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BC Geological Survey Assessment Report 37725

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)]: Ground IP Surveys

TOTAL COST: CAD$71,142.20

AUTHOR(S): Michael Pond, Alexander Walcott, Peter Walcott, Paul Jago

SIGNATURE(S): M. A. POND; C. P. JAGO

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): 1300188-201701 , July 31, 2017

YEAR OF WORK: 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): statement of work - event # 5707728

PROPERTY NAME: Mount Milligan Minesite - Mine #1300188 / MAX

CLAIM NAME(S) (on which the work was done): 521165, 521177, 521181, 512921

COMMODITIES SOUGHT: Gold, Copper, Silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093N/ 194

MINING DIVISION: Omineca

NTS/BCGS: 093K, 093O, 093J, 093K UTM Zone 10

LATITUDE: 55 ° 06 ' 59 " **LONGITUDE:** 123 ° 56 ' 32 " **(at centre of work)**

OWNER(S):

1) Thompson Creek Metals Company Inc.
2) JAMA Holdings Inc.

MAILING ADDRESS:

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

1287 McNair Street
North Vancouver, BC V7K 0A1

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: Gold, Copper Significant Minerals: Pyrite, Magnetite, Chalcopyrite, Sphalerite, Bornite
Alteration: K-Feldspar, Biotite, Actinolite, Epidote, Calcite, Chlorite, Albite, Pyrite Alteration Type: Potassic, Propylitic, Carbonate
Classification: Porphyry, Hydrothermal, Epigenetic Type: L03: Alkalic Porphyry Cu-Au
Shape: Regular Modifier: Fractured Dimension: 1300x950x244 metres

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

see attached Schedule A

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	15.5	521165, 521177, 521181, 512921	$71,142.20
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$71,142.20

Mount Milligan Mine & MAX Property 2018 Assessment Report

Title Page & Summary: Schedule A

Refferences to Previous Assessment Report Numbers:

ARIS Reports	
MtM	**MAX**
4274	20530
4742	21736
5175	21873
11951	22271
12912	29353
13508	31625
13891	31939
14377	32790
17860	34935
19164	35072
19268	36936
19396	
19921	
20227	
20230	
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20853	
20978	
21089	
21197	
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28210	
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35023	

Assessment Report

Mount Milligan Mine -
MAX Property
2018 Ground Induced Polarization Survey

Omineca Mining Division

N.T.S. 93N , 93O, 93J, 93K
Latitude 55^{0} 06' 59" N
Longitude 123^{0} 56' 32" W

Owner/Operator:
Thompson Creek Metals Company Inc.
Mount Milligan Mine
299 Victoria Street, Suite 200
Prince George, B.C. V2L 5R8

Owner:
JAMA Holdings Inc.
MAX Property
1287 McNair Street
North Vancouver, B.C. V7K 0A1

Prepared for

Ministry of Energy, Mines, & Petroleum Resources
Mining & Minerals Division

by

Michael Pond, P. Geo., Paul Jago, P.Geo.
Thompson Creek Metals Company Inc. – Mount Milligan Mine.

Alexander Walcott, Peter E. Walcott - Peter E. Walcott & Associates Ltd.

November 10, 2018

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Appendices

Maps (at back of report)

1.0 Summary

The Mount Milligan alkalic gold-copper porphyry deposit is located 155 kilometres northwest of Prince George in central British Columbia. The property consists of 109 claims and 1 mineral lease covering approximately 51,079 hectares. Thompson Creek Metals Company Inc. (TCM), owns 100% of the operation and all mineral titles.

The MAX property consists of 12 mineral claim titles covering approximately 4,869 hectares and lies contiguous and directly south of the Mount Milligan property. JAMA Holdings Inc. (JAMA), owns 100% of all mineral titles. On August 14, 2018 an option agreement was entered between TCM and JAMA for MTM to earn up to a 70% interest in the MAX property.

The Mount Milligan Mine consists of one open pit and one tailings storage facility. Mine life is 22 years with a total proven and probable reserve of 467,939 kilo tonnes grading 0.3 g/t gold and 0.188% copper as of December 31, 2017, (5,138 kilo ounces contained gold and 1,938 million pounds contained copper). The mine is currently operating at a rate of approximately 55,000 tonnes per day.

A field program completed during 2017 was comprised of the ground based geophysical surveys completed by Peter E. Walcott & Associates. Approximately 310 line kilometers of magnetics and 68.5 line kilometers of induced polarization (IP) were completed from August 15th to November 18th over two grids. Over a southwestern grid block, full coverage of both the magnetic and IP surveys were completed resulting in two anomalous zones. Over a northeastern grid block, the magnetic survey was fully completed, but only a partial IP survey was run before winter shut down. Several magnetic features and deep IP anomalies were identified.

From May 27th to June 17th 2018 approximately 15.5 line kilometers of IP were additionally brushed and surveyed on the northeastern grid block to complete the planned grid area started in 2017. Several ring anomaly features identified from the 2017 magnetic survey in the eastern grid had lines run across them, and a NE trending airborne resistivity high feature had a single line run across it.

The survey identified one discrete anomaly on a single north-south line (8000E) which should be evaluated in conjunction with all available historic data. If warranted two flanking IP lines should be undertaken, followed by subsequent drilling.

Additional inversion work should be carried out, testing models using fixed resistivity layers derived from the TEM sounding data to test if a valid target exists beneath the highly conductive layer observed in most of the east -west orientated lines. An exploratory drill hole should be considered into the highest chargeability feature if the results of the exercise yield any features of interest, as exploration information within this area is limited.

Regionally, JoAnne Nelson (1996) describes a concentration of porphyry Cu-Au prospects within the southern part of the Nation Lakes project area (Mount Milligan deposit area). Airborne magnetic and gravity highs show an ESE regional trend from the southeastern end of Hogem Batholith (Chuchi project area) towards Mount Milligan. Monzonite intrusive rocks along this trend are coeval with the Early Jurassic phase of the southern Hogem Batholith and it is believed the Mount Milligan porphyry camp formed above subjacent structurally-controlled magma chambers. This underlying structural control is the reasoning behind the 2017-2018 exploration programs at the Mount Milligan property being focused on prospective N-S and E-W

trends. The MAX property lies within this ~25 km-wide regional ESE trending magnetic high corridor, and also within an N-S oriented gravity high cross-trend, again suggesting influence of deep basement structures.

At the property scale, the MAX prospect is porphyry Cu-Au target based on the identification in the 1980's and 90's of widespread alteration with sporadic mineralization. With the exception of the northwestern sector of the claims, much of the property has some outcrop with a relatively thin veneer of alluvial to occasional glacial cover. Contouring of several soil sampling programs since the late 80's shows numerous small to medium size copper and gold anomalies clustered within a ~6 x 2 km area. Copper anomalies appear to be oriented in cross-cutting NE-SW and narrow NW-SE linear polygons. The NW trending anomalies are partly coincident with magnetic highs and lows. All historic and recent soil sample digestions have been done by aqua regia.

Government airborne geophysical surveys (magnetic, radiometric) coupled with soil geochemistry Cu-Au anomalies suggests the potential for a large magmatic-hydrothermal system. The inverted 2-D IP survey line data (Walcott Geophysics, 2011) shows large open ended chargeability anomalies associated with airborne magnetic highs, and resistivity highs and lows. The IP survey had N-S line orientation at 200 to 400 m line spacing. Walcott recommended additional work to close off the anomalies.

2.0 Introduction

2.1 Terms of Reference

2.1.1 Thompson Creek Metals – JAMA Holdings JV

The MAX Property is under joint venture option to Thompson Creek Metals Company Inc (TCM), whereby TCM can acquire up to 51% interest after meeting work commitments and cash payments over 4 years. Upon acquiring this first option interest, a second option to acquire an additional 19% interest after meeting continued work commitments, cash payments, and share issuances over 3 additional years may be entered within 90 days of the first option completion. The agreement was formalized the 14th of August, 2018.

2.1.2 Peter E. Walcott & Associates

A field program completed during 2017 was comprised of the ground based geophysical surveys completed by Peter E. Walcott & Associates. Approximately 310 line kilometers of magnetics and 68.5 line kilometers of induced polarization (IP) were completed from August 15th to November 18th over two grids. Over a southwestern grid block, full coverage of both the magnetic and IP surveys were completed resulting in two anomalous zones. Over a northeastern grid block, the magnetic survey was fully completed, but only a partial IP survey was run before winter shut down. Several magnetic features and deep IP anomalies were identified.

From May 27th to June 17th 2018 approximately 15.5 line kilometers of IP were additionally brushed and surveyed on the northeastern grid block to complete the planned grid area started in 2017. Several ring anomaly features identified from the 2017 magnetic survey in the eastern grid had lines run across them, and a NE trending airborne resistivity high feature had a single line run across it. (Figure 3 and Map 1).

The survey consisted of 5 east-west traverses and 1 north-south tie line, with a nominal line spacing between 400 meters utilizing a 100 meter ‘a’-spacing and measuring the 1st to 10th separations.

Deliverables for the project included digital files for the surveys in Geosoft and MapInfo formats, and the final technical report in Appendix 6.

All 2018 work was conducted under work approval for Mines Act Permits M-236 and MX-13-182, and Notice of Work 1300188-201701.

2.2 Property Description and Location

The Mount Milligan Property is 100% owned by Thompson Creek (Owner Number 283374), a division of Centerra Gold Inc. Located within the Omineca Mining Division in north-central British Columbia, approximately 155 km northwest of Prince George. Access is from Fort St James 86 km to the south, or from Mackenzie 95 km to the east (Figure 1). The claim group consists of 109 mineral claims and 1 mining lease covering a total area of 51,079 ha, the details of which are summarized in Appendix 2 and shown in Figures 2a, 2b, 2c, and 3. The boundaries of these claims are defined by map locations (longitude/latitude or UTM) rather than ground position. Positioned over four National Topographic System (NTS) maps, which include 93O04, 93N01, 93K16 and 93J13, the Property is centred at approximately 124°01’46” west longitude and 55°07’19” north latitude, or 434,349 mE, 6,108,845 mN (NAD 83 Zone 10).

The Mount Milligan Mine consists of one open pit and one tailings storage facility. Mine life is 22 years with a total proven and probable reserve of 467,939 kilo tonnes grading 0.3 g/t gold and 0.188% copper as of December 31, 2017, (5,138 kilo ounces contained gold and 1,938 million pounds contained copper). The mine is currently operating at a rate of approximately 55,000 tonnes per day.

The 4,868.85 hectare Max Property is located 20 kilometres south and contiguous with the Mount Milligan Property. Tenures are also detailed in Appendix 2 and shown in Figures 1 and 2c).

The property consists of 12 contiguous mineral cell tenures and measures approximately 7.0 x 8.0 kilometers, covering a range of elevation from 3,000 to 4,500 feet (915-1,370 meters). Cripple Lake (aka, Nendatoo Lake) is just off the claims to the southwest and Kilner Creek flanks the eastern edge of the claims. Detailed 50,000 topographic maps covering the property are Tezzeron Creek-093K16 and Salmon Creek-093J13.

2.3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Mt. Milligan Property can be accessed from the south via Fort St James on the Germansen North Road followed by the Rainbow-Milligan Forest Service Road (FSR), or from the east via Mackenzie on the Community Connector FSR and switching to the Rainbow-Milligan FSR. The roads are in good condition and well maintained owing to active logging and mining in the area that utilises both routes. In addition, the Community Connector FSR serves as a haul road for the Mt. Milligan mine site. Both routes are used for daily and weekly crew changes.

Access to the MAX property is from the Rainbow Road to a series of logging roads across the northwest side of the property.

The climate in the area is classified as Interior Plateau that is characterized by short warm summers and longer moderately cold winters. Climate data derived from a monitoring station at Mackenzie airport indicate that temperatures range from an average low of -12.9°C in January to an average high of 22.2°C in July.

Regionally, the Property lies near the northern boundary of the Nechako Plateau and the southern limits of the Swannell Range of the Omineca Mountains of the Canadian Cordilleran Interior System. A chain of peaks aligned in an approximate north-south direction dominates the western part of the Property, which includes the field area for this report and the Mt. Milligan mine site. Mt. Milligan is the highest of these peaks, rising to an elevation of 1,508 m, and is rounded and symmetrical in shape. The Mt. Milligan deposit occurs to the south of Mt. Milligan at an elevation of approximately 1,100 m. The eastern part of the Property is dominated by gentle relief but includes a central region of elevated topography trending northwest and rising to approximately 1,350 m. Several isolated rounded hills also occur in the area rising to a similar elevation. A region of lower topography separates the western and eastern areas of the Property. Several elongated northwest-trending lakes occur in the eastern part of the Property and are interpreted to reflect the regional structural grain.

The Mt. Milligan area was last glaciated 10,000–20,000 years ago with regional ice flow direction to the northeast. This event coated the landscape with a blanket of glacial till and altered pre-glacial drainage patterns. Drumlins, flutings, eskers and melt-water channels of various dimensions are noticeable features of the region. Locally, glacial features show that ice was funnelled through east–west oriented valleys north and south of the Mt. Milligan deposit before flowing northeast. In the field area south of the Nation River, ice flow direction was re-oriented towards the east. The field area is generally well drained with flow towards the Nation River except for glacial depressions that have formed into bogs.

Vegetation in the region consists of pine and spruce with lesser amounts of alder. Beetle-killed timber is present throughout the field area and represents a hazard during fieldwork, especially during strong winds. In addition, numerous recent and active logging cut blocks occur throughout the field area, many of which have been recently replanted.

Labour and services are readily available from Fort St James, Mackenzie, Vanderhoof and Prince George with access provided by the aforementioned forest service roads from the south and east. The Mt. Milligan mine site occurs approximately 4.5 km to the southeast of the field area providing well-serviced camp accommodation, emergency response capabilities and specialized trade expertise. Electrical power is accessed directly from the BC Hydro Kennedy Substation south of Mackenzie or from the main high voltage transmission lines that run from the Kennedy Substation to the Mt. Milligan mine site.

2.4 Property History

2.4.1 Mount Milligan

Limited exploration activity was first recorded in 1937. In 1984, prospector Richard Haslinger (Haslinger) and BP Resources Canada Limited (BP Resources) located claims on the site. In 1986, Lincoln Resources Inc. (Lincoln) optioned the claims and in 1987 completed a diamond drilling program that led to the discovery of significant copper-gold mineralization. In the late 1980s, Lincoln reorganized, amalgamated with Continental Gold Corp. (Continental Gold) and continued ongoing drilling in a joint-venture with BP Resources.

In 1991, Placer Dome Inc. (Placer Dome) acquired the Project from the joint-venture partners, resumed exploration drilling and completed a pre-feasibility study for the development of a 60,000 t/d open pit mine and flotation process plant.

Barrick Gold Corporation (Barrick) purchased Placer Dome in 2006 and sold its Canadian assets to Goldcorp Inc. (Goldcorp), who then in turn sold the Project to

Atlas Cromwell Ltd. (Atlas Cromwell). Atlas Cromwell changed its name to Terrane Metals Corp. (Terrane) and initiated a comprehensive work program.

In October 2010, Thompson Creek Metals Company Inc. (TCM) acquired the Mount Milligan development project through its acquisition of Terrane and subsequently constructed the Mount Milligan Mine, which commenced commercial production in February 2014.

In October 2016, TCM was acquired by Centerra Gold Inc. In connection with the acquisition, Terrane (Mt. Milligan Mine), and certain other subsidiary entities of TCM were amalgamated into TCM. TCM now operates as a wholly owned subsidiary of Centerra Gold Inc.

2.4.2 MAX Property

Property work on the Max property is considered quite modern having no known reported activity older than 1986. That year, staking was undertaken by Arthur A. Halleran and Uwe Schmidt based on gold anomalies in stream sediments and regional magnetic anomalies (Schmidt, 1987). The two owners promptly optioned the property to United Pacific Gold Ltd who carried out a program of geological mapping, stream sediment sampling, prospecting, and soil sampling. This work in 1987 ultimately discovered widespread propylitic alteration in volcanic rocks and was followed-up with work in 1988/89 that included soil sampling, ground magnetics, and VLF-em geophysical surveys.

United Pacific sold their interest in the property to City Resources in 1990 who then entered into a joint venture with Rio Algom Exploration that same year in May. Rio Algom followed with a robust program that included aerial magnetic and VLF-em geophysical surveys, airphoto interpretation of surficial geology, grid soil geochemical sampling, and geologic mapping in 1990 (McClintock, 1990). This work outlined a coincident copper and gold soil geochemical anomaly that measured 2.0 by 2.5km with associated magnetic and IP chargeability anomalies. The target type sought was an alkalic copper-gold system, similar to Mount Milligan directly to the north.

A British Columbia government geological mapping program in 1990 and 1991 documented a copper showing (K-2) on the Max property (Nelson, 1991).

Rio Algom returned in 1991 and furthered their exploration with additional soil sampling, geological mapping, rock chip sampling, and induced polarization geophysical surveys north and south of the Max property on adjoining properties. Their work concluded the copper and gold anomalies had origins from localized shear and vein structures, and then abandoned the property in 1992.

The B.C. government conducted a regional low-level airborne magnetic and radiometric survey that covered the Max property in 1993 (Shives, 2010).

The current Max property was acquired by staking. The first ten claims listed in Appendix 2 were staked in 2006 & 2007 by David Blann, with the last two added in 2011 by JAMA Holdings.

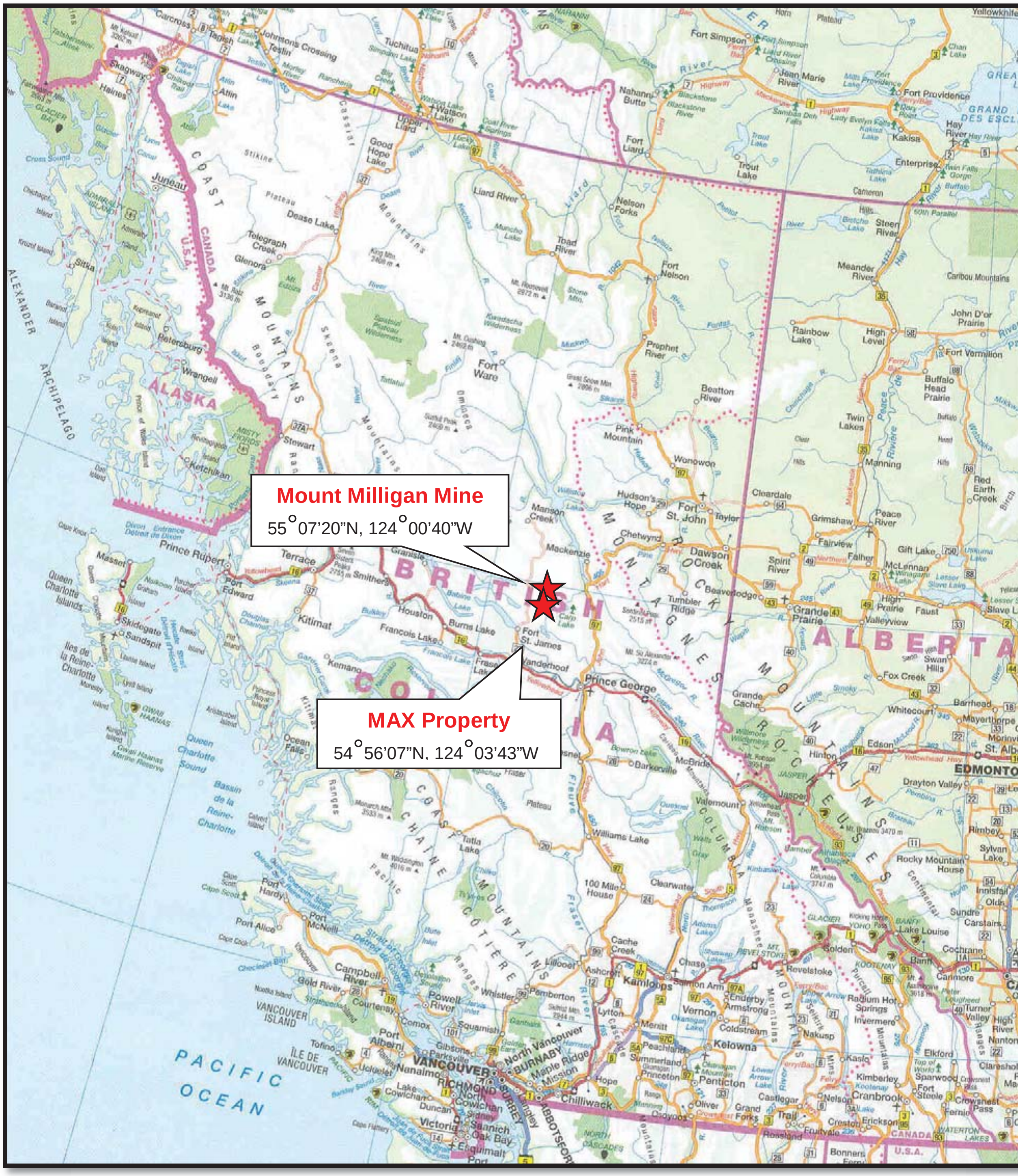
Standard Metals Exploration Ltd carried out a program of geological mapping, soil and silt geochemical sampling in June and July, 2007 (Blann, 2007). Anomalous gold and copper values were returned from the assays.

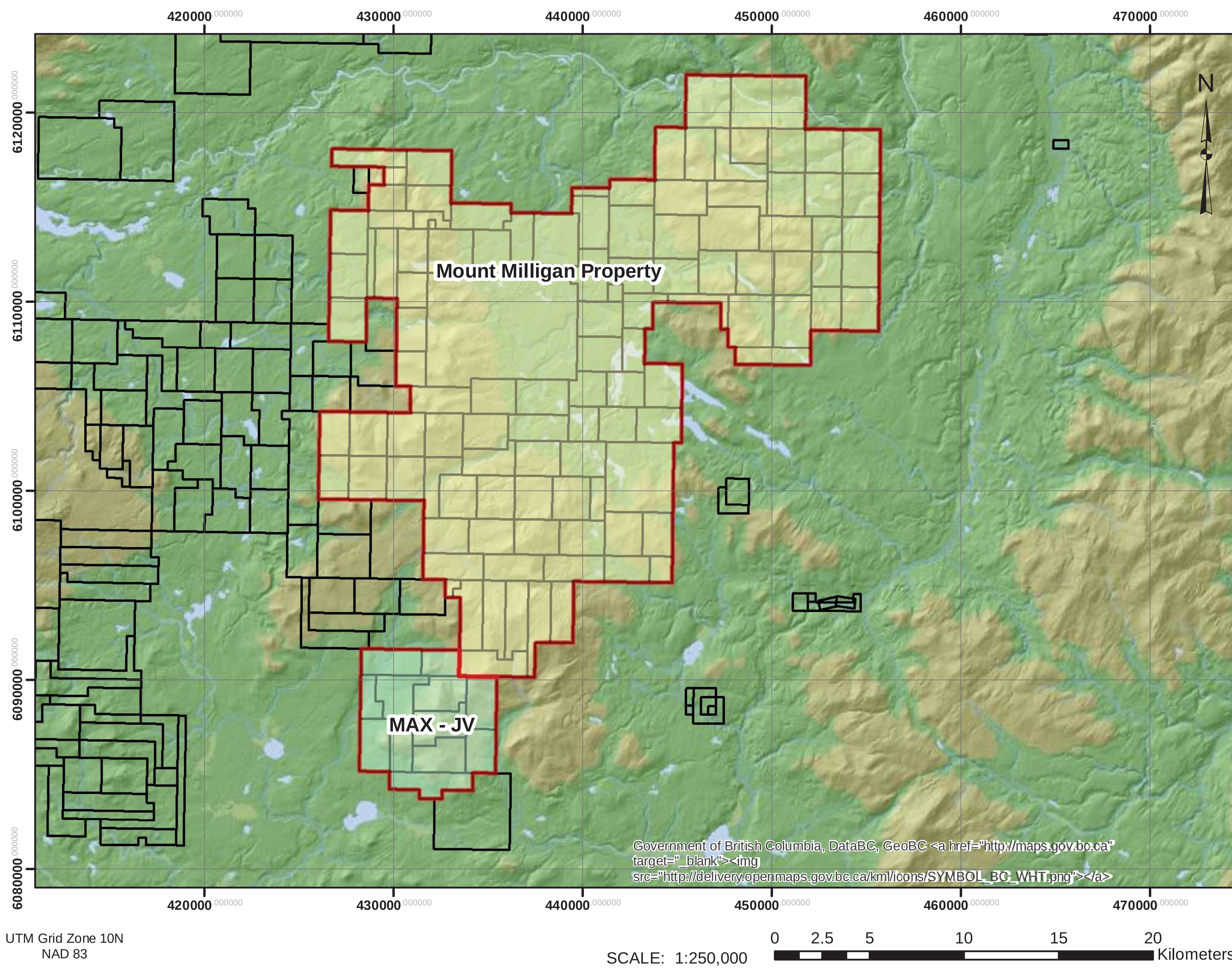
The B.C. government carried out a regional aerial gravity survey which covered the Max property (Sander, 2008). The survey shows similarities between the Mount Milligan deposit and the Max property.

Standard Metals Exploration Ltd (David Blann) sold the property to Anthony James Hewett in 2010. Mr Hewett formed the company Jama Holdings which then commissioned Peter Walcott and Associates to carry out a 20.5 line km grid of induced polarization between August and October, 2010 and a further 16.3 line km in 2011 (Walcott, 2011). These surveys outlined several strong chargeability anomalies in areas of historic gold and copper soil geochemical anomalies. All IP lines were oriented north-south, typically 200m apart with 50 to 100m dipole separations.

The property was optioned by Aztec Metals Corp in June of 2013 who commenced with an exploration program of property-wide airborne magnetic/radiometric survey followed by soil sampling, rock chip sampling, and geologic mapping. Assessment reports 34935 and 35072 provide details and SOW (Statements of Work) evidence of prior exploration on the Max property.

Figure 1 Property Location Map





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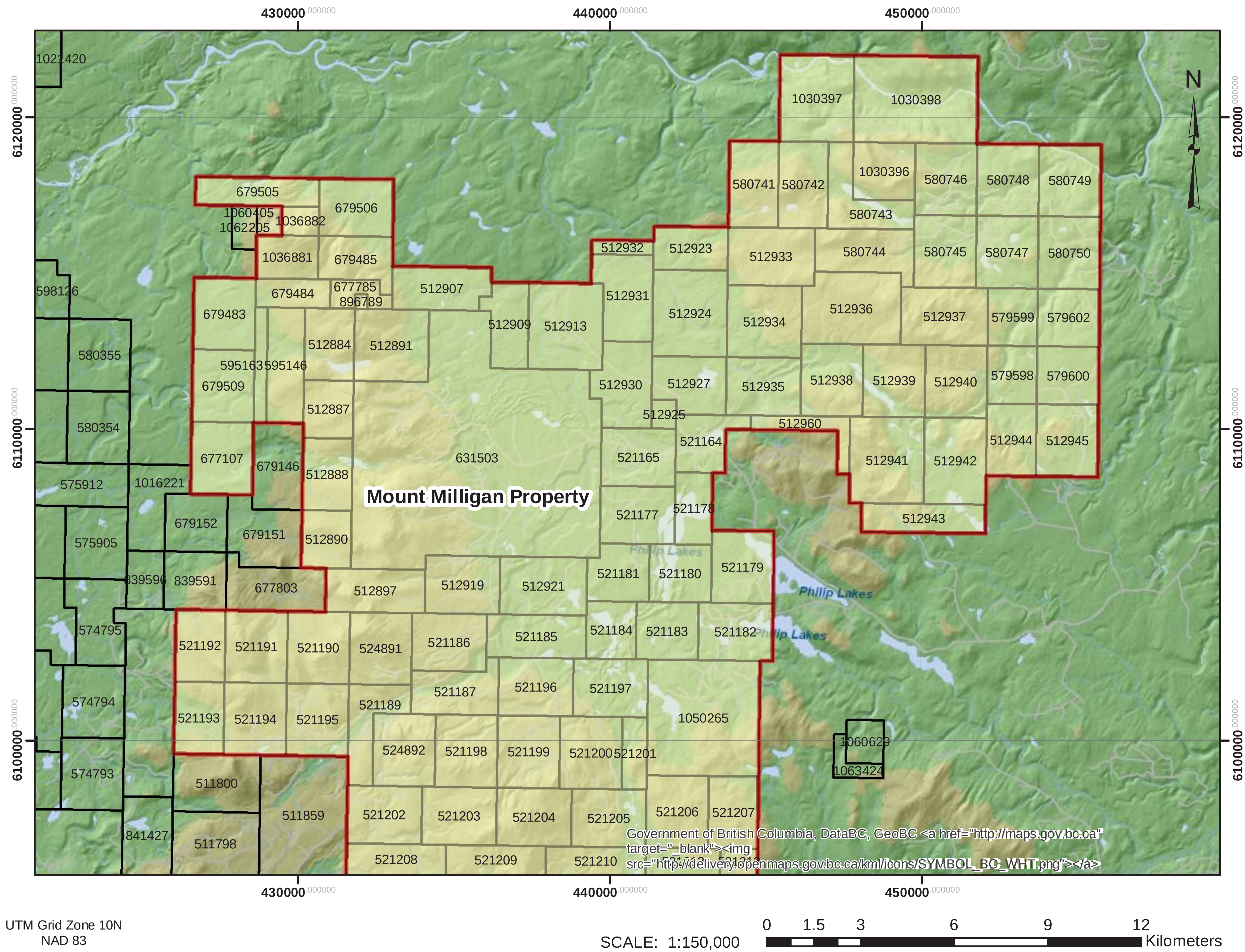

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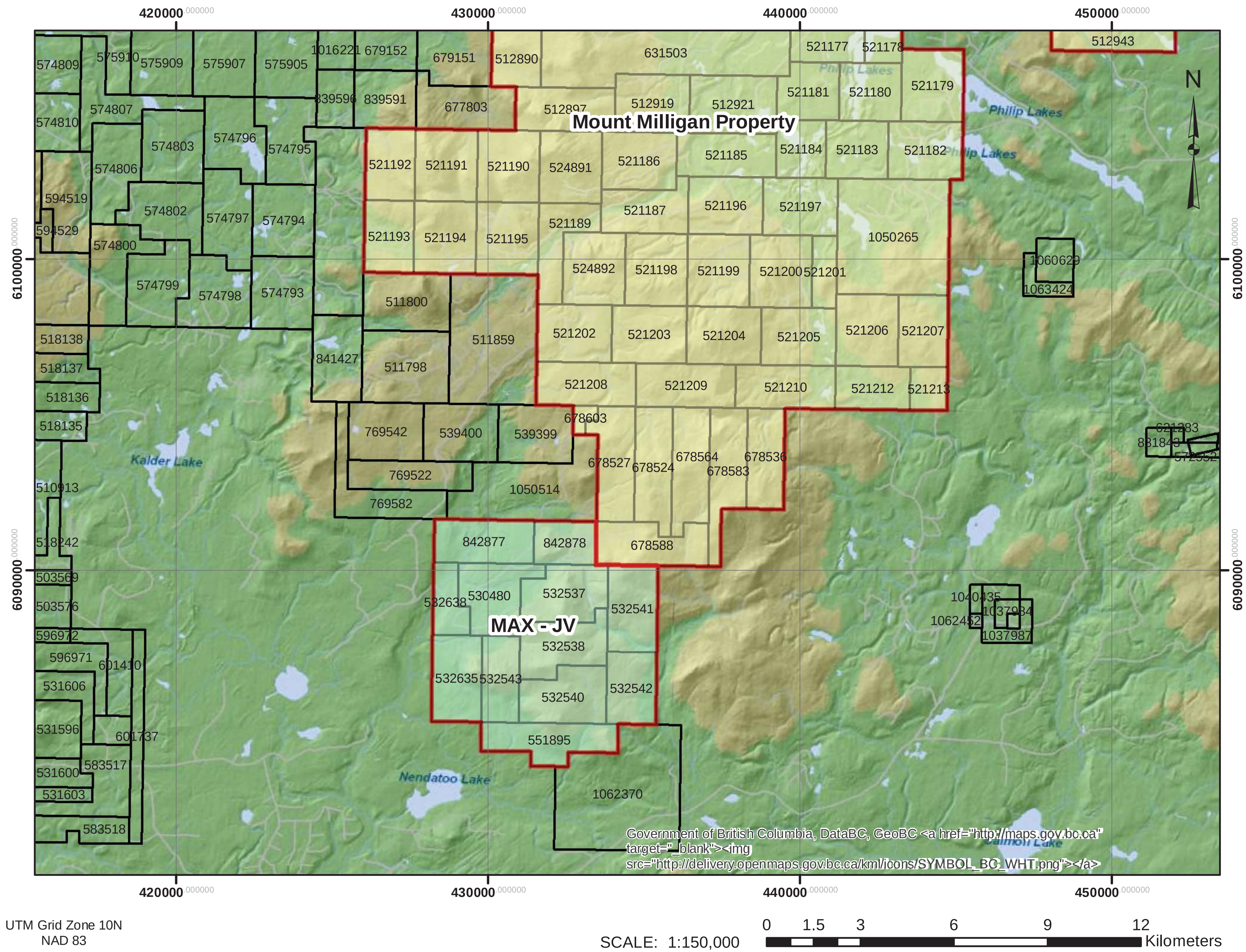

Mount Milligan Property
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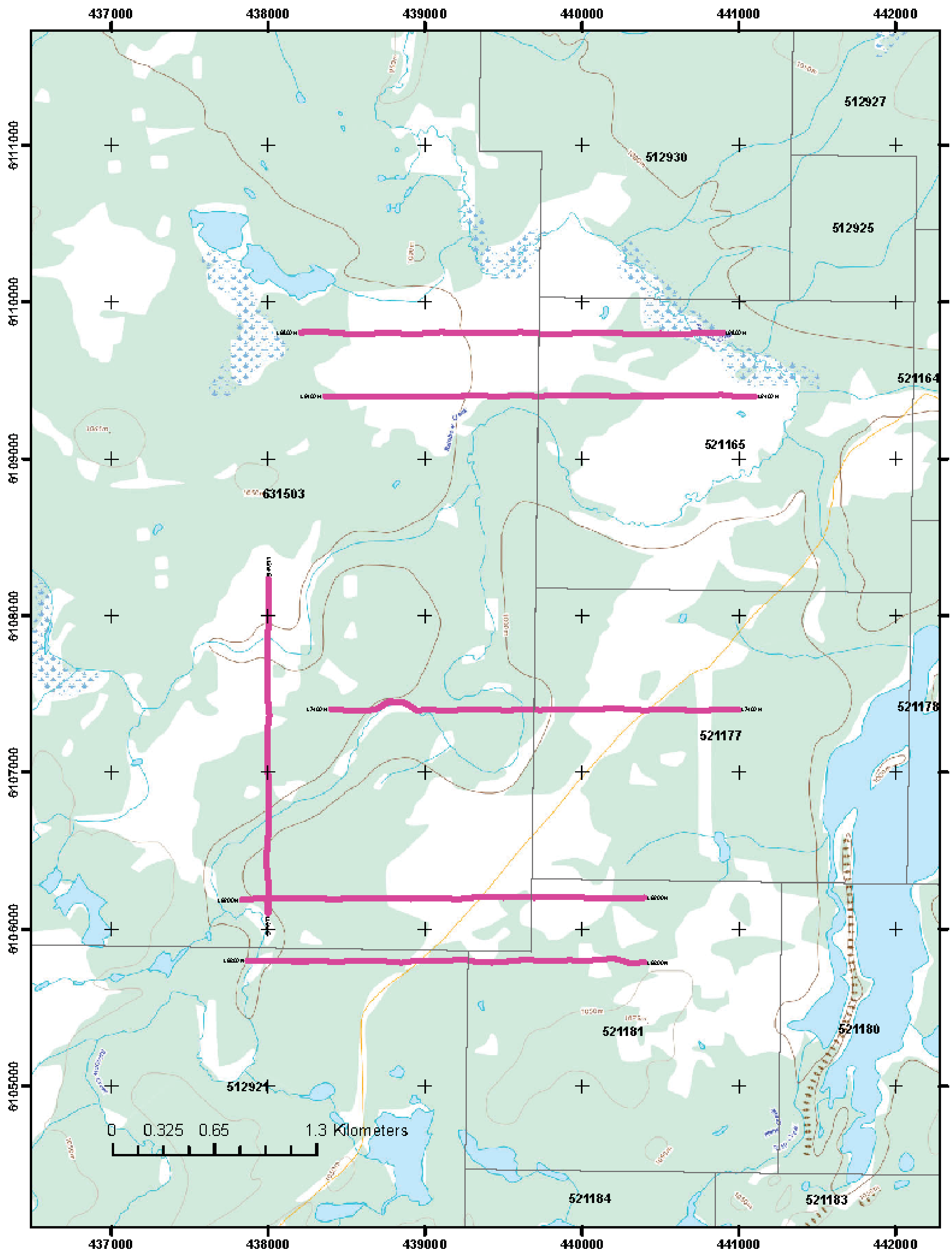
UTM Grid Zone 10N
NAD 83
SCALE: 1:150,000
0 1.5 3 6 9 12 Kilometers

Figure 3 Geophysical IP Line Locations.



3.0 Regional Geology and Mineralization

3.1 Regional Geology

The Mt. Milligan Property occurs within the Quesnel Terrane, a part of the Intermontane Belt that also includes the Cache Creek and Stikine terranes (Figure 4). The Intermontane Belt is thought to have amalgamated offshore in an oceanic setting prior to being accreted onto North America during the Early Jurassic (Monger et al., 1982). The Quesnel Terrane extends from southern BC northwest towards the Yukon, and is bound by the Cassiar Terrane to the east, inter-fingered with the Slide Mountain Terrane, and bound by the Cache Creek and Stikine terranes to the west.

The eastern boundary between the Quesnel and Cassiar terranes is marked by the Manson Fault Zone, a complex zone of east directed thrust faults that have emplaced the Quesnel Terrane above the Cassiar Terrane (Nelson, 1991). The western boundary contact with the Cache Creek Terrane is defined by the Pinchi Fault Zone, which comprises a network of strike slip and localized thrust faults (Nelson, 1991).

The Cassiar Terrane forms an autochthonous group of Upper Proterozoic to Permian sediments that were deposited along the ancient margin of the North American Craton (Colpron et al., 2007). The Wolverine Metamorphic Complex (WMC) forms part of the Cassiar Terrane and occurs in the eastern part of the Mt. Milligan claim group and to the east and southeast of the Property. Towards the southeast, in the area around Carp Lake, it is known as the southern WMC (Nelson, 1991). Regionally, the WMC consists of metamorphosed sedimentary and mafic to intermediate intrusive rocks that are intruded by syn- and post-metamorphic felsic rocks (Staples, 2007). They can be divided into three sub-groups based on their composition, including metapelite, calc-silicate and amphibolite assemblages with biotite to garnet-grade metapelitic schist occurring at the highest stratigraphic level (Staples, 2007).

The Quesnel Terrane is a composite of low-grade metamorphic volcanic, intrusive and sedimentary rocks interpreted to represent an island arc assemblage that was first formed in the Middle and Late Triassic (Mortimer, 1986, 1987). The Takla and Nicola groups form the dominant lithologic units of this terrane. The Nicola Group is the name assigned to the volcano-sedimentary sequence and related intrusions in the south of the province with the Takla Group representing a coeval package of rocks in the north (Monger et al., 1982).

Regionally, the Takla Group comprises Late Triassic to Early Jurassic sedimentary units consisting of volcanic sandstone, tuff, siltstone, argillite, slate and sedimentary breccia, informally named the Inzana Lake Formation, inter-fingered with and overlain by volcanic, pyroclastic and epiclastic rocks of the Witch Lake Formation (Nelson, 1991). Augite-phyric volcaniclastics and coherent basaltic andesite's dominant the Witch Lake Formation, although plagioclase- and hornblende-phyric rocks also occur and may be locally abundant (Nelson, 1991; Nelson and Bellefontaine, 1996). Both formations are intruded by coeval and post-Takla Group intrusions that are as young as Early Jurassic (Nelson, 1991).

Within the Mt. Milligan region, Takla Group volcanic rocks have undergone regional low grade metamorphism that produced prehnite-pumpellyite and, locally, zeolite facies assemblages. These low-grade metamorphic rocks contain secondary chlorite, carbonate, albite, epidote as well as rare pumpellyite and prehnite (Nelson, 1991; Nelson and Bellefontaine, 1996). Clinopyroxene is generally fresh whereas plagioclase ranges from fresh to albitized and sericitized (Nelson and Bellefontaine, 1996). Mapping has shown that a faulted package of rocks within the vicinity of the Properties has undergone lower greenschist facies metamorphism as defined by abundant clear to pale green actinolite occurring as small acicular crystals and overgrowths on clinopyroxene (Nelson and Bellefontaine, 1996). Due to the complex structural history of the region, it is thought that these rocks may have laid closer to, and possibly even formed the roof of, the southern WMC where they were affected by elevated regional isotherms (Nelson and Bellefontaine, 1996).

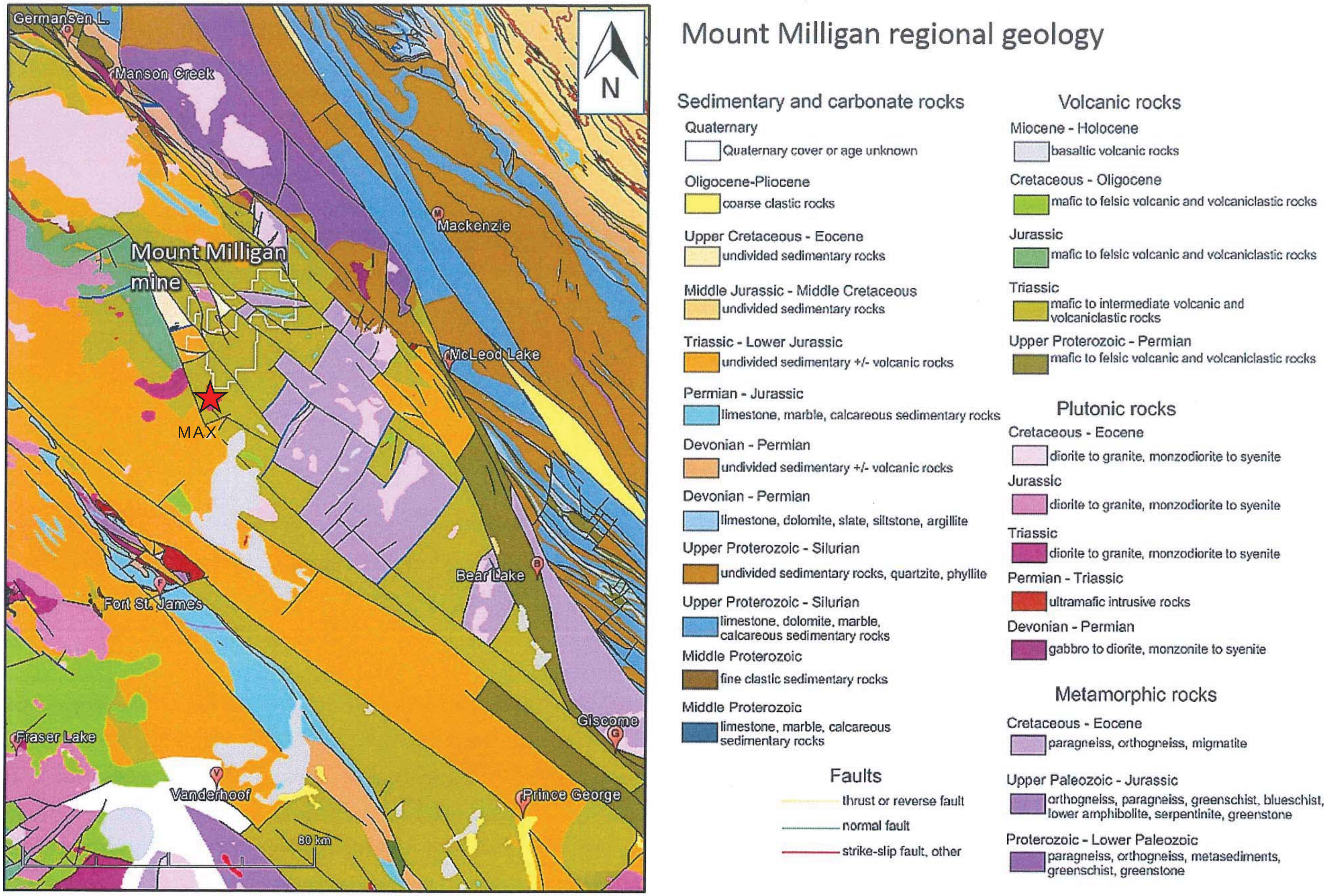
3.2 Regional Mineralization

The Late Triassic volcanic arc responsible for the formation of the Quesnel Terrane also produced a number of intrusions that range in composition from gabbro to granodiorite. These intrusions are associated with several mineralization styles that include porphyry, epithermal and VMS. Of these deposit types, the Late Triassic to Early Jurassic porphyry Cu-Au and porphyry Cu-Mo deposits represent one of the most important groups of ore deposits in British Columbia.

Calc-alkaline porphyry Cu-Mo deposits such as Highland Valley, Brenda and Gibraltar are typically hosted in quartz-diorite to granodiorite intrusions that are approximately 215 to 210 Ma (Mortensen et al., 1995). The alkalic porphyry Cu-Au deposits are younger and thought to have formed during two different temporal events, the first of which includes Mt. Polley and Copper Mountain (210–200 Ma) and the second event includes Mt. Milligan and Lorraine (183–178 Ma) (Mortensen et al., 1995). Host rocks for these deposits include monzonite, monzodiorite and syenite. Regional mapping and prospecting has documented the potential for alkaline porphyry Cu-Au deposits throughout the Takla Group. Unfortunately, exposure of Takla Group rocks is generally poor, especially within the Nechako Plateau area, so that identification of prospective areas relies on less direct criteria such as alteration haloes and/or coincident geophysical and geochemical anomalies. Several such prospects occur in the vicinity of the Mt Milligan Mine.

The Mt. Milligan alkalic porphyry Cu-Au deposit occurs as three main zones: MBX (including the Cu-Au-rich WBX Zone), the 66 Zone (Au-rich) and Southern Star (Cu-Au-rich). Each of these zones is surrounded by well-developed propylitic and potassic alteration halos. Together these mineralized bodies constitute a mineral resource (measured and indicated) of 122.3 Mt at 0.155 % Cu and 0.321 g/t Au and proven and probable mineral reserves of 542.1 Mt at 0.201 % Cu and 0.355 g/t Au (Clifford and Berthelsen, 2015). December 31 2017 mineral reserves update: Total proven and probable 467,939 kilo tonnes grading 0.3 g/t gold and 0.188% copper.

Figure 4 Regional Geology.



4.0 Property and Mine Geology

4.1 Mount Milligan

4.1.1 MtM Geology

The Mt. Milligan Property is located within Triassic to Lower Jurassic volcanic and sedimentary rocks of the Takla Group and Hogem Intrusive Suite. On the property, the Takla Group is divided into the lower sedimentary Inzana Lake Formation and upper volcaniclastic Witch Lake Formation (Figure 5).

The Witch Lake Formation hosts the Mt. Milligan deposit and is characterized by augite-phyric volcaniclastics and more coherent basaltic andesite flows with subordinate epiclastic beds (Mills et al., 2009). At Mt. Milligan, the Witch Lake Formation is intruded by coeval and post-Takla Group intrusions. The coeval intrusions include monzonite with minor diorite/monzodiorite and gabbro, with the monzonite intrusions hosting mineralization in the MBX, SS, Goldmark and North Slope stocks. Post-Takla Group intrusions comprise mainly granite (Mills et al., 2009).

The Main and Southern Star deposits are centred on the MBX and SS stocks respectively. The Main deposit is further divided into the DWBX, WBX, MBX and “66” zones, with the MBX Zone comprising the main Au-Cu ore body. Centred on the Rainbow Dyke, the MBX stock is a moderate west dipping monzonite body with mineralization extending from the eastern contact of the MBX stock to the Great Eastern Fault (Mills et al., 2009). The SS stock is moderately west dipping, strikes north-northwest and has more irregular margins than the MBX stock (Mills et al., 2009). The MBX and SS stocks contain up to 30% sub parallel plagioclase phenocrysts in a greyish pink fine-grained groundmass of plagioclase, quartz, hornblende, biotite and accessory magnetite. Hydrothermal breccia, characterized by potassium feldspar veinlet’s and flooding, occurs throughout the SS stock and less commonly along the margins of the MBX stock (Mills et al., 2009). Mine geology is detailed in Figure 6.

Monolithic andesitic rocks of the Witch Lake Formation host most of the Mt. Milligan deposit. They are characterized by actinolite-altered augite-porphyritic lapilli tuff and augite crystal lithic tuff with augite-plagioclase porphyritic flows and heterolithic debris flows. Hornblende phenocrysts are locally present within flows and crystal tuffs. Rocks originally described as latitic volcanics surround most of the area of the MBX stock and less commonly in areas adjacent to the SS stock (Mills et al., 2009). The latitic volcanic rocks can be distinguished from andesite rocks by their darker colour, a general absence of visible hornblende, the presence of biotite and, based on staining, greater than one-third potassium feldspar content (Mills et al., 2009).

The abundance of potassium feldspar led past workers to a field classification of augite-porphyritic latite rocks. However, microscopic examination revealed that rocks up to 4 km from the stocks contained secondary potassium feldspar occurring in veinlet’s, clumps along with pyrite and seams cutting plagioclase crystals (Nelson, 1991). The replacement in rocks distal to the deposit suggests that the “latitic” rocks occurring around and within the deposit are more likely potassic altered andesite (Nelson, 1991).

Alteration assemblages at Mt. Milligan are either potassic or propylitic, with propylitic alteration locally overprinting the potassic assemblage (DeLong et al., 1991; Jago and

Tosdal, 2009); Gold and copper mineralization is concentrated in zones of potassic alteration (DeLong et al., 1991).

Zones of potassic alteration occur around the contacts of the monzonite stocks and extend several hundred meters into surrounding fractured andesite. Potassic alteration also occurs within the monzonite intrusions themselves. The alteration assemblage includes potassium feldspar, hydrothermal biotite and magnetite, with biotite most abundant close to and along brecciated margins of the (DeLong et al., 1991; Jago and Tosdal, 2009). Biotite forms up to 30% of wall rocks near intrusive contacts, typically showing pervasive replacement of andesite protoliths but also occurring as envelopes to potassium feldspar veinlet's (DeLong et al., 1991). Chalcopyrite, bornite and secondary magnetite are strongly associated with the potassic alteration assemblage.

The propylitic alteration assemblage is widespread and peripheral to the potassic alteration shell and consists of epidote with variable abundances of calcite, chlorite, albite and pyrite (DeLong et al., 1991; Jago and Tosdal, 2009). Epidote is the most common propylitic mineral and is associated with pyrite blebs and disseminations. It also forms envelopes around pyrite-calcite veinlet's, replaces pyroxene and forms aggregates in the groundmass (DeLong et al., 1991). Albite and calcite are generally also present in the groundmass whereas pyrite is widespread (DeLong et al., 1991).

The propylitic and potassic alteration zones locally overlap as they are contemporaneous and form part of the same hydrothermal system. Within parts of the MBX deposit, an inner propylitic alteration shell overprints part of the potassic assemblage (Jago and Tosdal, 2009). Propylitic alteration also cross-cuts earlier alteration assemblages along permeable horizons and could have formed as part of a retrograde event during the collapse of the hydrothermal system (DeLong et al., 1991; Jago and Tosdal, 2009).

Noted in Nelson and Bellefontaine (1996), but absent from more recent regional geology maps (Massey et al., 2005; Struick et al., 2007), is a thin strip of Witch Lake Formation rocks, comprised of epiclastic sediments (sandstone, siltstone) with minor amygdaloidal trachyte and dacite flows mapped south of the MBX and Southern Star deposits. This package extends to the northwest, adjacent to the eastern edge of Heidi Lake, and continues north and west of Mitzi Lake, where it is truncated by the regional north-northwest striking Nelson Fault.

Figure 5   Property Geology.

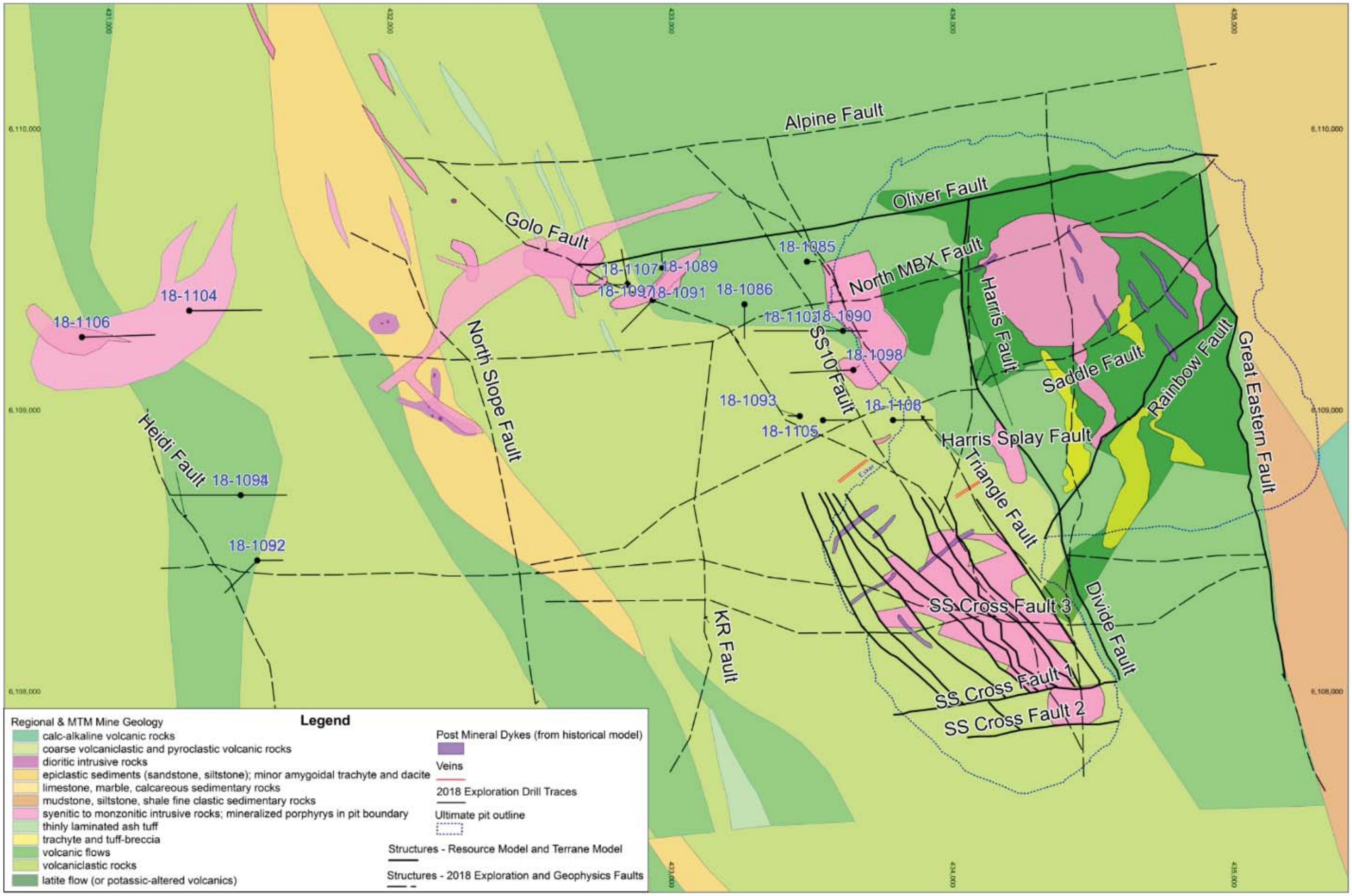
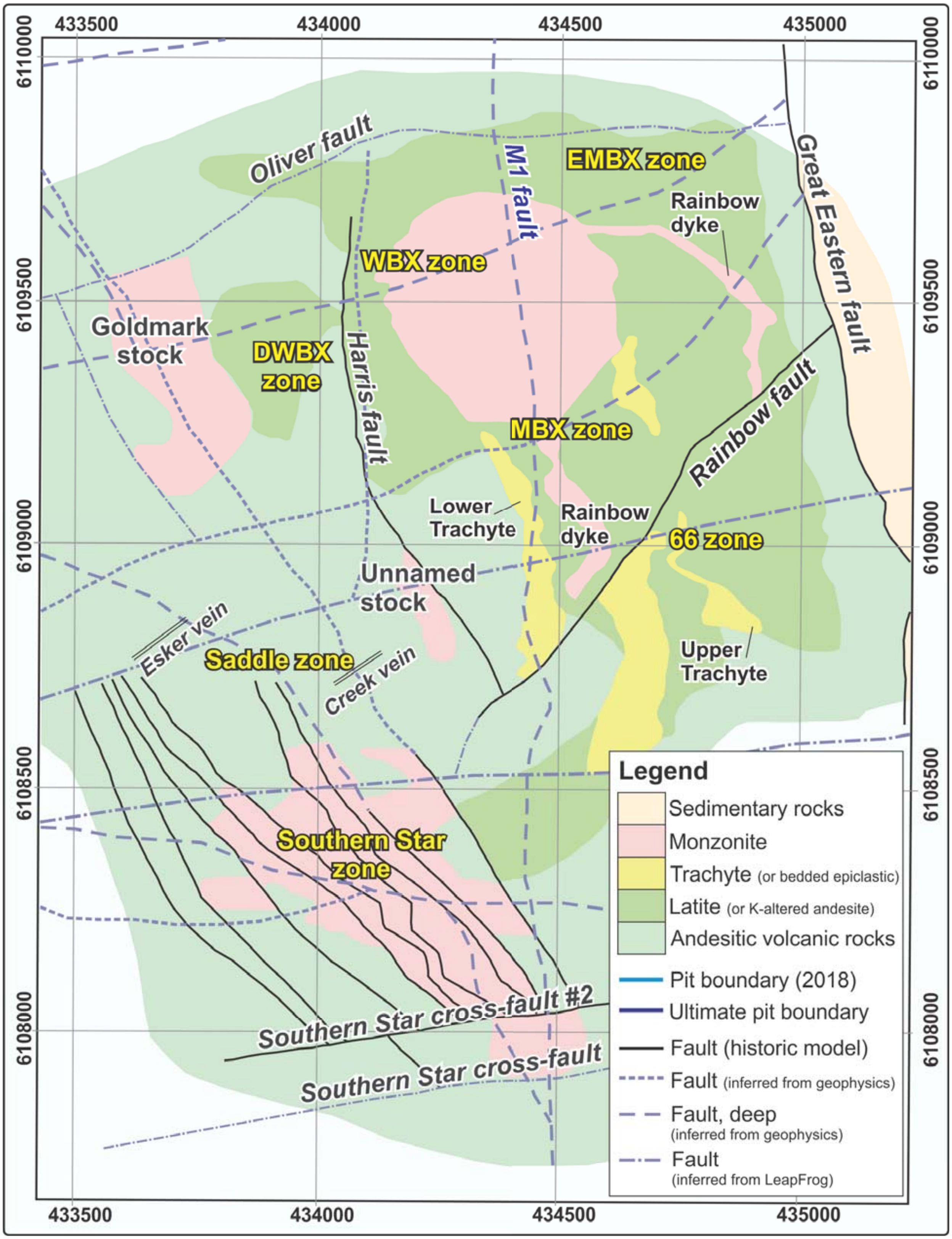


Figure 6 Mine Geology.



4.1.2 MtM Structure

Intrusions on the property are likely structurally controlled and coeval with the demise of the long-lived subduction zone between Quesnellia and the Cache Creek Terrane when Quesnellia was emplaced eastward onto the westward edge of Ancestral North America (Nelson and Bellefontaine, 1996). Major faults in Quesnellia are dextral transcurrent faults that include the Manson-McLeod Fault system, the Finlay-Ingenika system and the Pinchi Fault (Figure 4). A north-easterly striking second order network of transcurrent and normal faults divides Quesnellia into structural blocks (Nelson and Bellefontaine, 1996).

Ductile fabrics in the intrusive phases present on Mount Milligan record the accretion of Quesnellia. Wall rocks and numerous pendants include strongly foliated amphibolite's and augite gneisses as well as contact hornfelses. The transition from plutonic and high-grade metamorphic core of the complex into low-grade metamorphic Witch Lake rocks occurs variously across both contact metamorphic zones and strain gradients. South of the main Mount Milligan peak, amphibolite's are proximal (~300 m) to texturally unaffected augite porphyritic rocks. The intrusive phases display sporadic schistosity, though felsic apophyses are post-kinematic, suggesting the granites were emplaced during the waning stages of penetrative deformation in the wall rocks, whereas ductile fabrics resulted from crustal shortening accompanied locally by plutonic heating (Nelson and Bellefontaine, 1996).

West of Mount Milligan peak, the Mount Milligan intrusive suite is faulted in contact with slightly metamorphosed Takla Group rocks. Striking parallel to this fault zone are strongly deformed, steep northwest striking foliations in quartz-plagioclase-biotite rhyodacite porphyry dikes. Thin sections indicate dextral strike-slip motion with poorly developed C-S structures. These plastically deformed rocks show later, post-uplift brittle deformation where in contact with foliated green clay gouge. A U-Pb titanite age of 169.3 ± 5 Ma for the dikes suggests this fault was in existence by Middle Jurassic, but underwent subsequent dextral motion (Nelson and Bellefontaine, 1996).

Faulting occurs throughout the Mt. Milligan deposit and the surrounding host rocks. A steep northwest trending east-dipping fault separates the MBX stock from the SS stock (Mills et al., 2009). The regional Great Eastern Fault, a broad zone of milling and brittle shear zones seen only in drill core (Nelson and Bellefontaine, 1996), truncates mineralization to the east and juxtaposes Takla Group volcanic rocks against a wedge of early Tertiary rocks (Mills et al., 2009). East-northeast trending cross faults represent the latest faulting episode of the area. Regionally, several northwest trending faults occur on the Property which include the Limestone Creek Fault and Philip Lakes Fault. Several elongated lakes occur within the field area and are also oriented northwest, thereby following the regional fault pattern. This orientation is interpreted to reflect the underlying structural grain of the region (Figures 5 and 6).

Rocks within and surrounding the Mt. Milligan deposit generally trend north-northwest, dipping moderately to steeply to the east (Mills et al., 2009). North of the deposits, strata dips steeply to the west. In the south-eastern portion of the deposit, the stratigraphy trends northerly to north-easterly (Mills et al., 2009). Graded bedding and cross-bedding in tuffaceous rocks indicate that the stratigraphy faces east.

The north-northwest striking regional Nelson Fault cuts through the Northwest Claim Group and the Snell Target Area. North of the Nation River, the Nelson Fault cuts through Witch Lake Formation rocks, whereas south of the Nation River, the fault hosts a sliver of the Early to Middle Jurassic Mount Milligan intrusive suite rocks with Witch Lake Formation volcanoclastic rocks bounded to the west. West of Mitzi Lake, the Nelson Fault terminates a package of north-westerly striking Witch Lake Formation epiclastic sedimentary rocks (Nelson and Bellefontaine, 1996).

4.2 MAX

4.2.1 MAX Geology

The center of the Max property is a topographic high though contains only sporadic outcrop with maximum dimensions up to 200 square meters, but more commonly <30 square meters in surficial extent. Layered or stratified rocks are largely composed of augite-rich andesite flows, plagioclase feldspar porphyry bearing andesite, agglomerates of the above lithologies, locally interbedded andesitic tuffs and volcanoclastics, all underlain by a sedimentary sequence of greywacke, siltstone, argillite, and shale. The mafic volcanic package is considered Upper Triassic Witch Lake Formation and the underlying sedimentary rocks are likely Inzana Formation (Nelson J.L & Bellefontaine K.A, 1999). The sedimentary rocks have been previously mapped in the north-central part of the property. Overall, these mostly stratified rocks are intruded by stocks, dikes, and possible sills consisting of diorite, monzodiorite, latite porphyry, megacrystic feldspar porphyry, and hornblende latite porphyry.

Copper mineralization at Max is found sporadically and typically as malachite, neotocite, chrysocolla, and sparse chalcopyrite. The copper occurs in fractures, disseminations, breccias, and occasional veins often associated with magnetite and hosted in both volcanic and intrusive rocks. Minor amounts of sphalerite, galena, and sulfosalt sulphides were identified at the K-2 mineral occurrence, hosted in a quartz-carbonate vein with abundant chalcopyrite as well.

Geologic mapping was conducted reconnaissance style over a 100m topographic high and more specifically, on portions of claim 842878 in 2017. The mapping was limited to the south facing slope where outcrop exposures contain propylitic to locally albitic altered Witch Lake andesitic host rocks with alteration such as propylitic, albitic, and locally quartz-pyritic. Isolated areas of quartz silicification, hydrothermal magnetite, calcite veining, and malachite (copper carbonate) were identified. The andesites are undifferentiated and likely part of the finer grained plagioclase rich sequence. A thin diorite dyke was located and is oriented in a NNW direction. A small occurrence of copper oxide (malachite) was found and in association with hydrothermal magnetite and chlorite alteration in a small outcrop on the western edge of the mapping. The quartz-pyrite and gossanous outcrops were exposed in the past by a bulldozer over an area roughly 140m elongate by 60-70m widths (vintage unknown).

5.0 2018 IP Survey

From May 27th to June 17th 2018 approximately 15.5 line kilometers of IP were brushed and surveyed on the northeastern grid block to complete the planned grid area started in 2017. Several ring anomaly features identified from the 2017 magnetic survey in the eastern grid had lines run across them, and a NE trending airborne resistivity high feature had a single line run across it. (Figure 3 and Map 1).

The survey consisted of 5 east-west traverses and 1 north-south tie line, with a nominal line spacing between 400 meters utilizing a 100 meter ‘a’-spacing and measuring the 1st to 10th separations.

The complete Walcott technical report is located in Appendix 6. All accompanying full scale maps are located at the end of the report inside the back cover.

6.0 Conclusions and Recommendations

1. The 2018 IP survey identified one discrete anomaly on a single north-south line (8000E) which should be evaluated in conjunction with all available historic data. If warranted two flanking IP lines should be undertaken, followed by subsequent drilling.

2. Additional inversion work should be carried out, testing models using fixed resistivity layers derived from the TEM sounding data to test if a valid target exists beneath the highly conductive layer observed in most of the east -west orientated lines. An exploratory drill hole should be considered into the highest chargeability feature if the results of the exercise yield any features of interest, as exploration information within this area is limited.

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Respectfully submitted,

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November 10, 2018

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Exploration Manager
Thompson Creek Metals Company Inc. – Mount Milligan Mine
November 10, 2018

Appendix 1

Statement of Author's Qualifications

I, Michael Pond, P.Geo. do hereby certify that:

1. I am currently employed as Regional Exploration Geologist by:

    Thompson Creek Metals Company Inc.
    Mount Milligan Mine
    177 Victoria Street, Suite 100
    Prince George, BC V2L 5R8

2. I graduated from the University of British Columbia with a Bachelors of Science, Geology in 1982.

3. I graduated from the British Columbia Institute of Technology with a Diploma of Technology, CAD/CAM in 1986.

4. I am a Registered Professional Geologist with the Association of Professional Engineers and Geoscientists of BC.
    Registration # 18735

5. I have worked as a Geologist for a total of 30 years since my graduation from university.

6. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes this Assessment Report misleading.

Dated 10th day of November, 2018.

M. Pond, P.Geo.

Appendix 1

Statement of Author's Qualifications

I, C. Paul Jago, P.Geo. do hereby certify that:

1. I am currently employed as Exploration Manager by:

   Thompson Creek Mining Ltd.
   Mount Milligan Mine
   299 Victoria Street, Suite 200
   Prince George, BC V2L 5B8

2. I am a Registered Professional Geologist with the Association of Professional Engineers and Geoscientists of BC. Registration # 41112.

3. I worked as the Northcentral-Northeast Regional Geologist for the BC Ministry of Energy and Mines from January 2012 - May 2018.

4. I worked as a Geologist for Freeport-McMoRan Inc. (Oro Valley, Tucson AZ) from May 2008 - December 2011

5. I graduated from the Mineral Deposit Research Unit (MDRU), University of British Columbia with a Master of Geological Sciences in June 2008.

6. I graduated from the University of Toronto with a Bachelor of Science (Geology-Physical Geography) in 2005.

7. I have worked full-time as a Geologist in both industry and government for over 10 years since graduation from university.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Dated 10th day of November, 2018.

C. Paul Jago, P.Geo.

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 five 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.
October 2018

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 am currently employed by Peter E. Walcott & Associated Limited.

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

Alexander Walcott, B.Sc.

Coquitlam, B.C.
October 2018

Appendix 2

Tenure Information

110 TCM – Mount Milligan Titles in Good Standing to March 14, 2019 and beyond.

12 JAMA - MAX Titles in Good Standing to August 15, 2019.

Title Number	Claim Name	Owner	Title Type	Title Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
512884		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2021/MAR/14	GOOD	369.6
512887		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2021/MAR/14	GOOD	295.8
512888		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	370.0
512890		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	296.1
512891		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	554.4
512897		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	444.3
512907		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	424.9
512909		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	351.1
512913		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	665.2
512919		283374 (100%)	Mineral	Claim	093N	2005/MAY/18	2020/MAR/14	GOOD	444.3
512921		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2021/MAR/14	GOOD	518.4
512923		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	332.4
512924		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	665.2
512925		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	74.0
512927		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2021/MAR/14	GOOD	406.7
512930		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2021/MAR/14	GOOD	480.6
512931		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	480.3
512932		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	92.3
512933		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	517.1
512934		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	554.3
512935		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	443.7
512936		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	720.6
512937		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	517.3
512938		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	462.1
512939		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	462.1
512940		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	462.1
512941		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	665.9
512942		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	554.9
512943		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	370.1
512944		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	369.9
512945		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	462.3
512960		283374 (100%)	Mineral	Claim	093O	2005/MAY/18	2020/MAR/14	GOOD	203.4
521164	MILL 1	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	332.9
521165	MILL 2	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2021/MAR/14	GOOD	443.9
521177	MILL 3	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	444.1
521178	MILL 4	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2021/MAR/14	GOOD	277.5
521179	MILL 5	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	462.8
521180	MILL 6	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	370.2
521181	MILL 7	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2021/MAR/14	GOOD	351.7
521182	MILL 8	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	444.4
521183	MILL 9	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	370.4
521184	MILL10	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	296.3
521185	MILL 11	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2020/MAR/14	GOOD	444.5
521186	MILL 12	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	444.5
521187	MILL 13	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	407.6
521189	MILL 14	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	370.6
521190	MILL 15	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	463.0
521191	MILL 16	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	463.0
521192	MILL 17	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	370.4
521193	MILL 18	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	370.6
521194	MILL 19	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	463.3
521195	MILL 20	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	463.3
521196	MILL 21	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	444.6
521197	MILL 22	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	444.6
521198	MILL 23	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	463.4
521199	MILL 24	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	463.4
521200	MILL 25	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	463.4
521201	MILL 26	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	185.4
521202	MILL 27	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	445.0
521203	MILL 28	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	445.0

Title Number	Claim Name	Owner	Title Type	Title Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
521204	MILL 29	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	445.0
521205	MILL 30	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	445.0
521206	MILL 31	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	463.6
521207	MILL 32	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	370.9
521208	MILL 33	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	445.2
521209	MILL 34	283374 (100%)	Mineral	Claim	093N	2005/OCT/14	2019/MAR/14	GOOD	445.2
521210	MILL 35	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	445.2
521212	MILL 36	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	333.9
521213	MILL 37	283374 (100%)	Mineral	Claim	093O	2005/OCT/14	2019/MAR/14	GOOD	167.0
524891	ARM	283374 (100%)	Mineral	Claim	093N	2006/JAN/08	2020/MAR/14	GOOD	463.0
524892	STRONG	283374 (100%)	Mineral	Claim	093N	2006/JAN/08	2020/MAR/14	GOOD	463.4
579598		283374 (100%)	Mineral	Claim	093O	2008/MAR/28	2019/MAR/14	GOOD	295.8
579599		283374 (100%)	Mineral	Claim	093O	2008/MAR/28	2019/MAR/14	GOOD	295.6
579600		283374 (100%)	Mineral	Claim	093O	2008/MAR/28	2019/MAR/14	GOOD	369.7
579602		283374 (100%)	Mineral	Claim	093O	2008/MAR/28	2019/MAR/14	GOOD	369.5
580741		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	443.0
580742		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	443.0
580743		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	406.1
580744		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.7
580745		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.7
580746		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.5
580747		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.7
580748		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.5
580749		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.5
580750		283374 (100%)	Mineral	Claim	093O	2008/APR/08	2019/MAR/14	GOOD	461.7
595146		283374 (100%)	Mineral	Claim	093N	2008/DEC/01	2021/MAR/14	GOOD	443.6
595163		283374 (100%)	Mineral	Claim	093N	2008/DEC/01	2021/MAR/14	GOOD	147.9
631503		283374 (100%)	Mineral	Lease	093N	2009/SEP/09	2019/SEP/09	GOOD	5,138.0
677107	FURB	283374 (100%)	Mineral	Claim	093N	2009/DEC/01	2020/MAR/14	GOOD	462.4
677785		283374 (100%)	Mineral	Claim	093N	2009/DEC/02	2020/MAR/14	GOOD	147.8
678524		283374 (100%)	Mineral	Claim	093K	2009/DEC/03	2019/MAR/14	GOOD	464.0
678527		283374 (100%)	Mineral	Claim	093K	2009/DEC/03	2019/MAR/14	GOOD	464.0
678536		283374 (100%)	Mineral	Claim	093J	2009/DEC/03	2019/MAR/14	GOOD	389.7
678564		283374 (100%)	Mineral	Claim	093J	2009/DEC/03	2019/MAR/14	GOOD	464.0
678583		283374 (100%)	Mineral	Claim	093J	2009/DEC/03	2019/MAR/14	GOOD	464.0
678588		283374 (100%)	Mineral	Claim	093J	2009/DEC/03	2019/MAR/14	GOOD	464.3
678603		283374 (100%)	Mineral	Claim	093K	2009/DEC/03	2019/MAR/14	GOOD	55.7
679483		283374 (100%)	Mineral	Claim	093N	2009/DEC/05	2020/MAR/14	GOOD	461.9
679484		283374 (100%)	Mineral	Claim	093N	2009/DEC/05	2020/MAR/14	GOOD	221.7
679485		283374 (100%)	Mineral	Claim	093N	2009/DEC/05	2020/MAR/14	GOOD	350.9
679505		283374 (100%)	Mineral	Claim	093N	2009/DEC/05	2020/MAR/14	GOOD	369.2
679506		283374 (100%)	Mineral	Claim	093N	2009/DEC/05	2020/MAR/14	GOOD	443.1
679509		283374 (100%)	Mineral	Claim	093N	2009/DEC/05	2020/MAR/14	GOOD	462.2
896789	MILL 9	283374 (100%)	Mineral	Claim	093N	2011/SEP/13	2019/MAR/14	GOOD	18.5
1030396	GD1	283374 (100%)	Mineral	Claim	093O	2014/AUG/19	2019/MAR/14	GOOD	369.2
1030397	GD2	283374 (100%)	Mineral	Claim	093O	2014/AUG/19	2019/MAR/14	GOOD	664.1
1030398	GD3	283374 (100%)	Mineral	Claim	093O	2014/AUG/19	2019/MAR/14	GOOD	1,106.9
1036881	DB1	283374 (100%)	Mineral	Claim	093N	2015/JUN/23	2020/MAR/14	GOOD	277.1
1036882	DB2	283374 (100%)	Mineral	Claim	093N	2015/JUN/23	2020/MAR/14	GOOD	110.8
1050265		283374 (100%)	Mineral	Claim	093O	2017/FEB/24	2019/MAR/14	GOOD	1,334.2

BRITISH COLUMBIA

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Mineral Titles Online Viewer

Search criteria:

Criteria	Owner	Title Type	Title Status
	265548	M	GOOD

Click here to go back to the previous page
Click here to go back to the titles search page.

Search results: Download to Excel (all results)

Total 12 titles are found.

Title Number	Claim Name	Owner	Title Type	Title Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
530480	NEWCOPPER WEST	265548 100%	Mineral	Claim	093K	2006/MAR/24	2019/AUG/15	GOOD	464.44
532537	MAX COPPER	265548 100%	Mineral	Claim	093K	2006/APR/18	2019/AUG/15	GOOD	464.44
532538	MAX COPPER 2	265548 100%	Mineral	Claim	093K	2006/APR/18	2019/AUG/15	GOOD	464.61
532540	MAX COPPER 3	265548 100%	Mineral	Claim	093K	2006/APR/18	2019/AUG/15	GOOD	464.78
532541	MAX COPPER 4	265548 100%	Mineral	Claim	093K	2006/APR/18	2019/AUG/15	GOOD	445.90
532542	MAX COPPER 5	265548 100%	Mineral	Claim	093K	2006/APR/18	2019/AUG/15	GOOD	371.80
532543	MAX COPPER 6	265548 100%	Mineral	Claim	093K	2006/APR/18	2019/AUG/15	GOOD	334.60
532635	MAX COPPER 7	265548 100%	Mineral	Claim	093K	2006/APR/19	2019/AUG/15	GOOD	446.14
532638	MAX COPPER 8	265548 100%	Mineral	Claim	093K	2006/APR/19	2019/AUG/15	GOOD	222.95
551895	MAX COPPER SOUTH	265548 100%	Mineral	Claim	093K	2007/FEB/13	2019/AUG/15	GOOD	464.93
842877		265548 100%	Mineral	Claim	093K	2011/JAN/12	2019/AUG/15	GOOD	445.70
842878		265548 100%	Mineral	Claim	093K	2011/JAN/12	2019/AUG/15	GOOD	278.56

Total 12 titles are found.

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Appendix 3

Mineral Titles Online – Event 5707728

BRITISH COLUMBIA

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Mineral Titles Online

Mineral Claim Exploration and Development Work/Expiry Date Change

Confirmation

Recorder: THOMPSON CREEK METALS COMPANY INC. (283374)
Submitter: THOMPSON CREEK METALS COMPANY INC. (283374)
Recorded: 2018/AUG/14
Effective: 2018/AUG/14
D/E Date: 2018/AUG/14

Confirmation

If you have not yet submitted your report for this work program, your technical work report is due in 90 days. The Exploration and Development Work/Expiry Date Change event number is required with your report submission. **Please attach a copy of this confirmation page to your report.** Contact Mineral Titles Branch for more information.

Event Number: **5707728**

Work Type: Technical Work
Technical Items: Geophysical

Work Start Date: 2018/MAY/29
Work Stop Date: 2018/JUN/17
Total Value of Work: $ 71142.20
Mine Permit No: 17-1300188-0731

Summary of the work value:

Title Number	Claim Name/Property	Issue Date	Good To Date	New Good To Date	# of Days For-ward	Area in Ha	Applied Work Value	Sub-mission Fee
521165	MILL 2	2005/OCT/14	2021/MAR/14	2021/MAR/14	0	443.91	$ 0.00	$ 0.00
521177	MILL 3	2005/OCT/14	2020/MAR/14	2020/MAR/14	0	444.09	$ 0.00	$ 0.00
521181	MILL 7	2005/OCT/14	2020/MAR/14	2021/MAR/14	365	351.72	$ 7023.11	$ 0.00
512921		2005/MAY/18	2020/MAR/14	2021/MAR/14	365	518.37	$ 10353.95	$ 0.00
521185	MILL 11	2005/OCT/14	2020/MAR/14	2020/MAR/14	0	444.47	$ 0.00	$ 0.00
521196	MILL 21	2005/OCT/14	2019/MAR/14	2019/MAR/14	0	444.63	$ 0.00	$ 0.00
521199	MILL 24	2005/OCT/14	2019/MAR/14	2019/MAR/14	0	463.37	$ 0.00	$ 0.00
521204	MILL 29	2005/OCT/14	2019/MAR/14	2019/MAR/14	0	445.05	$ 0.00	$ 0.00
521209	MILL 34	2005/OCT/14	2019/MAR/14	2019/MAR/14	0	445.21	$ 0.00	$ 0.00
678524		2009/DEC/03	2019/MAR/14	2019/MAR/14	0	464.02	$ 0.00	$ 0.00
678588		2009/DEC/03	2019/MAR/14	2019/MAR/14	0	464.27	$ 0.00	$ 0.00
842877		2011/JAN/12	2018/AUG/15	2019/AUG/15	365	445.70	$ 4454.47	$ 0.00
842878		2011/JAN/12	2018/AUG/15	2019/AUG/15	365	278.56	$ 2784.05	$ 0.00
532638	MAX COPPER 8	2006/APR/19	2018/AUG/15	2019/AUG/15	365	222.95	$ 2228.21	$ 0.00
530480	NEWCOPPER WEST	2006/MAR/24	2018/AUG/15	2019/AUG/15	365	464.44	$ 4641.83	$ 0.00
532537	MAX COPPER	2006/APR/18	2018/AUG/15	2019/AUG/15	365	464.44	$ 4641.76	$ 0.00
532541	MAX COPPER 4	2006/APR/18	2018/AUG/15	2019/AUG/15	365	445.90	$ 4456.51	$ 0.00
532538	MAX COPPER 2	2006/APR/18	2018/AUG/15	2019/AUG/15	365	464.61	$ 4643.46	$ 0.00

532635	MAX COPPER 7	2006/APR/19	2018/AUG/15	2019/AUG/15	365	446.14	$ 4458.85	$ 0.00
532543	MAX COPPER 6	2006/APR/18	2018/AUG/15	2019/AUG/15	365	334.60	$ 3344.12	$ 0.00
532540	MAX COPPER 3	2006/APR/18	2018/AUG/15	2019/AUG/15	365	464.78	$ 4645.20	$ 0.00
532542	MAX COPPER 5	2006/APR/18	2018/AUG/15	2019/AUG/15	365	371.80	$ 3715.86	$ 0.00
551895	MAX COPPER SOUTH	2007/FEB/13	2018/AUG/15	2019/AUG/15	365	464.93	$ 4646.69	$ 0.00

Financial Summary:

Total applied work value: $ 66038.07

PAC name: Thompson Creek Metals Company Inc.
Debited PAC amount: $ 0.0
Credited PAC amount: $ 5,104.13

Total Submission Fees: $ 0.0

Total Paid: **$ 0.0**

Please print this page for your records.

The event was successfully saved.

Click here to return to the Main Menu.

Appendix 4

Computer Software List

1. Project locations were accurately sited using a Trimble GPS system. Data input and output functions used “Trimble Geomatics Office”, version 1.60.

2. Many plotting and drafting functions were done with the Autodesk – “Autocad 2013” program.

3. General report and documentation has been done using the “Microsoft Office Professional Plus 2013 Suite”. (Word, Excel, Outlook)

4. Document PDF file creation and edits have been done using Nuance “PDF Converter Professional 6.0”.

5. PDF document review and collaboration have also used the Adobe Systems Inc, “Adobe Reader” DC (18.009.20050).

6. Simple text data file edits and review used the Helios Software Solutions – “TextPad” program, version 5.4.2.

7. Map GIS and coordinate translations were done with “MapInfo Discover” Bundle 2017.

8. Regional and detailed locations and imagery were plotted from “Google Earth”, version 6.2.2.6613.

9. Screen Captures completed with Techsmith SnagIt version 9.1.3.

10. Geosoft Oasis Montage version 9.3.

11. GemLink Software for magnetometers version 5.4.

12. Additional GIS Mapping with Blue Marble - Global Mapper version 16.1.3 software.

Appendix 5

Program Expenditures

Peter E. Walcott & Associates Ltd.		
IP Survey (15.5 lineKM)	Inv. 5542	$71,142.20
May-June , 2018		
		$71,142.20

Appendix 6

Peter E. Walcott & Associates Ltd. –
Induced Polarization Survey Report
Mount Milligan Mine, October 2018

A REPORT

ON

INDUCED POLARIZATION SURVEYING

MOUNT MILLIGAN MINE
FT. ST. JAMES AREA, BRITISH COLUMBIA

OMINECA M.D.
55° 7' N, 124° 02' W
NTS 93N/01

Claims:

521165,521177,512921,521181, Mining Lease 631503

Work Dates:
May 28th – June 17th, 2018

FOR

THOMPSON CREEK METALS CO INC.
A Subsidiary of Centerra Gold

PRINCE GEORGE, BRITISH COLUMBIA

BY

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

PETER E. WALCOTT & ASSOCIATES LIMITED
Coquitlam, British Columbia

OCTOBER 2018

TABLE OF CONTENTS

INTRODUCTION.

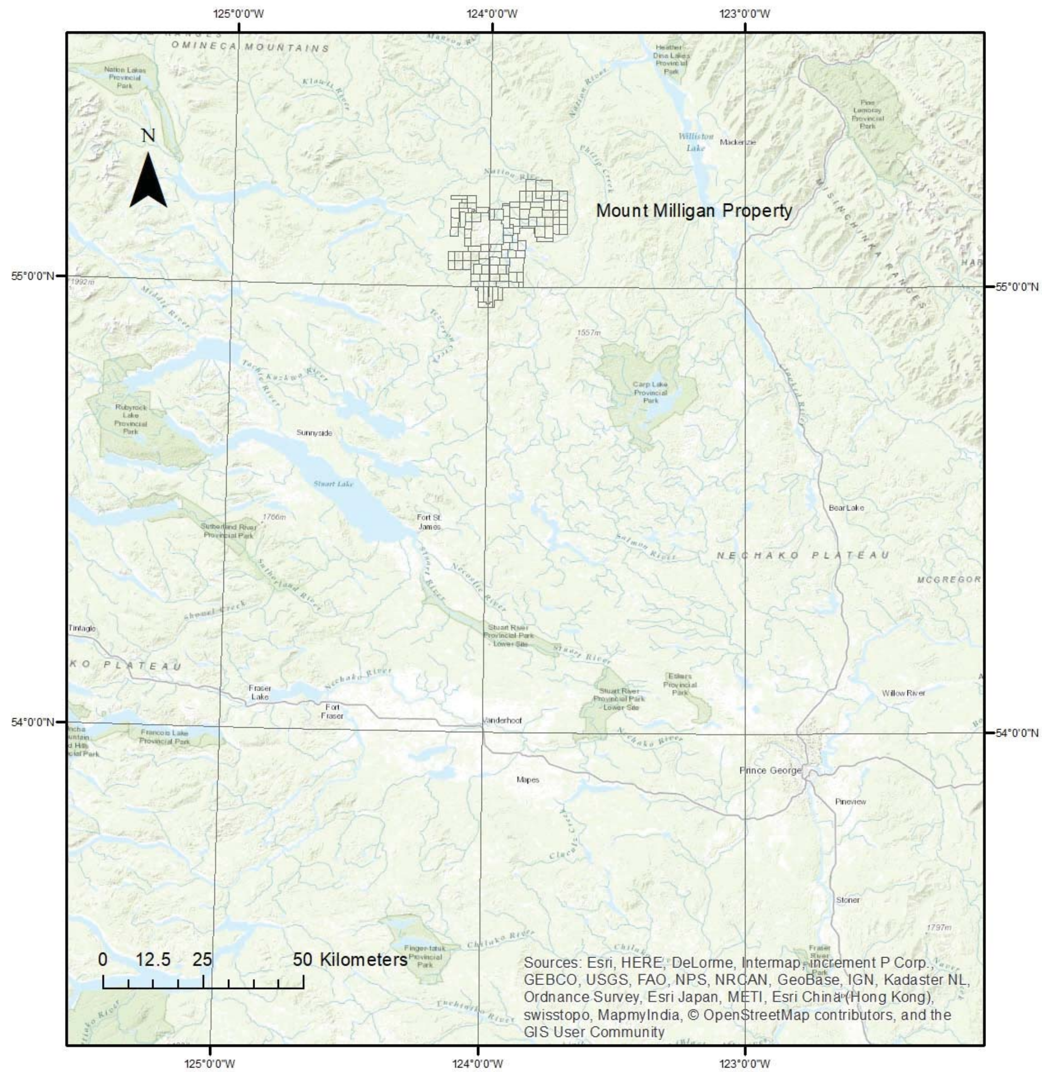
Between May 28th and June 17th, 2018 Peter E. Walcott & Associates Limited undertook induced polarization surveying over parts of the Mount Milligan Mine property for Thompson Creek Metals Inc.

The survey consisted of some 15.5-line kilometers of line brushing and induced polarization, carried out on 5 east-west traverses, and one north-south traverse utilizing a 100-meter a-spacing and measuring the 1st to 10th separations.

PROPERTY LOCATION AND ACCESS.

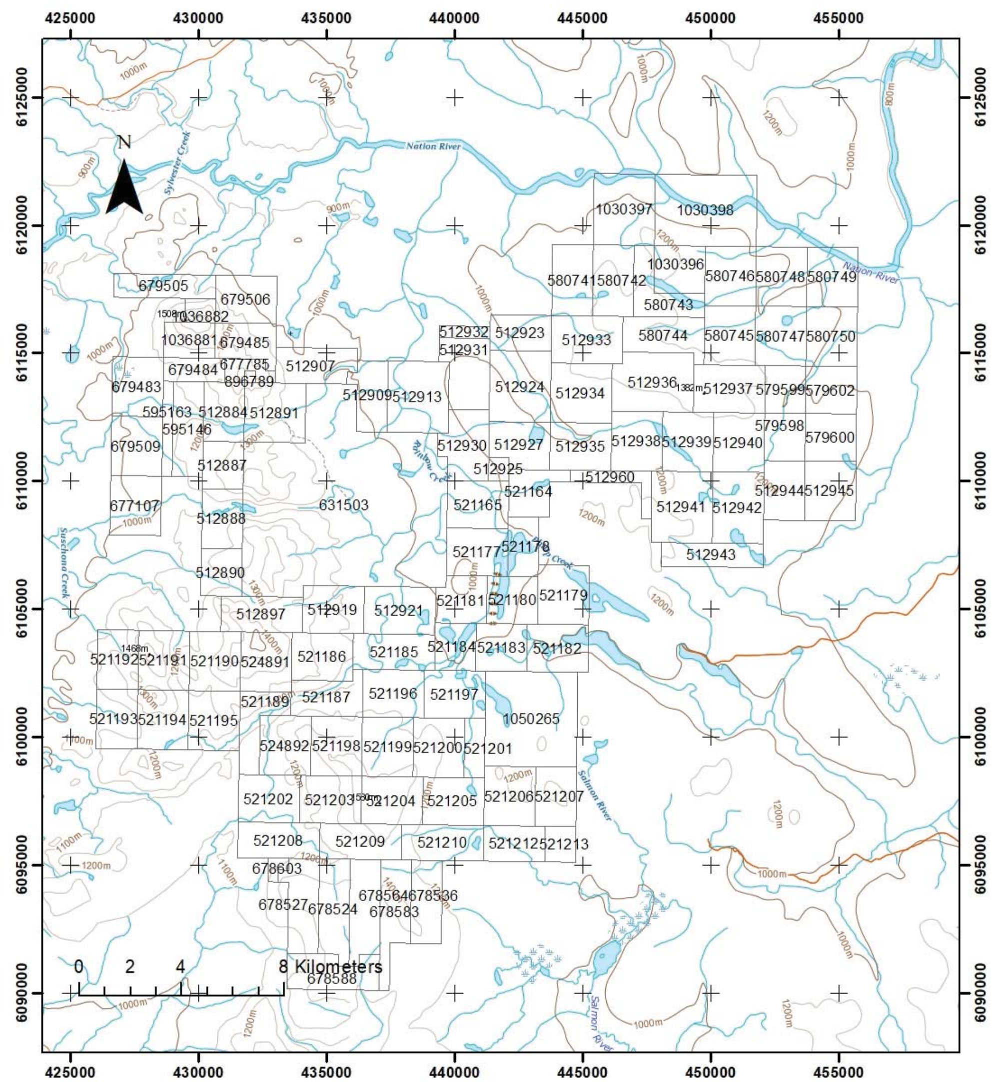
The Mount Milligan Mine is located some 150 kilometres northwest of the Prince George, British Columbia.

Access to the property can be gained from the community of Fort St. James via the North Road, and then at approximately kilometer 57 turning easterly onto the Rainbow road which passed through the property.



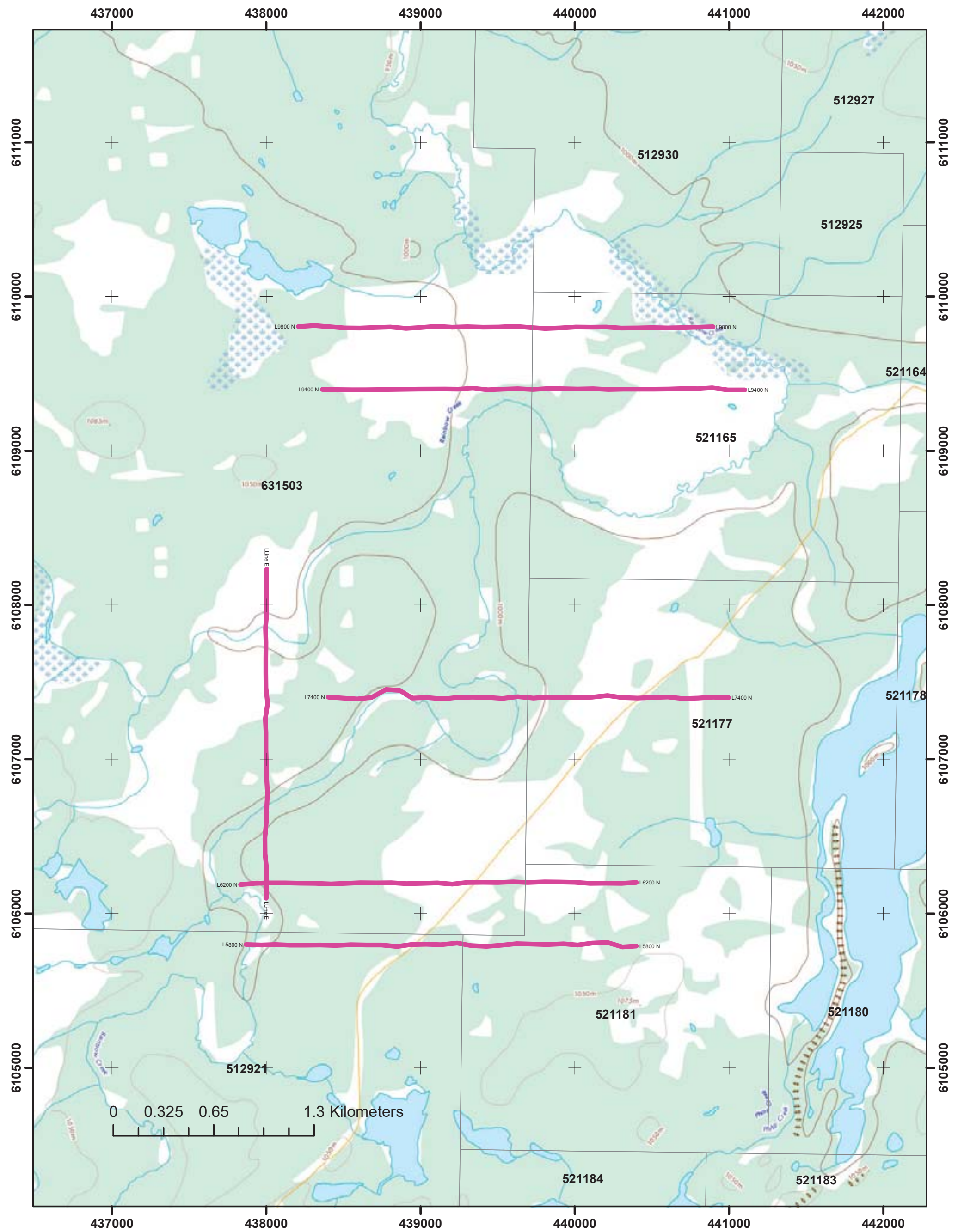
Property Location Map

PROPERTY LOCATION AND ACCESS con't



Claim Map

PROPERTY LOCATION AND ACCESS con't



Claim and Line Location Map

PURPOSE.

The 2018 ground geophysical program as designed to follow-up on several target areas identified during a compilation exercise in an attempt to locate addition zones of potential mineralization proximal to the Mount Milligan mine site.

The survey was a continuation of the previous years survey which terminated due to winter conditions.

HISTORICAL WORK.

Areas in the Mount Milligan camp have been prospected since the late 1930's, with the first recorded exploration work in the area dated to the early 1970's.

Since that time numerous exploration programs have been conducted, both prior and post discovery of the Mount Milligan deposit.

For further information the reader is referred to the Government of British Columbia Aris website.

GEOLOGY

The Milligan property lies in the northern part of the Upper Triassic to Lower Jurassic Quesnel Trough – Quesnellia Terrane –, a Mesozoic island arc terrane juxtaposed against the ancestral North American continental margin.

It hosts numerous alkalic porphyry copper-gold deposits, from southern to northern B.C. The deposits in this region of the Quesnel Trough area are associated with potassically altered diorite to syenite plugs and stocks and coeval andesitic volcanic rocks, mainly along the flanks of the Hogem batholith.

Mount Milligan is the most significant mineral occurrence known. It was discovered in the late 1980s and lies immediately to the east of the project.

The property is dominantly covered by Upper Triassic Rainbow Creek, Inzana Lake and Witch Lake formations and the Lower Jurassic Chuchi Lake Formation, intruded by a range of intrusive rocks ranging from gabbro through diorite to quartz monzonite.

For further information the reader is referred to the aforementioned Aris website.

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 and Walcer Geophysics of Enniskillen, Ontario.

The system consists basically of three units, a receiver (GDD), transmitter (Walcer) and a motor generator (Walcer). The transmitter, which provides a maximum of 10.0 kw d.c. to the ground, obtains its power from a 20 kw 400 c.p.s. alternator driven by a Honda 24 h.p. gasoline engine. 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.

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” method of survey utilizing a pre-laid receiver array which remains stationary, while the current C_1 is moved along the survey lines at a spacing of “a” (the dipole) apart, with the second current electrode, C_2, kept constant at “infinity”.

SURVEY SPECIFICATIONS cont'd.

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 in achieving 1st to 10th separation measurements.

On this survey a total of some 15.5 kilometres of survey traverses were completed.

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. In addition, data was subjected to 2D inversion and presented as model sections at a scale of 1:10,000.

DISCUSSION OF RESULTS.

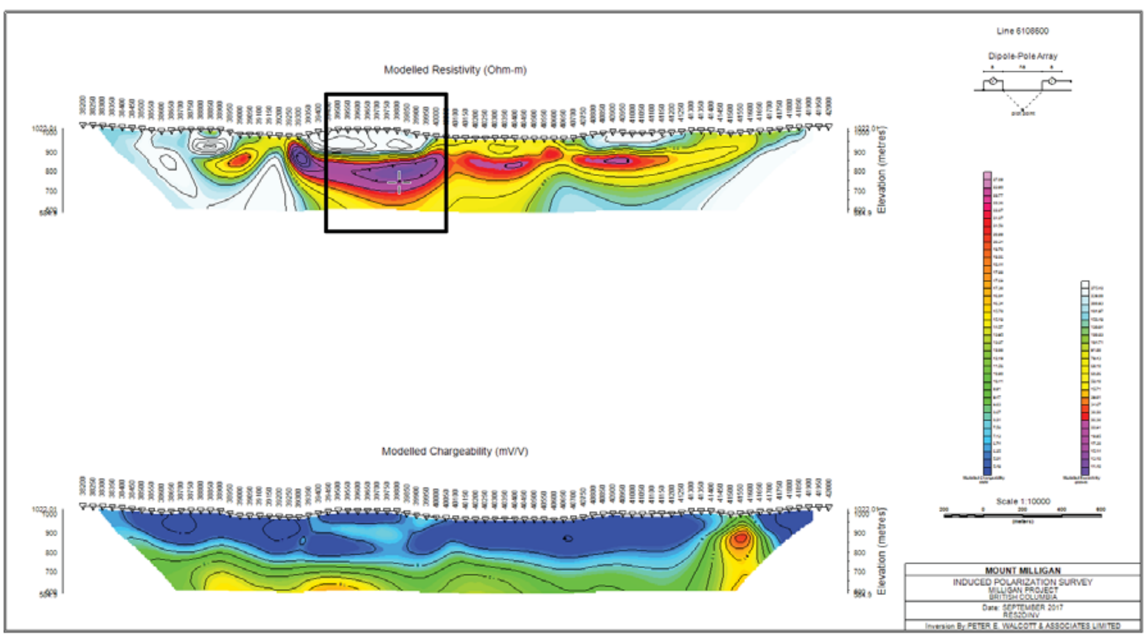
During the late spring of 2018, Peter E. Walcott & Associates Limited undertook induced polarization within the Mount Milligan mine mineral claims.

The results of the survey of almost all the east – west lines demonstrated a very similar signature. A moderately to highly resistive surface unit, underlain by a conductive unit. A lower resistive unit can also be observed a depth.

The lower resistive unit is associated with abroad low to moderate chargeability unit, likely associated with a lithological change rather than an elevated level of sulphides.

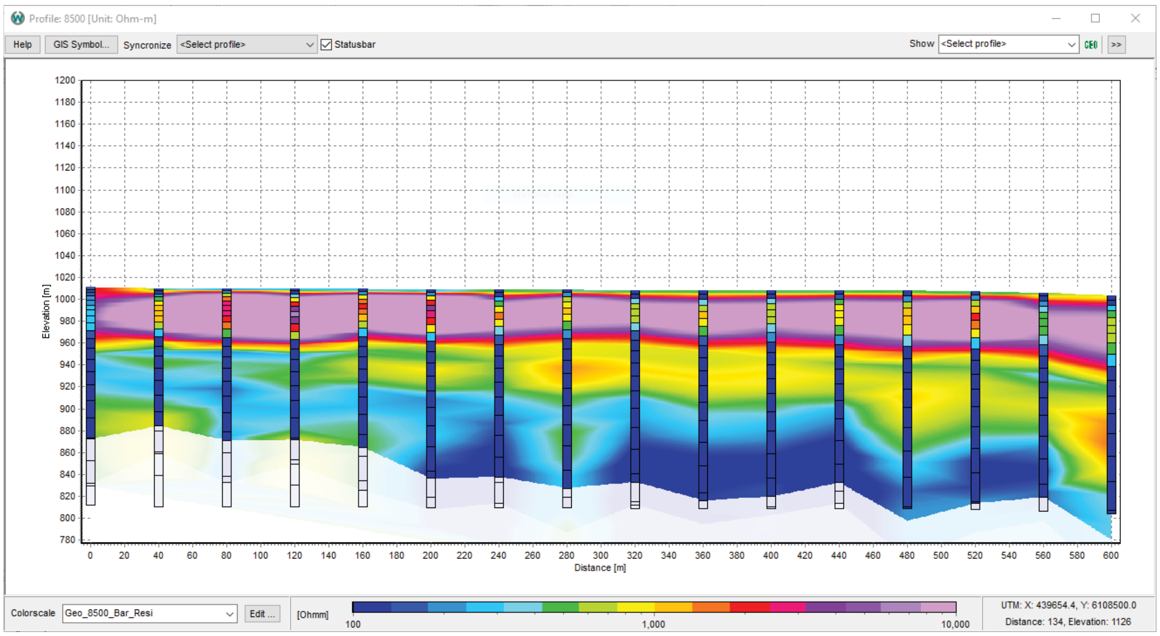
It should be noted that the flat lying highly conduct horizon, also may have hampered the depth of investigation of the survey, due to current channeling.

A comparison of a 2017 induced polarization survey, with a TEM sounding profile which was collected prior to the writing of the report, demonstrate a similar conductivity feature extending to depth, with a slightly more complex layering. A further analysis of the induced polarization survey using a reference model derived from the TEM is slated for the future.



2017 Line 8600N
(Outline of TEM sounding Location).

DISCUSSION OF RESULTS cont'd.



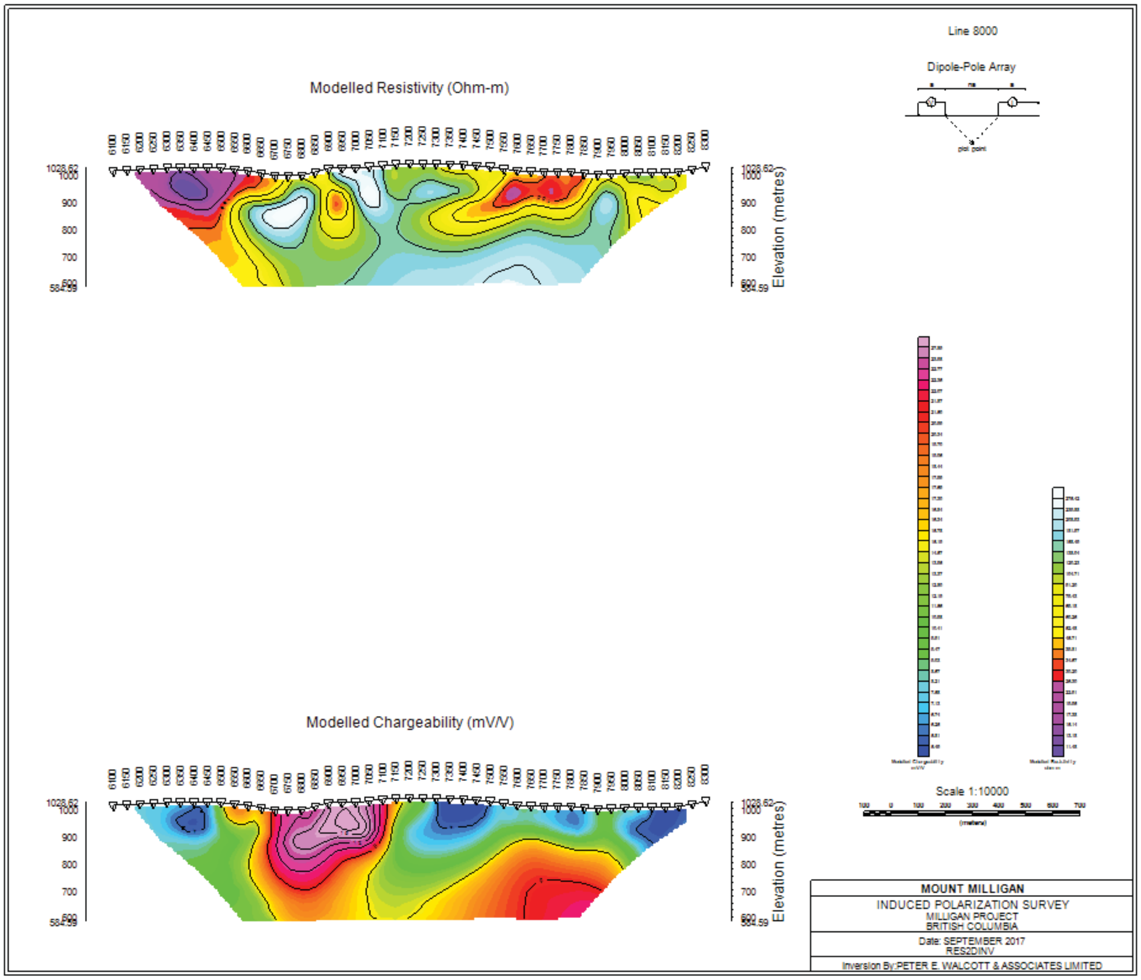
TEM Sounding Line – 8500N
1D Inverted Resistivity
39500E – 40100E

An overlapping lines (9800N) using an alternate remote from the previous year, was also carried out read to test for current pathing. Both lines yielded similar responses in both resistivities and chargeability.

A single north-south line was carried out over a resistivity target identified in a historic ZTEM survey in the western portion of the survey area.

The line identified a near surface moderate intensity chargeability feature some 400 meters wide, centered at 6900N. The feature is also associated with moderate resistivity, and a weak magnetic plug observed within the historic airborne magnetic data.

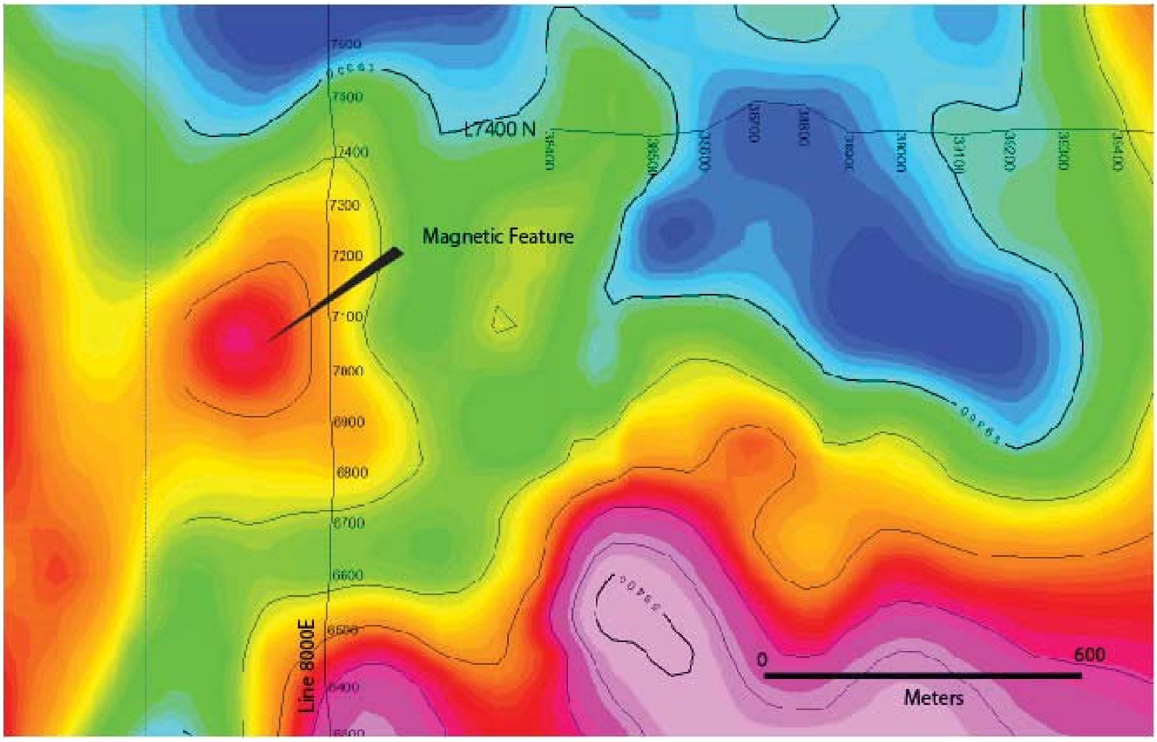
DISCUSSION OF RESULTS cont'd.



Line 8000E

This feature while weak is potentially of interest and should be reviewed in conjunction with historic data.

DISCUSSION OF RESULTS cont'd.



TMI (nT) with 2018 Lines Locations, proximal to Line 8000E

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Between May 28th, and June 17th, 2018 Peter E. Walcott & Associates Limited conducted induced polarization surveying to the east of the Mount Milligan mine.

The survey was designed to follow up on several targets identified during a compilation exercise and expand on the previous years work.

The survey identified one discrete anomaly on a single north-south line (8000E) which should be evaluated in conjunction with all available historic data. If warranted two flanking IP lines should be undertaken, followed by subsequent drilling.

Additional inversion work should be carried out, testing models using fixed resistivity layers derived from the TEM sounding data to test if a valid target exists beneath the highly conductive layer observed in most of the east -west orientated lines. An exploratory drill hole should be considered into the highest chargeability feature if the results of the exercise yield any features of interest, as exploration information within this area is limited.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LTD.

Alexander Walcott
Geophysicist

Peter E. Walcott, P.Eng.
Geophysicist

Coquitlam, B.C.
October 2018

APPENDIX I

PERSONNEL EMPLOYED ON PROJECT.

Name	Occupation	Address	Dates Worked
Walcott, A	Geophysicist	111-17 Fawcett Road Coquitlam, British Columbia	
Cornock, J	"		Sep 7th-Oct 19th,2017
Magee, M.	Geophysical Operator	“	May 28th- June 17th, 2018
Kennedy, W	Geologist	“	“
Bragg, C.	Geophysical Assistant	“	“
Loubser, N..	Geophysical Operator	“	June 5th-17th, 2018
Lajeunesse, B.	“	“	“

COST OF PROJECT.

Peter E. Walcott & Associates Limited undertook the line brushing providing a 4-man crew, 4x4 truck and line brushing equipment on a daily rate of $2,525.00

The induced polarization component of the program, Peter E. Walcott & Associates Limited provided a 6-man crew, time-domain IP system, 4x4 truck along with all auxiliary equipment for a daily rate of $4,285.00.

A mobilization charge of $10,617.20 was also incurred. Thus, the total cost of services provide was $71,142.20

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 five 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.
October 2018

CERTIFICATION.

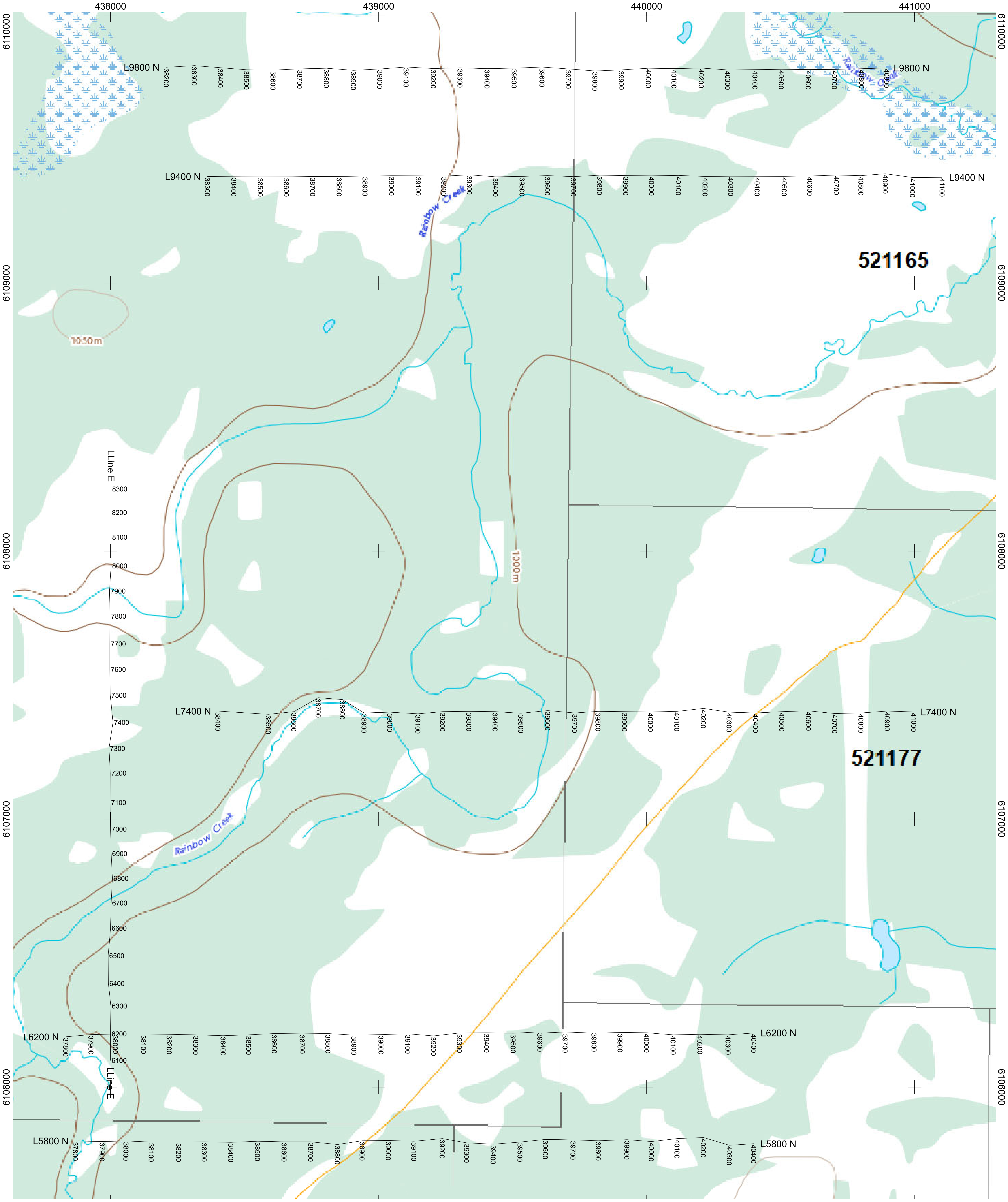
I, Alexander Walcott, of 38-181 Ravine Dr., Port Moody, British Columbia, hereby certify that:

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 am currently employed by Peter E. Walcott & Associated Limited.
4. I hold no interest, direct or indirect, in the property, nor do I expect to receive any.

Alexander Walcott, B.Sc.

Coquitlam, B.C.
October 2018

Accompanying Maps



Scale 1:10000

200 0 200 400 600

(meters)

WGS 84 / UTM zone 10N

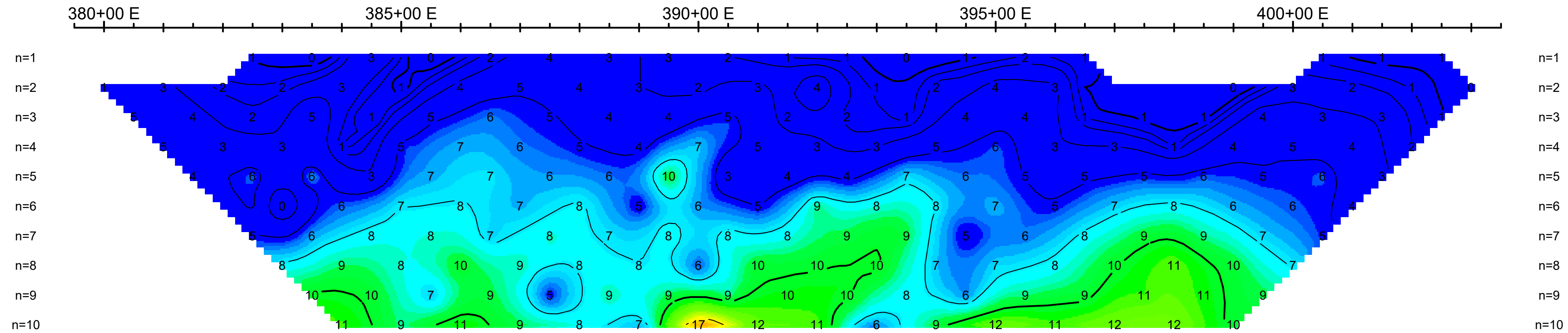
MOUNT MILLIGAN

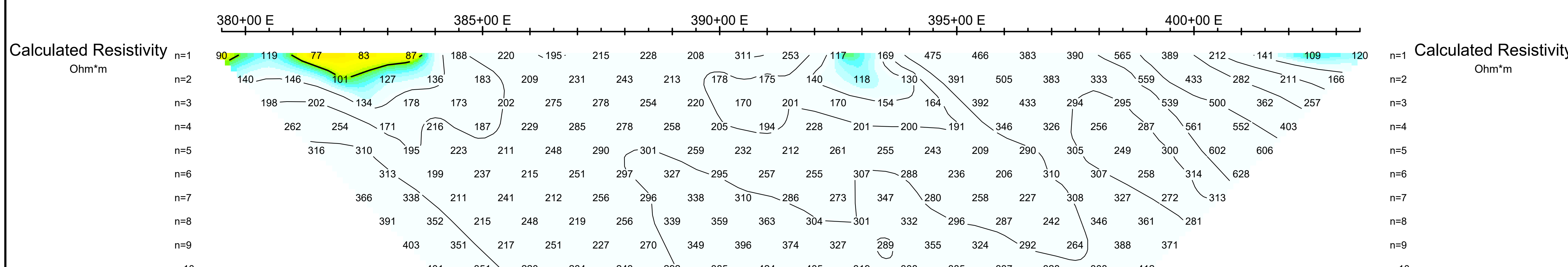
INDUCED POLARIZATION SURVEY
LINE AND CLAIM LOCATION MAP

AREA 2
MILLIGAN PROJECT
SPRING 2017

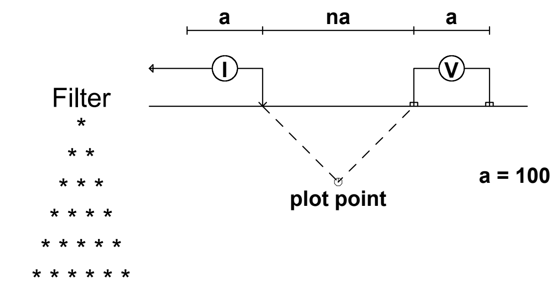
PETER E. WALCOTT & ASSOCIATES LIMITED

58+00 N





Pole-Dipole Array



Instruments: Walcer 10 kW Tx, GDD GRX-8 Rx

Frequency: 0.125 Hz.
Operators: J.C.

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

Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

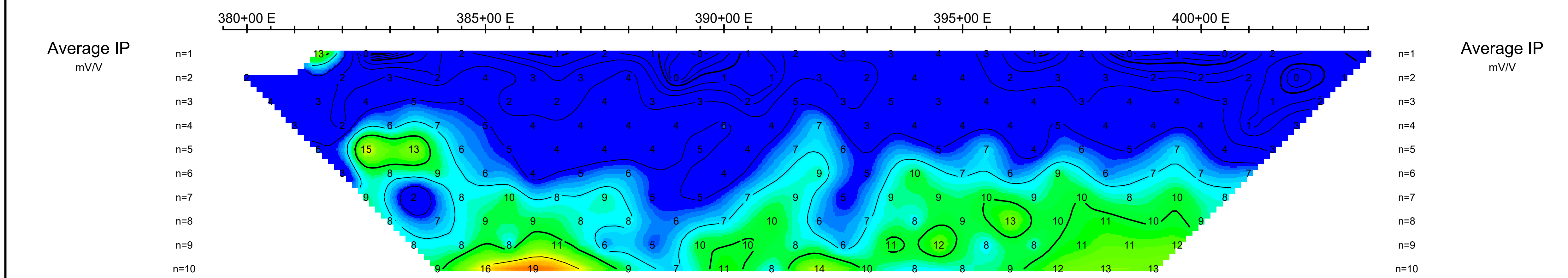
MOUNT MILLIGAN.

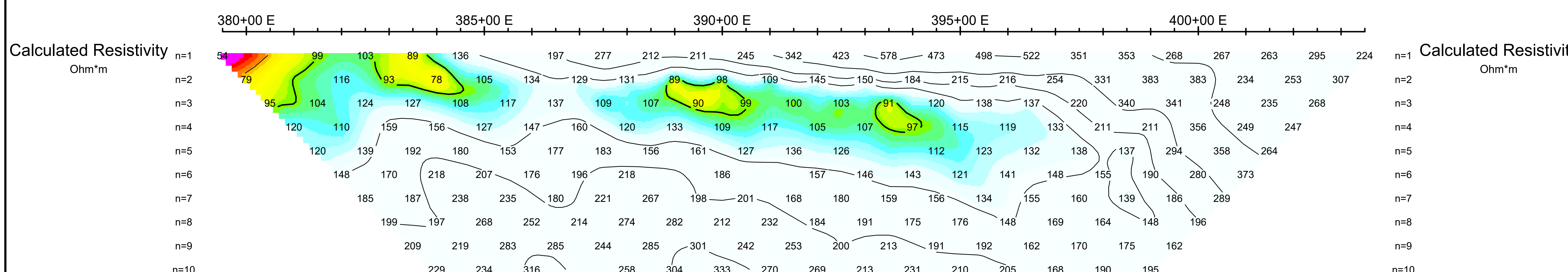
INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SPRING 2018

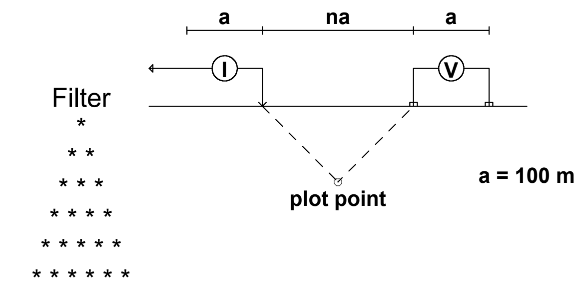
PETER E. WALCOTT & ASSOCIATES LIMITED

62+00 N





Pole-Dipole Array

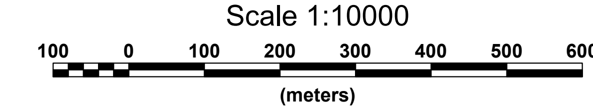


Instruments: Walcer 10 kW Tx, GDD GRX-8 Rx

Frequency: 0.125 Hz.
Operators: J.C.

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

Scale 1:10000



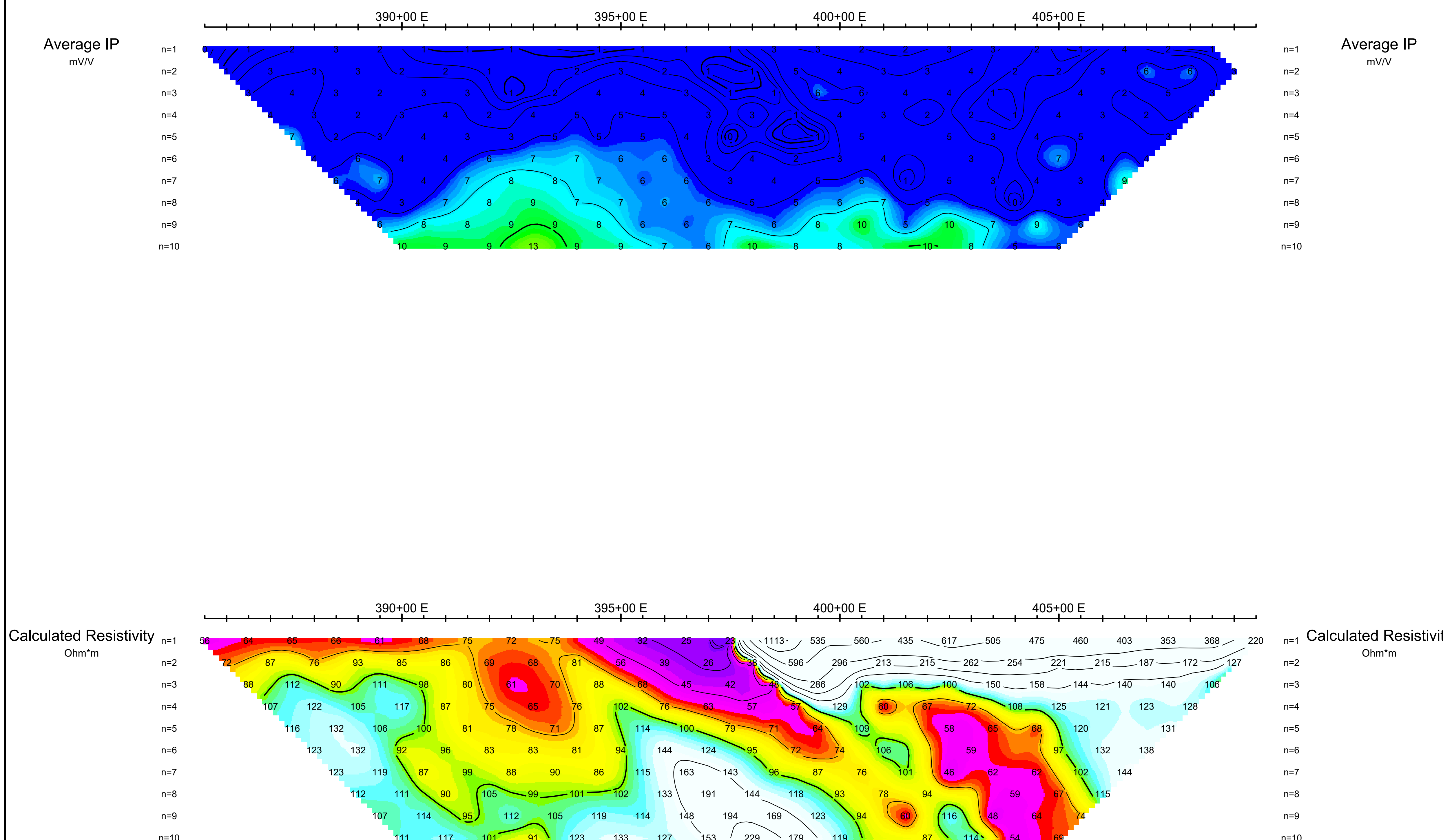
MOUNT MILLIGAN.

INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

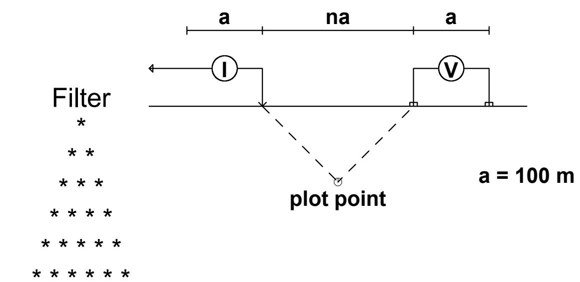
Date: SPRING 2018

PETER E. WALCOTT & ASSOCIATES LIMITED

74+00 N



Pole-Dipole Array

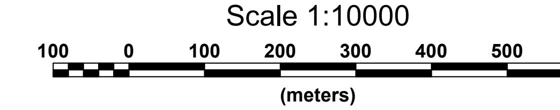


Instruments: Walcer 10 kW Tx, GDD GRX-8 Rx

Frequency: 0.125 Hz.
Operators: J.C.

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

Scale 1:10000

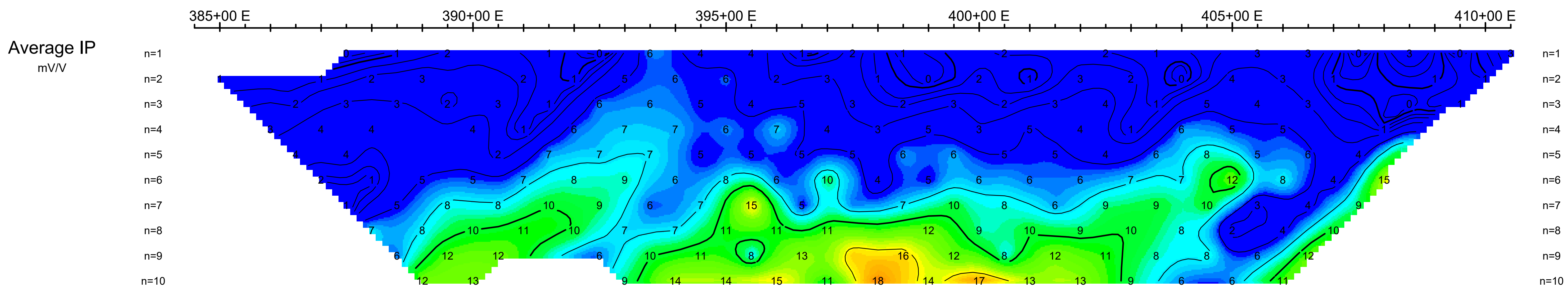


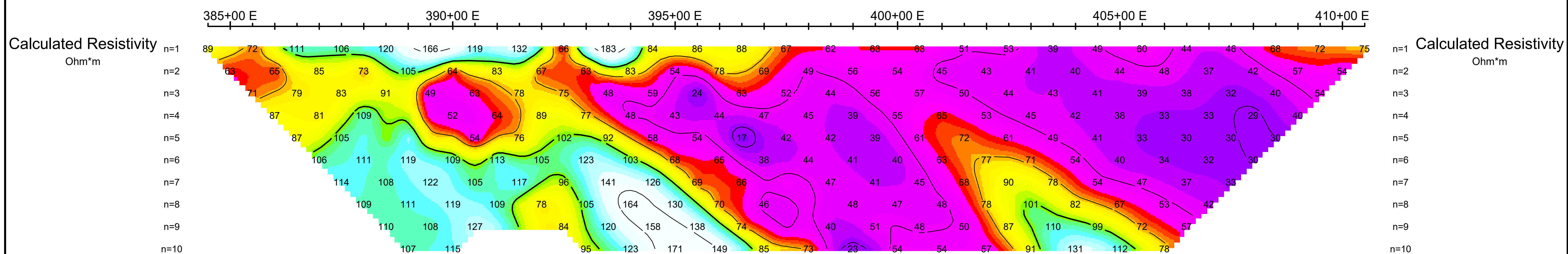
MOUNT MILLIGAN.

INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SPRING 2018

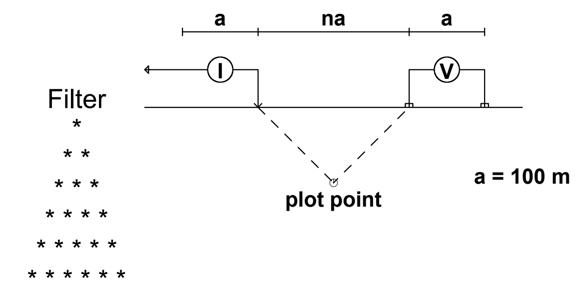
PETER E. WALCOTT & ASSOCIATES LIMITED





94+00 N

Pole-Dipole Array

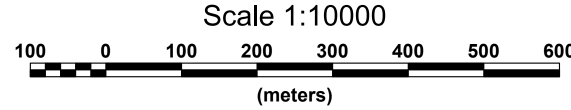


Instruments: Walcer 10 kW Tx, GDD GRX-8 Rx

Frequency: 0.125 Hz.
Operators: J.C.

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

Scale 1:10000



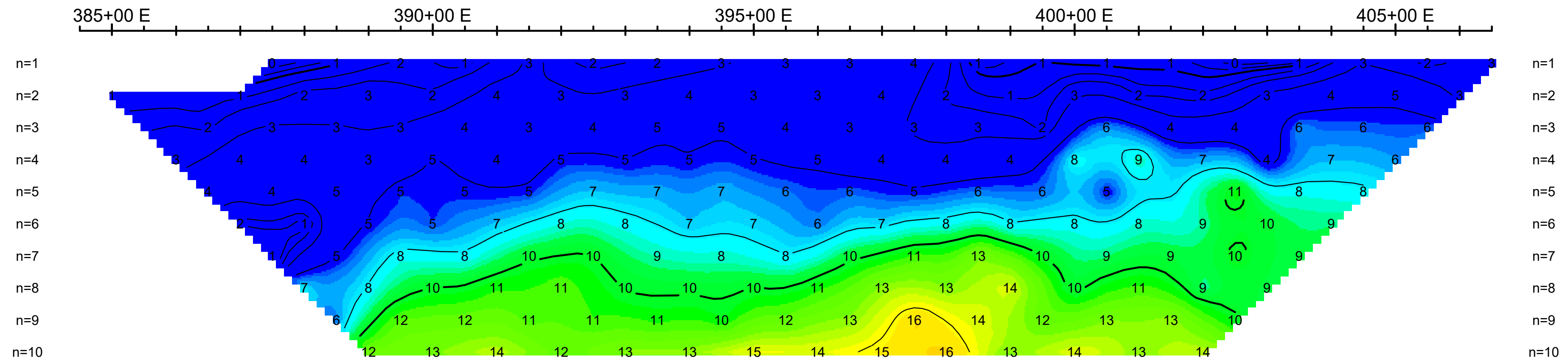
MOUNT MILLIGAN.

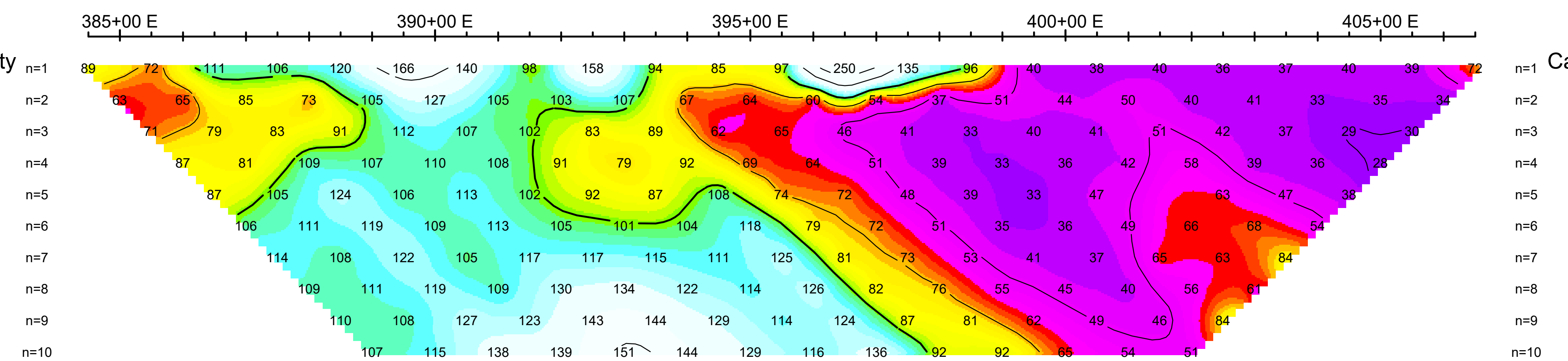
INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SPRING 2018

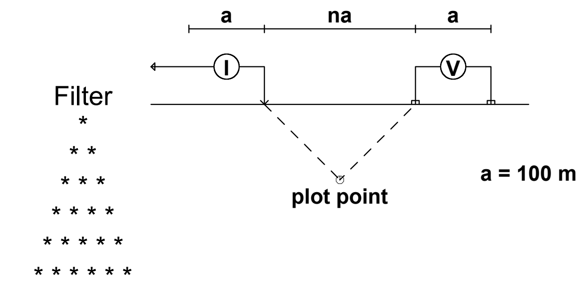
PETER E. WALCOTT & ASSOCIATES LIMITED

98+00 N





Pole-Dipole Array



Instruments: Walcer 10 kW Tx, GDD GRX-8 Rx

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Operators: J.C.

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

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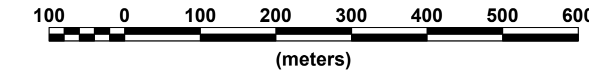


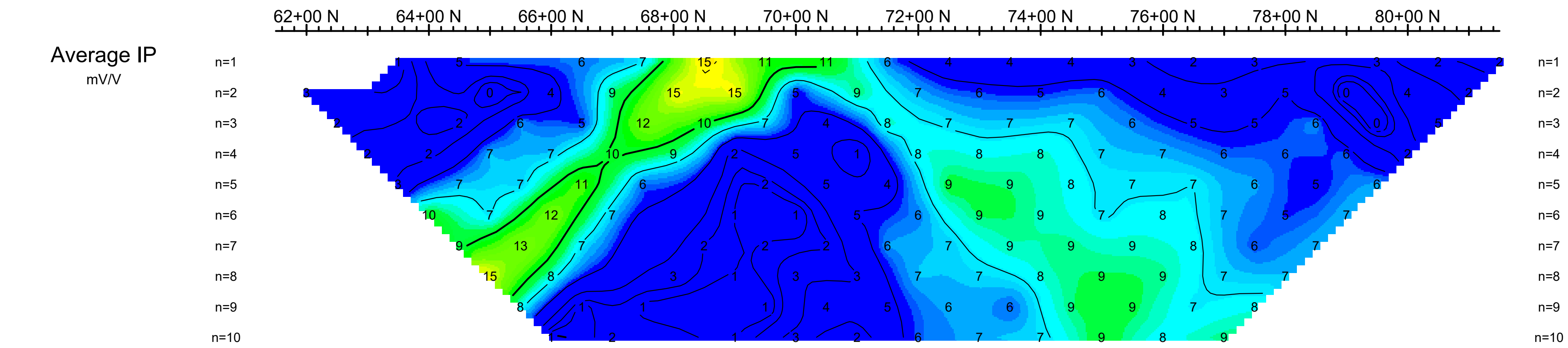
MOUNT MILLIGAN.

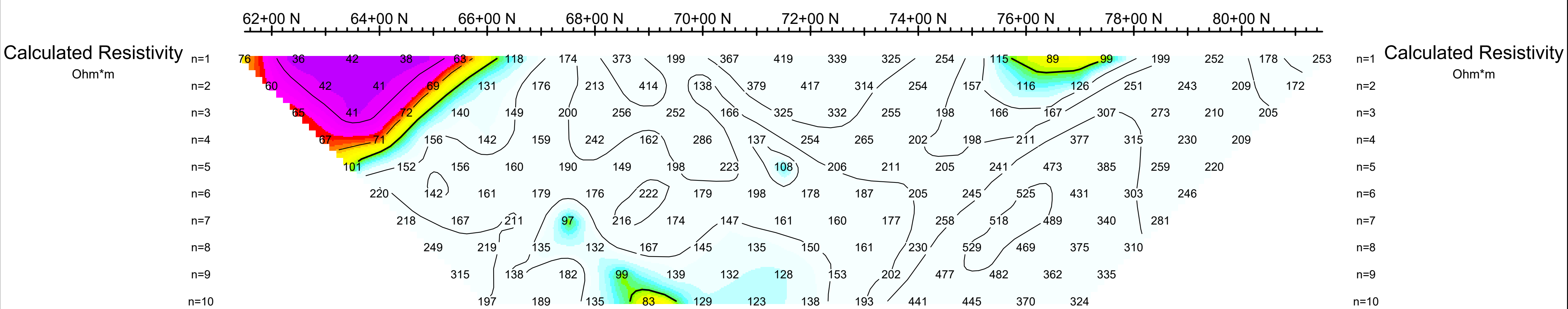
INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SPRING 2018

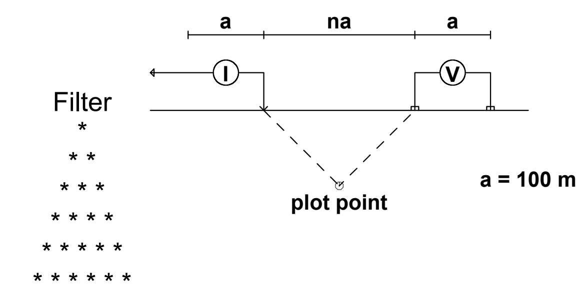
PETER E. WALCOTT & ASSOCIATES LIMITED

80+00 E





Pole-Dipole Array



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Frequency: 0.125 Hz.
Operators: J.C.

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

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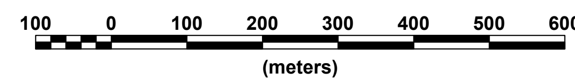
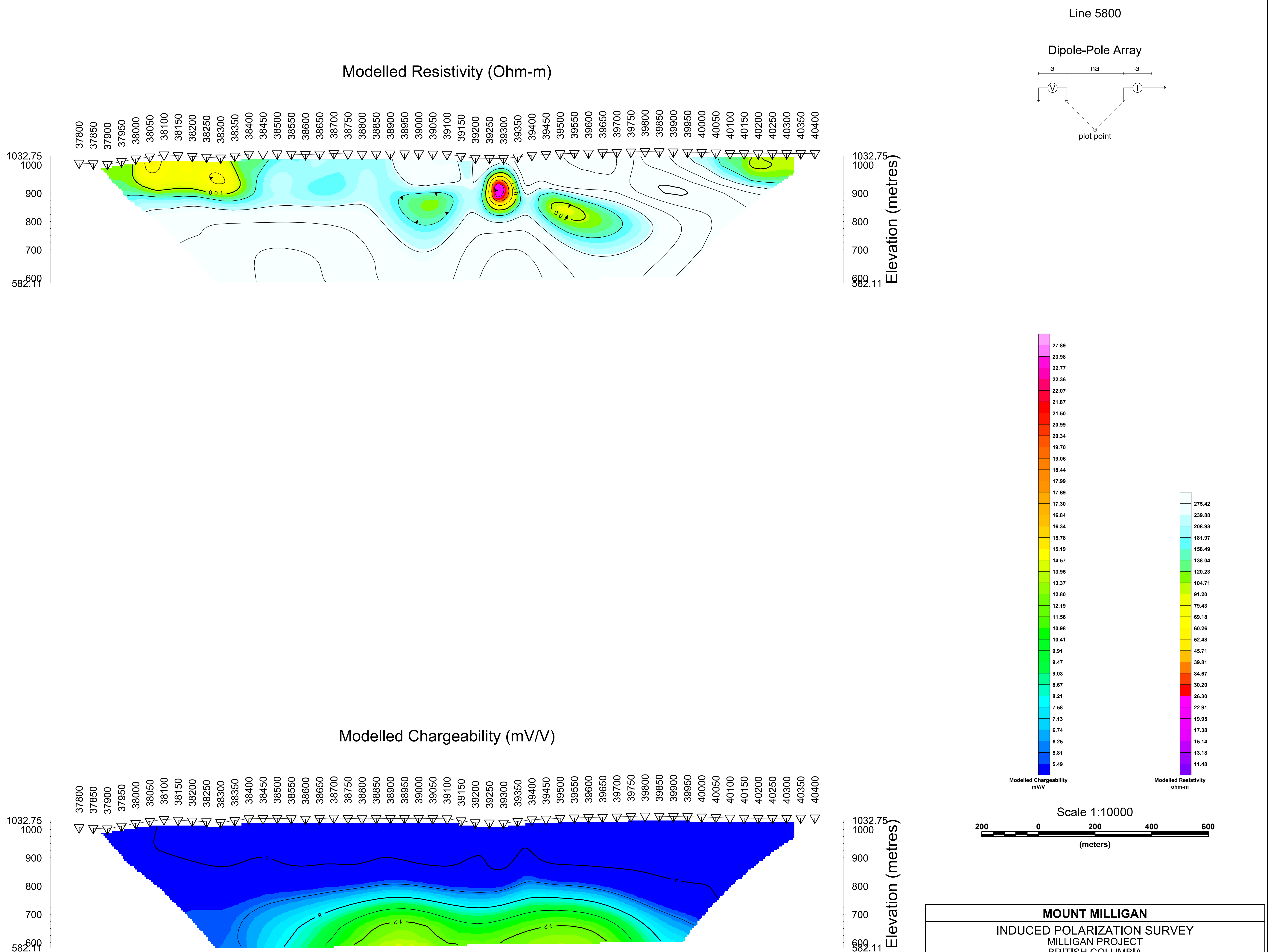


MOUNT MILLIGAN.

INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SPRING 2018

PETER E. WALCOTT & ASSOCIATES LIMITED

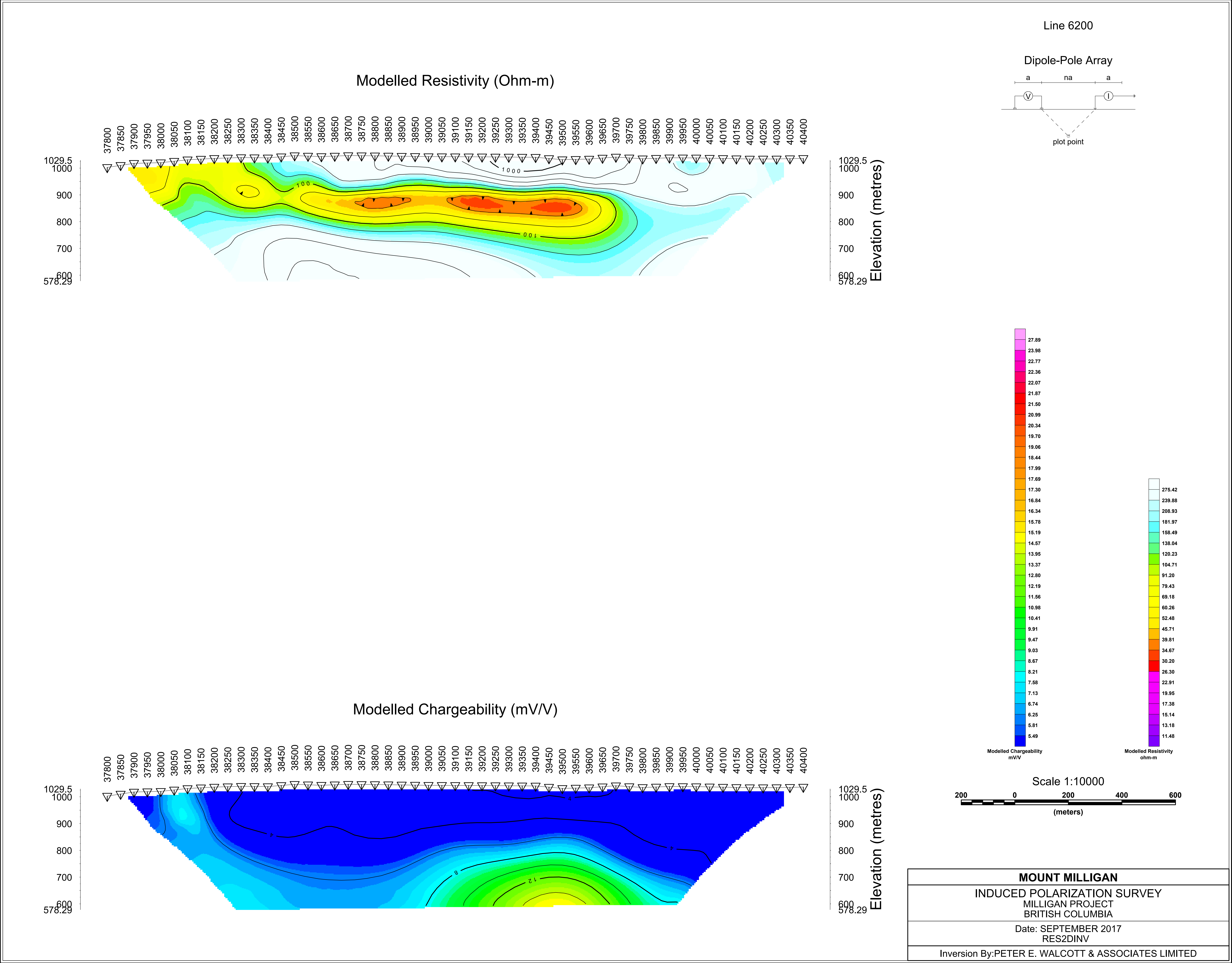


MOUNT MILLIGAN

INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SEPTEMBER 2017
RES2DINV

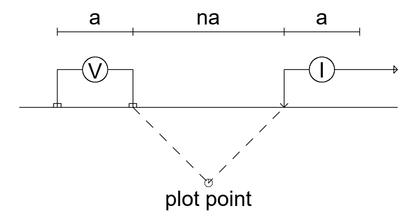
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED



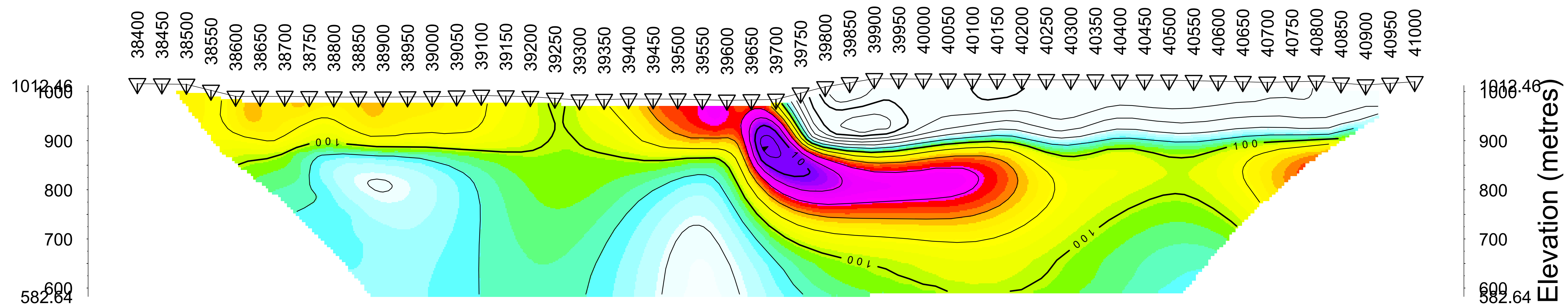
Line 6200
Dipole-Pole Array
a
na
a
V
I
plot point
Modelled Resistivity (Ohm-m)
37800 37850 37900 37950 38000 38050 38100 38150 38200 38250 38300 38350 38400 38450 38500 38550 38600 38650 38700 38750 38800 38850 38900 38950 39000 39050 39100 39150 39200 39250 39300 39350 39400 39450 39500 39550 39600 39650 39700 39750 39800 39850 39900 39950 40000 40050 40100 40150 40200 40250 40300 40350 40400
1029.5
1000
900
800
700
600
578.29
1000
100
Elevation (metres)
Modelled Chargeability (mV/V)
27.89 23.98 22.77 22.36 22.07 21.87 21.50 20.99 20.34 19.70 19.06 18.44 17.99 17.69 17.30 16.84 16.34 15.78 15.19 14.57 13.95 13.37 12.80 12.19 11.56 10.98 10.41 9.91 9.47 9.03 8.67 8.21 7.58 7.13 6.74 6.25 5.81 5.49
Modelled Chargeability mV/V
275.42 239.88 208.93 181.97 158.49 138.04 120.23 104.71 91.20 79.43 69.18 60.26 52.48 45.71 39.81 34.67 30.20 26.30 22.91 19.95 17.38 15.14 13.18 11.48
Modelled Resistivity ohm-m
Scale 1:10000
200 0 200 400 600
(meters)
8
12
MOUNT MILLIGAN
INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA
Date: SEPTEMBER 2017
RES2DINV
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 7400

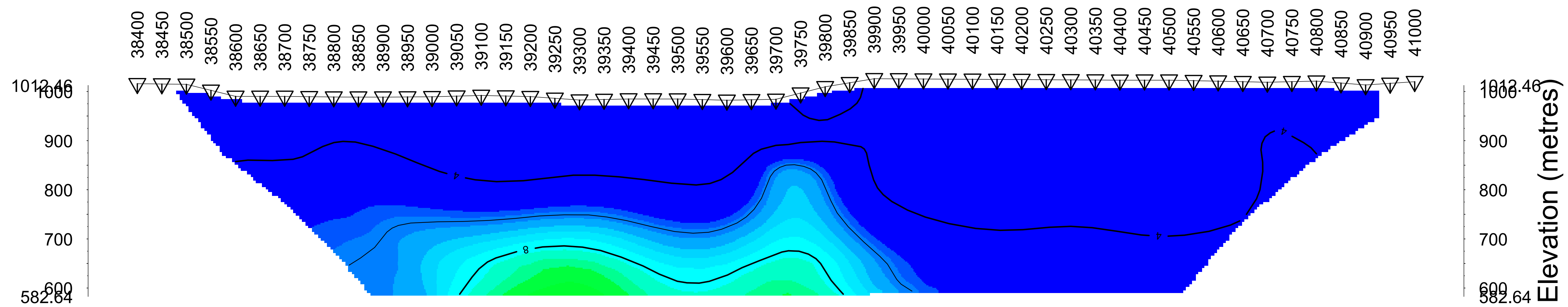
Dipole-Pole Array

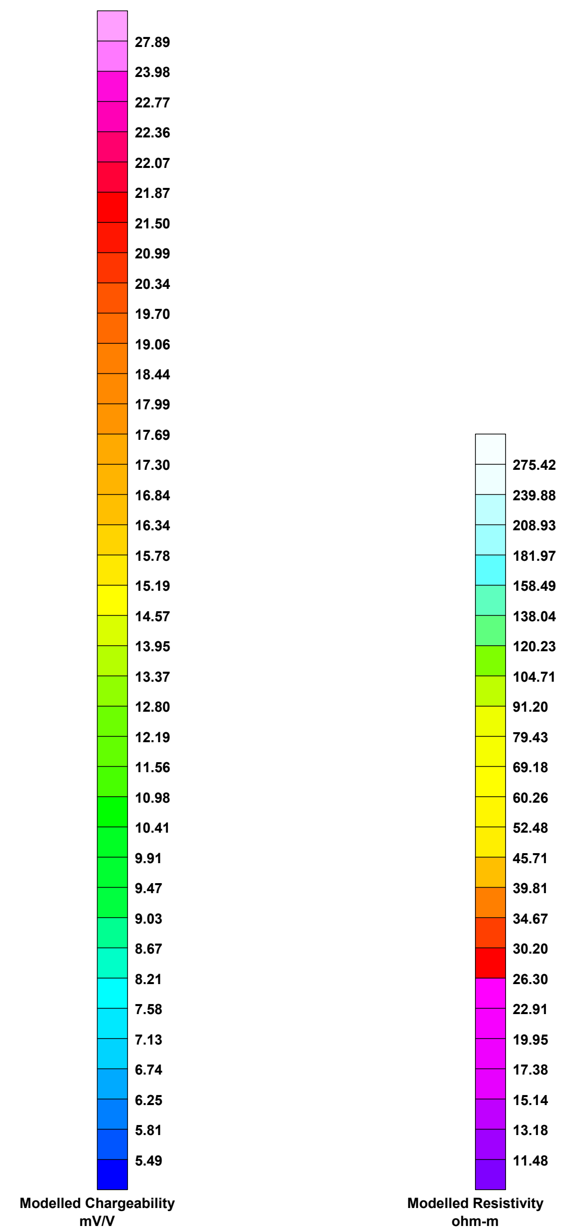


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





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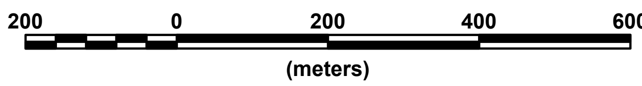


MOUNT MILLIGAN

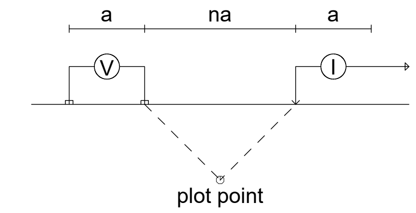
INDUCED POLARIZATION SURVEY
MILLIGAN PROJECT
BRITISH COLUMBIA

Date: SEPTEMBER 2017
RES2DINV

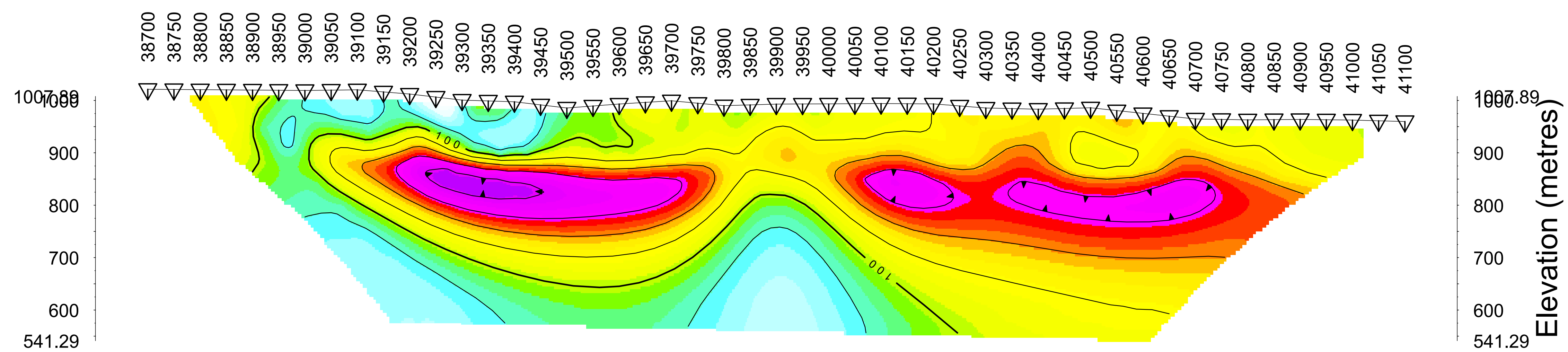
Inversion By:PETER E. WALCOTT & ASSOCIATES LIMITED

Line 9400

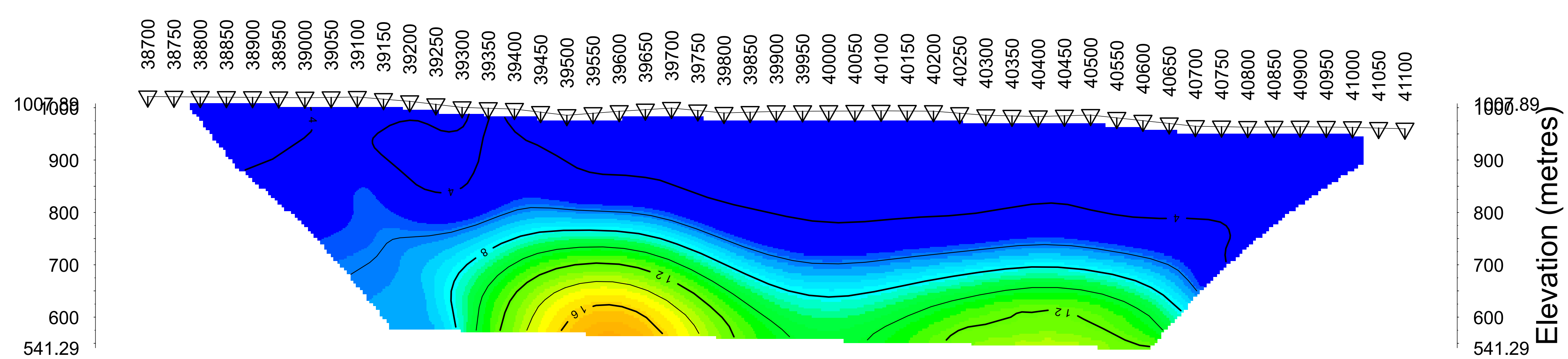
Dipole-Pole Array

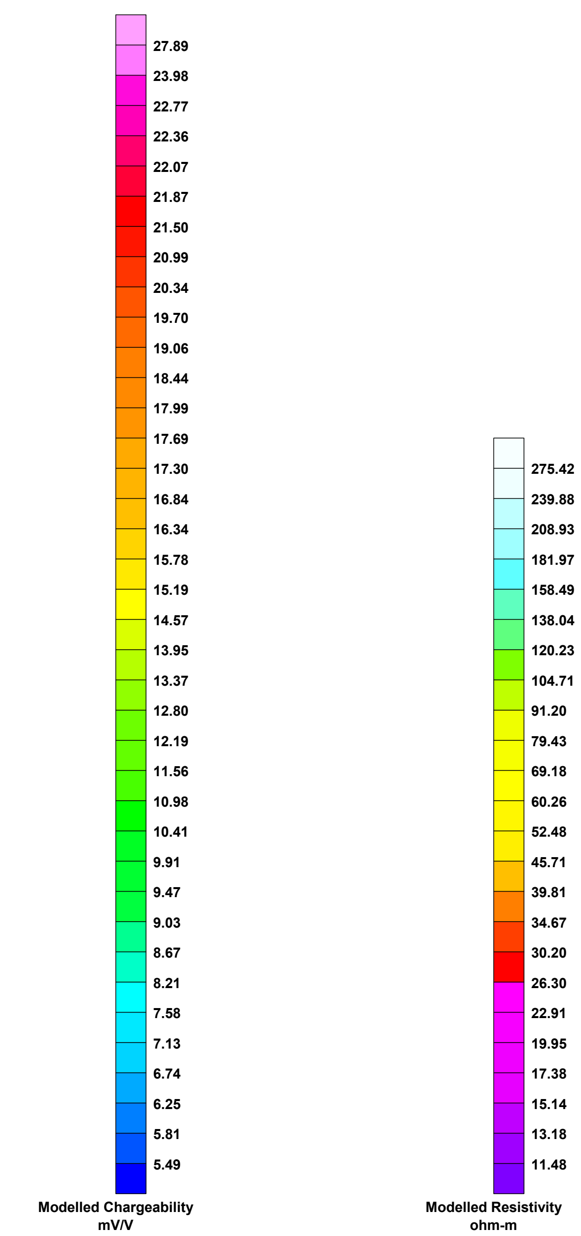


Modelled Resistivity (Ohm-m)



Modelled Chargeability (mV/V)





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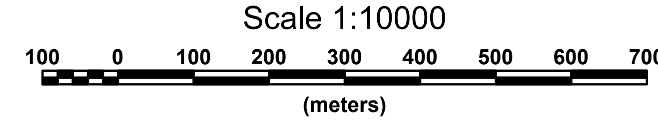

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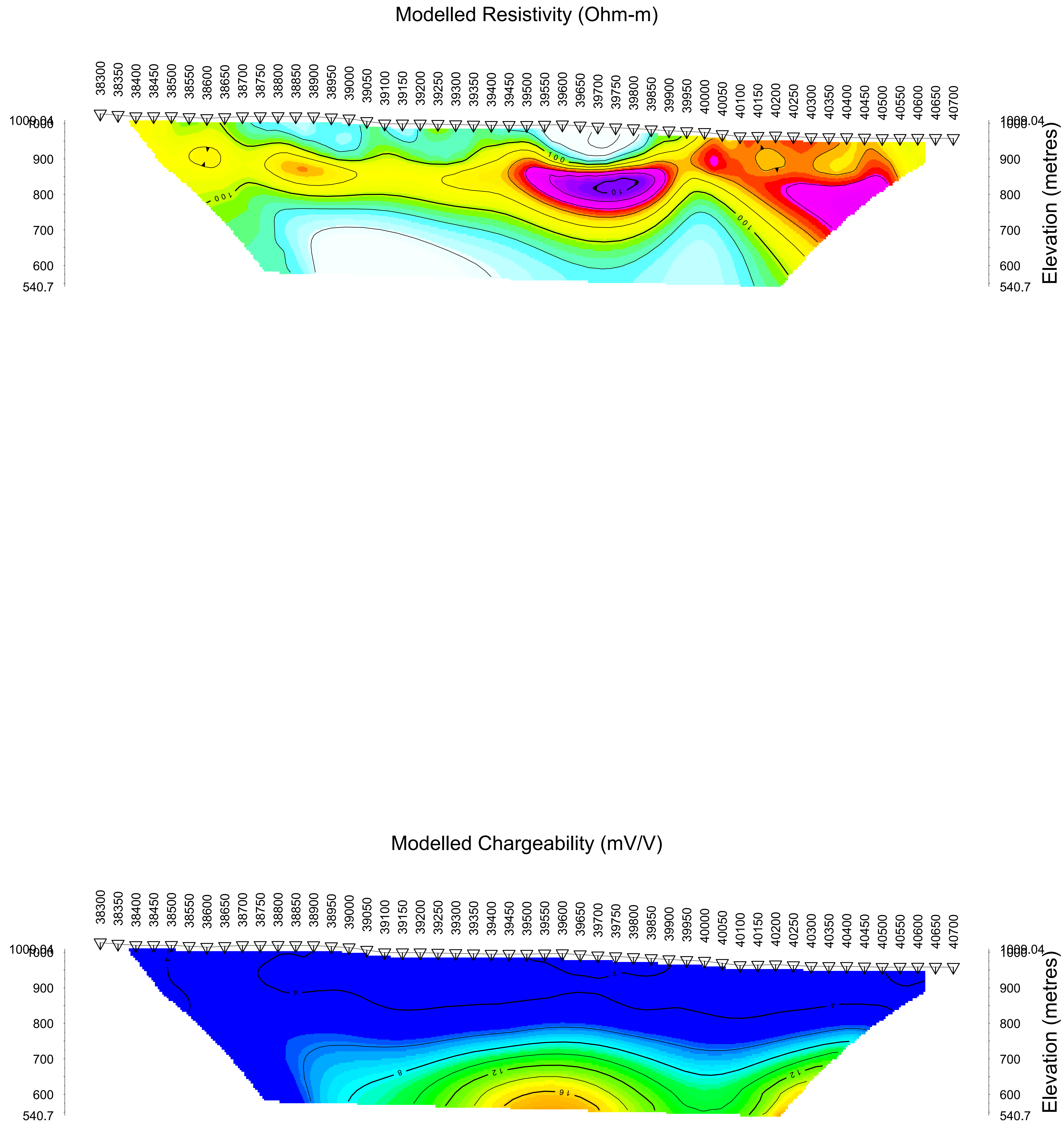

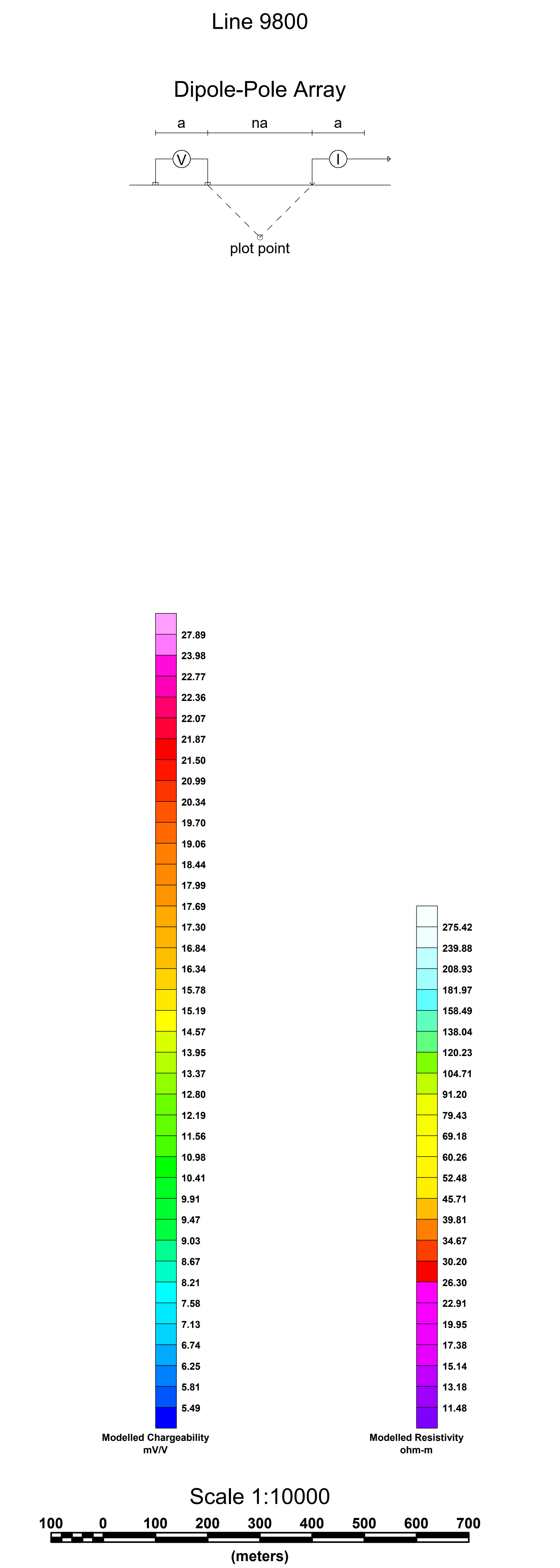

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