BRITISH COLUMBIA
The Best Place on Earth

BC Geological Survey Assessment Report 38515

Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

Assessment Report Title Page and Summary

TYPE OF REPORT [type of survey(s)]: IP Geophysical Survey **TOTAL COST:** CAD$49,667.05

AUTHOR(S): Alex Walcott **SIGNATURE(S):**

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): #M-4 **YEAR OF WORK:** 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): statement of work - event # 5758421

PROPERTY NAME: Endako Minesite - Mine #0200478

CLAIM NAME(S) (on which the work was done): 507165, 507245, 507246, 507254, 1017558, 1017551

note: work for this survey was also completed on Mine Lease 1028911. The total cost of the survey was $76,410.85.

The line km. proportion of the survey on claims is 65%, resulting in the total cost $49,667.05 as shown above.

COMMODITIES SOUGHT: molybdenum

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093K/006

MINING DIVISION: Omineca **NTS/BCGS:** Trim 093K 005 UTM Zone 10

LATITUDE: 54 ° 03 ' 37 " **LONGITUDE:** 125 ° 09 ' 27 " **(at centre of work)**

OWNER(S):

1) Thompson Creek Metals Company Inc.
2) Sojitz Canada Corp.

MAILING ADDRESS:

299 Victoria Street, Suite 200
Prince George, BC V2L 5B8

Suite 2624, 1055 Dunsmuir St.
Vancouver, BC V7X1L3

OPERATOR(S) [who paid for the work]:

1) Thompson Creek Metals Company Inc.
2)

MAILING ADDRESS:

299 Victoria Street, Suite 200
Prince George, BC V2L 5B8

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Commodities: Molybdenum Significant Minerals: Molybdenite, Pyrite, Magnetite, Chalcopyrite, Sphalerite, Bornite, Scheelite
Alteration: Sericite, Kaolinite, K-Feldspar, Specularite, Pyrite Alteration Type: Argillic, Potassic, Oxidation
Classification: Stockwork, Vein, Porphyry, Hydrothermal, Epigenetic Type: L05: Porphyry Mo (Low F- type)
Shape: Irregular Modifier: Faulted Dimension: 3353x370x365 metres Strike/Dip: 110/60S

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization	17.5 line Km.	507165, 507245, 507246, 507254, 1041	49,667.05
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	CAD$49,667.05

AN A REPORT

ON

GEOPHYSICAL SURVEYING

ENDAKO MINE
FRASER LAKE AREA, BRITISH COLUMBIA

OMINECA M.D.
54° 02' 10" N, 125° 06' 36" W
NTS 93K/ 03

Areas Work: Endako Mine Lease (1028911), 507165,507245, 507246, 507254,1017558

Work Dates: November 5th – 23rd,2018

FOR

THOMPSON CREEK METALS COMPANY INC.

BY

ALEX WALCOTT, B. Sc.

PETER E. WALCOTT & ASSOCIATES LIMITED
Coquitlam, British Columbia

SEPTEMBER 2019
Revised FEBRUARY 2020

TABLE OF CONTENTS

INTRODUCTION.

Between November 5th and 23rd, 2018 - Peter E. Walcott & Associates Limited carried out induced polarization surveying over parts of the Endako Mining Lease, and surrounding claims for Thompson Creek Metals Company Inc.

The project consisted of 7 lines of deep sensing induced polarization lines carried out on broad spacing, along a known trend.

The survey was designed to test for additional mineralized zones along strike and at depth.

PROPERTY LOCATION AND ACCESS

The Endako Property is situated within Omineca Mining Division of British Columbia.

It is located some 15 kilometers west of the community of Fraser Lake, British Columbia.

Access to the property is gained by way a series of resource roads emanating from Highway 16, and the by foot.

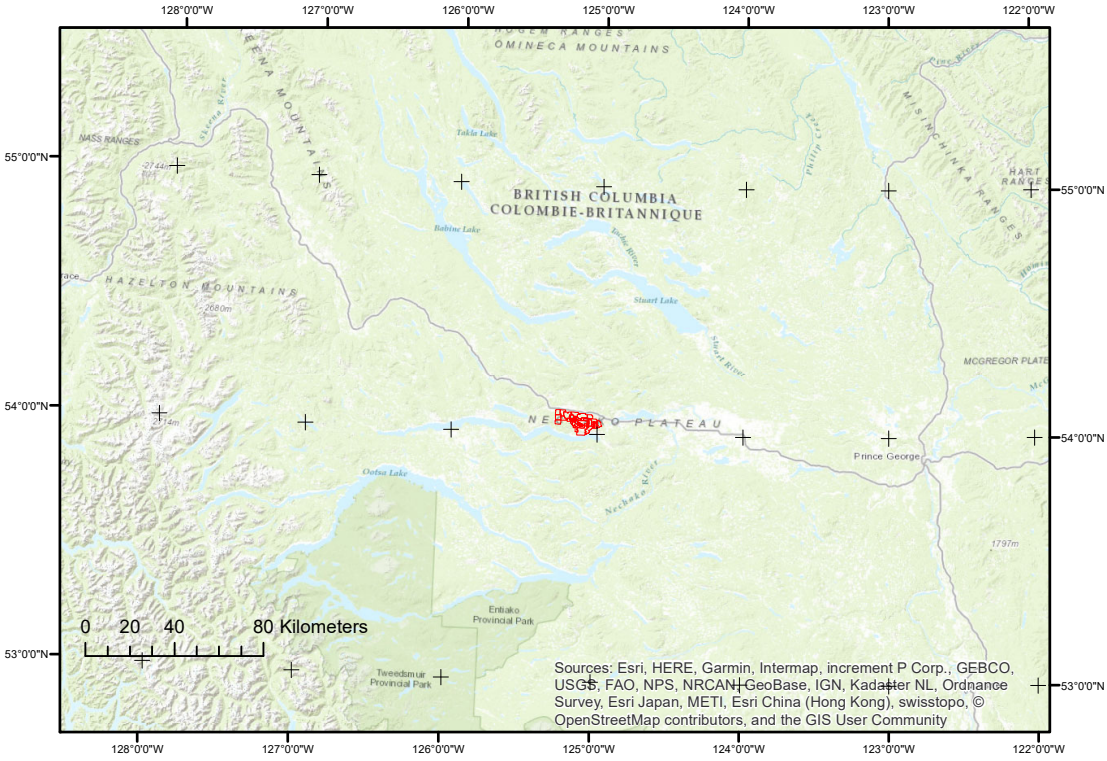


Figure 1.
Property Location Map

PROPERTY LOCATION AND ACCESS cont'd.

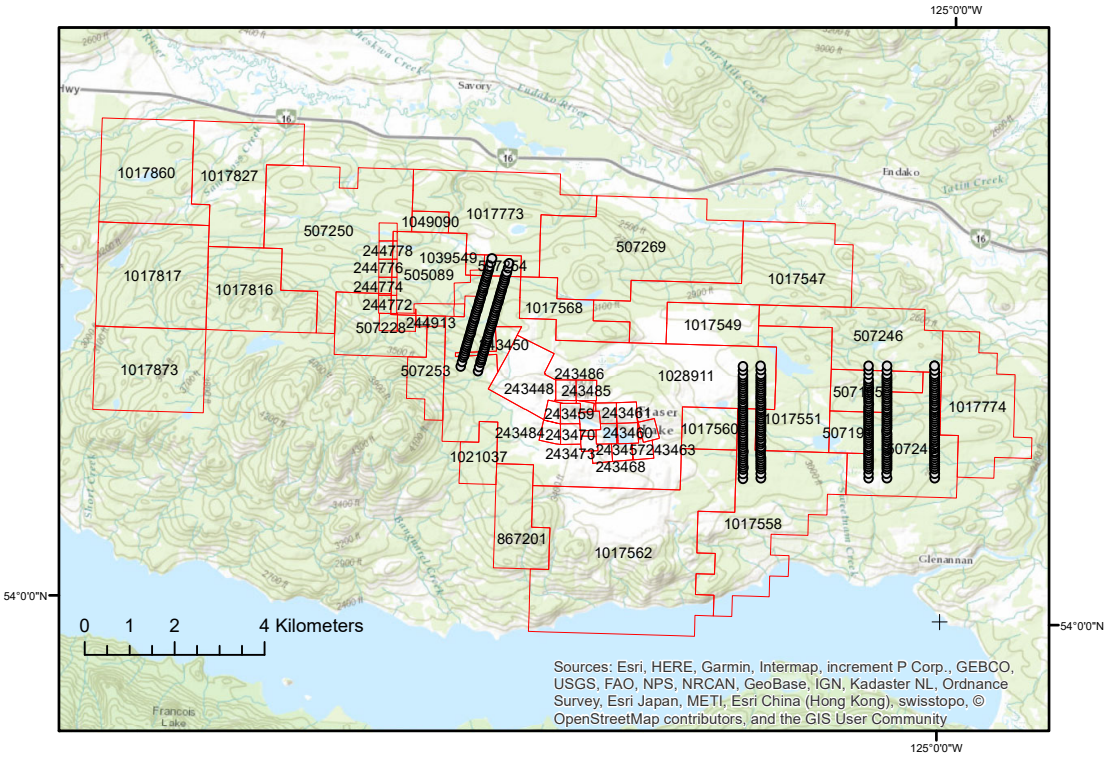


Figure 2.
Claim Location Map

PROPERTY LOCATION AND ACCESS cont'd.

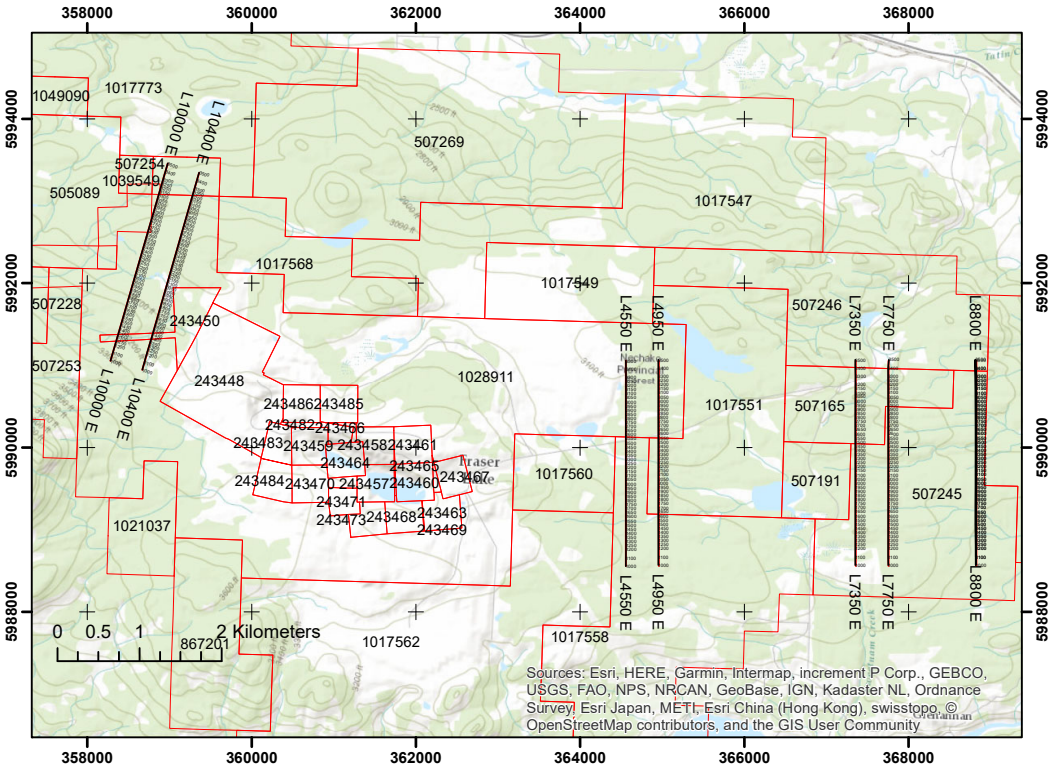


Figure 3.
Claim and Line Location Map

EXPLORATION HISTORY.

The Endako deposit was originally discovered in 1927. Minor underground exploration work took place in the subsequent years. Exploration continued on and off through 1959. Due to the leached nature of the mineralization, extensive overburden, low grades and lack of precious metals, the property was dropped in 1958.

In 1962, R&P Metals Corporation Ltd. began a diamond drilling program to evaluate the discovery and based on the exploration results, incorporated a company named Endako Mines Ltd. ("Endako"). Canadian Exploration Limited, a wholly-owned subsidiary of Placer Development Ltd. ("Placer") then entered into an option agreement with Endako in August 1962 and continued exploration on the property with diamond drilling and bulk sampling.

In March 1964, Placer decided to place the property into production. Production commenced in June of 1965 at a plant capacity of approximately 9,070 tpd. Endako merged with Placer in 1971. Expansions during 1967 increased production to 24,500 tpd and improvements during 1980 increased the concentrator capacity once more to 28,000 - 30,000 tpd.

The mine and concentrator were closed from 1982 to 1986 due to poor demand for molybdenum. The roaster continued to operate, processing molybdenum concentrates from other operations on a toll basis. Mine and concentrator production resumed in 1986 at a reduced rate. Production returned to 28,000 tpd by 1989.

TCM (75%) and Nissho Iwai Moly Resources, Inc. (25%) formed the Endako Joint Venture and acquired the property from Placer in 1997. Nissho Iwai Moly Resources Inc. later changed its name to Sojitz.

Blue Pearl Mining Ltd. acquired Thompson Creek Metals Company in October 2006 and, on May 14, 2007, Blue Pearl Mining Ltd. changed its name to Thompson Creek Metals Company Inc. (TCM).

Endako was issued a *Mines Act* permit amendment in early March 2012 allowing the increase in production. The expansion amalgamated the mine's three pits and resulted in a major upgrade to the mine's 42-year-old mill and created a new facility that nearly doubles the processing capacity from 28,000 tpd to 55,000 tonnes.

EXPLORATION HISTORY cont'd.

The Endako Mine was put on "temporary suspension" in late December 2014 due to a weak market for molybdenum. The price of molybdenum in early December 2014, struck a low of US$8.95-9.05 per pound. When the expanded mill was opened in June 2012, the price stood at US$13 per pound, which was down from US$17 per pound the year before.

On July 5th, 2016, Centerra and TCM announced they had entered into a definitive arrangement whereby Centerra was to acquire all of the issued and outstanding common shares of TMC. The plan of arrangement was completed on October 20th, 2016. Since that date, the Endako Mine is a joint venture between Centerra (75% interest) and Sojitz (25% interest).

Exploration has been ongoing from the mid-sixties to the present, including geochemical sampling, diamond drilling and percussion drilling. Recent work conducted by Placer, since 1989, includes 14 diamond drill holes in 1989, 22 in 1992, 44 in 1993, and 19 in 1994.

Exploration resumed in 2001. Since that year, Endako carried out yearly exploration programs except in 2005, 2009, 2012 and 2013. These programs consisted mainly of diamond drilling with geophysical surveys in 2004 and 2006 and metallurgical testing in 2002. A LiDAR survey was completed in 2013 along with a legal ground survey of the mineral claims and mineral leases.

Endako also engaged the service of Integral Ecological Group in 2013 to design and implement a pilot reclamation assessment program. This work was continued in 2015.

GEOLOGICAL SETTING AND MINERALIZATION.

Earth scientists from several government agencies, eleven universities, and four companies joined forces, both formally and informally, from 1995 to 2000 to study Eocene tectonics in the central Canadian Cordillera of British Columbia. Their research was conducted under the auspice of the Geological Survey of Canada's National Mapping Program (NATMAP) as the Nechako Project which covered the Endako deposit.

The regional geology description in this section of the report has been sourced and summarized from a paper titled "The Endako Batholith: Episodic Plutonism Culminating in Formation of the Endako Porphyry Deposit, North-Central British Columbia" authored by Mike Villeneuve and Joseph B. Wallen, dated 2001. The property geology has been reproduced with modifications from the 2006 Claim Assessment report authored by Terri Millinoff, P. Geo., and J. R. Stacey, B. Sc., of Taiga.

REGIONAL GEOLOGY

The Francois Lake Intrusions occur as numerous granitic intrusions of middle to late Jurassic age. The main body of the Francois Lake Intrusions, which is the host of the Endako molybdenite deposit, is a large northwesterly trending composite batholith that has been emplaced along the boundary zone between the Cache Creek and Stikine terrane of the Intermontage Tectonic Belt. The composite Endako batholith stretches from the Nechako River to south of Babine Lake and is divided into three mainly Mesozoic suites on the basis of geologic mapping conducted in the late 1990s, as follows:

- The Stern Creek plutonic suite dated at 219.3 Ma is comprised of foliated and locally gneissic, hornblende +/- biotite, diorite to granodiorite that displays a distinctive through-going foliation. Grain size is variable and ranges from extremely coarse to medium.

- The Stag Lake plutonic suite forms the western, northeastern and eastern margins of the Endako batholith and is comprised of intermediate to mafic phases ranging in age from 180 – 161 Ma. These include gabbro and diorite of the Boer, Stag Lake and Twenty-Six Mile Lake phases, hornblende-biotite quartz monzonite of the Sugarloaf, and Limit Lake phases and quartz monzonite to monzogranite of the Tintagel, Stellako, and Caledonia phases.

- The Francois Lake plutonic suite forms the bulk of the exposed batholith and serves as host rock to the Endako deposit. The lack of penetrative deformation fabrics and the more chemically evolved felsic compositions are consistent with it being younger than the Stag Lake plutonic suite. The Francois Lake suite has been

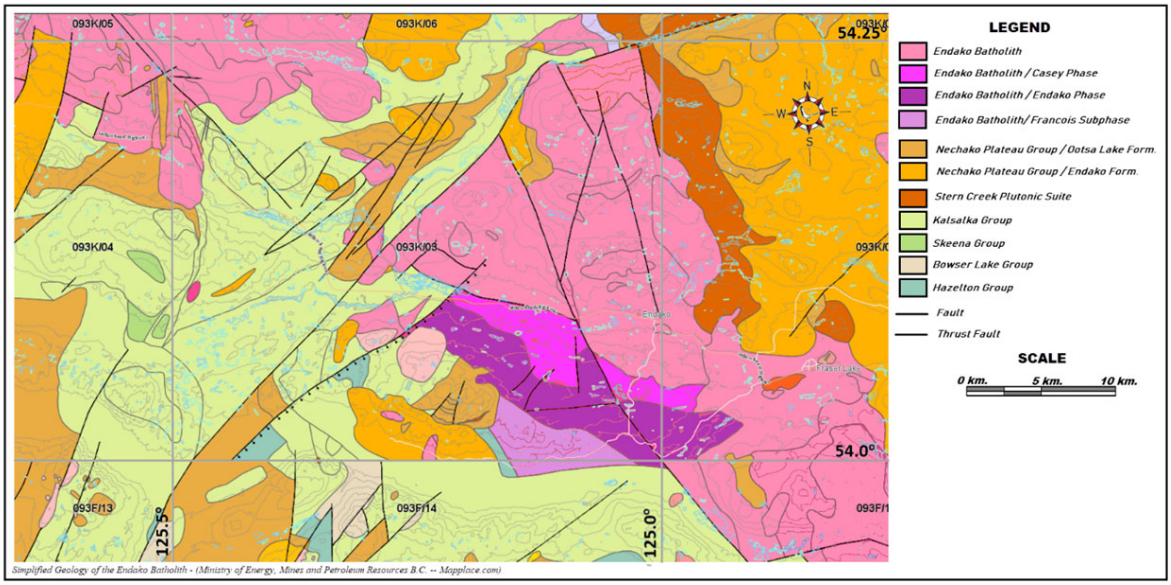
GEOLOGICAL SETTING AND MINERALIZATION cont'd.

- subdivided into two sub-suites based on composition, texture, mineralogy, and age. The older Glenannan sub-suite (157–155 Ma) displays a range of composition from biotite monzogranite to hornblende-biotite granodiorite. Rocks are generally medium to coarse grained. The younger Endako sub-suite (149–145 Ma) contains the Casey phase and the Endako phase with its Francois sub-phase. These bodies consist of medium to fine grained biotite-monzogranite to granodiorite units.

The Endako phase of the Endako sub-suite forms a northwesterly, elongated body consisting of coarse-grained, dark pink to orange, biotite-hornblende granodiorite to monzogranite, sub-porphyritic with distinctive orange K feldspar phenocrysts. Except in the open pit, it is remarkably fresh with unaltered mafic minerals and poor veining.

The Francois sub-phase is exposed adjacent to the Endako phase and consists of purple to red, medium-grained, equigranular biotite (+/- hornblende) granodiorite to monzogranite.

The Casey phase is exposed only south of Highway 16 and it borders the Endako phase on its northern side. It consists of fine to medium grained, dark pink, granophyric biotite monzogranite.

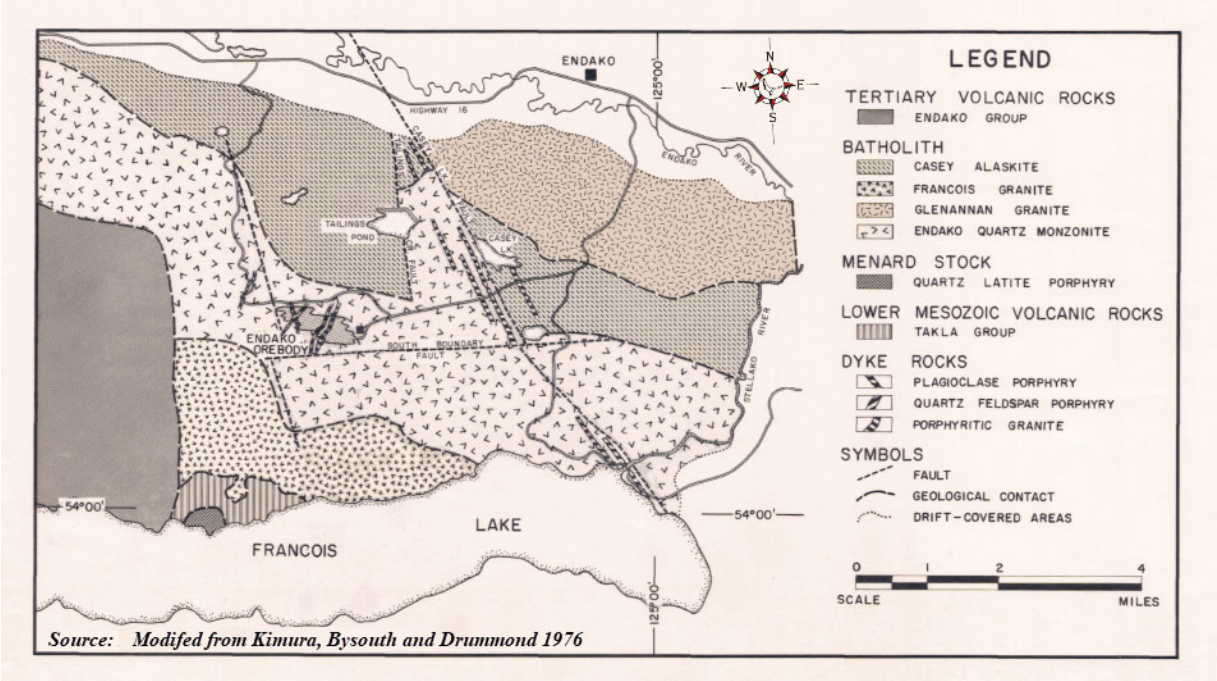


REGIONAL GEOLOGICAL MAP

GEOLOGICAL SETTING AND MINERALIZATION cont'd.

PROPERTY GEOLOGY

The Endako molybdenite deposit is hosted within the Endako Quartz Monzonite, which is intruded by younger Casey Alaskite toward the north and François Granite toward the south. In the mine area, Endako Quartz Monzonite has been intruded by aplite, andesite, quartz-feldspar porphyry, and porphyritic granite dykes and post-ore basaltic dykes .



ENDAKO PROPERTY GEOLOGY MAP

The deposit is elongated in a northwest-southeast orientation, with a maximum length of 4,800 m and a width of 750 m. The orebody is a series of major en-echelon moly-sulfide veins that strike from north through east across the deposit and dip west to south.

Structural studies that were initiated in 1973 resulted in the creation of the "Endako Vein System" concept. This model is based on the fact that a complex array of structural elements present in the Endako ore body are actually distributed along certain natural axes. When these axes are properly identified, it allows the grouping of the structural elements into natural workable units or systems. Each system therefore, possesses a definite structural style, and because hydrothermal mineralogy is a function of structure, each system also possesses a characteristic mineralogical style.

GEOLOGICAL SETTING AND MINERALIZATION cont'd.

LITHOLOGY

Lithology is relatively simple in the pit area. The dominant rock type is the Endako Quartz Monzonite. This unit is intruded by barren quartz-feldspar porphyry dykes and weakly mineralized aplite dykes.

Endako Quartz Monzonite is the dominant rock type encountered in diamond drilling in the Endako pit. This pink to orange-pink phase is equigranular to weakly porphyritic with grain size typically 3-4 mm, with K-feldspar crystals ranging up to 7 mm. Its composition is typically 30% quartz, 35% K-feldspar, 30% plagioclase, and 5-10% variably chloritized biotite. In the ore zone, the unit is variably kaolinized ranging in colour from pale greenish to creamy white.

Casey Alaskite consists of 33% quartz, 40% orthoclase, 25% plagioclase, and 2% biotite. It is a fine to medium crystalline, pink or buff leucogranite, characterized by inequigranular texture, low biotite content, and absence of hornblende.

Quartz-Feldspar Porphyry Dykes are pale pink to tan in colour with an aphanitic, or very finely crystalline groundmass and with quartz and feldspar phenocrysts averaging 3 mm to 4 mm in size.

Aplite Dykes are typically pink and fine to medium-grained quartz-K-feldspar-rich dykes. These dykes range up to several metres thick, show sharp contacts with host rocks and exhibit no chilled selvages. In the ore zone, aplite dykes are often mineralized with thin stockwork quartz molybdenite veinlets. Above the South Basalt Fault, aplite often hosts quartz-pyrite stringers.

Basalt (Andesite) Dykes are post-ore basaltic dykes. The dark greenish grey, fine-grained and locally porphyritic dykes in the Endako pit are often associated with major fault systems. The South Basalt Fault is the best exposed fault/basalt dyke structure.

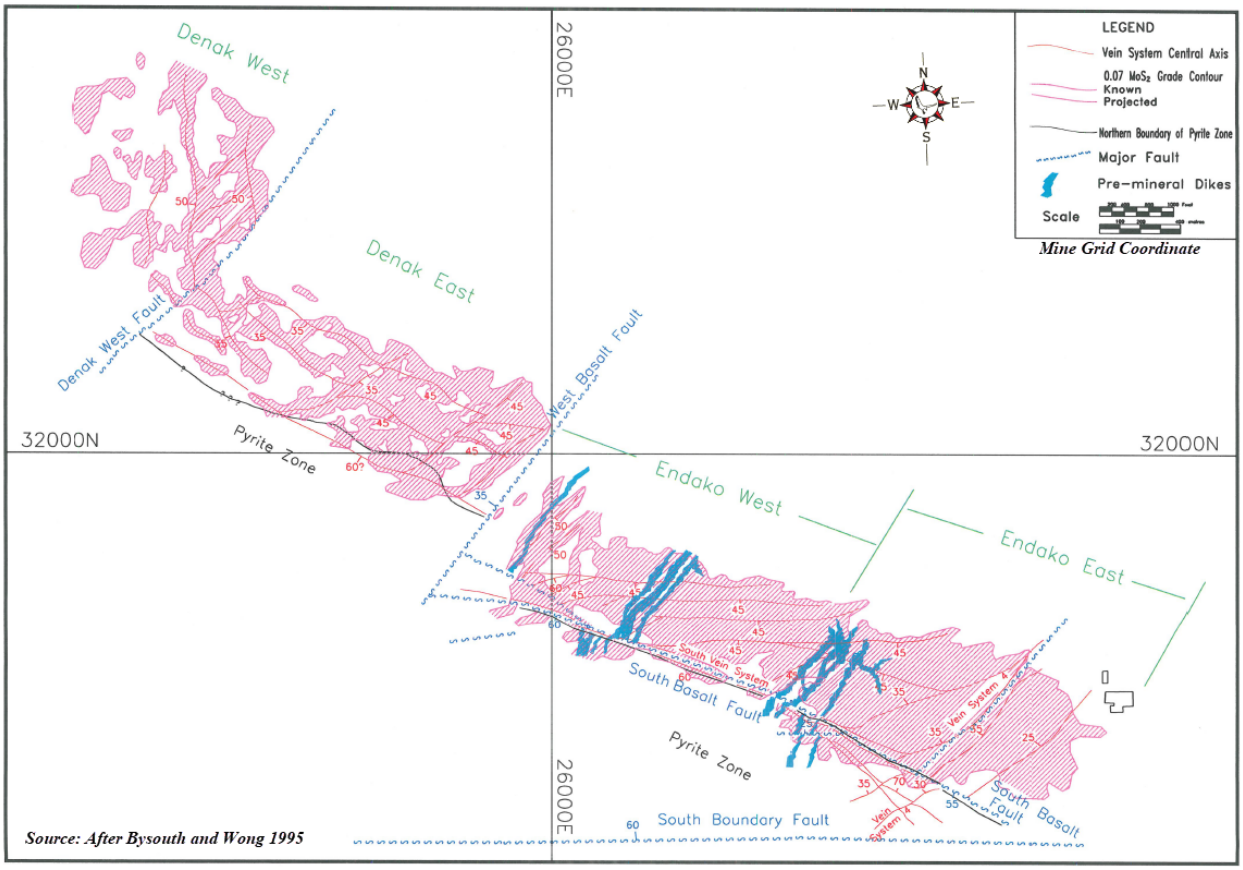
STRUCTURE

Pre-ore dykes that are associated with the Endako deposit strike to the northeast with vertical to steep westerly dips. These dykes have sharp contacts with little evidence of any deformation during intrusion. Post-ore basaltic dykes are marked by extensive gouge and brecciation and are associated with major structures that likely predate ore deposition. The South Boundary Fault appears to be a major controlling structure for both subsidiary structures and later hydrothermal activity.

GEOLOGICAL SETTING AND MINERALIZATION cont'd.

Four structurally distinct zones have been identified from east to west: Endako East, Endako West, Denak East and Denak West/ Denak Northwest. These zones are separated by steep northeast-trending structures including the eastern pre-ore dyke swarm (between Endako East and West), West Basalt Fault and Denak West Fault. A possible fault is currently inferred between the Denak West and Denak Northwest however, this feature remains to be mapped in the field.

The Endako East Zone hosts veins that dip shallowly to the northwest. The Endako West Zone hosts veins that dip to the south; the South Basalt Fault appears to be a post-ore component of this south vein system (Bysouth and Wong, 1995). Ore structures in the Denak East pit dip southwesterly, turning abruptly to westerly dips in the Denak West pit. Secondary controls include northeast trending structures with moderate southeast dips.



Endako Structural Domains and Vein Systems Axis

GEOLOGICAL SETTING AND MINERALIZATION cont'd.

MINERALIZATION AND ALTERATION

At Endako, the mineralization consists of molybdenite with a gangue of pyrite, magnetite, minor chalcopyrite, and rare bornite, bismuthinite, scheelite, and specularite. The orebody consists of a series of sub-parallel or en-echelon quartz-molybdenite-pyrite veins and stockwork veins, veinlets and mineralized fractures. The increase in frequency of these veins along a preferred axis form part of the vein system concept.

Mineralization occurs in milky white to banded or ribboned quartz veins that are often brecciated and healed by quartz and late stage calcite and minor chalcedony. Molybdenite varies in grain size from very coarse and greasy to microscopic blue-black grains in quartz referred to as "black quartz ore". A pyrite zone lies to the south of, and adjacent to, the orebody with a transitional boundary in the immediate hanging wall of the South Basalt Fault.

Extensive hydrothermal alteration occurs within the Endako ore zone. K-feldspar bearing envelopes develop around quartz-molybdenite veins and barren quartz veins in the footwall of the deposit. Sericite envelopes, consisting of quartz, sericite and pyrite, are developed around quartz-molybdenite and quartz-magnetite veinlets in the orebody, and quartz-pyrite veins in the pyrite zone. Argillic alteration (kaolinization) is pervasive throughout the orebody, ranging from weak to intense.

Deposit Types

The Endako deposit is a porphyry molybdenum deposit. The geometry and geologic occurrence are such that it is sometimes used as an example to define a style of mineralization known as an Endako Style mineralization. W. Sinclair, 1995, described the porphyry molybdenum deposit as a Low-F type. The following description was summarized from the mineral deposit profiles from the Ministry of Energy, Mines and Petroleum Resources.

This deposit type is characterized by a stockwork of molybdenite-bearing quartz veinlets and fractures in intermediate to felsic intrusive rocks and associated country rocks. Deposits tend to be low grade but large and amenable to bulk mining methods. Porphyry molybdenum deposits can occur in a number of host rocks. Genetically related intrusive rocks range from granodiorite to granite and their fine-grained equivalents, with quartz monzonite most common: they are commonly porphyritic. The intrusive rocks are characterized by low F contents (generally <0.1 % F) compared to intrusive rocks associated with Climax-type porphyry Mo deposits. Mineralization is predominantly

GEOLOGICAL SETTING AND MINERALIZATION cont'd.

structurally controlled; mainly stockworks of crosscutting fractures and quartz veinlets, also veins, vein sets and breccias.

Molybdenite is the principal ore mineral; chalcopyrite, scheelite, and galena are generally subordinate. Alteration mineralogy is similar to that of porphyry Cu deposits. A core zone of potassic and silicic alteration is characterized by hydrothermal K-feldspar, biotite, quartz and, in some cases, anhydrite. Phyllic alteration typically surrounds and may be superimposed to various degrees on the potassic-silicic core. Propylitic alteration, consisting mainly of chlorite and epidote, may extend for hundreds of metres beyond the zones of potassic-silicic and phyllic alteration.

The Endako deposit fits the above description. Endako is lower in silica content than the Climax-style deposits and is hosted by a monzonite or monzogranite host rather than the more rhyolitic host rocks of the Climax-style deposits. Endako is a magmatic – hydrothermal deposit associated with subduction around island arc formation or continental collision. The deposit is predominately structurally controlled, mainly as stockworks and en-echelon veinlets that establish the overall orientation of the deposit. The primary ore is molybdenite (MoS_2) with minor associated chalcopyrite, scheelite, and galena. Gangue minerals are quartz, pyrite, K-feldspar, biotite, sericite, clays, calcite and anhydrite.

PURPOSE.

The purpose of the survey was designed to test features along an anomalous trend identified in regional geophysics, geochemistry and historic drilling in an attempt to define new targets along strike and to depth.

SURVEY SPECIFICATIONS.

The Induced Polarization Survey.

The induced polarization (IP) survey was conducted using a pulse type system, the principal components of which were manufactured by Instrumentation GDD of Quebec, Canada.

The system consists basically of three units, a receiver (GDD), transmitter (GDD) and a motor generator (Honda). On this survey two transmitters used in series providing a maximum of 8.6 kw d.c. to the ground, obtains their power from two 7.5 kw 60 c.p.s. alternators driven by Honda 14 h.p. gasoline engines. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through the current electrodes C_1 and C_2, the primary voltages (V) appearing between any two potential electrodes, P_1 through P_5, during the "current-on" part of the cycle, and the apparent chargeability, (M_a) presented as a direct readout in millivolts per volt using a 200 millisecond delay and a 1000 millisecond sample window by the receiver, a digital receiver controlled by a micro-processor – the sample window is actually the total of twenty individual windows of 50 millisecond widths – at any time.

The apparent resistivity (ρ_a) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The surveying was carried out using the "pole-dipole" / "dipole-pole" method of survey. With the pre-laid receiver array remaining stationary, the current C_1 is moved along the survey lines at a spacing of "a" (the dipole) apart, while the second current electrode, C_2, is kept constant at "infinity".

As the current (C_1) is injected between the respective potential electrodes, and the receiving array is stationary, both pole-dipole and dipole-pole geometries can be measured with the maximum "n"-separation a function of the length of the receiver array which on this survey was "n" = 19.5, depending on the injection placement.

SURVEY SPECIFICATIONS cont.

The distance, "na" between C_1 and the nearest potential electrode generally controls the depth to be explored by the particular separation, "n", traverse. On this survey a 100 metre dipole separation was utilized.

On this survey a total of some 17.5 kilometres of survey traverses were completed on 7 northerly orientated lines.

Horizontal control.

The horizontal positions of the stations were recorded using a Garmin GPSmap 64CSx.

Data Presentation.

The data are presented as individual pseudo section plots of apparent resistivity and apparent chargeability at a scale of 1:10,000 generated using Geosoft Oasis Montaj.

2D inversions of both resistivity and chargeability modelled using Res2DInv are also presented at a scale of 1:10,000.

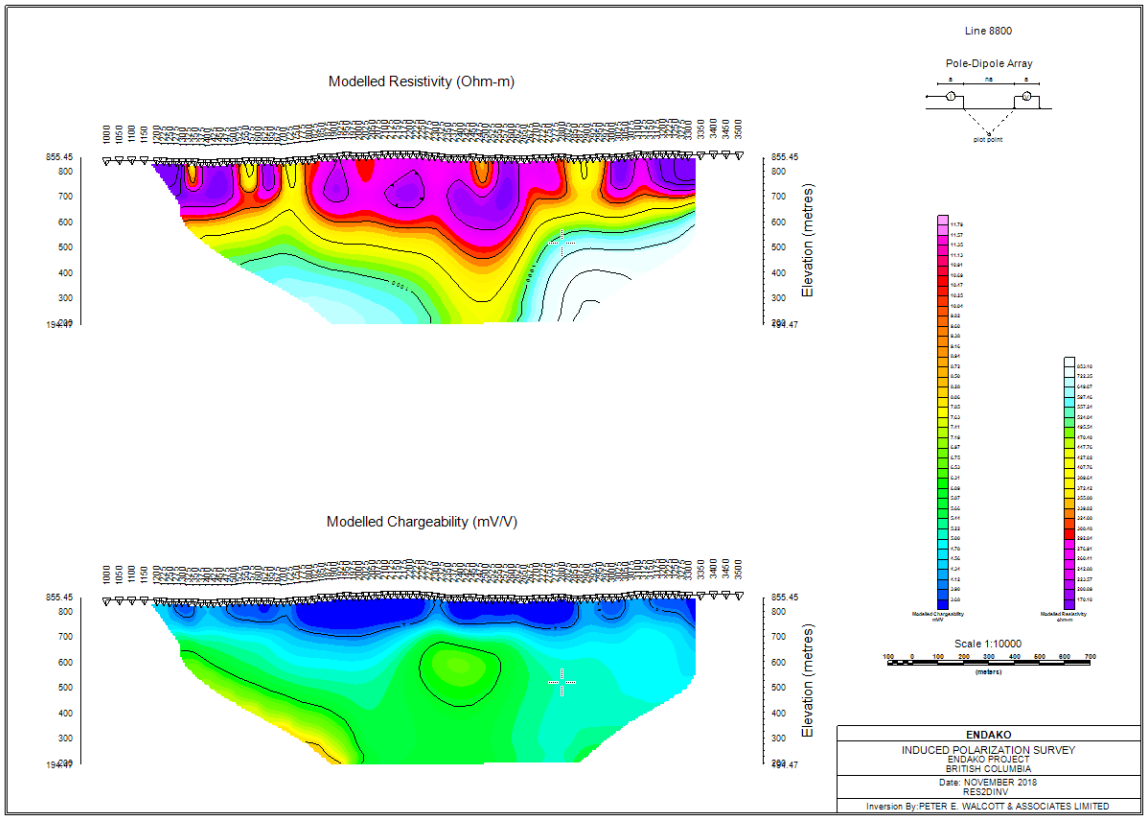
DISCUSSION OF RESULTS.

The results of the 2018 Induced Polarization survey identified several areas of potential interest;

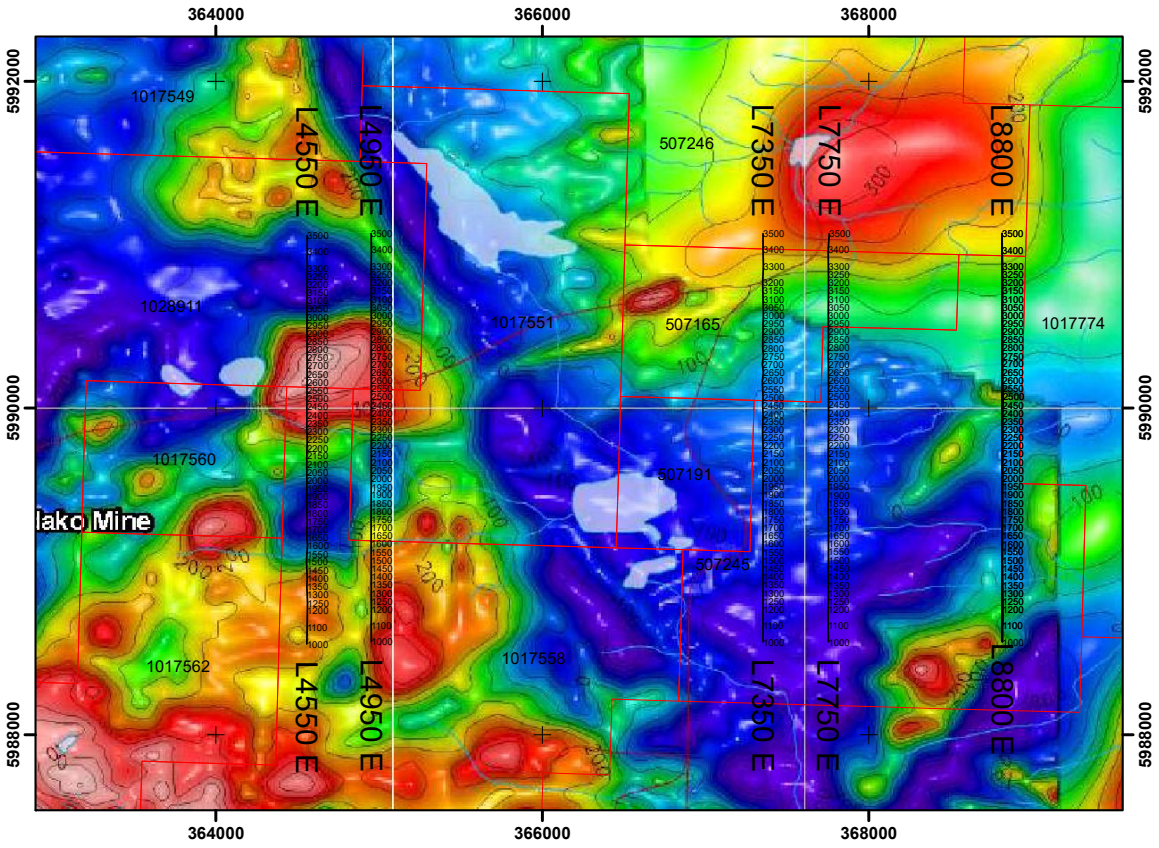
Line 8800E

Line 8800 E was the most eastern survey line carried out. The line exhibits a large flat lying zone of reduced resistivity over the entire length of the line associated with low chargeability. Resistivity appears to increase at depth along with the chargeability.

A slight break in the resistivity can be observed circa 2500N, this is also associated with a slight increase in chargeability and associates with a north easterly trending magnetic high.



DISCUSSION OF RESULTS cont'd.



Residual Magnetics (TMI (nT)
with Eastern Line Location

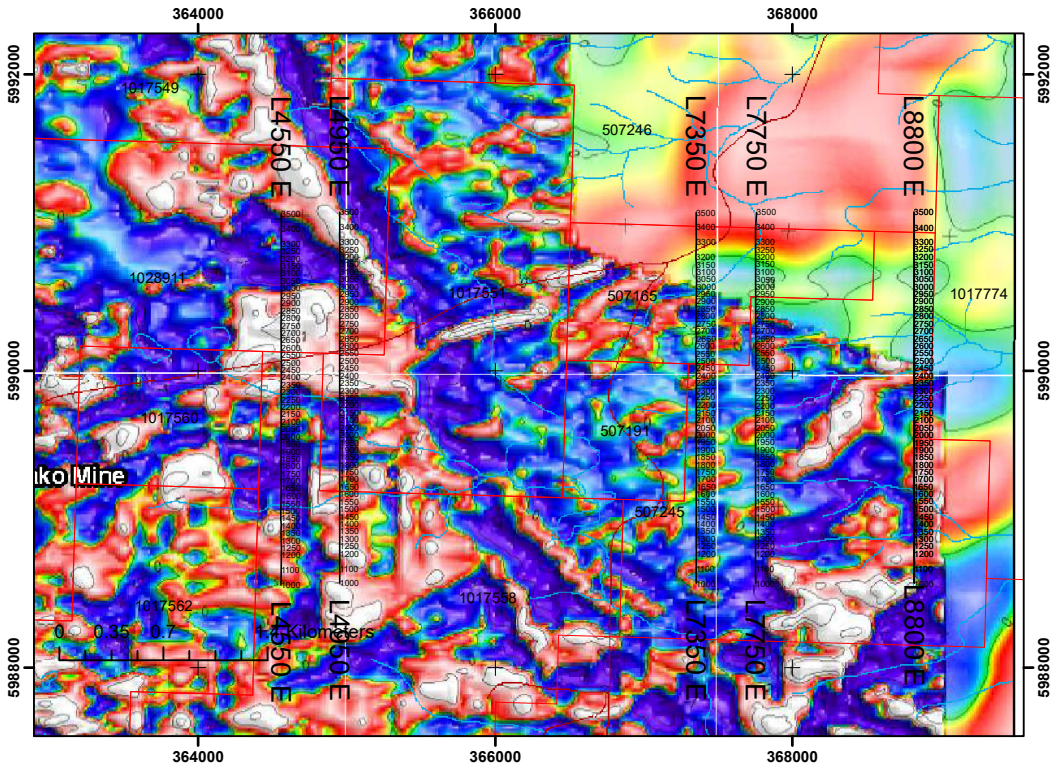
Lines 7750E & 7750E

These lines cover an area of reduced magnetic as observed within regional data set. A slight northeasterly grain can also be observed in the first vertical derivative.

The two survey lines show a series of resistivity features potentially associated with structural zones orientated like that of the magnetic grain.

Two very weak chargeability features confined within zones of reduced resistivity can also be observed, in both the south and central portion of the survey lines which maybe of interest.

DISCUSSION OF RESULTS cont'd.



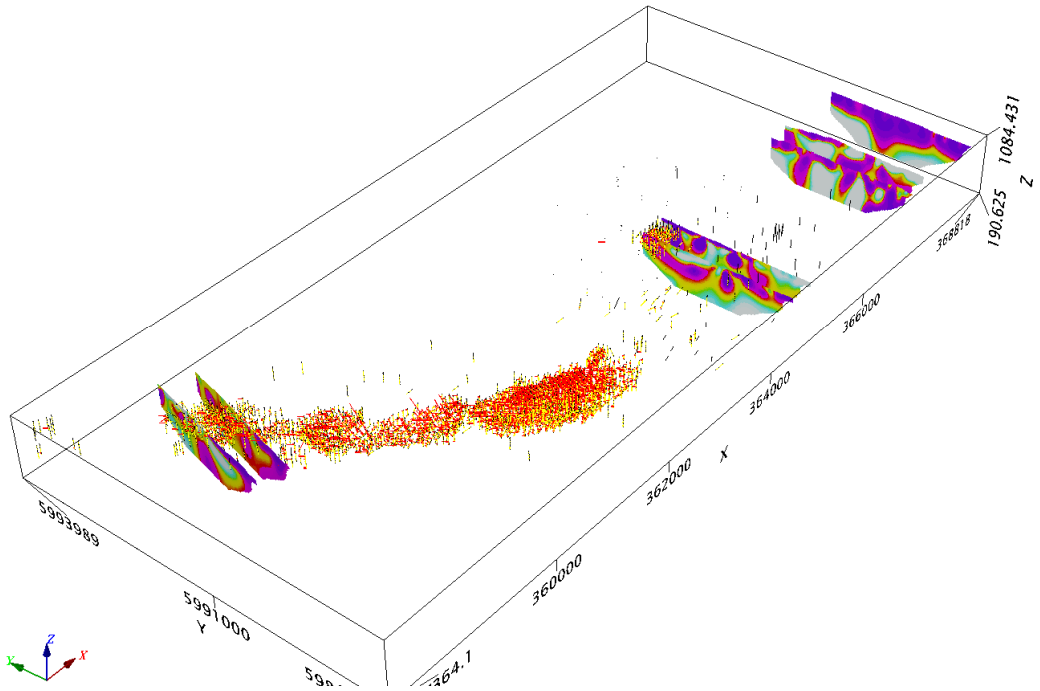
Magnetics (1VD)
with Eastern Line Location

Lines 4450E & 4950E

These lines are situated on the eastern end of the known mineralization. The northern portion of the lines cover a zone of historic drilling which encountered molybdenum mineralization. This zone is situated on the northern flanks of a plug like magnetic high, within a mag/resistivity low. The area exhibits a low chargeability response.

A second low magnetic embayment can be observed on the southern flank the previously mentioned magnetic high. This low is also associated with a resistivity low, along with several anomalous soil geochemistry sample. Historic drilling proximal to this feature yielded no significant results.

DISCUSSION OF RESULTS cont.



3D View of 2D Modelled Resistivity with Historic Drilling.

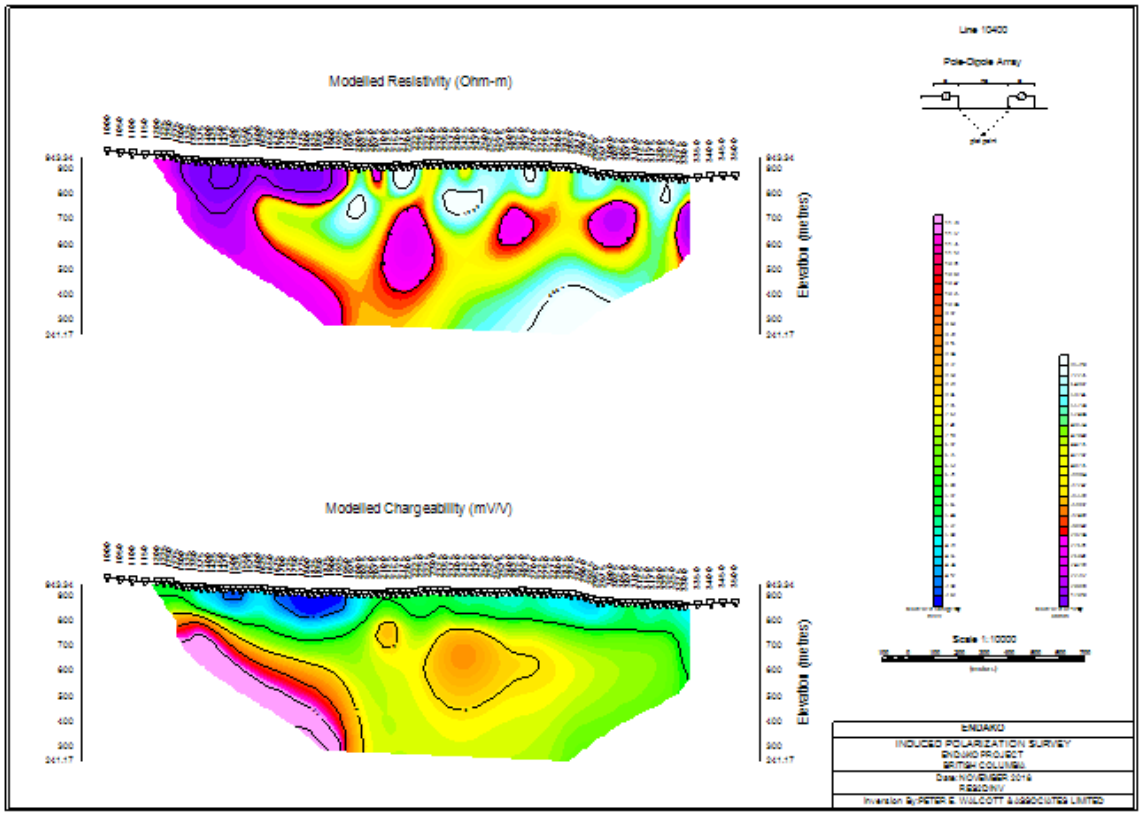
Lines 10000E & 10400E

Lines 10000E and 10400E cover the western edge of the deposit. The lines bisect the eastern terminus of know mineralization as defined by drilling.

Line 10000E and 10400E show several features of interest. Both lines appear to show a shallow southerly dipping unit in the northern two thirds of the line. This feature is characterized by a zone of elevated resistivity, with a low chargeability response. This region appears to host most of the mineralization as defined by drilling.

The gentle dipping unit appears to be truncated in the south, circa 1500N to 1600N, by a lower resistivity unit associated with high chargeability. This is likely associated with a lithological change. This marked contact can also be observed within regional magnetics.

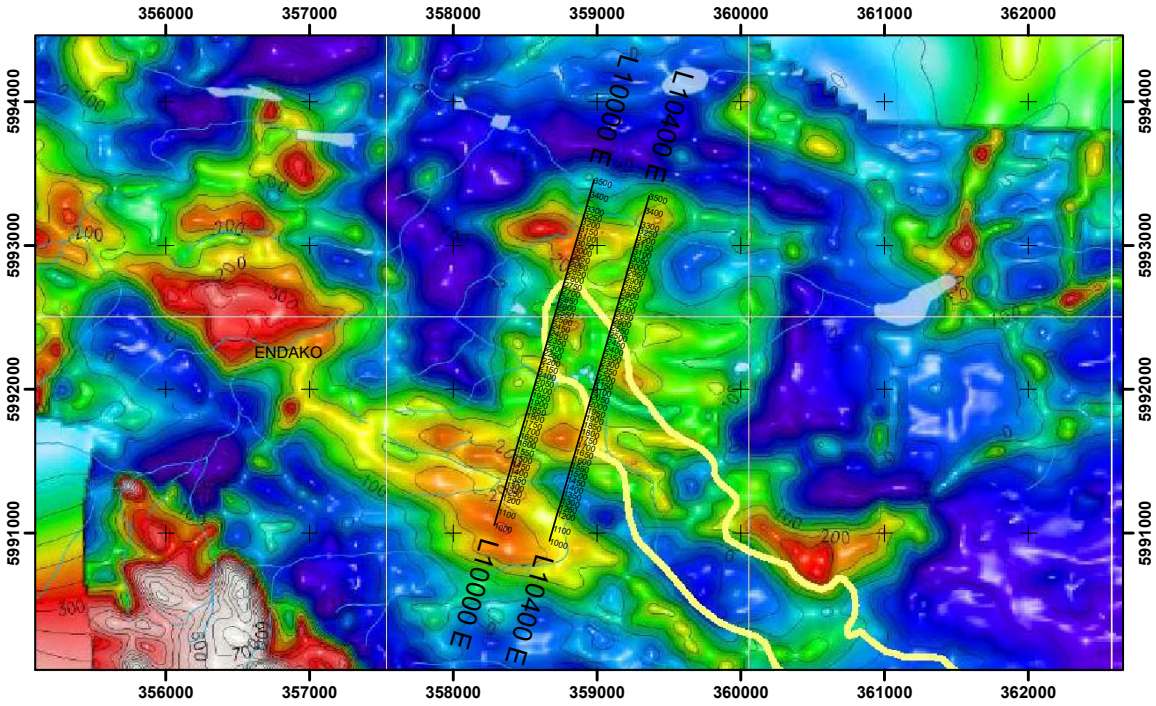
DISCUSSION OF RESULTS cont.



Line 10400E – 2D Inversion

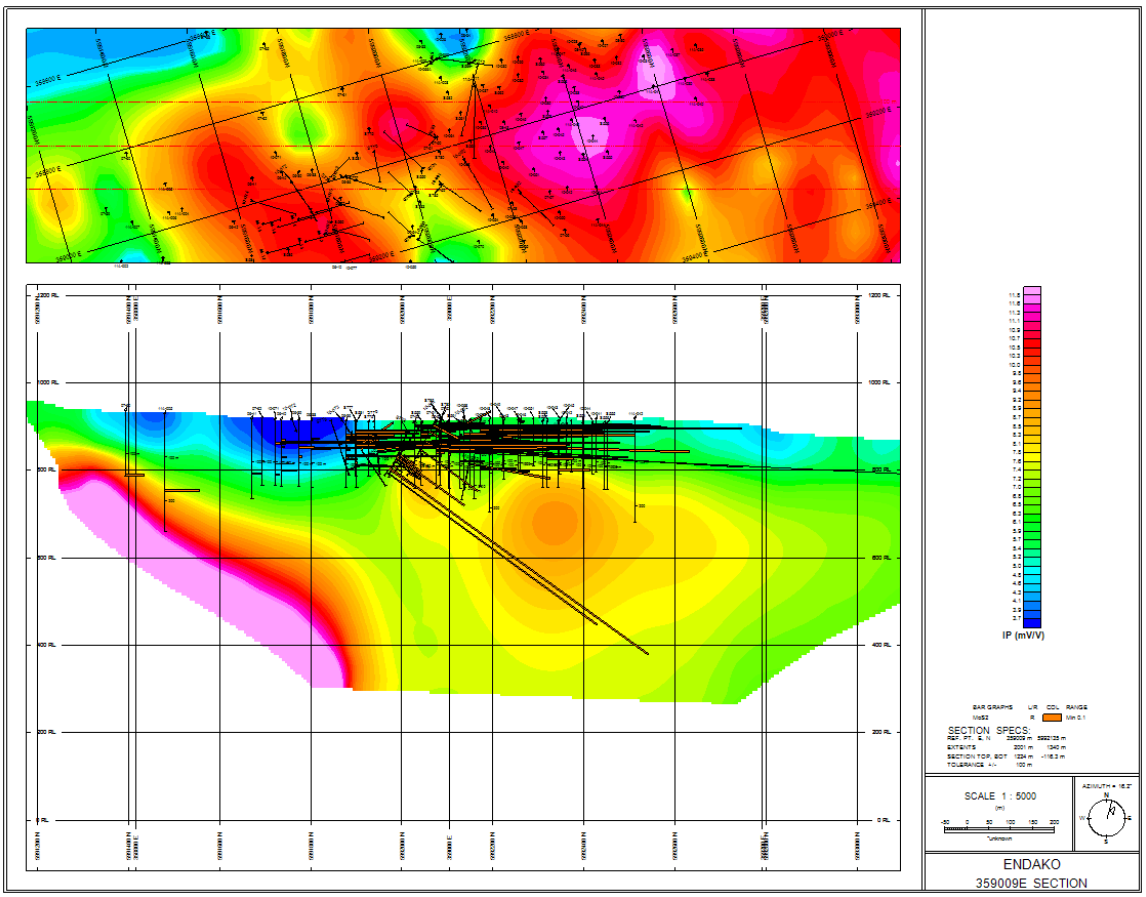
A weak chargeability feature can also be observed in the central portion of the lines circa 2400N. This deeper anomaly is situated beneath the known mineralized zone as defined by drilling. The chargeability anomaly appears to be confined within the lower resistivities and weakens to the west towards line 10000E.

DISCUSSION OF RESULTS cont.



Residual Magnetics (TMI (nT)
with Western Line Location

DISCUSSION OF RESULTS cont.



Cross Section along Line 10400E

SUMMARY, CONCLUSIONS & RECOMMENDATIONS.

Between November 5th and 23rd, 2018, Peter E. Walcott & Associates Limited undertook induced polarization surveying on Thompson Creek Metals Company Inc. – Endako Mine, located in the Fraser Lake area of British Columbia.

The survey consisted of 7 northern orientated lines of deep sensing induced polarization, located along a mineralized trend, to test for additional mineralization along trend and to depth.

The survey identified several resistivity features of potential interest with only a minor chargeability responses on the eastern lines.

The two western most lines situated on the western edge of the deposit were the most interesting. In the central portion of the line, a marked zone of elevated chargeability can be observed beneath historic drilling, associated with low to moderate resistivities. A larger more intense chargeability anomaly can also be observed in the southern portion of the survey lines.

A detailed review of historic drilling should be carried out on holes proximal to lines 10000E and 10400E, with a focus on the deeper portions of the holes. Soil geochemistry coverage and historical results should be also be reviewed over the southern portion of these lines in conjunction with known geology. If warranted additional induced polarization / geochemistry should be considered expanding to both the west and south.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LTD.

Alexander Walcott
Geophysicist

Coquitlam, B.C.
September 2019

APPENDIX I

REFERENCES

Devine, F.A.M., M.A. Pond, D.R. Heberlein, P. Kowalczyk, and W. Kilby (2015): A geo-exploration atlas of the Endako porphyry molybdenum district; Geoscience BC, Report 2015-08.

COST OF PROJECT.

Peter E. Walcott & Associates Limited undertook induced polarization surveying on a daily rate for a total of $53,400.00.

A mobilization charge of $10,600.00, ATV rental of $600.00, and accommodation and fuel charges of $11,810.85. Thus, the total cost of services provided was $76,410.85

PERSONNEL EMPLOYED ON SURVEY.

Name	Occupation	Address	Dates
Peter E. Walcott	Geophysicist	Unit 111- 17 Fawcett Rd. Coquitlam, B.C. V3K 6V2	
Alexander Walcott	"	"	
Tom Kocan	Geophysical Operator	"	Nov 5th-23rd, 2018
Oldrich Kucera	"	"	"
William Kennedy	"	"	"
Nick Russell	"	"	"
Marylyne Bizier	Geophysical Helper		"
Tyler Sam	"		"

CERTIFICATION.

I, Alexander Walcott, of 38-181 Ravine Dr., Port Moody, British Columbia, hereby certify that:

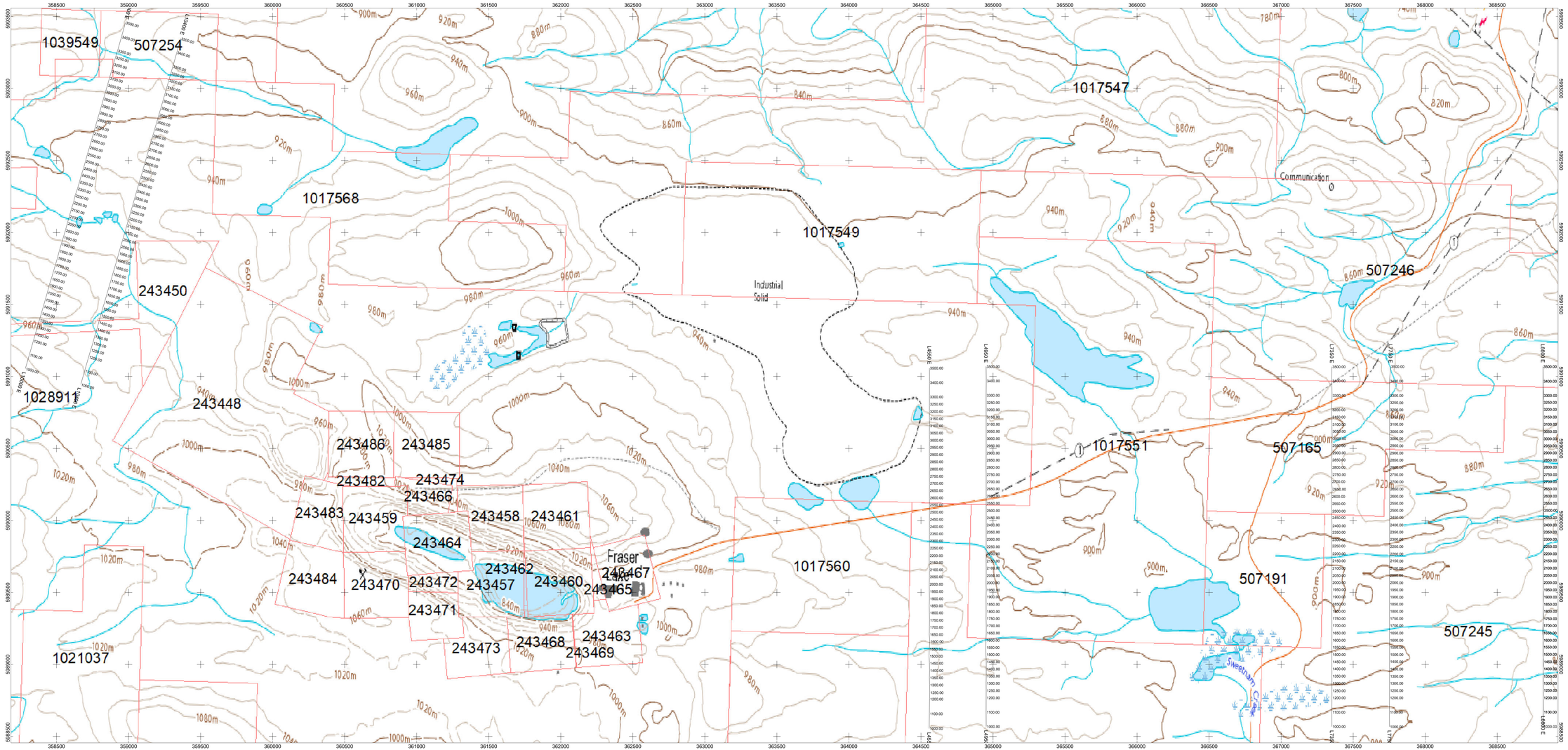
1. I am a graduate of the University of Alberta with a B.Sc. Earth Sciences Major, with a Physics Minor.

2. I have been active in mineral exploration for the past 20 years.

3. I hold no interest, direct or indirect, in the property, nor do I expect to receive any.

Alexander Walcott

Coquitlam, B.C.
September 2019



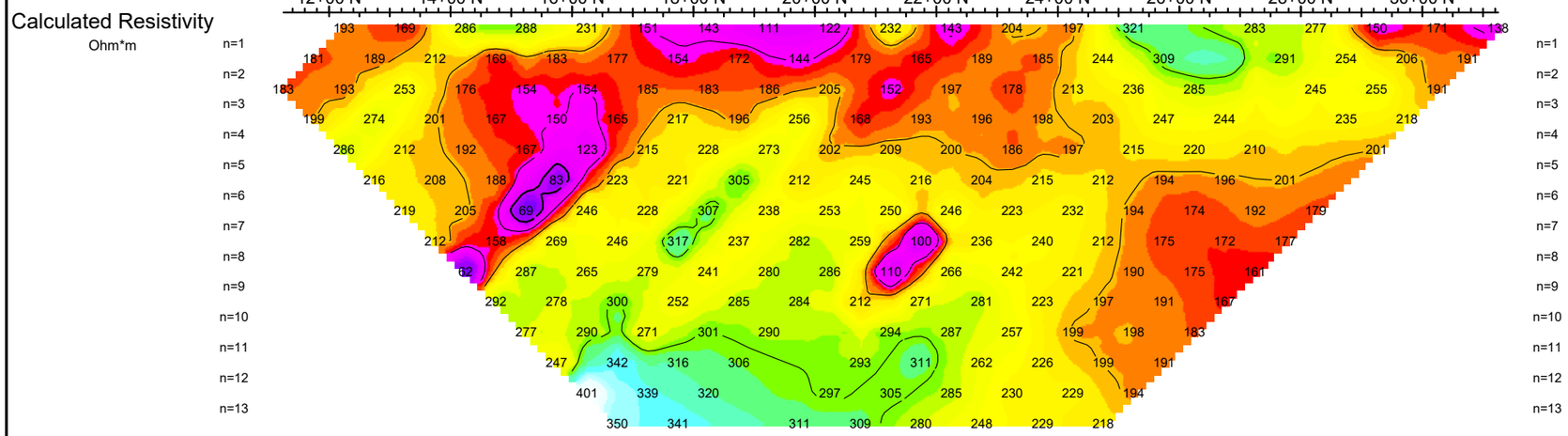
THOMPSON CREEK METALS COMPANY INC.

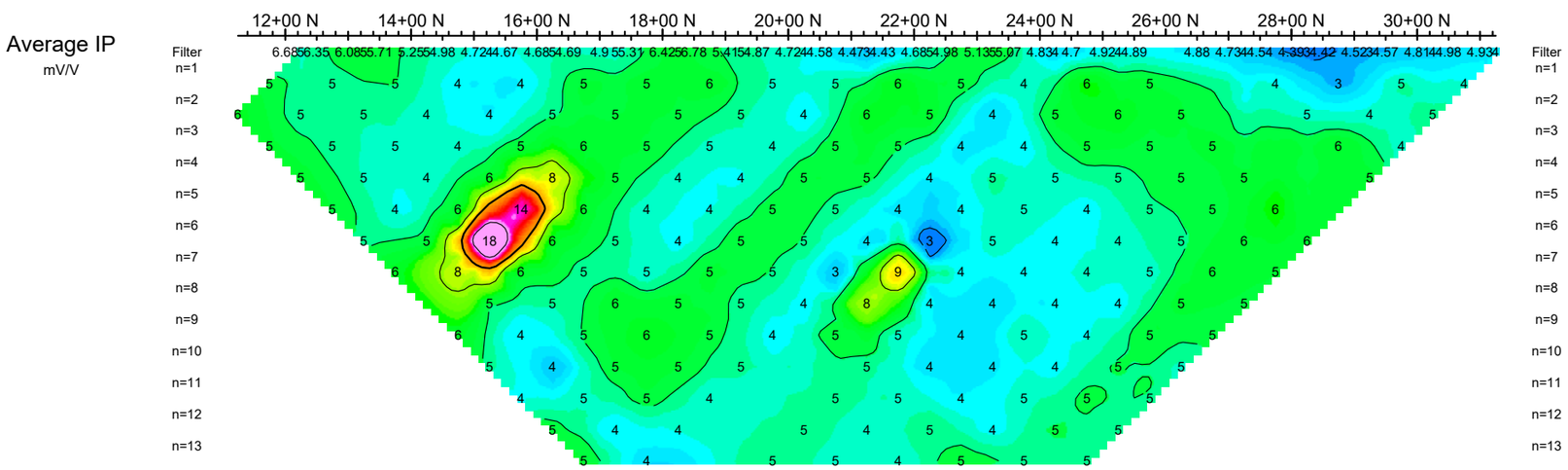
INDUCED POLARIZATION SURVEY
CLAIM AND LINE LOCATION MAP

ENDAKO MINE
FRASER LAKE AREA, BRITISH COLUMBIA
NOVEMBER 2018

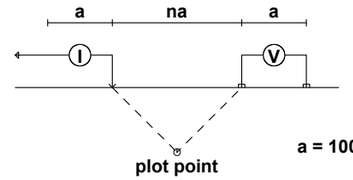
PETER E. WALCOTT & ASSOCIATES LIMITED

45+50 E





Pole-Dipole Array



a = 100 m

Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600

(meters)

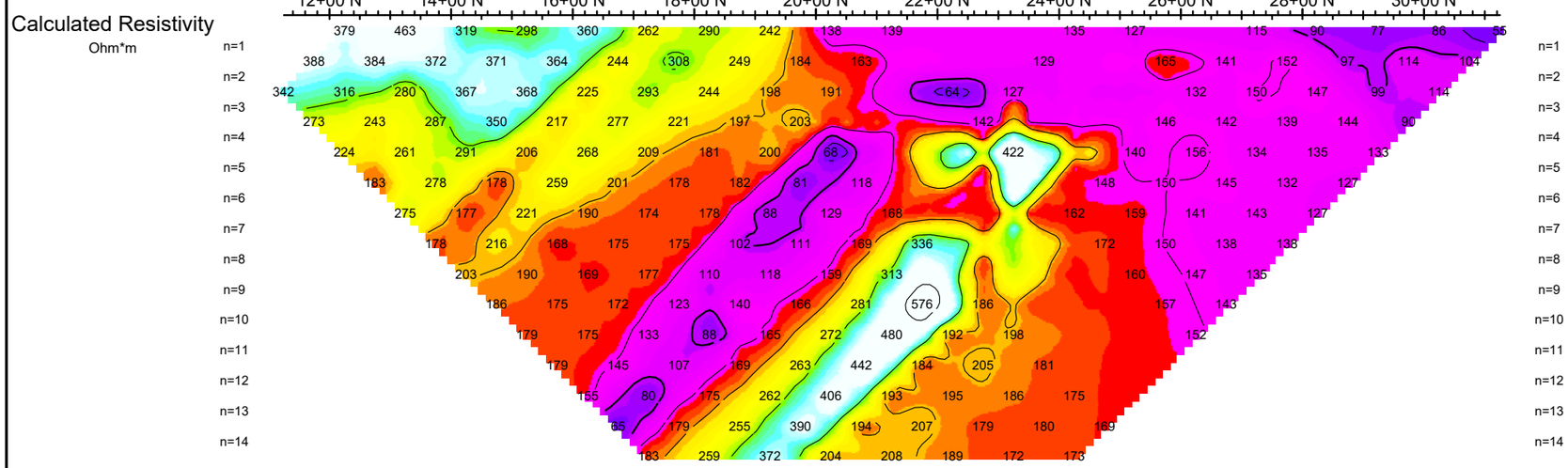
THOMPSON CREEK METALS COMPANY INC.

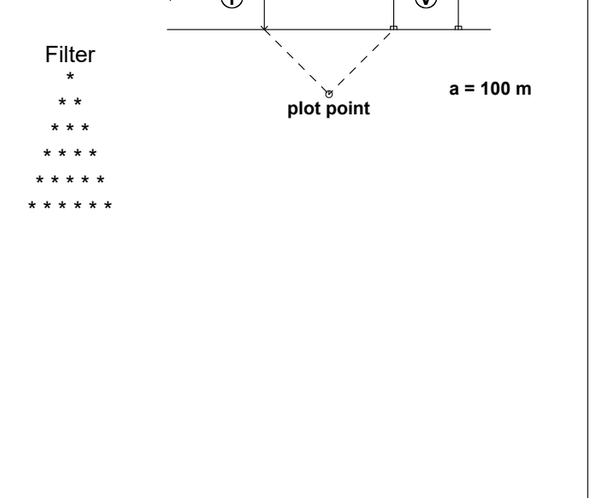
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

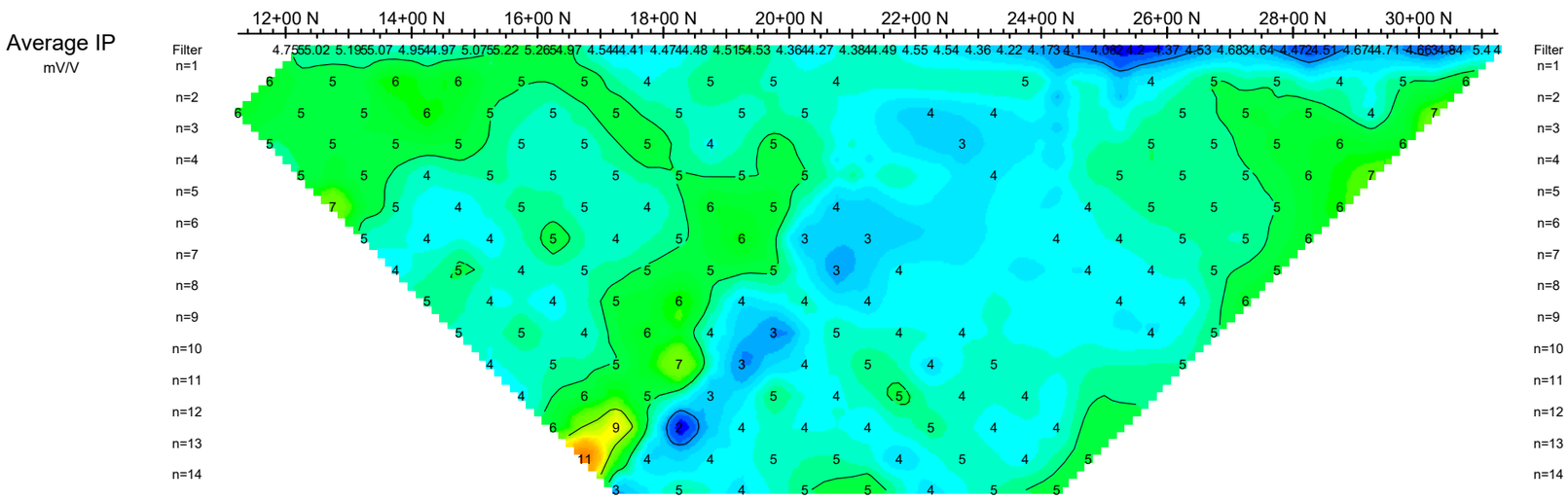
Date: November 2018
Interpretation:

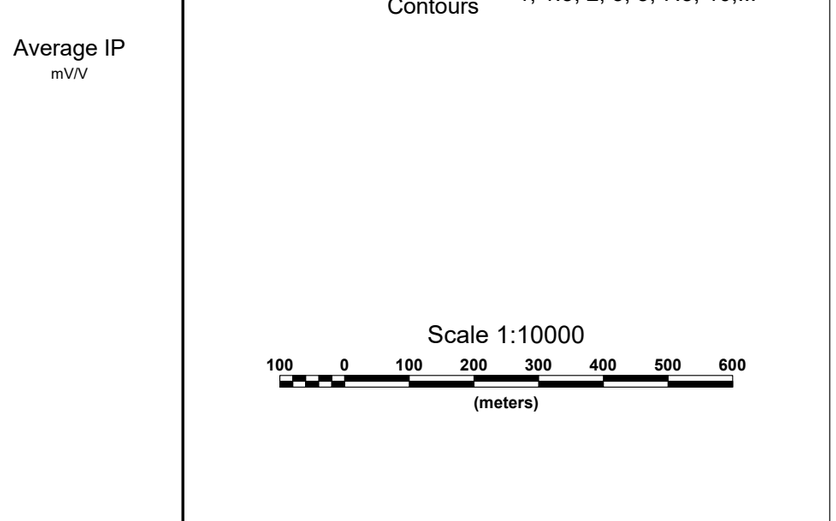
PETER E. WALCOTT & ASSOCIATES LIMITED

49+50 E









GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

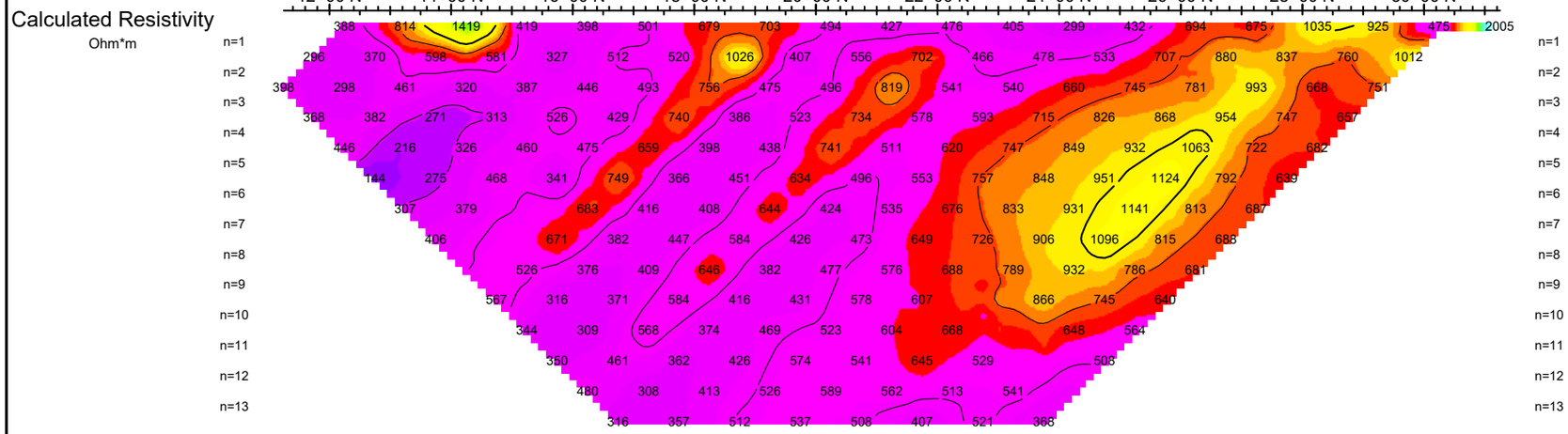
THOMPSON CREEK METALS COMPANY INC.

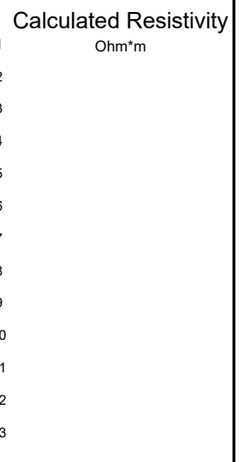
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

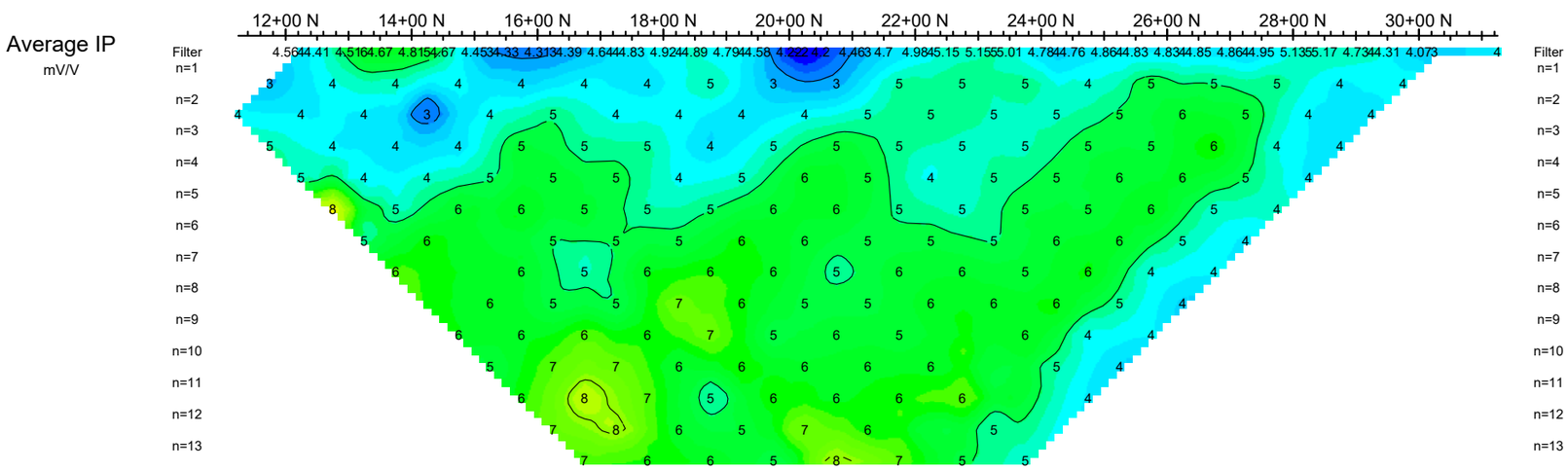
Date: November 2018
Interpretation:

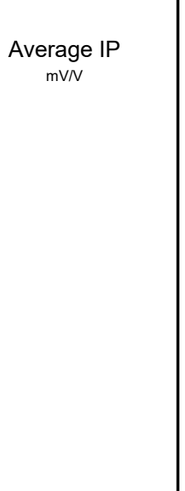
PETER E. WALCOTT & ASSOCIATES LIMITED

73+50 E

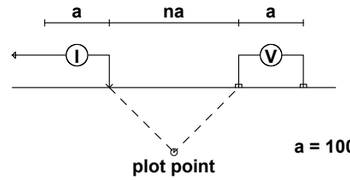








Pole-Dipole Array



Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

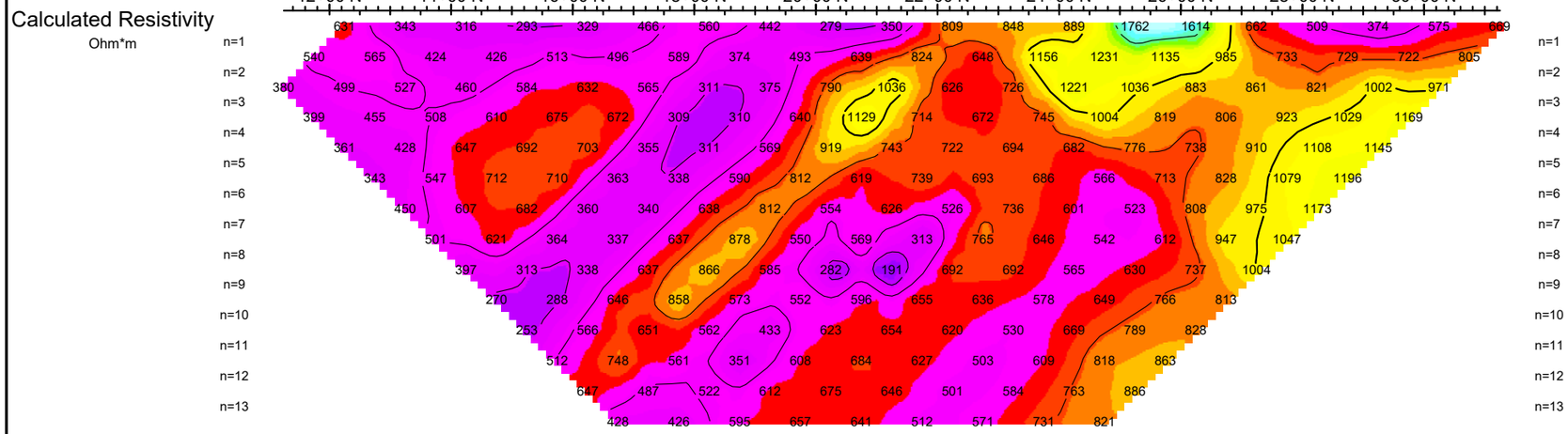
THOMPSON CREEK METALS COMPANY INC.

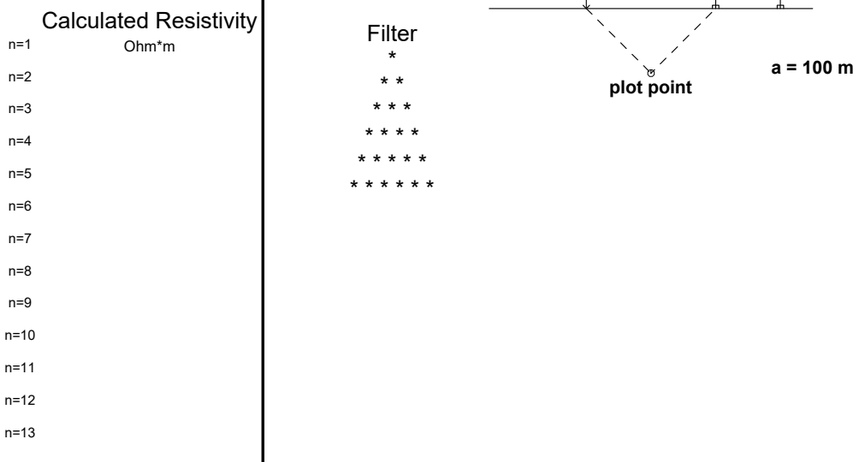
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

77+50 E



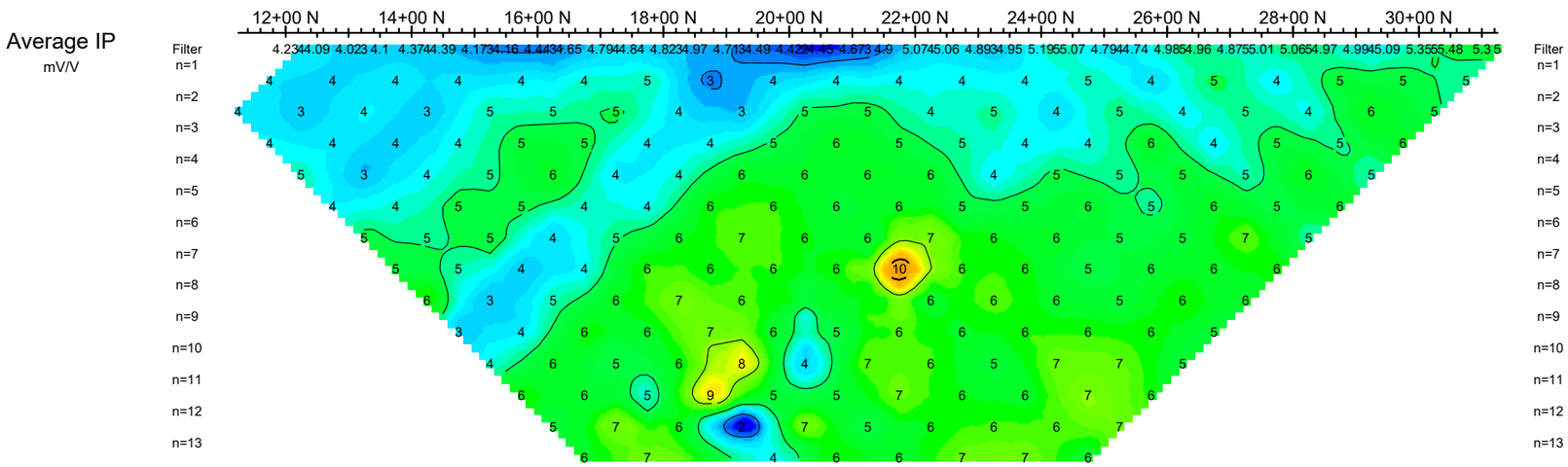


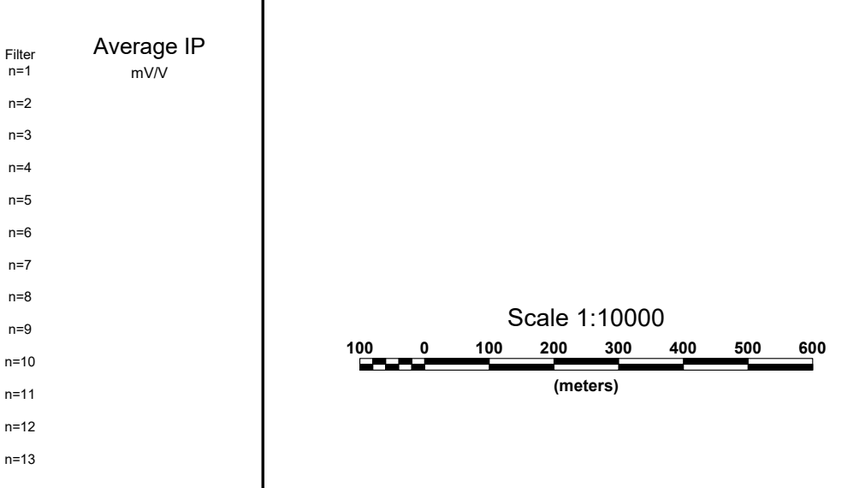
Pole-Dipole Array

a = 100 m

Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *





GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600

(meters)

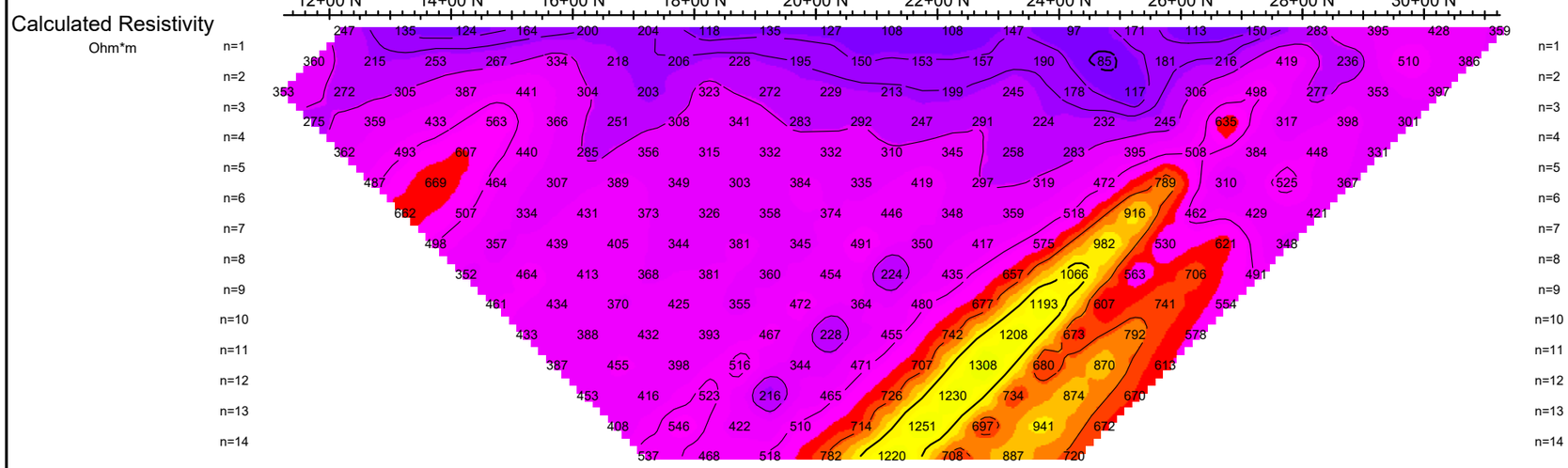
THOMPSON CREEK METALS COMPANY INC.

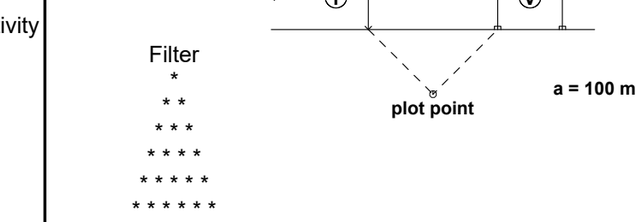
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

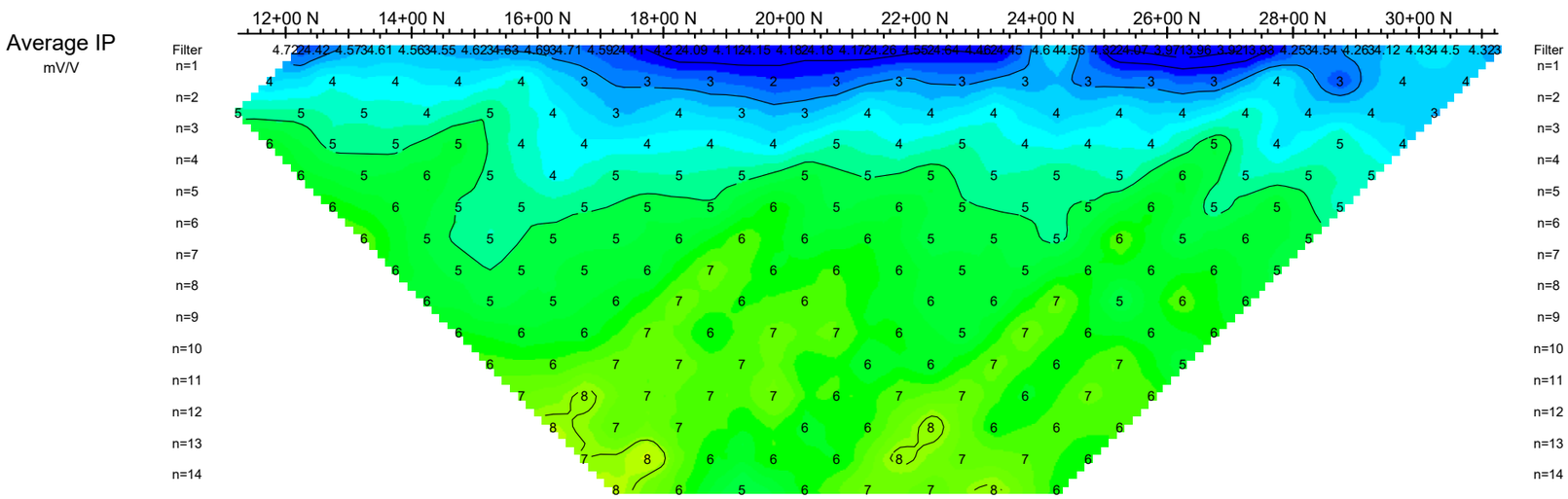
Date: November 2018
Interpretation:

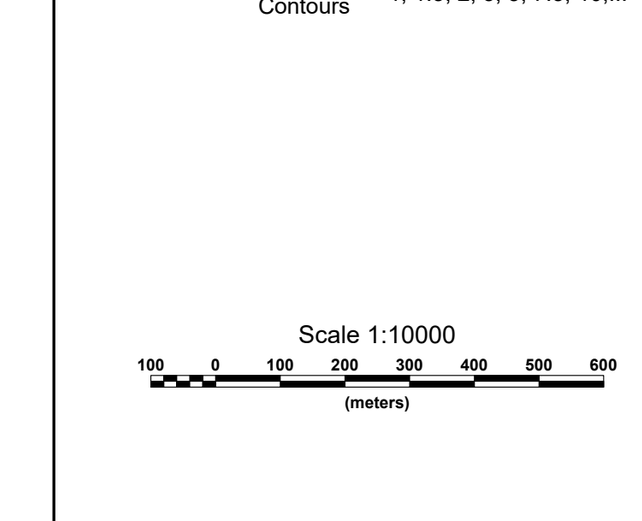
PETER E. WALCOTT & ASSOCIATES LIMITED

88+00 E









Pole-Dipole Array

Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600

(meters)

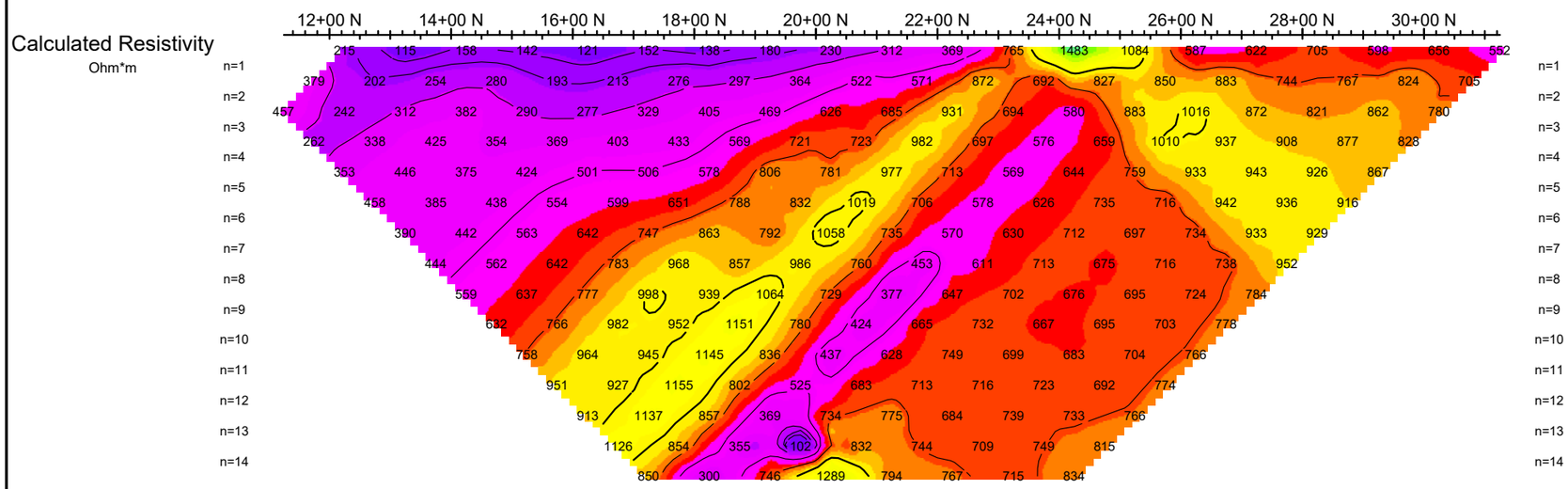
THOMPSON CREEK METALS COMPANY INC.

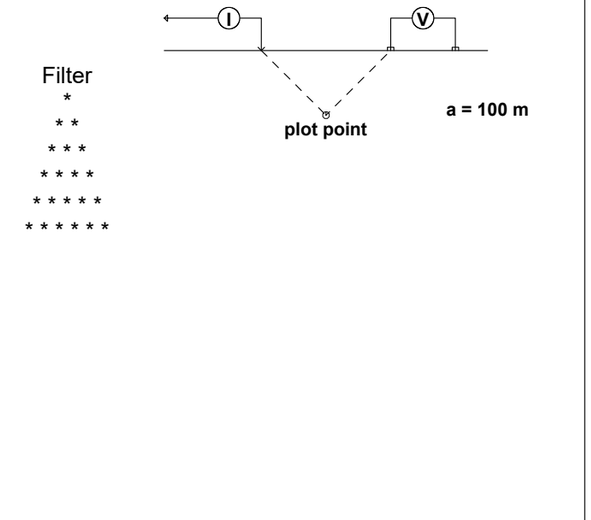
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

100+00 E

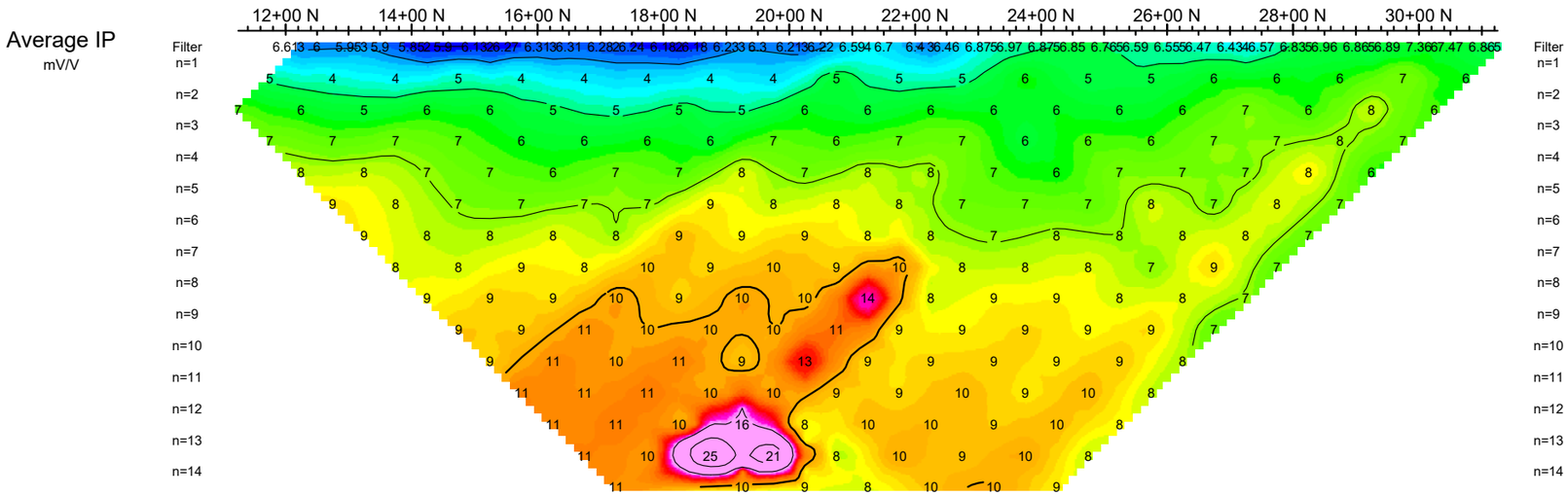


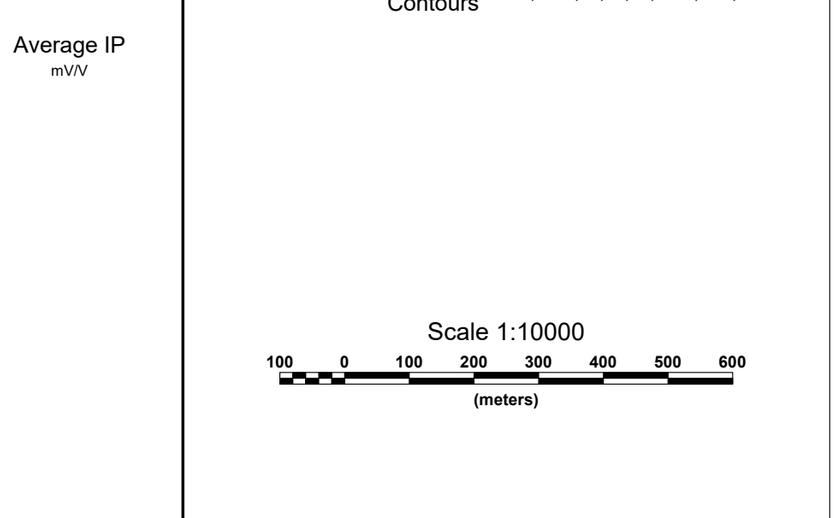


Pole-Dipole Array

Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *





GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600

(meters)

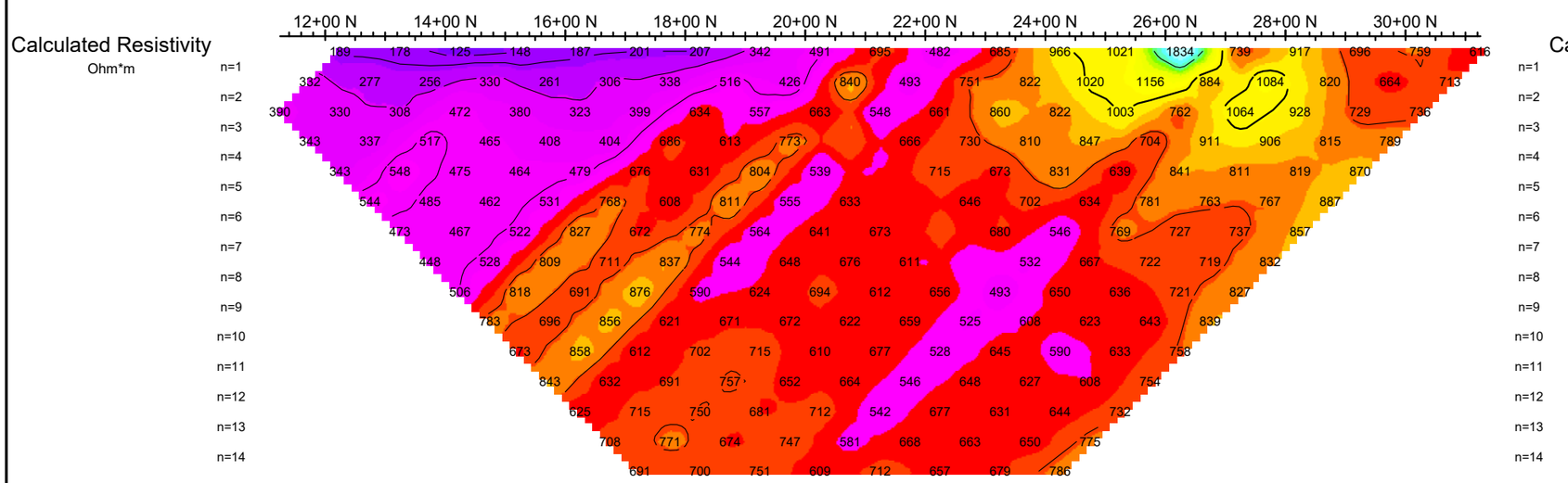
THOMPSON CREEK METALS COMPANY INC.

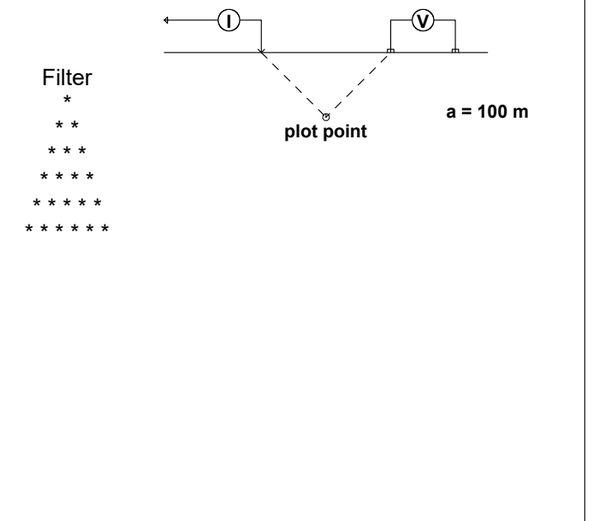
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

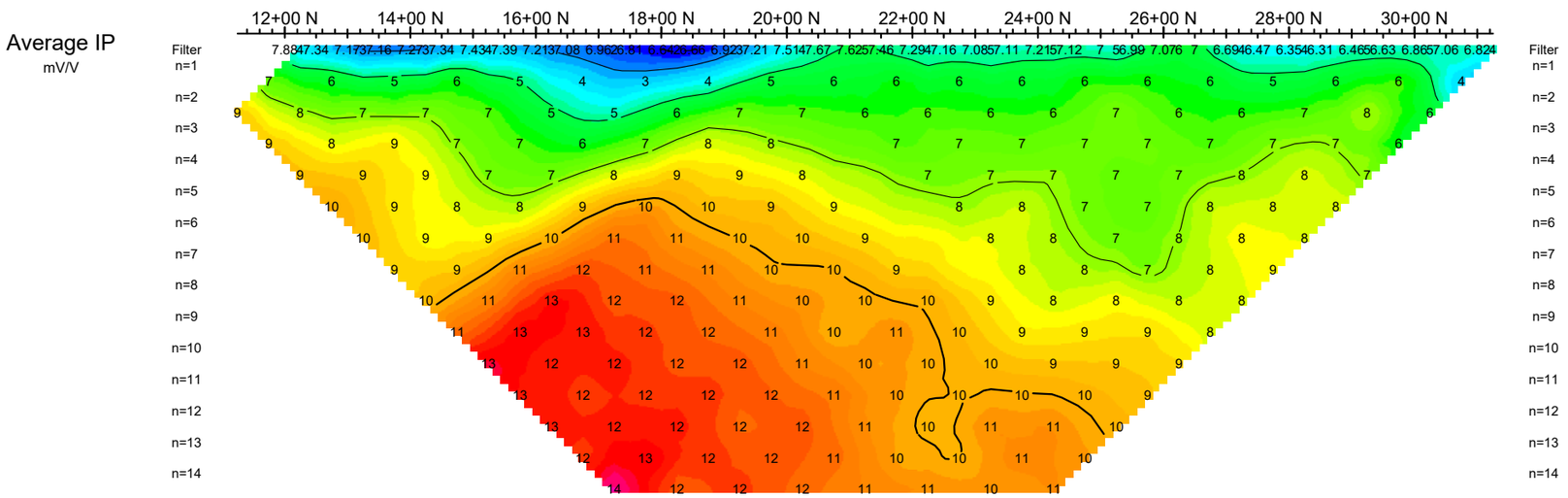
Date: November 2018
Interpretation:

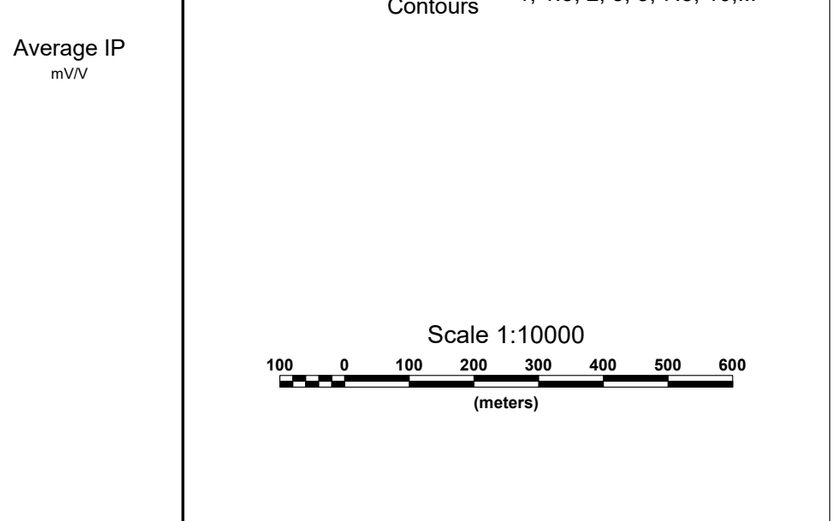
PETER E. WALCOTT & ASSOCIATES LIMITED

104+00 E









GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

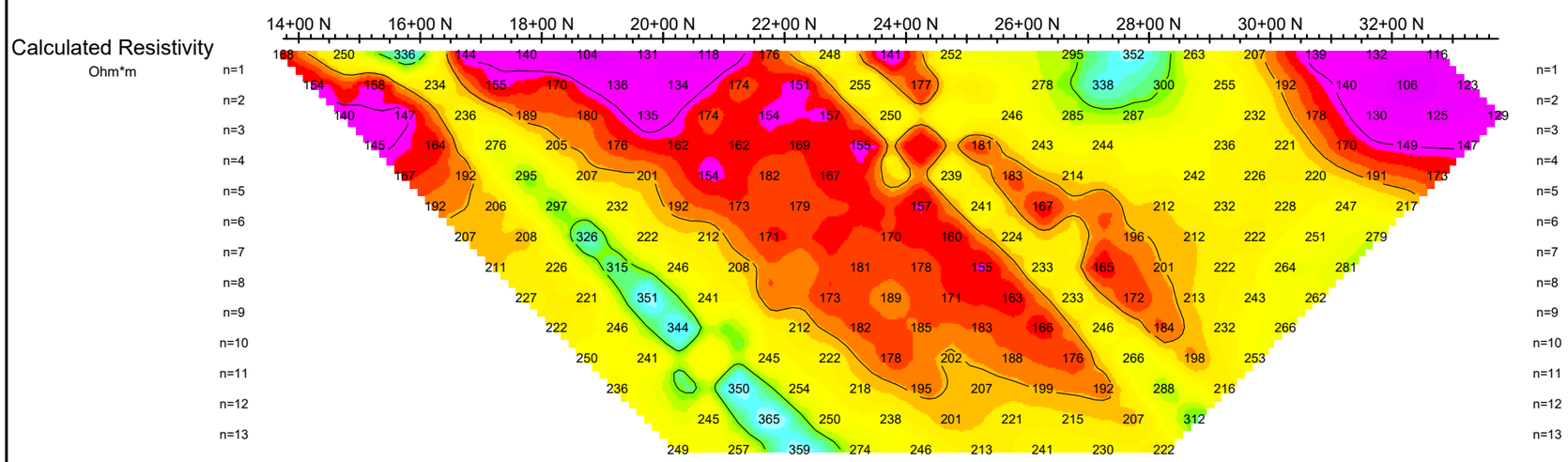
THOMPSON CREEK METALS COMPANY INC.

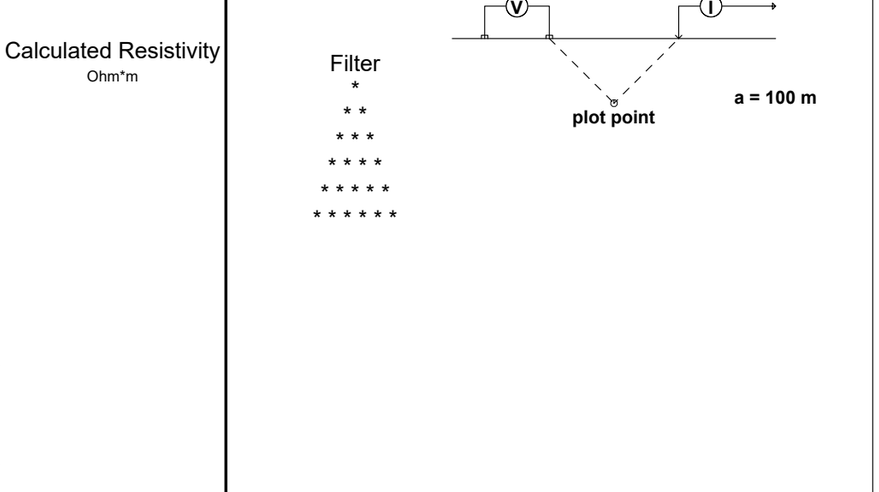
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

45+50 E



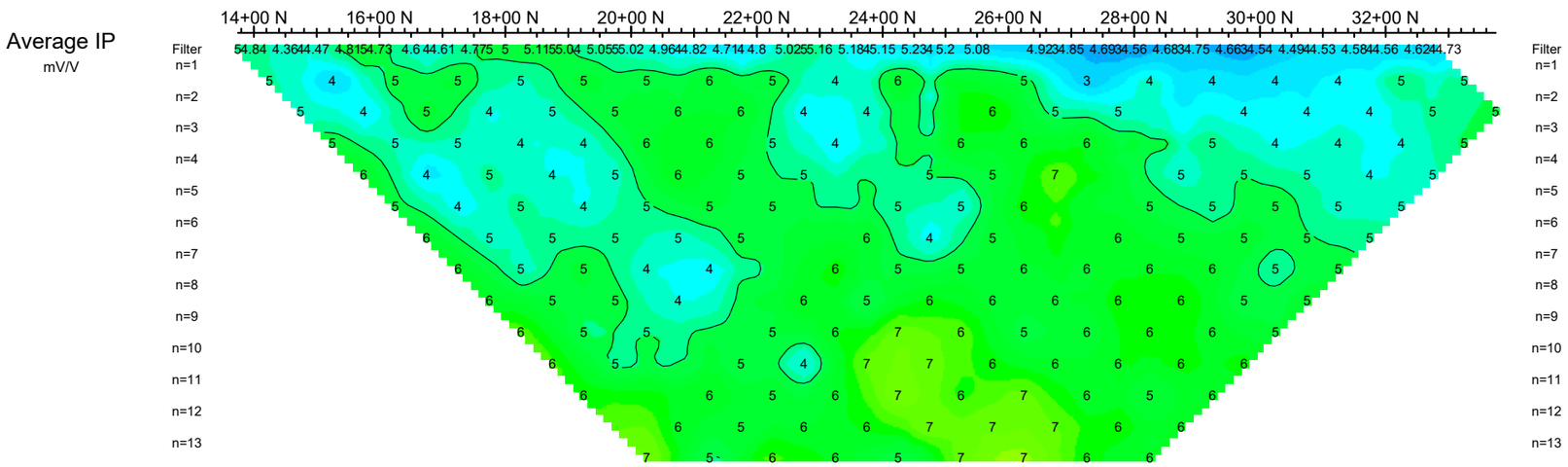


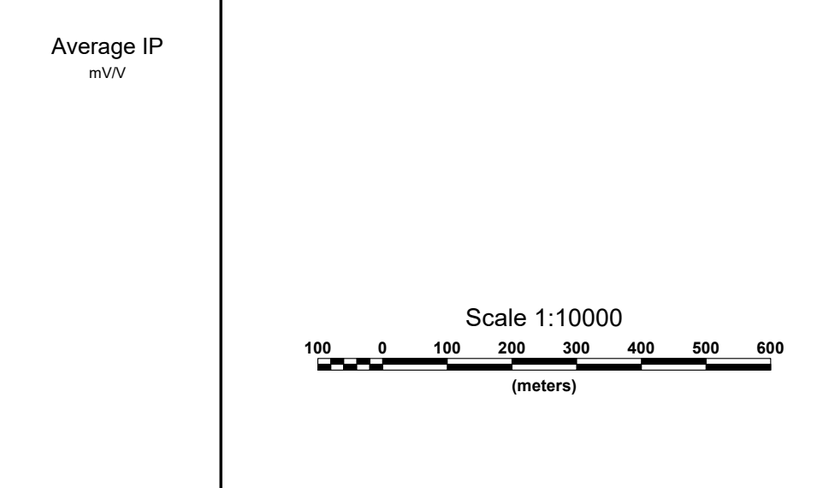
Dipole-Pole Array

a = 100 m

Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *





GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

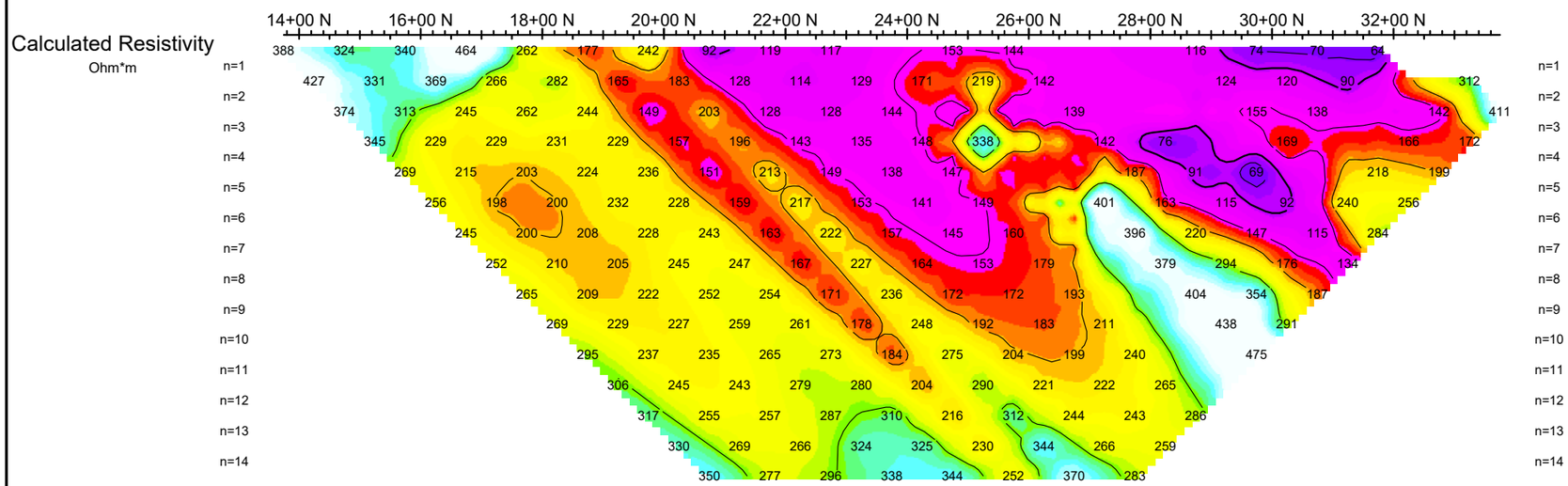
THOMPSON CREEK METALS COMPANY INC.

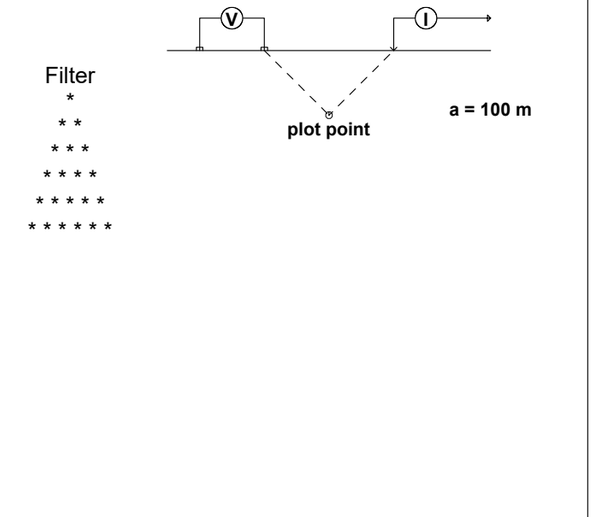
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

49+50 E

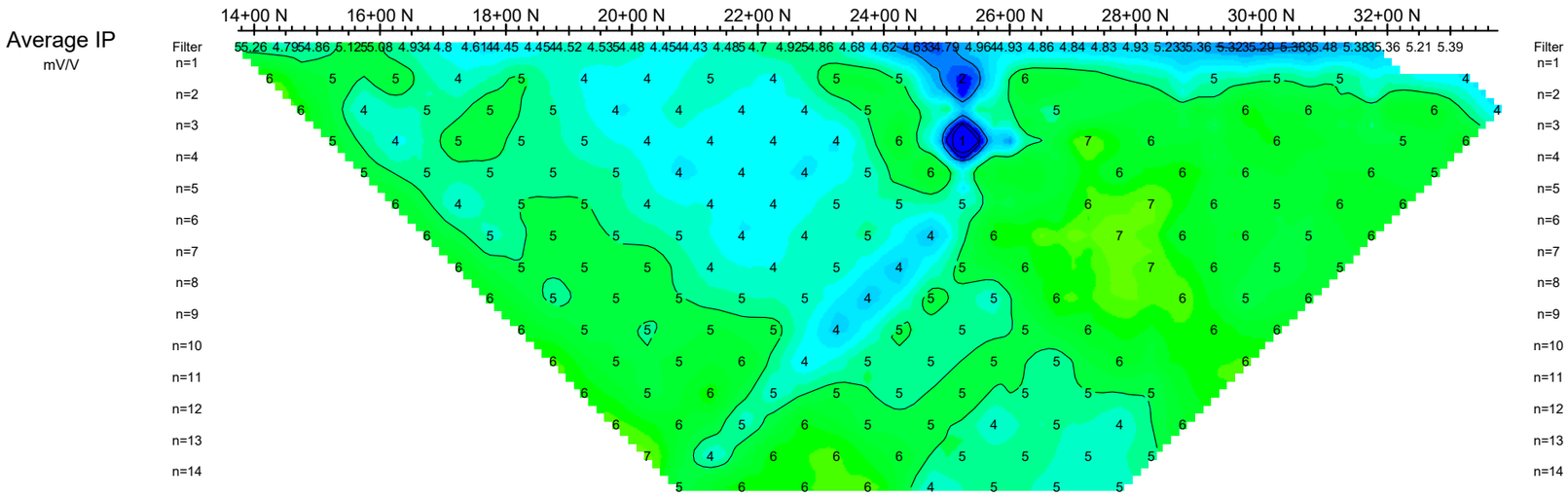




Dipole-Pole Array

Filter

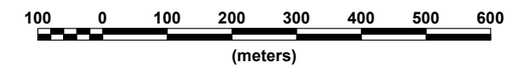
*
* *
* * *
* * * *
* * * * *
* * * * * *



GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000



THOMPSON CREEK METALS COMPANY INC.

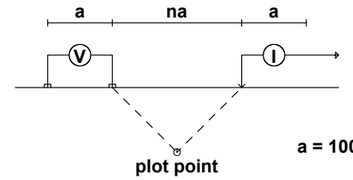
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

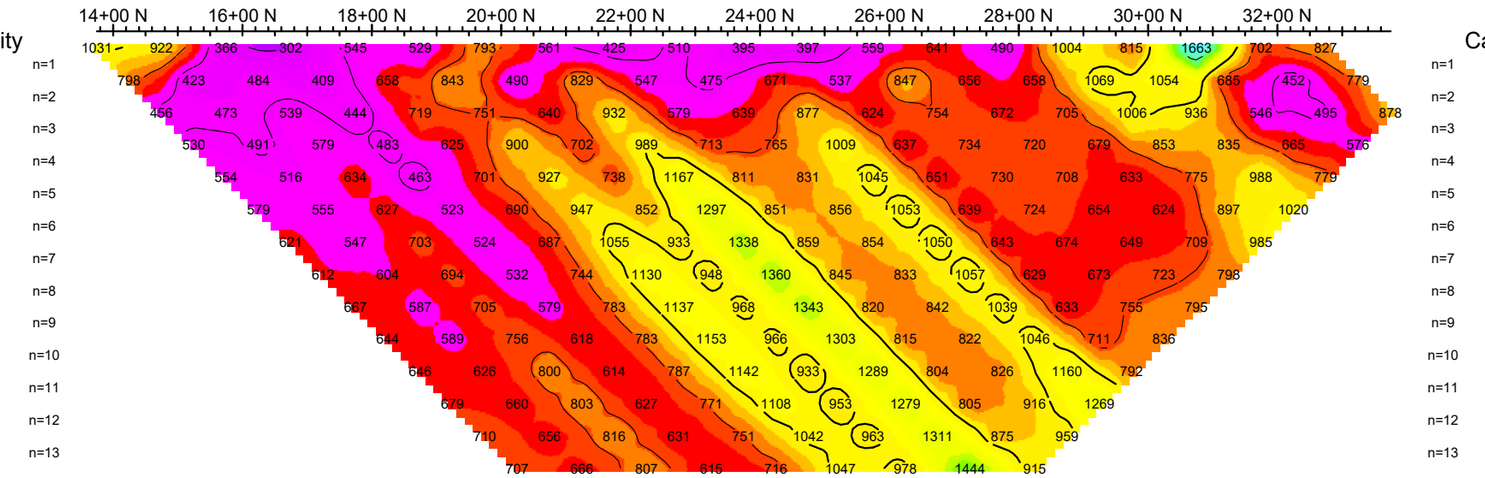
73+50 E

Dipole-Pole Array



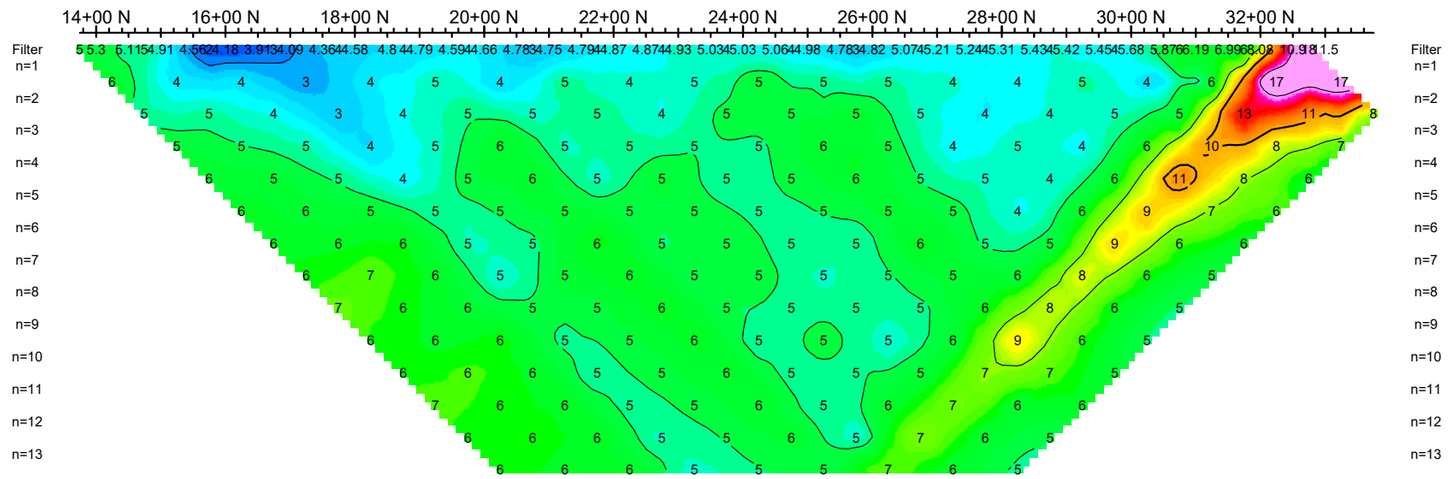
Filter
*
* *
* * *
* * * *
* * * * *
* * * * * *

Calculated Resistivity
Ohm*m



Calculated Resistivity
Ohm*m

Average IP
mV/V



Average IP
mV/V

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

THOMPSON CREEK METALS COMPANY INC.

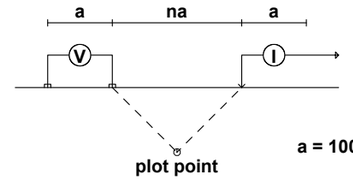
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

77+50 E

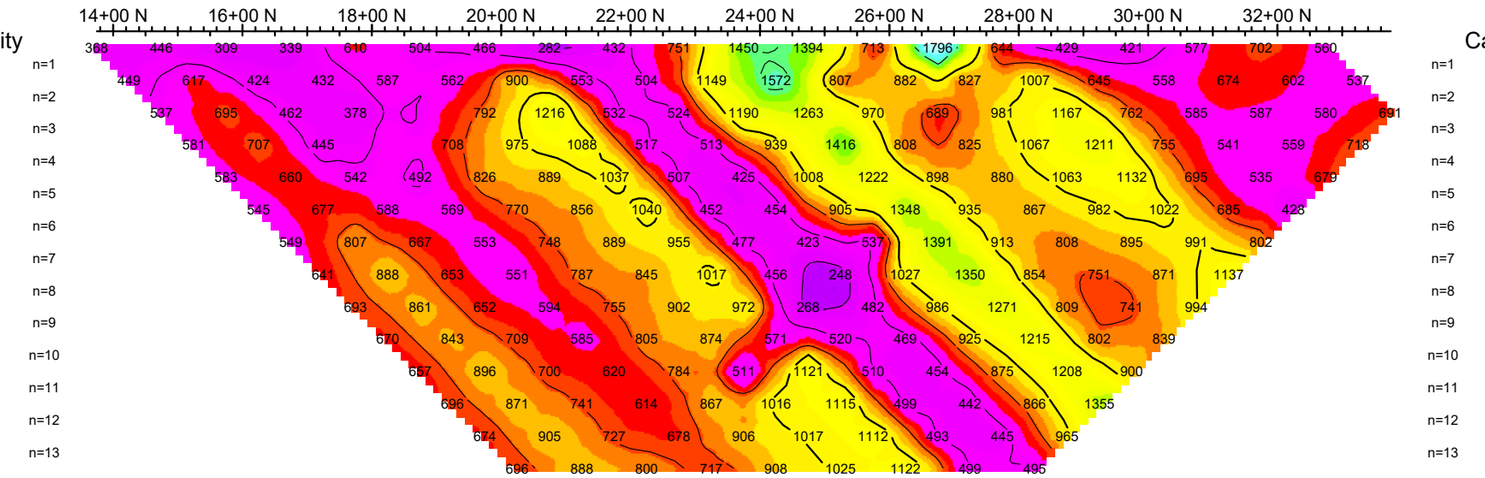
Dipole-Pole Array



Filter

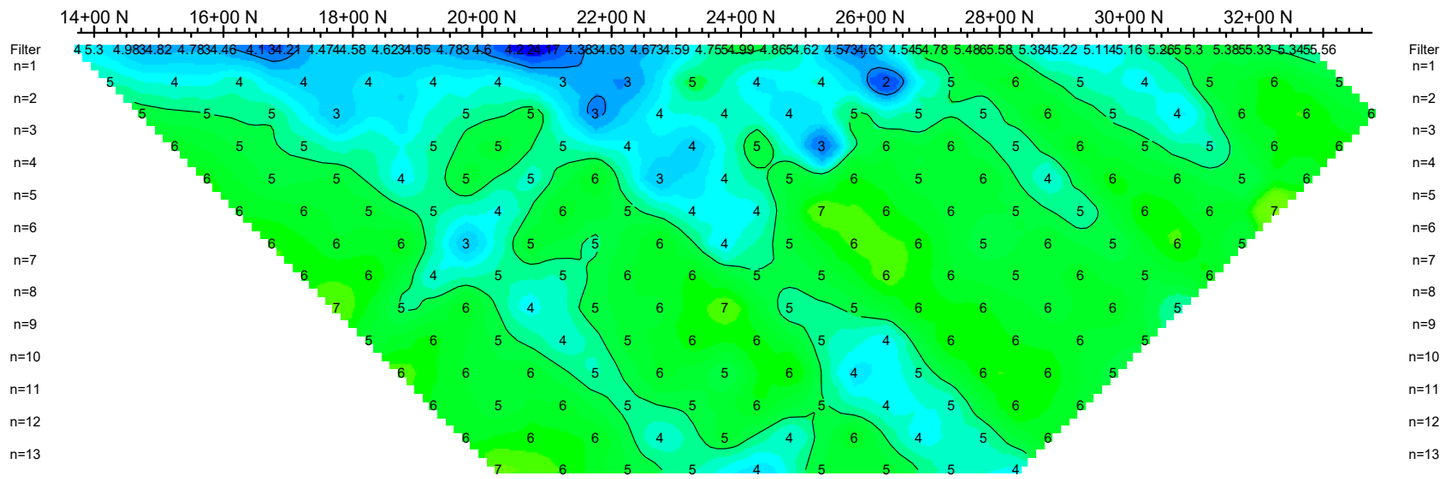
*
* *
* * *
* * * *
* * * * *
* * * * * *

Calculated Resistivity
Ohm*m



Calculated Resistivity
Ohm*m

Average IP
mV/V



Average IP
mV/V

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

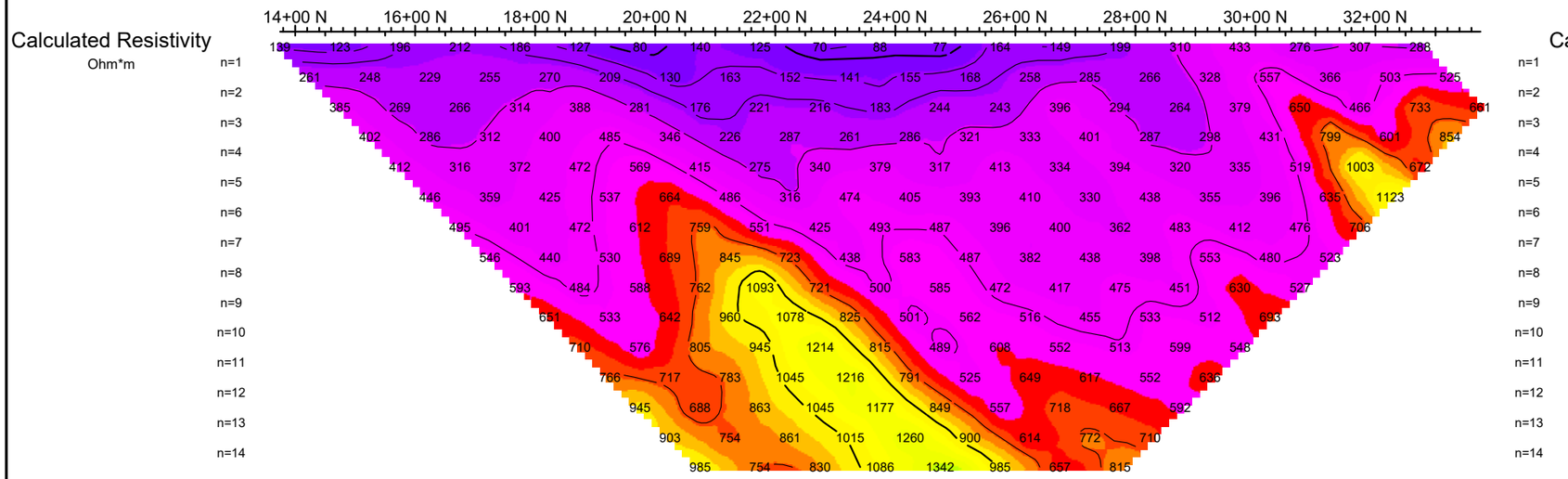
100 0 100 200 300 400 500 600
(meters)

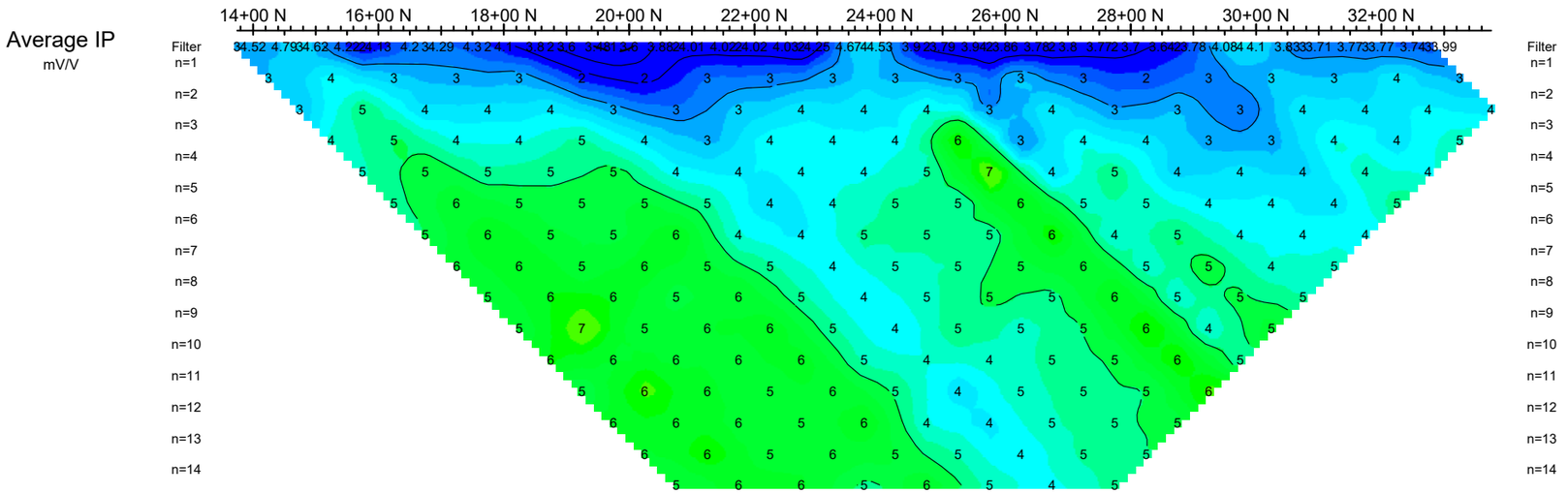
THOMPSON CREEK METALS COMPANY INC.

INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

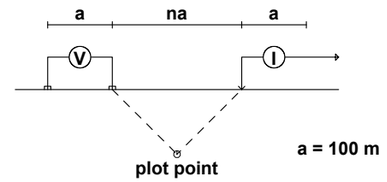
PETER E. WALCOTT & ASSOCIATES LIMITED





88+00 E

Dipole-Pole Array



Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

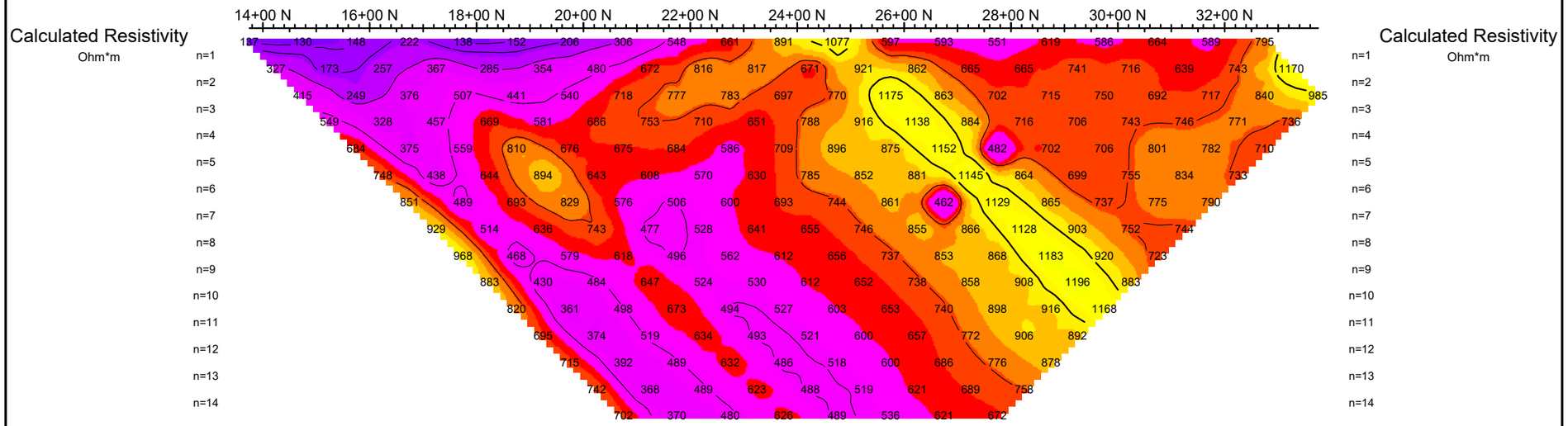
100 0 100 200 300 400 500 600
(meters)

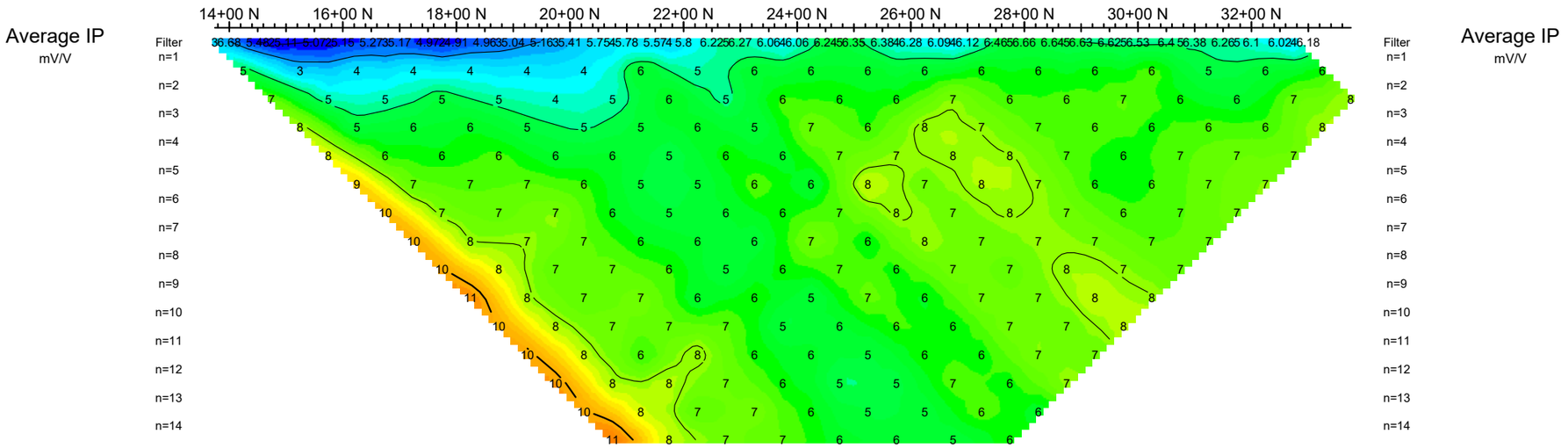
THOMPSON CREEK METALS COMPANY INC.

INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

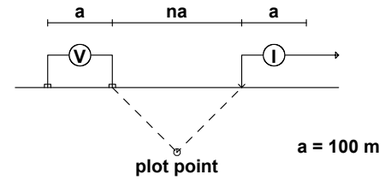
PETER E. WALCOTT & ASSOCIATES LIMITED





100+00 E

Dipole-Pole Array



Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *

GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

THOMPSON CREEK METALS COMPANY INC.

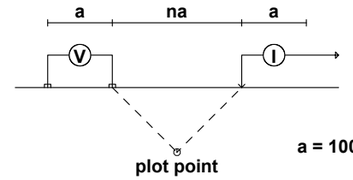
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

PETER E. WALCOTT & ASSOCIATES LIMITED

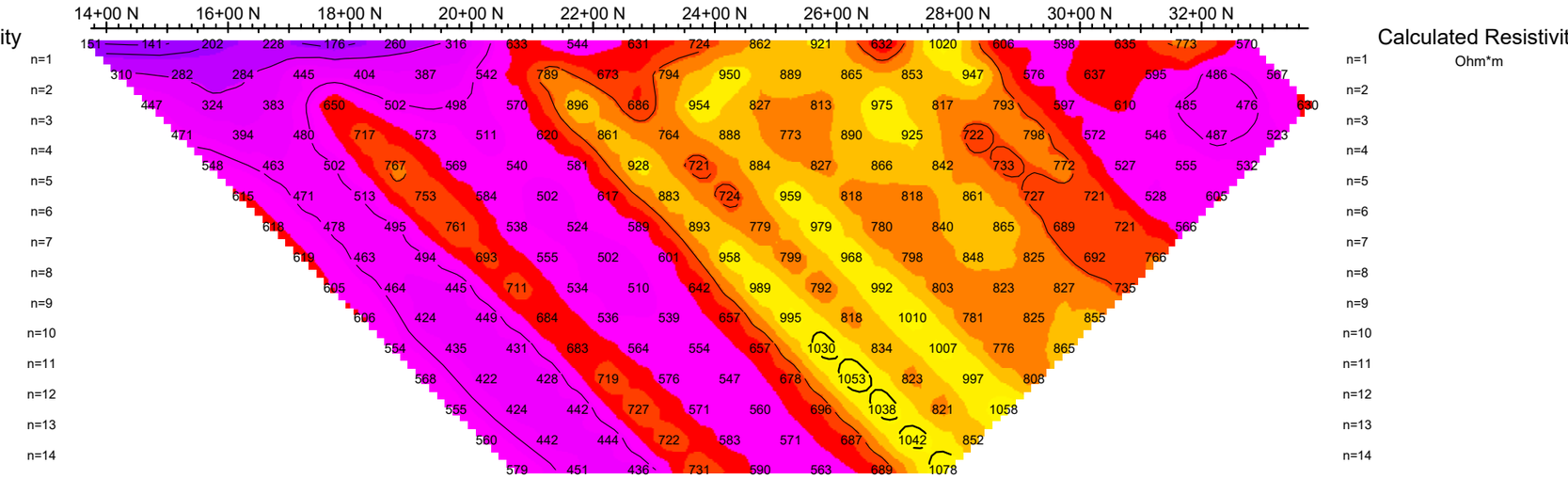
104+00 E

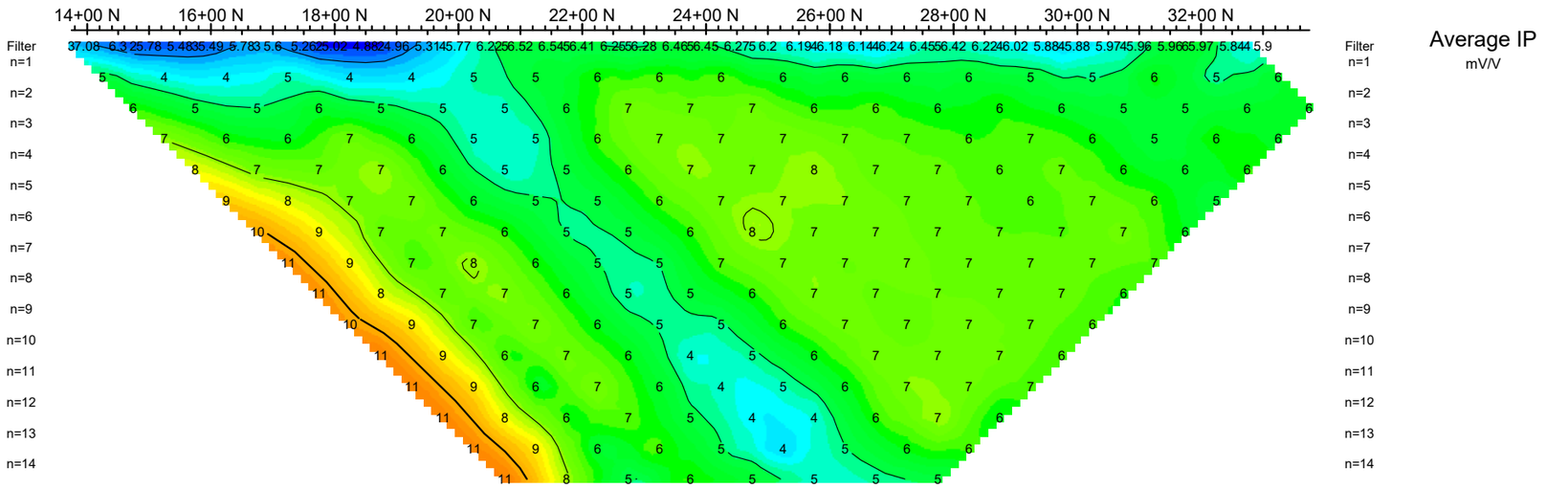
Dipole-Pole Array



Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *





GDD GRX8 x 2
& WALCER 9 kw Tx
Frequency: 0.125 Hz.
Operators:

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

THOMPSON CREEK METALS COMPANY INC.

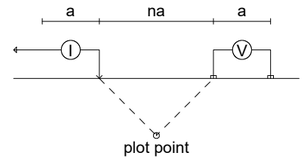
INDUCED POLARIZATION SURVEY
ENDAKO PROJECT

Date: November 2018
Interpretation:

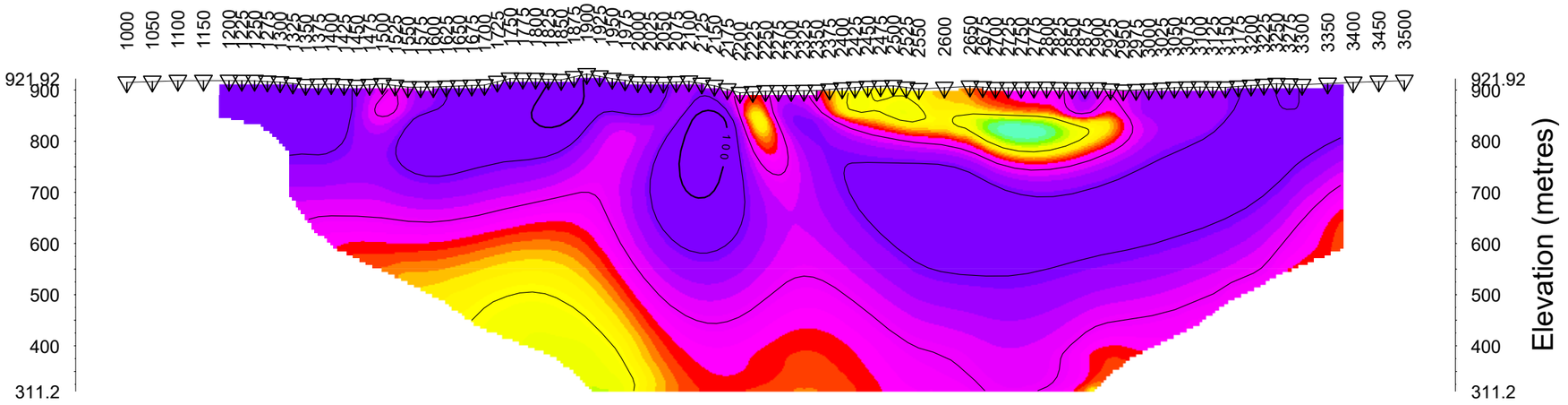
PETER E. WALCOTT & ASSOCIATES LIMITED

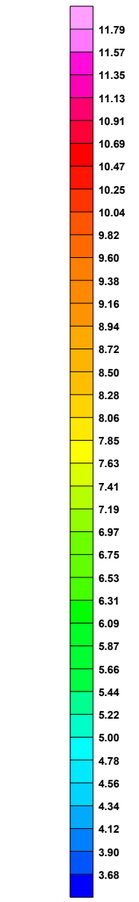
Line 4550

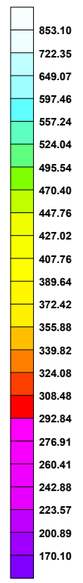
Pole-Dipole Array



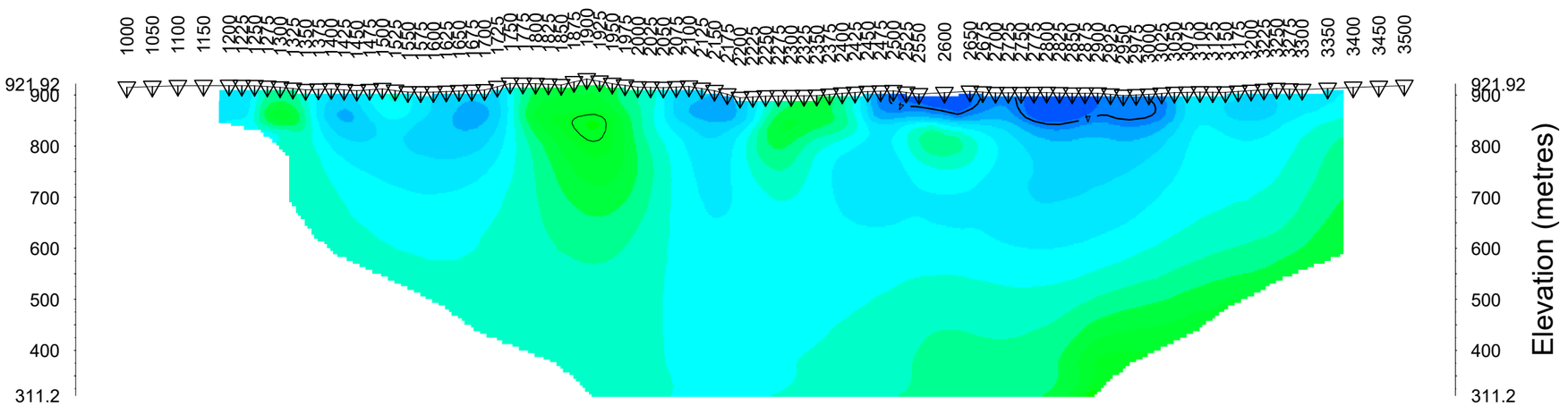
Modelled Resistivity (Ohm-m)







Modelled Chargeability (mV/V)



Scale 1:10000

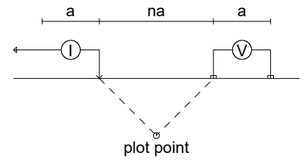
100 0 100 200 300 400 500 600 700

(meters)

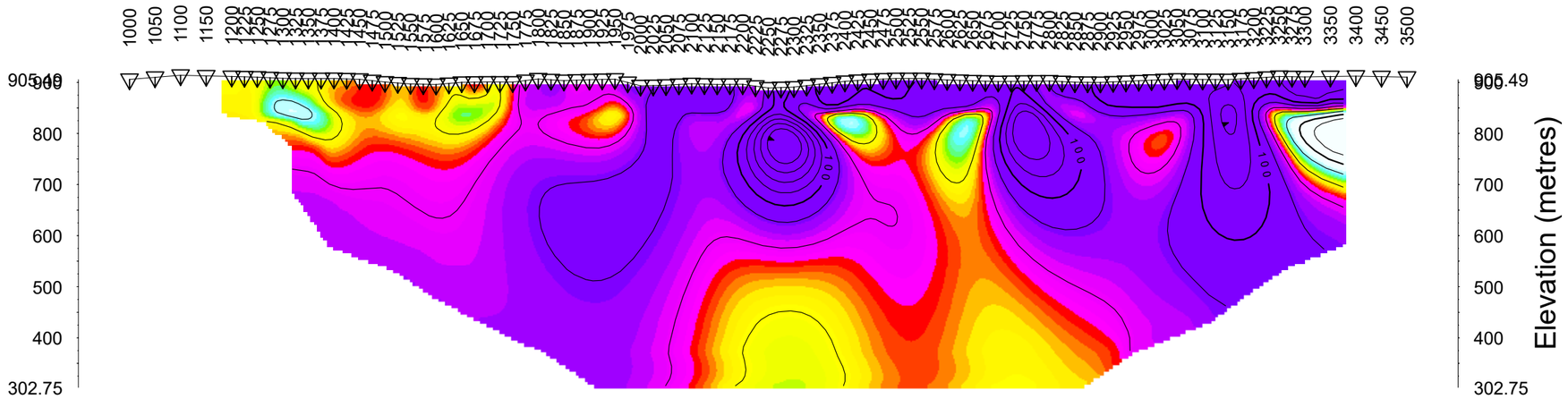
THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 4950

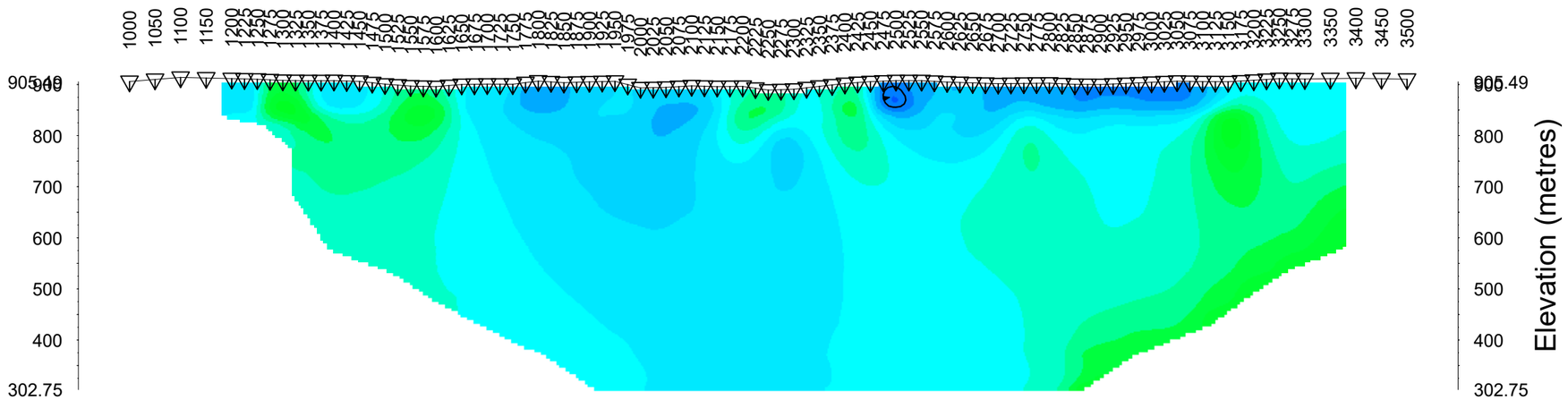
Pole-Dipole Array

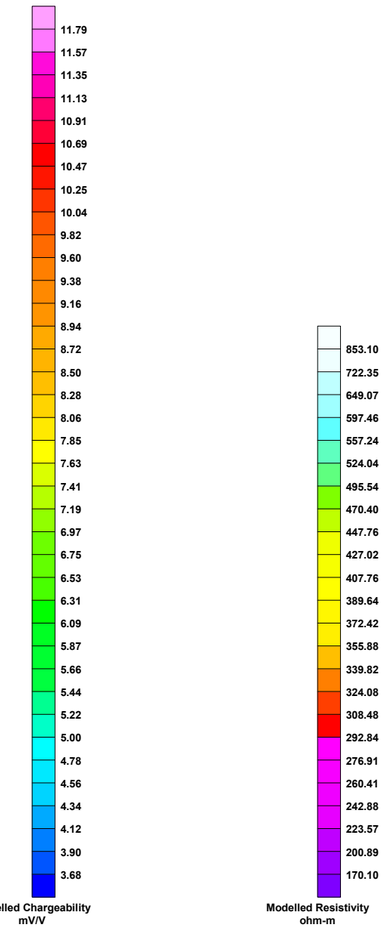


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





Scale 1:10000

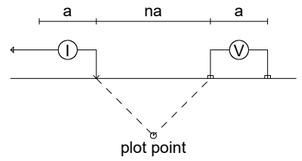
100 0 100 200 300 400 500 600 700

(meters)

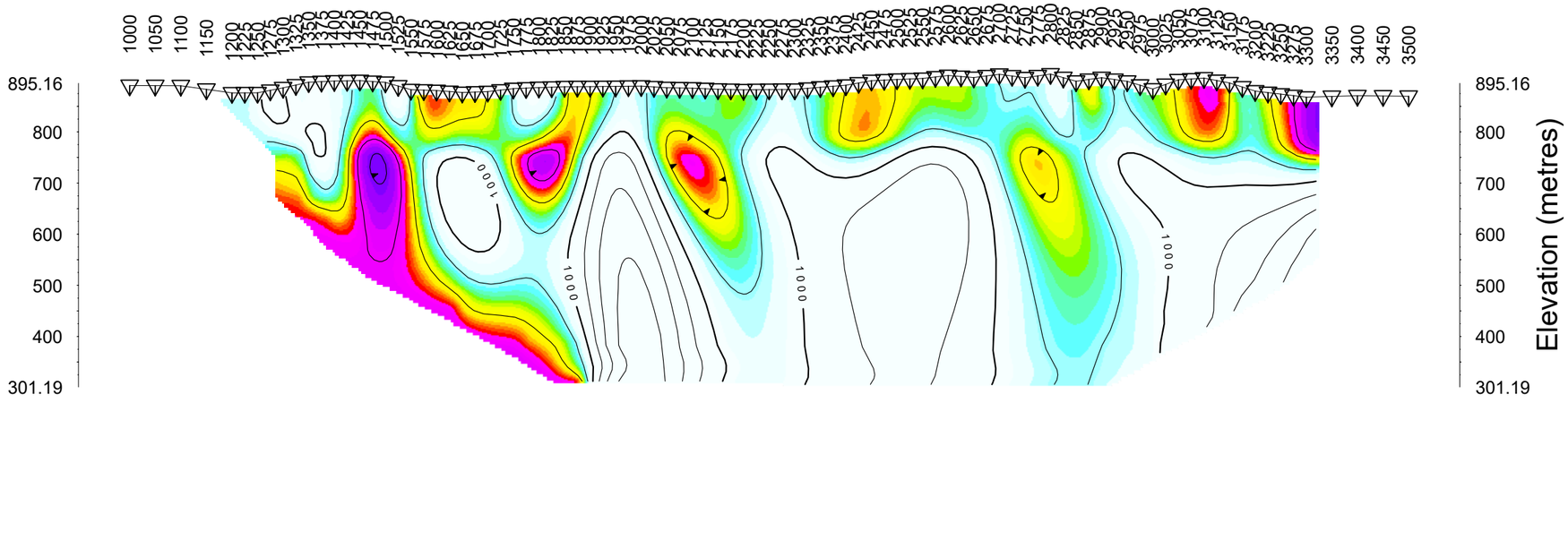
THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 7350

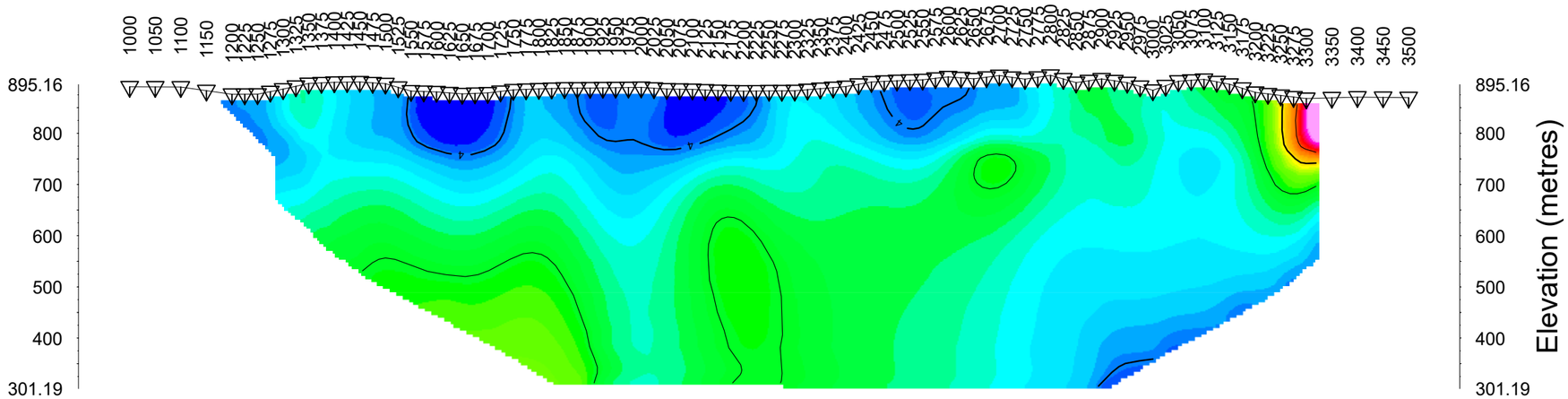
Pole-Dipole Array

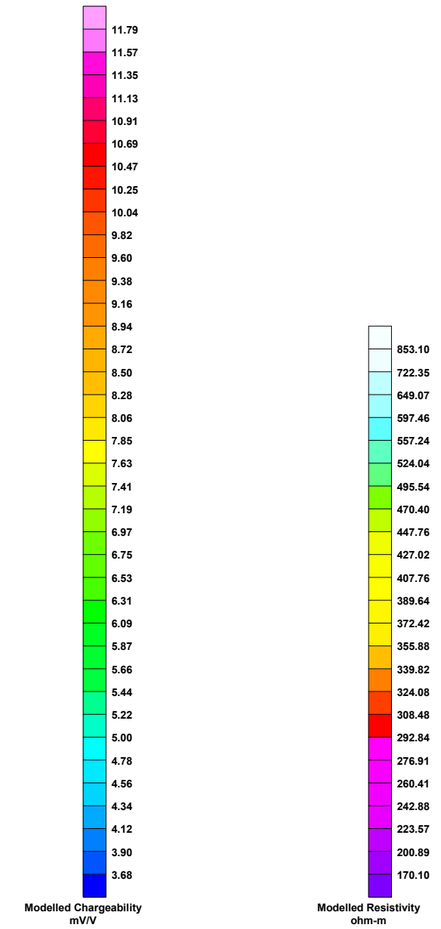


Modelled Resistivity (Ohm-m)

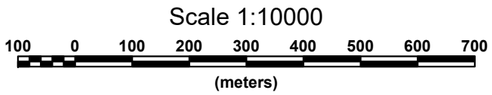


Modelled Chargeability (mV/V)





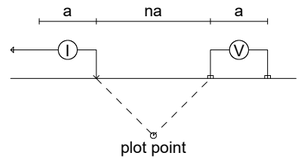
Scale 1:10000



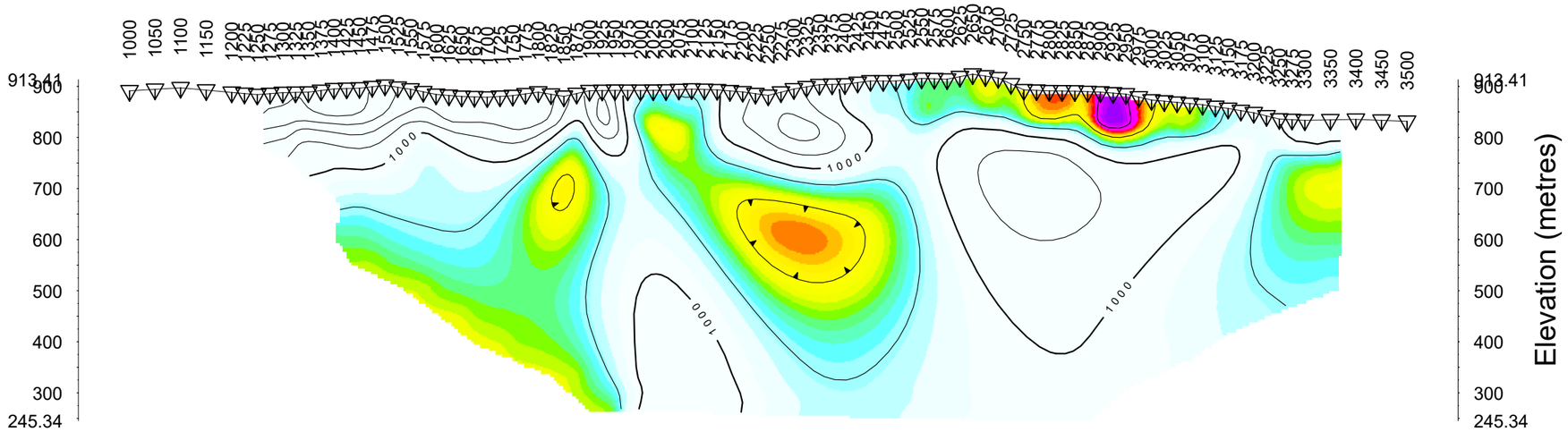
THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 7750

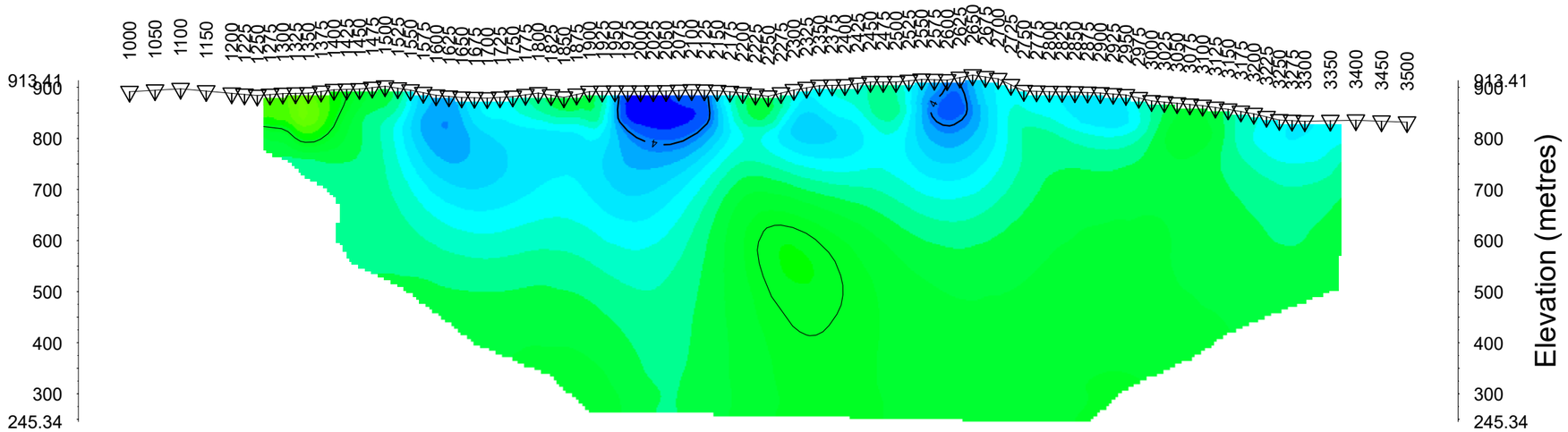
Pole-Dipole Array

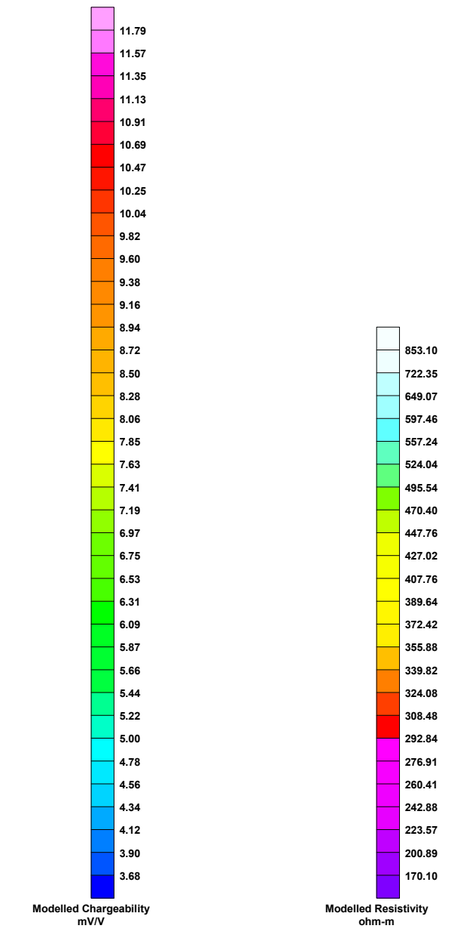


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





Scale 1:10000

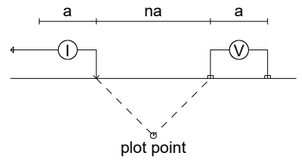
100 0 100 200 300 400 500 600 700

(meters)

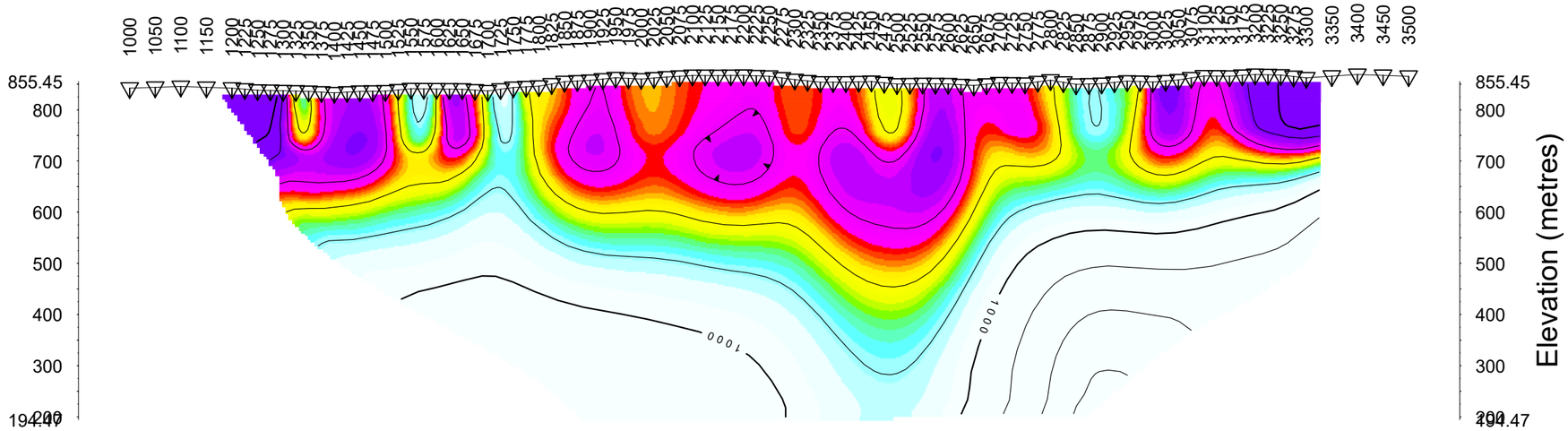
THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 8800

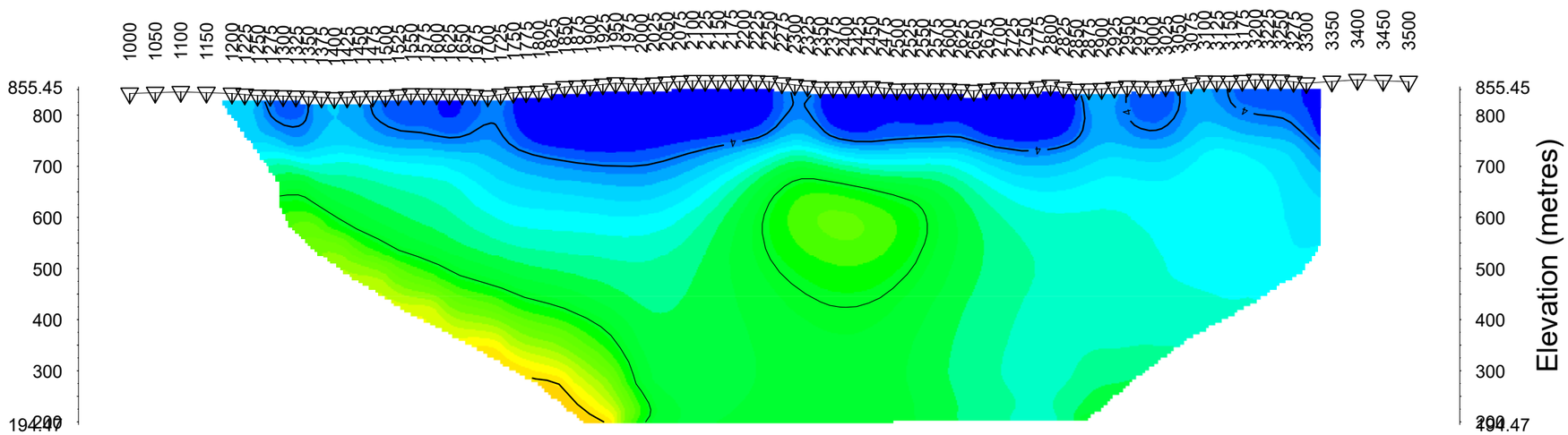
Pole-Dipole Array

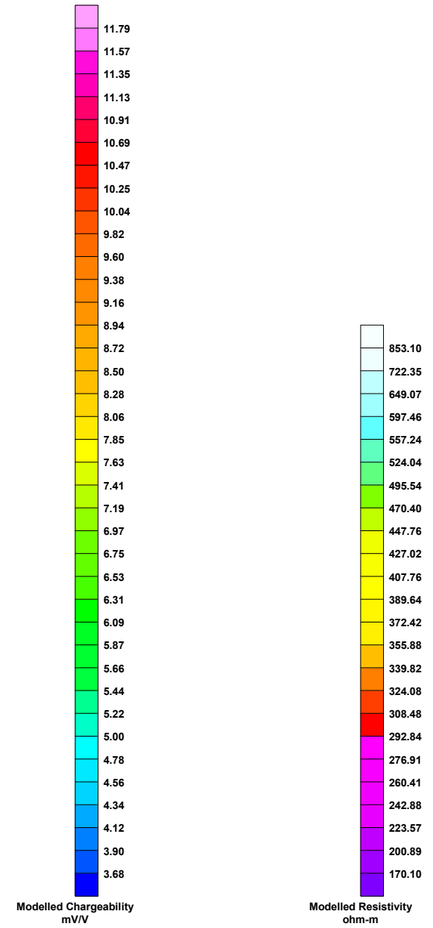


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





Scale 1:10000

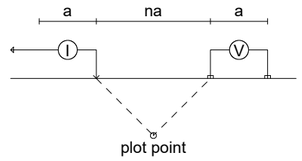
100 0 100 200 300 400 500 600 700

(meters)

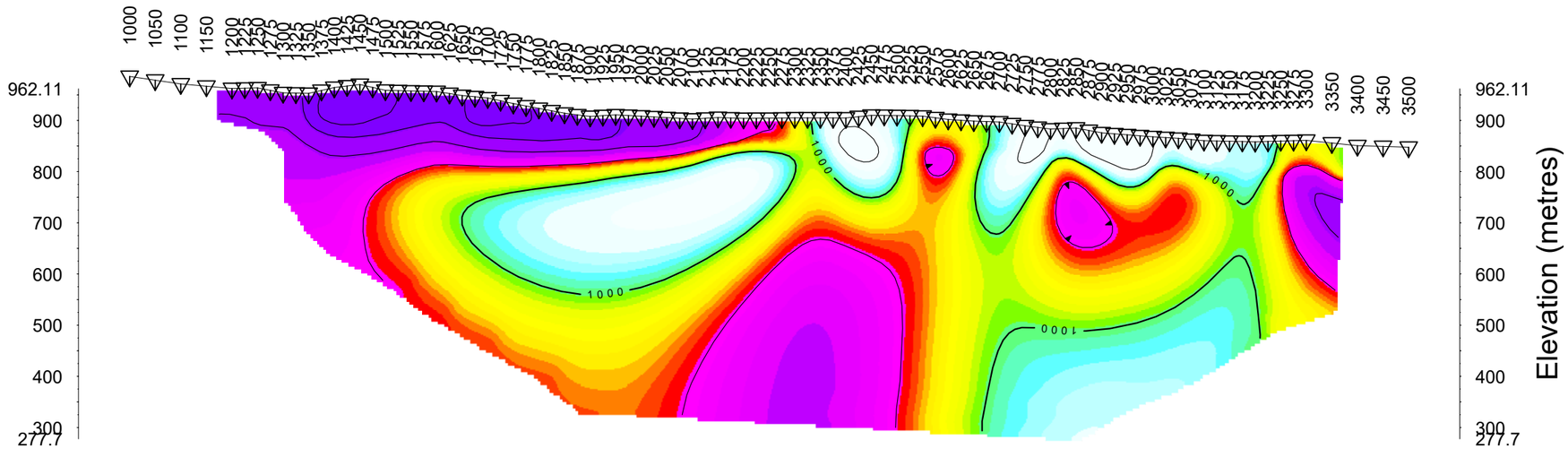
THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 10000

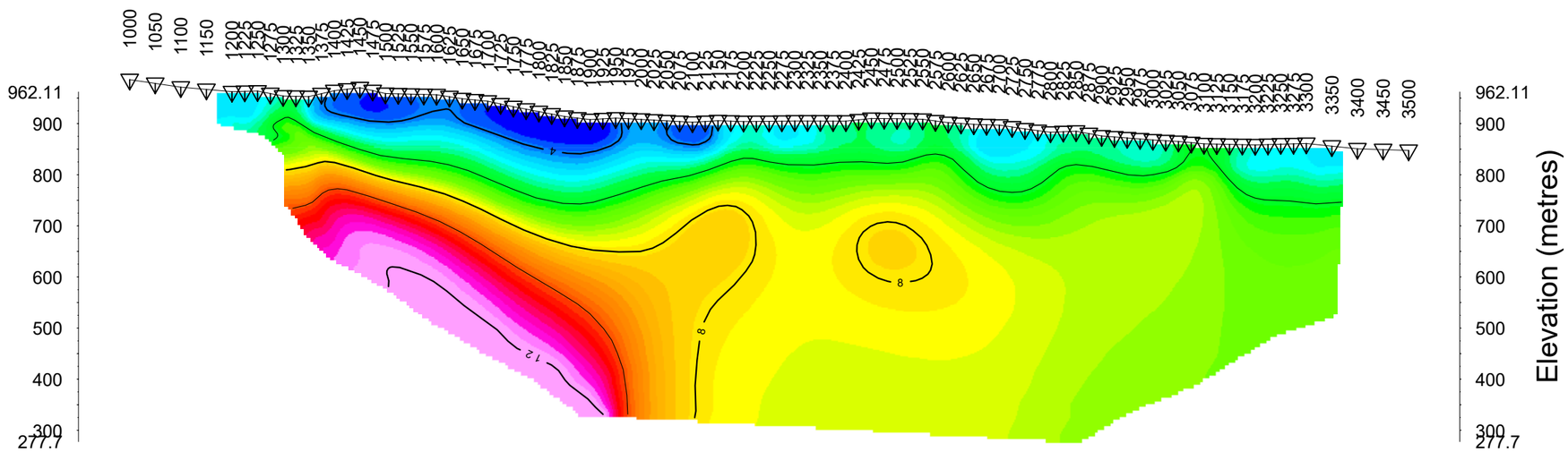
Pole-Dipole Array

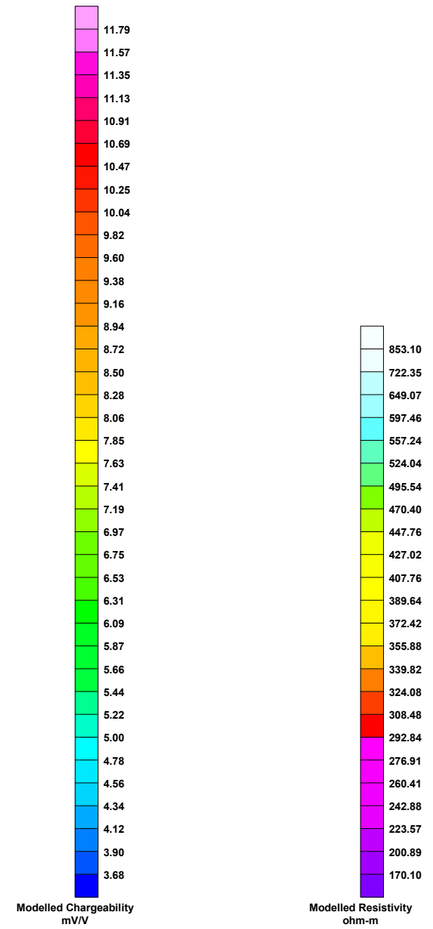


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





Scale 1:10000

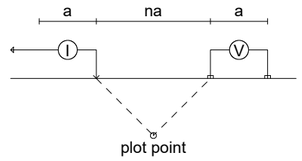
100 0 100 200 300 400 500 600 700

(meters)

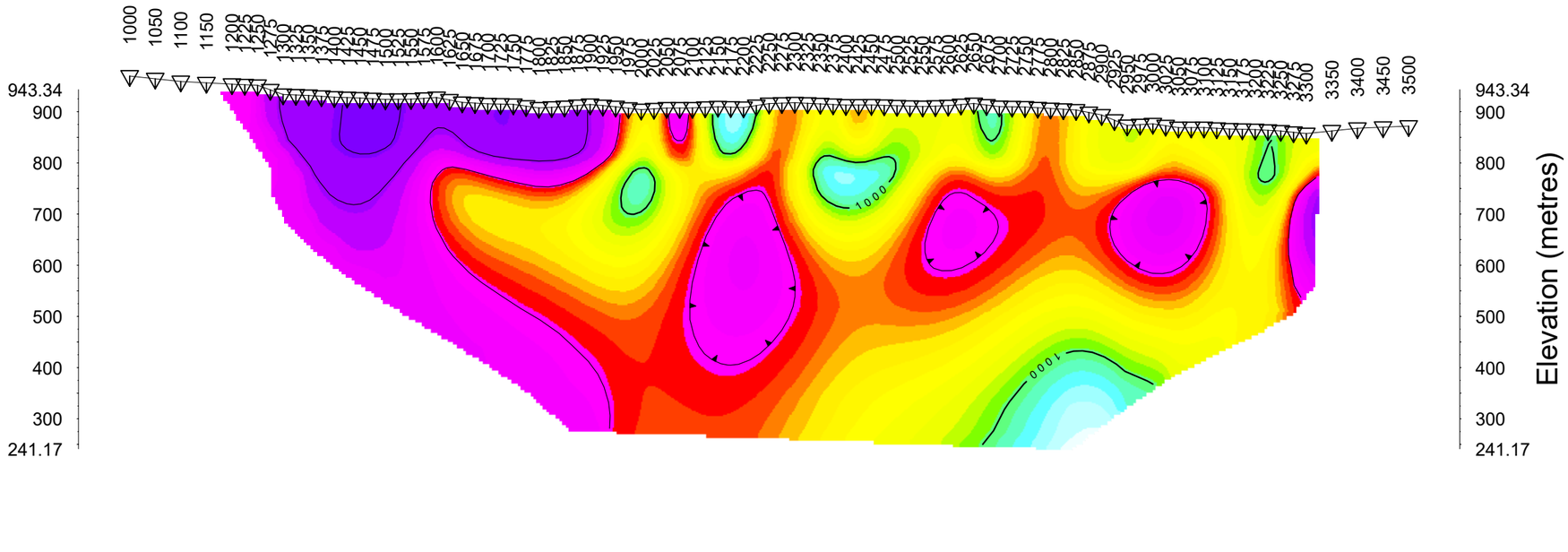
THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 10400

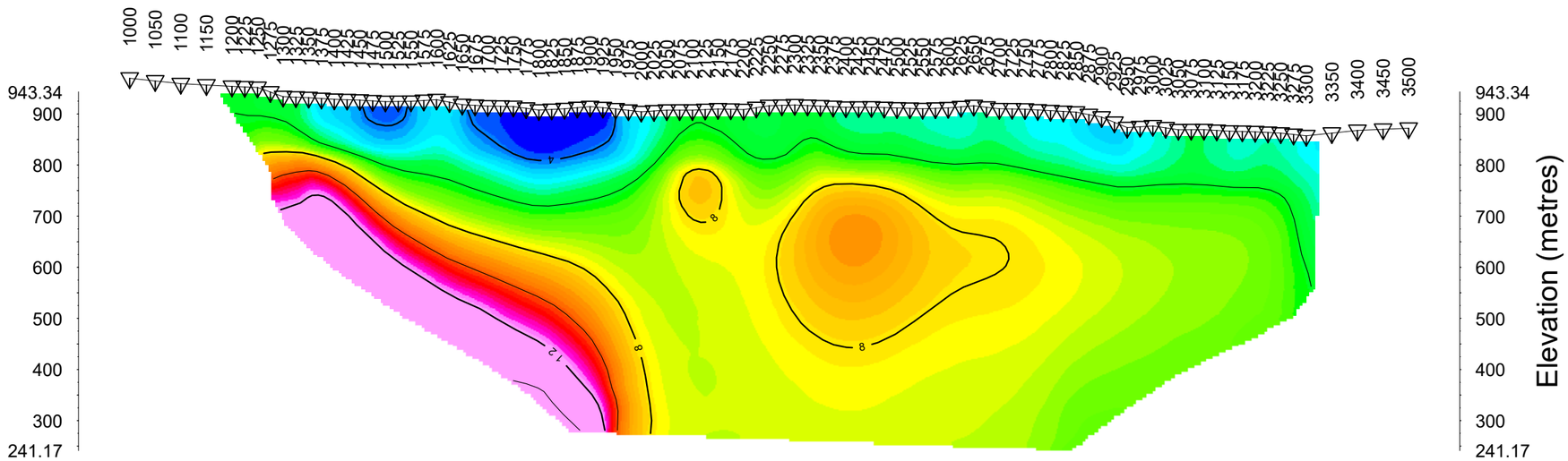
Pole-Dipole Array

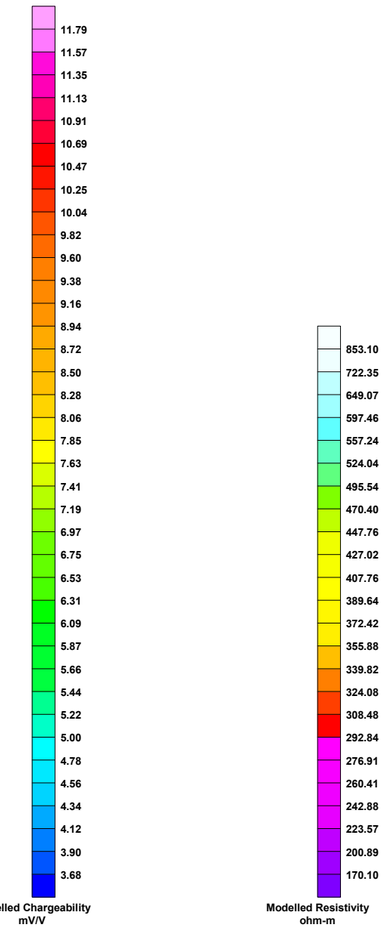


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





Scale 1:10000

100 0 100 200 300 400 500 600 700

(meters)

THOMPSON CREEK METALS COMPANY INC.
INDUCED POLARIZATION SURVEY ENDAKO PROJECT BRITISH COLUMBIA
Date: NOVEMBER 2018 RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED