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Rio Tinto Exploration Canada Inc.

Induced Polarization Survey

Bark Lake Property

Boot Bay Area
NTS 50B/10
Thunder Bay Mining Division
Ontario, Canada

Eileen Lyon
June 2018

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Introduction

In mid-2016, Rio Tinto Exploration Canada Inc. (RTECI) entered into an option agreement with Benton Resources Corporation (BEX) to acquire the Bark Lake property in the Boot Bay Area. This property covers the named Bark Lake intrusion which has been explored in the past by various companies including Platinum Group Metals.

Work included in this assessment report is pursuant to the following existing Exploration Plan and Permit:

- Exploration Plan No. PL17-10812 filed October 12, 2017

Specifically, the work recorded in this report includes a ground resistivity and induced polarization (IP) survey, as well as the line cutting that was completed prior to the ground geophysics. The work was completed for RTECI and completed by the following contracted companies: Haveman Brothers Forestry Services Limited (Haveman) as the line cutting contractor, and Abitibi Geophysics Ltd. (Abitibi) as the ground geophysical contractor.

In December of 2017, RTECI contracted Haveman to line cut three (3) lines at a 1.4 m width over the Bark Lake intrusion corresponding to the lines desired to be ground surveyed with Abitibi's ground resistivity and IP system. Once the line cutting was completed, Abitibi arrived on site and began data acquisition. All coordinates used by both contractors was in NAD83 and UTM Zone 15N. No rehabilitation of the ground survey sites was required due to the negligible disruption by both sets of personnel.

RTECI's objective of the above work was two-fold:

A) To follow up and extend an existing ground resistivity and IP survey that was completed by Benton Resources Corp. in 2008, and
B) To better cover the magnetic anomaly over the Bark Lake intrusion

By achieving both objectives with more ground resistivity and IP, RTECI would be in a position to determine whether a strong chargeable anomaly sits associated with the Bark Lake intrusion. Should such anomaly exist, follow up drilling would be a natural successor to determine the presence of massive sulphide.

While both objectives were achieved, the results, however, of the resistivity and IP survey did not produce a large strong chargeable anomaly but rather a shallow moderate anomaly that was coincident with the magnetic feature. The results were still interpreted as being prospective and the recommendation was to drill test that anomaly to determine the validity of the conclusion.

Location and Access

The Bark Lake property is located approximately 110km west-northwest of Thunder Bay Ontario (Figure 1), travelling west on Highway 11/17 before merging on to Highway 11 towards Atikokan. The exact property itself is accessible by a combination of truck through a trail/road network off of the highway and then a short distance by foot to the exact locations depending on the task. Outside of Thunder Bay, the nearest populated area is Atikokan, at approximately 70 km to the west.

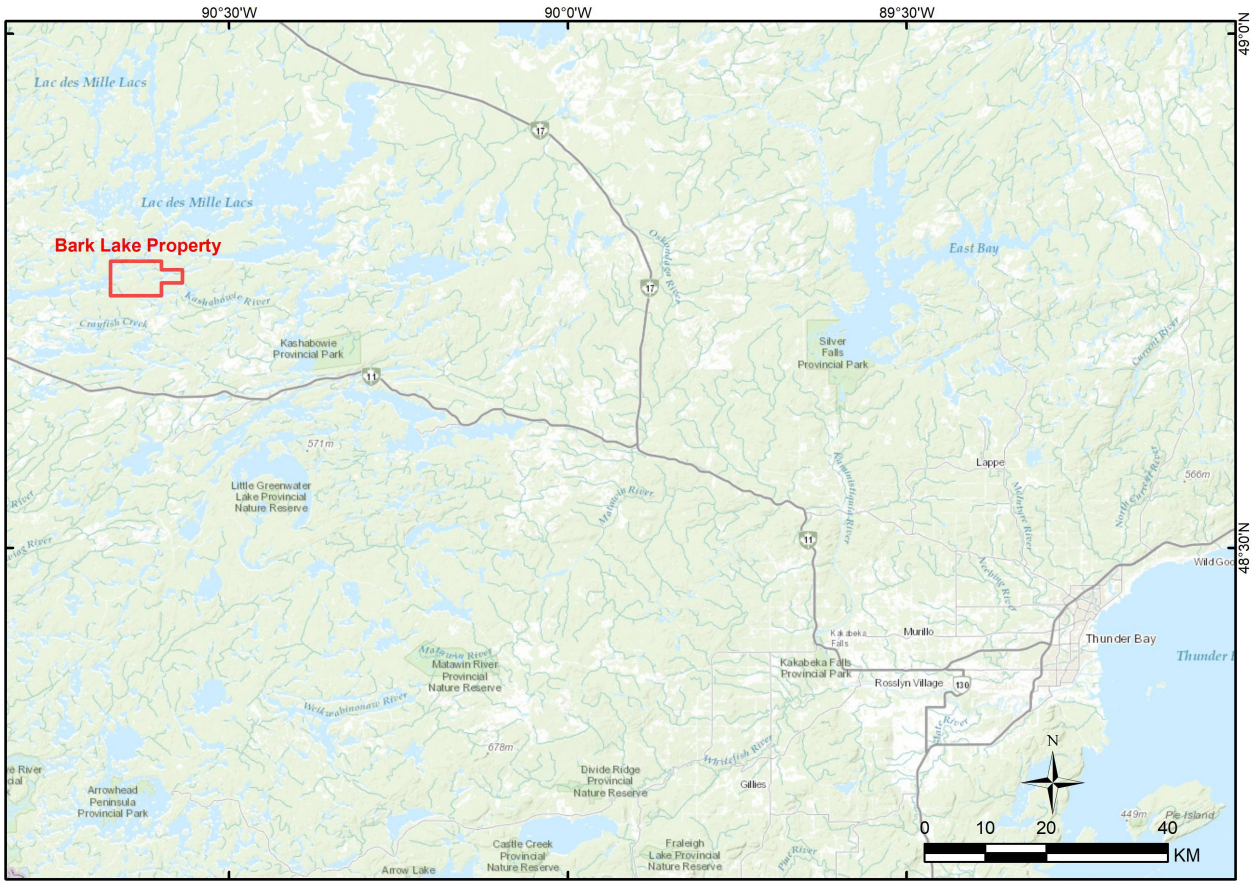

Figure 1: Project area map showing regional location to nearest major cities/towns.

Property Status

The Bark Lake property consists of 130 contiguous claims totalling 2,080 Ha. The work reported in this assessment was completed on 13 of these claim units. The work presented here was done before the modernization of the claims system by the Ministry of Northern Development and Mines in April 2018. At the time, the work was done over 4 of the pre-conversion claims (Figure 2), but is now reported with reference to the new claim units established on April 10th, 2018. Both pre-conversion and current claims are shown in plan map in Figure 2 and Figure 3, and further described in Table 1.

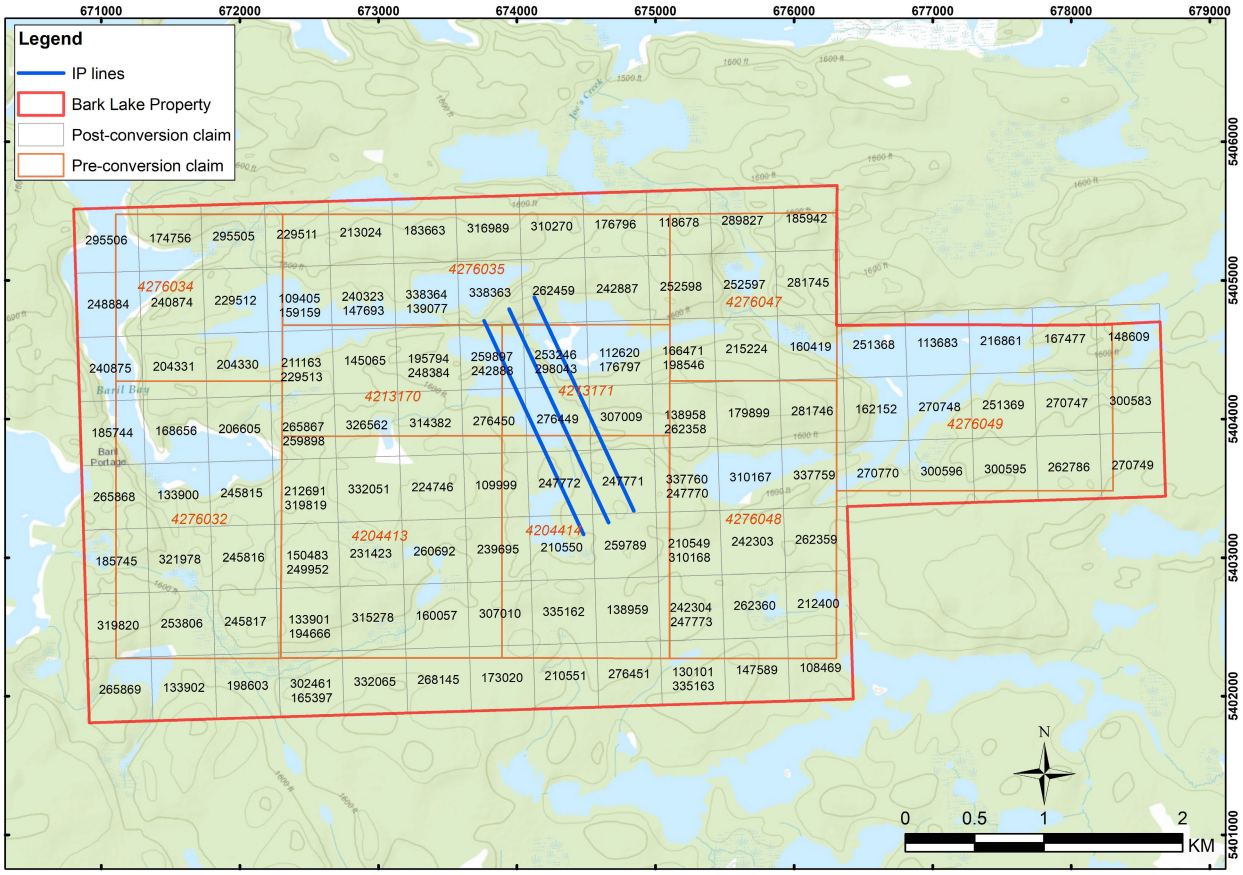

Figure 2: Property overview map showing all 130 Bark Lake claim units, with the specific claims for which the work reported on in this assessment filled in with red.

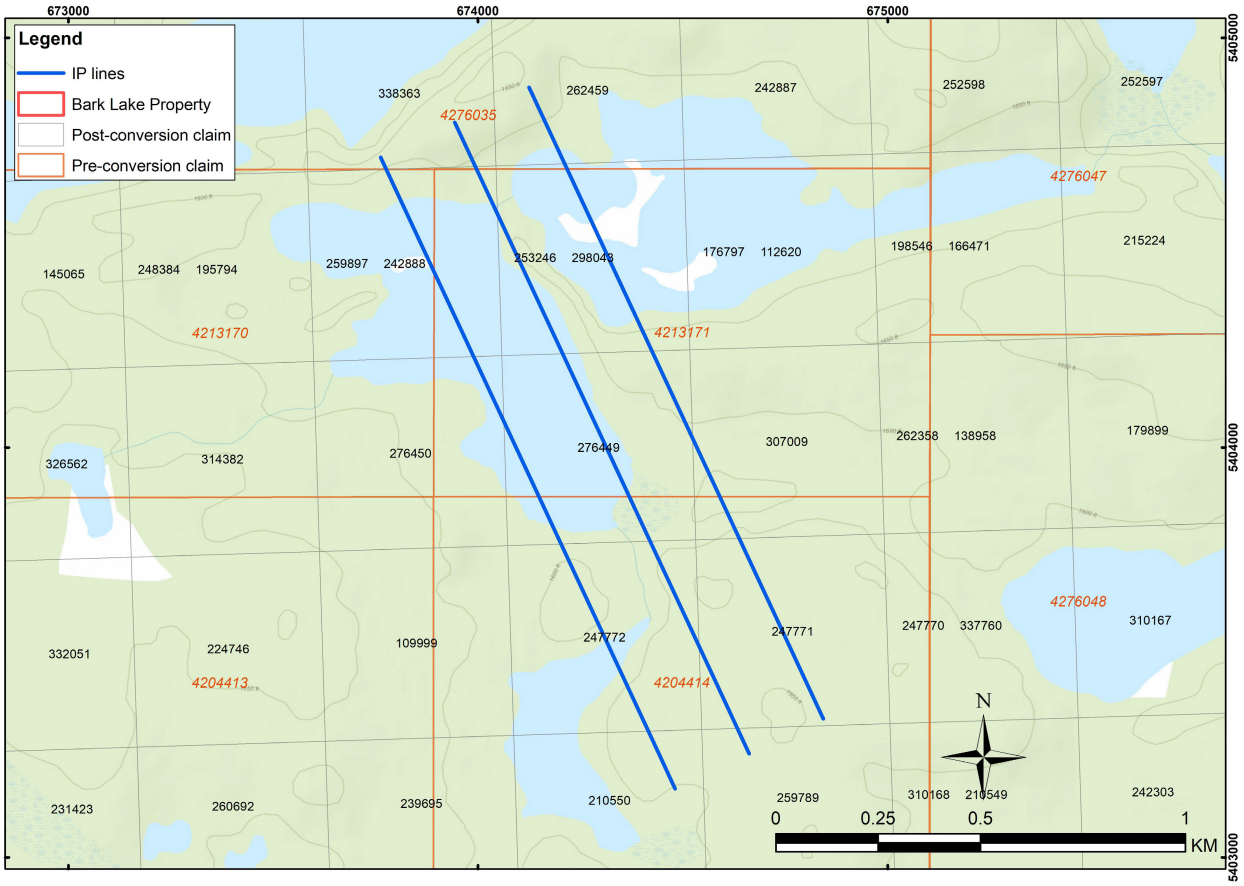

Figure 3: Zoomed in plan map showing and labelling the 13 mineral claims that assessment work in therein described in this assessment report.

Table 1: List of claims covered by the IP survey

Claim Number	Type	Issue Date	Pre-conversion claim number	Claim Holder
210550	Single Cell Mining Claim	2018-04-10	4204414	Rio Tinto Exploration Canada Inc. (100%)
247771	Single Cell Mining Claim	2018-04-10	4204414	Rio Tinto Exploration Canada Inc. (100%)
247772	Single Cell Mining Claim	2018-04-10	4204414	Rio Tinto Exploration Canada Inc. (100%)
259789	Single Cell Mining Claim	2018-04-10	4204414	Rio Tinto Exploration Canada Inc. (100%)
262459	Single Cell Mining Claim	2018-04-10	4276035	Rio Tinto Exploration Canada Inc. (100%)
276449	Single Cell Mining Claim	2018-04-10	4213171	Rio Tinto Exploration Canada Inc. (100%)
276450	Single Cell Mining Claim	2018-04-10	4213171	Rio Tinto Exploration Canada Inc. (100%)
307009	Single Cell Mining Claim	2018-04-10	4213171	Rio Tinto Exploration Canada Inc. (100%)
338363	Single Cell Mining Claim	2018-04-10	4276035	Rio Tinto Exploration Canada Inc. (100%)
242888	Boundary Cell Mining Claim	2018-04-10	4276035	Rio Tinto Exploration Canada Inc. (100%)
253246	Boundary Cell Mining Claim	2018-04-10	4213171	Rio Tinto Exploration Canada Inc. (100%)
259897	Boundary Cell Mining Claim	2018-04-10	4213170	Rio Tinto Exploration Canada Inc. (100%)
298043	Boundary Cell Mining Claim	2018-04-10	4276035	Rio Tinto Exploration Canada Inc. (100%)

Previous Work

Prior to 2006, the Bark Lake property was explored for gold and base metal style mineralization. Following 2006, Joe Hackl and Benton Resources staked claims in the area and exploration work saw an increase in activity.

1928-1931: Geological mapping by Tanton from the Geological Survey of Canada discovers two gold showings, now known as the East and West zones.

1964: Kaye, L., and assistants mapped the geology of the area and shows the Bark Lake area as underlain by metasedimentary rocks intruded by Precambrian granitic Intrusive comprised of biotite leucogranite and red hornblende granite - quartz syenite.

1971: Airborne geophysical surveys carried out in 1969 were followed up with ground EM and Magnetic surveys over selected conductors from the airborne work by Monteagle Minerals Limited in the Boot Bay – Bedivere Lake area. An additional thirteen claims were staked to cover airborne anomalies which were ground truthed to be sulphide concentrations and graphitic horizons in a volcanic package of basalt, andesite, rhyolite, tuffs and greywacke.

1974: Geological mapping, prospecting, trenching and diamond drilling was completed by Falconbridge Nickel Mines Limited. This diamond drill program returned gold assays up to 0.13 oz/ton over 23.0 feet of core. It is thought this drilling tested the West zone.

1981: Follow-up line-cutting, prospecting and ground magnetometer and EM surveys were conducted by Lacana Mining Corporation over the southern Wabigoon/Quetico Subprovince boundary. Only one small land package owned by Lacana Mining overlies the Bark Lake Property in the Bolton Bay area.

1990: Mingold Resources Inc. carried out a reconnaissance till sampling program with a total of 823 samples being collected. The results of the bulk till sampling program outlined 37 first order anomalies and many lesser anomalies have also been outlined. This sampling program covers a large area, stretching from Bedivere Lake Area and Brule Lake Area in the northwest to Paipoonge and Gilles Townships in the South east. The sampling area covers portions of the Bark Lake Property.
1997: The Bolton Bay property was acquired by Green Ice Corp. which overly the northeast edge of the Bark Lake property. Work completed includes geological mapping, prospecting, ground magnetic and IP geophysical surveys. Follow-up IP and diamond drilling over the East and West Zones discovered in early 1900's is recommended.

1998: Ground IP geophysics and diamond drilling was completed by Green Ice Corp. as followup to their 1997 mapping program. Drilling encountered bonanza style gold mineralization between 15 – 20 g/t in half meter wide quartz-carbonate veins, however it was thought that the strong IP anomalies were explained by graphitic sections encountered in drilling. Follow-up surface trenching of the gold zones is recommended to improve the geological understanding of the showings.

1999: Ontario Geological Survey completed lake-bottom sediment sampling over the property as part of Operation Treasure Hunt.

2003: Ontario Geological Survey completed lake-bottom sediment sampling over the property as part of the Shebandowan area high density regional lake sediment and water geochemical survey.

2005: Stone maps the area of Bark Lake as part of the Bedivere Lake area mapping and shows boulders of Hornblendite (10h) in the area where, subsequently, mineralized boulders are discovered through prospecting.

2008: Benton Resources Corporation drilled a total of 1,444.00 m of BQ thin wall core in seven holes (table 2 and figure 3). Drill core is cross piled and stored on the property. The drill program was designed to follow-up surface boulders that assayed up to 1.5% Ni, 1.2% Cu, 2.6 g/t Pt, 1.4 g/t Pd and 0.7 g/t Au. In addition, an outcrop of Ultramafic intrusive was discovered during prospecting. Ground magnetometer and IP surveys were then carried out to define drill targets in the area of interest where coincident mag and IP anomalies occurred. Only one of the five holes encountered anomalous values of nickel, copper and PGE's.

2009: Benton Resources Corporation contracted Universal Wing to fly 530 survey line kilometres of aeromagnetics over the Bark Lake Property. The purpose of the survey was to collect geophysical data that could be used to prospect directly for anomalous magnetic areas in the Earth's crust which may be caused by, or related to, economic minerals. Secondly, the geophysical patterns identified, could be used indirectly for exploration by mapping the geology in detail, including faults, shear zones, folding, alteration zones and other structures. Recommendations included ground follow up of magnetic features and a survey for conductors in prospective areas.

2011: Platinum Group Metals conducted a prospecting and 8-hole diamond drill program. Targets were magnetic anomalies associated with down-ice discovering of mineralized boulders. Drilling results produced two minor intersections of gabbro and leucogabbro. Platinum Group Metals determined these results did not warrant any further work.

2016/2017: RTECI flew at helicopter-supported HeliTEM survey that covered 100% of the Bark Lake property. This survey collected time-domain EM and magnetics with the purpose of determining whether there was a conductive response within the Bark Lake claims, specifically over the magnetic anomaly known as the Bark Lake intrusion. The results of the multi-pulse platform did not produce a discernible conductive response.

Regional and Property Geology

The Mesoproterozoic Midcontinent Rift (MCR) is a large igneous province that formed from plume influenced intercontinental rifting at ~1.1Ga (Hutchinson et al., 1990). The MCR extends along a 2000km arcuate path from the Lake Superior region to as far south as Kansas and as far southeast as Michigan as shown in figure 3 (Van Schmus and Hinze, 1985). The rift, though only exposed in the Lake Superior region, is known to be as thick as 20km with an estimated lava volume of $2x10^6$ km^3 and was thought to be emplaced in 23 million years between 1109Ma and 1186Ma (Davis and Paces, 1990, Cannon et al., 1989, Cannon, 2002).

In addition to the extrusive rocks emplaced during the rift a large amount of intrusive rocks were emplaced including the Duluth Complex, Mellen Complex, Coldwell Complex, and the Beaver Bay Complex in addition to various smaller intrusions such as the Eagle intrusion, Tamarack intrusion, Crystal Lake intrusion, and Sonju Lake intrusion. Many of these intrusions are known to produce high grade mineralization often with impressive PGE values.

The Bark Lake property is underlain by ca. 2.690 – 2.698 Ga Archean meta-sediments and Granitic rocks of the Quetico Subprovince. To the North, the Quetico Fault bounds the Wabigoon Subprovince to the north and Quetico Subprovince to the South.

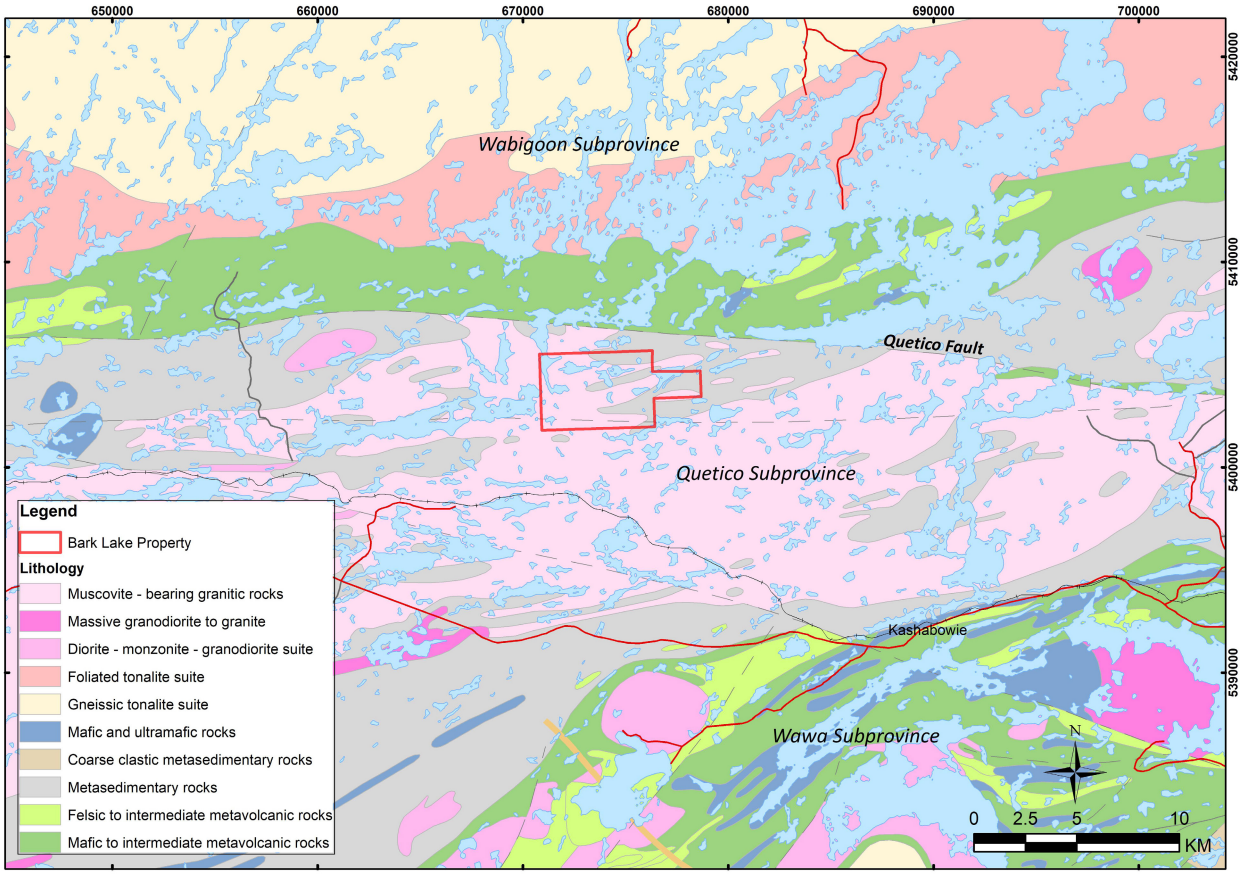

Figure 4: Geological map showing the Bark Lake claims on regional geology (250k OGS map).

The Quetico Subprovince, which hosts the Bark Lake property consists of mainly meta-sedimentary rocks, derived migmatite and granite with a suite of Alaska type mafic-ultramafic intrusions. These intrusions, known as the Quetico Intrusions, are commonly associated with the narrow meta-sedimentary belt that is wedged between the Quetico Batholith to the south and the Quetico Fault Zone to the north (MacTavish, 1999).

2017/2018 Geophysical Program

Ahead of Abitibi arriving at the Bark Lake project site, Haveman sent two crew members to cut lines over the proposed ground resistivity and IP lines. While a good portion of those survey lines were over a lake, the Haveman crew cut approximately 3.3 kms over forested ground, over the course of 6 days.

Once the line cutting was completed, Abitibi completed a ground resistivity and IP survey over the same using the following equipment:

Transmitter	2 IRIS Instruments TIPIX (s/n 6 & 7)
Power Supply	Honda 2000 VA with maximum output of up to 2.0 kW/13A/1800V
Electrodes	stainless steel electrodes
Receiver	2 IRIS Elrec-PRO with integrated SwitchPRO (S/N 184 & 46)

This particular survey was a pole-dipole survey with an “a” spacing of 37.5 m and a “N” spacing of 1-20. Three survey lines of approximately 1.8 km length were surveyed at 200m line spacing and an angle of 155°.

Following is the detailed personnel list for the company and contractors, in addition to the dates worked by each.

Table 2: List of personnel and dates

Company	Dates Work Completed	Number of Days	Name	Position
Abitibi	December 15 – 17, 2017	2 days	Pierre Berube	Project Manager
			Catherine Phaneuf	Data Processing
			Carole Picard	Data Plotting
			Tommy Lessard	Field Assistant
			Brian Willard	Field Assistant
			Ludevick Falardeau	Field Assistant
			Marc-Antoine Blais	Field Assistant
			Mathieu Campeau	Crew Chief
Haveman	December 9 – 14, 2017	6 days	Mike Haveman	Manager
			Mark Haveman	Line Cutter

A total of 5.175 line kilometers were surveyed by Abitibi over the course of 3 days.

Data quality control was completed by Abitibi offsite, as well as a secondary review was completed by RTECI on receipt of the preliminary data. Quality control involved a daily check of the decay curves of voltage potentials, and measured and calculated resistivity values.

A report supplied by Abitibi can be found in Appendix B that contains the above and further details of the work completed. In Appendix C are the results of the data acquisition as processed and supplied by Abitibi.

Interpretation of the Ground Resistivity and IP Survey

The objective of the ground resistivity and IP survey was to identify a chargeable anomaly associated with the magnetic anomaly known as Bark Lake intrusion thereby pointing to the potential existence of a Ni-Cu-PGE deposit. Magnetically, the Bark Lake intrusion is a very well isolated magnetic high with an amplitude of approximately 450 nT. The target is semi-coincident with a lake. The presence of a chargeable response, coincident with the magnetic feature would increase the probability that the intrusion contains some level of sulphides. The stronger the response, the stronger the likelihood of a sulphidic component.

The particular ground resistivity and IP platform used by Abitibi is their proprietary OreVision system that has increased N levels than a traditional pole-dipole system (20 versus 6). These N values representing the number of points in the time varying decay that can be recorded. In older traditional systems, the voltage potential would have dropped to below the noise threshold limiting the length of the decay. With the OreVision system, a combination of greater power and greater sensitivity in the receiver electrodes has remedied this issue.

The Bark Lake survey showed a shallow, moderate, chargeable anomaly coincident with the magnetic intrusion on the centre line of the survey (L600). While on the same section slice there appears to be a similar intensity chargeable anomaly at depth, this was something that was given low confidence due to the irreproducibility by in-house inversions completed by RTECI. Aside from that target, no other feature of interest was resolved.

Recommendation for further exploration work

The lack of strong chargeable response from the ground resistivity and IP survey coupled with the lack of in-hole or off-hole conductive response from the downhole survey by Crone rules out any further work for this area. All that remains with the Bark Lake target is a near surface strong magnetic anomaly coincident with the logging of a peridotite but lacking coincidence with any conductive feature as from the downhole EM work. No further work is suggested at this time.

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Statement of Qualifications

I, Eileen Anne Lyon certify that:

I am a full time employee of Rio Tinto Exploration Canada Inc, of 1300 Walsh Street W, Thunder Bay, ON P7E 4X4 since May 2011.

I graduated with Honours, Bachelor of Science degree in Geophysics from Western University, Ontario in 2003, graduate with a Bachelor of Law degree from University of Windsor, Ontario in 2007.

I have first-hand experience working with geophysical data for multiple commodities since graduation from my Geophysics degree in 2003. This work includes quality control, quality analysis, processing and interpretation of magnetic, electromagnetic, gravity, resistivity, and induced polarization airborne and ground data.

I authored this assessment report entitled: Line Cutting, Ground Resistivity and Induced Polarization survey, Bark Lake Property, Ontario.

To the best of my knowledge, all costs reported in this Assessment Report were incurred in the 2017/2018 exploration program.

Signed,

Dated this 29th of June, 2018
E. Lyon
Senior Project Geophysicist
Rio Tinto Exploration Canada Inc.

Appendix A: Exploration Costs

Table 3: Line Cutting, Ground Geophysics and Downhole Geophysics Survey Costs

Activity	Supplier	Expenditures
Line Cutting		$10,363
Ground Resistivity and IP Survey		$35,430
Grand Total		***$45,793***

Table 4: Claim Units and Work Required/Completed Amounts

Claim Number	Claim Type	Work on Claim (m)	Percentage of Total Work	Line-cutting Cost	IP Cost	Total Survey Cost
210550	Single Cell Mining Claim	150	2.98%	$308	$1,054	$1,363
247771	Single Cell Mining Claim	700	13.89%	$1,439	$4,921	$6,360
247772	Single Cell Mining Claim	775	15.38%	$1,593	$5,448	$7,042
259789	Single Cell Mining Claim	70	1.39%	$144	$492	$636
262459	Single Cell Mining Claim	200	3.97%	$411	$1,406	$1,817
276449	Single Cell Mining Claim	1050	20.83%	$2,159	$7,381	$9,540
276450	Single Cell Mining Claim	170	3.37%	$350	$1,195	$1,545
307009	Single Cell Mining Claim	275	5.46%	$565	$1,933	$2,499
338363	Single Cell Mining Claim	150	2.98%	$308	$1,054	$1,363
242888	Boundary Cell Mining Claim	312.5	6.20%	$643	$2,197	$2,839
253246	Boundary Cell Mining Claim	437.5	8.68%	$900	$3,076	$3,975
259897	Boundary Cell Mining Claim	312.5	6.20%	$643	$2,197	$2,839
298043	Boundary Cell Mining Claim	437.5	8.68%	$900	$3,076	$3,975
		Total	***100.00%***	***$10,363***	***$35,430***	***$45,793***

Appendix B: Abitibi Geophysics Logistics and Interpretation Report

ABITIBI GEOPHYSICS

OREVISION IP

RIO TINTO EXPLORATION CANADA INC.

BARK LAKE PROJECT

BOOT BAY AREA, ONTARIO, CANADA

LOGISTICS AND INTERPRETATION REPORT

17N115 **JANUARY 2018**

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Table 1. Maps Produced

Map Number	OreVision® Survey	Scale
3 Plates Lines 4+00E to 8+00E	3D Inversion Vertical Sections – Gold Index	1:10 000
	3D Inversion Vertical Sections – Metal Factor	1:10 000
	2D Inversion Vertical Sections	1:10 000
	Colour Apparent Resistivity & Chargeability Pseudosections **(PDF format only)**	1:5000
8.2_450	Inverted Resistivity at an Elevation of 450 m (Ohm-m)	1:5000
8.2_350	Inverted Resistivity at an Elevation of 350 m (Ohm-m)	1:5000
8.2_250	Inverted Resistivity at an Elevation of 250 m (Ohm-m)	1:5000
8.3_450	Inverted Chargeability at an Elevation of 450 m (mV/V)	1:5000
8.3_350	Inverted Chargeability at an Elevation of 350 m (mV/V)	1:5000
8.3_250	Inverted Chargeability at an Elevation of 250 m (mV/V)	1:5000
8.4_450	Calculated Metal Factor at an Elevation of 450 m	1:5000
8.4_350	Calculated Metal Factor at an Elevation of 350 m	1:5000
8.4_250	Calculated Metal Factor at an Elevation of 250 m	1:5000
8.6_450	Calculated Gold Index at an Elevation of 450 m	1:5000
8.6_350	Calculated Gold Index at an Elevation of 350 m	1:5000
8.6_250	Calculated Gold Index at an Elevation of 250 m	1:5000
10.0	Geophysical Interpretation	1:5000

Vertical sections and colour maps are bound or 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. Please note that all color plan maps were prepared with the recovered 3D VOXI inversions.

1. RESULTS AND RECOMMENDATIONS

- *RESISTIVITY*

Resistivity features have been interpreted by studying the apparent resistivity pseudosections, the recovered 3D inversion vertical sections and the intrinsic resistivity maps plotted at elevations of 450, 350 and 250 m.

The survey grid is dominated by a large, centrally located, conductive overburden layer that crosses the grid in the ENE direction (*Maps 8.2_450* and *8.2_350*). High resistivity values are found in the southern portion of the grid, outlined in blue on the *Geophysical Interpretation Map (10.0)*. A shallow resistivity high trend is also found in the northern portion of the grid (*Map 8.2_450)*.

- *CHARGEABILITY*

Following a detailed interpretation of the pseudosections and with the help of the recovered 3D inversion vertical sections, a total of **5 chargeable sources** were interpreted. Their surface projections are illustrated on the *Geophysical Interpretation map (10.0)*. The observed sources are trending roughly ENE.

High priority chargeable sources **BL-01** and **BL-04** seem to coincide with high resistivity values, possibly indicating disseminated sulphide mineralization in silicified zones. Anomaly **BL-03** is associated with low resistivity values indicating potential shear zone hosted mineralization. No obvious resistivity association was observed for chargeable sources **BL-02** and **BL-05**.

- *METAL FACTOR*

From the recovered resistivity / chargeability data set acquired from the VOXI 3D inversion, the *Metal Factor* has been calculated.

The *Metal Factor* was calculated as [(chargeability / √resistivity) * 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 a conductive 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 *Metal Factor*.

The *Metal Factor* maps (8.4) display the results of this calculation. Metal Factor is also shown on all 3D inversion vertical sections.

❑ *GOLD INDEX*

From the recovered resistivity / chargeability data set acquired from the VOXI 3D inversion, the *Gold Index* has been calculated.

The *Gold Index* was calculated as (Chargeability^2 * Resistivity / 1000). It highlights regions of high resistivity and chargeability which are amenable to hosting disseminated sulphides associated quartz veining or 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* maps (8.6) display the results of this calculation. Gold Index is also shown on all 3D inversion vertical sections.

❑ *FOLLOW UP*

○ *SURVEY EXTENSION*

The survey has identified interesting sources that are still open near the edges of the survey grid. It is recommended that additional survey lines be added in the east and west directions in order to fully delineate the extent of all interpreted chargeable trends. Successful DDH results for high priority targets increases the potential benefit of survey extension. It is also recommended that survey lines be extended to the north to fully delineate the extent of target trend **BL-05**.

○ *PROSPECTING / TRENCHING*

Much of the grid is dominated by a thick conductive layer that leaves only a few areas that seem viable for prospecting and trenching. The resistivity and chargeability data as well as the inversion results indicate that chargeable source **BL-01** potentially outcrops or passes very near surface on *L 8+00E* between stations *12+75S* and *12+25S* and at station *12+25S* on *L 6+00E.*

○ *DRILLING*

A drilling program has been recommended to test the chargeable targets outlined in this report. Table 2 lists DDH and target locations as well as anomaly descriptions. The pages following this table are images of the selected drill targets.

The interpretation of the geophysical data embodied in this report is essentially a geophysical appraisal of the Bark Lake Project. As such, it incorporates only as much geoscientific information as the author has on hand at this time. Geologists thoroughly familiar with the area are in a better position to evaluate the geological significance of the various geophysical signatures. Moreover, as time passes, and information provided by follow-up exploration programs are compiled, exploration targets recognized in this study may be down graded or up graded.

Respectfully submitted,
Abitibi Geophysics Inc.

Catherine Phaneuf, P. Geo.

Pierre Bérubé, P. Eng.

CP/jg

Table 2. OreVision® Drilling Targets on Bark Lake Project

DRILL HOLE (Priority_Source)	Type / Target Interest	Location of the Target			Proposed DDH				Figure	Page
		Line	Station	Elevation (to Center)	Collar	Az.	Dip	Length		
1_BL-01	Source **BL-01** is a moderately chargeable target (weak on *L 4+00E* with increasing chargeability values towards the east). Well-defined and good vertical extension, especially on *L 8+00E*. This target is in the mid-depth range (~350m) of the survey. This source is associated with an increase in resistivity, which could define an environment favorable to sulphides associated quartz veining zones (Gold Index target).	8+00E	12+50S	350 m	11+75S	155°	65°	325 m	1	5
1_BL-04	**BL-04** is a deep and moderately chargeable source. Good vertical extension on *L 8+00E*. This source is associated with an increase in resistivity, which could define an environment favorable to sulphides associated quartz veining zones (Gold Index target).	8+00E	6+50S	300 m	7+50S	335°	60°	375 m	1	5
2_BL-03	**BL-03** is a deep and moderately chargeable source. This target seems to be associated within a more conductive environment, indicating potential shear zone hosted mineralization.	8+00E	8+25S	250 m	9+50S	335°	60°	350 m	1	5
3_BL-05	Source **BL-05** is a moderately chargeable source. Slip in two parts, this anomaly seems associated within a conductive zone at depth and a more resistive environment closer to surface. This source is located at the north end of lines; therefore, it is a lower priority target.	6+00E	1+50S	300 m	0+25S	155°	55°	350 m	2	6
3_BL-02	**BL-02** is a deep and weak chargeable target with no obvious resistivity association. This source is not very well defined, making it a lower priority target.	4+00E	10+00S	250 m	8+75S	155°	60°	350 m	3	7

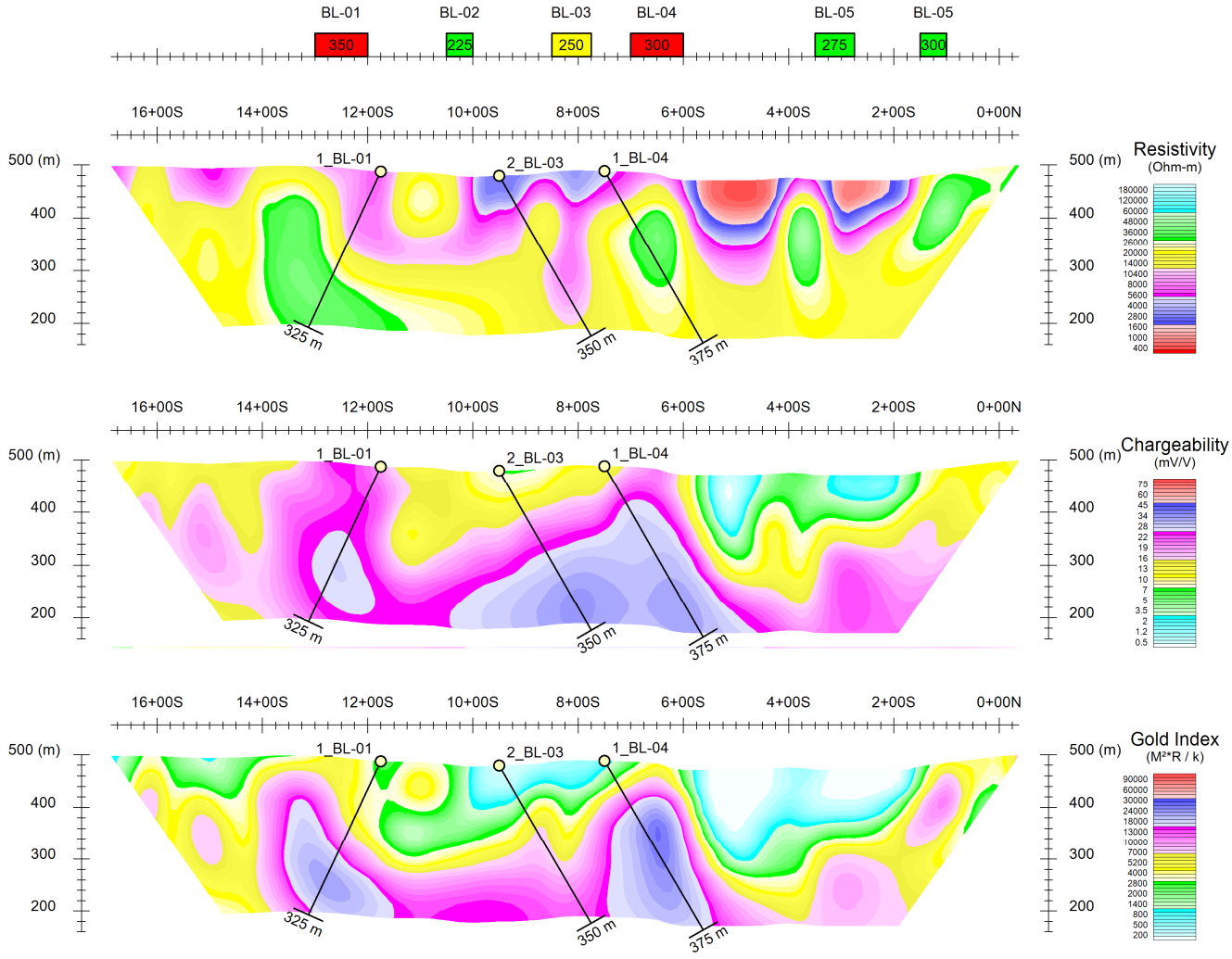


Figure 1. Recommended DDH on priority 1 targets BL-01 & BL-04 and priority 2 target BL-03 (L 8+00E)

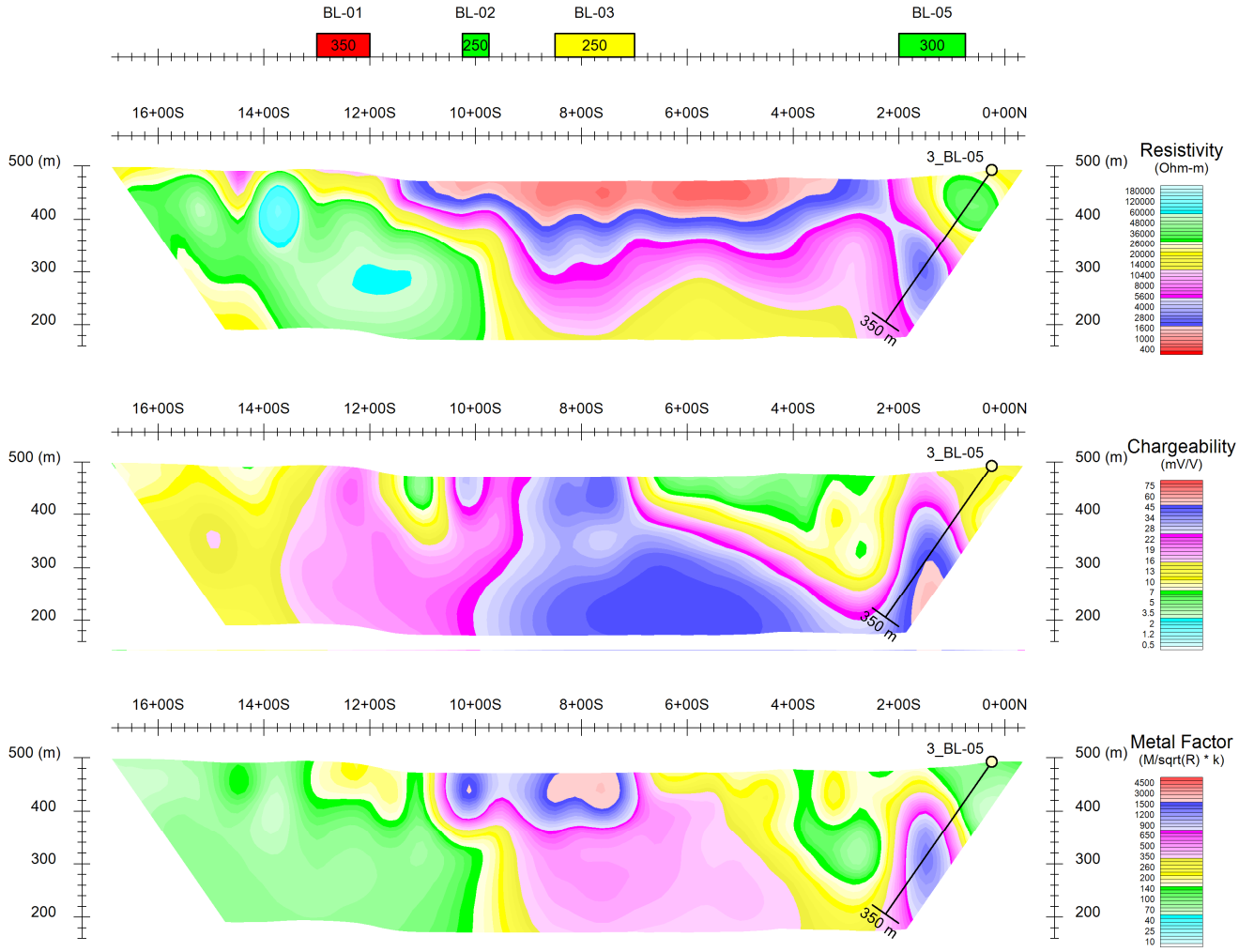


Figure 2. Recommended DDH on priority 3 target BL-05 (L 6+00E)

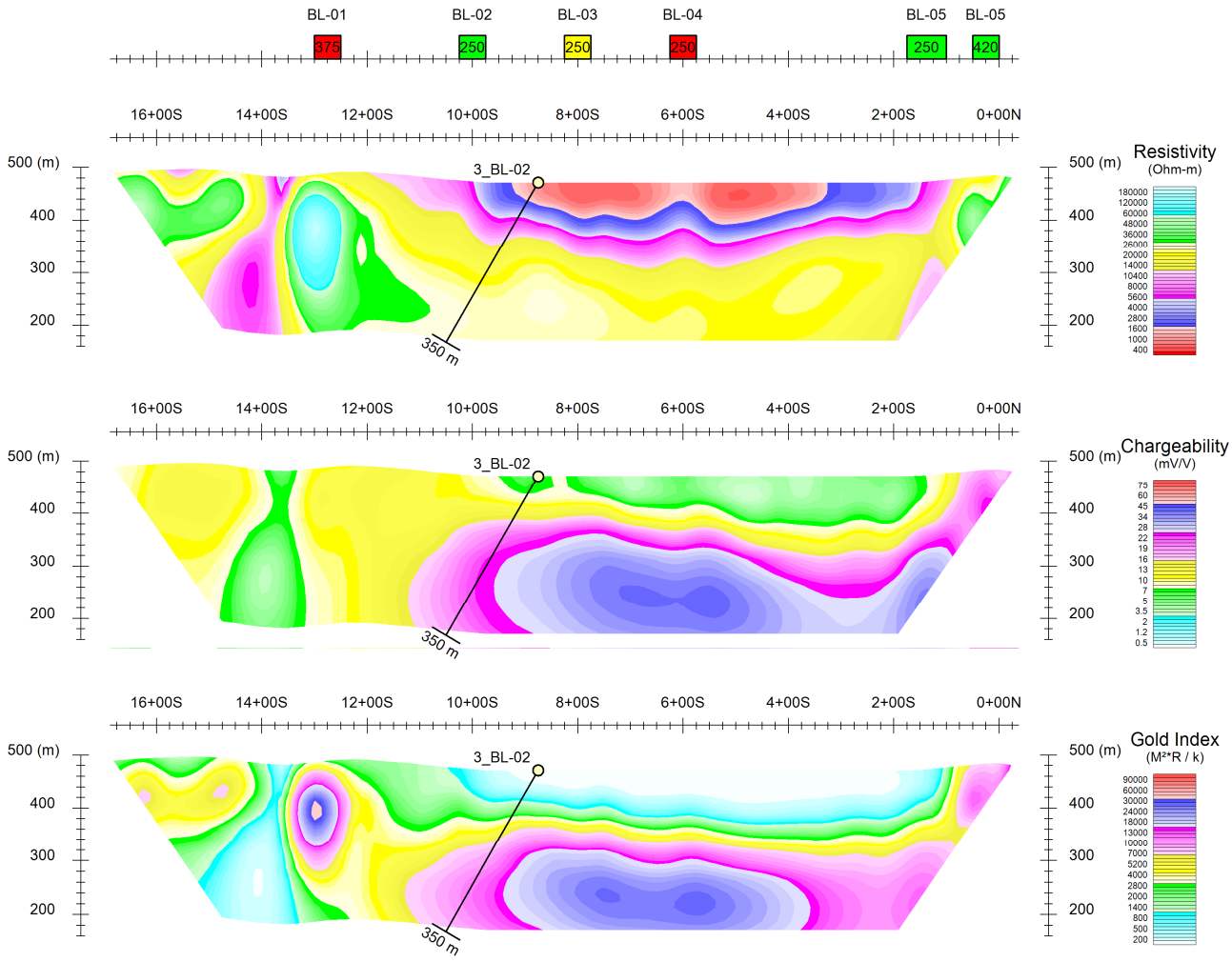


Figure 3. Recommended DDH on priority 3 target BL-02 (L 4+00E)

2. THE MANDATE

❑ *PROJECT ID*	**Bark Lake Project** (Our reference: **17N115**)
❑ *GENERAL LOCATION*	Thunder Bay Area, Ontario, Canada
❑ *CUSTOMER*	**Rio Tinto Exploration Canada Inc.** 1300 Walsh Street West Thunder Bay (Ontario) P7E 4X4 **Tel:** (807) 473-5558 **Fax:** (807) 473-5660 www.riotinto.com
❑ *REPRESENTATIVE*	**Eileen Lyon, B.Sc., LLB** Senior Project Geophysicist **Tel:** (807) 356-3096 eileen.lyon@riotinto.com
❑ *SURVEY TYPE*	**OreVision® Survey**
❑ *GEOPHYSICAL OBJECTIVE*	To define and prioritize targets for further exploration.

Figure 4. General location of the Bark Lake Project

3. BARK LAKE PROJECT

❑ *LOCATION*	**Boot Bay Area**, Ontario**,** Canada Centred on 48°45'54" N and 90°37'41" W, NAD83 / UTM zone 15N: 674 300 mE, 5 404 050 mN NTS sheet: 52B/15
❑ *NEAREST SETTLEMENTS*	**Thunder Bay:** 110 km Southeast **Shebandowan:** 43 km Southeast **Kashabowie:** 18 km Southeast
❑ *ACCESS*	From Thunder Bay, the survey grid can be accessed by travelling west on highway 17, and then on highway 11 for approximately 110 kilometers. From the highway, a road leading to the survey grid is located near coordinates 680 595 mE and 5 391 210 mN.
❑ *GEOMORPHOLOGY*	The property is located within the Superior Province of the Canadian Shield. The landscape is typical of the region and is dominated by boreal forests. Elevation over the survey area ranges approximately from 470 m to 500 m above sea level. Some small lakes and swamps are present in the survey area.
❑ *CULTURAL FEATURES*	No cultural features were observed on the grid.
❑ *MINING LAND TENURE*	The claims covered by this survey are 100% owned by Rio Tinto Exploration Canada Inc. and are illustrated in Figure 5.
❑ *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 LINES*	The OreVision® survey covered 3 lines of approximately 1700 m in length (200 m line intervals).
❑ *COORDINATE SYSTEM*	Projection: Universal Transverse Mercator UTM, Zone 15N Datum: NAD83

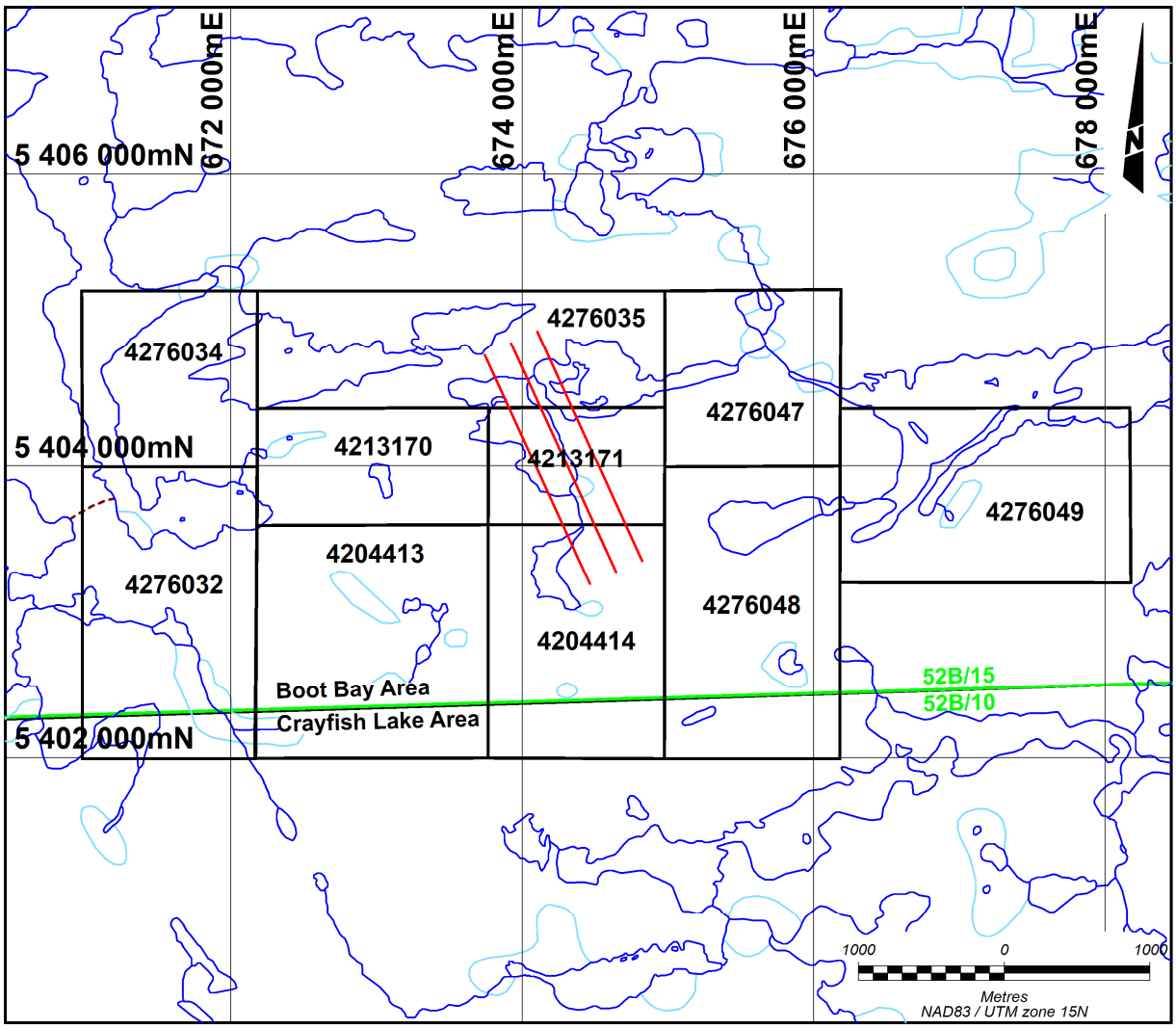


Figure 5. Index of claims and grid coverage over the Bark Lake Project

4. OREVISION® SURVEY

- ❑ *TYPE OF SURVEY* — **OreVision®** Time Domain Resistivity / Induced Polarization
  "a" = **37.5 m** / "n" = **1 to 20**

- ❑ *PERSONNEL*

Mathieu Campeau,	Crew chief & Rx operator
Marc-Antoine Blais,	Field assistant
Ludevick Falardeau,	Field assistant
Brian Willard,	Field assistant
Tommy Lessard,	Field assistant
Carole Picard, Tech.,	Plotting
Catherine Phaneuf, P. Geo.,	Data processing, interpretation & report
Pierre Bérubé, P. Eng.,	Project supervision and final validation of product conformity

- ❑ *ACQUISITION* — December 15th to 17th, 2017

- ❑ *SURVEY COVERAGE* — **5.175** km

- ❑ *IP TRANSMITTER (TX)* — **IRIS Instruments TIPIX**, s/n **6** & **7**

Power supply:	Honda 2000 VA
Maximum output:	up to 2.0 kW or 13 A or 1800 V
Electrodes:	stainless steel
Resolution:	1 mA on output current display
Waveform:	bipolar square wave with 50% duty cycle
Pulse duration:	1 second

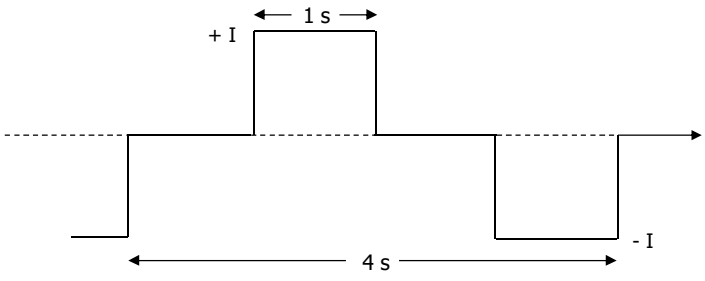


Figure 6. Transmitted signal across $C_1 - C_2$

❑ *IP RECEIVER (RX)*

IRIS Elrec-PRO with integrated SwitchPRO, (10 input channels), s/n **184** & **46**
Electrodes: stainless steel

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 (M_1 to M_{20})
- ✧ All gates are normalized with respect to a standard decay curve for QC in the field.

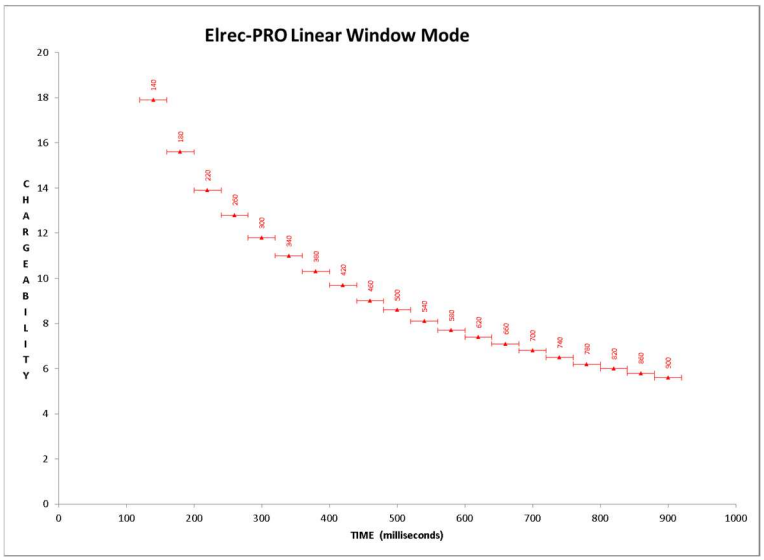


Figure 7. Linear windows (1 s pulse)

❑ *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 chaining accuracy.

❑ *QUALITY CONTROL*
(RECORDS AVAILABLE UPON REQUEST)

Before the survey:

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

During data acquisition:

- ✓ Rx & Tx cable insulation was verified every morning.
- ✓ Data was reviewed using Prosys II® allowing a daily, thorough monitoring of data quality and survey efficiency.
- ✓ Sufficient pulses were stacked: a minimum of 8 pulses for every reading.

At the Base of Operations:

- ✓ Field QCs were inspected & 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.

❑ *QUALITY STATISTICS*

Table 3. OreVision® Quality Statistics

Bark Lake Project	
Average contact resistance across R_X dipole (P_1-P_2)	**7.56** kΩ
Average injected current to T_X bipole (C_1-C_2)	**264** mA
Average V_p measured across R_x dipole (P_1-P_2)	**421** mV
Observed windows found to fit a pure electrode polarization relaxation curve	**99.2** %
Average deviation of the validated, normalized windows with respect to the mean chargeabilities.	**0.27** mV/V

5. OreVision® Data Processing and Deliverables

- ***Quality control***

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. Following this automated procedure, the apparent resistivity and apparent chargeability pseudosections are reviewed and further, manual QC is conducted.

- ***VOXI 3D inversion***

Apparent resistivity and chargeability values were inverted using VOXI Earth Modelling, IP and Resistivity Inversion from Geosoft (www.geosoft.com). This software calculates three-dimensional resistivity and chargeability models of the subsurface that best explain the values recorded at surface.

In this project, the modeled area consists of a mesh of 22 X 126 X 22 cells discretized horizontally at 25 m (X-axis) and 15 m (Y-axis) intervals and in the vertical direction at 10 m. Five cells margin elements (padding) were added on each side of the model to move the model edges effect away from the bordering data points. Once the mesh is defined, the topography is discretized onto it. The 117 504 cells below this surface define the model, and the inverse problem is therefore formalized by inverting 2130 data points to recover the resistivity and chargeability values in those cells.

The final resistivity model was obtained by inverting the normalized Vp values (**Vp_norm)** using a relative fit error of 5% and 0.001. A EW gradient weighting constant of 8 and a vertical gradient weighting constant of 10 were also applied. The resulting model was obtained in 14 iterations with a final RMS of 1.04.

The final chargeability model was obtained by inverting the chargeability values (**Chg)** with a relative fit error of 5% and 0.05. A EW gradient weighting constant of 5 and vertical gradient weighting constant of 10 were also applied.
Finally, the conductivity padded voxel was used as the starting model. The resulting chargeability model was obtained in 4 iterations with a final RMS of 0.88.

- *LIMITATIONS OF THE 3D INVERSION TECHNIQUE*

Inversions cannot create information that is not in the raw data set (pseudosections), i.e., the limitations of the technique and array that was used will still prevail. With pole-dipole, for instance, resolution is asymmetrical and vertical sources may show a false dip. 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.

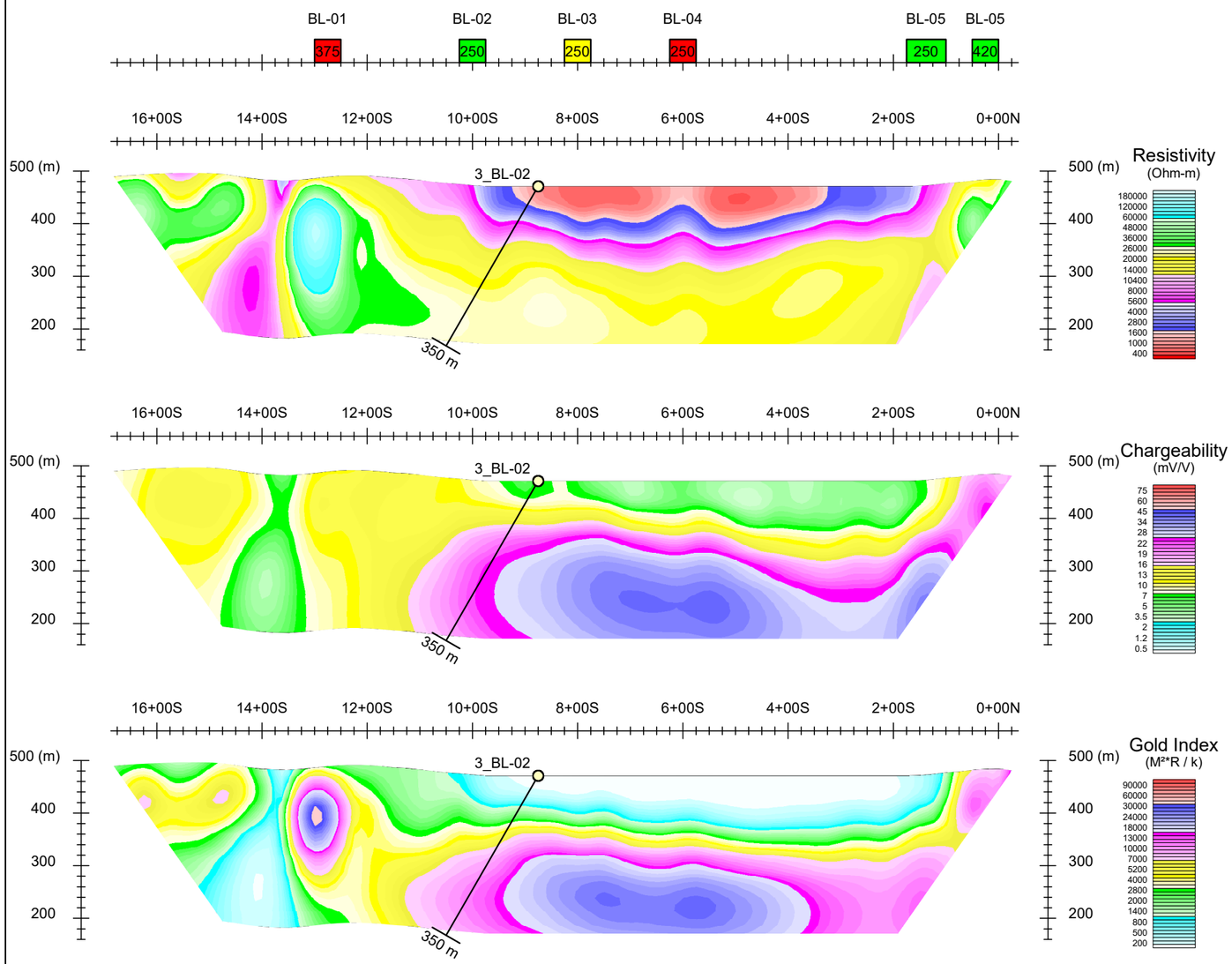
In the absence of hard constraining data about the subsurface geometry of the mineralization and considering the non-uniqueness of the geophysical inversion methods, any recovered electrical distribution is only one of an infinite number of possible distributions that could explain the observed data.

- *DIGITAL DATA*

The maps, pseudosections and true depth sections described below are delivered in the Oasis Montaj map file format on DVD-Rom.

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

Appendix C: IP Survey Maps and Sections



Project no: 17N115

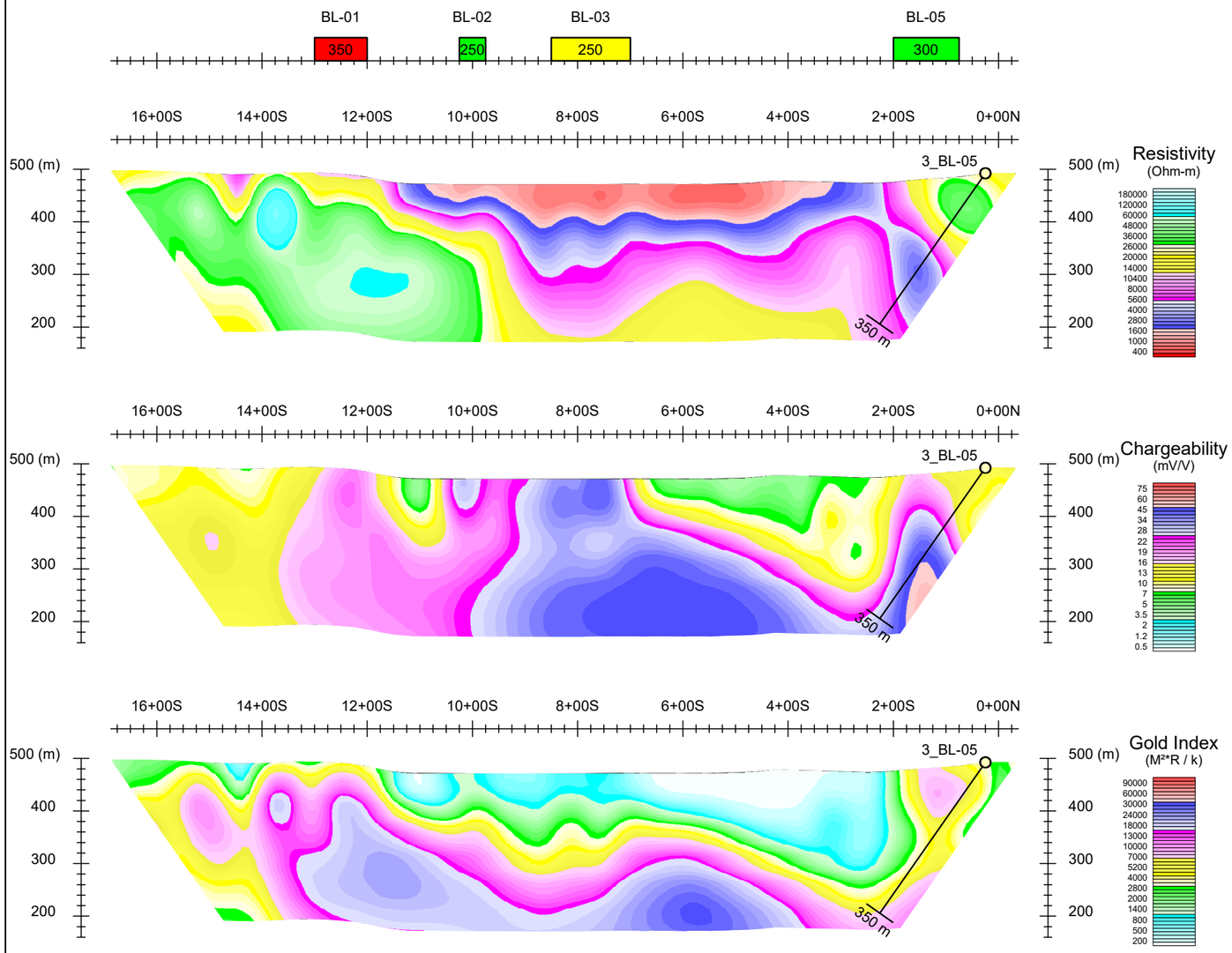
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section

Bark Lake Project

Line 4+00E



Project no: 17N115

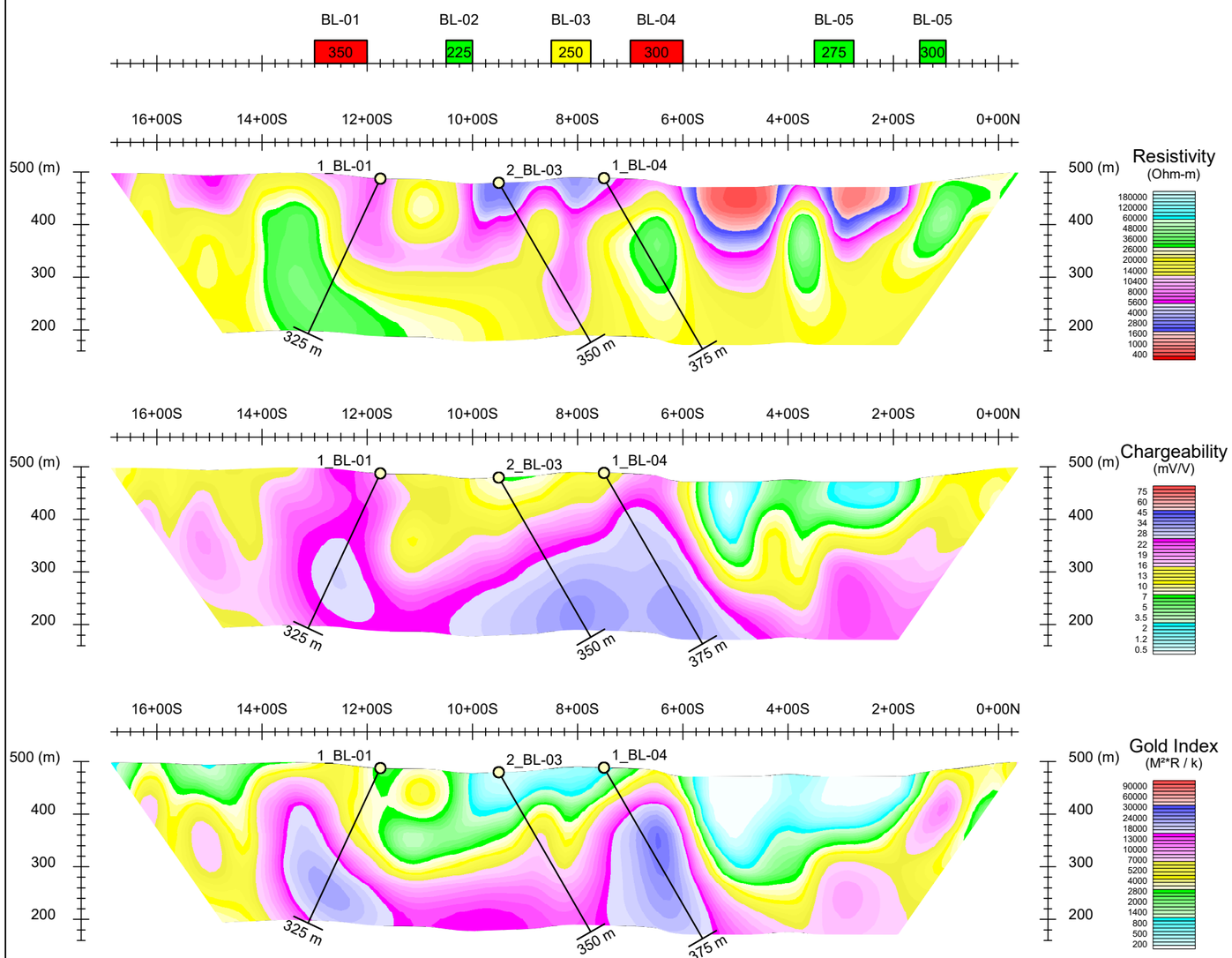
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section

Bark Lake Project

Line 6+00E



Project no: 17N115

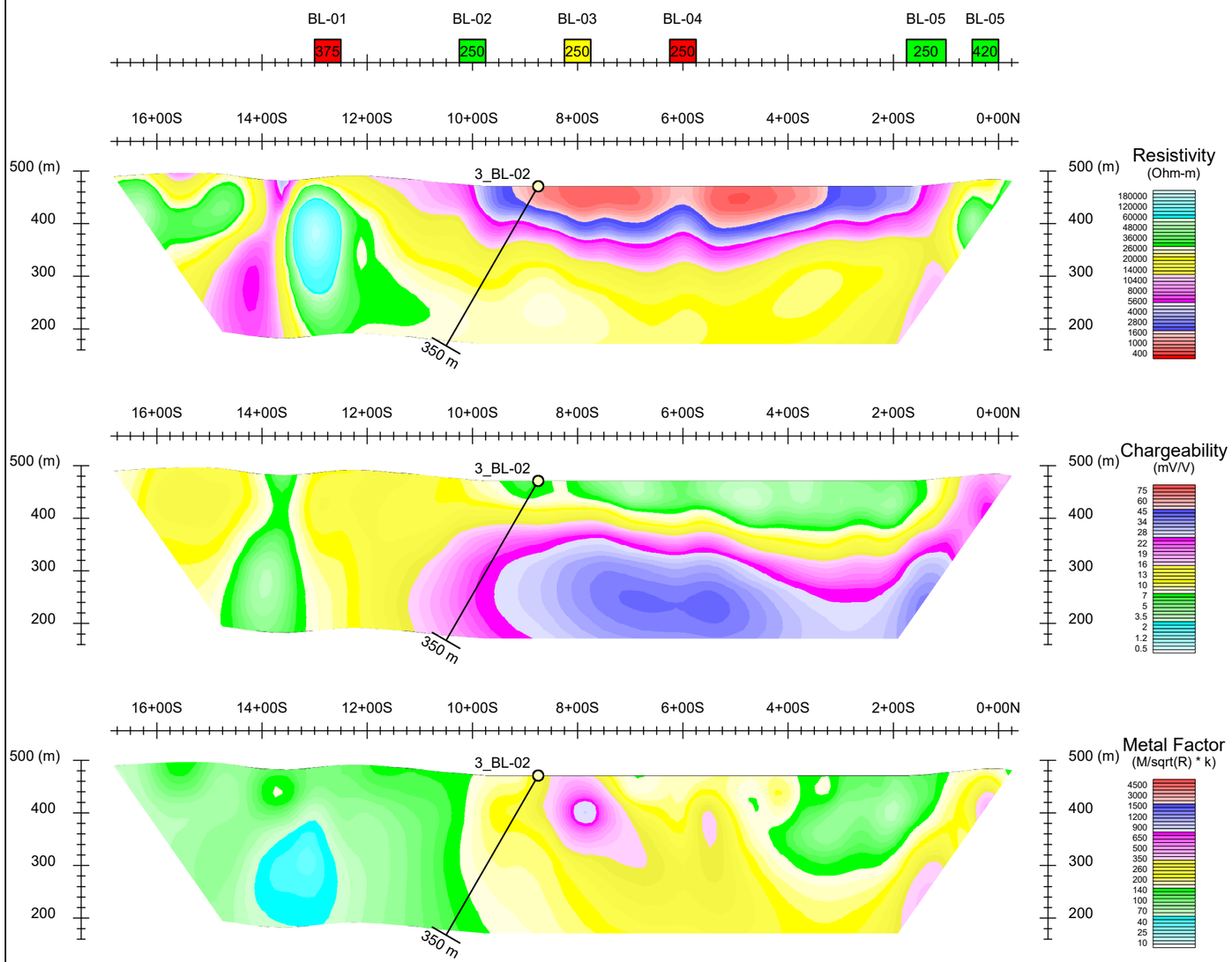
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section

Bark Lake Project

Line 8+00E



Project no: 17N115

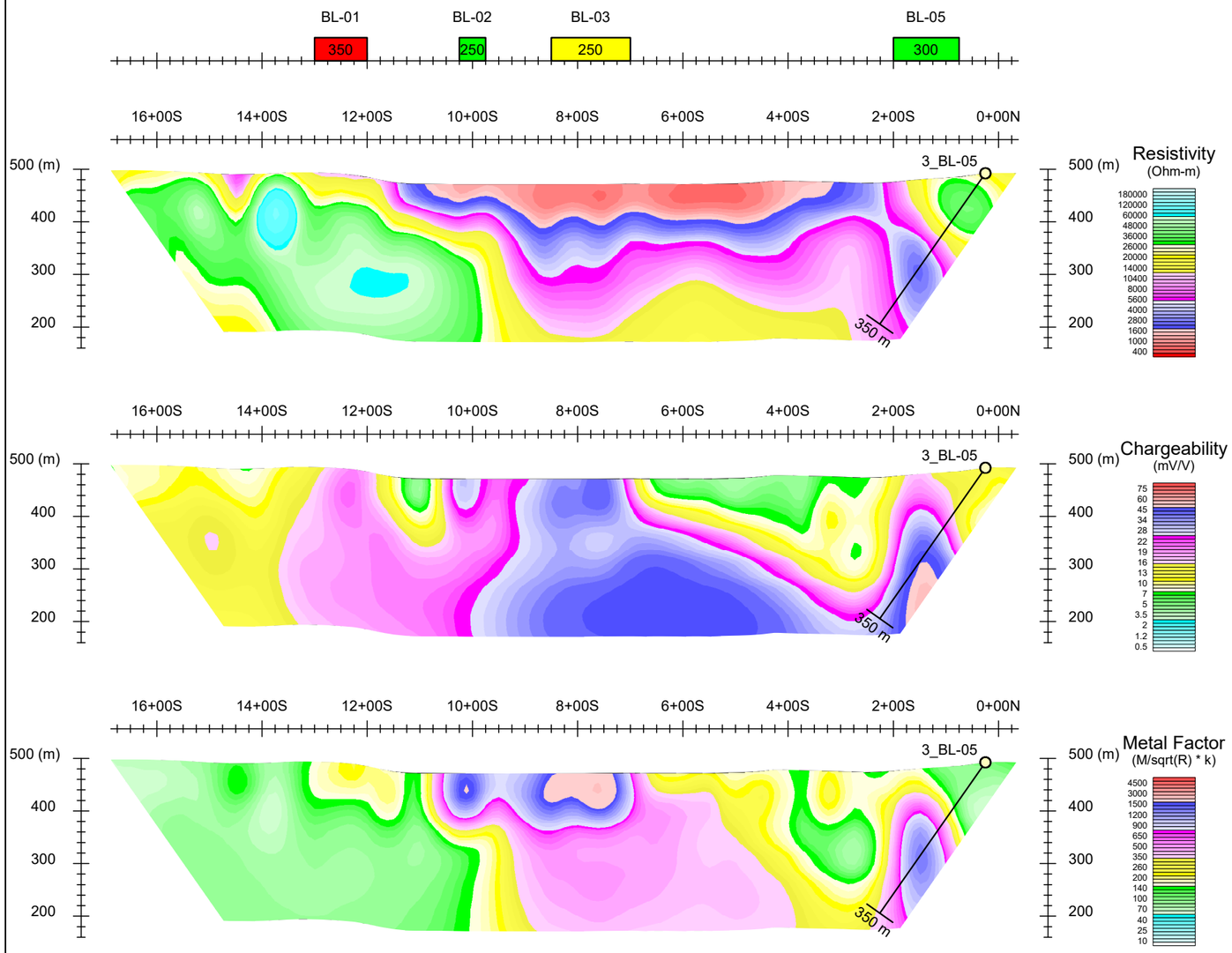
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section

Bark Lake Project

Line 4+00E



Project no: 17N115

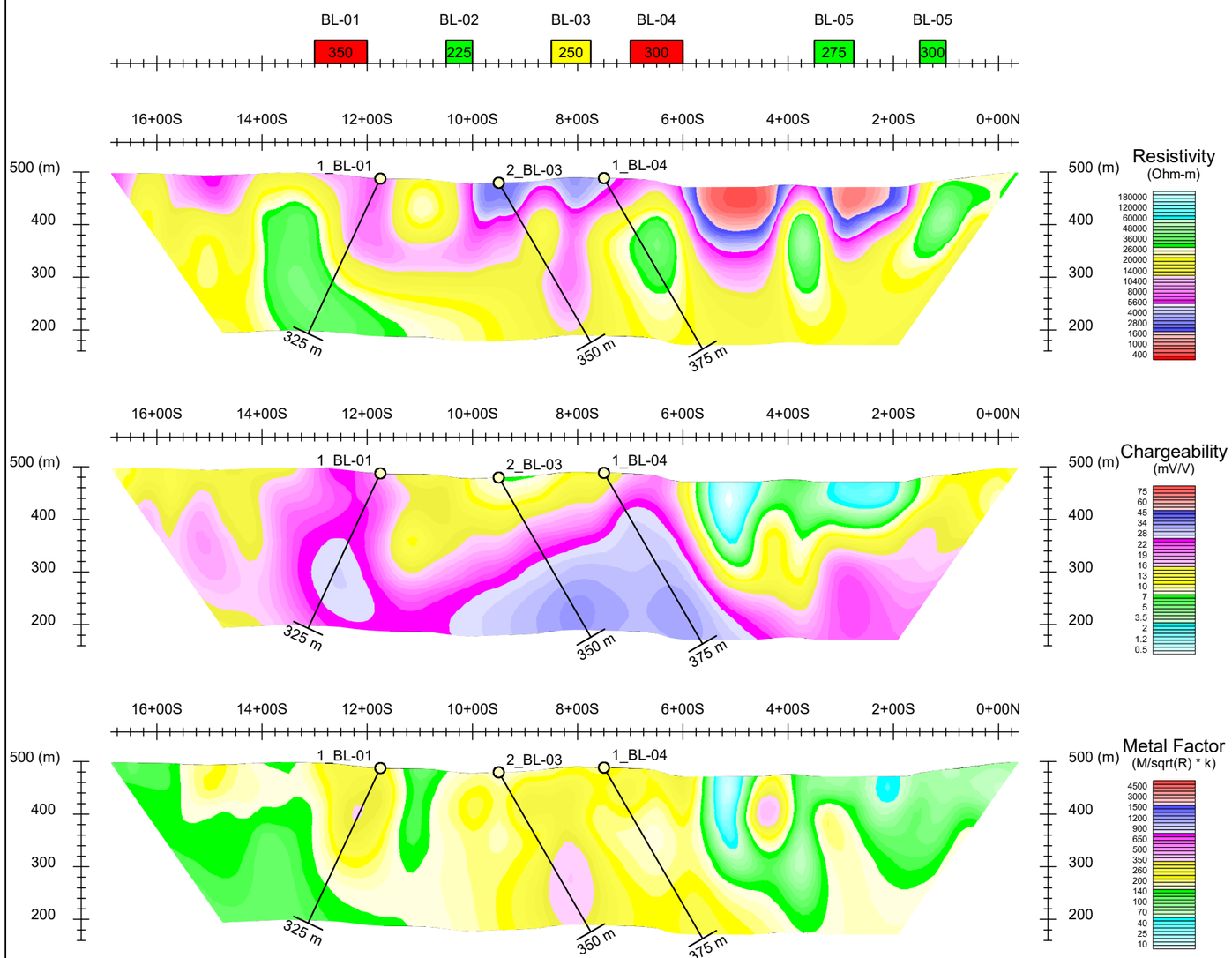
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section

Bark Lake Project

Line 6+00E



Project no: 17N115

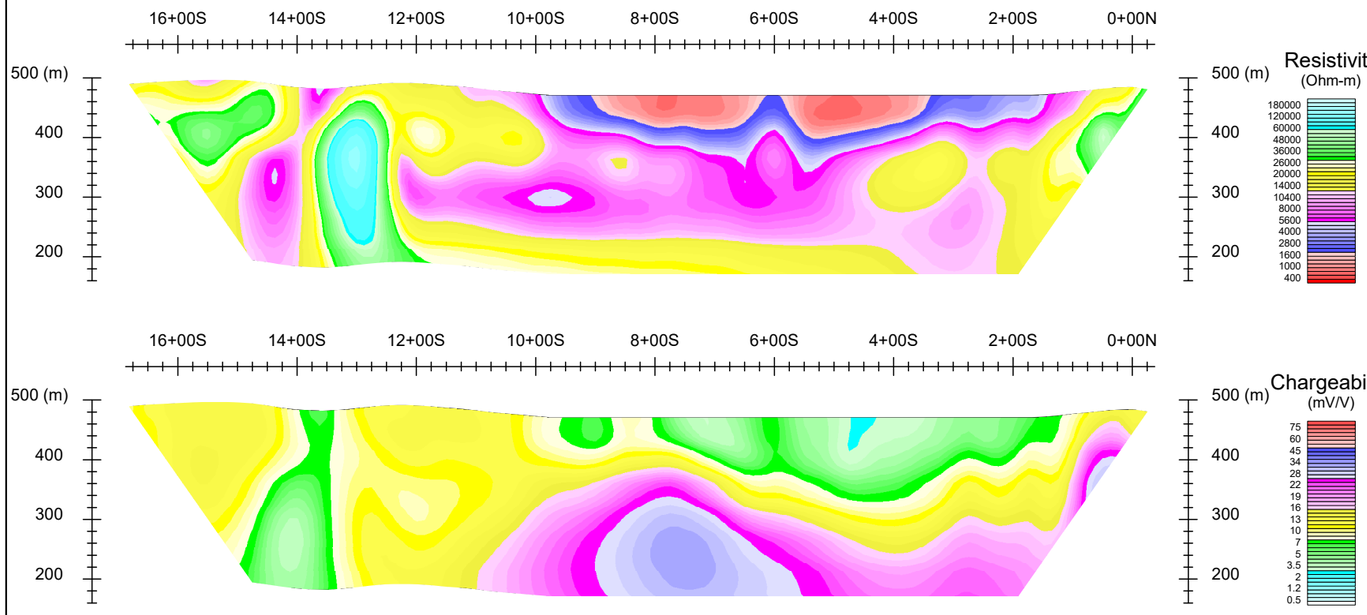
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section

Bark Lake Project

Line 8+00E



Project no: 17N115

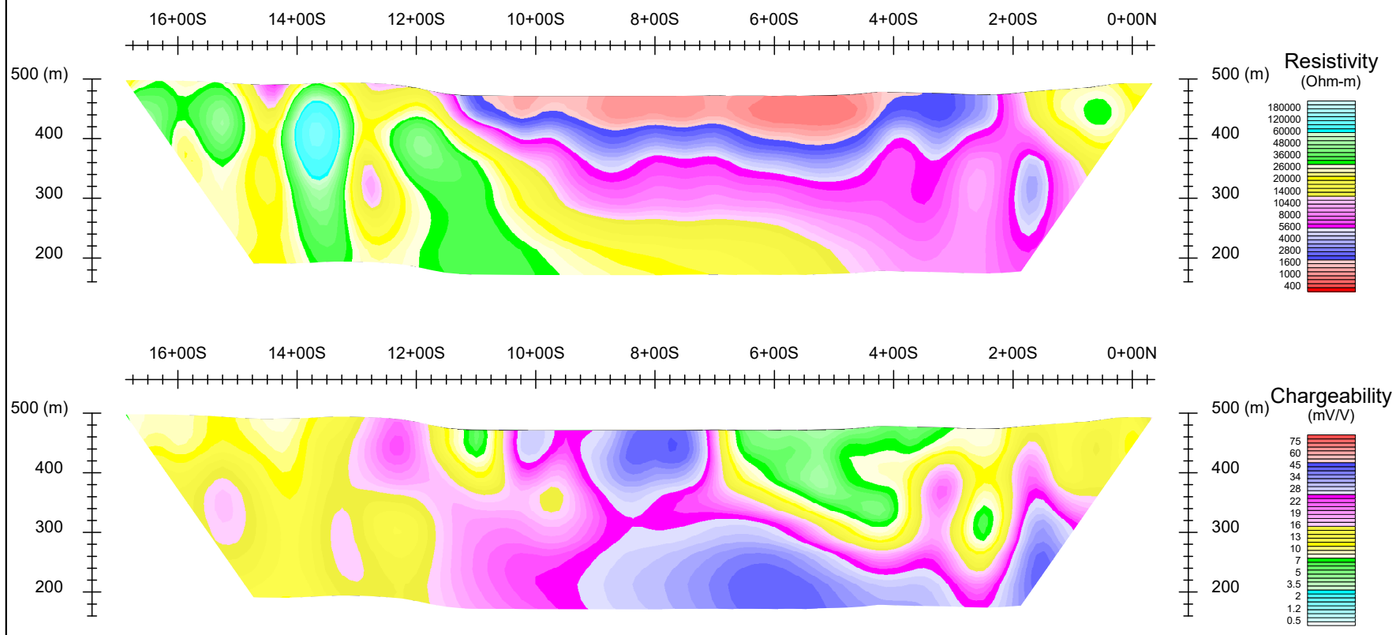
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section from 2D inversion

Bark Lake Project

Line 4+00E



Project no: 17N115

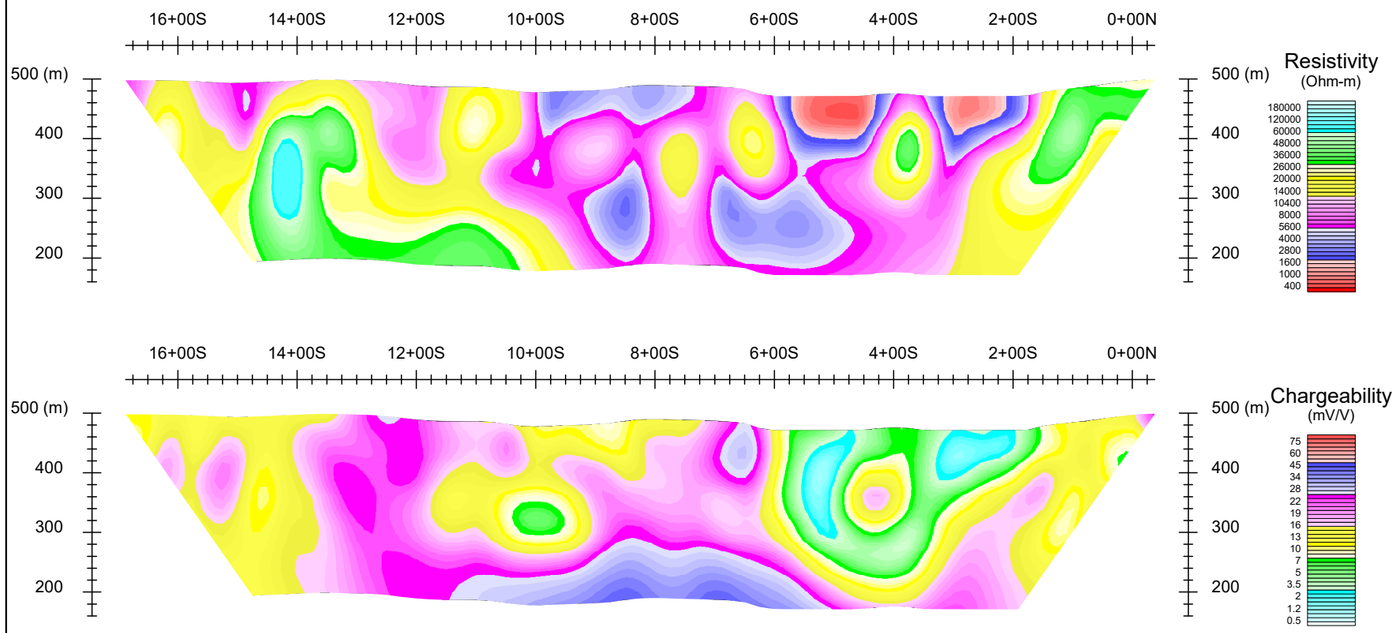
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section from 2D inversion

Bark Lake Project

Line 6+00E



Project no: 17N115

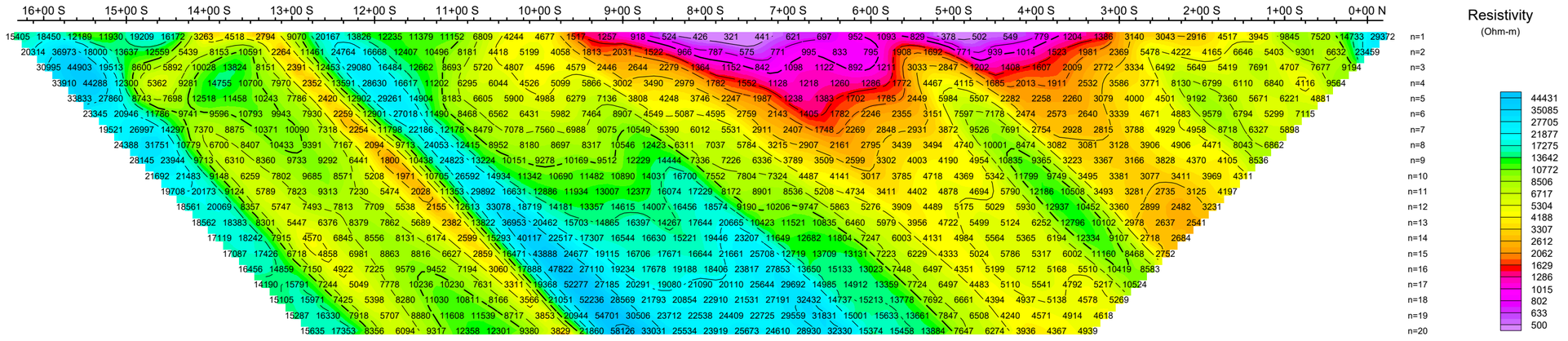
Scale 1 : 10 000

Rio Tinto Exploration Canada Inc.

OreVision® Survey - Vertical Section from 2D inversion

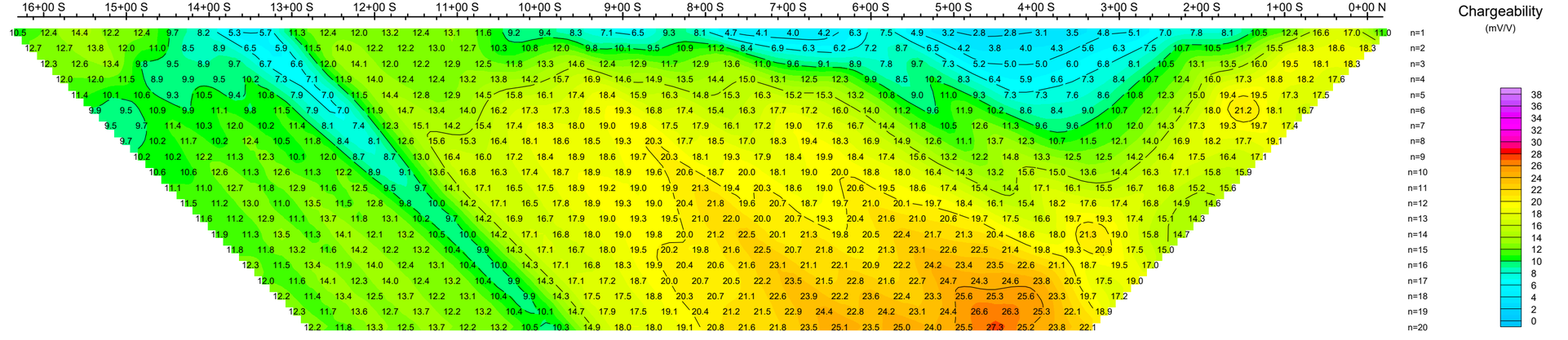
Bark Lake Project

Line 8+00E



Resistivity
(Ohm-m)

44431
35085
27705
21877
17275
13642
10772
8506
6717
5304
4188
3307
2612
2062
1629
1286
1015
802
633
500



Chargeability
(mV/V)

38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0

OreVision® Survey

(a = 37.5 m / n = 1 to 20)

Line 4+00E

Scale 1:5000

50 0 50 100 150 200 250 300

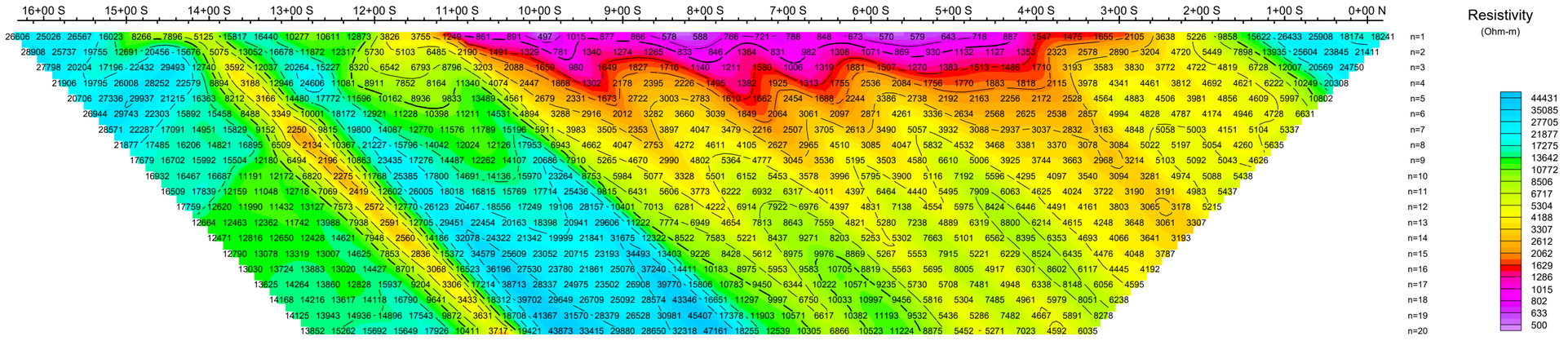
(meters)

Rio Tinto Exploration Canada Inc.

Bark Lake Project
Boot Bay Area
Ontario, Canada

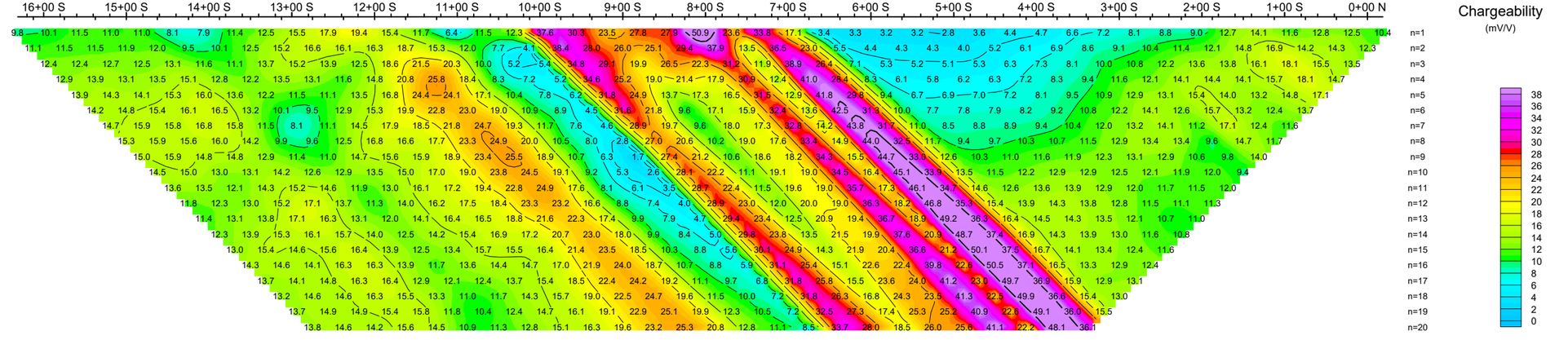
Project no: 17N115 **Line 4+00E**

Abitibi Geophysics Inc.



Resistivity
(Ohm-m)

44431
35085
27705
21877
17275
13642
10772
8506
6717
5304
4188
3307
2612
2062
1629
1286
1015
802
633
500



Chargeability
(mV/V)

38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0

OreVision® Survey

(a = 37.5 m / n = 1 to 20)

Line 6+00E

Scale 1:5000

50 0 50 100 150 200 250 300

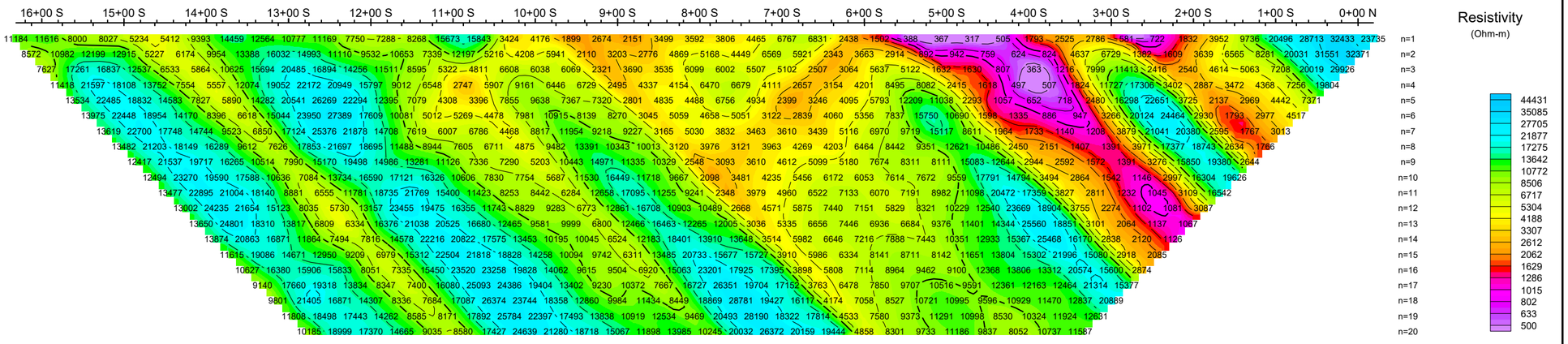
(meters)

Rio Tinto Exploration Canada Inc.

Bark Lake Project
Boot Bay Area
Ontario, Canada

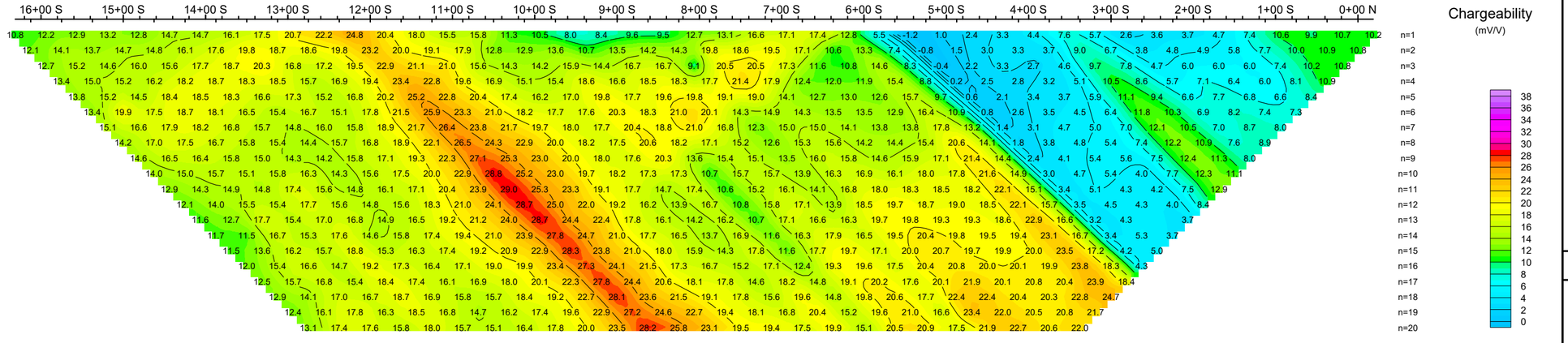
Project no: 17N115 **Line 6+00E**

Abitibi Geophysics Inc.



Resistivity
(Ohm-m)

44431
35085
27705
21877
17275
13642
10772
8506
6717
5304
4188
3307
2612
2062
1629
1286
1015
802
633
500



Chargeability
(mV/V)

38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0

ABITIBI GEOPHYSICS

OreVision® Survey

(a = 37.5 m / n = 1 to 20)

Line 8+00E

Scale 1:5000

50 0 50 100 150 200 250 300

(meters)

Rio Tinto Exploration Canada Inc.

Bark Lake Project
Boot Bay Area
Ontario, Canada

Project no: 17N115 **Line 8+00E**

Abitibi Geophysics Inc.

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4204413 4204414 4276048

L 8+00E L 6+00E L 4+00E

0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

Resistivity Contours

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

Resistivity (Ohm-m)

Scale 1: 5000

(meters)
NAD83 / UTM zone 15N

5 406 000mN
5 404 000mN
5 402 000mN
672 000mE
674 000mE
676 000mE
678 000mE

4276034 4276035 4276047 4276049 4213170 4213171 4204413 4276032 4276048 4204414

Boot Bay Area
Crayfish Lake Area
52B/15
52B/10

Metres
NAD83 / UTM zone 15N

Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Inverted Resistivity at an Elevation of 450 m (Ohm-m)

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.2_450

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1950 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4204413 4204414 4276048

L 8+00E L 6+00E L 4+00E

0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

Resistivity Contours

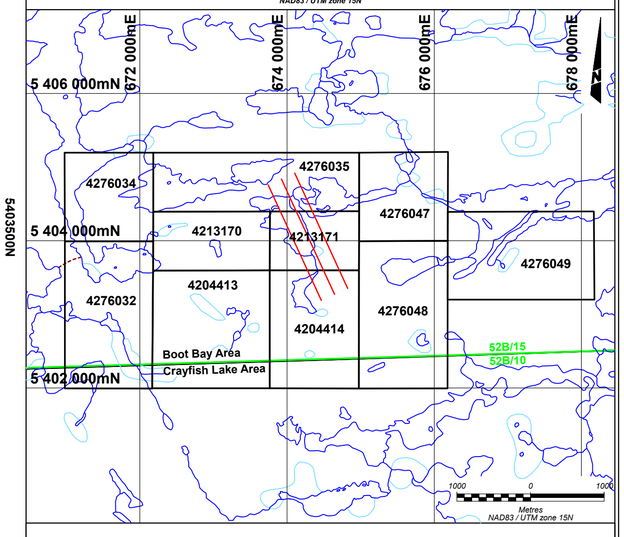
Unit: Ohm-m
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

200000 180000 160000 140000 120000 100000 80000 60000 56000 52000 48000 44000 40000 36000 32000 28000 26000 24000 22000 20000 18000 16000 14000 12000 11200 10400 9600 8800 8000 7200 6400 5600 4800 4400 4000 3600 3200 2800 2400 2000 1600 1400 1200 1000 800 600 400 200

Resistivity
(Ohm-m)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Inverted Resistivity at an Elevation of 350 m (Ohm-m)

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.2_350

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1999 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4204413 4276048 4204414

L 4+00E L 6+00E L 8+00E

0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

Resistivity Contours

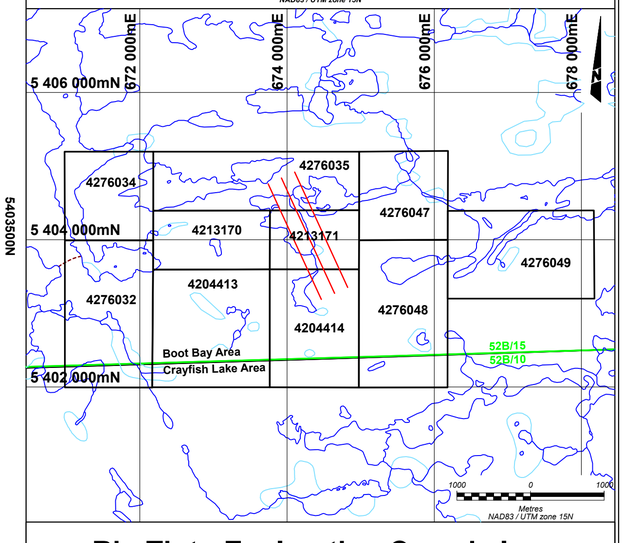
Unit: Ohm-m
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

200000 180000 160000 140000 120000 100000 80000 60000 56000 52000 48000 44000 40000 36000 32000 28000 26000 24000 22000 20000 18000 16000 14000 12000 11200 10400 9600 8800 8000 7200 6400 5600 4800 4400 4000 3600 3200 2800 2400 2000 1600 1400 1200 1000 800 600 400 200

Resistivity
(Ohm-m)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Inverted Resistivity at an Elevation of 250 m (Ohm-m)

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1950 QUÉBEC

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.2_250

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

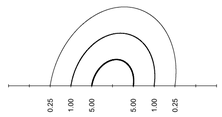
4276035 4276047 4213170 4213171 4276048 4204413 4204414

L 4+00E L 6+00E L 8+00E

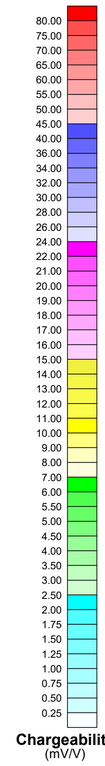
0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

Chargeability Contours



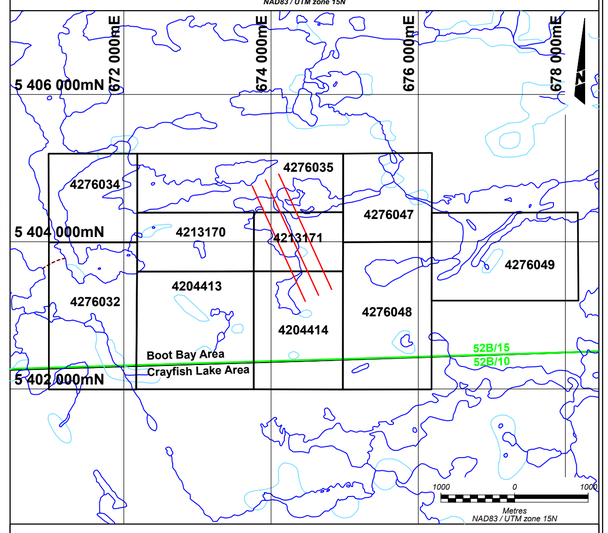
Unit: mV/V
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



Chargeability
(mV/V)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Inverted Chargeability at an Elevation of 450 m (mV/V)

GÉOLOGUE / GEOLOGIST
CATHERINE PHANEUF
1868
QUÉBEC

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.3_450

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4276048 4204413 4204414

L 8+00E L 6+00E L 4+00E

0S - 200S - 400S - 600S - 800S - 1000S - 1200S - 1400S - 1600S -

Legend

Chargeability Contours

0.25 1.00 5.00 5.00 1.00 0.25

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

80.00 75.00 70.00 65.00 60.00 55.00 50.00 45.00 40.00 36.00 34.00 32.00 30.00 28.00 26.00 24.00 22.00 21.00 20.00 19.00 18.00 17.00 16.00 15.00 14.00 13.00 12.00 11.00 10.00 9.00 8.00 7.00 6.00 5.50 5.00 4.50 4.00 3.50 3.00 2.50 2.00 1.75 1.50 1.25 1.00 0.75 0.50 0.25

Chargeability
(mV/V)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N

5 406 000mN 5 404 000mN 5 402 000mN
672 000mE 674 000mE 676 000mE 678 000mE

4276035 4276034 4276047 4213170 4213171 4276049 4204413 4276032 4276048 4204414

Boot Bay Area
Crayfish Lake Area
52B/15
52B/10

1000 0 1000
Metres
NAD83 / UTM zone 15N

Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Inverted Chargeability at an Elevation of 350 m (mV/V)

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.3_350

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1999 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

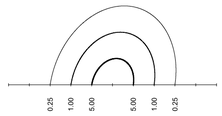
4276035 4276047 4213170 4213171 4204413 4204414 4276048

L 4+00E L 6+00E L 8+00E

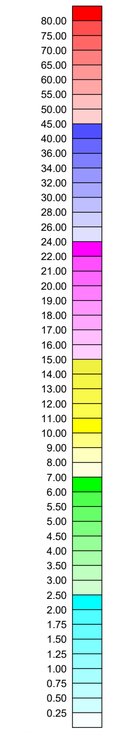
0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

Chargeability Contours



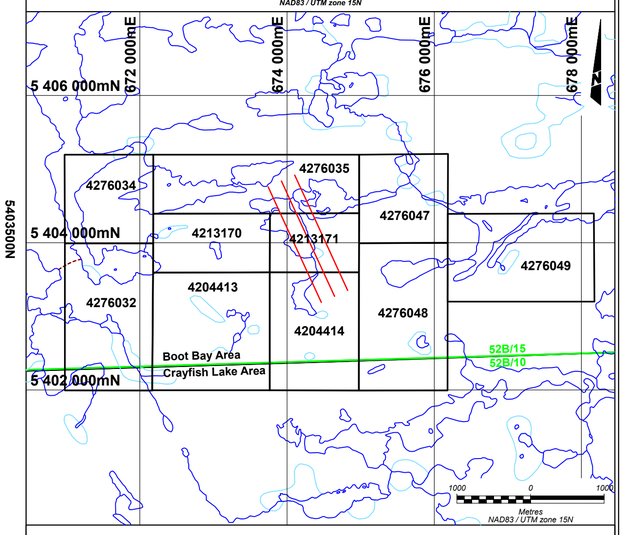
Unit: mV/V
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



Chargeability
(mV/V)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Inverted Chargeability at an Elevation of 250 m (mV/V)

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.3_250

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1950 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

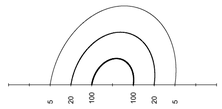
4276035 4276047 4213170 4213171 4204413 4276048 4204414

L 8+00E L 6+00E L 4+00E

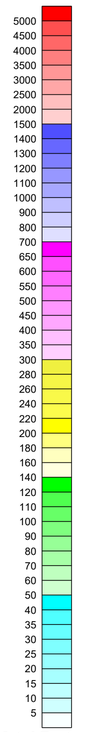
0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

Metal Factor Contours



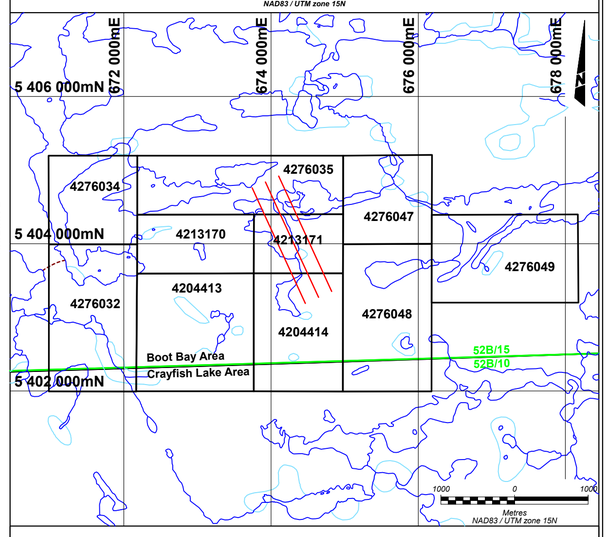
Formula: M/sqrt(R) * k
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



Metal Factor

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Calculated Metal Factor at an Elevation of 450 m

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.4_450

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1958 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4276048 4204413 4204414

L 8+00E L 6+00E L 4+00E

0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

Legend

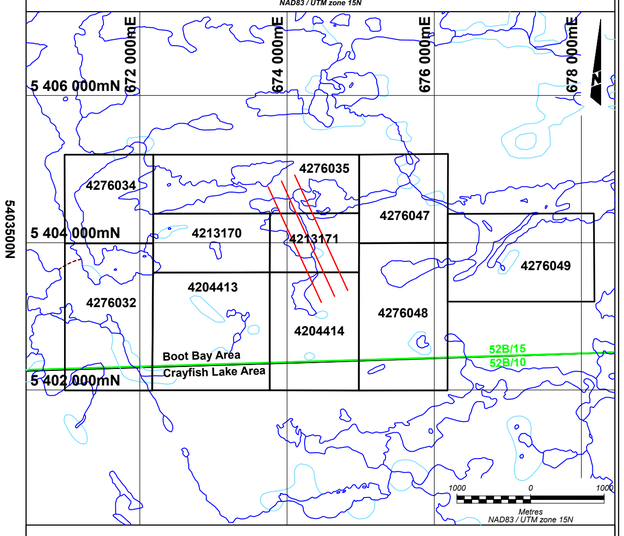
Metal Factor Contours

Formula: M/sqrt(R) * k
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

Metal Factor: 5000 4500 4000 3500 3000 2500 2000 1500 1400 1300 1200 1100 1000 900 800 700 650 600 550 500 450 400 350 300 280 260 240 220 200 180 160 140 120 110 100 90 80 70 60 50 40 35 30 25 20 15 10 5

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Calculated Metal Factor at an Elevation of 350 m

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.4_350

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1950 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4276048 4204413 4204414

L 4+00E L 6+00E L 8+00E

0S - - 0S - 200S - - 200S - 400S - - 400S - 600S - - 600S - 800S - - 800S - 1000S - - 1000S - 1200S - - 1200S - 1400S - - 1400S - 1600S - - 1600S -

Legend

Metal Factor Contours

Formula: M/sqrt(R) * k
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

Metal Factor

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N

672 000mE 674 000mE 676 000mE 678 000mE

5 406 000mN
5 404 000mN
5 402 000mN

4276034 4276035 4276047 4276049 4213170 4213171 4204413 4276032 4276048 4204414

Boot Bay Area
Crayfish Lake Area

52B/15
52B/10

1000 0 1000
Metres
NAD83 / UTM zone 15N

Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Calculated Metal Factor at an Elevation of 250 m

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.4_250

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1958 QUÉBEC

ABITIBI GEOPHYSICS

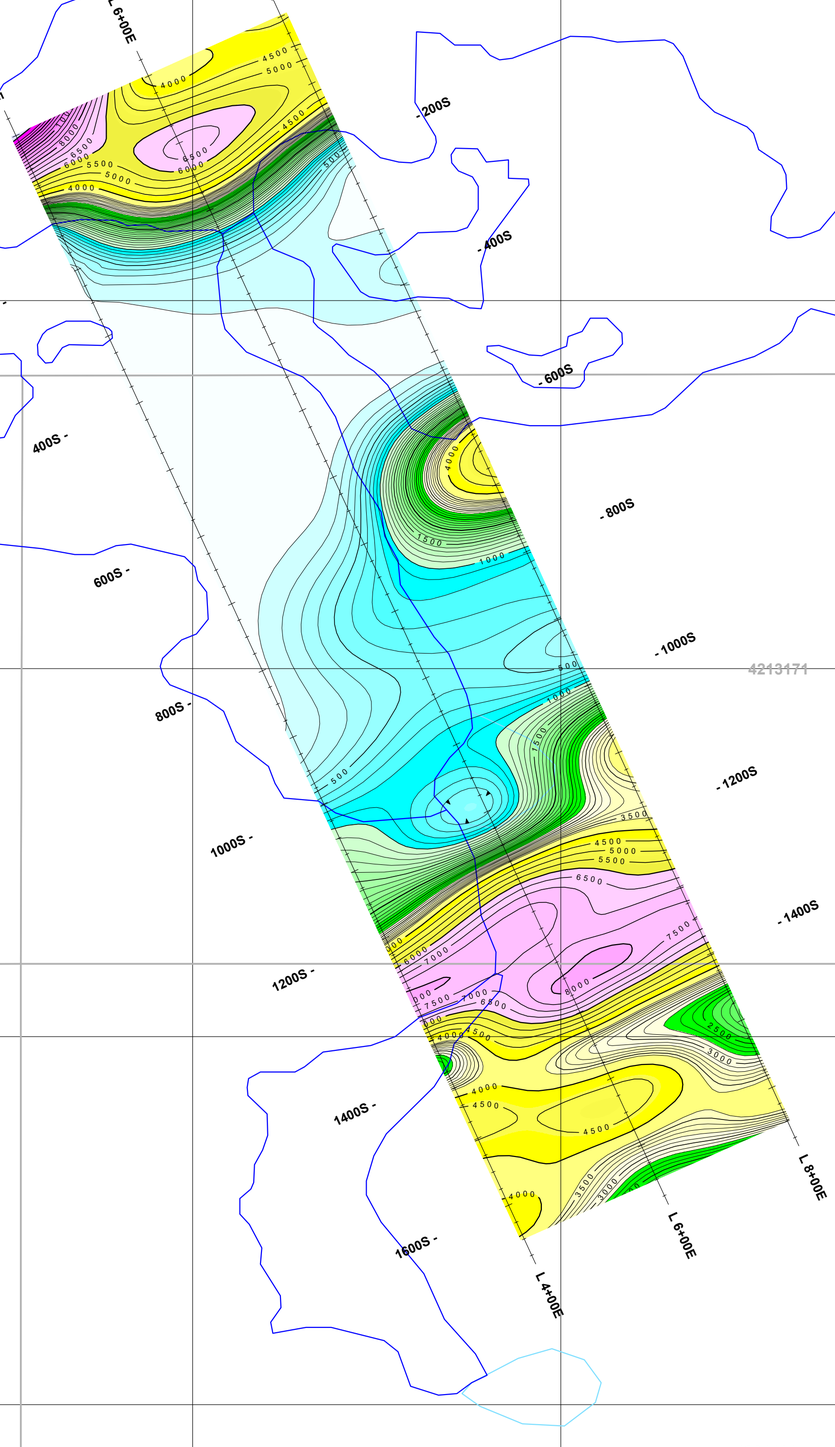
673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4276048 4204413 4204414

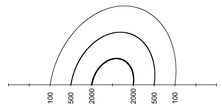
L 8+00E L 6+00E L 4+00E

0S - 200S - 400S - 600S - 800S - 1000S - 1200S - 1400S - 1600S -

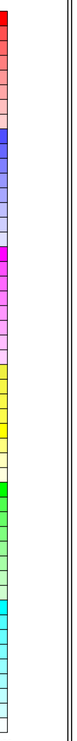


Legend

Gold Index Contours



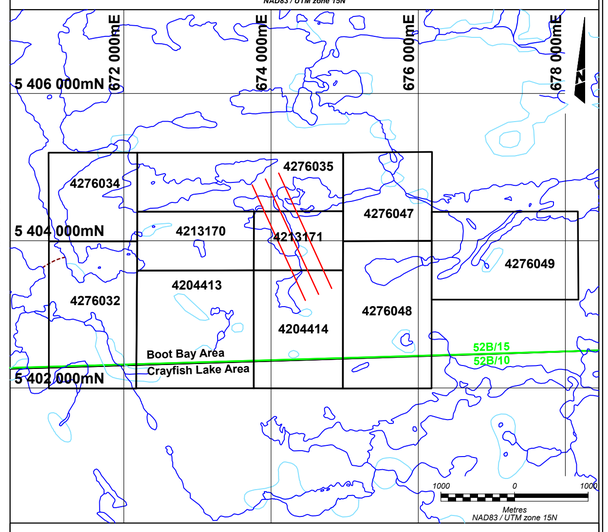
Formula: M²*R / k
Configuration: OreVision®
Inversion: VOXI (MONTAJ)



Gold Index

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Calculated Gold Index at an Elevation of 450 m

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.6_450

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1986 QUÉBEC

ABITIBI GEOPHYSICS

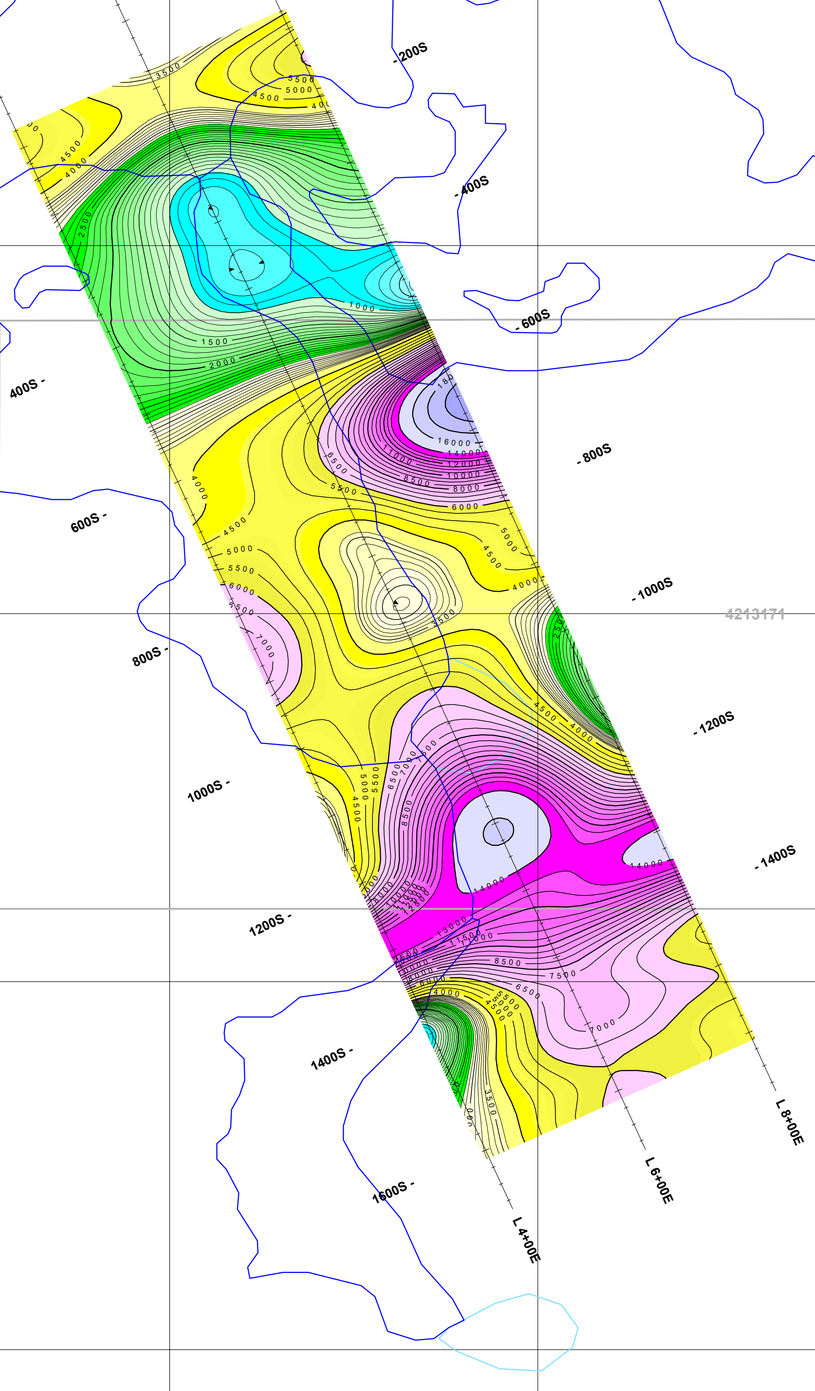
673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4204413 4276048 4204414

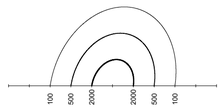
L 8+00E L 6+00E L 4+00E

0S - 200S - 400S - 600S - 800S - 1000S - 1200S - 1400S - 1600S



Legend

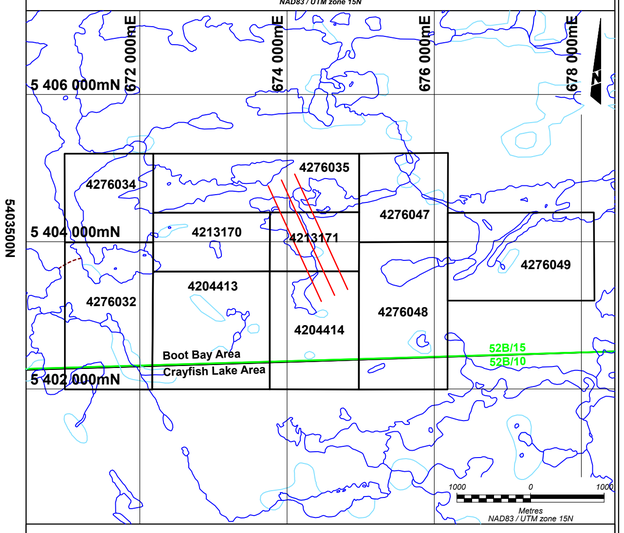
Gold Index Contours



Formula: M²*R / k
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Calculated Gold Index at an Elevation of 350 m

GÉOLOGUE / GEOLOGIST
CATHERINE PHANEUF
1958
QUÉBEC

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.6_350

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4204413 4204414 4276048

L 8+00E L 6+00E L 4+00E

0S - 200S - 400S - 600S - 800S - 1000S - 1200S - 1400S - 1600S -

Legend

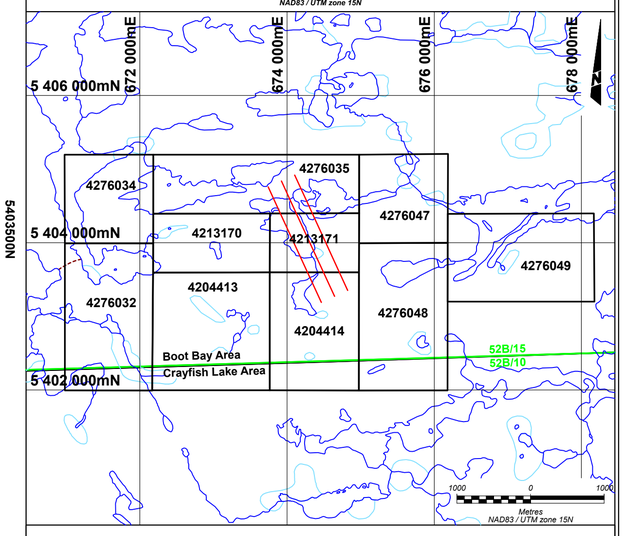
Gold Index Contours

Formula: M²*R / k
Configuration: OreVision®
Inversion: VOXI (MONTAJ)

Gold Index

Scale 1: 5000

100 0 100 200 300 (meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

OreVision® Survey
Calculated Gold Index at an Elevation of 250 m

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 8.6_250

GÉOLOGUE / GEOLOGIST CATHERINE PHANEUF # 1950 QUÉBEC

ABITIBI GEOPHYSICS

673500E 674000E 674500E 675000E

5405000N 5404500N 5404000N 5403500N 5403000N

4276035 4276047 4213170 4213171 4276048 4204413 4204414

L 8+00E L 6+00E L 4+00E

0S 200S 400S 600S 800S 1000S 1200S 1400S 1600S

BL-05 BL-04 BL-03 BL-02 BL-01

1_BL-04 2_BL-03 3_BL-02 1_BL-01 3_BL-05

250 200 150 100 50

25000

Legend

OreVision® Survey

Follow-up Chargeable Targets...

... priority 1
... priority 2
... priority 3
... priority 4

Target Elevation (m)
ASL (Above Sea Level)

Chargeable Only Source
- Questionable Continuity
- Definite Continuity

Conductive Source
- Questionable Continuity
- Definite Continuity

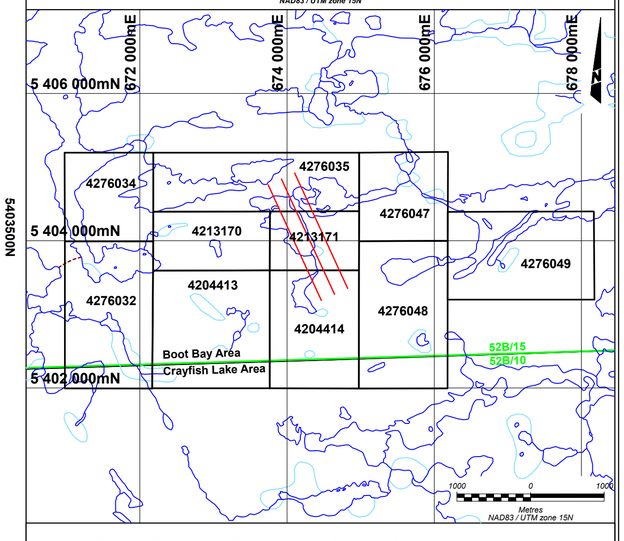
Resistive Source
- Questionable Continuity
- Definite Continuity

25000 32500 40000 47500 55000 62500 70000 77500 85000 92500 100000
Resistive Zone
(Ohm-m)

Miscellaneous Symbols
- Recommended DDH (3_BL-02)

Scale 1: 5000

100 0 100 200 300
(meters)
NAD83 / UTM zone 15N



Rio Tinto Exploration Canada Inc.
Bark Lake Project
Boot Bay Area, Ontario

Geophysical Interpretation

CATHERINE PHANEUF # 1950 GÉOLOGUE / GEOLOGIST QUÉBEC

Interpreted by:	C. Phaneuf, P. Geo.	2018/01
Surveyed by:	Abitibi Geophysics Inc.	2017/12
Approved by:	P. Bérubé, P. Eng.	2018/01
Reference map: 52B/15		Scale 1:5000
Project no: 17N115		Map no: 10.0

ABITIBI GEOPHYSICS

Bark Lake IP Station Coodinates (UTM Zone 15N; NAD83)

Line	Station	Easting	Northing
4	0	673762.5	5404708.1
4	25	673773	5404685.5
4	50	673783.6	5404662.8
4	75	673794.2	5404640.1
4	100	673804.7	5404617.5
4	125	673815.3	5404594.8
4	150	673825.9	5404572.2
4	175	673836.4	5404549.5
4	200	673847	5404526.9
4	225	673857.6	5404504.2
4	250	673868.1	5404481.5
4	275	673878.7	5404458.9
4	300	673889.3	5404436.2
4	325	673899.8	5404413.6
4	350	673910.4	5404390.9
4	375	673921	5404368.3
4	400	673931.5	5404345.6
4	425	673942.1	5404322.9
4	450	673952.7	5404300.3
4	475	673963.2	5404277.6
4	500	673973.8	5404255
4	525	673984.4	5404232.3
4	550	673994.9	5404209.6
4	575	674005.5	5404187
4	600	674016.1	5404164.3
4	625	674026.6	5404141.7
4	650	674037.2	5404119
4	675	674047.7	5404096.4
4	700	674058.3	5404073.7
4	725	674068.9	5404051
4	750	674079.4	5404028.4
4	775	674090	5404005.7
4	800	674100.6	5403983.1
4	825	674111.1	5403960.4
4	850	674121.7	5403937.8
4	875	674132.3	5403915.1
4	900	674142.8	5403892.4
4	925	674153.4	5403869.8
4	950	674164	5403847.1
4	975	674174.5	5403824.5
4	1000	674185.1	5403801.8
4	1025	674195.7	5403779.2
4	1050	674206.2	5403756.5
4	1075	674216.8	5403733.8
4	1100	674227.4	5403711.2
4	1125	674237.9	5403688.5
4	1150	674248.5	5403665.9
4	1175	674259.1	5403643.2
4	1200	674269.6	5403620.5
4	1225	674280.2	5403597.9
4	1250	674290.8	5403575.2
4	1275	674301.3	5403552.6

Line	Station	Easting	Northing
4	1300	674311.9	5403529.9
4	1325	674322.4	5403507.3
4	1350	674333	5403484.6
4	1375	674343.6	5403461.9
4	1400	674354.1	5403439.3
4	1425	674364.7	5403416.6
4	1450	674375.3	5403394
4	1475	674385.8	5403371.3
4	1500	674396.4	5403348.7
4	1525	674407	5403326
4	1550	674417.5	5403303.3
4	1575	674428.1	5403280.7
4	1600	674438.7	5403258
4	1625	674449.2	5403235.4
4	1650	674459.8	5403212.7
4	1675	674470.4	5403190.1
4	1700	674480.9	5403167.4
6	0	673943.3	5404793.5
6	25	673953.9	5404770.8
6	50	673964.5	5404748.2
6	75	673975	5404725.5
6	100	673985.6	5404702.9
6	125	673996.2	5404680.2
6	150	674006.7	5404657.5
6	175	674017.3	5404634.9
6	200	674027.9	5404612.2
6	225	674038.4	5404589.6
6	250	674049	5404566.9
6	275	674059.6	5404544.3
6	300	674070.1	5404521.6
6	325	674080.7	5404498.9
6	350	674091.3	5404476.3
6	375	674101.8	5404453.6
6	400	674112.4	5404431
6	425	674123	5404408.3
6	450	674133.5	5404385.6
6	475	674144.1	5404363
6	500	674154.7	5404340.3
6	525	674165.2	5404317.7
6	550	674175.8	5404295
6	575	674186.4	5404272.4
6	600	674196.9	5404249.7
6	625	674207.5	5404227
6	650	674218.1	5404204.4
6	675	674228.6	5404181.7
6	700	674239.2	5404159.1
6	725	674249.7	5404136.4
6	750	674260.3	5404113.8
6	775	674270.9	5404091.1
6	800	674281.4	5404068.4
6	825	674292	5404045.8
6	850	674302.6	5404023.1

Line	Station	Easting	Northing
6	875	674313.1	5404000.5
6	900	674323.7	5403977.8
6	925	674334.3	5403955.2
6	950	674344.8	5403932.5
6	975	674355.4	5403909.8
6	1000	674366	5403887.2
6	1025	674376.5	5403864.5
6	1050	674387.1	5403841.9
6	1075	674397.7	5403819.2
6	1100	674408.2	5403796.5
6	1125	674418.8	5403773.9
6	1150	674429.4	5403751.2
6	1175	674439.9	5403728.6
6	1200	674450.5	5403705.9
6	1225	674461.1	5403683.3
6	1250	674471.6	5403660.6
6	1275	674482.2	5403637.9
6	1300	674492.8	5403615.3
6	1325	674503.3	5403592.6
6	1350	674513.9	5403570
6	1375	674524.4	5403547.3
6	1400	674535	5403524.7
6	1425	674545.6	5403502
6	1450	674556.1	5403479.3
6	1475	674566.7	5403456.7
6	1500	674577.3	5403434
6	1525	674587.8	5403411.4
6	1550	674598.4	5403388.7
6	1575	674609	5403366.1
6	1600	674619.5	5403343.4
6	1625	674630.1	5403320.7
6	1650	674640.7	5403298.1
6	1675	674651.2	5403275.4
6	1700	674661.8	5403252.8
8	0	674124.2	5404878.9
8	25	674134.8	5404856.2
8	50	674145.3	5404833.5
8	75	674155.9	5404810.9
8	100	674166.5	5404788.2
8	125	674177	5404765.6
8	150	674187.6	5404742.9
8	175	674198.2	5404720.3
8	200	674208.7	5404697.6
8	225	674219.3	5404674.9
8	250	674229.9	5404652.3
8	275	674240.4	5404629.6
8	300	674251	5404607
8	325	674261.6	5404584.3
8	350	674272.1	5404561.6
8	375	674282.7	5404539
8	400	674293.3	5404516.3
8	425	674303.8	5404493.7

Line	Station	Easting	Northing
8	450	674314.4	5404471
8	475	674325	5404448.4
8	500	674335.5	5404425.7
8	525	674346.1	5404403
8	550	674356.7	5404380.4
8	575	674367.2	5404357.7
8	600	674377.8	5404335.1
8	625	674388.4	5404312.4
8	650	674398.9	5404289.8
8	675	674409.5	5404267.1
8	700	674420	5404244.4
8	725	674430.6	5404221.8
8	750	674441.2	5404199.1
8	775	674451.7	5404176.5
8	800	674462.3	5404153.8
8	825	674472.9	5404131.2
8	850	674483.4	5404108.5
8	875	674494	5404085.8
8	900	674504.6	5404063.2
8	925	674515.1	5404040.5
8	950	674525.7	5404017.9
8	975	674536.3	5403995.2
8	1000	674546.8	5403972.5
8	1025	674557.4	5403949.9
8	1050	674568	5403927.2
8	1075	674578.5	5403904.6
8	1100	674589.1	5403881.9
8	1125	674599.7	5403859.3
8	1150	674610.2	5403836.6
8	1175	674620.8	5403813.9
8	1200	674631.4	5403791.3
8	1225	674641.9	5403768.6
8	1250	674652.5	5403746
8	1275	674663.1	5403723.3
8	1300	674673.6	5403700.7
8	1325	674684.2	5403678
8	1350	674694.7	5403655.3
8	1375	674705.3	5403632.7
8	1400	674715.9	5403610
8	1425	674726.4	5403587.4
8	1450	674737	5403564.7
8	1475	674747.6	5403542.1
8	1500	674758.1	5403519.4
8	1525	674768.7	5403496.7
8	1550	674779.3	5403474.1
8	1575	674789.8	5403451.4
8	1600	674800.4	5403428.8
8	1625	674811	5403406.1
8	1650	674821.5	5403383.4
8	1675	674832.1	5403360.8
8	1700	674842.7	5403338.1