

**ASSESSMENT REPORT ON THE  
SPY PROPERTY 2014 EXPLORATION PROGRAM  
WHITEHORSE MINING DISTRICT**

Located in the Faro area, Yukon Territory  
NTS Map Sheet 115G/02  
Latitude 61° 08' N; Longitude 138° 05' W

Prepared for:  
Ashburton Ventures Inc.  
1220-789 West Pender Street  
Vancouver, B.C.  
V6C 1H2

Prepared by:  
Phil Jackson, P. Geoph.  
**Aurora Geosciences Ltd**  
34A Laberge Road  
Whitehorse, Yukon, Canada  
Y1A 5Y9

Work performed on Claims

V 1 (YE69339) to V 28 (YE69366)  
VM 1 (YC66812) to VM 32 (YC66843)

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## 1 SUMMARY

The Spy property is located in the Kluane mountains approximately 13 km south of Destruction Bay, Yukon Territory on NTS map sheet 115 G/02. The property consists of 60 contiguous claims contained as claim grouping HW07341 in the Whitehorse Mining District. The property has a detailed history dating back to 1972.

The Spy Project lies within the Wrangell Terrane in the northeastern portion of the accreted Insular Super Terrane, which consists of the Alexander and Wrangell Terranes. Regionally, the project is situated within the 600 km long Kluane Ultramafic Belt, which is characterized by Triassic aged mafic (gabbro to diorite) to ultramafic (commonly peridotite) sills that are referred to as the Kluane mafic-ultramafic suite.

The property contains the Congdon (Spy) 115G 003 Minfile occurrence as documented by the Yukon Geological Survey. Showings on the property include the Spy, Bugs, Wylie, Taz, Sweet 16, 21 Again and Claimpost.

This assessment report documents a geophysical review, including the compilation airborne geophysics and a petrophysical study on both mineralized samples and surrounding lithological units. A total of 58 samples were analysed for their petrophysical properties. The samples were selected to represent zones of mineralization as well as country rock units found on the property. The samples are petrologically described and analysed for their physical properties. The properties that were considered in this study are porosity, specific gravity, magnetic susceptibility, DC resistivity and chargeability, Remanent mag and pore fluid conductivity recorded as water conductivity.

The petrophysical analysis can be used to guide future exploration, with magnetic susceptibility, resistivity and chargeability providing an identifiable geophysical signature to the mineralization encountered on the property. The resistivity and chargeability results clearly identify all samples with noted massive sulfides regardless of whether they are within highly magnetic ultramafic assemblages or associated with the more moderate magnetic signature of the gabbroic units. A single peridotite sample with serpentine coated fractures is the only sample not associated with any mineralization to exhibit these same characteristics. While these are encouraging results they also indicate that false positive anomalies from altered ultramafics will likely be common in the surrounding area

The reprocessed 1996 airborne magnetic survey consistently outlines the Kluane ultramafic unit as continuous over the property with a NW/SE strike. The Spy sill is readily observed as a linear magnetic high which runs parallel to the claim boundary and can be clearly followed from the southeast corner of the property along the northeastern claim boundary for approximately four kilometers where it bends north at approximately 619500 UTM east.

A subtle discontinuous trend of moderate conductivity traced parallel to the spy sill is also observed. This is highlighted as a high priority linear magnetic trend and associated discontinuous conductivity trend. Lower

priority targets with isolated magnetic highs and conductive boundaries are also highlighted, where ground truthing is recommended.

Due to the discontinuity of the spy sill and intermittent zones of mineralization, continued prospecting and hand trenching in areas of low cover is recommended to expose and sample the footwall contact zone in areas not previously exposed. Additionally ground geophysical surveys are recommended to delineate drill targets. A magnetic survey over an initial area of 2.5 kilometers by 1.0 kilometer with a 100 meter line spacing is recommended to be positioned centrally over the showings within the sill. A complimentary survey of either induced polarization or a low-frequency passive-source technique is recommended to search for mineralization at depth. These EM methods are recommended to highlight the low resistivity and high chargeability associated with mineralization as observed in the petrophysical study. While false anomalies from altered, unmineralized ultramafics are possible, the potential for discovery warrant this investigation.

## 2 INTRODUCTION

Aurora Geosciences Ltd. was retained by Ashburton Ventures Inc. to conduct petrophysical studies and a geophysical review on the Spy property located northwest of Haines Junction. The purpose of the petrophysical study was to measure physical properties on both mineralized zones and samples representative of the surrounding country rocks. The results of the study assist in the interpretation of the geophysical compilation and guide further geophysical surveys on the property.

## 3 PROPERTY DESCRIPTION and LOCATION

The Spy property is located approximately 13 km south of Destruction Bay, which is 267 km northwest of Whitehorse, Yukon Territory (Figure 1). The project area is on NTS map sheet 115 G/02 and centered at a latitude of 61°08'N and a longitude of 138°45'W.

The Spy project consists of 60 contiguous claims contained as claim grouping HW07341 and covers an area of approximately 1,250 hectares in the Whitehorse Mining District (Figure 2). The claims were staked by GPS, and/or compass, in accordance with the Yukon Quartz Mining Act on claim sheet 115G/02,. The registered owner of the claims is Tom Morgan of Dawson City, Yukon Territory. Table 1, summarizing pertinent claim data, complete details are shown in Appendix III.

Table 1 - Claim List for Grouping HW07339

Claims	Grant Number	No. of Claims	Registered Owner	Recording Date
VM 1 - 32	YE69339 - YE69366	32	Tom Morgan - 100.	19/02/2008
V 1 - 28	YC66812 - YC66843	28	Tom Morgan - 100.	27/07/2011
<b>Total</b>		<b>60</b>		

## 4 ACCESS, CLIMATE, LOCAL RESOURCES, and PHYSIOGRAPHY

The Spy Project lies just northwest of Congdon Creek within the Kluane Mountains of southwestern Yukon (Figure 2). It covers steep, craggy mountain peaks of the front ranges. Elevations range between 1400 and just over 2400 metres above sea level. The property is generally devoid of vegetation, dominated by barren talus slopes, rocky cliffs and mountain peaks, with buckbrush along the valleys. Water is available from Nines Creek and its tributaries.

The area is affected by coastal weather systems, situated approximately 150 km from the coast. It receives abundant moisture year round, especially in the mountains, where local weather systems often prevail. Snow generally begins accumulating in the high alpine areas in late August or early September and begins receding in late April to early May. Fieldwork can often be started at lower elevations by July, but at higher elevations a narrow window exists in August to September with minimum snow conditions. Summer temperatures range up to 30° C and winter temperatures down to -50° C.

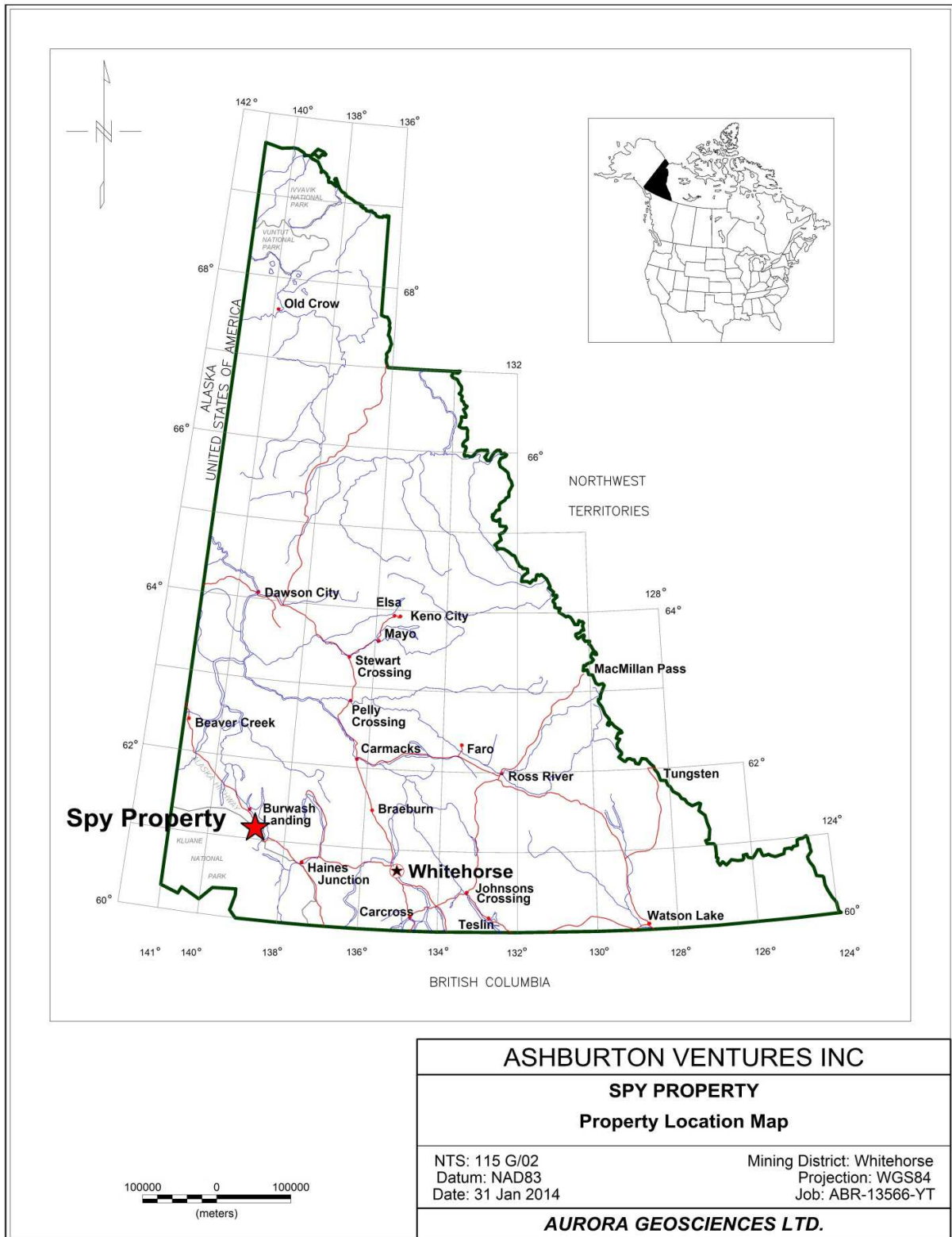


Figure 1 - Property Location Map

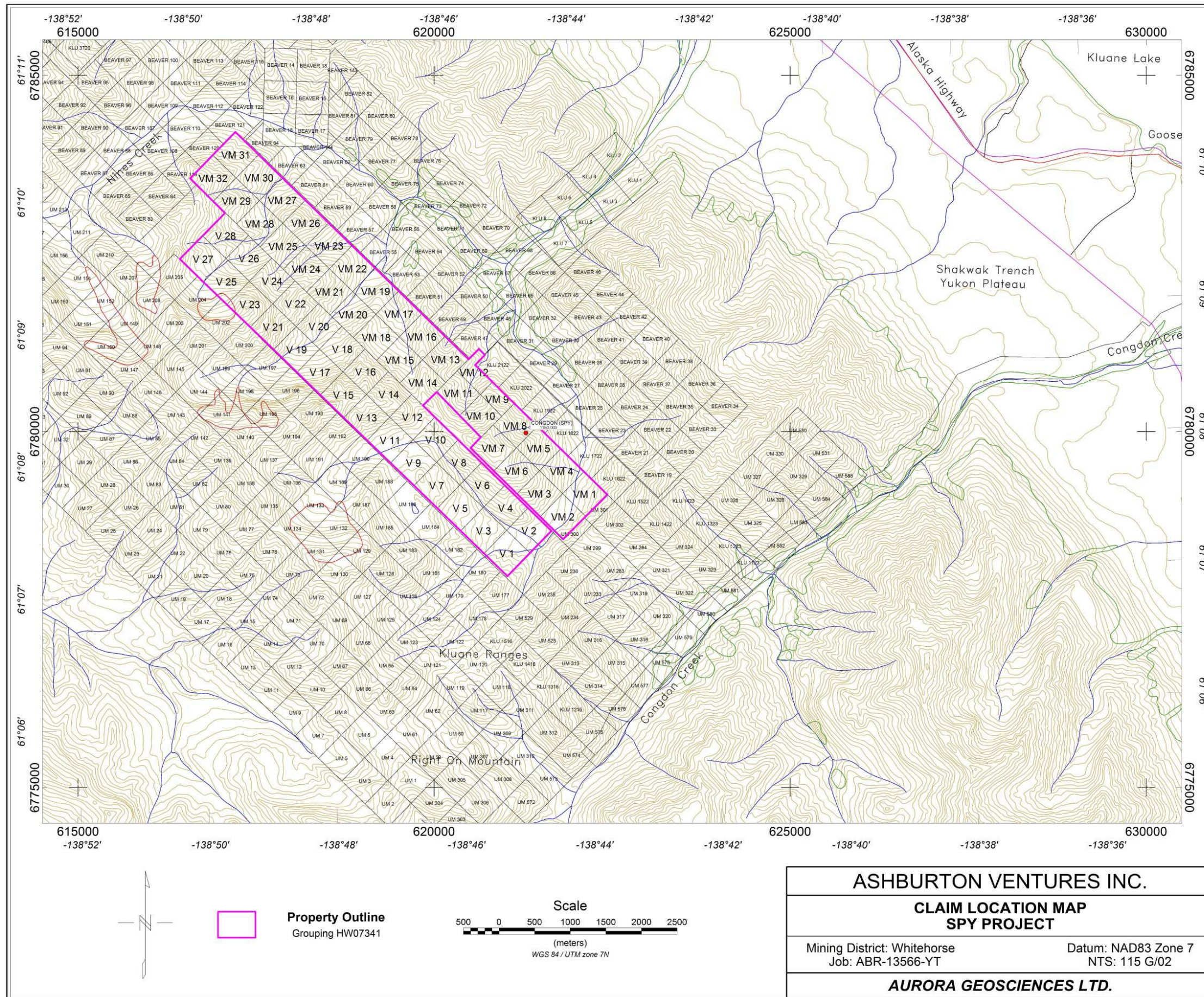


Figure 2 - Claim Location Map  
2014 Spy Property Assessment Report



Destruction Bay is the nearest community and has a population of 60 with a motel, restaurant, service station, laundromat, nursing station and police station. Haines Junction, 108 km to the southeast, is the closest major town with a population of approximately 800. Facilities include a grocery store, health centre, ambulance service, RCMP, service stations and restaurants. The town is on the power grid with diesel backup. Complete services are available in Whitehorse. Haines Junction is the gateway to Kluane National Park and lies 255 km via Highway 3 from the seaport of Haines, Alaska.

Access is by helicopter, which is available from Haines Junction on a year-round basis. Suitable staging sites for helicopter access into the project area are available from the Talbot Arm Motel at Destruction Bay, situated along the paved Alaska Highway. A gravel road extends along the southeast bank of Nines Creek from the Alaska Highway, approaching within 4-5 km of the property boundary.

## 5 PREVIOUS WORK

The Spy Project covers the Congdon (Spy) nickel-copper-PGE showing (Minfile 115G 003) as documented by the Yukon Geology Program (Deklerk, 2009). A summary of previous work follows:

1972-73 Geological mapping and geochemical sampling by Nickel Syndicate (Canadian Superior Exploration Ltd., Aquitaine, Home Oil Ltd. and Getty Mines Ltd.) resulted in discovery of chalcopyrite and nickeliferous pyrrhotite in gabbro at the base of the main (Spy) peridotite sill (McLoughlin and Vincent, 1973).

1987-88 Geological mapping and geochemical surveying on I claims by Polestar Exploration Inc. outlined four gold and four platinum and palladium anomalies with values up to 920 ppb Au, 158 ppb Pt and 277 ppb Pd over the Spy ultramafic sill (Giroux and Montgomery, 1988).

1994-97 Geological mapping, litho-geochemical, silt, heavy mineral sampling and soil sampling in 1994 (Bell, 1996), an airborne EM and magnetics survey in 1996 (McGowan, 1996), followed up by geological mapping, prospecting and ground geophysical surveying in 1997 (Hattie, 1997), by Inco Ltd., delineated sulphide showings, with highly anomalous PGE grades and significant Ni and Cu, over a strike of 3.6 km along the base of the 6 km long Spy Sill. Maximum values from the gabbro at the lower contact include 3.1% Ni, 2.8% Cu, 0.2% Co, 3.1 g/t Pt, 1.4 g/t Pd and 1.0 g/t Au from grab samples.

2000 Santoy Resources Ltd optioned the property from Inco and performed geochemical sampling and detailed geological mapping of the area. The program outlined massive and disseminated Ni, Cu and PGE mineralization associated with a 950m strike length of the Spy sill (Tulk, 2001).

2005 Klu claims were acquired by Resolve Ventures. Re-processing of the 1996 airborne geophysics and a brief property visit sampling previously identified geophysical features was completed. The majority of the claim block lapsed in 2007.

2008 Staked by Tom Morgan as VM claims, with V claims added and brief mapping and prospecting program was completed in 2011.

## 6 GEOLOGICAL SETTING

### 6.1 Regional Geology

The Spy Project lies within the Wrangell Terrane in the northeastern portion of the accreted Insular Super Terrane, which consists of the Alexander and Wrangell Terranes. The Wrangell Terrane consists of Devonian to Permian arc volcanic, clastic and platform carbonate rocks overlain by Triassic oceanic rift tholeiitic basalt and carbonate rocks.

Post accretionary units, overlapping Wrangellia and Alexander Terranes, include Jura- Cretaceous sedimentary rocks of the Dezadeash Group (JKs) and Tertiary felsic to mafic volcanic rocks with interbedded terrestrial sedimentary rocks (Tvs). Post accretionary intrusions include Jura-Cretaceous (JKp), mid Cretaceous (mKp) and Neogene plutons (Np). Thick Quaternary (Q) deposits and glaciers (Ice) cover much of the region.

The Wrangell Terrane is bounded by the Denali and the Duke River Faults. The Denali Fault is a large strike-slip fault, with a dextral sense of motion and an offset in the order of 350 km, that defines the Shakwak Valley and lies approximately 5 km northeast of the Spy property. The Duke River Fault, separating the Alexander and Wrangell Terranes, lies approximately 5 km southwest of the property.

Regionally, the Spy project is situated within the 600 km long Kluane Ultramafic Belt, which is characterized by Triassic aged mafic (gabbro to diorite) to ultramafic (commonly peridotite) sills that are referred to as the Kluane mafic-ultramafic suite. The Kluane mafic-ultramafic suite hosts a number of magmatic nickel (Ni) - copper (Cu) - platinum group element (PGE) ±gold (Au) occurrences within the Wrangell Terrane from Northern British Columbia, through Yukon and into Alaska.

The mafic-ultramafic intrusions in the belt are sill-like bodies that preferentially intrude the country rock sequences at or near the contact between the Hasen Creek Formation (tuffs, mafic volcanics, argillite and limestone) and Station Creek Formation (tuffs, pyritic black tuff, mafic volcanics and argillite), part of the Pennsylvanian(?) to Permian Skolai Group. Many of the ultramafic sills have marginal gabbro phases at their bases and upper contacts that appear to be preferentially mineralized. The Kluane Belt nickel-copper-PGE occurrences are particularly enriched in the rarer platinum group elements osmium, iridium, ruthenium and rhodium.

The Wellgreen deposit represents the most advanced property within the Kluane Belt, with historic production (1972-1973) of 171,652 tonnes grading 2.23% Ni, 1.39% Cu, 0.073% Co, and 2.15 g/t Pt and Pd and a resource outlined in the late 1980's of 49.9 million tonnes grading 0.36% Ni, 0.35% Cu, 0.51 g/t Pt and 0.34 g/t Pd. The Wellgreen deposit emphasizes the excellent potential for large tonnage nickel-copper-PGE deposits in the Kluane Ultramafic Belt.

### 6.2 Property Geology

Figure 3 is a generalized property scale geology map. A compilation of the detailed geological mapping and sampling program completed in 2000 is shown in MAP 1 (map pocket). The oldest rocks exposed on the Spy property are clastic sedimentary rocks of the Hasen Creek Formation (PHp), part of the Pennsylvanian to Lower Permian Skolai Group and exposed along the northeastern property area. The strata trend northwest and dip at an average of 40° southwest. These are intruded by Late Triassic and possibly older mafic to ultramafic sills of the Kluane mafic-ultramafic suite (uTru), including the Spy sill, in the southeastern property area. A significant limestone band within the Hasen Creek Formation (uHC1) is mapped below the Spy sill and additional similar limestone bands occur above the sill.

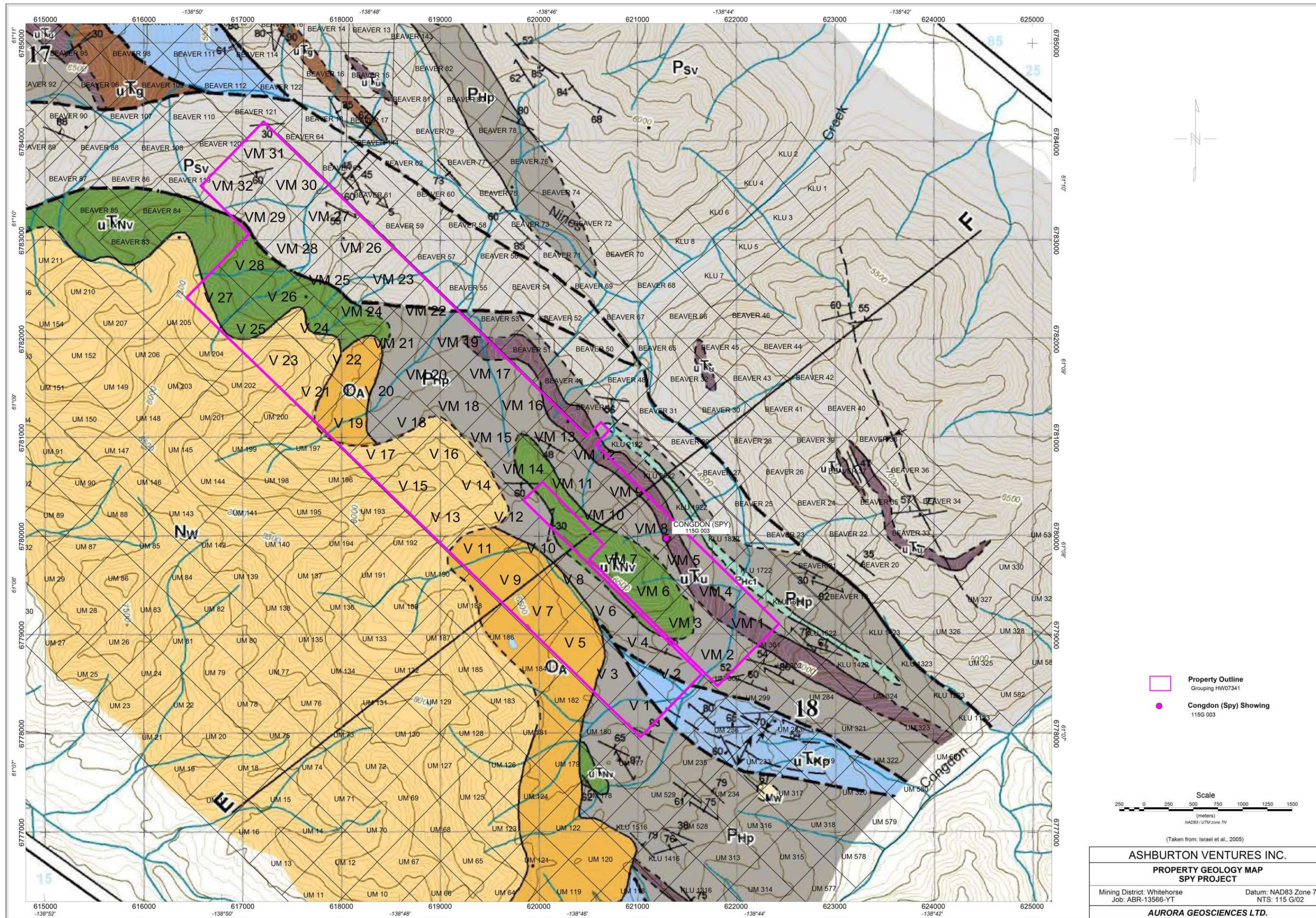


Figure 3 - Property Geology Map

The Hasen Creek Formation is overlain to the southwest by the Triassic Nikolai Group volcanic rocks (uTrNv), Triassic to Cretaceous clastic rocks of the Tatamagouche succession (uTrKp), and Tertiary Amphitheatre Group sedimentary rocks (OA) and Wrangell Lavas (NW), which dominate in the southwestern half of the property. The Nikolai Group consists of basaltic and andesitic flows with local tuff, breccia, shale and thin-bedded bioclastic limestone. The Tatamagouche consists of a succession of dark buff-gray lithic greywacke, sandstone, siltstone, shale, argillite, phyllite and conglomerate. The Amphitheatre Group consists of yellow-buff sandstone, pebbly sandstone, polymictic conglomerate, siltstone, mudstone, minor carbonaceous shale and thin lignite coal. The Wrangell Lavas consist of rusty, red-brown basaltic andesite flows, interbedded with felsic tuff.

The Spy sill is located along the northeastern boundary of the project claim boundary and intrudes Hasen Creek siltstone for a minimum of 6 kilometres along a northwest-southeast trend (Figure 3 & MAP 1). The sill is 75 to 100 metres thick and dips at approximately 50 degrees to the southwest. Contacts with the country rock are sharp and often sheared, accompanied by local hornfelsing, silicification and sulphide mineralization. The sill is composed of peridotite, gabbro and anorthositic gabbro members, which form sub-parallel moderately dipping units. The peridotite forms the central phase of the sill and measures approximately 35 to 60 metres in thickness. It is generally unserpentinized, fine to medium grained, black, and feldspathic. Gabbro, measuring approximately 2 to 50 metres thick, is present at the top and base of the peridotite unit and varies in composition between gabbro and metagabbro. The contact between the gabbro and the peridotite is generally gradational over several metres. Both the gabbro and peridotite units are intruded by an anorthosite to anorthositic gabbro which was mapped as a distinct unit in 2000 (MAP 1, map pocket). This unit occurs locally as a 10 to 15 metre thick, concordant to cross-cutting sill with gabbroic margins. The anorthositic gabbro is light grey, fine to medium grained and generally contains 2 to 4% finely disseminated pyrite and pyrrhotite. Thin anorthosite seams within peridotite have also been noted south of the Spy showing and highlight small scale block faulting.

Inco interpreted the anorthositic gabbro unit to represent a marginal gabbro phase related to mineralization (Tulk, 2001). A 40 metre wide gabbro unit underlying the anorthositic gabbro/marginal gabbro was interpreted to be a Maple Creek Gabbro which intruded along the marginal gabbro-siltstone contact post-mineralization and separated the two units. In the vicinity of the Wylie/Bugs showings, a peridotite unit in contact with the siltstone was interpreted as possible later underplating phase.

Maple Creek gabbro sills occur stratigraphically above and below the Spy sill. The most continuous Maple Creek gabbro sill occurs 230 metres down-section from the base of the peridotite and is up to 160 metres thick. This sill is intermittently exposed over a 10-kilometre strike. The northwestern end of the Spy sill is cut by a 200-metre thick section of Maple Creek gabbro. Elsewhere, smaller bodies of Maple Creek gabbro also cut and form lens shaped bodies within the peridotite.

The Hasen Creek and Station Creek Formations have a constant southeast-northwest strike and dip at an average of 40 degrees to the southwest. The strata in the Spy sill area do not appear to be overturned. Nikolai basalt caps the ridge above the Spy sill. The lower contact of the basalt is approximately 450 metres up-section from the top of the peridotite. The contact between the Hasen Creek Formation and the Nikolai basalt appears to be disconformable.

All of the above units are locally overlain by Quaternary unconsolidated glacial, glaciofluvial and glaciolacustrine deposits (Q) and ice.

### **6.2.1 Mineralization**

Nickel - copper - platinum group element mineralization is associated with the basal contact of the Spy Sill and the footwall Hasen Creek siltstone. Numerous mineral occurrences have established the presence of both

narrow massive sulphide lenses and disseminated mineralization within the contact zone. High grade values are associated with massive copper-nickel sulphide mineralization, whereas low grade values in the range of 0.5-3.5 g/t Pt+Pd+Au are associated with disseminated mineralization. Host rocks include gabbro and peridotite phases of the sill as well as footwall siltstone. Several showings suggest that massive and disseminated mineralization occur intermittently over a strike length of 950 meters northwest of the Spy showing. A brief description (taken from Tulk, 2001) of the showings found in 2000 follows:

The Spy showing consists of massive chalcopyrite-pyrrhotite lenses, up to 2.0 by 0.25 metres, occurring in sediments at the base of the Spy sill. The host siltstone is weakly altered, but highly fractured with chalcopyrite-pyrrhotite mineralization occurring along the fractures.

The Bugs showing is located approximately 200 metres northwest of the Spy showing and consists of two outcrops of silicified gossanous siltstone in contact with mineralized marginal gabbro. The siltstone is strongly malachite stained and hosts 10 cm wide massive chalcopyrite-pyrrhotite veins in several orientations.

At the Wylie showing a total of 2.9 metres of footwall siltstone with trace disseminated cpy-po and strong malachite staining were sampled as well as 5.4 metres of marginal gabbro hosting three 5 cm massive cpy-po veins and one 15 cm wide vein that can be traced along strike for 16 metres. The marginal gabbro also hosts net textured and disseminated po & cpy generally between 3 and 8%, lessening away from the siltstone contact.

The Taz showing consists of strongly malachite altered siltstone downsection of the gabbro contact. Several attempts were made to expose the gabbro contact, however thick scree in the area prevented upslope advances. The hand trench was sampled for its entire 5.5 metre length with significant mineralization being encountered in sample. The final 0.3 metre sample collected did not return significant values, but it does not preclude the is potential for better mineralization approaching the unexposed gabbro contact.

The 21 Again showing comprises an up to 3 m wide semi-massive pyrrhotite skarn occurring at the contact of limestone, limy shales and gabbro, located approximately 900 metre northwest of the Spy Showing. The mineralization was traced for over 50 metres and then into talus cover. A composite chip was taken during the course of Santoy mapping, but contained only 77 ppb Pt, 68 ppb Au and 604 ppm Cu

The Sweet 16 showing located 920 meters north-northwest of the Spy showing revealed disseminated net-mesh textured Po>Py>Cpy in a marginal gabbro at or above the siltstone contact. Extensive talus cover limited exposure to one small outcrop and several small pits dug over a 100 metre area. Several grab and chip samples collected by Santoy and Inco in the area contain values ranging from 0.5-2.1 g/t combined PGE+Au, but a lack of outcrop has limited understanding of the extent of mineralization.

## **7 Geophysics**

In 2013 and 2014, a geophysical review accompanied by a petrophysical study was conducted on the property. The petrophysical study was completed on surrounding lithological units in an effort to establish which physical properties of the mineralized zones could be readily differentiated from surrounding lithological units.

### **7.1 Geophysics Compilation**

A small ground magnetic and UTEM survey was completed in 1996 just off the northwestern limit of the Spy property. No other record was found of historical ground geophysical surveys over the property. An airborne geophysical survey was conducted in 1996 and subsequently reprocessed in 2006 by Resolve

Ventures. Digital datasets are not publically available. Final products from the 2006 processing have been georeferenced and displayed in property scale Figures 4 to 7.

### **7.1.1 Products**

Digital data included with this report comprises:

Airborne Total Magnetic Intensity Map	Digital Data\Geophysics\Spy Total Magnetic Intensity.map & .pdf
Airborne Calculated Vertical Gradient Map	Digital Data\Geophysics\Spy CVG.map & .pdf
Airborne Resistivity Map	Digital Data\Geophysics\Spy Resistivity.map & .pdf
Airborne EM Anomalies on TMI Map	Digital Data\Geophysics\Spy EM on TMI.map & .pdf

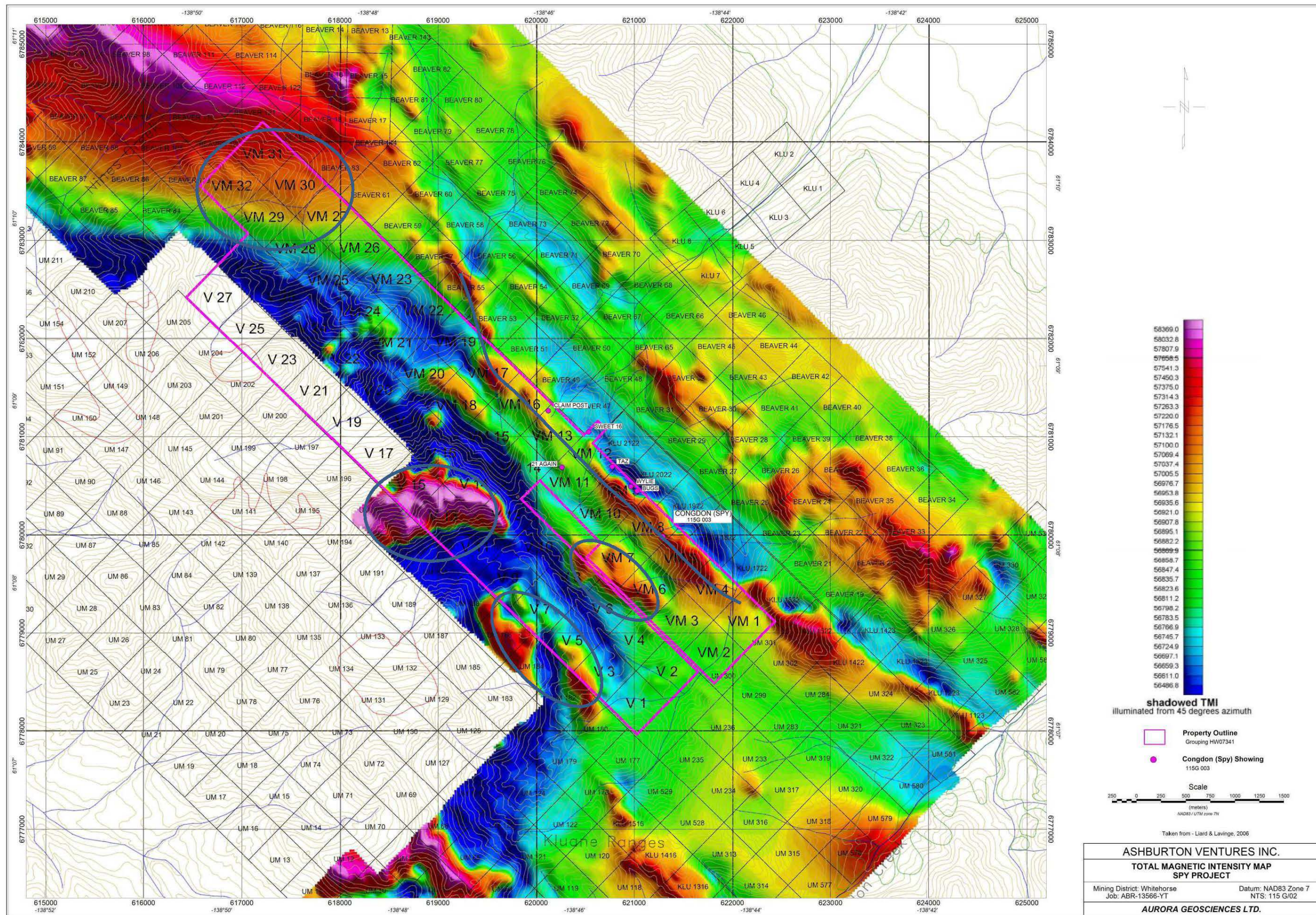
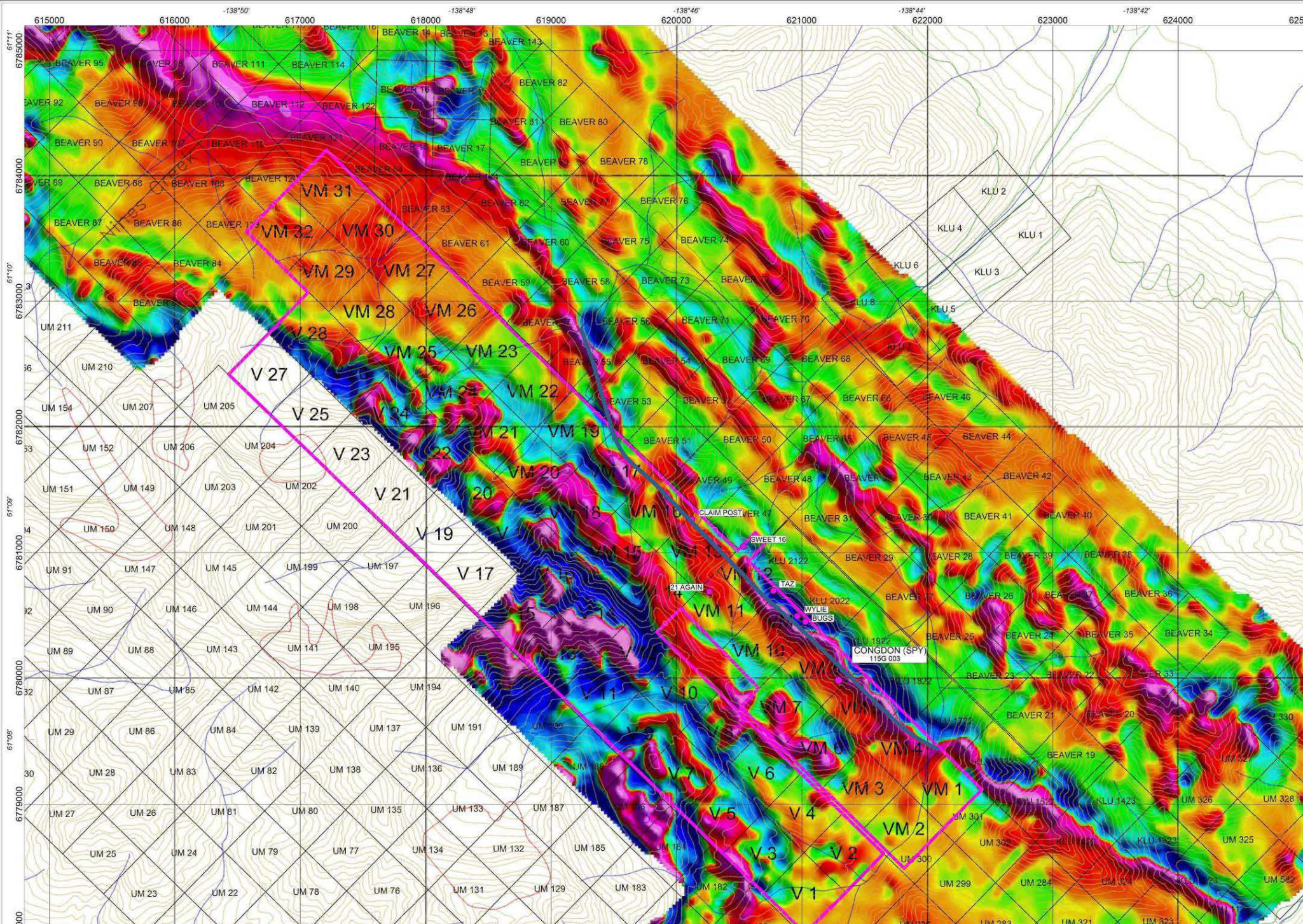
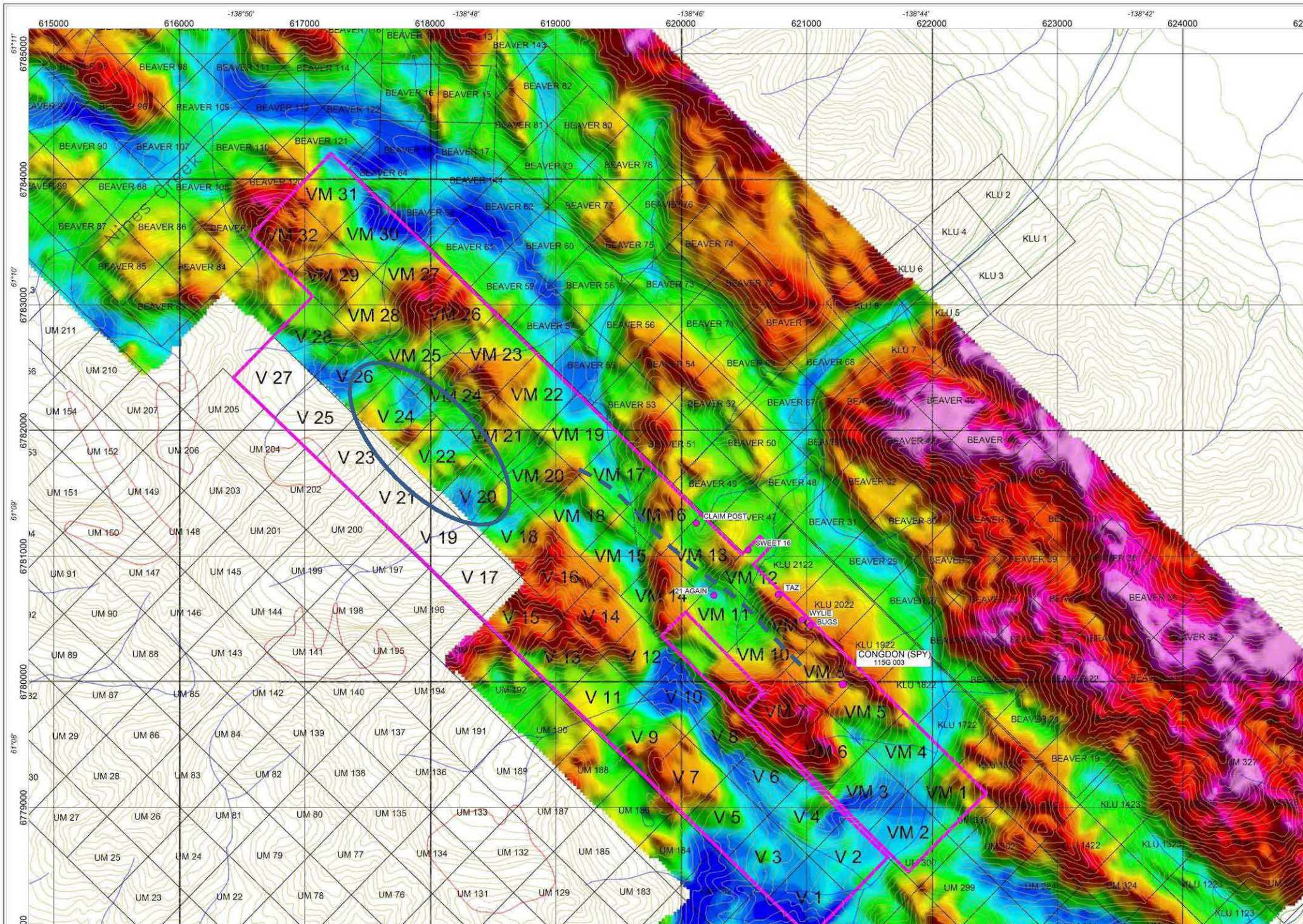
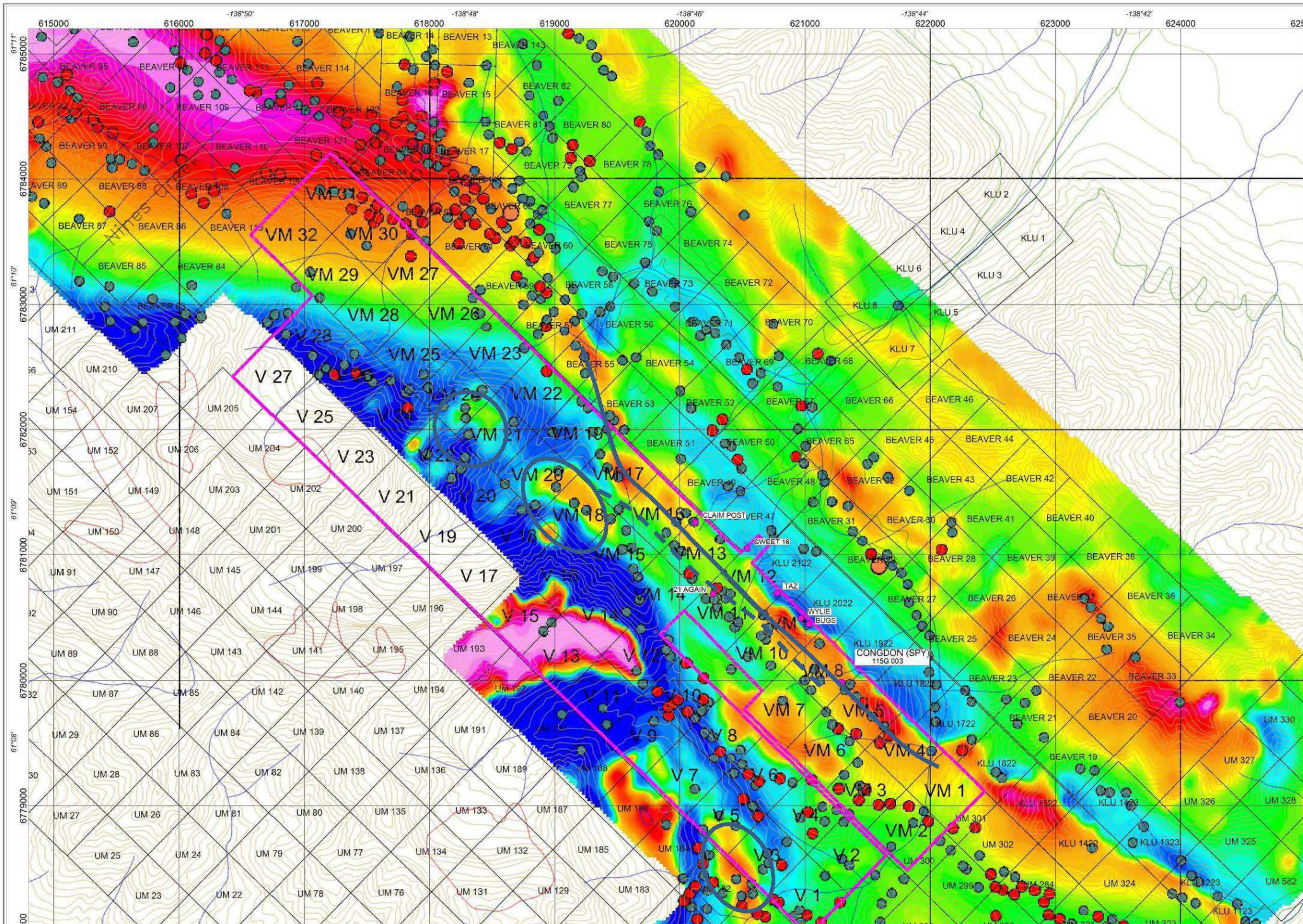


Figure 4 - Total Magnetic Intensity Map









## 7.2 Petrophysical Properties

A total of 58 samples were analysed for their petrophysical properties. Of these, 50 consisted of drillcore samples from the neighboring Wellgreen project and 8 regional samples were obtained from the Yukon Geological Survey. The samples were selected to represent mineralized as well as host country rock units found on the property. The samples are petrologically described and analysed for their physical properties. The properties that were considered in this study are porosity, specific gravity, magnetic susceptibility, DC resistivity and chargeability, Remanent mag and pore fluid conductivity, recorded as water conductivity.

Samples have been grouped by lithological unit, a summary table and complete details of the petrophysical results are collated in Appendix III.

### 7.2.1 Equipment

The petrophysical properties were measured using the following equipment:

Sample preparation:

- 1 – Tile Saw
- 1 – Low vacuum pump
- 4 – Dessicators
- 10L – Distilled water

Equipment:

- 1 – MolSpin (Remanent Mag measurement)
- 1 – Electronic Densimeter MD-300S
- 1 – KT-9 Mag susceptibility meter
- 1 – Elrec Pro IP receiver
- 1 – GDD IP transmitter
- 1 – KT-9 Susceptibility meter
- 1 – Model 73 Conductivity meter

### 7.2.2 Specifications

The petrophysics survey was conducted according to the following specifications:

<u>Porosity:</u>	Single measurement recorded as % using imbibition method described below.
<u>Specific Gravity:</u>	Single measurement with densimeter. 0.0001g/cm <sup>3</sup> resolution
<u>Remanent Mag:</u>	Molspin measurements in 6 sample orientations
<u>DC resistivity:</u>	3 measurements at different voltages .
<u>Chargeability:</u>	3 measurements at different voltages.
<u>Magnetic susceptibility:</u>	10 magnetic susceptibility readings per sample with the average shown in the report.
<u>Water Conductivity:</u>	Conductivity measurement of water bath following 24hr immersion in dessicators. Meter range of 0 – 1999 mmohs
<u>Sample preparation:</u>	Each sample was covered with distilled water and exposed to a vacuum of 25 bar for a period of a minimum of 12 hours and then allowed to equilibrate to atmospheric pressure to re-flood the pore spaces with fluid. Each sample was isolated for this procedure to ensure pore fluid was consistent with the rock type.

### 7.2.3 Data Processing

Porosity: Results of a single measurement on each sample are recorded as a percentage using imbibition methodology.  $W_{dry}$  is measured following drying for 1 hour at 400°F.  $W_{wet}$  is measured following a minimum 12 hr immersion in dessicators.

$$Porosity = \frac{W_{wet} - W_{dry}}{Volume} \times 100$$

Specific Gravity: Single specific gravity measurement recorded with Densimeter – MD-300S with resolution of 0.001 g/cm<sup>3</sup>.

Remanent Mag: Results including declination, inclination and intensity for 6 orientations are measured. Final results are compiled as intensity per unit volume using the following formula:

$$\text{Remanent Magnetism} = \text{Intensity} \frac{\text{Volume}_{\text{glass cube}}}{\text{Volume}_{\text{sample}}}$$

Equipment problems only allowed 17 of the 79 sampled to be tested. This is deemed inconsequential as the interpretation of any results are limited without known in situ sample orientations.

Resistivity: After rehydrating the sample and measuring the dimensions of the sample the resistivity is then calculated by

$$R = \frac{AV}{\ell I}$$

where  $R$  is the resistivity of the sample (Ohm\*m),  $A$  is the cross sectional area of the sample ( $m^2$ ),  $L$  is the sample length (m),  $I$  is the current passed through the sample (A) and  $V$  is the voltage drop across the sample (V).

The resistivity test was run three times at different output voltages. The results were averaged to give a mean and standard deviation of the resistivity.

IP Response: The IP response is due to ionic charges building up on mineral or oxide grains within the sample when a current is applied through it and when the current is turned off these charges decay and are measured. A GDD IP transmitter generates a time domain square wave which was passed through the sample. Copper plates at the end of the sample are connected to an ELREC PRO IP receiver to measure the IP response of each sample in mV/V. The IP response was measured simultaneously to the resistivity, so it was measured three times and the result is the mean of those measurements.

Magnetic Susceptibility: The magnetic susceptibility is the degree of which the sample can be magnetized. The magnetic susceptibility, measured using a KT-9 susceptibility meter, is defined by

$$H_E = kH$$

where  $k$  is the magnetic susceptibility (SI units),  $H$  is the exciting magnetic field (Amp/m) and  $H_E$  is the external magnetic field (Amp/m).

Susceptibility measurements were repeated ten times. The results were averaged and recorded for each sample.

Water Conductivity (pore fluid conductivity): A single conductivity measurement of the sample water bath was measured and recorded with a Model 73 Conductivity meter.

## 8 INTERPRETATION and RECOMMENDATIONS

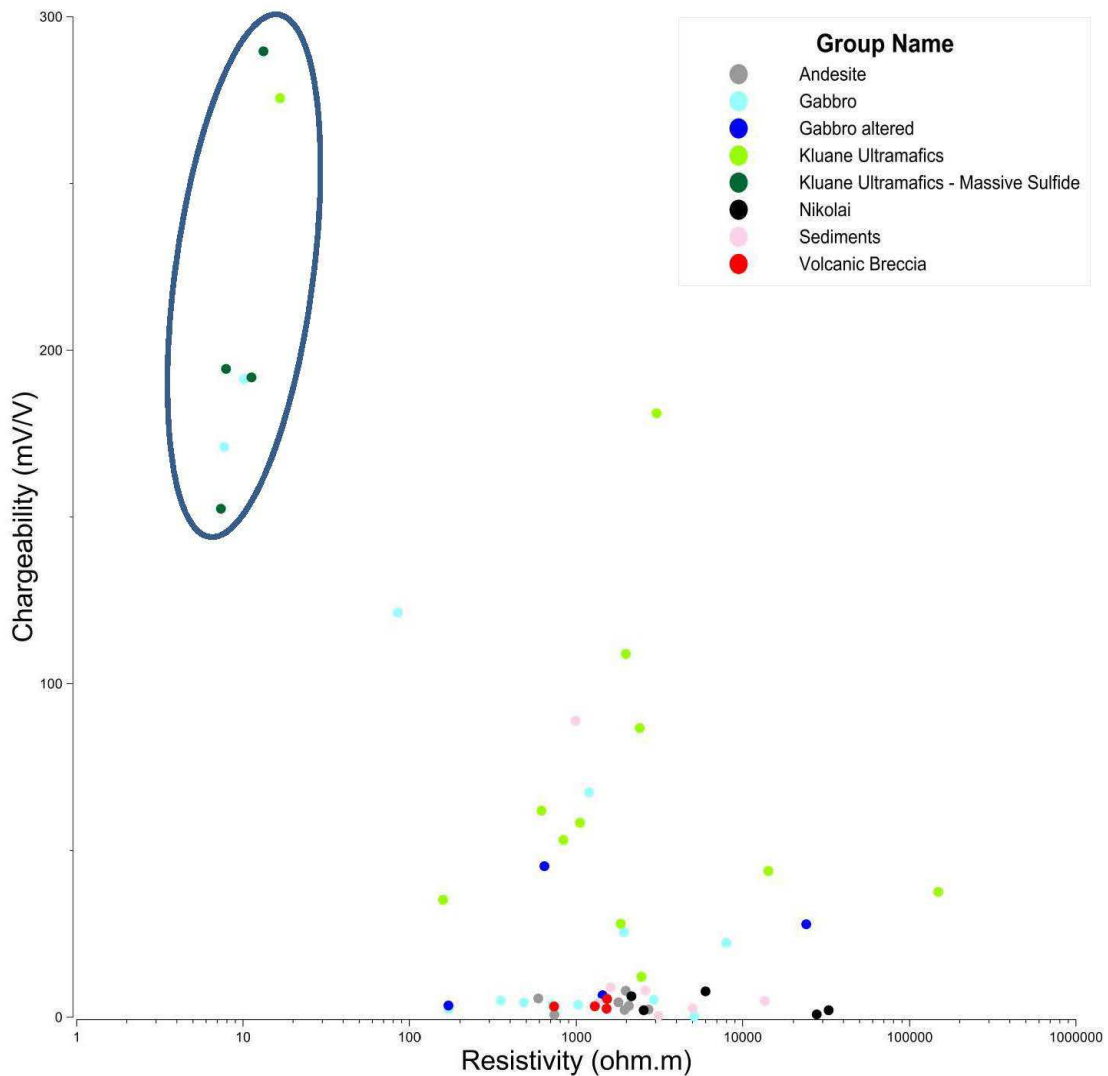
The main purpose of this geophysical review was to determine which physical properties of the mineralized zones property could be readily differentiated from surrounding lithological units. Primary mineralization on the property occurs as mafic volcanic hosted copper-zinc-silver-gold massive sulphides. The main difficulty arises from differentiating between the geophysical signature of the highly magnetic ultramafic units, the massive sulfides and the surrounding altered but, at times, unmineralized ultramafic and mafic volcanics.

The petrophysical analysis indicates, as expected, that the ultramafic units have a consistent and high magnetic susceptibility. Moderately high susceptibility is also observed in the massive sulphides, the Nikolai group and gabbroic samples. A notable exception is also observed in the YGS gabbro sample (ref# 04-515-142-01-01) which had the highest magnetic susceptibility of all measured samples.

The porosity measurements provide generally consistent results within each unit, however they do not prove to be a useful exploration tool for delineating zones of economic interest.

The specific gravity measurements provide consistent results within the units and a marked contrast is readily observed in the massive sulphide samples. However, mineralization in the mafic and sedimentary units would not provide sufficient contrast to warrant gravity as a viable exploration tool in this setting.

The resistivity and chargeability results clearly identify all samples with noted sulfides regardless of whether they are within the highly magnetic ultramafic assemblages or associated with the more moderate magnetic signature of the gabbroic units. The mineralized units all have a low resistivity signature coupled with high chargeability. The mineralized units have a resistivity range from 3 to 50 ohm-m, with the bulk being less than 20 ohm-m, and a chargeability of greater than 100 mV/V. Figure 8 is an x-y scatterplot of the resistivity vs chargeability and illustrates the separate and distinct grouping of these samples highlighted with an ellipse. A peridotite sample with serpentine coated fractures (AGL sample# 25) is the only sample not associated with any mineralization to exhibit these same characteristics. While these are encouraging results they also indicate that false positive anomalies from altered ultramafics will likely be common in the surrounding area.



**Figure 8 - Resistivity vs Chargeability Scatter Plot**

The reprocessed 1996 airborne magnetic survey consistently outlines the Kluane ultramafic unit as continuous over the property with a NW/SE strike. The Spy sill is readily observed as a linear magnetic high which runs parallel to the claim boundary and can be clearly followed from the southeast corner of the property along the northeastern claim boundary for approximately four kilometers where it bends north at approximately 619500 UTM east. The feature is outlined in Figures 4, 5 and 7.

Four large strong magnetic features are also highlighted in Figure 4. The three southern most anomalies correlate with the mapped overlying Triassic Nikolai Group volcanic rocks and Wrangell Lavas. While these are generally not considered priority targets, ground truthing is recommended for the southern most anomaly highlighted in Figure 7 which has associated high conductivity. Additionally, the northwestern

anomaly in Figure 4 is along trend of the Spy sill, however only unmineralized gabbro is indicated in the detailed geology maps. A mineralized zone at depth is a possible explanation for the anomaly and should be considered a low priority drill target.

A subtle discontinuous trend of moderate conductivity traced parallel to the Spy sill is indicated in Figures 6 and 7. The more dominant resistivity features observed throughout the property are all topographically related, with the exception of the subtle conductive features in the northwestern portion of the property highlighted in Figure 6.

Figure 7 highlights the high priority linear magnetic trend of the Spy sill and associated discontinuous conductivity. Lower priority targets with isolated magnetic highs and conductive boundaries are also highlighted, where ground truthing is recommended.

Due to the discontinuity of the spy sill and intermittent zones of mineralization, continued prospecting and hand trenching in areas of low cover is recommended to expose and sample the footwall contact zone in areas not previously exposed. Additionally ground geophysical surveys are recommended to delineate drill targets. A magnetic survey over an initial area of 2.5 kilometers by 1.0 kilometer with a 100 meter line spacing is recommended to be positioned centrally over the showings within the sill. A complimentary survey of either induced polarization or a low-frequency passive-source technique is recommended to search for mineralization at depth. These EM methods are recommended to highlight the low resistivity and high chargeability associated with mineralization as observed in the petrophysical study. While false positive anomalies from altered, unmineralized ultramafics are possible, the potential for discovery warrant this investigation.

In addition, these recommended geophysical surveys should be inverted with petrological and geological constraints to maximize drill target vectoring potential.



## 9 REFERENCES

**Bell, C., 1995.** Report on 1995 Geological and Geochemical Surveys on the KLU Property. Yukon Assessment Report 093371.

**Deklerk, R., 2009.** The MINFILE Manual. Yukon Geological Survey, CD-ROM

**Giroux, G.H. and Montgomery, J.H., 1988.** Geological, geophysical and geochemical report on the I, IV and V mineral claims. Report for Polestar Exploration Inc. Yukon Assessment Report 092092.

**Israel, S., Tizzard, A. and Major, J., 2005.** Geological Map of the Duke River area (parts of NTS 115G/2, 3, 5, 6, 7), Yukon (1:50,000 scale). Yukon Geological Survey, Open File 2005-11.

**Liard, J.M., Lavigne, J., 2006.** An Initial Field Investigation and Data Compilation the KLU Property. Yukon Assessment Report 094687.

**McGowan, P., 1996.** Report on 1996 geophysical survey on the Klu property. Yukon Assessment Report 093560.

**McLoughlin and J.S. Vincent, 1973.** Geological report Spy Claims 1-12. Yukon Assessment Report 060154.

**Pautler, J.M., 2012.** Geological and geochemical assessment report on the Spy project. Yukon Assessment Report 096111.

**Tulk, L.A., 2001.** Report on geological and geochemical surveys on the Klu property. Yukon Assessment Report 094164.

**Appendix I**

**Statement of Expenditures**

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**STATEMENT OF EXPENDITURES*****Hourly Services: Professional, Technical & Expediting***

Rock Physics: 14 hrs @ \$100/hr	\$1,400.00	
- 79 total samples: Ultra and country rock (14 samples allocated to the SPY assessment)		
Project Management: 7 hrs @ \$100/hr	<u>\$700.00</u>	
<i>Total - Preparation</i>	\$2,100.00	\$2,100.00

***Analyses and report***

Geophysical Interpretation: 16 hrs @ \$75/hr	\$1,200.00	
- Geophysics compilation and petrophysics interpretation		
Geophysical Report Preparation: 32 hrs @ \$75/hr	\$2,400.00	
- Spy assessment report preparation		
<i>Total - Analyses &amp; report</i>	<u>\$3,600.00</u>	<u>\$3,600.00</u>
		\$5,700.00

I certify that this statement of expenditures is complete and true to the best of my knowledge.

Phil Jackson, P.Geoph

**Appendix II**

**Statement of Qualifications**

---

## STATEMENT OF QUALIFICATIONS

I, Philip Jackson, P. Geoph., of the city of Whitehorse in the Yukon Territory, Canada,

HEREBY CERTIFY:

1. I reside at 75 Walnut Crescent, Whitehorse, Yukon Territory, Y1A 5J3
2. I am a geophysicist employed by Aurora Geosciences Ltd. of Whitehorse, Yukon Territory.
3. I am a graduate of Concordia University with a B.Sc. in Geology/Physics in 1996 and have worked as a geophysicist since that time.
4. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories, Registration No 1667.

Dated this 21<sup>st</sup> day of February, 2014, at Whitehorse, Yukon Territory.

\_\_\_\_\_.

Philip Jackson, P.Geoph.

**Appendix III**

**Petrophysical Results**

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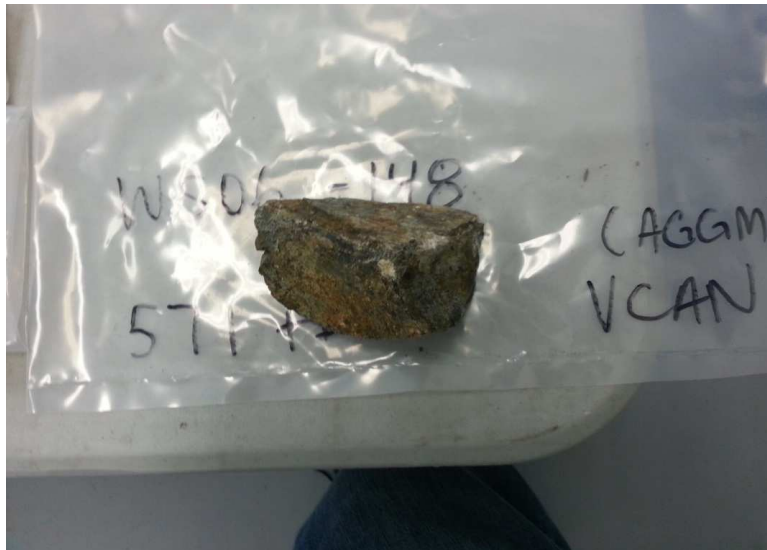
AGL Lab Sample #	From	Grouped as..	Drill Hole	Depth (feet)	Property	Comment	UTME_NAD83_Z7	UTMN_NAD83_Z7	Logs	Rock Description	Porosity (%)	Specific Gravity (g/cm3)	Magnetic Susceptibility (SI Units)	Resistivity Mean (Ohm - m)	Resistivity Dev (Ohm - m)	IP Response (mV/V)	IP Response Dev (mV/V)	Remenant Mag	Water Conductivity (mmols)	Temperature at which specific gravity was measured (C)
51	Prophecy Platinum	KLUANE ULTRAMAFICS	WS09-176	22	Wellgreen	Dunite			<a href="#">WS09-176</a>	PERIDOTITE: dark green black, medium grain, weak sulphides.	1.37	2.73	30.76	111.13	4.01	---	---	5416.8755	29.00	18.00
52	Prophecy Platinum	KLUANE ULTRAMAFICS	WS09-176	46	Wellgreen	Dunite			<a href="#">WS09-176</a>	PERIDOTITE: dark green black, medium grain, weak sulphides.	1.27	2.78	27.49	3040.96	133.74	181.12	15.90	---	37.00	18.00
14	Prophecy Platinum	KLUANE ULTRAMAFICS MASSIVE SULFIDE	WS06-151	783	Wellgreen	Kluane Ultramafics, Massive sulfides			<a href="#">WS06-151</a>	Massive sulfides bounded by gabbro / gabbro breccia	3.81	4.17	9.45	7.90	0.50	194.43	23.84	---	28.00	18.00
15	Prophecy Platinum	KLUANE ULTRAMAFICS MASSIVE SULFIDE	WS06-155	308	Wellgreen	Kluane Ultramafics, Massive sulfides			none	---	1.92	4.50	6.05	7.37	0.62	152.50	30.93	---	21.00	18.00
16	Prophecy Platinum	KLUANE ULTRAMAFICS MASSIVE SULFIDE	WS08-160	1547	Wellgreen	Kluane Ultramafics, Massive sulfides			<a href="#">WS08-160</a>	Massive sulfides bounded by gabbro	1.26	4.55	4.49	11.24	0.60	191.90	5.88	1825.1724	8.00	18.00
17	Prophecy Platinum	KLUANE ULTRAMAFICS MINERALIZED	WS08-154	1747	Wellgreen	Kluane Ultramafics, Well Mineralized Peridotite			<a href="#">WS08-154</a>	PERIDOTITE: dark green/grey to dark grey; medium grained, phaneritic; olivine and pyroxene rich, highly magnetic; occ serpentine in fractures; weak to moderate intensity carb alteration with calcite as frac fills; significant sulphides 10% TS	2.21	2.88	9.59	13.27	9.77	289.67	21.50	---	6.00	18.00
46	Prophecy Platinum	SEDIMENTS	WS06-151	810	Wellgreen	Quartzite			<a href="#">WS06-151</a>	QUARTZITE	0.96	2.69	0.09	2602.61	566.14	7.98	2.84	1.6395	39.00	18.00
48	Prophecy Platinum	SEDIMENTS	WS08-161	445	Wellgreen	Quartzite			<a href="#">WS08-161</a>	SEDIMENTS: quartzite	0.32	2.68	0.13	3116.40	156.95	0.49	0.27	---	51.00	18.00
49	Prophecy Platinum	SEDIMENTS	WS08-161	427	Wellgreen	Quartzite			<a href="#">WS08-161</a>	SEDIMENTS: siltstone/ mudstone	0.79	2.81	0.03	5005.29	1519.88	2.71	0.58	---	18.00	18.00
67	Prophecy Platinum	SEDIMENTS	WS08-164	1037	Wellgreen	Argillite			<a href="#">WS08-164</a>	ARGILLITE: dark greenish grey to black fine grained alightly silica chlorite with moderate carbonate quartz stringer 4% with fine pyrite dissemination/stringers at bedding plane 70 deg ACA	1.13	2.79	0.21	1355.75	71.75	4.40	0.10	---	106.00	18.00
68	Prophecy Platinum	SEDIMENTS	WS09-174	1509	Wellgreen	Argillite			<a href="#">WS09-174</a>	ARGILLITE: dark grey - black, fg, bedding at 80 - 85 CA, fractured infilled with quartz/carbonate.	0.49	2.80	0.07	1607.34	65.00	8.97	0.81	34.8401	35.00	18.00
69	Prophecy Platinum	SEDIMENTS	WS09-174	1495	Wellgreen	Argillite			<a href="#">WS09-174</a>	ARGILLITE: dark grey - black, fg, bedding at 80 - 85 CA, fractured infilled with quartz/carbonate.	2.77	2.71	0.24	989.28	43.65	88.92	0.60	---	38.00	18.00
70	Prophecy Platinum	SEDIMENTS	WS08-161	433	Wellgreen	Siltstone			<a href="#">WS08-161</a>	SEDIMENTS: siltstone/ mudstone	1.01	2.71	0.04	13628.57	874.16	4.95	0.09	0.6175	111.00	18.00
2	Prophecy Platinum	VOLCANIC BRECCIA	WS08-160	2531	Wellgreen	Agglomerate			<a href="#">WS08-160</a>	VOLCANIC AGGLOMERATE - pervasive chlo-carb altn with crosscutting calcite veinlets 1% py-po, tr. Cpy	0.86	3.02	0.12	734.38	68.81	3.27	0.25	---	22.00	18.00
8	Prophecy Platinum	VOLCANIC BRECCIA	WS08-160	2509	Wellgreen	Volcanic Tuff			<a href="#">WS08-160</a>	VOLCANIC AGGLOMERATE - pervasive chlo-carb altn with crosscutting calcite veinlets 1% py-po, tr. Cpy	2.28	2.69	0.04	1532.67	97.12	5.50	0.30	2.2505	25.00	18.00
9	Prophecy Platinum	VOLCANIC BRECCIA	WS08-155	339	Wellgreen	Volcanic Tuff			<a href="#">WS08-155</a>	ANDESITE/VOLC TUFF/AGGLOMERATE: medium grey; fg; fractured with calcite filling	1.76	2.66	0.04	1290.84	74.16	3.30	0.17	---	6.00	18.00
47	Prophecy Platinum	VOLCANIC BRECCIA	WS06-147	331	Wellgreen	Quartzite?			<a href="#">WS06-147</a>	AGGLOMERATE: Trace malachite and azurite	0.97	2.83	0.04	1521.31	68.08	2.60	0.10	---	80.00	18.00
72	YGS	GABBRO	---	---	YGS Regional	Ref# 04-515-112-1-1					0.82	2.86	0.87	170.52	19.72	2.52	0.25	---	43.00	18.00
73	YGS	GABBRO	---	---	YGS Regional	Ref# 04-515-142-01-01					0.92	2.92	72.35	7974.29	85.05	22.36	0.11	---	7.00	18.00
76	YGS	GABBRO	---	---	YGS Regional	Ref# 04-515-217-1-1					2.16	2.92	0.72	5112.03	420.22	0.28	1.27	---	37.00	18.00
80	YGS	NIKOLAI	---	---	YGS Regional	Ref# 05-51-040-1					2.85	2.77	34.32	32598.67	413.23	2.13	0.08	---	18.00	18.00
81	YGS	NIKOLAI	---	---	YGS Regional	Ref# 04-515-124-01					1.74	2.80	6.80	2144.65	267.39	6.33	0.22	---	27.00	18.00
83	YGS	NIKOLAI	---	---	YGS Regional	Ref# 04-515-136-1					1.75	3.07	7.27	2540.16	16.65	2.13	0.19	---	7.00	18.00
85	YGS	NIKOLAI	---	---	YGS Regional	Ref# 04-515-157-1-1					0.37	2.87	0.38	27601.32	253.41	0.88	0.36	---	18.00	18.00
86	YGS	NIKOLAI	---	---	YGS Regional	Ref# 04-515-169-1					1.65	2.92	11.77	5978.27	114.69	7.78	0.24	---	9.00	18.00





## PHYSICAL PROPERTY LAB REPORT

Sample #: 1



### Rock Sample Description

Rock type	Agglomerate
Comment	WS06-148 @571 ft

### Physical properties of the Rock Sample:

Porosity (%)	1.13
Specific Gravity ( g/cm <sup>3</sup> )	2.81
Magnetic Susceptibility (SI Units)	0.181
Resistivity Mean ( Ohm - m )	1023.23
Resistivity Dev ( Ohm - m )	8.51
IP Response (mV/V)	3.77
IP Response Dev (mV/V)	0.31
Remenant Mag	---
Water Conductivity (mmohs)	52
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

\_\_\_\_\_  
February 3, 2014

\_\_\_\_\_  
Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 2



### Rock Sample Description

Rock type	Agglomerate
Comment	WS08-160 @ 2531 ft

### Physical properties of the Rock Sample:

Porosity (%)	0.86
Specific Gravity ( g/cm <sup>3</sup> )	3.02
Magnetic Susceptibility (SI Units)	0.12
Resistivity Mean ( Ohm - m )	734.38
Resistivity Dev ( Ohm - m )	68.81
IP Response (mV/V)	3.27
IP Response Dev (mV/V)	0.25
Remenant Mag	---
Water Conductivity (mmohs)	22
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

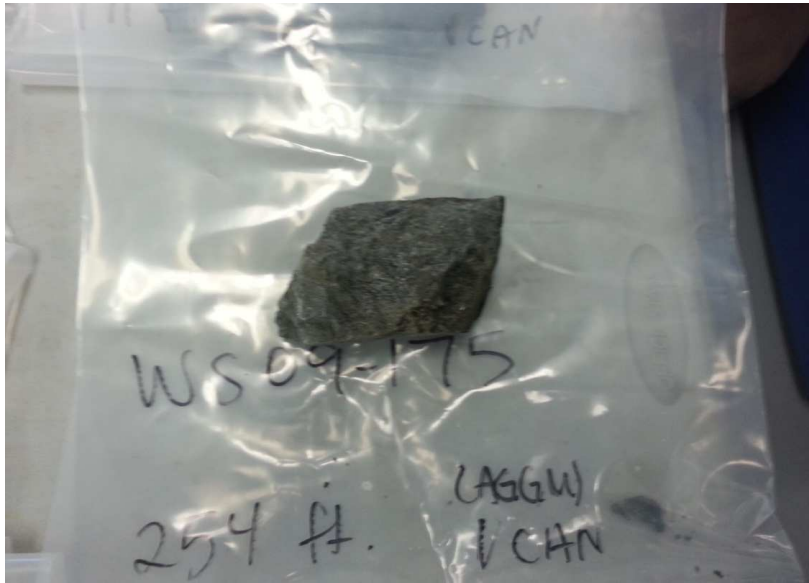
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## PHYSICAL PROPERTY LAB REPORT

Sample #: 3



### Rock Sample Description

Rock type	Volcanic Agglomerate
Comment	WS09-175 @ 254 ft

### Physical properties of the Rock Sample:

Porosity (%)	0.54
Specific Gravity ( g/cm <sup>3</sup> )	2.96
Magnetic Susceptibility (SI Units)	0.185
Resistivity Mean ( Ohm - m )	590.55
Resistivity Dev ( Ohm - m )	17.47
IP Response (mV/V)	5.67
IP Response Dev (mV/V)	0.15
Remenant Mag	---
Water Conductivity (mmohs)	38
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

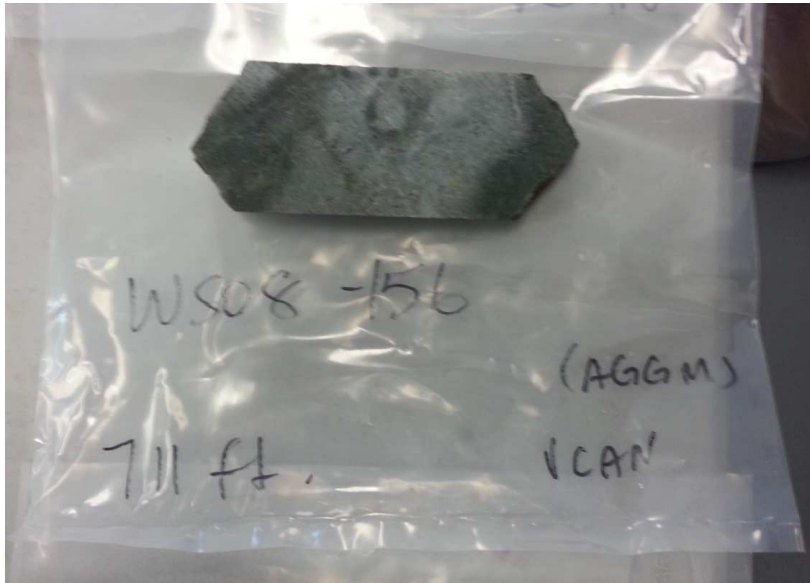
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## PHYSICAL PROPERTY LAB REPORT

Sample #: 4



### Rock Sample Description

Rock type	Volcanic Agglomerate
Comment	WS08-156 @ 711ft

### Physical properties of the Rock Sample:

Porosity (%)	1.04
Specific Gravity ( g/cm <sup>3</sup> )	2.71
Magnetic Susceptibility (SI Units)	0.104
Resistivity Mean ( Ohm - m )	2071.36
Resistivity Dev ( Ohm - m )	336.80
IP Response (mV/V)	3.43
IP Response Dev (mV/V)	0.68
Remenant Mag	---
Water Conductivity (mmohs)	39
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

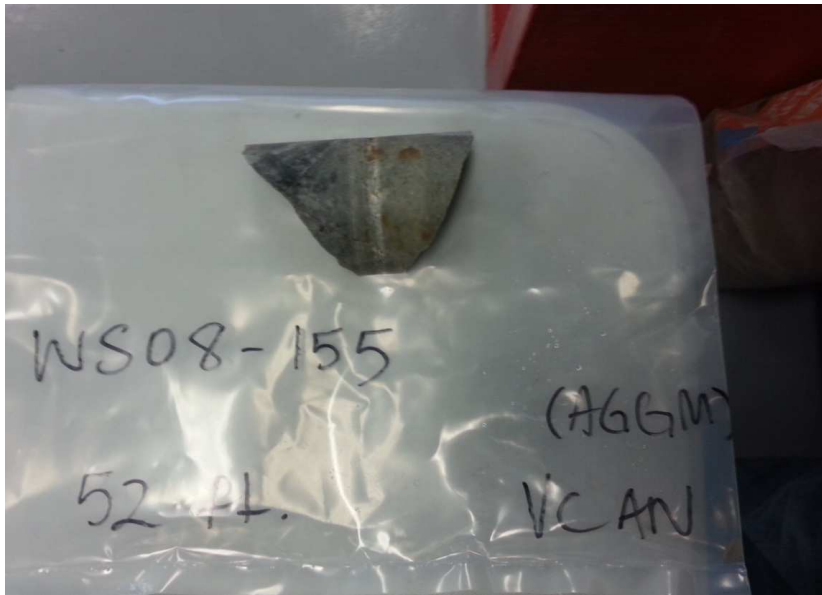
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## PHYSICAL PROPERTY LAB REPORT

Sample #: 5



### Rock Sample Description

Rock type	Volcanic Agglomerate
Comment	WS08-155 @ 52ft

### Physical properties of the Rock Sample:

Porosity (%)	0.58
Specific Gravity ( g/cm <sup>3</sup> )	2.87
Magnetic Susceptibility (SI Units)	0.017
Resistivity Mean ( Ohm - m )	2713.99
Resistivity Dev ( Ohm - m )	275.35
IP Response (mV/V)	2.33
IP Response Dev (mV/V)	0.42
Remenant Mag	---
Water Conductivity (mmohs)	34
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

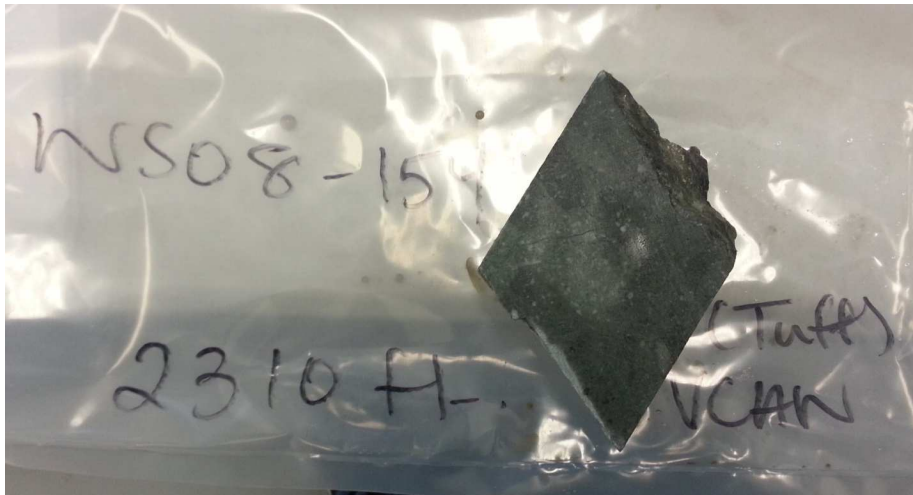
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**PHYSICAL PROPERTY LAB REPORT**

**Sample #: 6**



**Rock Sample Description**

Rock type	Volcanic Tuff
Comment	WS08-154@ 2310ft

**Physical properties of the Rock Sample:**

Porosity (%)	0.91
Specific Gravity ( g/cm <sup>3</sup> )	2.73
Magnetic Susceptibility (SI Units)	0.125
Resistivity Mean ( Ohm - m )	1948.47
Resistivity Dev ( Ohm - m )	194.30
IP Response (mV/V)	2.20
IP Response Dev (mV/V)	0.17
Remenant Mag	---
Water Conductivity (mmohs)	25
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

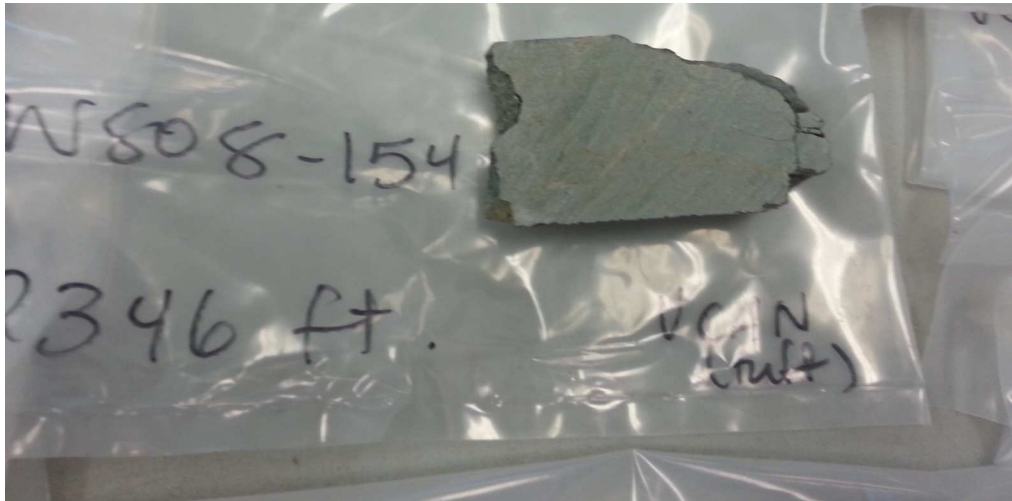
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**Andre Lebel**  
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**February 3, 2014**  
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**PHYSICAL PROPERTY LAB REPORT**

**Sample #: 7**



**Rock Sample Description**

Rock type	Volcanic Tuff
Comment	WS08-154 @ 2346ft

**Physical properties of the Rock Sample:**

Porosity (%)	2.28
Specific Gravity ( g/cm <sup>3</sup> )	2.72
Magnetic Susceptibility (SI Units)	0.093
Resistivity Mean ( Ohm - m )	1790.13
Resistivity Dev ( Ohm - m )	9.17
IP Response (mV/V)	4.50
IP Response Dev (mV/V)	0.30
Remenant Mag	---
Water Conductivity (mmohs)	18
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

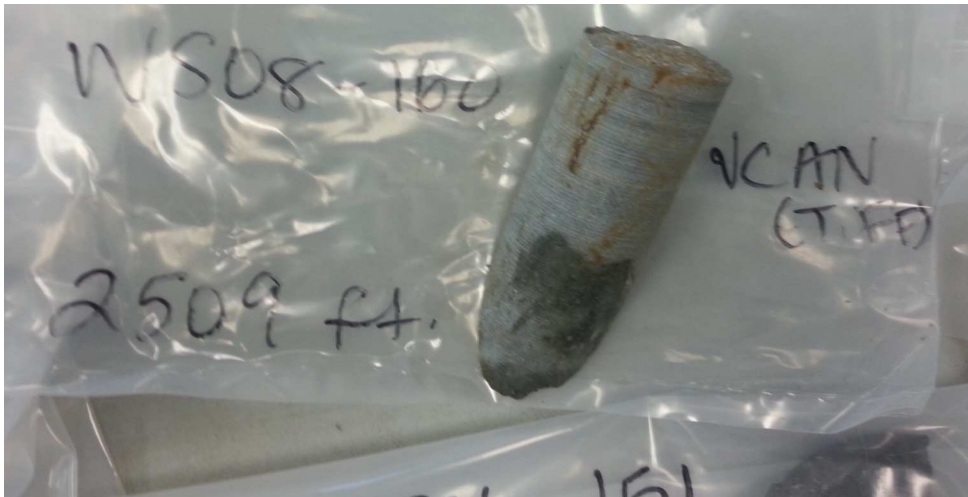
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**February 3, 2014**  
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**PHYSICAL PROPERTY LAB REPORT**

**Sample #: 8**



**Rock Sample Description**

Rock type	Volcanic Tuff
Comment	WS08-160 @ 2509ft

**Physical properties of the Rock Sample:**

Porosity (%)	2.28
Specific Gravity ( g/cm3 )	2.69
Magnetic Susceptibility (SI Units)	0.037
Resistivity Mean ( Ohm - m )	1532.67
Resistivity Dev ( Ohm - m )	97.12
IP Response (mV/V)	5.50
IP Response Dev (mV/V)	0.30
Remenant Mag	2.2505
Water Conductivity (mmohs)	25
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
**Andre Lebel**  
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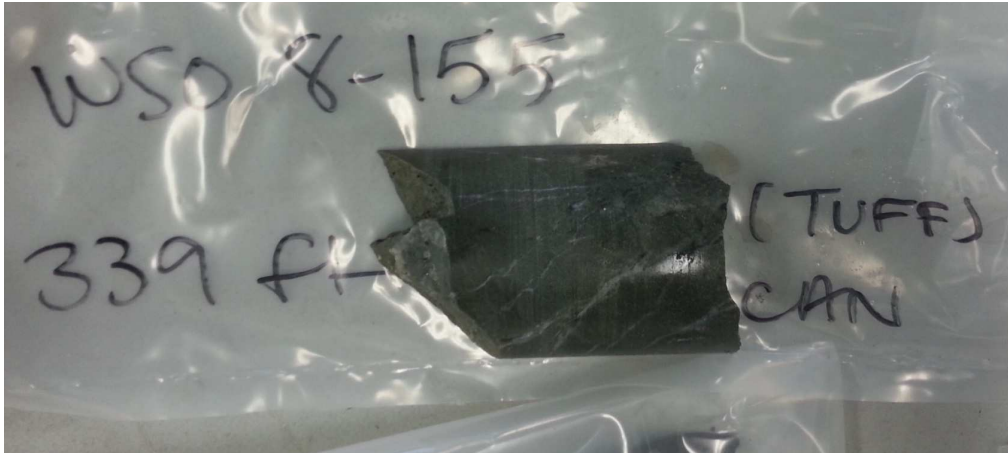
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# PHYSICAL PROPERTY LAB REPORT

Sample #: 9



### Rock Sample Description

Rock type	Volcanic Tuff
Comment	WS08-155 @ 339ft

### Physical properties of the Rock Sample:

Porosity (%)	1.76
Specific Gravity ( g/cm <sup>3</sup> )	2.66
Magnetic Susceptibility (SI Units)	0.041
Resistivity Mean ( Ohm - m )	1290.84
Resistivity Dev ( Ohm - m )	74.16
IP Response (mV/V)	3.30
IP Response Dev (mV/V)	0.17
Remenant Mag	---
Water Conductivity (mmohs)	6
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel  
\_\_\_\_\_

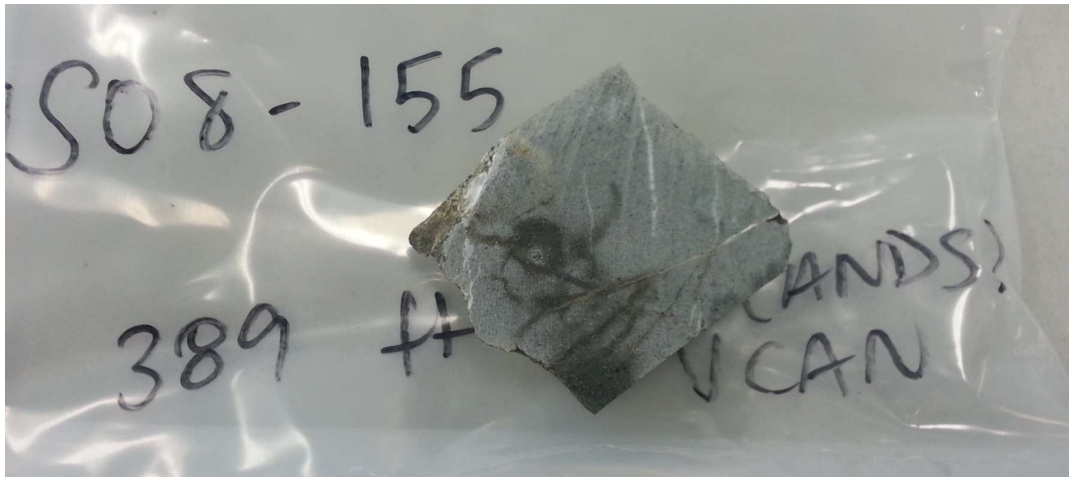
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**PHYSICAL PROPERTY LAB REPORT**

Sample #: 10



**Rock Sample Description**

Rock type	Volcanic Andesite
Comment	WS08-155 @ 389ft

**Physical properties of the Rock Sample:**

Porosity (%)	1.73
Specific Gravity ( g/cm <sup>3</sup> )	2.81
Magnetic Susceptibility (SI Units)	0.088
Resistivity Mean ( Ohm - m )	718.51
Resistivity Dev ( Ohm - m )	52.27
IP Response (mV/V)	3.63
IP Response Dev (mV/V)	0.23
Remenant Mag	---
Water Conductivity (mmohs)	17
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
**Andre Lebel**  
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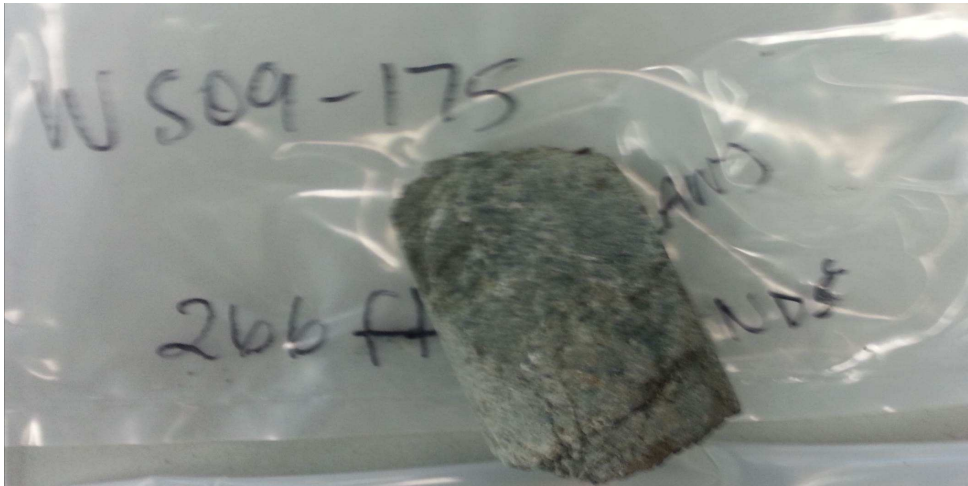
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## PHYSICAL PROPERTY LAB REPORT

Sample #: 11



### Rock Sample Description

Rock type	Volcanic Andesite
Comment	WS09-175 @ 266ft

### Physical properties of the Rock Sample:

Porosity (%)	2.82
Specific Gravity ( g/cm <sup>3</sup> )	2.95
Magnetic Susceptibility (SI Units)	0.0975
Resistivity Mean ( Ohm - m )	483.64
Resistivity Dev ( Ohm - m )	5.65
IP Response (mV/V)	4.47
IP Response Dev (mV/V)	0.40
Remenant Mag	5.3374
Water Conductivity (mmohs)	9
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

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February 3, 2014

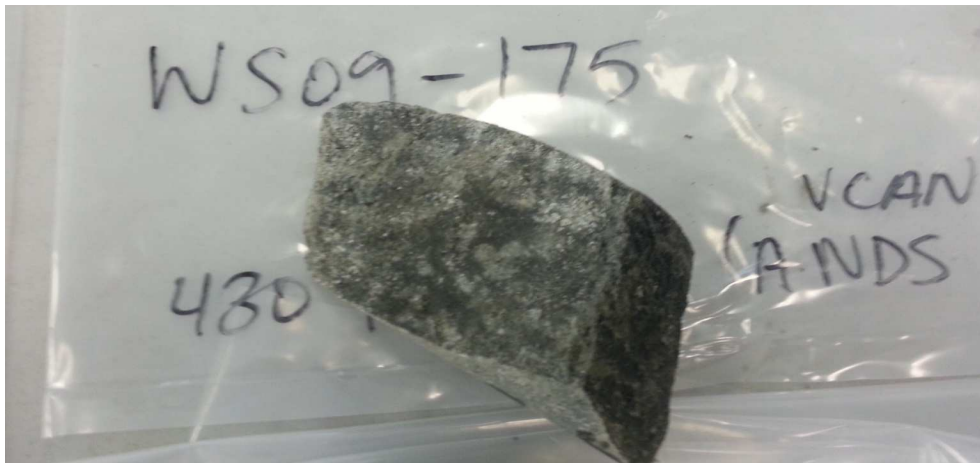
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AURORA GEOSCIENCES

## PHYSICAL PROPERTY LAB REPORT

Sample #: 12



### Rock Sample Description

Rock type	Volcanic Andesite
Comment	WS09-175 @ 430ft

### Physical properties of the Rock Sample:

Porosity (%)	2.67
Specific Gravity ( g/cm <sup>3</sup> )	2.99
Magnetic Susceptibility (SI Units)	0.197
Resistivity Mean ( Ohm - m )	2924.43
Resistivity Dev ( Ohm - m )	17.33
IP Response (mV/V)	5.30
IP Response Dev (mV/V)	0.36
Remenant Mag	---
Water Conductivity (mmohs)	16
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

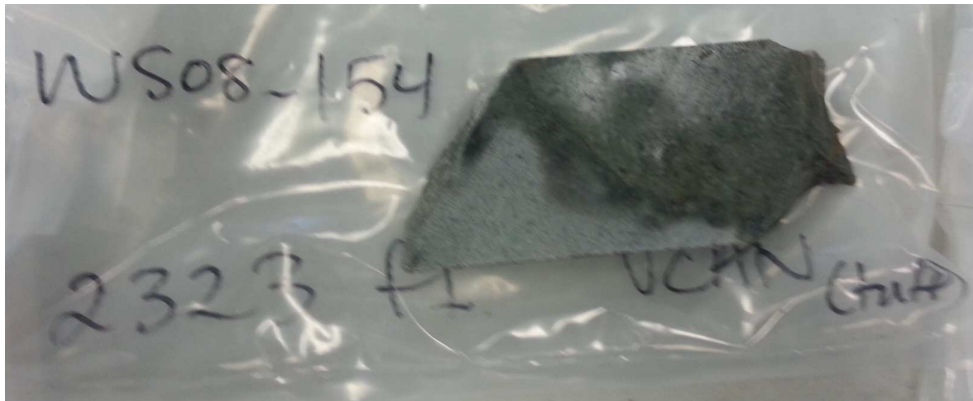
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February 3, 2014

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Date



**PHYSICAL PROPERTY LAB REPORT**

Sample #: 13



**Rock Sample Description**

Rock type	Volcanic Andesite
Comment	WS08-154 @ 2323ft

**Physical properties of the Rock Sample:**

Porosity (%)	0.79
Specific Gravity ( g/cm <sup>3</sup> )	2.69
Magnetic Susceptibility (SI Units)	0.455
Resistivity Mean ( Ohm - m )	1980.51
Resistivity Dev ( Ohm - m )	87.52
IP Response (mV/V)	7.97
IP Response Dev (mV/V)	0.15
Remenant Mag	---
Water Conductivity (mmohs)	19
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

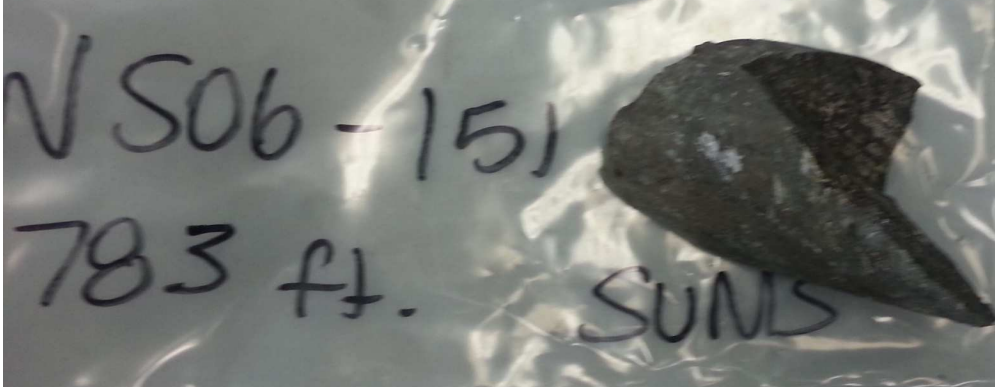
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**Andre Lebel**  
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**February 3, 2014**  
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Date

PHYSICAL PROPERTY LAB REPORT

Sample #: 14



Rock Sample Description

Rock type	Kluane Ultramafics, Massive sulfides
Comment	WS06-151 @ 783ft

Physical properties of the Rock Sample:

Porosity (%)	3.81
Specific Gravity ( g/cm <sup>3</sup> )	4.17
Magnetic Susceptibility (SI Units)	9.448
Resistivity Mean ( Ohm - m )	7.90
Resistivity Dev ( Ohm - m )	0.50
IP Response (mV/V)	194.43
IP Response Dev (mV/V)	23.84
Remenant Mag	---
Water Conductivity (mmohs)	28
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

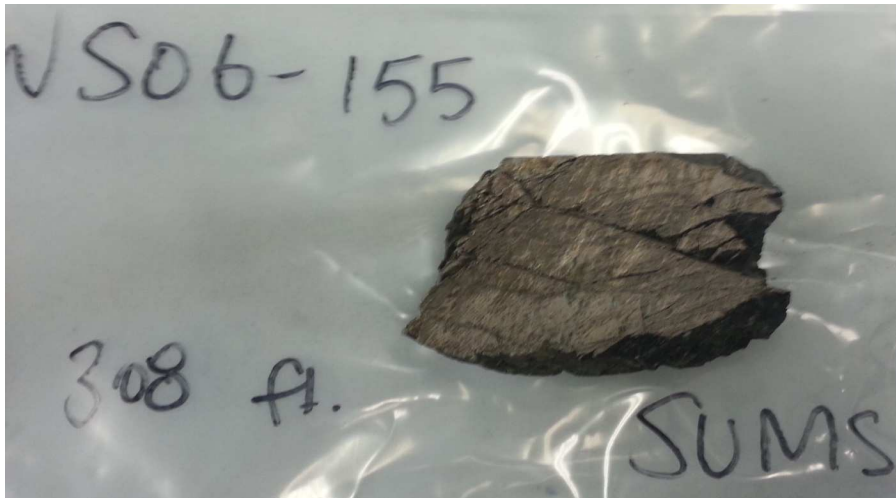
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**Andre Lebel**  
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**February 3, 2014**  
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 Date



**PHYSICAL PROPERTY LAB REPORT**

**Sample #: 15**



**Rock Sample Description**

Rock type	Kluane Ultramafics, Massive sulfides
Comment	WS06-155 @ 308ft

**Physical properties of the Rock Sample:**

Porosity (%)	1.92
Specific Gravity ( g/cm <sup>3</sup> )	4.50
Magnetic Susceptibility (SI Units)	6.048
Resistivity Mean ( Ohm - m )	7.37
Resistivity Dev ( Ohm - m )	0.62
IP Response (mV/V)	152.50
IP Response Dev (mV/V)	30.93
Remenant Mag	---
Water Conductivity (mmohs)	21
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

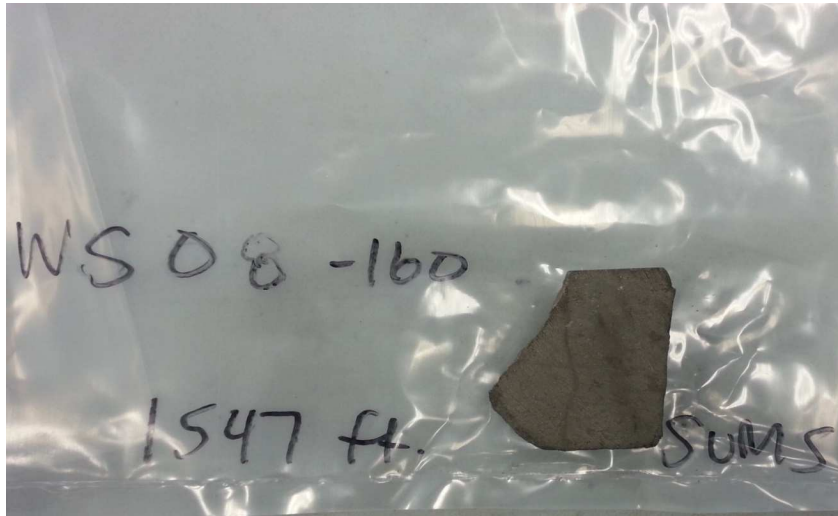
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**Andre Lebel**  
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**February 3, 2014**  
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 Date



**PHYSICAL PROPERTY LAB REPORT**

**Sample #: 16**



**Rock Sample Description**

<b>Rock type</b>	Kluane Ultramafics, Massive sulfides
<b>Comment</b>	WS08-160@ 1547ft

**Physical properties of the Rock Sample:**

Porosity (%)	1.26
Specific Gravity ( g/cm <sup>3</sup> )	4.55
Magnetic Susceptibility (SI Units)	4.488
Resistivity Mean ( Ohm - m )	11.24
Resistivity Dev ( Ohm - m )	0.60
IP Response (mV/V)	191.90
IP Response Dev (mV/V)	5.88
Remenant Mag	1825.1724
Water Conductivity (mmohs)	8
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

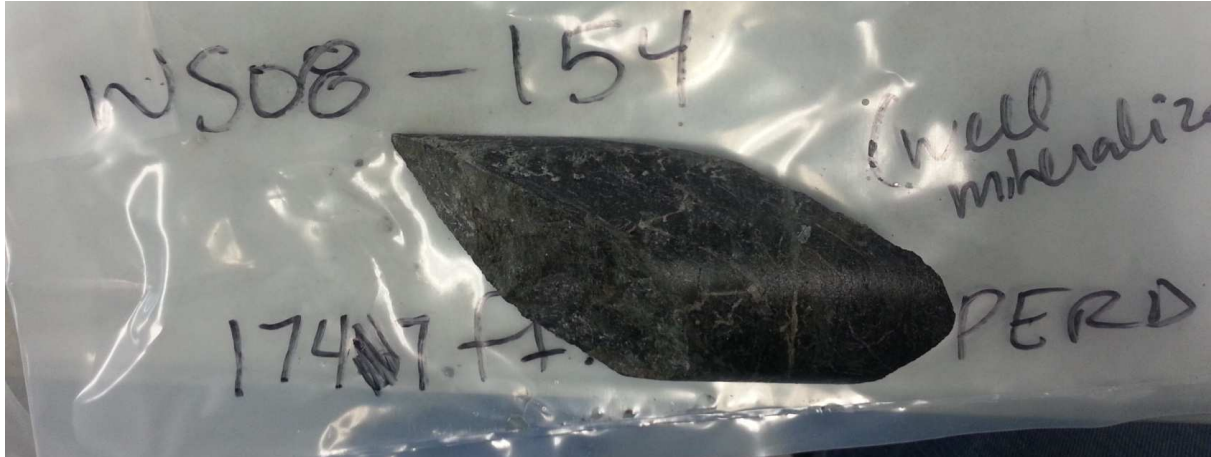
Measured by:

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**Andre Lebel**  
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**February 3, 2014**  
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 Date



Sample #: 17



**Rock Sample Description**

Rock type	Kluane Ultramafics, Well Mineralized Peridotite
Comment	WS08-154@ 1747ft

**Physical properties of the Rock Sample:**

Porosity (%)	2.21
Specific Gravity ( g/cm <sup>3</sup> )	2.88
Magnetic Susceptibility (SI Units)	9.586
Resistivity Mean ( Ohm - m )	13.27
Resistivity Dev ( Ohm - m )	9.77
IP Response (mV/V)	289.67
IP Response Dev (mV/V)	21.50
Remenant Mag	---
Water Conductivity (mmohs)	6
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

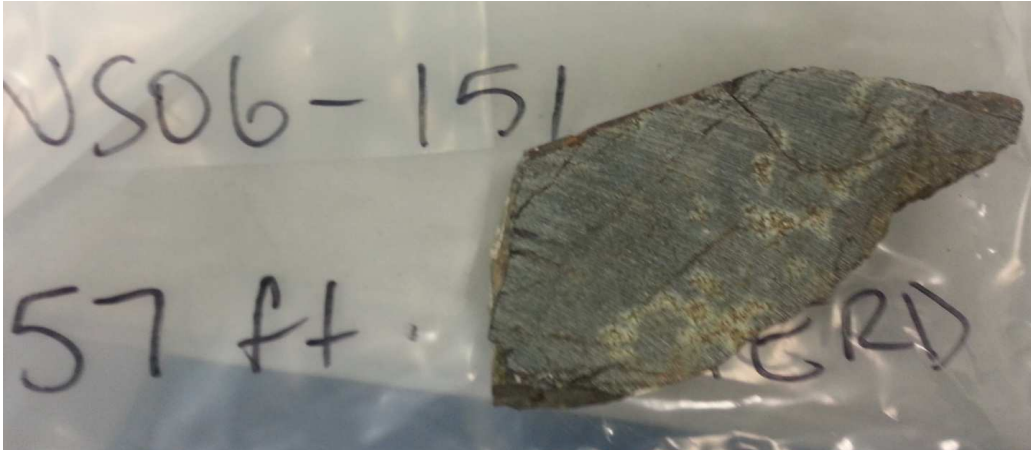
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 Andre Lebel  
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February 3, 2014

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 Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 18



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS06-151@ 57ft

### Physical properties of the Rock Sample:

Porosity (%)	7.52
Specific Gravity ( g/cm <sup>3</sup> )	2.83
Magnetic Susceptibility (SI Units)	29.712
Resistivity Mean ( Ohm - m )	1051.78
Resistivity Dev ( Ohm - m )	17.78
IP Response (mV/V)	58.33
IP Response Dev (mV/V)	1.52
Remenant Mag	---
Water Conductivity (mmohs)	21
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

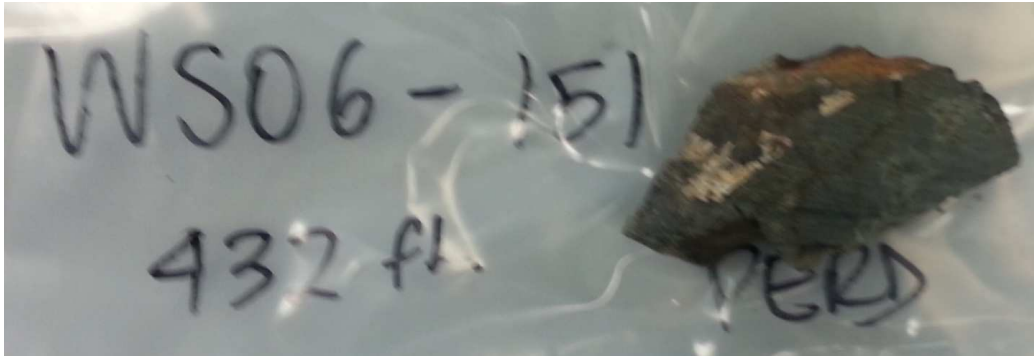
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 19



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS06-151@ 432ft

### Physical properties of the Rock Sample:

Porosity (%)	5.35
Specific Gravity ( g/cm <sup>3</sup> )	2.68
Magnetic Susceptibility (SI Units)	20.88
Resistivity Mean ( Ohm - m )	616.57
Resistivity Dev ( Ohm - m )	27.93
IP Response (mV/V)	61.97
IP Response Dev (mV/V)	1.82
Remenant Mag	---
Water Conductivity (mmohs)	32
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

\_\_\_\_\_  
February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 20



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS08-156@ 61ft

### Physical properties of the Rock Sample:

Porosity (%)	1.98
Specific Gravity ( g/cm <sup>3</sup> )	2.79
Magnetic Susceptibility (SI Units)	32.67
Resistivity Mean ( Ohm - m )	2406.90
Resistivity Dev ( Ohm - m )	529.09
IP Response (mV/V)	86.76
IP Response Dev (mV/V)	2.81
Remenant Mag	1500.9024
Water Conductivity (mmohs)	45
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 21**



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS06-150@ 191ft

### Physical properties of the Rock Sample:

Porosity (%)	3.48
Specific Gravity ( g/cm <sup>3</sup> )	2.71
Magnetic Susceptibility (SI Units)	26.271
Resistivity Mean ( Ohm - m )	14287.93
Resistivity Dev ( Ohm - m )	514.65
IP Response (mV/V)	43.88
IP Response Dev (mV/V)	1.31
Remenant Mag	---
Water Conductivity (mmohs)	54
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

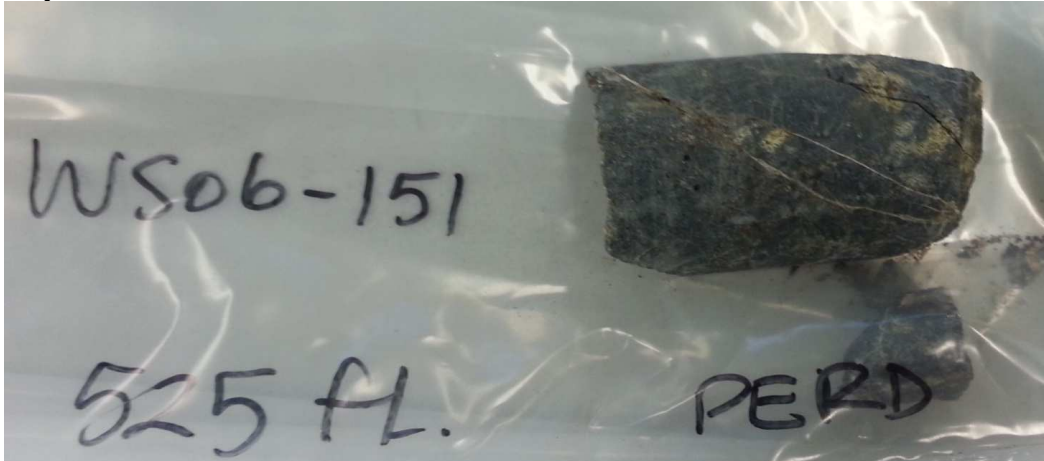
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**Andre Lebel**

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**February 3, 2014**

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## PHYSICAL PROPERTY LAB REPORT

Sample #: 22



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS06-151 at 525ft

### Physical properties of the Rock Sample:

Porosity (%)	4.22
Specific Gravity ( g/cm <sup>3</sup> )	2.68
Magnetic Susceptibility (SI Units)	29.11
Resistivity Mean ( Ohm - m )	157.64
Resistivity Dev ( Ohm - m )	8.71
IP Response (mV/V)	35.24
IP Response Dev (mV/V)	1.82
Remenant Mag	---
Water Conductivity (mmohs)	210
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 23



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS08-154 at 2051ft

### Physical properties of the Rock Sample:

Porosity (%)	0.98
Specific Gravity ( g/cm <sup>3</sup> )	2.81
Magnetic Susceptibility (SI Units)	18.462
Resistivity Mean ( Ohm - m )	835.84
Resistivity Dev ( Ohm - m )	17.56
IP Response (mV/V)	53.20
IP Response Dev (mV/V)	1.18
Remenant Mag	---
Water Conductivity (mmohs)	39
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

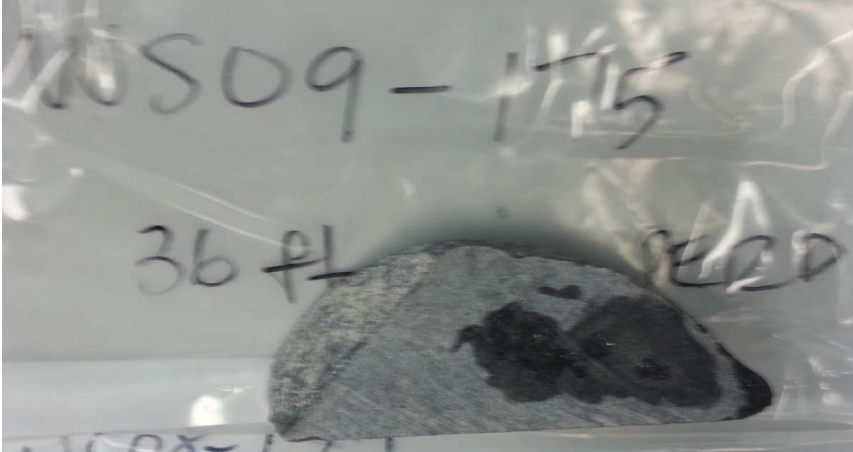
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February 3, 2014

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## PHYSICAL PROPERTY LAB REPORT

Sample #: 24



### Rock Sample Description

Rock type	Kluane Ultramafics, Peridotite
Comment	WS09-175 at 36ft

### Physical properties of the Rock Sample:

Porosity (%)	0.48
Specific Gravity ( g/cm <sup>3</sup> )	2.97
Magnetic Susceptibility (SI Units)	23.332
Resistivity Mean ( Ohm - m )	1985.77
Resistivity Dev ( Ohm - m )	106.12
IP Response (mV/V)	108.97
IP Response Dev (mV/V)	1.36
Remenant Mag	---
Water Conductivity (mmohs)	9
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

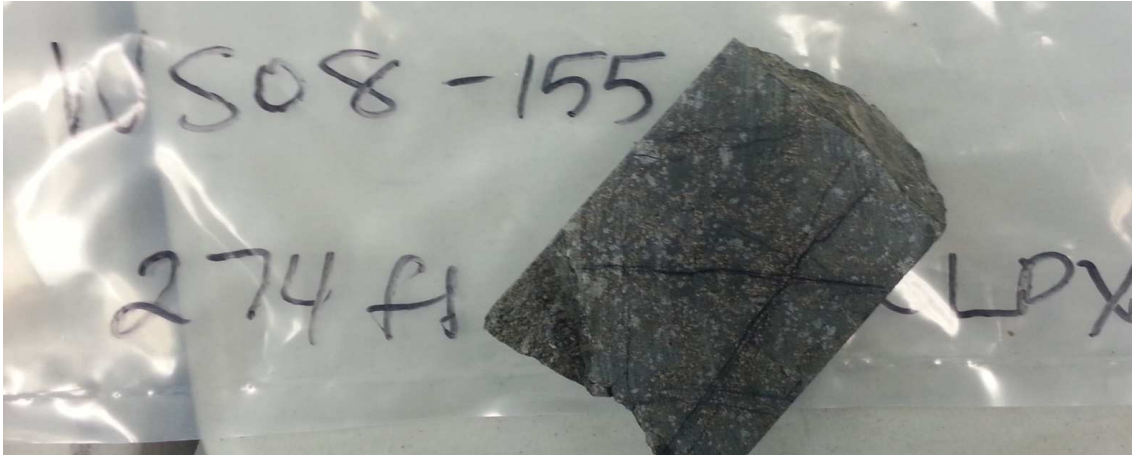
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## PHYSICAL PROPERTY LAB REPORT

Sample #: 25



### Rock Sample Description

Rock type	Kluane Ultramafics, Clinopyroxenite
Comment	WS08-155 at 274ft

### Physical properties of the Rock Sample:

Porosity (%)	3.17
Specific Gravity ( g/cm <sup>3</sup> )	2.90
Magnetic Susceptibility (SI Units)	39.42
Resistivity Mean ( Ohm - m )	16.71
Resistivity Dev ( Ohm - m )	0.44
IP Response (mV/V)	275.63
IP Response Dev (mV/V)	5.27
Remenant Mag	---
Water Conductivity (mmohs)	45
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

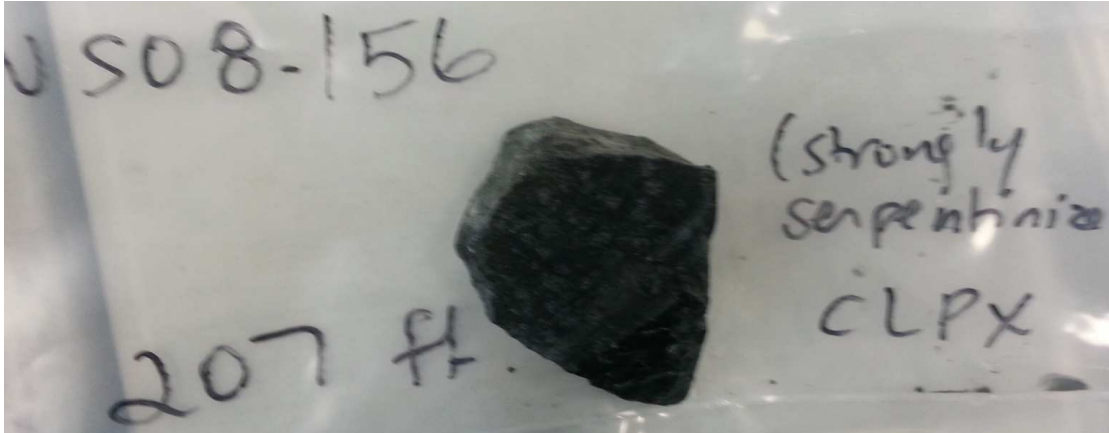
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Andre Lebel

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February 3, 2014

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## PHYSICAL PROPERTY LAB REPORT

Sample #: 26



### Rock Sample Description

Rock type	Kluane Ultramafics, Clinopyroxenite, Strongly serpentinized
Comment	WS08-156 at 207ft

### Physical properties of the Rock Sample:

Porosity (%)	1.79
Specific Gravity ( g/cm3 )	2.81
Magnetic Susceptibility (SI Units)	29.52
Resistivity Mean ( Ohm - m )	1849.04
Resistivity Dev ( Ohm - m )	175.83
IP Response (mV/V)	28.07
IP Response Dev (mV/V)	0.59
Remanent Mag	---
Water Conductivity (mmohs)	9
Temperature at which specific gravity was measured (C)	18

Notes: Remanent Mag was measured in six directions.

Measured by:

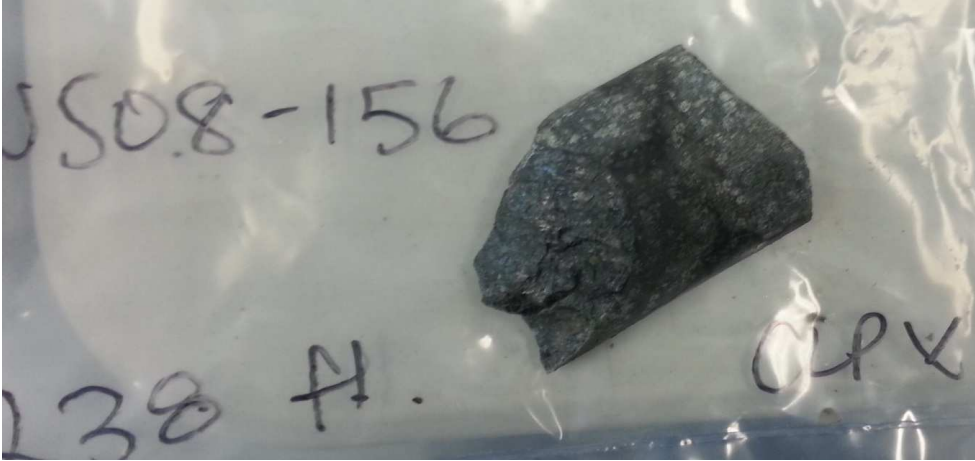
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 27



### Rock Sample Description

Rock type	Kluane Ultramafics, Clinopyroxenite,
Comment	WS08-156 at 238ft

### Physical properties of the Rock Sample:

Porosity (%)	2.25
Specific Gravity ( g/cm <sup>3</sup> )	2.71
Magnetic Susceptibility (SI Units)	19.93
Resistivity Mean ( Ohm - m )	148545.09
Resistivity Dev ( Ohm - m )	4782.93
IP Response (mV/V)	37.60
IP Response Dev (mV/V)	1.48
Remanent Mag	2703.6204
Water Conductivity (mmohs)	42
Temperature at which specific gravity was measured (C)	18

Notes: Remanent Mag was measured in six directions.

Measured by:

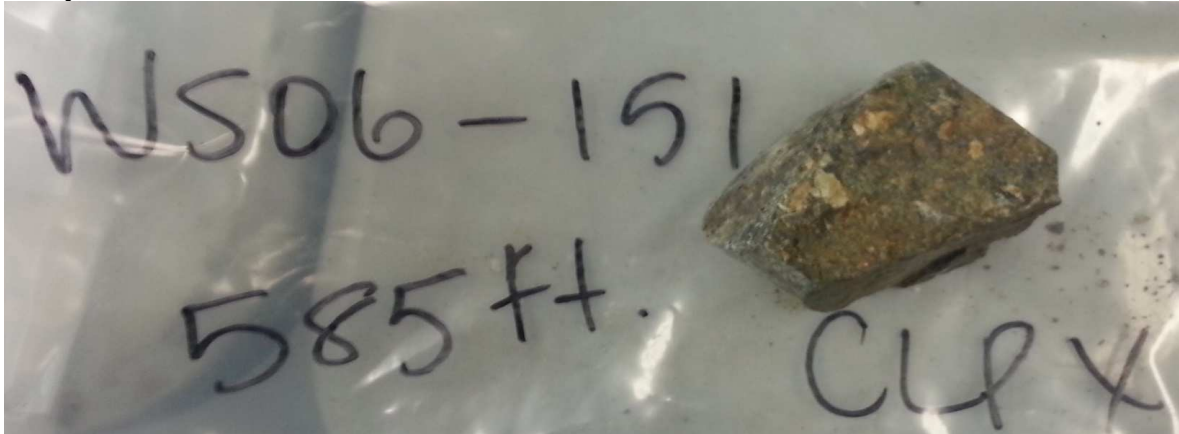
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 28



### Rock Sample Description

Rock type	Kluane Ultramafics, Clinopyroxenite,
Comment	WS06-151 at 585 ft

### Physical properties of the Rock Sample:

Porosity (%)	2.91
Specific Gravity ( g/cm <sup>3</sup> )	2.83
Magnetic Susceptibility (SI Units)	6.294
Resistivity Mean ( Ohm - m )	2458.90
Resistivity Dev ( Ohm - m )	34.38
IP Response (mV/V)	12.19
IP Response Dev (mV/V)	0.66
Remenant Mag	---
Water Conductivity (mmohs)	9
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

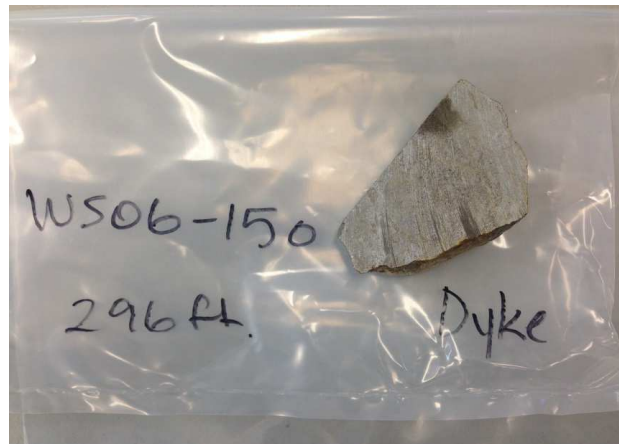
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February 3, 2014

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## PHYSICAL PROPERTY LAB REPORT

Sample #: 45



### Rock Sample Description

Rock type	Dyke (Chilled Gabbro)
Comment	WS06-150 @ 296ft

### Physical properties of the Rock Sample:

Porosity (%)	3.39
Specific Gravity ( g/cm <sup>3</sup> )	3.14
Magnetic Susceptibility (SI Units)	0.155
Resistivity Mean ( Ohm - m )	738.17
Resistivity Dev ( Ohm - m )	76.14
IP Response (mV/V)	0.75
IP Response Dev (mV/V)	0.13
Remenant Mag	3.6430
Water Conductivity (mmohs)	26
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

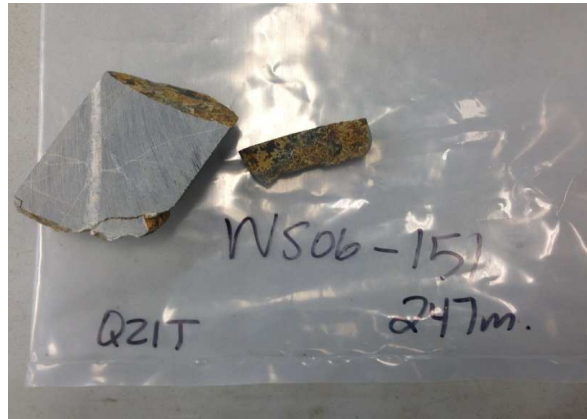
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 46



### Rock Sample Description

Rock type	Quartzite
Comment	WS06-151 @ 247m

### Physical properties of the Rock Sample:

Porosity (%)	0.96
Specific Gravity ( g/cm <sup>3</sup> )	2.69
Magnetic Susceptibility (SI Units)	0.085
Resistivity Mean ( Ohm - m )	2602.61
Resistivity Dev ( Ohm - m )	566.14
IP Response (mV/V)	7.98
IP Response Dev (mV/V)	2.84
Remenant Mag	1.6395
Water Conductivity (mmohs)	39
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

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February 3, 2014

\_\_\_\_\_  
Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 47**



### Rock Sample Description

Rock type	Quartzite
Comment	WS06-147 @ 331ft

### Physical properties of the Rock Sample:

Porosity (%)	0.97
Specific Gravity ( g/cm <sup>3</sup> )	2.83
Magnetic Susceptibility (SI Units)	0.036
Resistivity Mean ( Ohm - m )	1521.31
Resistivity Dev ( Ohm - m )	68.08
IP Response (mV/V)	2.60
IP Response Dev (mV/V)	0.10
Remenant Mag	---
Water Conductivity (mmohs)	80
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

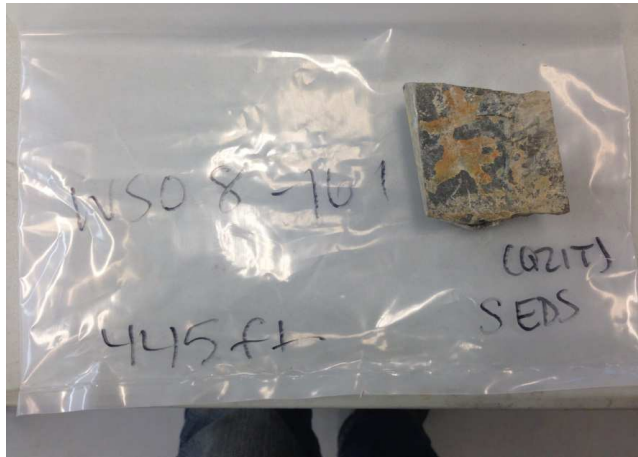
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 48



### Rock Sample Description

Rock type	Quartzite
Comment	WS08-161 @ 445ft

### Physical properties of the Rock Sample:

Porosity (%)	0.32
Specific Gravity ( g/cm <sup>3</sup> )	2.70
Magnetic Susceptibility (SI Units)	0.13
Resistivity Mean ( Ohm - m )	3116.40
Resistivity Dev ( Ohm - m )	156.95
IP Response (mV/V)	0.49
IP Response Dev (mV/V)	0.27
Remenant Mag	---
Water Conductivity (mmohs)	51
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

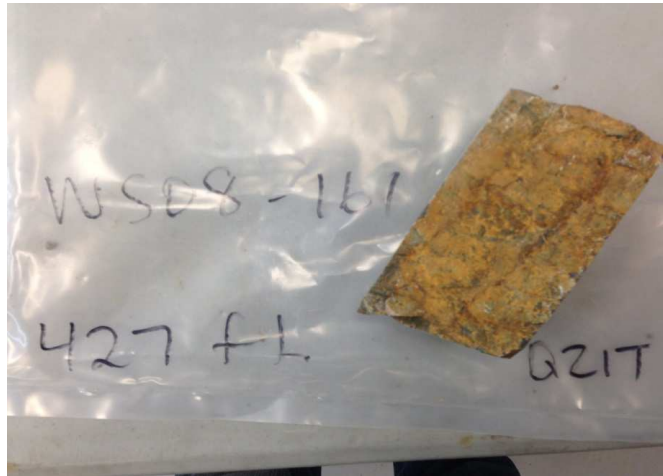
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 49



### Rock Sample Description

Rock type	Quartzite
Comment	WS08-161 @ 427ft

### Physical properties of the Rock Sample:

Porosity (%)	0.79
Specific Gravity ( g/cm <sup>3</sup> )	2.81
Magnetic Susceptibility (SI Units)	0.034
Resistivity Mean ( Ohm - m )	5005.29
Resistivity Dev ( Ohm - m )	1519.88
IP Response (mV/V)	2.71
IP Response Dev (mV/V)	0.58
Remenant Mag	---
Water Conductivity (mmohs)	16
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 50



### Rock Sample Description

Rock type	Dunite
Comment	WS09-176 @ 272ft

### Physical properties of the Rock Sample:

Porosity (%)	1.35
Specific Gravity ( g/cm <sup>3</sup> )	2.76
Magnetic Susceptibility (SI Units)	28.98
Resistivity Mean ( Ohm - m )	---
Resistivity Dev ( Ohm - m )	---
IP Response (mV/V)	---
IP Response Dev (mV/V)	---
Remenant Mag	---
Water Conductivity (mmohs)	8
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.  
 Could not measure Resistivity or IP Response.

Measured by:

\_\_\_\_\_  
 Andre Lebel

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 February 3, 2014

\_\_\_\_\_  
 Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 51**



### Rock Sample Description

Rock type	Dunite
Comment	WS09-176 @ 22ft

### Physical properties of the Rock Sample:

Porosity (%)	1.37
Specific Gravity ( g/cm <sup>3</sup> )	2.73
Magnetic Susceptibility (SI Units)	30.76
Resistivity Mean ( Ohm - m )	111.13
Resistivity Dev ( Ohm - m )	4.01
IP Response (mV/V)	---
IP Response Dev (mV/V)	---
Remenant Mag	5416.8755
Water Conductivity (mmohs)	10
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

\_\_\_\_\_  
February 3, 2014

\_\_\_\_\_  
Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 52



### Rock Sample Description

Rock type	Dunite
Comment	WS09-176 @ 46ft

### Physical properties of the Rock Sample:

Porosity (%)	1.27
Specific Gravity ( g/cm <sup>3</sup> )	2.78
Magnetic Susceptibility (SI Units)	27.49
Resistivity Mean ( Ohm - m )	3040.96
Resistivity Dev ( Ohm - m )	133.74
IP Response (mV/V)	181.12
IP Response Dev (mV/V)	15.90
Remenant Mag	---
Water Conductivity (mmohs)	37
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 53



### Rock Sample Description

Rock type	Gabbro
Comment	WS08-156 @ 296ft

### Physical properties of the Rock Sample:

Porosity (%)	2.56
Specific Gravity ( g/cm <sup>3</sup> )	3.44
Magnetic Susceptibility (SI Units)	-0.018
Resistivity Mean ( Ohm - m )	351.30
Resistivity Dev ( Ohm - m )	8.50
IP Response (mV/V)	5.00
IP Response Dev (mV/V)	0.35
Remenant Mag	---
Water Conductivity (mmohs)	8
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

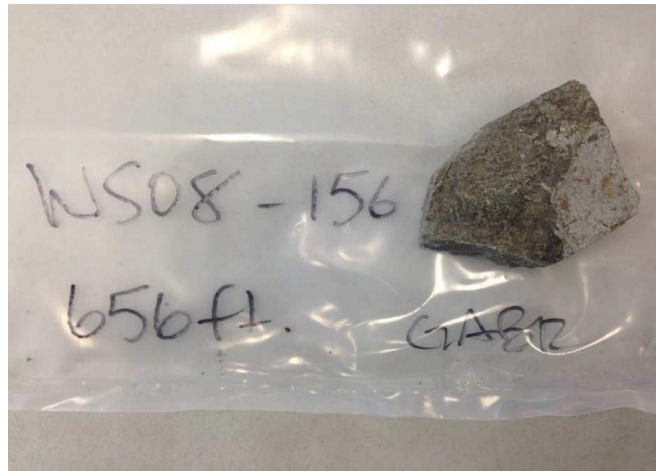
\_\_\_\_\_  
Andre Lebel

\_\_\_\_\_  
February 3, 2014

\_\_\_\_\_  
Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 54



### Rock Sample Description

Rock type	Gabbro
Comment	WS08-156 @ 656ft

### Physical properties of the Rock Sample:

Porosity (%)	2.16
Specific Gravity ( g/cm <sup>3</sup> )	3.16
Magnetic Susceptibility (SI Units)	2.139
Resistivity Mean ( Ohm - m )	7.72
Resistivity Dev ( Ohm - m )	0.34
IP Response (mV/V)	171.07
IP Response Dev (mV/V)	19.92
Remenant Mag	---
Water Conductivity (mmohs)	36
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

\_\_\_\_\_  
February 3, 2014

\_\_\_\_\_  
Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 55



### Rock Sample Description

Rock type	Gabbro
Comment	WS08-148 @ 547ft

### Physical properties of the Rock Sample:

Porosity (%)	1.39
Specific Gravity ( g/cm <sup>3</sup> )	3.12
Magnetic Susceptibility (SI Units)	6.269
Resistivity Mean ( Ohm - m )	1936.68
Resistivity Dev ( Ohm - m )	132.45
IP Response (mV/V)	25.57
IP Response Dev (mV/V)	0.06
Remenant Mag	744.7301
Water Conductivity (mmohs)	29
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

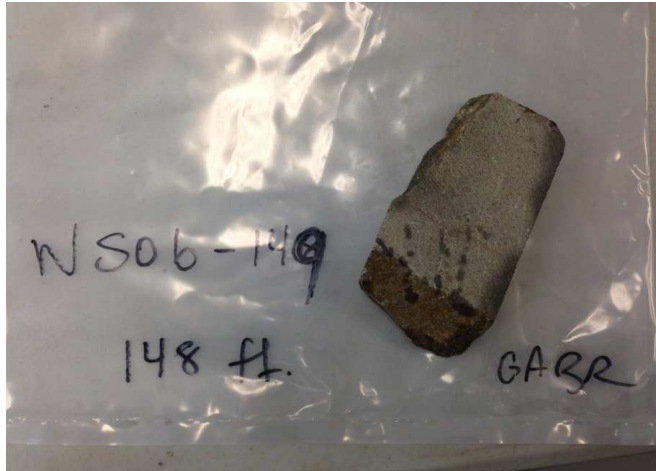
\_\_\_\_\_  
Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 56



### Rock Sample Description

Rock type	Gabbro
Comment	WS06-149 @ 148ft

### Physical properties of the Rock Sample:

Porosity (%)	3.78
Specific Gravity ( g/cm <sup>3</sup> )	3.21
Magnetic Susceptibility (SI Units)	0.25
Resistivity Mean ( Ohm - m )	1194.61
Resistivity Dev ( Ohm - m )	96.90
IP Response (mV/V)	67.43
IP Response Dev (mV/V)	2.73
Remenant Mag	---
Water Conductivity (mmohs)	71
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

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February 3, 2014

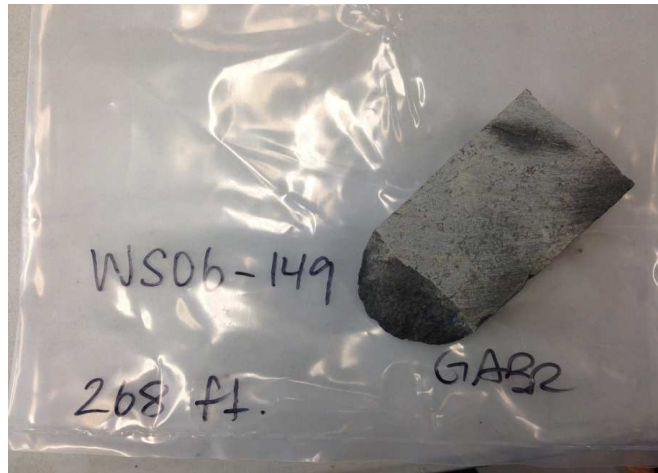
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Date





## PHYSICAL PROPERTY LAB REPORT

Sample #: 57



### Rock Sample Description

Rock type	Gabbro
Comment	WS06-149 @ 268ft

### Physical properties of the Rock Sample:

Porosity (%)	1.16
Specific Gravity ( g/cm <sup>3</sup> )	3.09
Magnetic Susceptibility (SI Units)	2.208
Resistivity Mean ( Ohm - m )	10.14
Resistivity Dev ( Ohm - m )	0.90
IP Response (mV/V)	191.37
IP Response Dev (mV/V)	1.96
Remenant Mag	---
Water Conductivity (mmohs)	32
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

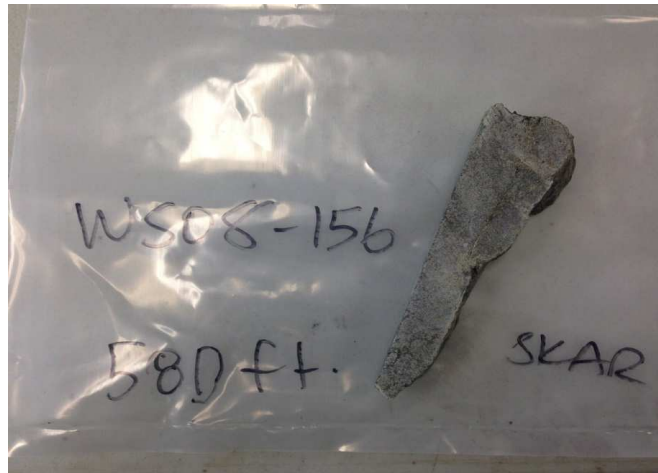
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 58**



### Rock Sample Description

Rock type	Skarn
Comment	WS08-156 @ 580ft

### Physical properties of the Rock Sample:

Porosity (%)	2.46
Specific Gravity ( g/cm <sup>3</sup> )	3.09
Magnetic Susceptibility (SI Units)	1.995
Resistivity Mean ( Ohm - m )	85.35
Resistivity Dev ( Ohm - m )	2.15
IP Response (mV/V)	121.37
IP Response Dev (mV/V)	2.48
Remenant Mag	---
Water Conductivity (mmohs)	40
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
**Andre Lebel**

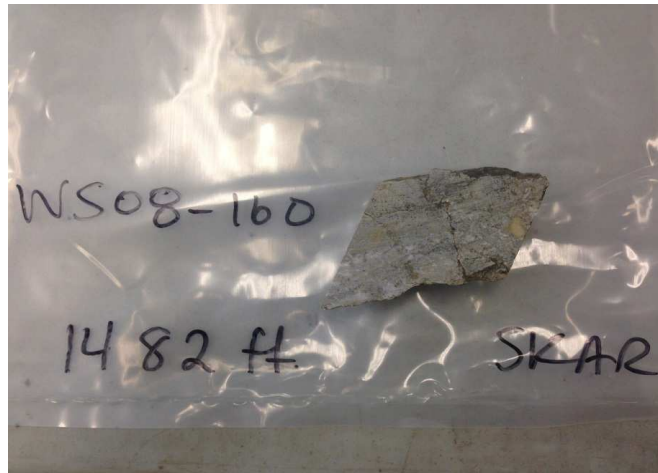
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**February 3, 2014**

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 Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 59



### Rock Sample Description

Rock type	Skarn
Comment	WS08-160 @ 1482ft

### Physical properties of the Rock Sample:

Porosity (%)	5.36
Specific Gravity ( g/cm <sup>3</sup> )	2.83
Magnetic Susceptibility (SI Units)	-0.554
Resistivity Mean ( Ohm - m )	642.32
Resistivity Dev ( Ohm - m )	16.63
IP Response (mV/V)	45.33
IP Response Dev (mV/V)	0.60
Remenant Mag	2.8653
Water Conductivity (mmohs)	105
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

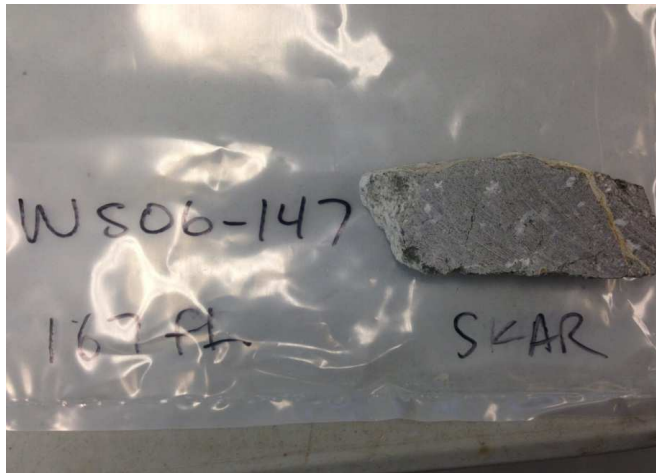
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 60



### Rock Sample Description

Rock type	Skarn
Comment	WS08-147 @ 167ft

### Physical properties of the Rock Sample:

Porosity (%)	1.75
Specific Gravity ( g/cm <sup>3</sup> )	3.18
Magnetic Susceptibility (SI Units)	-0.088
Resistivity Mean ( Ohm - m )	1439.02
Resistivity Dev ( Ohm - m )	138.27
IP Response (mV/V)	6.63
IP Response Dev (mV/V)	0.15
Remenant Mag	---
Water Conductivity (mmohs)	54
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

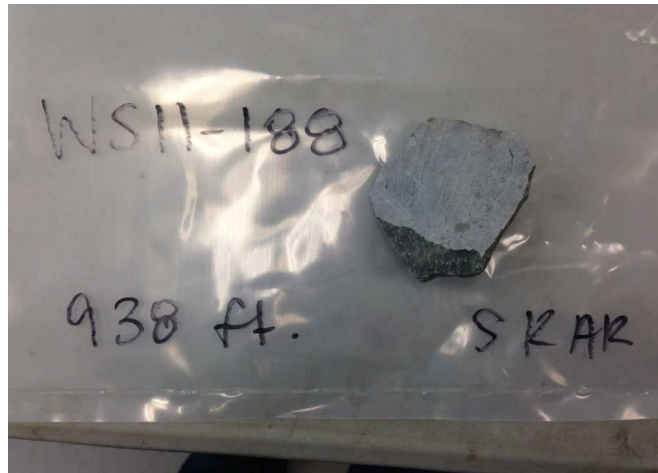
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 61**



### Rock Sample Description

Rock type	Skarn
Comment	WS11-188 @ 938ft

### Physical properties of the Rock Sample:

Porosity (%)	1.19
Specific Gravity ( g/cm <sup>3</sup> )	3.30
Magnetic Susceptibility (SI Units)	-0.258
Resistivity Mean ( Ohm - m )	23892.31
Resistivity Dev ( Ohm - m )	1842.85
IP Response (mV/V)	27.90
IP Response Dev (mV/V)	0.53
Remenant Mag	---
Water Conductivity (mmohs)	16
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

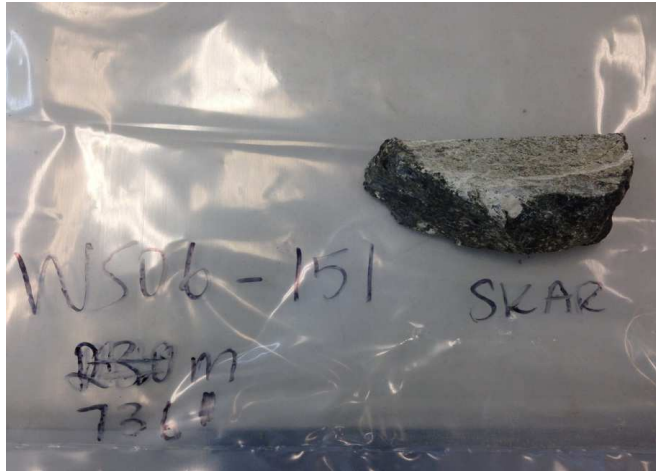
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 62



### Rock Sample Description

Rock type	Skarn
Comment	WS06-151 @ 736m

### Physical properties of the Rock Sample:

Porosity (%)	3.79
Specific Gravity ( g/cm <sup>3</sup> )	2.86
Magnetic Susceptibility (SI Units)	-0.001
Resistivity Mean ( Ohm - m )	170.17
Resistivity Dev ( Ohm - m )	4.72
IP Response (mV/V)	3.53
IP Response Dev (mV/V)	0.06
Remenant Mag	---
Water Conductivity (mmohs)	37
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

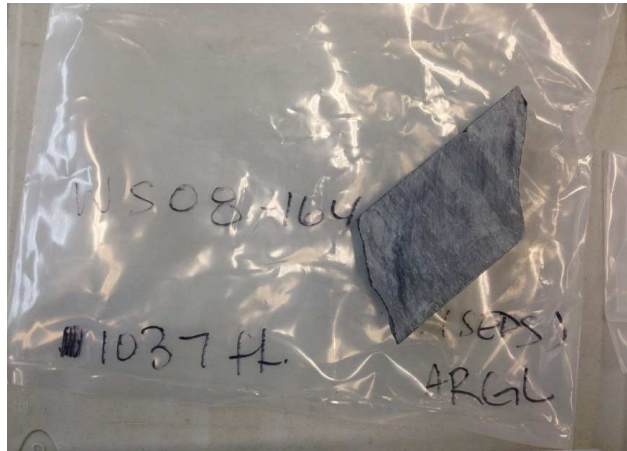
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 67**



### Rock Sample Description

Rock type	Argillite
Comment	WS08-164 @ 1037ft

### Physical properties of the Rock Sample:

Porosity (%)	1.13
Specific Gravity ( g/cm <sup>3</sup> )	2.79
Magnetic Susceptibility (SI Units)	0.212
Resistivity Mean ( Ohm - m )	1355.75
Resistivity Dev ( Ohm - m )	71.75
IP Response (mV/V)	4.40
IP Response Dev (mV/V)	0.10
Remenant Mag	---
Water Conductivity (mmohs)	106
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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**Andre Lebel**

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**February 3, 2014**

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 Date



## PHYSICAL PROPERTY LAB REPORT

**Sample #: 68**



### Rock Sample Description

Rock type	Argillite
Comment	WS09-174 @ 1509ft

### Physical properties of the Rock Sample:

Porosity (%)	0.49
Specific Gravity ( g/cm <sup>3</sup> )	2.76
Magnetic Susceptibility (SI Units)	0.068
Resistivity Mean ( Ohm - m )	1607.34
Resistivity Dev ( Ohm - m )	65.00
IP Response (mV/V)	8.97
IP Response Dev (mV/V)	0.81
Remenant Mag	34.8401
Water Conductivity (mmohs)	35
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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**Andre Lebel**

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**February 3, 2014**

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 Date





## PHYSICAL PROPERTY LAB REPORT

Sample #: 69



### Rock Sample Description

Rock type	Argillite
Comment	WS09-174 @ 1495ft

### Physical properties of the Rock Sample:

Porosity (%)	2.77
Specific Gravity ( g/cm <sup>3</sup> )	2.71
Magnetic Susceptibility (SI Units)	0.243
Resistivity Mean ( Ohm - m )	989.28
Resistivity Dev ( Ohm - m )	43.65
IP Response (mV/V)	88.92
IP Response Dev (mV/V)	0.60
Remenant Mag	---
Water Conductivity (mmohs)	38
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

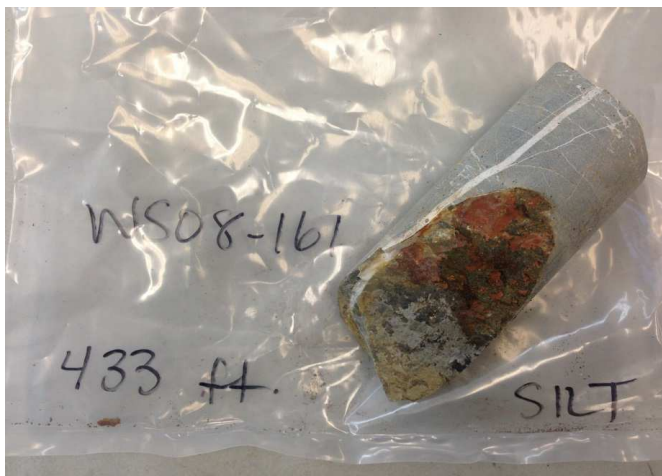
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 70



### Rock Sample Description

Rock type	Siltstone
Comment	WS08-161 @ 433ft

### Physical properties of the Rock Sample:

Porosity (%)	1.01
Specific Gravity ( g/cm <sup>3</sup> )	2.71
Magnetic Susceptibility (SI Units)	0.036
Resistivity Mean ( Ohm - m )	13628.57
Resistivity Dev ( Ohm - m )	874.16
IP Response (mV/V)	4.95
IP Response Dev (mV/V)	0.09
Remenant Mag	0.6175
Water Conductivity (mmohs)	111
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

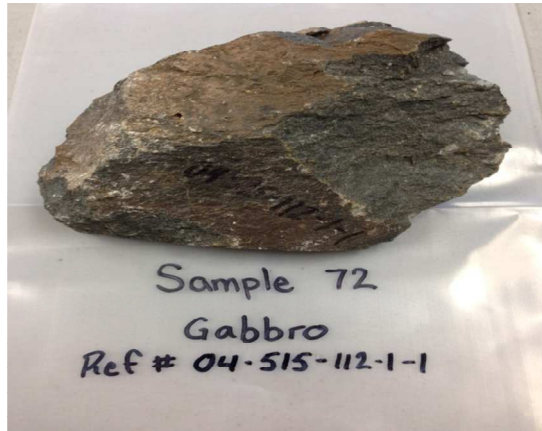
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 72



### Rock Sample Description

Rock type	Gabbro
Comment	04-515-112-1-1

### Physical properties of the Rock Sample:

Porosity (%)	0.82
Specific Gravity ( g/cm <sup>3</sup> )	2.86
Magnetic Susceptibility (SI Units)	0.866
Resistivity Mean ( Ohm - m )	170.52
Resistivity Dev ( Ohm - m )	19.72
IP Response (mV/V)	2.52
IP Response Dev (mV/V)	0.25
Remenant Mag	---
Water Conductivity (mmohs)	43
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

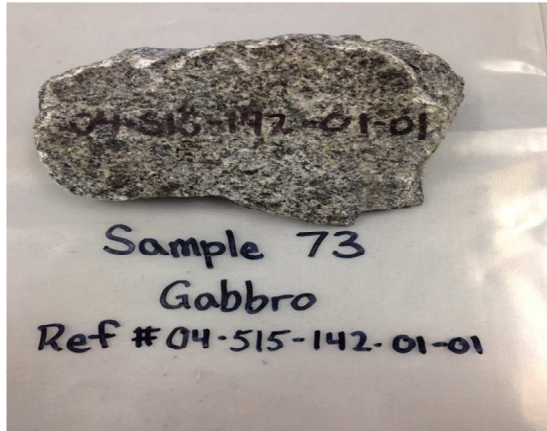
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 73



### Rock Sample Description

Rock type	Gabbro
Comment	04-515-142-01-01

### Physical properties of the Rock Sample:

Porosity (%)	0.92
Specific Gravity ( g/cm <sup>3</sup> )	2.92
Magnetic Susceptibility (SI Units)	72.35
Resistivity Mean ( Ohm - m )	7974.29
Resistivity Dev ( Ohm - m )	85.05
IP Response (mV/V)	22.36
IP Response Dev (mV/V)	0.11
Remenant Mag	---
Water Conductivity (mmohs)	7
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

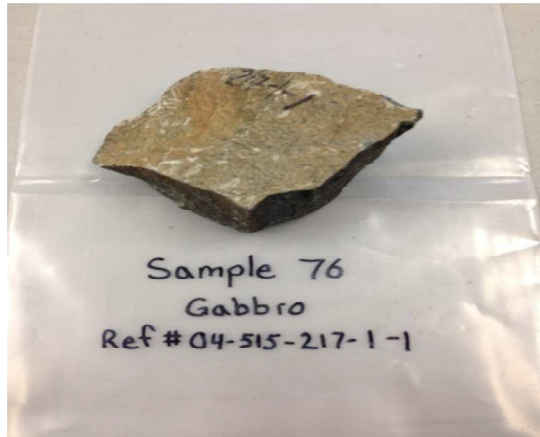
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 76



### Rock Sample Description

Rock type	Gabbro
Comment	04-515-217-1-1

### Physical properties of the Rock Sample:

Porosity (%)	2.16
Specific Gravity ( g/cm <sup>3</sup> )	2.92
Magnetic Susceptibility (SI Units)	0.717
Resistivity Mean ( Ohm - m )	5112.03
Resistivity Dev ( Ohm - m )	420.22
IP Response (mV/V)	0.28
IP Response Dev (mV/V)	1.27
Remenant Mag	---
Water Conductivity (mmohs)	37
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

**Sample #: 80**



### Rock Sample Description

Rock type	Nikolai
Comment	05-51-040-1

### Physical properties of the Rock Sample:

Porosity (%)	2.85
Specific Gravity ( g/cm <sup>3</sup> )	2.77
Magnetic Susceptibility (SI Units)	34.32
Resistivity Mean ( Ohm - m )	32598.67
Resistivity Dev ( Ohm - m )	413.23
IP Response (mV/V)	2.13
IP Response Dev (mV/V)	0.08
Remenant Mag	---
Water Conductivity (mmohs)	18
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

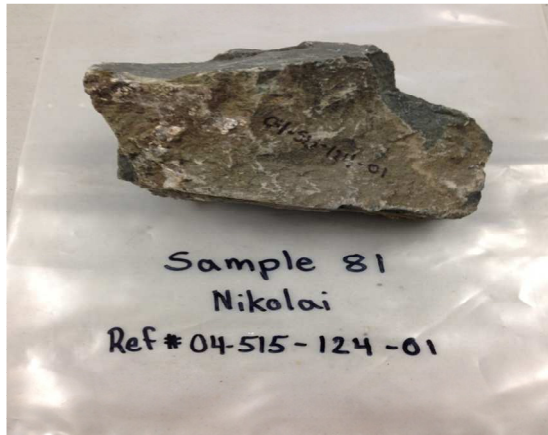
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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 81



### Rock Sample Description

Rock type	Nikolai
Comment	04-515-124-01

### Physical properties of the Rock Sample:

Porosity (%)	1.74
Specific Gravity ( g/cm <sup>3</sup> )	2.80
Magnetic Susceptibility (SI Units)	6.796
Resistivity Mean ( Ohm - m )	2144.65
Resistivity Dev ( Ohm - m )	267.39
IP Response (mV/V)	6.33
IP Response Dev (mV/V)	0.22
Remenant Mag	---
Water Conductivity (mmohs)	27
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 83



### Rock Sample Description

Rock type	Nikolai
Comment	04-515-136-1

### Physical properties of the Rock Sample:

Porosity (%)	1.75
Specific Gravity ( g/cm <sup>3</sup> )	3.07
Magnetic Susceptibility (SI Units)	7.268
Resistivity Mean ( Ohm - m )	2540.16
Resistivity Dev ( Ohm - m )	16.65
IP Response (mV/V)	2.13
IP Response Dev (mV/V)	0.19
Remenant Mag	---
Water Conductivity (mmohs)	7
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

\_\_\_\_\_  
Andre Lebel

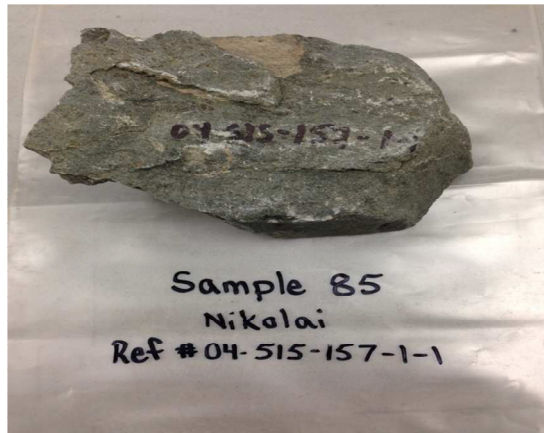
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February 3, 2014

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Date



## PHYSICAL PROPERTY LAB REPORT

Sample #: 85



### Rock Sample Description

Rock type	Nikolai
Comment	04-515-157-1-1

### Physical properties of the Rock Sample:

Porosity (%)	0.37
Specific Gravity ( g/cm <sup>3</sup> )	2.87
Magnetic Susceptibility (SI Units)	0.383
Resistivity Mean ( Ohm - m )	27601.32
Resistivity Dev ( Ohm - m )	253.41
IP Response (mV/V)	0.88
IP Response Dev (mV/V)	0.36
Remenant Mag	---
Water Conductivity (mmohs)	18
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

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February 3, 2014

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Date

## PHYSICAL PROPERTY LAB REPORT

Sample #: 86



### Rock Sample Description

Rock type	Nikolai
Comment	04-515-169-1

### Physical properties of the Rock Sample:

Porosity (%)	1.65
Specific Gravity ( g/cm <sup>3</sup> )	2.92
Magnetic Susceptibility (SI Units)	11.768
Resistivity Mean ( Ohm - m )	5978.27
Resistivity Dev ( Ohm - m )	114.69
IP Response (mV/V)	7.78
IP Response Dev (mV/V)	0.24
Remenant Mag	---
Water Conductivity (mmohs)	9
Temperature at which specific gravity was measured (C)	18

Notes: Remenant Mag was measured in six directions.

Measured by:

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Andre Lebel

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February 3, 2014

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Date

**Appendix IV**

**Claim Summary Data**

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