

DeepRock Minerals Inc.

**ASSESSMENT REPORT:
RALLEAU PROJECT,
WILSON AND RALLEAU TOWNSHIPS,
QUEBEC
NTS 32F/01**

49°08'00" North / 76°23'00" West.
399000 East, 5443000 North (UTM NAD83 Zone 18)

Prepared by

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of

MIRB & **associates**
Geological Consultants

July 25th, 2017

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DATE AND SIGNATURE PAGE: QP

This report is effective as at the 15th day of July, 2017.

The date of issue of the report is the 25th day of July, 2017.



John Langton, P.Geol.
MRB & Associates

Signed and Sealed this 25th day of July, 2017

1 EXECUTIVE SUMMARY

This report has been prepared for DeepRock Minerals Incorporated (“DeepRock”), an incorporated company in the Province of British Columbia, and reporting issuer in British Columbia and Alberta (not currently listed for trading), with head offices at #1000-409 Granville Street, Vancouver, British Columbia, Canada, V6C 1T2.

The Ralleau Property (“the Property”, or “the Project”), covers parts of Ralleau and Wilson townships on NTS map sheet 32F/01, approximately 50 kilometres east of Lebel-sur-Quevillon, a small community in north-western Quebec. The Property overlies a sequence of Archean volcanic rocks belonging to the Abitibi Greenstone Belt that have the potential to host volcanogenic massive-sulphide (VMS) and lode gold deposits.

Lebel-sur-Quevillon is approximately 620 km north-northwest of Montreal and 160 km northeast of the mining centre of Val d’Or. It is accessed by driving north on paved provincial Highway (Route 113), which joins the Trans-Canada Highway (Route 117) some 30 km east of Val-d’Or. Access to the Property is via all-season secondary and tertiary logging roads from Lebel-sur-Quevillon and typically takes 60 - 90 minutes, depending on road conditions.

The Property is situated in Category III lands as defined in the James Bay and Northern Quebec Agreement. Category III Lands are public lands on which Native people can, while respecting the principles of conservation, carry on their traditional activities year-round, and on which they have exclusive rights to certain animal species.

The Property is roughly rectangular, extending approximately 14 kilometres east-west and 4 km north-south, and comprises 59 contiguous, map-designated claims, covering approximately 3,325 hectares.

The claims comprising the Property are owned 100% by Megastar Development Corporation (“Megastar”) and were in good standing as of April 10th, 2017 when DeepRock entered into an Option Agreement with Megastar to acquire a 50% ownership of the Property. Under terms of the Option Agreement, DeepRock will be deemed to have exercised its Option upon: 1) paying to Megastar \$100,000 cash in staged payments over a period of 3 years (beginning on the signing date); 2) issuing to Megastar a fully paid and non-assessable 750,000 shares, in stages, over the same 3 year period, and; 3) expending \$250,000 in exploration on the Property over the same period.

The Ralleau Property area is within the Northern Volcanic Zone (NVZ) of the Abitibi Subprovince, Superior Province, in the western part of the Urban-Barry Greenstone Belt (UBGB). The mafic to felsic, volcanic and volcanoclastic rocks underlying the Ralleau Property area are part of the basal, mafic-dominated sequence referred to as Volcanic Cycle I, which formed between 2,730 and 2,720 Ma, and comprise massive, pillowed and brecciated, tholeiitic basalt flows with local felsic and sedimentary units. With the exception of Proterozoic diabase dykes, all the rocks in the area are Archean. The NVZ rocks in the region of the Ralleau Property underwent regional amphibolite-facies metamorphism and have locally retrograded to greenschist-grade. Although all of the rocks underlying the Property have been metamorphosed, the “meta” prefix is generally omitted for simplicity from the rock descriptions in this Report.

The UBGB extends over 135 km along a general east-west trend, and varies between 4 km and 20 km across. It is bordered to the north by the Mountain and Father plutons and to the south by the Wilson and Souart plutons, which range from granodioritic to tonalitic in composition. Rocks directly underlying the Property, which is in the western part of the UBGB, belong to the Urban Formation and comprise mainly mafic to intermediate volcanic rocks with minor felsic volcanic and sedimentary rocks. Data from historic exploration campaigns indicate that the Novellet Member, a dacitic to rhyolitic felsic volcanic unit that underlies the central axis of the Property, is the best prospective target for massive-sulphide deposits.

Lithology strikes east-west in the western part of the Property flexing gradually to northwest-southeast in the eastern part. This change in orientation is attributed to the effects of the southeast trending Cameron Deformation Zone that transects the eastern part of the Property. The Urban Deformation Zone, which forms a 2 km wide corridor through the central part of the western UBGB and affects the rocks underlying the Property, is also deflected by the Cameron Deformation Zone.

The geology underlying the Property comprises a setting favourable for volcanic massive-sulphide (VMS) mineralization, which is the primary exploration focus on the Property. Should evidence of prospective deposits of other commodities be identified, the scope of work and the models utilized would be expanded to include them. The principal geological control on mineralization on the Property is the association with the felsic volcanic Novellet Member, which appears to host most of the historic pits and showings.

Mineral exploration activity has been carried out sporadically on parts of the current Property and its immediate vicinity since the mid-1950s, including geological reconnaissance mapping, geophysical surveys, and limited diamond-drilling. Recent work has been carried out by Megastar, who acquired a 12-claim block north Lac Wilson in 2005 that evolved into the present Property.

Since 2005, Megastar has completed a reconnaissance geology survey (2005 - GM63677), a surface geophysical survey (2006 - GM62775), a diamond-drilling programme (2006 - GM63676), trenching and sampling (2007 - GM63732), an airborne geophysical survey (2008 - 64158), a digital-database compilation of all earlier work (Langton and Stephens, 2010), and geological mapping, prospecting and sampling surveys over almost the entire property (2010 - GM65611; 2015 - GM69123). Felsic volcanic rocks, displaying characteristic hydrothermal alteration known to be associated with VMS-style deposits, had been identified from the geological review, diamond-drilling, and trenching.

The exploration programme carried out by DeepRock in May 2017 comprises the first mineral exploration activity on the Property since 2014. DeepRock completed a prospecting and mapping programme on the eastern part of the Property and a ground geophysical Induced Polarization (IP) survey on the western part of the Property. Results of DeepRock's activities are presented in this Report.

There are no records of mineral production from the Ralleau Property, nor any documented mineral resources on the Property.

Additional work is recommended for the Property, in the form of more detailed geological and geophysical work over those areas where the greatest potential exists, and subsequent diamond-drilling to test as many of the most promising anomalies as possible. The recommended exploration programme should comprise geological mapping, a pitting/trenching programme, and follow-up diamond-drilling (\$410,000).

2 INTRODUCTION

This report has been prepared for DeepRock Minerals Incorporated (“DeepRock”, or “the Company”), a junior mining company headquartered at #1000-409 Granville Street, Vancouver, British Columbia, Canada, V6C 1T2.

The purpose of this report is to provide a summary of the 2015 work programme completed on the Ralleau Property (“the Property”, or “the Project”), and to provide recommendations for further exploration.

The Property, covers parts of Ralleau and Wilson townships on NTS map sheet 32F/01, approximately 50 kilometres east of Lebel-sur-Quevillon, a small community in north-western Quebec. The Property overlies a sequence of Archean volcanic rocks belonging to the Abitibi Greenstone Belt that have the potential to host volcanogenic massive-sulphide (VMS) and lode gold deposits.

The claims comprising the Property are currently owned 100% by Megastar Development Corporation (“Megastar”) and were in good standing as of April 10th, 2017 when DeepRock entered into an Option Agreement with Megastar to acquire a 50% ownership of the Property. Under terms of the Option Agreement, DeepRock will be deemed to have exercised its Option upon: 1) paying to Megastar \$100,000 in cash over a period of 3 years (beginning on the signing date); 2) allotting and issuing to Megastar a fully paid and non-assessable 750,000 shares, in stages, over the same 3 year period, and; 3) expending \$250,000 in exploration on the Property over the same period.

This Report provides details of the exploration work completed in May of 2017 on the Property that included an OreVision® ground geophysical Induced Polarization (IP) survey by Abitibi Geophysics of Val-d’Or, Quebec, and a geological ground mapping, sampling and analytical programme. The objective of the 2017 work was to determine additional characteristics of potential base-metal sulphide occurrences underlying the Property, to help determine their extent, and to help evaluate their potential as a mineral resource.

This Report was prepared by John Langton M.Sc., P.Geo. (the “Author”), of MRB & Associates - a Val d’Or-based consulting firm - in accordance with Ministère des Ressources naturelles et de la Faune du Quebec (MRNFQ) standards of disclosure for mineral exploration projects.

In preparing this Report the Author made use of publicly available Assessment Reports, on-line resources, publications of the Geological Survey of Canada and scientific papers from various earth science Journals. A list of the principal material reviewed and used in the preparation of this document is included in the References section of this document. Historical geological information was assimilated from the on-line SIGEOM/EXAMINE database (http://sigeom.mines.gouv.qc.ca/signet/classes/l1102_indexAccueil?!=a) of the Ministre de l’Énergie et des Ressources naturelles (MERN) Quebec, and incorporates all known assessment work data filed by exploration companies, as well as geological work performed or commissioned by the Quebec government. The bulk of the historical data utilized in this report was distilled from work conducted by Megastar between 2005 and 2014.

Recommendations for continued exploration on the Property and a supporting budget are presented.

As per the requirements of the Professional Code of Quebec, Geologists Act of Quebec, and Mining Act of Quebec, the Author hereby discloses that although completely independent of DeepRock and Megastar, the Author holds a nominal amount of shares in a number of other junior mining companies and is currently acting as President of Cartier Iron Corp., a junior mining company with iron resources and claims in the Labrador Trough area of northeastern Quebec.

3 PROPERTY DESCRIPTION AND LOCATION

The Ralleau property is located in the west-central part of Quebec, within National Topographic System (NTS) map sheet 32F/01 (Lac de la Ligne), approximately 150 km northeast of Val-d'Or, and some 45 km east-northeast of the community of Label-sur-Quevillon (**Figure 3.1** and **Figure 3.2**).

The approximate centre of the Property has Universal Transverse Mercator (UTM) coordinates 399000 East, 5443000 North in Zone 18 of the NAD 83 geoid, and Latitude/Longitude coordinates of approximately 49°08'00" North / 76°23'00" West.

The Property over lies parts of Wilson and Ralleau townships, and comprises a contiguous block of 59 mineral claims, covering 3,323.85 hectares (ha) (**Figure 3.3**). Each claim covers an area of 30 seconds in latitude and 30 seconds in longitude.

The claims comprising the Property have not been legally surveyed. The boundary of each claim block was defined using the MRNFQ website at www.mrnfp.gouv.qc.ca/mines/index.jsp, and the GESTIM claim management system. There are no land claim issues, ownership disputes pending on the Property, or major environmental issues. All claims comprising the Property are in good standing. The renewal dates, rental fees, required minimum work and excess credits, as at the effective date of this Report (July 15th, 2017), are detailed in **Appendix I**. Details of claim renewals, work credits, claim access rights, allowable exploration, development, mining works, and site rehabilitation are summarized in the Mining Act of Quebec, available at www2.publicationsduquebec.gouv.qc.ca.

Claims are renewed every two years at their expiration date. Since various blocks of claims have been registered at different periods of time, their expiration date is different from one claims block to other claim blocks. Renewal fees (in dollars) for each claim have to be paid at their expiration date and exploration work expenses totalling a minimum fixed amount of dollar/claim have to be reported. Explorations expenses reported which exceed the minimum requirement are kept for future renewal as "excess work credit". Those credits can also be used for the renewal of surrounding claims under some conditions.

On April 10, 2017 Megastar Development Corporation ("Megastar") and DeepRock Minerals Incorporated ("DeepRock") entered into an Option Agreement (the "Agreement") to acquire a 50% ownership on Megastar's wholly-owned Ralleau Property (the "Property"). Under the terms of the Agreement, DeepRock will be deemed to have exercised its Option upon: 1) paying to Megastar \$100,000 cash in staged payments over a period of 3 years (beginning on the signing date); 2) allotting and issuing to Megastar a fully paid and non-assessable 750,000 shares, in stages, over the same 3 year period, and; 3) incurring exploration expenditures of \$250,000 on the Property over the same 3 year period.

The current status of the claims comprising the Property show work credits of \$8,990.65 and obligated work requirements of \$78,480.00. According to the surface area and the location of the claims, rent fees for the Property currently amount to \$3,781.31. As at the date of this Report, DeepRock has expended sufficient exploration funds to fulfill its work requirement commitments to support the renewal of all the claims comprising the Property.

The Ralleau Property is situated in Category III lands as defined by the James Bay and Northern Quebec Agreement (JBNQA)(<http://www.gcc.ca/>). Category III Lands are public lands on which Native people can, while respecting the principles of conservation, carry on their traditional activities year-round, and on which they have exclusive rights to certain animal species. The Eeyou Istchee James Bay Regional Government established pursuant to the Agreement on Governance in the Eeyou Istchee James Bay Territory signed by the Cree and the Government of Quebec on July 2012, exercises jurisdictions, functions and powers on Category III Lands located south of the 55th

parallel. The Regional Government is formally constituted with equal representation of Aboriginal and non-Aboriginal populations. The Ralleau Property straddles Cree family traditional territories or Cree Traplines of Mr. Sammy Blacksmith (trapline No W24C) and Mr Clarence Blacksmith (trapline No W24D) (Cree Mineral Exploration Board, 2014) members of the Cree First Nation of Waswanipi.

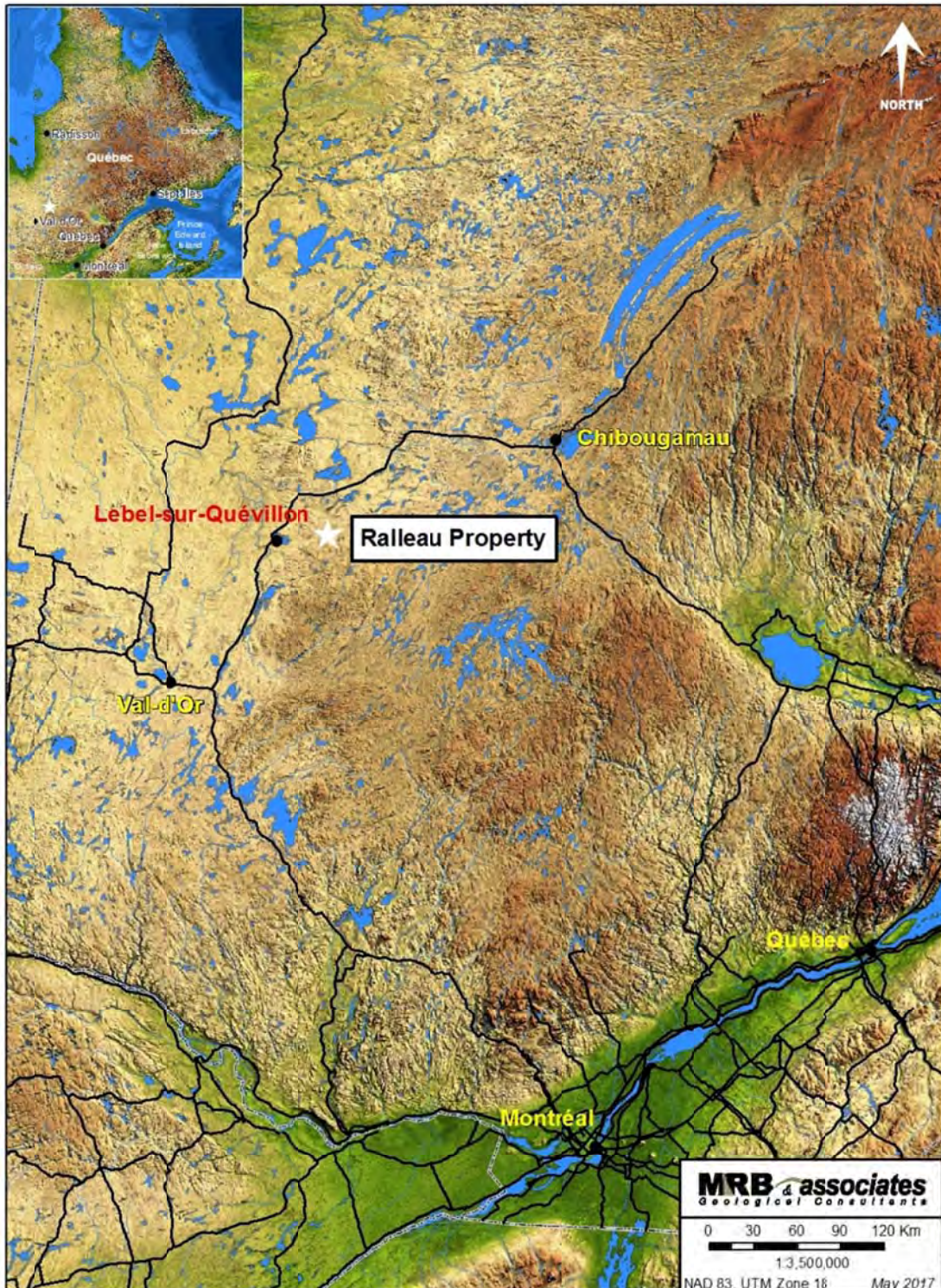


Figure 3.1: Regional location map of the Ralleau Property

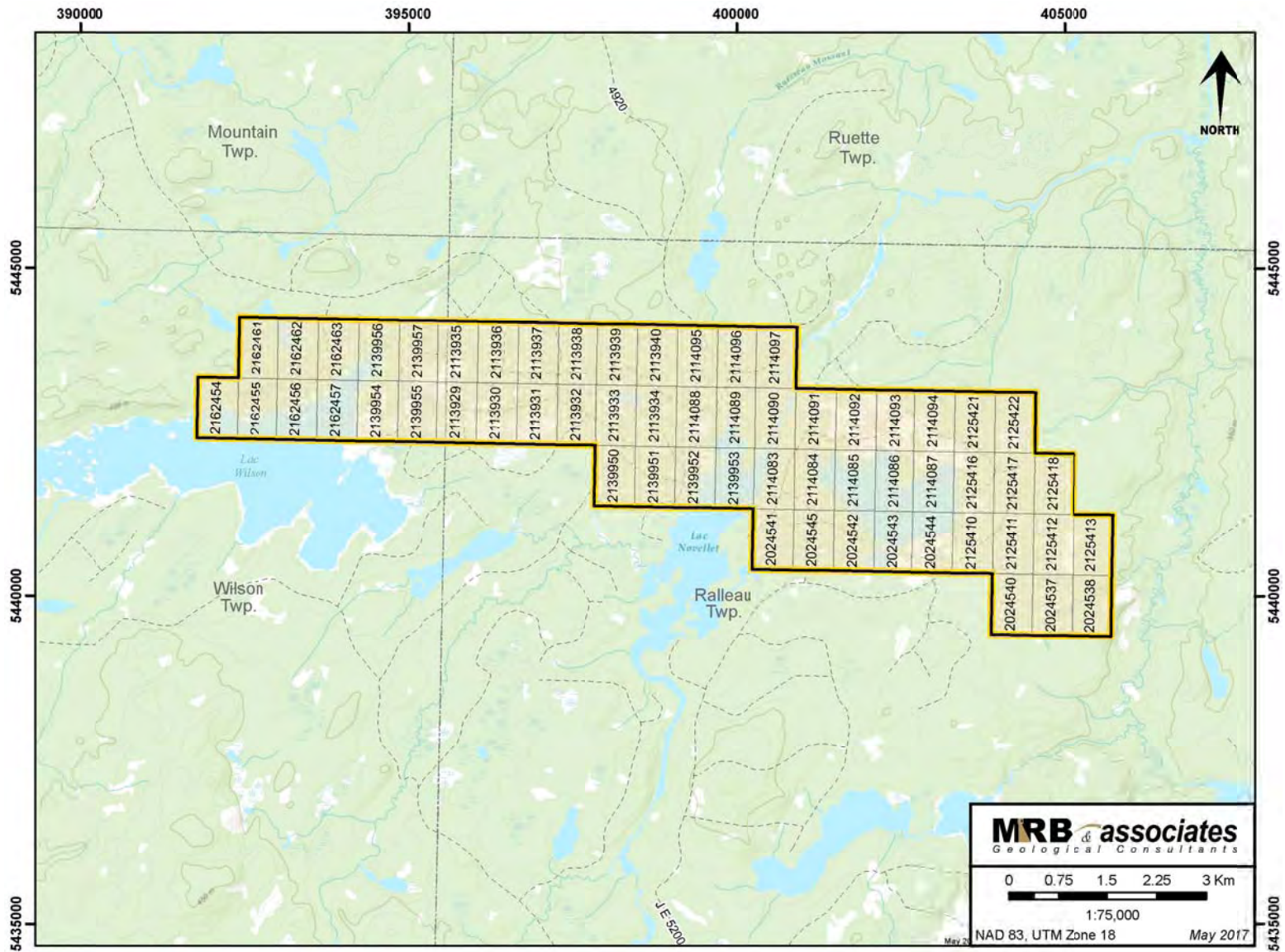


Figure 3.3: Ralleau Property claim map

3.1 Environmental Liabilities

No environmental permits are currently assigned to the Property for exploitation purposes. Environmental permit(s) may be required at a later date to fulfil environmental requirements with the goal of returning the land to a use whose value is at least equal to its previous value, and to ensure the long term ecological and environmental stability of the land and its watershed; however, no environmental liabilities were inherited with any of the claims on the Property, and there are no environmental requirements that need to be fulfilled in order to maintain any of the claims in good standing at this time.

Neither are there any apparent environmental issues related to the exploration and/or development of the Property, with the possible exception that there are numerous prominent streams and lakes that may require precautions be taken during certain types of exploration activity, such as diamond drilling or stripping.

3.2 Permits

Exploration work permits may be required for future work on the Property. The appropriate Permit Applications for potential forthcoming work on the Property would be required to be submitted by DeepRock Mining Inc. to MRNF Quebec. As operator, DeepRock has assured the Author that all exploration programmes on the Property shall be conducted in an environmentally sound manner, and will follow, to the best of their abilities, the principles and guidelines outlined in the E3 Framework Document for Responsible Exploration, as according to industry best practices (<http://www.pdac.ca/e3plus/index.aspx>).

3.3 Other Relevant Factors

Each mining claim provides access rights to a parcel of land on which exploration work may be performed; however, the claim holder cannot access land that has been granted, alienated or leased by the Province for non-mining purposes, or land that is the subject of an exclusive lease to mine surface mineral substances, without first having obtained the permission of the current holder of these rights.

To the Authors' knowledge there are no significant factors and risks that may affect access, title, or the right or ability to perform work on the Property throughout the year.

4 ACCESSIBILITY, INFRASTRUCTURE, CLIMATE AND PHYSIOGRAPHY

4.1 Accessibility

The Property is located approximately 160 km northeast of Val-d'Or and 50 km east of Lebel-sur-Quevillon. The town of Lebel-sur-Quevillon is accessible via Provincial Highway 113, which joins the Trans-Canada Highway (Route 117) some 30 km east of Val-d'Or (**Figure 4.1**). From Lebel-sur-Quevillon, the Property is easily accessed by truck via a network of secondary forestry roads (**Figure 4.2**). Ingress within the Property is best realized by all-terrain vehicle (or snowmobile in winter) and by foot. Total driving time from Lebel-sur-Quevillon to the Property is typically 60 - 90 minutes, depending on road conditions.

From Lebel-sur-Quevillon, the main access route - to the central and western parts of the Property - is accommodated by travelling 53 km eastward on Haul Roads 1000 and 3000 to the junction of secondary road 4920, which leads 10 km southwards to the heart of the Property. The eastern part of the property (around Lac Sheilann) is accessed by travelling 36 km eastward on Haul Road 5000 from its junction with Haul Road 1000, and thence 15 km northward on road JE5200 (**Figure 4.2**).

4.2 Infrastructure

Lebel-sur-Quevillon, situated in the administrative region of Northern Quebec, is a small town providing housing, servicing, supplies, consumable, transport facilities and an experienced workforce. Services also include a health care centre with emergency services, primary and secondary schooling and provincial government services. The current population of Lebel-sur-Quevillon is 2,159 people (Statistics Canada, 2014). Lebel-sur-Quevillon has a municipal airstrip but it should be noted that there are presently no regular flights. The town of Val d'Or, located 160 km southwest has a regional airport with daily scheduled flight to Montreal. Other infrastructure in Lebel-sur-Quevillon area includes the Barraute-Lebel-sur-Quevillon-Franquet-Matagami freight railway line operated by Chemin de fer d'interet local du nord du Quebec (CFILNQ), a semi-autonomous division of Canadian National (CN), serving the administrative region of Abitibi-Temiscamingue and Nord-du-Quebec; a 315 kV power transmission line supplying Lebel hydroelectric substation, and; a 120 kV transmission line from Lebel substation to the Langlois Mine (Nyrstar) located some 20 km northwest of the Ralleau Property. The Comtois sawmill (Resolute Forest Products) and the Langlois mine (Nyrstar) are main businesses operating in the Lebel-sur-Quevillon area.

The proximity of the Property to nearby mines and the mining centres of Chibougamau and Val-d'Or ensures the availability of equipment and personnel for exploration and mining.

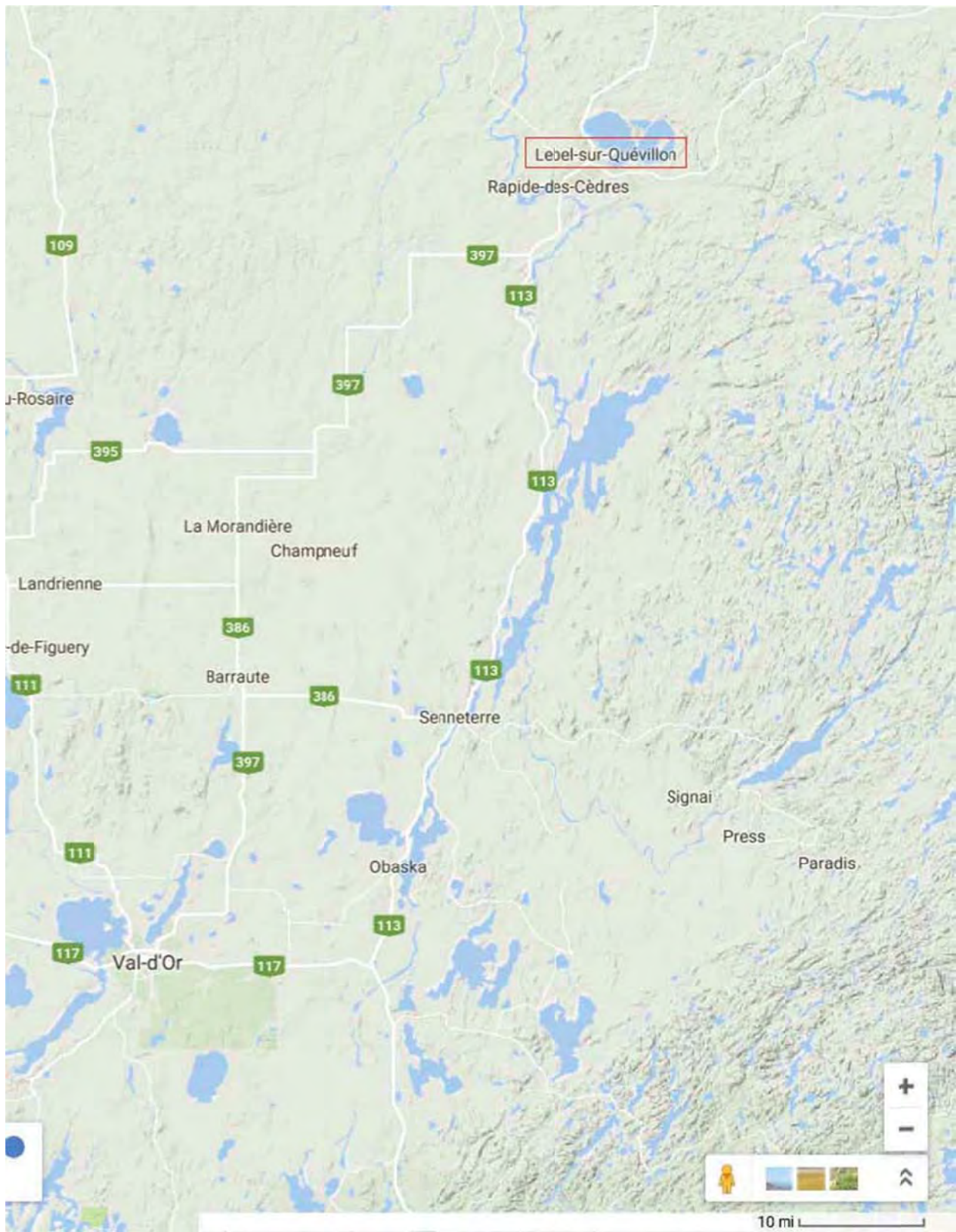


Figure 4.1: Main provincial roads in the vicinity of Val-d'Or/Lebel-sur-Quévillon

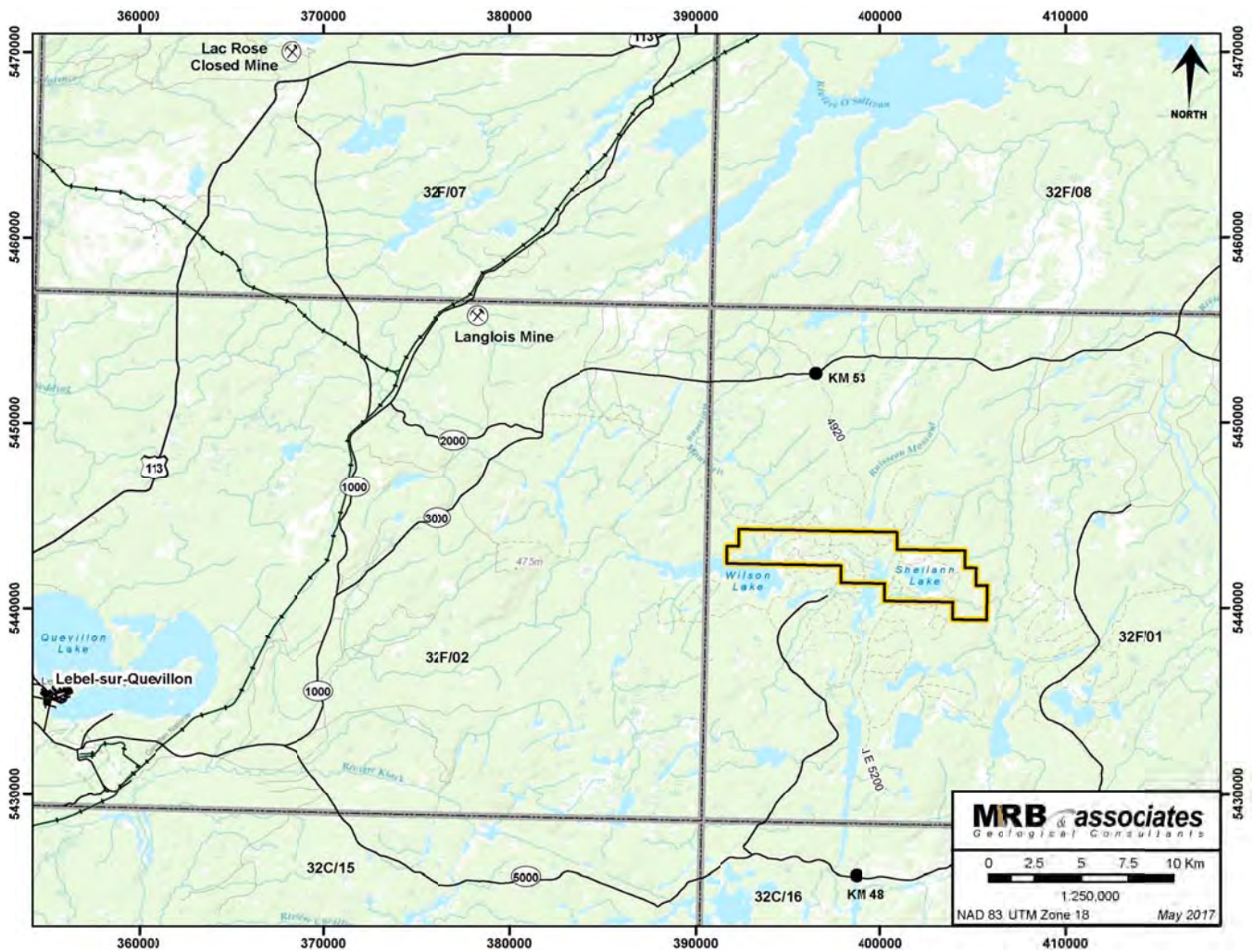


Figure 4.2: Primary and secondary access roads in the vicinity of the Ralleau Property

4.3 Climate

Climate data was obtained from Canadian Climate Normals, Environment Canada, http://www.climate.weatheroffice.ec.gc.ca/climate_normals. Data collected from the meteorological station in Lebel-sur-Quevillon between 1971 and 2000 show that the hottest summer temperature was 34.4°C and the coldest winter temperature was - 43°C. The average daily temperature was slightly above 1°C. On average, the area experienced 929.4 mm of annual precipitation: 703.8 mm of rain and 225.6 mm of snow.

Between February and May, the prevailing winds in the region are from the northwest, whereas between June and January there is a predominance of winds from the southwest. The wind data was collected in Val-d’Or, between 1952 and 1980. Exploration operations on the Property can be carried out year-round.

4.4 Physiography

The Property lies in the Mistassini Highlands natural province of the Canadian Shield and is characterized by an irregular topography consisting of relatively flat lands dotted with hills that rise less than 100 m above the surrounding ground. Elevation ranges from 370 m to 430 m, with the highest area located north of Lac Sheilann. A few hills to the north of Lac Wilson attain an altitude of approximately 410 m. Local lake elevations are around 360 m. The Property is characterized by low-relief topography and an overall gentle slope towards the north. The physiography around the Property is largely attributed to the lithologies and structures of the underlying rocks, which in turn were sculpted by the most recent period of glaciation. Retreating glaciation left a generally thick veneer of moraine boulder till and eskers that cover much of the local bedrock and control the drainage. The outcrop exposure is minimal, and local swamps and wetlands are present throughout the Property.

Water from the central and eastern parts of the Property drains into Lac Novellet, which feeds into the O'Sullivan River and ultimately empties into James Bay via the Nottaway River system. Lac Wilson drains into the Wilson River, which flows south-west to Lac Quevillon.

Lakes, swamps and grassy meadows fill bedrock and drift depressions. Although most of the Property has been harvested by local forestry companies (**Figure 4.3**), the local terrain hosts a typical boreal forest mixture of fir (black spruce in the wetlands and jack pine in the drier areas) and tamarack, with local stands of aspen and yellow birch. Ground cover is generally in the form of grasses, caribou moss, and shrubs; the latter typically comprising willow, arctic birch, alders and Labrador tea.



Figure 4.3: Google Earth image showing local physiography and outline of Ralleau Property

5 HISTORY

***Note:** The GESTIM and E-Sigeom sites allow on-line searching of the Province of Quebec's database of Provincial Assessment Reports or "Gestimes Minières" (GM's). The data are accessible online at <https://gestim.mines.gouv.qc.ca/> and <http://sigeom.mrnf.gouv.qc.ca/>.*

The area in the vicinity of the Property has seen exploration programmes completed by various companies since the 1950's. The historical exploration work pertaining to the Project, but not necessarily to the entire Ralleau Property, is summarized below.

5.1 Historic Exploration and Development Work

Most of the companies that have held property in the Ralleau Project area since the 1950's only investigated small parcels of land and performed very limited work, usually consisting of reconnaissance mapping and magnetic and/or electromagnetic geophysical surveys, and preparation of simple reports. In a few cases, diamond-drilling was carried out to test geophysical anomalies and surface showings. No significant deposits have been found to date.

1940: Major geologic features at a scale of 1:63,360 (one inch to one mile) were published by the Ministère des Mines du Québec (Fairbairn, 1940 and 1946) for the Ralleau, Effiat and Carpiquet townships. Fairbairn confirmed the presence of felsic rocks northwest of Lac Sheilann (RG028A).

1956: Cyprus Exploration Corporation Limited completed mapping in the area west of Lac Novellet. Following their investigations, Cyprus decided to discontinue further work (GM61348).

1956 (**1.5 km south of current Property**): Malartic Goldfields completed an airborne EM geophysical survey over prospective gold claims to the southwest of Lac Novellet, followed by reconnaissance mapping and a surface electromagnetic survey. Eight packsack drill-holes were bored over a long conductor identified from the survey, but none of the holes were able to penetrate the overburden. No further work was recommended, although the source of the conductor was never explained. At a later date, three short, vertical packsack drill holes (N1, N2 and N3) totalling 31.4 m were drilled in the same area and again failed to determine the source of the electromagnetic conductor that had been previously outlined in 1956 (GM05419; GM07306).

1956: Dome Exploration Company bored eight diamond drill-holes, totalling 610 m, on the southwest side of Lac Sheilann in the same general area as their earlier pitting/trenching/stripping programme (for which no published documents were found). Mineralization in hole SA-5 consisted of 0.11% Cu over 1.8 m. Three other holes appear to have intersected the same mineralization at greater depth: S-A1, SA-1A, and SA-6, returned 0.61% Cu over 1.46 m, 0.21% Cu over 1.58 m, and 0.38% Cu over 2.9 m, respectively. Hole SA-2, drilled approximately 60 m further to the northwest, returned 0.12% Cu over 19.2 m in the upper part of the hole and 0.18% Cu over 5.2 m in a lower part of the hole. This location may be a candidate for more detailed geophysical surveys, such as a surface pulse-EM, as the area appears to be strongly anomalous in copper (GM04721).

1956: SPES Exploration investigated the copper potential of the area northeast of Lac Sheilann, as a result of an encouraging copper assay from a sample taken from a showing; however, after several weeks of reconnaissance prospecting, without success, the work was halted (GM05363).

1964 (**5 km west of current Property**): Mining Corporation of Canada Limited completed electromagnetic (EM) and magnetic geophysical surveys over areas north of Lac Wilson. Trenching, and results from 7 drill holes, produced encouraging results. One trench over 20 m long and 11 m wide, produced results of 4.4% Cu over 1.2 m and 1.9% Cu over 11.4 m. The best result from the drilling was 0.33% Cu over 14.3 m. Another nearby hole returned several metres of graphite and barren massive pyrite (GM15336, GM15337, GM15348).

1964-1965 (**5 km west of current Property**): Coniagas Mines Limited completed EM and Magnetic surveys and 6 diamond drill-holes near the northeast shores of Lac Wilson. The most favourable results were 0.27% Cu over 0.6 m, and 0.12% Cu over 7.3 m (GM15848; GM15849; GM17234).

1965: Anglo American conducted a magnetic survey over an area northeast of Lac Sheillan and followed up with a Crone EM survey that identified two conductors that were drill tested by holes R-1, R-1A, R-2 and R-3, totalling 421.2 m. The holes encountered disseminated, semi-massive to massive sulphide mineralization associated with graphite stringers, with mineralized intercepts as follows: R-1A encountered 1% pyrrhotite and chalcopyrite over 4.57 m; R-1 intersected 20% pyrrhotite over 2.90 m and up to 30% pyrrhotite over 1.52 m; R-2 intersected 60% pyrrhotite and pyrite over 15.24 m and 10-20% sulphides, including chalcopyrite, over 12.74 m, and; hole R-3 encountered 20% pyrrhotite and trace chalcopyrite over 1.07 m (GM15993; GM18253; GM19519).

1968 (**west of current Property**): Madison Syndicate and Atlantic Syndicate completed a horizontal loop EM survey and drilled five (5) holes, totalling 616 m. Results of two of the holes included: 0.42% Cu over 8.54 m and 0.37% Cu over 8.84 m. The location of this work was not provided (GM39363).

1981 (**between 1 km and 5 km west of current Property**): SEREM Limited completed work on a number of claims held north of Lac Wilson, including line cutting, horizontal loop MaxMin EM, and magnetic surveys. Fifteen conductive zones were identified. A proposed programme to drill a number of the more promising conductors does not appear to have been completed (GM39363).

1986: Mines Sullivan Inc. evaluation report. CDI Surveys Inc. performed an interpretation of data collected by Questor Surveys a few years earlier, over areas covering the eastern half of the current Ralleau Property. The survey outlined 31 EM conductors and delineated 8 target areas, of which two are located on the Ralleau property (near the western and southeastern shores of Lac Sheillan). It was noted that some of the conductive anomalies were not continuous, which may suggest greater opportunities for VMS-style systems. Magnetic susceptibility interpretation differences were believed to be caused by alternating zones of felsic to mafic volcanic rocks, plus several known structural features representing north-south lineaments (GM44514).

1988: Onyx Resources Inc. contracted Sagax Geophysics to carry out an Induced Polarization (IP) geophysical survey totalling 70 line-kilometres over the area directly south of Lac Sheillan (the "west grid"). The survey outlined a total of thirty-two (32) conductive bodies, the orientations of which corresponds to the general orientation of the previously interpreted geological contacts. Seven (7) of the anomalies were deemed as priority targets for testing by diamond-drilling (GM47599).

1992: SOQUEM, in cooperation with Explorateurs-Innovateurs de Quebec Inc. carried out a Beep-Mat survey over an area just north of Lac Wilson. Eleven conductive outcrops on strike with two strong electromagnetic conductors detected by the IP survey were exhumed (dynamited) and sampled. Analysis of the samples did not reveal any economic concentrations. The discovery of near-surface bedrock using the Beep Mat suggests that parts of the property are covered with only thin overburden and that further Beep Mat surveys are warranted (GM52037).

2003: The Lac de la Ligne map sheet (NTS 32F/01) was mapped at a scale of 1:50,000 by Bandyayera (RG2002-12). This work was undertaken mainly in order to update the geological maps of the Urban-Barry Greenstone Belt and evaluate the mineral potential of the area.

2005-2015: Megastar carried out various exploration programmes following its acquisition of the property in 2005, including: reconnaissance geology and reporting (2005 - GM63677); surface geophysical surveys (2006 - GM62775); diamond drilling (2006 - GM63676); trenching and sampling (2007 - GM63732), and; an airborne geophysical survey (2008 - 64158); a digital-database compilation of all earlier work (Langton and Stephens, 2010); field truthing

geophysical anomalies and detailed geological mapping (2010 - GM65611); National Instrument 43-101 Technical Report (2015 - GM69123). Megastar's exploration work is summarized as follows:

2005: Geological compilation: Megastar completed a limited geological compilation in the fall of 2005 shortly after the initial block of 12 claims had been acquired (Fournier, 2005; GM63677).

2006: Megastar Development Corporation initiated field exploration work in January of 2006, consisting of approximately 75 line-km of line cutting over areas of the original twelve (12) cells, in preparation for ground geophysical surveys (see Megastar News Release dated Jan. 31, 2006). A magnetometer survey and DeepEM in-loop survey were completed over the grid during March and April of 2006 following completion of the line cutting (Boileau, 2006; GM62775). The objective was to refine the geological interpretation and further characterize the historic airborne Input conductors.

The magnetic survey outlined a unit of low magnetic susceptibility that correlated with the Novellet Rhyolite identified in an earlier Government survey (RG2002-12). Based on local outcrop exposure of the Novellet Rhyolite, the RG2002-12 Report estimated it to be 500 m thick. The 2006 detailed ground magnetic survey conducted by Megastar indicated that the Novellet Member was more than 850 m thick, and extended across the entire Ralleau Property. In addition, magnetic anomalies adjacent to the south contact of the rhyolite were coincident with reported surface mineralization and DeepEM conductors.

The DeepEM in-loop down-hole TDEM survey identified six (6) distinct DeepEM conductors, four (4) of which occurred within the favourable rhyolite Novellet Member. Drilling to test these conductors was recommended.

2006 - Exploration Drilling: Megastar completed five diamond-drill holes in 2006 for a total of 1,545.7 metres. Drilling was planned to test coincidental Magnetic, DeepEM conductors, and favourable geology that had been identified on the original twelve cells.

The locations of the five (5) diamond-drill holes are summarized in **Table 5.1**. Best results of the drilling programme are summarized in **Table 5.2**.

Table 5.1: Summary of 2006 Diamond-Drilling Programme

Hole #	Length (m)	UTM (E) [NAD83, Zone 18]	UTM (N) [NAD83, Zone 18]	Azimuth	Dip
MAR-06-01	300	397688	5443970	360°	-50°
MAR-06-02	297	397502	5444364	180°	-50°
MAR-06-03	299	397275	5443238	360°	-50°
MAR-06-04	300	397861	5442897	360°	-50°
MAR-06-05	300	397846	5442459	360°	-50°

Table 5.2: Selected “Best” Results From 2006 Diamond-Drilling Programme

Hole	Sample	From (m)	To (m)	Cu (ppm)	Zn (ppm)
MAR-06-01	60873	72.00	73.50	247	106
MAR-06-01	60872	66.23	67.50	38	205
MAR-06-02	63349	192.00	193.50	218	176
MAR-06-02	63358	241.50	243.00	19	473
MAR-06-03	61244	216.00	216.30	631	2130
MAR-06-03	61220	66.00	67.50	47	1475
MAR-06-04	61277	208.50	209.10	243	91
MAR-06-04	61264	157.50	159.00	42	126
MAR-06-05	60865	334.50	336.00	131	44
MAR-06-05	60833	159.00	160.60	59	157

All EM conductors were reportedly explained by the drill hole intersections. Although no economic Au, Ag, Cu or Zn mineralization was found in the samples analysed, the anomalous values correspond to an environment of geochemical alteration. Geochemical data was used to characterize the rock types, as well as their alteration type and intensity. Whole rock analyses of several samples showed depletion of Na₂O in the footwall, whereas other samples exhibited K₂O enrichment of hanging wall. These alteration styles are often associated with VMS environments. In addition, hole MAR-06-01 intersected a wide zone of sericitized rhyolite, a type of alteration also associated with VMS deposits (Piché, 2007; GM63676).

2008: Megastar completed a stripping and channel sampling programme designed to follow up on potential VMS targets around Lac Sheillan (GM63732). A 15 kilometre snow road was opened to Site #1, where approximately one (1) metre of overburden was removed to expose the bedrock surface. Forty-seven (47) channel samples were taken from the outcrop over a distance of approximately 50 metres, in a north-south direction. A rock-saw channel was cut and the channel material chipped out over approximately one metre. The work exposed massive to semi-massive sulphides that appeared anomalous in copper and zinc. The sulphide enrichment appeared to have occurred along the contact between the felsic and mafic rocks.

Fifty samples were submitted to ALS Chemex of Val-d’Or for assay of gold, silver, copper and zinc content. Eight of these samples were also sampled by whole rock methods for 14 metal compounds (GM63732).

Site #2, which was located about three kilometres west of Site #1, was excavated but encountered water, prohibiting the collection of samples. The site was rehabilitated and abandoned.

2008: In late April of 2008, Megastar engaged Abitibi Geophysique Ltd. of Val d’Or, Quebec, and Geotech Ltd. of Aurora, Ontario, to conduct a helicopter-borne Versatile Time-Domain Electromagnetic (VTEM) geophysical survey. The survey area totalled 1,456 line kilometres over 8,000 hectares, on Megastar’s entire 100% owned Ralleau project area (additional cells were acquired following the survey). Flight lines were spaced at 75 metre intervals, and accurately located using a GPS device and a radar altimeter for elevation (Abitibi Geophysics Report 08N045, 2008).

The VTEM system is particularly suited to identifying deeply buried, conductive ore bodies. The survey identified forty-nine (49) discrete anomalies classified according to conductivity and strike length as priorities 1 to 4. Eight (8) of these anomalies were classified as Priority 1, an additional eight (8) as priority 2, thirteen (13) were classified as priority 3, and finally twenty (20) more were classified as priority 4. Because VMS deposits are more often than not associated with anomalies of shorter strike length and moderate to low conductivity, the Company believed that all 49 anomalies needed to be reclassified following a field mapping programme to verify those anomalies that may be near surface, and corroborate them with favourable geological environments.

2010: Megastar solicited MRB & Associates to compile a comprehensive digital database of previous exploration work, prior to the 2010 summer exploration programme (Langton and Stephens, 2010). During the summer, Megastar carried out a programme that comprised ground-truthing the VTEM anomalies discovered by the 2008 airborne survey, as well as a detailed geological mapping and sampling programme (Stephens 2011; GM65611).

One hundred and sixty-one (161) grab samples were collected during the course of the mapping in 2010 and sent to ALS Chemex Laboratories in Val d'Or, Quebec for multi-element (109 samples), whole rock (35 samples), gold (22 samples), and platinum and palladium (5 samples) analysis.

Of the samples submitted for trace element geochemistry, twelve returned over 200 ppm Cu, the highest concentration being ppm Cu (Sample 108412). Eight samples returned values exceeding 200 ppm Zn, the highest concentration being 1,190 ppm Zn (Sample 7899). No significant values were obtained from grab samples analysed for gold, platinum or palladium content. Thirteen samples were reported as having anomalous copper-zinc, as well as K-enrichment and Na and Ca depletion.

2014: Megastar retained Roger Moar, consulting geologist, on July 22nd, 2014 to conduct a geological mapping and litho-geochemical sampling programme to augment the work done by Stephens in 2010. Fieldwork was carried out over a period of 44 days between August 5th and September 28th, 2014 (Moar, 2015; GM69123).

The 2014 exploration programme was conducted to refine the accuracy of the geological map, obtain a better understanding of the geological setting of the property, and to define potential targets for VMS mineralization. The geological mapping programme was conducted along north-south traverses totalling 94 km, and along the numerous forestry roads and access trails transecting the Property.

A total of 158 outcrops over an area of 20 km² were mapped during the course of the survey. All geological data was concatenated with earlier reconnaissance mapping data and used to produce geological maps of the Property. A total of ninety-four (94) grab samples of representative lithological units as well as mineralized outcrops were collected and analyzed for a group of 33 elements. **Table 5.3** shows a summary of the grab samples collected during the 2014 geological mapping programme that contained significant concentrations of Cu and Zn. Forty-seven grab samples were sent for gold assay, but none returned notable values.

Table 5.3: Summary of Grab Samples With Notable Cu and Zn - 2014 Programme

Sample	Easting	Northing	Cu (ppm)	Zn (ppm)	Description
Q592576	395878	5444293	2070	190	Weakly to moderately carbonatized fine-grained andesite; 2-3% pyrite and chalcopyrite associated with a sub-vertical shear zone striking E-W
Q592641	401501	5441397	1920	8360	Sericitized and chloritized shear zone (10 cm) affecting intermediate volcanic; up to 10% pyrite with minor amount of chalcopyrite
Q592645	404228	5441569	720	130	Massive, fine-grained basalt; moderately carbonatized with 3% disseminated Pyrite

The whole rock data was used to determine the composition and classification of the rock units on the Property. According to the results of Moar (2015), the rocks underlying the Property span the range from felsic to mafic, consistent with bimodal volcanism genesis, and are classified as subalkaline, island arc tholeiites, likely derived from the fractionation of a primitive, mantle-derived magma.

6 GEOLOGICAL SETTING AND MINERALIZATION

6.1 Regional Geology

The area of the Ralleau Property is within the Northern Volcanic Zone (NVZ) of the Abitibi Subprovince, Superior Province (Chown et al., 1992), in the western part of the Urban-Barry Greenstone Belt (UBGB) (**Figure 6.1** and **Figure 6.2**). The mafic to felsic, volcanic and volcanoclastic rocks underlying the Ralleau Property area are part of the basal, mafic-dominated sequence referred to as Volcanic Cycle I (Mueller et al., 1989), which formed between 2,730 and 2,720 Ma (Mortensen, 1993), and comprise massive, pillowed and brecciated, tholeiitic basalt flows with local felsic and sedimentary units. With the exception of Proterozoic diabase dykes, all the rocks in the area are Archean.

The NVZ rocks in the region of the Ralleau Property underwent regional amphibolite-facies metamorphism that have locally retrograded to greenschist-grade. Although all of the rocks underlying the Property have been metamorphosed, the “meta” prefix has generally been omitted for simplicity from the following rock descriptions.

The cyclic volcanic and sedimentary successions of the NVZ represent oceanic supracrustal assemblages deposited in an ancient arc-rift setting that were later basally accreted and intruded by syn-volcanic, poly-phase granitoid plutons. This entire assemblage was deformed and shortened during the north-south compressional Kenoran Orogeny (<2708 Ma), with concomitant development of mainly south-directed, high-angle reverse thrusts, followed by regional dextral transpression. Syn-tectonic plutons (2703-2690 Ma) intruded the sequence, mainly along major shear zones and along the contacts of the syn-volcanic plutons with the supracrustal rock sequences.

The UBGB extends in a generally east-west direction over 135 km and is between 4 km and 20 km wide. It is delimited to the north by the Mountain and Father plutons and to the south by the Wilson and Souart plutons (**Figure 6.3**), which range in composition from granodiorite to tonalite. The UBGB comprises mainly volcanic rocks imbricated by east to east-northeast oblique thrust-faults. Rheume and Bandyayera (2007) reviewed the lithostratigraphy of the Urban-Barry, Chapais and Chibougamau regions and proposed a sequence of three volcano-sedimentary cycles for the UBGB, dated between 2791 to 2707 Ma. Based on the work of Bandyayera et al. (2002, 2003, 2004a and 2004b), and Rheume and Bandyayera (2007) the UBGB has been subdivided into five formations: the Fecteau (2791 Ma), Lacroix, Chanceux, Macho (2718 Ma), and Urban (2707-2714 Ma).

The volcanic rocks of the Urban Formation are interpreted to represent the third and final volcano-sedimentary cycle of the Urban-Barry Greenstone Belt. With the exception of the volcano-sedimentary Hauy Formation, which has been dated at 2691.7 ± 2.9 Ma (David et al., 2007), the Urban Formation is younger than the volcanic rocks of the Chibougamau-Chapais region. The Ralleau Property is underlain by the Urban Formation, in the far western part of the UBGB.

Rocks underlying the area of the Property have been affected by amphibolite-facies regional metamorphism characterized by the assemblage hornblende +actinolite +chlorite +biotite \pm garnet (Bandyayera et al., 2003); however, the central part of the Urban Formation has retrograded to greenschist facies, illustrated by the predominant mineral assemblage of albite +epidote +actinolite +chlorite +carbonate. The rocks surrounding the syn-volcanic felsic intrusions record amphibolite-facies, contact metamorphic conditions characterized by the assemblage hornblende +biotite +garnet.

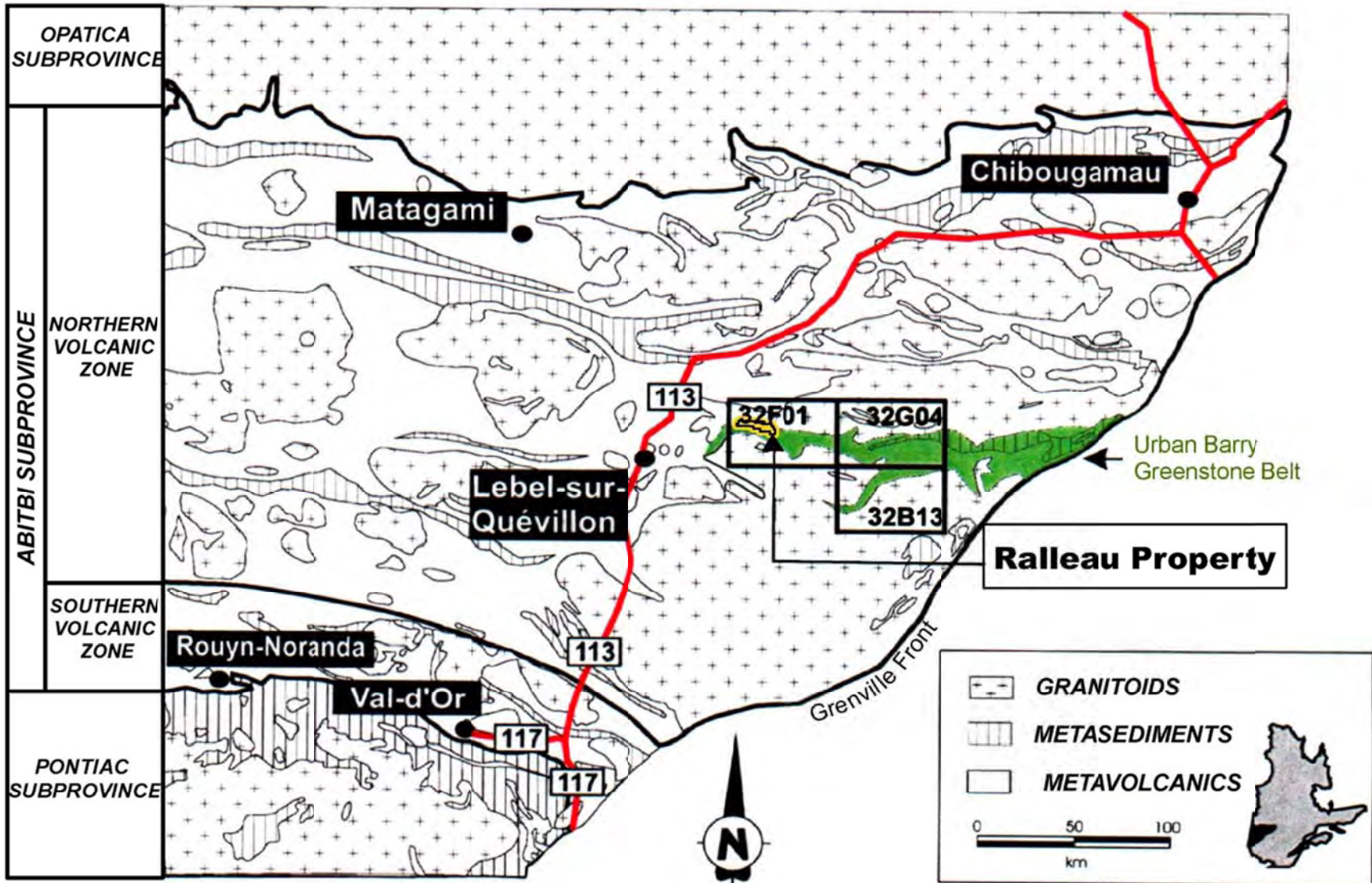
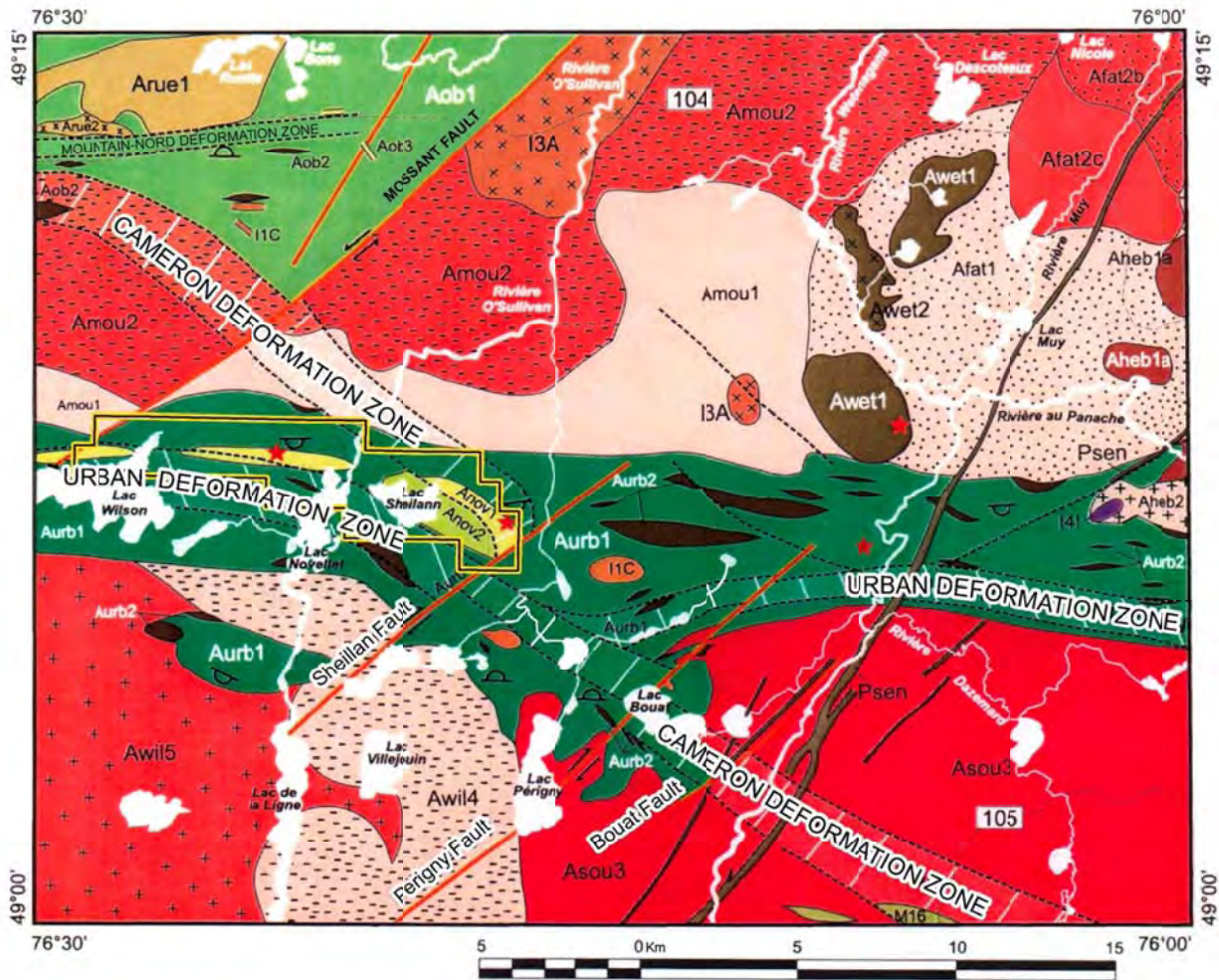


Figure 6.1: Regional map showing geological divisions of the Abitibi Subprovince (after Bandyayera et al., 2003)



Stratigraphic Legend

Proterozoic			Wilson Pluton			Urban Formation		
Psén	Diabase Dyke		Awil5	Biotite Granodiorite	Aurb2	Gabbro (sills)	Anov2	Tuff undifferentiated
Archean			Awil4	Biotite Tonalite ± Epidote	Aurb1	Glomeroporphyritic Basalt	Anov1	Volcanic and Felsic Volcaniclastic (2714 Ma)
Hébert Pluton			Souart Pluton			Novellet Member		
Aheb2	Gneissic Tonalite		Asou3	Biotite Granodiorite ± Hornblende				
Aheb1a	Diorite		Ruette Intrusion			Obatogamau Formation		
Father Pluton			Awet2	Hornblende Granophyre	Aob3	Volcanic and Felsic Volcaniclastic		
Afat2c	Coarse Granodiorite		Awet1	Gabbro	Aob2	Gabbro (sills)		
Afat2a	Medium Granodiorite		Wettnagami Intrusion			Aob1	Glomeroporphyritic Basalts	
Afat1	Biotite Tonalite ± Hornblende		Awet2	Gabbro-Diorite				
Mountain Pluton			Awet1	Gabbro-Gabbroiorite				
Amou2	Biotite Granodiorite ± Epidote							
Amou1	Biotite Tonalite ± Hornblende							

Lithologic Legend

I1C	Granodiorite	GA	Gabbro	M	Peridotite	M16	Amphibolite		Mineral Showing		Railleau Property
	Late Fault		Deformation Zone		Ductile Fault		Polarity		-104-		Forest Road

Figure 6.2: Regional geological map of the Abitibi Subprovince (after Bandyayera et al., 2003)

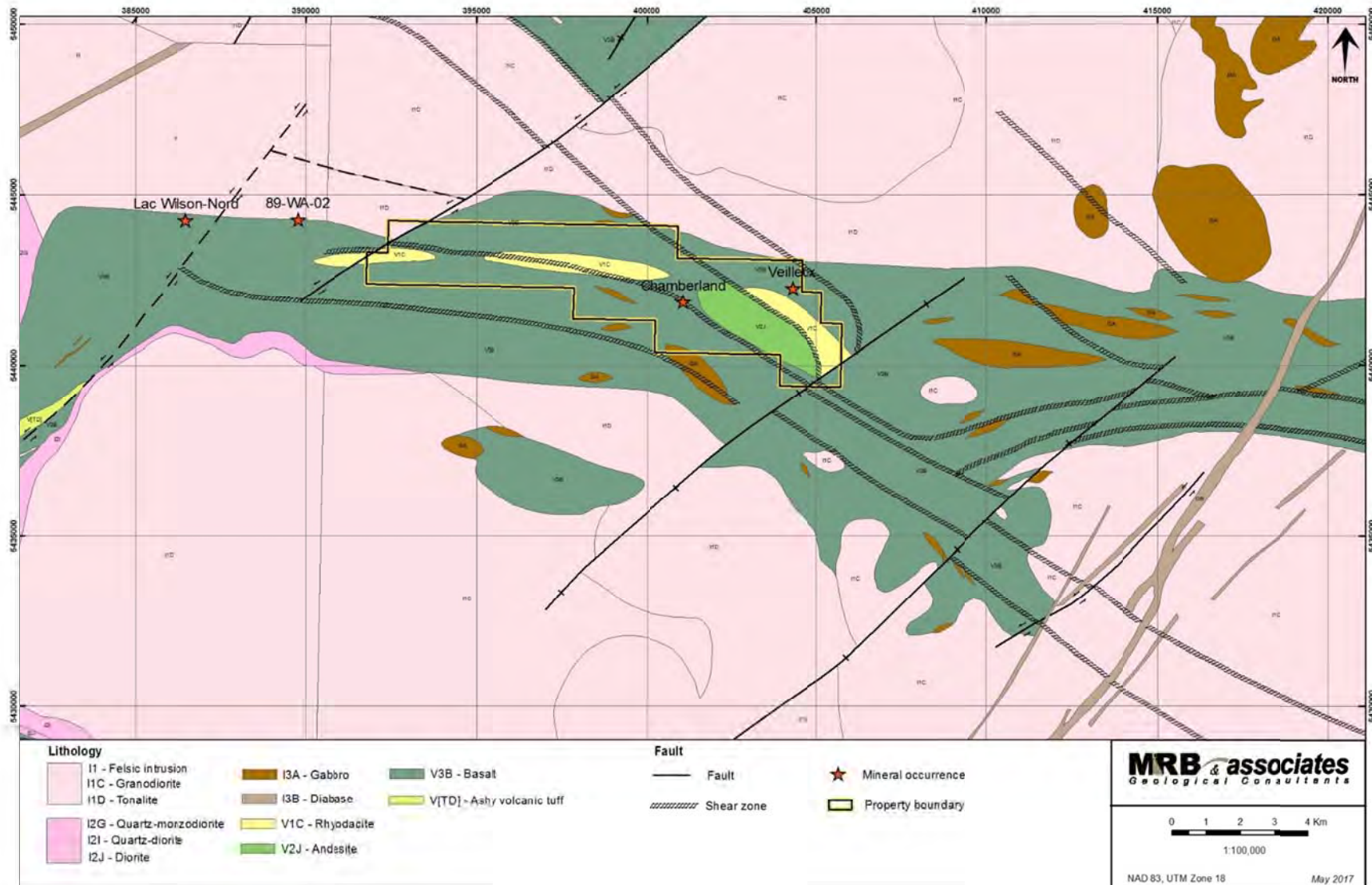


Figure 6.3: Local geology - Ralleau Property

6.2 Local Geology

The Urban Formation, which was first defined in exposures near Lac Picquet and Lac Mesplet by Bandyayera et al. (2002), extends for more than 125 km between the Grenville Front and Lac Wilson (see **Figure 6.1** and **Map 1**). It is composed principally of tholeiitic, glomeroporphyritic basalt, syn-volcanic gabbro, felsic volcanic, and sedimentary rocks. Mafic and andesitic rocks make up approximately 85% of the Urban Formation.

The mafic and andesitic rocks of the Urban Formation exhibit a variety of textures including aphyric, porphyritic, amygdular and pillowed units. The basalts are greyish green to dark green on weathered surfaces and dark greyish green on fresh surfaces. Mafic lavas are aphanitic and locally contain 2-5% amygdules (2-3 mm) filled with calcite and occasionally with quartz. The porphyritic units contain up to 15% plagioclase phenocrysts (2-5 mm). Pillowed basalts contain a relatively common epidote alteration at the centre of the pillows. These mafic flow units are chloritized, variably carbonatized, and locally silicified.

The two main felsic volcanic units of the Urban Formation are the Novellet (2,714 Ma) and Freeman (2,707 Ma) members (Bandyayera et al., 2002, 2004b). The Freeman Member forms a 25 km long and 4 km wide band in the Lac Hebert area (NTS 32G/03), and is consists of mainly rhyolitic to dacitic flows, lapilli tuffs and blocky tuffs of calc-alkaline affinity. The Novellet Member comprises mainly volcanic and volcanoclastic rocks and undifferentiated tuffs of intermediate to felsic composition, with calc-alkaline affinity. The felsic volcanic rocks of the Novellet Member have been dated at 2714.1±1.1 Ma by Bandyayera et al. (2003).

Several gabbro sills intrude the Urban Formation. They are massive to very weakly foliated, medium-grained and contain about equal proportions of chloritized amphibole and plagioclase. The gabbros are also weakly to strongly carbonatized. These sills are concordant with the regional foliation.

The Mountain Pluton, a relatively homogenous, syn-volcanic intrusion, lies along the northern contact of the Urban Formation, at the extreme north of the Property. The main intrusive phase of that part of the Mountain Pluton that underlies the Property is a biotite tonalite. In the field, this unit either occurs as small, isolated outcrops or as large zones of exposed rock on hill tops in the northeast part of Wilson Township. The biotite tonalite is medium-grained, homogeneous, and contains 60% subhedral plagioclase, 30% interstitial, blue quartz and approximately 10% fine-grained biotite. It is pale grey on fresh surfaces and weathers to a whitish grey. The Mountain Pluton also contains a granodiorite phase with 20-25% K-feldspar that crops out a few hundred metres north of the Property.

6.3 Property Geology

The latest interpretation of the geology underlying the Property is based primarily on the geological mapping programmes carried out in 2010 by Megastar (Stephens, 2011), which was modified following the 2014 summer field season by Moar (2015).

The Ralleau Property is situated within the western part of the Urban-Barry Greenstone Belt. The geology of the Property is dominated by mafic to intermediate volcanic rocks of the Urban Formation, and felsic volcanics of dacitic to rhyolitic composition of the Novellet Member. These lithological units mainly strike east-west in the western part of the Property, changing gradually to northwest-southeast in the eastern part of the Property. This changes in orientation is likely related to the influences of the Urban Deformational Zone and the Cameron Deformational Zone (see **Section 6.4**). Bedrock exposures are scarce, as glacial deposits and wetland areas cover much of the Property.

The following details of the Property geology are summarized from Stephens (2011) and Moar (2015):

Interpretation of the geology of the Property following the 2010 mapping programme (Stephens, 2011) confirmed the original geological interpretation to be generally representative; however, as a result of analysis of the data from the field mapping programme, and new information available from an up-to-date airborne magnetic survey, a more precise delineation of the geological units was possible. The relocation of the geological contacts and the new interpretation of the regional structure resulted in several significant changes, including:

- repositioning of the Lac Wilson felsic unit further north but following the same general trend;
- shifting of the Lac Wilson felsic 'dome' toward the west, and a reduction in its width from 400 m to just over 100m;
- identification of a narrow cherty horizon within the core of the Lac Wilson felsic dome;
- extension of the Lac Novellet felsic dome toward the east, across Lac Sheilann, and an increase in its width toward the west;
- elimination of the most easterly felsic dome indicated on the original geological maps, and replacement by a northwest-southeast trending shear zone within silicified intermediate rocks;
- field correlation of observed mafic intrusions in the field with many of the magnetic-high anomalies, and interpretation that similar magnetic-high anomalies likely reflect unmapped mafic intrusions;
- repositioning of many of the earlier mapped mafic intrusions due to direct field observation and correlation with magnetic maps;
- elimination of several of the faults or shears indicated on the original maps, and modification of others;
- addition of several new faults or shears;
- repositioning of several regional shears based on correlation with the topography of the Property;

A porphyritic, pillowed andesite has been defined between the Novellet Member and mafic rocks of the Urban Formation. Several outcrops of this unit were mapped in the central part of the Property, as well as west of Lac Sheilann. The andesites are a medium greenish grey on weathered surfaces and a light, greyish green on fresh surfaces. They contain 15-30% subhedral plagioclase phenocrysts (2 mm - 4 mm) in a fine-grained matrix with 5-15% euhedral amphibole and fine-grained biotite. The pillows are moderately to strongly deformed and vary in thickness between 15 cm and 30 cm. The long axis of the pillows measure approximately 50 cm and are oriented generally east-west with a steep to sub-vertical dip to the north. The borders (2 cm) of the pillows have a rusty appearance and contain disseminated pyrite. The centre of the pillows are depleted in mafic minerals and are weakly altered to epidote. The pillows are commonly deformed and contain a series of parallel fractures, several decimetres apart. The fractures are oriented north-northwest to north-northeast, and are locally filled with quartz.

The Novellet Member regroups a suite of dacitic to rhyolitic volcanic rocks underlying the central axis of the Property. It has an apparent width of 150 m - 180 m in the centre of the Property, and of 300 m - 350 m at the eastern and western parts of the Property. The felsic lavas are light grey and weather greyish-white to white. They contain 3-15%, millimetre-scale, blue quartz, 3-7% acicular amphibole and minor biotite in a fine-grained, quartzo-feldspathic matrix. Subhedral phenocrysts (2 cm - 5 cm) of white plagioclase occur locally. The schistosity dips between 68° and 90° towards 350°-360°. Quartz veins are relatively rare and unmineralized. Alteration is characterized primarily by silicification, albitization and a weak sericitization. The Novellet Member is mainly exposed between Lac Wilson and Lac Novellet, and in the area surrounding Lac Sheilann.

A small quartz-feldspar porphyritic (QFP) dyke (outcrop RM-14-064) that intrudes mafic volcanic rocks of the Urban Formation lies just inside the northern Property boundary, due north of hole MAR-06-05. The QFP dyke, with an estimated thickness of 10 m, forms a small east-west escarpment. Although, the dyke is not widely exposed, it is interpreted to be concordant with the regional foliation. It is beige on weathered surfaces and speckled beige and medium grey on fresh surfaces. This unit contains 25-40% whitish, subhedral plagioclase phenocrysts (2 mm - 4 mm), 7% fine black biotite flakes and 3% millimetre-scale blue quartz eyes attenuated or flattened parallel to the

east-west schistosity, set in a fine-grained quartzo-feldspathic groundmass. The unit is weakly sericitized and weakly mineralized with finely disseminated pyrite.

Intermediate volcanoclastic rock exposures are rare on the Property. They have been logged in drill core and mapped at a few locations north and west of Lac Wilson, north of Lac Novellet (at the mouth of the O'Sullivan River), and northwest of Lac Sheilann. They form relatively continuous bands, several tens of metres wide, at the contact with the Novellet Member. The intermediate tuffs are layered with alternating, centimetre-scale bands of greyish beige rock interlayered with darker-coloured, greenish grey rocks. The lighter coloured layers are fine-grained and composed of plagioclase, quartz, and 10% mafic minerals, including biotite, amphibole and chlorite. The darker coloured bands are coarser-grained and contain approximately 50% mafic minerals. This unit contains minor quartz-carbonate veins oriented parallel to the foliation. Fine-grained pyrite occurs locally disseminated parallel to the dominant foliation. Monogenic lapilli tuffs of intermediate composition are grey and beige on weathered surfaces and pale greenish-grey on fresh surfaces. This unit contains 30-40% elongated, felsic volcanic fragments in a fine-grained, chloritized matrix with minor pyrite. Sericite and biotite define the foliation.

Although rare, a few outcrops of metasedimentary rocks have been identified among the mafic and intermediate layers of the Urban Formation. Outcrop RM-14-006 (Moar, 2015) was mapped in the central part of the Property, approximately 500 m south of the felsic rocks of the Novellet Member. It consists of thinly laminated, schistose, very fine-grained metasediments interlayered within massive mafic lavas. Dark thin laminae indicate the presence of graphite. The metasediments are sericitized and weakly mineralized with pyrite. The bedding dips 70° towards 016°. Thin layers of greywacke occur sporadically within pillowed and porphyritic intermediate lava flows. A thin wacke layer mapped north of Lac Wilson (outcrop RM-14-109) is pale grey on weathered surface and medium grey on fresh surface. It forms a massive to thinly laminated, centimetric to decimetric thick layer. The unit is moderately magnetic and contains 3-4% finely disseminated magnetite.

Amphibolite occurs between Lac Novellet and Lac Sheilann (outcrops RM-14-136, RM-14-137 and RM-14-148). This unit includes amphibolites and garnet-amphibolites, which are interpreted to be recrystallized and metamorphosed basalts. Fresh rocks are dark greenish grey and weathered surfaces are dark green. They vary from medium-to coarse-grained and display a foliated texture. The amphibolites consist mainly of hornblende, 10% plagioclase and up to 15% garnet porphyroblasts (1 mm - 10 mm). These amphibolites are weakly mineralized with pyrite and pyrrhotite, and are variably carbonatized.

A suite of felsic volcanoclastic rocks was mapped on a hill north of Lac Wilson (outcrop RM-14-111). The rocks are light grey on a fresh surface and weather to white on outcrops. This unit contains 20% angular to sub-rounded blocks (6.4 cm - 21.0 cm) and 30-40% lapilli fragments (0.2 cm - 3.0 cm). The matrix is fine-grained, tuffaceous and is composed of sericitized plagioclase, quartz and 20-25% fine-grained biotite. The fragments contain 5-15% rounded quartz phenocrysts (2 m - 8 m) and are commonly elongated parallel to the east-west foliation.

A few outcrops of felsic tuffs or reworked felsic volcanoclastic rocks were mapped in the Lac Wilson area (outcrops RM-14-123 to RM-14-126). The rocks are grey on a fresh surface and greyish-white when weathered. They are very fine-grained and composed primarily of quartz and feldspar with 3-7% biotite and disseminated magnetite. These units contain up to 15% angular to sub-rounded fragments (2 mm) of grey and blue quartz and 5-10% fragments/phenocrysts of white plagioclase. Locally, the rocks developed a schistose texture and are strongly sericitized. Overall, the unit is weakly mineralized with trace amounts of disseminated pyrite.

6.4 Structural Geology

The Urban-Barry Belt occupies a large anastomosing, trough-like synform bordered by felsic intrusive plutons. The belt is characterized by an overall east-west oriented schistosity consistent with the overall structural fabric of the Abitibi Subprovince and with the axis of the synform. The region has been sub-divided into several structural domains based on the orientation of planar and linear fabrics (Bandyayera et al., 2003). The synformal geometry is based on the geological observation that there is a reversal of the stratigraphic polarity on either side of the Urban-Barry Belt (Bandyayera et al., 2003).

The Urban Deformation Zone (UDZ) forms a two km wide, generally east-west corridor through the central part of the greenstone belt and affects the western and south-central part of the Property (see **Figure 6.2**). Deformation in the UDZ is characterized by intermediate to high strain producing a weak to moderate schistosity oriented 085°-110° with a sub-vertical dip. The UDZ hosts several decimetre- to metre-scale shear zones associated with chlorite, biotite and sericite alteration and locally containing minor pyrite.

The Cameron Deformation Zone is a southeast trending, late-stage structural zone, characterized by a series of anastomosing high-strain zones (shear zones) that transects the Property east of Lac Sheilann (see **Figure 6.2**). The Cameron Deformation Zone has been recognized as being auriferous along strike, and is associated with the Langlois Zinc Mine, a volcanogenic massive-sulphide (VMS) deposit approximately 20 km to the northwest of the Property.

Late-stage, brittle faults cross cut the region. They are oriented generally northeast and do not exhibit any significant displacement (see **Figure 6.2** and **Figure 6.3**).

6.5 Mineralization

Several areas of mineralization, or areas deemed to have potential to host mineralization, have been identified from the 2010 field reconnaissance work of Stephens (2011).

The known and recently discovered occurrences, include:

1. The Chamberland Occurrence. This occurrence is catalogued in the Provincial mineral occurrence database (Cogite #32F/01-0001), on-line at http://sigeom.mines.gouv.qc.ca/signet/classes/I1102_aLaCarte?l=A#GITE. The showing was discovered in 1956 and is adjacent to the southwestern shoreline of Lac Sheilann. Surface mineralization comprises disseminated sulphides of chalcopyrite (copper), pyrrhotite, pyrite, sphalerite (zinc) and silver. Sample Q592641 (GM69123) contains up to 10% pyrite and traces of chalcopyrite (0.84% Zn and 0.19% Cu).

The mineralization is hosted in a sequence of metasedimentary greywackes, pyroclastic intermediate tuffs, lapilli tuffs and polygenic tuff breccia (Novellet Member) in contact with porphyritic, pillowed and massive, amygdaloidal and porphyritic basalt and andesites, all belonging to the Urban Formation. Although affected by a shear zone that dips 42°→356°, the mineralization appears to be stratiform, and is oriented at 315°, parallel with the Cameron Deformation Zone, which passes through the area of the occurrence. The surface and sub-surface extent of the occurrence remains undefined. Altered volcanic rocks, which locally host up to 50% sulphides, have been identified within felsic to intermediate rocks in the immediate vicinity of this occurrence, parts of which exhibit moderate to strong sericitic and occasionally chloritic and carbonate alteration.

The sub-surface was investigated by an 8-hole diamond-drilling programme (SA-1, SA1-A, and SA-2 to SA-7), totalling 2002.4 ft (610.3 m) in 1956 by Dome Exploration (Sigma Mines Quebec) Ltd. (GM04721). Selected “best” results include 0.53% Cu and 9.49 gpt Ag over 1.86 m (hole SA-6); 0.61% Cu and 2.97 gpt Ag over 1.46 m (hole SA-1). All eight (8) holes encountered mineralization, but no significant grade intervals were encountered.

2. North of Lac Sheilann, in the general area of airborne anomaly R-39 and R-39A (**Map 1**), silicified, sericitized, and altered mafic to intermediate rocks locally hosts up to 10% sulphides. Weathering is extensive in the area. The extent of the apparent mineralization was traced over a surface distance of approximately 50 metres, although exposure was discontinuous. The width of the alteration observed was in excess of 10 metres;
3. East of Lac Sheilann, in the same general area of airborne anomaly R-41 (**Map 1**). In 2006, overburden was removed from the shallow bedrock at this location and a continuous channel sample taken along a length of approximately 50 metres. Lithology consists of multiple zones of interlayered, narrow, felsic to mafic units intruded by gabbroic dykes. The mineralization primarily consists of small pockets of near-massive pyrite with very minor chalcopyrite and sphalerite, and stringers of 2-10% pyrite along the contacts between the gabbro sills and the volcanic rocks. Use of a beep mat over this area failed to trace the weak conductors beyond the limits of the stripped area;
4. The “Central Zone”, between Lac Novellet and Lac Wilson, in the same general area of airborne anomaly R-19 (**Map 1**). The location is host to several relic pits within the felsic Novellet Member that had reportedly returned significant Cu and Zn values;
5. The “South Centre Zone” is in the same general area of airborne anomalies R-21, R-27 and R-29 (**Map 1**) and occupies an pronounced generally east-west topographic valley. Although there are no outcrop exposures within the valley, elevated levels of sulphides in schistose rock, cut by a white quartz vein at the south edge of the valley, indicates the potential for gold mineralization. In 2006, Megastar drilled holes MAR-06-03, MAR-06-04 and MAR-06-05 on airborne anomalies R-21, R-29 and R-27 respectively. None of the holes returned notable gold assay values, but all intersected elevated concentrations of sulphides;

The “Northwest Gold Zone” and “Southeast Zone” of Stephens (2011) are no longer within the Property limits.

Geological Controls on Mineralization:

The principal geological control on VMS mineralization on the Property is the association with the felsic volcanic Novellet Member, which is host to most of the historic showings.

There is evidence of shear zones and faults on the Property. A prominent topographic feature that extends generally east-west across the western part of the Property is a deep ravine, coincident with a magnetic “low”, where three (3) of the 2006 diamond-drill holes (MAR-06-03, -04, -05) intersected discrete zones of sulphide mineralization. It is interpreted that this ravine is the surface representation of a major fault (shear zone?) system associated with the Urban Deformation Zone.

Mapping by Megastar in 2010 (Stephens, 2011) in areas adjacent to this ravine found wide parallel zones of high-strain within mafic units to the north, and mixed mafic-felsic units along the southern perimeter. Stephens noted that the sheared zones were accompanied by silicification, iron enrichment (primarily as pyrite, with occasionally trace chalcopyrite and sphalerite), hematite and/or epidote and/or carbonate alteration, primarily in the mafic rocks. The lithology and deformational features suggested the potential for gold mineralization. However, although numerous secondary offset shear zones and displacements, as well as the main high-strain zones, were sampled, no anomalous gold value assays were obtained.

Alteration and Mineralization:

Volcanogenic massive sulphide deposits are formed in close temporal association with submarine volcanism by hydrothermal circulation and exhalation of sulphides. Hydrothermal circulation is generally considered to be driven via heat in the crust often related to deep-seated gabbroic intrusions. The convective hydrothermal circulation alters the host rocks resulting in zoned alteration haloes around, and mainly below, VMS deposits. These alteration zones are typically conical-shaped, stratigraphically discordant, and occur stratigraphically below the original fluid flow location, and not necessarily in the deposit itself. The most intense alteration is generally located directly underneath the main deposit associated with a stockwork feeder-vein systems, within the footwall volcanic sequence.

The alteration assemblages of the footwall alteration zone, from core outwards, are shown in (**Figure 6.4**) and summarized as follows;

1. silica alteration zone, found in the most intensely altered examples, resulting in complete silica replacement of the host rocks, and associated with chalcopyrite-pyrite stringer zones;
2. chlorite zone, found in nearly all examples, consisting of chlorite +/- sericite +/- silica. Often the host rock is entirely replaced by chlorite, which may appear as a chlorite schist in deformed examples;
3. sericite zone, found in nearly all examples, consisting of sericite +/- chlorite +/- silica;
4. silicification zone, often gradational with background silica-albite metasomatism.

In all cases these alteration zones are metasomatism effects in the strictest sense, resulting in addition of potassium (K_2O), silica, magnesium, and depletion of sodium (Na_2O). The hangingwall to a VMS deposit is often weakly sodium depleted.

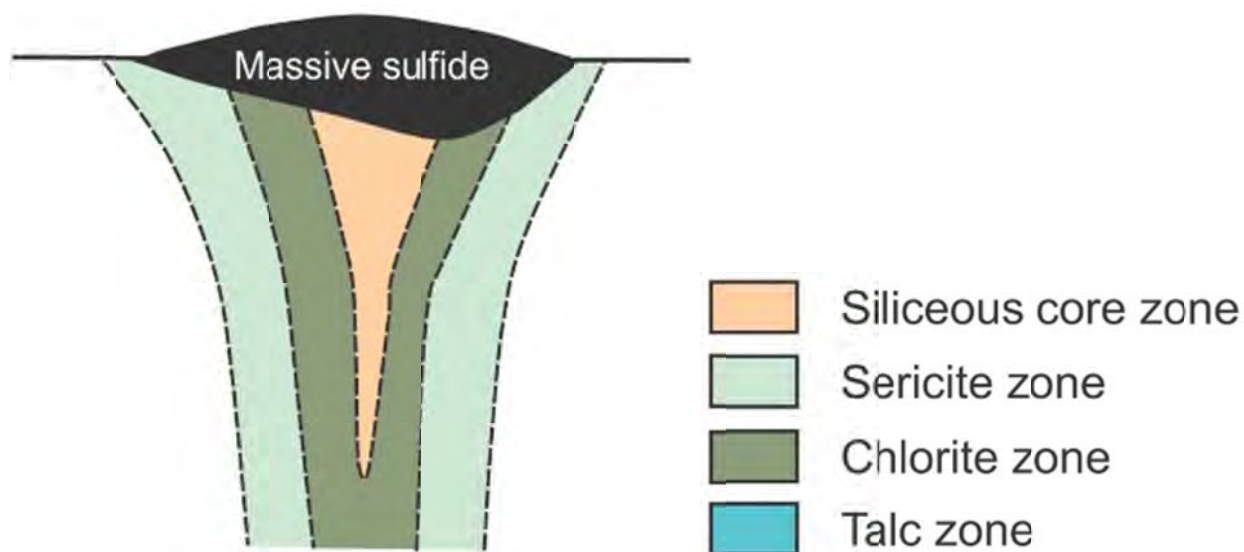


Figure 6.4: Alteration zones beneath a model VMS deposit (after Gifkins et al., 2005)

In ancient deposits, like those potentially underlying the Ralleau Property, metamorphic, mineralogical, textural and structural changes within the host volcanic sequence disguise original metasomatic mineral assemblages. Furthermore, the underlying alteration zone has typically been displaced from the sulphides due to post-deposition tectonic deformation (Figure 6.5), hampering exploration efforts.

VMS – Deformation

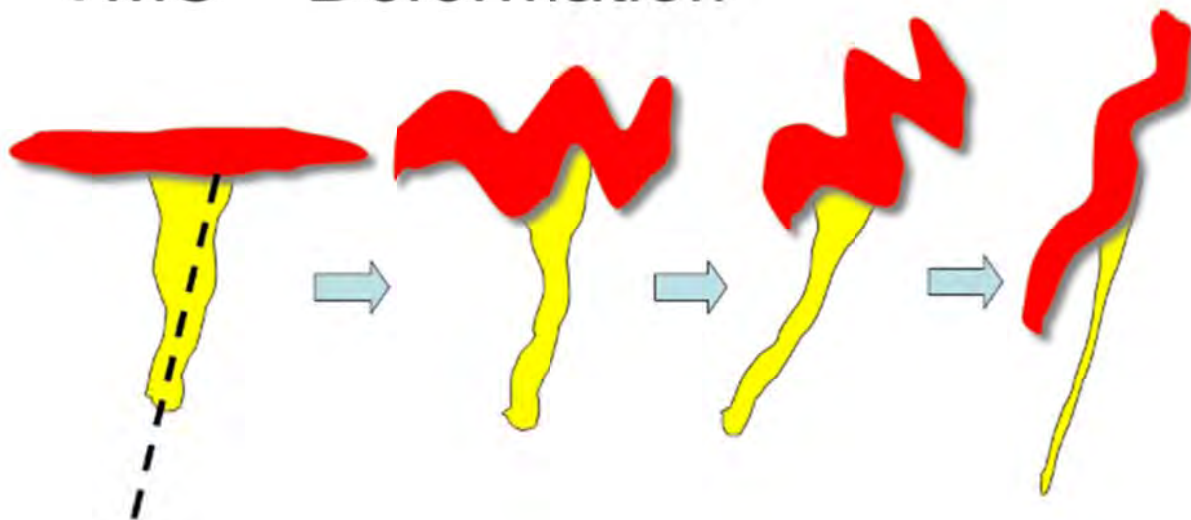


Figure 6.5: Post-deposition deformation of VMS system showing schematic flattening and rotation of sulphide deposit (red) and alteration zone (yellow).

With the objective of target-vectoring potential VMS deposit mineralization, the alteration chemistry of rocks underlying the Novelett Member and its flanking intermediate to mafic volcanic rocks were investigated by Stephens (2011), and by Moar (2015).

Stephens (2011) correlated samples having Na- and Ca-depletion, K-enrichment, and copper-zinc mineralization and disclosed that most samples with these correlations comprise sericitically altered intermediate to felsic volcanic rocks in the area around Lac Sheillan.

Moar (2015) showed that although most of his collected samples were generally unaltered, some showed a trend towards carbonate alteration. Based on various alteration indices (IFRAIS¹ and ISER²), anomalously altered rocks were noted northeast of Lac Wilson and east of Lac Sheilann. Sericite-altered rocks were only noted east of Lac Sheilann. Samples with anomalous K₂O enrichment were noted north of Lake Wilson, whereas Na₂O depletion was detected in a sample from the north-central part of the Property (Moar, 2015).

The 2006 diamond-drilling programme intersected a sericitized quartz-phyric rhyolitic unit (319 m - 333 m down-hole) in hole MAR-06-05, characterized by low ISER values (GM63676). Although no anomalous Cu and Zn zones were intersected in hole MAR-06-05, it intersected the most abundant sulphide mineralization. The slightly Na₂O-depleted and sericitized rhyolite unit is flanked to the south by a wide anomalous normative-orthoclase-zone affecting andesitic to dacitic rocks. Zones of K₂O enrichment (>10%), were encountered in hole MAR-06-03 (45 m - 95 m), hole MAR-06-04 (145 m - 175 m), and hole MAR-06-05 (5 m -110 m).

$${}^1\text{IFRAIS} = 100 \times (\text{Ab} + \text{Or} + \text{An} + \text{Cpx}) / ((\text{HChl} + \text{HSer} + \text{HPrl} + \text{HPrg}) + (\text{Ab} + \text{Or} + \text{An} + \text{Cpx})).$$

Unaltered rocks have an IFRAIS value of 100, whereas totally altered rocks have a value of 0.

$${}^2\text{ISER} = 100 \times \text{ISER} / ((\text{HChl} + \text{HSer} + \text{HPrg} + \text{HPrl}) + (\text{Ab} + \text{Or} + \text{An} + \text{Cpx})).$$

ISER is a normative mineral alteration index that quantifies the degree of overall sericitization. Completely altered rocks have an ISER value of 100, whereas unaltered rocks have a value of 0.

In both equations, Ab is albite, Or is orthoclase, An is anorthite, Cpx is clinopyroxene, HChl is hydrothermal chlorite, HSer is hydrothermal sericite, HPrg is hydrothermal paragonite, and Hprl is pyrophyllite (Piché and Jébrak; 2004, 2006).

7 GEOLOGICAL MODEL OF TARGETED MINERALIZATION

The following section describing VMS deposits is largely based on Franklin (1996), Galley et al. (2007), Gibson et al. (2007) and Hannington (2014).

The Ralleau Property is relatively underexplored, having only been the subject of basic grassroots exploration to date. The geology underlying the Property comprises a setting favourable for volcanic massive-sulphide (VMS) mineralization, which is the primary exploration focus on the Property. Should evidence of prospective deposits of other commodities be identified, the scope of work and the models utilized would be expanded to include them.

The term “VMS deposit” commonly refers to volcanic-associated, volcanic-hosted and volcanogenic massive-sulphide deposits (Franklin, 1996; Large, 1992; Large et al., 2001; Galley et al., 2007; Hannington, 2014). These deposits typically occur as lenses of polymetallic massive-sulphide that form at or near the seafloor in submarine volcanic environments, and are classified according to base-metal content, gold content, and host-rock lithology (Franklin et al., 1981; Poulsen and Hannington, 1995; Morton and Franklin, 1987; Barrie and Hannington, 1999; Franklin et al., 2005; Galley et al., 2007). VMS deposits typically have underlying discordant to semi-discordant, extensively altered, stockwork systems, referred to as the feeder zone or stringer zone, that represent the conduit system of upward hydrothermal fluid flow beneath the deposits.

VMS deposits range in age from 3.4 Ga to actively forming deposits in modern seafloor environments (i.e., black smokers). The most common feature among all types of VMS deposits is that they form in extensional tectonic settings, including both oceanic seafloor spreading and arc environments. Ancient VMS deposits, such as those being targeted on the Ralleau Property, formed mainly in oceanic and continental nascent-arc, rifted-arc, and back-arc settings.

Primitive bimodal mafic volcanic-dominated oceanic rifted arc and bimodal felsic-dominated siliciclastic continental back-arc terranes contain some of the world’s most economically important VMS districts. Most significant VMS mining districts host clusters of deposits that formed within calderas or along extensive rift systems. Their clustering is further attributed to a common deep-seated heat source (intrusions) that drives large-scale sub-seafloor fluid convection systems. These subvolcanic intrusions may also supply metals to the VMS hydrothermal systems through magmatic devolatilization.

As a result of large-scale fluid flow, VMS mining districts are commonly characterized by extensive semi-conformable zones of hydrothermal alteration that intensify into zones of discordant alteration in the immediate footwall and hanging wall of individual deposits. VMS camps typically also host thin, but very extensive, units of ferruginous chemical exhalite deposits (e.g., chert, iron-formation).

VMS deposits are important sources of Cu, Zn, and Pb, and may contain significant concentrations of Ag and Au. There are close to 350 known VMS deposits (>200,000 t) in Canada and over 800 known worldwide. They have contributed 27% of Canada's historical Cu production, 49% of its Zn, 20% of its Pb, 40% of its Ag, and 3% of its Au (Galley et al., 2007).

The large majority of VMS deposits in Canada form in either bimodal mafic or bimodal felsic volcanic terranes dominated by basalt-basaltic andesite and rhyolite-rhyodacite. Prospective VMS-hosting arc terranes are characterized by bimodal volcanic successions that have a tholeiitic to transitional tholeiitic-calc alkaline composition. The felsic volcanics are characterized by low Zr/Y (<7) and low (La/Yb)_N (<6) ratios, with elevated high-field-strength element contents (Zr >200 ppm, Y >30 ppm, and elevated LREE and HREE) typical of high-temperature, reduced magmas derived from partially hydrated crust (Barrie et al., 1993; Lentz, 1998).

The lithostratigraphic types of VMS are shown in **Figure 7.1**. According to this classification, the most probable deposit type for the Ralleau Property corresponds to the bimodal-mafic model.

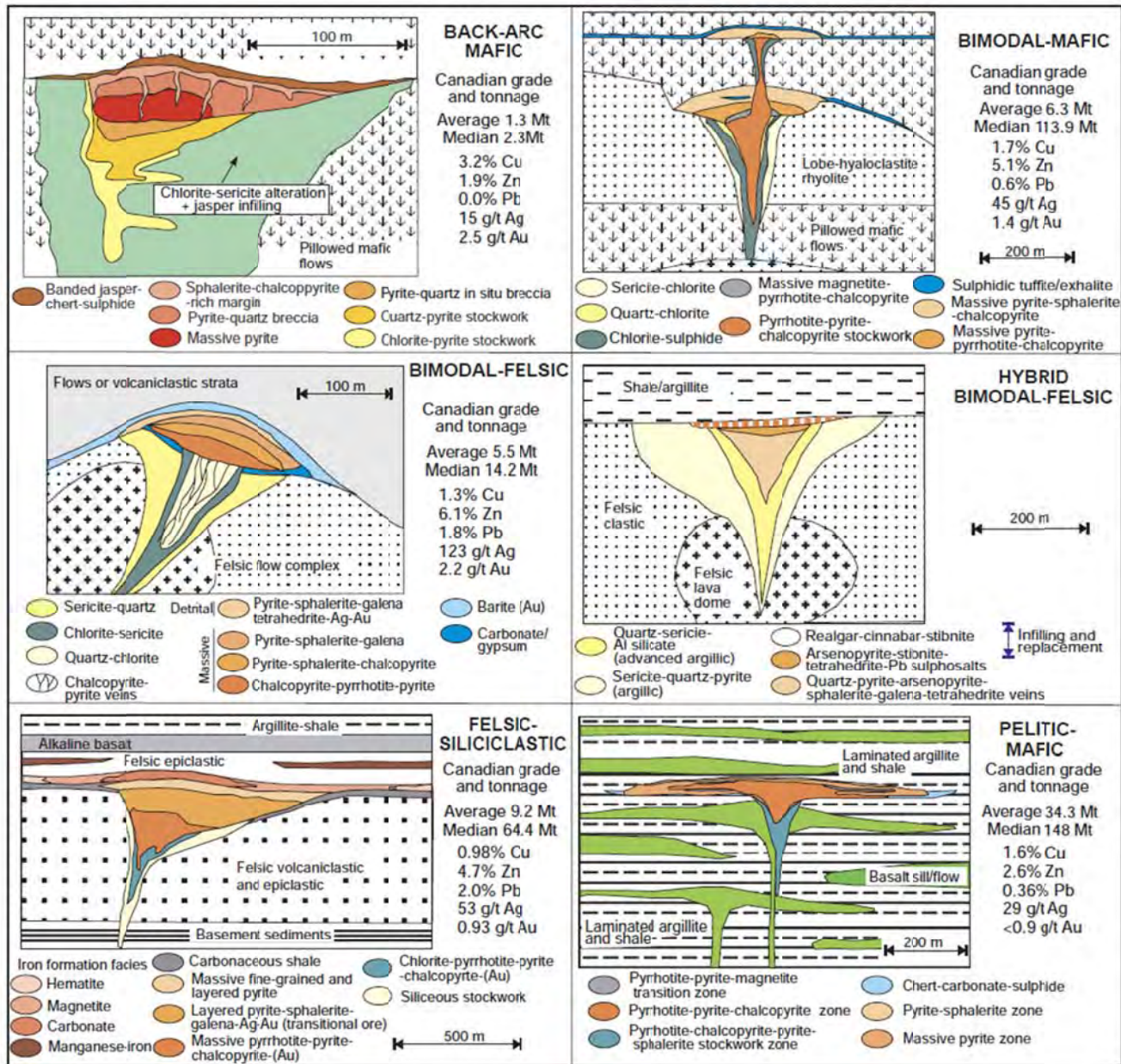


Figure 7.1: Lithological classification of VMS deposits proposed by Barrie and Hannington (1999)(modified by Galley et al., 2007).

As the model-name suggests, VMS deposits of this type are typically found within terranes dominated by mafic volcanic rocks, with lesser felsic volcanic rocks. It is often near the felsic-mafic contacts that these VMS deposits occur.

On the Ralleau Property, most of the known sulphide showings and catalogued occurrences are spatially associated with the felsic volcanic Novellet Member.

Bimodal-mafic volcanic seafloor sequences are dominated by effusive volcanic successions (flows) and accompanying, large-scale, hypabyssal intrusions. This sub-seafloor environment supports high-temperature (>350°C) hydrothermal systems, from which VMS deposits are precipitated. The formation of the felsic exhalites on the mafic substrate is usually accompanied by silicification and/or chloritization of the underlying strata, the depth of which can be significant. In felsic volcanoclastic terrains, the generation of iron-rich exhalites can be accompanied by extensive K-Mg alteration of the felsic substrate.

Mineralogical Zonation

VMS deposits occurring in mafic volcanic rocks are characterized by significant amounts of iron-sulphides such as pyrite (FeS_2), accompanied by less abundant pyrrhotite (Fe_{1-x}S) or marcasite (FeS_2), and variable amounts of chalcopyrite (CuFeS_2) and sphalerite (ZnS). VMS deposits dominated by felsic rocks are generally characterized by abundant but variable amounts of pyrite, chalcopyrite, and sphalerite, along with significant galena and tetrahedrite. Many deposits also show a zonation pattern in which the upper stockwork is dominated by chalcopyrite-pyrite±magnetite, with the basal part of the ore body dominated by pyrite-chalcopyrite, and the upper and outer margins dominated by sphalerite ±galena± barite. The gangue material varies according to several parameters such as metamorphic grade, age, and geologic setting of the VMS deposits. For deposits that occur at lower greenschist facies, the gangue material may consist of quartz, carbonate, barite, sericite, and chlorite. At higher metamorphic grades, chloritoid, garnet, amphibole, cordierite, gahnite, staurolite, kyanite, and andalusite are common gangue constituents.

Alteration Zonation

Alteration zones surrounding VMS deposits are caused by a complex interplay of ore-forming fluids, circulating seawater and host-rock interaction processes. Hydrothermal alteration varies widely from district to district and among individual VMS deposits. Alteration pipes beneath Cu-Zn deposits formed in deep water are generally characterized by a chloritic core and a sericitic outer zone (Franklin, 1996). Alteration associated with Zn-Pb-Cu deposits is dominated by sericite and quartz. Broad zones of semiconformable alteration will show increases in Ca-Si (epidotization-silicification), Ca-Si-Fe (actinolite-clinzoisite-magnetite), Na (spilitization), or K-Mg (mixed chlorite-sericite±Kfeldspar). The alteration zones associated with the feeder/stringer zone may extend vertically for several hundred metres below the VMS deposits and up to ten metres laterally forming a proximal hanging-wall alteration zone. Proximal alteration associated with discordant sulphide-silicate stockwork vein systems include chlorite-quartz- sulphide rich and sericite-quartz-pyrite±aluminosilicate rich assemblages, and are typically strongly depleted in Na and Ca due to high-temperature feldspar destruction. Most proximal alteration zones can be traced for up to twice the diameter of the massive-sulphide deposit and may extend to depths roughly 10 times the thickness of the deposit making them a much broader exploration target than the deposits themselves.

As the alteration zones around VMS deposits are much larger than the deposits themselves, systematic study of alteration-zone minerals and mineral assemblages (e.g., geochemical analysis, X-ray diffraction, oxygen isotope analysis) provide geologists with crucial target vectoring data for VMS exploration.

8 SUMMARY OF WORK

8.1 Introduction

Mineral exploration activity has been carried out sporadically on parts of the current Property and its immediate vicinity since the mid-1950s, including geological reconnaissance mapping, geophysical surveys, and limited diamond-drilling.

Since acquiring claims in the area in 2005, Megastar has completed a reconnaissance geology survey (2005 - GM63677), a surface geophysical survey (2006 - GM62775), a diamond-drilling programme (2006 - GM63676), trenching and sampling (2007 - GM63732), an airborne geophysical survey (2008 - 64158), a digital-database compilation of all earlier work (Langton and Stephens, 2010), and geological mapping, prospecting and sampling surveys over almost the entire property (2010 - GM65611; 2015 - GM69123). There has been no exploration activity on the Property since 2014.

DeepRock has not completed any diamond-drilling on the Property. The most recent diamond-drilling on the Property comprised a 5-hole, 1,545 m programme completed by Megastar in 2006 (GM63676). Unfortunately, drill-core from this programme was lost when the facility in which it was being stored was demolished in late 2016.

8.2 2017 Exploration Programme

Geological Mapping & Prospecting

This report presents the results of the surface exploration programmes carried out during May of 2017 on the Ralleau Property, which comprised a prospecting and mapping programme on the eastern part of the Property and a ground geophysical Induced Polarization (IP) survey on the western part of the Property.

From May 18th to May 21st, reconnaissance geological mapping/prospecting on the eastern part of the Ralleau Property claims was carried out by a two-person field crew. This area was targeted as it has seen the least exploration by previous programs due to its restricted accessibility; however, numerous historic samples collected from this part of the Property show anomalous sulphide content, sericitic alteration, elevated K₂O content, and Na₂O and CaO depletion - all of which are indicators associated with VMS systems. In addition, a large part of the area is interpreted to be underlain the Novellet Member. The four-day reconnaissance programme located several occurrences of mafic volcanic and intrusive, andesite and porphyritic felsic volcanic (Lac Novellet Member) exposures in the extreme southeastern part of the Property (see **Map 1**); no mineralization was noted.

The collected samples were sent to ALS-Chemex Laboratories Ltd. of Val d'Or, Que. ("ALS"), an accredited lab, for multi-element analyses. Outcrop and descriptions and locations are compiled in **Table 8.1**, and are shown on **Map 1**. Assay results from the samples are included in **Appendix II**.

Table 8.1: Summary of Samples Collected during 2017 Reconnaissance Mapping

Reference #	Sample #	UTM-X	UTM-Y	Description
V574001	R17-01	404223.35	5440151.89	Boulder field. Mainly fine-grained, foliated mafic volcanic (75%).
V574002	R17-02	404225.35	5440153.89	Boulder field. Gabbro (25%). Medium grained, undeformed to slightly foliated. Hornblende porphyry. Presence of decimetre quartz veins.
V574003	R17-03	404359.72	5440278.19	Coarsely crystalline gabbro outcrop on the northern slope of a rise. Foliation trends 70° towards 020°
V574004	R17-04	404630.29	5440118.40	Boulder/subcrop (30 m x 30 m approximately). Subangular / slightly rounded. Porphyritic felsic intrusion, cut by a decimetric quartz vein.

Details of the analytical procedures completed by ALS are summarized in **Table 8.2**.

Table 8.2: Summary of Test-work Carried Out by ALS

ANALYTES AND RANGES (ppm)								CODE	PRICE PER SAMPLE (\$)
SiO ₂	0.01-100%	MgO	0.01-100%	TiO ₂	0.01-100%	BaO	0.01-100%	ME-ICP06	Sold only as a complete package.* CCP-PKG01 75.30 CCP-PKG03 Includes ME-XRF26 instead of ME-ICP06. 90.75
Al ₂ O ₃	0.01-100%	Na ₂ O	0.01-100%	MnO	0.01-100%	LOI	0.01-100%		
Fe ₂ O ₃	0.01-100%	K ₂ O	0.01-100%	P ₂ O ₅	0.01-100%				
CaO	0.01-100%	Cr ₂ O ₃	0.01-100%	SrO	0.01-100%				
Ba	0.5-10,000	Gd	0.05-1,000	Sm	0.03-1,000	W	1-10,000	ME-MS81	
Ce	0.5-10,000	Hf	0.2-10,000	Sn	1-10,000	Y	0.5-10,000		
Cr	10-10,000	Ho	0.01-1,000	Sr	0.1-10,000	Yb	0.03-1,000		
Cs	0.01-10,000	La	0.5-10,000	Ta	0.1-2,500	Zr	2-10,000		
Dy	0.05-1,000	Lu	0.01-1,000	Tb	0.01-1,000				
Er	0.03-1,000	Nb	0.2-2,500	Th	0.05-1,000				
Eu	0.03-1,000	Nd	0.1-10,000	Tm	0.01-1,000				
Ga	0.1-1,000	Pr	0.03-1,000	U	0.05-1,000				
Ge	5-1,000	Rb	0.2-10,000	V	5-10,000			ME-4ACD81	
Ag	0.5-100	Cu	1-10,000	Ni	1-10,000	Zn	2-10,000		
Cd	0.5-1,000	Li	10-10,000	Pb	2-10,000				
Co	1-10,000	Mo	1-10,000	Sc	1-10,000				
As	0.1-250	In	0.005-250	Se	0.2-250			ME-MS42	
Bi	0.01-250	Re	0.001-250	Te	0.01-250				
Hg	0.005-25	Sb	0.05-250	Tl	0.02-250				
C	0.01-50%	S	0.01-50%					ME-IR08	

The employed ALS analytical package is designed to provide complete rock characterization. By combining a number of methods into one cost effective package, a complete sample characterization is obtained. This package combines the whole rock package ME-ICP06 plus carbon and sulfur by combustion furnace (ME-IR08) to quantify the major elements in a sample. Trace elements including the full rare earth element suites are reported from three digestions with either ICP-AES or ICP-MS finish: a lithium borate fusion for the resistive elements (ME-MS81), a four acid digestion for the base metals (ME-4ACD81) and an aqua regia digestion for the volatile gold related trace elements (ME-MS42).

According to the results of the geochemical analyses, the samples collected during the 2017 field reconnaissance programme fit the geochemical characteristics of previous samples from the Property. Samples R17-1 to R17-4 all plot in the subalkaline/tholeiitic part on TAS (Total Alkali versus Silica)(Le Bas et al., 1986) and AFM (Alkali/FeO/MgO) (Irvine and Baragar, 1971) diagrams (**Figure 8.1a,b**), consistent with previous samples (**Figure 8.2a,b**).

The field classifications (**Table 8.1**) are consistent with the mafic (Samples R17-1 and R17-2), intermediate (sample R17-3), and felsic (sample R17-4) classification indicated from the TAS diagram.

The samples collected in 2017 are also relatively unaltered, consistent with previous samples from the Property (**Figure 8.3**). Samples R17-1 and R17-2 show slight carbonate (Mg-Fe) alteration; none of the samples show indications of sericite alteration.

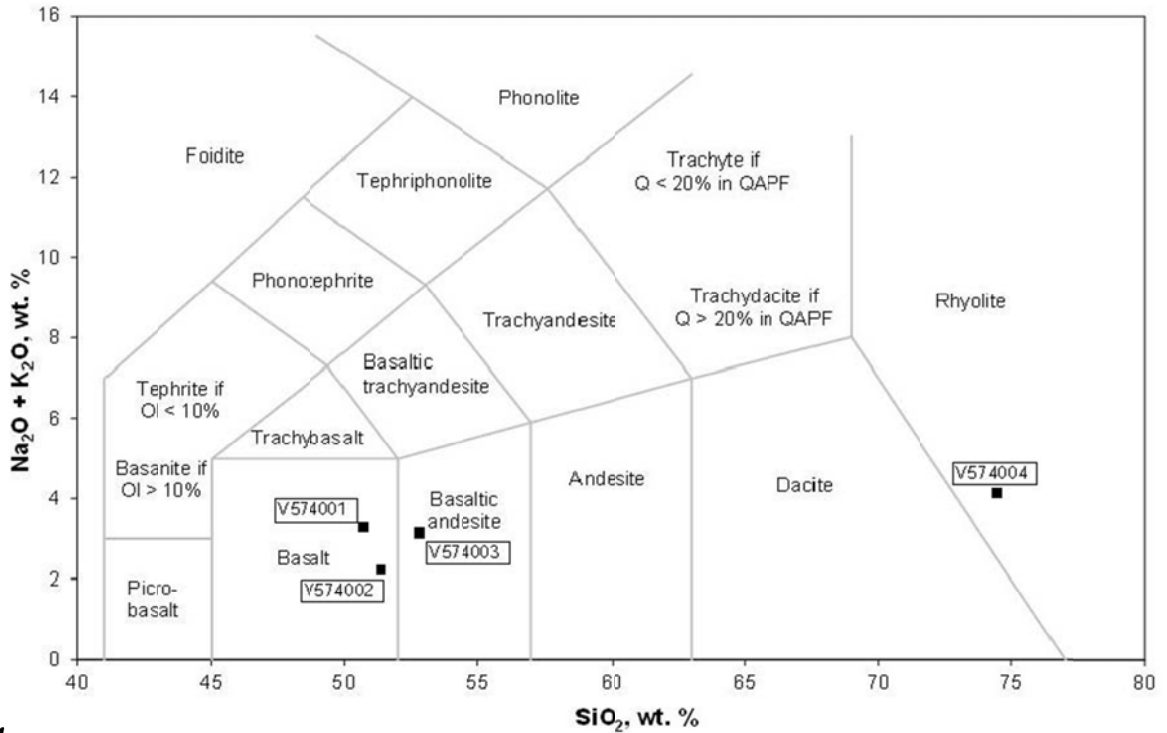


Figure 8.1a

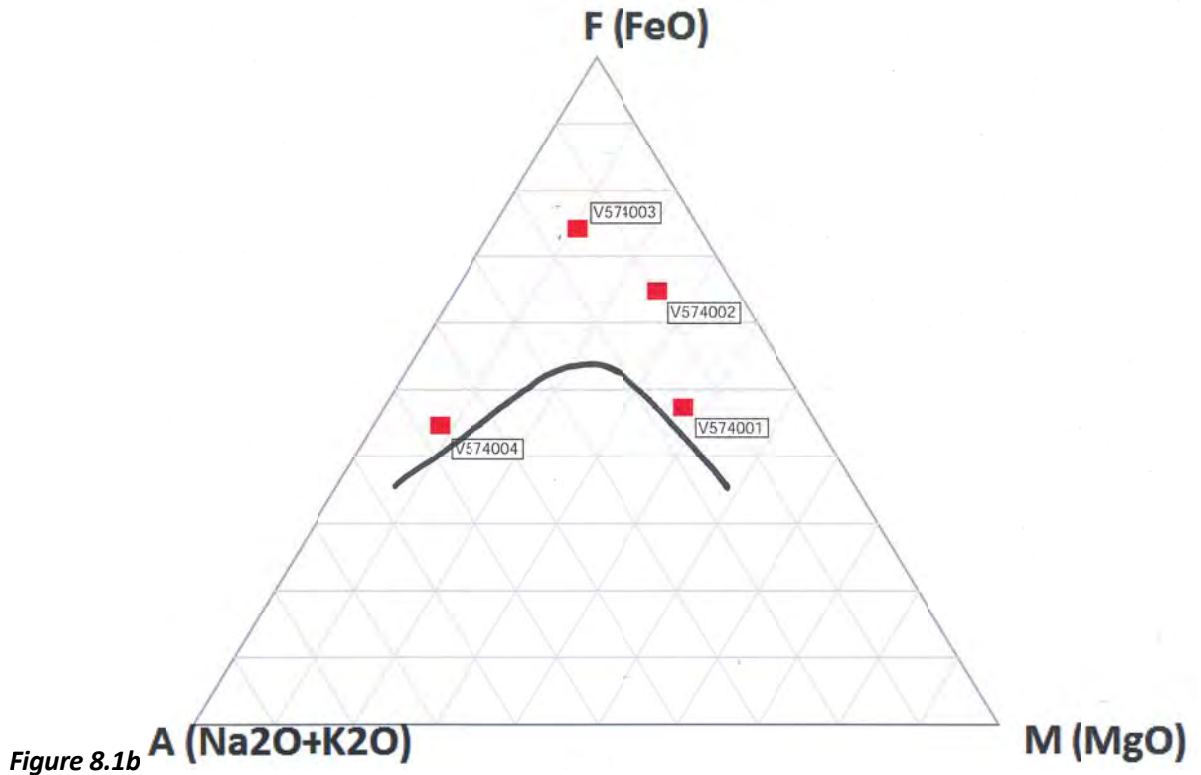


Figure 8.1b

Figure 8.1 Classification diagrams of Ralleau samples collected in 2017: a) TAS diagram; b) AFM diagram

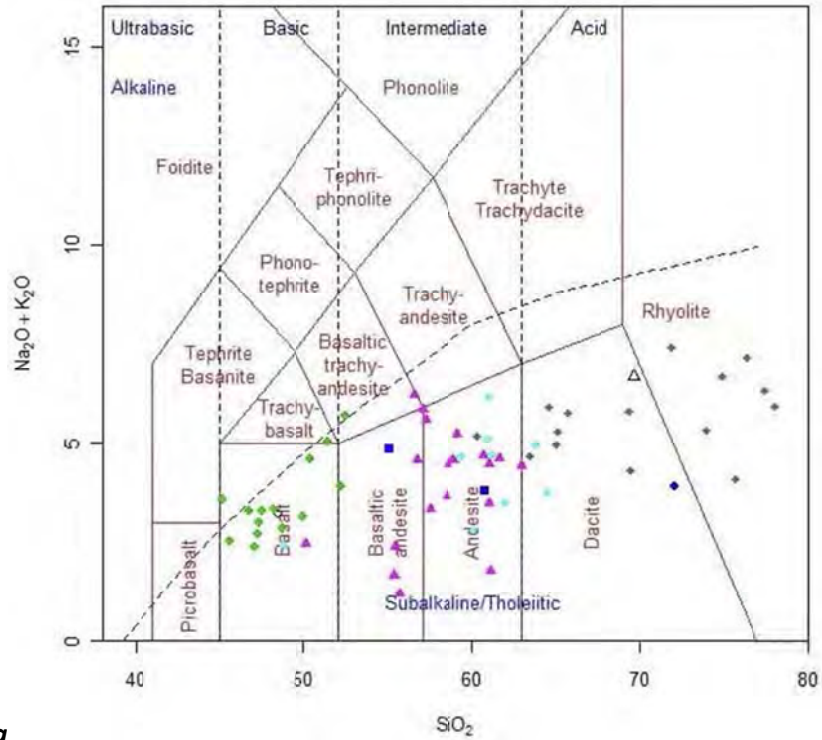


Figure 8.2a

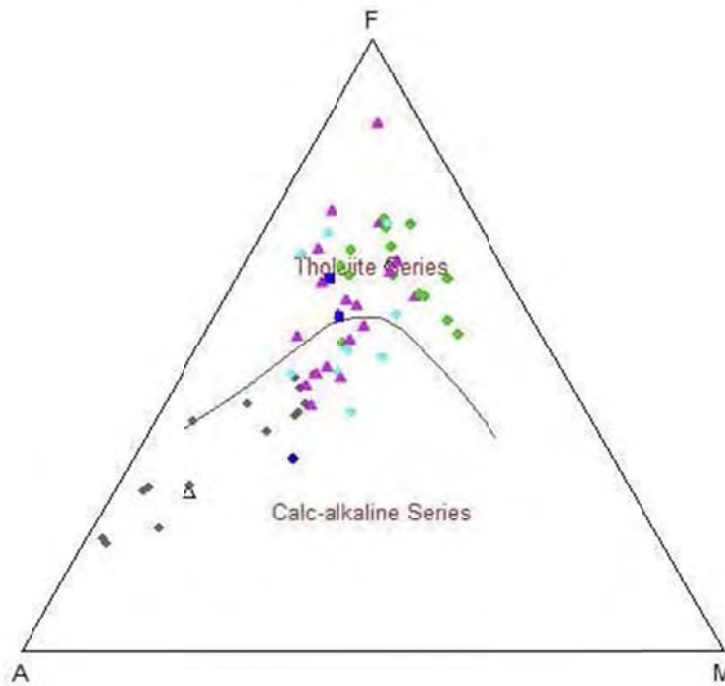


Figure 8.2b

Figure 8.2: Classification diagrams of Ralleau samples compiled by Moar (2015): a) TAS diagram; b) AFM diagram. Green = mafic volcanic; blue = reworked volcanic/metasediment; cyan = intermediate volcanoclastic; magenta = intermediate volcanic; grey = felsic volcanic

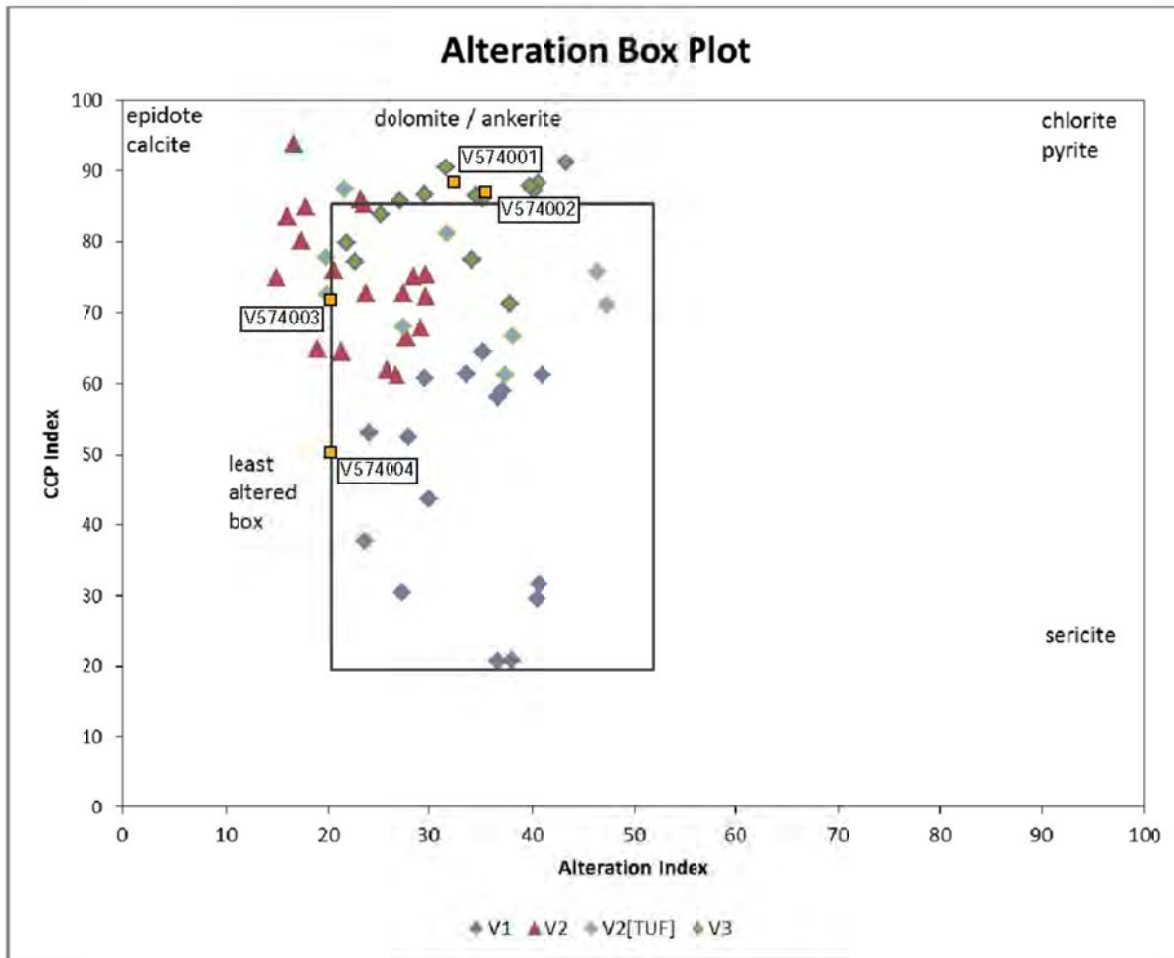


Figure 8.3: Alteration box plot (see Figure 8.2 for symbol definitions). 2017 samples are shown as orange squares.

Geophysical Survey

An OreVision® ground geophysical IP survey was completed over the area where diamond-drill holes MAR-06-03, -04 and -05, of the 2006 Megastar drilling campaign (GM63676) were collared (Figure 8.4 and Map 1). These 3 holes were designed to test linear EM anomalies R-21, R-29 and R-27 respectively, and intersected a series of linear sulphide horizons and alteration zones within the Novellet Member, parallel to the local strike (see Appendix III for logs of drill-holes MAR-06-03, MAR-06-04 and MAR-06-05).

The IP survey was carried out by Abitibi Geophysics of Val-d'Or, QC from May 22nd to May 28th, 2017 and covered 9.9 line km. The OreVision® system is capable of penetrating to 300 m depths with high resolution results.

The survey outlined numerous coincident chargeability and resistivity anomalies (Figure 8.5), several of which are recommended as targets for diamond-drilling (Table 8.3).

Abitibi's Report on the Ralleau IP survey is included as Appendix IV.

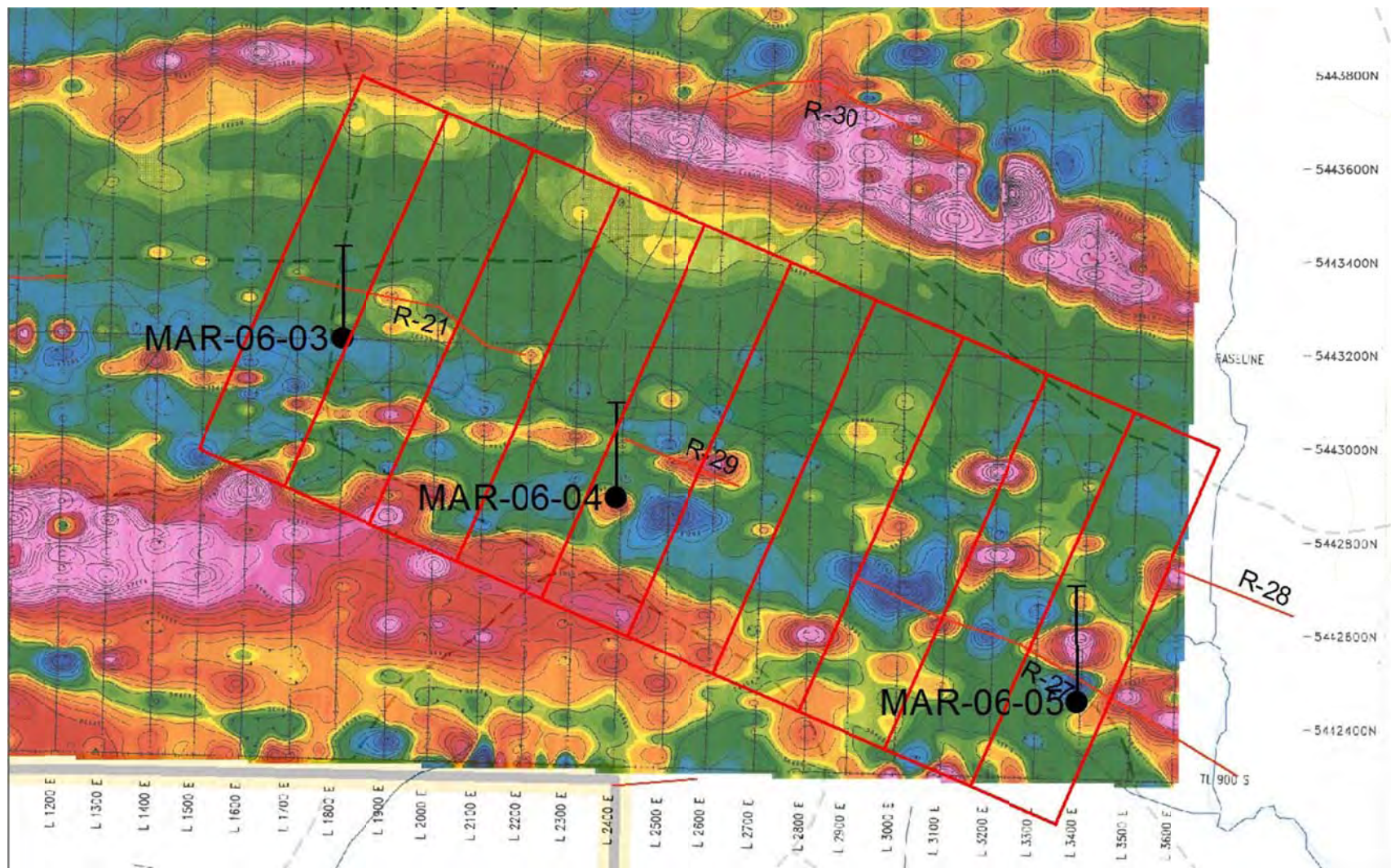


Figure 8.4: Total field magnetic response raster image showing 2017 IP geophysical survey grid (red lines) and 2006 diamond-drill hole locations.

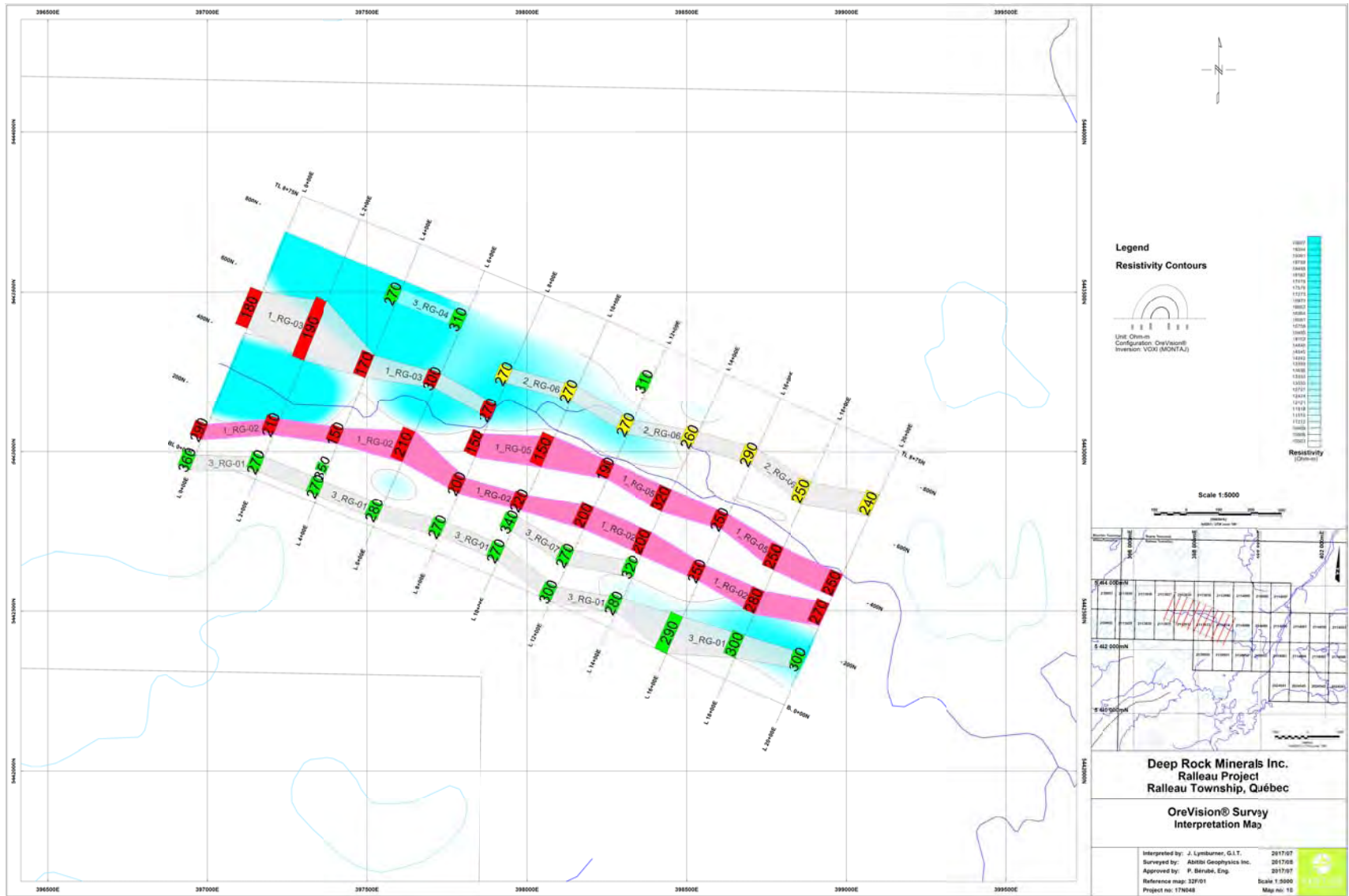


Figure 8.5: Geophysical interpretation of Ralleau project IP survey showing areas of resistivity (blue shading) and conductivity (coloured liners).

Table 8.3: Drill-holes Proposed To Test Chargeability/Resistivity Anomalies

Proposed Drill-hole	Abitibi hole designation	Grid Coordinates	UTM (NAD83 Z18) Coordinates (X/Y)	Attitude (dip°→azimuth°)	Length (m)
DR17-A	1 RG-01	10+00E/1+50N	397350/2442750	55→202	125
DR17-B	1 RG-02	6+00E/4+00N	397675/5443130	55→202	250
DR17-C	1 RG-03	2+00E/3+50N	397220/5443240	50→022	275
DR17-D	1 RG-04	4+00E/6+50N	397575/5443445	55→022	125
DR17-E	1 RG-05	12+00E/6+00N	398325/5443075	55→202	250
DR17-F	1 RG-06	16+00E/5+50N	398665/5442875	50→022	200
DR17-G	1 RG-07	14+00E/1+50N	398320/5442585	50→022	275

9 DISCUSSION

The summer 2017 surface exploration programme carried out at the Ralleau Project comprised ground-based geological and geophysical surveys.

The objective of the geological reconnaissance programme was to investigate the Lac Sheillan area where the geology is poorly understood, but which hosts numerous historic samples with indicators associated with VMS systems. The field work was carried out from May 18th to May 21st. Four areas of subcrop/outcrop were discovered and sampled, one of which belongs to the Novellet Member, the principle target for VMS style mineralization on the Property. No mineralization was noted.

The geophysical IP survey was carried out from May 22nd to May 28th, 2017 by Abitibi Geophysics, whose proprietary OreVision[®] system is capable of penetrating to 300 m depths with high resolution results. The IP survey outlined several coincident chargeability and resistivity anomalies. In their report, Abitibi recommends a 1,500 m diamond-drilling programme to test a number of these anomalies (Lymburner, 2017).

Results from the 2017 exploration programme will be used to better determine the areas most favourable for exploration by further ground work and diamond-drilling.

10 INTERPRETATION AND CONCLUSIONS

The Property is at an early, grassroots stage of exploration. A review of all available historic data on the Ralleau Property shows that it is host to prospective VMS base-metal sulphide mineralization in an active mining camp recognized for sulphide and gold production.

The Ralleau Property includes areas of carbonate-, paragonite, and sericite-altered bimodal volcanic rocks. Recent exploration programmes completed by Megastar Development Corporation (2005-2014) significantly improved understanding of the geological setting of the property. Of particular benefit was the improved delineation of the felsic Novellet Member, which is interpreted to have an important association with bimodal-mafic style VMS mineralization, as all of the known occurrences of sulphide mineralization on the Property are spatially associated with this felsic unit. The Novelett Member underlies the central east-west axis of the Property coincident with a magnetic “low”, and flanked by magnetically responsive basalts, andesites and gabbros of the Urban Formation.

Proximal alteration zones associated with stockwork vein systems underlying VMS deposits include assemblages that are typically strongly depleted in Na_2O and CaO , and enriched in K_2O , due to high-temperature feldspar destruction (Galley et. al., 2007). Alteration indices reveal that rocks anomalously altered in a style characteristic of VMS deposit alteration haloes rocks are present in the area northwest of Lac Novellet and east of Lac Sheilann. Numerous linear electromagnetic geophysical anomalies were outlined in both of these areas by an airborne survey in 2008 (GM64158; Cifuentes, 2008), only some of which have been tested by diamond-drilling.

The 2017 geological reconnaissance programme located several bedrock exposures in the easternmost part of the Property of mafic volcanic and intrusive rocks, and porphyritic felsic volcanic (QFP?).

The 2017 OreVision® ground geophysical IP survey outlined several strong anomalous chargeability/resistivity zones underlying the Novellet Member in the central part of the Property, where previous drilling by Megastar intersected sulphide mineralization. This area is a target for follow-up diamond-drilling.

The Author concludes that the Ralleau Project is one of merit with regard to potential VMS resources, and should be the subject of continued exploration.

11 RECOMMENDATIONS

Geological prospecting and geophysical methods were used by previous exploration programmes (Megastar 2005-2014) to help identify areas of massive and disseminated VMS-style mineralization on the Property, around and along strike from documented historic occurrences and showings.

Geophysical anomalies generated by these surveys, especially the linear EM anomalies defined by the 2008 airborne survey (GM64158), were ground-truthed for evidence of surface expressions, and in some cases, drill-tested by Megastar (GM65611). In many cases, however, the source of the anomaly was not evident at surface, it being covered by glacial overburden, or it being a response to a sub-surface source. As such, many of these anomalies remain essentially untested.

Exploration should be directed towards testing all significant EM anomalies delineated by the 2008 survey (GM64158). As most of the linear EM anomalies on the Property are spatially associated with the Novellet Member, which is host to most of the sulphide showings, they represent the most interesting geophysical targets and should be more thoroughly investigated, to assess their economic potential.

A pit-excavation programme is recommended to investigate the depth of overburden on all the linear EM anomalies within, or in close proximity to, the Novellet Member. Bedrock that is encountered under less than 1.2 m of overburden should be further exposed by trenching/stripping and systematically sampled. The most prospective of these anomalies should be tested by diamond-drilling. If warranted, follow-up down-hole electromagnetic surveys should also be carried out.

Further prospecting and detailed ground geophysical surveys are warranted, especially in the Lac Sheillan area of the Property, east of the O'Sullivan River. This area is the least explored by previous programmes due to its restricted accessibility; however, numerous samples collected from this part of the Property show anomalous sulphide content, sericitic alteration, elevated K_2O content, and Na_2O and CaO depletion - all of which are indicators associated with VMS systems. In addition, a large part of the area is interpreted to be underlain the Novellet Member.

If warranted, diamond-drilling and down-hole electromagnetic surveys should follow.

The OreVision® IP survey commissioned by DeepRock and completed by Abitibi Geophysics over the area where diamond-drill holes MAR-06-03, -04 and -05, were collared provided important 3D information on the area between these holes, especially as the core from these holes is no longer available. A seven (7) hole, 1,500 metre drilling programme to investigate strong coincident chargeability/resistivity anomalies underlying this area is recommended.

The recommended exploration programme to further define prospective areas of VMS mineralization underlying the Property is summarized in **Table 12.1**.

Table 12.1: Summary of Recommended Exploration Programme for Ralleau Property

Program	Estimate
Prospecting, Mapping	\$10,000
Pitting / Trenching programme	\$25,000
1,000 metre NQ drilling programme, includes assaying, and reporting, on previously defined EM anomalies.	\$125,000
1,500 metre drilling programme to test IP anomalies	\$200,000
15% Miscellaneous	\$50,000
Total	\$410,000

DATED this 25th Day of July, 2017



(Signed) John P. Langton, M.Sc., P. Geo.

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APPENDIX I

Summary of Claim Statistics: Ralleau Property

Claim #	Renewal Date	Expiring	Area (ha)	Work Credit (\$)	Work Obligation (\$)	Expenditures required (\$)	Rent (\$)	Owner
2113931	30-May-17	31-Jul-17	56.33	\$570.00	\$1,170.00	-\$600.00	\$64.09	Megastar Developments Corp (19263)
2113932	30-May-17	31-Jul-17	56.33	\$1,302.00	\$1,170.00	\$132.00	\$64.09	Megastar Developments Corp (19263)
2113933	30-May-17	31-Jul-17	56.33	\$355.00	\$1,170.00	-\$815.00	\$64.09	Megastar Developments Corp (19263)
2113934	30-May-17	31-Jul-17	56.33	\$202.00	\$1,170.00	-\$968.00	\$64.09	Megastar Developments Corp (19263)
2113935	30-May-17	31-Jul-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2113936	30-May-17	31-Jul-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2113937	30-May-17	31-Jul-17	56.33	\$17.00	\$1,170.00	-\$1,153.00	\$64.09	Megastar Developments Corp (19263)
2113938	30-May-17	31-Jul-17	56.32	\$49.00	\$1,170.00	-\$1,121.00	\$64.09	Megastar Developments Corp (19263)
2113939	30-May-17	31-Jul-17	56.32	\$110.00	\$1,170.00	-\$1,060.00	\$64.09	Megastar Developments Corp (19263)
2113940	30-May-17	31-Jul-17	56.32	\$139.00	\$1,170.00	-\$1,031.00	\$64.09	Megastar Developments Corp (19263)
2114083	30-May-17	31-Jul-17	56.34	\$17.00	\$1,170.00	-\$1,153.00	\$64.09	Megastar Developments Corp (19263)
2114084	30-May-17	31-Jul-17	56.34	\$311.03	\$1,170.00	-\$858.97	\$64.09	Megastar Developments Corp (19263)
2114085	30-May-17	31-Jul-17	56.34	\$330.00	\$1,170.00	-\$840.00	\$64.09	Megastar Developments Corp (19263)
2114086	30-May-17	31-Jul-17	56.34	\$17.00	\$1,170.00	-\$1,153.00	\$64.09	Megastar Developments Corp (19263)
2114087	30-May-17	31-Jul-17	56.34	\$17.00	\$1,170.00	-\$1,153.00	\$64.09	Megastar Developments Corp (19263)
2114088	30-May-17	31-Jul-17	56.33	\$139.00	\$1,170.00	-\$1,031.00	\$64.09	Megastar Developments Corp (19263)
2114089	30-May-17	31-Jul-17	56.33	\$200.00	\$1,170.00	-\$970.00	\$64.09	Megastar Developments Corp (19263)
2114090	30-May-17	31-Jul-17	56.33	\$78.00	\$1,170.00	-\$1,092.00	\$64.09	Megastar Developments Corp (19263)
2114091	30-May-17	31-Jul-17	56.33	\$111.00	\$1,170.00	-\$1,059.00	\$64.09	Megastar Developments Corp (19263)
2114092	30-May-17	31-Jul-17	56.33	\$80.00	\$1,170.00	-\$1,090.00	\$64.09	Megastar Developments Corp (19263)
2114093	30-May-17	31-Jul-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2114094	30-May-17	31-Jul-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2114095	30-May-17	31-Jul-17	56.32	\$322.00	\$1,170.00	-\$848.00	\$64.09	Megastar Developments Corp (19263)
2114096	30-May-17	31-Jul-17	56.32	\$261.00	\$1,170.00	-\$909.00	\$64.09	Megastar Developments Corp (19263)
2114097	30-May-17	31-Jul-17	56.32	\$78.00	\$1,170.00	-\$1,092.00	\$64.09	Megastar Developments Corp (19263)
2113929	30-May-17	31-Jul-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2113930	30-May-17	31-Jul-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2125410	30-Jul-17	30-Sep-17	56.35	\$11.00	\$1,170.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2125411	30-Jul-17	30-Sep-17	56.35	\$11.00	\$1,170.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2125412	30-Jul-17	30-Sep-17	56.35	\$11.00	\$1,170.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2125413	30-Jul-17	30-Sep-17	56.35	\$11.00	\$1,170.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2125416	30-Jul-17	30-Sep-17	56.34	\$11.00	\$1,170.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2125417	30-Jul-17	30-Sep-17	56.34	\$301.62	\$1,170.00	-\$868.38	\$64.09	Megastar Developments Corp (19263)
2125418	30-Jul-17	30-Sep-17	56.34	\$10.00	\$1,170.00	-\$1,160.00	\$64.09	Megastar Developments Corp (19263)
2125421	30-Jul-17	30-Sep-17	56.33	\$10.00	\$1,170.00	-\$1,160.00	\$64.09	Megastar Developments Corp (19263)
2125422	30-Jul-17	30-Sep-17	56.33	\$10.00	\$1,170.00	-\$1,160.00	\$64.09	Megastar Developments Corp (19263)
2139950	12-Oct-17	13-Dec-17	56.34	\$132.00	\$1,170.00	-\$1,038.00	\$64.09	Megastar Developments Corp (19263)
2139951	12-Oct-17	13-Dec-17	56.34	\$132.00	\$1,170.00	-\$1,038.00	\$64.09	Megastar Developments Corp (19263)
2139952	12-Oct-17	13-Dec-17	56.34	\$10.00	\$1,170.00	-\$1,160.00	\$64.09	Megastar Developments Corp (19263)
2139953	12-Oct-17	13-Dec-17	56.34	\$10.00	\$1,170.00	-\$1,160.00	\$64.09	Megastar Developments Corp (19263)
2139954	12-Oct-17	13-Dec-17	56.34	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2139955	12-Oct-17	13-Dec-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2139956	12-Oct-17	13-Dec-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2139957	12-Oct-17	13-Dec-17	56.33	\$0.00	\$1,170.00	-\$1,170.00	\$64.09	Megastar Developments Corp (19263)
2162454	23-Apr-18	24-Jun-18	56.34	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2162455	23-Apr-18	24-Jun-18	56.34	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2162456	23-Apr-18	24-Jun-18	56.34	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2162457	23-Apr-18	24-Jun-18	56.34	\$281.00	\$1,800.00	-\$1,519.00	\$64.09	Megastar Developments Corp (19263)
2162461	23-Apr-18	24-Jun-18	56.33	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2162462	23-Apr-18	24-Jun-18	56.33	\$129.00	\$1,800.00	-\$1,671.00	\$64.09	Megastar Developments Corp (19263)
2162463	23-Apr-18	24-Jun-18	56.33	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2024537	11-Jul-18	11-Sep-18	56.36	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2024538	11-Jul-18	11-Sep-18	56.36	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2024540	11-Jul-18	11-Sep-18	56.36	\$0.00	\$1,800.00	-\$1,800.00	\$64.09	Megastar Developments Corp (19263)
2024541	11-Jul-18	11-Sep-18	56.35	\$641.00	\$1,800.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2024542	11-Jul-18	11-Sep-18	56.35	\$641.00	\$1,800.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2024543	11-Jul-18	11-Sep-18	56.35	\$641.00	\$1,800.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2024544	11-Jul-18	11-Sep-18	56.35	\$641.00	\$1,800.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
2024545	11-Jul-18	11-Sep-18	56.35	\$641.00	\$1,800.00	-\$1,159.00	\$64.09	Megastar Developments Corp (19263)
Totals			3323.85	\$8,990.65	\$78,480.00	\$69,489.35	\$3,781.31	

APPENDIX II

Copy of Assay Certificate



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
 www.alsglobal.com

To: MRB ET ASSOCIES
 1740, CHEMIN SULLIVAN
 SUITE 1100
 VAL-D OR QC J9P 7H1

Page: 1
 Total # Pages: 2 (A - E)
 Plus Appendix Pages
 Finalized Date: 8-JUL-2017
 Account: MRBASS

CERTIFICATE VO17114484

Project: RALLEAU

This report is for 4 Rock samples submitted to our lab in Val d'Or, QC, Canada on 6-JUN-2017.

The following have access to data associated with this certificate:

GEOFF BALDERSON

JOHN LANGTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS42	Up to 34 elements by ICP-MS	ICP-MS
OA-GRA05	Loss on Ignition at 1000C	WST-SEQ
TOT-ICP06	Total Calculation for ICP06	ICP-AES
ME-4ACD81	Base Metals by 4-acid dig.	ICP-AES
ME-ICP06	Whole Rock Package - ICP-AES	ICP-AES
C-IR07	Total Carbon (Leco)	LECO
S-IR08	Total Sulphur (Leco)	LECO
ME-MS81	Lithium Borate Fusion ICP-MS	ICP-MS

To: MRB ET ASSOCIES
 ATTN: JOHN LANGTON
 1740, CHEMIN SULLIVAN
 SUITE 1100
 VAL-D OR QC J9P 7H1

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: *Nacera Amara*
 Nacera Amara, Laboratory Manager, Val d'Or



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 Total # Pages: 2 (A - E)
 Plus Appendix Pages
 Finalized Date: 8-JUL-2017
 Account: MRBASS

Project: RALLEAU

CERTIFICATE OF ANALYSIS VO17114484

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP06 SiO2 %	ME-ICP06 Al2O3 %	ME-ICP06 Fe2O3 %	ME-ICP06 CaO %	ME-ICP06 MgO %	ME-ICP06 Na2O %	ME-ICP06 K2O %	ME-ICP06 Cr2O3 %	ME-ICP06 TiO2 %	ME-ICP06 MnO %	ME-ICP06 P2O5 %	ME-ICP06 SrO %	ME-ICP06 BaO %	OA-GRA05 LOI %
		0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
V574001		1.33	50.8	16.20	12.95	9.26	5.64	3.18	0.17	0.01	1.37	0.19	0.20	0.04	<0.01	0.71
V574002		1.49	51.4	13.30	15.00	9.79	5.27	1.91	0.36	0.01	1.67	0.22	0.13	0.02	0.02	1.87
V574003		1.43	52.7	12.20	16.80	8.70	2.28	2.57	0.70	<0.01	1.98	0.42	0.24	0.02	0.03	2.03
V574004		1.13	74.7	12.80	4.42	3.76	0.86	3.31	0.91	<0.01	0.44	0.09	0.09	0.02	0.02	0.52



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 Account: MRBASS

Project: RALLEAU

CERTIFICATE OF ANALYSIS VO17114484

Sample Description	Method Analyte Units LOR	TOT-ICP06	C-IR07	S-IR08	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
		Total %	C %	S %	Ba ppm	Ce ppm	Cr ppm	Cs ppm	Dy ppm	Er ppm	Eu ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Ho ppm
		0.01	0.01	0.01	0.5	0.5	10	0.01	0.05	0.03	0.03	0.1	0.05	5	0.2	0.01
V574001		100.72	0.08	0.08	44.8	33.4	80	0.09	4.16	2.48	1.29	16.7	4.21	<5	2.5	0.81
V574002		100.97	0.40	0.05	155.5	21.2	100	0.34	4.63	2.93	1.29	17.1	4.57	<5	3.0	0.96
V574003		100.67	0.78	0.27	306	34.0	30	0.74	6.40	3.98	1.76	18.3	6.17	<5	4.0	1.38
V574004		101.94	0.12	0.01	213	12.5	30	1.22	3.93	2.34	0.86	14.1	3.62	<5	6.7	0.82



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 Total # Pages: 2 (A - E)
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 Finalized Date: 8-JUL-2017
 Account: MRBASS

Project: RALLEAU

CERTIFICATE OF ANALYSIS VO17114484

Sample Description	Method Analyte Units LOR	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	
		La ppm 0.5	Lu ppm 0.01	Nb ppm 0.2	Nd ppm 0.1	Pr ppm 0.03	Rb ppm 0.2	Sm ppm 0.03	Sn ppm 1	Sr ppm 0.1	Ta ppm 0.1	Tb ppm 0.01	Th ppm 0.05	Tm ppm 0.01	U ppm 0.05	V ppm 5
V574001		13.0	0.32	8.1	18.0	4.34	2.8	4.28	1	363	0.4	0.65	1.34	0.38	0.32	282
V574002		8.3	0.42	7.2	13.6	3.02	12.9	4.00	1	145.0	0.4	0.73	0.83	0.43	0.22	306
V574003		14.0	0.60	10.1	20.8	4.65	25.5	5.75	1	152.0	0.6	1.01	1.54	0.61	0.35	231
V574004		5.3	0.38	8.5	8.4	1.76	35.9	2.83	2	172.5	0.8	0.59	1.55	0.37	0.49	40

***** See Appendix Page for comments regarding this certificate *****



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 Total # Pages: 2 (A - E)
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 Account: MRBASS

Project: RALLEAU

CERTIFICATE OF ANALYSIS VO17114484

Sample Description	Method Analyte Units LOR	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-MS42	ME-4ACD81	ME-4ACD81	
		W ppm	Y ppm	Yb ppm	Zr ppm	As ppm	Bi ppm	Hg ppm	In ppm	Re ppm	Sb ppm	Se ppm	Te ppm	Tl ppm	Ag ppm	Cd ppm
		1	0.5	0.03	2	0.1	0.01	0.005	0.005	0.001	0.05	0.2	0.01	0.02	0.5	0.5
V574001		1	22.0	2.39	101	0.5	0.02	<0.005	0.017	0.001	<0.05	0.2	0.04	0.03	<0.5	0.5
V574002		1	26.3	2.95	111	0.4	0.03	<0.005	0.023	0.001	<0.05	<0.2	0.02	<0.02	<0.5	<0.5
V574003		1	36.1	3.73	166	0.2	0.03	<0.005	0.035	<0.001	<0.05	0.5	0.02	0.06	<0.5	0.6
V574004		1	22.5	2.28	328	0.1	0.01	<0.005	0.011	<0.001	<0.05	<0.2	<0.01	0.15	<0.5	<0.5



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 Total # Pages: 2 (A - E)
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 Finalized Date: 8-JUL-2017
 Account: MRBASS

Project: RALLEAU

CERTIFICATE OF ANALYSIS VO17114484

Sample Description	Method Analyte Units LOR	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81
		Co	Cu	Li	Mo	Ni	Pb	Sc	Zn
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		1	1	10	1	1	2	1	2
V574001		44	59	10	1	87	<2	26	107
V574002		53	55	10	<1	80	<2	31	120
V574003		36	85	10	<1	9	<2	29	133
V574004		7	11	30	<1	3	3	9	72



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Page: Appendix 1
 Total # Appendix Pages: 1
 Finalized Date: 8-JUL-2017
 Account: MRBASS

Project: RALLEAU

CERTIFICATE OF ANALYSIS VO17114484

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Val d'Or located at 1324 Rue Turcotte, Val d'Or, QC, Canada. C-IR07 PUL-31 WEI-21	CRU-31 PUL-QC	CRU-QC S-IR08	LOG-22 SPL-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. ME-4ACD81 OA-GRA05	ME-ICP06 TOT-ICP06	ME-MS42	ME-MS81

APPENDIX III

Drill-logs: Holes MAR-06-03, MAR-06-04 and MAR-06-05

PROPRIÉTÉ: RALLEAU

Forage #: MAR-06-03

CLAIM #: _____

Page : 1 de

Localisation	Canton: _____	Grille: <u>1</u>	UTM: <u>17</u>	Élévation: <u>ND</u>
	Rang (s): _____	Eastant: <u>18+00 E</u>	Eastant: <u>397275</u>	Collet arpenté: Oui <input type="checkbox"/>
	Lot (s): _____	Nordant: <u>0+00 N</u>	Nordant: <u>5E+06</u>	Non <input checked="" type="checkbox"/>

Azimuth: <u>360</u>	Débuté le: <u>26/04/2006</u>	Géologue: <u>Mathieu Piché</u>
Pendage: <u>-50</u>	Complété le: <u>28/04/2006</u>	
Length: <u>299</u>		
Diamètre: <u>BQ</u>	Unités: Imperial <input type="checkbox"/> Métrique <input checked="" type="checkbox"/>	Tubage en place: Oui <input type="checkbox"/> Non <input checked="" type="checkbox"/>
		Cimenté: Oui <input type="checkbox"/> Non <input checked="" type="checkbox"/>
		Coin: Trou original #: _____ Profondeur: _____

Données directionnelles

Type:	Type	Prof.	Pendage	Direction	Type	Prof.	Pendage	Direction
A - Test acide	E	30	49.9	2.4	E	270	42	2.9
T - Tropari	E	60	49.6	2	E	299	40.3	1.3
S - Sperry sun	E	90	48.7	0.4				
E - EZ-shot	E	120	48	1.8				
	E	150	47.6	2				
	E	180	45.3	3.1				
	E	210	44.2	2.1				
	E	240	42.8	2.5				

Trou # : MAR-06-03

Niveau 1		Niveau 2		Description	Échantillons			Résultats				Notes			
De	À	De	À		Numéro	De	À	Description	Au PPE	Ag ppm	Cu PPM	Zn PPM	Prof.	S1	
0.00	12.70			MT									15	30	
				Mort terrain.									20	30	
12.70	65.10			V2 PO PL FO++ BO+ Tr PY											
				Lave intermédiaire porphyrique à plagioclase (15%, 2-5 mm, aplats par endroits), de couleur gris verdâtre pâle, constituée de 75% de matrice aphanitique grise et de 10% de cristaux de biotite de 5 mm. La roche est non magnétique et a une dureté moyenne à élevée. Traces de calcite. Traces d'amygdales de QZ de 1 cm. La roche est fortement foliée. La roche contient des veinules de quartz ondulantes et boudinées de 0.5 à 2 cm d'épaisseur (1V/5m). Traces de pyrite à grain fin disséminée.	57415	24.00		V2 PO PL BO+ (WR)						30	20
		12.70	17.00	BO+	57416	63.00		V2 PO PL (WR)					40	30	
				Zone biotisée brunâtre.	61217	20.50	21.00	V2 PO PL BO++	-0.005	-0.2	57	70	50	38	
		19.20	19.80	BO+	61218	49.90	50.90	B GF VQZ Tr Py	-0.005	-0.2	36	72	60	32	
				Zone biotisée brunâtre.	61219	65.10	66.00	TC BO++ TM+	-0.005	-0.2	40	66	70	30	
		49.00	50.90	B GF	61220	66.00	67.50	TC BO++	-0.005	0.4	47	1475	80	32	
				Dyke mafique à grain fin peu folié. Contacts nets à 40° AC	61221	67.50	69.00	TC TM++ BO+	-0.005	-0.2	35	101	80	35	
65.10	71.95			(V2 TC LP?) FO BO++ TM+	61222	69	70.5	TC BO++ TM+	-0.005	-0.2	53	105	100	35	
				Tuf à cendres? Intermédiaire à laminaisons // centimétriques gris brunâtre et vert par endroits, à dureté moyenne à élevée, non magnétique, contenant des traces de calcite. La roche est fortement recristallisée et foliée. Son identification est hypothétique. Le contact inférieur est incertain, étant masqué par une intense tremolitisation. Pas de minéralisation visible.	61223	70.5	71.95	TC TM +++	-0.005	-0.2	48	82			
71.95	88.04			(V2 TB?) AM FO++ TM++ BO+	61224	71.95	73.5	V2 AM TM+++	-0.005	-0.2	144	93	120	25	
				Tuf intermédiaire à bombes? (5-20 cm) composées de lave intermédiaire amygdalaire (3% d'amygdales de calcite aplats de 0.5 à 2 cm). La matrice de la lave (bombes) est à grain fin et homogène. La matrice entre les fragments est fortement tremolitisée (20-30% d'aiguilles de tremolite de 0.2 à 1 cm qui recoupent la foliation). La roche est également biotisée par endroits. La foliation est intense.	61225	79.50	81.00	V2 AM TB BO+	-0.005	-0.2	55	106			
		54.00	58.04	CL+ Tr PO PY	57417	81.00		V2 AM (WR)					130	40	
				Zone où la roche est rétrotransformée au sous facies à chlorite du facies des schistes verts. La biotite est graduellement remplacée par de la chlorite vers le contact inférieur. La roche contient des traces d'amas disséminés de pyrrhotite aplats de 3 mm contenant des traces de pyrite.	61226	89.00	89.70	V2 TB BO+ TM+	-0.005	-0.2	45	108			
88.04	89.00			I2 PO PL	61227	89.7	91	V2 TB TC? BO++ 1% Po	-0.005	-0.2	122	118	160	35	
				Dyke intermédiaire porphyrique à plagioclase (70%, 0.5 cm) dans une matrice aphanitique gris foncé. La roche est légèrement foliée. Pas de sulfures visibles. Contacts nets à 40° AC, // à S1.	61228	93.70	95.00	I1 PO PL Tr Po	-0.005	0.2	13	67			
89.00	92.50			(V2 TB?) AM FO++ TM++ BO++ 1% PO Tr PY	61229	95	96	I1 PO PL Tr Po	-0.005	-0.2	23	56	170	42	
				Tuf intermédiaire à bombes?, folié et légèrement tremolitisé et fortement biotisé, similaire à 71.95 - 83.04. La roche contient 1% de pyrrhotite en lambeaux de 1-4 mm d'épaisseur, // à S1.	61230	98.00	97.20	I1 PO PL BR Tr Po	-0.005	0.2	140	73			
		89.70	91.00	3% PO	61231	97.20	98.00	TC BO+	-0.005	-0.2	21	73	200	30	
				Zone contenant 3% de pyrrhotite en lambeaux de 1-4 mm d'épaisseur, // à S1.	61232	98.00	99.40	TC BO++	-0.005	0.2	49	142	210	38	
92.50	93.60			B GF FO								220	36		
				Dyke mafique à grain fin vert grisâtre et légèrement folié. Contacts nets à 35° AC, // à S1. Pas de sulfures visibles.									230	40	
93.60	97.20			I17 BR AP PO PL AM Tr PO									240	42	
				Dyke? mafique bréchique et aphanitique gris vert clair. La roche est rétrotransformée à la zone de chlorite. Elle contient par endroits de 5 à 30% d'ophéocristaux de plagioclase de 2 - 10 mm. Elle contient également des amas de quartz et/ou de calcite de 1-2 cm qui ressemblent à des amygdales. Certaines de celles-ci contiennent de la pyrrhotite. Contact supérieur net à 80° AC. Contact inférieur bréchique sur 20 cm.										250	45
97.20	99.40			V2 TC TB LP BO+++									260	40	

Trou # : MAR-06-03

Niveau 1		Niveau 2		Description	Échantillons			Résultats				Notes		
De	À	De	À		Número	De	À	Description	Au PPB	Ag ppm	Cu PPM	Zn PPM	Prof.	S1
0.00	12.70			MT										
				Tuf intermédiaire à cendres et à blocs albitaire à 71.95 - 58.40 mais d'aspect plus cendrex (comme 65.10 - 71.95 dans sa portion inférieure). La roche est fortement biotisée (brunâtre). La foliation est intense. Pas de minéralisation visible. Contact inférieur incertain.									270	40
99.40	117.50			V2 AM MA FO TM+								280	45	
				Lave intermédiaire massive, gris moyen, à grain fin qui contient 5% d'amygdales de quartz - calcite de 0.5 à 2 cm. La roche a une dureté moyenne à élevée. Elle est recoupée de 20% de bandes trémolitisées de 10 à 40 cm d'épaisseur à contacts graduels.									290	43
		108.00	117.70	BR TM+ BO+	57418	114.00	V2 AM (WR)					299	43	
				La roche devient graduellement fragmentaire (fragments aplatis de 2 à 20 cm d'épaisseur) dans 30% de matrice biotisée et trémolitisée. Pas de sulfures visibles.										
117.50	118.95			I3 GF FO TM+										
				Dyke mafique vert foncé, à grain fin, trémolitisé aux contacts. Contact supérieur à 20° AC. Contact inf. à 40° AC, // à S1.										
118.95	121.20			V2 AM TB FO BO+										
				Tuf intermédiaire à blocs idem à 199.40 - 117.500. La roche est biotisée et										
121.20	125.90			I2 PO (PX?) FO										
				Dyke intermédiaire vert grisâtre, porphyrique à PX? Cratiaux mafiques (30%, 0.2 cm, aplatis et remplacés par de la chlorite) dans une matrice grise plus foliée. Les contacts sont trémolitisés sur 30 cm. Pas de minéralisation visible. Contacts nets à 35° AC, // à S1.										
125.90	299.00			V2 AM MA TL TM+ BO+										
				Lave intermédiaire amygdalaire (1-5%, 0.5-2 cm), grise, à grain fin et à dureté moyenne à élevée. La roche est par endroits fragmentaire. Elle est également recoupée par endroits par des zones de trémolitisation qui recoupent la foliation ainsi que par des zones biotisées brunâtres, surtout dans les zones fragmentaires. Pas de minéralisation significative.										
		127.40	139.10	TM++										
				Zone trémolitisée: 10-50% d'aiguilles de trémolite de 0.2 à 1 cm recoupant S1.										
		139.40	141.40	FO++ BO++ TM+	57419	150.00	V2 AM TL BO+ (WR)							
				Zone très foliée, rubanée, brun verdâtre qui contient 15-30% de bandes riches en biotite à grain très fin, // à S1.	61233	139.00	140.50	V2 AM TM+++ BO+	-0.005	-0.2	39	69		
		144.70	154.60	TL BO+	61234	140.50	141.40	V2 AM TM+++	-0.005	-0.2	69	65		
				Zone fragmentaire à lapilli (rubans centimétriques de lave) dans 30% de matrice hétérogène légèrement biotisée.	61235	148.50	150.00	V2 TL BO+	-0.005	-0.2	58	53		
		154.60	162.00	MA	61287	152.50	154.00	V2 TL échantillon ouillé	-0.005	-0.2	59	58		
				Zone massive	61236	185.50	185.00	V2 TL BO+	-0.005	-0.2	57	37		
		162.00	165.40	TL BO++ FO	61237	172.00	173.50	V2 TL BO+	-0.005	-0.2	51	69		
				Zone foliée, rubanée et fortement biotisée. Aspect fragmentaire	61238	174.10	175.20	V2 TB BO+	-0.005	0.2	62	68		
		165.00	172.00	MA	61239	201.00	202.50	V2 TL TM++	-0.005	-0.2	40	55		
				Zone massive	61240	202.50	204.00	V2 TB TM+++	-0.005	-0.2	71	272		
		172.00	175.20	TL BO++ FO										
				Zone foliée, rubanée et fortement biotisée. Aspect fragmentaire										
		175.20	198.25	MA										
				Zone massive										
		198.25	204.96	TL TM++ BO+										
				Zone fragmentaire trémolitisée d'aspect plus grenue (1 mm), constituée de 20% de TM de 1 mm diffusés et trappus. La roche est également légèrement biotisée.	57420	180.00	V2 AM (WR)							
		204.96	205.00	V PO SSM 35° AC										
				Ruban de Pyrrhoïte semi massive de 2.5 cm à 35° AC.										

Trou # : MAR-06-03

Niveau 1		Niveau 2		Description	Echantillons			Description	Résultats				Notes	
De	À	De	À		Numéro	De	À		Au PPB	Ag ppm	Cu PPM	Zn PPM	Prof.	S1
0.00	12.70			MT										
		205.00	205.65	TL TM++ BO+										
				Zone fragmentaire trémolitisée d'aspect plus grenue (1 mm), constituée de 20% de TM de 1 mm dilués et trappus. La roche est également légèrement biotisée.	57421	207.00		V2 AM TB+ BO+ (WR)						
		205.65	216.00	MA	61241	204.00	204.75	V2 MA TM++	-0.005	-0.2	30	51		
				Zone massive	61242	204.75	205.25	V2 TB TM+++ 2.5 cm Po SSM Ruban	-0.005	0.4	34	503		
		216.00	216.30	V SM PO QZ	61243	215.50	216.00	V2 AM MA	-0.005	-0.2	52	103		
				Veine de pyroxène massive (80% PO, 10% QZ). La roche est à grain fin (<1mm). Le quartz est concentré aux bordures en amas boudinés de 1-4 cm. Contacts nets à 45 AC (sup) et 70 AC (inf).	61244	216.00	216.30	V Po MA 80% Po 20% QZ	0.006	1.3	631	2130		
		216.30	217.50	BO++ CL Tr PY	61245	216.30	217.50	M8 BO CL 20% V QZ Tr Py	-0.005	-0.2	57	195		
				Zone fortement biotisée brun verdâtre recoupée par 20% de veines de quartz boudinées de 0.5 à 15 cm d'épaisseur, à épontes chloriteuses. Ces veines sont ondulantes et sub // à S1. Traces de pyrite à grain fin.	61246	259.70	260.40	V2 TL TM++ BO+ 1VQZ 5cm	-0.005	0.2	139	38		
		217.50	219.00	CL+	61247	276.00	277.50	V2 TL BO++	-0.005	-0.2	47	73		
				Zone chloriteuse néométamorphisée. Pas de sulfures visibles.										
		219.00	246.20	V2 AM TL FO BO+ TM+										
				Tuf intermédiaire à lapilli (2-10 cm) de la ve à grain fin amygdalaire en fragments aplatis constituant 75% de la roche dans 25% de matrice vert brunâtre biotisée et trémolitisée. La roche est foliée et homogène. Pas de sulfures visibles.	57422	239.00		V2 AM TL BO++ (WR)						
		246.20	247.35	D GF FO										
				Dyke mafique vert grisâtre à grain fin, folié et homogène. Contacts nets à 43° AC. // à S1. Pas de sulfures visibles.										
		247.35	268.30	V2 AM TL FO BO+ TM+	57423	256.80		V2 AM TL BO+ (WR)						
				Zone fragmentaire idem à 219.00 - 246.20.										
		268.30	270.10	D										
				Dyke mafique idem à 246.20 - 247.35.										
		270.10	289.00	V2 AM TL FO BO+ TM+										
				Zone fragmentaire idem à 219.00 - 246.20.	57424	285.00		V2 TL AM BO+ (WR)						
289.00				FIN										
				Fin du trou.										

Trou # :

Niveau 1		Niveau 2		Description	Échantillons			Résultats				Notes				
De	À	De	À		Número	De	À	Description	Au PPB	Ag PPM	Cu PPM	Zn PPM	Prof	S1		
0.00	4.00			MT									8	25		
				Mort terrain									10	20		
4.00	117.63			(V27 I27) PO PL MA FO TM+ BO+									20	27		
				Lave ou intrusif intermédiaire porphyrique à plagioclase, gris verdâtre, massif et fortement folié par endroits. La roche est constituée de 30% de phénocristaux de plagioclase de 3 à 10 mm de Ø, trappus dans une matrice à grain fin. La roche est non magnétique et a une dureté moyenne à élevée et n'est pas carbonatisée. Dans l'ensemble de l'unité, la roche est partiellement à fortement recristallisée et est recoupée par des rubans diffus d'alimination trémolite de 1 à 30 cm d'épaisseur, // à S1. Les phénocristaux sont détruits dans les zones les plus foliées. Traces de pyrite dans les bandes trémolitisées vert foncées.	57425	12.00		V2 PO PL (WR)								
		32.50	33.00	V QZ	57426	51.00		V2 PO PL TM+ (WR)					40	20		
				Veine de quartz	57427	84.00		V2 PO PL TM+ (WR)					50	20		
		39.00	39.50	V QZ	57428	114.00		V2 PO PL (WR)					60	28		
				Veine de quartz	61243	6.50	7.50	V2 PO PL FO BO+	-0.005	-0.2	59	45	70	25		
		44.00	46.00	BO+ EP+	61249	32.50	33.30	VQZ	-0.005	0.2	9	54	80	20		
				Zone à grain fin biotisée et épidoitisée vert pâle.	61250	39.00	39.50	VQZ	-0.005	-0.2	158	50	80	20		
		46.00	46.70	GN+	61251	44	45	V2 PO PL FO BO+ EP+	-0.005	0.2	61	83	100	30		
				Zone vert foncé à grain fin contenant 15% de grenats de 2-4mm.	61252	45.00	46.50	V2 PO PL BO+ GN+	-0.005	0.2	31	74	110	30		
		46.70	49.20	BO+ EP+	61253	46.50	48.00	V2 PO PL GN+	-0.005	-0.2	28	52	120	30		
				Idem à 44.00 - 46.00.	61254	48.00	49.50	V2 PO PL EP+	-0.005	0.2	23	98	130	28		
		49.20	66.50	RU TM++ Tr PY	61255	61.90	63.10	V2 PO PL TM++ Tr Py	-0.005	-0.2	38	72	140	32		
				Zone contenant 25% de rubans diffus vert foncé trémolitisés sub // à S1. Certains contiennent des veinules millimétriques de pyrite.	61256	66.10	66.70	V2 PO PL TM+++ Tr Py	-0.005	-0.2	44	102	150	37		
		66.50	103.10	I2 PO PL	61257	90.20	90.90	VQZ	-0.005	-0.2	79	65	160	22		
				Dyke intermédiaire porphyrique à plagioclase, vert grisâtre, à grain fin, contenant 15% de phénocristaux de plagioclase trappus de 3 à 10 mm. Les zones de trapps sont vert foncé et ne contiennent pas de phénocristaux. Contact net // à S1.	61258	105.70	106.50	V2 PO PL BO+	-0.005	-0.2	10	40				
		110.00	117.00	V FP BR	61259	106.50	108.00	V2 PO PL BO+++ TM+	-0.005	-0.2	44	66	180	30		
				Zone de veinules millimétriques, feldspathiques, roses, par endroits drusiques, format le ciment de la roche bréchillée.										190		
117.63	150.40			V27 AM FO TM+										200	33	
				Lave intermédiaire gris verdâtre à grain fin, à dureté moyenne à élevée, très foliée et légèrement carbonatisée. La roche est homogène et contient 1-2% d'amygdales aplatis de calcite de 5 à 10 mm. La roche est recoupée par des rubans vert foncé de 2 à 30 cm (10%) // à S1, constitués d'aiguilles de trémolite de 1 à 10 mm et de matériel à grain fin vert pâle (chlorite?). Pas de sulfures significatifs. Contact supérieur incertain car la roche ressemble aux portions schisteuses de l'unité précédente. Contact inférieur net à 30' AC.	57429	141.00		V2 GF ou I1D7 (WR)								
150.40	163.83			M8 BO QZ										210	38	
				Schiste à biotite et à quartz à grain très fin, non magnétique, à dureté moyenne et légèrement carbonatisé.	57430	156.50		M8 BO (WR)							220	28
		150.40	155.40	10% BO	61260	151.90	153.00	M8	-0.005	0.2	26	50	240	45		
				Schiste leucocrate (quartz-feldspath) gris brunâtre avec 10% de biotite. Pas de sulfures.	61261	153.00	154.50	M8 BO	-0.005	-0.2	28	83	250	30		
		155.40	163.35	M8 BO	61262	154.50	156.00	M8 BO	-0.005	-0.2	62	114	260	38		
				Schiste à biotite (80%) brun violacé. Pas de sulfures.	61263	156.00	157.50	M8 BO	-0.005	0.2	71	113	270	38		
163.83	172.00			V2 TL PO PL FO BO+	61264	157.50	159.00	M8 BO	-0.005	-0.2	42	126	280	22		
				Tuf intermédiaire à lapilli aplatis de 1 à 5 cm, de lave porphyrique à plagioclase (30%, 5-10 mm) dans une matrice gris verdâtre. La matrice entre les fragments est légèrement biotisée. Pas de sulfures visibles.	61265	159.00	160.50	M8 BO	-0.005	0.2	49	125	290	34		
172.00	181.33			V2 PO PL MA FO BO+	61266	160.50	162.00	M8 BO	-0.005	-0.2	47	115	300	30		

Trou # :

Niveau 1		Niveau 2		Description	Échantillons			Résultats				Notes		
De	À	De	À		Numéro	De	À	Description	Au PPB	Ag PPM	Cu PPM	Zn PPM	Prof	S1
0.00	4.00			MT										
				Lave intermédiaire porphyrique à plagioclase (30%, 5-10 mm) dans une matrice gris verdâtre, par endroits brunâtre. La roche est homogène et modérément foliée. Elle est légèrement biotisée. Pas de sulfures visibles.	61267	162.00	163.50	M8 BO	-0.005	-0.2	41	107		
181.35	197.35			I2J GF	57431	180.00		V2 PO PL (WR)						
				Dyke de diorite gris verdâtre à grain fin (1-3 mm), très faiblement folié, à dureté moyenne à élevée et non magnétique. Contacts nets // à S1. Pas de sulfures visibles.	61268	163.50	165.00	M8 BO	-0.005	-0.2	45	99		
197.35	203.35			I4 PO PX	61269	165	166.5	V2 TL BO++	-0.005	-0.2	23	92		
				Dyke de pyroxénite porphyrique à pyroxènes (50%, 5-10 mm) vert grisâtre à grain grossier. La roche est légèrement foliée, à dureté moyenne et légèrement carbonatisée. Pas de sulfures visibles.	61270	168.50	168.00	V2 TL BO+	-0.005	0.2	17	98		
203.35	229.10			I27 MA GF FO	61271	168	169.5	V2 TL SI+	-0.005	-0.2	16	76		
				Dyke ? Intermédiaire, gris moyen, à grain fin (< 1mm) à dureté moyenne à élevée et à texture homogène. La roche contient des fanalomes d'amygdales ou de phénocristaux recristallisés et aplatis gris pâles. Contacts nets // à S1. Pas de sulfures visibles. L'unité ressemble à la lave de l'unité 117.60 - 150.40. Cette dernière pourrait être de nature intrusive.	57432	218.00		I1D (WR)						
229.60	236.70			V2 TL PO PL FO BO+ PY PO	61272	169.5	171	V2 TL SI+ Tr Py	-0.005	0.4	32	80		
				Idem à 203.35 - 209.10.	61273	203.35	204.50	V2 TL <1% Py Po	-0.005	-0.2	46	84		
		229.60	231.00	5-10% PY PO	61274	204.50	205.75	V2 TL 1% Py Po	-0.005	-0.2	31	71		
				Idem à 207.45 - 209.10.	61275	205.75	207.45	V2 TL 3% Py Po	-0.005	0.4	163	58		
		231.00	232.50	3% PY PO	61276	207.45	208.50	V2 TL 10% Py Po	-0.005	-0.2	51	78		
				Idem à 205.75 - 207.45.	61277	208.50	209.10	V2 TL 10% Py Tr Po	-0.005	0.4	243	91		
		232.50	236.70	<1% PY PO	61278	229.60	231.00	V2 TL 10% Py Tr Po	-0.005	0.2	61	69		
				Idem à 203.35 - 205.75	61279	231.00	232.50	V2 TL 3% Py Po	-0.005	-0.2	55	72		
236.70	239.20			H GF FO BO+ TM+	61280	232.50	234.00	V2 TL Tr Py Po	-0.005	-0.2	58	78		
				Dyke felsique gris à grain très fin, à dureté élevée, non carbonatisé et non magnétique. La roche est légèrement biotisée et est recoupée par 1% d'aiguilles de trémolite. Contacts nets // à S1. Pas de sulfures visibles.	57433	248.00		V2 TL BO+ (WR)						
239.20	254.45			V2 TL PO PL FO BO++	61281	254.45	255	M8	-0.005	-0.2	29	60		
				Tuf intermédiaire à fragments aplatis de lave porphyrique à plagioclase. La roche est foliée et modérément biotisée. Pas de sulfures visibles.	61282	255.00	256.50	M8 BO	-0.005	-0.2	27	57		
254.45	259.90			M8 FP QZ BO	61283	256.50	258.00	M8	-0.005	-0.2	31	71		
				Schiste à feldspaths - quartz - biotite (15%) gris clair, à grain fin, à dureté moyenne et non magnétique. Contacts nets // à S1. Pas de sulfures visibles.	61284	258.00	259.50	M8	-0.005	-0.2	33	70		
259.90	269.70			V2 TL PO PL FO BO++	61285	259.50	259.90	M8	-0.005	-0.2	48	59		
				Tuf intermédiaire Idem à 239.20 - 254.45. Pas de sulfures visibles.	61286	276.34	279.75	V2 TL Tr Py	-0.005	-0.2	71	63		
269.70	271.85			I1D GF MA										
				Dyke de tonalite gris moyen, massif, à grain fin, à dureté élevée, non magnétique et non carbonatisé. La roche n'est pas foliée. Contacts nets // à S1 de l'encasement. Pas de sulfures.										
271.85	288.00			V2 TL PO PL FO BO+										
				Idem à 259.90 - 269.70.	57434	276.00		V2 TL BO+ (WR)						
288.00	300.00			V2 PO PL FO BO+										
				Lave intermédiaire porphyrique à plagioclase, identique à celle des fragments de l'unité précédente. La roche est recoupée par des rubans (3 - 15 cm) chloriteux et biotiques suggérant des bordures de coulée recristallisée. Pas de sulfures visibles.	57435	297.00		V2 PO PL MA BO+ (WR)						
300.00				FIN										
				Fin du trou.										

PROPRIÉTÉ: RALLEAU

Forage #: MAR-06-05

CLAIM #: _____

Page : 1 de

Localisation	Canton: _____	Grille: <u>1</u>	UTM: <u>17</u>	Élévation: <u>ND</u>				
	Rang (s): _____	Eastant: <u>34+00</u>	Eastant: <u>398846</u>	Collet arpenté: Oui <input type="checkbox"/>				
	Lot (s): _____	Nordant: <u>7+25</u>	Nordant: <u>5E+06</u>	Non <input checked="" type="checkbox"/>				
Azimuth: <u>360</u>		Débuté le: <u>01/05/2006</u>		Géologue: <u>Mathieu Piché</u>				
Pendage: <u>-50</u>		Complété le: <u>03/05/2006</u>						
Longueur: <u>350</u>								
Diamètre: <u>BQ</u>	Unités: Imperial <input type="checkbox"/>	Tubage en place: Oui <input type="checkbox"/>	Cimenté: Oui <input type="checkbox"/>	Coin: Trou original #: _____				
	Métrique <input checked="" type="checkbox"/>	Non <input checked="" type="checkbox"/>	Non <input checked="" type="checkbox"/>	Profondeur: _____				
Données directionnelles								
Type:	Type	Prof.	Pendage	Direction	Type	Prof.	Pendage	Direction
	E	30	48.1	-2.3	E	240	42.1	-1
A - Test acide	E	60	47.8	-1.7	E	270	44.1	-0.7
T - Tropari	E	90	46.7	-2.7				
S - Sperry sun	E	120	46	-2.2				
E - EZ-shot	E	150	44.6	0.5				
	E	180	44	0.7				
	E	210	43.1	-2.6				

Niveau 1		Niveau 2		Description	Échantillons			Description	Résultats				Notes	
De	À	De	À		Numéro	De	À		Au PPB	Ag PPM	CU PPM	ZN PPM	Prof	S1
0.00	4.00			MT										
				Rhyolite porphyrique à quartz (10%, 1-3 mm) grise, brunâtre par endroits (biolite à grain très fin), massive et fortement foliée. Pas de sulfures visibles.										
167.40	170.90			B GF FO										
				Dyke mafique vert foncé, à grain très fin et folié et à dureté moyenne. La foliation est sub // à l'axe de la carotte.	57440	160.00		VID GF (WR)						
170.90	177.00			VIB PO QZ TL? FO RU BO+ 5% PY Tr PO										
				Rhyolite idem à 160.60 - 167.40 mais d'aspect rubané suggérant une texture fragmentaire. La roche contient 5% de rubans et de lambeaux de pyrite à grain très fin de 0.2 à 2 cm d'épaisseur. La pyrite est enrobée d'une couche millimétrique de pyrrholite. Les rubans sont // à S1.	60834	170.90	172.50	Tr Py	-0.005	-0.2	48	32		
177.00	180.95			I3A PO PX GM FO	60835	172.5	174	6% Py	-0.005	-0.2	37	25		
				Dyke de gabbro porphyrique à pyroxènes, vert grisâtre foncé et à grain moyen. La roche est légèrement foliée. Ressemble au "gabbro mouche" de Matagami. Pas de sulfures. Contacts nets // à S1.	60836	174.00	175.50	1% Py	-0.005	-0.2	32	43		
180.95	184.10			VIB PO QZ FO RU MA BO+	60837	175.5	177	1% Py	-0.005	0.2	16	54		
				Idem à 160.60 - 167.40. Pas de sulfures visibles.										
184.10	197.10			V1 AP FO MA										
				Lave felsique (dyke?) à grain très fin, gris pâle, homogène, à dureté élevée et très foliée. Pas de sulfures visibles. Contacts nets // à S1.										
197.10	211.80			V1B PO QZ FO BO+	57441	186.00		VID ? GF (WR)						
				Idem à 180.95 - 184.10. Pas de sulfures visibles.										
211.80	319.25			VID PO PL AM FO RU BO+ PY PO	57442	200.00		VIB PO QZ BO++ (WR)						
				Dacite ? Gris brunâtre à verdâtre, à grain fin, à dureté élevée et non magnétique. Traces d'amygdales aplatis de calcite de 0.5 - 1 cm. La roche est très foliée et rubanée par endroits.	57443	230.80		VID BO (WR)						
	211.80	242.00		BO++ Tr PO	57444	270.00		VID frais (WR)						
				Zone biolitisée avec traces de pyrrholite en rubans.	60838	205.85	207.00	Tr Po	-0.005	0.3	24	73		
	254.80	259.00		I2 GF 30° AC	60839	207.00	208.50	Tr Po	-0.005	-0.2	22	64		
				Dyke intermédiaire gris à grain fin, massif et homogène. Très dur. Contacts nets à 30° AC.	60840	208.50	210.00	Tr Po	-0.005	-0.2	21	65		
	260.10	260.85		I2 GF	60841	210.00	211.50	Tr Po	-0.005	-0.2	14	68		
				Idem à 254.80 - 259.00.	60842	211.50	211.80		-0.005	0.2	98	68		
	262.20	264.65		I2 GF	60843	218.85	219.00	VID BO+	-0.005	-0.2	54	51		
				Idem à 254.80 - 259.00.	60844	219.00	220.50	VID BO+	-0.005	-0.2	45	56		
	276.00	284.50		BO+	60845	220.50	222.00	VID BO+ Tr Po	-0.005	-0.2	47	40		
				Zone modérément biolitisée.	60846	222.00	223.50	VID BO+ 2% Po	-0.005	-0.2	69	56		
	284.50	294.00		AN+++ BO+	60847	223.50	225.00	VID BO+ Tr Po	-0.005	-0.2	37	59		
				Zone andalousitisée contenant 10-35% de porphyroblastes d'andalousite blanc lailleux de 3 à 10 mm qui recoupe la foliation. La matrice entre ces cristaux est légèrement biolitisée.	60848	225.00	226.50	VID BO+ Tr Po	-0.005	-0.2	62	55		
	294.00	298.10		I2 GF MA	60849	226.50	228.00	VID BO+ Tr Po	-0.005	-0.2	85	65		
				Dyke intermédiaire gris à grain fin, homogène, idem à 254.80 - 259.00.	60850	228.00	229.50	VID BO+	-0.005	-0.2	54	48		
	298.10	309.30		AN+++ BO+	60851	229.50	231.00	VID BO+	-0.005	-0.2	70	71		
				Idem à 284.50 - 294.00.	60852	231.00	232.50	VID BO+	-0.005	-0.2	42	50		
	309.30	310.20		I2 GF FO	60853	232.50	234.00	VID BO+ Tr Po	-0.005	-0.2	67	56		
				Dyke intermédiaire gris à grain fin et folié. Contacts // à S1.	60854	234.00	235.50	VID BO+ CL+ Tr Po	-0.005	-0.2	53	49		
	310.20	319.25		AN+++ BO+	60855	235.50	237.00	VID BO+ Tr Po	-0.005	-0.2	56	66		
				Idem à 284.50 - 294.00.	60856	237.00	238.50	VID BO+ Tr Po	-0.005	-0.2	60	75		
319.25	350.00			VIB PO QZ AN+ SR++ FO RU Tr PO	60857	238.50	240.00	VID BO+	-0.005	-0.2	72	77		

Niveau 1		Niveau 2		Description	Échantillons			Description	Résultats				Notes	
De	À	De	À		Numéro	De	À		Au PPB	Ag PPM	CU PPM	ZN PPM	Prof	S1
0.00	4.00			MT										
				Rhyolite porphyrique à quartz gris verdâtre, à dureté élevée et non magnétique. La roche contient 20% de phénocristaux de quartz de 2-3 mm de Ø dans une matrice aphanitique. La roche est foliée et rubanée par endroits. Elle contient de 0 à 10% de porphyroblastes d'andalouite de 5 à 10 mm et est par endroits séricitisée. La roche contient des lambeaux boudinés de 0.5 à 2 cm de pyrrhotite // à S1.	57445	321.00		V1B PO QZ SR+++ (WR)						
		338.40	344.00	I2 GF SR+	57446	348.00		V1B PO QZ AN+ (WR)						
				Dyke intermédiaire gris à grain moyen, homogène, légèrement folié, d'aspect légèrement séricitisé (matrice beige). Contacts obscurs sur 20 cm.	57447	300.00		V1D AN+++ (WR)						
350.00				FIN	60858	240.00	241.50	V1D B0+	-0.005	-0.2	124	87		
				Fin du trou (PO massive dans 2 derniers cm.)	60859	328.75	330.00	V1B SR++ 1% Po	-0.005	-0.2	61	103		
					60860	330.00	331.50	V1B Po QZ SR++ Tr Po	-0.005	-0.2	55	100		
					60861	331.50	333.00	V1B Po QZ SR++ 2% Po	-0.005	-0.2	59	48		
					60862	324.00	325.50	V1B Po QZ SR+++ 3% Po	-0.005	-0.2	31	95		
					60863	325.50	327.00	idem	-0.005	0.4	33	85		
					60864	333.00	334.50	V1B PO QZ SR+ Tr Po	-0.005	-0.2	106	49		
					60865	334.50	336.00	V1B PO QZ 2% Py Po	-0.005	-0.2	131	44		
					60866	336.00	337.50	idem	-0.005	-0.2	81	61		
					60867	337.50	338.35	idem	-0.005	-0.2	76	47		
					60868	348.00	349.50	idem	-0.005	-0.2	48	50		
					60869	349.50	350.00	idem	-0.005	-0.2	61	68		

APPENDIX IV

Copy of Abitibi Geophysics Report 17N048



DEEPROCK MINERALS INC.

OREVISION® SURVEY

RALLEAU PROJECT

RALLEAU TOWNSHIP, LABEL-SUR-QUÉVILLON, QUÉBEC, CANADA

LOGISTICS AND INTERPRETATION REPORT

17N048

JULY 2017



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Table 1. Maps Produced

Map Number	OreVision® Survey	Scale
11 Plates Lines 20+00E to 0+00E	Vertical Sections	1:5000
11 Plates Lines 20+00E to 0+00E	Colour Apparent Resistivity & Chargeability Pseudosections (PDF format only)	1:5000
8.2_300	Inverted Resistivity at an Elevation of 300 m (Ohm-m)	1:5000
8.2_250	Inverted Resistivity at an Elevation of 250 m (Ohm-m)	1:5000
8.2_200	Inverted Resistivity at an Elevation of 200 m (Ohm-m)	1:5000
8.3_300	Inverted Chargeability at an Elevation of 300 m (mV/V)	1:5000
8.3_250	Inverted Chargeability at an Elevation of 250 m (mV/V)	1:5000
8.3_200	Inverted Chargeability at an Elevation of 200 m (mV/V)	1:5000
8.4_300	Calculated Metal Factor at an Elevation of 300 m	1:5000
8.4_250	Calculated Metal Factor at an Elevation of 250 m	1:5000
8.4_200	Calculated Metal Factor at an Elevation of 200 m	1:5000
8.6_300	Calculated Gold Index at an Elevation of 300 m	1:5000
8.6_250	Calculated Gold Index at an Elevation of 250 m	1:5000
8.6_200	Calculated Gold Index at an Elevation of 200 m	1:5000
10.0	Geophysical Interpretation	1:5000

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



1. RESULTS AND RECOMMENDATIONS

□ RESISTIVITY

Resistivity features have been interpreted by studying the apparent resistivity pseudosections; the Voxi vertical sections and the intrinsic resistivity maps plotted at elevations of 300 m, 250 m and 200 m.

Much of the grid is dominated by moderate to low resistivity values, with deep and shallow discrete resistivity low trends, found primarily in the middle and southern portions of the grid. There is a shallow resistivity trend running along the southern portion of the survey grid, trending NW/SE, that correlates with chargeable trend **R-01**.

A conductive layer is present over much of the middle to northern portions of the survey grid and is best observed on the vertical sections. It is likely caused by overburden. Its depth can be estimated to range from ~0 to 50 m in thickness.

□ CHARGEABILITY

Following a detailed interpretation of the pseudosections and with the help of the recovered Voxi vertical sections, a total of **7 chargeable sources** were interpreted. Their surface projections are illustrated on the *Interpretation map (10.0)*. The observed sources are trending roughly between NE/SW.

Many of the chargeable sources have been recommended for follow up DDH testing in table 2 and the images that follow. Much of the grid is dominated by moderate to low resistive areas and many chargeable sources are paired with narrow and resistivity lows (conductors), including, **R-02**, and **R-05**. These areas potentially contain mineralization associated with a faulted or sheared zone.

Many of the chargeable sources described above have been recommended for follow up DDH testing in table 2 and the images that follow.

□ METAL FACTOR

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

The *Metal Factor* was calculated as $[(\text{chargeability} / \sqrt{\text{resistivity}}) * 1000]$. It highlights regions of low resistivity and high chargeability which are amenable to hosting disseminated sulphides associated with gold in sheared or faulted environments, and/or semi-massive to massive sulphide occurrences. Although the *Metal Factor* can be helpful in the search for conductive and chargeable zones, it should be interpreted with caution. Particularly in areas with moderate background chargeability and variable resistivity, as a conductive zone with moderate background chargeability may yield a high. The resistivity and chargeability data should always be consulted prior to drawing any conclusions from the *Metal Factor*.

The most notable high Metal Factor signatures occur along trends **R-02** and **R-05** towards the middle portion of the grid. *Metal Factor* maps (8.4) display the results of the calculation. Metal Factor is also shown on all vertical sections.



□ FOLLOW UP

○ SURVEY EXTENSION

Many of the responses in the survey extension area vary from weak to strong, with a general northwest/southeast trend. Trend **R-03** becomes weaker, narrower and shallower towards the southeast but remains deep and broad towards the northwest. **R-02** and **R-01** are not as strong towards the northwest. However, they may still show some continuity towards the northwest. Additional lines in this direction are recommended to help delineate the extent of these trends. Towards the southern portion of the grid, **R-01** is a consistent trend but is located towards the southern end of the lines. To delineate this trend, extending the lines to the southwest would be recommended. Trends **R-01**, **R-02** and **R-05** persist to the eastern most line with **R-02** and **R-05** showing strong chargeable sources at depth. Extending the line towards the southeast would be recommended to further delineate these trends. Successful DDH results for high priority targets increases the potential benefit of survey extension.

○ PROSPECTING

Table 2. Orevision® Prospecting/Trenching Targets on Ralleau Project

Target (Priority_Source)	Location of the Target			Prospecting/Trenching Stations
	Line	Station	Max Depth to Top of Source	
1_R-02	2+00E	1+75E	5 m	1+50E – 2+00E
1_R-02	4+00E	2+25E	5 m	2+25E – 2+50E
1_R-02	8+00E	2+25E	25 m	2+00E – 2+50E
1_R-02	16+00E	3+00E	15 m	2+75E – 3+00E
1_SLS-01	4+00E	1+25E	20 m	1+00E – 1+25E
1_R-03	10+00E	1+25E	20 m	1+00E – 1+25E
1_R-05	12+00E	4+00E	15 m	4+00E – 4+25E
1_R-05	14+00E	4+50E	10 m	4+00E – 4+75E
1_R-05	16+00E	4+50E	10 m	4+25E – 4+50E
1_R-05	18+00E	4+50E	15 m	3+75E – 4+50E
1_R-05	20+00E	4+25E	25 m	4+00E – 4+25E
2_R-07	10+00E	1+75E	15 m	1+75E – 200E
3_R-01	0+00E	0+25W	15 m	0+50W – 0+00E

Although small portions of the grid appear to be covered with a thin conductive layer, there are many areas that are viable for prospecting and trenching.

○ DRILLING

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



Table 3. Drilling Targets on Ralleau Project

DRILL HOLE (Priority_ Source)	Type / Target Interest	Location of the Target			Proposed DDH				Figure	Page
		Line	Station	Elevation (to Center)	Station	Az.	Dip	Length		
1_R-02	Strongly chargeable source, 2000 m strike length, and open to the southeast and northwest. It is a moderately deep to very deep, vertical source, ranging from 300 - 150 m elevation (depth to apparent center of mass) and trending NW/SE. The trend becomes weaker, narrower and more discrete from lines 18+00E - 20+00E, remaining open in the trending direction. It is a relatively narrow trend. It is found within a narrow low resistive, high metal factor zone which may indicate a shear zone or fault.	6+00E	3+00N	210 m	4+00N	204°	55°	250 m	1	5
1_R-03	Strongly chargeable source, 800 m strike length, and open to the northeast. It is a deep source, ranging from 290 - 180 m elevation (depth to apparent center of mass) and trending NE/SW. The trend becomes much shallower on the last line, coming up from 180 m elevation to 290 m elevation. The trend also becomes much weaker on line 8+00E. Found within a discrete low resistivity and high metal factor zone, making it a potential VMS target.	2+00E	5+00N	190 m	3+00N	24°	50°	275 m	2	6
1_R-05	Strongly chargeable source, 1200 m strike length, and open to the southeast. The depth of the source varies but it is predominately a deep source, ranging from 250 - 130 m, with the source becoming relatively shallow at 320 m, on line 14+00E. The depth is the depth to apparent center of mass. The trend occurs in the NW/SE direction. Associated with a discrete, narrow resistivity low and high metal factor. Association with a narrow low resistivity zone may point to potential shear zone or fault style mineralization.	12+00E	4+50N	190 m	6+00N	204°	55°	250 m	3	7
2_R-06	Moderate to highly chargeable source, 1200 m strike length. It is a mid-depth source, ranging from 270 - 230 m elevation (depth to apparent center of mass) and trending NW/SE. Narrow source associated with a discrete resistivity low and moderate to high metal factor, which may indicate a fault or shear zone. The trend becomes more chargeable towards the SE.	16+00E	6+75N	290 m	5+50N	24°	55°	200 m	4	8



Table 3. Drilling Targets on Ralleau Project (Continued)

DRILL HOLE (Priority_Source)	Type / Target Interest	Location of the Target			Proposed DDH				Figure	Page
		Line	Station	Elevation (to Center)	Station	Az.	Dip	Length		
3_R-01	Moderate to strong chargeable source, 2000 m strike length. It is a shallow source, ranging from 380 - 300 m elevation (depth to apparent center of mass) and trending NE/SW. Found within a wide resistive zone towards the SE portion of the grid, but found within a low resistivity zone towards the NW portion. High metal factor is seen in the northwest portions of the trend, but are low in the southeast portion. This is a lower priority target, as it is found on the edge of the lines warranting less confidence.	10+00E	0+75N	270 m	1+50N	204°	55°	125 m	5	9
3_R-04	Weakly chargeable source, 200 m strike length. It is a shallow source, ranging from 300 - 270 m elevation (depth to apparent center of mass) and trending NW/SE. Found within a wide resistive and low metal factor zone, indicating potential disseminated mineralization within a silicified zone	4+00E	7+25N	270 m	6+50N	24°	55°	125 m	6	10
3_R-07	Moderate to strong chargeable source, 400 m strike length. It is a shallow, discrete and narrow source, ranging from 340 - 260 m elevation (depth to apparent center of mass) and trending NW/SE. Found within a narrow zone of moderate to low resistivity and low metal factor. This may be associated with a fault or shear zone.	14+00E	2+00N	320 m	1+50N	24°	55°	275 m	7	11

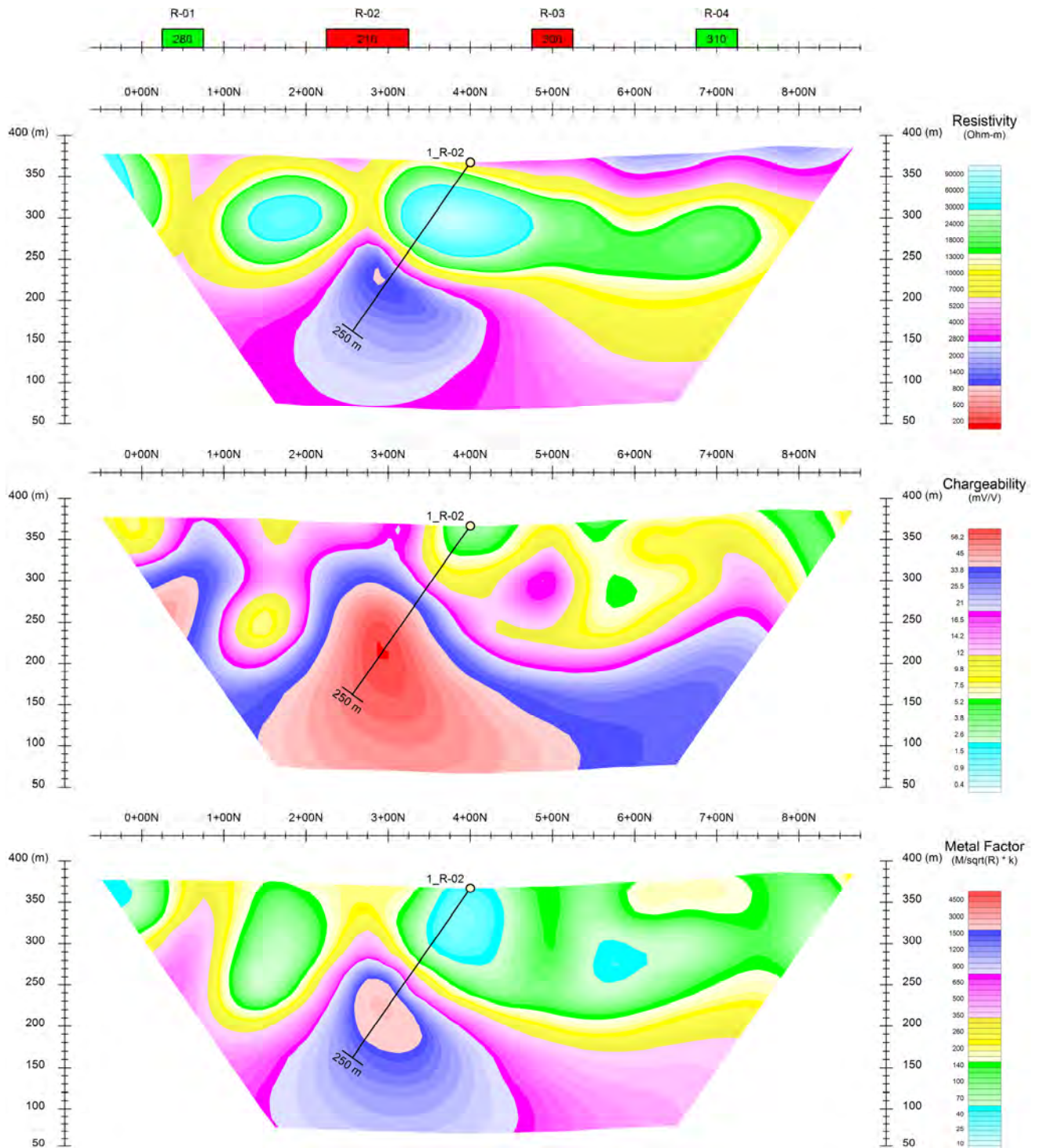


Figure 1. Recommended DDH on priority 1 target R-02 (L 6+00E)

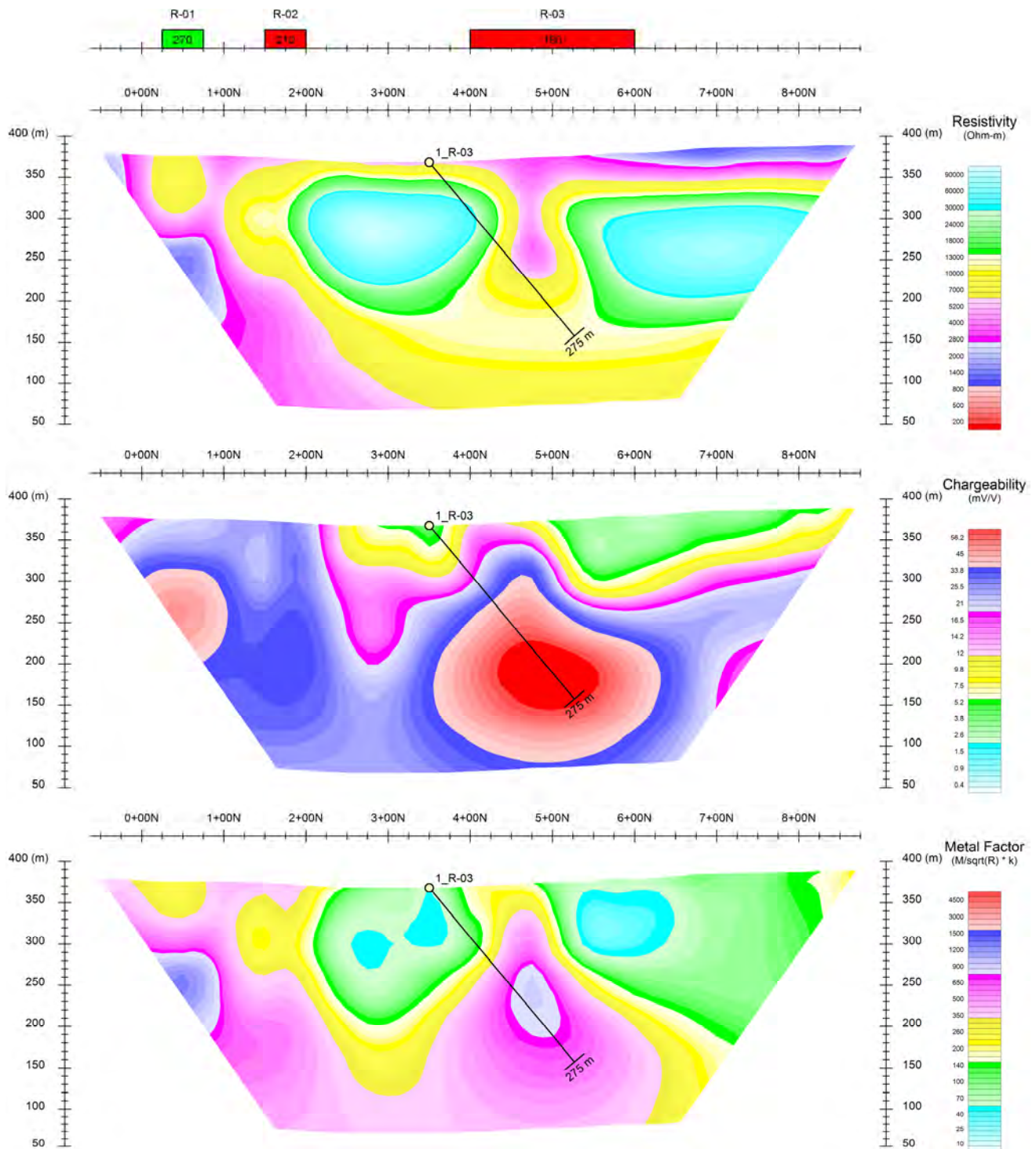


Figure 2. Recommended DDH on priority 1 target R-03 (L 2+00E)

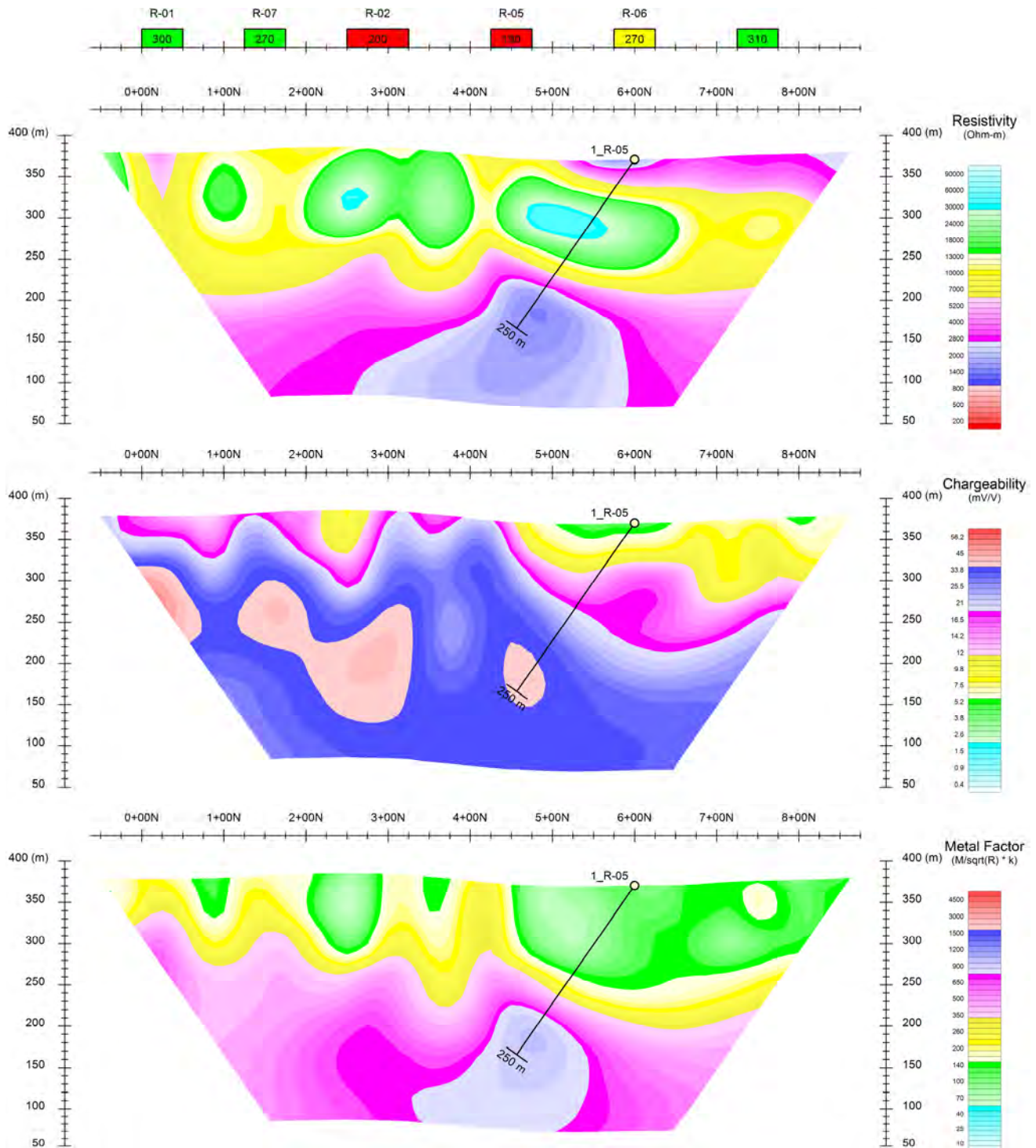


Figure 3. Recommended DDH on priority 1 target R-05 (L 12+00E)

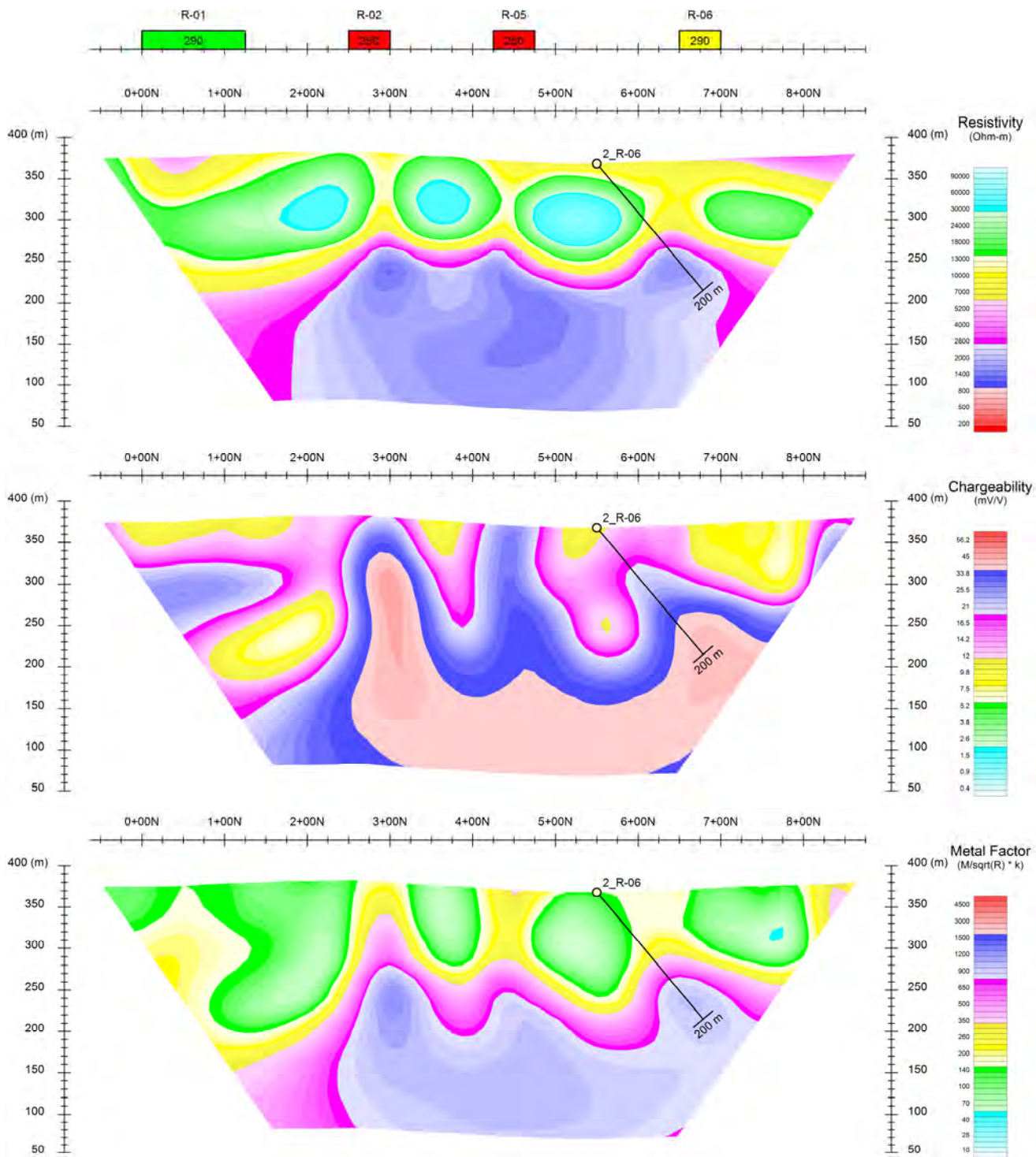


Figure 4. Recommended DDH on priority 2 target R-06 (L 16+00E)

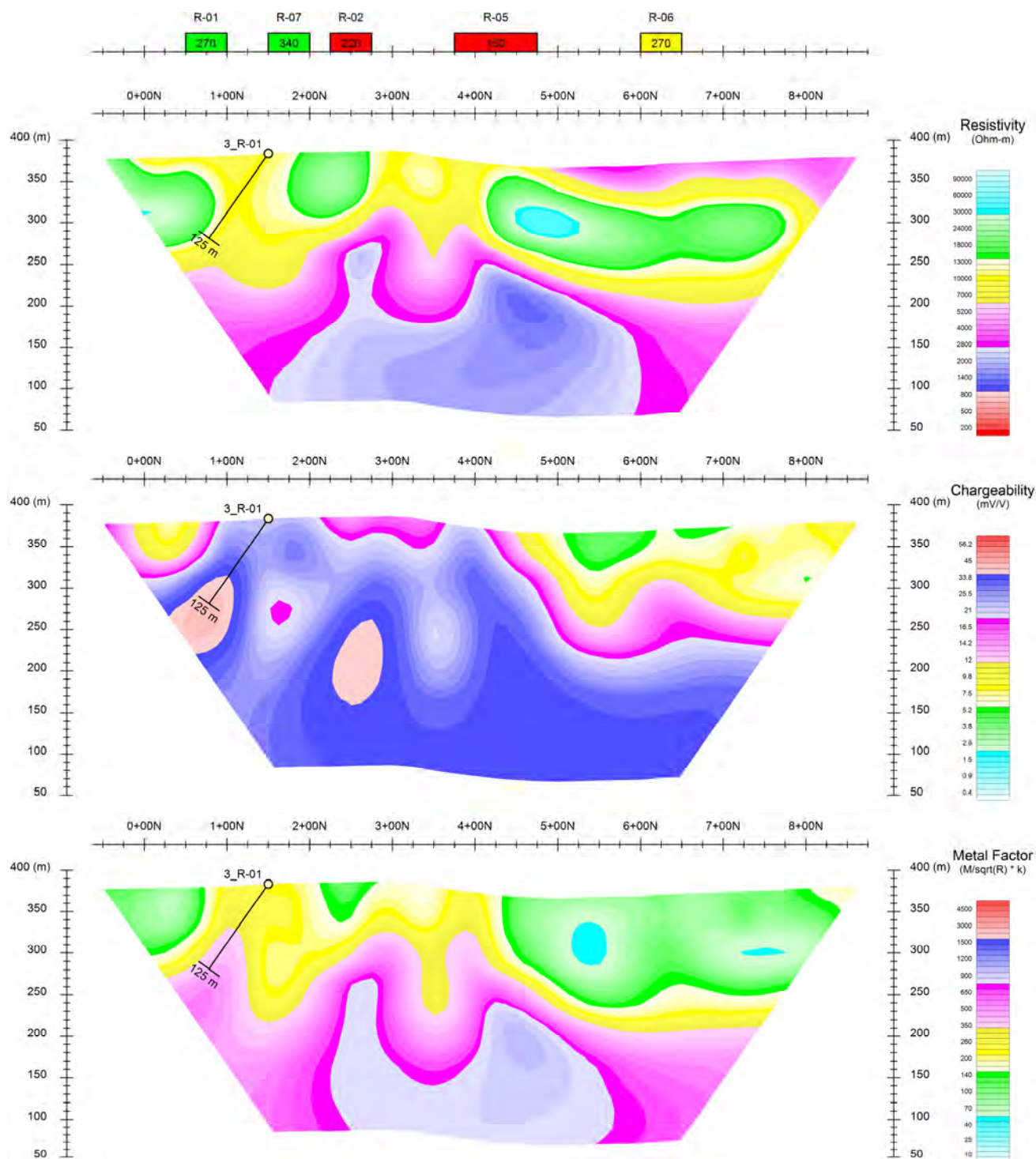


Figure 5. Recommended DDH on priority 3 target R-01 (L 10+00E)

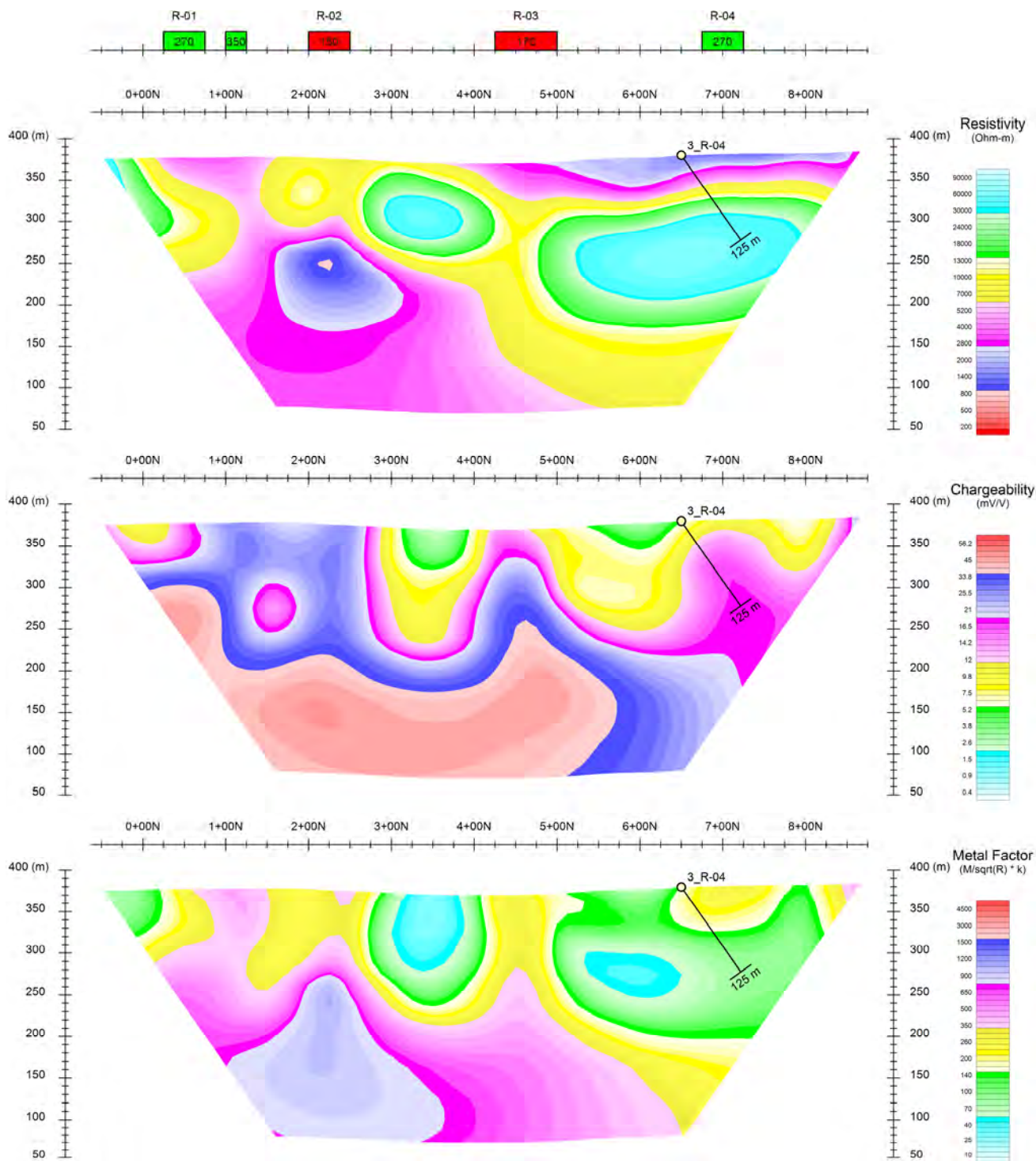


Figure 6. Recommended DDH on priority 3 target R-04 (L 4+00E)

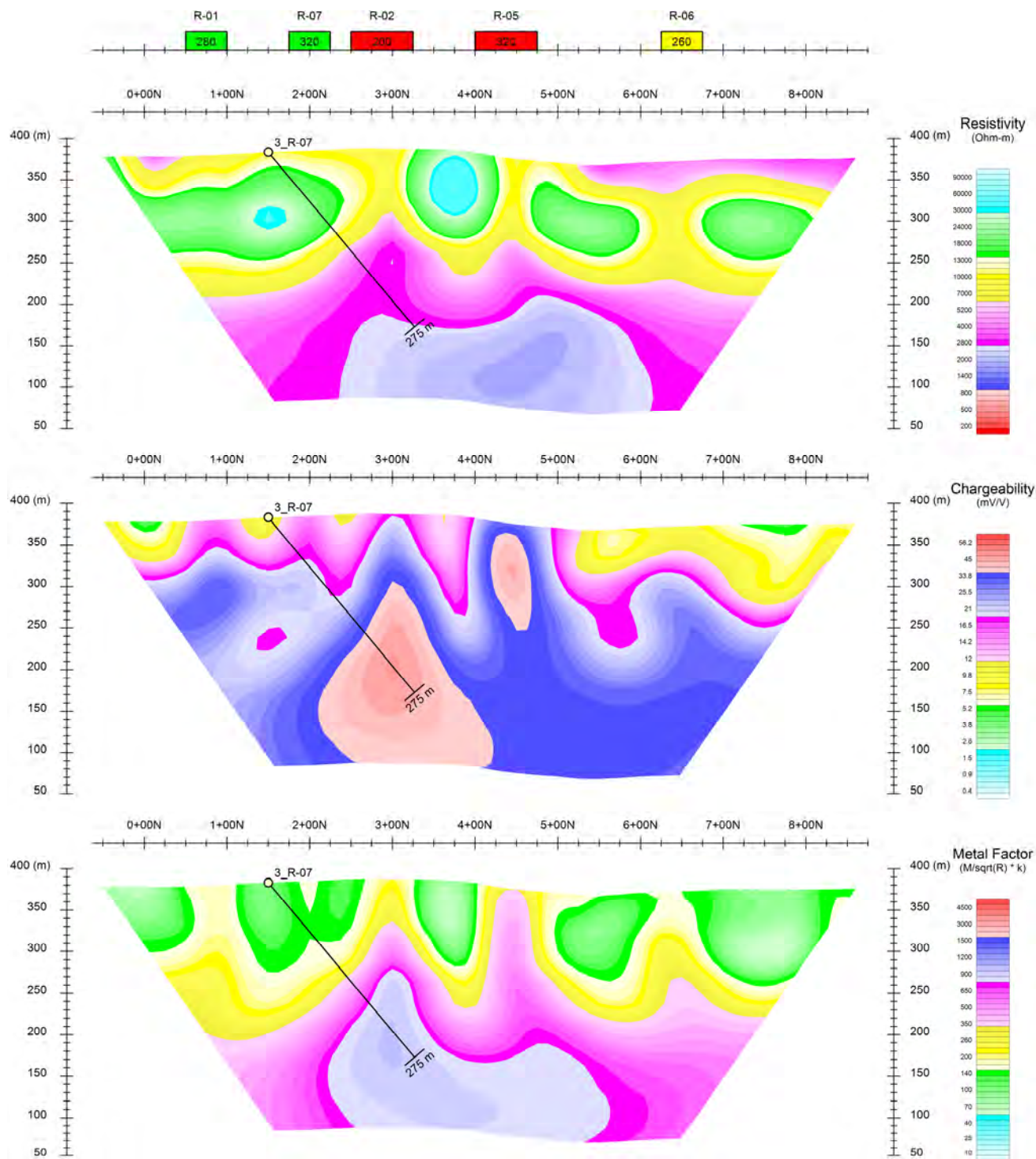


Figure 7. Recommended DDH on priority 3 target R-07 (L 14+00E)



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

Respectfully submitted,
Abitibi Geophysics Inc.

Josh Lymburner, G.I.T.



Pierre Bérubé, Eng.

JL/sl



2. THE MANDATE

- PROJECT ID** **Ralleau**
(Our reference: **17N048**)

- GENERAL LOCATION** Lebel-sur-Quévillon Area, Québec, Canada

- CUSTOMER** **DeepRock Minerals Inc.**
1000-409 Granville St.
Vancouver, BC V6C 1T2
Telephone: (604) 602-0001

- REPRESENTATIVE** John Langton
Geophysical Consultant (MRB & Associates)
john@mrweb.com

- SURVEY TYPE** **OreVision® Survey**

- GEOPHYSICAL OBJECTIVE** To define and prioritize targets for further exploration



Figure 8. General location of the Ralleau Project



3. RALLEAU PROJECT

- LOCATION* Ralleau Township; Lebel-sur-Quévillon, Québec, Canada
Centred on 49°07'52.9" N and 76°23'50.5" W,
NAD83 / UTM zone 18N: 398 063 mE, 5 443 000 mN
NTS sheet: 32F/01

- NEAREST SETTLEMENT* **Lebel-sur-Quévillon: 43.5 km southwest**

- ACCESS* The property is located 43.5 km northeast of the city of Lebel-sur-Quévillon. The survey area was accessed daily on logging roads by truck. Access to the grid is by driving 13 km east on Chemin du Moulin, followed by a left turn at the split going north for 22.5 km, followed by a right turn and continuing for 17.5 km.

- GEOMORPHOLOGY* The property is located within the Abitibi Greenstone Belt in Québec. The landscape is typical of the region and is dominated by mixed boreal forests. There are several lake areas present throughout the grid; ~5% lake coverage.

- CULTURAL FEATURES* No cultural features were observed on this grid.

- MINING LAND TENURE* The claims covered by this survey are 100% owned by Megastar Development Corp. and are illustrated in Figure 9.

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

No incidents were reported during this project.

- SURVEY LINES* The OreVision® survey covered 11 lines, 875 m in length (200 m line intervals).

- COORDINATE SYSTEM* Projection : Universal Transverse Mercator, zone 18N
Datum: NAD83

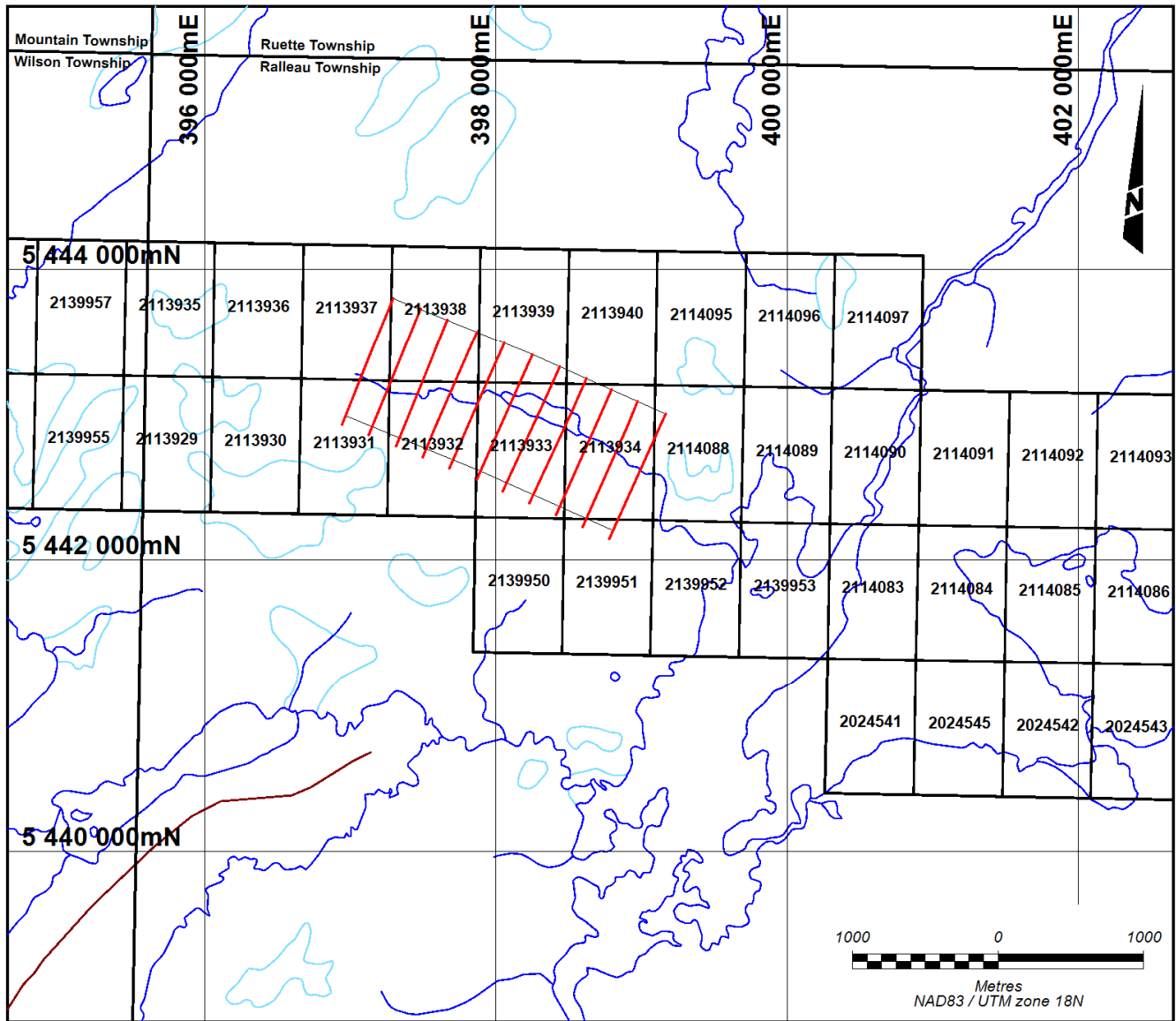


Figure 9. Index of claims and OreVision® Survey coverage over the Ralleau Project



4. OREVISION® SURVEY

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

- ❑ *PERSONNEL*

Saliou Mamadou Bah,	Crew chief & Rx operator
Guillaume Gauthier,	Field assistant
Guillaume-Olivier Poirier,	Field assistant
Hakim Saphar,	Field assistant
Brian William,	Field assistant
Carole Picard, Tech.,	QC, Plotting
Josh Lymburner, G.I.T.,	QC, Interpretation, Report
Jonathan Simoneau,	Logistics
Pierre Bérubé, Eng.,	Project supervision and final validation of product conformity

- ❑ *ACQUISITION* May 25th to May 27th, 2017

- ❑ *SURVEY COVERAGE* **10.3 km**

- ❑ *IP TRANSMITTER (TX)*

IRIS Instruments TIPIX, s/n 5, 2
Power supply: Honda 2000 W
Maximum output: up to 5.0 kW or **10 A** or 2400 V

Electrodes: stainless steel
Resolution: 1 mA on output current display
Waveform: bipolar square wave with 50% duty cycle
Pulse duration: 1 second

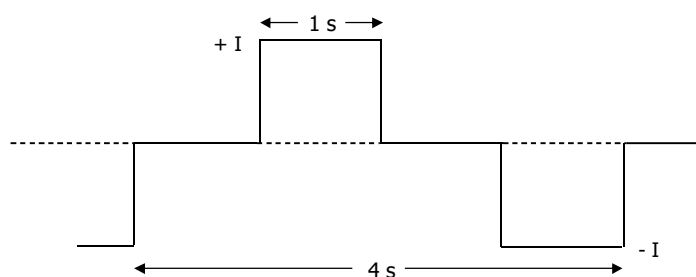


Figure 10. Transmitted signal across C₁ – C₂



□ *IP RECEIVER (Rx)*

IRIS Elrec-PRO with integrated switch pro, (10 input channels), s/n 190 & 104

IRIS Switch Pro 240, s/n 65, 71

Electrodes: stainless steel

V_p Primary voltage measurement:

◇ Input impedance: 100 MΩ

◇ Resolution: 1 μV

◇ Typical accuracy: **0.2%**

M_a Apparent chargeability measurement:

◇ Resolution: 0.01 mV/V

◇ Typical accuracy: **0.4%**

◇ Linear sampling mode, 20 time slices (M₁ to M₂₀)

◇ All gates are normalized with respect to a standard decay curve for QC in the field.

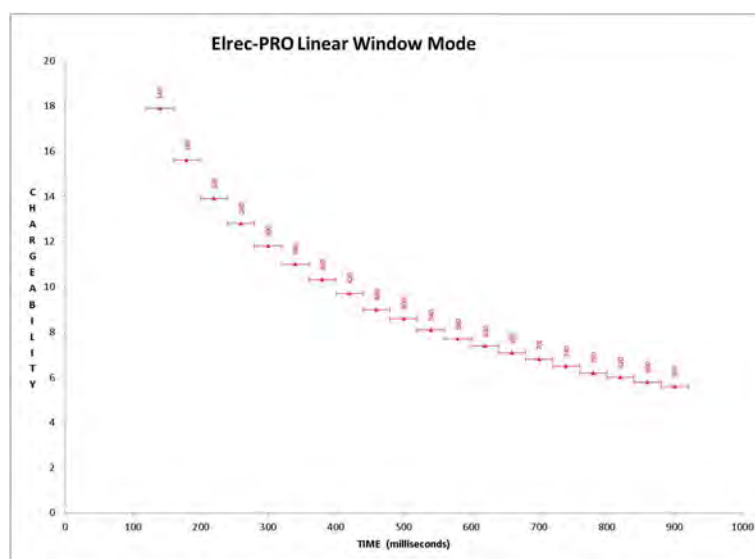


Figure 11. Linear windows (1 s pulse)

□ *APPARENT RESISTIVITY CALCULATION*

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

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



☐ **QUALITY CONTROL**
(RECORDS AVAILABLE UPON
REQUEST)

Before the survey:

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

During data acquisition:

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

At the Base of Operations:

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

☐ **QUALITY STATISTICS**

Table 4. Quality Statistics – OreVision®

Ralleau Project OreVision® Survey	
Average contact resistance across R_x dipole (P_1 - P_2)	4.25 k Ω
Average current applied to T_x dipole (C_1 - C_2)	744 mA
Average V_p measured across R_x dipole (P_1 - P_2)	946 mV
Observed windows found to fit a pure electrode polarization relaxation curve	98.34 %
Average deviation of the validated, normalized windows with respect to the mean chargeabilities.	0.14 mV/V



5. OREVISION® DATA PROCESSING AND DELIVERABLES

❑ QUALITY CONTROL

The first step in processing OreVision® data is quality control. To ensure consistent and efficient quality control Abitibi Geophysics has developed *InteractiveAnomaly*®. This Geosoft GX analyses the normalized decay curve for each reading within the data set. Only readings that successfully pass quality control will be used to calculate the final chargeability. Following this automated procedure, the apparent resistivity and apparent chargeability pseudosections are reviewed and further, manual QC is conducted.

❑ VOXI INVERSION

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

❑ LIMITATIONS OF THE 3D INVERSION TECHNIQUE

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

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

❑ DIGITAL DATA

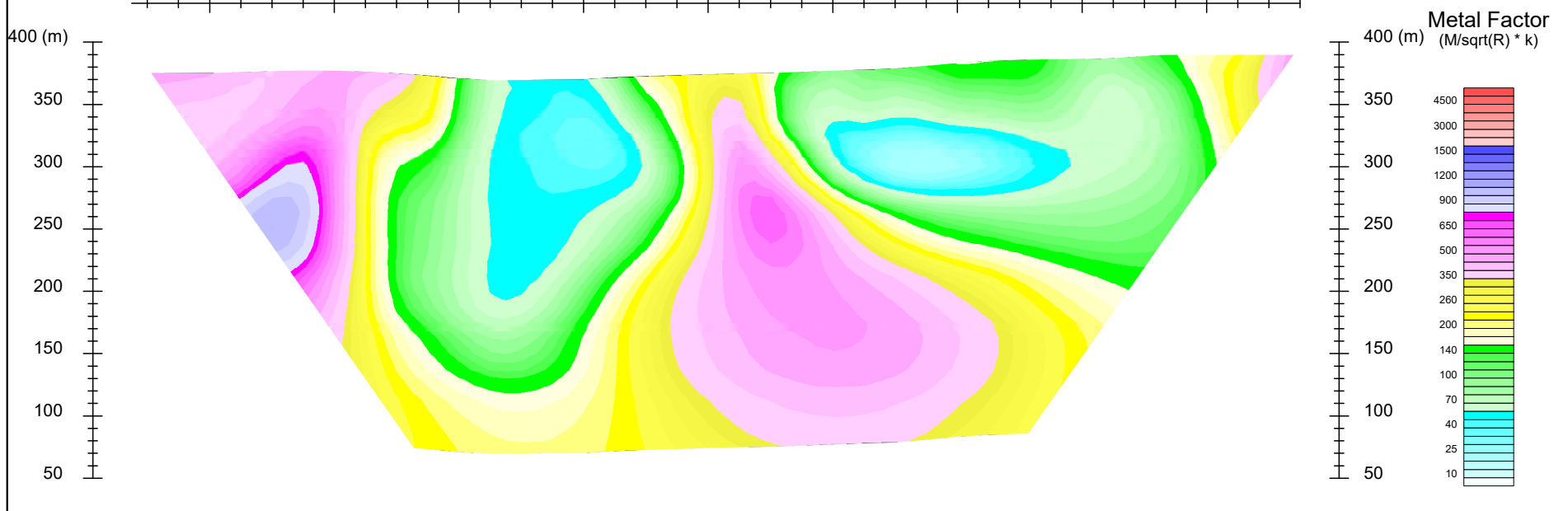
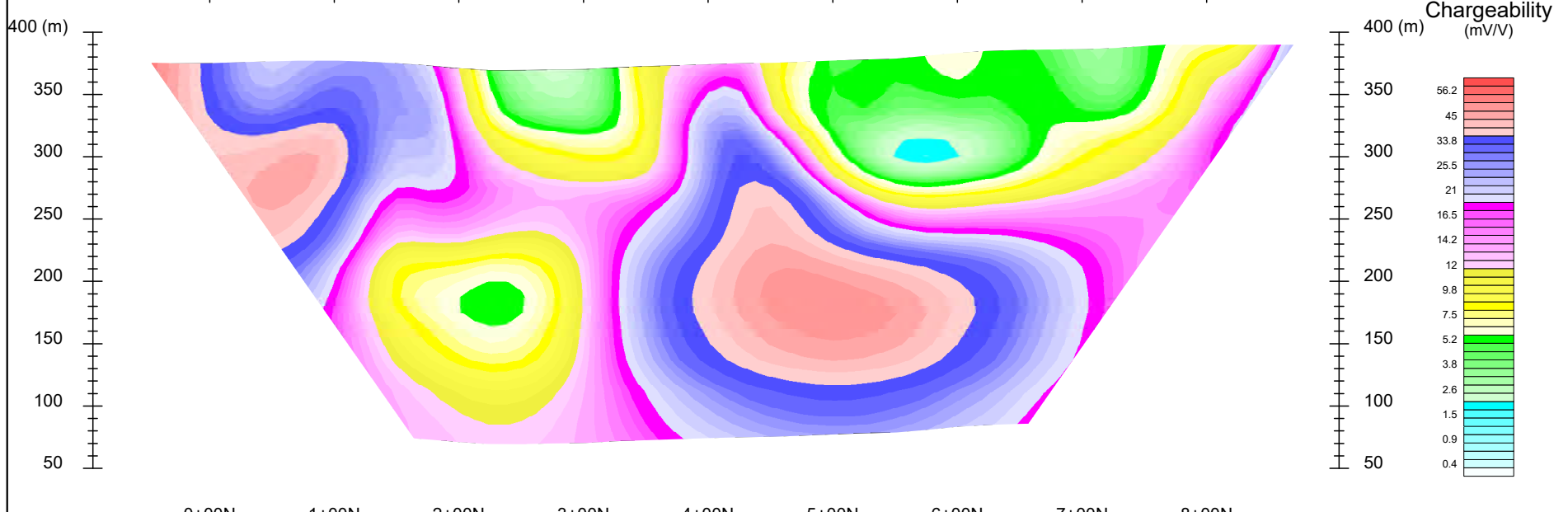
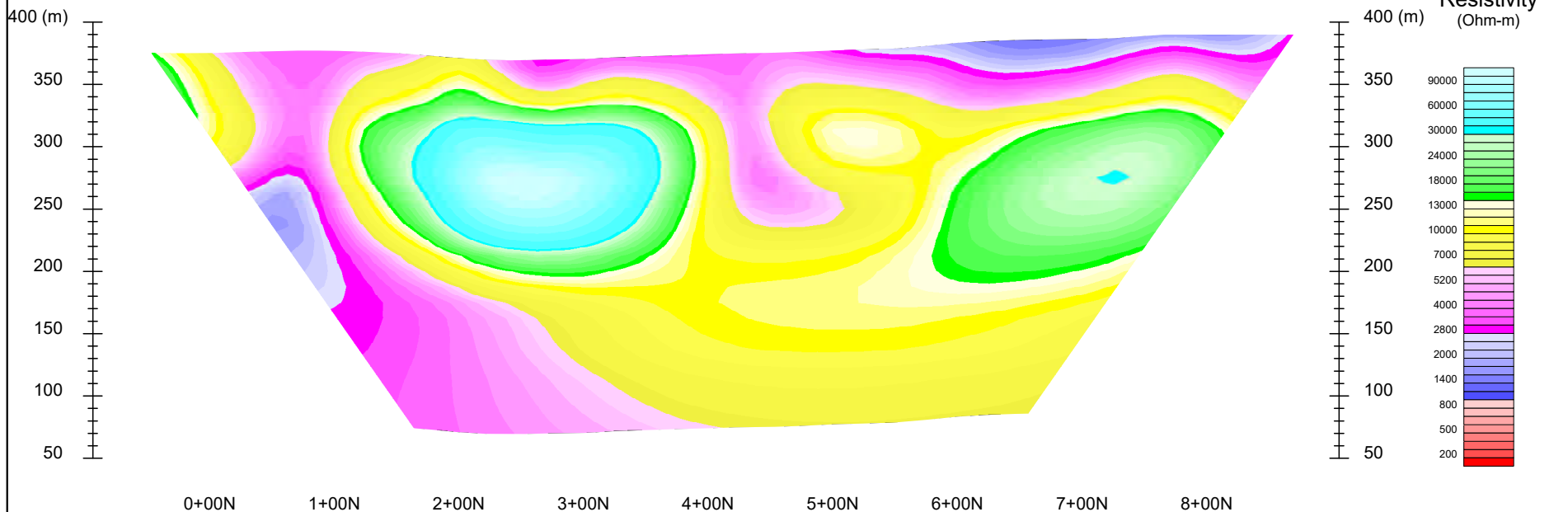
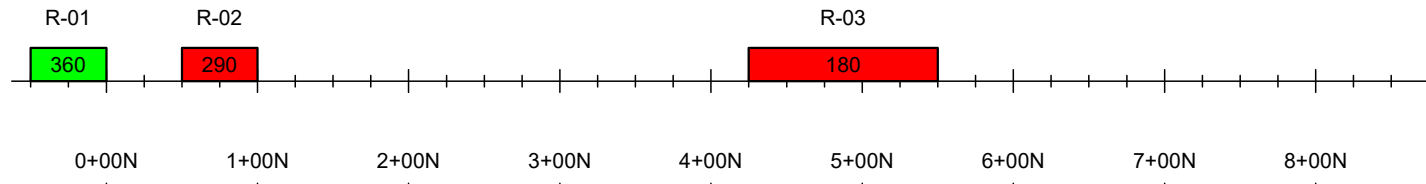
The maps, pseudosections and true depth sections described below are delivered in the Oasis Montaj map file format on DVD-Rom.

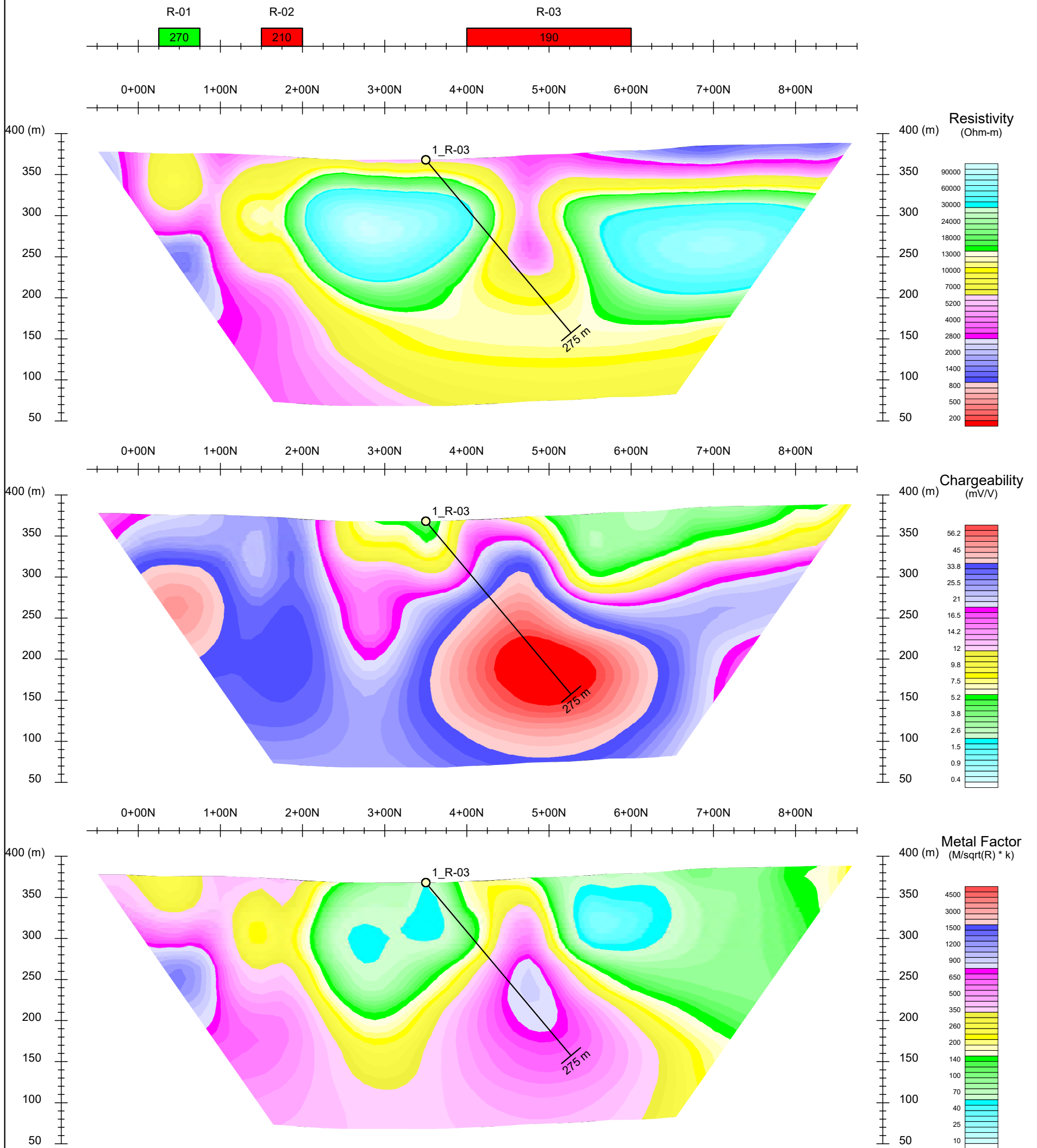
A copy of all survey acquisition data (ASCII text format) and processed data (Geosoft Montaj databases) are also delivered on DVD-Rom.

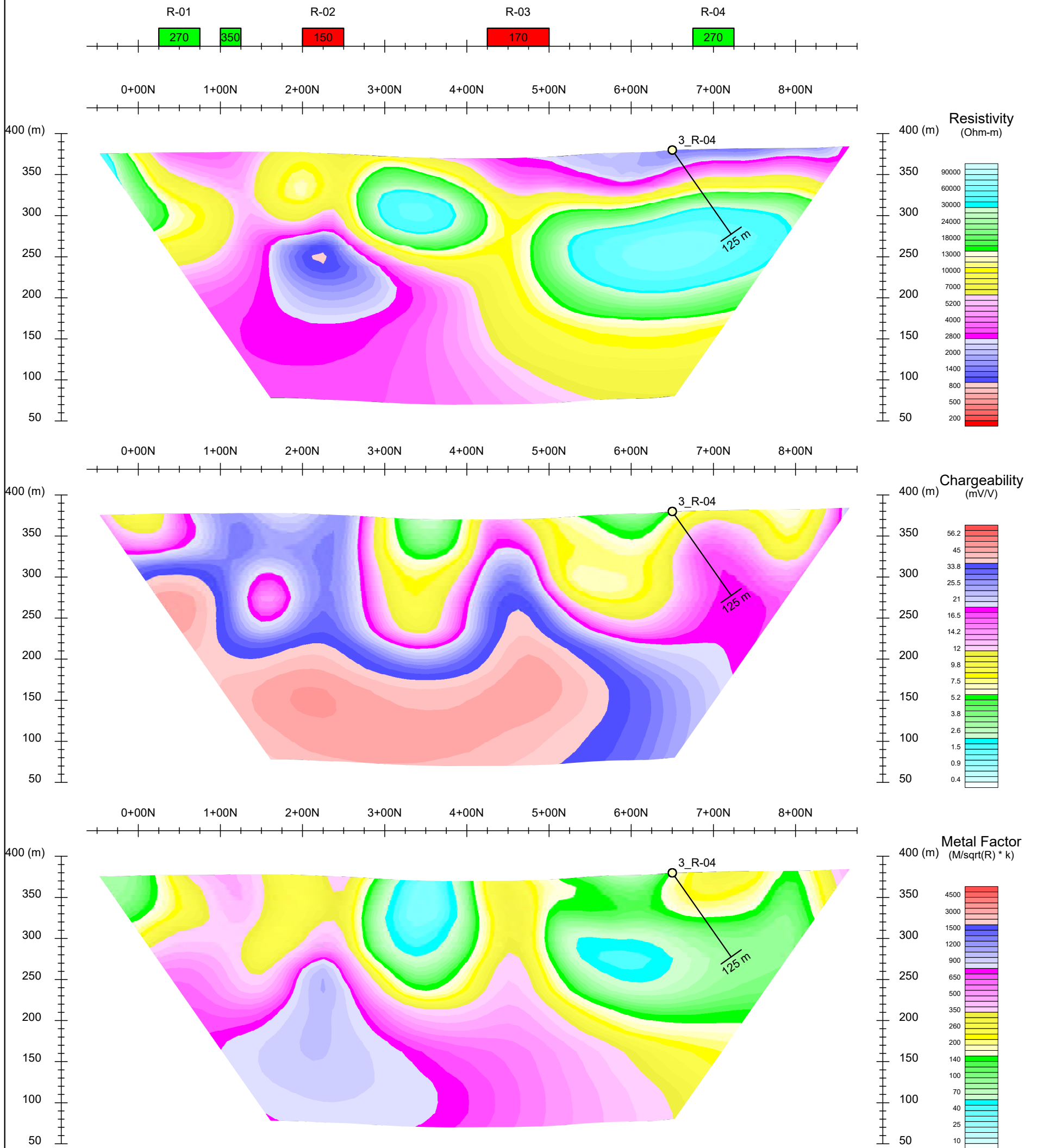


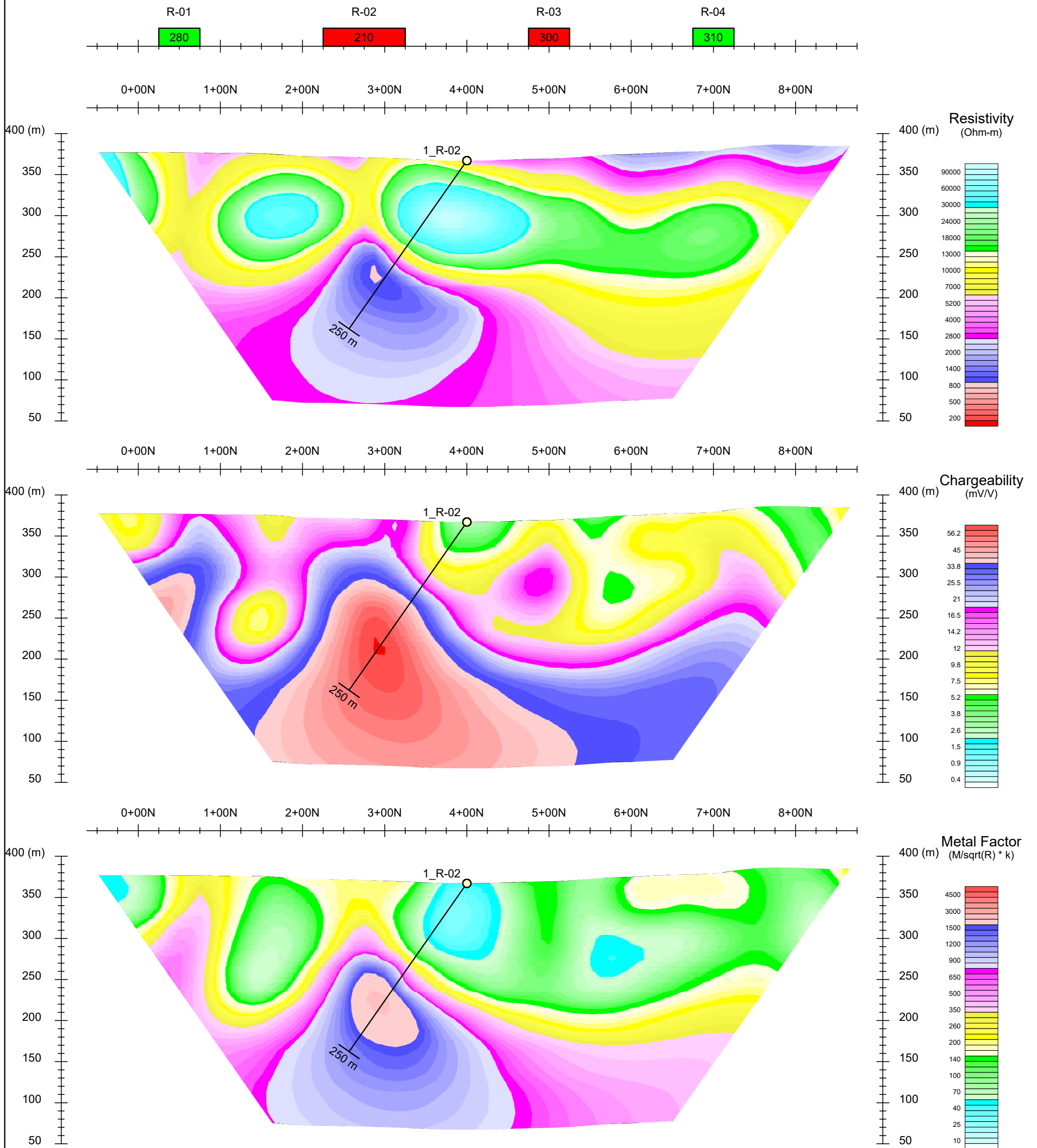
OREVISION[®] SURVEY

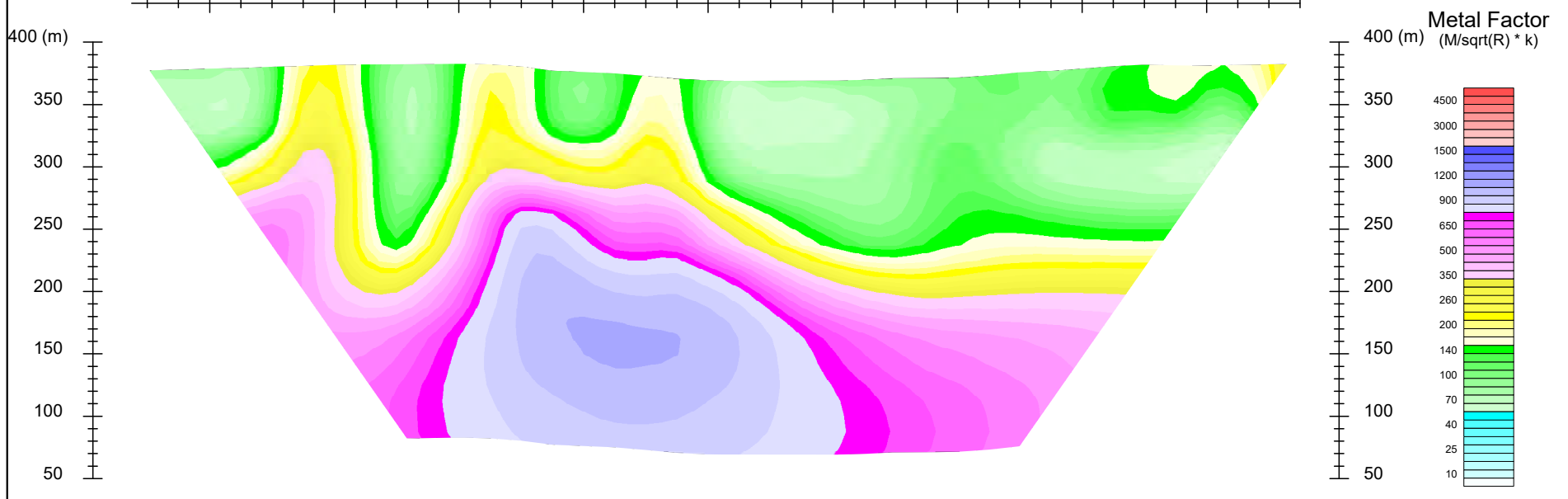
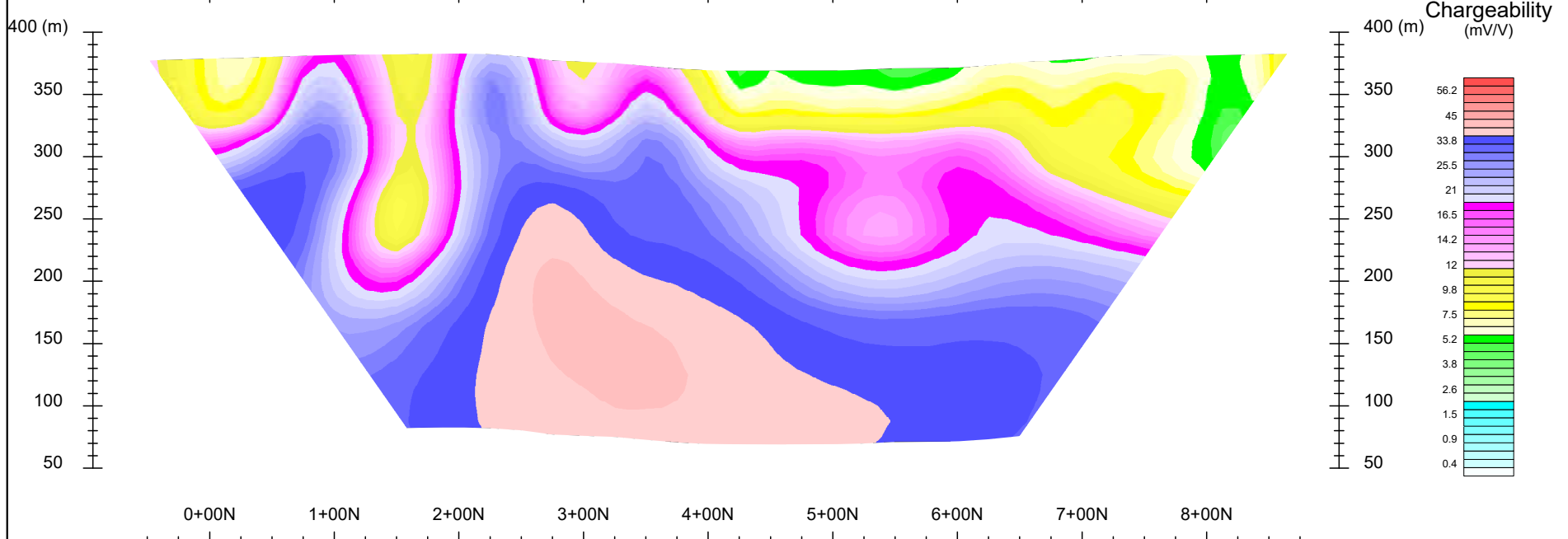
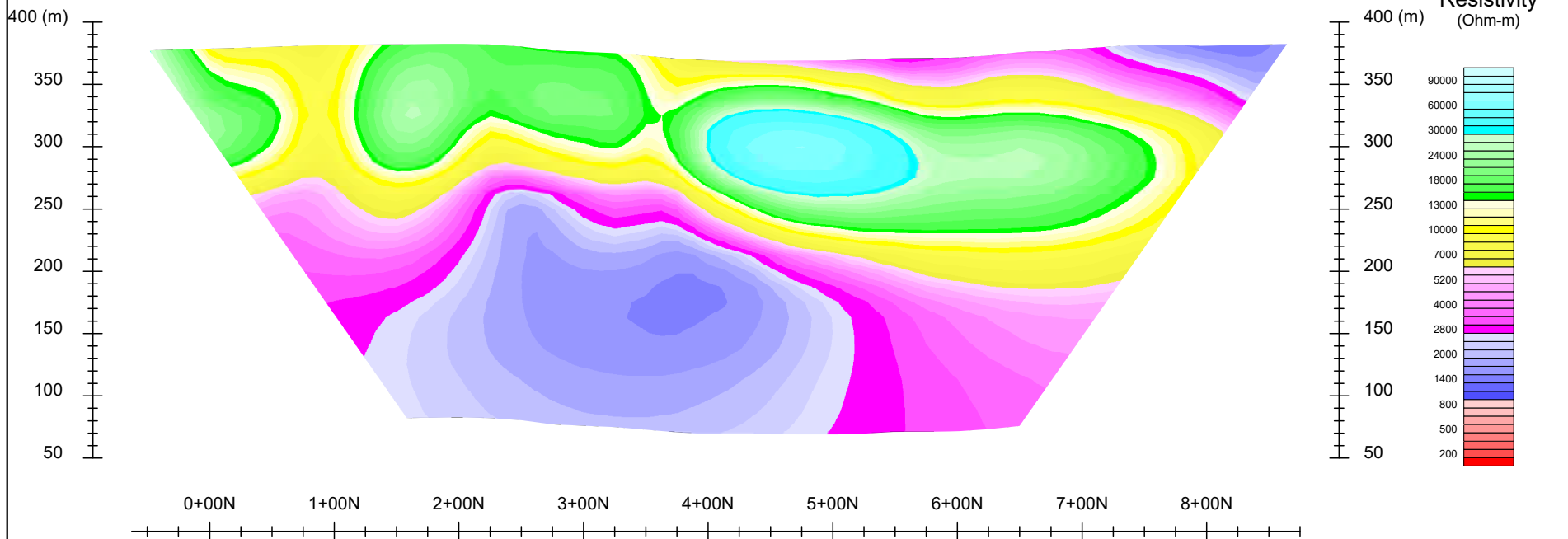
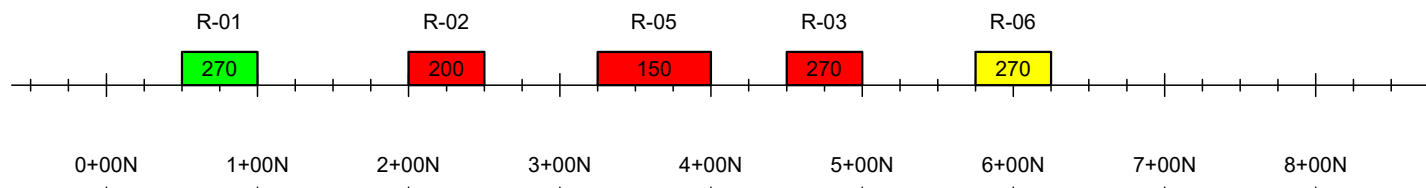
**VERTICAL SECTIONS FROM 3D INVERSIONS
WITH PROPOSED DDH**

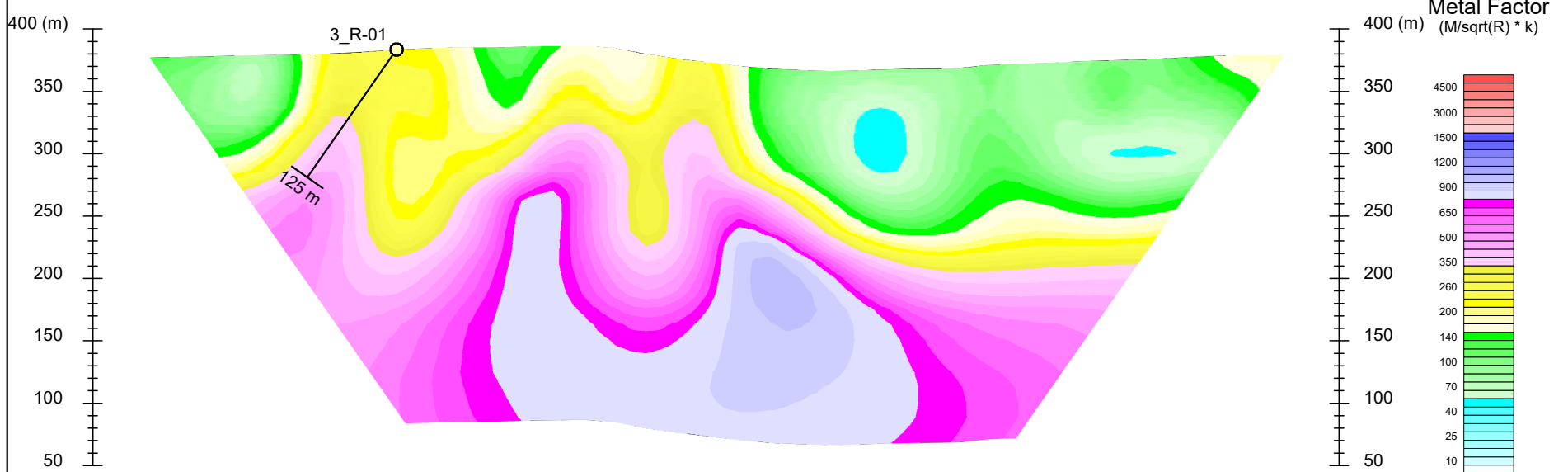
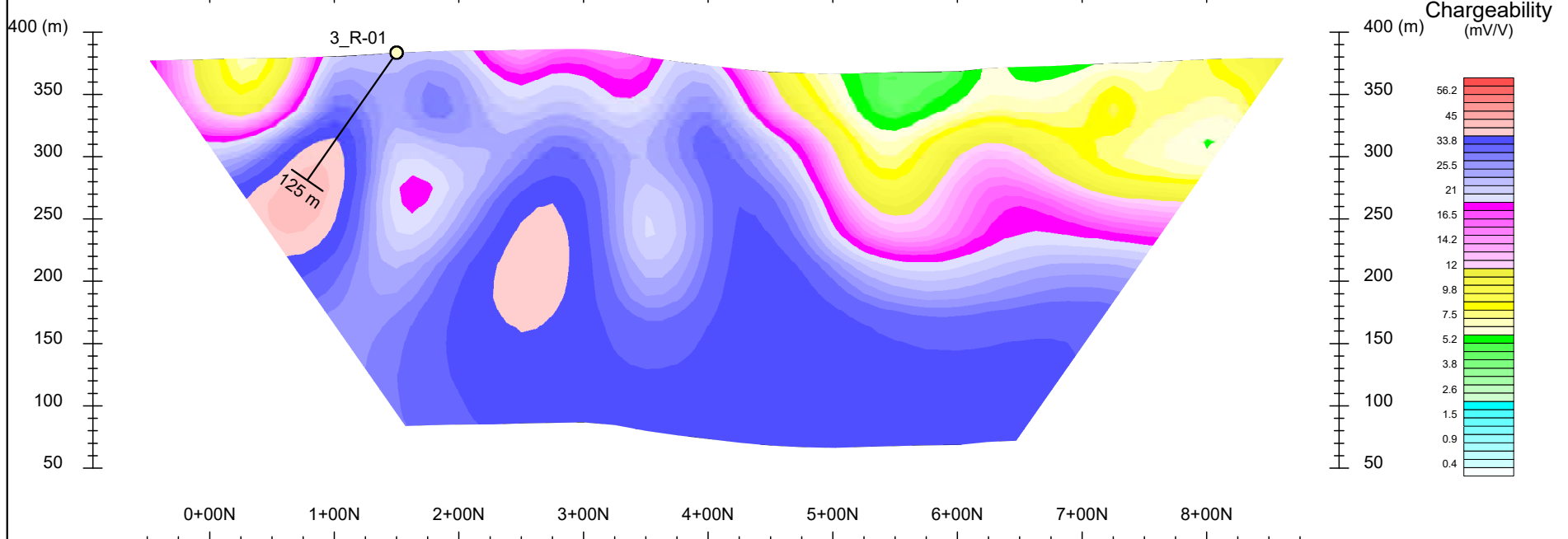
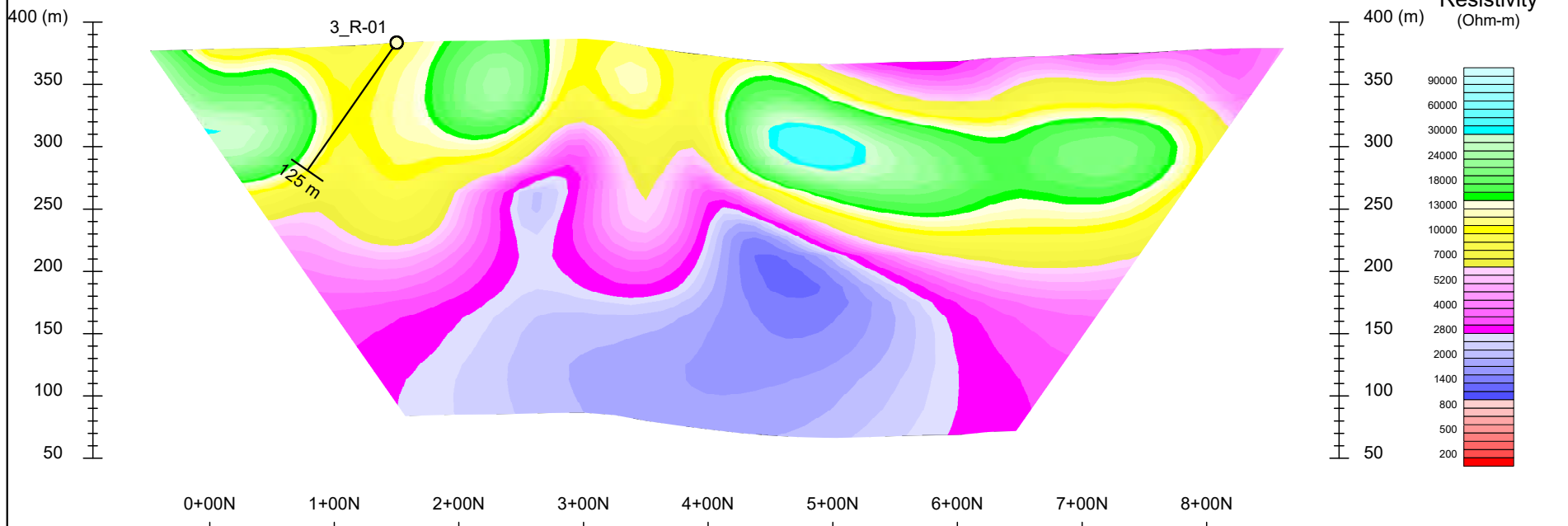
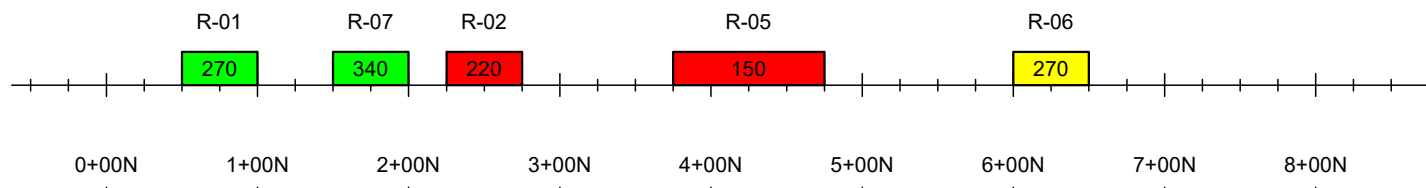


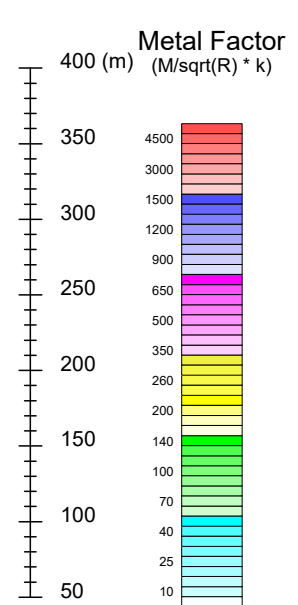
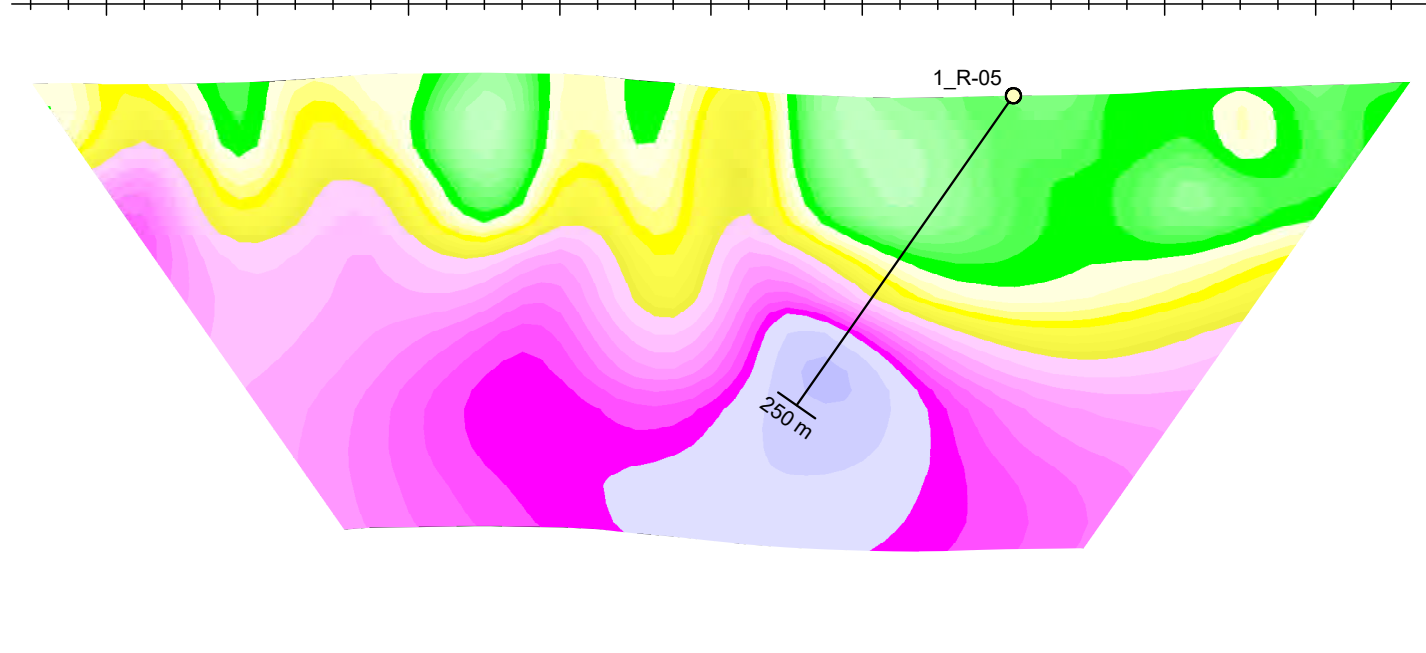
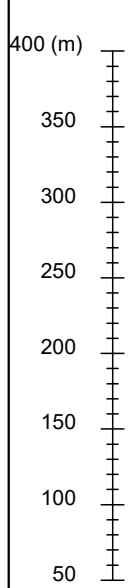
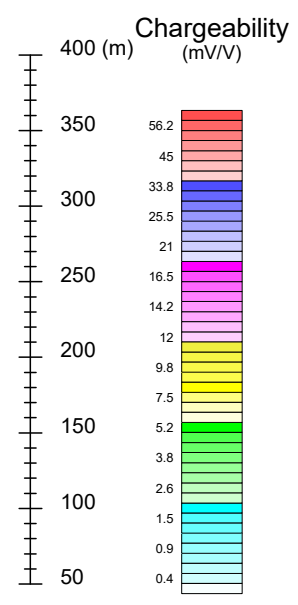
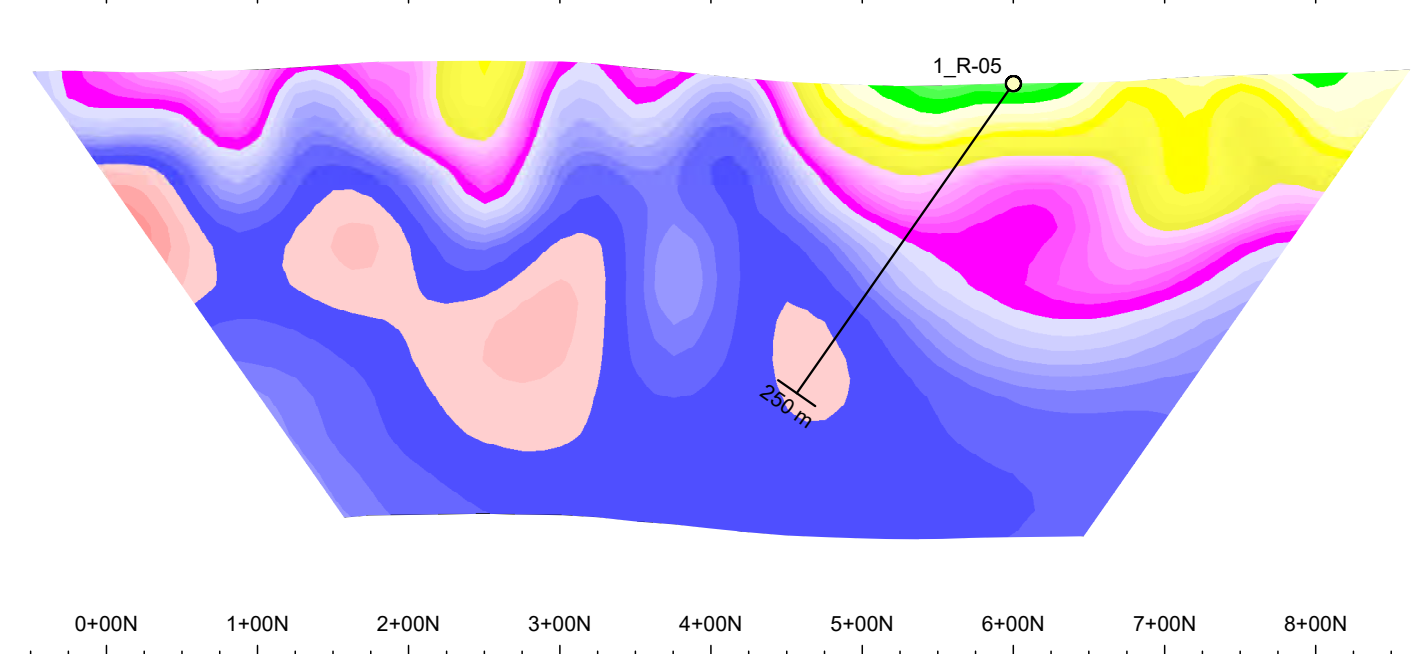
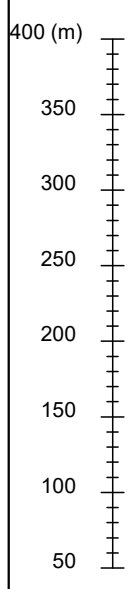
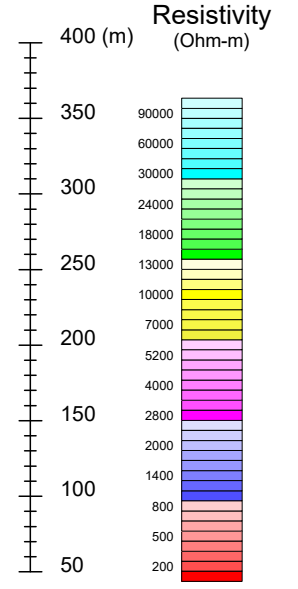
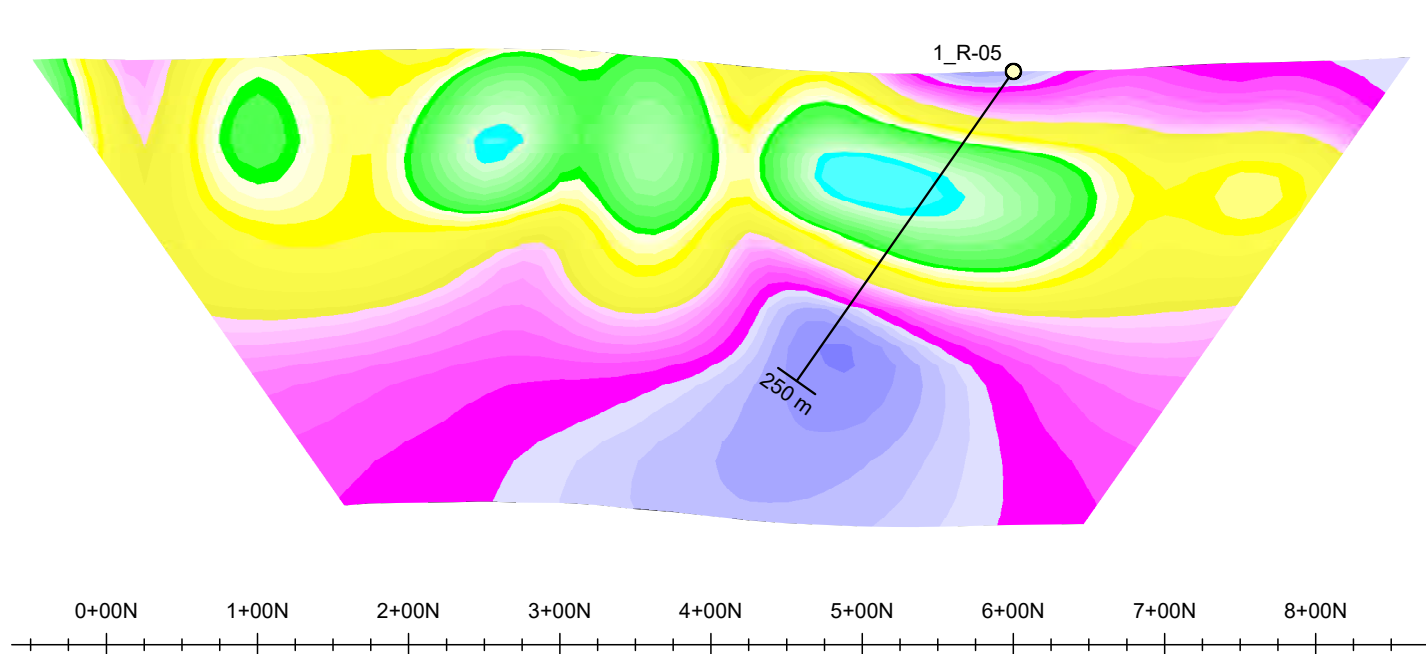
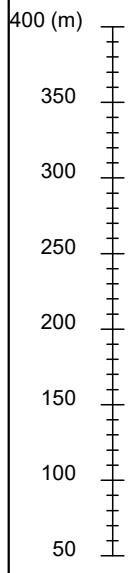
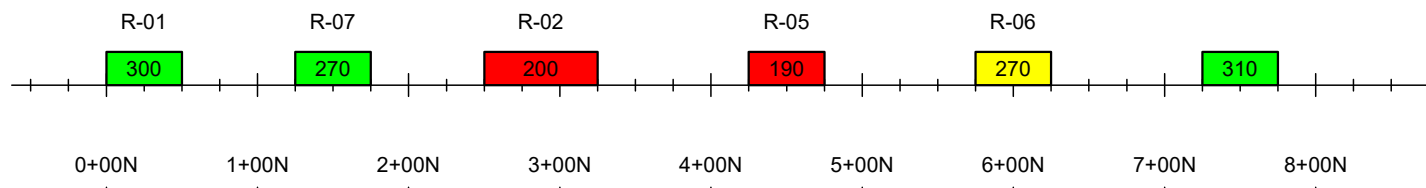


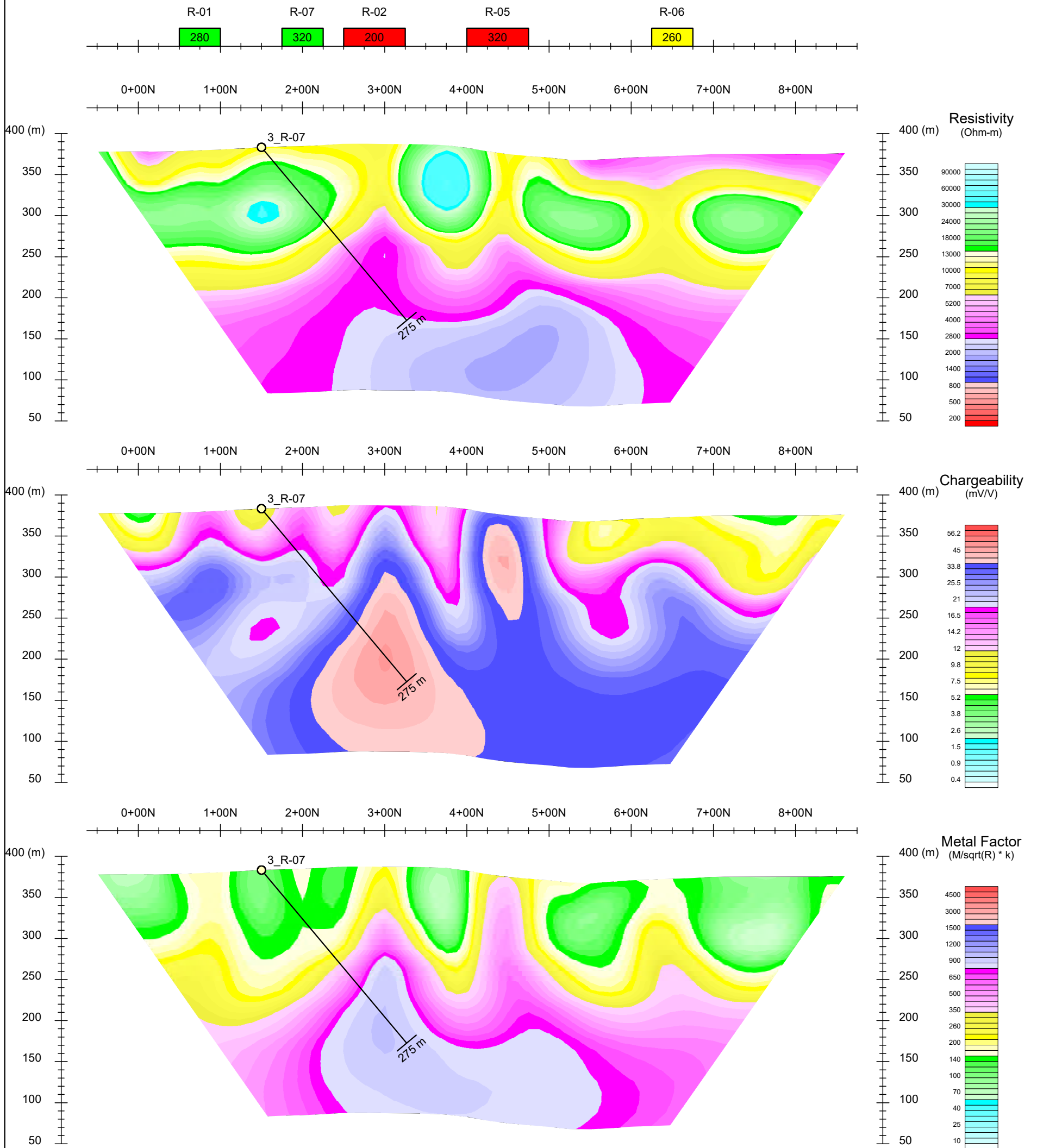


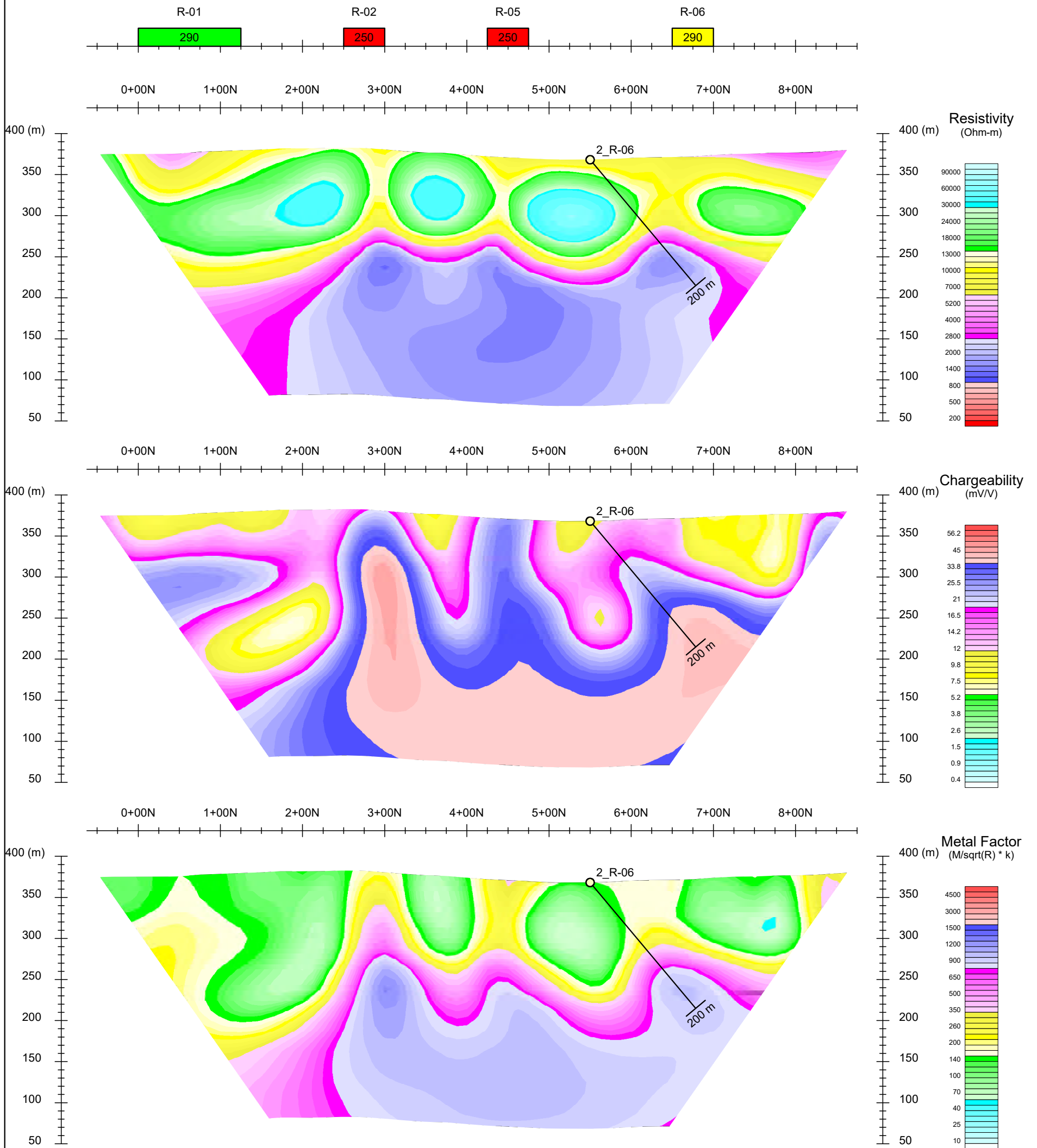


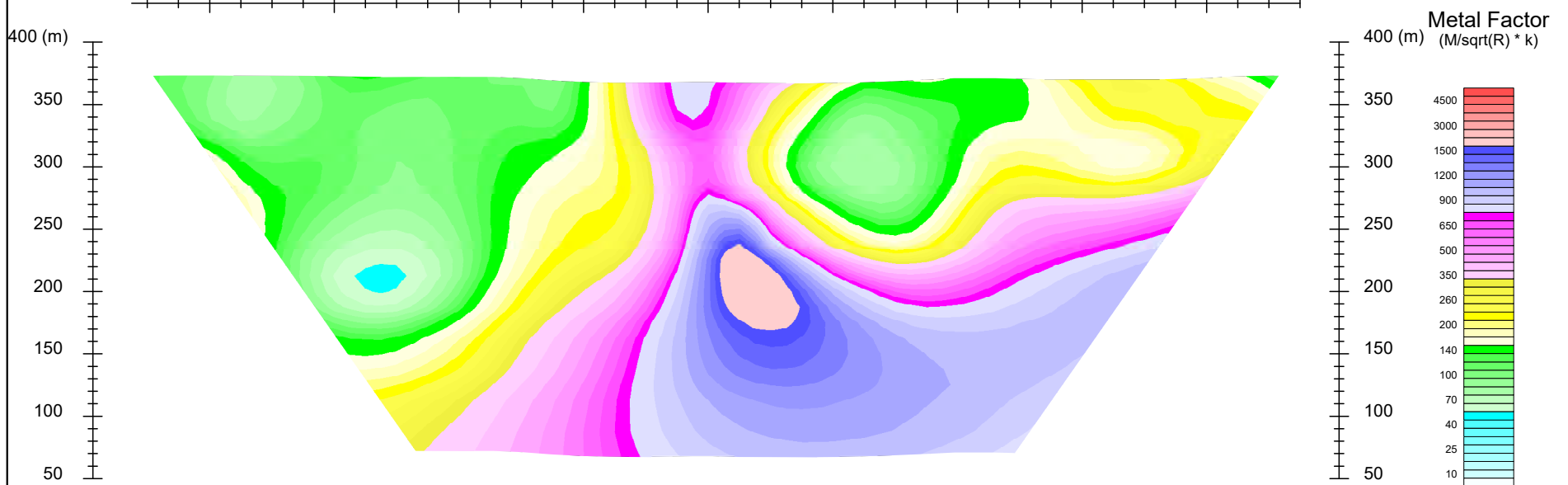
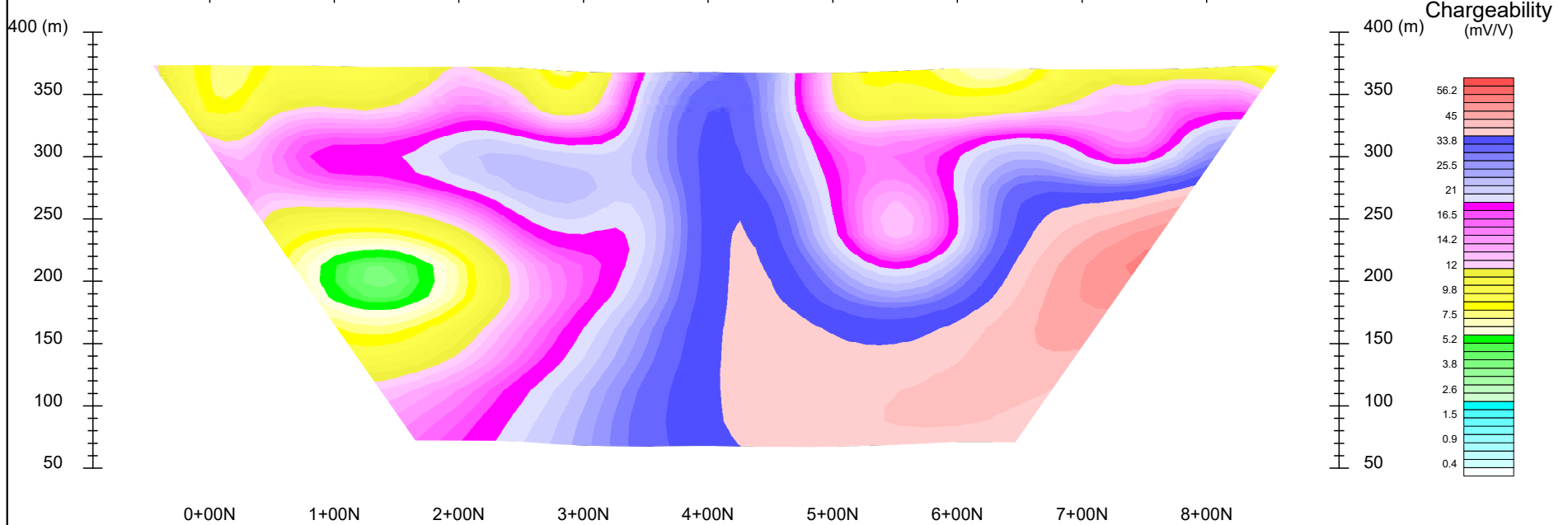
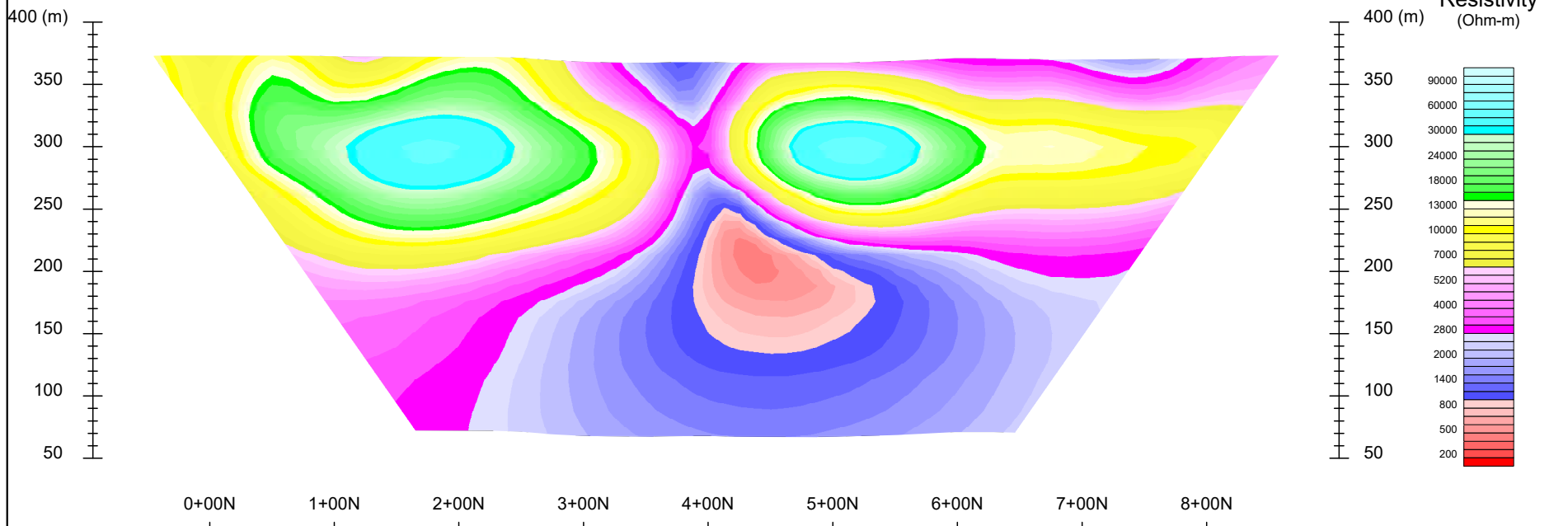
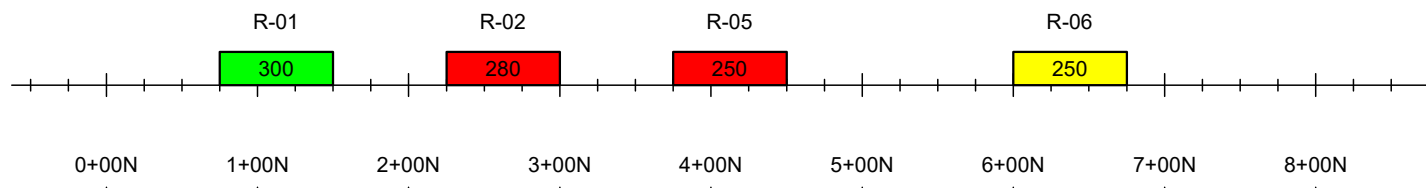


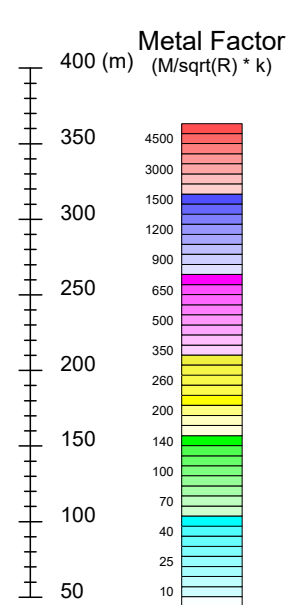
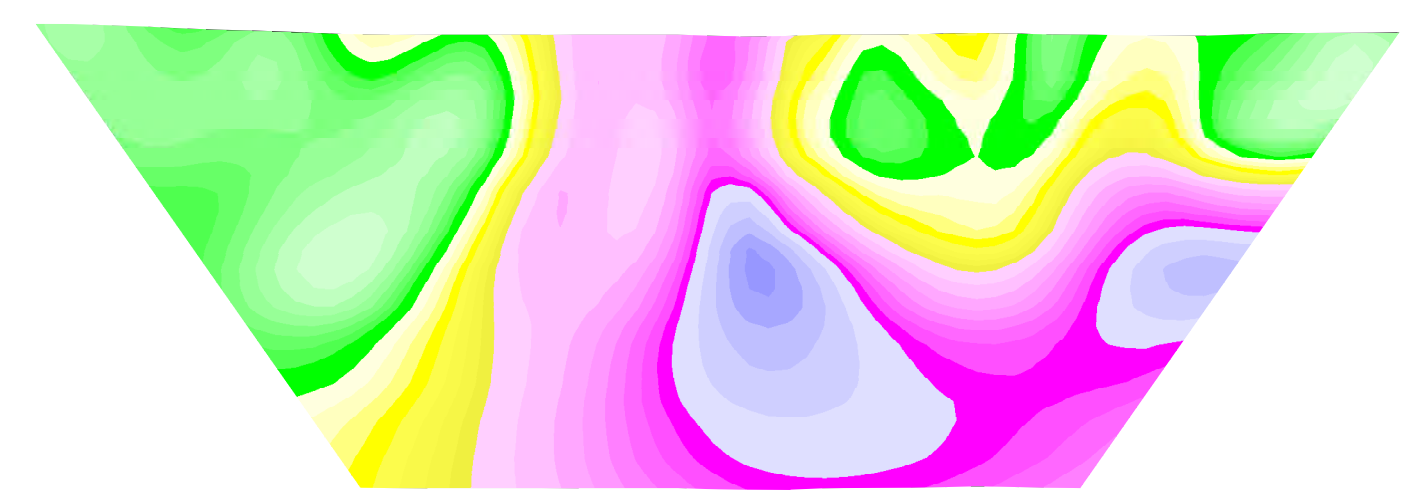
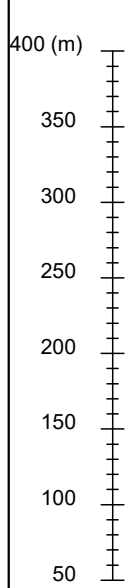
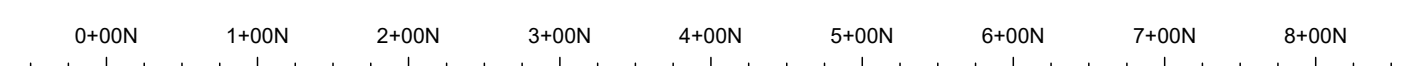
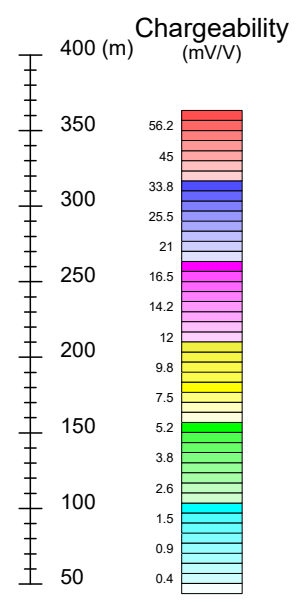
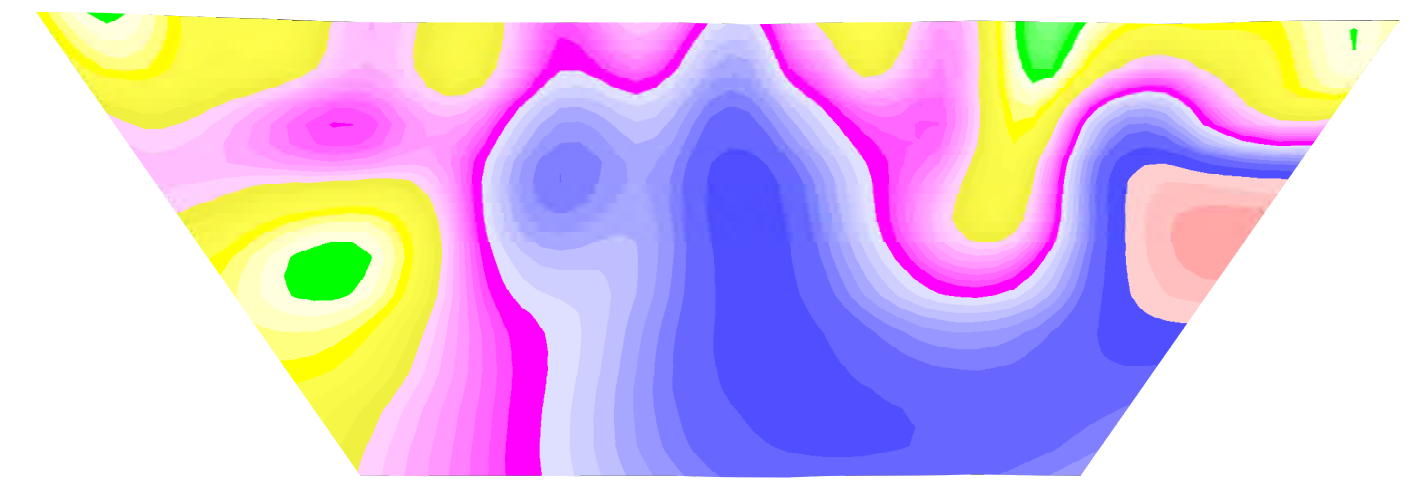
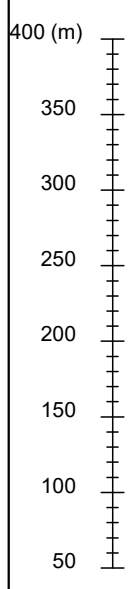
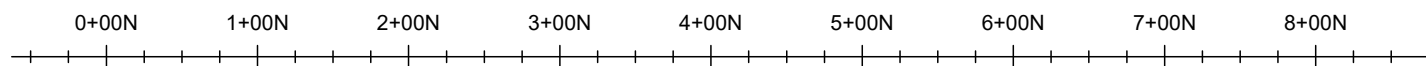
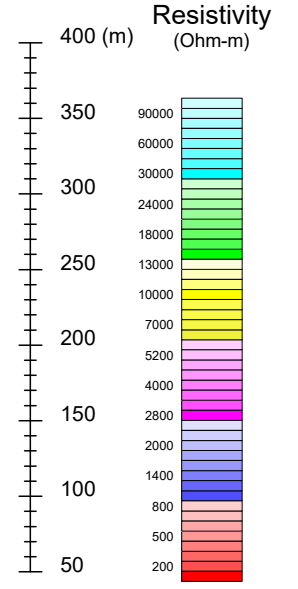
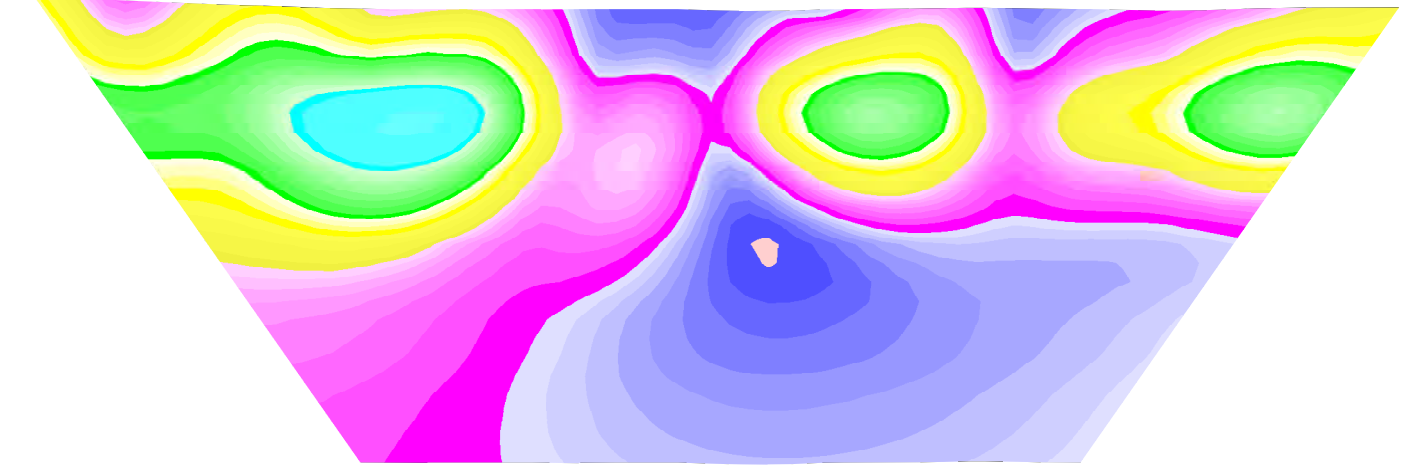
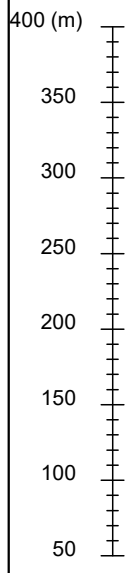
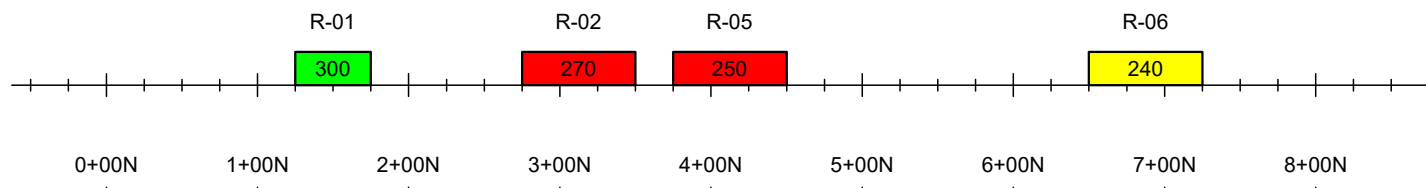












MAP 1

Geological Compilation Map: Ralleau Property

395000

400000

405000

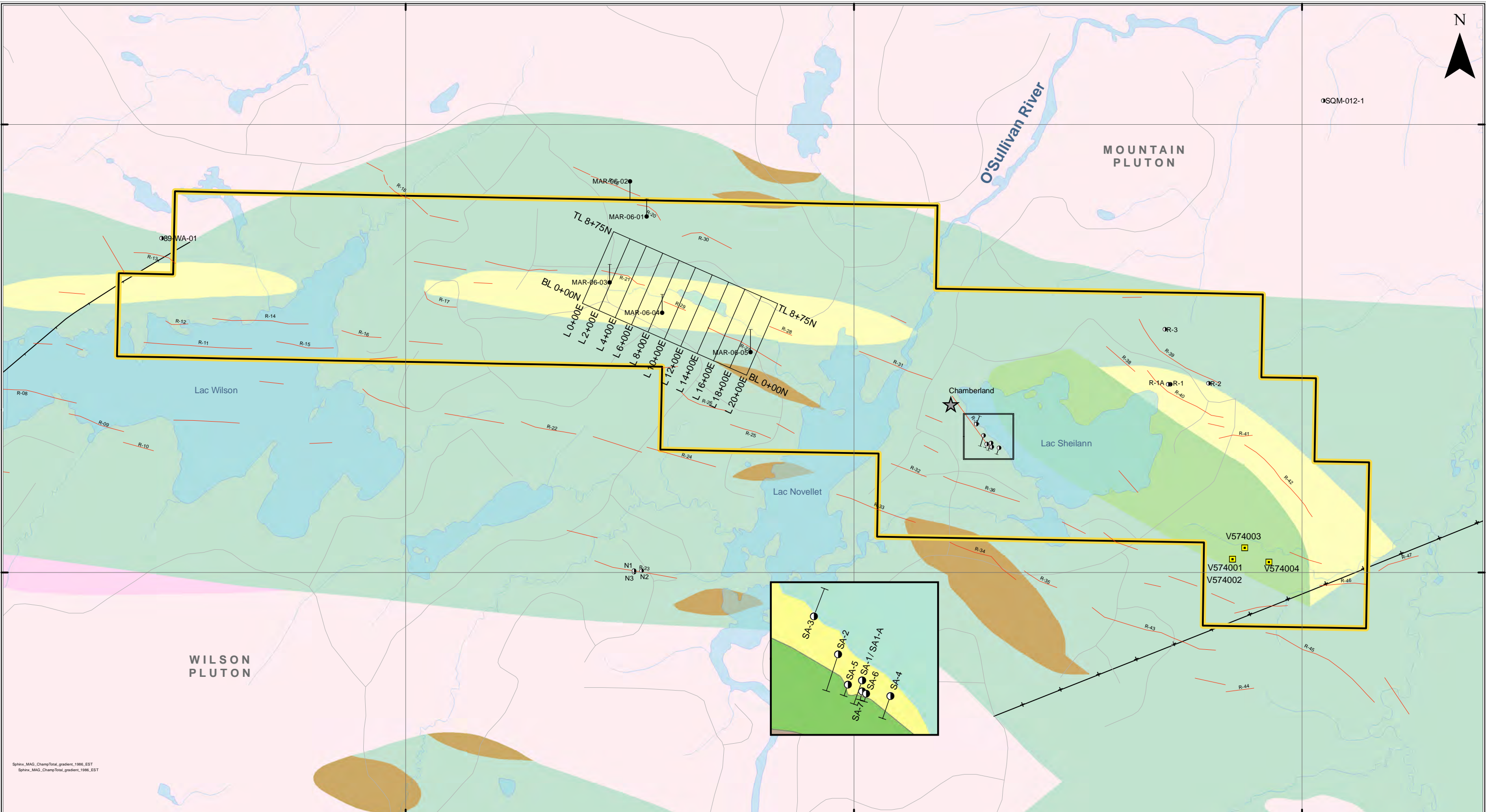


5445000

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Lithology

	I1C - Granodiorite
	I1D - Tonalite
	I2I - Quartz-diorite

Urban Formation

	I2J, I3A - Diorite, Gabbro
	V1B, VIC, V1D - Rhyolite, Rhyodacite, Dacite (Novellet Member)
	V2J - Andesite
	V2J-V3B, V3B - Andesitic Basalt, Basalt

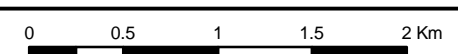
	Fault
	Outcrops Samples 2017
	Drill hole (Historic)
	Drill hole 2006 (Megastar)
	Catalogued mineral Occurrence

	Property boundary
	Access Road
	Hydrography

	IP Grid
	Geophysical (EM) anomaly axis

MRB & associates
Geological Consultants

MAP 1: Simplified Geological Compilation



1:40,000

NAD 83, UTM Zone 18

July 2017