

**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)]: Geophysical****TOTAL COST: 1650.00****AUTHOR(S):** Walcott, A., Walcott P**SIGNATURE(S):** \_\_\_\_\_**NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):** \_\_\_\_\_**YEAR OF WORK: 2016****STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):** 5604336**PROPERTY NAME:** 514083**CLAIM NAME(S) (on which the work was done):** 514083**COMMODITIES SOUGHT:** Copper, Gold, Silver**MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:** 092ISE063**MINING DIVISION:** Nicola**NTS/BCGS:** 92I/07**LATITUDE:** 50 ° 20.12' "    **LONGITUDE:** 120 ° 51.79' "    **(at centre of work)****OWNER(S):**1) Lepinski, John      2) \_\_\_\_\_**MAILING ADDRESS:**1000 Austin AveCoquitlam, B.C., V3K 3P1**OPERATOR(S) [who paid for the work]:**1) As Above      2) \_\_\_\_\_**MAILING ADDRESS:****PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):****REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:** 4043,14978

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 Inversion	514083		1650.00
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:	1650.00

**EVENT #5604336**  
**AN ASSESSMENT REPORT**  
**ON**  
**INDUCED POLARIZATION MODELING**  
**514083 PROPERTY**  
**MERRITT AREA, BRITISH COLUMBIA**  
**NICOLA M.D.**  
**50° 20.12'N, 120° 51.79'W**  
**NTS 92I/ 7**

**Claims: 514083**  
**Work Dates: February 15<sup>th</sup> – 19<sup>th</sup>, 2016**

**FOR**  
**JOHN LEPINSKI**  
**COQUITLAM, BRITISH COLUMBIA**

**BY**  
**ALEXANDER WALCOTT, B.Sc**  
**PETER E. WALCOTT, P.Eng.**

**PETER E. WALCOTT & ASSOCIATES LIMITED**  
**Coquitlam, British Columbia**

**AUGUST 2016**

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## APPENDIX I

- Cost of Project
- Personnel Employed on Project
- Certification
- Claim List
- References

## ACCOMPANYING MAPS

Claim and Historic Line Location Map                      Scale 1:10,000

2D Inverted Sections

46000N, 46400N, 46800N, 47200N, 47600N, 48000N  
48400N, 48800N, 49200N, 50400N                      Scale 1: 5,000

## **INTRODUCTION.**

Between February 15<sup>th</sup> to 19<sup>th</sup>, 2016, Peter E. Walcott & Associates Limited undertook a data review and induced polarization modelling over tenure number 514083 for John B. Lepinski.

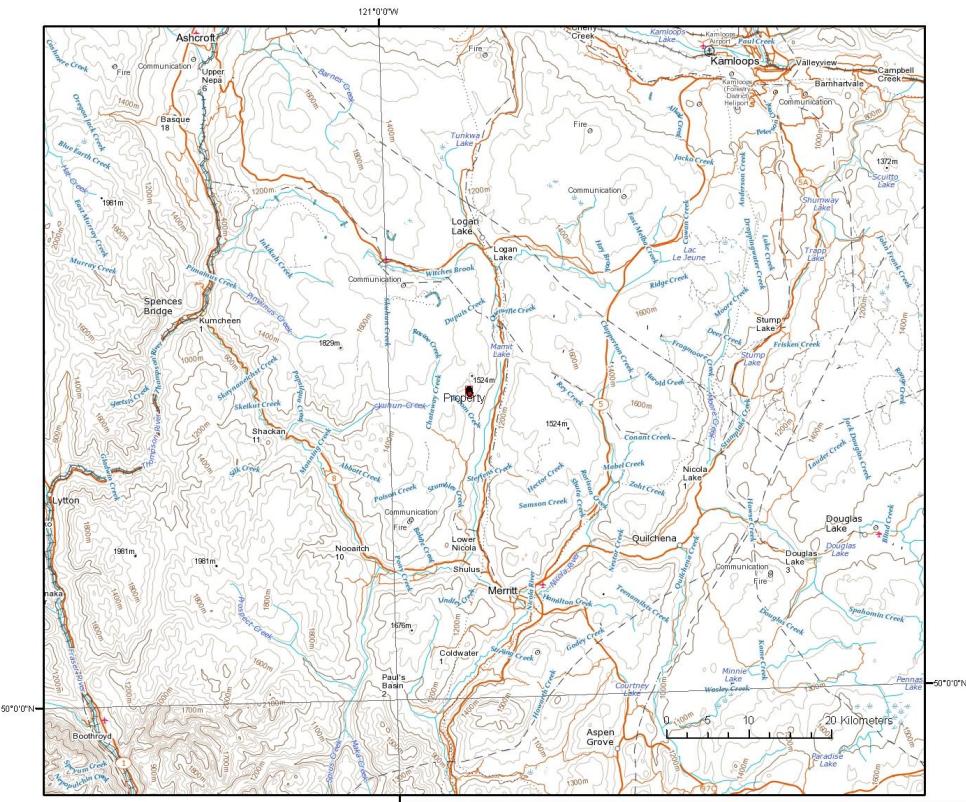
The project consisted of reviewing, geo-referencing and modelling of a historic induced polarization dataset acquired in 1972 by Mcphar Geophysics for Aselo Industries Limited.

Two-dimensional resistivity and IP inversion was carried out on 10 IP lines which covered Zone 4, a mineralized shear zone over which the property is centered. In addition to this a preliminary compilation of historic data was also carried out.

## **PROPERTY LOCATION AND ACCESS**

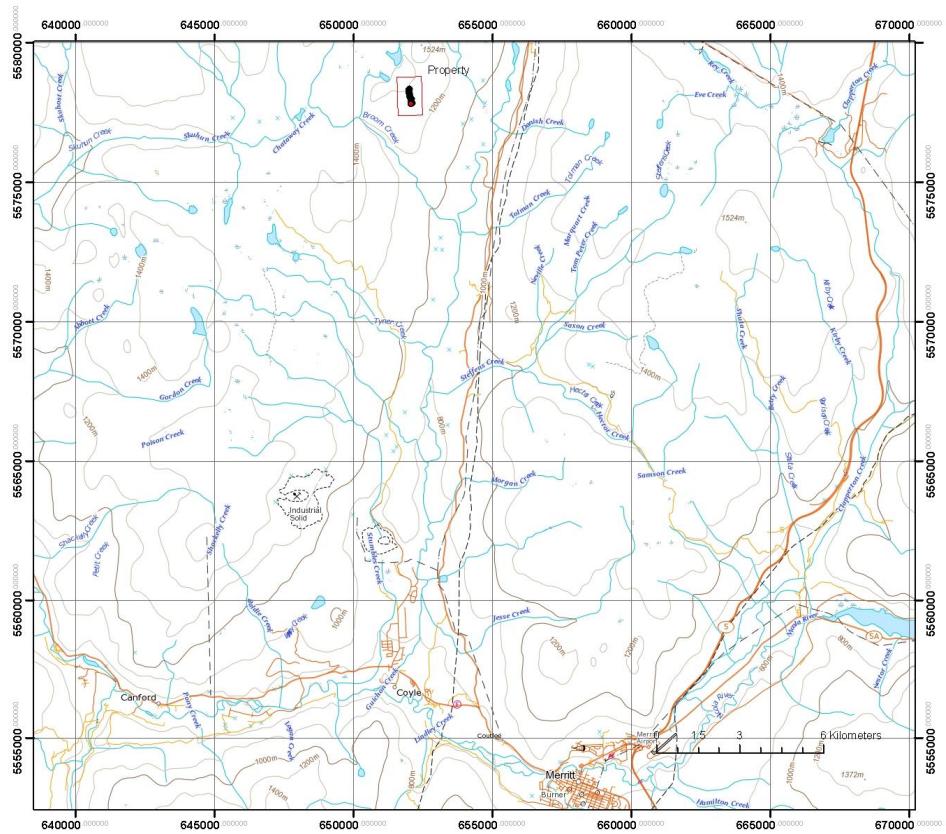
Tenure 514083 is located some 24 kilometres north of the community of Merritt, British Columbia.

Access to the core of the property is obtained from Merritt, BC via highway 8 and the Aberdeen FSR and then utilizing a network of resources roads.



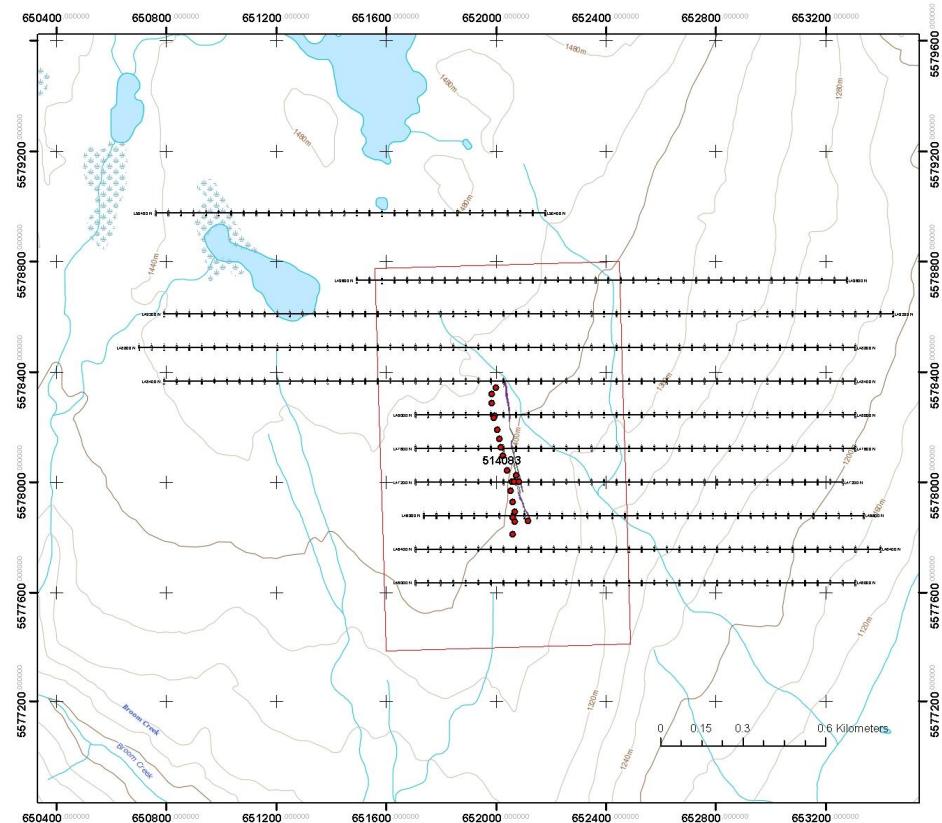
*Property Location Map*

## PROPERTY LOCATION AND ACCESS con't



*Line and Property Claim Location Map*

## **PROPERTY LOCATION AND ACCESS con't**



*Line and Claim Location Map*

## **PREVIOUS WORK.**

The property and surrounding areas has been the subject of numerous exploration campaigns over the past 100 years.

Well documented exploration programs conducted over the property have consisted of prospecting, geological mapping, geochemical samples, geophysics, and diamond drilling.

The author would refer the reader to the BC Ministry of Energy and Mines – Assessment Report Indexing System (ARIS) <http://www.empr.gov.bc.ca/mining/geoscience/arис> for the historic public reports.

## **REGIONAL & PROPERTY GEOLOGY**

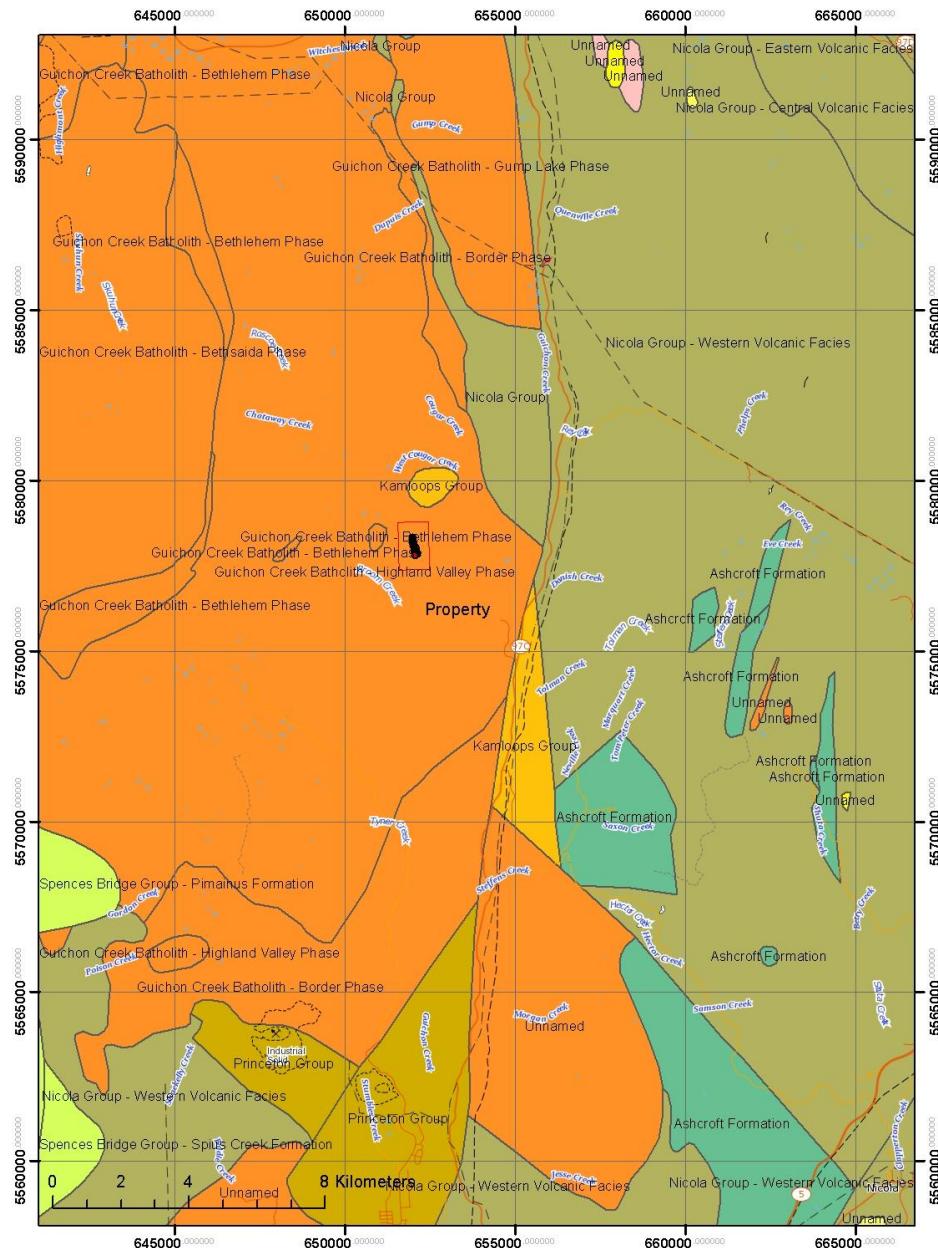
The area in which the property is proximal to the south eastern extent of the Guichon Batholith. The area is dominantly underlain by Triassic to Jurassic age granodiorite to diorite intrusive rocks.

The core of the claim is underlain by a quartz diorite unit similar to that of the Witches Brook Variety.

Mineralization on the claim is associated with a north-trending shear zones, which host a number of significant copper intercepts as defined by historic surface, and drillhole sampling.

In addition to copper mineralization a number of significant gold and silver assays have also been noted. For further information please see Minfile 092ISE063 (Wiz).

## REGIONAL & PROPERTY GEOLOGY con't



## General Geology

**PURPOSE.**

The geophysical review of the data was carried out over tenure 514083, as part of an ongoing compilation of historic data, to aid in the planning of additional field work during the upcoming season.

## **DATA PROCESSING AND MODELLING.**

### *Historic Data.*

The historic induced polarization survey was carried out by Mcphar Geophysics. The survey utilized a frequency domain induced polarization system with a 300 ft dipole measuring the 1<sup>st</sup> to 3<sup>rd</sup> separation using a dipole-dipole array.

The resulting data presented on the historic pseudo sections was then digitized into a tabular format. Apparent resistivity and distance units were then converted into metric units, with the PFE requiring no conversion.

The apparent resistivity ( $\rho_a$ ) 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 (PFE) 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.

### *Data Modelling and Presentation.*

The tabular data was first converted into a format compatible with GeoTomo Res2dInv inversion software utilizing a Matlab script for each individual line.

Two dimensional smooth model inversion of the resistivity and chargeability then was carried out using the Geotomo RES2DINV Algorithm, an algorithm developed by Loke et-al. This algorithm uses a 2-D finite element method and incorporates topography in modeling resistivity and I.P. data. Nearly uniform starting models are generated by running broad moving-average filters over the respective lines of data. Model resistivity and chargeability properties are then adjusted iteratively until the calculated data values match the observed as closely as possible, given constraints which keep the model section smooth.

The resulting inversion datasets were then converted via another Matlab script into a compatible format with Geosoft Oasis Montaj.

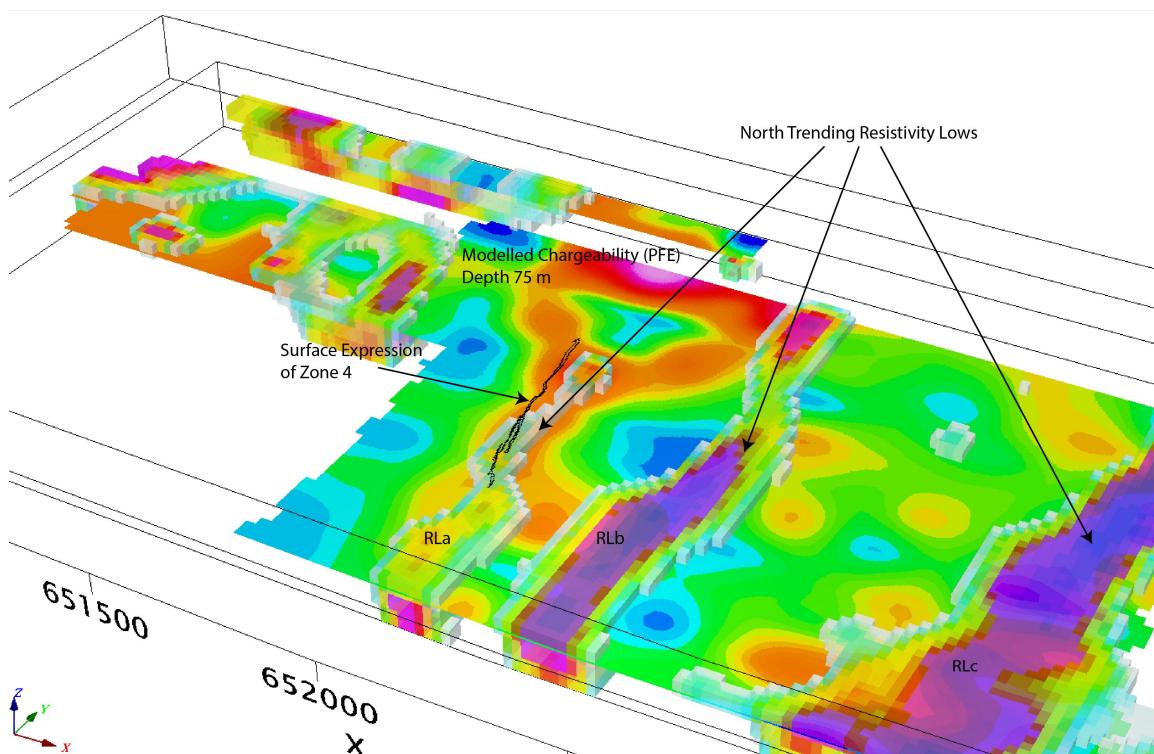
The data are presented as individual model section plots of resistivity and PFE at a scale of 1:5,000.

## **DISCUSSION OF RESULTS.**

The results of the inversion work carried out over tenure 514083 show a number of strong northerly trending corridors associated with low and low to moderate resistivity values.

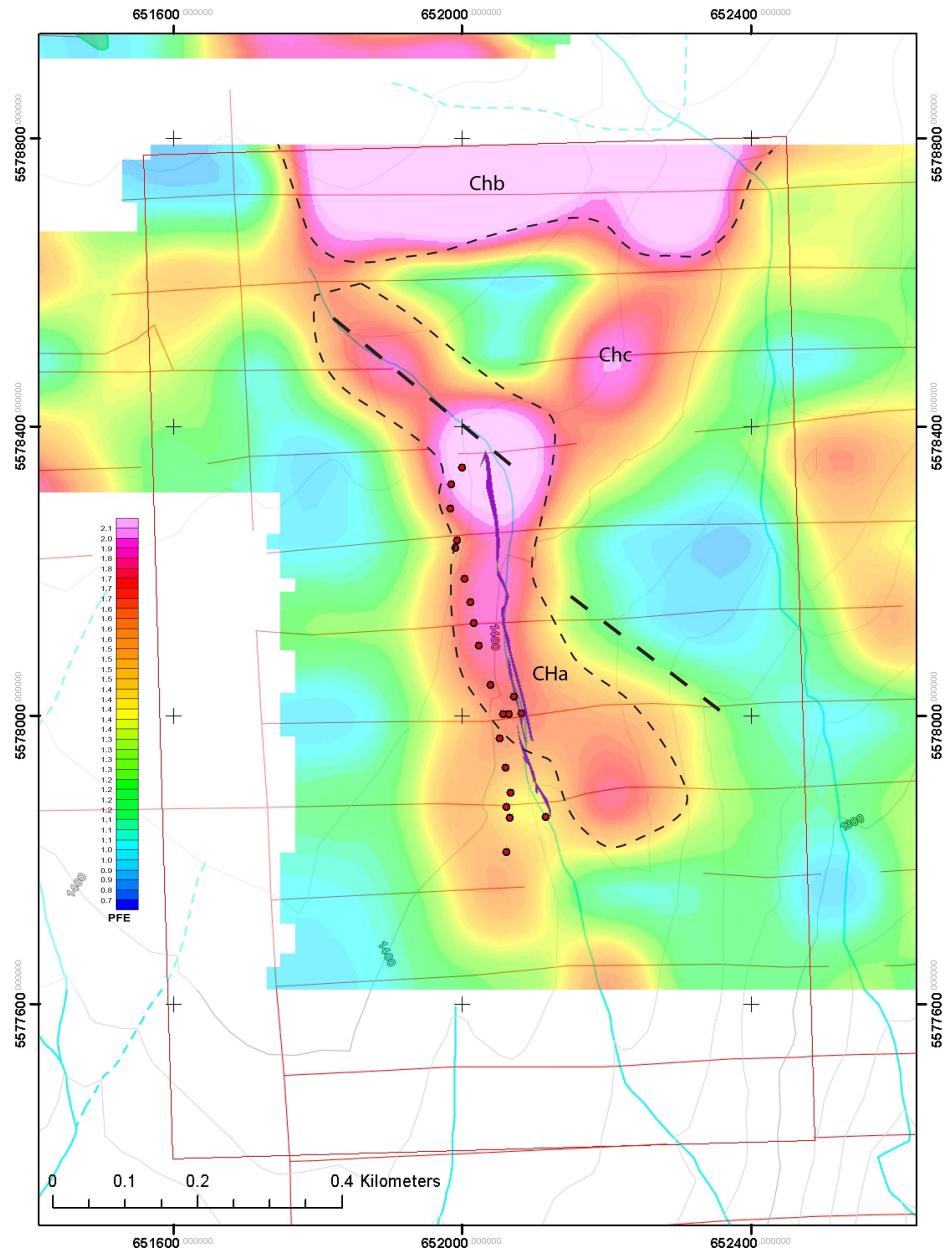
Anomaly RLa is associated with an elevated chargeability (Cha) response and tracks a mineralized shear zone known as Zone 4. The feature appears to continue further south than defined by reported historic work. In the north, the resistivity feature is truncated by the northwesterly trending Gypsum Lake fault. The chargeability also continues to track this structure, to the northwest.

Two other north trending resistivity features are also readily apparent in the dataset, both of which are to the east of the current claim block, however neither showing any elevated chargeability response as to that of RLa



Voxel Model of 2D Resistivity Inversions with Chargeability at -75

## DISCUSSION OF RESULTS con't.



**DISCUSSION OF RESULTS con't.**

In the northern portion of the large deep anomaly (CHb) is readily observed within the inverted data. This large anomaly is potentially due to an abrupt change in orientation of the body to the line direction, thus reading oblique to the feature, however never the less warrants investigation.

## **SUMMARY, CONCLUSIONS & RECOMMENDATIONS.**

Between February 15<sup>th</sup> and 19<sup>th</sup>, 2016, Peter E. Walcott & Associates Limited undertook induced polarization inversion for John Lepinski over his Wiz property, located in the Merrit area of British Columbia.

The project consisted of inversion of compilation and inversion of 10 east west orientated historic survey lines.

The project was designed to review historic data as part of an ongoing compilation to aid in the planning of additional field work during the 2016 season.

The resulting products shows a number of areas of potential interest. The zone 4 mineralized shear zone is readily apparent in the resistivity, and is associated with an elevated chargeability response. The resistivity/chargeability anomaly appears to extend to the south beyond the area of reported historic results.

Another large chargeability anomaly can also be observed in the northern portion of the property.

A complete GIS dataset should be compiled of all historic geochemical, geophysical and drilling data. Three deep IP EW orientated lines should be conducted though the property to test for mineralized bodies at depth.

**Respectfully submitted,**

**PETER E. WALCOTT & ASSOCIATES LTD.**

**Alexander Walcott, B.Sc.  
Geophysicist**

**Peter E. Walcott, P.Eng.  
Geophysicist**

**Coquitlam, B.C.  
August 2016**

**APPENDIX I**

## **COST OF PROJECT.**

Peter E. Walcott & Associates Limited undertook the project on an hourly basis for a total cost of \$1650.00 including reporting.

**PERSONNEL EMPLOYED ON PROJECT.**

Name	Occupation	Address	Dates
Peter E. Walcott	Geophysicist	Unit 111- 17, Fawcett Rd. Coquitlam, B.C. V3K 6V2	
Alexander Walcott	"	"	Feb 15 <sup>th</sup> – 19 <sup>th</sup> , 2016

**CERTIFICATION.**

I, Peter E. Walcott, of 605 Rutland Court, Coquitlam, British Columbia, hereby certify that:

1. I am a graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
2. I have been practicing my profession for the last fifty three years.
3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.
4. I hold no interest, direct or indirect, in the property, nor do I expect to receive any.

**Peter E.Walcott, P.Eng.**

**Coquitlam, B.C.  
August 2016**

**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.  
August 2016**

**CLAIM LIST**

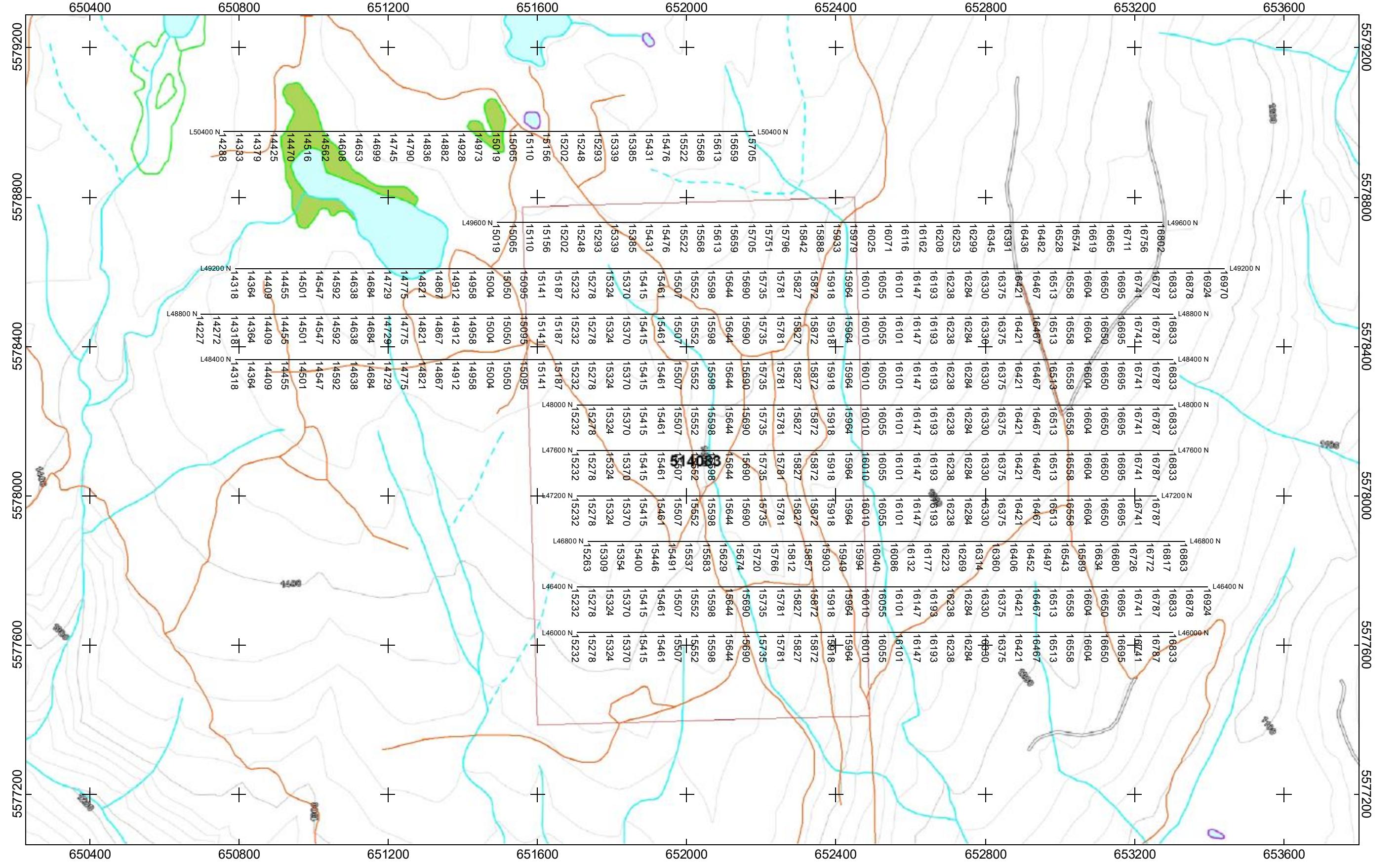
<u>Title Number</u>	<u>Claim Name</u>	<u>Owner</u>	<u>Issue Date</u>	<u>Good To Date</u>	<u>Status</u>	<u>Area (ha)</u>
<a href="#">514083</a>		<a href="#">115566</a> 100%	2005/jun/07	2017/oct/30	GOOD	123.747

**REFERENCES.**

Gower, Stephen – Reconnaissance Geology and Silt and Rock Geochemistry on the Chataway I-A Mineral Claim, 1986, BC Assessment Report 14978

Halof, Phillip, Mullan, Ashton – Report on the Induced Polarization and Resistivity Survey on the Southeast Portion, Chataway Option Claim Group, Nicola Mining Division, British Columbia for Aselo Industries Ltd. , 1972, BC Assessment Report 4043

Chataway Exploration Co. Ltd. Plan of Diamond and Percussion Drill Holes, Property File 35130.pdf



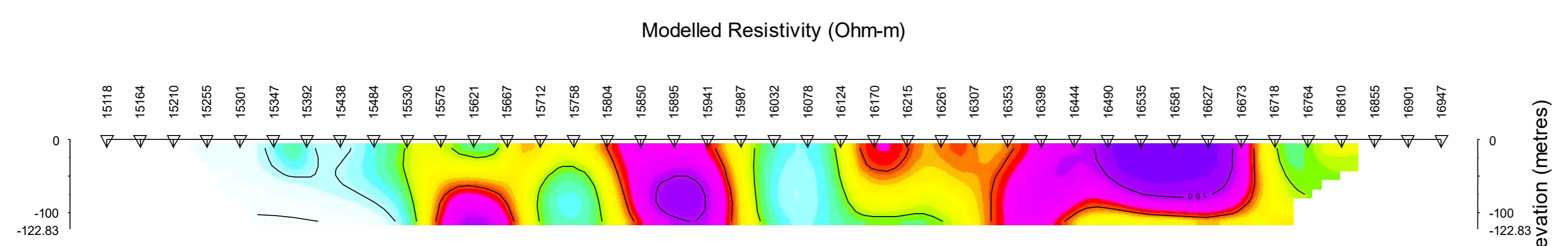
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**JOHN LEPINSKI**  
**CLAIM AND LINE LOCATION MAP**  
**TENURE 514083**

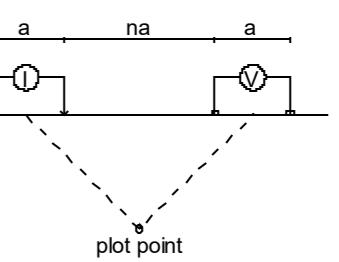
MERRITT AREA, BRITISH COLUMBIA  
AUGUST 2016

**PETER E. WALCOTT & ASSOCIATES LIMITED**

Line 46000



Dipole-Dipole Array



1.52

1.45

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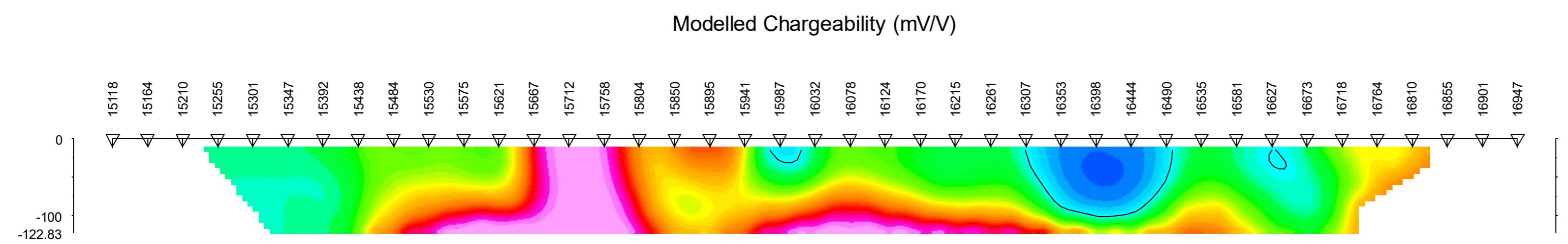
0.92

0.88

0.82

Modelling Chargeability PFE

Modelling Resistivity ohm-m



Scale 1:5000

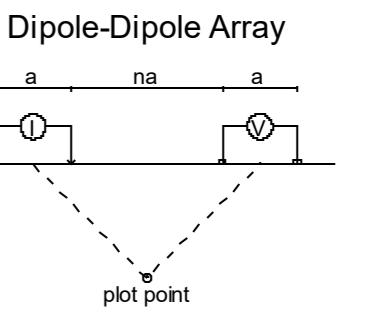
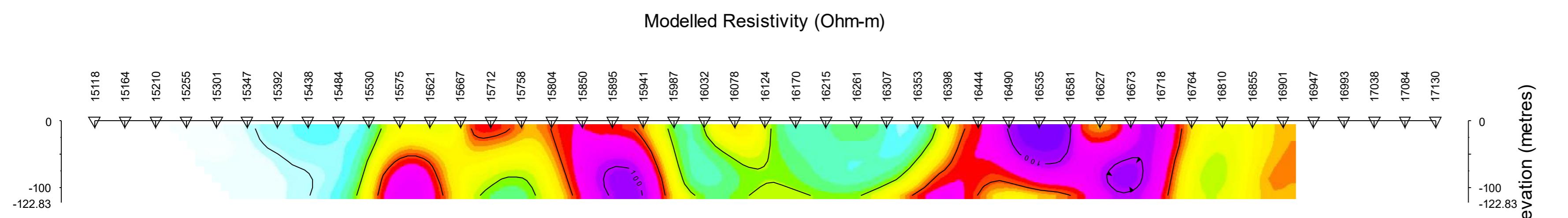
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JOHN LEPINSKI

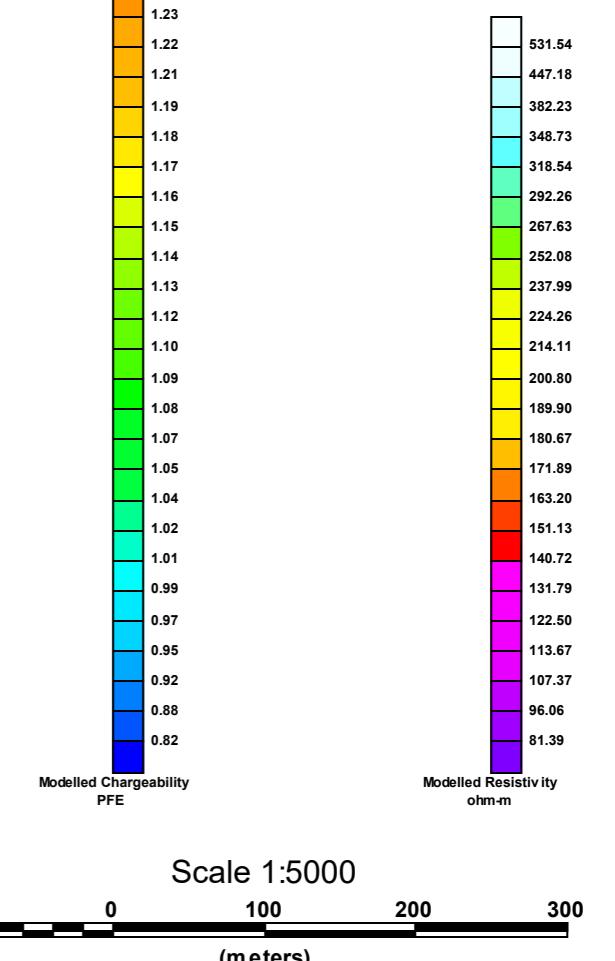
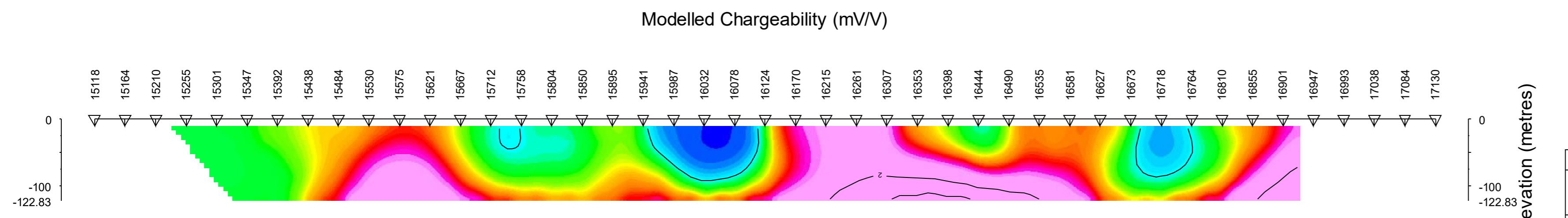
INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA  
Date: JULY 2016  
RES2DINV

Inversion By: PETER E. WALCOTT & ASSOCIATES LIMITED

Line 46400



1.52	531.54
1.45	447.18
1.42	382.23
1.39	348.73
1.36	318.54
1.34	292.26
1.33	267.63
1.31	252.08
1.29	237.99
1.28	224.26
1.27	214.11
1.25	200.80
1.24	189.90
1.23	180.67
1.22	171.89
1.21	163.20
1.19	151.13
1.18	140.72
1.16	131.79
1.15	122.50
1.14	113.67
1.13	107.37
1.12	107.37
1.10	107.37
1.09	107.37
1.08	107.37
1.07	107.37
1.05	107.37
1.04	107.37
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0.88	107.37
0.82	107.37

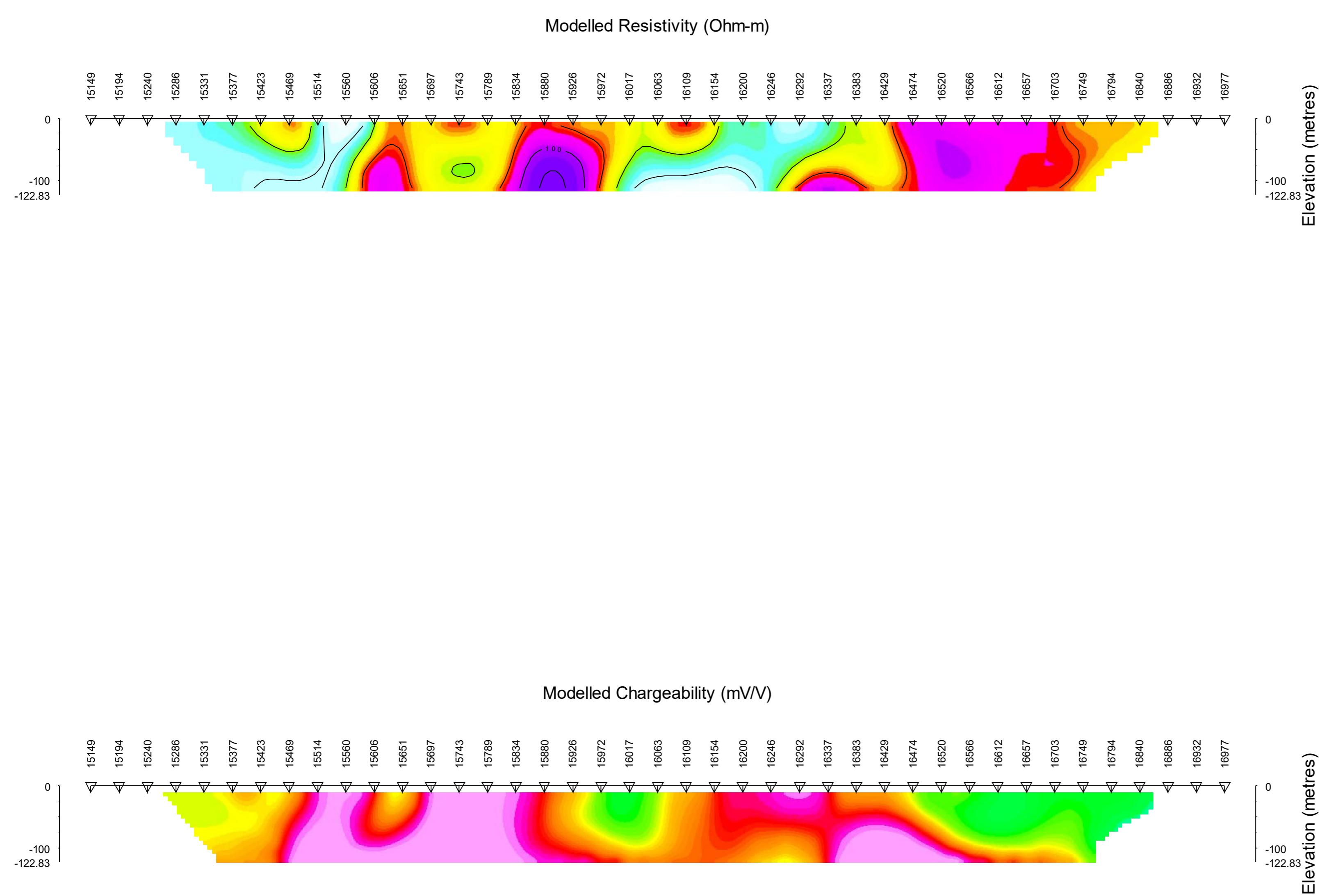


JOHN LEPINSKI  
INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA

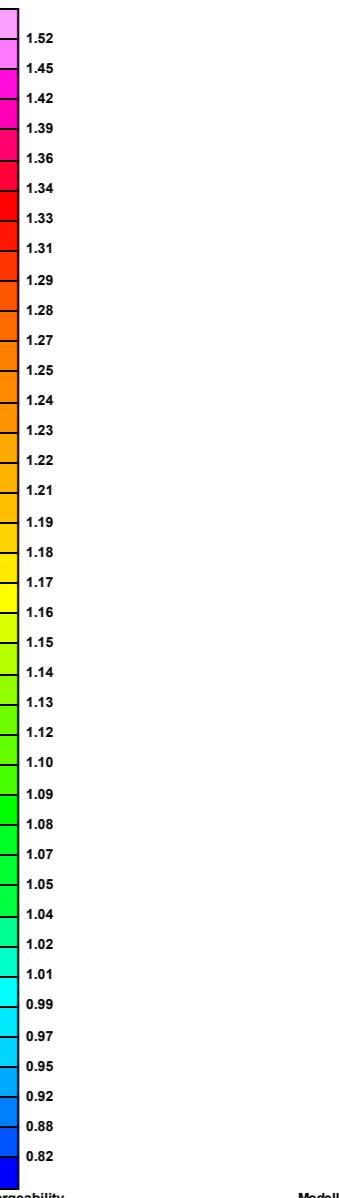
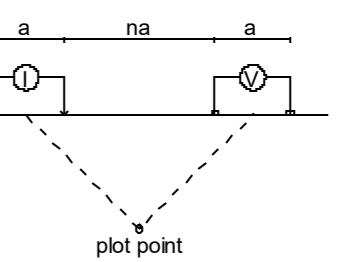
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RES2DINV

Inversion By: PETER E. WALCOTT & ASSOCIATES LIMITED

Line 46800



Dipole-Dipole Array

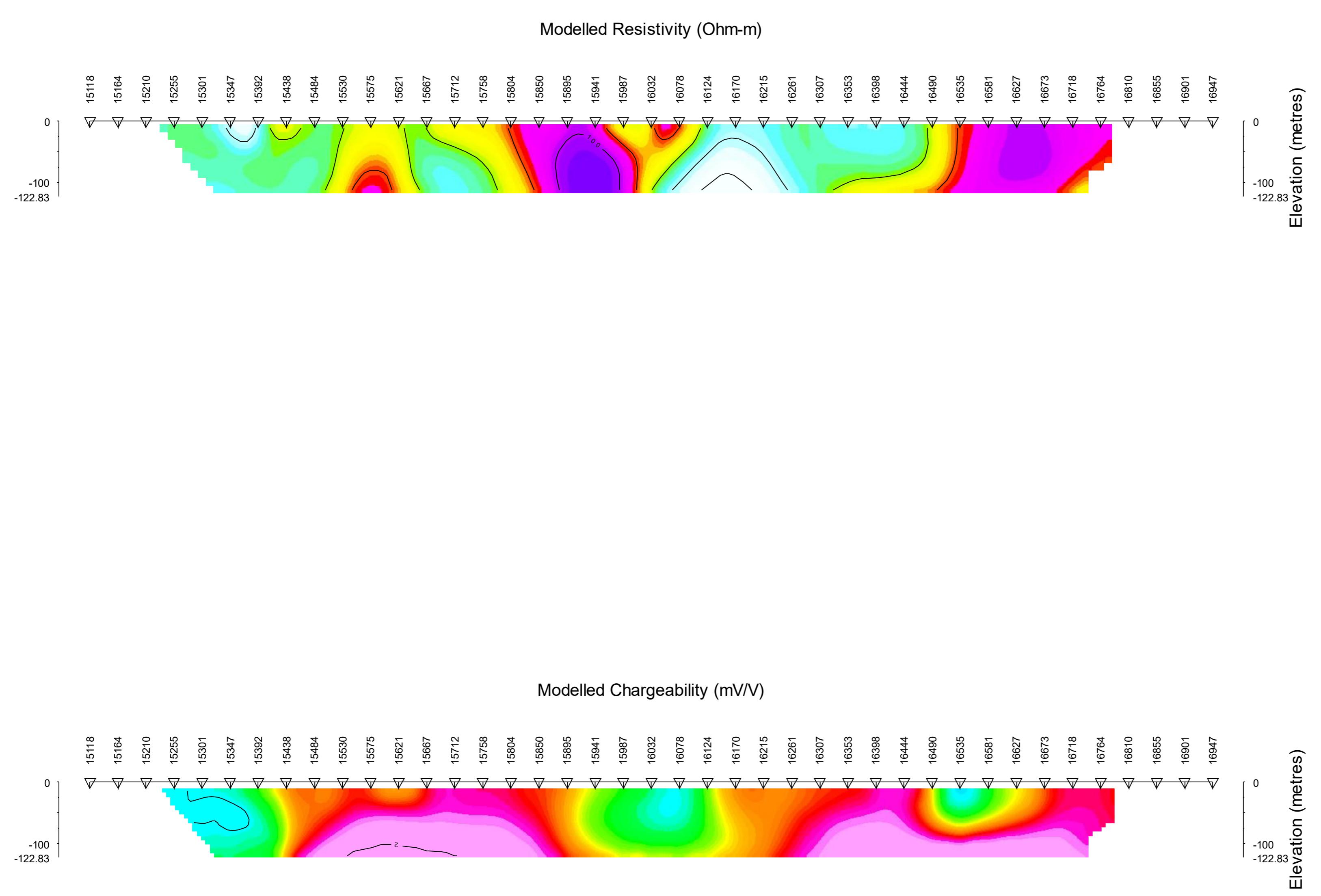


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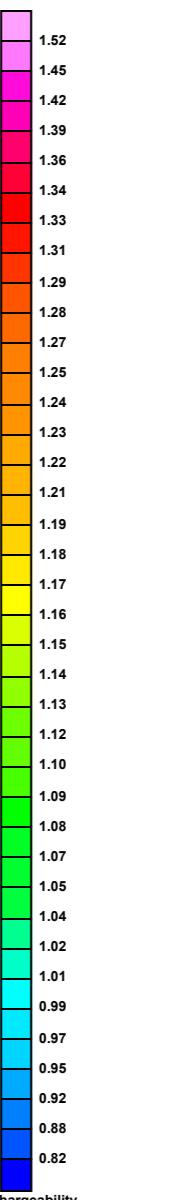
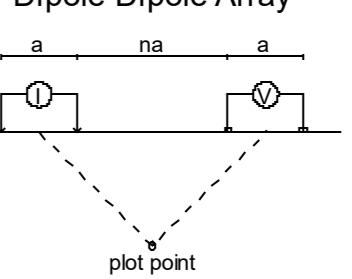
JOHN LEPINSKI  
INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA  
Date: JULY 2016  
RES2DINV

Inversion By: PETER E. WALCOTT & ASSOCIATES LIMITED

Line 47200



Dipole-Dipole Array



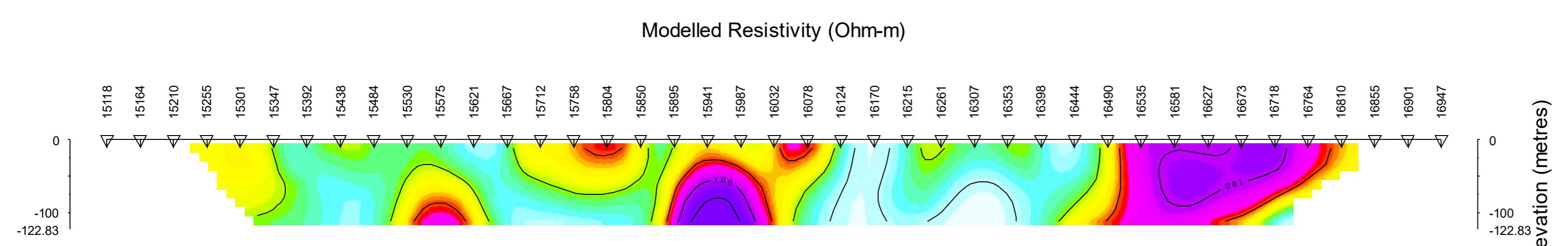
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**JOHN LEPINSKI**  
INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA

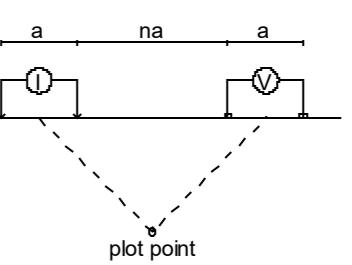
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RES2DINV

Inversion By: PETER E. WALCOTT & ASSOCIATES LIMITED

Line 47600



Dipole-Dipole Array



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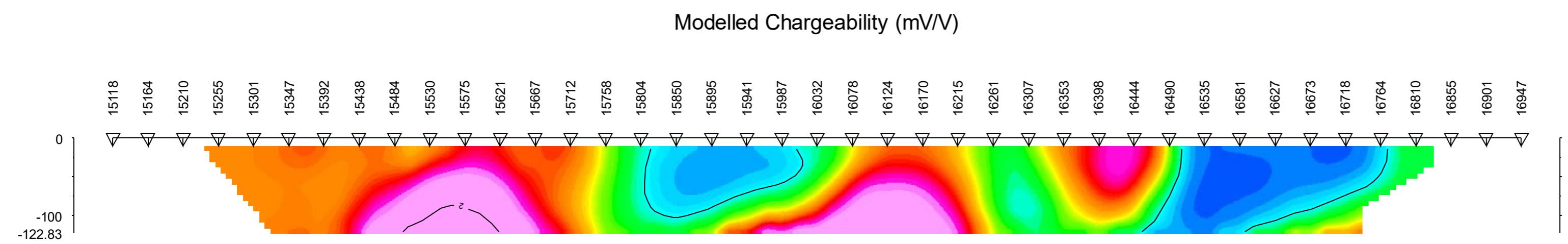
0.92

0.88

0.82

Modelling Chargeability PFE

Modelling Resistivity ohm-m



Scale 1:5000

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(meters)

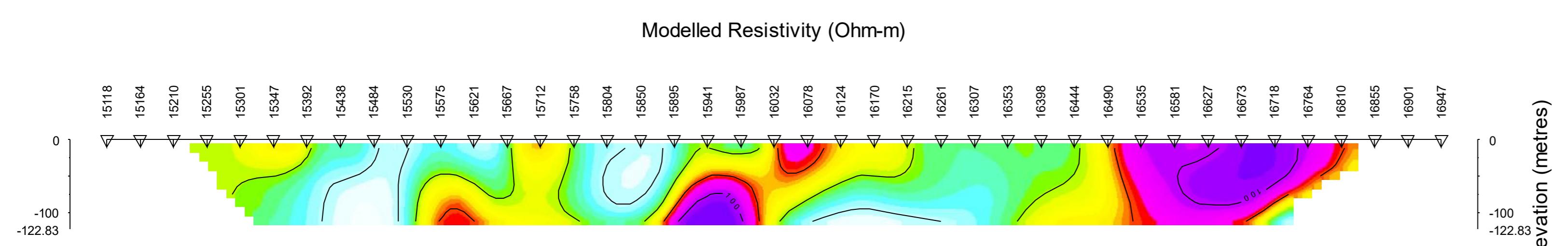
JOHN LEPINSKI

INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA

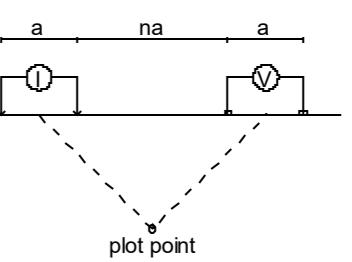
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RES2DINV

Inversion By: PETER E. WALCOTT & ASSOCIATES LIMITED

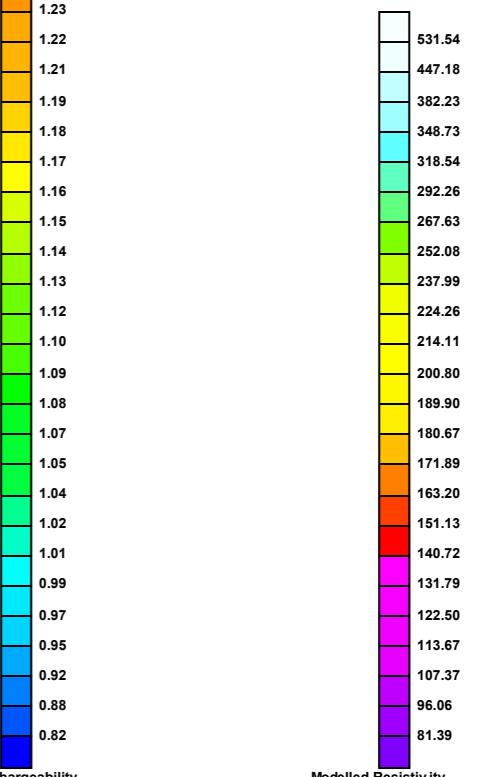
Line 48000



Dipole-Dipole Array



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0.97  
0.95  
0.92  
0.88  
0.82



Scale 1:5000

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(meters)

JOHN LEPINSKI

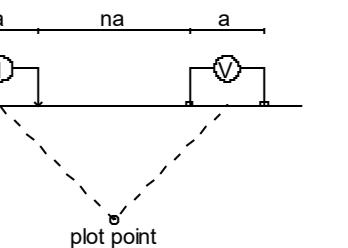
INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA

Date: JULY 2016  
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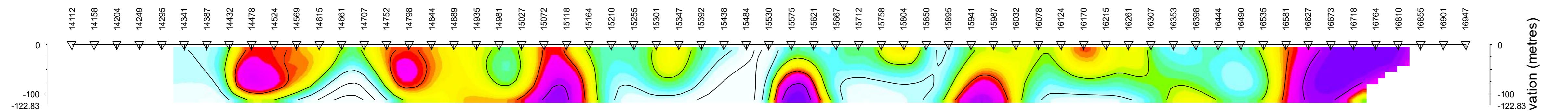
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Line 48400

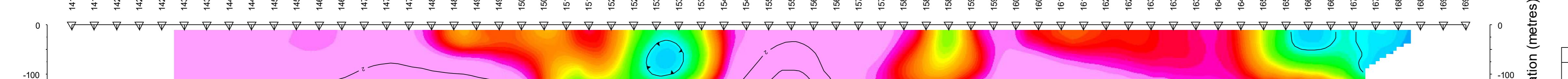
Dipole-Dipole Array



Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)



Scale 1:5000



(meters)

JOHN LEPINSKI

INDUCED POLARIZATION SURVEY  
WIZ PROJECT  
BRITISH COLUMBIA

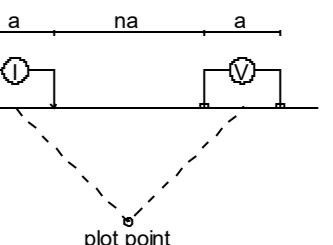
Date: JULY 2016

RES2INV

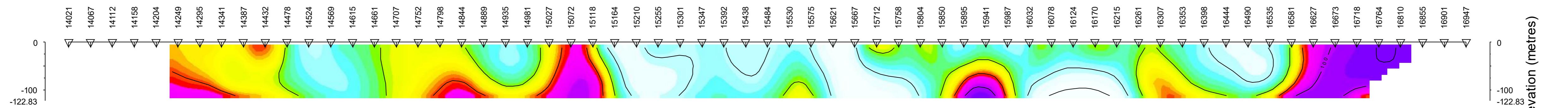
Inversion By: PETER E. WALCOTT & ASSOCIATES LIMITED

Line 48800

Dipole-Dipole Array



Modelled Resistivity (Ohm-m)



Elevation (metres)

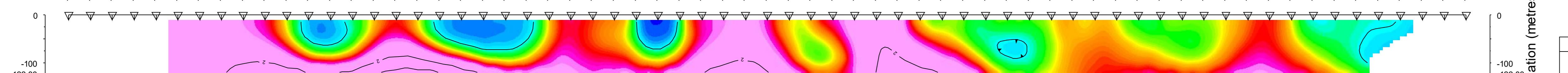
Elevation (metres)



Scale 1:5000

(meters)

Modelled Chargeability (mV/V)



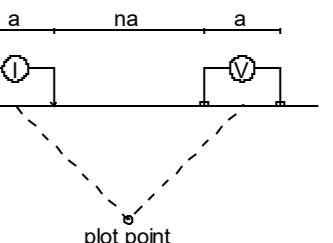
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RES2INV

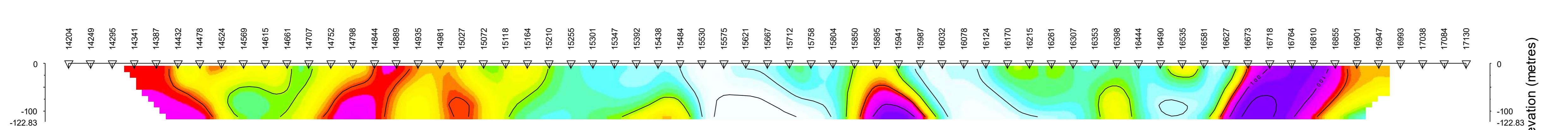
Inversion By: PETER E. WALCOTT &amp; ASSOCIATES LIMITED

Line 49200

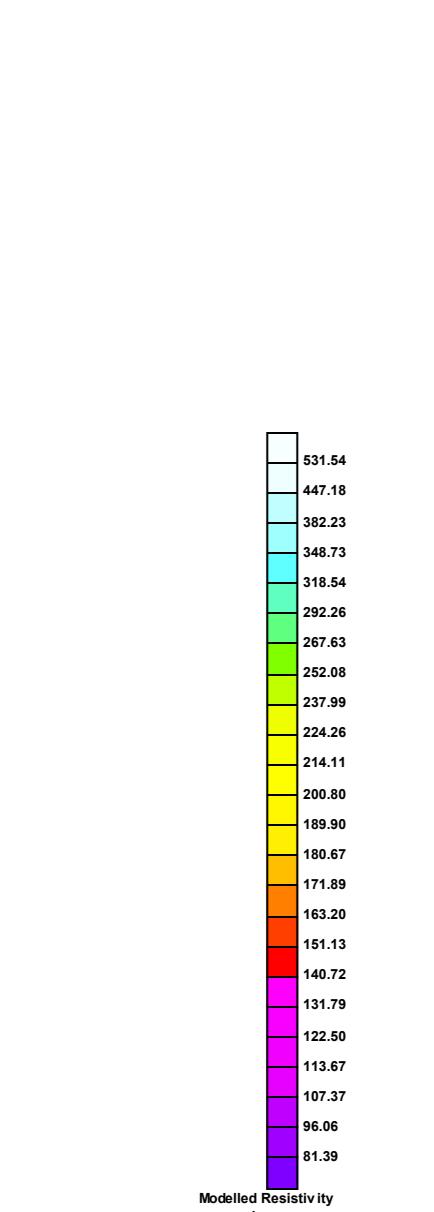
Dipole-Dipole Array



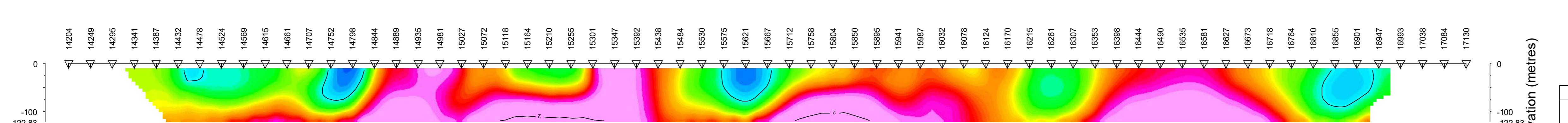
Modelled Resistivity (Ohm-m)



Elevation (metres)



Modelled Chargeability (mV/V)



Elevation (metres)

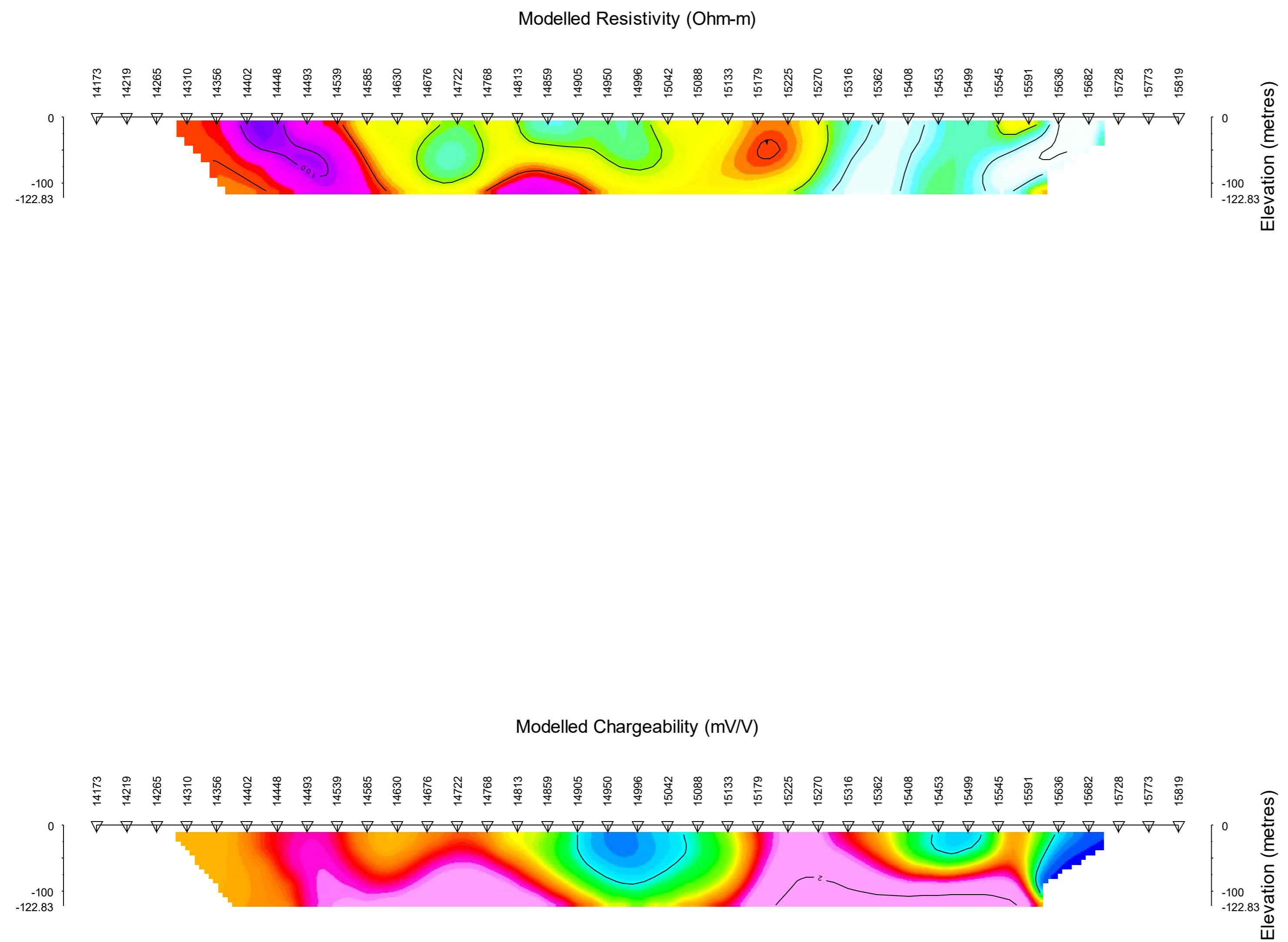


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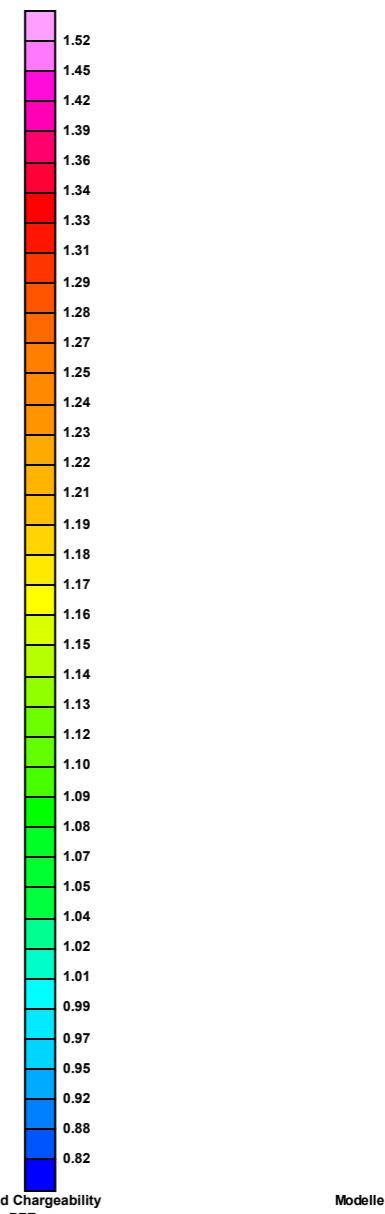
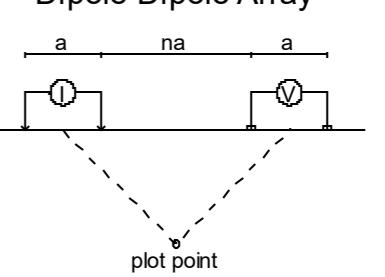
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Dipole-Dipole Array



Scale 1:5000  
100 0 100 200 300 (meters)

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Date: JULY 2016  
RES2DINV

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