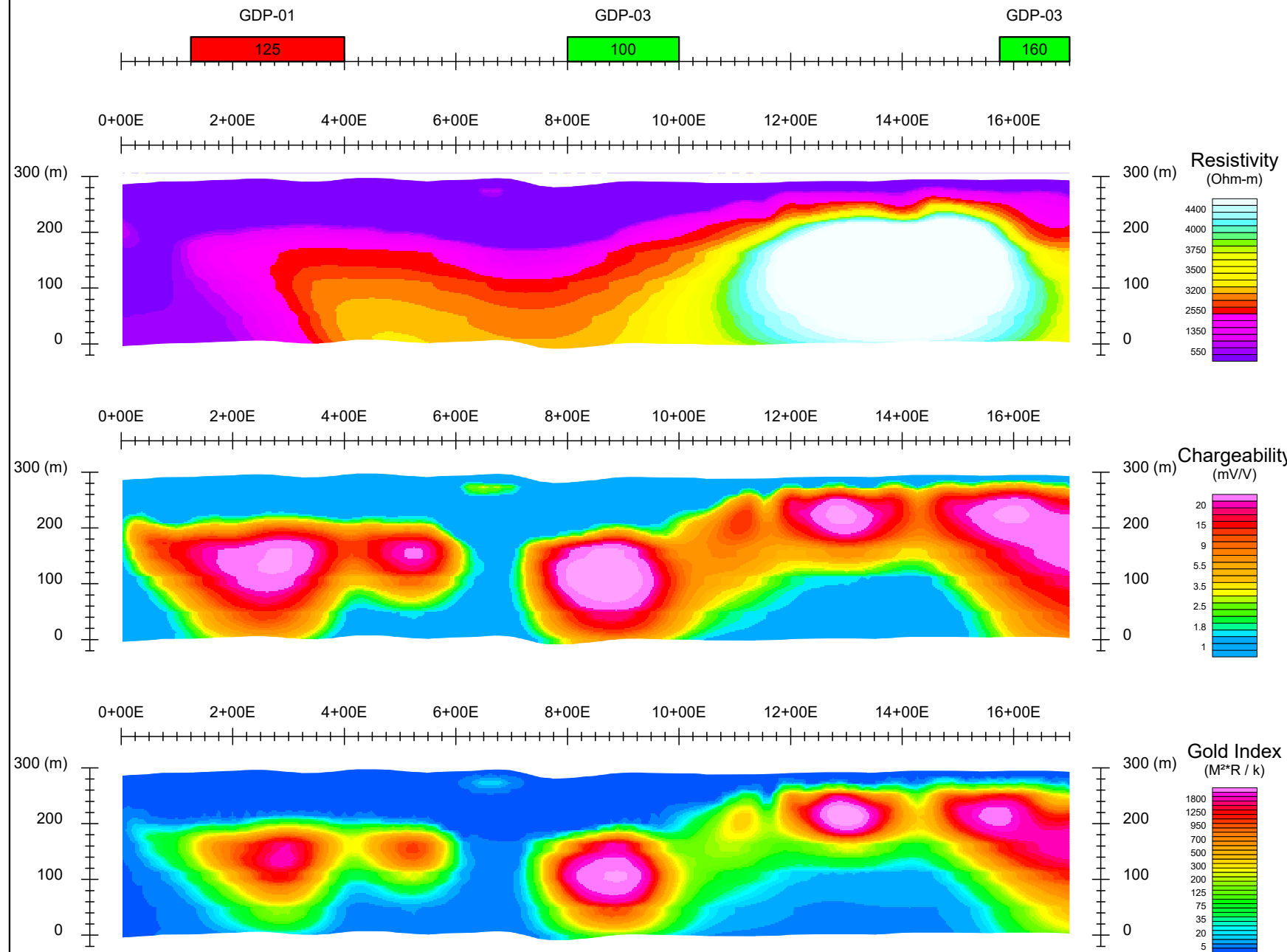
Abitibi Geophysics Inc.

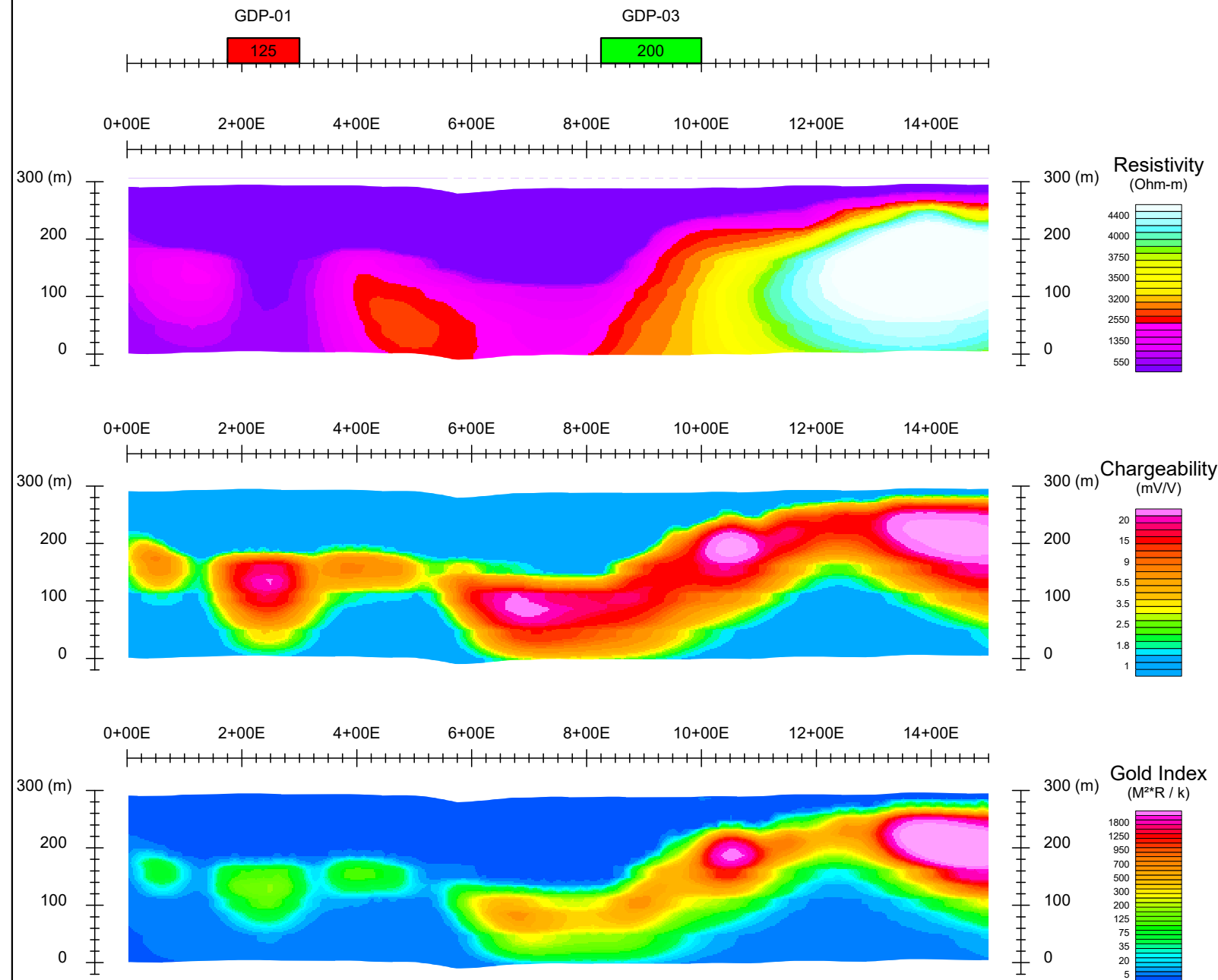


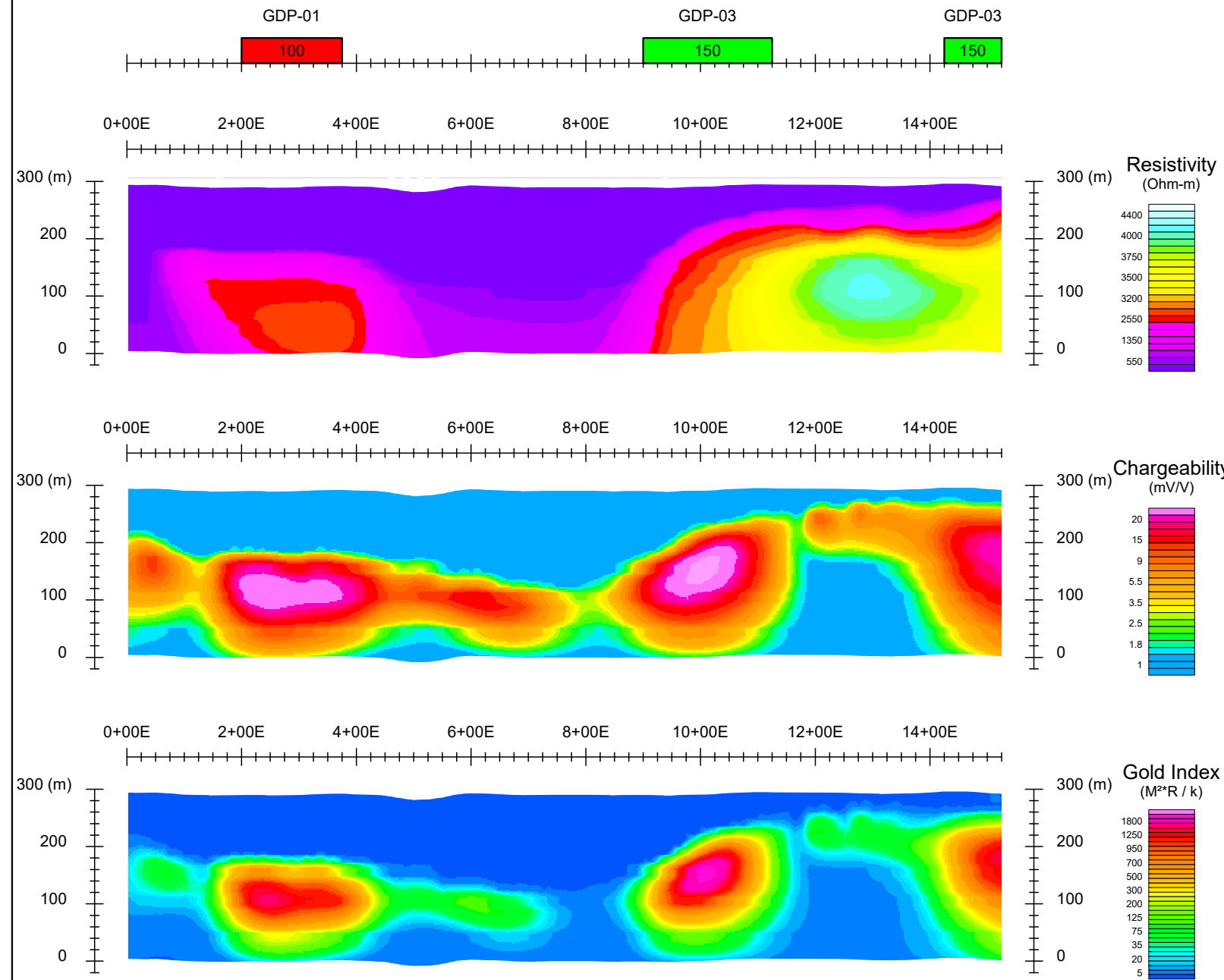


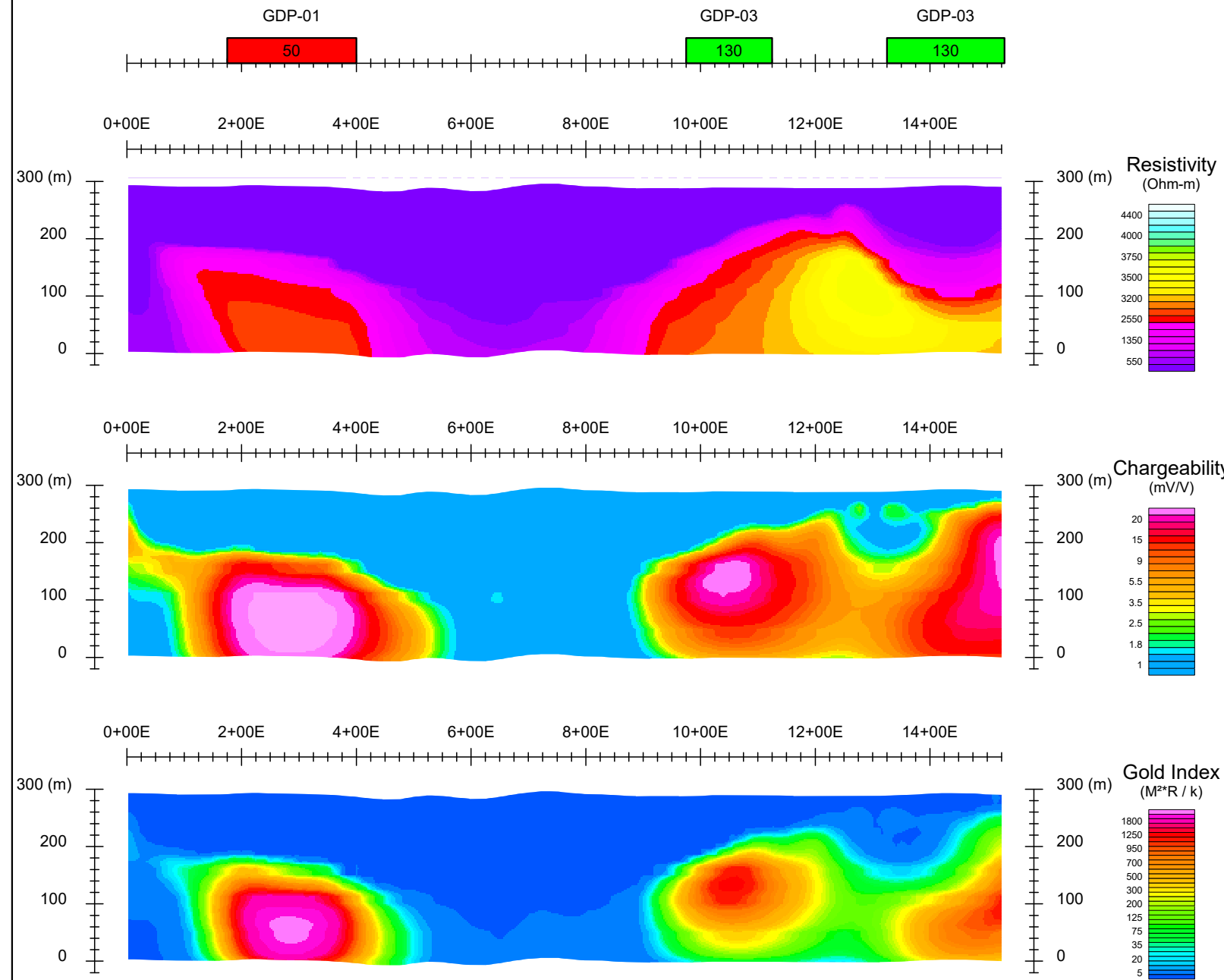


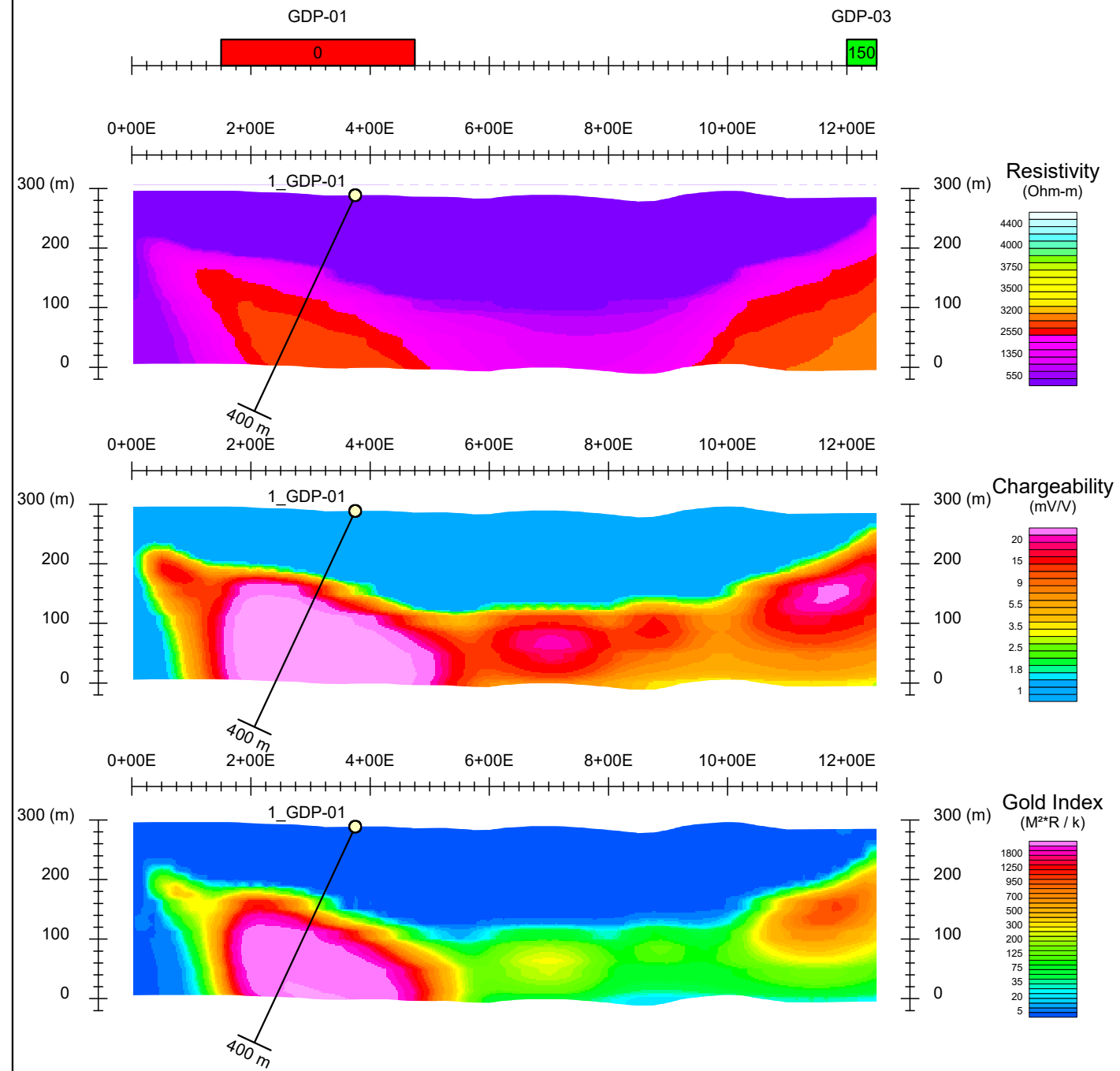












Project no: 20NT063-P2

Scale 1 : 10 000

HighGold Mining Inc.

OreVision® Survey - Vertical Section

Golden Perimeter Project

Line 16+00N