



## Waite Amulet Property

### Lithogeochemical Survey

#### Mining Concessions 173, 186 and 321

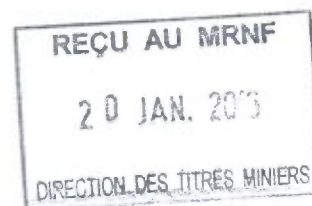


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Table of Content.....	2
List of tables.....	3
List of appendices.....	3
List of Figures.....	3
List of Photos.....	4
1.0 Notice to the reader.....	5
2.0 Summary.....	6
3.0 Introduction.....	7
4.0 Property Description and Location.....	8
5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography.....	9
5.1 Accessibility.....	9
5.2 Climate.....	10
5.3 Local Resources.....	10
5.4 Infrastructures.....	10
5.5 Physiography.....	11
6.0 History.....	13
7.0 Geological Setting.....	15
7.1 Geology.....	16
7.2 Local Lithologies.....	17
7.3 Structures.....	25
8.0 Deposit Type.....	25
9.0 Mineralization.....	27
10.0 Exploration.....	28
10.1 Project Results.....	28
10.1.1 Gold and Trace Elements.....	28
10.1.2 Major Oxides.....	34
11.0 Drilling.....	47
12.0 Sampling Method and Approach.....	47
13.0 Sample Preparation, Analysis and Security.....	48
13.1 Sample Preparation.....	48
13.2 Analysis.....	48

13.3 Security.....	49
14.0 QAQC.....	50
15.0 Adjacent Properties.....	51
16.0 Geological Modelling.....	51
17.0 Resource Calculation.....	51
18.0 Conclusions and summary .....	52
19.0 References.....	53
20.0 Date and Signature.....	54

#### List of tables

Table 1. Table providing the sample number, the UTM coordinates (NAD 83, Zone 18), major oxide contents, calculated alteration indexes along with basic geological features. ....	44
Table 2. Average chemical composition of lithological from our 2015 sampling.. ....	45
Table 3. Table providing the sample number, the UTM coordinates (NAD 83, Zone 18), major oxide contents, rock affinity, rock names and alteration as defined by "Lithomodeleur" along with basic geological features.....	45
Table 4. Tonnage and grade of selected massive sulfide deposits in the Rouyn-Noranda area.....	50

#### List of appendices

Appendix 1. CDN-CM-20 Certificate .....	55
Appendix 2. Certificate of Assays.....	59

#### List of Figures

Figure 1. Regional location showing the Glencore's mining concessions in red and their claims in green. ....	8
Figure 2. Waite-Amulet mining concessions and claims map. ....	9
Figure 3. Waite-Amulet geological map. ....	18
Figure 4. Main features of volcanogenic massive sulfide deposits. ....	26
Figure 5. Graphic representation of the lithological classification for VMS deposits by Barrie and Hannington (1999), with "high sulfidation" type and added subtype to the bimodal-felsic group. Average and median sizes for each type for all Canadian deposits, all Canadian deposits, along with average grade. ....	27
Figure 6. Rock sample locations with GPS tracking in green. ....	29

Figure 7. Gold distribution. Green diamonds have no significant gold. ....	30
Figure 8. Colored Cu distribution and values in ppm. ....	31
Figure 9. Colored Pb distribution and values in ppm. ....	32
Figure 10. Colored Zn distribution and values in ppm.....	33
Figure 11. SiO <sub>2</sub> against Na <sub>2</sub> O + K <sub>2</sub> O from Le Bas et al. Rock_Code is the following rock names assigned by the author (And stands for andesite, Dac for dacite, Dio for diorite, Gab for gabbro).....	35
Figure 12. AFM diagram showing the rock affinities. Rock code is on figure 12.....	36
Figure 13. Alteration box plot with the Hashimoto alteration index (AI) versus the chlorite-carbonate-pyrite index (CCPI) from the 2015 rock sampling program.....	37
Figure 14. Rock samples affected by intense chlorite alteration (red diamonds).....	38
Figure 15. Chlorite index plot (MgO+Fe <sub>2</sub> O <sub>3</sub> ) against MgO+Fe <sub>2</sub> O <sub>3</sub> +Na <sub>2</sub> O+K <sub>2</sub> O).....	39
Figure 16. Degree of alteration using the Chlorite-carbonate-pyrite index.....	40
Figure 17. Degree of alteration using the Hashimoto Index. ....	41
Figure 18. Degree of alteration using the sericite index. ....	42

List of Photos.

Photo 1. Waite-Amulet remaining infrastructures. ....	11
Photo 2. Typical vegetation found around the Waite Amulet Property dominated by spruces and firs. ....	12
Photo 3. Columnar joints in aphyric andesite 300m north of the Amulet A lens (sample R146814). ....	19
Photo 4. Weakly deformed, epidotized andesite flow with pillow lava 300m north of the Amulet A lens.....	20
Photo 5. Massive porphyry andesite 400 m SW of Amulet A lens (sample R146820). ....	21
Photo 6. Equigranular gabbro, 500 NW of Amulet C lens (sample R146841). ....	22
Photo 7. Vari-textured quartz diorite 400m ENE of Amulet C lens (sample R574948) ....	23
Photo 8. Massive chalcopyrite vein in K-altered andesite (sample R146830). ....	24
Photo 9. K-altered andesite (?) 140 meters south of Amulet A lens (sample R146825)..	24

## **1.0 Notice to the reader**

This report is based on public and internal documents acquired by the company and private documents provided by the company to the author. Reasonable care has been taken preparing this report, but the author cannot guarantee the accuracy or completeness of all supporting documentation. The interpretative views expressed herein are those of the author and may or may not reflect the views of Glencore. Consequently, the use of this report shall be at the user's sole risk and the author hereby disclaims any or all liability arising out of use or distribution of this report or reliance by any party on the data herein.

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## 2.0 Summary

All located on Mining Concessions 173, 186 and 321, Waite-Amulet A, C, and F are polymetallic volcanogenic massive sulfide deposits that lay directly on the Waite Andesite. (Chartrant, 1990). They are located 8 kilometres north of the city of Rouyn-Noranda within a block of volcanic strata east of the Flavrian Pluton.

The volcanic succession is dominated by massive andesitic flows, dacitic flows, gabbro and dioritic intrusions that are probably subvolcanics. In many locations, the andesite was found variably chloritized, sericitized and pyritic.

From 1927 to 1978, about ten massive sulphide lenses were exploited in this part of the central Noranda camp. Historic production figures are as follows:

Lenses	Mt	Cu%	Zn%	Au g/t	Ag g/t
Amulet Lower A	4.69	5.14	5.28	1.43	44.1
Amulet Upper A	0.19	2.37	6.12	2	46
Amulet C	0.57	2.2	8.5	0.6	86.7
Amulet F Shaft	0.27	3.4	8.6	0.3	46.3
Amulet No 11	0.45	3.6	2.4	0.7	22
East Waite	1.5	4.1	3.25	1.8	31
Old Waite	1.12	4.7	2.98	1.1	22
Millenbach	3.2	3.43	4.23	0.72	42.5
Corbet	2.8	2.99	2.13	0.76	19
Norbec	3.7	2.78	4.76	0.5	31.9
Total	18.49				

In the current project, a rock sampling program was carried out in fall 2015 on the Waite-Amulet Glencore's mining concessions with objectives to characterize, the gold, major oxides and trace elements changes among the different volcanic units cropping out on the property. All the samples were described defining the host rock lithology, the degree

of alteration and weathering; the degree of deformation and the style and type of mineralization.

Excluding the quality control samples, a total of 54 samples were collected on the Waite-Amulet mining concessions and were subsequently subjected to gold, whole rock and trace elements analyses by ALS Minerals in Val D'Or, Québec.

In general the rocks show a calc-alkaline affinity, dominated by an andesitic geochemical composition and few samples show intense chlorite-sericite alteration.

### **3.0 Introduction**

At the request of Mr. Gordon Maxwell of Glencore, the author was asked to collect a series of well representative rock samples with the objective to characterize, the gold, major oxides and trace elements changes among the different volcanic units cropping out on the Waite-Amulet property. All samples were analyzed for Au, the major oxide elements and a group of 33 trace elements that includes Cu, Pb, and Zn. A total of 54 selected grab samples were collected. The field work was carried out on Mining Concessions 173, 186 and 321. The author spent 7 days on the concessions to collect the samples and 6 days interpreting the data and preparing this report.

#### 4.0 Property Description and Location

Waite-Amulet Mines are located 8 kilometres north of the town of Rouyn-Noranda (figure 1). The Waite-Amulet property is composed of three Mining Concessions 173, 186 and 321 and 13 mining claims (CLD-6001237, CLD-6001238, CL-26266361, CL-2626362, CL-2626363, CL-2626364, CL-009422, CL-C003593, CDC-1103945, CL-C09422, CLC-P480010 and CLD-P480020) covering a total of 752.63 hectares.

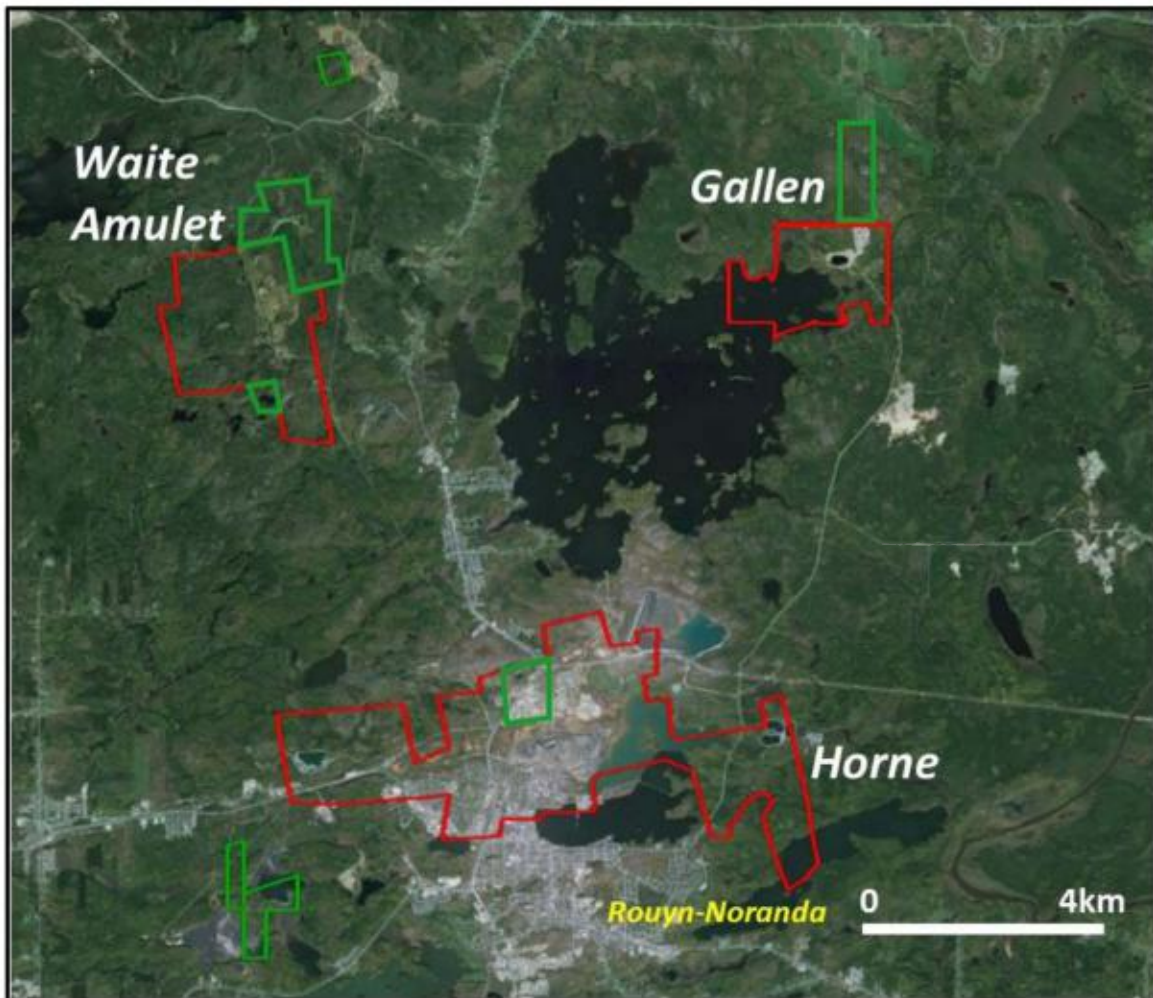


Figure 1. Regional location showing the Glencore's mining concessions in red and their claims in green.

The claims are all owned 100% by Glencore Canada and cover 167.35 hectares. The mining concessions include surface, mining and timber rights. The property is located in the

Duprat and Dufresnoy Townships, in the NTS sheet 32D06 (figure 2). The 2015 field work was carried out on mining concessions 173, 186 and 321.

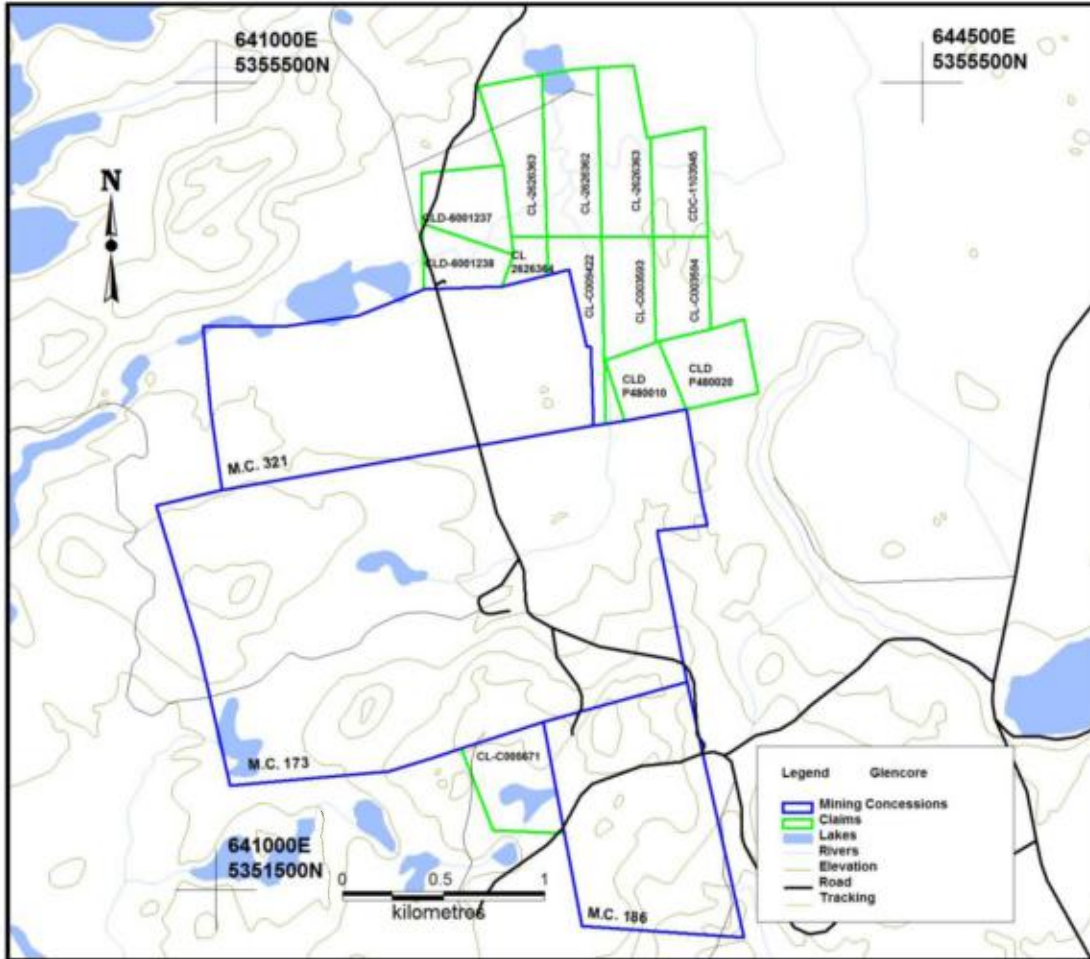


Figure 2. Waite-Amulet mining concessions and claims map.

## 5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

### 5.1 Accessibility

The principal access to the Waite Amulet property is by paved road 101 over 3 kilometres from the north side of Rouyn-Noranda up the Millenback gravel road, westward over 1 kilometre (figure 1). This access is open all year around.

## **5.2 Climate**

Rouyn-Noranda is in sub-arctic climate which is intermediate between polar and tempered climate. Average annual temperatures range between -18° C and -19° C in January and 16° C to 17° C in July with coldest record of -49.5° C and warmest record of 34.5° C (*Wikipedia web site*).

## **5.3 Local Resources**

The town of Rouyn-Noranda was founded in 1966 and has 41,012 inhabitants based on the 2011 census (*Wikipedia web site*). The town possesses a city hall, full-service maintenance department, post offices, schools, General Hospital, CLSC health centres, airport and tourist office. Basic commercial infrastructure includes hotels, grocery stores, hardware stores, pharmacies, banks, restaurants and gas stations. Rouyn-Noranda main activities include agriculture, mining exploitation and transformation, forestry and transport.

## **5.4 Infrastructures**

The only remaining infrastructure on the Waite-Amulet mining concessions are gravel roads, a transmission lines as well as past producing underground mines, tailing and a pump house (photo 1).



Photo 1. Waite-Amulet remaining infrastructures.

### 5.5 Physiography

The Waite-Amulet Property exhibits a low relief, with an elevation ranging from 310 to 360 metres above sea level. Vegetation in the area is dominated by spruces, firs and tamaracks (photo 2).



**Photo 2. Typical vegetation found around the Waite Amulet Property dominated by spruces and firs.**

## 6.0 History

The first basemetal discovery on the Waite Amulet Property area is back in 1924. It was discovered by Joe and Peter McDounough and William O'Reilly (Lemieux 2005). Between 1927 and 1930, Noranda acquired two properties to form the Waite-Amulet Mines Ltd. and the Amulet-Dufault Mines Ltd. In December 1927, mining operations began with the extraction of ores from the Amulet C massive sulphide lens. The Amulet mining operation ceased in 1962 after depletion of the Amulet Lower A reserve.

From 1927 to 1978, about ten massive sulphide lenses were exploited in this part of the central Noranda camp. Historic production figures are as follows:

Lenses	Mt	Cu%	Zn%	Au g/t	Ag g/t
Amulet Lower A	4.69	5.14	5.28	1.43	44.1
Amulet Upper A	0.19	2.37	6.12	2	46
Amulet C	0.57	2.2	8.5	0.6	86.7
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Total	18.49				

Overall, more than 3762 holes were drilled (surface and underground) for a total of 520 kilometres of coring (Lemieux 2005). Of this number, 546 holes were on surface totalling 216 kilometres. Drill campaigns can be grouped into 4 phases.

The first phase between 1924 and 1930 was definition and underground drilling to define Amulet C, F and Upper A lenses. This exploration work and mining ended in 1930 caused by the "*grande recession*".

The second phase occurred between 1937 and 1962 including underground and surface drilling at Amulet F and C lenses. Between 1963 and 1967, the property was dormant following the closure of the mine complex.

Following the discovery of Corbet (1974) and Ansil (1981), a fourth phase of exploration was carried out between 1978 and 1984 with 22 drill holes. The property is inactive from 1985 and 1995. In 1995, Noranda drilled one deep hole (1344m) on the property. Hole WA-95-01 tested the Amulet C northwest area. No significant mineralization was intercepted.

In 1999, Noranda undertaken a significant compilation leading to 1247 meters of drilling in 2000 testing the top of Flavrian Andesite (horizon Corbet) as well as the basis of the Northwest Rhyolite.

In 2005, Noranda drilled two holes totalling 2103 metres. Both holes were subsequently pulses (Lemieux 2005). WA-05-02 located on the NW corner of mining concession 173 had no conductor detected by the Pulse-EM survey (figure 3). Hole WA-05-02 aimed two favorable horizons; the Ansil horizon at 800m and the Corbet horizon at 1100m deep. The Corbet horizon was never reached. Copper mineralization were intersected near surface with 1.3% Cu from 49.6 to 50.8m, 0.82% Cu from 100.0 to 101.2 and 2.9% Cu from 152.6 to 154.0m.

WA-05-04 collared about 400m south of WA-05-02 was aiming the same favorable horizons (figure 3). In this hole as well, the Corbet horizon was not reached. Assay results from hole WA-05-04 were disappointing.

## 7.0 Geological Setting

The Waite-Amulet property is located in the eastern part of Blake River group within the third (3) felsic cycle of the Mine Sequence (Lemieux 2005). The Blake River group consists of bi-modal volcanics (andesite-rhyolite) of tholeiitic to calc-alkaline affinity. This group is bounded to the North and South by two major faults. They are respectively, the Porcupine-Destor and Cadillac-Larder Lake Faults. These two faults separate the Blake River group from the Duparquet Formation to the north and the Pontiac Formation to the south. Both of these formations are sedimentary sequences.

The stratigraphic sequence of the Noranda mining camp is very well defined and documented. The heart of the complex is occupied by the Powell and Flavrian synvolcanic intrusions and a post-tectonic intrusion named Lac Dufault. The age of the volcanic complex is estimated at 2.7 Ga. In total, five (5) felsic volcanic cycles characterize the Noranda mine sequence including the prolific cycle III which occupies the Noranda Caldera (central part of the mining camp).

On successive intercalation of andesitic and rhyolitic cycles can occur volcanogenic massive sulfide deposits over several stratigraphic levels. These are commonly associated with exhalative cherty horizon representing hiatus in volcanism.

In the central part of the Noranda mining camp within the third cycle, four (4) favorable horizons (exhalite) occur comprising:

1. Corbet Tuff (top of the Flavrian andesite hosting the Corbet Mine),
2. Lewis exhalite, (top of the Northwest Rhyolite hosting the Ansil Mine),
3. "C" contact (top of the Waite Andesite hosting the Amulet F and C lenses)
4. "Main Contact" (top of the Waite Rhyolite, hosting the Mines Millenbach, Norbec, Old-East Waite, Old Waite, Vauzé and the Amulet A Mine).

## 7.1 Geology

Amulet A, C, F and Corbet deposits are all located in the Noranda Mining Camp in the southern part of the Abitibi greenstone belt. More precisely, these deposits occur throughout the Noranda Shield Volcano but are concentrated within and along the margins of the Noranda Cauldron (Gibson, L. H., et al. 1990). "Cauldron" as defined by Smith and Bailey (1968) "*includes all volcanic subsidence structures regardless of shape, size, depth of erosion or connection with surface volcanism*", a definition which is applicable to the east-tilted and dissected Noranda Structure.

Gibson (1989) subdivided the evolution of the Noranda Cauldron into three cauldron subsidence cycles. Subsidence was piece-meal and is interpreted to have occurred in response to partial evacuation of an underlying magma chamber now represented by the Flavrian Pluton. Cauldron subsidence commenced with eruption of the Flavrian formation (base of the Mine sequence) and subsidence, during the second cauldron cycle, is interpreted to have ended with extrusion of the Amulet Andesite formation, the uppermost unit in the mine sequence. A third cauldron subsidence cycle, with subsidence localised along the Horne and ancillary faults, is interpreted to have occurred during extrusion of Cycle 4 formations. The amount of subsidence during the third cauldron cycle is uncertain.

Cycle 1 and 2 do not contain an economic volcanic massive sulfide (VMS) deposits although do have evidences of volcanogenic hydrothermal activities with associated sulfide stringer zones (Gibson 1989).

By far the most significant cluster of VMS deposits occurs within the cauldron-filling mine sequence (Cycle 3) where 20 deposits occur within 3000 metres of volcanic strata. These deposits occur within and along the margins of the Noranda Cauldron (Gibson 1989).

## **7.2 Local Lithologies**

The volcanic rocks occurring and observed by the author on M.C. 173, 186 and 381 comprise flows and porphyry andesites, dacite flow, gabbro and quartz diorite intrusions that cross cut all the previous units.

In the Flavrian Block, the Amulet A, C and F VMS deposits lay on the Amulet Upper Member (figure 3) that comprise silicified andesite flows, minor rhyolite feldspar and quartz feldspar porphyritic rhyolite flows and minor breccia (Beecham Breccia) at the base of the unit (Gibson et al. 1990).

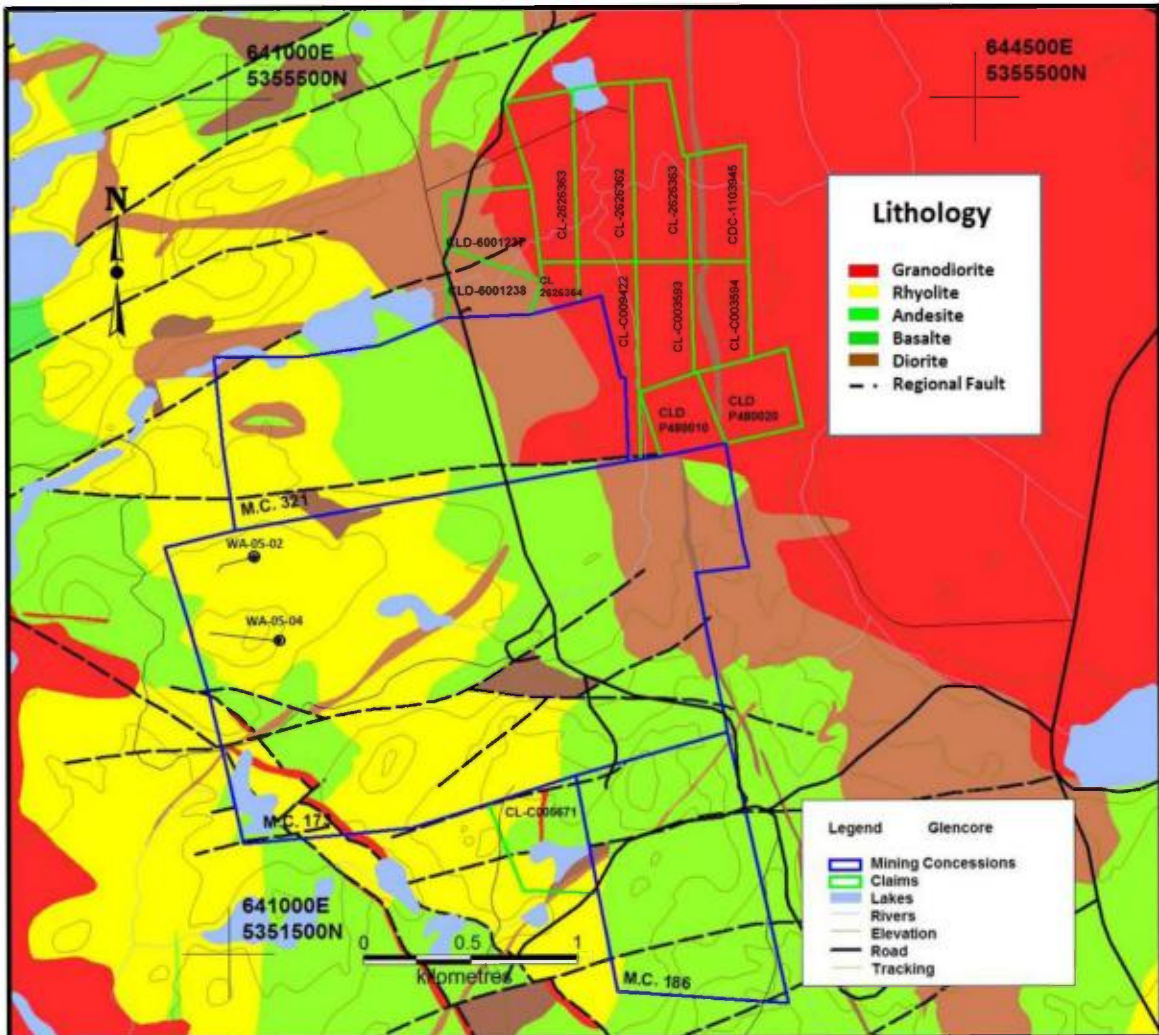


Figure 3. Waite-Amulet geological map.

Next photos 3 to 9 show the typical look of various volcanic units observed by the author on the property including few mineralized samples.



Photo 3. Columnar joints in aphyric andesite 300m north of the Amulet A lens (sample R146814).



Photo 4. Weakly deformed, epidotized andesite flow with pillow lava 300m north of the Amulet A lens.



Photo 5. Massive porphyry andesite 400 m SW of Amulet A lens (sample R146820).



Photo 6. Equigranular gabbro, 500 NW of Amulet C lens (sample R146841).



Photo 7. Vari-textured quartz diorite 400m ENE of Amulet C lens (sample R574948)



Photo 8. Massive chalcopyrite vein in K-altered andesite (sample R146830).



Photo 9. K-altered andesite (?) 140 meters south of Amulet A lens (sample R146825)

### **7.3 Structures**

At the mine scale perhaps the most important and fundamental control on the location of VMS deposits is their special association with volcanic vents localized along synvolcanic faults and less well defined paleostructures or lineaments. Gibson (1989) puts in evidence of structural control, the clustering of VMS deposits in 6 eruptive centres that occur within and along the margins of the Noranda Cauldron where they are localized along major synvolcanic faults (Gibson 1989). One of these eruptive center, adjacent east of the Flavrian Pluton comprise the Waite-Amulet A, C and F lenses, Corbet, Millenbach and D68.

### **8.0 Deposit Type**

The Waite-Amulet A, C and F lenses, Corbet, Millenbach and D68 deposits share many features with Archean volcanogenic massive-sulfide deposit (VMS). VMS deposits occur as lenses of polymetallic massive sulfide that form at or near the seafloor in submarine volcanic environments (Galley et al. 2005). They formed from metal-enriched fluids associated with seafloor hydrothermal convection. Their immediate host rocks can be either volcanic or sedimentary.

VMS deposits form at, or near, the seafloor through the focused discharge of hot, metal-rich hydrothermal fluids. Most VMS deposits have two components (figure 4). There is typically a mound-shaped to tabular, stratabound body composed principally by massive sulfide, quartz and subordinate phyllosilicates and iron oxide minerals and altered silicate wallrock. These stratabound bodies are typically underlain by discordant to semi-concordant stockwork veins and disseminated sulfides. The stockwork vein systems, or pipes, are enveloped in distinctive alteration halos, which may extend into the hanging-wall strata above the VMS deposit.

VMS deposits are grouped according to base metal, gold content and host-rock lithology. The Cu-Zn and Zn-Cu categories for Canadian deposits. In Canada, VMS deposits can also be grouped based on dominant host-rock lithology. There are mafic-dominant, bimodal mafic, bimodal felsic, siliciclastic-mafic and bimodal-siliciclastic (figure 5). The VMS deposits found in the Noranda massive sulfide district falls in the bimodal-mafic dominant group.

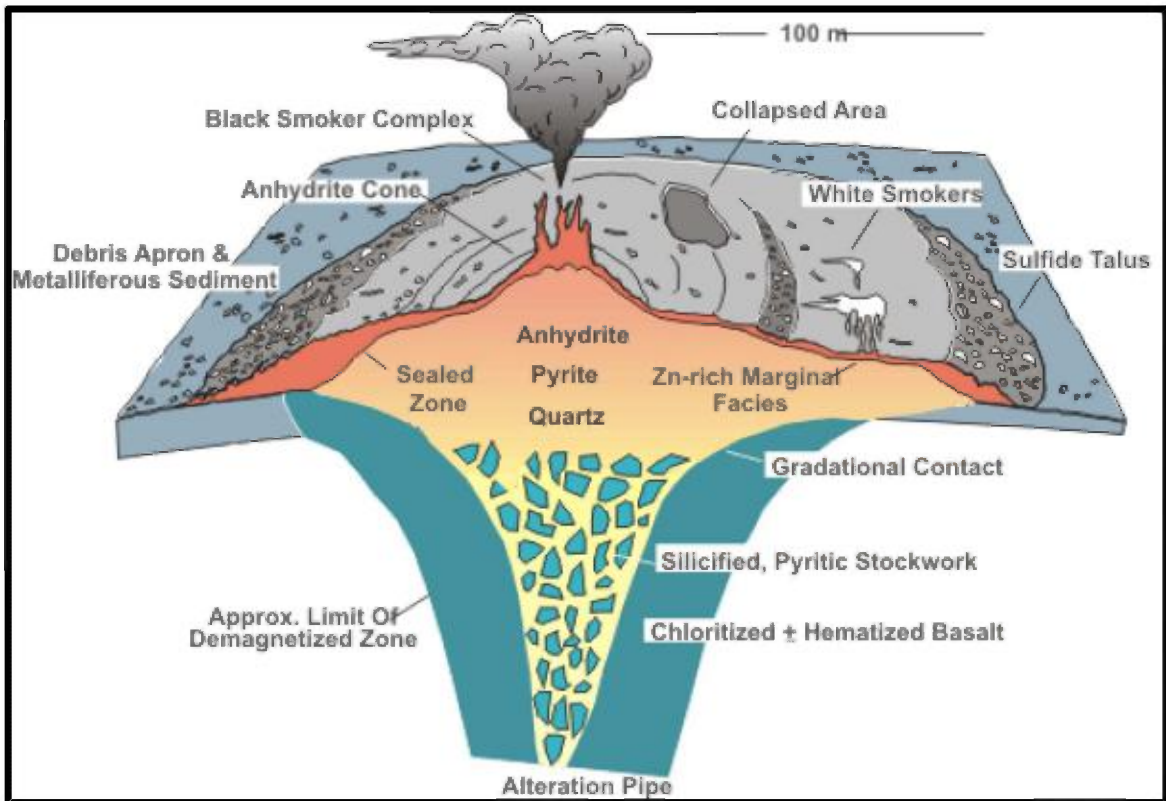


Figure 4. Main features of volcanogenic massive sulfide deposits.

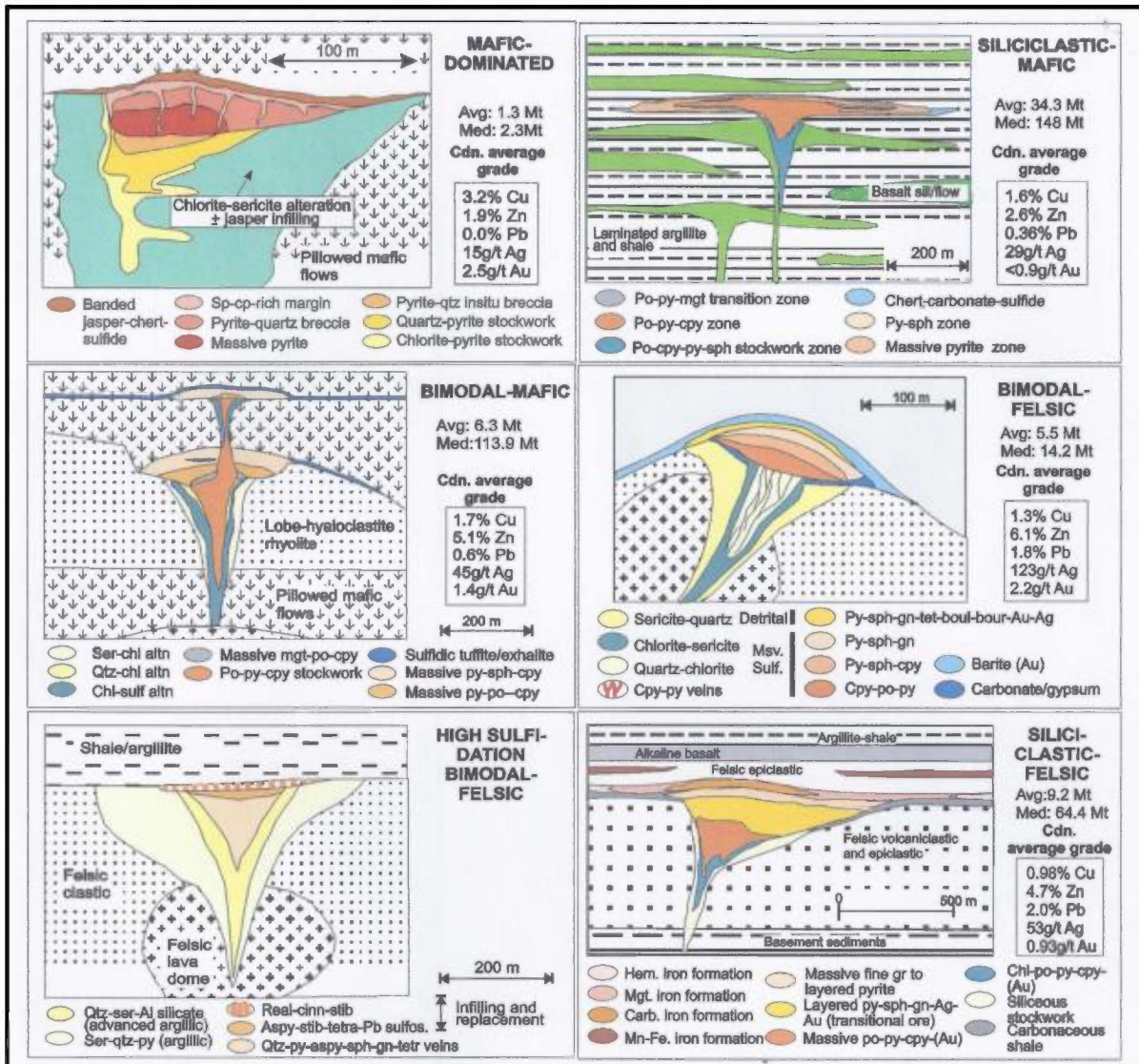


Figure 5. Graphic representation of the lithological classification for VMS deposits by Barrie and Hannington (1999), with "high sulfidation" type and added subtype to the bimodal-felsic group. Average and median sizes for each type for all Canadian deposits, all Canadian deposits, along with average grade.

## 9.0 Mineralization

Restricted to the Mining Concessions 173, 186 and 321, the Waite-Amulet property contains three massive sulfide lenses on two stratigraphic levels. C and F lenses are located at the top of the Amulet andesite whereas Upper A lens is located above the Lower A lens which together exhibiting an effect of stacking on top of the Waite Rhyolite.

The morphology of the lenses is variable, the Amulet Lower A lens has a 200 meters circular shape. Other lenses are elongated parallel to the structure that control them. Distribution in metals is also variable. The C and F lenses are zinc-rich relative to the A lens.

## **10.0 Exploration**

Rock geochemical sampling was carried out from October 24 to October 29, 2015 at Waite-Amulet Mines. The field work was carried out on Mining Concession 173, 186 and 321. The program objectives were to characterize, the gold, major oxides and trace elements changes among the different volcanic units cropping out on the property.

Along with the geological data, at each site where rock sample was collected, the GPS coordinates and numeric photos were recorded. Daily GPS tracking was also recorded. The work took 14 man/day including mobilization and demobilization. A total of 58 outcrops were described with 54 rock samples collected and send to ALS Mineral in Val D'Or for assay. Assay certificate can be found in appendix 2.

## **10.1 Project Results**

### **10.1.1 Gold and Trace Elements**

A total of 54 samples were collected around Waite-Amulet Mines and analyzed for gold, major oxides and trace elements. Figure 6 shows the individual rock sample location and its respective identification sample number and the combined daily GPS tracking recorded in green. Sampling was mainly concentrated on Mining concessions 173 and 186 in reason of very good outcropping. In general gold assays are below detection limit (-0.005 g/t) with the highest value (sample LRB15851) returning 0.166 g/t coming from a strongly silicified andesite with 7 percent pyrite. Figure 7 is a Mapinfo thematic map showing the gold distribution of the sampling program.

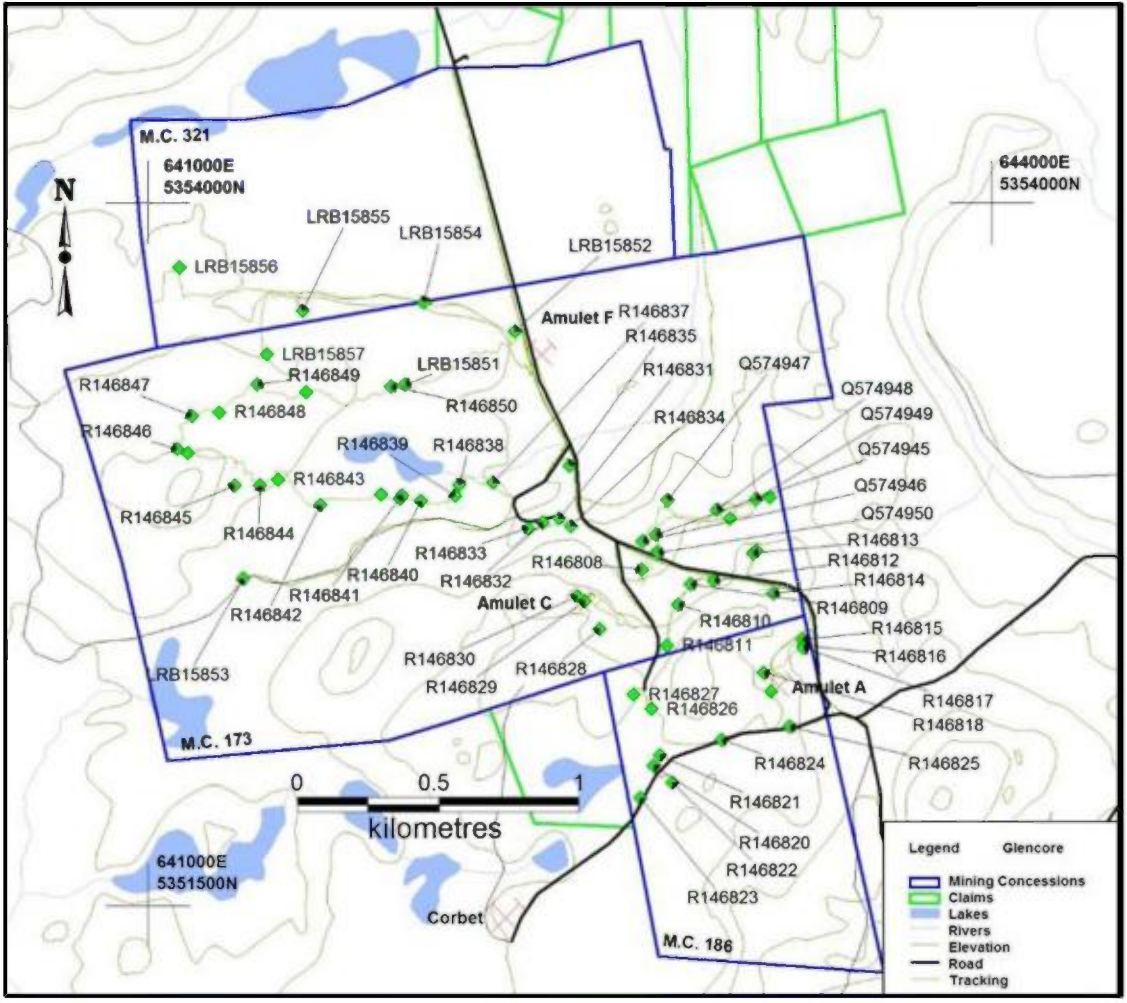


Figure 6. Rock sample locations with GPS tracking in green.

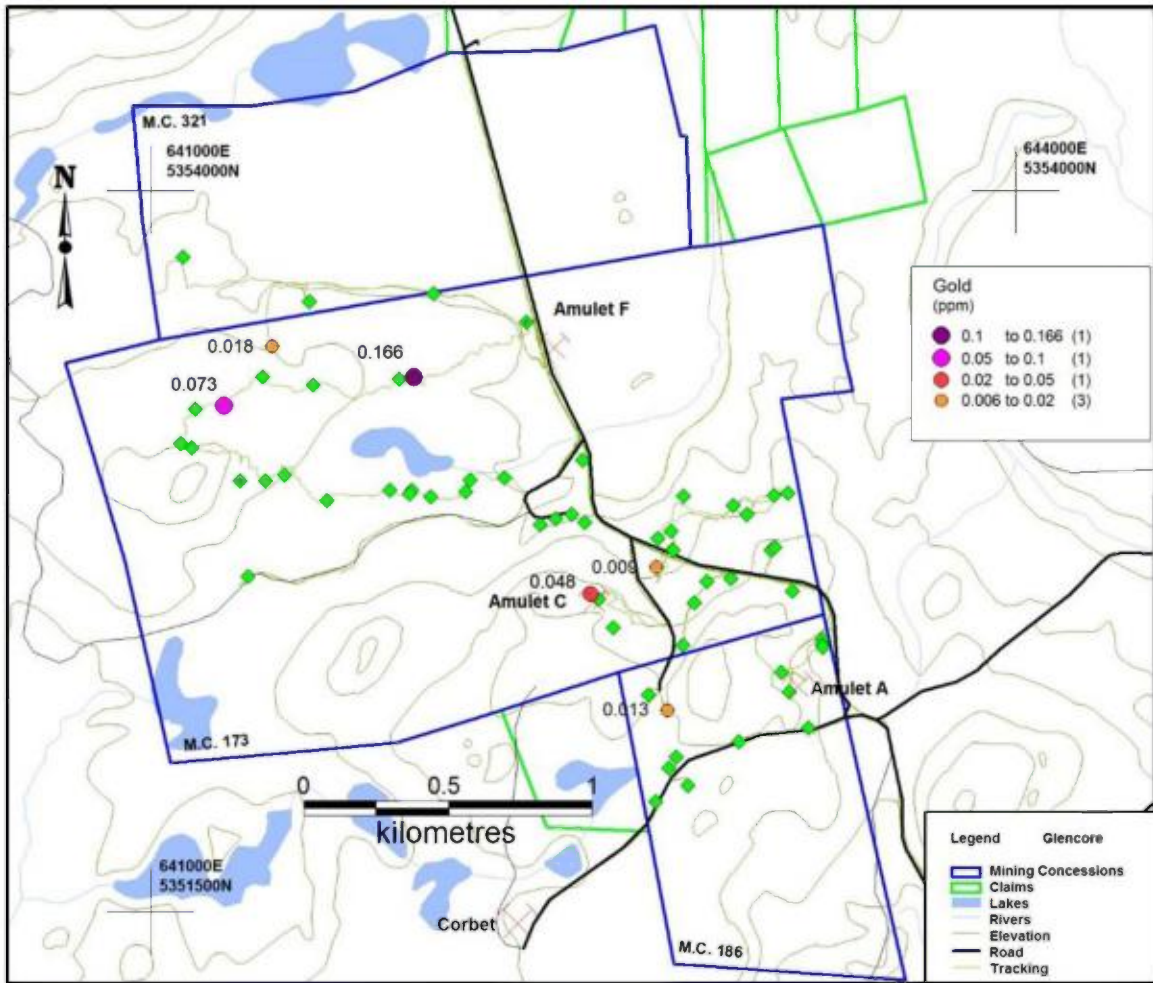


Figure 7. Gold distribution. Green diamonds have no significant gold.

Trace elements especially Ag, As, Co, Cu, Mo, Ni, Pb, Sb and Zn are rather low. However, Cu, Pb and Zn seem to contrast well as they highly Amulet A, C and the NW corner of M.C. 173. Figure 8, 9 and 10 are Mapinfo thematic maps showing the Cu, Pb and Zn distributions of the sampling program. Outside the Amulet A and C mineralized areas; seen deeply in the bush, sample R146847 to R146849 spread over a 250 metres traverse and located on the NW corner of M.C. 173, returned the most anomalous basemetal values with 4300 ppm Cu in sample R146848, 2050 ppm Zn in sample R146849 and 494 ppm Zn in sample R146847. These samples are all strongly altered with disseminated pyrite and chalcopyrite. The extent of the alteration zone is unknown by the author and believes that this alteration system should be further investigated in the event a massive sulfide lens might be associated with near surface or at depth.



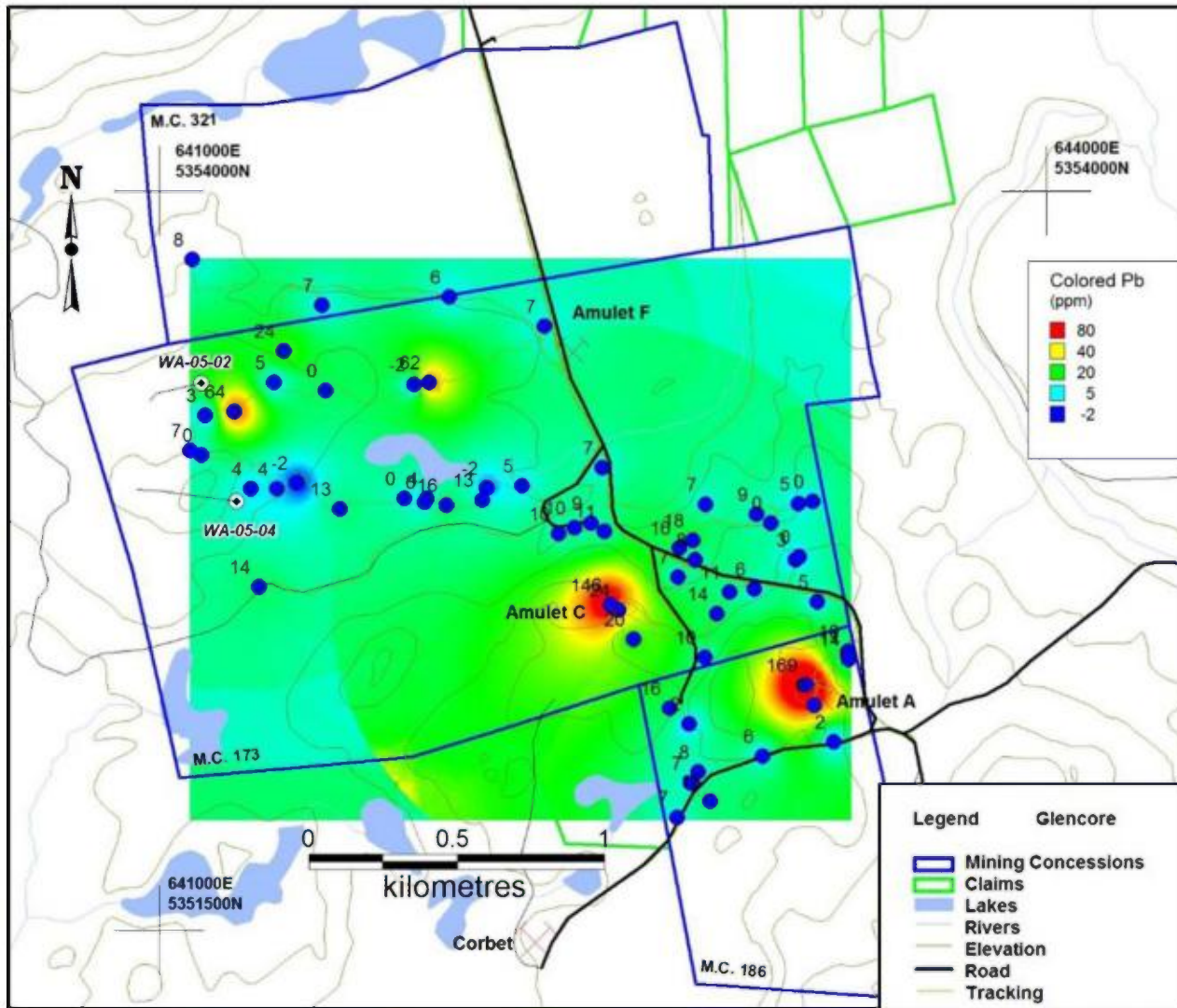


Figure 9. Colored Pb distribution and values in ppm.

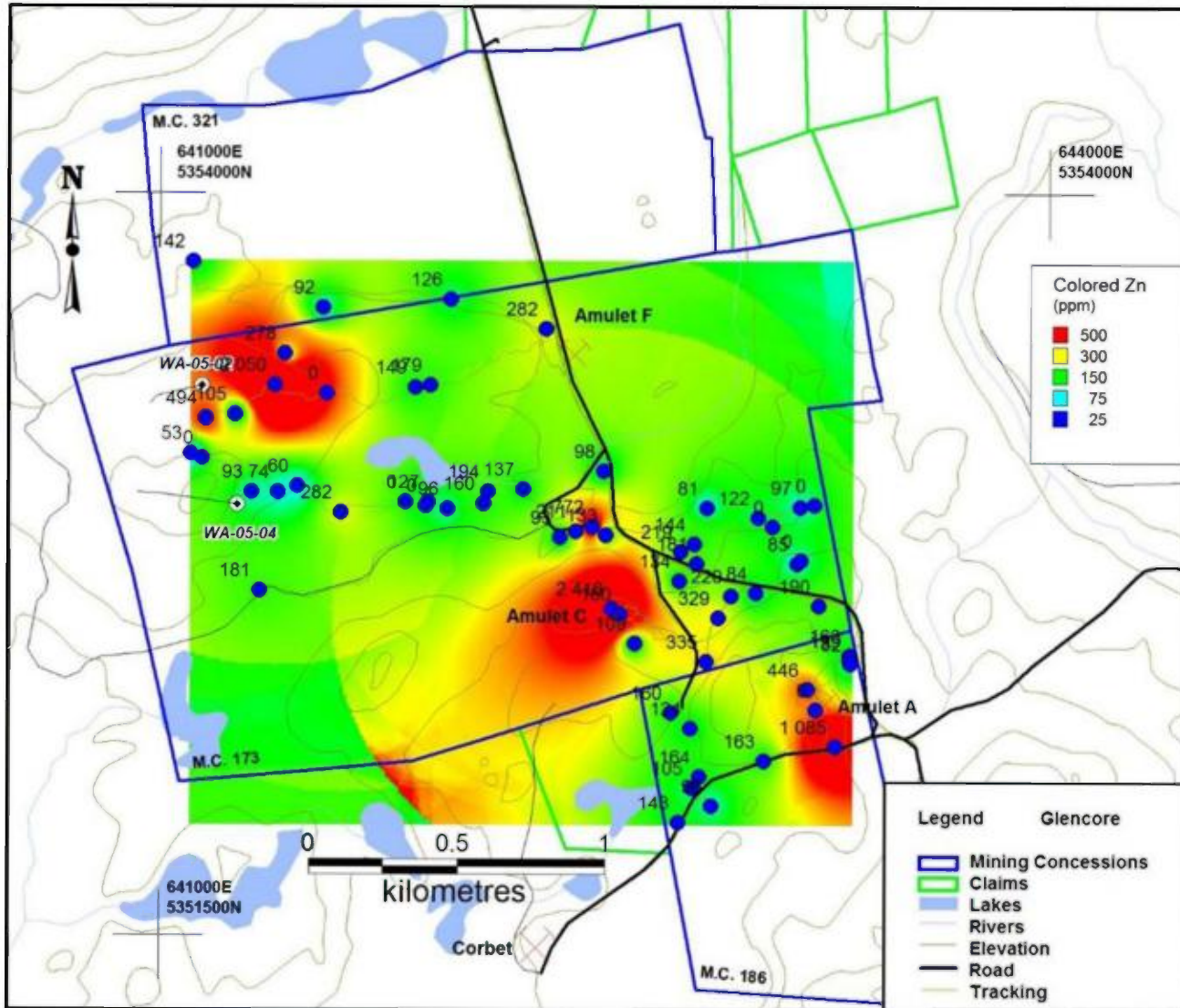


Figure 10. Colored Zn distribution and values in ppm.

### 10.1.2 Major Oxides

All samples were analyzed for the major oxides comprising the follow elements:  $\text{Al}_2\text{O}_3$ ,  $\text{BaO}$ ,  $\text{CaO}$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ ,  $\text{MgO}$ ,  $\text{MnO}$ ,  $\text{Na}_2\text{O}$ ,  $\text{P}_2\text{O}_5$ ,  $\text{SO}_3$ ,  $\text{SiO}_2$ ,  $\text{SrO}$ ,  $\text{TiO}_2$ . We used "*lithomodeleur*" developed by the Consorem to determine rock names, affinities and alterations. Figure 11 is a  $\text{SiO}_2$  against  $\text{Na}_2\text{O} + \text{K}_2\text{O}$  plot to determine the protolithe. In general, most andesite fall in the andesite basaltic or the proper andesite field. Few samples fall in the dacitic field with only one in the rhyolite field. Figure 12 shows the rock affinities. In general, most collected samples fall in the calco-alkaline field, whereas the diorite and the gabbro are more in the tholeiitic field. Figure 13 shows the type alteration affected by the selected samples.

SiO<sub>2</sub> vs K<sub>2</sub>O+Na<sub>2</sub>O (Le Bas et al. 1986) (Amulet) N=54

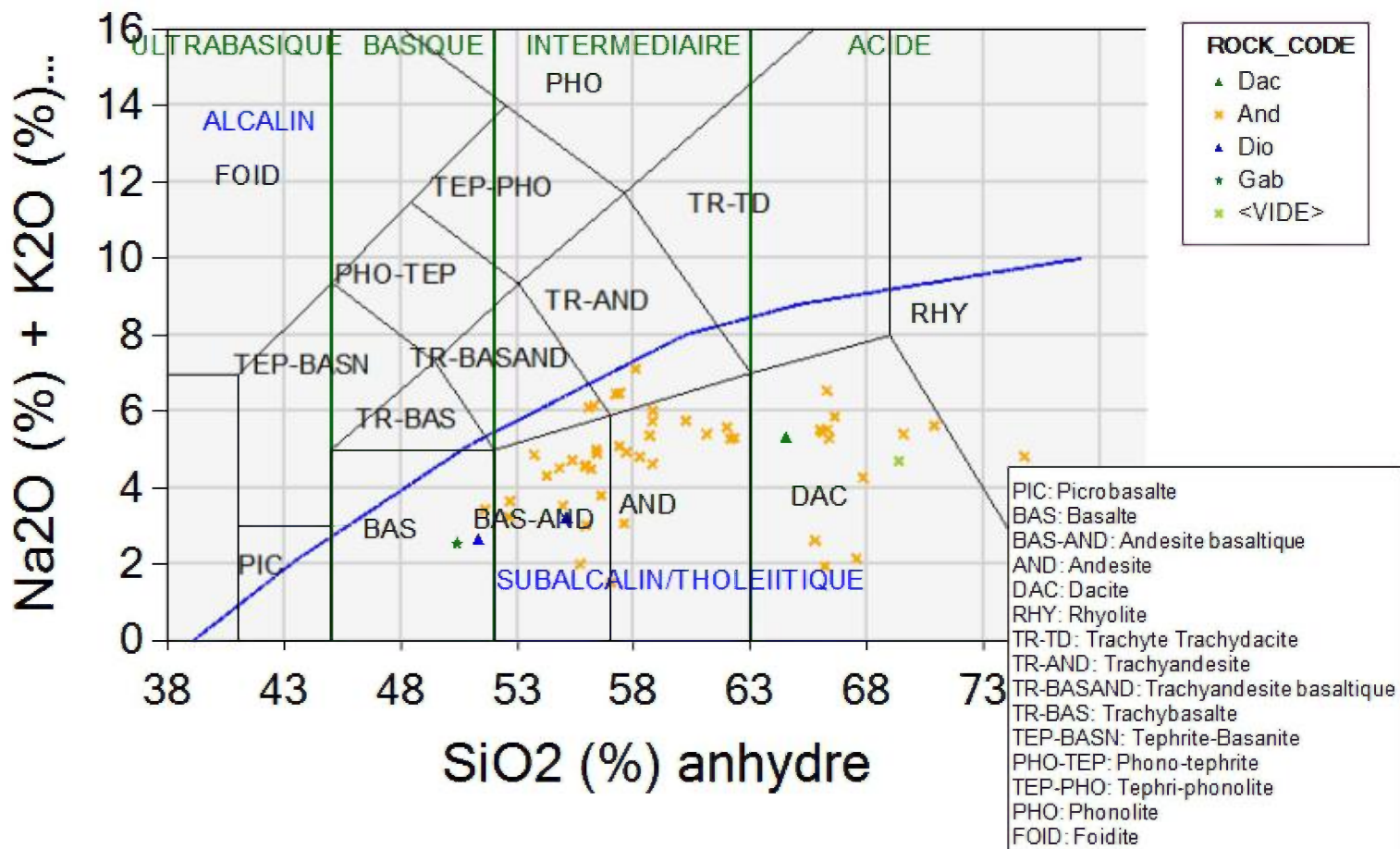


Figure 11. SiO<sub>2</sub> against Na<sub>2</sub>O + K<sub>2</sub>O from Le Bas et al. Rock\_Code is the following rock names assigned by the author (And stands for andesite, Dac for dacite, Dio for diorite, Gab for gabbro).

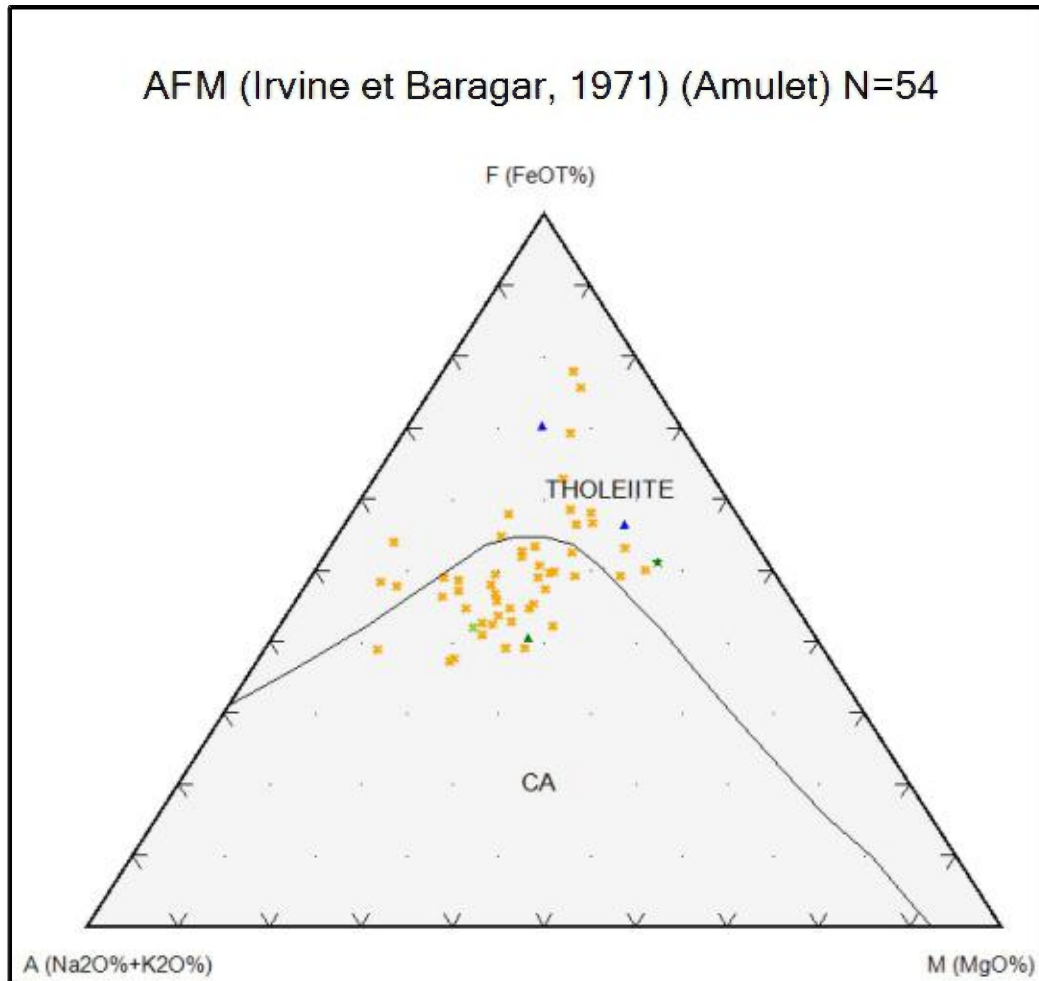


Figure 12. AFM diagram showing the rock affinities. Rock code is on figure 12.

In addition, from this database, simple alteration indexes as the one below were calculated for each sample. These indexes have been extensively used with success in the mining industry as exploration tools especially looking for volcanogenic massive sulfide deposits.

Sericite:  $(K_2O/K_2O+Na_2O)$  [Saeki and Date 1975]

Chlorite:  $100 * (MgO+Fe_2O_3) / (MgO+Fe_2O_3+Na_2O+K_2O)$  [Large et al. 2001]

Hashimoto  $100 * (MgO+K_2O) / (MgO+K_2O+CaO+Na_2O)$  [Ishikawa et al. 1975]

From these indexes, we produced a plot (figure 14) that shows the alteration box plot with the Hashimoto alteration index (AI) versus the chlorite-carbonate-pyrite index (CCPI) developed by Large et al. (2001).

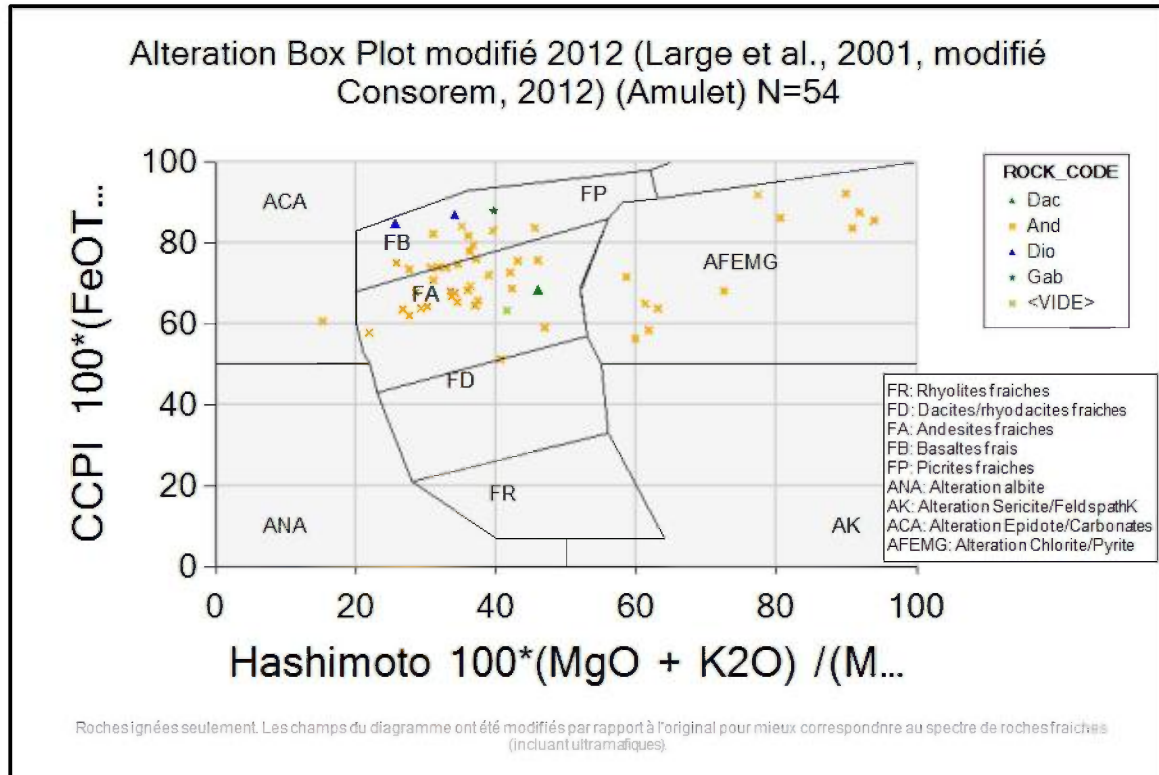


Figure 13. Alteration box plot with the Hashimoto alteration index (AI) versus the chlorite-carbonate-pyrite index (CCPI) from the 2015 rock sampling program.

The diagram on figure 13 indicates that some andesite are clearly in the chlorite alteration field (AFEMG). They are samples R146817, R146818 and R146825 coming from the Amulet A mineralized area; R146830 from the Amulet C mineralized area and R146837, R146842, R146844, R146846 to R146850 and LRB15851 coming from the NW corner of Mining Concession 173 (figure 14). Except one andesite in the epidote alteration field (ACA), all other volcanic units plot in the fresh unaltered field (FA). Another plot  $(MgO+Fe_2O_3)/(MgO+Fe_2O_3+Na_2O+K_2O)$  supports the same conclusion (figure 15).

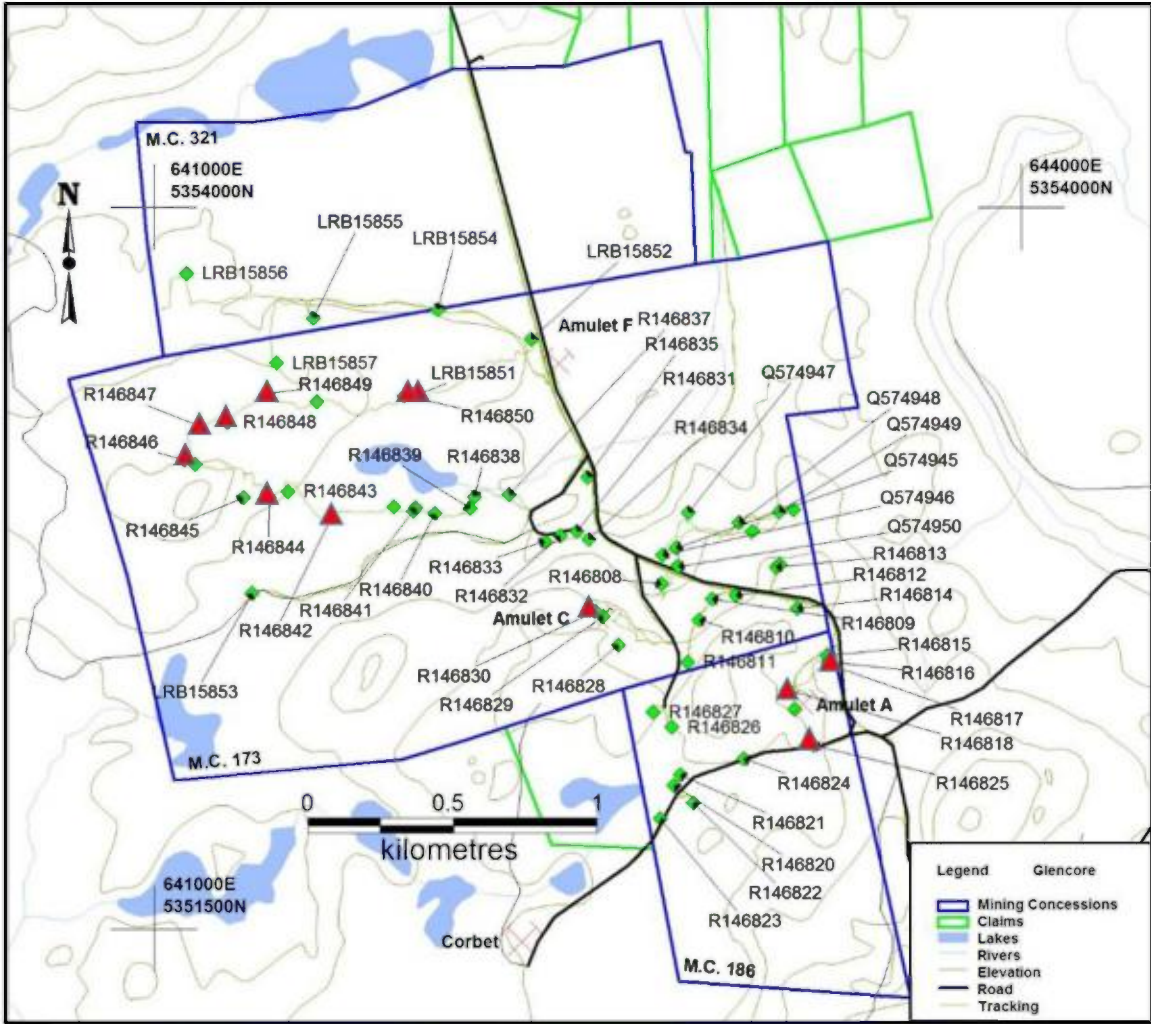


Figure 14. Rock samples affected by intense chlorite alteration (red diamonds).

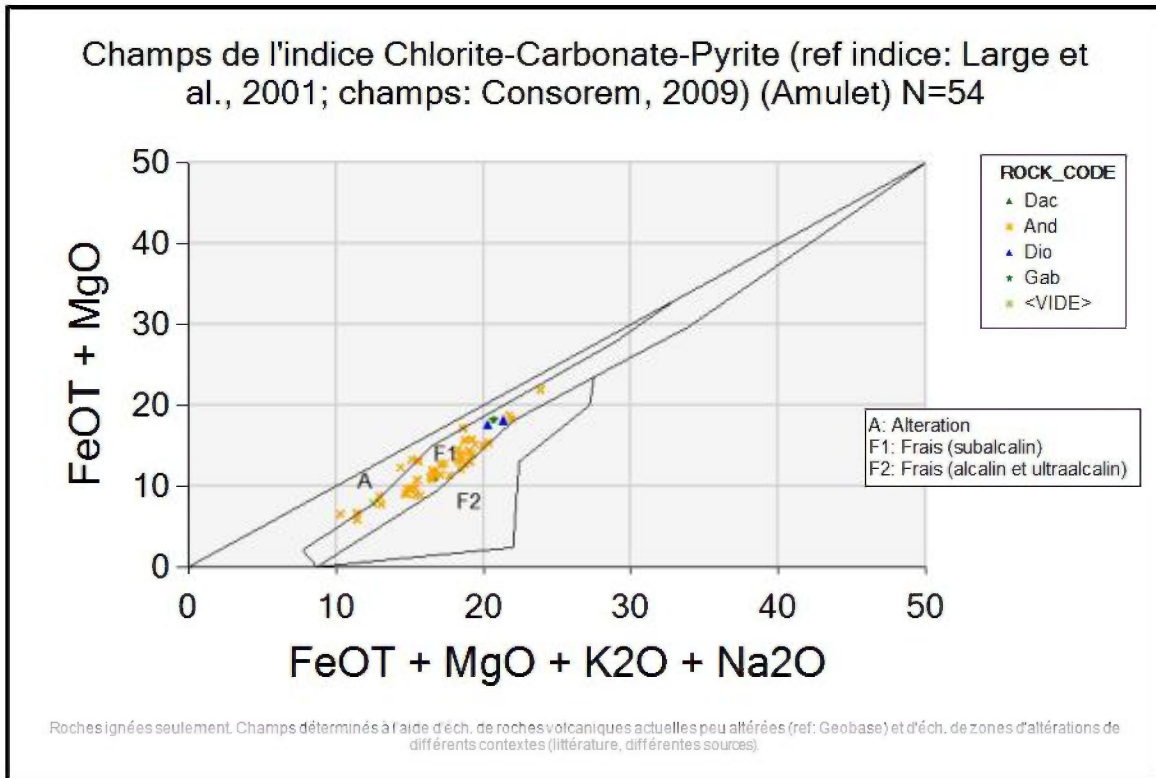


Figure 15. Chlorite index plot ( $\text{MgO} + \text{Fe}_2\text{O}_3$ ) against  $\text{MgO} + \text{Fe}_2\text{O}_3 + \text{Na}_2\text{O} + \text{K}_2\text{O}$ .

Following figure 16, 17 and 18 are Mapinfo thematic maps showing the Chlorite, Hashimoto and Sericite indexes distribution of the sampling program. Even though the 2015 rock sampling was not particularly aimed at known mineralised systems, without surprise all indexes highlight the Amulet A, C known mineralized systems and the NW corner of M.C 173. Amulet F is covered by thick overburden.

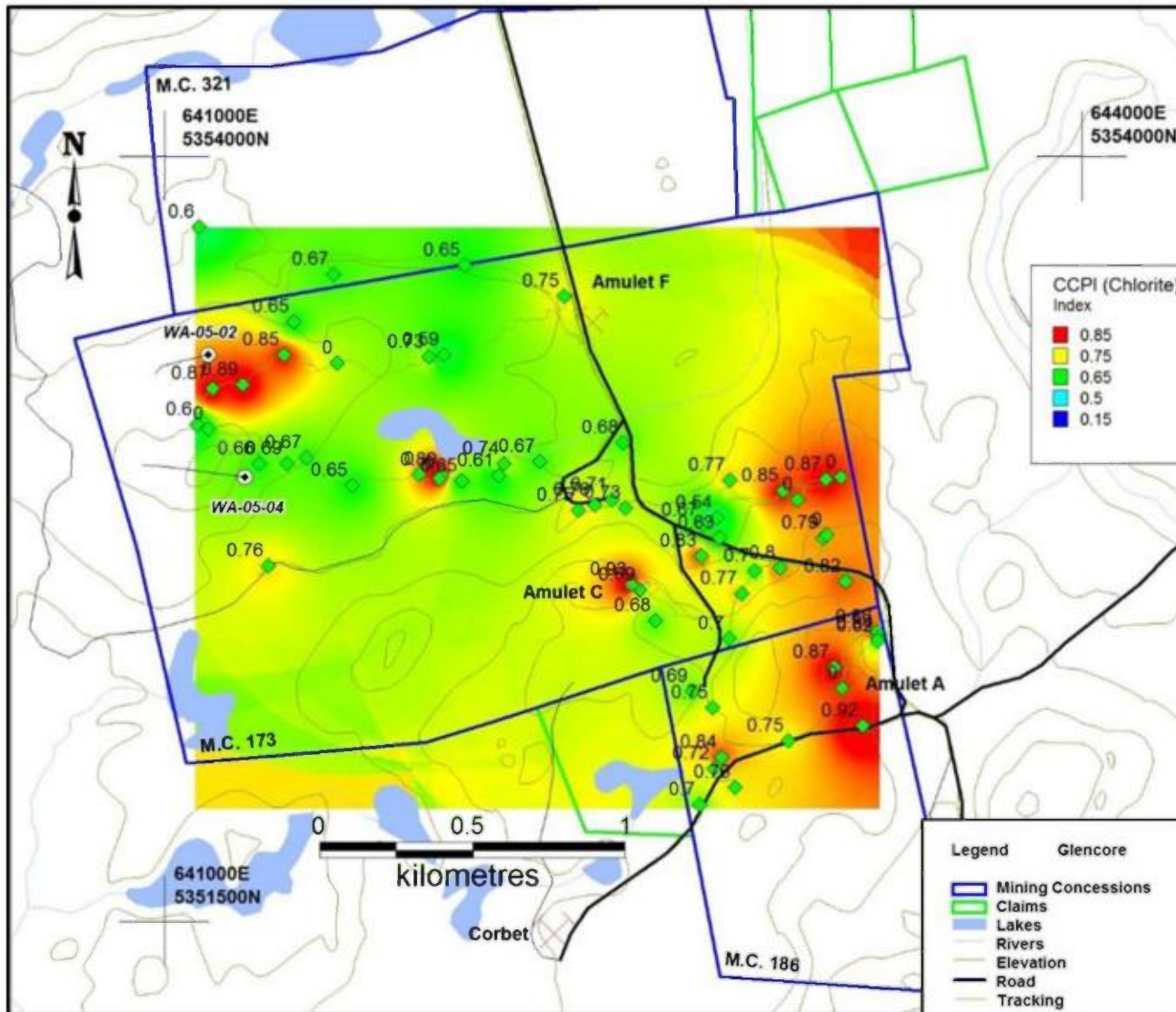


Figure 16. Degree of alteration using the Chlorite-carbonate-pyrite index.

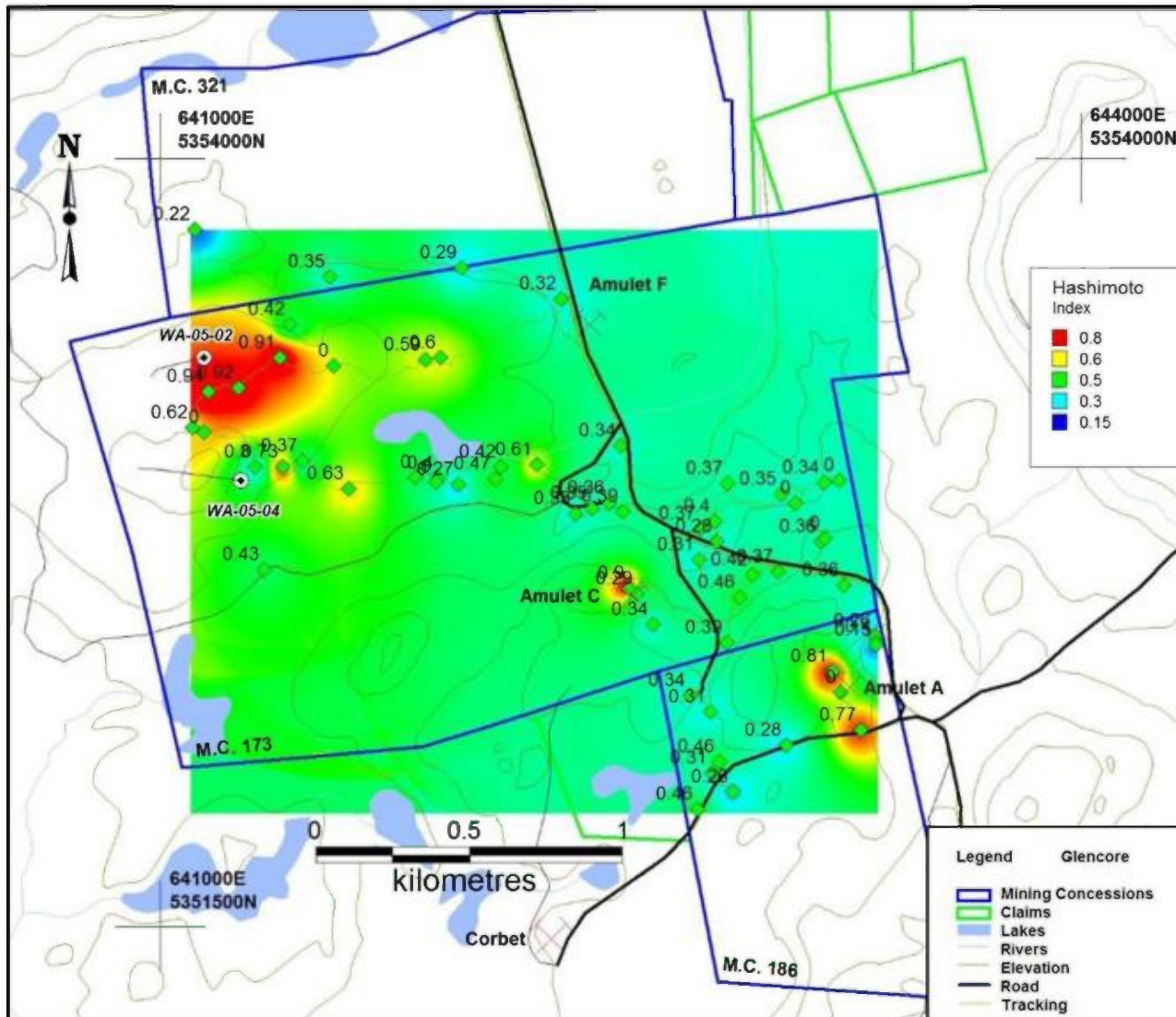


Figure 17. Degree of alteration using the Hashimoto Index.

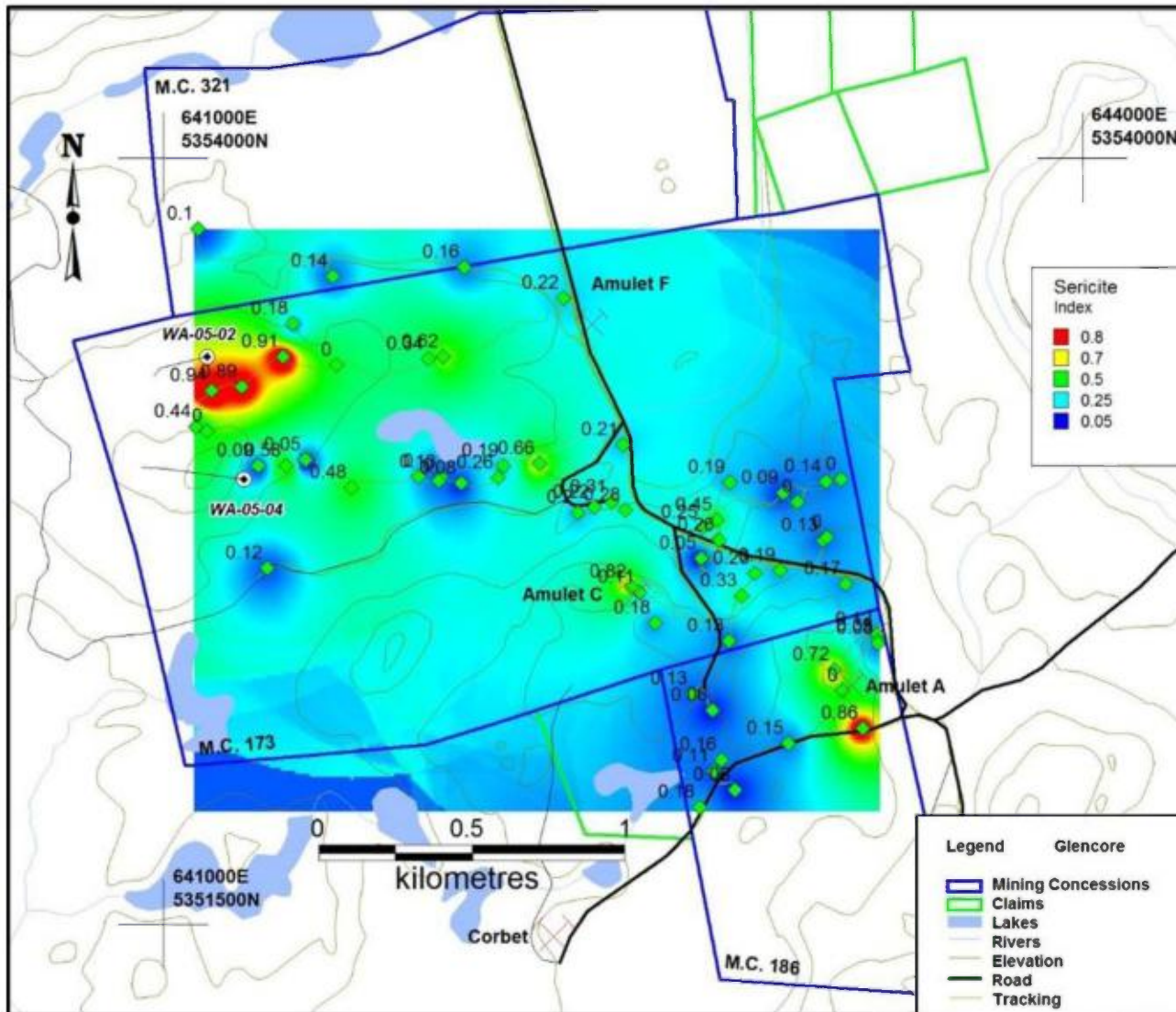


Figure 18. Degree of alteration using the sericite index.

To compare each volcanic units differentiated by the author, major oxide averages were calculated for each group including aphyric andesite, porphyry andesite, altered andesite, dacite and diorite/gabbro intrusions. Because of lacking contracts BaO, Cr<sub>2</sub>O<sub>3</sub>, P<sub>2</sub>O<sub>5</sub>, and SrO were not included. Table 1 provides the sample number, the UTM coordinates (NAD 83, Zone 18), major oxide contents, calculated alteration indexes along with basic geological features. Table 2 provides the average oxides composition for the 2015 rock sampling while table 3 provides the observed geological features against the "*lithomodeleur*" rock names, rock affinity and alteration classification.

Table 2 indicates that in average the fresh andesite have less SiO<sub>2</sub>, Na<sub>2</sub>O and more Fe<sub>2</sub>O<sub>3</sub> than the dacite. The average altered andesites seem depleted in Na<sub>2</sub>O and CaO and enriched in K<sub>2</sub>O and SO<sub>3</sub> relative to the fresh andesite. The prophyry andesites seem to have in average more CaO, Na<sub>2</sub>O and less SiO<sub>2</sub> than the fresh andesite. Without surprise the gabbro and the diorite are enriched in Fe<sub>2</sub>O<sub>3</sub>, MgO in contrast with all the other units.

**Table 1. Table providing the sample number, the UTM coordinates (NAD 83, Zone 18), major oxide contents, calculated alteration indexes along with basic geological features.**

IDlab	UTM_E	UTM_N	Description	Rock_code	Alter.	Texture	Mineral.	Py_%	Po_%	Cpy_%	Al2O3	CaO	Fe2O3	K2O	MgO	MnO	Na2O	SO3	SiO2	TiO2	Total	LOI	Ishikawa	Sericite	CCPI	
Q574945	642805	5352821	Silicified andesite with Py stringers	And	Sil		Diss	1			12.26	2.74	5.06	2.53	1.44	0.07	3.07	0.62	70.63	0.87	100.9	1.26	0.40	0.45	0.54	
Q574946	642758	5352795	Aphyric andesite very hard and silicified	And	Sil		Stk	2			15.6	4.52	7.79	1.4	3.84	0.16	4.26	0.07	59.29	1.14	99.82	1.4	0.37	0.25	0.67	
Q574947	642848	5352942	Aphyric fine grained, very hard with weak sericite alteration	And	Ser						15.56	6.03	10.23	0.83	4.85	0.17	3.58	0.06	55.2	1.34	100.15	1.94	0.37	0.19	0.77	
Q574948	643021	5352908	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And			Stk	tr			14.71	6.85	12.17	0.26	4.92	0.19	2.72	0.09	55.42	1.37	100.4	1.37	0.35	0.09	0.85	
Q574950	642812	5352755	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr	Diss	tr			15.42	5.78	7.29	1.46	2.32	0.16	4.12	0.12	61.99	1.03	100.45	0.45	0.28	0.26	0.63	
R146808	642755	5352695	Massive andesite, very hard cross cut by a porphyry dacitic dyke. Pys+Cpy blebs	And		Aphyr		tr		tr	16.13	7.55	12.82	0.19	4.67	0.2	3.29	2.16	52.5	1.8	102.15	0.41	0.31	0.05	0.83	
R146809	642929	5352645	Very hard andesite with concoidal fractures. Stringer Py, rusty.	And		Aphyr	Stk	2			15.81	3.52	9.11	1.36	4.57	0.16	4.58	0.06	58.14	1.14	99.92	1.13	0.42	0.23	0.70	
R146810	642886	5352572	Rusty very hard, massive aphyric andesite with cubic disseminated Pyé	And	Sil	Aphyr	Diss	2		tr	15.06	3.83	11.58	1.58	4.42	0.09	3.22	3.96	56.39	1.38	103.85	1.94	0.46	0.33	0.77	
R146811	642845	5352425	Same as R146810	And	Sil	Aphyr	Stk	2		tr	14.65	2.67	8.97	0.68	3.48	0.12	4.76	2.46	61.5	1	102.4	1.77	0.39	0.13	0.70	
R146812	643011	5352656	Very hard andesite with concoidal fractures.	And		Aphyr		1			15.4	6.62	10.56	0.7	4.93	0.17	3.07	-0.01	56.17	1.3	100.15	0.91	0.37	0.19	0.80	
R146813	643151	5352753	Very hard andesite with concoidal fractures. Epidote veining	And		Aphyr					15.88	7.13	10.31	0.55	5.63	0.21	3.74	0.01	53.92	1.56	100.35	0.98	0.36	0.13	0.79	
R146814	643225	5352612	Fine grained, very hard andesite with thinny collomnaire joints (30*40cm)	And		Aphyr					15.14	6.83	11.34	0.59	4.89	0.26	2.9	0.73	54.39	1.5	99.99	1.03	0.36	0.17	0.82	
R146816	643330	5352427	Fine grained andesite with visible Pys+Pl. Not as hard.	And	Carb	Equ	Diss	tr			16.59	9.22	9.93	1.05	6.39	0.21	2.14	0.01	51.89	0.82	100.3	1.72	0.40	0.33	0.84	
R146817	643332	5352417	Very hard andesite with epidote veinlets.	And	Chl	Aphyr					13.96	2.82	8.38	0.47	1	0.07	5.37	0.12	66.33	0.76	100.15	0.58	0.15	0.08	0.62	
R146821	642821	5352037	Fine grained, massive, very hard aphyric and homogeneous andesite. Py pods.	And		Aphyr	Stk	2			14.93	4.8	13.26	0.57	5.94	0.21	2.99	1.21	51.34	1.7	100.3	2.94	0.46	0.16	0.84	
R146822	642864	5351939	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And	Epidote	Aphyr					14.44	6.08	12.15	0.3	3.43	0.19	4.66	0.02	55.97	1.64	99.79	0.57	0.26	0.06	0.76	
R146825	643282	5352139	Altered andesite with py veinlets. Neoblast of Qtz.	And	K		Stk	2		tr	14.4	1.36	18.64	1.66	3.87	0.19	0.26	0.11	53.67	1.48	99.71	3.49	0.77	0.86	0.92	
R146826	642791	5352200	Altered andesite, very hard, massive and homogeneous. Qtz neoblast.	And	Epidote	Aphyr	Diss			tr	15.04	5.01	10.58	0.28	3.95	0.17	4.54	0.19	58.42	1.69	100.3	0.05	0.31	0.06	0.75	
R146828	642605	5352485	Alt. Andes., very hard, homog. cross cut by a unregonized network of veinlets.	And	Epidote	Aphyr					15.76	6.46	6.81	0.95	4.65	0.14	4.35	0.17	58.03	1.22	99.95	1.1	0.34	0.18	0.68	
R146829	642553	5352584	Pillowed, massive and homogeneous andesite. Casing at 308	And		Aphyr	Diss	tr			15.78	6.7	9.11	0.69	4.12	0.19	5.35	0.12	55.63	1.2	99.9	0.7	0.29	0.11	0.69	
R146831	642461	5352878	K altered Andesite with less intense stockwork	And	K	Aphyr	Stk	2		tr	14.4	5.17	9.17	1.6	3.33	0.12	3.48	6.69	58.56	0.95	106.8	2.92	0.36	0.31	0.71	
R146832	642405	5352867	Very hard, massive weakly rusty with minor biotite	And	K	Aphyr		2		tr	15.42	7.13	10.98	1.08	4.71	0.15	3.81	1.65	54.05	1.28	102.05	1.44	0.35	0.22	0.76	
R146833	642352	5352844	Epidotized, very hard, massive, homo amd aphyric andesite	And	Epidote	Aphyr					15.78	7.63	9.18	0.9	4.63	0.17	3.66	0.08	55.67	1.46	100.5	0.97	0.33	0.20	0.75	
R146834	642505	5352851	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr				tr	15.38	6.53	7.58	1.31	4.94	0.15	3.29	0.25	58.41	1.16	100.1	0.76	0.39	0.28	0.73	
R146835	642499	5353066	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr					15.66	5.79	7.97	1.22	3.98	0.14	4.46	0.03	58.21	1.17	100.45	1.49	0.34	0.21	0.68	
R146837	642227	5353006	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr					14.2	1.92	7.93	3.42	2.44	0.14	1.78	0.24	65.35	0.63	100.55	2.17	0.61	0.66	0.67	
R146838	642108	5352997	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr					14.03	1.92	11.07	1	3.44	0.19	4.21	0.02	61.17	0.78	99.36	1.23	0.42	0.19	0.74	
R146839	642092	5352957	Silicified andesite. Dalmatianite	And	Sil	Aphyr					13.4	0.82	5.66	1.4	2.82	0.08	3.96	0.99	68.99	0.71	100.2	1.06	0.47	0.26	0.61	
R146840	641971	5352940	Silicified andesite very hard, massive and homo with thynny stringers of Py	And	Sil	Aphyr	Stk	1		tr	13.64	2.24	8.2	4.44	2.21	0.21	5.06	0.37	66.01	0.85	100.3	0.78	0.27	0.08	0.65	
R146842	641612	5352926	Aphyric fine grained, very hard, homogeneous andesite. Dalmatianite	And	Sil	Aphyr					11.54	0.26	4.96	1.79	1.98	0.08	1.95	0.9	74.26	0.27	100.45	2.32	0.63	0.48	0.65	
R146843	641463	5353016	Aphyric fine grained, very hard, homogeneous andesite. Dalmatianite	And	Sil	Aphyr		2			14.22	1.05	7.6	0.28	3.33	0.12	5.1	0.48	65.21	0.96	100.75	2.09	0.37	0.05	0.67	
R146846	641104	5353125	Aphyric fine grained, very hard, homogeneous andesite. Silicified	And	Sil	Aphyr	Diss	1			11.69	0.13	4.75	2.07	2.41	0.08	2.65	0.51	73.27	0.26	99.71	1.73	0.62	0.44	0.60	
R146847	641156	5353242	Aphyric fine grained, homo andesite. Dalmatianite. Collumn Joints. (5-7cm)	And	Sil	Aphyr	Diss	tr		tr	13.59	0.3	8.84	1.94	4.64	0.33	0.13	0.1	65.07	0.84	99.8	3.61	0.94	0.94	0.87	
R146849	641389	5353354	K altered homo and massive andesite with 2% Py stringers	And	Sil+Chl	Aphyr	Stk	2			12.34	0.33	11.33	2.34	3.29	0.5	0.24	1.89	64.89	0.81	101.65	3.04	0.91	0.91	0.85	
R146850	641863	5353346	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr					14.81	1.2	9.25	1.74	4.76	0.21	3.39	0.07	60.35	0.91	99.05	1.96	0.59	0.34	0.73	
LRB15852	642304	5353544	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And	Epidote	Aphyr					16.58	7.9	9.47	0.98	4.31	0.16	3.51	0.46	54.6	1.24	100.75	1.17	0.32	0.22	0.75	
LRB15853	641338	5352664	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr	Stk	tr			14.53	3.35	10.78	0.59	5.25	0.25	4.36	0.62	55.86	1.34	99.64	2.38	0.43	0.12	0.76	
LRB15854	641981	5353644	Pillowed, massive and homogeneous andesite.	And		Aphyr		1			15.1	6.82	8.11	1	4.07	0.22	5.44	0.26	57.18	1.1	100.6	0.98	0.29	0.16	0.65	
LRB15855	641551	5353616	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And	Epidote	Aphyr		tr		tr	15.38	5.34	8.13	0.87	4.83	0.16	5.48	0.4	56.24	1.16	99.19	0.89	0.35	0.14	0.67	
LRB15856	641112	5353771	As LRB15855 but more intense epidote	And	Epidote	Aphyr					13.66	2.13	8.01	0.67	1.55	0.2	5.78	0.02	65.45	0.86	99.15	0.41	0.22	0.10	0.60	
LRB15857	641422	5353460	Aphyric fine grained, very hard, homogeneous andesite with concoidal fractures.	And		Aphyr					13.74	1.19	5.99	0.84	2.66	0.32	3.73	0.03	67.58	0.9	99.8	2.46	0.42	0.18	0.65	
			<b>Average Andesite</b>								<b>14.67</b>	<b>4.28</b>	<b>9.29</b>	<b>1.11</b>	<b>3.88</b>	<b>0.18</b>	<b>3.62</b>	<b>0.69</b>	<b>59.83</b>	<b>1.11</b>	<b>100.53</b>					
R146820	642797	5351999	Fine grained, Pl aphyric andesite	And		Por	Diss	tr			16.31	6.72	8.05	0.56	4.39	0.13	4.32	0.06	57.1	1.04	100	1.01	0.31	0.11	0.72	
R146824	643040	5352091	Pl porphyry, very hard, massive and homogeneous andesite	And	Epidote	Por	Diss	tr			16.18	7.75	9.7	0.68	3.74	0.22	3.85	0.03	55.68	1.36	100.45	0.88	0.28	0.15	0.75	
R146827	642725	5352252	Pillowed and porphyric (Pl) andesite. Weak epidote	And	Epidote	Por		tr			16.31	5.81	8.42	0.8	4.77	0.13	5.25	0.03	55.32	1.12	99.18	0.92	0.34	0.13	0.69	
			<b>Average Porphyry Andesite</b>								<b>16.27</b>	<b>6.76</b>	<b>8.72</b>	<b>0.68</b>	<b>4.30</b>	<b>0.16</b>	<b>4.47</b>	<b>0.04</b>	<b>56.03</b>	<b>1.17</b>	<b>99.88</b>					

**Table 2. Average chemical composition of lithological units from our 2015 sampling.**

<b>Rock_Name</b>	<b>Al2O3</b>	<b>CaO</b>	<b>Fe2O3</b>	<b>K2O</b>	<b>MgO</b>	<b>MnO</b>	<b>Na2O</b>	<b>SO3</b>	<b>SiO2</b>	<b>TiO2</b>	<b>Total</b>
Average Andesite n= 41	14.67	4.28	9.29	1.11	3.88	0.18	3.62	0.69	59.83	1.11	100.53
Average Porphyry Andesite n= 3	16.27	6.76	8.72	0.68	4.30	0.16	4.47	0.04	56.03	1.17	99.88
Average mineralized andesite n= 6	12.94	0.94	10.88	2.14	3.41	0.16	1.82	4.13	62.56	0.80	102.67
Average Dacite n= 1	13.82	2.24	7.34	0.92	4.66	0.11	4.32	0.23	63.49	0.91	100.25
Average Diorite/gabbro n= 3	13.77	9.28	13.43	0.35	5.67	0.22	2.42	0.22	51.49	1.28	100.09

**Table 3. Table providing the sample number, the UTM coordinates (NAD 83, Zone 18), major oxide contents, rock affinity, rock names and alteration as defined by "Lithomodeleur" along with basic geological features.**

IDlab	UTM_E	UTM_N	Description	Code	Alter.	Mineral.	Py_%	Cpy_%	IUGS_Rock_Name	Rock Affinity	Alteration	Al2O3	CaO	Fe2O3	K2O	MgO	Na2O	SiO2	TiO2	CCPI
Q574945	642805	5352821	Silicified andesite with Py stringers	And	Sil	Diss	1		Dacite	Tholeiitique Med-K	Frais	12.26	2.74	5.06	2.53	1.44	3.07	70.63	0.87	0.54
Q574946	642758	5352795	Aphyric andesite very hard and silicified	And	Sil	Stk	2		Andesite	Calco-alcalin Med-K	Frais	15.6	4.52	7.79	1.4	3.84	4.26	59.29	1.14	0.67
Q574947	642848	5352942	Aphyric fine grained, very hard with weak sericite alteration	And	Ser				Andesite basalt.	Calco-alcalin Med-K	Frais	15.56	6.03	10.23	0.83	4.85	3.58	55.2	1.34	0.77
Q574948	643021	5352908	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And		Stk	tr				Chlorite	14.71	6.85	12.17	0.26	4.92	2.72	55.42	1.37	0.85
Q574950	642812	5352755	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And		Diss	tr		Andesite	Tholeiitique Med-K	Frais	15.42	5.78	7.29	1.46	2.32	4.12	61.99	1.03	0.63
R146808	642755	5352695	Massive andesite, very hard cross cut by a porphyry dacitic dyke. Py+Cpy blebs	And			tr	tr	Basalte subcalcin		Albite	16.13	7.55	12.82	0.19	4.67	3.29	52.5	1.8	0.83
R146809	642929	5352645	Very hard andesite with concordal fractures. Stringer Py, rusty.	And		Stk	2	tr	Andesite	Calco-alcalin Med-K	Frais	15.81	3.52	9.11	1.36	4.57	4.58	58.14	1.14	0.70
R146810	642886	5352572	Rusty very hard, massive aphyric andesite with cubic disseminated Pyé	And	Sil	Diss	2	tr	Andesite basalt.		Chlorite	15.06	3.83	11.58	1.58	4.42	3.22	56.39	1.38	0.77
R146811	642845	5352425	Same as R146810	And	Sil	Stk	2	tr	Andesite		Albite	14.65	2.67	8.97	0.68	3.48	4.76	61.5	1	0.70
R146812	643011	5352656	Very hard andesite with concordal fractures.	And			1		Andesite basalt.	Calco-alcalin Bas-K	Frais	15.4	6.62	10.56	0.7	4.93	3.07	56.17	1.3	0.80
R146813	643151	5352753	Very hard andesite with concordal fractures. Epidote veining	And					Andesite basalt.		Albite	15.88	7.13	10.31	0.55	5.63	3.74	53.92	1.56	0.79
R146814	643225	5352612	Fine grained, very hard andesite with thinny collonnaire joints (30*40cm)	And					Andesite basalt.	Calco-alcalin Bas-K	Frais	15.14	6.83	11.34	0.59	4.89	2.9	54.39	1.5	0.82
R146816	643330	5352427	Fine grained andesite with visible Pyrx+Pl. Not as hard.	And	Carb	Diss	tr		Andesite basalt.		Altere	16.59	9.22	9.93	1.05	6.39	2.14	51.89	0.82	0.84
R146817	643332	5352417	Very hard andesite with epidote veinlets.	And	Chl				Dacite		Albite	13.96	2.82	8.38	0.47	1	5.37	66.33	0.76	0.62
R146821	642821	5352037	Fine grained, massive, very hard aphyric and homogeneous andesite. Py pods.	And		Stk	2		Altere		Chlorite	14.93	4.8	13.26	0.57	5.94	2.99	51.34	1.7	0.84
R146822	642864	5351939	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And	Epidote				Andesite basalt.		Albite	14.44	6.08	12.15	0.3	3.43	4.66	55.97	1.64	0.76
R146825	643282	5352139	Altered andesite with py veinlets. Neoblast of Qtz.	And	K	Stk	2	tr	Altere		Chlorite Sericite	14.4	1.36	18.64	1.66	3.87	0.26	53.67	1.48	0.92
R146826	642791	5352200	Altered andesite, very hard, massive and homogeneous. Qtz neoblast.	And	Epidote	Diss		tr	Andesite		Albite	15.04	5.01	10.58	0.28	3.95	4.54	58.42	1.69	0.75
R146828	642605	5352485	Alt. Andes., very hard, homog. cross cut by a unregonized netwok of veinlets.	And	Epidote				Andesite		Albite	15.76	6.46	6.81	0.95	4.65	4.35	58.03	1.22	0.68
R146829	642553	5352584	Pillowed, massive and homogeneous andesite. Casing at 308	And		Diss	tr		Trachyandesite		Albite	15.78	6.7	9.11	0.69	4.12	5.35	55.63	1.2	0.69
R146831	642461	5352878	K altered Andesite with less intense stockwork	And	K	Stk	2	tr	Altere	Calco-alcalin Med-K	Frais	14.4	5.17	9.17	1.6	3.33	3.48	58.56	0.95	0.71
R146832	642405	5352862	Very hard, massive weakly rusty with minor biotite	And	K	Stk	2	tr	Andesite basalt.	Calco-alcalin Med-K	Frais	15.42	7.13	10.98	1.08	4.71	3.81	54.05	1.28	0.76
R146833	642352	5352844	Epidotized, very hard, massive, homo amd aphyric andesite	And	Epidote				Andesite basalt.	Calco-alcalin Med-K	Frais	15.78	7.63	9.18	0.9	4.63	3.66	55.67	1.46	0.75
R146834	642505	5352851	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And				tr	Andesite	Calco-alcalin Med-K	Frais	15.38	6.53	7.58	1.31	4.94	3.29	58.41	1.16	0.73
R146835	642499	5353066	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And					Andesite		Albite	15.66	5.79	7.97	1.22	3.98	4.46	58.21	1.17	0.68
R146837	642227	5353005	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And					Dacite		Sericite	14.2	1.92	7.93	3.42	2.44	1.78	65.35	0.63	0.67
R146838	642108	5352997	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And					Andesite		Chlorite Albite	14.03	1.92	11.07	1	3.44	4.21	61.17	0.78	0.74
R146839	642092	5352957	Silicified andesite. Dalmatianite	And	Sil				Dacite		Sericite	13.4	0.82	5.66	1.4	2.82	3.96	68.99	0.71	0.61
R146840	641971	5352940	Silicified andesite very hard, massive and homo with thynny stringers of Py	And	Sil	Stk	1	tr	Dacite		Albite	13.64	2.24	8.2	0.44	2.21	5.06	66.01	0.85	0.65
R146842	641612	5352926	Aphyric fine grained, very hard, homogeneous andesite. Dalmatianite	And	Sil				Rhyolite		Sericite	11.54	0.26	4.96	1.79	1.98	1.95	74.26	0.27	0.65
R146843	641463	5353016	Aphyric fine grained, very hard, homogeneous andesite. Dalmatianite	And	Sil		2		Dacite		Chlorite Albite	14.22	1.05	7.6	0.28	3.33	5.1	65.21	0.96	0.67
R146846	641104	5353125	Aphyric fine grained, very hard, homogeneous andesite. Silicified	And	Sil	Diss	1		Rhyolite		Sericite	11.69	0.13	4.75	2.07	2.41	2.65	73.27	0.26	0.60
R146847	641156	5353242	Aphyric fine grained, homo andesite. Dalmatianite. Collumn Joints. (5-7cm)	And	Sil	Diss	2r	tr	Altere		Chlorite Sericite	13.59	0.3	8.84	1.94	4.64	0.13	65.07	0.84	0.87
R146849	641389	5353354	K altered homo and massive andesite with 2% Py stringers	And	Sil+Chl	Stk	tr		Altere		Chlorite Sericite	12.34	0.33	11.33	2.34	3.29	0.24	64.89	0.81	0.85
R146850	641863	5353346	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And					Andesite		Chlorite Sericite	14.81	1.2	9.25	1.74	4.76	3.39	60.35	0.91	0.73
LRB15852	642304	5353544	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And	Epidote				Andesite basalt.	Calco-alcalin Med-K	Frais	16.58	7.9	9.47	0.98	4.31	3.51	54.6	1.24	0.75
LRB15853	641338	5352664	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And		Stk	tr		Andesite		Chlorite Albite	14.53	3.35	10.78	0.59	5.25	4.36	55.86	1.34	0.76
LRB15854	641981	5353644	Pillowed, massive and homogeneous andesite.	And			1		Trachyandesite		Albite	15.1	6.82	8.11	1	4.07	5.44	57.18	1.1	0.65
LRB15855	641551	5353616	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And	Epidote		tr	tr	Trachyandesite		Albite	15.38	5.34	8.13	0.87	4.83	5.48	56.24	1.16	0.67
LRB15856	641112	5353771	As LRB15855 but more intense epidote	And	Epidote				Dacite		Albite	13.66	2.13	8.01	0.67	1.55	5.78	65.45	0.86	0.60
LRB15857	641422	5353460	Aphyric fine grained, very hard, homogeneous andesite with concordal fractures.	And					Dacite		Altere	13.74	1.19	5.99	0.84	2.66	3.73	67.58	0.9	0.65
R146820	642797	5351999	Fine grained, Pl phytic andesite	And		Diss	tr		Andesite		Albite	16.31	6.72	8.05	0.56	4.39	4.32	57.1	1.04	0.72
R146824	643040	5352091	Pl porphyry, very hard, massive and homogeneous andesite	And	Epidote	Diss	tr		Andesite basalt.		Albite	16.18	7.75	9.7	0.68	3.74	3.85	55.68	1.36	0.75
R146827	642725	5352252	Pillowed and porphyric (Pl) andesite. Weak epidote	And	Epidote		tr		Trachyandesite		Albite	16.31	5.81	8.42	0.8	4.77	5.25	55.32	1.12	0.69
R146818	643188	5352331	Biotite altered andesite with Py+Po+Cpy stockwork	And			10	1	Altere		Chlorite Sericite	15.21	1.58	11.71	2.16	7.85	0.83	56.01	1.11	0.87
LRB15851	641913	5353354	Silicified and very rusty andesite	And		Stk	7		Altere		Altere	13.2	1.26	9.45	4.71	1.38	2.83	61.66	1.01	0.59
R146844	641398	5352996	Very rusty andesite.	And	Sil		5	tr	Altere		Sericite	12.86	0.22	6.92	2.49	2.89	1.82	68.62	0.56	0.69
R146845	641309	5352996	Rusty andesite.	And	Sil		6		Dacite		Albite	13.58	2.21	8.16	0.49	2.61	4.96	65.08	0.83	0.66
R146830	642526	5352602	K altered Andesite with intense stockwork	And	K	Stk		10	Altere		Chlorite Sericite	10	0.19	16.93	1.28	2.88	0.28	59.29	0.51	0.93
R146848	641253	5353255	Massive, silicified and chloritized andesite with diss and stringers Py - Cpy	And	Sil+Chl	Stk		3	Altere		Chlorite Sericite	12.77	0.2	12.13	1.7	2.82	0.2	64.67	0.8	0.89
R146823	642750	5351883	Qtz porphyry, very hard, massive and homogeneous dacite. Biotite alt.	Dac	K	Diss	tr		Dacite		Chlorite Albite	13.82	2.24	7.34	0.92	4.66	4.32	63.49	0.91	0.70
Q574949	643162	5352945	Coarse grained Pym+Pl (60-40) diorite intrusion	Dio					Basalte subcalcin	Tholeiitique Bas-K	Frais	14.43	10.5	12.66	0.37	6.22	2.26	50.64	1.03	0.87
R146815	643328	5352446	Small mesogabbro (diorite) massive and homogenous. Dacite porphy dyke aside.	Dio		Diss	2		Andesite basalt.	Tholeiitique Bas-K	Frais	11.87	7.38	15.92	0.37	3.14	2.84	54.71	1.92	0.86
R146841	641904	5352961	Medium grained, massive, homo, equigranular gabbroic intrusion	Gab				tr	Basalte subcalcin	Tholeiitique Bas-K	Frais	15	9.97	11.71	0.32	7.64	2.15	49.13	0.89	0.89

## **11.0 Drilling**

In the course of this project, no drilling was conducted.

## **12.0 Sampling Method and Approach**

Fifty-four (54) selected rock samples were collected around east, south and west of the Waite-Amulet property to characterize, the gold, major oxides and trace elements changes among the different volcanic units cropping out on the property. All the samples were described defining the host rock lithology, the degree of alteration and weathering; the degree of deformation and the style and type of mineralization. Along with the geological data, at each stadium where rock sample was collected, the GPS coordinates and numeric photos were recorded. Daily GPS tracking was also recorded.

Most samples collected and routinely named by the author were andesite (76%), porphyry andesite (5.5%), mineralized andesite (11%), dacite (2%), gabbro and quartz diorite intrusions (5.5%). No significant deformation is observed in all the selected grab. The mineralization, where observed, was mainly in the form of disseminated pyrite.

From surface sampling, all the samples weighing about 1 to 2 kilograms were placed in individual plastic bag with their appropriate tag number and the bags were sealed with plastic tie-wrap. Individual bagged samples were then placed in shipping riz-bags. The author is not aware of any sampling or recovery factors that would impact the reliability of the samples.

## **13.0 Sample Preparation, Analysis and Security**

### **13.1 Sample Preparation**

All samples collected by the author were sent to ALS Mineral in Val D'Or, Québec. Upon arrival, all samples had to be sorted and checked against the sample submission form before entering the preparation laboratory.

All samples received by ALS Mineral were logged in and sorted with their LIMS system, a sample tracking system. The samples were verified against the customer submission list. The samples are then dried at 60 degrees C. The entire sample was crushed to better than 85% passing -10 mesh using a TM Terminator crusher. Samples are then riffle split and an approximately 1000 gram aliquot is pulverized in a Labtech Essa LM2 ring and puck pulverizer to 95% passing -150 mesh. Preparation duplicates (from rejects) and pulp duplicates (from pulps) are periodically run and analyzed as part of their internal QC procedure.

### **13.2 Analysis**

All the samples were analyzed for gold by fire assays with an atomic absorption finish. In addition all samples were characterized for their major oxides contents using a XRF finish following a lithium borate fusion. The major elements comprises  $\text{Al}_2\text{O}_3$ , BaO, CaO,  $\text{Cr}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ , MgO, MnO,  $\text{Na}_2\text{O}$ ,  $\text{P}_2\text{O}_5$ ,  $\text{SO}_3$ ,  $\text{SiO}_2$ , SrO,  $\text{TiO}_2$ . Finally, all samples were also analyzed for trace elements digested by 4-acids with an ICP-AES finish for 33 elements (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn).

ALS Minerals was required to include preparation duplicates every 10 samples and pulp duplicates every 10 samples for all analyses. The laboratory was also requested to use a

preparation blank at least twice for the work order batch and insert in-house standards appropriate to the samples approximately every 20 samples. Lower detection limits were 0.01% for all major elements, 5 ppb for gold and variable for the trace elements.

### **13.3 Security**

The author certify that all selected samples collected during the sampling program was kept in a secure condition in Rouyn-Noranda, Quebec. The samples were transported by the author up to ALS Mineral facilities in Val D'Or.

Assay results were provided directly and exclusively to the author. There was little or no opportunity for anyone to interfere or corrupt the samples, or to access or alter the analytical results. All the pulps shall be returned to the Glencore Horne facilities and are stored on the property.

## 14.0 QAQC

The quality control program consisted of the insertion of at least one (1) blank after every 40 samples, one standard every 40 samples. For this program the control materials used was a Certified Reference Material (CRM) named CDN-CM-20 and certified by CDN Resource Laboratory Ltd. in Vancouver. CDN-CM-20 assay certificate can be found in appendix 1. CDN-CM-20 is certified for copper and molybdenum for both 4-acids and or aqua regia digestion with either an ICP or AA finish. The tolerances are indicated below:

Copper	0.316% ± 0.0016% 4-acid, ICP or AA
Copper	0.314% ± 0.0016% aqua regia, ICP or AA
Mo	0.030% ± 0.002% 4-acid/ICP or AA
Mo	0.030% ± 0.004% aqua regia, ICP or AA

Gold was also characterized with concentration of 0.278 g/t ± 0.044 g/t. This analytical reference is provisional meaning it cannot be used to monitor accuracy with a degree of certainty.

During this program, samples R146819, R146836 and LRB15851 were the standards in a batch of 57 samples. No blank was inserted.

Glencore defined a tolerance of  $\pm 3$  standard deviations from the expected grades of the reference materials.

Other than internal control from ALS Minerals, there was no control for the major oxides and trace elements except for Cu and Mo by the author. The author, as qualified person, reviewed all ALS Minerals results from the assay lab and did not find any reason to believe something went particularly wrong during the analysis.

## 15.0 Adjacent Properties

The Noranda massive sulfide district is known to host many other VMS deposits such as Horne, Corbet, Vauze, Norbec, East Waite, West Waite, Lac Dufault, Millenbach, Quemont, Delbridge and Mobrún among others. Table 3 providing tonnage and grade of selected massive sulfides located within 10 kilometres from the town of Rouyn-Noranda (Robinson et al. 1982).

**Table 4. Tonnage and grade of selected massive sulfide deposits in the Rouyn-Noranda area.**

Deposit name	Tonnes	Cu %	Zn %	Pb %	Ag g/t	Au g/t
Corbet	2,836,470	2.99	2.13		19.0	0.756
Vauze	350,350	2.9	0.94		21.5	0.588
East Waite	1,365,000	4.13	3.26		28	1.62
Waite Amulet	1,132,950	4.7	2.97	0.038	19.3	0.98
Amulet F	254,800	3.54	3.4		4.2	0.47
Amulet C	546,000	2.2	8.5		78.4	0.53
Amulet A and Lower A	4,823,000	5.12	5.47		42	1.31
Norbec	3,657,654	2.78	4.76		31.9	0.50
Lake Dufault No 2	91,000	0.5	9.8		92.4	1.23
Millenbach	3,215,030	3.43	4.23		42.5	0.72
Horne	56,693,000	2.18			0	4.62
Quemont	13,967,590	1.31	2.43	0.018	28	4.84
Delbridge	439,530	0.49	9.4		86.8	2.46
Gallen	9,141,860	0.014	2.69		1.708	0
Mobrún	2,767,310	0.62	2.32		19.1	1.59

## 16.0 Geological Modelling

No geological modelling was done in the course of the current study.

## 17.0 Resource Calculation

No resource calculation was performed during the course of the current study.

## 18.0 Conclusions and summary

While completing the rock lithogeochemical sampling, five distinct volcanic units were recognized by the author comprising aphyric andesite (76%), porphyry andesite (5%), dacite (2%), altered andesite (11%) and gabbro/diorite intrusions (5%). In general, most collected samples fall in the calco-alkaline field, whereas the diorite and the gabbro are more in the tholeiitic field.

In average the fresh andesite have less SiO<sub>2</sub>, Na<sub>2</sub>O and more Fe<sub>2</sub>O<sub>3</sub> than the dacite. The average altered andesites seem depleted in Na<sub>2</sub>O and CaO and enriched in K<sub>2</sub>O and SO<sub>3</sub> relative to the fresh andesite. The prophyry andesites seem to have in average more CaO, Na<sub>2</sub>O and less SiO<sub>2</sub> than the fresh andesite. Without surprise the gabbro and the diorite are enrich in Fe<sub>2</sub>O<sub>3</sub>, MgO in contrast with all the other units. In general, lithogeochemical analysed distincts well the various volcanic units.

At some degrees, few andesite rock samples were affected by either K-feldspar, sericite, silica and or chlorite alteration as indicated by the various indexes especially the chlorite index (ICCP). This index marks very well the Amulet A and C lenses and an area NW of M.C. 173. Utilization of alteration indexes seem to be a good tool as it detects well the Amulet A and C discharge zones. Basic Cu, Pb and Zn distribution seem as effective as the various indexes to identify the discharge zones.

An attention should be bared to the alteration zone found NW of the M.C. 173. An exhaustive compilation should be initiated to make sure there is no further exploration potential to find a buried VMS in that area.

## 19.0 References

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## 20.0 Date and Signature

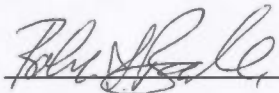
### 20.0 Date and Signature

I, **Robert Banville**, engineer, 3 D'Amqui, Blainville, Québec, J7B 1X3, do hereby certify that:

- I am presently employed as consultant geologist by Glencore Canada Corporation.
- I have received a B.Sc. in Geological Engineering in 1985 from the Université Laval, Québec City.
- I am a member of l'Ordre des Ingénieurs du Québec; number 41807.
- I am working in exploration over more than 25 years and I am a Qualified Person in accordance to section 5.1 of the National Instrument 43-101.
- I have supervised the Waite-Amulet Project in 2015 up until now. I have directly supervised the rock sampling program assisted by Charles Lemieux Verreault.
- I am responsible for writing the present technical report, utilizing proprietary exploration data generated by Glencore Canada Corporation and information compiled from various authors and sources as summarized in the reference section 19 of this report.
- I am not aware of any missing information or changes, which could have caused the present report to be misleading.
- I have read and used the National Instrument 43-101 and the Form 43-101A1 to make the present report in accordance with their specifications and terminology.

Dated in Blainville, Québec, this 1<sup>st</sup> of January, 2016.

**Robert Banville Ing.**



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## Appendix 1. CDN-CM-20 Certificate

# CDN Resource Laboratories Ltd.

#2, 20148 – 102<sup>nd</sup> Ave, Langley, B.C., Canada, V1M 4B4, 604-882-8422, Fax: 604-882-8466 (www.cdnlabs.com)

### REFERENCE MATERIAL: CDN-CM-20

Recommended values and the "Between Lab" Two Standard Deviations

Gold	0.278 g/t ± 0.044 g/t	**Provisional**	30g FA / ICP or AA
Copper	0.316 % ± 0.016 %	Certified value	4-acid / ICP or AA
Copper	0.314 % ± 0.014 %	Certified value	Aqua regia / ICP or AA
Molybdenum	0.030 % ± 0.002 %	Certified value	4-acid / ICP or AA
Molybdenum	0.030 % ± 0.004 %	**Provisional**	Aqua regia / ICP or AA

**Note:** Standards with an RSD of near or less than 5% are certified; RSD's of between 5% and 15% are Provisional; RSD's over 15% are Indicated. Provisional and Indicated values cannot be used to monitor accuracy with a high degree of certainty.

**PREPARED BY:** CDN Resource Laboratories Ltd.  
**CERTIFIED BY:** Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia  
**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., P. Geo.  
**DATE OF CERTIFICATION:** November 25, 2011

#### **METHOD OF PREPARATION:**

Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone mixer. Splits were taken and sent to 15 laboratories for round robin assaying.

#### **ORIGIN OF REFERENCE MATERIAL:**

Standard CDN-CM-20 was prepared using 790 kg of a granitic rock blended with 10 kg of a Cu-Au-Mo concentrate.

**Approximate chemical composition (from whole rock analysis) is as follows:**

	Percent		Percent
SiO <sub>2</sub>	67.5	MgO	2.1
Al <sub>2</sub> O <sub>3</sub>	13.0	K <sub>2</sub> O	1.5
Fe <sub>2</sub> O <sub>3</sub>	5.8	TiO <sub>2</sub>	0.6
CaO	3.6	LOI	2.0
Na <sub>2</sub> O	3.2	S	0.4
C	0.1		

#### **Statistical Procedures:**

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

**REFERENCE MATERIAL CDN-CM-20**

**Results from round-robin assaying:**

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
CM-20-1	0.303	0.258	0.248	0.260	0.32	0.28	0.268	0.299	0.304	0.274	0.246	0.310	0.301	0.262	0.28
CM-20-2	0.266	0.262	0.246	0.249	0.29	0.28	0.311	0.284	0.321	0.258	0.231	0.283	0.314	0.290	0.27
CM-20-3	0.278	0.263	0.247	0.247	0.30	0.26	0.262	0.285	0.298	0.290	0.256	0.320	0.301	0.276	0.29
CM-20-4	0.252	0.257	0.259	0.255	0.31	0.27	0.261	0.292	0.340	0.246	0.289	0.280	0.285	0.269	0.31
CM-20-5	0.275	0.252	0.27	0.250	0.31	0.28	0.282	0.299	0.279	0.288	0.273	0.300	0.345	0.289	0.27
CM-20-6	0.267	0.247	0.264	0.252	0.33	0.31	0.276	0.291	0.291	0.254	0.274	0.310	0.289	0.257	0.29
CM-20-7	0.278	0.258	0.268	0.253	0.30	0.26	0.309	0.295	0.345	0.266	0.297	0.306	0.293	0.246	0.32
CM-20-8	0.273	0.246	0.253	0.253	0.30	0.35	0.295	0.289	0.333	0.313	0.290	0.297	0.313	0.283	0.30
CM-20-9	0.285	0.252	0.256	0.243	0.32	0.25	0.251	0.296	0.326	0.224	0.296	0.280	0.266	0.253	0.29
CM-20-10	0.302	0.256	0.249	0.264	0.31	0.25	0.283	0.285	0.308	0.283	0.360	0.295	0.337	0.275	0.27
Mean	0.278	0.255	0.256	0.253	0.309	0.279	0.280	0.292	0.315	0.270	0.281	0.298	0.304	0.270	0.289
Std. Devn.	0.0157	0.0058	0.0089	0.0061	0.0127	0.0307	0.0203	0.0057	0.0219	0.0255	0.0355	0.0138	0.0238	0.0152	0.0173
% RSD	5.66	2.26	3.48	2.41	4.11	11.01	7.27	1.96	6.98	9.47	12.62	4.64	7.83	5.64	5.98
4-acid	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
CM-20-1	0.314	0.327	0.318	0.310	0.308	0.304	0.321	0.32	0.33	0.32	0.320	0.297	0.32	0.324	0.323
CM-20-2	0.314	0.327	0.315	0.323	0.309	0.305	0.314	0.31	0.33	0.32	0.320	0.309	0.31	0.328	0.321
CM-20-3	0.308	0.326	0.316	0.311	0.314	0.308	0.304	0.32	0.32	0.31	0.310	0.308	0.31	0.337	0.320
CM-20-4	0.330	0.312	0.301	0.315	0.313	0.307	0.317	0.32	0.33	0.30	0.316	0.305	0.32	0.330	0.327
CM-20-5	0.316	0.310	0.310	0.313	0.312	0.309	0.324	0.32	0.32	0.31	0.316	0.306	0.31	0.335	0.330
CM-20-6	0.315	0.319	0.306	0.319	0.311	0.309	0.544	0.32	0.33	0.30	0.308	0.308	0.31	0.332	0.326
CM-20-7	0.307	0.321	0.321	0.321	0.310	0.289	0.314	0.32	0.33	0.30	0.310	0.307	0.32	0.316	0.323
CM-20-8	0.298	0.317	0.321	0.318	0.315	0.303	0.315	0.32	0.32	0.32	0.311	0.310	0.31	0.332	0.323
CM-20-9	0.315	0.330	0.310	0.321	0.310	0.304	0.315	0.31	0.33	0.31	0.328	0.306	0.31	0.332	0.325
CM-20-10	0.313	0.327	0.290	0.324	0.315	0.304	0.317	0.32	0.32	0.32	0.324	0.299	0.31	0.331	0.322
Mean	0.313	0.322	0.311	0.318	0.312	0.304	0.339	0.318	0.326	0.311	0.316	0.306	0.313	0.330	0.324
Std. Devn.	0.0081	0.0069	0.0098	0.0050	0.0024	0.0058	0.0724	0.0042	0.0052	0.0088	0.0068	0.0042	0.0048	0.0060	0.0030
% RSD	2.60	2.16	3.14	1.57	0.78	1.91	21.39	1.33	1.58	2.82	2.16	1.39	1.54	1.81	0.93
Aqua regia	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
CM-20-1	0.311	0.321	0.308	0.309	0.31	0.328	0.324	0.31	0.32	0.31	0.310	0.308	0.32	0.327	0.314
CM-20-2	0.311	0.318	0.306	0.320	0.31	0.318	0.307	0.30	0.32	0.31	0.318	0.306	0.31	0.329	0.315
CM-20-3	0.310	0.314	0.309	0.312	0.31	0.324	0.313	0.31	0.32	0.30	0.312	0.309	0.31	0.331	0.314
CM-20-4	0.315	0.323	0.296	0.308	0.31	0.328	0.315	0.31	0.32	0.31	0.325	0.309	0.31	0.314	0.327
CM-20-5	0.312	0.311	0.309	0.318	0.31	0.322	0.315	0.31	0.32	0.31	0.306	0.310	0.31	0.315	0.316
CM-20-6	0.311	0.311	0.294	0.313	0.31	0.323	0.321	0.31	0.32	0.32	0.321	0.304	0.30	0.329	0.318
CM-20-7	0.315	0.315	0.307	0.309	0.32	0.324	0.321	0.31	0.32	0.31	0.316	0.308	0.32	0.33	0.319
CM-20-8	0.319	0.327	0.305	0.311	0.31	0.324	0.320	0.31	0.32	0.31	0.311	0.312	0.31	0.329	0.321
CM-20-9	0.317	0.313	0.302	0.311	0.31	0.320	0.319	0.30	0.33	0.31	0.315	0.305	0.32	0.329	0.320
CM-20-10	0.335	0.311	0.301	0.316	0.31	0.313	0.324	0.31	0.33	0.30	0.322	0.302	0.32	0.316	0.321
Mean	0.316	0.316	0.304	0.313	0.311	0.322	0.318	0.308	0.322	0.309	0.316	0.307	0.313	0.325	0.319
Std. Devn.	0.0074	0.0056	0.0053	0.0041	0.0030	0.0044	0.0054	0.0042	0.0042	0.0057	0.0059	0.0030	0.0067	0.0069	0.0040
% RSD	2.36	1.78	1.76	1.30	0.97	1.37	1.69	1.37	1.31	1.84	1.86	0.98	2.16	2.13	1.27

**Note:** Au data from Lab 9 was excluded for failing the t test.

**REFERENCE MATERIAL CDN-CM-20**

**Results from round-robin assaying:**

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
4-acid	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo
CM-20-1	0.030	0.032	0.03	0.030	0.029	0.031	0.030	0.03	0.035	0.03	0.031	0.029	0.032	0.029	0.031
CM-20-2	0.030	0.032	0.03	0.031	0.029	0.032	0.029	0.03	0.035	0.03	0.031	0.029	0.031	0.030	0.0306
CM-20-3	0.030	0.032	0.03	0.030	0.029	0.031	0.029	0.03	0.033	0.03	0.031	0.029	0.031	0.030	0.0312
CM-20-4	0.033	0.031	0.03	0.030	0.029	0.031	0.030	0.03	0.034	0.03	0.031	0.029	0.032	0.030	0.03
CM-20-5	0.030	0.032	0.029	0.030	0.030	0.031	0.030	0.03	0.035	0.03	0.031	0.029	0.031	0.030	0.0289
CM-20-6	0.030	0.031	0.031	0.030	0.030	0.032	0.050	0.03	0.035	0.03	0.030	0.029	0.032	0.030	0.029
CM-20-7	0.030	0.030	0.031	0.031	0.030	0.029	0.030	0.03	0.034	0.03	0.032	0.029	0.032	0.029	0.0292
CM-20-8	0.030	0.032	0.031	0.031	0.029	0.031	0.030	0.03	0.035	0.03	0.032	0.029	0.031	0.030	0.0299
CM-20-9	0.030	0.031	0.031	0.029	0.029	0.031	0.029	0.03	0.035	0.03	0.033	0.030	0.031	0.030	0.0307
CM-20-10	0.029	0.033	0.028	0.030	0.029	0.031	0.030	0.03	0.034	0.03	0.031	0.029	0.031	0.029	0.0307
Mean	0.030	0.032	0.030	0.030	0.029	0.031	0.032	0.030	0.035	0.030	0.031	0.029	0.031	0.030	0.030
Std. Devn.	0.0010	0.0008	0.0010	0.0004	0.0004	0.0008	0.0064	0.0000	0.0007	0.0000	0.0009	0.0003	0.0005	0.0005	0.0008
% RSD	3.42	2.67	3.30	1.41	1.37	2.70	20.34	0.00	2.05	0.00	2.74	1.09	1.64	1.63	2.82
Aqua regia	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo
CM-20-1	0.029	0.031	0.031	0.025	0.027	0.035	0.030	0.02	0.032	0.03	0.032	0.030	0.029	0.027	0.030
CM-20-2	0.029	0.030	0.03	0.025	0.030	0.034	0.029	0.02	0.032	0.03	0.033	0.030	0.030	0.029	0.029
CM-20-3	0.029	0.030	0.031	0.026	0.029	0.034	0.030	0.02	0.032	0.03	0.031	0.030	0.028	0.029	0.029
CM-20-4	0.029	0.030	0.031	0.025	0.027	0.035	0.031	0.02	0.033	0.03	0.034	0.029	0.028	0.027	0.031
CM-20-5	0.029	0.030	0.03	0.026	0.027	0.035	0.030	0.02	0.033	0.03	0.031	0.030	0.029	0.029	0.030
CM-20-6	0.029	0.029	0.031	0.026	0.028	0.035	0.029	0.02	0.033	0.03	0.033	0.030	0.027	0.030	0.030
CM-20-7	0.030	0.029	0.031	0.025	0.027	0.035	0.029	0.02	0.034	0.03	0.033	0.030	0.028	0.027	0.029
CM-20-8	0.030	0.030	0.03	0.025	0.028	0.034	0.029	0.02	0.033	0.03	0.032	0.030	0.028	0.027	0.029
CM-20-9	0.030	0.030	0.029	0.025	0.029	0.035	0.029	0.02	0.031	0.03	0.033	0.029	0.028	0.029	0.030
CM-20-10	0.030	0.030	0.03	0.026	0.028	0.033	0.030	0.02	0.032	0.03	0.034	0.030	0.028	0.028	0.030
Mean	0.029	0.030	0.030	0.025	0.028	0.034	0.030	0.020	0.033	0.030	0.033	0.030	0.028	0.028	0.030
Std. Devn.	0.0005	0.0006	0.0007	0.0005	0.0009	0.0006	0.0007	0.0000	0.0008	0.0000	0.0010	0.0004	0.0008	0.0011	0.0004
% RSD	1.76	1.90	2.30	1.84	3.14	1.87	2.36	0.00	2.61	0.00	3.16	1.41	2.91	4.03	1.32

**Note:** Aqua regia Mo data from Lab 8 was excluded for failing the t test.

**REFERENCE MATERIAL CDN-CM-20**

**Participating Laboratories:**

(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, B.C., Canada  
Actlabs, Ancaster, Ontario, Canada  
Actlabs, Thunder Bay, Ontario, Canada  
ALS Chemex Laboratories, North Vancouver, B.C., Canada  
AGAT, Mississauga, Ontario  
AHK, Alaska, USA  
Alex Stewart Argentina SA  
Stewart Group, Kamloops, B.C., Canada  
CIMM, Lima, Peru  
Inspectorate, Richmond, B.C., Canada  
Genalysis, Perth, Australia  
SGS, Lima, Peru  
Skyline Assayers & Laboratories, Arizona, USA  
TSL Laboratories, Saskatoon, Canada  
Ultra Trace, Perth, Australia

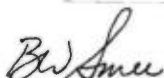
**Legal Notice:**

This certificate and the reference material described in it have been prepared with due care and attention. However CDN Resource Laboratories Ltd. or Barry Smee accept no liability for any decisions or actions taken following the use of the reference material. Our liability is limited solely to the cost of the reference material.

Certified by

  
Duncan Sanderson, Certified Assayer of B.C.

Geochemist

  
Dr. Barry Smee, Ph.D., P. Geo.

**Appendix 2. Certificate of Assays**



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 21 03 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
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 www.alsglobal.com

À: R/ EXPLORATION  
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Page: 1  
 Nombre total de pages: 4 (A - D)  
 plus les pages d'annexe  
 Finalisée date: 13-NOV-2015  
 Compte: RBBXLE

**CERTIFICAT VO15166011**

Ce rapport s'applique aux 98 échantillons de roche soumis à notre laboratoire de Val d'Or, QC, Canada le 29- OCT- 2015.  
 Les résultats sont transmis à:  
 ROBERT BANVILLE

PRÉPARATION ÉCHANTILLONS	
CODE ALS	DESCRIPTION
WEI- 21	Poids échantillon reçu
LOG- 22	Entrée échantillon - Reçu sans code barre
LOG- 24	Entrée pulpe - Reçu sans code barre
CRU- 32	Granulation 90 % < 2 mm
CRU- QC	Test concassage QC
PUL- QC	Test concassage QC
SPL- 21	Échant. fractionné - div. riffles
PUL- 35a	Pulvériser la Division à 95% < 106 um
BAG- 01	Entreposage pulp de ref.

PROCÉDURES ANALYTIQUES		
CODE ALS	DESCRIPTION	INSTRUMENT
ME- XRF26		XRF
OA- GRA05x	LOI pour XRF	WST- SEQ
ME- ICP61	33 éléments, quatre acides ICP- AES	ICP- AES
Ag- OG62	Teneur marchande Ag - quatre acides	VARIABLE
ME- OG62	Teneur marchande éléments - quatre acides	ICP- AES
Cu- OG62	Teneur marchande Cu - quatre acides	VARIABLE
Au- AA23	Au 30 g fini FA- AA	AAS

À: R/ EXPLORATION  
 ATTN: ROBERT BANVILLE  
 3 RUE D AMQUI  
 BLAINVILLE QC J7A 2H1

Ce rapport est final et remplace tout autre rapport préliminaire portant ce numéro de certificat. Les résultats s'appliquent aux échantillons soumis. Toutes les pages de ce rapport ont été vérifiées et approuvées avant publication.

\*\*\*\*\* Voir la page d'annexe pour les commentaires en ce qui concerne ce certificat \*\*\*\*\*

Commentaire: ME- XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

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



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Page: 2 - A  
 Nombre total de pages: 4 (A - D)  
 plus les pages d'annexe  
 Finalisée date: 13- NOV- 2015  
 Compte: RBBXLE

**CERTIFICAT D'ANALYSE VO15166011**

Description échantillon	Méthode élément unités LD.	WEI- 21	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	
		Poids reçu kg	Al2O3 %	BaO %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SO3 %	SiO2 %	SrO %	TiO2 %
LRB1 5851		0.87	13.20	0.28	1.26	0.01	9.45	4.71	1.38	0.25	2.83	0.12	10.30	61.66	0.01	1.01
LRB1 5852		1.31	16.58	0.03	7.90	0.01	9.47	0.98	4.31	0.16	3.51	0.18	0.46	54.60	0.03	1.24
LRB1 5853		1.54	14.53	0.04	3.35	<0.01	10.78	0.59	5.25	0.25	4.38	0.17	0.62	55.86	0.01	1.34
LRB1 5854		0.90	15.10	0.03	6.82	0.01	8.11	1.00	4.07	0.22	5.44	0.12	0.26	57.18	0.02	1.10
LRB1 5855		0.91	15.38	0.03	5.34	0.01	8.13	0.87	4.83	0.16	5.48	0.14	0.40	56.24	0.02	1.16
LRB1 5856		0.83	13.68	0.03	2.13	0.03	8.01	0.67	1.55	0.20	5.78	0.26	0.02	65.45	0.01	0.86
LRB1 5857		0.95	13.74	0.02	1.19	<0.01	5.99	0.84	2.66	0.32	3.73	0.25	0.03	67.58	0.01	0.90
LRB1 5858		0.10	13.16	0.08	3.60	0.01	5.88	1.48	2.03	0.09	3.28	0.16	1.15	68.44	0.04	0.55
Q574904		1.21	14.75	0.08	1.34	<0.01	5.75	1.86	0.74	0.05	4.17	0.21	0.02	66.98	0.01	0.65
Q574905		2.12	14.67	0.04	1.76	<0.01	6.09	0.67	1.02	0.06	5.49	0.20	0.01	68.01	0.02	0.64
Q574906		1.17	14.43	0.03	1.12	<0.01	3.90	0.81	0.62	0.03	5.34	0.18	<0.01	71.27	0.01	0.59
Q574907		0.95	5.84	0.02	18.15	<0.01	10.22	0.49	6.70	0.39	1.65	0.13	0.05	30.46	0.02	0.32
Q574908		1.25	12.38	0.03	0.29	<0.01	5.56	1.28	4.26	0.05	0.61	0.13	0.06	71.98	0.01	0.43
Q574909		1.18	14.25	0.03	1.36	<0.01	5.94	1.26	1.10	0.09	4.27	0.18	0.28	67.20	0.01	0.60
Q574910		1.23	14.80	0.03	2.95	<0.01	3.95	1.06	2.63	0.08	2.04	0.19	<0.01	65.82	0.02	0.62
Q574911		1.01	12.48	0.02	2.15	<0.01	6.85	0.68	4.68	0.10	0.99	0.21	0.02	65.40	0.01	0.45
Q574912		0.10	13.11	0.09	3.62	0.01	5.91	1.48	2.09	0.10	3.28	0.15	1.16	68.52	0.05	0.56
Q574913		1.46	13.86	0.04	0.91	<0.01	4.48	1.16	0.63	0.03	4.92	0.12	0.02	71.24	0.01	0.47
Q574914		1.22	14.27	0.04	1.11	<0.01	4.55	1.06	0.69	0.04	5.16	0.13	0.01	70.22	0.01	0.48
Q574915		1.24	13.93	0.04	2.30	<0.01	5.75	1.36	1.96	0.05	3.73	0.17	0.01	65.46	0.01	0.56
Q574916		0.87	14.62	0.04	0.55	<0.01	7.12	1.82	1.36	0.05	2.77	0.16	0.15	68.32	0.01	0.57
Q574917		1.34	13.02	0.02	7.29	0.10	8.76	0.33	9.15	0.13	3.03	0.25	0.01	43.80	0.01	0.70
Q574918		1.10	13.87	0.02	1.02	<0.01	5.51	0.45	0.93	0.05	5.33	0.16	0.04	70.02	0.02	0.53
Q574919		0.69	14.15	0.05	0.17	0.01	4.83	2.33	4.16	0.07	0.39	0.12	<0.01	70.27	0.01	0.48
Q574920		0.80	13.64	0.04	2.06	0.01	4.30	1.40	1.42	0.05	3.60	0.12	<0.01	69.46	0.01	0.45
Q574921		0.84	14.34	0.05	1.19	0.01	5.45	1.70	2.32	0.09	3.18	0.19	0.38	68.15	0.01	0.64
Q574922		1.00	14.10	0.03	2.29	<0.01	4.92	0.79	0.98	0.06	5.03	0.13	<0.01	69.67	0.02	0.51
Q574923		0.93	14.00	0.04	1.29	<0.01	4.52	1.21	1.04	0.05	4.83	0.13	<0.01	70.59	0.01	0.49
Q574924		1.09	15.49	0.06	0.45	<0.01	5.61	1.58	1.48	0.04	3.79	0.16	0.01	68.72	0.01	0.58
Q574925		0.94	14.62	0.03	1.43	<0.01	5.06	0.89	1.20	0.06	5.08	0.15	0.01	69.06	0.02	0.58
Q574926		1.00	15.02	0.03	3.91	<0.01	4.85	1.10	1.94	0.06	2.83	0.14	0.27	64.35	0.02	0.57
Q574927		0.88	15.20	0.04	2.22	<0.01	5.08	1.64	2.37	0.09	2.77	0.15	0.22	65.48	0.01	0.61
Q574928		1.24	16.03	0.03	5.23	<0.01	5.28	1.03	1.68	0.09	3.21	0.15	0.72	64.46	0.02	0.59
Q574929		0.96	11.48	0.04	0.02	<0.01	2.92	3.11	0.27	0.01	0.32	0.05	4.93	78.60	<0.01	0.41
Q574930		0.89	17.98	0.10	0.07	0.01	7.29	4.56	1.46	0.03	0.55	0.07	12.30	60.99	0.01	1.06
Q574931		0.94	19.20	0.02	0.76	<0.01	7.28	1.38	0.46	0.02	8.64	0.17	12.40	57.71	0.01	0.74
Q574932		1.07	16.90	0.02	6.33	<0.01	5.98	0.68	3.31	0.10	3.14	0.17	0.56	59.81	0.02	0.64
Q574933		1.04	19.18	0.01	0.92	<0.01	0.73	0.11	0.23	0.01	>10.0	0.18	0.24	66.45	<0.01	0.74
Q574934		1.65	16.59	0.06	2.65	<0.01	4.23	2.22	1.64	0.06	3.53	0.14	0.30	64.11	0.01	0.58
Q574935		1.18	16.79	0.01	8.32	<0.01	5.57	0.11	4.92	0.27	2.31	0.20	4.42	56.57	0.02	0.68

Commentaire: ME- XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

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Page: 2 - B  
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 plus les pages d'annexe  
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 Compte: RBBXLE

**CERTIFICAT D'ANALYSE VO15166011**

Description échantillon	Méthode élément unités LD.	ME-XRF26	OA- GRA05x	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		Total %	LOI 1000 %	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.01	0.01	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
LRB15851		>110	3.64	3.4	6.92	26	760	0.8	<2	0.92	0.5	22	37	43	6.51	10
LRB15852		100.75	1.17	<0.5	8.75	<5	240	0.8	<2	5.69	0.7	24	44	68	6.58	20
LRB15853		99.64	2.38	<0.5	7.90	<5	420	0.7	<2	2.49	<0.5	25	8	66	7.79	20
LRB15854		100.60	0.98	<0.5	7.91	<5	190	0.5	<2	4.83	<0.5	18	41	10	5.67	20
LRB15855		99.19	0.89	<0.5	7.86	<5	240	0.8	<2	3.73	<0.5	24	68	61	5.56	20
LRB15856		99.15	0.41	<0.5	7.27	<5	290	0.9	<2	1.63	<0.5	7	193	14	5.66	20
LRB15857		99.80	2.46	<0.5	6.98	6	170	1.0	<2	0.86	<0.5	4	23	6	4.07	20
LRB15858		101.95	1.53	0.8	6.91	8	720	0.9	<2	2.63	0.5	11	46	3210	4.15	10
Q574904		99.16	2.52	<0.5	7.42	<5	630	1.1	<2	0.97	<0.5	5	9	6	3.88	20
Q574905		100.90	2.18	<0.5	7.36	5	280	0.7	<2	1.26	<0.5	4	11	3	4.15	20
Q574906		100.20	1.86	<0.5	7.40	<5	210	0.6	<2	0.83	<0.5	3	29	4	2.73	20
Q574907		100.45	25.95	<0.5	3.26	<5	160	0.5	<2	12.95	1.9	4	14	11	7.11	10
Q574908		100.55	3.45	<0.5	6.71	<5	200	<0.5	<2	0.24	<0.5	8	5	2	4.03	20
Q574909		100.95	4.31	<0.5	7.56	<5	220	0.7	<2	1.03	<0.5	6	15	38	4.24	20
Q574910		100.50	6.25	<0.5	7.02	<5	170	1.0	<2	2.01	<0.5	2	18	7	2.56	20
Q574911		100.10	6.02	<0.5	6.32	<5	130	0.5	<2	1.50	<0.5	8	9	7	4.60	20
Q574912		102.15	1.55	0.9	6.72	6	700	0.9	<2	2.57	<0.5	14	46	3170	4.04	20
Q574913		99.91	1.96	<0.5	7.12	<5	340	0.6	<2	0.67	<0.5	6	17	73	3.09	20
Q574914		99.84	2.02	<0.5	7.40	<5	330	0.8	<2	0.82	<0.5	7	18	8	3.18	20
Q574915		99.92	4.55	<0.5	6.92	<5	310	0.7	<2	1.63	<0.5	7	26	3	3.92	20
Q574916		100.25	2.65	<0.5	7.58	<5	380	1.0	<2	0.40	<0.5	9	14	7	4.85	20
Q574917		100.00	13.51	<0.5	6.75	<5	150	0.9	<2	5.11	0.6	40	521	7	5.87	10
Q574918		99.61	1.63	<0.5	7.18	<5	90	0.8	<2	0.76	<0.5	5	10	6	3.81	20
Q574919		100.40	3.30	<0.5	7.13	<5	360	0.8	<2	0.12	<0.5	6	85	5	3.29	20
Q574920		99.53	2.93	<0.5	6.95	<5	370	0.8	<2	1.50	<0.5	5	71	4	2.96	20
Q574921		100.60	2.84	<0.5	7.30	<5	350	0.8	<2	0.85	<0.5	5	64	9	3.78	20
Q574922		100.50	1.94	<0.5	7.17	<5	290	0.9	<2	1.65	<0.5	6	20	6	3.37	20
Q574923		100.25	2.02	<0.5	7.05	6	350	0.8	<2	0.93	<0.5	4	11	5	3.08	20
Q574924		100.15	2.11	<0.5	7.89	<5	480	1.1	<2	0.33	<0.5	7	9	5	3.87	20
Q574925		100.10	2.08	<0.5	7.40	7	270	0.9	<2	1.03	<0.5	6	11	4	3.49	20
Q574926		100.60	5.47	<0.5	7.40	<5	230	0.7	<2	2.79	<0.5	6	19	21	3.33	20
Q574927		100.45	4.52	<0.5	7.91	5	350	0.6	<2	1.64	0.6	7	13	44	3.68	20
Q574928		100.95	2.37	<0.5	7.72	<5	230	0.7	<2	3.75	<0.5	8	11	30	3.65	20
Q574929		105.05	2.77	<0.5	6.11	<5	340	<0.5	<2	0.02	1.6	5	15	30	2.10	10
Q574930		>110	6.07	<0.5	9.22	<5	570	0.6	<2	0.05	<0.5	14	46	29	5.11	20
Q574931		>110	4.17	<0.5	9.89	5	180	<0.5	<2	0.56	<0.5	25	21	7	5.13	10
Q574932		100.10	2.34	<0.5	8.01	<5	150	0.6	<2	4.58	<0.5	27	31	40	4.22	20
Q574933		100.15	0.12	<0.5	7.66	<5	20	<0.5	<2	0.57	<0.5	2	31	2	0.44	10
Q574934		99.94	3.80	<0.5	8.41	<5	490	0.8	<2	1.96	<0.5	5	12	18	3.03	20
Q574935		104.50	4.20	<0.5	8.43	<5	60	0.6	<2	6.00	<0.5	8	17	66	3.99	20

Commentaire: ME-XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

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Page: 2 - C  
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**CERTIFICAT D'ANALYSE VO15166011**

Description échantillon	Méthode élément unités LD.	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
LRB1 5851		3.89	10	0.77	1930	<1	2.06	31	540	62	4.19	<5	23	70	<20	0.53
LRB1 5852		0.82	10	2.66	1275	<1	2.65	53	860	7	0.20	<5	24	226	<20	0.76
LRB1 5853		0.50	10	3.39	2000	<1	3.39	11	790	14	0.26	<5	31	84	<20	0.84
LRB1 5854		0.82	10	2.45	1685	<1	4.04	35	570	6	0.10	<5	27	136	<20	0.66
LRB1 5855		0.69	10	2.88	1165	<1	3.94	48	610	7	0.16	<5	28	141	<20	0.68
LRB1 5856		0.56	20	0.91	1630	1	4.34	1	1200	8	0.01	<5	18	59	<20	0.54
LRB1 5857		0.66	20	1.49	2420	1	2.66	<1	1100	24	0.01	<5	19	62	<20	0.53
LRB1 5858		1.21	10	1.20	723	298	2.43	26	710	16	0.45	<5	14	385	<20	0.33
Q574904		1.49	20	0.39	341	1	2.94	<1	920	5	0.01	<5	15	88	<20	0.22
Q574905		0.54	20	0.55	421	<1	3.91	<1	870	7	<0.01	<5	15	132	<20	0.23
Q574906		0.66	10	0.34	249	<1	3.92	1	840	3	<0.01	<5	13	78	<20	0.23
Q574907		0.42	40	4.25	3100	<1	1.26	<1	590	9	0.02	<5	8	127	<20	0.10
Q574908		1.08	20	2.63	427	<1	0.46	1	630	4	0.03	<5	8	36	<20	0.11
Q574909		1.06	20	0.63	695	2	3.19	2	840	11	0.12	<5	14	104	<20	0.21
Q574910		0.81	20	1.40	607	1	1.40	5	800	13	<0.01	<5	11	126	<20	0.18
Q574911		0.54	10	2.76	773	<1	0.69	3	930	18	0.01	<5	9	57	<20	0.11
Q574912		1.19	10	1.18	703	299	2.35	28	700	17	0.45	<5	13	374	<20	0.33
Q574913		0.95	20	0.34	256	2	3.58	7	570	14	0.01	<5	10	69	<20	0.20
Q574914		0.88	20	0.38	283	1	3.82	3	580	10	<0.01	<5	10	94	<20	0.21
Q574915		1.12	20	1.09	380	<1	2.71	<1	760	5	<0.01	<5	12	75	<20	0.22
Q574916		1.51	10	0.76	374	<1	2.03	1	720	10	0.06	<5	12	47	<20	0.21
Q574917		0.26	10	5.64	985	<1	2.19	264	1110	25	<0.01	<5	20	130	<20	0.40
Q574918		0.37	20	0.52	411	<1	3.86	<1	740	14	0.02	<5	12	105	<20	0.22
Q574919		1.85	20	2.37	513	1	0.27	<1	520	12	<0.01	<5	10	44	<20	0.19
Q574920		1.16	20	0.82	375	<1	2.61	5	520	8	<0.01	<5	9	64	<20	0.23
Q574921		1.39	20	1.38	677	1	2.33	1	860	22	0.15	<5	12	47	<20	0.27
Q574922		0.64	20	0.54	502	<1	3.67	2	610	17	<0.01	<5	11	139	<20	0.27
Q574923		0.97	20	0.80	390	<1	3.47	1	570	19	<0.01	<5	10	88	<20	0.24
Q574924		1.28	20	0.83	336	<1	2.77	3	710	4	<0.01	<5	12	61	<20	0.27
Q574925		0.56	20	0.69	442	<1	3.75	3	710	18	<0.01	<5	11	121	<20	0.27
Q574926		0.88	10	1.06	438	1	2.06	12	640	<2	0.11	<5	11	130	<20	0.32
Q574927		1.41	10	1.41	701	<1	2.14	7	730	28	0.10	<5	12	98	<20	0.36
Q574928		0.83	10	0.93	681	<1	2.38	7	670	7	0.30	<5	11	178	<20	0.35
Q574929		2.65	<10	0.16	49	6	0.24	3	250	7	1.97	<5	8	11	<20	0.16
Q574930		3.78	10	0.85	200	1	0.38	12	300	9	4.96	<5	23	21	<20	0.31
Q574931		1.16	10	0.26	109	<1	6.48	16	780	2	5.05	<5	21	46	<20	0.43
Q574932		0.52	10	1.94	783	<1	2.36	68	800	4	0.24	<5	17	204	<20	0.38
Q574933		0.10	<10	0.09	56	<1	8.35	<1	860	2	0.10	<5	6	19	<20	0.45
Q574934		1.87	10	0.98	509	<1	2.63	5	670	2	0.13	<5	12	87	<20	0.31
Q574935		0.08	10	3.19	2070	<1	1.73	11	900	27	1.88	<5	17	195	<20	0.41

Commentaire: ME- XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

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Page: 2 - D  
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 plus les pages d'annexe  
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CERTIFICAT D'ANALYSE VO15166011

Description échantillon	Méthode élément unités LD.	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	Ag-OG62	Cu-OG62	Au-AA23
		Ti ppm 10	U ppm 10	V ppm 1	W ppm 10	Zn ppm 2	Ag ppm 1	Cu % 0.001	Au ppm 0.005
LRB1 5851		10	<10	207	<10	179			0.166
LRB1 5852		<10	<10	228	<10	282			0.005
LRB1 5853		<10	<10	304	<10	181			<0.005
LRB1 5854		<10	<10	255	<10	126			<0.005
LRB1 5855		<10	<10	252	<10	92			<0.005
LRB1 5856		<10	<10	32	<10	142			<0.005
LRB1 5857		<10	<10	21	<10	278			0.018
LRB1 5858		<10	<10	108	20	76			0.294
Q574904		<10	<10	13	<10	36			<0.005
Q574905		<10	<10	15	<10	29			<0.005
Q574906		<10	<10	14	<10	25			<0.005
Q574907		<10	<10	14	<10	92			<0.005
Q574908		<10	<10	19	<10	95			<0.005
Q574909		<10	<10	21	<10	46			<0.005
Q574910		<10	<10	27	<10	71			0.092
Q574911		<10	<10	28	<10	180			<0.005
Q574912		10	<10	105	20	77			0.326
Q574913		<10	<10	27	<10	71			<0.005
Q574914		<10	<10	31	<10	53			<0.005
Q574915		<10	<10	26	<10	28			<0.005
Q574916		<10	<10	22	<10	89			<0.005
Q574917		<10	<10	177	<10	86			<0.005
Q574918		<10	<10	15	<10	29			<0.005
Q574919		<10	<10	27	<10	140			<0.005
Q574920		<10	<10	29	<10	31			<0.005
Q574921		<10	<10	33	<10	100			<0.005
Q574922		<10	<10	32	<10	34			<0.005
Q574923		<10	<10	29	<10	30			<0.005
Q574924		<10	<10	45	<10	59			<0.005
Q574925		<10	<10	41	<10	53			<0.005
Q574926		<10	<10	77	<10	51			<0.005
Q574927		<10	<10	77	<10	132			0.006
Q574928		<10	<10	89	<10	104			<0.005
Q574929		<10	<10	42	<10	540			<0.005
Q574930		<10	<10	187	<10	97			0.008
Q574931		<10	<10	136	<10	7			0.011
Q574932		<10	<10	140	<10	78			<0.005
Q574933		<10	<10	35	<10	7			<0.005
Q574934		<10	<10	63	<10	66			<0.005
Q574935		10	<10	123	<10	146			0.016

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Page: 3 - A  
 Nombre total de pages: 4 (A - D)  
 plus les pages d'annexe  
 Finalisée date: 13- NOV- 2015  
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**CERTIFICAT D'ANALYSE VO15166011**

Description échantillon	Méthode élément unités LD.	WEI- 21	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	ME- XRF26	
		Poids reçu kg	Al2O3 %	BaO %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SO3 %	SO2 %	SiO %	TiO2 %
		0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Q574936		0.95	15.03	0.06	1.70	<0.01	5.04	2.48	1.13	0.06	2.62	0.17	0.08	67.19	0.01	0.62
Q574937		1.08	16.10	0.01	0.83	<0.01	12.13	0.81	4.97	0.05	2.69	0.30	0.14	56.19	<0.01	1.22
Q574938		1.19	14.46	0.02	1.12	<0.01	4.16	0.48	1.19	0.03	6.29	0.15	0.17	70.05	0.01	0.56
Q574939		1.35	13.49	0.02	1.32	0.01	2.51	0.31	0.56	0.03	6.61	0.09	0.03	73.43	0.01	0.40
Q574940		0.11	13.08	0.08	3.58	0.01	5.90	1.46	2.02	0.09	3.28	0.16	1.12	68.14	0.04	0.55
Q574941		0.94	14.52	0.02	2.19	<0.01	5.62	0.31	1.20	0.07	4.73	0.13	0.28	67.11	0.01	0.56
Q574942		1.07	14.24	0.02	2.75	<0.01	4.11	0.31	1.34	0.07	4.66	0.12	0.45	67.58	0.02	0.45
Q574943		0.85	13.52	0.03	2.32	<0.01	1.69	0.72	0.20	0.03	5.08	0.06	<0.01	73.23	0.01	0.34
Q574944		1.12	13.58	0.02	4.00	<0.01	5.58	0.56	1.84	0.17	3.50	0.13	1.57	64.00	0.01	0.52
Q574945		0.86	12.28	0.08	2.74	0.01	5.06	2.53	1.44	0.07	3.07	0.13	0.62	70.83	0.02	0.87
Q574946		1.14	15.60	0.06	4.52	<0.01	7.79	1.40	3.84	0.16	4.26	0.17	0.07	59.29	0.02	1.14
Q574947		1.04	15.58	0.03	6.03	0.01	10.23	0.83	4.85	0.17	3.58	0.21	0.06	55.20	0.02	1.34
Q574948		1.47	14.71	0.02	6.85	0.01	12.17	0.26	4.92	0.19	2.72	0.19	0.09	55.42	0.02	1.37
Q574949		0.71	14.43	0.01	10.50	0.01	12.66	0.37	6.22	0.20	2.26	0.09	0.09	50.64	0.01	1.03
Q574950		1.34	15.42	0.03	5.78	<0.01	7.29	1.46	2.32	0.16	4.12	0.16	0.12	61.99	0.02	1.03
R146808		1.42	16.13	0.02	7.55	0.01	12.82	0.19	4.67	0.20	3.29	0.23	2.16	52.50	0.02	1.80
R146809		1.38	15.81	0.04	3.52	<0.01	9.11	1.36	4.57	0.16	4.58	0.17	0.06	58.14	0.02	1.14
R146810		1.55	15.06	0.03	3.83	<0.01	11.58	1.58	4.42	0.09	3.22	0.20	3.96	56.39	0.02	1.38
R146811		1.08	14.65	0.02	2.67	<0.01	8.97	0.68	3.48	0.12	4.76	0.16	2.46	61.50	0.01	1.00
R146812		1.18	15.40	0.02	6.62	0.01	10.56	0.70	4.93	0.17	3.07	0.20	<0.01	56.17	0.02	1.30
R146813		1.30	15.88	0.02	7.13	0.01	10.31	0.55	5.63	0.21	3.74	0.26	0.01	53.92	0.02	1.56
R146814		0.92	15.14	0.01	6.83	0.01	11.34	0.59	4.89	0.26	2.90	0.25	0.73	54.39	0.02	1.50
R146815		1.59	11.87	0.01	7.38	0.01	15.92	0.37	3.14	0.26	2.84	0.23	0.45	54.71	0.01	1.92
R146816		1.33	16.59	0.05	9.22	0.03	9.93	1.05	6.39	0.21	2.14	0.11	0.01	51.89	0.02	0.82
R146817		0.76	13.96	0.02	2.82	<0.01	8.38	0.47	1.00	0.07	5.37	0.22	0.12	66.33	0.01	0.76
R146818		1.33	15.21	0.11	1.58	0.02	11.71	2.16	7.85	0.20	0.83	0.16	0.07	56.01	0.01	1.11
R146819		0.11	13.09	0.08	3.58	0.01	5.82	1.48	2.01	0.09	3.30	0.15	1.17	68.15	0.04	0.54
R146820		1.14	16.31	0.03	6.72	0.01	8.05	0.56	4.39	0.13	4.32	0.15	0.06	57.10	0.03	1.04
R146821		1.42	14.93	0.03	4.80	<0.01	13.26	0.57	5.94	0.21	2.99	0.27	1.21	51.34	0.01	1.70
R146822		1.53	14.44	0.02	6.08	<0.01	12.15	0.30	3.43	0.19	4.66	0.20	0.02	55.97	0.02	1.64
R146823		1.16	13.82	0.04	2.24	0.03	7.34	0.92	4.66	0.11	4.32	0.13	0.23	63.49	0.01	0.91
R146824		0.99	16.18	0.04	7.75	0.01	9.70	0.88	3.74	0.22	3.85	0.22	0.03	55.68	0.02	1.36
R146825		1.42	14.40	0.12	1.36	<0.01	18.64	1.66	3.87	0.19	0.26	0.27	0.11	53.67	<0.01	1.48
R146826		1.29	15.04	0.02	5.01	<0.01	10.58	0.28	3.95	0.17	4.54	0.23	0.19	58.42	0.01	1.69
R146827		0.82	16.31	0.02	5.81	0.01	8.42	0.80	4.77	0.13	5.25	0.16	0.03	55.32	0.01	1.12
R146828		1.30	15.76	0.03	6.46	0.01	6.81	0.95	4.65	0.14	4.35	0.15	0.17	58.03	0.02	1.22
R146829		1.38	15.78	0.03	6.70	0.01	9.11	0.69	4.12	0.19	5.35	0.14	0.12	55.63	0.01	1.20
R146830		1.33	10.00	<0.01	0.19	<0.01	16.93	1.28	2.88	0.16	0.28	0.11	8.30	59.29	<0.01	0.51
R146831		1.20	14.40	0.05	5.17	0.01	9.17	1.60	3.33	0.12	3.48	0.12	6.69	58.56	0.01	0.95
R146832		1.30	15.42	0.03	7.13	0.01	10.98	1.08	4.71	0.15	3.81	0.16	1.65	54.05	0.01	1.28

Commentaire: ME- XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

\*\*\*\* Voir la page d'annexe pour les commentaires en ce qui concerne ce certificat \*\*\*\*



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**CERTIFICAT D'ANALYSE VO15166011**

Description échantillon	Méthode élément unités LD.	ME-XRF26	OA-GRA05x	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Total %	LOI 1000 %	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.01	0.01	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
Q574936		99.98	3.74	<0.5	7.78	<5	470	0.8	<2	1.27	<0.5	8	8	22	3.58	20
Q574937		99.69	4.19	<0.5	8.21	<5	100	0.7	<2	0.60	<0.5	15	4	2	8.38	30
Q574938		100.30	1.57	<0.5	7.14	<5	100	<0.5	<2	0.78	<0.5	10	10	5	2.80	20
Q574939		100.25	1.41	<0.5	6.54	<5	140	0.5	<2	0.92	<0.5	3	12	4	1.68	10
Q574940		101.35	1.53	1.1	6.71	6	700	0.8	<2	2.55	<0.5	12	45	3170	4.05	20
Q574941		100.05	3.29	<0.5	7.33	11	110	0.8	<2	1.60	<0.5	7	9	26	3.84	20
Q574942		99.87	3.71	<0.5	6.95	<5	130	0.8	<2	1.93	<0.5	7	11	56	2.79	20
Q574943		99.79	2.53	<0.5	6.66	<5	220	0.8	<2	1.70	<0.5	1	20	5	1.17	10
Q574944		100.40	4.78	0.5	7.10	37	140	0.7	<2	2.91	3.4	19	19	185	3.95	10
Q574945		100.90	1.26	<0.5	6.20	5	670	0.6	<2	1.92	0.5	7	23	80	3.47	20
Q574946		99.82	1.40	<0.5	7.76	<5	490	0.8	3	3.28	<0.5	13	21	28	5.44	20
Q574947		100.15	1.94	<0.5	8.32	5	230	0.5	7	4.32	<0.5	23	49	10	7.15	20
Q574948		100.40	1.37	<0.5	7.82	7	90	0.5	3	4.85	<0.5	30	45	85	8.48	20
Q574949		100.15	1.49	<0.5	7.71	<5	60	<0.5	<2	7.38	<0.5	48	23	116	8.89	20
Q574950		100.45	0.45	<0.5	8.17	<5	270	0.9	<2	4.22	<0.5	14	30	25	5.29	20
R146808		102.15	0.41	<0.5	8.48	<5	160	0.6	3	5.27	0.5	27	29	120	8.90	20
R146809		99.92	1.13	<0.5	8.55	7	340	0.6	<2	2.63	<0.5	28	21	129	6.61	20
R146810		103.85	1.94	<0.5	8.04	7	290	0.6	6	2.79	<0.5	21	40	242	8.18	20
R146811		102.40	1.77	<0.5	7.90	5	190	0.8	3	1.97	<0.5	23	10	100	6.39	20
R146812		100.15	0.91	<0.5	8.16	<5	180	0.5	2	4.74	<0.5	25	59	7	7.47	20
R146813		100.35	0.98	<0.5	8.68	<5	160	0.6	<2	5.22	<0.5	26	64	4	7.44	20
R146814		99.99	1.03	<0.5	8.57	<5	110	0.5	6	5.14	<0.5	36	57	98	8.40	20
R146815		100.25	1.01	<0.5	6.63	<5	100	0.8	<2	5.48	0.5	42	35	49	11.70	20
R146816		100.30	1.72	<0.5	9.02	5	370	<0.5	<2	6.87	<0.5	20	145	3	7.20	20
R146817		100.15	0.58	<0.5	7.78	<5	100	1.0	3	2.18	<0.5	2	16	8	6.21	20
R146818		99.74	2.55	<0.5	8.26	<5	1070	0.8	6	1.19	<0.5	28	100	210	8.44	20
R146819		101.45	1.48	0.9	7.03	12	760	0.9	<2	2.67	0.5	13	47	3320	4.28	10
R146820		100.00	1.01	<0.5	8.77	<5	230	0.6	2	4.98	<0.5	28	55	60	5.80	20
R146821		100.30	2.94	<0.5	8.27	6	280	0.7	4	3.57	<0.5	25	4	151	9.67	20
R146822		99.79	0.57	<0.5	8.12	7	130	<0.5	<2	4.59	<0.5	23	12	46	8.99	20
R146823		100.25	1.89	<0.5	7.37	<5	360	0.7	<2	1.65	<0.5	18	54	129	5.25	20
R146824		100.45	0.88	<0.5	8.76	<5	340	0.6	<2	5.68	<0.5	20	62	43	6.91	20
R146825		99.71	3.49	<0.5	8.12	<5	1190	0.5	<2	1.05	1.4	23	35	122	14.00	20
R146826		100.30	0.05	<0.5	8.12	7	110	0.5	<2	3.65	<0.5	24	16	229	7.57	20
R146827		99.18	0.92	<0.5	9.12	6	200	0.5	<2	4.46	<0.5	25	61	4	6.30	20
R146828		99.95	1.10	<0.5	8.46	<5	250	0.6	3	4.72	<0.5	24	43	36	4.98	20
R146829		99.90	0.70	<0.5	8.76	7	280	0.6	<2	4.97	<0.5	27	38	52	6.66	20
R146830		108.30	4.16	>100	5.52	<5	60	<0.5	51	0.13	6.2	21	3	>10000	12.20	20
R146831		106.80	2.92	1.0	7.59	<5	460	0.6	7	3.69	1.6	32	44	319	6.36	20
R146832		102.05	1.44	<0.5	8.16	<5	270	0.8	2	5.05	<0.5	27	41	108	7.63	20

Commentaire: ME-XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

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		Total %	LOI 1000 %	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.01	0.01	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
Q574936		99.98	3.74	<0.5	7.78	<5	470	0.8	<2	1.27	<0.5	8	8	22	3.58	20
Q574937		99.69	4.19	<0.5	8.21	<5	100	0.7	<2	0.60	<0.5	15	4	2	8.38	30
Q574938		100.30	1.57	<0.5	7.14	<5	100	<0.5	<2	0.78	<0.5	10	10	5	2.80	20
Q574939		100.25	1.41	<0.5	6.54	<5	140	0.5	<2	0.92	<0.5	3	12	4	1.68	10
Q574940		101.35	1.53	1.1	6.71	6	700	0.8	<2	2.55	<0.5	12	45	3170	4.05	20
Q574941		100.05	3.29	<0.5	7.33	11	110	0.8	<2	1.60	<0.5	7	9	26	3.84	20
Q574942		99.87	3.71	<0.5	6.95	<5	130	0.8	<2	1.93	<0.5	7	11	56	2.79	20
Q574943		99.79	2.53	<0.5	6.66	<5	220	0.8	<2	1.70	<0.5	1	20	5	1.17	10
Q574944		100.40	4.78	0.5	7.10	37	140	0.7	<2	2.91	3.4	19	19	185	3.95	10
Q574945		100.90	1.26	<0.5	6.20	5	670	0.6	<2	1.92	0.5	7	23	80	3.47	20
Q574946		99.82	1.40	<0.5	7.76	<5	490	0.8	3	3.28	<0.5	13	21	28	5.44	20
Q574947		100.15	1.94	<0.5	8.32	5	230	0.5	7	4.32	<0.5	23	49	10	7.15	20
Q574948		100.40	1.37	<0.5	7.82	7	90	0.5	3	4.85	<0.5	30	45	85	8.48	20
Q574949		100.15	1.49	<0.5	7.71	<5	60	<0.5	<2	7.38	<0.5	48	23	116	8.89	20
Q574950		100.45	0.45	<0.5	8.17	<5	270	0.9	<2	4.22	<0.5	14	30	25	5.29	20
R146808		102.15	0.41	<0.5	8.48	<5	160	0.6	3	5.27	0.5	27	29	120	8.90	20
R146809		99.92	1.13	<0.5	8.55	7	340	0.6	<2	2.63	<0.5	28	21	129	6.61	20
R146810		103.85	1.94	<0.5	8.04	7	290	0.6	6	2.79	<0.5	21	40	242	8.18	20
R146811		102.40	1.77	<0.5	7.90	5	190	0.8	3	1.97	<0.5	23	10	100	6.39	20
R146812		100.15	0.91	<0.5	8.16	<5	180	0.5	2	4.74	<0.5	25	59	7	7.47	20
R146813		100.35	0.98	<0.5	8.68	<5	160	0.6	<2	5.22	<0.5	26	64	4	7.44	20
R146814		99.99	1.03	<0.5	8.57	<5	110	0.5	6	5.14	<0.5	36	57	98	8.40	20
R146815		100.25	1.01	<0.5	6.63	<5	100	0.8	<2	5.48	0.5	42	35	49	11.70	20
R146816		100.30	1.72	<0.5	9.02	5	370	<0.5	<2	6.87	<0.5	20	145	3	7.20	20
R146817		100.15	0.58	<0.5	7.78	<5	100	1.0	3	2.18	<0.5	2	16	8	6.21	20
R146818		99.74	2.55	<0.5	8.26	<5	1070	0.8	6	1.19	<0.5	28	100	210	8.44	20
R146819		101.45	1.48	0.9	7.03	12	760	0.9	<2	2.67	0.5	13	47	3320	4.28	10
R146820		100.00	1.01	<0.5	8.77	<5	230	0.6	2	4.98	<0.5	28	55	60	5.80	20
R146821		100.30	2.94	<0.5	8.27	6	280	0.7	4	3.57	<0.5	25	4	151	9.67	20
R146822		99.79	0.57	<0.5	8.12	7	130	<0.5	<2	4.59	<0.5	23	12	46	8.99	20
R146823		100.25	1.89	<0.5	7.37	<5	360	0.7	<2	1.65	<0.5	18	54	129	5.25	20
R146824		100.45	0.88	<0.5	8.76	<5	340	0.6	<2	5.68	<0.5	20	62	43	6.91	20
R146825		99.71	3.49	<0.5	8.12	<5	1190	0.5	<2	1.05	1.4	23	35	122	14.00	20
R146826		100.30	0.05	<0.5	8.12	7	110	0.5	<2	3.65	<0.5	24	16	229	7.57	20
R146827		99.18	0.92	<0.5	9.12	6	200	0.5	<2	4.46	<0.5	25	61	4	6.30	20
R146828		99.95	1.10	<0.5	8.46	<5	250	0.6	3	4.72	<0.5	24	43	36	4.98	20
R146829		99.90	0.70	<0.5	8.76	7	280	0.6	<2	4.97	<0.5	27	38	52	6.66	20
R146830		108.30	4.16	>100	5.52	<5	60	<0.5	51	0.13	6.2	21	3	>10000	12.20	20
R146831		106.80	2.92	1.0	7.59	<5	460	0.6	7	3.69	1.6	32	44	319	6.36	20
R146832		102.05	1.44	<0.5	8.16	<5	270	0.8	2	5.05	<0.5	27	41	108	7.63	20

Commentaire: ME-XRF26: High total was obtained due to partial Sulphur being reported twice (in individual data and also in LOI data). SF (Sulphur Free) Total is below 102%

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À: R/ EXPLORATION  
 3 RUE D AMQUI  
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Page: 3 - C  
 Nombre total de pages: 4 (A - D)  
 plus les pages d'annexe  
 Finalisée date: 13- NOV- 2015  
 Compte: RBBXLE

**CERTIFICAT D'ANALYSE VO15166011**

Description échantillon	Méthode élément unités LD.	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	ME ICP61	
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
Q574936		2.07	10	0.66	500	1	1.92	6	780	2	0.04	<5	13	78	<20	0.30
Q574937		0.64	10	3.19	396	<1	1.94	3	1350	3	0.06	<5	21	23	<20	0.33
Q574938		0.38	10	0.67	221	<1	4.46	2	650	7	0.07	<5	10	46	<20	0.22
Q574939		0.25	10	0.31	212	1	4.77	2	390	10	0.01	<5	6	60	<20	0.21
Q574940		1.19	10	1.17	701	290	2.36	26	700	12	0.44	<5	13	375	<20	0.32
Q574941		0.25	20	0.67	529	2	3.34	<1	600	8	0.11	<5	12	127	<20	0.29
Q574942		0.25	20	0.76	506	<1	3.35	1	530	4	0.18	<5	10	141	<20	0.21
Q574943		0.59	10	0.10	247	<1	3.77	1	250	11	<0.01	<5	6	99	<20	0.20
Q574944		0.47	20	1.08	1320	1	2.56	14	600	186	0.65	<5	11	116	<20	0.25
Q574945		2.04	10	0.83	522	2	2.17	11	600	18	0.25	<5	15	127	<20	0.51
Q574946		1.16	10	2.33	1290	<1	3.21	44	780	16	0.03	<5	20	166	<20	0.71
Q574947		0.69	10	3.16	1355	<1	2.68	21	980	7	0.02	<5	32	165	<20	0.79
Q574948		0.22	<10	3.19	1440	<1	2.04	24	860	9	0.04	<5	35	155	<20	0.83
Q574949		0.31	<10	4.18	1560	<1	1.70	72	420	5	0.03	<5	46	147	<20	0.62
Q574950		1.24	20	1.40	1305	1	3.12	21	770	8	0.05	<5	19	187	<20	0.64
R146808		0.16	10	3.05	1510	<1	2.45	4	1070	7	0.86	<5	41	171	<20	1.09
R146809		1.18	10	3.11	1280	<1	3.54	46	780	11	0.03	<5	23	135	<20	0.73
R146810		1.32	10	2.89	717	<1	2.40	5	920	14	1.62	<5	35	151	<20	0.86
R146811		0.58	20	2.17	979	1	3.62	14	740	10	1.03	<5	18	72	<20	0.63
R146812		0.59	10	3.25	1335	<1	2.31	23	950	6	<0.01	<5	31	159	<20	0.80
R146813		0.48	10	3.82	1665	<1	2.88	21	1210	3	<0.01	<5	35	192	<20	0.99
R146814		0.52	10	3.39	2130	<1	2.31	17	1260	5	0.32	<5	34	176	<20	0.98
R146815		0.32	10	2.02	2130	<1	2.23	17	1080	10	0.19	<5	45	113	<20	1.24
R146816		0.90	<10	4.38	1690	<1	1.67	143	520	11	<0.01	<5	28	164	<20	0.52
R146817		0.42	20	0.62	583	<1	4.27	<1	1100	14	0.05	<5	20	91	<20	0.49
R146818		1.85	<10	5.38	1605	<1	0.64	33	760	169	0.03	<5	33	50	<20	0.71
R146819		1.26	10	1.25	749	306	2.48	26	720	19	0.47	<5	14	398	<20	0.34
R146820		0.47	10	2.89	1075	1	3.35	44	740	7	0.02	<5	25	284	<20	0.66
R146821		0.50	10	4.04	1745	<1	2.32	10	1270	8	0.52	<5	36	133	<20	1.10
R146822		0.27	10	2.23	1540	<1	3.70	<1	960	15	0.01	<5	40	184	<20	1.07
R146823		0.79	10	3.08	922	<1	3.28	26	610	7	0.10	<5	21	65	<20	0.55
R146824		0.58	10	2.34	1800	<1	2.95	19	1040	6	0.01	<5	32	213	<20	0.85
R146825		1.48	10	2.55	1615	<1	0.23	11	1300	2	0.05	<5	33	34	<20	0.97
R146826		0.24	10	2.50	1340	<1	3.46	2	1090	2	0.08	<5	40	130	<20	1.06
R146827		0.71	10	3.30	1100	<1	4.22	48	760	16	0.01	5	27	117	<20	0.74
R146828		0.81	10	3.08	1085	<1	3.34	44	690	20	0.07	<5	30	204	<20	0.76
R146829		0.61	10	2.66	1540	<1	4.23	48	700	24	0.06	<5	31	154	<20	0.76
R146830		1.09	20	1.81	1190	2	0.24	<1	470	146	3.13	<5	14	7	<20	0.32
R146831		1.32	10	2.03	916	<1	2.58	42	550	9	2.82	<5	24	79	<20	0.57
R146832		0.89	10	3.04	1155	1	2.85	48	710	10	0.68	<5	32	123	<20	0.77

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 BLAINVILLE QC J7A 2H1

Page: 3 - D  
 Nombre total de pages: 4 (A - D)  
 plus les pages d'annexe  
 Finalisée date: 13- NOV- 2015  
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CERTIFICAT D'ANALYSE VO15166011

Description échantillon	Méthode élément unités LD.	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	Ag-OG62	Cu-OG62	Au-AA23
		Ti	U	V	W	Zn	Ag	Cu	Au
		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
		10	10	1	10	2	1	0.001	0.005
Q574936		<10	<10	47	<10	44			<0.005
Q574937		<10	<10	120	<10	152			<0.005
Q574938		<10	<10	39	<10	36			<0.005
Q574939		<10	<10	27	<10	24			<0.005
Q574940		<10	<10	103	20	73			0.250
Q574941		<10	<10	84	<10	84			<0.005
Q574942		<10	<10	47	<10	32			<0.005
Q574943		<10	10	32	<10	33			<0.005
Q574944		<10	<10	56	<10	508			<0.005
Q574945		<10	<10	136	<10	144			<0.005
Q574946		<10	<10	207	<10	219			<0.005
Q574947		<10	<10	242	<10	81			<0.005
Q574948		<10	<10	274	<10	122			<0.005
Q574949		<10	<10	294	<10	97			<0.005
Q574950		<10	<10	169	<10	181			<0.005
R146808		<10	<10	393	<10	134			0.009
R146809		<10	<10	222	<10	220			<0.005
R146810		<10	<10	281	<10	329			<0.005
R146811		<10	<10	162	<10	335			<0.005
R146812		<10	<10	236	<10	84			<0.005
R146813		<10	<10	261	<10	85			<0.005
R146814		<10	<10	235	<10	190			<0.005
R146815		<10	<10	328	<10	163			<0.005
R146816		<10	<10	209	<10	139			<0.005
R146817		<10	<10	9	<10	82			<0.005
R146818		<10	<10	234	<10	446			<0.005
R146819		10	<10	111	20	78			0.307
R146820		<10	<10	217	<10	105			<0.005
R146821		<10	<10	230	<10	164			<0.005
R146822		<10	<10	377	<10	96			<0.005
R146823		<10	<10	118	<10	143			<0.005
R146824		<10	<10	280	<10	163			<0.005
R146825		<10	<10	216	<10	1085			<0.005
R146826		<10	<10	367	<10	124			0.013
R146827		<10	<10	235	<10	160			<0.005
R146828		<10	<10	268	<10	109			<0.005
R146829		<10	<10	281	<10	160			<0.005
R146830		<10	<10	11	<10	2410	129	2.98	0.048
R146831		<10	<10	205	<10	772			<0.005
R146832		<10	<10	289	<10	211			<0.005

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Page: Annexe 1  
 Total # les pages d'annexe: 1  
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**CERTIFICAT D'ANALYSE VO15166011**

	COMMENTAIRE DE CERTIFICAT
	<b>ADRESSE DE LABORATOIRE</b>
Applique à la Méthode:	Traité à ALS Val d'Or, 1324 Rue Turcotte, Val d'Or, QC, Canada. Au- AA23                                      BAG- 01                                      CRU- 32                                      CRU- QC LOG- 22                                      LOG- 24                                      PUL- 35a                                      PUL- QC SPL- 21                                      WE- 21
Applique à la Méthode:	Traité à ALS Vancouver, 2103 Dollarton Hwy, North Vancouver, BC, Canada. Ag- OG62                                      Cu- OG62                                      ME- ICP61                                      ME- OG62 ME- XRF26                                      OA- GRA05x