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TILL SAMPLING FOLLOW-UP UPON DIAMOND EXPLORATION TARGETS, PREMIER PROPERTY

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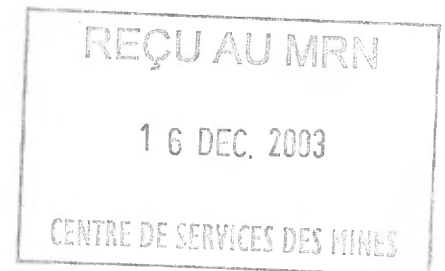
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Énergie et Ressources
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Québec 

**TILL SAMPLING FOLLOW-UP
UPON DIAMOND EXPLORATION TARGETS**
PREMIER PROPERTY, NORTHERN QUÉBEC

Presented to
Mr. MIKE SIEB
STORNAWAY VENTURES LTD.



by
Réjean GIRARD
P.Geo, OGQ #521

IOS Services Géoscientifiques Inc.

Your project number:
Our project number: 413-1

Chicoutimi

9 December 2003

MRN-GÉOINFORMATION 2004

GM 60651

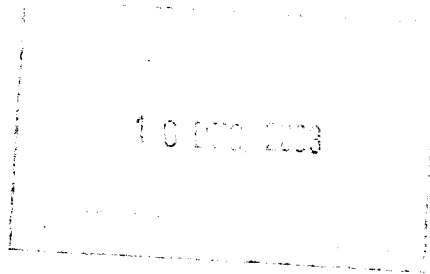
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INTRODUCTION

In the course of the Otish diamond exploration activity, a property has been acquired by Northern Empire Minerals Ltd adjacent to the upper course of the Eastmain River, north of the Otish Mountains, central Québec. This property is located about 130 kilometers to the south-west of Renard kimberlite cluster recently discovered by Asthon-Soquem, 65 kilometers to the west of Ditem's Beaver Lake kimberlite and H-Complex, and 70 kilometers to the north of the Papaskwasati dispersion train held by Soquem, Majescor, Dios and Plexmar.

In august 2002, Northern Empire Minerals Ltd carried a systematic glacial sediments survey over the property in order to evaluate its preliminary diamond potential. Discovery of 9 kimberlitic indicator minerals, including valuable harzburgitic garnets, spurred Stornaway Ventures Ltd (formerly Northern Empire) to proceed with a follow-up sampling program upon the formerly outlined targets.

TERMS OF REFERENCES

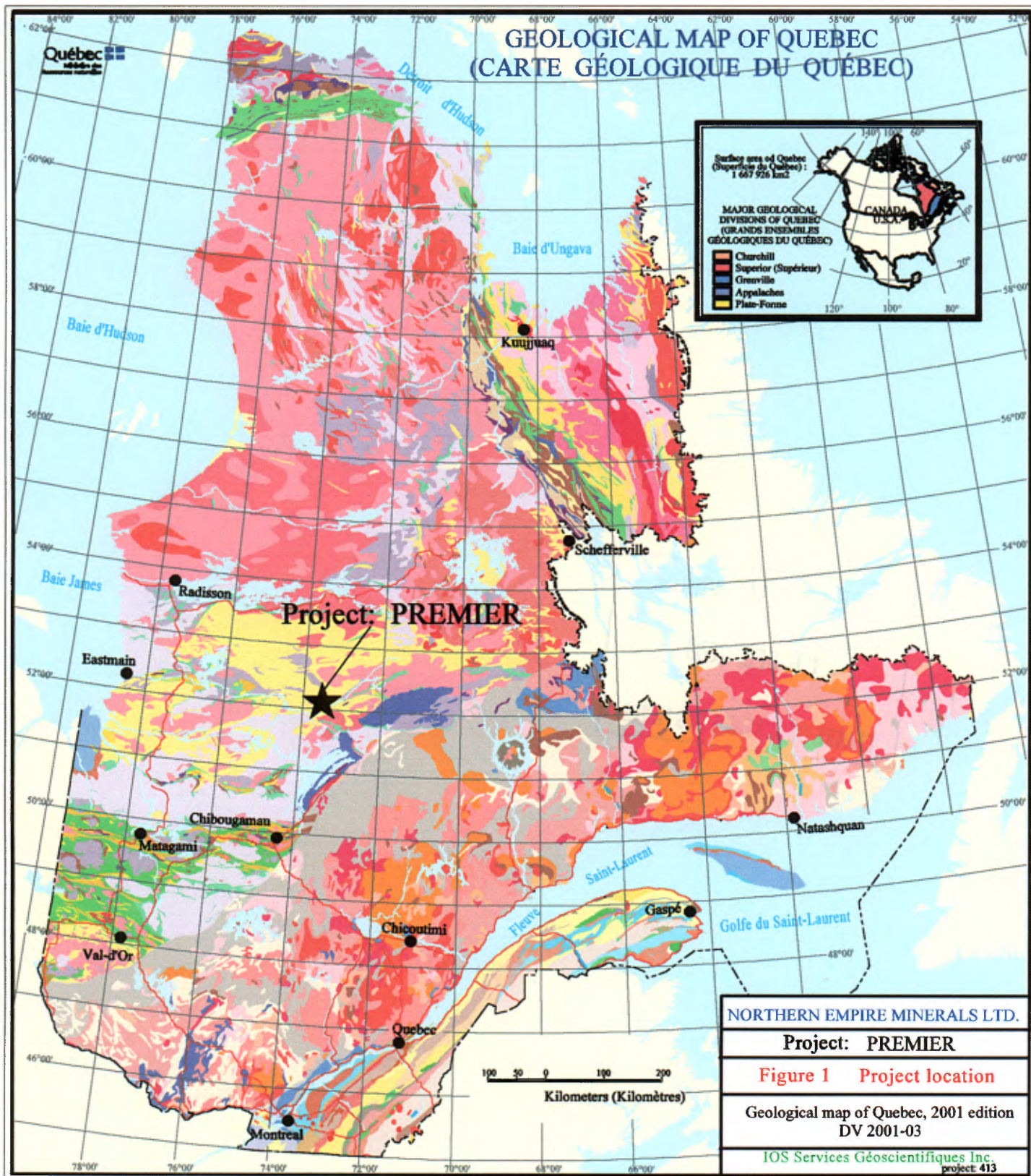
Stornaway Ventures Ltd requested IOS Services Geoscientifiques Inc to organize and carry a sampling program over the Premier property in accordance with a specified budget. IOS has been responsible for implementation of field work, selection of sampling sites, sampling, processing of samples and extraction of kimberlitic indicator minerals, as well as interpretation of results. IOS has not been involved in property acquisition process neither in property management.

The field work has been carried by author's employee under its supervision. The author did not visit the property itself, although he is very familiar with the area. Sample processing is currently carried under his supervision.

PROPERTY DESCRIPTION

The property is made of 295 contiguous map designated cell (30" long. X 30" lat.) for approximately 150 square kilometers (15,000 hectares). The property ownership is valid until December 2003 and renewable indefinitely. Assessment credits are currently available although not submitted.

The property is located in NTS-IV 33A-03 (Lac Autric), bounded by longitude 73°07' and 73°18'30" west and latitude



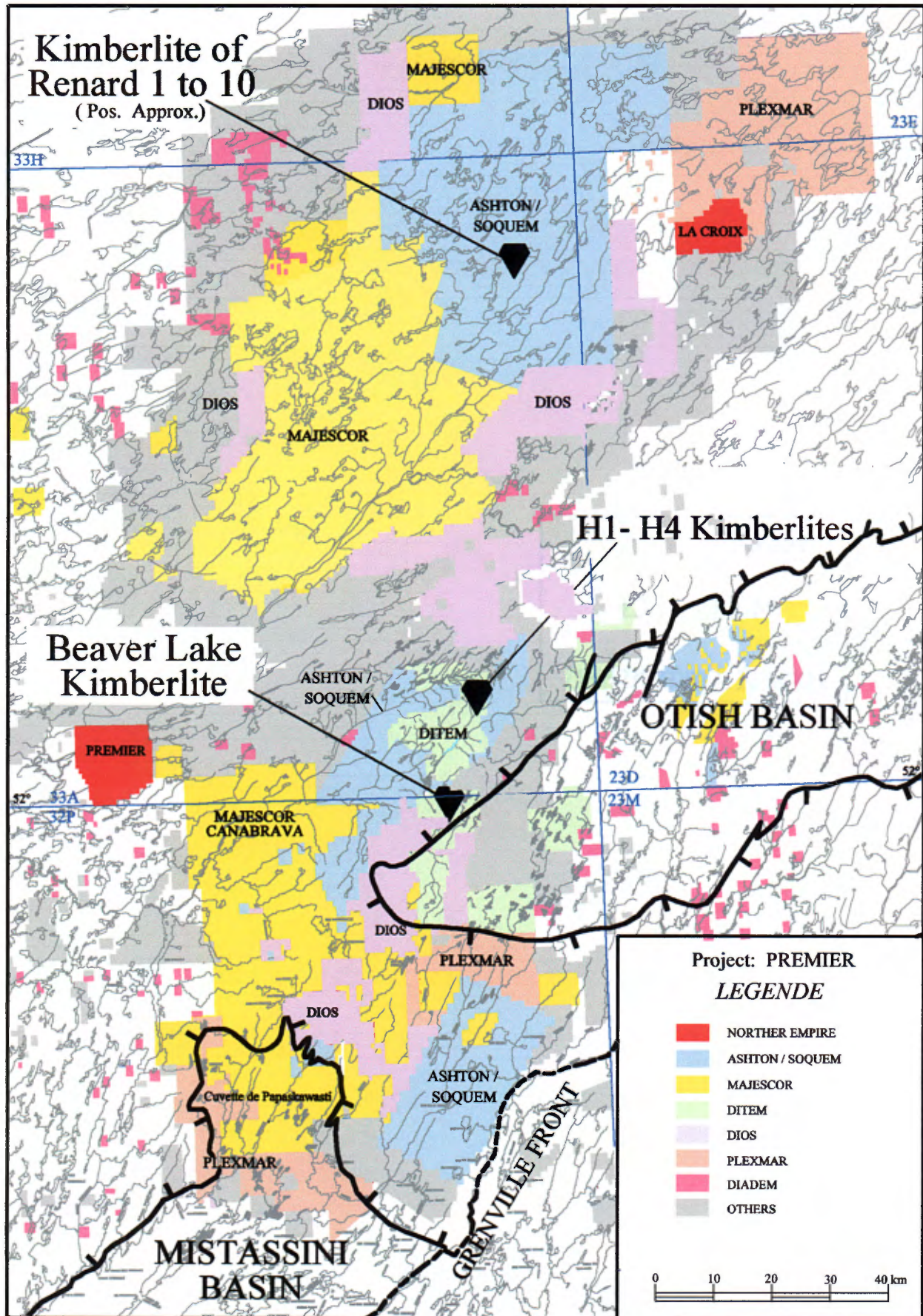


Figure 2: Adjacents properties and discoveries

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52°00' and 52°07'30" north. It is limited to the east by a property held by Ressources Majescor under option by Dunsmuir Ventures, and a small block held by Artik Geosciences, to the north-east by a block held by Mike Elson, to the north by a block held by Ressources Frenchies (Val d'Or prospectors), to the north-west by Ecstall Resources. Most of these properties are expected to expire next winter.

The property is included in Category III land by the James Bay Agreement, made between Quebec Government and Cree first nation. No restriction else than environmental regulation do restrict exploration and mining activities. Although located along the Eastmain river, the project do not seems affected by restriction due to hydraulic power.

The property is located about 240 kilometers from the mining town of Chibougamau, and 190 kilometers from the Mistissini Cree community. It is accessible by float-plane on the Eastmain river widening, or by helicopter. Remoteness require complex logistical support.

LOCAL GEOLOGY

The property covers gneiss and granitoid belonging to the Opinaca sub-province of the Archean Superior province. A kilometric keel of amphibolite covers the northern third of the property, which is likely belonging to the Upper Eastmain river volcanic belt. The reader should be aware that a small gold mine (Eastmain mine, MSV Resources) has operated in this belt. However, no previous exploration work over the property is recorded in government's assessment files. Numerous small ultramafic bodies are reported scattered in the gneiss.

SAMPLING CAMPAIGN

In 2002, a total of 39 samples were taken upon Premier property, which yield a 1 sample per 4 square kilometers density according to a quincunx pattern (**Map. 1**). Samples were ideally basal till plus a few esker material. However, du to local condition, many of the samples were fusion till.

The 2003 campaign included a total of 74 samples, of which 10 were in fill samples upon 2002 grid, and 64 were taken along closely spaced fences up-ice of 2002 anomalous sites. Samples were ideally spaced every 150 meters along

fences, and fences spaced 500 meters apart. A long fence, with samples spaced every 250 meters, has been taken along the northern border of the property, up-ice of 2002 indicators.

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Table 1: Sampling pattern

Target	Indicator	Fences	Samples
4130036	1 G9 pyrope	3	18
4130029	2 G10-G1 pyropes	3	21
4130006	1 G10 pyrope	2	6
4130021	1 Picroilmenite	1	4
4130026	1 picroilmenite	1	4
4130035	1 picroilmenite	1	4
4130008	1 Picroilmenite	2	2
4130037	1 Cr-Diopside	1	4

Sampling has been carried on the 3rd to 5th of August 2003, by an IOS crew. The Hippocampe Lake exploration camp has been used as logistic platform. The crew was led by Alexandre Boudreault, ing, assisted by Patrice Gagnon P.Geo., plus Jonathan Lalancette, Steve Lavoie and Jean-Michel Belly, students. Logistic support included Yves Pépin, pilot and Norbert Bergeron, cook. Helicopter was a Eurocopter A-Star BA from Abitibi Helicopter. De Havilland DHC-3 sea-plane from Air-Saguenay was used for logistic, out of Rivière Témiscamie base. No fuel nor sample cache were required. Samples were taken out right away by IOS staff, and trucked to IOS facility in Chicoutimi. Daily log is provided in **appendix-1**.

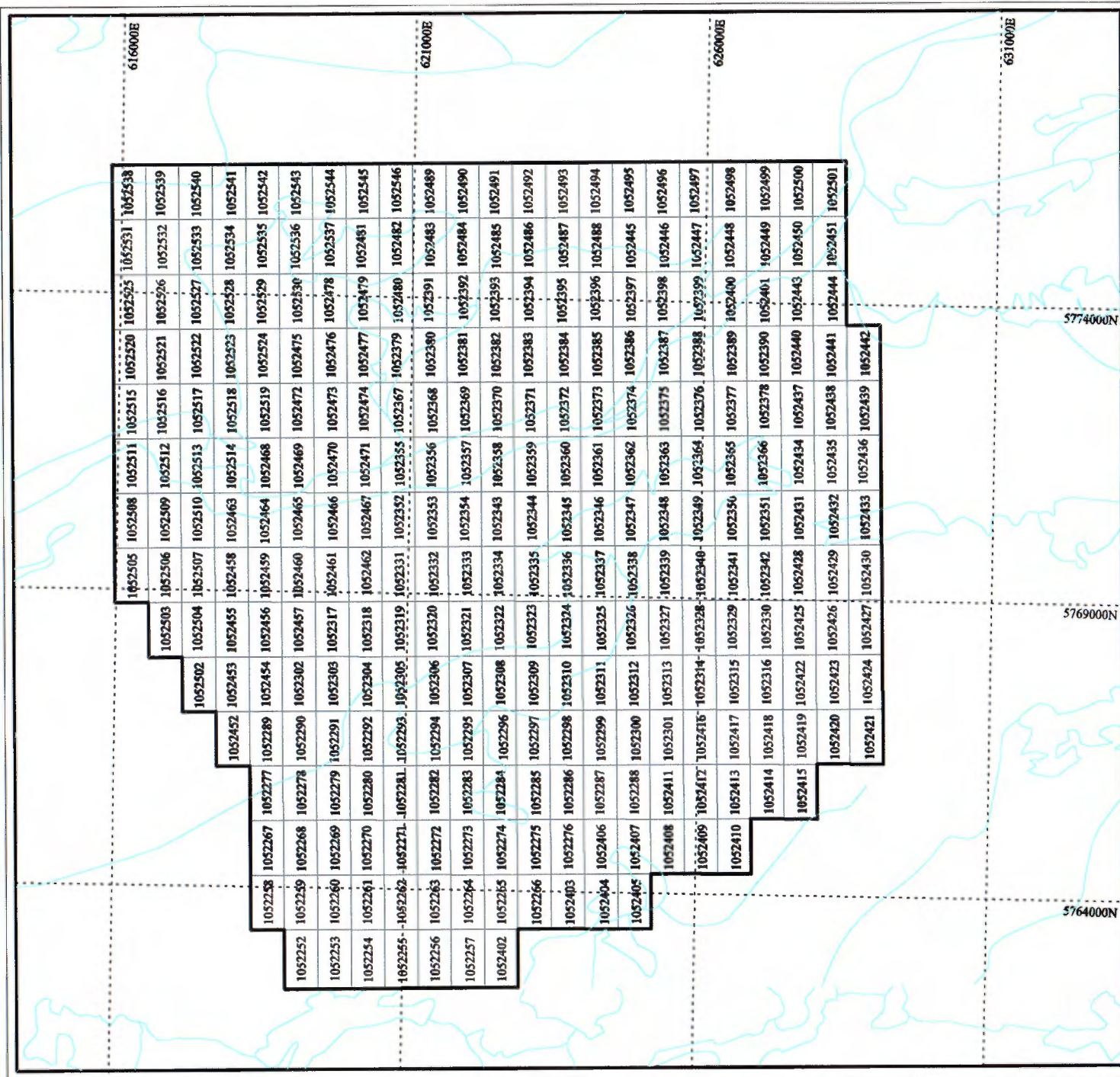
SAMPLING PROTOCOLE


Sampling protocole is similar to 2002 campaign and has been carried by the same geologist. Sampling proceed by helicopter hop-frog dropping geologist one by one for regional in fill or by a ground crew for follow-up fences. Sampling site were pre-planned and stored in GPS, although final decision is taken by geologist acting as co-pilot according to local land morphology and landing site availability. Coordinate measurement is recorded with GPS by sampler. Sampling sites descriptions and localization is provided in **appendix-2**.

All samples were received at the laboratory in good standing and stored in queue for processing.


Till samples


Final sampling site is selected by geologist in the field, in accordance with local topography, drainage and material availability. In numerous instances, many test holes needs to be dug prior to found suitable material.






LEGEND

 Drainage

 Property limit

1052435 Claim number



STORNAWAY VENTURES

Project: PREMIER

Figure 3: Claim map

NTS: 33A03 UTM, Zone18, Nad27	Drawing: S. Gao Verification: R. Girard Date: Oct. 2003
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Sampling holes are dug by hand shovel and scaling bar to a depth below podzolized soil, usually about 1.5 meter. In most instances, fresh material from "C" horizon is taken. However the "B2" horizon (light brown material) is locally sampled if the soil structure is well developed and fresh material not obtainable. It was imperative that sample being taken below cemented ferricrust and below lag and deflation surface. Soil structure is described in term of horizon thickness and color. Boulders from lag deposits and cobbles from samples are described, as well as neighboring outcrop if present. Sampled material is described in terms of grain size distribution and constituent materials.

Sample, targeted as 25 kilograms, are taken with a shovel, removed of the most obvious cobbles, and bagged in a nylon bag plus a rice bag and sealed in the field. Samples tags and bags are prepared in advance. The number is written twice upon the bag, plus upon two plastic tag, and engraved on aluminum tag. The first plastic tag is attached at sampling site. The second plastic tag and the aluminum tag are introduced in the sample. An indexed spike, provided in vial, is introduced almost every samples. The sampling hole is not filled back.

Most samples were sandy ablation (or fusion) tills.

Esker samples

In a two instances, esker material has been sampled. Overall sampling procedure is identical with till sampling with the following differences. The esker is ideally sample at the crest, in a gravel horizon. Pebbles and cobbles are removed by hand. Material has not been sieved in the field, considering the small number of samples of such nature.

No stream nor black beach samples were collected.

SAMPLE PROCESSING

Processing of the samples follow the standard procedure implemented in our laboratory and is near to identical to 2002 procedure, with the exception of tighter quality control. Detail laboratory procedure is available on request. Results of sample processing are presented in **appendix 3**, concatenated with 2002 results. Laboratory notes and processing sheets are available under request.

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Wet sieving

Samples were sieved by hand in the laboratory at 1000, 2000 and 9800 microns. A water spray on a standard 12" sieves mounted on top of a decanting tub has been used. Sand and silt is recovered by draining the tub and stored in pails until processing. Other fractions were drained and weighted (**appendix 3, table 1**) then discarded. Pebbles (>9.8 mm) were stored until a decision kept concerning counting.

If sample was cohesive due to clay, they are liquefied with the used of a drill mixer and added with calgon to free clay pellets.

A 300 grams aliquot of the received material was saved, dried and stored as reference.

Pebbles counts

No pebble count has been requested by client.

Shaking table preconcentration

The 0-1000 microns fraction has been processed on a shaking table. The model used is derived from a Wilfley table, with a custom built deck out of a Plexiglas sheet. The feed has been processed with multiple passes in order to recover an heavy mineral preconcentrate, a reject which has been discarded, and a meddling which has been stored until full processing is successfully completed with acceptable recovery (**appendix 3, table 2**). A 300 grams aliquots of the rejected mud has been dried and shipped for chemical analysis.

Chemical analysis

Mud recovered from Wilfley table has been dried and shipped to Chimitec (ALS Chemex) in Val d'Or for a multi-elements spectrometric analysis. Mud were digested in hot hydrochloric acid for a partial leach. Such digestion enable leaching of adsorbed ions and to dissolve ferrochelated material and sulfide minerals, without dissolving silicate minerals. Gold has not been assayed. Result is presented in **appendix 5a** and analysis certificate in **appendix 5b**.

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Dry sieving

The dried table preconcentrate has been sieved dry at 150 and 250 microns. The fines (0-150 μ and 150-250 μ) were stored while the 250-1000 microns fraction has been sent to acid wash (**appendix 3, table 2**).

Acid wash

The 250-1000 μ preconcentrate has been soaked for about 8 hours in oxalic acid solution (20g/l for each 250 grams of mineral) in order to remove the ferric coating upon the grains. No corrosion is usually observed upon sulfides mineral nor upon silicates (**appendix 3, table 3**).

Heavy liquids

Clean preconcentrate has been submitted to heavy liquid in Chimitec facilities in Val d'or. Methylene Iodide has been used with a density of 3.3 g/cc. Heavy mineral concentrates are washed in acetone, dried and returned to our facilities. Lights minerals are stored for 3 months in Chimitec facilities and discarded upon successful completion of the processing (**appendix 3, table 4**).

Hand magnet separation

Magnetite and other ferromagnetic mineral are removed from the concentrate with an hand magnet (**appendix 3, table 4**). Lot of care is apply to this step since any trace of magnetite will tend to clog the Frantz separator. Magnetite is stored in case visual examination is needed.

Frantz magnetic separation

The non-ferromagnetic heavy minerals were then split into various fractions based on their apparent magnetic susceptibility with a Frantz field barrier magnetic separator. Forward and slope angles were set at 15°, and passes done at diverse currents (**appendix 3, table 5**).

Visual examination

Visual examination of the concentrate was carried under a polarizing stereomicroscope by geologists or mineral

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technician, Mme Natacha Fournier, Sanmei Gao and Renée Rossignol. Selected minerals were extracted and stored in specially designed board.

Results of visual examination are presented in **appendix 4**. Proportion of constituent minerals is provided in **table 1**, while a list of extracted mineral is provided in **table 2** and visual KIM counts in **table 3**.

Mineral mounting and microprobe analysis

Grains selected by the mineralogist were reexamined by Mme Lucie Tremblay, P. Geol. In last year (2002) program, significant grains were shipped to Barnett Geological consulting for microprobe analysis (**appendix 5a**). Microprobe results were provided back to IOS (**Appendix 5b**) by Northern Empire Minerals. No indication concerning microprobe setting is available to the author. Only kimberlitic indicators were analyzed, such as pyropes and magnesium bearing ilmenite. Most of the minerals were tested with EDS prior to full WDS analysis. Diopside are exception, the majority of the grains provided have been analyzed.

Microprobe analysis for 2003 samples has been carried by IOS. Significant grains are mounted upon a glued glass plate, indexed and molded into epoxy. The epoxy bead is then engraved, polished to 0.2 μ and carbon-coated for microprobe analysis.

Scanning electron microscope

Grains of dubious visual identification or unfamiliar to the mineralogist are submitted for examination with a scanning electron microscope (SEM). A qualitative chemical characterization is made using an energy dispersive system (EDS). The Jeol 820A microscope from the "*Laboratoire de microanalyse de l'Université Laval*" is used, which is equipped with a Northern-Tracor EDS analyzer. The x-ray spectrum is visually interpreted by the author to evaluate the chemical proportion and to interpret mineral species. Results are presented in **Appendix 3**.

Microprobe analysis

Microprobe analyses were carried out using the 1998 Cameca SX-100 electron microprobe based at the *Laboratoire de*

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microanalyse de l'Université Laval. This machine is Sun-based and equipped with five variable multi-crystal wave-length dispersion spectrometers (WDS), EDS analyzer, cold plate, imaging facilities, etc. Analytical routine for indicator minerals was established four years ago by IOS. Settings and detailed procedures are provided in **Appendix 4, Table 1**.

Calibration is performed upon pure oxides, and checked with standard minerals. Different calculation routines (labels) are available for garnet, pyroxene, ilmenite, olivine and spinel stoichiometry. The ferric-ferrous iron ratio is calculated by Cameca software according to labeled stoichiometry.

Olivine were checked with EDS-SEM solely and not mounted for microprobe analysis. Chromite were confused with ilmenite in course of visual identification, and thus analyzed using ilmenite calibration. The stoichiometry and iron partitioning recalculated by the author.

Microprobe analysis certificates (microprobe print-out) are provided in **Appendix 4, Table 2**. Recast and indexed analyses are listed in **Appendix 4, Table 3**, along with mineral interpretation.

Minerals are typically analyzed near their core, as far away as possible from cracks, inclusions, exsolutions and alteration. Rare reaction rims were noted upon ilmenite, only two of such were analyzed.

QUALITY CONTROL

Spiking

Near to all samples were doped in the field with brass chips. These spikes are indexed and designed to be recovered by the picker. This provide a control on the overall recovery of the process, to ensure that no material is loss through accident and to detect any cross-contamination, sample switching or mislabeling. A total of 410 chips were introduced in 2003 samples, of which 399 were recovered for 97% (118 over 124 in 2002 for 95%). Average 2003 recovery is above 97%. Result are provided in **appendix 6**.

Metallurgical balance

Achieving a good and regular recovery on a shaking table is notoriously tricky and needs to be constantly monitored. This recovery is dependent upon grain size, mineral shape and

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density contrast. Typically, recovery decrease with coarseness, from about 95% at 0.25 mm to 90% at 0.5 mm to 70% at 1 mm for garnet. Stubby mineral such as garnet typically shows a good recovery, which decrease for prismatic mineral such as hornblende and drastically drop for platy minerals such as mica.

To monitor recovery rates by mineral species, a metallurgical balance is carried every 10 samples in average, 4 out of 39 samples for this project. For such, table rejects are dried, split into a 250 grams aliquot, sieved at 250 μ and separated with heavy liquids. Common garnet, hornblende and magnetite abundance are visually estimated. Proportion are then calculated back. Tolerated threshold are 95% for oxide, 90% for garnet and 75% for hornblende, while lowest recoveries were respectively 96,73%, 94,31% and 77,37%.

Cross-picking

Quality of mineral sorting is controlled through cross-examination of the 0.4 amps paramagnetic fraction. No sorting problems were identified within this project.

Microprobe analysis

Quality of microprobe results are controlled through closure tolerance (98%-102%), stoichiometric balance (0.1 cations) and trend fitting. Stoichiometric imbalance indicates inter-elements discrepancies, typically due to single spectrometer drift or calibration misfit. Closure misfit in absence of stoichiometric imbalance is indicative of current drift, carbon coating irregularities or stage Z axis focus misalignment. Since calibration is carried upon pure oxides, intrinsic closure induced by improper standard are unlikely. Stoichiometric imbalances are complex to interpret and dependant upon mineral species. They are sensitive to iron valence allocation, which may induce intrinsic balancing. Finally, in rare instances, intrinsically closed and balanced analysis are detected in course of interpretation through typical trend misfit. Analysis quality control test are hidden in the microprobe database.

No significant closure discrepancies nor stoichiometric imbalanced exceeding tolerance limits were detected in this analytical batch.

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CHEMISTRY OF THE MINERALS

A total of 9 kimberlitic indicator minerals with good chemical signature were located in 2002 survey over Premier property. All these individual samples prompted a follow-up sampling program, which yielded 24 dependable indicator minerals. Such counts are not comparable with typical results from Northwest Territories, but do deserves attention in the actual setting. These are summarized in table 1.

TABLE 1: Indicator mineral

Sample	Pyrope	Ilmenite	Dioside	Chromite	Total
4130006	1				1
4130008		1			1
4130021		1			1
4130026		1			1
4130029	2				2
4130035		1			1
4130036	1				1
4130037			1		1
4130078		1			1
4130080				1	1
4130083		1			1
4130087		1	1		2
4130093		1			1
4130094				1	1
4130095			1		1
4130101			1		1
4130111		2			2
4130113	1				1
4130114		1			1
4130117	1				1
4130119		1			1
4130120		1			1
4130121		1			1
4130122			1		1
4130130		2			2
4130131		1		1	2
4130133		1			1
4130135			1		1
4130140		1			1
Total	6	19	6	3	34

For sake of simplicity, all mineral analyzed in 2002 and 2003 were interpreted together.

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Garnet

A total of 68 garnets were analyzed in 2003, of which only 40 were manganese bearing and definitively not of mantellic origin. According to Dawson and Stephen cluster analysis, the non-manganese garnets are grouped as follow:

		2002	2003	Meaningfulness
G1	Low-Cr Megacryst	1	1	Medium
G2	High Ti Megacryst	0	1	Medium
G5	Almandine	0	2	Low
G7	Ouvarovite	1	0	Low
G8	Grossular	1	24	None
G9	Pyrope	1	0	High
G10	Knorringite	2	0	Very high

In the ternary diagram of aluminous end-member (*figure 4*), the garnets plots close to pyrope, almandine or grossular pole. No intermediate composition typical of eclogitic garnet is present. Pyropes fall in a tight cluster, the position of which is typical of kimberlitic signature. Consider this diagram do take account of aluminous end-member excluding all spessartine bearing analysis, and filters the effect of uvarovite and knorringite end-members.

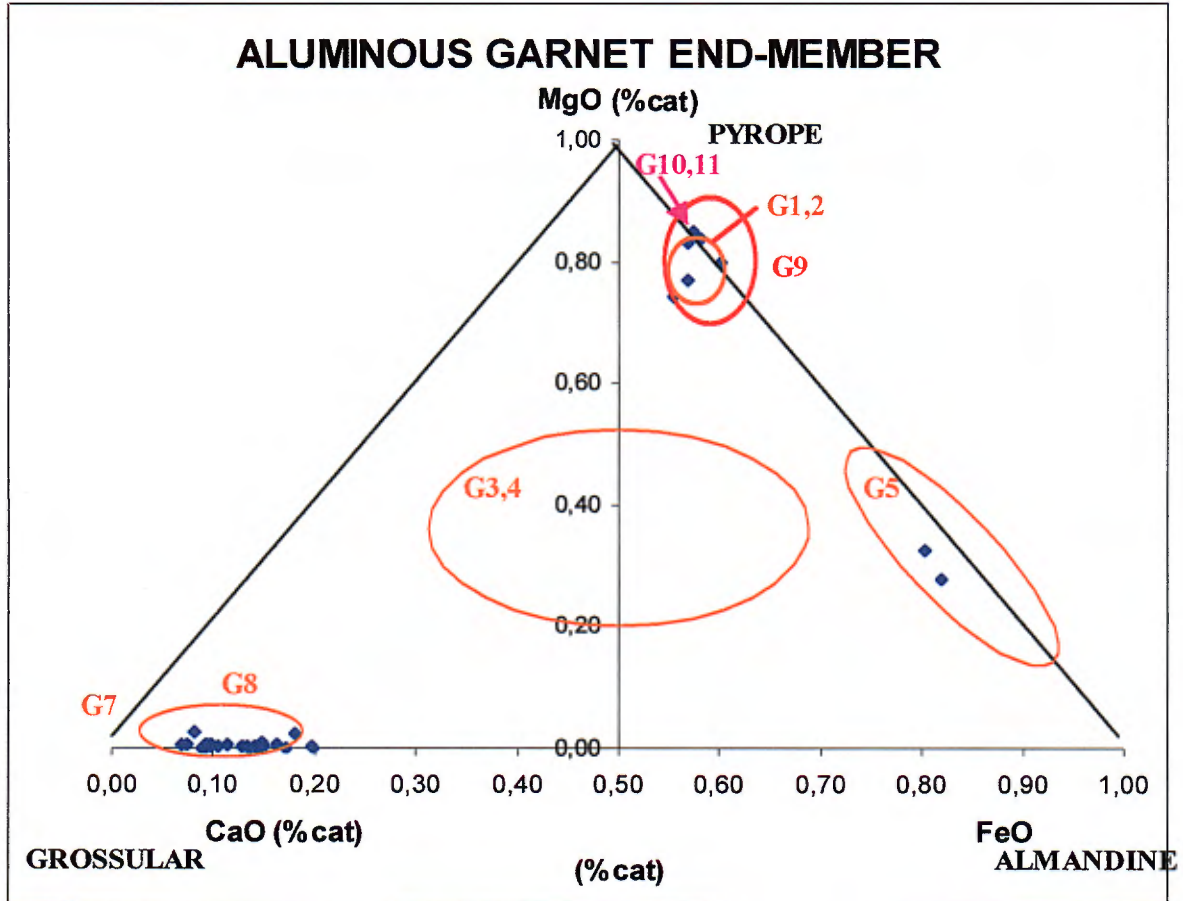


Figure 4: Ternary diagram for aluminous garnet end-member. Note that no eclogitic garnet (G3 and G4) are present. Data filtered at <1% MnO.

In the industry standard diagram of Gurney et al, opposing chromium and lime content, the pyropic garnet plots dominantly in the lherzolitic calcic pyrope (figure 5). Note the few low-chromium megacryst. On garnet, from sample 4130029 falls well inside the harzburgitic field, above the diamond exclusivity boundary (Grütter, 2003). This grain, indicating that the diamond stability field has been tap by a kimberlitic source, is highly significant. The average J-factor is of 1.83 (Lee 1993).

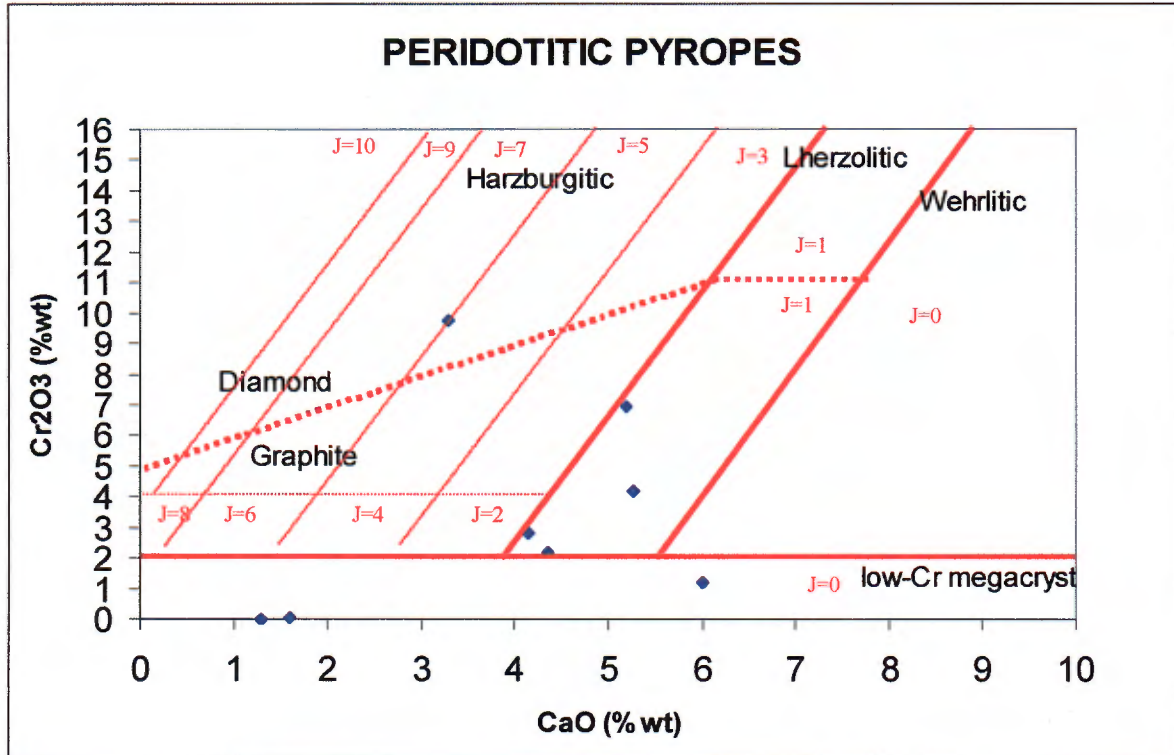


Figure 5: Gurney's diagram for peridotitic pyrope. Note the harzburgitic grain from sample 4130029, which has 7 on J-score (Lee, 1993). The diamond exclusive field is from Grütter 2003.

On the Schultz diagram for eclogitic garnet (figure 6), opposing titanium and sodium, all suitable garnets fall along the typical low-Cr megacryst trend. Remember that 2002 analysis do not have sodium values. Data were filtered at <1% MnO, <22% FeO, <20% CaO and 4% Cr₂O₃.

Detrital pyropes are found throughout the area in low abundance. High chromium harzburgitic pyropes, such as in sample 4130029, are accounting for 30% of total pyropes in the Renard cluster and Portage dispersion train, to the north of Premier. They are less abundant in the surrounding of Premier, and practically absent from Beaver Lake kimberlite. The Beaver lake area is characterized by a small population of low-chromium harzburgitic pyrope. Harzburgitic pyrope are very rare further south. All pyrope population are dominated by lherzolitic pyrope, the maximum chromium content decreasing from Renard-Portage southward. Similarly, low-chromium megacrysts are seldom in Renard-Portage, and make up to 50% of detrital pyropes close to lake Mistassini. No

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eclogitic garnet are reported yet in the area¹. Garnets found in Premier property share similarities with Beaver Lake signature, with the exception of the high-chromium harzburgitic knorringite of sample 4130029.

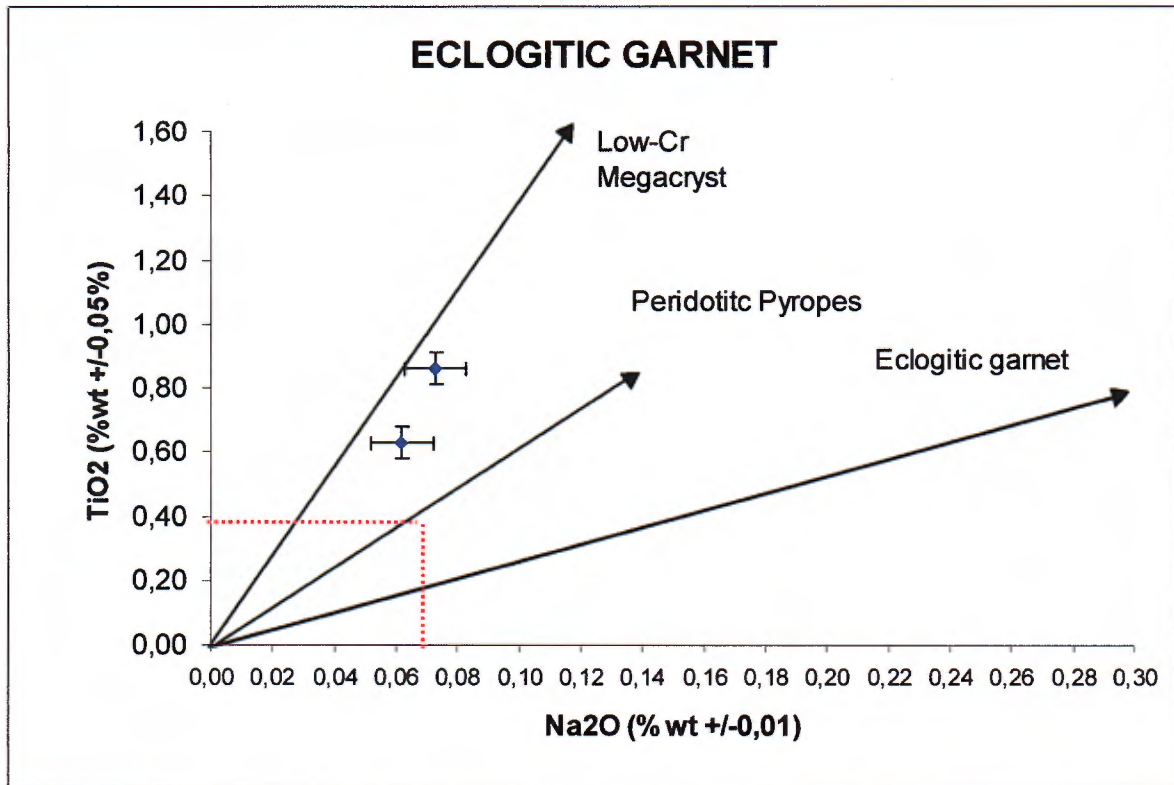


Figure 6: Schultz's diagram, modified by the author, for eclogitic garnet. Only the two low-chromium megacryst analysis qualify for this diagram, and fall along the LCM trend.

Pyroxene

Pyroxene is a difficult mineral to interpret as kimberlitic indicator. Although assumed that the vivid green color being distinctive, it's chemical characterization can be tricky. Furthermore, not all kimberlitic pyroxene megacryst are vivid green. Therefore, many dull green pyroxene were extracted and analyzed. If excluding the eclogitic omphazite, most kimberlitic pyroxene are diopside,

with MG# greater than 85%. They shall plot close to the diopside pole on the ternary end-member diagram (**figure 7**).

¹ Eclogitic garnet and diopside reported by Melkior Resources are likely crustal garnets.

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In the current project, all pyroxene plot close to the diopside pole. Two populations are noted, which carries in every diagrams. All grains with MG# > 0.85 are salite and diopside ss., while grains with MG# < 0.85 are dominantly diopside augite. Two salite are hypercalcic or oversaturated in wollastonite molecule.

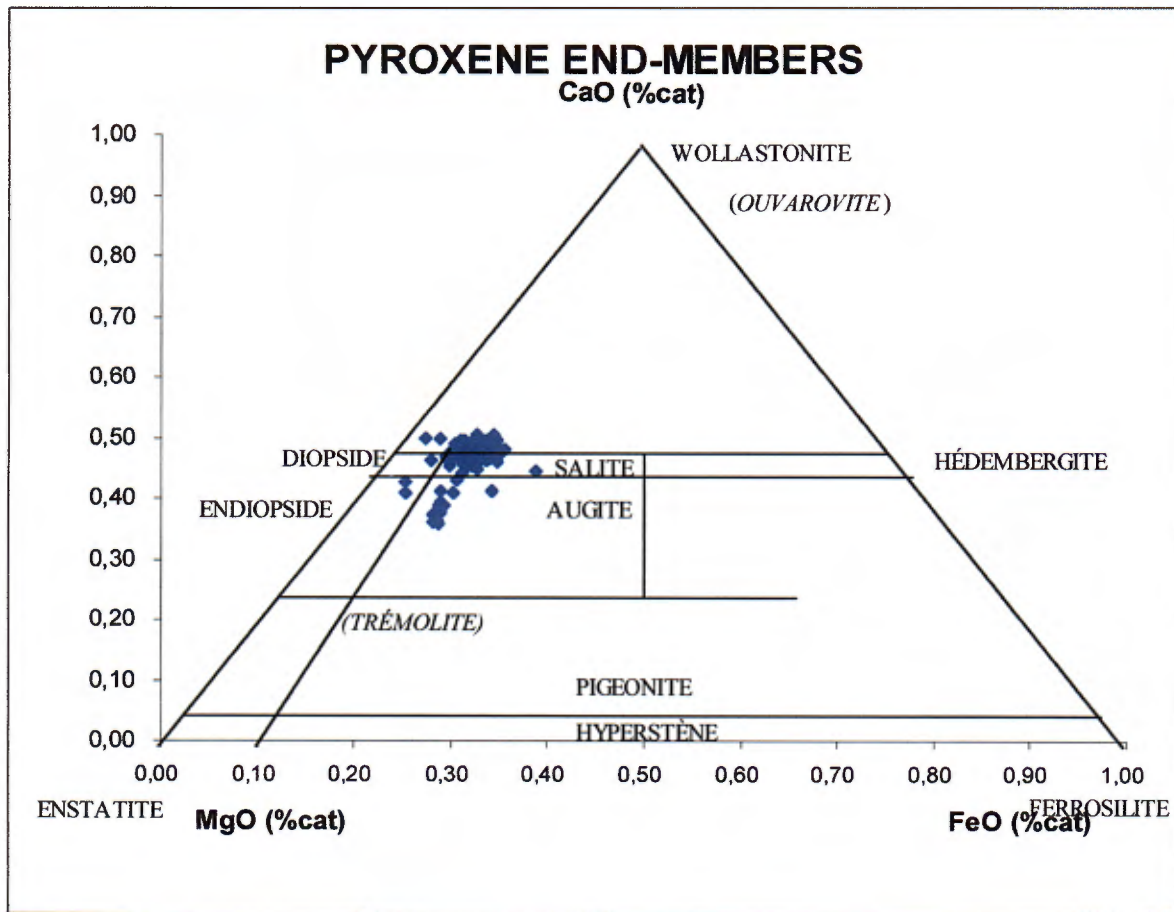


Figure 7. End-member ternary diagram for pyroxene. All analysis fall close to the diopside pole, either as salite or diopside ss. analysis oversaturated in wollastonite.

Trace elements are currently used to filter mantellic pyroxene from ones of regional origin. Sodium and chromium are typically present in kimberlitic pyroxene in level above 0.8% (figure 8). Potassium can be present in eclogitic pyroxene, while titanium is indicative of alkalic sources.

Two populations are discernable. A low-chromium and moderate sodium population correspond to salite, while a moderate chromium and low sodium population correspond to

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diopsidic augite. These two populations are ubiquitous in the area and interpreted as regional diopside. A few analysis stands above the 0.8% Na₂O threshold, corresponding to endiopside and diopside ss.

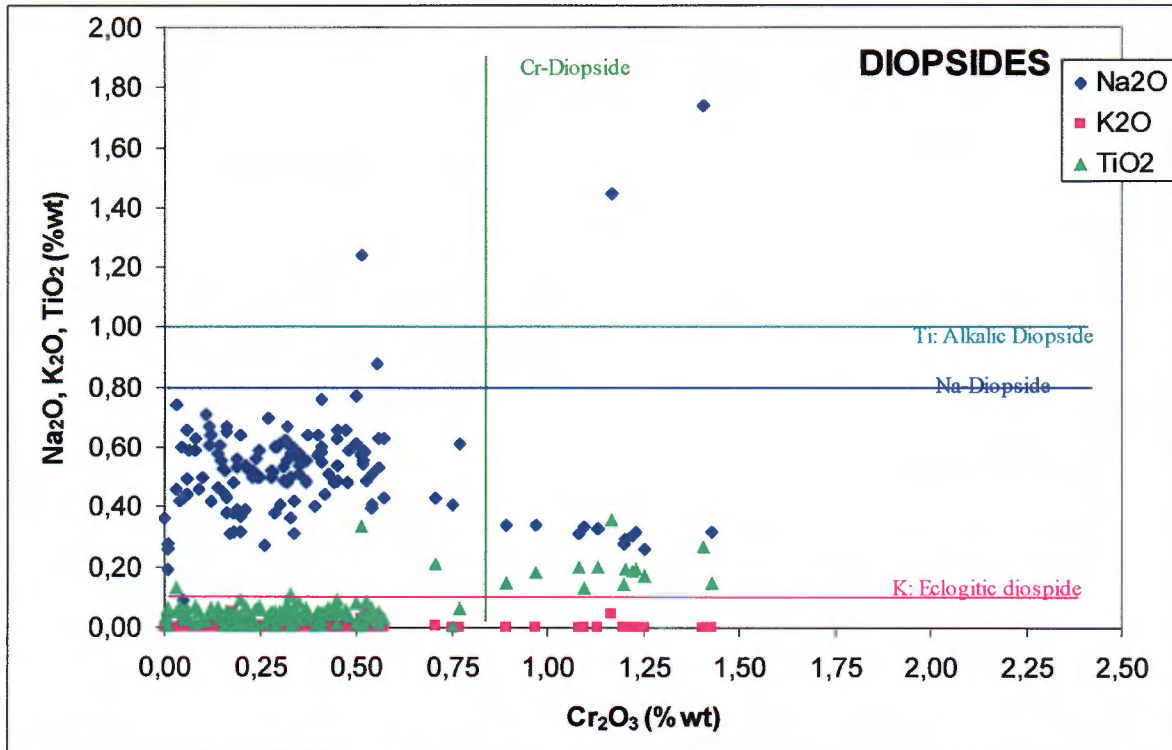


Figure 8: Minor elements in diopside. Note the two main population corresponding to salite and diopsidic augite, and the four analysis enriched in sodium.

Incorporation of minor elements in pyroxene is linked with a few diadochic substitution, to generate minor molecules. Sodium is introduced according to $\text{Na}^+\text{M}^{+++} \rightleftharpoons 2\text{M}^{++}$ in octahedral coordination. The trivalent cation can be Al⁺⁺⁺ in the jadeite molecule, Cr⁺⁺⁺ in kosmochlor and Fe⁺⁺⁺ in acmite. Excess of M⁺⁺⁺ is allocated as Tshermack substitution, in octahedral and tetrahedral coordination. Deficiency of trivalent cation is compensated by allocating iron to ferric state. Stoichiometric calculation allows for these molecules.

Kosmochlor molecule is typically introduced under high pressure condition and chromium availability, such as in peridotitic mantle. Jadeite molecule is typically introduced under high pressure and aluminum availability, such as in eclogitic mantle and to a lesser extent in peridotitic mantle. Tshermack substitution is more typical of lower

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pressure condition, while acmite is indicative of low silica activity and oxidizing conditions, such as in alkalic magmas. Typically, diopside macrocryst in kimberlite are enriched in jadeite and kosmochlor molecules. These can be visualized in the classical Sobolev diagram (figure 9), opposing the sum of octahedric aluminium and chromium, versus sodium, with a 1:1 ratio. A lower ratio indicates presence of Tshermack molecule, while higher ratio indicate acmite molecule. This diagram is powerful in outlining most significant macrocrystic pyroxene, but fail to outline all varieties of kimberlitic pyroxene. Three jadeite-kosmochlor diopside are retained, from samples 4130101, 4130122, 4130135, plus one enriched in jadeite and Al-Tshermack typical of spinel peridotite or eclogite in sample 4130095. All these are positive kimberlitic indicator minerals.

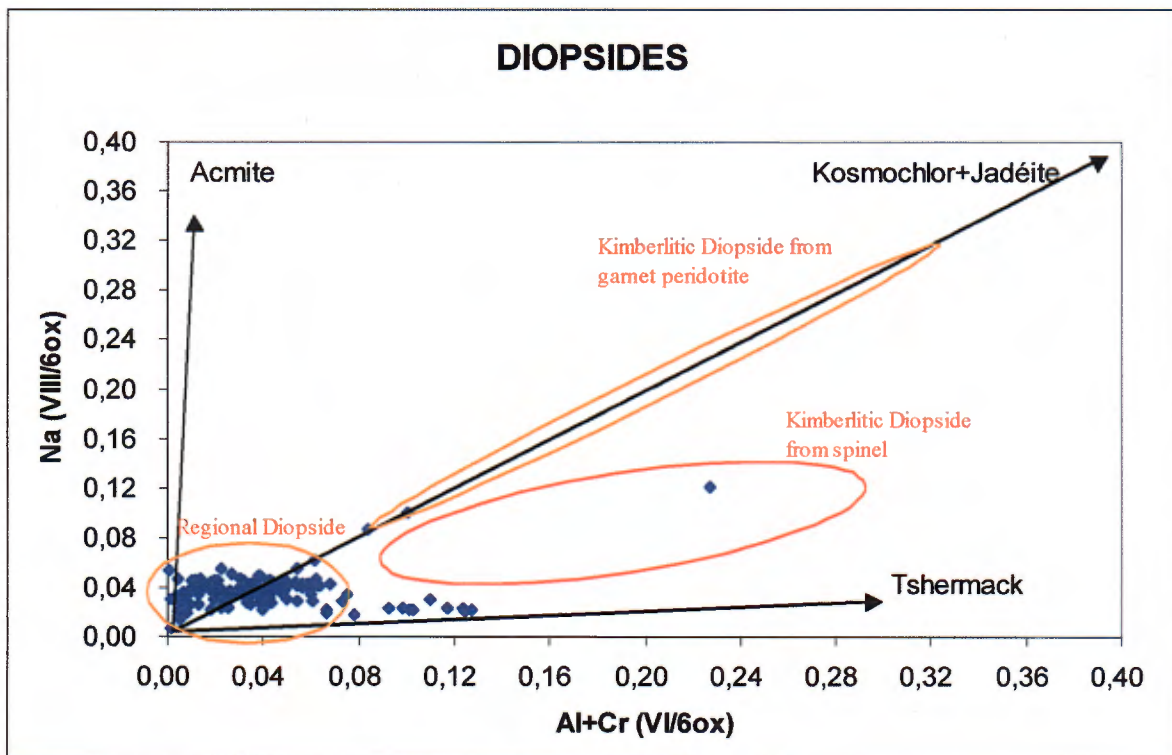


Figure 9: Sobolev diagram for diopside discriminating kimberlitic macrocryst on the basis of sodic end-member. Note that four analysis plot along the 1:1 ratio indicative of kosmochlor-jadeite substitution, plus one also including a Tshermack molecule component.

Numerous other discrimination diagrams are available for diopside, although none is fully reliable. The Morris et al (2000) diagram (figure 10a) use a minor molecule ternary plot and the companion Crabtree (2003) diagram (figure 10b) use Ca# and sodium. Both diagrams outstand the same sodium-rich

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analysis as potential kimberlitic indicator. The salite and diopsidic augite population are clearly distinctive.

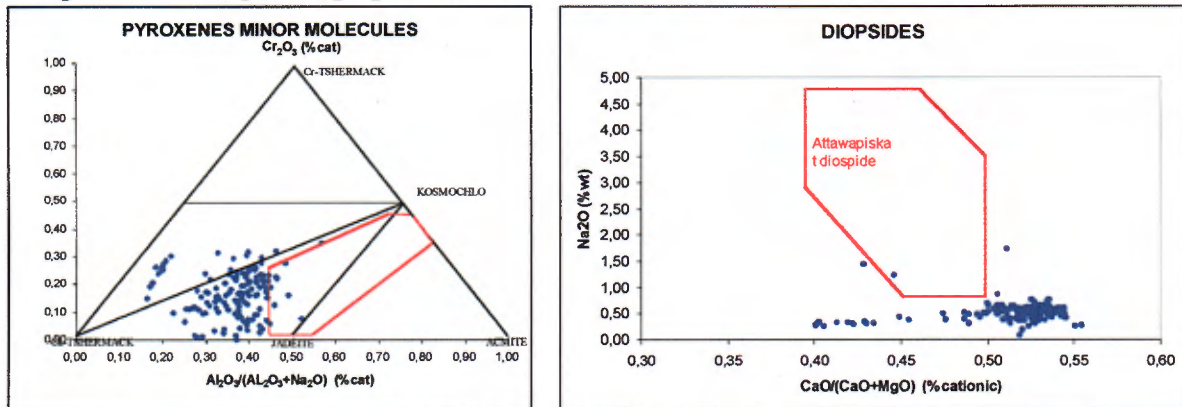


Figure 10: Morris (2000) and Crabtree (2003) diagram for diopside discriminating kimberlitic from regional diopsides. Note the salite and diopsidic augite population and the few outlying analysis falling close to the kimberlitic field.

Detrital kimberlitic diopside are seldom in the area, both in the Renard-Portage area and the Mistassini-Papaskwasati area. Diopside is absent from the Beaver Lake kimberlite and has not been noticed by the author in other kimberlite core from the area. The rares kimberlitic diopside known from the author have a chemical signature similar to the one found in the Premier property. Thermobarometric calculation were not carried.

Chromite

Three grains of chromite were analyzed along with ilmenites. Two of these chromites, from samples 4130080 and 4130132, have very high chromium content, about 64%, which makes them similar to chromite found as inclusion in diamond. On the classical MgO-Cr₂O₃ and TiO₂-Cr₂O₃ plots (figure 11 & 12), these are projected directly in the DI-chromite field.

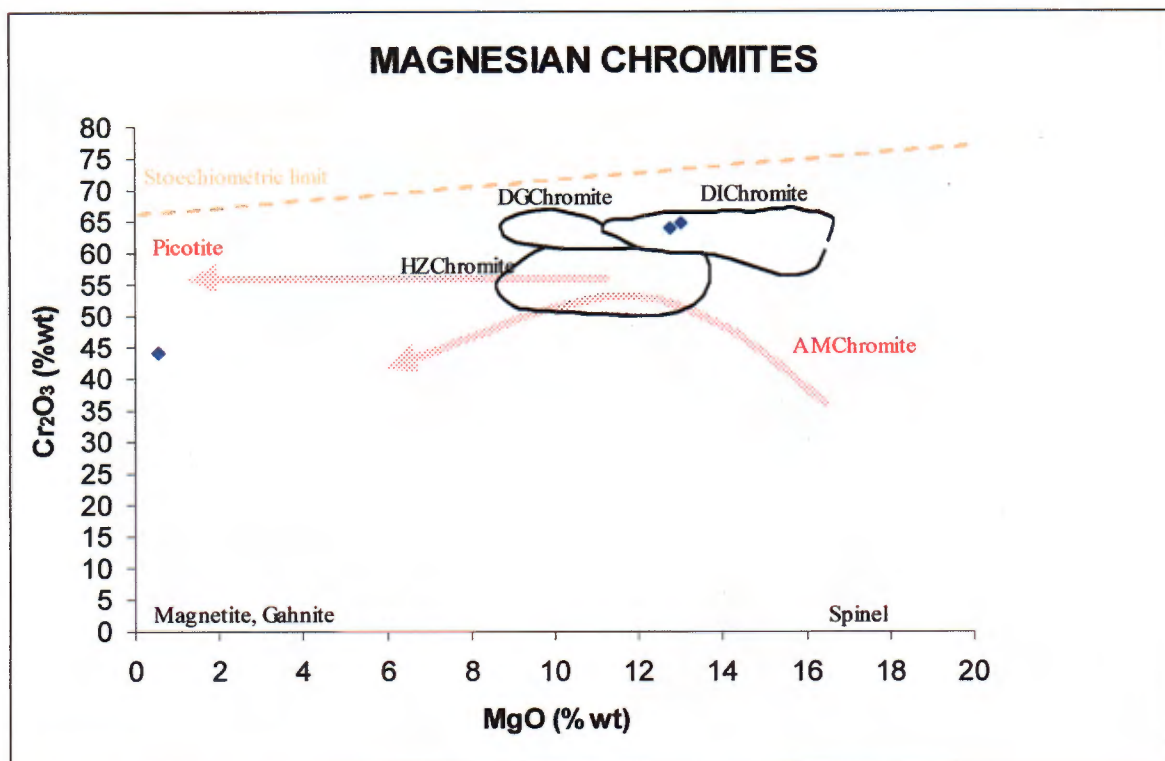


Figure 11: Industry standard diagram to discriminant kimberlitic chromite. DI and DG chromite field are from Fipke et al. 1993, other items are from the author. Note the two DIChromites.

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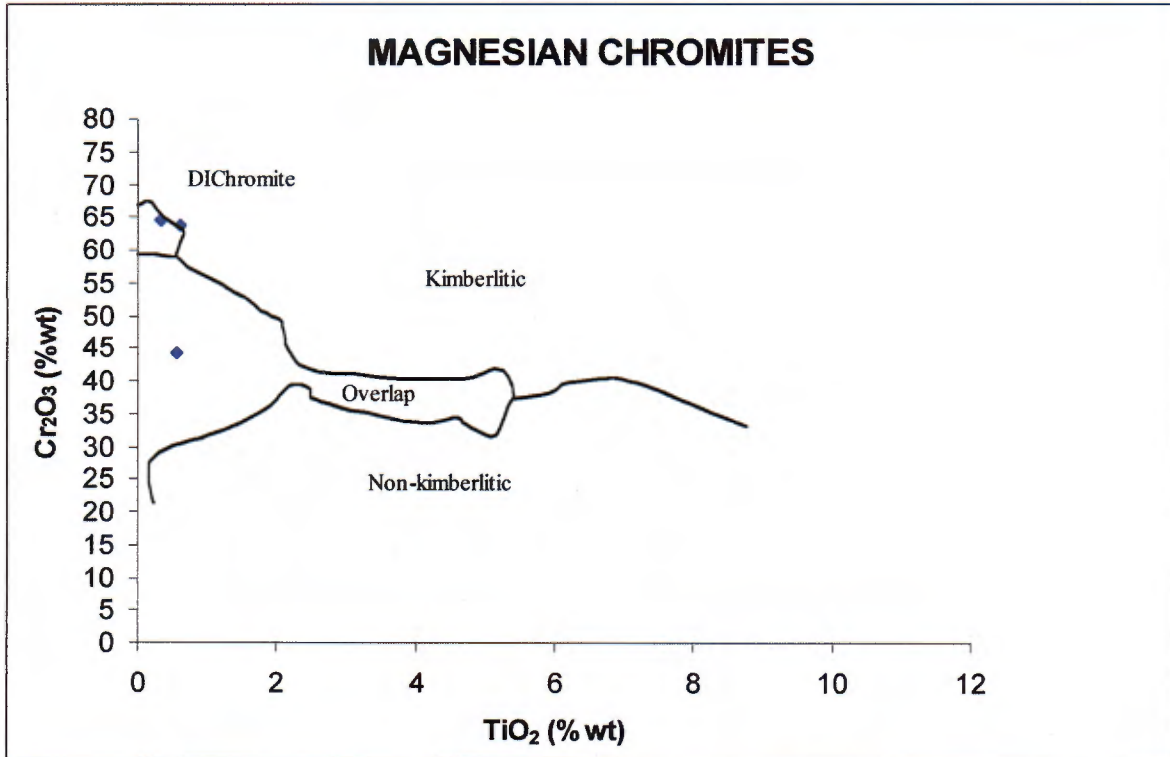


Figure 12: Discriminant diagram for chromite based upon titanium content (Fipke 19xxx). Both DI-Chromite are properly located in low-titanium range.

The third chromite, from sample 4130094 is a ferrochromite, with medium level of chromium and almost devoid of magnesium. Its origin can be kimberlitic as well as crustal. Lumps of peridotite are reported here and there in the area, which could act as source rock.

Kimberlitic chromite are rare in the Portage and Renard area north of Premier, as well as in Beaver lake intrusion. Further south in the Mistassini-Papaskwasati dispersion train, kimberlitic chromites are not abundant although ubiquitous.

Ilmenite

From the ilmenites analyzed, a total of 19 have a chemical signature of kimberlitic ilmenite macrocryst. Three grains were analyzed both at core and rim. In ternary plots of end-member molecules, kimberlitic macrocryst nicely discriminate from regional ilmenites (figure 13). In the hematite-ilmenite-geikielite ternary diagram (Haggerty,

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undated), the magnesian ilmenite neatly fit the kimberlitic trend at low F_{O_2} .

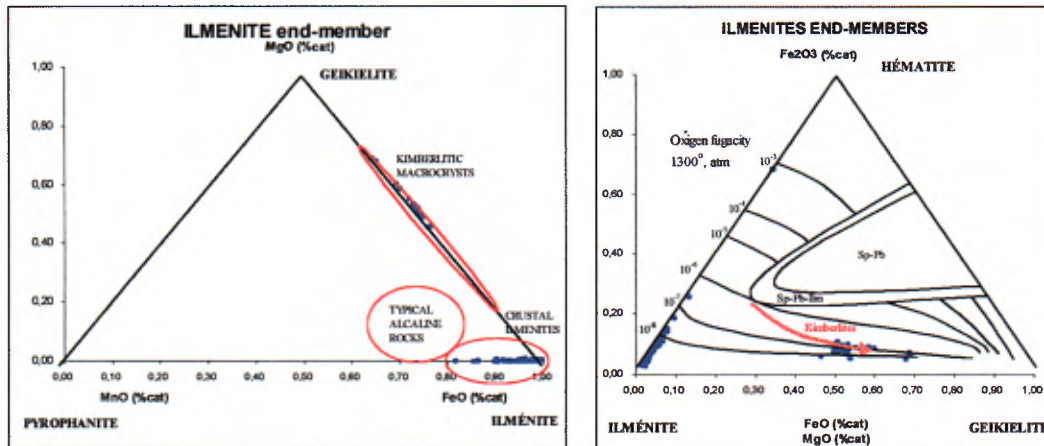


Figure 13: Ilmenite composition in term of end-members. Note the distinctiveness of kimberlitic geikielite.

The magnesium content of the present kimberlitic ilmenite is narrowly constrained, between 12% to 15% MgO, with a few analysis with higher content. No ilmenite falls in the 4-12% MgO, which is quite a distinctive feature of this population. Two analysis are above 18% MgO, both from rims of grains. These ilmenites are low in chromium, in spite of their high magnesium. In the industry standard plot of magnesium against chromium (*figure 14*), they form a two tight cluster at 1.8% and 0.8% Cr_2O_3 , which is not very typical. Some people would interpret such analysis as indicative of prevailing low oxygen fugacity in the magma, preventing diamond dissolution by the magma. This corroborate the low hematite content of the ilmenite. The two rim analysis are very rich in magnesium, up to 18% MgO, but proportionally low in chromium.

In the titanium against magnesium diagram (*figure 15*), which is gaining acceptance in the industry, the microilmenite fall well inside the kimberlitic field, along the 20% Fe_2O_3/FeO_{total} isopleth.

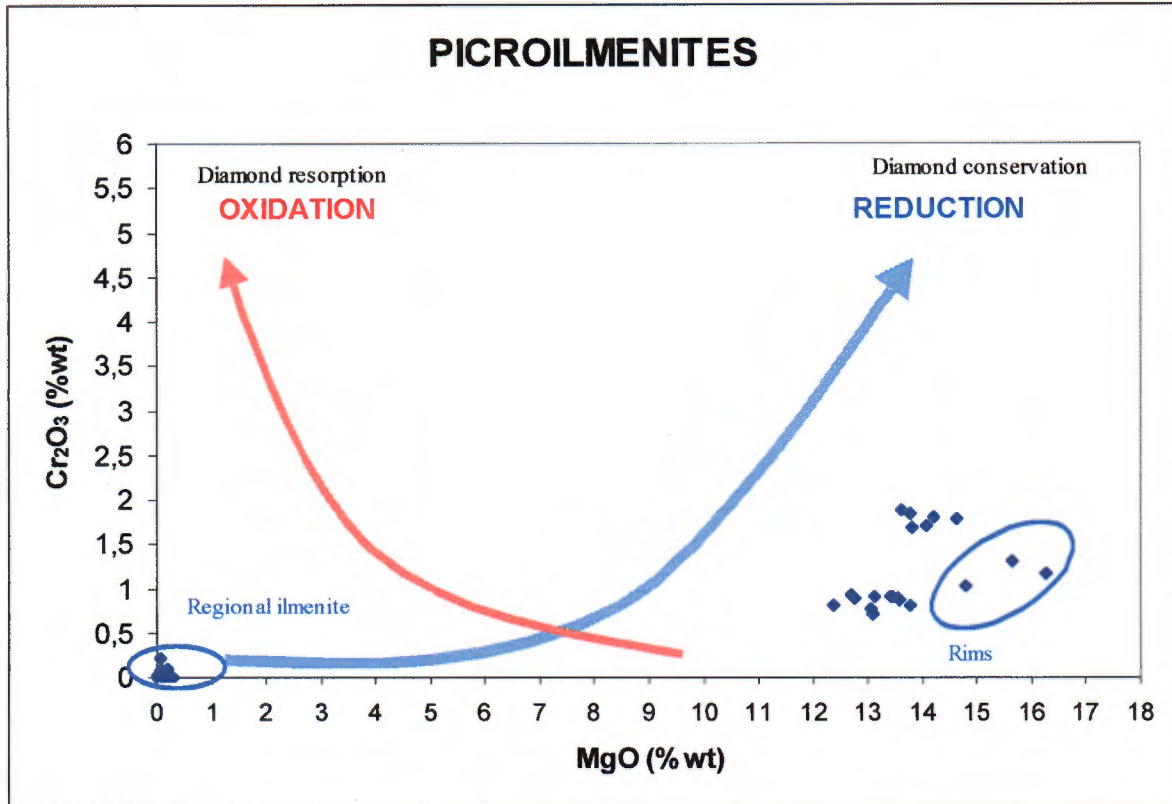


Figure 14: Industry standard diagram for ilmenite. Notice the two clusters of magnesium bearing ilmenite, and the rim analysis even richer in magnesium.

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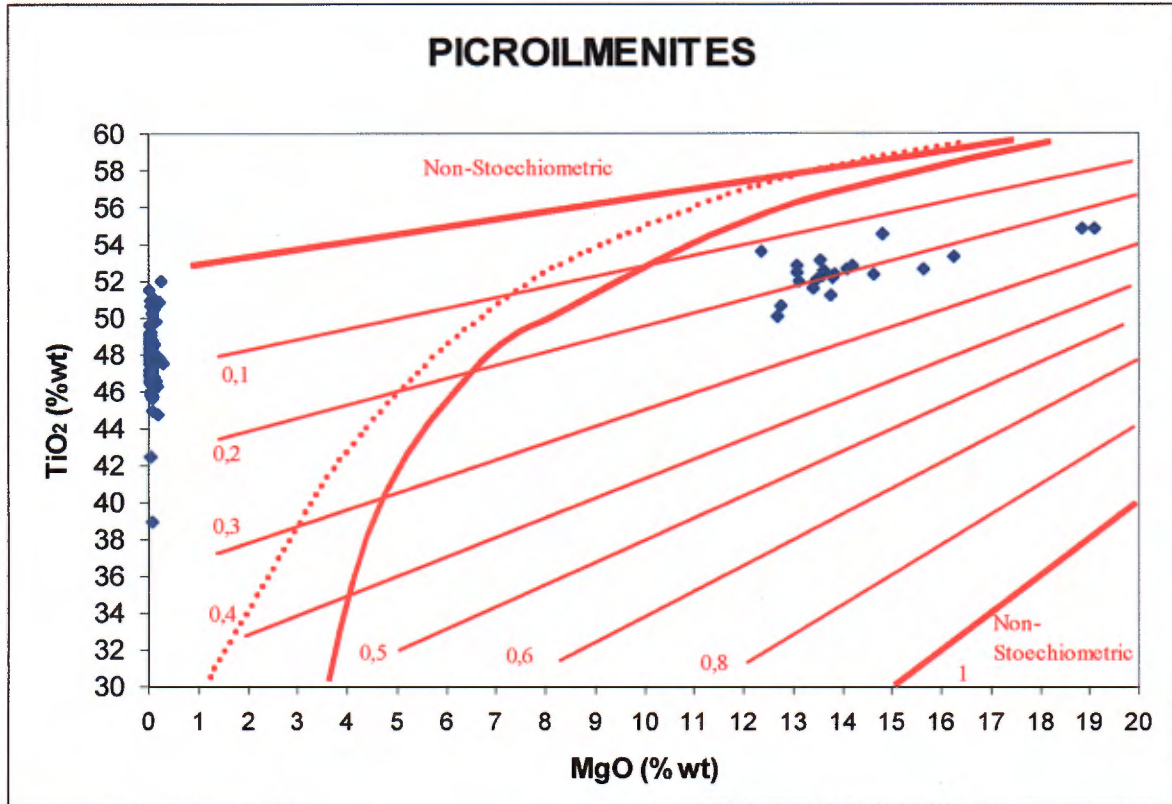


Figure 15: Titanium-magnesium diagram, indicating the constant oxidation level of iron in the ilmenite, which plot along the 20% isopleth.

The chemical signature of the ilmenite from Premier is peculiar compare to other source in the area. Its show similarity with Renard-Portage signature in term of magnesium content and ilmenite abundance, but do lack the high chromium grains. It is distinctively richer in magnesium than Beaver lake ilmenite. It lack the scattering in magnesium and chromium of ilmenite from Mistassini-Papaskwasati dispersion train. Finally, the ilmenite-pyrope ratio is higher than in Portage-Renard area, but much lower than in the Mistassini-Papaskwasati area.

Olivine

A few olivine were confirmed by the EDS-SEM, but were not analyzed with microprobe. These are forsteritic in composition, but their kimberlitic nature can not be confirmed.

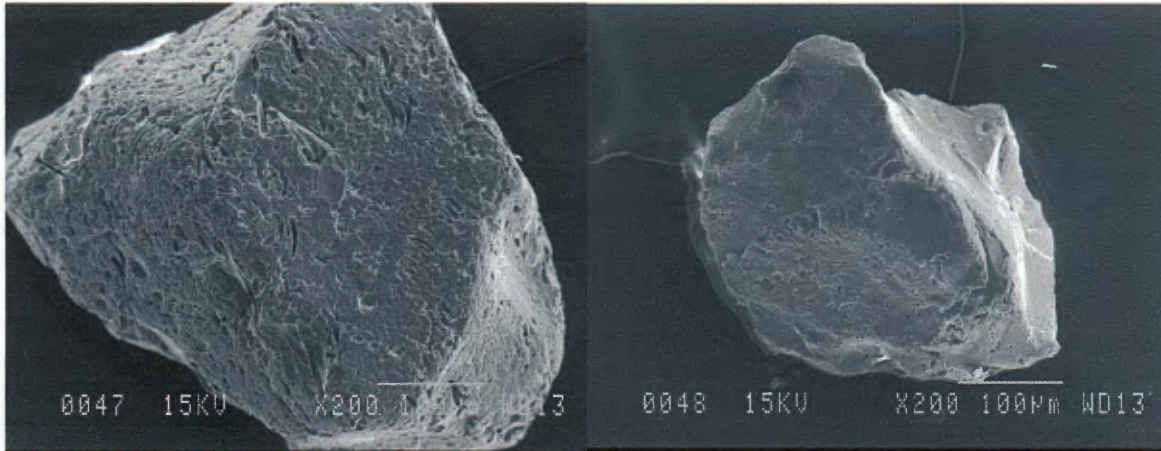


Figure 17: SEI-SEM electronic images of the olivine grains. Notice the small round chromite inclusion in the olivine of the left picture and the typical etched textures left by serpentine alteration.

INTERPRETATION²

Indicator minerals are sufficiently abundant in Premier property to spur interest, although not sufficiently abundant to make a dependable interpretation. Chemical signatures of the indicator minerals show similarities with both the Portage-Renard panache to the north, as well as with Beaver Lake kimberlite to the east. Shall be considered that indicators minerals from Portage panache shows a chemistry suggestive of very good diamond potential of the source kimberlites, as witnessed by the Renard intrusions. Inversely, the Beaver Lake intrusion is practically barren of diamond, as forecast by its mineral chemistry.

No KIM high count samples were found yet on Premier. The KIM distribution do not seems to be random, and part of the minerals seems to be structured as a dispersion train. Furthermore, KIM are dominantly located in the upper third of the property, being scattered occurrences in the south.

Dubious indicator minerals were indicated on the KIM distribution maps. These include minerals which composition is not exclusive to kimberlitic occurrences and are common within regional crystalline environment, such as

² The interpretation of results is made according to author's best knowledge and remains intrinsically not thoroughly dependable. It shall not be considered by readers as certainties and the author do not take any liability concerning their use by the client or someone else.

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ferrochromite, olivine, G5 and G7 garnets. Also were added minerals which do not have a chemical signature typical of kimberlitic origin, but still have surface textures or other physical features which may suggest they resided in a kimberlitic magma. These are corroded or shiny ilmenites and vivid green diopsides.

Follow-up on sample 4130006

Sample 4130006 is of concern, since it contains an high chromium lherzolitic pyrope. It has been described as an ablation till in hummocks moraine. Fluted moraines or drumlins are present about a kilometer to the south, while an esker is present about a kilometer to the north. Nothing indicates that original and follow-up samples might have been taken from different material, nor that any outwash material being present in the area. This pyrope shall be considered as background signal and likely far traveled. Abundant pyropes of this kind were located in Melkior's property, about 20 kilometer up-ice of the present occurrence. No further work is recommended upon target 4130006.

Follow-up on sample 4130008

Sample 4130008, which contain an isolated microilmenite, is of dubious origin, either sandy outwash material or coarse and well washed ablation till. Aerial photograph suggest hummock moraines, while a short esker terminate less than 1 kilometer up-ice. Follow-up samples were taken from this esker and hummock moraine, which did not returned any indicator minerals. No further work is recommended upon target 4130008.

Follow-up on sample 4130021

Sample 4130021, which yield a microilmenite, is reported as a sandy-gravelly ablation till, with a topography typical of hummock moraine. Numerous linear features, induced by basement structures, are discernable, suggesting a thin till covers. Numerous ilmenites were suspected to be kimberlitic in one of the follow-up sample, based upon their shininess. They all failed to be magnesium bearing and thus no kimberlitic indicator mineral were found in follow-up samples. No further work is recommended on target 4130021.

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Follow-up on sample 4130026

A microilmenite has been recovered from sample 4130026. This sample has been described as an outwash or esker material, coarse and gravelly. According to aerial photograph, sample was taken at the edge of a fluvial terrace associated with Eastmain River. Follow-up samples, taken up-ice, were ablation till from hummock moraines, and might not represent same material as initial samples. Exception is sample 4130087, southmost of the fence, where a microilmenite and a Cr-diopside were found. It shall be noticed that overburden in this area is complex, with local outcrops on hilltop, and ablation till merging with outwash material. A large sampling gap is present to the north, which justify some in-fill sampling. A nice round lake, 200-300 meters across, is present 1.5 kilometer up-ice.

Follow-up on sample 4130029

Sample 4130029 returned 3 potentially kimberlitic garnet, of which was the high-chromium harzburgitic pyrope plus a Cr-poor lherzolitic pyrope. Adjacent was sample 4130036 which yielded another lherzolitic pyrope. Sample 4130029 is a sandy ablation till, taken from an area of washed hummock moraines (**figure 16**). These results prompted a dense follow-up sampling, built as three up-ice fences for a total of 23 samples, plus 16 samples for target 4130036. The last fence is located along the northern property limit. A total of 11 indicator minerals were found in these, scattered with a maximum of two indicators in a single sample. No clean dispersion train can be outlined. The terrain where follow-up samples were taken is covered by hummock moraines, with increasingly smooth texture northward. A large outwash plain is suspected about 5 kilometers to the north. A few of the samples were clay rich and interpreted a basement till. The actual distribution pattern suggest samples are from the tail of a dispersion train, the source of which might be located north of the property limits. To proceed with further sampling of the area will necessitate an effort to dig through the ablation till and potential outwash material, which would be a costly effort. An airborne survey would to pinpoint target will be more recommended.

Follow-up on sample 4130035

Sample 4130035 yielded a microilmenite. The sample is from ablation till, from an area of corrugated or transverse moraine. Two follow-up samples carried single indicator, both from ablation till. In such rugose area, it should not be

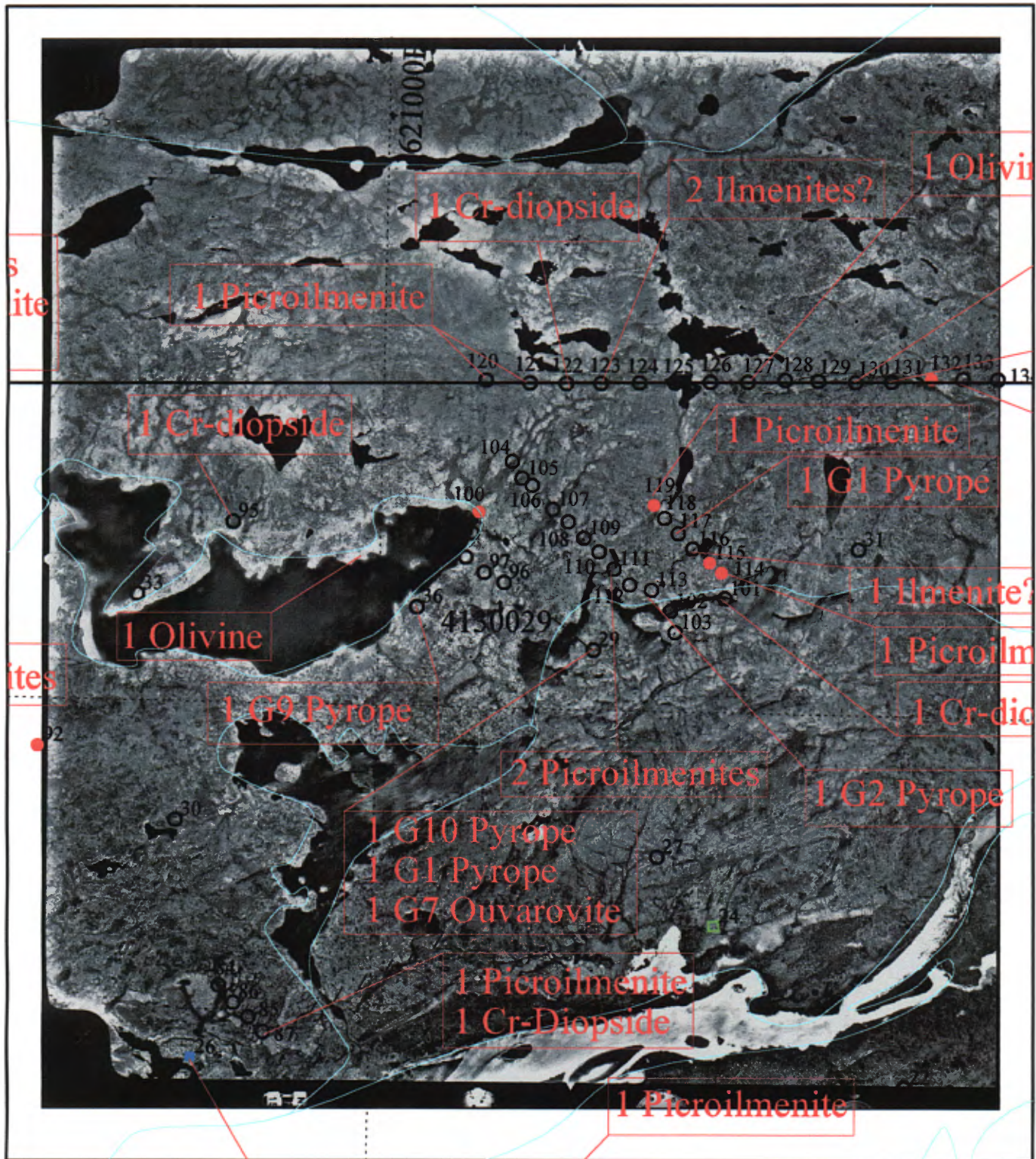


Figure16: Target 4130029 follow up results

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expect dispersion train will be uniform and regular. It can not, with actually available data, decipher whether these kimberlitic minerals belong to a distal signature of a trend or if they are background values. Supplementary sampling is needed.

Follow-up on sample 4130036

A lherzolitic pyrope was located in sample 4130036, which spurred a dense follow-up sampling. No information is available on the nature of the sample. It is from an area covered by smooth hummock moraine, likely fusion till affected by superficial meltwater washing. Two fences of follow-up samples were taken, which failed to reproduce the anomaly. Scattered count were found in samples from a fence at the limit of the property, which is located in heavily washed material.

Follow-up on sample 4130037

A Cr-diopside has been located in sample 4130037, which is from a coarse ablation till in an area covered by hummock moraines, possibly controlled by relict corrugated moraines. An esker run 200 meters to the north. Numerous large erratic boulder are present on top of the till, suggesting that surface has been washed by subglacial rivers associated with the esker. A fence of four samples has been taken as follow-up, all of them within the ablation till. One of them, located directly up-ice from target, carried a single picroilmenite. These two samples might be distal expression of a narrow dispersion train, and may justify some further work. But it can not be excluded that these two grains are from background signal. No till sample are presently located up-ice for a few kilometer.

2003 Regional samples

A few of the regional samples collected in 2003 carried isolated indicator minerals, such as 4130094, 4130095, 4130135, and 4130140. Since they are located close to property limits, no follow-up is recommended. Sample 41300093 shall be considered one of these, since from the 4 potential indicator reported, only one has an non dubious origin.

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Geochemistry of mud

Mud recovered off the Wilfley table has been submitted for a 33 elements analysis. Results are presented on **figure 17** along with basement geology. The element package includes chromium and nickel to detect ultramafic signature along with strontium, barium and lanthanum to detect alkaline signature. Manganese is added, being an indicator for metal scavenging through chelation. Only a few samples show chemical activity in spite of lack of chelation, such as 4130075. Chemical activity associated with chelation is noted in sample 4130032, 4130035, 4130086, 4130089 and 4130135. No chemical anomaly is noticed within the 4130029 follow-up sampling.

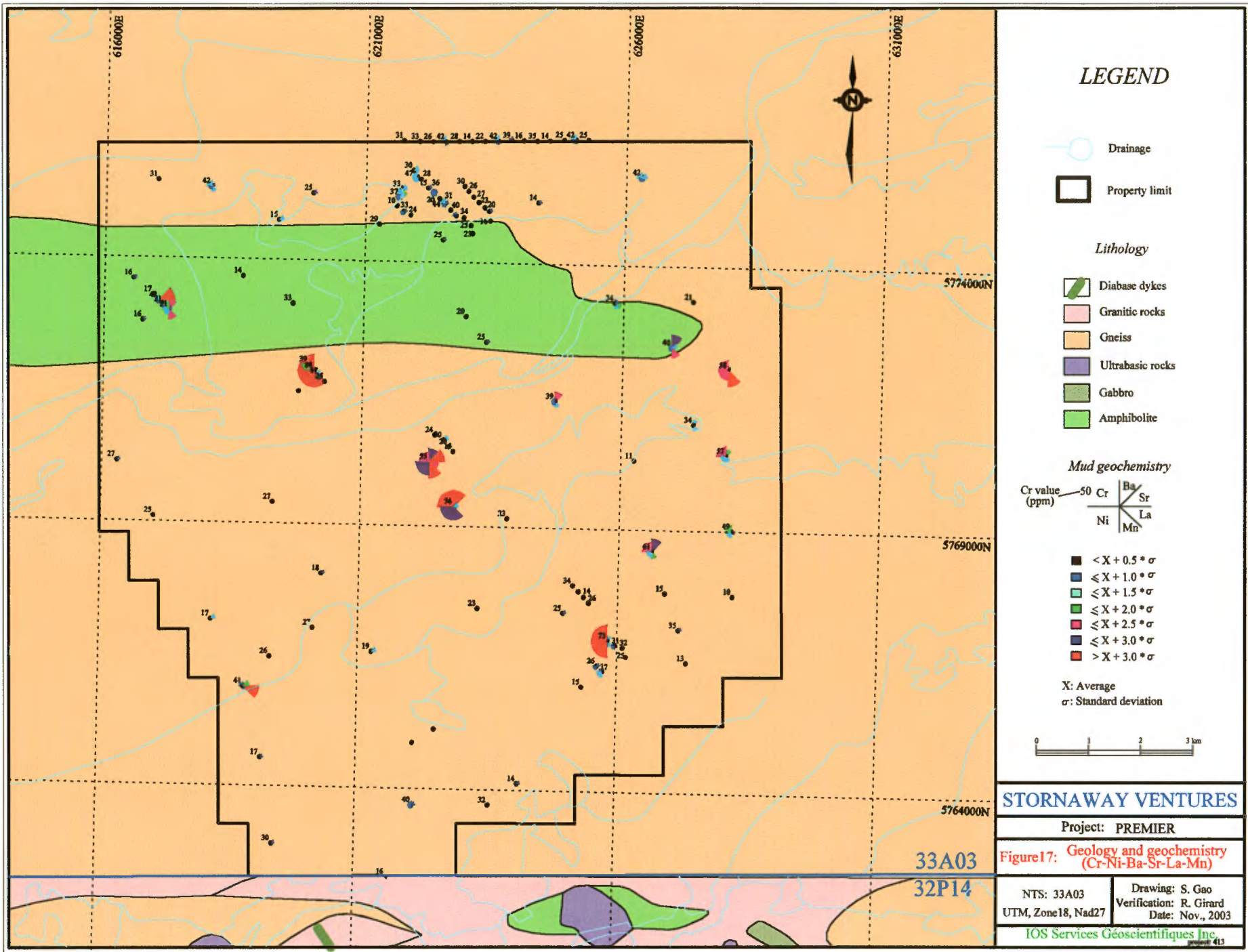
Base metal anomalies

Base metal occurrences are indicated either by sulfides in the heavy mineral concentrate, or by geochemical anomalies in the mud (**figure 18**). A significantly anomalous sample is 4130113, in which 126 grains of chalcopyrite were present. No iron sulfides nor other base metal indicator were associated. No meaningful geochemical anomaly is detected in this sample. However, in the neighboring sample and the up-ice fence, a few grains of chalcopyrite plus some chemical Cu anomalies are detected. The anomaly totally disappear in the fence along the property limit. The origin of this anomaly is likely associated with the metavolcanic belt, which ended roughly below the sample. Two other significant anomalies are detected in samples 4130094 and 4130105. Other anomalous sites are associated with manganese and suspected as metal scavenging due to ferrochelation.

A few grains of gahnite are the only zinc mineral found. A single grain of pentlandite is present in sample 4130113. Corundum is abundant in sample 4130032, which is a mineral indicative of alkali lixiviation associated with alteration zone.

Some copper dendrites and flakes were found in random samples. These are suspected as contamination from the heavy liquid stabilizer. A few flakes of calamine, witherite and malachite were also detected with the SEM-EDS, suspected as reaction product between brass or tin (both contamination from sieves) and oxalic acid.







An exploration program can be justified upon anomaly 4130113, starting with an EM airborne survey carried along the aeromagnetic survey recommended for diamond exploration.



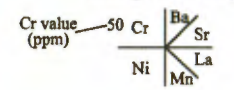
LEGEND








-  Drainage
-  Property limit

Lithology

-  Diabase dykes
-  Granitic rocks
-  Gneiss
-  Ultrabasic rocks
-  Gabbro
-  Amphibolite

Mud geochemistry



-  $< X + 0.5 \sigma$
-  $\leq X + 1.0 \sigma$
-  $\leq X + 1.5 \sigma$
-  $\leq X + 2.0 \sigma$
-  $\leq X + 2.5 \sigma$
-  $\leq X + 3.0 \sigma$
-  $> X + 3.0 \sigma$

X: Average
 σ : Standard deviation



STORNAWAY VENTURES

Project: PREMIER

Figure 17: Geology and geochemistry (Cr-Ni-Ba-Sr-La-Mn)

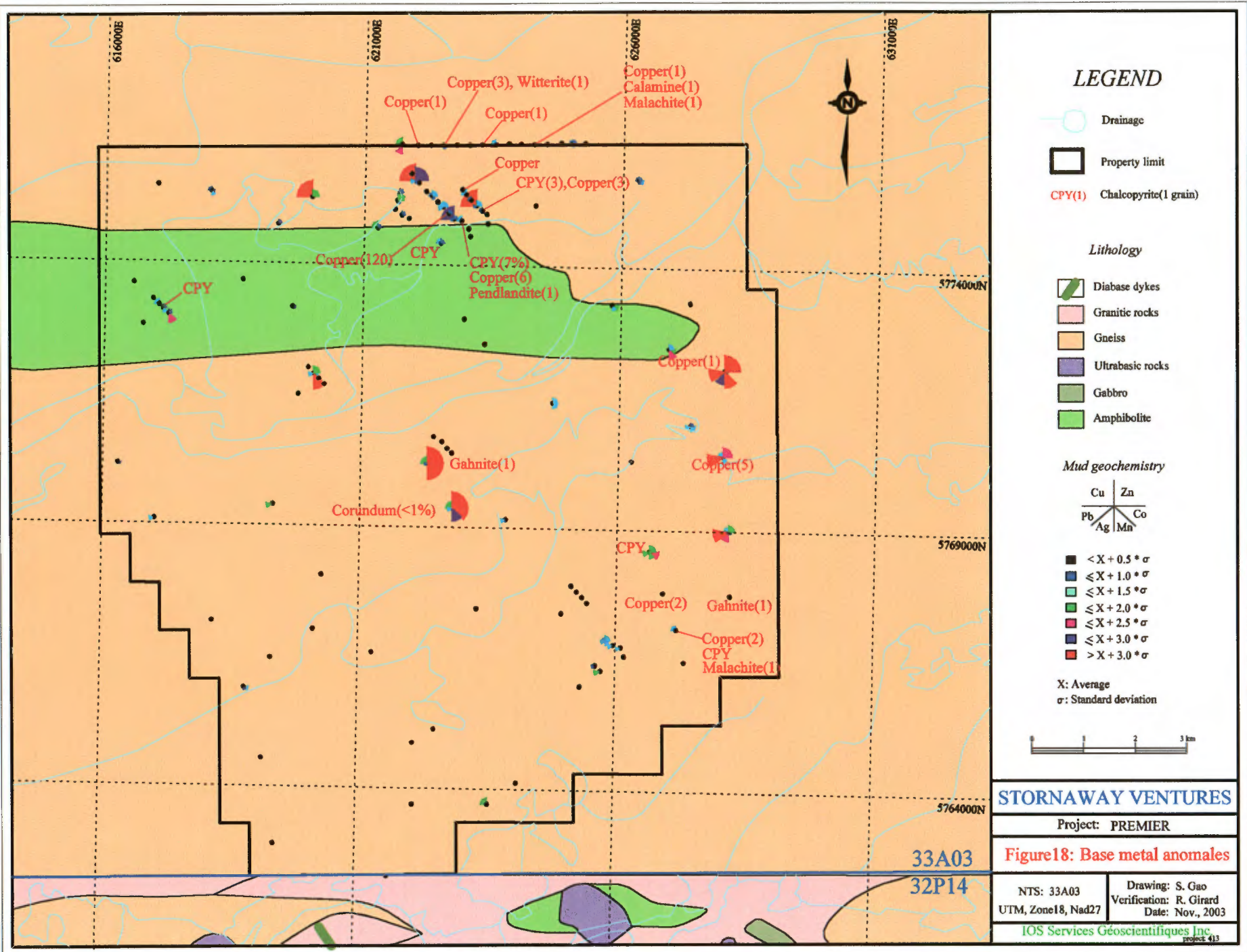
33A03

32P14

NTS: 33A03
 UTM, Zone 18, Nad27

Drawing: S. Gao
 Verification: R. Girard
 Date: Nov., 2003

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Precious metal anomalies

No gold grains were found, nor very limited number of arsenopyrite or lollingite grains. A single sample shall be considered anomalous, 4130121, with arsenopyrite making about 1% of the diamagnetic fraction. No geochemical anomaly of arsenic, bismuth, antimony or other pathfinder elements is detected (*figure 19*).

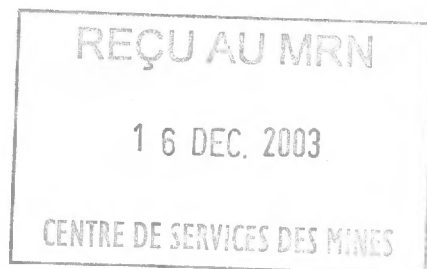
RECOMMENDATION

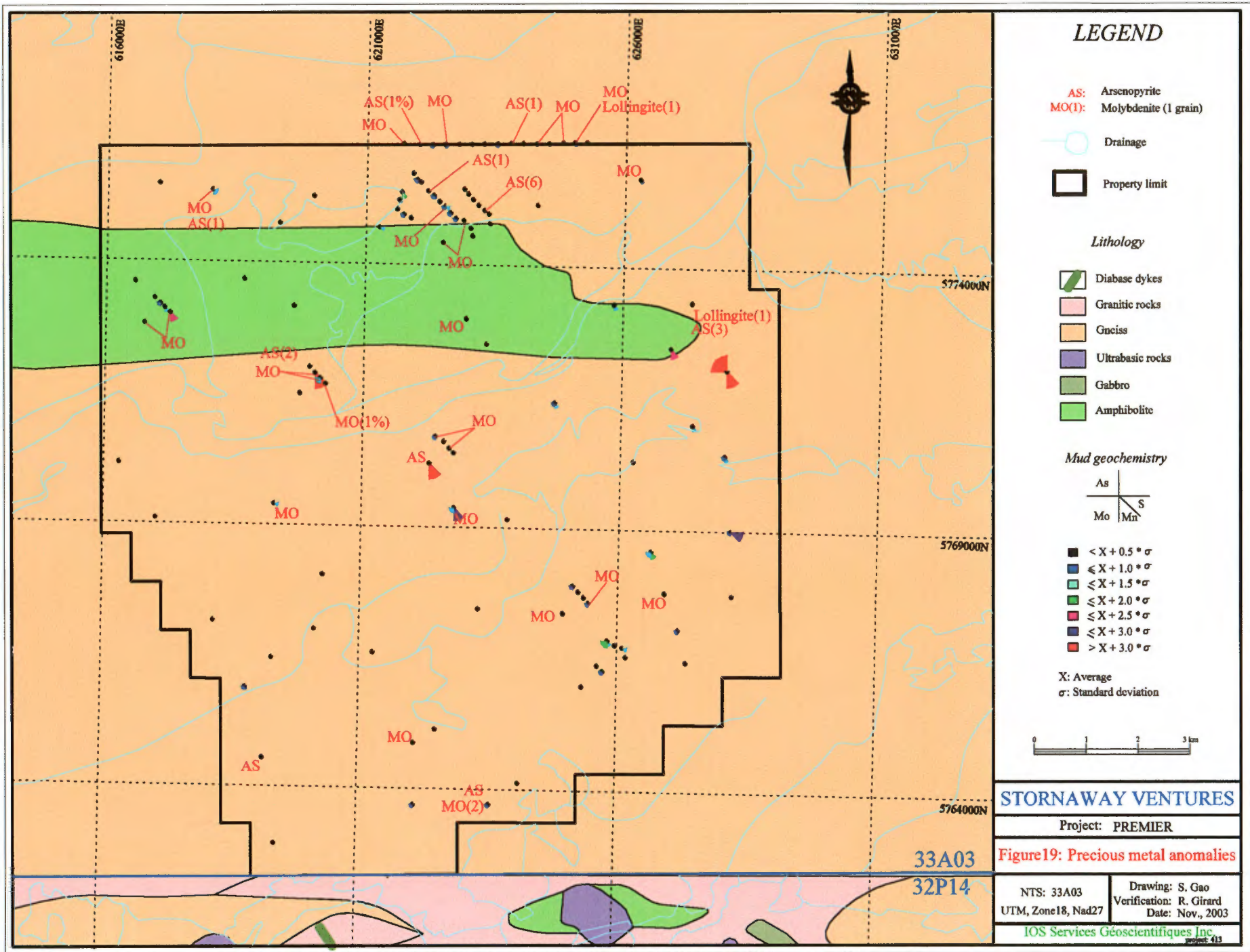
It is recommended that the northern portion of the property being renewed and that further exploration work being carried. Since this area is covered with a blanket of ablation till, pin-pointing a kimberlite with the use of surface till sampling might be a difficult task. A dense low-altitude helicopter-borne magnetometric and electromagnetic survey is recommended, for 250 kilometer of flight along 100 meter spaced lines. Hand shoveled or mechanized auger sampling of lodgment till will be required next.

It is also recommended that a few samples being taken up-ice of targets 4130026, 4130035 and 4130037.



Réjean Girard, P. Geo.
OGQ #521
IOS Services Géoscientifiques Inc.





33A03

32P14

TILL SAMPLING FOLLOW-UP
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APPENDIX 1

FIELD LOG

**TILL SAMPLING FOLLOW-UP
PREMIER PROPERTY**

RAPPORTS JOURNALIERS PROJET 03-413

Samedi, 9 août 2003

Départ de Chicoutimi à 8 h am de Patrice, Alexandre, Steeve, Jean-Michel et Jonathan direction Rivière Témiscamie. Arrivée à destination à 3 h pm. L'avion a pu nous emmener au camp du Lac Hippocampe en 2 voyages car il y avait de l'épicerie à apporter avec nous.

Dimanche, 10 août 2003

Arrivée de l'hélicoptère vers 11h45 am, au moment où la brume matinale épaisse se soit dissipée. Départ sur le terrain vers 13 h direction du suivi au nord de la propriété. 20 échantillons ont été récoltés aujourd'hui en quelques heures de travail: 10 sur la ligne bordant complètement le nord et 10 sur la grille des échantillons 4130029 et 4130036. L'échantillonnage s'est bien passé et les échantillons sont restés sur le terrain. 1.3 heures de vol utilisées et 1 baril provenant d'Hippocampe.

Lundi, 11 août 2003

31 échantillons ont été ramassés aujourd'hui sur la propriété, majoritairement dans la partie nord. Nous avons terminé la cible principale, fait quelques échantillons de régional et deux autres cibles. Un voyage d'une vingtaine d'échantillons ont été apportés à Témiscamie en hélicoptère. Temps de vol = 4.7 h et 4 barils utilisés ; 2 de Témiscamie et 2 Hippo.

Mardi, 12 août 2003

Nous avons récolté les derniers 23 échantillons restants sur le propriété Premier pour un total de 74 échantillons. De ce nombre, 69 sont déjà rendus à Témiscamie et 5 sont toujours au camp Hippocampe. Temps de vol utilisé 6 = et 3 barils à Témiscamie.

10 AOUT 2003

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PREMIER PROPERTY**

APPENDIX 2

SAMPLE LOCATION AND DESCRIPTION

Table 2A: Sample location
Table 2B: Sample description
Table 2C: Field annotations

Sample number	Property	Material type	Survey	Target	Claim	Date	Sampler	Depth (m)	NTS map	UTMX	UTMY	Weight (kg)	Spike	Bags	Survey type	Transport	Excavation
4130068	Premier	Esker	2	4130008	1052290	12-08-03	Jonathan L.	0,8	33A/03	619303	5766457			1	Follow-up	Helicopter	Hand shovel
4130069	Premier	Ablation	2	4130008	1052304	12-08-03	Alexandre B.	0,57	33A/03	620119	5767015	20	1553		Follow-up	Helicopter	Hand shovel
4130070	Premier	Ablation	2	4130006	1052301	12-08-03	Patrice Gagnon	0,5	33A/03	625721	5766293	20	1054	1	Follow-up	Helicopter, walk	Hand shovel
4130071	Premier	Ablation	2	4130006	1052301	12-08-03	Patrice Gagnon	0,6	33A/03	625610	5766395	20	1044	1	Follow-up	Helicopter, walk	Hand shovel
4130072	Premier	Ablation	2	4130006	1052316	12-08-03	Patrice Gagnon	0,6	33A/03	626170	5766571	20	1059		Follow-up	Helicopter, walk	Hand shovel
4130073	Premier	Ablation	2	4130006	1052316	12-08-03	Patrice Gagnon	0,7	33A/03	626103	5766746	20	1053	1	Follow-up	Helicopter, walk	Hand shovel
4130074	Premier	Ablation	2	4130006	1052316	12-08-03	Patrice Gagnon	0,7	33A/03	625955	5766790	20	1042	1	Follow-up	Helicopter, walk	Hand shovel
4130075	Premier	Ablation	2	4130006	1052316	12-08-03	Patrice Gagnon	0,8	33A/03	625811	5766877	20	1056	1	Follow-up	Helicopter, walk	Hand shovel
4130076	Premier	Ablation	2	4130037	1052313	12-08-03	Steeve Lavoie	0,95	33A/03	625432	5767588	20	1156	1	Follow-up	Helicopter, walk	Hand shovel
4130077	Premier	Ablation	2	4130037	1052313	12-08-03	Jonathan/Steeve	0,6	33A/03	625336	5767696	20		1	Follow-up	Helicopter, walk	Hand shovel
4130078	Premier	Ablation	2	4130037	1052313	12-08-03	Jonathan/Steeve	0,65	33A/03	625229	5767800	20	1159	1	Follow-up	Helicopter, walk	Hand shovel
4130079	Premier	Ablation	2	4130037	1052312	12-08-03	Jonathan/Steeve	0,8	33A/03	625121	5767909	20	1161	1	Follow-up	Helicopter, walk	Hand shovel
4130080	Premier	Ablation	2	4130035	1052343	12-08-03	Jonathan/Steeve	0,9	33A/03	622762	5770412	20		1	Follow-up	Helicopter, walk	Hand shovel
4130081	Premier	Ablation	2	4130035	1052343	12-08-03	Jonathan/Steeve	0,55	33A/03	622672	5770499	20	1173	1	Follow-up	Helicopter, walk	Hand shovel
4130082	Premier	Ablation	2	4130035	1052343	12-08-03	Jonathan/Steeve	0,82	33A/03	622567	5770627	20	1142	1	Follow-up	Helicopter, walk	Hand shovel
4130083	Premier	Ablation	2	4130035	1052343	12-08-03	Jonathan/Steeve	0,75	33A/03	622403	5770719	20	1148	1	Follow-up	Helicopter, walk	Hand shovel
4130084	Premier	Ablation	2	4130026	1052474	11-08-03	Jonathan/Steeve	0,55	33A/03	619950	5772011	20	1177	1	Follow-up	Helicopter, walk	Hand shovel
4130085	Premier	Ablation	2	4130026	1052474	11-08-03	Jonathan/Steeve	0,5	33A/03	620160	5771793	20	1176	1	Follow-up	Helicopter, walk	Hand shovel
4130086	Premier	Ablation	2	4130026	1052474	11-08-03	Jonathan/Steeve	0,55	33A/03	620055	5771894	20	1169	1	Follow-up	Helicopter, walk	Hand shovel
4130087	Premier	Ablation	2	4130026	1052474	11-08-03	Jonathan/Steeve	0,65	33A/03	620263	5771691	20	1165	1	Follow-up	Helicopter, walk	Hand shovel
4130088	Premier	Ablation	2	4130021	1052522	11-08-03	Patrice Gagnon	0,8	33A/03	617240	5773000	20	1052	1	Follow-up	Helicopter, walk	Hand shovel
4130089	Premier	Ablation	2	4130021	1052522	11-08-03	Patrice Gagnon	1,1	33A/03	617046	5773171	20	1041	1	Follow-up	Helicopter, walk	Hand shovel
4130090	Premier	Lodgement	2	4130021	1052522	11-08-03	Patrice Gagnon	0,5	33A/03	617130	5773094	20	1060	1	Follow-up	Helicopter, walk	Hand shovel
4130091	Premier	Ablation	2	4130021	1052521	11-08-03	Patrice Gagnon	0,9	33A/03	616935	5773278	20	1050	1	Follow-up	Helicopter, walk	Hand shovel
4130092	Premier	Lodgement	2		1052529	11-08-03	Alexandre B.	1	33A/03	618664	5773665	20	1046	1	Regional	Helicopter, walk	Hand shovel
4130093	Premier	Ablation	2		1052540	11-08-03	Alexandre B.	0,7	33A/03	616999	5775465	20	1554	1	Regional	Helicopter, walk	Hand shovel
4130094	Premier	Ablation	2		1052541	11-08-03	Alexandre B.	0,6	33A/03	618025	5775350	20	1542	1	Regional	Helicopter, walk	Hand shovel
4130095	Premier	Ablation	2		1052581	11-08-03	Alexandre B.	0,9	33A/03	619979	5775264	20	1559	1	Regional	Helicopter, walk	Hand shovel
4130096	Premier	Ablation	2	4130036	1052484	11-08-03	Patrice Gagnon	0,6	33A/03	621857	5774876	20	765	1	Follow-up	Helicopter, walk	Hand shovel
4130097	Premier	Ablation	2	4130036	1052484	11-08-03	Patrice Gagnon	0,6	33A/03	621719	5774945	20	763	1	Follow-up	Helicopter, walk	Hand shovel
4130098	Premier	Ablation	2	4130036	1052484	11-08-03	Patrice Gagnon	0,7	33A/03	621587	5775048	20	776	1	Follow-up	Helicopter, walk	Hand shovel
4130099	Premier	Ablation	2	4130036	1052484	11-08-03	Patrice Gagnon	1	33A/03	621629	5775219	20	773	1	Follow-up	Helicopter, walk	Hand shovel
4130100	Premier	Lodgement	2	4130036	1052490	11-08-03	Patrice Gagnon	0,4	33A/03	621673	5775369	20	772	1	Follow-up	Helicopter, walk	Hand shovel
4130101	Premier	Ablation	2	4130029	1052487	11-08-03	Steeve/Jonathan	0,8	33A/03	623386	5774794	20	1168	1	Follow-up	Helicopter, walk	Hand shovel

Sample number	Property	Material type	Survey	Target	Claim	Date	Sampler	Depth (m)	NTS map	UTMX	UTMY	Weight (kg)	Spike	Bags	Survey type	Transport	Excavation
4130102	Premier	Ablation	2	4130029	1052486	11-08-03	Steeve/Jonathan	0,85	33A/03	623014	5774698	20	1175	1	Follow-up	Helicopter, walk	Hand shovel
4130103	Premier	Ablation	2	4130029	1052486	11-08-03	Steeve/Jonathan	0,55	33A/03	623051	5774551	20	1179	1	Follow-up	Helicopter, walk	Hand shovel
4130104	Premier	Ablation	2	4130036	1052490	11-08-03	Steeve/Jonathan	1,05	33A/03	621895	5775729	20	1178?	1	Follow-up	Helicopter, walk	Hand shovel
4130105	Premier	Ablation	2	4130036	1052490	11-08-03	Steeve/Jonathan	0,4	33A/03	621968	5775610	20	1167	1	Follow-up	Helicopter, walk	Hand shovel
4130106	Premier	Ablation	2	4130036	1052490	11-08-03	Steeve/Jonathan	0,7	33A/03	622038	5775561	20	1174	1	Follow-up	Helicopter, walk	Hand shovel
4130107	Premier	Ablation	2	4130036	1052491	11-08-03	Steeve/Jonathan	0,75	33A/03	622182	5775398	20	1163	1	Follow-up	Helicopter, walk	Hand shovel
4130108	Premier	Ablation	2	4130036	1052485	11-08-03	Steeve/Jonathan		33A/03	622293	5775312	20	1171		Follow-up	Helicopter, walk	Hand shovel
4130109	Premier	Ablation	2	4130036	1052485	11-08-03	Steeve/Jonathan	0,55	33A/03	622403	5775200	20		1	Follow-up	Helicopter, walk	Hand shovel
4130110	Premier	Ablation	2	4130029	1052485	10-08-03	Jonathan L.	0,65	33A/03	622510	5775106	20	1556	1	Follow-up	Helicopter, walk	Hand shovel
4130111	Premier	Ablation	2	4130029	1052485	10-08-03	Alexandre B.	0,6	33A/03	622617	5774987	20	1547	1	Follow-up	Helicopter, walk	Hand shovel
4130112	Premier	Ablation	2	4130029	1052486	10-08-03	Alexandre B.	0,7	33A/03	622727	5774879	20	1545	1	Follow-up	Helicopter, walk	Hand shovel
4130113	Premier	Ablation	2	4130029	1052486	10-08-03	Alexandre B.	0,8	33A/03	622878	5774846	20	1551	1	Follow-up	Helicopter, walk	Hand shovel
4130114	Premier	Lodgement	2	4130029	1052487	10-08-03	Alexandre B.	0,9	33A/03	623361	5774978	20	1558	1	Follow-up	Helicopter, walk	Hand shovel
4130115	Premier	Lodgement	2	4130029	1052487	10-08-03	Alexandre B.	0,7	33A/03	623274	5775044	20	1548	1	Follow-up	Helicopter, walk	Hand shovel
4130116	Premier	Ablation	2	4130029	1052486	10-08-03	Alexandre B.	0,55	33A/03	623159	5775141	20	1560	1	Follow-up	Helicopter, walk	Hand shovel
4130117	Premier	Ablation	2	4130029	1052486	10-08-03	Alexandre B.	0,8	33A/03	623053	5775244	20	1557	1	Follow-up	Helicopter, walk	Hand shovel
4130118	Premier	Ablation	2	4130029	1052486	10-08-03	Alexandre B.	0,7	33A/03	622957	5775351	20	1550	1	Follow-up	Helicopter, walk	Hand shovel
4130119	Premier	Lodgement	2	4130029	1052492	10-08-03	Alexandre B.	0,75	33A/03	622881	5775443	20	1555	1	Follow-up	Helicopter, walk	Hand shovel
4130120	Premier	Ablation	2	4130036	1052490	10-08-03	Patrice Gagnon	0,7	33A/03	621701	5776293	20	775	1	Follow-up	Helicopter, walk	Hand shovel
4130121	Premier	Ablation	2	4130036	1052490	10-08-03	Patrice Gagnon	1	33A/03	622005	5776279	20	761	1	Follow-up	Helicopter, walk	Hand shovel
4130122	Premier	Ablation	2	4130036	1052491	10-08-03	Patrice Gagnon	0,8	33A/03	622256	5776281	20	771	1	Follow-up	Helicopter, walk	Hand shovel
4130123	Premier	Ablation	2	4130036	1052491	10-08-03	Patrice Gagnon	0,5	33A/03	622497	5776287	20	770	1	Follow-up	Helicopter, walk	Hand shovel
4130124	Premier	Ablation	2	4130036	1052492	10-08-03	Patrice Gagnon	1	33A/03	622763	5776294	20	764	1	Follow-up	Helicopter, walk	Hand shovel
4130125	Premier	Ablation	2	4130036	1052492	10-08-03	Jean-Michel B.	0,6	33A/03	623007	5776300	20	766	1	Follow-up	Helicopter, walk	Hand shovel
4130126	Premier	Ablation	2	4130036	1052493	10-08-03	Patrice Gagnon	0,9	33A/03	623252	5776309	20	769	1	Follow-up	Helicopter, walk	Hand shovel
4130127	Premier	Ablation	2	4130029	1052493	10-08-03	Patrice Gagnon	0,6	33A/03	623513	5776316	20	778	1	Follow-up	Helicopter, walk	Hand shovel
4130128	Premier	Ablation	2	4130029	1052493	10-08-03	Patrice Gagnon	1	33A/03	623769	5776335	20	777	1	Regional	Helicopter, walk	Hand shovel
4130129	Premier	Ablation	2	4130029	1052494	10-08-03	Patrice Gagnon	0,6	33A/03	624000	5776333	20	?	1	Follow-up	Helicopter, walk	Hand shovel
4130130	Premier	Ablation	2	4130029	1052494	10-08-03	Patrice Gagnon	0,7	33A/03	624259	5776330	20	774	1	Follow-up	Helicopter, walk	Hand shovel
4130131	Premier	Ablation	2	4130029	1052495	11-08-03	Patrice Gagnon	1	33A/03	624506	5776339	20	780	1	Follow-up	Helicopter, walk	Hand shovel
4130132	Premier	Lodgement	2	4130029	1052495	11-08-03	Patrice Gagnon	0,4	33A/03	624781	5776362	20	767	1	Follow-up	Helicopter, walk	Hand shovel
4130133	Premier	Ablation	2	4130029	1052496	11-08-03	Patrice Gagnon	0,8	33A/03	625000	5776368	20	779	1	Follow-up	Helicopter, walk	Hand shovel
4130134	Premier	Ablation	2	4130029	1052496	11-08-03	Patrice Gagnon	0,7	33A/03	625242	5776370	20	770	1	Follow-up	Helicopter, walk	Hand shovel
4130135	Premier	Ablation	2		1052440	12-08-03	Alexandre B.	0,7	33A/03	627331	5773338	20	1543	1	Regional	Helicopter	Hand shovel

Sample number	Property	Material type	Survey	Target	Claim	Date	Sampler	Depth (m)	NTS map	UTMX	UTMY	Weight (kg)	Spike	Bags	Survey type	Transport	Excavation
4130136	Premier	Ablation -	2		1052438	12-08-03	Alexandre B.	0,5	33A/03	628026	5772067	20	?	1	Regional	Helicopter	Hand shovel
4130137	Premier	Ablation	2		1052432	12-08-03	Alexandre B.	0,5	33A/03	628016	5770432	20	?	1	Regional	Helicopter	Hand shovel
4130138	Premier	Ablation	2		1052429	12-08-03	Alexandre B.	0,7	33A/03	628155	5769004	20	1544	1	Regional	Helicopter	Hand shovel
4130139	Premier	Ablation	2		1052423	12-08-03	Alexandre B.	1	33A/03	628198	5767760	20	1541	1	Regional	Helicopter	Hand shovel
4130140	Premier	Outwash	2		1052418	12-08-03	Alexandre B.	0,5	33A/03	627168	5767102	20	1164	1	Regional	Helicopter	Hand shovel
4130141	Premier	Ablation	2		1052316	12-08-03	Alexandre B.	0,85	33A/03	626899	5767795	20		1	Regional	Helicopter	Hand shovel

Sample number	Soil structure: Depth (cm) and color									Grain size					Roundness				Cobbles type	structure	Material type	Weight (kg)	Dry	Wet	Unstaved	Staved
	A ₀	Color	A ₁	Color	B ₁	Color	B ₂	Color	C	Color	Pebble	Grits	Sand	Silt	Clay	Angular	Subangular	Rounded								
4130068	5	Brown	5	Black	5	Grey	30	Beige orangeous	40	Beige	20	40	40						X	Granite, amphibolite, gneiss	Sableux		X		X	
4130069					5	Grey	20	Orangeous brown	30	Beige	15	15	40	30		X				Granite, granodiorite, tonalite	Sandy till	20	X		X	
4130070	5	Brown	5	Black	5	Grey	30	Orange		Grey	10	10	70	10			X			Granitoide, amphibolite, gabbro	Sandy till	20	X		X	
4130071	5	Brown	2	Black	5	Grey	20	Orange		Grey	10	10	50	17	3	X	X			Granitoide, gneiss	Sandy till	20	X		X	
4130072	1	Brown	3	Black	1	Grey	30	Orange		Beige	10	15	55	15		X	X			Granitoide, gneiss	Sandy till	20	X		X	
4130073	10	Brown	5	Black	2	Grey	30	Orange		Grey	10	15	70	5		X	X			Granitoide, gneiss, amphibolite	Sandy till	20	X		X	
4130074	15	Brown	5	Black	5	Grey	30	Orange		Grey	5	10	80	5		X				Granitoide	Sandy till	20	X		X	
4130075	3	Brown	2	Black	10	Grey	20	Orange			15	10	70	5		X	X	X		Granitoide, gneiss	Sandy till	20	X		X	
4130076	5	Brown	5	Black	15	Grey	30	Brown orange	40	Beige	15	20	80	5		X	X			Gneiss, granite, amphibolite	Sandy till	20	X		X	
4130077	5	Brown	5	Black	10	Grey	15	Brown red	25	Beige orange	20	20	40	10	5	X				Granite, gneiss, amphibolite	Sandy till	20	X		X	
4130078	5	Brown	5	Black	10	Grey	15	Brown orange	30	Beige	25	20	50	5		X	X			Granite, amphibolite, paragneiss	Sandy till	20	X		X	
4130079	5	Brown	5	Black	10	Grey	40	Brown orange	20	Orangeous beige	20	20	55	5			X			Gneiss, granite	Sandy till	20	X		X	
4130080	5	Brown	10	Black	10	Grey	15	Brown orange	50	Beige	10	15	70	5		X				Granite, metagreywack, amphibolite, granodiorite	Sandy till	20	X		X	
4130081	5	Brown	5	Black	5	Grey	10	Brown red	30	Beige grey	10	20	85	5			X			Gneiss granitique, granitoide, amphibolite	Sandy till	20	X		X	
4130082	2	Brown	5	Black	5	Grey	10	Brown orange	80	Beige	15	20	80	5		X	X			Gneiss, granite, amphibolite	Sandy till	20	X		X	
4130083	5	Brown	5	Black	10	Grey	15	Orangeous brown	40	Beige grey	10	20	85	5			X			Gneiss, paragneiss, granitoide	Sandy till	20	X		X	
4130084	5	Brown	5	Black	5	Grey	15	Brown orange	25	Beige	15	25	50	10		X	X			Granite, gabbro grits	Sandy till	20	X		X	
4130085	5	Brown	5	Black	5	Grey	30	Brown orange	5		15	20	80	5		X	X			Granite	Sandy till	20	X		X	
4130086	5	Brown	5	Black	5	Grey	15	Orangeous brown	25	Beige	15	20	55	10		X				Granitoide	Sandy till	20	X		X	
4130087	5	Brown	5	Black	5	Grey	20	Brown orange	30	Beige	15	15	55	15		X				Granitoide	Sandy till	20	X		X	
4130088	10	Brown	5	Black	5	Grey	20	Brown		Grey	10	10	55	20	5	X	X			Granite, gneiss, amphibolite	Sandy, silty till	20		X	X	
4130089	40	Brown	5	Black	15	Grey	30	Brown			10	10	55	20	5	X	X			Granodiorite, gneiss	Sandy, silty till	20	X		X	
4130090	5	Brown	5	Black	5	Grey	20	Black		Grey	0	10	40	40	10	X	X			Granite, gneiss	Sandy, silty till	20	X		X	
4130091	25	Brown	5	Black	3	Grey	20	Orange		Grey	5	15	75	5		X	X			Amphibolite, granitoide, gabbro, gneiss	Sandy till	20	X		X	
4130092	20	Brown	20	Black	10	Grey	30	Darker brown	20	Beige		5	35	50	10	X				Granitoide, amphibolite	Silty till	20		X	X	
4130093	2	Brown	3	Black	5	Grey	20	Brown orange	40	Beige	10	5	75	10		X				Granite, tonalite, amphibolite	Sandy till	20	X		X	
4130094	5	Brown	5	Black	5	Grey	25	Orangeous brown	20	Beige	15	5	30	50		X				Granite, gabbro, gneiss, amphibole	Silty till	20	X		X	
4130095	10	Brown	10	Black	10	Grey	50	Rusty brown	10	Beige	15	10	45	25	5	X				Granitoide, gneiss	Sandy till	20	X		X	
4130096	3	Brown	3	Black	3	Grey	15	Orange		Grey	5	5	65	20	5	X	X			Granitoide, gneiss, amphibolite, gabbro	Sandy, silty till	20	X		X	
4130097	3	Brown	3	Black	7	Grey	20	Orange		Grey	10	10	65	15	0	X	X			Granitoide, gneiss	Sandy till	20	X		X	
4130098	20	Brown	3	Black			20	Orange		Grey	5	10	65	15	5	X	X			Amphibolite, granitoide, gabbro	Sandy till	20	X		X	
4130099	15	Brown	5	Black	7	Grey	15	Orange		Grey	15	5	80	17	3	X	X			Granitoide, gneiss, amphibolite, gabbro	Sandy till	20	X		X	
4130100	10	Brown	3	Black	5	Grey	10	Orange		Grey	1	5	44	40	10	X	X			Granitoide, amphibolite, gabbro	Sandy till	20	X		X	
4130101	5	Brown	5	Black	10	Grey	20	Brown orange	40	Beige	5	15	65	15		X	X			Granitoide	Sandy till	20	X		X	
4130102	5	Brown	5	Black	10	Grey	15	Orangeous brown	50	Beige	5	15	65	10			X			Granitoide	Sandy till	20	X		X	

Sample number	Soil structure: Depth (cm) and color									Grain size					Roundness				Cobbles type	structure	Material type	Weight (kg)	Dry	Wet	Unslaved	Sieved
	A ₀	Color	A ₁	Color	B ₁	Color	B ₂	Color	C	Color	Pebble	Grits	Sand	Silt	Clay	Angular	Subangular	Rounded								
4130103	5	Brown	5	Black	5	Grey	10	Brown	30	Beige	5	15	70	10		X	X			Granite, granodiorite	Sandy till	20	X		X	
4130104	10	Brown	15	Black	20	Grey	40	Brown orange	20	Beige	25	15	50	10		X	X			Granitoide	Sandy till	20		X	X	
4130105	5	Brown	10	Black	5	Grey	10	Brown orange	10	Beige	20	15	55	10	0	X	X			Granitoide, granodiorite	Sandy till	20	X		X	
4130106	5	Brown	5	Black	10	Grey	20	Orangeous brown	30	Beige brown	15	15	60	10		X				Granitoide	Sandy till	20		X	X	
4130107	5	Brown	5	Black	5	Grey	30	Brown orange	30	Beige	10	20	45	20	5	X	X			Granitoide	Sandy till	20	X		X	
4130108	5	Brown	5	Black	10	Grey	15	Brown orange	30	Beige grey	15	25	50	10	0	X				Paragneiss, granite	Sandy till	20	X		X	
4130109	5	Brown	5	Black	10	Grey	15	Brown orange	20	Beige	10	15	45	25	5	X	X			Granitoide	Sandy till	20	X		X	
4130110	5	Brown	10	Black	10	Grey	10	Brown orange	30	Beige	10	20	60	10		X				Granitoide, amphibolite	Sandy till	20	X		X	
4130111	5	Brown	10	Black	10	Grey	10	Darker brown	25	Beige	10	20	60	10		X				Granite, gneiss, granodiorite	Sandy till	20	X		X	
4130112	5	Brown	10	Black	15	Grey	20	Brown orange	20	Beige	10	20	65	5		X				Granite, gneiss, basalt	Sandy till	20	X		X	
4130113	5	Brown	5	Black	10	Grey	30	Brown	30	Beige	10	15	65	10		X				Granite, granodiorite, amphibole, gneiss	Sandy till	20	X		X	
4130114	40	Brown	10	Black					55	Beige			5	55	40		X			Granitoide	Silty till	20	X		X	
4130115	5	Brown	5	Black	2	Mauve grey	10	Darker brown	30	Beige	5	10	65	20		X				Gneiss, granite, mafique	Sandy till	20	X		X	
4130116	5	Brown	5	Black	5	Grey	20	Brown orange	20	Brown beige	10	20	40	30		X				Granitoide	Sandy, silty till	20	X		X	
4130117	5	Brown	5	Black	10	Grey	30	Orangeous brown	30	Beige	10	5	20	65		X				Granite, gabbro, granodiorite, amphibolite	Silty till	20	X		X	
4130118	10	Brown	10	Black	10	Grey	20	Orangeous brown	20	Beige	20	10	50	10		X	X			Gneiss, granitoide, gabbro, amphibolite	Sandy till	20	X		X	
4130119	15	Brown	10	Black	5	Grey	15	Orangeous brown	30	Beige	5	5	50	40			X			Granitoide, gabbro	Sandy till	20	X		X	
4130120	5	Brown	10	Black	5	Grey		Orange			5	10	70	10	5	X	X			Granitoide, gneiss	Sandy till	20	X	X		
4130121	10	Brown	10	Black	7	Grey	13	Orange		Beige	5	10	55	25	5		X			Gneiss, granitoide, amphibolite	Sandy till	20	X		X	
4130122	10	Brown	10	Black	10	Grey	35	Orange		Grey	5	5	80	5	5		X	X		Granitoide, gneiss, amphibolite	Sandy till	20	X		X	
4130123	10	Brown	10	Black	5	Grey	20	Orange		Grey	5	15	40	5	5		X	X		Granitoide, gneiss, quartzarenite	Sandy till	20		X	X	
4130124	10	Black	15	Brown black	10	Grey brown	20	Brown		Beige	10	5	65	17	3	X	X			Gneiss, granitoide, amphibolite	Sandy till	20	X		X	
4130125	5	Brown	5	Black	5	Grey	15	Orange		Grey	5	10	60	20	5		X			Granitoide, gneiss, gabbro	Sandy, silty till	20	X		X	
4130126	5	Black	5	Brown black	15	Brown orange	10	Orangeous		Grey brown	10	10	55	20	5		X	X		Gneiss, granitoide	Sandy till	20	X		X	
4130127	5	Brown	5	Black	5	Grey	20	Orange		Beige	5	5	70	15	5	X	X			Granitoide, gneiss, amphibolite	Sandy till	20	X		X	
4130128	5	Brown	10	Black	5	Grey	20	Orange		Beige	5	10	70	12	3	X	X			Granitoide, gneiss, amphibolite	Sandy till	20	X		X	
4130129	5	Brown	10	Black	3	Grey	45	Orange			5	5	80	10	0	X	X			Granitoide, gneiss	Sandy till	20	X		X	
4130130	80	Brown	1	Black	3	Grey	15	Orange		Beige	10	5	50	25	10	X	X			Gneiss, granitoide, amphibolite	Sandy, silty till	20	X		X	
4130131	40	Brown	1	Black	2	Grey	20	Brown		Beige	1	5	49	35	10	X				Amphibolite, granitoide, gneiss	Sandy, silty till	20		X	X	
4130132	5		3		3		15	Orange	14	Grey	0	5	40	50	10	X				Gneiss, amphibolite	Silty till	20		X	X	
4130133	3	Brown	2	Black	3	Grey	30	Orange		Grey	10	10	75	5			X	X		Granitoide, gabbro, amphibolite, gneiss	Sandy till	20	X		X	
4130134	5	Brown	5	Black	5	Grey	15	Orange		Grey	5	15	60	15	5	X	X			Granitoide, gneiss	Sandy till	20	X		X	
4130135	10	Brown	10	Black			20	Brown	30	Beige	15	10	45	25	5	X				Granitoide, gneiss, amphibolite	Sandy till	20		X	X	
4130136	5	Brown			5	Grey	20	Brown	20	Beige	10	20	60	10		X				Granite, gabbro, amphibolite, granodiorite	Sandy till	20	X		X	
4130137	5	Brown			5	Grey	20	Orangeous brown	20	Beige	20	25	40	15		X				Granite, tonalite, gneiss	Sandy till	20	X		X	

Sample number	Soil structure: Depth (cm) and color								Grain size					Roundness				Cobbles type	structure	Material type	Weight (kg)	Dry	Wet	Unstoved	Sieved		
	A ₀	Color	A ₁	Color	B ₁	Color	B ₂	Color	C	Color	Pebble	Grfts	Sand	Silt	Clay	Angular	Subangular									Rounded	Subrounded
4130138	3	Brown	3	Black	5	Grey	30	Orangeous brown	20	Beige	10	20	60	10		X				Granite, tonalite, gneiss		Sandy till	20	X		X	
4130139	5	Brown	5	Black	10	Grey	60	Brown black	20	Beige	20	10	30	30	10	X				Quartzite, granite, tonalite		Silty till	20		X	X	
4130140	5	Brown	10	Black	5	Grey	30	Orangeous brown			20	25	50	5			X			Granitoides, amphibolite		Sandy	20		X	X	
4130141	5	Brown	10	Black	10	Grey black	30	Pale brown	30	Beige	20	10	40	25	5	X				Granite, diorite, tonalite, quartzite		Sandy till	20		X	X	

Sample number	Glacial material type	Surface boulder type	Outcrop	Glacial forms	Landform, drainage, surrounding
4130068	Glacial-fluvio, esker	Granite.			Pris dans flanc d'un esker (flanc sud), couleur beige, subarrondi, B ₂ très riche en sable, C plus riche en gravier.
4130069	Fusion till	Granite, granodiorite, tonalite			Echantillon récolté à 75m au nord d'un lac, sur la pente sud d'un buton de till, sec drainage excellent, beaucoup d'arbres (brûlé) till sablo-silteux, peut ressembler à un fluvio mais l'angulosité des blocs laisse croire le contraire. Beaucoup de blocs anguleux en surface.
4130070	Fusion till	Pink granite, gneiss, granitoïde			Till de fusion sablo-silt pris au sommet d'une colline de till avec beaucoup de blocs en surface. Endroit plat, sec, faible végétation, lac à 100m au nord.
4130071	Fusion till	Granitoïde, gneiss			Till de fusion sablo-silteux pris sur le dessus plat et sec d'une butte de till nord-sud, beaucoup de blocs en surface, ancien brûlé, présence de ferri-croûte mince, plus épaisse au bas de la butte près d'un lac, lac à 3m au nord, pente moyenne vers le lac.
4130072	Fusion till	Granitoïde			Till de fusion sablo-silteux échantillonné dans une forêt peu dense, endroit sec, quelques blocs en surface, légèrement en pente vers le sud, échantillonné sur une butte de till.
4130073	Fusion till	Gneiss, granitoïde			Till de fusion sablo-silteux avec beaucoup de gravier (mixé de toutes ses fines, pris sur le flanc sud d'une colline nord-est-sud-ouest à 3m d'un lac. Endroit penté faiblement, sec, peu boisé, pris dans un champ de buttes glacées à matériel bivalent, ressemble à esker mais plus anguleux.
4130074	Fusion till	Pink granite, gneiss, paragneiss to biotite gneiss			Till de fusion sablo-silteux avec beaucoup de gravier, ressemble à un fluvio mais plus anguleux, pris sur une colline de matériel glaciaire, flanc sud, pente douce, endroit sec, peu boisé, près d'un lac (30m)
4130075	Fusion till	Gneiss, granitoïde, paragneiss to biotite garnet			Till de fusion sablo-silteux, beaucoup de gravier (cailloux et gravier). Till dérivé des fines, ressemble à matériel d'esker mais anguleux, pris sur le sommet plat et sec d'une colline de dépôts glaciaires avec beaucoup de blocs en surface. fragments décomposés de mafiques dans échantillon horizon B. Échantillonné. Iron blocs et croûtes.
4130076	Fusion till	Big, a lot, granite			Till sablo-silteux et compact, à flanc nord d'une chaîne de collines abruptes échantillon pris entre deux pics, bon drainage, colline entourée de swamp, couleur beige-gris, blocs - boulder de l'horizon B ₁ .
4130077	Fusion till	Granite			Beaucoup de blocs (granite) en B1 et B2, entouré de gros boudiers, drainage moyen (un peu humide) bordure de swamp (200), till sablo-silteux, couleur beige orangé, dans le bas d'une petite colline.
4130078	Fusion till	Frequently, different size granite			Till sablo-silteux, fond plat entre deux collines (petites), bon drainage, bloc de granite B ₁ , couleur beige-orange pâle.
4130079	Fusion till	Granite, gneiss			Dans le bas du flanc sud (340) d'une colline, plusieurs gros boudiers, plusieurs collines alentour, plusieurs blocs dans B ₂ et B ₁ , till sablo-silteux riche en cailloux, couleur beige orangé.
4130080	Fusion till	Low quantity of granite			Till sablo-silteux, environnement collinaire, conclusion : 1 à l'est, 1 au nord, 1 au sud-ouest, l'autre trou se situant au centre, endroit bien drainé, bloc se trouvant dans le B ₁ - B ₂
4130081	Fusion till	Granite			Till sablo-silteux, facilement échantillonnable, couleur gris beige, forêt brûlée, en bordure d'une swamp (ouest), peu de blocs en surface, plusieurs petites collines, très bon drainage.
4130082	Fusion till	White and pink granite, medium quantity			Till sablo-silteux, sur sommet d'un buton, drainage excellent, facilement échantillonnable, blocs en faible quantité, un beau gris beige.
4130083	Fusion till	Granitoïde and gneiss			Till sablo-silteux, croûte 5 à 10cm, au sommet d'une colline (à l'ombre d'un arbre), environnement = alternance de swamp et de collines, très bon drainage, couleur gris beige.
4130084	Fusion till	Some block in surface			Till sablo-silteux, dans le début d'une petite pente, bon drainage, végétation moyenne.
4130085	Fusion till	A few block of granite, little			Till sablo-silteux situé sur un affleurement, bon drainage, bonne oxydation (ferri-croûte), végétation moyenne.
4130086	Fusion till	Granite			Beau till sablo-silteux, bon drainage, gros blocs autour, plusieurs blocs dans B ₂ et C, environnement = forêt peu dense.
4130087	Fusion till				Beau till sable et silt, facile à échantillonner, pas de cailloux dans B ₂ , plusieurs cailloux dans C, au pied d'un buton, bordure d'une swamp, bon drainage.
4130088	Fusion till	Granite and gneiss			Till de fusion sablo-silteux pris sur le flanc nord d'une montagne de granite, endroit en pente faible vers le nord, boisé faiblement et sec, peu de blocs en surface, quelques uns dans le till.
4130089	Fusion till	N/D			Till de fusion sablo-silteux avec beaucoup de cailloux, pris flanc sud d'une montagne recouverte de till, endroit en pente forte vers le sud, sec, boisé de bouleaux, pas de blocs en surface.
4130090	Basal till	Granitoïde, gneiss	Granitoïde		Till de fond pris au dessus d'un affleurement, peu de cailloux, très siltieux, mélange avec B ₂ parce que couche trop mince pour remplir le sac, endroit plat, sec, légère pente vers le nord-est, blocs métriques en surface.
4130091	Fusion till	N/D			Till de fusion sablo-silteux pris sur le dessus de la montagne, endroit sec, boisé, pente vers le nord faible, pas de blocs en surface, peu dans le till, sable assez fin dans le till.
4130092	Basal till				Echantillon récolté sur une pente dans une petite vallée entre 2 montagnes, penté vers l'ouest, mauvais drainage, humide, ruissellement, roc peu profond, difficile de trouver du till. Impossible de voir l'affleurement (boulons) au-dessus.
4130093	Fusion till				Echantillon récolté sur un buton de till, partout autour le sol est composé de fluvial et c'est plat, sec, drainage excellent, beaucoup d'arbres, till sablo-silteux.
4130094	Fusion till	Granite	Granite		Echantillon récolté sur un petit buton de till à proximité d'un affleurement de granite (5m environ). Quelques blocs de granite en surface, sec, peu d'arbres, bon drainage, till siltieux, semble recouvrir un fluvio glaciaire creusé.
4130095	Fusion till				Echantillon récolté à 75m au nord-est d'un lac, penté vers le sud-ouest, drainage moyen, peu d'arbres, blocs, till sablo-silteux.
4130096	Fusion till	Granitoïde, gneiss			Till fusion sablo-silteux pris en bordure d'une swamp (10m) au bas d'une colline de till est-ouest, endroit plat, sec, boisé, légère pente vers le sud (swamp)
4130097	Fusion till	Granitoïde			Till de fusion sablo-silteux pris sur le till est-ouest, situé près d'une swamp (50m), endroit boisé faiblement.
4130098	Fusion till	N/D			Till de fusion sablo-silteux pris sur le flanc nord d'une butte de till, endroit en pente douce vers le nord, sec, boisé, pas de blocs en surface.
4130099	Fusion till	N/D			Till de fusion sablo-silteux avec silt pris sur le sommet d'une butte de till est-ouest, endroit plat et sec, boisé, pas de blocs en surface, beaucoup dans le till.
4130100	Basal till	Gneiss, gabbro, granitoïde			Till de fond siltieux pris sur une plaine (champ de blocs) en bordure d'un lac, endroit plat, sec, boisé, blocs décimétriques en surface. Pas de blocs dans le till, quelques cailloux et un peu de gravier, beau till de fond siltieux.
4130101	Fusion till	Low quantity of granite, little			Till sablo-silteux situé à 120m de la cible qui se trouvait dans le centre d'un lac (le minuscule), sur un buton peu boisé, endroit bien drainé, sans difficulté.
4130102	Fusion till	no			Beau till sablo-silteux sur colline en bordure d'un lac, peu de cailloux en B ₁ , un peu de croûte (10 à 15cm), peu d'arbres, bon drainage.
4130103	Fusion till	Few of granite and granodiorite			Till sablo-silteux sur bas d'un buton, 1er essai => argile unique, 2e essai => à 10m de la cible, bon drainage, forêt peu dense.
4130104	Fusion till	A lot of granite, big			Till très sablo-silteux, beaucoup de blocs autour, en pente, trouvé beaucoup de fluvio alentour (3 essais), mauvais drainage
4130105	Fusion till	Beautiful granitoïde and granodiorite			Till sablo-silteux situé au bas d'une pente douce, bien drainée, très compacté, légère oxydation, blocs en grande quantité, forêt légère.
4130106	Fusion till	Granitoïde			Bordure d'une swamp (150'), point impossible à reciter en plein milieu d'une swamp, beau till sablo-silteux facilement échantillonnable, très mauvais drainage, plusieurs blocs granite en B ₁ , dans le bas d'une pente moyenne.
4130107	Fusion till	A few granitoïde, big			Till sablo-silteux humide sur fond plat mal drainé. Environnement composé d'arbres, beaucoup de gros blocs d'horizon B ₂
4130108	Fusion till	Granite, paragneiss			Till sablo-silteux (till de fusion) bon drainage, un peu de croûte environ 5cm, beaucoup de blocs en B ₁ , => granite, paragneiss, pente douce, environnement => forêt.
4130109	Fusion till	Granitoïde			Pris dans une légère pente 70m nord-est d'un champ de boulder, bon drainage, till sablo-silteux sec. Quelques gros blocs de granite, horizon B ₁ , environnement composé de forêt moyennement dense.
4130110	Fusion till				Echantillon récolté sur un buton (trop sablo-silteux dans les flancs), très sablo-silteux, bon drainage, beaucoup de cailloux.
4130111	Fusion till				Echantillon récolté sur une pente légère vers le nord, lac à 75m au nord, till sablo-silteux, bon drainage, très blocs, quantité d'arbres moyennes.
4130112	Fusion till	Granitoïde			Echantillon récolté entre des butons de till, endroit très vallonné, quelques blocs en surface, difficilement creusable (compact et blocs) beaucoup de blocs, sec et bon drainage, quantité moyenne d'arbres, till de fusion sablo-silteux, légère pente vers le sud.
4130113	Fusion till	Granitoïde			Echantillon récolté sur un buton de till, lac à 25m au sud-ouest, quelques blocs en surface, sec et bien drainé, peu d'arbres, till de fusion sablo-silteux.

Sample number	Glacial material type	Surface boulder type	Outcrop	Glacial forms	Landform, drainage, surrounding
4130114	Basal till				Échantillon récolté en bas d'une légère pente vers l'est, lac à 75m vers le sud-est, plat et mauvais drainage, quantité d'arbres moyenne, till silto-sableux.
4130115	Basal till				Échantillon récolté entre des buttes de till, terrain valonneux, sec et peu d'arbres mais très très compact et peu de cailloux, till de fond.
4130116	Fusion till				Bordure d'un lac, blocs anguleux, plusieurs gros boulders, till silteux, bon drainage
4130117	Fusion till	Granitoïde			Échantillon récolté sur le flanc sud-ouest d'une montagne, quelques blocs de granite en surface, till silteux, pente forte, beaucoup d'arbres, bon drainage.
4130118	Fusion till				Échantillon récolté au sommet d'un buton plat au sommet, till sableux, sec, beaucoup d'arbres, excellent drainage
4130119	Basal till	Granite			Plat et sec, bon drainage, peu de blocs, till sablo-silteux, beaucoup d'arbres
4130120	Fusion till	ND	Gneiss		Till de fusion sableux avec peu de cailloux et till, endroit en pente faible, flanc sud d'une butte de till, endroit sec et boisé. On a ramassé horizon B ₂ parce qu'on est arrivé sur un affleurement à 70cm, nappe chlorésium à 70cm
4130121	Fusion till	Gneiss, granitoïde			Till de fusion sableux avec bonne proportion de sable fin (silt), endroit en pente moyenne vers le sud, sec, boisé, peu de blocs en surface et dans le till, beaucoup de boulettes silteuses ± oxydées
4130122	Fusion till	Granitoïde			Till de fusion sableux avec des passes sableuses et silteuses, endroit plat et sec, boisé, affleurement cailloux et blocs en surface, flanc sud de montagne.
4130123	Fusion till	Gneiss, granitoïde			Till de fusion sablo-graveleux, un peu de fines, endroit plat et humide, sommet butte affleurement, endroit boisé, affleurement à 0.5m, till au-dessus avec poches de sable et silt.
4130124	Fusion till	Gneiss, granitoïde	Gneiss		Till de fusion, flanc nord d'une colline légèrement en pente (vers le nord), endroit peu boisé, assez sec, fin du trou sur affleurement à 1m, humide, quelques blocs en surface, décimétrique à métrique.
4130125	Fusion till	ND			Till de fusion sablo-silteux pris en bordure d'un lac (5m), endroit plat sec et boisé, au pied de montagne, beau till gris, pas de blocs en surface, peu dans le till.
4130126	Fusion till	Gneiss			Till de fusion, bas d'une butte de till côté ouest, endroit sec, légère pente, à proximité d'une swamp environ 15m
4130127	Fusion till	Gneiss, granitoïde			Till de fusion sableux avec bonne proportion de silt, endroit plat et sec, boisé au sommet d'une colline de till, peu de blocs en surface, un peu dans le till, beau matériel gris caillouteux, légère pente vers l'est.
4130128	Fusion till	Gneiss, granitoïde			Till de fusion sableux pris au pied d'une colline de till, près d'un ruisseau (5m), endroit plat, sec peu boisé, peu de blocs en surface, un peu dans le till, couche de fluviatile sous le till.
4130129	Fusion till	ND	Pink granite		Till de fusion sableux avec un peu de silt et cailloux, pris sur le dessus d'un affleurement, endroit plat et sec, boisé, ressemble à un fluvi mais cailloux anguleux, peu de blocs en surface et dans le till
4130130	Fusion till	:Gneiss			Till de fusion sablo-silteux pris sur le flanc nord d'une montagne de gneiss, pente douce vers le nord, endroit plat, sec et boisé, ressemble à till de fond T32-131 mais moins compact et plus cailloux, petite butte de till au nord d'une falaise
4130131	Basal till	ND	Gneiss		Till de fond sablo-silteux, flanc d'une montagne de gneiss (flanc nord), pente moyenne vers le nord, endroit sec et peu boisé
4130132	Basal till	Gneiss, granitoïde	Gneiss		Till de fond silteux pris sur le dessus d'un affleurement à 40cm de profondeur, endroit plat, sec et boisé, blocs métriques en surface, ruisseau à proximité (5m plus bas), fragments d'amphibolite désagrégés dans le till
4130133	Fusion till	Gneiss, gabbro			Till de fusion sableux pris sur le flanc sur d'une butte de till, endroit sec, boisé, en pente forte vers le sud, cailloux et blocs en surface, champ de blocs métriques au bas de la pente à 10m, au travers champ blocs couche mince de till recouvrant du fluviatile
4130134	Fusion till	ND	Gneiss		Till fusion sableux avec bonne proportion de fines et grossières, endroit plat, sec et boisé, pris sur le sommet d'une butte de till étagée, pas de blocs en surface, pente assez forte vers le sud-ouest à 2m
4130135	Fusion till	Gneiss	Gneiss		Échantillon récolté à 25m à l'ouest d'un lac, plat et sec, drainage mauvais, peu d'arbres, till sableux
4130136	Fusion till	Granite, gneiss			Échantillon récolté entre des buttes de till, terrain valonneux, beaucoup de blocs en surface, pas bon drainage, peu d'arbres, till sableux.
4130137	Fusion till	Tonalite, gneiss, granite			Échantillon récolté à 10m à l'est d'une swamp au sommet d'un petit buton de till, beaucoup de gros blocs en surface, sec, bon drainage, peu d'arbres, till sableux, bloeux, difficile à récolter.
4130138	Fusion till	Granite, tonalite			Échantillon récolté à 25m à l'ouest d'un lac, plat et sec, peu d'arbres, beaucoup de gros blocs en surface, till sableux, à l'est d'un buton de till
4130139	Fusion till	Quartzite, granite			Terrain valonneux, légère pente vers le nord, beaucoup de blocs à proximité, peu d'arbres, drainage moyen, sec, till silteux
4130140	Fluvio glacial	Granite			Colline au nord (50m), bordure d'un lac au sud (10m) beaucoup de blocs en surface, ressemble à fluvi glaciaire, très mauvais drainage, beaucoup de blocs dans B ₁ et B ₂ , pas capable de se rendre à C
4130141	Fusion till	Granite			Échantillon récolté en bordure nord d'une swamp et bordé sud d'un buton de till, beaucoup de gros blocs anguleux en surface, plat, peu d'arbres, humide, drainage mauvais, till sableux, trou se remplit d'eau, bloeux

APPENDIX 3

SAMPLE PROCESSING

- Table 1: Sieving and grain size distribution
- Table 2: Heavy minerals preconcentration
- Table 3: Heavy liquids and magnetic separation
- Table 4: Quality controls
- Table 5: Comments

Sample ID	Property	Material type	Wet Sieving before Table						Grain size			
			Initial Weight	Pebbles <9.5 mm	Grits 2-9.5 mm	Coarse Sand 1-2 mm	Sand and Silt <1mm	Witness Sample	Pebbles <9.5 mm	Grits 2-9.5 mm	Coarse Sand 1-2 mm	Sand and Silt <1mm
			(kg)	(kg)	(kg)	(kg)	(kg wet)	300 g	%	%	%	%
4130068	Premier	Esker	20,5	2,6	3,78	1,93	13,5	311	13%	18%	9%	59%
4130069	Premier	Fusion	17,0	3,2	1,54	0,63	12,0	314	19%	9%	4%	69%
4130070	Premier	Fusion	20,0	4,4	3,14	1,31	11,5	297	22%	16%	7%	56%
4130071	Premier	Fusion	19,0	4,0	3,77	1,61	11,0	384	21%	20%	8%	50%
4130072	Premier	Fusion	18,0	4,0	2,06	1,08	11,0	298	22%	11%	6%	60%
4130073	Premier	Fusion	17,0	1,7	2,74	1,78	12,5	384	10%	16%	10%	63%
4130074	Premier	Fusion	18,5	2,2	1,82	2,04	15,0	370	12%	10%	11%	67%
4130075	Premier	Fusion	20,0	6,0	5,08	1,83	8,0	331	30%	25%	9%	35%
4130076	Premier	Fusion	17,5	1,7	2,76	2,45	10,5	426	10%	16%	14%	60%
4130077	Premier	Fusion	21,5	1,4	2,17	3,38	13,2		6%	10%	16%	68%
4130078	Premier	Fusion	25,0	2,4	5,34	6,40	13,8	541	10%	21%	26%	43%
4130079	Premier	Fusion	21,5	1,8	5,36	8,40	9,6	551	8%	25%	39%	28%
4130080	Premier	Fusion	22,6	2,7	3,07	2,33	15,0	477	12%	14%	10%	64%
4130081	Premier	Fusion	26,5	3,1	2,67	1,99	20,0	295	12%	10%	8%	71%
4130082	Premier	Fusion	25,0	3,2	2,92	2,07	17,0	359	13%	12%	8%	67%
4130083	Premier	Fusion	22,0	2,7	2,69	2,34	15,0	284	12%	12%	11%	65%
4130084	Premier	Fusion	29,0	3,9	3,37	1,81	11,6	355	13%	12%	6%	69%
4130085	Premier	Fusion	10,0	1,8	1,34	0,80	8,0	321	18%	13%	8%	61%
4130086	Premier	Fusion	19,0	3,6	3,78	1,61	11,0	334	19%	20%	8%	53%
4130087	Premier	Fusion	22,0	5,3	2,37	1,07	14,0	337	24%	11%	5%	60%
4130088	Premier	Fusion	16,0	2,6	1,02	4,02	9,0	408	16%	6%	25%	53%
4130089	Premier	Fusion	15,0	4,9	2,79	1,34	7,8	429	33%	19%	9%	40%
4130090	Premier	Fond	20,0	4,1	2,58	1,16	9,4	339	20%	13%	6%	61%
4130091	Premier	Fusion	20,0	2,8	2,49	2,25	13,5	326	14%	12%	11%	62%
4130092	Premier	Fond	24,0	1,4	1,90	1,50	18,0	369	6%	8%	6%	80%
4130093	Premier	Fusion	19,0	2,1	1,45	1,03	15,0	391	11%	8%	5%	76%
4130094	Premier	Fusion	20,0	6,5	3,22	1,38	11,0	426	33%	16%	7%	45%
4130095	Premier	Fusion	17,0	4,3	2,85	1,69	10,0	414	25%	17%	10%	48%
4130096	Premier	Fusion	15,5	3,3	1,46	0,70	11,4	355	21%	9%	5%	65%
4130097	Premier	Fusion	21,5	2,6	3,62	1,81	12,5	286	12%	17%	8%	63%
4130098	Premier	Fusion	22,5	2,9	1,28	6,14	14,0	367	13%	6%	27%	54%
4130099	Premier	Fusion	20,5	5,0	3,34	1,68	10,5	302	25%	16%	8%	51%
4130100	Premier	Fond	17,0	2,5	2,28	1,21	8,0	331	15%	13%	7%	65%
4130101	Premier	Fusion	17,0	1,5	0,93	0,60	12,0	302	9%	5%	4%	82%
4130102	Premier	Fusion	20,0	3,8	1,56	0,97	15,0	297	19%	8%	5%	68%

Sample ID	Property	Material type	Wet Sieving before Table						Grain size			
			Initial Weight	Pebbles <9.5 mm	Grits 9.5 mm	Coarse Sand 1-2 mm	Sand and Silt <1mm	Witness Sample	Pebbles <9.5 mm	Grits 2-9.5 mm	Coarse Sand 1-2 mm	Sand and Silt <1mm
			(kg)	(kg)	(kg)	(kg)	(kg wet)	300 g	%	%	%	%
4130103	Premier	Fusion	19,0	4,0	1,88	0,78	13,0	330	21%	10%	4%	65%
4130104	Premier	Fusion	19,0	4,3	2,43	1,37	11,0	429	22%	13%	7%	58%
4130105	Premier	Fusion	18,0	3,8	3,26	2,15	10,0	434	21%	18%	12%	49%
4130106	Premier	Fusion	19,0	3,6	1,75	1,07	12,0	316	19%	9%	6%	66%
4130107	Premier	Fusion	20,5	4,6	3,02	1,43	11,0	349	22%	15%	7%	56%
4130108	Premier	Fusion	20,0	4,3	2,14	1,22	13,0	319	21%	11%	6%	62%
4130109	Premier	Fusion	22,0	4,5	2,97	1,11	10,0	331	21%	14%	5%	61%
4130110	Premier	Fusion	18,0	5,8	2,62	1,56	11,5	397	32%	15%	9%	45%
4130111	Premier	Fusion	17,0	4,2	2,79	1,22	11,0	331	24%	16%	7%	52%
4130112	Premier	Fusion	23,0	6,5	3,36	1,77	15,0	319	28%	15%	8%	49%
4130113	Premier	Fusion	20,0	5,1	1,89	1,04	16,5	346	26%	9%	5%	60%
4130114	Premier	Fond	25,5	3,6	4,79	2,60	10,0	380	14%	19%	10%	57%
4130115	Premier	Fond	18,5	2,4	2,05	1,71	15,0	322	13%	11%	9%	67%
4130116	Premier	Fusion	19,0	6,5	2,17	1,21	10,0	314	34%	11%	6%	48%
4130117	Premier	Fusion	21,0	2,9	2,31	1,46	16,0	323	14%	11%	7%	68%
4130118	Premier	Fusion	20,0	3,4	2,28	1,74	13,0	411	17%	11%	9%	63%
4130119	Premier	Fond	17,5	2,5	1,52	0,84	13,0	377	14%	9%	5%	72%
4130120	Premier	Fusion	25,0	4,7	3,36	1,69	15,0	457	19%	13%	7%	61%
4130121	Premier	Fusion	17,0	0,4	0,33	0,25	16,0	317	2%	2%	1%	94%
4130122	Premier	Fusion	22,0	3,7	2,91	2,87	13,0	403	17%	13%	13%	57%
4130123	Premier	Fusion	23,5	4,7	4,21	1,95	12,0	392	20%	18%	8%	54%
4130124	Premier	Fusion	24,0	3,7	2,20	1,35	18,0	356	16%	9%	6%	70%
4130125	Premier	Fusion	23,5	3,7	2,76	1,41	15,0	398	16%	12%	6%	67%
4130126	Premier	Fusion	21,5	4,7	2,55	1,20	12,0	379	22%	12%	6%	61%
4130127	Premier	Fusion	17,0	3,5	1,62	0,81	12,0	300	20%	10%	5%	65%
4130128	Premier	Fusion	18,0	2,8	1,34	7,81	4,0	411	15%	7%	43%	34%
4130129	Premier	Fusion	19,5	1,7	0,82	0,84	16,5	394	9%	4%	4%	83%
4130130	Premier	Fusion	19,0	3,4	1,44	1,01	13,0	390	18%	8%	5%	69%
4130131	Premier	Fusion	19,5	2,4	1,47	1,00	14,0	400	12%	8%	5%	75%
4130132	Premier	Fond	16,0	1,1	0,40	0,25	13,0	470	7%	2%	2%	89%
4130133	Premier	Fusion	22,5	5,6	4,55	1,83	12,5	382	25%	20%	8%	47%
4130134	Premier	Fusion	21,0	4,3	2,35	1,26	12,0	433	20%	11%	6%	63%
4130135	Premier	Fusion	20,5	3,3	2,04	1,50	12,0	428	16%	10%	7%	67%
4130136	Premier	Fusion	22,0	7,0	3,72	2,25	10,0	380	32%	17%	10%	41%
4130137	Premier	Fusion	19,0	6,0	4,39	1,64	10,0	299	32%	23%	9%	37%

Sample ID	Property	Material type	Wet Sieving before Table						Grain size			
			Initial Weight	Pebbles <9.5 mm	Grits 2-9.5 mm	Coarse Sand 1-2 mm	Sand and Silt <1mm	Witness Sample	Pebbles <9.5 mm	Grits 2-9.5 mm	Coarse Sand 1-2 mm	Sand and Silt <1mm
			(kg)	(kg)	(kg)	(kg)	(kg wet)	300 g	%	%	%	%
4130138	Premier	Fusion	21,0	5,2	3,42	1,61	11,0	300	25%	16%	8%	51%
4130139	Premier	Fusion	23,0	4,0	2,39	1,14	13,0	367	17%	10%	5%	67%
4130140	Premier	Outwash	23,0	11,0	3,40	1,08	8,6	422	48%	15%	5%	33%
4130141	Premier	Fusion	22,0	4,8	2,15	1,67	12,0	330	22%	10%	8%	61%

Sample ID	Property	Material type	Wifley table and Dry sieving									Acid Wash (0.25-1mm)			Dry sieving after acid wash			
			Jig concentrate 1-2 mm g.	Table concentrate 0-1 mm g.	0.25mm - 1mm g.	0.15mm - 0.25mm g.	<0.15mm g.	Meddling g.	0.25mm - 1mm #2 g.	Meddling #2 g.	Mud sample 300 g	Initial weight (g)	Weight (g) after	Send for Heavy Liquid Separation g.	Initial weight (g)	Weight after (g)		
4130068	Premier	Esker		1688	726	360	602	2668		484		234	317	726	719	484		
4130069	Premier	Fusion		1357	446	340	570	1673					239	446	437	437		
4130070	Premier	Fusion		1654	593	548	535	3194					131	593	539	506	539	506
4130071	Premier	Fusion		1299	520	392	386	2446					274	520	493	493		
4130072	Premier	Fusion		1242	454	431	355	1979					154	454	433	433		
4130073	Premier	Fusion		1307	437	527	341	2212					52	437	429	429		
4130074	Premier	Fusion		2396	835	971	589	3174		539	307		188	835	821	512	539	512
4130075	Premier	Fusion		1317	369	652	296	1950					46	369	356	356		
4130076	Premier	Fusion		1367	440	558	369	2272					219	440	428	428		
4130077	Premier	Fusion		1549	511	612	427	1860					97	511	498	498		
4130078	Premier	Fusion		1573	483	613	477	1852						483	474	474		
4130079	Premier	Fusion		1212	477	391	342	1166					86	477	462	462		
4130080	Premier	Fusion		1769	678	630	459	3681		499	164		134	678	667	499		
4130081	Premier	Fusion		1937	720	662	555	3668		542	137		150	720	681	519	542	519
4130082	Premier	Fusion		1830	616	656	556	3492					204	616	594	594		
4130083	Premier	Fusion		1808	693	561	555	3030		530	117		157	692	648	518	530	518
4130084	Premier	Fusion		1319	464	463	390	1811					140	464	452	452		
4130085	Premier	Fusion		1082	426	390	266	1220					116	426	374	374		
4130086	Premier	Fusion		1142	382	451	308	2291					64	382	366	366		
4130087	Premier	Fusion		2099	764	661	674	2444		597	154		111	764	752	597		
4130088	Premier	Fusion		1301	494	428	379	1578					118	494	471	471		
4130089	Premier	Fusion		1038	402	396	240	1451					113	402	373	373		
4130090	Premier	Fond		1438	682	414	340	1685		528	123		145	682	651	528		
4130091	Premier	Fusion		1303	443	455	405	2665					169	443	420	420		
4130092	Premier	Fond		1499	516	568	413	3120					207	516	478	478		
4130093	Premier	Fusion		1353	433	510	410	2162					254	433	417	417		
4130094	Premier	Fusion		1635	1037	329	269	1998		495	492		186	1037	990	495		
4130095	Premier	Fusion		1398	613	430	355	2971					167	613	501	501		
4130096	Premier	Fusion		1557	684	511	361	1737		439	179		123	684	620	439		
4130097	Premier	Fusion		1824	747	616	460	2495		494	190		104	747	683	494		
4130098	Premier	Fusion		2162	683	765	713	1867		436	209		151	683	646	436		
4130099	Premier	Fusion		1824	840	619	365	1864		484	228		69	840	713	484		
4130100	Premier	Fond		1342	644	377	321	874		501	121		165	644	618	501		
4130101	Premier	Fusion		1699	510	594	593	1782					151	510	467	467		
4130102	Premier	Fusion		1330	415	503	412	2313					186	415	379	379		
4130103	Premier	Fusion		1365	494	505	370	1770					176	494	469	469		
4130104	Premier	Fusion		1516	715	514	287	2018		469	168		191	715	639	469		
4130105	Premier	Fusion		1315	532	522	261	2029					131	532	460	460		
4130106	Premier	Fusion		1344	438	577	329	1802					136	438	398	398		
4130107	Premier	Fusion		1334	410	546	378	2042					213	410	392	392		
4130108	Premier	Fusion		1379	364	705	310	2423					50	364	335	335		
4130109	Premier	Fusion		1556	577	571	407	2026					130	577	551	521	551	521
4130110	Premier	Fusion		1886	841	672	373	3033		506	275		92	841	784	506		
4130111	Premier	Fusion		1581	770	485	325	2501		493	190		80	770	718	493		
4130112	Premier	Fusion		1474	575	577	320	2754					76	575	551	528	551	528
4130113	Premier	Fusion		1557	562	569	424	3196					87	562	534	522	534	522
4130114	Premier	Fond		1715	845	473	395	2096		452	383		147	845	836	452		
4130115	Premier	Fond		1954	932	630	390	2630		603	278		106	932	882	603		
4130116	Premier	Fusion		1108	469	421	218	1688					128	469	424	424		
4130117	Premier	Fusion		1492	475	604	413	2588					206	475	441	441		
4130118	Premier	Fusion		1352	512	554	285	2273					91	512	489	489		
4130119	Premier	Fond		1419	502	528	388	2183					502	484	484			
4130120	Premier	Fusion		1776	819	636	309	4336		431	301		112	819	730	431		
4130121	Premier	Fusion		1572	322	621	627	2006					260	322	301	301		

Sample ID	Property	Material type	Wifley table and Dry sieving									Acid Wash (0.25-1mm)			Dry sieving after acid wash	
			Jig concentrate 1-2 mm g.	Table concentrate 0.1 mm g.	0.25mm- 1mm g.	0.15mm- 0.25mm g.	<0.15mm g.	Meddling g.	0.25mm- 1mm #2 g.	Meddling #2 g.	Mud sample 300 g	Initial weight (g) g.	Weight (g) after g.	Send for Heavy Liquid Separation g.	Initial weight (g) g.	Weight after (g) g.
4130122	Premier	Fusion		1753	731	670	350	2789	491	211	125	731	702	491		
4130123	Premier	Fusion		1590	764	550	275	1992	508	233	157	764	742	508		
4130124	Premier	Fusion		1917	734	768	415	2721	502	172	133	734	692	520		
4130125	Premier	Fusion		1824	837	662	325	2480	469	318	116	837	809	489		
4130126	Premier	Fusion		1595	713	586	298	2340	438	248	149	713	686	438		
4130127	Premier	Fusion		1599	622	587	390	2017	409	172	148	622	582	409		
4130128	Premier	Fusion		1364	445	568	349	2306			125	445	422	422		
4130129	Premier	Fusion		1550	542	641	366	2789			1152	542	499	499		
4130130	Premier	Fusion		1623	609	639	358	2641			136	609	578	526	578	526
4130131	Premier	Fusion		1506	597	528	380	2631			194	597	556	466	556	466
4130132	Premier	Fond		1082	309	411	361	1426			226	309	285	285		
4130133	Premier	Fusion		1217	374	497	345	2118			101	374	364	364		
4130134	Premier	Fusion		1121	477	364	280	1789			135	477	448	448		
4130135	Premier	Fusion		1098	422	394	283	2393			170	422	412	412		
4130136	Premier	Fusion		956	377	401	179	1941			63	377	362	362		
4130137	Premier	Fusion		1165	463	445	258	2129			119	463	441	441		
4130138	Premier	Fusion		1189	411	448	284	2062			88	411	391	391		
4130139	Premier	Fusion		1593	586	615	392	2738			107	500	569	514	569	514
4130140	Premier	Outwash		1057	482	381	194	1430			86	482	448	448		
4130141	Premier	Fusion		1157	395	503	260	2705			104	395	378	378		

Sample ID	Property	Material type	Heavy Liquid, Methylene Iodide (3.3 g/cc)			Hand Magnet		Magnetic Separator Frantz				
			Initial Weight (g)	Lights (g)	Heavies (g)	No-Mag (g)	Mag (g)	Processed (g)	0.1 A	0.17 A	0.4 A	>0.4A
			g.	g.	g.	g.	g.	g.	g.	g.	g.	g.
4130068	Premier	Esker	484	466,10	17,75	12,38	5,36	12,38	1,43	5,01	5,79	0,16
4130069	Premier	Fusion	437	422,90	13,16	9,99	3,16	9,99	0,81	5,40	3,64	0,15
4130070	Premier	Fusion	506	484,40	21,69	18,33	3,36	18,33	1,25	13,39	3,53	0,11
4130071	Premier	Fusion	493	468,00	23,35	20,64	2,70	20,64	1,15	14,44	4,89	0,15
4130072	Premier	Fusion	433	411,30	20,66	18,80	1,86	18,8	0,77	13,68	4,17	0,16
4130073	Premier	Fusion	429	407,20	21,13	19,91	1,22	19,91	0,8	14,68	4,26	0,14
4130074	Premier	Fusion	512	494,80	16,42	14,29	2,13	14,29	0,8	9,33	4,00	0,14
4130075	Premier	Fusion	356	305,40	49,31	40,58	8,72	40,58	2,59	31,00	6,74	0,19
4130076	Premier	Fusion	428	408,00	18,52	14,67	3,85	14,67	1,04	9,30	4,12	0,17
4130077	Premier	Fusion	498	473,20	23,87	21,15	2,72	21,15	1,02	13,54	6,38	0,19
4130078	Premier	Fusion	474	439,90	33,83	25,14	8,69	25,14	2,43	15,81	6,64	0,23
4130079	Premier	Fusion	462	421,80	40,28	25,75	14,53	25,75	3,55	15,21	6,73	0,23
4130080	Premier	Fusion	499	474,20	24,60	16,35	8,25	16,35	1,87	9,42	4,87	0,17
4130081	Premier	Fusion	519	497,00	21,78	15,43	6,34	15,43	1,66	9,50	4,09	0,17
4130082	Premier	Fusion	594	575,10	18,56	14,35	4,20	14,35	0,91	8,90	4,38	0,14
4130083	Premier	Fusion	518	502,90	16,49	12,01	4,48	12,01	1,27	6,08	4,48	0,16
4130084	Premier	Fusion	452	437,80	13,41	9,17	4,24	9,17	0,77	5,67	2,59	0,11
4130085	Premier	Fusion	374	367,80	5,81	3,59	2,22	3,59	0,34	2,24	0,96	0,03
4130086	Premier	Fusion	366	348,80	16,44	10,40	6,04	10,40	0,77	5,97	3,52	0,10
4130087	Premier	Fusion	597	577,50	19,01	13,16	5,85	13,16	1,20	7,39	4,42	0,14
4130088	Premier	Fusion	471	465,90	4,38	3,88	0,50	3,88	0,15	2,55	1,12	0,05
4130089	Premier	Fusion	373	363,50	9,65	6,75	2,90	6,75	0,60	3,61	2,45	0,07
4130090	Premier	Fond	528	520,60	7,09	6,20	0,89	6,20	0,29	3,88	1,88	0,11
4130091	Premier	Fusion	420	399,90	19,52	13,19	6,32	13,19	1,73	7,43	3,84	0,17
4130092	Premier	Fond	478	466,00	11,24	8,79	2,45	8,79	0,97	4,59	3,11	0,10
4130093	Premier	Fusion	417	402,70	14,52	10,71	3,81	10,71	1,29	4,97	4,29	0,14
4130094	Premier	Fusion	495	481,00	13,62	8,76	4,86	8,76	1,27	4,15	3,25	0,08
4130095	Premier	Fusion	501	495,80	4,51	2,50	2,01	2,50	0,34	0,77	1,25	0,07
4130096	Premier	Fusion	439	432,50	6,82	4,93	1,89	4,93	0,66	2,40	1,79	0,07
4130097	Premier	Fusion	494	479,20	12,99	9,37	3,62	9,37	1,42	4,29	3,56	0,08
4130098	Premier	Fusion	436	429,00	10,56	7,61	2,94	7,61	0,95	4,53	1,97	0,09
4130099	Premier	Fusion	484	478	8,54	5,79	2,75	5,79	0,56	2,60	2,52	0,08
4130100	Premier	Fond	501	493	10,57	7,95	2,62	7,95	0,85	4,98	2,03	0,08
4130101	Premier	Fusion	467	455,8	10,32	7,6	2,72	7,6	1,26	4,34	1,91	0,08
4130102	Premier	Fusion	379	359,1	19,77	13,62	6,15	13,62	1,73	8,13	3,60	0,15
4130103	Premier	Fusion	469	455	11,97	8,63	3,34	8,63	0,86	4,55	3,14	0,08
4130104	Premier	Fusion	469	456	16,05	12,54	3,5	12,54	1,19	7,58	3,62	0,13
4130105	Premier	Fusion	460	328,3	9,14	6,23	2,91	6,23	0,71	3,52	1,93	0,04

Sample ID	Property	Material type	Heavy Liquid, Methylene Iodide (3.3 g/cc)			Hand Magnet		Magnetic Separator Frantz				
			Initial Weight (g)	Lights (g)	Heavies (g)	No-Mag (g)	Mag (g)	Processed (g)	0.1 A	0.17 A	0.4 A	>0.4A
			g.	g.	g.	g.	g.	g.	g.	g.	g.	g.
4130106	Premier	Fusion	398	385,3	12,83	9,02	3,8	9,02	1,00	4,80	3,12	0,12
4130107	Premier	Fusion	392	378,2	13,66	10,56	3,09	10,56	0,85	4,79	4,79	0,11
4130108	Premier	Fusion	335	320,5	14,12	11,57	2,55	11,57	0,85	6,50	4,10	0,12
4130109	Premier	Fusion	521	513	3,75	2,34	1,41	2,34	0,37	0,93	1,04	0,01
4130110	Premier	Fusion	506	503	5,96	4,37	1,59	4,37	0,58	2,09	1,65	0,04
4130111	Premier	Fusion	493	485	10,28	7,35	2,93	7,35	1,1	3,85	2,30	0,09
4130112	Premier	Fusion	528	506	21,91	15,93	5,97	15,93	2,24	9,48	4,08	0,10
4130113	Premier	Fusion	522	511	10,41	7,54	2,87	7,54	1,15	4,13	2,15	0,08
4130114	Premier	Fond	452	450	4,72	4,34	0,38	4,34	0,34	2,54	1,35	0,08
4130115	Premier	Fond	603	578	27,55	10,83	7,72	19,83	2,96	12,77	3,95	0,11
4130116	Premier	Fusion	424	409	5,89	5,05	0,84	5,05	0,65	1,98	2,33	0,07
4130117	Premier	Fusion	441	429	13,07	9,28	3,79	9,28	1,2	5,30	2,67	0,09
4130118	Premier	Fusion	489	469	20,63	15,02	5,61	15,02	2,13	9,11	3,63	0,11
4130119	Premier	Fond	484	471	13,33	9,45	3,88	9,45	1,36	5,36	2,58	0,12
4130120	Premier	Fusion	431	418	15,11	11,6	3,51	11,6	1,34	8,00	2,11	0,12
4130121	Premier	Fusion	301	296	4,75	3,1	1,65	3,1	0,42	1,85	0,76	0,03
4130122	Premier	Fusion	491	470	23,5	19,35	4,15	19,35	2,71	11,46	4,93	0,19
4130123	Premier	Fusion	508	492	19,09	18,15	0,94	18,15	1,9	10,87	5,16	0,20
4130124	Premier	Fusion	520	499	24,55	17,62	6,93	17,62	2,22	10,85	4,30	0,21
4130125	Premier	Fusion	489	469	23,03	17,77	5,25	17,77	1,81	10,80	4,89	0,23
4130126	Premier	Fusion	438	423	18,08	13,21	4,87	13,21	1,73	8,05	3,27	0,17
4130127	Premier	Fusion	409	399	12,54	8,98	3,56	8,98	1,21	4,73	2,94	0,10
4130128	Premier	Fusion	422	406	15,65	10,82	4,83	10,82	1,75	6,47	2,50	0,08
4130129	Premier	Fusion	499	484	15,21	11,34	3,87	11,34	1,23	6,63	3,28	0,15
4130130	Premier	Fusion	526	514	13,95	13,23	0,72	13,23	1,34	8,27	3,49	0,12
4130131	Premier	Fusion	466	451	16,01	11,63	4,38	11,63	1,78	6,44	3,29	0,12
4130132	Premier	Fond	285	271	14,54	10,4	4,14	10,4	1,65	6,43	2,21	0,10
4130133	Premier	Fusion	364	325	40,46	27,17	13,29	27,17	4,53	16,66	5,71	0,23
4130134	Premier	Fusion	448	425	23,56	14,96	8,6	14,96	2,6	8,95	3,28	0,13
4130135	Premier	Fusion	412	397	15,66	10,81	4,85	10,81	1,46	5,50	3,71	0,11
4130136	Premier	Fusion	362	341	22,5	21,97	0,53	21,97	0,22	19,76	1,88	0,08
4130137	Premier	Fusion	441	406	35,6	34,13	1,47	34,13	0,53	30,92	2,55	0,09
4130138	Premier	Fusion	391	364	27,47	26,07	1,4	26,07	0,68	22,62	2,66	0,08
4130139	Premier	Fusion	514	479	35,98	24,04	11,94	24,04	3,89	13,62	6,30	0,22
4130140	Premier	Outwash	448	426	20,25	14,66	5,59	14,66	1,23	9,58	3,69	0,12
4130141	Premier	Fusion	378	367	10,96	8,44	2,52	8,44	0,91	5,40	2,08	0,04

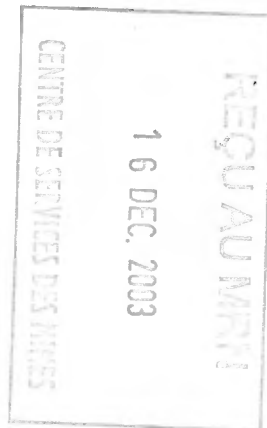
Sample ID	Property	Material type	Metallurgical balances				Spikes			Heavy mineral proportion			Metallurgical balance: Wilfley Table				
			Magnetic separation	Heavy liquids	Wet Solving	Weighted/ calculated mud	Dry solving	Index	Added	Recovered	Magnetite %	In initial sample	In table concentrate	In heavy liquids	Garnet	Magnetite	Pyroboles
			+ : Gains; - : Losses				Added during sampling			%			%				
4130068	Premier	Esfer	0,00	-0,15	1,6	114%	0,00				30%	0,09%	1,1%	3,7%			
4130069	Premier	Fusion	0,00	-0,94	0,6	106%	-1,00	1553	6	6	24%	0,08%	1,0%	3,0%			
4130070	Premier	Fusion	-0,05	0,09	0,6	106%	22,00	1054	8	8	15%	0,11%	1,3%	4,3%	96,73	94,93	83,71
4130071	Premier	Fusion	-0,02	-1,65	1,8	119%	-1,00	1044	8	8	12%	0,12%	1,8%	4,7%			
4130072	Premier	Fusion	-0,02	-1,04	0,4	104%	-2,00	1059	8	8	9%	0,11%	1,7%	4,8%			
4130073	Premier	Fusion	-0,03	-0,67	2,1	121%	-2,00	1053	6	6	6%	0,12%	1,6%	4,9%			
4130074	Premier	Fusion	-0,02	-0,78	3,0	125%	-1,00	1046	2	2	13%	0,09%	0,7%	3,2%			
4130075	Premier	Fusion	-0,07	-1,29	1,2	118%	0,00	1056	2	2	18%	0,25%	3,7%	13,9%			
4130076	Premier	Fusion	-0,04	-1,48	0,4	104%	0,00	1156	2	2	21%	0,11%	1,4%	4,3%			
4130077	Premier	Fusion	-0,02	-0,93	-1,4	91%	1,00				11%	0,11%	1,5%	4,8%			
4130078	Premier	Fusion	-0,03	-0,27	3,5	134%	0,00	1159	8	7	26%	0,14%	2,2%	7,1%			
4130079	Premier	Fusion	-0,03	0,08	4,2	177%	-2,00	1161	2	2	36%	0,19%	3,3%	6,7%			
4130080	Premier	Fusion	-0,02	-0,20	0,9	107%	-2,00				34%	0,11%	1,4%	4,9%	98,05	97,98	77,37
4130081	Premier	Fusion	-0,02	-0,22	1,6	109%	0,00	1173	6	6	29%	0,08%	1,1%	4,2%			
4130082	Premier	Fusion	-0,03	-0,34	0,6	103%	-2,00	1142	4	4	23%	0,07%	1,0%	3,1%			
4130083	Premier	Fusion	-0,02	1,39	1,1	108%	1,00	1148	6	6	27%	0,07%	0,8%	3,2%			
4130084	Premier	Fusion	-0,03	-0,79	-8,0	59%	-2,00	1177	4	4	32%	0,05%	1,0%	3,0%			
4130085	Premier	Fusion	-0,02	-0,39	2,3	139%	0,00	1176	2	2	38%	0,06%	0,5%	1,6%			
4130086	Premier	Fusion	-0,04	-0,76	1,4	114%	-1,00	1169	8	8	37%	0,09%	1,4%	4,5%			
4130087	Premier	Fusion	-0,01	-0,49	1,1	108%	0,00	1165	10	10	31%	0,09%	0,9%	3,2%			
4130088	Premier	Fusion	-0,01	-0,72	1,0	112%	0,00	1052	4	4	11%	0,03%	0,3%	0,9%			
4130089	Premier	Fusion	-0,02	0,15	2,3	142%	0,00	1041	2	2	30%	0,06%	0,9%	2,6%			
4130090	Premier	Fond	-0,04	-0,31	-2,4	79%	-2,00	1060	10	9	13%	0,04%	0,5%	1,3%	99,43	97,26	95,33
4130091	Premier	Fusion	-0,03	-0,58	1,3	111%	0,00	1050	10	10	32%	0,10%	1,5%	4,6%			
4130092	Premier	Fond	-0,02	-0,76	-0,8	96%	-2,00	1546	2	2	22%	0,05%	0,7%	2,4%			
4130093	Premier	Fusion	-0,02	0,22	1,0	107%	0,00	1554	8	8	26%	0,08%	1,1%	3,5%			
4130094	Premier	Fusion	-0,01	-0,38	2,5	130%	0,00	1542	4	4	36%	0,07%	0,8%	2,8%			
4130095	Premier	Fusion	-0,07	-0,89	2,2	128%	0,00	1559	8	8	45%	0,03%	0,3%	0,9%			
4130096	Premier	Fusion	-0,01	0,32	1,7	117%	-1,00	765	10	10	28%	0,04%	0,4%	1,6%			
4130097	Premier	Fusion	-0,02	-1,81	-0,7	95%	-1,00	763	6	6	28%	0,06%	0,7%	2,6%			
4130098	Premier	Fusion	-0,08	3,56	2,2	118%	-1,00	776	2	2	28%	0,05%	0,5%	2,4%			
4130099	Premier	Fusion	-0,03	2,54	0,4	104%	0,00	773	6	6	32%	0,04%	0,5%	1,8%			
4130100	Premier	Fond	-0,01	2,57	-2,7	75%	0,00	772	4	4	25%	0,06%	0,8%	2,1%	99,16	99,02	91,68
4130101	Premier	Fusion	-0,01	-0,88	-1,7	88%	-2,00	1168	6	6	26%	0,06%	0,6%	2,2%			
4130102	Premier	Fusion	-0,01	-0,13	1,6	112%	0,00	1175	10	10	31%	0,10%	1,5%	5,2%			
4130103	Premier	Fusion	0,00	-2,03	1,0	108%	4,00	1179	8	7	28%	0,06%	0,9%	2,6%			
4130104	Premier	Fusion	-0,03	3,05	0,5	105%	0,00	1178	6	6	22%	0,08%	1,1%	3,4%			
4130105	Premier	Fusion	-0,03	-122,56	1,6	119%	0,00	1167	4	2	32%	0,05%	0,7%	2,0%			
4130106	Premier	Fusion	0,01	0,13	-0,2	98%	0,00	1174	8	8	30%	0,07%	1,0%	3,2%			
4130107	Premier	Fusion	-0,03	-0,14	-0,1	99%	0,00	1163	6	5	23%	0,07%	1,0%	3,5%			
4130108	Premier	Fusion	0,00	-0,38	0,9	108%	0,00	1171	2	2	18%	0,07%	1,0%	4,2%			
4130109	Premier	Fusion	0,01	-4,25	-3,1	76%	-1,00				38%	0,02%	0,2%	0,7%			
4130110	Premier	Fusion	-0,01	2,96	3,9	151%	0,00	1556	2	2	27%	0,03%	0,3%	1,2%	99,30	94,31	93,42
4130111	Premier	Fusion	-0,01	2,28	2,5	129%	-1,00	1547	4	4	29%	0,06%	0,7%	2,1%			
4130112	Premier	Fusion	-0,04	-0,09	3,9	136%	-2,00	1545	10	9	27%	0,10%	1,5%	4,1%			
4130113	Premier	Fusion	-0,03	-0,59	4,9	142%	-2,00	1551	2	2	26%	0,05%	0,7%	2,0%			
4130114	Premier	Fond	-0,03	2,72	-4,2	71%	-2,00	1558	6	4	8%	0,02%	0,3%	1,0%			
4130115	Premier	Fond	-0,04	2,55	2,9	124%	-2,00	1548	6	6	28%	0,15%	1,4%	4,6%			
4130116	Premier	Fusion	-0,02	-9,11	1,2	114%	0,00	1560	10	10	14%	0,03%	0,5%	1,4%			
4130117	Premier	Fusion	-0,02	1,07	2,0	114%	0,00	1557	4	4	29%	0,06%	0,9%	3,0%			
4130118	Premier	Fusion	-0,04	0,63	0,8	106%	-1,00	1550	10	10	27%	0,10%	1,5%	4,2%			
4130119	Premier	Fond	-0,03	0,33	0,7	106%	-1,00	1555	10	10	29%	0,08%	0,9%	2,8%			
4130120	Premier	Fusion	-0,03	2,11	0,2	102%	-12,00	775	10	10	23%	0,06%	0,9%	3,5%	99,24	97,24	95,40
4130121	Premier	Fusion	-0,04	-0,25	0,3	102%	-2,00	761	2	2	35%	0,03%	0,3%	1,6%			
4130122	Premier	Fusion	-0,06	2,50	0,9	107%	-2,00	771	2	2	18%	0,11%	1,3%	4,8%			
4130123	Premier	Fusion	-0,02	3,09	-0,3	98%	-1,00	762	4	4	5%	0,08%	1,2%	3,8%			

Sample ID	Property	Material type	Metallurgical balances					Spikes			Heavy mineral proportion			Metallurgical balance: Wilfley Table			
			Magnetic separation	Heavy liquids	Wet Solving	Weighted/ calculated mud	Dry solving	Index	Added	Recovered	Magnetite %	In initial sample	In table concentrates	In heavy liquids	Garnet	Magnetite	Pyroboles
			+: Gains; -: Losses					Added during sampling			%	%	%	%	%	%	
4130124	Premier	Fusion	-0,04	3,55	1,6	110%	0,00	764	8	8	28%	0,10%	1,3%	4,7%			
4130125	Premier	Fusion	-0,05	3,03	-0,3	98%	0,00	766	2	2	23%	0,10%	1,3%	4,7%			
4130126	Premier	Fusion	0,01	3,08	-0,6	95%	2,00	769	8	8	27%	0,08%	1,1%	4,1%			
4130127	Premier	Fusion	0,00	2,54	1,2	111%	0,00	778	6	6	28%	0,07%	0,8%	3,1%			
4130128	Premier	Fusion	-0,02	-0,35	-1,7	70%	-2,00	777	4	4	31%	0,09%	1,1%	3,7%			
4130129	Premier	Fusion	-0,05	0,21	0,8	105%	-1,00	768	6	6	25%	0,08%	1,0%	3,0%			
4130130	Premier	Fusion	-0,01	1,95	0,3	102%	-17,00	774	8	8	5%	0,07%	0,9%	2,7%	99,32	98,86	93,45
4130131	Premier	Fusion	0,00	1,01	-0,2	96%	-1,00	780	10	9	27%	0,08%	1,1%	3,4%			
4130132	Premier	Fond	-0,01	0,54	-0,7	95%	-1,00	767	4	4	28%	0,09%	1,3%	5,1%			
4130133	Premier	Fusion	-0,04	1,46	2,3	123%	-1,00	779	8	8	33%	0,18%	3,3%	11,1%			
4130134	Premier	Fusion	0,00	0,56	-0,7	95%	0,00	770	10	9	37%	0,11%	2,1%	5,3%			
4130135	Premier	Fusion	-0,03	0,66	-1,3	91%	1,00	1543	6	6	31%	0,08%	1,4%	3,8%			
4130136	Premier	Fusion	-0,03	1,50	1,4	116%	1,00	1552	4	4	2%	0,10%	2,4%	6,2%			
4130137	Premier	Fusion	-0,04	0,60	3,3	150%	1,00	1549	8	8	4%	0,19%	3,1%	8,1%			
4130138	Premier	Fusion	-0,03	0,47	0,5	105%	-46,00	1544	8	8	5%	0,13%	2,3%	7,0%			
4130139	Premier	Fusion	-0,01	0,98	-2,1	86%	0,00	1541	2	2	33%	0,16%	2,3%	7,0%			
4130140	Premier	Outwash	-0,04	-1,75	1,5	121%	0,00	1164	8	8	28%	0,09%	1,9%	4,5%	99,13	95,22	95,81
4130141	Premier	Fusion	-0,01	-0,04	-1,0	92%	1,00				23%	0,05%	0,9%	2,9%			

Sample ID	Property	Material type	Notes and commentaries
4130068	Premier	Esker	
4130069	Premier	Fusion	
4130070	Premier	Fusion	Gain inexplicable au tamisage à sec.
4130071	Premier	Fusion	
4130072	Premier	Fusion	
4130073	Premier	Fusion	
4130074	Premier	Fusion	
4130075	Premier	Fusion	
4130076	Premier	Fusion	
4130077	Premier	Fusion	
4130078	Premier	Fusion	
4130079	Premier	Fusion	
4130080	Premier	Fusion	
4130081	Premier	Fusion	
4130082	Premier	Fusion	
4130083	Premier	Fusion	
4130084	Premier	Fusion	Perte inexplicable au tamisage humide.
4130085	Premier	Fusion	
4130086	Premier	Fusion	
4130087	Premier	Fusion	
4130088	Premier	Fusion	
4130089	Premier	Fusion	
4130090	Premier	Fond	
4130091	Premier	Fusion	
4130092	Premier	Fond	
4130093	Premier	Fusion	
4130094	Premier	Fusion	
4130095	Premier	Fusion	
4130096	Premier	Fusion	
4130097	Premier	Fusion	
4130098	Premier	Fusion	
4130099	Premier	Fusion	
4130100	Premier	Fond	
4130101	Premier	Fusion	

Sample ID	Property	Material type	Notes and commentaries
4130102	Premier	Fusion	
4130103	Premier	Fusion	
4130104	Premier	Fusion	
4130105	Premier	Fusion	Perte notée chez Chimitec.
4130106	Premier	Fusion	
4130107	Premier	Fusion	
4130108	Premier	Fusion	
4130109	Premier	Fusion	
4130110	Premier	Fusion	
4130111	Premier	Fusion	
4130112	Premier	Fusion	
4130113	Premier	Fusion	
4130114	Premier	Fond	
4130115	Premier	Fond	
4130116	Premier	Fusion	Perte non notée chez Chimitec
4130117	Premier	Fusion	
4130118	Premier	Fusion	
4130119	Premier	Fond	
4130120	Premier	Fusion	Perte inexpliquée au tamisage à sec.
4130121	Premier	Fusion	
4130122	Premier	Fusion	
4130123	Premier	Fusion	
4130124	Premier	Fusion	Le poids envoyé à la liqueur dense pesé chez Chimitec est de 520.0 et ici il est de 502. Erreur corrigée.
4130125	Premier	Fusion	Le poids envoyé à la liqueur dense pesé chez Chimitec est de 488.6 et ici il est de 469. Erreur corrigée à 489 g
4130126	Premier	Fusion	
4130127	Premier	Fusion	
4130128	Premier	Fusion	
4130129	Premier	Fusion	
4130130	Premier	Fusion	Perte inexpliquée au tamisage à sec.
4130131	Premier	Fusion	
4130132	Premier	Fond	
4130133	Premier	Fusion	
4130134	Premier	Fusion	
4130135	Premier	Fusion	

Sample ID	Property	Material type	Notes and commentaries
4130136	Premier	Fusion	
4130137	Premier	Fusion	
4130138	Premier	Fusion	Perte inexplicée au tamisage à sec.
4130139	Premier	Fusion	
4130140	Premier	Outwash	
4130141	Premier	Fusion	



TILL SAMPLING FOLLOW-UP
PREMIER PROPERTY

APPENDIX 4

PEBBLE COUNT (NOT AVAILABLE)

10 FEB 2000

**TILL SAMPLING FOLLOW-UP
PREMIER PROPERTY**

APPENDIX 5

GEOCHEMISTRY

Table 1: Analysis results

Table 2: Certificate of analysis

Sample number	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Tl	Zr	S
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%
4130136	0,3	20	26	37	-1	22	4	-0,2	-5	53	-5	1,78	132	-10	26	58	26	-20	-20	13	2,13	0,42	0,06	0,01	0,15	4	7	8	34	5	-5	-10	0,11	3	0,02
4130137	-0,2	30	19	20	1	17	3	-0,2	-5	-5	-5	1,73	82	-10	35	57	33	-20	-20	13	2,04	0,20	0,06	0,01	0,17	4	5	8	16	4	-5	-10	0,11	4	0,02
4130138	0,2	32	21	27	1	15	4	-0,2	-5	-5	-5	1,35	59	-10	20	49	30	-20	-20	18	1,90	0,20	0,06	0,01	0,11	5	8	5	11	5	-5	-10	0,11	1	0,04
4130139	-0,2	4	3	3	-1	2	1	-0,2	-5	-5	-5	0,37	22	-10	3	10	8	-20	-20	9	0,27	0,04	0,12	-0,01	0,01	5	4	-2	2	1	-5	-10	0,03	1	-0,01
4130140	-0,2	28	8	13	1	10	1	-0,2	-5	-5	-5	1,14	45	-10	13	35	22	-20	-20	13	1,20	0,13	0,11	0,01	0,05	8	9	4	5	2	-5	-10	0,07	1	0,02
4130141	-0,2	6	8	5	-1	2	1	-0,2	-5	-5	-5	0,8	21	-10	4	15	17	-20	-20	11	0,82	0,06	0,03	-0,01	0,01	4	6	3	3	1	-5	-10	0,05	-1	0,01



**ALS Chemex
Chimitec**

**Rapport Lab Geochimie
Geochemical Lab Report**

4.13

IOS SERVICES GEOSCIENTIFIQUES INC.
1319, BOUL. ST-PAUL
CHICOUTIMI, QUEBEC
G7J 3Y2

+

+

+

+



**ALS Chemex
Chimitec**

Rapport Lab Geochimie Geochemical Lab Report

RAPPORT: C03-64029.0 (COMPLET)

RÉFÉRENCE:

CLIENT: IOS SERVICES GEOSCIENTIFIQUES INC.

SOUIS PAR:

PROJET: AUCUN

DATE RECU: 29-AUG-03

DATE DE L'IMPRESSION: 9-SEP-03

DATE APPROUVÉ	COMMANDE	ÉLÉMENT	NOMBRE D'ANALYSES	LIMITE INFÉRIEURE DE DETECTION	EXTRACTION	MÉTHODE	TYPES D'ÉCHANTILLONS	NOMBRE	FRACTION UTILISÉE	NOMBRE	PRÉP. DE L'ÉCHAN.	NOMBRE
							AUTRE	72	-80	72	SECHAGE, TAMIS -80	72
030909	1	Ag	72	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	2	Cu	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	3	Pb	72	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	4	Zn	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	5	Mo	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	6	Ni	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	7	Co	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	8	Cd	72	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	9	Bi	72	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	10	As	72	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	11	Sb	72	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	12	Fe	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	13	Mn	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	14	Te	72	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	15	Ba	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	16	Cr	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	17	V	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	18	Sn	72	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	19	W	72	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	20	La	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	21	Al	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	22	Mg	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	23	Ca	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	24	Na	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	25	K	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	26	Sr	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	27	Y	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	28	Ga	72	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	29	Li	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	30	Nb	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	31	Sc	72	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	32	Ta	72	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	33	Ti	72	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	34	Zr	72	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						
030909	35	S	72	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA						

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FACTURE À: 1319, BOUL.ST-PAUL

Ce rapport ne doit être reproduit que dans sa totalité. Les données présentées dans ce rapport sont exprimées sur base sèche sauf indication contraire et ne concernent que les échantillons reçus, identifiés par le numéro d'échantillon.

Hélène Dupont
Chimitec



CLIENT : IOS SERVICES GEOSCIENTIFIQUES INC.

RAPPORT: C03-64029.0 (COMPLET)

DATE RECU : 29-AUG-03

DATE DE L'IMPRESSION: 9-SEP-03

PROJET: AUCUN

PAGE 1 DE 3

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Te	Ti	Zr	S
UNITÉS		PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PCT	
413068		<.2	6	5	12	<1	9	2	<.2	<5	<5	<5	1.10	62	<10	12	26	22	<20	<20	9	0.82	.17	.07	0.01	.02	5	4	2	7	1	<5	<10	.070	1	0.01
413069		<.2	6	5	12	<1	6	2	<.2	<5	<5	<5	1.19	53	<10	11	27	24	<20	<20	12	1.09	.13	.06	0.01	.02	5	5	3	6	1	<5	<10	.080	<1	0.01
413070		<.2	17	12	15	1	17	3	<.2	<5	<5	<5	1.02	56	<10	14	37	18	<20	<20	8	1.32	.18	.06	0.01	.05	5	4	2	6	<1	<5	<10	.060	5	0.02
413071		<.2	19	9	13	<1	12	2	<.2	<5	<5	<5	0.87	57	<10	14	26	17	<20	<20	10	0.78	.18	.07	0.01	.05	6	5	2	6	<1	<5	<10	.060	5	0.01
413072		<.2	6	8	8	<1	7	2	<.2	<5	<5	<5	0.85	37	<10	10	25	17	<20	<20	12	1.05	.13	.06	<.01	.03	5	5	2	5	1	<5	<10	.050	1	0.01
413073		<.2	9	10	13	<1	11	1	<.2	<5	<5	<5	0.75	48	<10	15	32	18	<20	<20	9	1.52	.20	.05	0.01	.07	4	4	3	6	1	<5	<10	.070	2	0.03
413074		<.2	13	10	12	<1	12	2	<.2	<5	<5	<5	0.84	47	<10	14	31	16	<20	<20	10	1.04	.17	.04	<.01	.05	4	5	2	7	1	<5	<10	.060	2	0.01
413075		<.2	22	10	23	3	26	4	<.2	<5	8	<5	1.83	85	<10	30	73	37	<20	<20	12	2.00	.36	.09	0.01	.16	4	6	3	11	2	<5	<10	.100	4	0.01
413076		<.2	15	7	15	1	10	2	<.2	<5	<5	<5	0.89	44	<10	10	26	17	<20	<20	10	0.89	.12	.09	0.01	.04	5	4	2	6	1	<5	<10	.050	2	0.01
413077		<.2	4	7	7	<1	4	<1	<.2	<5	<5	<5	0.60	26	<10	5	14	11	<20	<20	6	0.74	.08	.06	<.01	.02	4	3	<2	4	1	<5	<10	.040	1	0.01
413079		<.2	15	8	14	1	9	3	<.2	<5	<5	<5	1.32	44	<10	11	34	24	<20	<20	8	1.54	.13	.06	0.01	.03	5	3	4	6	1	<5	<10	.070	2	0.02
413080		<.2	6	4	8	<1	5	2	<.2	<5	<5	<5	0.58	42	<10	8	15	11	<20	<20	9	0.57	.08	.10	0.01	.03	5	4	<2	4	1	<5	<10	.040	2	<.01
413081		<.2	9	7	10	<1	7	2	<.2	<5	<5	<5	0.65	41	<10	8	20	13	<20	<20	10	0.77	.08	.07	0.01	.02	6	3	<2	5	1	<5	<10	.040	1	0.01
413082		<.2	11	5	10	<1	7	2	<.2	<5	<5	<5	0.71	62	<10	12	20	14	<20	<20	10	0.71	.11	.11	0.01	.03	7	5	2	8	1	<5	<10	.050	<1	<.01
413083		<.2	15	7	9	1	9	1	<.2	<5	<5	<5	0.72	42	<10	8	24	14	<20	<20	7	0.86	.07	.08	0.01	.02	5	3	2	5	<1	<5	<10	.050	2	0.01
413084		<.2	7	4	11	<1	18	3	<.2	<5	5	<5	0.81	63	<10	14	39	15	<20	<20	8	0.55	.22	.09	0.01	.05	5	3	2	10	<1	<5	<10	.050	1	<.01
413085		<.2	16	8	15	2	13	2	<.2	<5	<5	<5	1.54	85	<10	9	47	22	<20	<20	13	2.12	.21	.10	0.01	.03	5	6	4	12	2	<5	<10	.070	2	0.02
413086		<.2	20	10	26	<1	42	5	<.2	<5	5	<5	1.69	146	<10	22	84	29	<20	<20	10	1.84	.50	.08	0.01	.11	5	4	4	21	3	<5	<10	.100	1	0.02
413087		<.2	7	5	10	<1	8	1	<.2	<5	<5	<5	0.97	59	<10	9	25	19	<20	<20	10	0.63	.16	.08	0.01	.03	5	5	2	7	1	<5	<10	.060	<1	0.01
413088		<.2	16	6	20	<1	17	3	<.2	<5	12	<5	1.26	109	<10	38	51	27	<20	<20	12	0.97	.41	.15	0.01	.17	6	5	3	14	1	<5	<10	.080	1	<.01
413089		<.2	28	7	16	1	13	3	<.2	<5	<5	<5	1.79	56	<10	20	42	31	<20	<20	15	1.72	.20	.14	0.01	.04	11	7	5	11	1	<5	<10	.090	1	0.02
413090		<.2	11	6	18	<1	12	2	<.2	<5	<5	<5	0.93	79	<10	18	31	20	<20	<20	12	0.74	.26	.14	0.01	.08	6	5	2	13	<1	<5	<10	.060	1	0.01
413091		<.2	11	2	8	<1	7	2	<.2	<5	<5	<5	0.55	34	<10	7	17	10	<20	<20	7	0.61	.10	.10	0.01	.02	5	3	<2	4	<1	<5	<10	.030	2	<.01
413092		<.2	6	2	5	<1	4	1	<.2	<5	<5	<5	0.47	26	<10	7	14	10	<20	<20	9	0.52	.07	.10	0.01	.02	5	4	<2	4	<1	<5	<10	.030	1	0.01
413093		<.2	17	5	14	<1	9	2	<.2	<5	<5	<5	1.10	55	<10	12	31	22	<20	<20	11	0.97	.15	.07	0.01	.03	5	4	2	6	1	<5	<10	.050	1	0.01
413094		<.2	21	8	17	<1	13	4	<.2	<5	<5	<5	1.55	81	<10	15	42	31	<20	<20	13	1.64	.23	.07	0.01	.03	6	4	3	8	1	<5	<10	.110	1	0.03
413095		<.2	71	8	27	<1	8	1	<.2	<5	<5	<5	1.34	53	<10	17	25	22	<20	<20	8	2.18	.11	.12	0.01	.03	6	4	4	9	1	<5	<10	.070	1	0.02
413096		<.2	8	7	12	<1	8	1	<.2	<5	<5	<5	1.04	45	<10	12	24	23	<20	<20	11	1.16	.12	.05	0.01	.02	5	4	4	8	<1	<5	<10	.080	<1	0.02
413097		<.2	14	6	20	1	12	2	<.2	<5	<5	<5	1.29	65	<10	17	33	25	<20	<20	8	1.59	.18	.07	0.01	.06	6	3	4	10	1	<5	<10	.080	1	0.02
413098		<.2	3	2	5	<1	3	2	<.2	<5	<5	<5	0.38	29	<10	6	10	7	<20	<20	5	0.37	.06	.07	<.01	.01	4	2	<2	3	<1	<5	<10	.030	<1	<.01

Hélène Dupuis
Chimitec



CLIENT : IOS SERVICES GEOSCIENTIFIQUES INC.
RAPPORT: C03-64029.0 (COMPLET)

DATE RECU : 29-AUG-03 DATE DE L'IMPRESSON: 9-SEP-03 PAGE 2 DE 3

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr	S
		PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PCT
413099		<.2	12	4	28	<1	12	3	<.2	<5	<5	<5	1.27	71	<10	21	37	24	<20	<20	7	1.71	.24	.10	0.01	.06	7	4	3	17	1	<5	<10	.070	1	0.01
413100		<.2	11	4	21	<1	16	3	<.2	<5	8	<5	1.14	94	<10	24	33	22	<20	<20	12	0.72	.28	.14	0.01	.09	7	5	2	13	1	<5	<10	.070	1	0.01
413101		<.2	3	3	5	<1	3	1	<.2	<5	<5	<5	0.66	25	<10	5	16	13	<20	<20	7	0.68	.05	.07	<.01	.01	4	2	<2	2	<1	<5	<10	.030	1	<.01
413102		<.2	13	5	9	<1	7	1	<.2	<5	<5	<5	0.93	39	<10	7	25	18	<20	<20	8	0.96	.10	.07	0.01	.02	5	3	2	5	1	<5	<10	.050	1	0.01
413103		<.2	16	5	11	<1	7	2	<.2	<5	<5	<5	1.06	41	<10	8	23	21	<20	<20	10	1.26	.10	.05	0.01	.01	5	5	2	5	1	<5	<10	.070	1	0.02
413104		<.2	25	4	15	<1	11	2	<.2	<5	<5	<5	1.30	54	<10	20	30	32	<20	<20	12	0.68	.17	.15	0.01	.09	7	5	2	7	1	<5	<10	.050	1	0.01
413105		<.2	74	11	34	1	15	3	<.2	<5	6	<5	1.49	68	<10	19	47	27	<20	<20	10	1.90	.23	.08	0.01	.08	5	3	5	11	3	<5	<10	.080	1	0.01
413106		<.2	19	7	12	<1	9	2	<.2	<5	5	<5	1.02	40	<10	10	28	18	<20	<20	11	1.19	.13	.07	0.01	.04	5	7	2	7	2	<5	<10	.050	<1	0.01
413107		<.2	7	3	9	<1	4	1	<.2	<5	<5	<5	0.60	37	<10	9	15	11	<20	<20	9	0.48	.10	.15	0.01	.03	6	4	<2	6	1	<5	<10	.040	1	<.01
413108		<.2	21	7	25	1	13	2	<.2	<5	<5	<5	0.99	73	<10	24	36	18	<20	<20	8	1.14	.21	.10	0.01	.09	6	3	2	13	2	<5	<10	.060	1	0.01
413109		<.2	4	5	12	<1	4	2	<.2	<5	<5	<5	0.90	38	<10	9	20	17	<20	<20	8	0.96	.11	.05	0.01	.02	4	3	3	8	2	<5	<10	.060	<1	0.01
413110		<.2	27	11	22	1	13	2	<.2	<5	<5	<5	1.56	60	<10	15	44	29	<20	<20	10	2.27	.17	.08	0.01	.03	6	4	5	12	3	<5	<10	.090	1	0.03
413111		<.2	24	6	20	1	9	1	<.2	<5	<5	<5	1.23	48	<10	10	31	21	<20	<20	8	1.86	.13	.09	0.01	.03	5	4	3	8	2	<5	<10	.060	2	0.02
413112		<.2	49	9	21	1	11	2	<.2	<5	<5	<5	1.34	48	<10	11	40	26	<20	<20	8	1.89	.13	.08	0.01	.03	5	3	4	6	3	<5	<10	.070	1	0.02
413113		<.2	29	8	17	<1	9	2	<.2	<5	<5	<5	1.18	54	<10	11	34	24	<20	<20	10	1.36	.14	.07	0.01	.03	5	4	3	6	2	<5	<10	.070	1	0.02
413114		<.2	5	2	12	<1	7	2	<.2	<5	<5	<5	0.55	65	<10	15	20	14	<20	<20	14	0.37	.18	.16	0.01	.05	6	6	2	7	1	<5	<10	.060	1	<.01
413115		<.2	21	5	10	<1	6	1	<.2	<5	<5	<5	0.76	32	<10	7	23	15	<20	<20	8	0.92	.07	.09	0.01	.02	4	3	2	3	2	<5	<10	.040	2	0.01
413116		<.2	52	9	22	<1	8	1	<.2	<5	<5	<5	0.87	48	<10	13	27	18	<20	<20	8	1.76	.12	.06	0.01	.02	5	2	5	8	2	<5	<10	.070	<1	0.02
413117		<.2	25	5	15	<1	8	2	<.2	<5	<5	<5	0.89	45	<10	11	26	16	<20	<20	8	1.02	.12	.06	0.01	.02	5	3	3	6	2	<5	<10	.050	1	0.01
413118		<.2	28	6	17	<1	9	2	<.2	<5	<5	<5	0.99	45	<10	11	30	20	<20	<20	9	1.26	.11	.08	0.01	.04	5	4	2	5	2	<5	<10	.060	2	0.02
413120		0.2	34	5	16	<1	8	2	<.2	<5	5	<5	0.68	42	<10	13	31	16	<20	<20	10	0.83	.14	.10	0.01	.07	5	3	3	5	2	<5	<10	.050	<1	0.01
413121		<.2	8	6	11	<1	8	2	<.2	<5	<5	<5	0.90	53	<10	11	33	18	<20	<20	9	0.58	.18	.08	0.01	.07	4	3	2	4	2	<5	<10	.050	2	<.01
413122		<.2	12	3	9	1	9	2	<.2	<5	<5	<5	0.75	48	<10	12	26	16	<20	<20	12	0.57	.17	.15	0.01	.07	5	5	2	5	1	<5	<10	.040	1	0.01
413123		<.2	11	5	15	<1	10	2	<.2	<5	<5	<5	0.75	72	<10	20	42	23	<20	<20	14	0.72	.26	.14	0.01	.12	5	5	3	7	2	<5	<10	.060	1	0.01
413124		<.2	8	5	10	<1	9	2	<.2	<5	<5	<5	0.90	52	<10	11	28	18	<20	<20	9	0.64	.18	.11	0.01	.06	5	3	2	6	2	<5	<10	.050	1	<.01
413125		<.2	6	4	5	<1	6	1	<.2	<5	<5	<5	0.48	32	<10	6	14	10	<20	<20	7	0.33	.09	.10	0.01	.03	4	3	<2	3	1	<5	<10	.030	2	<.01
413126		<.2	13	3	8	<1	9	2	<.2	<5	<5	<5	0.69	46	<10	11	22	14	<20	<20	11	0.52	.13	.09	0.01	.06	5	5	2	5	1	<5	<10	.050	<1	0.01
413127		<.2	30	6	14	1	13	2	<.2	<5	<5	<5	1.14	50	<10	12	42	20	<20	<20	9	1.37	.16	.06	0.01	.05	5	3	2	6	2	<5	<10	.060	3	0.02
413128		<.2	19	7	12	<1	8	2	<.2	<5	<5	<5	1.20	47	<10	10	39	20	<20	<20	16	1.48	.13	.08	0.01	.04	5	8	3	5	3	<5	<10	.060	<1	0.02
413129		<.2	6	2	5	<1	3	1	<.2	<5	<5	<5	0.63	26	<10	5	16	12	<20	<20	9	0.57	.07	.13	<.01	.02	4	4	<2	3	1	<5	<10	.040	1	<.01

Helene Lapere
Chimitec



CLIENT : LOS SERVICES GEOSCIENTIFIQUES INC.

PROJET: AUCUN

RAPPORT: C03-64029.0 (COMPLET)

DATE RECU : 29-AUG-03

DATE DE L'IMPRESSION: 9-SEP-03

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NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ge	Li	Nb	Sc	Ta	Ti	Zr	S
		PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM
413130		<.2	10	4	9	<1	6	1	<.2	<5	<5	<5	0.99	41	<10	8	35	18	<20	<20	9	0.90	.14	.08	<.01	.04	4	3	2	5	2	<5	<10	.050	1	0.01
413131		<.2	5	2	4	<1	4	1	<.2	<5	<5	<5	0.57	27	<10	4	14	11	<20	<20	8	0.39	.07	.09	<.01	.01	4	3	<2	3	1	<5	<10	.040	1	<.01
413132		<.2	7	4	7	<1	4	1	<.2	<5	<5	<5	0.95	36	<10	6	25	21	<20	<20	12	0.87	.11	.11	0.01	.01	4	4	3	5	2	<5	<10	.050	<1	0.01
413133		<.2	24	7	20	<1	14	4	<.2	<5	<5	<5	1.20	72	<10	15	42	23	<20	<20	13	0.96	.24	.09	0.01	.06	5	5	3	10	2	<5	<10	.070	1	0.01
413134		<.2	9	3	9	<1	7	2	<.2	<5	<5	<5	0.76	39	<10	7	25	15	<20	<20	9	0.62	.12	.06	0.01	.03	4	4	<2	6	1	<5	<10	.050	<1	0.01
413135		<.2	7	5	8	<1	5	1	<.2	<5	6	<5	0.72	39	<10	8	21	14	<20	<20	8	0.69	.11	.06	<.01	.03	5	3	2	5	2	<5	<10	.050	<1	0.01
413136		0.3	20	26	37	<1	22	4	<.2	<5	53	<5	1.78	132	<10	26	58	26	<20	<20	13	2.13	.42	.06	0.01	.15	4	7	6	34	5	<5	<10	.100	3	0.02
413137		<.2	30	19	29	1	17	3	<.2	<5	<5	<5	1.73	82	<10	35	57	33	<20	<20	13	2.04	.29	.06	0.01	.17	4	5	6	16	4	<5	<10	.100	4	0.02
413138		0.2	32	21	27	1	15	4	<.2	<5	<5	<5	1.35	59	<10	20	49	30	<20	<20	18	1.96	.26	.06	0.01	.11	5	8	5	11	5	<5	<10	.110	1	0.04
413139		<.2	4	3	3	<1	2	1	<.2	<5	<5	<5	0.37	22	<10	3	10	8	<20	<20	9	0.27	.04	.12	<.01	.01	5	4	<2	2	1	<5	<10	.030	1	<.01
413140		<.2	28	8	13	1	10	1	<.2	<5	<5	<5	1.14	45	<10	13	35	22	<20	<20	13	1.26	.13	.11	0.01	.05	6	9	4	5	2	<5	<10	.070	1	0.02
413141		<.2	6	8	5	<1	2	1	<.2	<5	<5	<5	0.80	21	<10	4	15	17	<20	<20	11	0.82	.05	.03	<.01	.01	4	6	3	3	1	<5	<10	.050	<1	0.01

Helene Dupuis
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APPENDIX 6

VISUAL EXAMINATION

- Table 1: Mineral proportions
- Table 2: List of extracted grains
- Table 3: Visual counts

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Biotite	Chalcopyrite	Copper	Corundum	Diopside	Dumortierite	Epidote
4130068	Sanmei	26-09-03	13				0.1A	1,43	100	10										4
4130068	Sanmei	26-09-03	9				0.17A	5,01	100	5										4
4130068	Sanmei	26-09-03	24	Renée	29-09-03		0.4A	5,79	100	10								5		46
4130068	Sanmei	26-09-03	4				Diam	0,16	100	0		30						20		8
4130069	Sanmei	26-09-03	10				0.1A	0,81	100	15										6
4130069	Sanmei	26-09-03	16				0.17A	5,4	100	6										2
4130069	Sanmei	26-09-03	16	Renée	29-09-03		0.4A	3,64	100	10								10		55
4130069	Sanmei	26-09-03	2				Diam	0,15	100			30						25		5
4130070	Renée	26-09-03	10				0.1A	1,25	100	67										0
4130070	Renée	26-09-03	33				0.17A	13,39	100											0
4130070	Renée	26-09-03	20				0.4A	3,53	100	41								2		35
4130070	Renée	26-09-03	2				Diam	0,11	100			62						5		0
4130071	Sanmei	26-09-03	5				0.1A	1,15	100	25										5
4130071	Sanmei	26-09-03	25				0.17A	14,44	100	2										2
4130071	Sanmei	26-09-03	15	Renée	29-09-036		0.4A	4,89	100	30		0						6		30
4130071	Sanmei	26-09-03	4				Diam	0,15	100			30						10		5
4130072	Sanmei	29-09-03	16				0.1A	0,77	100	10										4
4130072	Sanmei	29-09-03	20				0.17A	13,68	100	2										2
4130072	Sanmei	29-09-03	16	Natacha	29-09-03		0.4A	4,17	100	20								5		30
4130072	Sanmei	29-09-03	4				Diam	0,16	100	2		60						10		3
4130073	Renée	29-09-03	7				0.1A	0,8	100	20										0
4130073	Renée	29-09-03	75				0.17A	14,68	100	3										0
4130073	Renée	29-09-03	20	Natacha	29-09-03		0.4A	4,26	100	8								0		68
4130073	Renée	29-09-03	2				Diam	0,14	100			62						10		1
4130074	Sanmei	29-09-03	6				0.1A	0,8	100	12										5
4130074	Sanmei	29-09-03	23				0.17A	9,33	100	5										2
4130074	Sanmei	29-09-03	18	Natacha	29-09-03		0.4A	4	100	30		2						3		35
4130074	Sanmei	29-09-03	5				Diam	0,14	100			45						16		5
4130075	Sanmei	29-09-03	17				0.1A	2,59	100	13										7
4130075	Sanmei	29-09-03	110				0.17A	31	100	6										2
4130075	Sanmei	29-09-03	27	Natacha	29-09-03		0.4A	6,74	100	15		1						5		45
4130075	Sanmei	29-09-03	2				Diam	0,19	100			40						15		5
4130076	Natacha	29-09-03	5				0.1A	1,04	100	20								0		2
4130076	Natacha	29-09-03	25				0.17A	9,3	100	3								0		1
4130076	Natacha	29-09-03	25	Sanmei	29-09-03		0.4A	4,12	100	20								2		38
4130076	Natacha	29-09-03	5				Diam	0,17	100	1		25						6		3
4130077	Natacha	29-09-03	10				0.1A	1,02	100	10										4
4130077	Natacha	29-09-03	50				0.17A	13,54	100	2										0

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Heamatite	Hornblende	Hypersthene	Ilmenite	Jaspilite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon
4130068				3		5	67	2	4	3			1											1				0	
4130068			0			60	6	15	10	0																			
4130068			2	17		1		13	2																1		3		
4130068				0		10							5										0	25					2
4130069			1	4			50	8	10	2			2											0	2				
4130069			1	55			3	12	20				1												2				
4130069			1	5				5	4				3								0				5		2		
4130069						10							5												20				5
4130070			0	2			15	8	8	0											0								
4130070			0	87			4	5	4	0											0								
4130070	3		0	7			0	7	5				0								0				0				
4130070			0	0									10								0				3				20
4130071				7			40	5	12	2			1												3				
4130071				58			3	5	30																				
4130071			3	15		0		5	4												4				2		1		0
4130071						5							10								10			0	25				5
4130072				13			45	3	20	2															3				
4130072				75				6	15																				
4130072			2	25				9	3				2								1				2		1		
4130072				1		3							5												13				3
4130073			0	4			20	5	51	0																			
4130073			0	84			0	3	10																				
4130073			0	7				10	7				0												0		0		
4130073	7			0		0							5										0	15					0
4130074				13			43	5	20	2																			
4130074				65				6	22																				
4130074			1	14				6	5				2												1		1		
4130074						6							8								2				15				3
4130075				15			35	5	20	5					0														
4130075				63			3	6	20		0				0														
4130075			2	12			1	7	3				2		0						1				3		3		
4130075				0									15								3			0	20				2
4130076	0		0	56			0	12	28				0																
4130076	3			8				12	15				2				0				0				0		0		
4130076	2			0		3		0	0				8			0					2			0	45				5
4130077			0	2			52	6	25	1			0																
4130077	0			62			1	13	22				0								0								

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Biotite	Chalcopyrite	Copper	Corundum	Diopside	Dumortierite	Epidote
4130077	Natacha	29-09-03	25	Renée	29-09-03		0.4A	6,38	100	15								1		38
4130077	Natacha	29-09-03	5				Diam	0,19	100	1		33						6		2
4130078	Natacha	29-09-03	15				0.1A	2,43	100	20										3
4130078	Natacha	29-09-03	45				0.17A	15,81	100	4								0		2
4130078	Natacha	29-09-03	25	Renée	29-09-03		0.4A	6,64	100	25		0						2		48
4130078	Natacha	29-09-03	5				Diam	0,23	100	1		33						7		4
4130079	Natacha	29-09-03	20				0.1A	3,55	100	15										3
4130079	Natacha	29-09-03	40				0.17A	15,21	100	2								0		1
4130079	Natacha	29-09-03	25	Sanmei	30-09-03		0.4A	6,73	100	22		0						2		40
4130079	Natacha	29-09-03	5				Diam	0,23	100	1		30						8		3
4130080	Renée	29-09-03	10				0.1A	1,87	100	15										0
4130080	Renée	29-09-03	60				0.17A	9,42	100	7										0
4130080	Renée	29-09-03	40	Natacha	29-09-03		0.4A	4,87	100	15								0		57
4130080	Renée	29-09-03	2				Diam	0,17	100			25						3		2
4130081	Sanmei	29-09-03	7				0.1A	1,66	100	13										3
4130081	Sanmei	29-09-03	18				0.17A	9,5	100	5										2
4130081	Sanmei	29-09-03	16	Renée	30-09-03		0.4A	4,09	100	36		0						8		30
4130081	Sanmei	29-09-03	4				Diam	0,17	100			25						20		5
4130082	Renée	30-09-03	6				0.1A	0,91	100	15										0
4130082	Renée	30-09-03	40				0.17A	8,9	100	5										1
4130082	Renée	30-09-03	20	Natacha	30-09-03		0.4A	4,38	100	10								0		74
4130082	Renée	30-09-03	2				Diam	0,14	100			4						3		1
4130083	Sanmei	30-09-03	10				0.1A	1,27	100	15										5
4130083	Sanmei	30-09-03	14				0.17A	6,08	100	5										4
4130083	Sanmei	30-09-03		Renée	30-09-03		0.4A	4,46	100	10								10		45
4130083	Sanmei	30-09-03					Diam	0,16	100	5		20						15		
4130084	Natacha	30-09-03	15				0.1A	2,59	100	17		0								3
4130084	Natacha	30-09-03	30				0.17A	0,16	100	4								0		1
4130084	Natacha	30-09-03	17	Sanmei	30-09-03		0.4A	0,77	100	25		0						3		44
4130084	Natacha	30-09-03	30				Diam	5,67	100	1		23						5		3
4130085	Sanmei	30-09-03	7				0.1A	0,34	100	10										5
4130085	Sanmei	30-09-03	5				0.17A	2,24	100	5										3
4130085	Sanmei	30-09-03	19	Natacha	30-09-03		0.4A	0,96	100	25		2						2		50
4130085	Sanmei	30-09-03	2				Diam	0,03	100			20						10		3
4130086	Sanmei	30-09-03	11				0.1A	0,77	100	10										4
4130086	Sanmei	30-09-03	13				0.17A	5,97	100	10										4
4130086	Sanmei	30-09-03	13	Natacha	30-09-03		0.4A	3,52	100	30								4		30
4130086	Sanmei	30-09-03	3				Diam	0,1	100			35						15		5

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Heammatite	Hornblende	Hyperssthene	Ilmenite	Jaspilite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon
4130077	3			12				17	13				1						0	0				0					
4130077	2			0		3		0	0				10							6			0	30					7
4130078			0	3			25	8	39	2			0																
4130078	0			52			0	20	22	0			0																
4130078	3			6				7	8				1						0	0				0		0			0
4130078	3			0		4			0				6							1			0	34					7
4130079			0			3	55	5	18	1			0																
4130079	0		0	53			4	17	23	0			0																
4130079	2			8				13	12				1						0	0				0		0		0	0
4130079	1			0		3		0	0				3							3			0	40					8
4130080			0	0			50	10	25	0																			
4130080				68			5	10	10	0																			
4130080	5		0	3			0	10	10				0											0	0				
4130080	1		0			0		0	0				3							0			0	64					2
4130081				10			43	4	25	2			0																
4130081				55			3	15	20																				
4130081			2	7				6	5												1			2		3			
4130081				0		6							5			0				10				25					4
4130082				3		63		7	12	0				0															
4130082			0	54			0	25	15																				
4130082	1		0	0			0	8	7										0	0						0			
4130082	2			0		0							2							5			0	73					10
4130083				7			35	10	25	3																			
4130083				53			3	20	15	0																			
4130083			2	13				10	3				2											1		4			
4130083				0		9							10			0				6				30					5
4130084			0	2			36	6	35	1			0																
4130084	0			49			1	20	25	0			0																
4130084	4			5			0	8	10				1						0	0				0		0			
4130084	2			0		2		0	0				6							3			0	50					5
4130085				5			45	5	25	3														2					
4130085				45			2	22	23																				
4130085				5		0		3	3				3			0								4	0	3			
4130085				0		10		2					10			0								30					15
4130086				5			55	5	16	5																			
4130086				30			4	40	12											0				0					
4130086			2	6				20	3											1				2		2			
4130086				6				1					7			0				3				25					3

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Blotite	Chalcopyrite	Copper	Corundum	Dioptside	Dumortierite	Epidote
4130087	Sanmei	30-09-03	10				0.1A	1,2	100	20										5
4130087	Sanmei	30-09-03	13				0.17A	7,39	100	5										5
4130087	Sanmei	30-09-03	17	Natacha	30-09-03		0.4A	4,42	100	30								5		30
4130087	Sanmei	30-09-03	5				Diam	0,14	100			15						20		5
4130088	Renée	30-09-03	2				0.1A	0,15	100	46										2
4130088	Renée	30-09-03	7				0.17A	2,55	100	4										3
4130088	Renée	30-09-03	5	Natacha	30-09-03		0.4A	1,12	100	15								1		68
4130088	Renée	30-09-03					Diam	0,05	100			3								3
4130089	Natacha	30-09-03	5				0.1A	0,6	100	25										4
4130089	Natacha	30-09-03	15				0.17A	3,61	100	4								0		2
4130089	Natacha	30-09-03	17	Renée	30-09-03		0.4A	2,45	100	27		0						2		39
4130089	Natacha	30-09-03	3				Diam	0,07	100	0		17						6		3
4130090	Sanmei	30-09-03	11				0.1A	0,29	100	20										3
4130090	Sanmei	30-09-03	11				0.17A	3,88	100	4										2
4130090	Sanmei	30-09-03	14	Natacha	30-09-03		0.4A	1,88	100	17								3		50
4130090	Sanmei	30-09-03	11				Diam	0,11	100		0	30			0			10		3
4130091	Natacha	30-09-03	10				0.1A	1,73	100	25										3
4130091	Natacha	30-09-03	30				0.17A	7,43	100	3										2
4130091	Natacha	30-09-03	17	Sanmei	30-09-03		0.4A	3,84	100	32		0						2		31
4130091	Natacha	30-09-03	3				Diam	0,17	100	3		20						6		2
4130092	Renée	30-09-03	10				0.1A	0,97	100	35										3
4130092	Renée	30-09-03	25				0.17A	4,59	100	7										2
4130092	Renée	30-09-03	90	Natacha	30-09-03		0.4A	3,11	100	20								1		
4130092	Renée	30-09-03	2				Diam	0,1	100	0		15						10		
4130093	Sanmei	30-09-03	10				0.1A	1,29	100	20										4
4130093	Sanmei	30-09-03	10				0.17A	4,97	100	7										2
4130093	Sanmei	30-09-03	29	Natacha	30-09-03		0.4A	4,29	100	30								5		30
4130093	Sanmei	30-09-03	5				Diam	0,14	100			20						15		5
4130094	Natacha	30-09-03	10				0.1A	1,27	100	15										3
4130094	Natacha	30-09-03	20				0.17A	4,15	100	4								0		2
4130094	Natacha	30-09-03	22	Sanmei	30-09-03		0.4A	3,25	100	15		0						2		43
4130094	Natacha	30-09-03	3				Diam	0,08	100	1		25						3		2
4130095	Renée	30-09-03	2				0.1A	0,34	100	4								0		7
4130095	Renée	30-09-03	4				0.17A	0,77	100	7								0		20
4130095	Renée	30-09-03	7	Natacha	30-09-03		0.4A	1,25	100	10								0		81
4130095	Renée	30-09-03					Diam	0,07	100			10						0		61
4130096	Sanmei	30-09-03	9				0.1A	0,66	100	20										7
4130096	Sanmei	30-09-03	6				0.17A	2,4	100	7										4

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Heamatite	Hornblende	Hypersthene	Ilmenite	Jaspillite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon
4130087				5			47	6	14	3																			
4130087				40			4	26	20	0																			
4130087			3	5				11	6				3							0				4	3				
4130087						9							7			1								35					8
4130088			0	0			15	7	30																				
4130088			0	65			0	15	13																				
4130088	3		0	1			0	5	7				0						0							0			
4130088			0	0		5		0					0			0							0	0					89
4130089			0	3			26	5	35	2			0										0	0					
4130089	0			50			1	18	25	0			0																
4130089	4			2			0	12	12				2						0	0				0	0				0
4130089	2			0		3		0	0				10							1			0	50					8
4130090				2			35	3	30	5			1							1									
4130090				70			2	8	14	0																			
4130090			2	12				6	5											1				2		2			
4130090						6							26							2				20					3
4130091			0	1			28	6	35	2			0																
4130091	0			47			0	18	30				0																0
4130091	3			4				10	17				1						0	0				0	0				0
4130091	1					4		0	0				6							3			0	47					8
4130092			0	0			25	7	30											0									
4130092			0	61				15	15																				
4130092			0	2		65	0	7	5				0						0	0			0	0		0			
4130092			0	0		7							2							0			0	59					7
4130093				4			45	5	20	2																			
4130093				56			5	8	22	0																			
4130093				13				10	5				1							3				2		1			
4130093				0		10		0					12							10			0	25					3
4130094			0	2			37	7	35	1			0																
4130094	0			44			2	13	35	0			0																
4130094	7			4				15	13				1						0	0				0		0			0
4130094	1			0		3		0	0				6			0				2			0	45					12
4130095			0	1			45	3	40	0																			
4130095				28			0	30	15																				
4130095	8		1	0				0	0				0											0					
4130095			0										5							2			0	10					12
4130096				2			30	8	30	3																			
4130096				55			2	12	20																				

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Biotite	Chalcopyrite	Copper	Corundum	Diopside	Dumortierite	Epidote
4130096	Sanmei	30-09-03	10	Natacha	30-09-03		0.4A	1,79	100	40								9		25
4130096	Sanmei	30-09-03	3				Diam	0,07	100			35						10		
4130097	Natacha	30-09-03	10				0.1A	1,42	100	20										4
4130097	Natacha	30-09-03	20				0.17A	4,29	100	4								0		2
4130097	Natacha	30-09-03	27	Sanmei	30-09-03		0.4A	3,56	100	30		0						2		25
4130097	Natacha	30-09-03	3				Diam	0,08	100	1		25						2		1
4130098	Sanmei	01-10-03	9				0.1A	0,95	100	16										4
4130098	Sanmei	01-10-03	16				0.17A	4,53	100	7										5
4130098	Sanmei	01-10-03	11	Natacha	01-10-03		0.4A	1,97	100	35								5		35
4130098	Sanmei	01-10-03					Diam	0,09	100	4		15						5		6
4130099	Natacha	01-10-03	5				0.1A	0,56	100	10										5
4130099	Natacha	01-10-03	15				0.17A	2,6	100	2								0		4
4130099	Natacha	01-10-03	17	Sanmei	01-10-03		0.4A	2,52	100	22		0						2		58
4130099	Natacha	01-10-03	3				Diam	0,08	100	2		25						3		10
4130100	Sanmei	01-10-03	6				0.1A	0,85	100	15										7
4130100	Sanmei	01-10-03	8				0.17A	4,98	100	5								0		3
4130100	Sanmei	01-10-03	10	Natacha	01-10-03		0.4A	2,03	100	32								6		35
4130100	Sanmei	01-10-03	2				Diam	0,08	100	4		20						10		4
4130101	Natacha	01-10-03	10				0.1A	1,26	100	20										3
4130101	Natacha	01-10-03	20				0.17A	4,34	100	2								0		3
4130101	Natacha	01-10-03	13	Sanmei	01-10-03		0.4A	1,91	100	30		0						3		35
4130101	Natacha	01-10-03	2				Diam	0,08	100	2		22						4		4
4130102	Sanmei	01-10-03	11				0.1A	1,73	100	20										2
4130102	Sanmei	01-10-03	18				0.17A	8,13	100	5										3
4130102	Sanmei	01-10-03	17	Natacha	01-10-03		0.4A	3,6	100	32								6		40
4130102	Sanmei	01-10-03	3				Diam	0,15	100	2		30						10		6
4130103	Natacha	01-10-03	5				0.1A	0,86	100	20										2
4130103	Natacha	01-10-03	20				0.17A	4,55	100	6								0		2
4130103	Natacha	01-10-03	17	Sanmei	01-10-03		0.4A	3,14	100	25		0						3		42
4130103	Natacha	01-10-03					Diam		100	1		21						4		3
4130104	Renée	01-10-03	10				0.1A	1,19	100	20										0
4130104	Renée	01-10-03	40				0.17A	7,58	100	7										1
4130104	Renée	01-10-03	30	Natacha	01-10-03		0.4A	3,62	100	25								1		46
4130104	Renée	01-10-03	2				Diam	0,13	100			28						5		0
4130105	Sanmei	01-10-03	7				0.1A	0,71	100	17										5
4130105	Sanmei	01-10-03	9				0.17A	3,52	100	7										3
4130105	Sanmei	01-10-03	12	Natacha	01-10-03		0.4A	1,93	100	25								5		40
4130105	Sanmei	01-10-03	3				Diam	0,04	100			25						10		6

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Hematite	Hornblende	Hyperssthene	Ilmenite	Jaspilite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon
4130096			2	8				6	5								1							1		3			
4130096						5							5							1				42					2
4130097	0		0	7			15	8	45	1			0																
4130097	0		0	43			1	20	30				0																
4130097	3			6			0	20	12				2						0	0				0	0				0
4130097	1			0		2		0	0				8							5			0	40					15
4130098				6			35	4	30	4														1					
4130098				55			3	8	22																				
4130098			3	5		0		3	5				2							0				5		2			
4130098						5							14							2				45					4
4130099			0	7			18	8	51	1			0							0									
4130099	0			50			0	12	32	0			0																
4130099	2			1			0	4	6				1							4				0	0				0
4130099	2			0		2		0	0				4							4			0	41					7
4130100				3			30	10	32	3																			
4130100			2	7		1		5	5				2				2							2		1			
4130100				0		6							5										0	45					6
4130101			0	6			13	8	49	1			0																
4130101	0			45			0	15	35				0																
4130101	2			3				15	10				2							0				0	0				0
4130101	3			0		2		1	0				6							4			0	47					5
4130102				3			28	13	30	2										0				2					
4130102				50			3	14	25																				
4130102			2					10	5								0			0				4		1			0
4130102								2					6							1				40					3
4130103			0	2			20	7	48	1			0																
4130103	0			40			0	17	35				0																
4130103	2			2				17	8				1						0	0				0	0				0
4130103	2			0		1		1	0				8							3			0	50					6
4130104			0	0			28	10	40	2				0															
4130104			0	52			0	15	25	0																			
4130104	5		0	1				7	15										0							0			
4130104			0	0		2							3							0			0	52					10
4130105				4			35	6	30	3			0											0					
4130105				57			0	11	22	0			0																
4130105			2	4				8	7				2				2			2				3					
4130105				0		3		2					7							4				35					8

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Blotite	Chalcopyrite	Copper	Corundum	Dioptside	Dumortierite	Epidote
4130106	Natacha	01-10-03	10				0.1A	1	100	13										2
4130106	Natacha	01-10-03	20				0.17A	4,82	100	3								0		2
4130106	Natacha	01-10-03	17	Sanmei	01-10-03		0.4A	3,12	100	23		0						2		37
4130106	Natacha	01-10-03	3				Diam	0,12	100	0		32						3		0
4130107	Natacha	01-10-03	5				0.1A	0,85	100	25										3
4130107	Natacha	01-10-03	20				0.17A	4,79	100	5								0		2
4130107	Natacha	01-10-03	27	Sanmei	01-09-03		0.4A	4,79	100	22		0						2		49
4130107	Natacha	01-10-03	3				Diam	0,11	100	1		25						3		7
4130108	Sanmei	01-10-03	8				0.1A	0,85	100	20										4
4130108	Sanmei	01-10-03	16				0.17A	6,5	100	4										3
4130108	Sanmei	01-10-03	24	Natacha	01-10-03		0.4A	4,1	100	25								6		45
4130108	Sanmei	01-10-03	3				Diam	0,12	100			20						8		2
4130109	Natacha	01-10-03	5				0.1A	0,37	100	15										3
4130109	Natacha	01-10-03	10				0.17A	0,93	100	4								0		3
4130109	Natacha	01-10-03	7	Sanmei	01-10-03		0.4A	1,04	100	17		0						3		54
4130109	Natacha	01-10-03	3				Diam	0,01	100	3		25						4		17
4130110	Sanmei	01-10-03	12				0.1A	0,58	100	13										7
4130110	Sanmei	01-10-03	6				0.17A	2,09	100	6										6
4130110	Sanmei	01-10-03	11	Natacha	01-10-03		0.4A	1,65	100	20								2		60
4130110	Sanmei	01-10-03	3				Diam	0,04	100	4		25						10		6
4130111	Renée	01-10-03	12				0.1A	1,1	100	15										2
4130111	Renée	01-10-03	20				0.17A	3,85	100	5										0
4130111	Renée	01-10-03	12	Sanmei	01-10-03		0.4A	2,3	100	20		0						1		58
4130111	Renée	01-10-03	2				Diam	0,09	100	0		15						2		5
4130112	Sanmei	01-10-03	14				0.1A	2,24	100	15										10
4130112	Sanmei	01-10-03	25				0.17A	9,48	100	3										1
4130112	Sanmei	01-10-03	26	Natacha	01-10-03		0.4A	4,08	100	30								3		40
4130112	Sanmei	01-10-03	6				Diam	0,1	100	0		25						4		4
4130113	Renée	01-10-03	10				0.1A	1,15	100	30										3
4130113	Renée	01-10-03					0.17A	4,13	100	2										2
4130113	Renée	01-10-03	20	Natacha	01-10-03		0.4A	2,15	100	25					0			2		45
4130113	Renée	01-10-03	2				Diam	0,08	100			5			7			2		0
4130114	Sanmei	02-10-03	5				0.1A	0,34	100	10										4
4130114	Sanmei	02-10-03	11				0.17A	2,54	100	3										1
4130114	Sanmei	02-10-03	12	Natacha	02-10-03		0.4A	1,35	100	35								2		45
4130114	Sanmei	02-10-03	3				Diam	0,08	100	5		30						5		7
4130115	Renée	02-10-03	30				0.1A	2,96	100	25										
4130115	Renée	02-10-03	80				0.17A	12,77	100	3										3

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Hematite	Hornblende	Hypersthene	Ilmenite	Jaspilite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon
4130106			0	3			34	7	40	1			0																
4130106	0			47			0	13	35				0																
4130106	2			4				22	8				1						0	1				0		0			0
4130106	3			0		2		2	0				4							3			0	16					35
4130107			0	1			24	6	40	1			0																
4130107	0			43			0	17	33				0																
4130107	4			1				15	6				1						0	0					0				0
4130107	3			0		4		1	0				5							6			0	33					12
4130108				3			30	8	30	4																			
4130108				45			3	12	33																				
4130108			2	3		1		10	6												2								
4130108				0		4		1					10								2		0	50					3
4130109			0	1			47	4	30	0			0								0								
4130109	0			43			0	15	35				0																
4130109	3			2				6	14				1						0	0					0		0		
4130109	2			0		3		1	1				4								1		0	31					8
4130110				5			30	5	35	5														0					
4130110				40			2	13	33																				
4130110			2	4				4	3												2				3		0		
4130110								2					12		0	0					4				35				2
4130111			0	0			25	3	48	7																			
4130111			0	50			0	20	25	0																			
4130111	3		0	3			0	7	8												0								
4130111	0			0		10							2								0		0	59					7
4130112				5			30	5	30	2			2										0	1					
4130112				65			1	10	20																				
4130112			2	4				5	7				2		0		3				0				3		1		0
4130112						5							10								2		0	40					10
4130113			0	0			25	3	39																				
4130113			0	57			4	15	20																				
4130113	4			2		0	0	10	12				0								0								
4130113	0					2							3										0	70					8
4130114				2			50	6	25	2			1								3		0	0					
4130114				45			3	13	35																				
4130114			2	3				3	4				2								1				2		1		
4130114				1		2		1					6												40				3
4130115			0			0	20	5	48	2																			
4130115			0	52			2	15	25																				

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Biotite	Chalcopyrite	Copper	Corundum	Dioptside	Dumortierite	Epidote
4130115	Renée	02-10-03	25	Natacha	02-10-03		0.4A	3,95	100	25								2		53
4130115	Renée	02-10-03	2				Diam	0,11	100	0		20			0	0		0		1
4130116	Sanmei	02-10-03	15				0.1A	0,65	100	10								6		70
4130116	Sanmei	02-10-03	5				0.17A	1,98	100	5		20						10		5
4130116	Sanmei	02-10-03	9	Natacha	02-10-03		0.4A	2,33	100	10										4
4130116	Sanmei	02-10-03	10				Diam	0,07	100	6										3
4130117	Natacha	02-10-03	10				0.1A	1,2	100	20										3
4130117	Natacha	02-10-03	20				0.17A	5,3	100	3								0		2
4130117	Natacha	02-10-03	20	Sanmei	02-10-03		0.4A	2,67	100	23		0						2		57
4130117	Natacha	02-10-03	3				Diam	0,07	100	1		15						3		8
4130118	Sanmei	02-10-03	12				0.1A	2,13	100	15										10
4130118	Sanmei	02-10-03	18				0.17A	9,11	100	9										6
4130118	Sanmei	02-10-03	22	Natacha	02-10-03		0.4A	3,63	100	36		1						5		36
4130118	Sanmei	02-10-03	2				Diam	0,16	100	5		15								4
4130119	Natacha	02-10-03	10				0.1A	1,36	100	23										3
4130119	Natacha	02-10-03	35				0.17A	5,36	100	2								0		3
4130119	Natacha	02-10-03	17	Sanmei	02-10-03		0.4A	2,58	2,58	25		0						3		50
4130119	Natacha	02-10-03	3				Diam	0,12	100	1		15						3		3
4130120	Sanmei	02-10-03	12				0.1A	1,34	100	15										4
4130120	Sanmei	02-10-03	26				0.17A	8	100	5										4
4130120	Sanmei	02-10-03	117	Natacha	02-10-03		0.4A	2,11	100	35								5		35
4130120	Sanmei	02-10-03	7				Diam	0,12	100	1		39						3		2
4130121	Sanmei	02-10-03	7				0.1A	0,42	100	30										3
4130121	Sanmei	02-10-03	5				0.17A	1,85	100	10										3
4130121	Sanmei	02-10-03	7	Natacha	02-10-03		0.4A	0,76	100	50		1						6		20
4130121	Sanmei	02-10-03	3				Diam	0,03	100	1		25	1					3		2
4130122	Sanmei	02-10-03	57				0.1A	2,71	100	15										4
4130122	Sanmei	02-10-03	19				0.17A	11,46	100	4										4
4130122	Sanmei	02-10-03	24	Natacha	02-10-03		0.4A	4,93	100	43								5		30
4130122	Sanmei	02-10-03	3				Diam	0,19	100	5		45						3		2
4130123	Renée	02-10-03	15				0.1A	1,9	100	10										0
4130123	Renée	02-10-03	60				0.17A	10,87	100	0										2
4130123	Natacha	02-10-03	27	Renée	03-10-03		0.4A	5,16	100	30		0						2		41
4130123	Natacha	02-10-03	3				Diam	0,2	100	0		30						6		2
4130124	Sanmei	02-10-03	9				0.1A	2,22	100	17										3
4130124	Sanmei	02-10-03	20				0.17A	10,85	100	7										3
4130124	Sanmei	02-10-03	17	Renée	03-10-03		0.4A	4,3	100	35								5		40
4130124	Sanmei	02-10-03	3				Diam	0,21	100	1		40						1		1

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Hematite	Hornblende	Hypersthene	Ilmenite	Jasplite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon
4130115	3		0	2			0	8	7				0											0					
4130115	5		0	0		5							4							0				60		0			5
4130116			2	1		1		5	5															0					0
4130116				1		2							15											40					2
4130116				1			40	5	35	5														0					
4130116				37			3	11	40																				
4130117			0	3			30	7	37	0			0																
4130117	0			47			0	13	35				0																
4130117	3			2				4	8				1						0	0				0		0			
4130117	1			0		4		0	0				4							4			0	53					7
4130118				3			30	5	32	5			0											0					
4130118				48			2	15	20	0			0																
4130118			3					6	4				2							1				4		2			0
4130118						3							7							1				50					15
4130119			0	4			24	6	40	0			0																
4130119	0			45			0	15	35				0																
4130119	2			3				8	8				1						0	0				0		0			
4130119	2			0		2		0	0				4							0			0	66					4
4130120				1			45	5	25	5			0											0					
4130120				35			4	15	35	0			1											1					
4130120			3	3		0	0	2	10											0				4		3			
4130120				0		4							5											35					10
4130121				4			30	8	20	5			0							1				0					
4130121				50			2	10	25																				
4130121			2	6				3	7											1				3		1			
4130121				1		2							10											45					10
4130122				12			40	5	20	4																			
4130122				60			2	10	20																				
4130122			2	4		0		6					2										0	6		2			
4130122				5									7								1		0	30					2
4130123			0	1			69	3	15	2																			
4130123	0			0				7	15																				
4130123	3			5			0	8	10				1						0	0				0		0			0
4130123	1			0		4		0	0				4							0	1		0	45					7
4130124				2			30	3	40	4														1					
4130124				45			1	13	30				1																
4130124			3	4		0							1		0					3				6		3			
4130124						2		1					9								1			40					4

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Biotite	Chalcopyrite	Copper	Corundum	Diopside	Dumortierite	Epidote
4130125	Sanmei	03-10-03	15				0.1A	1,81	100	14										4
4130125	Sanmei	03-10-03	32				0.17A	10,8	100	12										2
4130125	Sanmei	03-10-03	33	Renée	03-10-03		0.4A	4,89	100	30								4		40
4130125	Sanmei	03-10-03	5				Diam	0,23	100			25						2		2
4130126	Sanmei	03-10-03	1				0.1A	1,73	100	17										3
4130126	Sanmei	03-10-03	23				0.17A	8,5	100	4										3
4130126	Sanmei	03-10-03	15	Renée	03-10-03		0.4A	3,27	100	36								5		40
4130126	Sanmei	03-10-03	5				Diam	0,17	100	2		20						10		5
4130127	Sanmei	03-10-03	10				0.1A	1,21	100	20										4
4130127	Sanmei	03-10-03	17				0.17A	4,73	100	5										2
4130127	Sanmei	03-10-03	16	Renée	03-10-03		0.4A	2,94	100	35								5		35
4130127	Sanmei	03-10-03	5				Diam	0,1	100	5		8								4
4130128	Sanmei	03-10-03	13				0.1A	1,75	100	15										2
4130128	Sanmei	03-10-03	25				0.17A	6,47	100	5										3
4130128	Sanmei	03-10-03	13	Renée	03-10-03		0.4A	2,5	100	40								5		30
4130128	Sanmei	03-10-03	3				Diam	0,08	100	3		15						9		5
4130129	Sanmei	03-10-03	11				0.1A	1,23	100	15										3
4130129	Sanmei	03-10-03	7				0.17A	6,63	100	5										3
4130129	Sanmei	03-10-03	19	Renée	06-10-03		0.4A	3,28	100	36		1						4		36
4130129	Sanmei	03-10-03	2				Diam	0,15	100	1		12						3		1
4130130	Renée	03-10-03	15				0.1A	1,34	100	25										0
4130130	Renée	03-10-03	45				0.17A	8,27	100	5										2
4130130	Renée	03-10-03	15				0.4A	3,49	100	25								2		44
4130130	Renée	03-10-03	2				Diam	0,12	100	0		8						2		0
4130131	Sanmei	03-10-03	14				0.1A	1,78	100	15										2
4130131	Sanmei	03-10-03	12				0.17A	6,44	100	4										1
4130131	Sanmei	03-10-03	16	Renée	06-10-03		0.4A	3,29	100	35								5		30
4130131	Sanmei	03-10-03	4				Diam	0,12	100	5		20						10		5
4130132	Renée	06-10-03	15				0.1A	1,65	100	7										2
4130132	Renée	06-10-03	40				0.17A	6,43	100	5										1
4130132	Renée	06-10-03	15	Natacha	06-10-03		0.4A	2,21	100	40								1		43
4130132	Renée	06-10-03	2				Diam	0,1	100	7		10						2		7
4130133	Natacha	06-10-03	30				0.1A	4,53	100	15										3
4130133	Natacha	06-10-03	75				0.17A	16,6	100	4								0		2
4130133	Natacha	06-10-03	40	Renée	06-10-03		0.4A	5,71	100	31		0						3		40
4130133	Natacha	06-10-03	5				Diam	0,23	100	1		30						5		1
4130134	Natacha	06-10-03	15				0.1A	2,6	100	10								0		4
4130134	Natacha	06-10-03	30				0.17A	8,95	100	5								0		2

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Heamatis	Hornblende	Hypersthene	Ilmenite	Jaspilite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon		
4130125				3			45	5	25	4														0							
4130125				40			3	13	30																						
4130125			1	7				6	4				1		0		2								3		2				
4130125						2		1					3							1	1				60					3	
4130126				8			30	9	30	3															0						
4130126				50			1	12	30																						
4130126			1	4		1		3	5				2								1				1		1				
4130126				1		6		1					5								5			0	35					10	
4130127				6			40	4	20	5			1																		
4130127				55			5	8	25																						
4130127			2	5				8					1				3				0				4		2				
4130127				1		6		1					10								2				60					3	
4130128				4			40	5	30	3			1								0										
4130128				50			5	17	20																						
4130128			1	3		2	0	4	6				2		0						1				4		2				
4130128				0		7		1					10											0	40					10	
4130129				3			40	8	28	2			1		0										0						
4130129				50		0	2	15	24				1																		
4130129			1	3		2		5	5				2								1				3		1				
4130129						1		0					5								0				75					2	
4130130			0	1			45	7	20	2																					
4130130			0	51			0	7	35																						
4130130	10			3			0	10	5						0					0	1					0					
4130130			0	0		5							15			0					3			0	52					15	
4130131				3			42	5	30	3																					
4130131				55			2	13	25																						
4130131			2	5		1		5	6				2		0		2				1				4		2				
4130131						1		0					9											0	45					5	
4130132		0	0	1			63	10	15	2																					
4130132	0		0	77			0	7	10	0																					
4130132	0		0	1			0	8	7				0		0						0				0						
4130132	0		0			2		1	2				7			0								0	42					20	
4130133			0	5			30	10	34	3			0																		
4130133	0			53			1	15	25	0			0																0		
4130133	4			6			0	6	9				1			0			0	0					0		0			0	
4130133	1			0		6		0	0				9			0				1				0	40					6	
4130134			0	3			43	8	30	2			0																		
4130134	0			48			0	15	30				0																		

Sample ID	Mineralogist	Day	Durée(min)	2 nd Sorting	Day	Grain size	Frantz Settings	Initial weight (g)	% Processed	Amphibole	Anatase	Apatite	Arsenopyrite	Biotite	Chalcopyrite	Copper	Corundum	Diopside	Dumortierite	Epidote
4130134	Natacha	06-10-03	27	Renée	06-10-03		0.4A	3,28	100	32		0						3		35
4130134	Natacha	06-10-03	3				Diam	0,13	100	1		23						5		2
4130135	Renée	06-10-03	15				0.1A	1,46	100	10										0
4130135	Renée	06-10-03	20				0.17A	5,5	100	2										0
4130135	Renée	06-10-03	30	Natacha	06-10-03		0.4A	3,71	100	25		0								42
4130135	Renée	06-10-03	2				Diam	0,11	100	0		15						5		0
4130136	Natacha	06-10-03	5				0.1A	0,22	100	13										4
4130136	Natacha	06-10-03	45				0.17A	19,76	100	2								0		1
4130136	Natacha	06-10-03	27	Renée	06-10-03		0.4A	1,88	100	8		1						1		44
4130136	Natacha	06-10-03	3				Diam	0,08	100	0		52						5		4
4130137	Natacha	06-10-03	5				0.1A	0,53	100	15										3
4130137	Natacha	06-10-03	50				0.17A	30,92	100	1								0		1
4130137	Natacha	06-10-03	15	Renée	06-10-03		0.4A	2,55	100	22		0						2		38
4130137	Natacha	06-10-03	5				Diam	0,09	100	0		45						3		2
4130138	Natacha	06-10-03	5				0.1A	0,68	100	15								0		5
4130138	Natacha	06-10-03	5				0.17A	22,62	100	2								0		1
4130138	Natacha	06-10-03	30	Renée	07-10-03		0.4A	2,66	100	23		0						2		35
4130138	Natacha	06-10-03	5				Diam	0,08	100	0		44						4		3
4130139	Natacha	07-10-03	30				0.1A	3,89	100	17										4
4130139	Natacha	07-10-03	45				0.17A	13,62	100	4								0		3
4130139	Natacha	07-10-03	27	Renée	07-10-03		0.4A	6,3	100	28		0						3		35
4130139	Natacha	07-10-03	2				Diam	0,22	100	1		12						13		4
4130140	Renée	06-10-03	15				0.1A	1,23	100	56										
4130140	Renée	06-10-03	60				0.17A	9,58	100	10										3
4130140	Renée	06-10-03	20	Natacha	07-10-03		0.4A	3,69	100	25		0						2		38
4130140	Renée	06-10-03	2				Diam	0,12	100	39								2		2
4130141	Renée	07-10-03	7				0.1A	0,91	100	25										3
4130141	Renée	07-10-03	30				0.17A	5,4	100	2										0
4130141	Renée	07-10-03	15	Natacha	07-10-03		0.4A	2,08	100	15								0		59
4130141	Renée	07-10-03	7				Diam	0,04	100			50						0		

Sample ID	Feldspar	Rock Fragment	Goethite	Pink Garnet	Garnet red	Grossular	Hematite	Hornblende	Hypersthene	Ilmenite	Jasplite	Kyanite	Leucoxene	Magnetite	Mica	Molybdenite	Monazite	Oxide black	Piemontite	Pyrite	Quartz	Pyrobole	Rutile	Sphene	Spinel	Staurolite	Topaze	Tourmaline	Zircon	
4130134	3			6				7	13				1						0	0				0	0				0	
4130134	1			0		5		2	1				5								1			0	44					10
4130135			0	1			70	5	12	2																				
4130135			0	69			2	15	12																					
4130135	4		0	4			0	10	15				0						0	0						0				
4130135	0		0	0		10							8							1				46					15	
4130136			0				39	7	35	2			0																	
4130136	0		0	73			0	20	4				0																	
4130136	15			12			0	13	4				1						0	0				0		1			0	
4130136	2			8		6		1					6							2			0	10					4	
4130137			0	7			37	6	30	2			0																	
4130137	0			80			0	9	9				0															0		
4130137	3			20				8	6				1			0			0	0				0		0			0	
4130137	1			7		6		0	0				17							0			0	13					6	
4130138			0	5			41	7	25	2			0																	
4130138	0			79			0	8	10				0																	
4130138	2			27				6	4				1						0	0				0		0			0	
4130138	1			20		4		1	0				4							0			0	15					4	
4130139			0	3			38	7	30	1			0																	
4130139	0			41			0	17	35				0																	
4130139	3			4				15	11				1						0	0				0		0			0	
4130139	3			0		3		0	0				5							0			0	52	0				7	
4130140	0		0	1			20	5	15	3																				
4130140			0	62			0	15	10																					
4130140	3		0	7			0	15	10						0				0							0				
4130140	3			0		2		0					15										0	30					7	
4130141	2		0	1			51	5	12	1																				
4130141	5		2	74			0	7	10																					
4130141	12		0	2			0	7	5				0										0	0						
4130141	15		0	1		3							21			0				0				5					5	

Sample	Frantz	Mineral	Quantity	Description
4130068	0.1A	Ilmenite	1	
4130068	0.17A	Grenat	1	
4130068	0.17A	Ilmenite	2	
4130068	0.17A	Grenat	8	
4130068	0.17A	Diopside	7	
4130068	0.17A	Olivine?	1	
4130068	Diam	Diopside	3	
4130069	0.1A	Ilmenite	3	
4130069	0.4A	Grenat	3	
4130069	0.4A	Diopside	7	
4130069	0.4A	Olivine ?	1	
4130069	Diam	Diopside	2	
4130070	0.1A	Ilmenite	4	
4130070	0.17A	Grenat	6	
4130070	0.17A	Ilmenite	1	
4130070	0.4A	Grenat	4	
4130070	0.4A	Spinelle	1	
4130070	0.4A	Diopside	3	
4130071	0.1A	Ilmenite	5	
4130071	0.17A	Grenat	4	
4130071	0.4A	Grenat	5	
4130071	0.4A	Diopside	5	
4130071	Diam	Diopside	2	
4130072	0.1A	Ilmenite	6	
4130072	0.17A	Grenat	3	
4130072	0.4A	Grenat	7	
4130072	0.4A	Diopside	5	
4130072	0.4A	Olivine	2	
4130072	Diam	Grenat	2	
4130073	0.1A	Ilmenite	8	
4130073	0.17A	Grenat	4	
4130073	0.17A	Ilmenite	1	
4130073	0.4A	Grenat	4	
4130073	0.4A	Diopside	1	
4130074	0.1A	Ilmenite	8	
4130074	0.4A	Grenat	7	
4130074	0.4A	Diopside	6	
4130075	0.1A	Ilmenite	11	
4130075	0.17A	Grenat	4	
4130075	0.4A	Grenat	7	
4130075	0.4A	Diopside	8	
4130075	0.4A	Olivine ?	6	
4130076	0.1A	Ilmenite	8	
4130076	0.4A	Grenat	5	
4130076	0.4A	Diopside	4	
4130076	0.4A	Olivine	2	
4130076	Diam	Diopside	3	
4130077	0.1A	Ilmenite	8	
4130077	0.17A	Grenat	1	
4130077	0.4A	Diopside	4	
4130077	0.4A	Olivine	1	
4130077	0.4A	Grenat	2	
4130077	Diam	Diopside	2	
4130078	0.1A	Ilmenite	13	
4130078	0.1A	Inconnu	1	jaune poudreux

Sample	Frantz	Mineral	Quantity	Description
4130078	0.17A	Ilmenite	2	
4130078	0.4A	Diopside	3	
4130078	0.4A	Grenat	6	
4130078	Diam	Diopside	1	
4130079	0.1A	Ilmenite	6	
4130079	0.17A	Ilmenite	1	
4130079	0.4A	Grenat	5	
4130079	0.4A	Diopside	6	
4130080	0.1A	Ilmenite	12	
4130080	0.17A	Grenat	2	
4130080	0.17A	Ilmenite	1	
4130080	0.4A	Diopside	5	
4130080	0.4A	Grenat	1	
4130080	0.4A	Gahnite	1	
4130080	0.4A	Olivine	1	
4130080	Diam	Diopside	1	
4130081	0.1A	Ilmenite	2	
4130081	0.4A	Grenat	8	
4130081	0.4A	Diopside	5	
4130081	0.4A	Olivine	1	
4130081	Diam	Diopside	1	
4130082	0.1A	Ilmenite	7	
4130082	0.17A	Grenat	2	
4130082	0.17A	Inconnu	1	
4130082	0.4A	Olivine	1	
4130082	0.4A	Diopside	2	
4130082	0.4A	Grenat	1	
4130083	0.1A	Ilmenite	4	
4130083	0.17A	Grenat	2	
4130083	0.17A	Ilmenite	2	
4130083	0.4A	Grenat	2	
4130083	0.4A	Diopside	5	
4130083	Diam	Olivine	1	
4130084	0.1A	Ilmenite	8	
4130084	0.4A	Grenat	3	
4130084	0.4A	Diopside	1	
4130084	Diam	Diopside	1	
4130084	Diam	Arsénopyrite	2	
4130085	0.1A	Ilmenite	3	
4130085	0.4A	Grenat	1	
4130085	0.4A	Diopside	2	
4130086	0.1A	Ilmenite	7	
4130086	0.4A	Grenat	7	
4130086	0.4A	Diopside	3	
4130086	Diam	Diopside	1	
4130087	0.1A	Ilmenite	5	
4130087	0.17A	Ilmenite	1	
4130087	0.4A	Grenat	6	
4130087	0.4A	Diopside	7	
4130087	Diam	Cr-Diopside	1	
4130088	0.1A	Ilmenite	6	
4130088	0.17A	Oxyde	1	
4130088	0.4A	Diopside	2	
4130088	0.4A	Grenat	3	
4130088	0.4A	Olivine ?	1	

Sample	Frantz	Mineral	Quantity	Description
4130089	0.1A	Ilmenite	1	
4130089	0.4A	Grenat	4	
4130089	0.4A	Diopside	2	
4130089	Diam	Diopside	2	
4130090	0.1A	Picro-ilménite	2	
4130090	0.1A	Ilmenite	14	
4130090	0.17A	Picro-ilménite	3	
4130090	0.17A	Grenat	1	
4130090	0.4A	Grenat	10	
4130090	0.4A	Diopside	6	1 assez vif
4130090	0.4A	Olivine ?	1	
4130090	Diam	Diopside	1	
4130090	Diam	Inconnu	1	
4130091	0.1A	Ilmenite	7	
4130091	0.17A	Ilmenite	1	
4130091	0.4A	Diopside	5	
4130091	0.4A	Grenat	4	
4130091	0.4A	Olivine ?	1	
4130091	Diam	Diopside	1	
4130092	0.1A	Ilmenite	13	
4130092	0.1A	Cr-Diopside	1	
4130092	0.17A	Oxyde	1	
4130092	0.4A	Diopside	5	
4130092	0.4A	Grenat	5	
4130092	Diam	Diopside	1	
4130093	0.1A	Ilmenite	8	
4130093	0.17A	Ilmenite	1	
4130093	0.4A	Grenat	3	
4130093	0.4A	Diopside	5	
4130093	0.4A	Olivine	2	
4130093	Diam	Diopside	2	
4130094	0.1A	Ilmenite	5	
4130094	0.17A	Ilmenite	1	
4130094	0.4A	Grenat	3	
4130094	0.4A	Diopside	5	
4130094	0.4A	Olivine ?	2	
4130094	Diam	Arsénopyrite ?	2	
4130095	0.1A	Ilmenite	1	
4130095	0.4A	Grenat	1	
4130095	0.4A	Diopside	1	
4130095	Diam	Cr-Diopside	1	
4130096	0.1A	Ilmenite	1	
4130096	0.17A	Grenat	4	
4130096	0.17A	Diopside	3	
4130096	0.17A	Olivine ?	1	
4130097	0.1A	Ilmenite	5	
4130097	0.17A	Grenat	1	
4130097	0.4A	Grenat	2	
4130097	0.4A	Diopside	5	
4130097	0.4A	Inconnu	1	pléochroïsme coloré
4130097	Diam	Diopside	2	
4130098	0.1A	Ilmenite	8	
4130098	0.4A	Diopside	5	
4130098	0.4A	Grenat	2	
4130098	0.4A	Olivine ?	2	

Sample	Frantz	Mineral	Quantity	Description
4130098	Diam	Diopside	3	
4130099	0.1A	Ilmenite	6	
4130099	0.1A	Grenat	1	
4130099	0.17A	Ilmenite	1	
4130099	0.4A	Grenat	4	
4130099	0.4A	Diopside	3	
4130100	0.1A	Ilmenite	5	
4130100	0.17A	Ilmenite	1	
4130100	0.17A	Grenat	1	
4130100	0.4A	Diopside	4	
4130100	0.4A	Grenat	2	
4130101	0.1A	Ilmenite	5	
4130101	0.4A	Diopside	6	
4130101	0.4A	Grenat	2	
4130101	0.4A	Cr-Diopside	1	
4130102	0.1A	Ilmenite	6	
4130102	0.17A	Ilmenite	1	1
4130102	0.4A	Grenat	4	
4130102	0.4A	Diopside	10	
4130102	0.4A	Olivine ?	1	
4130103	0.1A	Grenat	1	
4130103	0.1A	Ilmenite	2	
4130103	0.17A	Diopside	1	
4130103	0.4A	Diopside	6	
4130103	0.4A	Grenat	1	
4130103	0.4A	Olivine ?	1	
4130104	0.1A	Ilmenite	12	
4130104	0.17A	Ilmenite	4	
4130104	0.4A	Diopside	7	
4130104	0.4A	Olivine ?	1	
4130104	0.4A	Grenat	3	
4130104	Diam	Diopside	1	
4130105	0.1A	Ilmenite	4	
4130105	0.17A	Ilmenite	1	
4130105	0.17A	Grenat	1	
4130105	0.4A	Grenat	4	
4130105	0.4A	Diopside	2	
4130105	Diam	Diopside	1	
4130106	0,1	Ilmenite	2	
4130106	0.17A	Diopside	1	
4130106	0.17A	Grenat	2	
4130106	0.4A	Diopside	6	
4130106	0.4A	Grenat	6	
4130106	Diam	Diopside	2	
4130107	0.1A	Ilmenite	6	
4130107	0.4A	Grenat	5	
4130107	0.4A	Diopside	3	
4130107	Diam	Diopside	1	
4130107	Diam	Arsénopyrite	1	
4130108	0.1A	Ilmenite	6	
4130108	0.17A	Grenat	1	
4130108	0.4A	Grenat	7	
4130108	0.4A	Diopside	4	
4130108	0.4A	Olivine ?	2	
4130109	0.01A	Ilmenite	4	

Sample	Frantz	Mineral	Quantity	Description
4130109	0.17A	Grenat	1	
4130109	0.4A	Grenat	3	
4130109	0.4A	Diopside	1	
4130109	0.4A	Olivine ?	1	
4130110	0.1A	Ilmenite	4	
4130110	0.4A	Grenat	3	
4130110	0.4A	Diopside	2	
4130110	0.4A	Olivine ?	1	
4130111	0.1A	Ilmenite	13	
4130111	0.17A	Ilmenite	2	
4130111	0.4A	Diopside	5	
4130111	0.4A	Grenat	2	
4130111	0.4A	Olivine ?	1	
4130111	Diam	Diopside	1	
4130111	Diam	Cuivre	7	
4130111	Diam	Inconnu	4	
4130112	0.1A	Ilmenite	8	
4130112	0.4A	Grenat	5	
4130112	0.4A	Diopside	6	
4130112	Diam	Inconnu	2	
4130113	0.1A	Ilmenite	14	
4130113	0.1A	Inconnu	1	
4130113	0.17A	Grenat	2	
4130113	0.4A	Chalcopyrite	2	
4130113	0.4A	Diopside	2	
4130113	0.4A	Olivine ?	1	
4130113	0.4A	Grenat	2	
4130113	Diam	Contamination	2	
4130113	Diam	Cuivre	6	
4130113	Diam	Rutile	1	
4130114	0.1A	Ilmenite	5	
4130114	0.17A	Picro-ilménite	1	
4130114	0.17A	Ilmenite	2	
4130114	0.4A	Grenat	1	
4130114	0.4A	Diopside	4	
4130114	0.4A	Olivine	1	
4130115	0.1A	Ilmenite	21	
4130115	0.17A	Diopside	1	
4130115	0.4A	Grenat	3	
4130115	0.4A	Ouvarovite	1	
4130115	0.4A	Diopside	5	
4130115	0.4A	Olivine ?	1	
4130115	0.4A	Oxyde	2	
4130115	Diam	Chalcopyrite	3	
4130115	Diam	Arsénopyrite	6	
4130115	Diam	Cuivre	3	
4130116	0.1A	Grenat	3	
4130116	0.1A	Diopside	1	
4130116	0.17A	Inconnu	3	
4130116	0.4A	Ilmenite	4	
4130116	0.4A	Picro-ilménite	1	
4130117	0.1A	Ilmenite	2	
4130117	0.4A	Diopside	4	
4130117	0.4A	Pyrope	1	
4130117	Diam	Diopside	1	

Sample	Frantz	Mineral	Quantity	Description
4130118	0.1A	Ilmenite	8	
4130118	0.17A	Grenat	2	
4130118	0.17A	Ilmenite	1	
4130118	0.4A	Grenat	4	
4130118	0.4A	Diopside	5	
4130118	Diam	Cuivre	1	
4130119	0.1A	Ilmenite	7	
4130119	0.4A	Grenat	8	
4130119	0.4A	Diopside	5	
4130119	Diam	Diopside	1	
4130120	0.1A	Ilmenite	8	
4130120	0.17A	Ilmenite	1	
4130120	0.4A	Grenat	6	
4130120	0.4A	Oxyde	1	
4130120	0.4A	Diopside	3	
4130120	0.4A	Olivine ?	11	
4130121	0.1A	Ilmenite	6	
4130121	0.17A	Ilmenite	3	
4130121	0.4A	Grenat	5	
4130121	0.4A	Diopside	2	
4130121	Diam	Inconnu	2	arsénopyrite
4130121	Diam	Cuivre	1	
4130122	0.1A	Ilmenite	13	
4130122	0.17A	Grenat	2	
4130122	0.4A	Grenat	9	
4130122	0.4A	Diopside	5	
4130122	0.4A	Olivine	1	
4130123	0.1A	Ilmenite	13	
4130123	0.1A	Grenat	2	
4130123	0.1A	Picro-ilménite	5	
4130123	0.4A	Grenat	3	
4130123	0.4A	Diopside	5	
4130123	Diam	Diopside	2	
4130123	Diam	Cuivre ?	3	
4130124	0.1A	Ilmenite	1	
4130124	0.4A	Grenat	5	
4130124	0.4A	Diopside	3	
4130125	0.1A	Ilmenite	4	
4130125	0.17A	Ilmenite	1	
4130125	0.4A	Grenat	8	
4130125	0.4A	Diopside	3	
4130125	0.4A	Olivine ?	2	
4130126	0.1A	Ilmenite	8	
4130126	0.4A	Grenat	1	
4130126	0.4A	Diopside	1	
4130126	0.4A	Corundum	1	
4130126	Diam	Diopside	1	
4130126	Diam	Cuivre	1	
4130127	0.1A	Ilmenite	10	
4130127	0.4A	Grenat	3	
4130127	0.4A	Diopside	5	
4130127	0.4A	Olivine	1	
4130127	Diam	Diopside	1	
4130128	0.1A	Ilmenite	8	
4130128	0.4A	Grenat	5	

Sample	Frantz	Mineral	Quantity	Description
4130128	0.4A	Diopside	2	
4130128	Diam	Arsénopyrite	1	
4130129	0.1A	Ilmenite	5	
4130129	0.4A	Grenat	2	
4130129	0.4A	Diopside	4	
4130130	0.1A	Ilmenite	26	
4130130	0.1A	Picro-ilménite	2	
4130130	0.17A	Picro-ilménite ?	3	
4130130	0.17A	Grenat	1	
4130130	0.4A	Grenat	2	
4130130	0.4A	Diopside	5	
4130130	0.4A	Inconnu	1	
4130130	0.4A	Cr-Diopside	1	
4130130	0.4A	Inconnu	1	paillette jaune
4130130	Diam	Cuivre	1	
4130131	0.1A	Ilmenite	5	
4130131	0.17A	Grenat	2	
4130131	0.4A	Grenat	7	
4130131	0.4A	Diopside	2	
4130131	Diam	Diopside	2	
4130132	0.1A	Ilmenite	20	
4130132	0.1A	Grenat	1	
4130132	0.17A	Ilmenite	3	
4130132	0.4A	Oxyde	1	
4130132	0.4A	Diopside	4	
4130132	0.4A	Grenat	1	
4130132	Diam	Apatite ?	1	anisotrope
4130133	0.1A	Ilmenite	13	
4130133	0.17A	Ilmenite	3	
4130133	0.4A	Grenat	6	
4130133	0.4A	Diopside	8	
4130133	0.4A	Olivine ?	1	
4130133	0.4A	Orarovite	1	
4130133	Diam	Diopside	1	
4130133	Diam	Arsénopyrite	1	
4130134	0.1A	Ilmenite	12	
4130134	0.1A	Charmite	1	rounded black
4130134	0.17A	Grenat	1	
4130134	0.4A	Grenat	12	
4130134	0.4A	Diopside	3	
4130135	0.1A	Ilmenite	22	
4130135	0.17A	Grenat	3	
4130135	0.4A	Diopside	6	
4130135	0.4A	Grenat	4	
4130135	0.4A	Olivine ?	1	
4130136	0.1A	Ilmenite	7	
4130136	0.17A	Grenat	5	
4130136	0.4A	Grenat	6	
4130136	0.4A	Diopside	2	
4130136	Diam	Grenat	2	
4130136	Diam	Diopside	1	
4130136	Diam	Arsénopyrite	3	
4130136	Diam	Cuivre ?	1	
4130137	0.1A	Ilmenite	8	
4130137	0.17A	Grenat	3	

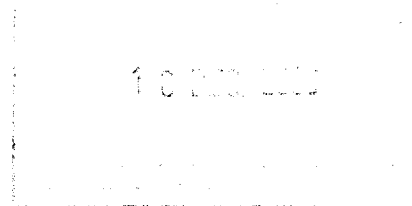
Sample	Frantz	Mineral	Quantity	Description
4130137	0.4A	Grenat	4	
4130137	0.4A	Diopside	5	
4130137	Diam	Diopside	2	
4130137	Diam	Cuivre ?	5	
4130138	0.1A	Ilmenite	8	
4130138	0.1A	Grenat	1	
4130138	0.17A	Grenat	3	
4130138	0.17A	Diopside	3	
4130138	0.4A	Diopside	5	
4130138	0.4A	Grenat	2	
4130138	Diam	Diopside	3	
4130138	Diam	Grenat	3	
4130139	0.1A	Ilmenite	25	
4130139	0.17A	Grenat	1	
4130139	0.17A	Diopside	1	
4130139	0.4A	Grenat	3	
4130139	0.4A	Diopside	9	
4130139	0.4A	Oxyde	1	
4130139	Diam	Gahnite	1	
4130139	Diam	Diopside	5	
4130140	0.1A	Ilmenite	11	
4130140	0.17A	Grenat	3	
4130140	0.17A	Picro-ilménite ?	3	
4130140	0.4A	Grenat	2	
4130140	0.4A	Diopside	5	
4130140	0.4A	Olivine ?	2	
4130140	Diam	Chalcopyrite	2	
4130140	Diam	Cuivre	3	
4130140	Diam	Diopside	1	
4130141	0.1A	Ilmenite	16	
4130141	0.17A	Grenat	4	
4130141	0.17A	Oxyde	3	
4130141	0.4A	Grenat	3	
4130141	0.4A	Diopside	2	
4130141	Diam	Cuivre	2	

Sample	PROBABLE KIMs					EXTRACTED GRAINS				OTHER
	PYROPE	ILMENITE	CHROMITE	DIOPSIDE	OLIVINE	GARNET	OXIDE	DIOPSIDE	OLIVINE	
4130068	0	0	0	0	0	9	7	10	1	
4130069	0	0	0	0	0	3	3	9	1	
4130070	0	0	0	0	0	10	5	2	0	1 spinel ?
4130071	0	0	0	0	0	9	5	7	0	0
4130072	0	0	0	0	0	12	6	5	2	0
4130073	0	0	0	0	0	8	9	1	0	
4130074	0	0	0	0	0	7	8	6	0	0
4130075	0	0	0	0	0	11	11	8	6	0
4130076	0	0	0	0	0	5	8	8	2	0
4130077	0	0	0	0	0	3	8	6	1	0
4130078	0	0	0	0	0	6	15	4	0	1 inconnu
4130079	0	0	0	0	0	5	7	6	0	0
4130080	0	0	0	0	0	3	13	6	1	1gahnite
4130081	0	0	0	0	0	8	2	6	1	0
4130082	0	0	0	0	0	4	7	2	1	1 unknown
4130083	0	0	0	0	0	4	6	5	1	0
4130084	0	0	0	0	0	3	8	2	0	2 arsenopyrite ?
4130085	0	0	0	0	0	1	3	2	0	0
4130086	0	0	0	0	0	7	7	4	0	0
4130087	0	0	0	1	0	6	6	8	0	0
4130088	0	0	0	0	0	3	7	2	1	0
4130089	0	0	0	0	0	4	1	4	0	0
4130090	0	0	0	0	0	11	19	7	1	1 unknown
4130091	0	0	0	0	0	4	8	6	1	0
4130092	0	0	0	0	0	5	14	6	0	0
4130093	0	0	0	0	0	3	9	7	2	0
4130094	0	0	0	0	0	3	6	5	2	2 arsenopyrite ?
4130095	0	0	0	1	0	1	1	1	0	0
4130096	0	0	0	0	0	4	7	3	1	0
4130097	0	0	0	0	0	3	5	7	0	1 unknown
4130098	0	0	0	0	0	2	8	8	2	0
4130099	0	0	0	0	0	5	7	3	0	0
4130100	0	0	0	0	0	3	6	4	0	0
4130101	0	0	0	0	0	2	5	7	0	0
4130102	0	0	0	0	0	4	7	10	1	0
4130103	0	0	0	0	0	3	2	7	1	0
4130104	0	0	0	0	0	3	16	8	1	0
4130105	0	0	0	0	0	9	9	5	0	1 contamination ?
4130106	0	0	0	0	0	8	2	9	0	0
4130107	0	0	0	0	0	5	6	4	0	1 arsenopyrite ?
4130108	0	0	0	0	0	8	6	4	2	0
4130109	0	0	0	0	0	4	4	1	1	0
4130110	0	0	0	0	0	3	4	2	1	0
4130111	0	0	0	0	0	2	15	6	1	7 copper? / 4 unknown
4130112	0	0	0	0	0	5	8	6	0	2 unknown
4130113	0	0	0	0	0	3	15	2	1	1 arsenopyrite, 2 contamination?, 6 copper mineral
4130114	0	1	0	0	0	1	8	4	1	0
4130115	0	0	0	0	0	4	23	6	1	1 chalcopyrite, 6 arsenopyrite, 3 copper?
4130116	0	0	0	0	0	3	5	1	0	2 unknown
4130117	1	0	0	0	0	1	2	5	0	0
4130118	0	0	0	0	0	6	9	5	0	1 copper?
4130119	0	0	0	0	0	8	7	6	0	0
4130120	0	0	0	0	0	6	10	3	4	0
4130121	0	0	0	0	0	5	9	2	0	2 arsenopyrite, 1 copper?
4130122	0	0	0	0	0	11	13	5	1	0
4130123	0	0	0	0	0	5	18	7	0	3 copper?
4130124	0	0	0	0	0	5	7	3	0	0
4130125	0	0	0	0	0	8	5	3	2	0
4130126	0	0	0	0	0	1	8	2	0	1 copper?, 1 corundum
4130127	0	0	0	0	0	3	6	10	1	0
4130128	0	0	0	0	0	5	8	2	0	1 arsenopyrite
4130129	0	0	0	0	0	2	5	4	0	0
4130130	0	0	0	0	0	3	31	6	0	1 copper?, 2 unknown
4130131	0	0	0	0	0	9	5	4	0	0
4130132	0	0	0	0	0	2	24	4	0	1 apatite (?)
4130133	0	0	0	0	0	7	16	9	1	1 arsenopyrite ?
4130134	0	0	0	0	0	13	13	3	0	0
4130135	0	0	0	0	0	7	22	6	1	0
4130136	0	0	0	0	0	13	7	3	0	3 arsenopyrite?, 1 copper?
4130137	0	0	0	0	0	7	8	7	0	5 copper?
4130138	0	0	0	0	0	9	8	11	0	0

Sample	PROBABLE KIMs					EXTRACTED GRAINS				OTHER
	PYROPE	ILMENITE	CHROMITE	DIOPSIDE	OLIVINE	GARNET	OXIDE	DIOPSIDE	OLIVINE	
4130139	0	0	0	0	0	4	26	15	0	1 gahnite
4130140	0	0	0	0	0	5	14	6	2	1 chalcopryite / 3 copppe?
4130141	0	0	0	0	0	7	19	2	0	2 copper?
Total 2002	1	0	0	0	0	136	354	258	0	
Total 2003	1	1	0	2	0	394	677	385	50	

TILL SAMPLING FOLLOW-UP
PREMIER PROPERTY

APPENDIX 7
SCANNING ELECTRON MICROSCOPE

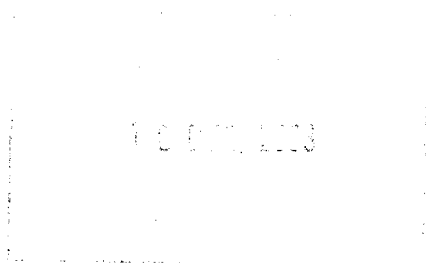


Échantillon	Propriété	Fraction	Visual id.	Description	Analyse	Interprétation	Photo
4130068	Premier	0,4	"Olivine ?"	White, milky, slightly yellow	Mg>Si>>Fe	Olivine	
4130069	Premier	0,4	Olivine ?		Al-Si-Ca>>Fe	Epidote	
4130080	Premier	0,17	Gahnite	Turquoise	Z-Al	Gahnite	
4130080	Premier	0,17	Olivine ?		Si>Mg>>Fe	Orthopyroxene	(see analyse)
4130084	Premier	0,17	Arsenopyrite		As>>Fe>>S	Lollingite	
4130084	Premier	0,17	Pyrite ?		As>>Fe>S	Lollingite	
4130088	Premier	0,4	"Olivine ?"	Small, colorless	Si-Al-Ca>>Fe	Epidote	
4130093	Premier	0,4	"Olivine ?"		Mg>Si>>Fe / Al>Mg>Cr-Fe	Olivine with spinel inclusion	see picture
4130094	Premier	0,4	Olivine ?		Al-Si-Ca>>Fe	Epidote	
4130094	Premier	Diam	Arsenopyrite		As-S>Fe	Arsenopyrite	
4130078	Premier	0,1	Fayalite	Yellow with sugary crust	Fe-Si	Fayalite	
4130082	Premier	0,4	Andradite ?	Reddish black vitreous fragment	Si-Ca>Al-Fe	Andradite	
4130090	Premier	Diam	Contamination	Greenish and grey	Sn/O/Fe/S	Contamination	
4130097	Premier	0,4	Unknown	Pale blue to colorless to pale yellow	Si-Al-Ca>>Fe-Mn	Epidote	
4130098	Premier	0,4	Olivine ?	Colorless	Mg-Si>>Fe	Olivine	
4130104	Premier	0,4	"Olivine ?"	Seems to have cleavage, colorless	Al-Si-Ca>>Fe	Epidote	
4130107	Premier	0,1	Arsenopyrite ?		As-S>Fe	Arsenopyrite	
4130111	Premier	0,4	"Olivine ?"	White	Si>Al-Ca>Mg-Fe>Mn	Grossular?	
4130111	Premier	Diam	Contamination	Or copper ?	Cu>>Zn>Mg	Brass (contamination)	
4130111	Premier	Diam	Contamination	Or copper ?	Cu>>Zn	Brass (contamination)	
4130111	Premier	Diam	Contamination ?	Greyish	Sn-S	Tin (contamination)	
4130111	Premier	Diam	Contamination ?	Greyish	Pb>>Sn	Soldering tin (contamination)	
4130112	Premier	0,1	Unknown	Pale pink, anisotropic	Si>Al-Ca-O>>Mn-Fe	Epidote ?	
4130113	Premier	0,1	Unknown	Pyrite ?	Fe>Cr>S>Ni	?	
4130113	Premier	Diam	"Copper mineral"	Iridescent	S>Fe>Cu>>Ag	Chalcopyrite with trace of silver	
4130113	Premier	Diam	"Copper mineral"	Iridescent	S>Cu>Fe>>Ag	Chalcopyrite with trace of silver	
4130113	Premier	Diam	"Copper mineral"	Iridescent, (2 fragment)	S>Fe-Cu>>Ag	Chalcopyrite with trace of silver	
4130113	Premier	Diam	"Rutile"	Black, vitreous	Ti	Rutile	
4130115	Premier	Diam	Arsenopyrite ?		As, S, Fe	Arsenopyrite	
4130115	Premier	Diam	Copper ?		Cu / Cu-O	Copper with oxidized copper, contamination?	
4130116	Premier	Diam	Contamination		Pb-Sn / Sn-Pb-Ca	Soldering tin Sn-Pb carbonate	
4130116	Premier	Diam	Contamination	Grey, smooth (soft)	Pb-Sn	Soldering tin	
4130118	Premier	Diam	Copper	Or contamination ?	Cu	Native copper	
4130121	Premier	Diam	Contamination ?	Grey, soft (noted as As)	Pb-Sn / Fe-O	Soldering tin	
4130122	Premier	0,4	"Olivine"	Quartz or Apatite, biréfringence, little cleavage	Si,Al,Ca,Fe		(see analyse)
4130123	Premier	Diam	Contamination ?	Greyish brown	Pb-C-O>Ca / Fe-O	Witherite, native Pb, iron hydroxide	
4130123	Premier	Diam	Contamination ?	Or copper	Cu / silicates	Native copper with very fine silicate grains	
4130127	Premier	0,1	"Olivine ?"	Colorless, anisotropic	Mg-Si-Fe	Olivine	
4130130	Premier	0,4	"Unknown"	Pleochroic, brownish, vitreous	Si-Mg-Ca-Fe-Al	Grossular?	see analyse
4130130	Premier	Diam	Contamination	Grey with green spot (Malachite)	Zn-C-O / Zn	Calamine, malachite, Native Zn	
4130133	Premier	0,4	"Olivine ?"	Colorless	Si-Al-Ca-Fe-Mn-Mg	Grossular?	See analyse Same as R4-G7
4130133	Premier	Diam	Oxide	Or Sulfure ?, grey	As-Fe	Lollingite	
4130136	Premier	Diam	"Arsenopyrite ?"	Altered, corroded	As-Fe >>S	Lollingite	
4130139	Premier	Diam	Gahnite		Zn-Al-O-Fe	Gahnite	
4130140	Premier	0,4	"Olivine ?"	Colorless	Si-Al-Ca-Fe-Mg-Mn	Grossular?	see analyse
4130140	Premier	Diam	"Copper"	Or contamination	Cu-O-S-Zn-C	Copper carbonate with metallic copper	

APPENDIX 8

MICROPROBE ANALYSIS

- Table 1: Settings and calibrations
- Table 2a: Garnet analysis
- Table 2b: Pyroxene analysis
- Table 2c: Ilmenite analysis
- Table 2d: Spinel analysis
- Table 3: Microprobe print-out
- Table 4: KIM counts



Quantitative Analysis Declaration

Label:pyrorg
 Date:Thu Nov 6 09:24:54 2003
 Type:Geo
 Take Off Angle:40.
 Iteration Limit:0.000

Condition #1 15.0 kV 50.0 nA

Sp1 LIF

Fe Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:hemvz	Esti 3 Sig.D.L. (ppm): 1192.74	
Bias(V):1296	Gain(*):413	DeadTime(us):3
Baseline:953	Window:2252	Mode:Pha Diff
SineTheta:48084	I(C/s/nA):96.329	Date:26/Feb/ 3

Mn Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:busx	Esti 3 Sig.D.L. (ppm): 905.39	
Bias(V):1300	Gain(*):412	DeadTime(us):3
Baseline:833	Window:2164	Mode:Pha Diff
SineTheta:52202	I(C/s/nA):23.671	Date:19/Aug/ 3

Sp2 LLIF

Ti Ka	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:ilmenei	Esti 3 Sig.D.L. (ppm): 438.01	
Bias(V):1815	Gain(*):360	DeadTime(us):3
Baseline:560	Window:1849	Mode:Pha Diff
SineTheta:68290	I(C/s/nA):146.844	Date:08/Oct/ 3

Cr Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:chromi	Esti 3 Sig.D.L. (ppm): 539.70	
Bias(V):1840	Gain(*):314	DeadTime(us):3
Baseline:722	Window:2072	Mode:Pha Diff
SineTheta:56880	I(C/s/nA):441.477	Date:01/Aug/ 2

Sp3 LPET

K Ka	Shift:0	Valence:1
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:ortho	Esti 3 Sig.D.L. (ppm): 147.05	
Bias(V):1856	Gain(*):923	DeadTime(us):3
Baseline:574	Window:3530	Mode:Pha Diff
SineTheta:42741	I(C/s/nA):280.022	Date:08/Oct/ 3

Ca Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000

Standard:diox	Esti 3 Sig.D.L. (ppm): 150.39
Bias(V):1845	Gain(*):869
Baseline:741	Window:3728
SineTheta:38387	I(C/s/nA):475.256

DeadTime(us):3
Mode:Pha Diff
Date:08/Oct/ 3

Sp4 TAP

Na Ka	Shift:0	Valence:1
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:500	(-)Bkg:0	Slope:1.000
Standard:alb	Esti 3 Sig.D.L. (ppm): 416.87	
Bias(V):1293	Gain(*):2584	DeadTime(us):3
Baseline:560	Window:4498	Mode:Pha Diff
SineTheta:46353	I(C/s/nA):73.702	Date:02/Oct/ 3

Mg Ka	Shift:0	Valence:2
Time(sec):20	Bkg(sec):10.0	
(+)Bkg:500	(-)Bkg:0	Slope:1.000
Standard:diop	Esti 3 Sig.D.L. (ppm): 136.94	
Bias(V):1291	Gain(*):2584	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:38489	I(C/s/nA):171.828	Date:22/May/ 3

Sp5 TAP

Al Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:plagvz	Esti 3 Sig.D.L. (ppm): 173.45	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:32463	I(C/s/nA):303.238	Date:02/Oct/ 3

Si Ka	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:busx	Esti 3 Sig.D.L. (ppm): 191.32	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:27737	I(C/s/nA):427.796	Date:19/Aug/ 3

Not analyzed :H
 Not analyzed :O
 Number of Oxygens = 6
 Number of H2O = 0

Quantitative Analysis Declaration

Label:garnrg
 Date:Thu Nov 6 09:25:22 2003
 Type:Geo
 Take Off Angle:40.
 Iteration Limit:0.000

Condition #1 15.0 kV 50.0 nA

Sp1 LIF

Ti Ka	Shift:0	Valence:4
Time(sec):20	Bkg(sec):10.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:ilmeni	Esti 3 Sig.D.L. (ppm): 607.20	
Bias(V):1296	Gain(*):408	DeadTime(us):3
Baseline:560	Window:1849	Mode:Pha Diff
SineTheta:68277	I(C/s/nA):27.180	Date:08/Oct/ 3

Fe Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:hemvz	Esti 3 Sig.D.L. (ppm): 1192.74	
Bias(V):1296	Gain(*):413	DeadTime(us):3
Baseline:953	Window:2252	Mode:Pha Diff
SineTheta:48084	I(C/s/nA):96.329	Date:26/Feb/ 3

Sp2 LLIF

Cr Ka	Shift:0	Valence:3
Time(sec):20	Bkg(sec):10.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:chromi	Esti 3 Sig.D.L. (ppm): 385.94	
Bias(V):1840	Gain(*):314	DeadTime(us):3
Baseline:721	Window:2072	Mode:Pha Diff
SineTheta:56887	I(C/s/nA):436.850	Date:25/Jun/ 3

Mn Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:busx	Esti 3 Sig.D.L. (ppm): 446.72	
Bias(V):1807	Gain(*):357	DeadTime(us):3
Baseline:833	Window:2164	Mode:Pha Diff
SineTheta:52202	I(C/s/nA):115.173	Date:19/Aug/ 3

Sp3 LPET

K Ka	Shift:0	Valence:1
Time(sec):20	Bkg(sec):10.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:ortho	Esti 3 Sig.D.L. (ppm): 103.98	
Bias(V):1856	Gain(*):923	DeadTime(us):3
Baseline:574	Window:3530	Mode:Pha Diff
SineTheta:42741	I(C/s/nA):280.022	Date:08/Oct/ 3

Ca Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000

Standard:diox
 Bias(V):1845
 Baseline:741
 SineTheta:38387

Esti 3 Sig.D.L. (ppm): 150.39
 Gain(*):869
 Window:3728
 I(C/s/nA):475.256
 DeadTime(us):3
 Mode:Pha Diff
 Date:08/Oct/ 3

Sp4 TAP

Na Ka	Shift:0	Valence:1
Time(sec):20	Bkg(sec):10.0	
(+)Bkg:500	(-)Bkg:0	Slope:1.000
Standard:alb	Esti 3 Sig.D.L. (ppm): 294.77	
Bias(V):1293	Gain(*):2584	DeadTime(us):3
Baseline:560	Window:4498	Mode:Pha Diff
SineTheta:46353	I(C/s/nA):73.702	Date:02/Oct/ 3

Si Ka	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:qvzv	Esti 3 Sig.D.L. (ppm): 204.60	
Bias(V):1291	Gain(*):2584	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:27737	I(C/s/nA):1057.412	Date:18/Jun/ 3

Sp5 TAP

Mg Ka	Shift:0	Valence:2
Time(sec):20	Bkg(sec):10.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:mgo	Esti 3 Sig.D.L. (ppm): 226.28	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:38503	I(C/s/nA):952.075	Date:02/Oct/ 3

Al Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:plagvz	Esti 3 Sig.D.L. (ppm): 173.45	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:32463	I(C/s/nA):303.238	Date:02/Oct/ 3

Not analyzed :H
 Not analyzed :O
 Number of Oxygens = 24
 Number of H2O = 0

Quantitative Analysis Declaration

Label:ilmerg
 Date:Thu Nov 6 09:25:54 2003
 Type:Geo
 Take Off Angle:40.
 Iteration Limit:0.000

Condition #1 15.0 kV 40.0 nA

Sp1 LIF

Fe Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:ilmeni	Esti 3 Sig.D.L.(ppm): 1486.13	
Bias(V):1297	Gain(*):408	DeadTime(us):3
Baseline:953	Window:2252	Mode:Pha Diff
SineTheta:48084	I(C/s/nA):45.742	Date:01/Aug/ 2

Mn Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:willelvz	Esti 3 Sig.D.L.(ppm): 867.61	
Bias(V):1297	Gain(*):408	DeadTime(us):3
Baseline:833	Window:2164	Mode:Pha Diff
SineTheta:52196	I(C/s/nA):5.483	Date:01/Aug/ 2

Sp2 LLIF

Zn Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:sphal	Esti 3 Sig.D.L.(ppm): 1291.06	
Bias(V):1824	Gain(*):369	DeadTime(us):3
Baseline:1495	Window:2624	Mode:Pha Diff
SineTheta:35621	I(C/s/nA):281.444	Date:21/Nov/ 1

Cr Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:chromi	Esti 3 Sig.D.L.(ppm): 610.22	
Bias(V):1840	Gain(*):314	DeadTime(us):3
Baseline:721	Window:2072	Mode:Pha Diff
SineTheta:56887	I(C/s/nA):436.850	Date:25/Jun/ 3

Sp3 LPET

Ti Kb	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:rut	Esti 3 Sig.D.L.(ppm): 1448.86	
Bias(V):1842	Gain(*):853	DeadTime(us):3
Baseline:1331	Window:4189	Mode:Pha Diff
SineTheta:28715	I(C/s/nA):281.173	Date:20/Jun/ 3

Nb La	Shift:7	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000

Standard:Nb100	Esti 3 Sig.D.L.(ppm): 1085.66	
Bias(V):1848	Gain(*):878	DeadTime(us):3
Baseline:560	Window:2393	Mode:Pha Diff
SineTheta:65459	I(C/s/nA):378.440	Date:04/Jul/ 2

Sp4 TAP

Si Ka	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:busx	Esti 3 Sig.D.L.(ppm): 203.83	
Bias(V):1288	Gain(*):2556	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:27737	I(C/s/nA):477.068	Date:19/Aug/ 3

Na Ka	Shift:0	Valence:1
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:500	(-)Bkg:0	Slope:1.000
Standard:alb	Esti 3 Sig.D.L.(ppm): 466.08	
Bias(V):1293	Gain(*):2584	DeadTime(us):3
Baseline:560	Window:4498	Mode:Pha Diff
SineTheta:46353	I(C/s/nA):73.702	Date:02/Oct/ 3

Sp5 TAP

Al Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:plagvz	Esti 3 Sig.D.L.(ppm): 193.92	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:32463	I(C/s/nA):303.238	Date:02/Oct/ 3

Mg Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:mgo	Esti 3 Sig.D.L.(ppm): 357.77	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:38503	I(C/s/nA):952.075	Date:02/Oct/ 3

Not analyzed :H
 Not analyzed :O
 Number of Oxygens = 6
 Number of H2O = 0

Quantitative Analysis Declaration

Label:olivpm
Date:Thu Nov 6 09:26:17 2003
Type:Geo
Take Off Angle:40.
Iteration Limit:0.000

Condition #1 15.0 kV 40.0 nA

Sp1 LIF

Fe Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:hemvz	Esti 3 Sig.D.L. (ppm): 1333.53	
Bias(V):1296	Gain(*):413	DeadTime(us):3
Baseline:953	Window:2252	Mode:Pha Diff
SineTheta:48084	I(C/s/nA):96.329	Date:26/Feb/ 3

Mn Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-500	Slope:1.000
Standard:busx	Esti 3 Sig.D.L. (ppm): 1012.26	
Bias(V):1300	Gain(*):412	DeadTime(us):3
Baseline:833	Window:2164	Mode:Pha Diff
SineTheta:52202	I(C/s/nA):23.671	Date:19/Aug/ 3

Sp2 LLIF

Cr Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:chromi	Esti 3 Sig.D.L. (ppm): 603.40	
Bias(V):1840	Gain(*):314	DeadTime(us):3
Baseline:722	Window:2072	Mode:Pha Diff
SineTheta:56880	I(C/s/nA):441.477	Date:01/Aug/ 2

Ni Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:ptlx	Esti 3 Sig.D.L. (ppm): 821.57	
Bias(V):1804	Gain(*):355	DeadTime(us):3
Baseline:1850	Window:1700	Mode:Pha Integral
SineTheta:41176	I(C/s/nA):209.366	Date:03/May/ 2

Sp3 LPET

Ti Kb	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000
Standard:rut	Esti 3 Sig.D.L. (ppm): 1414.92	
Bias(V):1843	Gain(*):857	DeadTime(us):3
Baseline:1331	Window:4189	Mode:Pha Diff
SineTheta:28713	I(C/s/nA):282.313	Date:08/Oct/ 3

Ca Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:0	(-)Bkg:-600	Slope:1.000

Standard:diox	Esti 3 Sig.D.L. (ppm): 168.14	
Bias(V):1845	Gain(*):869	DeadTime(us):3
Baseline:741	Window:3728	Mode:Pha Diff
SineTheta:38387	I(C/s/nA):475.256	Date:08/Oct/ 3

Sp4 TAP

Si Ka	Shift:0	Valence:4
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:busx	Esti 3 Sig.D.L. (ppm): 203.83	
Bias(V):1288	Gain(*):2556	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:27737	I(C/s/nA):477.068	Date:19/Aug/ 3

Al Ka	Shift:0	Valence:3
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:plagvz	Esti 3 Sig.D.L. (ppm): 203.60	
Bias(V):1293	Gain(*):2584	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:32457	I(C/s/nA):341.100	Date:02/Oct/ 3

Sp5 TAP

Na Ka	Shift:0	Valence:1
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:500	(-)Bkg:0	Slope:1.000
Standard:alb	Esti 3 Sig.D.L. (ppm): 319.02	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4497	Mode:Pha Diff
SineTheta:46365	I(C/s/nA):65.862	Date:02/Oct/ 3

Mg Ka	Shift:0	Valence:2
Time(sec):10	Bkg(sec):0.0	
(+)Bkg:600	(-)Bkg:0	Slope:1.000
Standard:mgo	Esti 3 Sig.D.L. (ppm): 357.77	
Bias(V):1282	Gain(*):2516	DeadTime(us):3
Baseline:560	Window:4960	Mode:Pha Diff
SineTheta:38503	I(C/s/nA):952.075	Date:02/Oct/ 3

Not analyzed:0
Number of Oxygens = 4
Number of H2O = 0

STANDARDS				
	Pyrope	Cr-Diopside	Ilmenite	
	ASTIMEX	ASTIMEX	SMITHSONIAN	
MgO	19,33	17,46	0,32	
Al ₂ O ₃	21,31			
SiO ₂	41,46	55,13		
CaO	4,65	25,55		
TiO ₂	1,17	0,05	45,71	
Cr ₂ O ₃	0,57	0,58		
MnO	0,27		4,76	
FeO	11,15	1,21	36,1	
Fe ₂ O ₃			11,6	
Nb ₂ O ₃			0,92	
TOTAL	99,91	99,98	99,41	

point n : 1 x= 10004.0 y= 21027.0 z= 83.
Ilmenite Smithsonian

Elt.	Peak (Cps)	Prec. (%)	Bkgd (Cps)	P/B	Ix/Istd (%)	Sig/k (%)	Detection limit (%)	Beam (nA)	Acceleration voltage (kV)
Fe	1861.2	0.7	24.0	77.55	1.0032	0.8	0.1146	40.0	15.0
Zn	100.4	3.2	107.6	0.93	0.0000	3.2	0.0000		
Cr	34.6	5.4	26.2	1.32	0.0005	5.4	0.0341		
Mn	197.2	2.2	10.8	18.26	0.8491	2.8	0.0740		
Ti	5694.7	0.4	297.1	19.17	0.4795	0.4	0.1412		
Nb	97.0	3.2	10.2	9.51	0.0057	3.2	0.0337		
Si	73.3	3.7	65.0	1.13	0.0004	3.7	0.0192		
Na	13.8	8.5	12.2	1.13	0.0005	8.5	0.0212		
Al	49.3	4.5	39.2	1.26	0.0008	4.5	0.0125		
Mg	98.5	3.2	23.4	4.21	0.0020	3.2	0.0144		

Elt.	k-ratio	Correc.
Fe	0.3289	1.1118
Zn	0.0000	NaN
Cr	0.0003	1.0550
Mn	0.0300	1.1244
Ti	0.2616	1.0375
Nb	0.0057	1.2820
Si	0.0001	1.3341
Na	0.0000	3.0547
Al	0.0001	1.6473
Mg	0.0009	2.0752

iteration : 4

Analysis no. 1 within ilmerg

Elt.	Conc. (wt%)	lsigma (wt%)	Norm Conc. (wt%)	Norm Conc. (at%)	Compound	Concen. (wt%)
Fe	36.5621	0.317659	37.2981	20.6363	FeO	47.037
Zn	0.0000	0.000000	0.0000	0.0000	ZnO	
Cr	0.0321	0.011256	0.0327	0.0194	Cr2O3	0.047
Mn	3.3788	0.101046	3.4468	1.9386	MnO	4.363
Ti	27.1428	0.130831	27.6891	17.8616	TiO2	45.276
Nb	0.7346	0.029033	0.7494	0.2492	Nb2O3	0.924
Si	0.0105	0.005681	0.0107	0.0117	SiO2	0.022
Na	0.0081	0.009868	0.0082	0.0111	Na2O	0.011
Al	0.0169	0.005973	0.0172	0.0197	Al2O3	0.032
Mg	0.1899	0.009637	0.1937	0.2463	MgO	0.315
O	29.9511		30.5540	59.0060	by stoic. wit norm.	
total :	98.0268		100.0000	100.0000		98.027

be careful, strong correction for Zn (0.00)

ilmenite cations on 6. <o> basis

	Wt.%	Cations
SiO2	0.0224	Si 0.0105 0.0011
TiO2	45.2757	Ti 27.1428 1.7433
Al2O3	0.0319	Al 0.0169 0.0019
Cr2O3	0.0469	Cr 0.0321 0.0019

Standards (ilmenite)

Fe2O3	12.5137	Fe	8.7524	0.4821
Nb2O3	0.9244	Nb	0.7346	0.0243
MgO	0.3149	Mg	0.1899	0.0240
MnO	4.3628	Mn	3.3788	0.1892
FeO	35.7771	Fe	27.8097	1.5319
ZnO	0.0000	Zn	0.0000	0.0000
Na2O	0.0109	Na	0.0081	0.0011
total	99.2806			4.0010

Ratio (Fe+Mn)/(Fe+Mn+Mg) = 98.62

Ratio Cr / (Cr+Al) = 49.63

point n : 2 x= 9997.0 y= 21058.0 z= 83.
Ilmenite Smithsonian

Elt.	Peak (Cps)	Prec. (%)	Bkgd (Cps)	P/B	Ix/Istd (%)	Sig/k (%)	Detection limit (%)	Beam (nA)	Acceleration voltage (kV)
Fe	1803.8	0.7	17.2	104.87	1.0106	0.8	0.1035	38.6	15.0
Zn	101.4	3.1	88.0	1.15	0.0012	3.1	0.0756		
Cr	36.9	5.2	28.2	1.31	0.0005	5.2	0.0372		
Mn	184.3	2.3	9.4	19.61	0.8253	2.8	0.0734		
Ti	5435.5	0.4	269.8	20.15	0.4754	0.4	0.1420		
Nb	90.7	3.3	13.2	6.87	0.0053	3.3	0.0400		
Si	67.1	3.9	64.2	1.05	0.0002	3.9	0.0201		
Na	12.6	8.9	10.4	1.21	0.0008	8.9	0.0208		
Al	47.2	4.6	35.2	1.34	0.0010	4.6	0.0125		
Mg	95.4	3.2	20.8	4.59	0.0020	3.2	0.0144		

Elt.	k-ratio	Correc.
Fe	0.3313	1.1116
Zn	0.0008	1.1749
Cr	0.0003	1.0540
Mn	0.0292	1.1241
Ti	0.2594	1.0373
Nb	0.0053	1.2829
Si	0.0000	1.3356
Na	0.0000	3.0590
Al	0.0001	1.6495
Mg	0.0009	2.0786

iteration : 4

Analysis no. 2 within ilmerg

Elt.	Conc. (wt%)	lsigma (wt%)	Norm Conc. (wt%)	Norm Conc. (at%)	Compound	Concen. (wt%)
Fe	36.8274	0.322130	37.6165	20.8328	FeO	47.3
Zn	0.0903	0.035480	0.0922	0.0436	ZnO	0.1
Cr	0.0344	0.012065	0.0351	0.0209	Cr2O3	0.0
Mn	3.2830	0.100045	3.3533	1.8879	MnO	4.2
Ti	26.9050	0.131915	27.4815	17.7449	TiO2	44.8
Nb	0.6800	0.030051	0.6946	0.2312	Nb2O3	0.8
Si	0.0038	0.005778	0.0039	0.0043	SiO2	0.0
Na	0.0115	0.009572	0.0118	0.0158	Na2O	0.0
Al	0.0208	0.005946	0.0213	0.0244	Al2O3	0.0
Mg	0.1957	0.009710	0.1999	0.2544	MgO	0.3
O	29.8504		30.4900	58.9398	by stoic. wit norm.	

total : 97.9022 100.0000 100.0000 97.902

ilmeneite cations on 6. <o> basis

		Wt. %	Cations
SiO2	0.0081	Si 0.0038	0.0004
TiO2	44.8790	Ti 26.9050	1.7300
Al2O3	0.0393	Al 0.0208	0.0024
Cr2O3	0.0502	Cr 0.0344	0.0020
Fe2O3	13.1618	Fe 9.2057	0.5077
Nb2O5	0.8556	Nb 0.6800	0.0225
MgO	0.3246	Mg 0.1957	0.0248
MnO	4.2391	Mn 3.2830	0.1841
FeO	35.5352	Fe 27.6217	1.5233
ZnO	0.1124	Zn 0.0903	0.0043
Na2O	0.0155	Na 0.0115	0.0015
total	99.2209		4.0030

Ratio (Fe+Mn)/(Fe+Mn+Mg) = 98.57

Ratio Cr / (Cr+Al) = 46.15

point n : 3 x= 5196.0 y= 6707.0 z= 5.
Cr-Diopside Astimex

Elt.	Peak (Cps)	Prec. (%)	Bkgd (Cps)	P/B	Ix/Istd (%)	Sig/k (%)	Detection limit (%)	Beam (nA)	Acceleration voltage (kV)
Fe	65.0	3.9	7.8	8.33	0.0118	3.9	0.0512	50.2	15.0
Ti	24.6	6.4	13.8	1.78	0.0015	6.4	0.0177		
Cr	106.5	3.1	29.0	3.67	0.0035	3.1	0.0197		
K	61.3	4.0	63.8	0.96	0.0000	4.1	0.0000		
Mn	7.2	11.8	7.8	0.92	0.0000	11.8	0.0000		
Ca	23237.5	0.2	136.1	170.79	0.9685	0.2	0.0091		
Na	107.3	3.0	18.4	5.83	0.0269	3.1	0.0131		
Mg	7423.8	0.4	73.2	101.40	0.1538	0.4	0.0127		
Al	164.8	2.5	40.6	4.06	0.0082	2.5	0.0080		
Si	24348.1	0.2	119.2	204.19	1.1285	0.2	0.0192		

Elt.	k-ratio	Correc.
Fe	0.0076	1.2324
Ti	0.0004	1.2455
Cr	0.0022	1.2315
K	0.0000	NaN
Mn	0.0000	NaN
Ca	0.1590	1.1183
Na	0.0013	1.9683
Mg	0.0714	1.4988
Al	0.0010	1.4629
Si	0.2036	1.2651

iteration : 4

Analysis no. 1 within pyrorg

Elt.	Conc. (wt%)	Isigma (wt%)	Norm Conc. (wt%)	Norm Conc. (at%)	Compound	Concen. (wt%)
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Fe	0.9409	0.046814	0.9405	0.3663	FeO	1.1
Ti	0.0484	0.010243	0.0484	0.0220	TiO2	0.1
Cr	0.2726	0.014268	0.2725	0.1140	Cr2O3	0.1
K	0.0000	0.000000	0.0000	0.0000	K2O	
Mn	0.0000	0.000000	0.0000	0.0000	MnO	
Ca	17.7816	0.044449	17.7742	9.6461	CaO	24.1
Na	0.2583	0.011112	0.2582	0.2443	Na2O	0.1
Mg	10.7046	0.041391	10.7002	9.5760	MgO	17.1
Al	0.1470	0.005879	0.1470	0.1185	Al2O3	0.1
Si	25.7527	0.056565	25.7419	19.9365	SiO2	55.1
O	44.1356		44.1172	59.9763		

total : 100.0419 100.0000 100.0000 100.0

be careful, strong correction for K (0.00)
be careful, strong correction for Mn (0.00)

pyroxene cations on 6. <o> basis

		Wt. %	Cations
SiO2	55.0946	Si 25.7527	1.9925
TiO2	0.0808	Ti 0.0484	0.0022
Al2O3	0.2778	Al 0.1470	0.0118
Cr2O3	0.3985	Cr 0.2726	0.0114
Fe2O3	0.4351	Fe 0.3043	0.0118
MgO	17.7515	Mg 10.7046	0.9570
CaO	24.8801	Ca 17.7816	0.9640
MnO	0.0000	Mn 0.0000	0.0000
FeO	0.8189	Fe 0.6365	0.0248
Na2O	0.3481	Na 0.2583	0.0244
K2O	0.0000	K 0.0000	0.0000
total	100.0855		4.0000

wo: 49.54 en: 49.18 fs: 1.27

Ratio (Fe+Mn)/(Fe+Mn+Mg) = 2.52

point n : 4 x= 5207.0 y= 6709.0 z= 5.
Cr-Diopside Astimex

Elt.	Peak (Cps)	Prec. (%)	Bkgd (Cps)	P/B	Ix/Istd (%)	Sig/k (%)	Detection limit (%)	Beam (nA)	Accelerat voltage (kV)
Fe	67.3	3.9	9.4	7.16	0.0120	3.9	0.0556	50.3	15.0
Ti	24.5	6.4	11.6	2.11	0.0017	6.4	0.0162		
Cr	117.7	2.9	29.6	3.98	0.0040	2.9	0.0198		
K	63.7	4.0	65.8	0.97	0.0000	4.0	0.0000		
Mn	8.6	10.8	7.4	1.16	0.0010	10.8	0.0833		
Ca	23114.6	0.2	138.9	166.46	0.9612	0.2	0.0092		
Na	115.7	2.9	16.2	7.14	0.0300	3.0	0.0123		
Mg	7398.1	0.4	67.6	109.42	0.1531	0.4	0.0122		
Al	177.5	2.4	48.2	3.68	0.0085	2.4	0.0087		
Si	24383.6	0.2	128.6	189.53	1.1273	0.2	0.0198		

Elt.	k-ratio	Correc.
Fe	0.0077	1.2324
Ti	0.0005	1.2451
Cr	0.0025	1.2313
K	0.0000	NaN
Mn	0.0002	1.2540

quite standard (quite ilmeneite, diopside)

Ca	0.1578	1.1183
Na	0.0015	1.9696
Mg	0.0711	1.5000
Al	0.0010	1.4632
Si	0.2034	1.2653

iteration : 4

Analysis no. 2 within pyrorg

Elt.	Conc. (wt%)	1sigma (wt%)	Norm Conc. (wt%)	Norm Conc. (at%)	Compound	Concen. (wt%)
Fe	0.9504	0.048276	0.9514	0.3705	FeO	1.223
Ti	0.0577	0.009768	0.0578	0.0262	TiO2	0.096
Cr	0.3092	0.014764	0.3096	0.1295	Cr2O3	0.452
K	0.0000	0.000000	0.0000	0.0000	K2O	
Mn	0.0200	0.025440	0.0200	0.0079	MnO	0.026
Ca	17.6466	0.044203	17.6656	9.5870	CaO	24.691
Na	0.2887	0.011268	0.2890	0.2734	Na2O	0.389
Mg	10.6618	0.041236	10.6733	9.5517	MgO	17.680
Al	0.1528	0.006191	0.1530	0.1233	Al2O3	0.289
Si	25.7301	0.056517	25.7578	19.9483	SiO2	55.046
O	44.0752		44.1226	59.9821	by stoic. wit norm.	
total :	99.8925		100.0000	100.0000		99.892

be careful, strong correction for K (0.00)

pyroxene cations on 6. <0> basis

	Wt.%	Cations
SiO2	55.0464	Si 25.7301 1.9939
TiO2	0.0962	Ti 0.0577 0.0026
Al2O3	0.2887	Al 0.1528 0.0123
Cr2O3	0.4519	Cr 0.3092 0.0129
Fe2O3	0.3278	Fe 0.2293 0.0089
MgO	17.6805	Mg 10.6618 0.9547
CaO	24.6912	Ca 17.6466 0.9583
MnO	0.0258	Mn 0.0200 0.0008
FeO	0.9277	Fe 0.7211 0.0281
Na2O	0.3891	Na 0.2887 0.0273
K2O	0.0000	K 0.0000 0.0000
total	99.9253	4.0000

wo: 49.35 en: 49.17 fs: 1.49

Ratio (Fe+Mn)/(Fe+Mn+Mg) = 2.94

Standard (suite diopside)

point n : 1 x= 5530.0 y= -135.0 z= -50.
Pyrope Astimex

Elt.	Peak (Cps)	Prec. (%)	Bkgd (Cps)	P/B	Ix/Istd	Sig/k (%)	Detection limit (%)	Beam (nA)	Acceleration voltage (kV)
Ti	30.6	4.0	2.3	13.28	0.0214	4.1	0.0217	48.6	15.0
Fe	498.3	1.4	8.6	57.95	0.1046	1.5	0.0555		
Cr	137.9	1.9	27.4	5.03	0.0052	1.9	0.0145		
Mn	101.7	3.1	43.8	2.32	0.0103	3.1	0.0395		
K	59.1	2.9	58.5	1.01	0.0000	2.9	0.0036		
Ca	4187.9	0.5	92.2	45.41	0.1773	0.5	0.0079		
Na	45.1	3.3	15.0	3.01	0.0084	3.4	0.0057		
Si	17827.4	0.2	106.6	167.18	0.3448	0.3	0.0172		
Mg	7900.2	0.3	73.4	107.61	1.0557	0.4	0.0100		
Al	9077.6	0.3	67.8	133.86	0.6113	0.4	0.0110		

Elt.	k-ratio	Correc.
Ti	0.0057	1.1996
Fe	0.0675	1.2155
Cr	0.0033	1.1822
Mn	0.0016	1.2293
K	0.0000	1.1588
Ca	0.0291	1.1146
Na	0.0004	2.0031
Si	0.1386	1.4047
Mg	0.0799	1.5153
Al	0.0753	1.5013

iteration : 4

Analysis no. 1 within garnrg

Elt.	Conc. (wt%)	lsigma (wt%)	Norm Conc. (wt%)	Norm Conc. (at%)	Compound	Concen. (wt%)
Ti	0.6806	0.032104	0.6788	0.3054	TiO2	1.135
Fe	8.2027	0.123828	8.1822	3.1568	FeO	10.553
Cr	0.3891	0.010941	0.3881	0.1608	Cr2O3	0.569
Mn	0.2008	0.015090	0.2003	0.0786	MnO	0.259
K	0.0005	0.002621	0.0005	0.0003	K2O	0.001
Ca	3.2445	0.017140	3.2363	1.7398	CaO	4.540
Na	0.0821	0.005309	0.0819	0.0768	Na2O	0.111
Si	19.4683	0.050280	19.4195	14.8982	SiO2	41.650
Mg	12.1027	0.046071	12.0724	10.7022	MgO	20.070
Al	11.3070	0.042610	11.2787	9.0068	Al2O3	21.364
O	44.5729		44.4613	59.8744	by stoic. wit norm.	

total : 100.2512 100.0000 100.0000 100.251

garnet cations on 24. <o> basis

	Wt.%	Cations
SiO2	41.6499	Si 19.4683 5.9441
TiO2	1.1352	Ti 0.6806 0.1218
Al2O3	21.3645	Al 11.3070 3.5935
Cr2O3	0.5687	Cr 0.3891 0.0642
Fe2O3	2.0747	Fe 1.4511 0.2228

MgO	20.0698	Mg	12.1027	4.2700
CaO	4.5396	Ca	3.2445	0.6941
MnO	0.2593	Mn	0.2008	0.0313
FeO	8.6860	Fe	6.7516	1.0367
Na2O	0.1107	Na	0.0821	0.0306
K2O	0.0006	K	0.0005	0.0001
total	100.4591			16.0092

uv: 1.62 ad: 7.45 gr: 1.36 py: 71.66 sp: 0.53 al: 17.40

Ratio (Fe+Mn)/(Fe+Mn+Mg) = 20.01

point n : 2 x= 5529.0 y= -112.0 z= -50.
Pyrope Astimex

Elt.	Peak (Cps)	Prec. (%)	Bkgd (Cps)	P/B	Ix/Istd	Sig/k (%)	Detection limit (%)	Beam (nA)	Acceleration voltage
Ti	29.4	4.1	1.7	17.27	0.0213	4.1	0.0197	47.8	15.0
Fe	498.0	1.4	8.0	62.25	0.1064	1.5	0.0550		
Cr	139.4	1.9	27.3	5.10	0.0054	1.9	0.0148		
Mn	93.0	3.3	40.8	2.28	0.0095	3.3	0.0392		
K	56.6	3.0	60.3	0.94	0.0000	3.0	0.0000		
Ca	4105.3	0.5	88.6	46.32	0.1768	0.5	0.0079		
Na	45.0	3.3	14.8	3.04	0.0086	3.4	0.0058		
Si	17670.0	0.2	100.2	176.29	0.3476	0.3	0.0171		
Mg	7747.6	0.3	70.0	110.66	1.0528	0.4	0.0100		
Al	8950.9	0.3	71.0	126.04	0.6125	0.4	0.0116		

Elt.	k-ratio	Correc.
Ti	0.0056	1.1991
Fe	0.0686	1.2150
Cr	0.0034	1.1814
Mn	0.0015	1.2288
K	0.0000	NaN
Ca	0.290	1.1143
Na	0.0004	2.0031
Si	0.1397	1.4043
Mg	0.0796	1.5152
Al	0.0755	1.5005

iteration : 4

Analysis no. 2 within garnrg

Elt.	Conc. (wt%)	lsigma (wt%)	Norm Conc. (wt%)	Norm Conc. (at%)	Compound	Concen. (wt%)
Ti	0.6769	0.031495	0.6722	0.3025	TiO2	1.1
Fe	8.3407	0.125666	8.2831	3.1970	FeO	10.7
Cr	0.4010	0.011152	0.3982	0.1651	Cr2O3	0.6
Mn	0.1840	0.014726	0.1827	0.0717	MnO	0.2
K	0.0000	0.000000	0.0000	0.0000	K2O	
Ca	3.2341	0.017231	3.2118	1.7273	CaO	4.5
Na	0.0837	0.005379	0.0832	0.0780	Na2O	0.1
Si	19.6165	0.050830	19.4810	14.9514	SiO2	41.5
Mg	12.0684	0.046135	11.850	10.6291	MgO	20.01
Al	11.3230	0.042943	11.2448	8.9834	Al2O3	21.3
O	44.7676		44.4582	59.8946	by stoic. with norm.	

standart pyrope

total : 100.6960 100.0000 100.0000 100.696

be careful, strong correction for K (0.00)

garnet cations on 24. <o> basis

		Wt. %	Cations
SiO2	41.9671	Si 19.6165	5.9625
TiO2	1.1290	Ti 0.6769	0.1206
Al2O3	21.3948	Al 11.3230	3.5825
Cr2O3	0.5861	Cr 0.4010	0.0658
Fe2O3	2.1464	Fe 1.5012	0.2295
MgO	20.0130	Mg 12.0684	4.2388
CaO	4.5252	Ca 3.2341	0.6888
MnO	0.2376	Mn 0.1840	0.0286
FeO	8.7990	Fe 6.8395	1.0455
Na2O	0.1129	Na 0.0837	0.0311
K2O	0.0000	K 0.0000	0.0000
total	100.911		15.9936

uv: 1.67 ad: 7.64 gr: 1.09 py: 71.49 sp: 0.48 al: 17.63

Ratio (Fe+Mn)/(Fe+Mn+Mg) = 20.22

Échantillon	Propriété	SiO2	TiO2	ZrO2	Al2O3	Cr2O3	Fe2O3	MgO	CaO	MnO	FeO	Na2O	K2O	Total	Groupe-G	Sobolev
4130068	Premier	36,85	0,03		21,77	0,06	0,00	3,67	0,39	4,69	33,76	0,02	0,00	101,24	Crustal	Crustal
4130070	Premier	38,09	0,46		16,43	0,01	7,82	0,09	33,48	0,70	2,49	0,01	0,00	99,59	G8	Crustal
4130071	Premier	37,71	0,01		22,04	0,00	0,00	7,51	1,47	3,34	28,38	0,03	0,00	100,46	Crustal	Crustal
4130074	Premier	37,43	0,00		21,29	0,01	0,03	3,13	1,44	3,13	34,69	0,03	0,00	101,17	Crustal	Crustal
4130078	Premier	37,91	0,15		18,69	0,00	4,81	0,03	32,04	0,34	5,59	0,00	0,00	99,57	G8	Crustal
4130080	Premier	35,82	0,00		21,47	0,00	0,00	3,27	1,32	5,03	32,44	0,02	0,00	99,38	Crustal	Crustal
4130081	Premier	36,47	0,03		21,76	0,00	0,00	5,68	0,56	1,81	32,69	0,04	0,00	99,04	Crustal	Crustal
4130085	Premier	35,08	0,00		21,21	0,00	0,00	1,86	1,82	8,17	30,46	0,04	0,00	98,63	Crustal	Crustal
4130086	Premier	35,88	0,00		21,68	0,00	0,00	4,34	0,36	4,22	32,83	0,06	0,00	99,37	Crustal	Crustal
4130087	Premier	36,93	0,04		21,87	0,00	0,00	6,31	1,19	2,17	31,10	0,03	0,00	99,62	Crustal	Crustal
4130088	Premier	35,88	0,00		21,60	0,03	0,00	3,36	0,39	1,94	36,65	0,04	0,00	99,87	Crustal	Crustal
4130090	Premier	36,15	0,00		21,45	0,00	0,00	2,90	0,29	1,73	37,64	0,02	0,00	100,18	Crustal	Crustal
4130091	Premier	36,85	0,30		18,14	0,01	4,88	0,06	30,26	1,16	6,51	0,03	0,00	98,19	Crustal	Crustal
4130092	Premier	37,53	0,01		22,35	0,01	0,00	7,92	1,20	1,26	30,13	0,03	0,00	100,45	Crustal	Crustal
4130092	Premier	36,97	0,37		16,66	0,01	7,23	0,10	32,81	1,13	3,33	0,02	0,00	98,62	Crustal	Crustal
4130093	Premier	36,93	0,00		22,41	0,02	0,00	8,64	1,29	0,85	29,51	0,00	0,00	99,65	G5	Crustal
4130093	Premier	36,97	0,03		22,31	0,04	0,00	7,29	1,59	0,80	30,78	0,03	0,00	99,84	G5	Crustal
4130094	Premier	37,42	0,01		22,15	0,00	0,00	8,29	0,78	1,75	29,40	0,03	0,01	99,83	Crustal	Crustal
4130095	Premier	38,31	0,15		18,95	0,00	4,55	0,04	31,86	0,93	5,08	0,03	0,00	99,90	G8	Crustal
4130096	Premier	36,12	0,01		21,41	0,00	0,00	2,72	2,47	5,27	31,69	0,03	0,00	99,71	Crustal	Crustal
4130097	Premier	36,19	0,00		21,59	0,01	0,00	3,33	0,74	3,72	34,61	0,00	0,00	100,19	Crustal	Crustal
4130099	Premier	36,50	0,01		21,39	0,00	0,00	2,24	0,86	7,89	31,25	0,03	0,00	100,17	Crustal	Crustal
4130099	Premier	37,00	0,22		17,96	0,00	5,39	0,06	32,11	0,96	4,60	0,02	0,00	98,30	G8	Crustal
4130100	Premier	37,42	0,04		21,99	0,02	0,00	5,74	0,64	4,37	30,37	0,04	0,00	100,63	Crustal	Crustal
4130100	Premier	37,50	0,02		21,70	0,06	0,00	4,58	1,00	4,64	31,57	0,02	0,00	101,08	Crustal	Crustal
4130100	Premier	36,59	0,00		21,56	0,00	0,00	2,79	0,75	6,67	31,58	0,04	0,00	99,99	Crustal	Crustal
4130102	Premier	36,49	0,36		20,81	0,00	1,28	0,13	35,25	0,93	2,41	0,02	0,00	97,68	G8	Crustal
4130104	Premier	35,40	0,04		21,25	0,00	0,00	1,80	1,00	3,73	35,57	0,03	0,00	98,80	Crustal	Crustal
4130105	Premier	37,10	0,00		22,41	0,06	0,00	8,84	1,39	1,05	28,97	0,03	0,00	99,83	Crustal	Crustal
4130106	Premier	37,01	0,13		18,77	0,00	4,38	0,01	31,39	0,46	6,57	0,00	0,00	98,71	G8	Crustal
4130107	Premier	36,58	0,37		13,64	0,02	11,55	0,11	33,23	0,48	2,83	0,03	0,00	98,83	G8	Crustal
4130108	Premier	37,13	0,25		10,75	0,00	15,92	0,02	31,32	0,99	3,50	0,01	0,00	99,88	G8	Crustal
4130110	Premier	36,38	0,00		21,69	0,03	0,00	4,74	1,49	2,45	32,09	0,04	0,00	98,89	Crustal	Crustal
4130111	Premier	37,37	0,29		18,26	0,00	5,14	0,14	32,82	1,07	3,72	0,02	0,00	98,83	Crustal	Crustal
4130112	Premier	40,30	0,86		21,89	1,23	0,87	20,08	6,01	0,31	8,55	0,07	0,00	100,18	G2	LCM
4130114	Premier	35,90	0,03		21,57	0,00	0,00	4,37	0,95	3,53	32,88	0,03	0,00	99,26	Crustal	Crustal
4130115	Premier	36,85	0,66		14,50	6,62	2,93	0,40	30,92	0,55	4,76	0,02	0,00	98,20	G8	Crustal
4130115	Premier	37,89	0,39		15,63	0,03	8,97	0,11	33,48	0,82	2,18	0,02	0,00	99,52	G8	Crustal

Échantillon	Propriété	SiO2	TiO2	ZrO2	Al2O3	Cr2O3	Fe2O3	MgO	CaO	MnO	FeO	Na2O	K2O	Total	Groupe-G	Sobolev
4130116	Premier	37,83	0,10		20,12	0,00	2,70	0,07	32,40	0,26	5,47	0,02	0,00	98,95	G8	Crustal
4130117	Premier	41,51	0,63		20,25	4,18	0,77	21,44	5,26	0,08	6,45	0,06	0,00	100,62	G1	Lherzolitic
4130118	Premier	37,19	0,00		21,95	0,01	0,00	6,68	1,44	1,71	30,95	0,02	0,00	99,94	Crustal	Crustal
4130118	Premier	38,30	0,11		18,58	0,00	5,19	0,14	33,64	0,45	3,28	0,01	0,00	99,69	G8	Crustal
4130120	Premier	37,50	0,25		20,31	0,00	2,07	0,18	31,19	0,80	6,22	0,01	0,01	98,55	G8	Crustal
4130120	Premier	37,37	0,24		19,47	0,00	3,34	0,08	33,80	0,35	3,46	0,03	0,00	98,15	G8	Crustal
4130120	Premier	37,77	0,13		20,63	0,00	1,93	0,06	33,41	0,42	4,22	0,02	0,00	98,56	G8	Crustal
4130120	Premier	37,31	0,13		19,26	0,00	3,73	0,01	32,37	0,28	5,40	0,02	0,00	98,51	G8	Crustal
4130122	Premier	36,88	0,02		21,67	0,00	0,00	4,19	1,09	1,59	35,07	0,05	0,00	100,56	Crustal	Crustal
4130122	Premier	36,09	0,02		21,45	0,00	0,00	3,03	0,55	5,87	32,88	0,03	0,00	99,91	Crustal	Crustal
4130123	Premier	38,25	0,06		18,19	0,00	5,89	0,02	33,98	0,17	3,45	0,02	0,00	100,01	G8	Crustal
4130127	Premier	38,73	0,13		19,46	0,00	3,98	0,10	32,03	0,18	5,62	0,02	0,00	100,25	G8	Crustal
4130128	Premier	38,57	0,23		19,46	0,00	3,95	0,10	33,78	0,35	3,60	0,02	0,00	100,06	G8	Crustal
4130130	Premier	35,51	0,02		20,81	0,01	0,00	2,78	0,67	24,21	14,89	0,05	0,00	98,95	Crustal	Crustal
4130131	Premier	36,48	0,03		21,36	0,03	0,00	3,34	1,58	4,02	33,15	0,02	0,00	100,00	Crustal	Crustal
4130132	Premier	35,83	0,04		21,60	0,00	0,00	2,86	0,40	3,28	35,52	0,02	0,00	99,56	Crustal	Crustal
4130133	Premier	38,38	0,19		18,66	0,00	4,84	0,05	30,18	0,81	6,99	0,01	0,00	100,10	G8	Crustal
4130134	Premier	37,50	0,00		21,86	0,01	0,00	5,81	1,33	3,52	30,55	0,04	0,00	100,62	Crustal	Crustal
4130134	Premier	35,51	0,00		21,35	0,00	0,00	2,45	0,52	4,22	34,99	0,02	0,00	99,05	Crustal	Crustal
4130134	Premier	36,47	0,02		20,88	0,00	0,06	1,71	2,73	13,67	24,36	0,05	0,00	99,95	Crustal	Crustal
4130134	Premier	38,08	0,20		17,67	0,00	6,20	0,05	30,65	1,26	5,79	0,03	0,00	99,91	Crustal	Crustal
4130135	Premier	36,89	0,09		21,38	0,00	0,00	2,62	7,36	1,82	29,75	0,02	0,00	99,93	Crustal	Crustal
4130135	Premier	36,16	0,75		11,78	0,01	13,76	0,09	34,22	0,42	1,31	0,02	0,00	98,51	G8	Crustal
4130137	Premier	35,99	0,00		21,51	0,03	0,00	3,70	0,53	2,90	34,36	0,03	0,00	99,05	Crustal	Crustal
4130137	Premier	36,17	0,01		21,49	0,00	0,00	2,86	0,50	2,02	37,29	0,04	0,00	100,37	Crustal	Crustal
4130138	Premier	36,04	0,02		21,98	0,00	0,00	5,59	0,84	2,42	32,49	0,02	0,00	99,41	Crustal	Crustal
4130139	Premier	38,50	0,28		19,52	0,01	3,57	0,05	32,38	0,60	4,71	0,00	0,00	99,61	G8	Crustal
4130140	Premier	36,15	0,04		21,52	0,00	0,00	3,51	0,53	4,00	33,69	0,03	0,00	99,47	Crustal	Crustal
4130140	Premier	38,45	0,30		18,88	0,02	4,56	0,02	33,88	0,24	3,31	0,02	0,00	99,67	G8	Crustal
4130141	Premier	37,45	0,05		17,25	0,00	6,77	0,06	32,14	0,59	4,62	0,03	0,00	98,95	G8	Crustal

Échantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	MgO	CaO	MnO	FeO	Na2O	K2O	Total	Interprétation
4130068	Premier	54,23	0,03	0,94	0,22	0,13	15,22	23,90	0,23	4,49	0,52	0,00	99,91	Diopside
4130070	Premier	54,34	0,01	0,98	0,16	0,10	15,10	23,69	0,17	5,48	0,44	0,01	100,47	Diopside
4130072	Premier	54,46	0,08	0,81	0,32	0,28	15,17	24,08	0,13	4,60	0,56	0,00	100,47	Diopside
4130073	Premier	53,91	0,03	0,74	0,16	1,14	14,80	23,27	0,46	5,41	0,52	0,00	100,43	Diopside
4130074	Premier	54,69	0,09	1,40	0,53	0,00	16,51	21,97	0,14	4,26	0,49	0,06	100,14	Low-Cr-Diopside
4130076	Premier	54,83	0,02	0,81	0,52	0,27	16,37	23,29	0,09	3,95	0,54	0,00	100,68	Low-Cr-Diopside
4130077	Premier	54,29	0,04	0,73	0,27	0,99	15,67	21,79	0,21	5,65	0,70	0,00	100,33	Diopside
4130078	Premier	54,43	0,05	1,12	0,47	0,06	15,91	22,62	0,08	4,63	0,66	0,01	100,04	Low-Cr-Diopside
4130080	Premier	52,45	0,21	3,64	0,71	0,98	17,24	19,55	0,18	4,93	0,43	0,01	100,33	Low-Cr-Diopside
4130080	Premier	53,57	0,03	1,30	0,07	1,41	14,86	22,46	0,21	5,89	0,59	0,00	100,37	Diopside
4130080	Premier	53,62	0,03	1,05	0,14	0,60	14,08	23,35	0,37	5,95	0,60	0,00	99,80	Diopside
4130080	Premier	53,75	0,00	1,07	0,25	0,66	15,61	21,65	0,33	6,07	0,50	0,01	99,87	Diopside
4130081	Premier	53,72	0,01	0,93	0,08	0,88	14,75	23,31	0,27	5,09	0,59	0,00	99,63	Diopside
4130082	Premier	54,32	0,03	0,87	0,35	0,00	15,18	23,93	0,18	4,66	0,51	0,00	100,01	Diopside
4130085	Premier	53,78	0,03	1,25	0,18	0,69	15,70	22,33	0,16	5,35	0,48	0,00	99,93	Diopside
4130085	Premier	54,35	0,03	1,25	0,35	0,00	15,22	23,27	0,19	5,15	0,58	0,00	100,39	Diopside
4130086	Premier	54,14	0,04	0,96	0,52	0,00	15,32	23,03	0,30	5,04	0,56	0,00	99,91	Low-Cr-Diopside
4130087	Premier	54,62	0,00	1,22	0,75	0,00	17,38	22,89	0,07	3,04	0,41	0,00	100,38	Low-Cr-Diopside
4130088	Premier	53,99	0,06	0,71	0,37	0,29	14,81	23,83	0,28	5,16	0,48	0,00	99,98	Diopside
4130090	Premier	54,48	0,06	0,99	0,25	0,18	15,94	22,51	0,23	4,96	0,59	0,00	100,19	Diopside
4130090	Premier	39,07	0,17	17,86	3,75	1,71	0,11	32,74	1,09	3,59	0,01	0,00	100,09	Cr-Grossulaire
4130091	Premier	54,23	0,04	0,87	0,12	0,61	14,88	23,38	0,21	5,09	0,67	0,00	100,08	Diopside
4130091	Premier	53,55	0,03	0,97	0,06	1,11	14,37	23,89	0,28	5,25	0,49	0,01	100,02	Diopside
4130092	Premier	35,42	0,16	1,89	2,24	26,10	0,41	32,74	0,08	0,00	0,02	0,00	99,07	Cr-Grossulaire
4130092	Premier	54,27	0,04	1,05	0,48	0,00	15,72	22,72	0,17	4,73	0,59	0,00	99,75	Low-Cr-Diopside
4130092	Premier	53,88	0,05	0,96	0,41	0,11	14,80	23,79	0,17	4,74	0,58	0,00	99,48	Low-Cr-Diopside
4130092	Premier	53,82	0,04	0,99	0,12	0,88	14,77	23,06	0,19	5,53	0,61	0,00	100,01	Diopside
4130093	Premier	53,60	0,06	1,32	0,54	0,43	15,62	22,88	0,20	4,88	0,41	0,00	99,94	Low-Cr-Diopside
4130094	Premier	54,36	0,00	0,38	0,51	0,42	15,84	22,37	0,54	4,91	0,57	0,00	99,91	Low-Cr-Diopside
4130095	Premier	53,63	0,27	5,00	1,41	0,00	15,04	21,84	0,00	1,45	1,74	0,00	100,36	Kim-Diopside
4130097	Premier	53,92	0,05	0,85	0,37	0,57	15,45	23,05	0,13	4,71	0,56	0,00	99,67	Diopside
4130098	Premier	52,63	0,19	3,12	1,22	0,24	17,81	18,99	0,16	5,45	0,31	0,00	100,11	Cr-Diopside
4130100	Premier	54,44	0,04	1,07	0,48	0,00	15,96	23,20	0,14	4,00	0,48	0,00	99,82	Low-Cr-Diopside

Échantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	MgO	CaO	MnO	FeO	Na2O	K2O	Total	Interprétation
4130101	Premier	55,16	0,36	1,59	1,17	0,36	18,15	18,92	0,07	2,81	1,44	0,04	100,04	Kim-Diopside
4130102	Premier	54,12	0,01	0,98	0,41	0,58	14,99	23,05	0,21	4,72	0,76	0,00	99,84	Low-Cr-Diopside
4130104	Premier	53,73	0,06	1,18	0,05	1,03	15,12	22,23	0,24	5,86	0,60	0,00	100,08	Diopside
4130104	Premier	54,27	0,04	0,89	0,38	0,24	14,83	23,76	0,26	4,83	0,64	0,00	100,13	Diopside
4130106	Premier	54,50	0,02	0,64	0,11	1,24	15,40	23,88	0,15	3,70	0,71	0,00	100,35	Diopside
4130108	Premier	37,29	0,03	20,53	0,01	0,14	0,06	22,68	0,12	15,27	0,01	0,00	96,13	Grossulaire
4130109	Premier	54,16	0,07	1,07	0,45	0,09	14,99	23,40	0,24	5,39	0,54	0,00	100,38	Low-Cr-Diopside
4130110	Premier	53,06	0,19	2,91	1,20	0,00	18,24	18,54	0,12	5,85	0,29	0,00	100,41	Cr-Diopside
4130111	Premier	53,58	0,03	1,33	0,28	0,75	15,19	22,65	0,28	5,41	0,50	0,00	99,99	Diopside
4130111	Premier	54,59	0,02	0,96	0,15	0,16	16,49	21,73	0,23	5,40	0,53	0,00	100,25	Diopside
4130112	Premier	54,10	0,03	0,90	0,54	0,00	15,19	23,36	0,23	5,39	0,40	0,01	100,13	Low-Cr-Diopside
4130115	Premier	54,24	0,03	1,17	0,52	0,39	15,89	22,89	0,12	4,41	0,59	0,00	100,25	Low-Cr-Diopside
4130119	Premier	54,11	0,11	1,05	0,33	0,56	15,62	23,68	0,16	3,78	0,58	0,00	99,95	Diopside
4130121	Premier	53,54	0,07	1,27	0,25	0,54	14,98	22,34	0,16	6,29	0,50	0,00	99,92	Diopside
4130122	Premier	53,89	0,04	1,03	0,51	0,34	15,47	22,21	0,08	5,70	0,58	0,00	99,85	Low-Cr-Diopside
4130122	Premier	54,98	0,34	1,63	0,51	1,18	18,00	20,12	0,09	2,28	1,24	0,03	100,39	Kim-Diopside
4130124	Premier	54,37	0,04	0,86	0,29	0,59	15,14	24,10	0,17	4,61	0,52	0,00	100,67	Diopside
4130124	Premier	54,04	0,04	1,01	0,31	0,20	14,99	23,68	0,21	4,47	0,62	0,01	99,60	Diopside
4130127	Premier	53,90	0,02	1,24	0,41	0,54	15,25	22,58	0,21	5,38	0,60	0,00	100,12	Low-Cr-Diopside
4130130	Premier	39,11	0,29	17,09	4,76	1,59	0,11	33,68	0,47	3,12	0,01	0,00	100,23	Cr-Grossulaire
4130130	Premier	54,37	0,03	1,03	0,57	0,23	15,37	23,65	0,22	4,20	0,63	0,00	100,30	Low-Cr-Diopside
4130132	Premier	52,97	0,13	3,18	1,10	0,21	18,48	18,04	0,16	5,71	0,33	0,00	100,31	Cr-Diopside
4130134	Premier	54,01	0,04	0,82	0,33	0,00	14,58	23,60	0,21	5,04	0,60	0,00	99,24	Diopside
4130135	Premier	54,14	0,02	1,05	0,55	1,04	15,31	21,79	0,17	5,31	0,88	0,00	100,27	Low-Cr-Diopside
4130136	Premier	54,04	0,03	0,88	0,40	0,57	14,40	23,90	0,25	5,45	0,57	0,00	100,50	Diopside
4130140	Premier	53,86	0,06	0,82	0,14	0,43	14,45	23,85	0,15	5,82	0,47	0,01	100,05	Diopside
4130140	Premier	54,28	0,02	0,98	0,15	0,91	16,19	22,95	0,12	3,96	0,56	0,00	100,11	Diopside
4130141	Premier	54,29	0,01	1,14	0,29	0,35	15,43	23,82	0,11	4,00	0,60	0,00	100,04	Diopside

Echantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	Nb2O3	MgO	CaO	MnO	FeO	ZnO	NiO	Na2O	Total	Interprétation
4130068	Premier	0,01	47,53	0,03	0,00	11,51	0,06	0,30		1,35	40,87	0,00		0,10	101,76	Mn-Ilménite
4130070	Premier	0,00	46,97	0,05	0,00	11,23	0,06	0,04		1,99	40,17	0,00		0,00	100,52	Mn-Ilménite
4130071	Premier	0,01	44,97	0,02	0,03	15,07	0,07	0,06		2,77	37,55	0,00		0,00	100,55	Mn-Ilménite
4130072	Premier	0,00	47,91	0,01	0,03	9,11	0,09	0,06		3,41	39,55	0,00		0,00	100,16	Mn-Ilménite
4130072	Premier	0,03	48,30	0,00	0,00	8,57	0,21	0,01		1,81	41,58	0,00		0,03	100,53	Mn-Ilménite
4130073	Premier	0,00	50,66	0,01	0,00	3,90	0,02	0,02		4,56	40,91	0,02		0,04	100,14	Mn-Ilménite
4130073	Premier	0,02	49,85	0,01	0,00	5,41	0,00	0,14		2,19	42,38	0,00		0,05	100,05	Mn-Ilménite
4130074	Premier	0,01	49,17	0,00	0,00	7,82	0,09	0,01		1,85	42,33	0,00		0,03	101,30	Mn-Ilménite
4130074	Premier	0,00	47,91	0,00	0,00	10,09	0,34	0,02		1,69	41,33	0,07		0,00	101,46	Mn-Ilménite
4130075	Premier	0,00	48,72	0,01	0,00	7,85	0,22	0,01		1,88	41,90	0,00		0,05	100,64	Mn-Ilménite
4130075	Premier	0,00	46,62	0,00	0,00	11,32	0,07	0,13		1,38	40,30	0,00		0,09	99,90	Mn-Ilménite
4130075	Premier	0,03	49,59	0,02	0,00	6,85	0,15	0,02		1,56	42,99	0,07		0,02	101,31	Mn-Ilménite
4130078	Premier	0,02	52,04	0,62	0,91	9,35	0,16	13,12		0,26	24,01	0,00		0,06	100,57	Low-Cr-Picroilménite
4130078	Premier	0,01	47,01	0,02	0,00	10,73	0,04	0,06		2,06	40,09	0,07		0,09	100,19	Mn-Ilménite
4130078	Premier	0,00	47,54	0,03	0,00	8,75	0,13	0,05		3,48	39,16	0,00		0,04	99,18	Mn-Ilménite
4130078	Premier	0,00	48,01	0,02	0,00	8,13	0,24	0,03		2,47	40,64	0,00		0,03	99,56	Mn-Ilménite
4130081	Premier	0,00	45,80	0,04	0,07	13,34	0,02	0,09		0,46	40,62	0,05		0,00	100,48	Ilménite
4130082	Premier	0,00	46,80	0,01	0,00	11,99	0,17	0,11		0,87	41,03	0,02		0,06	101,05	Ilménite
4130082	Premier	0,00	51,14	0,00	0,00	3,26	0,00	0,08		1,85	43,98	0,09		0,00	100,39	Mn-Ilménite
4130083	Premier	0,05	52,29	0,65	0,87	9,52	0,17	13,59		0,23	23,44	0,00		0,00	100,80	Low-Cr-Picroilménite
4130086	Premier	0,02	51,98	0,00	0,00	2,71	0,03	0,25		4,37	41,87	0,00		0,02	101,25	Mn-Ilménite
4130087	Premier	0,14	52,87	0,71	1,80	7,06	0,10	14,21		0,27	23,30	0,00		0,00	100,44	Cr-Picroilménite
4130087	Premier	0,01	48,92	0,02	0,01	8,37	0,22	0,02		1,97	41,98	0,00		0,04	101,56	Mn-Ilménite
4130087	Premier	0,05	48,98	0,01	0,00	8,11	0,27	0,00		1,94	42,09	0,00		0,00	101,46	Mn-Ilménite
4130088	Premier	0,01	50,82	0,03	0,03	4,43	0,00	0,22		1,95	43,37	0,02		0,03	100,91	Mn-Ilménite
4130088	Premier	0,00	46,76	0,01	0,00	11,93	0,01	0,06		3,35	38,56	0,03		0,02	100,71	Mn-Ilménite
4130090	Premier	0,02	49,26	0,01	0,03	5,60	0,26	0,03		0,97	43,29	0,07		0,04	99,56	Ilménite
4130090	Premier	0,03	50,59	0,03	0,02	5,07	0,24	0,08		1,21	44,16	0,03		0,02	101,47	Mn-Ilménite
4130090	Premier	0,01	51,53	0,02	0,02	3,08	0,19	0,02		1,18	45,13	0,04		0,03	101,24	Mn-Ilménite
4130090	Premier	0,01	50,17	0,00	0,01	4,51	0,24	0,06		1,23	43,77	0,00		0,05	100,06	Mn-Ilménite
4130090	Premier	0,00	49,57	0,00	0,01	5,13	0,19	0,05		1,03	43,44	0,01		0,00	99,42	Mn-Ilménite
4130090	Premier	0,00	50,49	0,00	0,00	5,27	0,19	0,10		0,73	44,50	0,01		0,05	101,32	Ilménite
4130090	Premier	0,00	50,95	0,01	0,00	4,27	0,21	0,02		0,63	45,15	0,01		0,00	101,26	Ilménite
4130091	Premier	0,00	47,40	0,07	0,00	10,23	0,16	0,09		1,49	41,00	0,01		0,06	100,49	Mn-Ilménite
4130092	Premier	0,01	46,89	0,00	0,02	10,79	0,20	0,02		1,35	40,77	0,04		0,04	100,12	Mn-Ilménite
4130092	Premier	0,00	48,22	0,00	0,00	8,71	0,05	0,02		1,86	41,46	0,00		0,05	100,37	Mn-Ilménite
4130093	Premier	0,03	53,18	0,50	0,89	8,05	0,14	13,55		0,24	24,19	0,05		0,07	100,88	Low-Cr-Picroilménite
4130093	Premier	0,00	47,16	0,02	0,00	10,43	0,15	0,03		2,21	40,13	0,01		0,03	100,17	Mn-Ilménite
4130095	Premier	0,01	48,29	0,01	0,02	8,46	0,15	0,04		2,05	41,28	0,00		0,04	100,34	Mn-Ilménite

Echantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	Nb2O3	MgO	CaO	MnO	FeO	ZnO	NiO	Na2O	Total	Interprétation
4130097	Premier	0,02	48,31	0,02	0,00	8,27	0,20	0,04		1,85	41,51	0,02		0,01	100,24	Mn-Ilménite
4130098	Premier	0,02	47,91	0,03	0,01	9,22	0,26	0,00		1,28	41,81	0,00		0,02	100,56	Mn-Ilménite
4130098	Premier	0,00	48,58	0,03	0,00	8,22	0,23	0,01		2,00	41,68	0,00		0,04	100,77	Mn-Ilménite
4130098	Premier	0,02	49,65	0,02	0,00	6,50	0,12	0,00		2,65	41,98	0,00		0,00	100,93	Mn-Ilménite
4130099	Premier	0,01	47,75	0,03	0,00	7,75	0,13	0,01		2,32	40,59	0,08		0,02	98,69	Mn-Ilménite
4130100	Premier	0,01	47,12	0,01	0,00	10,41	0,32	0,00		2,31	40,04	0,00		0,00	100,23	Mn-Ilménite
4130100	Premier	0,00	48,40	0,02	0,00	8,03	0,33	0,00		1,79	41,72	0,00		0,04	100,33	Mn-Ilménite
4130101	Premier	0,00	48,73	0,00	0,22	8,60	0,06	0,08		3,30	40,45	0,03		0,02	101,49	Mn-Ilménite
4130101	Premier	0,01	47,78	0,00	0,01	9,37	0,19	0,06		2,22	40,62	0,02		0,06	100,35	Mn-Ilménite
4130105	Premier	0,01	47,73	0,01	0,00	8,99	0,44	0,04		5,82	36,97	0,05		0,00	100,05	Mn-Ilménite
4130105	Premier	0,05	48,28	0,07	0,00	7,22	0,04	0,03		1,88	41,51	0,00		0,02	99,08	Mn-Ilménite
4130108	Premier	0,00	48,69	0,01	0,05	8,52	0,05	0,03		2,20	41,52	0,00		0,09	101,15	Mn-Ilménite
4130110	Premier	0,02	47,88	0,00	0,10	8,97	0,07	0,18		4,06	38,67	0,02		0,05	100,02	Mn-Ilménite
4130110	Premier	0,01	47,79	0,02	0,02	10,05	0,05	0,06		1,14	41,73	0,00		0,06	100,92	Mn-Ilménite
4130111	Premier	0,08	52,63	0,70	1,71	7,51	0,09	14,08		0,19	23,34	0,09		0,07	100,48	Cr-Picroilménite
4130111	Premier	0,02	54,61	0,16	1,03	5,61	0,04	14,79		0,21	23,13	0,00		0,02	99,63	Cr-Picroilménite
4130111	Premier	0,03	46,55	0,02	0,01	10,89	0,29	0,01		1,35	40,50	0,00		0,00	99,64	Mn-Ilménite
4130111	Premier	0,04	48,30	0,01	0,00	8,85	0,27	0,00		1,42	42,00	0,01		0,00	100,89	Mn-Ilménite
4130111	Premier	0,03	49,08	0,02	0,00	6,12	0,14	0,02		6,34	37,70	0,15		0,03	99,61	Pyrophanite
4130111	Premier	0,01	48,50	0,00	0,00	7,58	0,05	0,03		2,22	41,31	0,00		0,05	99,75	Mn-Ilménite
4130112	Premier	0,02	48,35	0,04	0,00	8,66	0,18	0,08		1,45	41,90	0,00		0,04	100,71	Mn-Ilménite
4130112	Premier	0,00	48,56	0,01	0,00	8,52	0,10	0,05		3,45	40,09	0,05		0,02	100,83	Mn-Ilménite
4130113	Premier	0,06	48,46	0,02	0,00	9,29	0,06	0,07		0,96	42,49	0,00		0,02	101,43	Ilménite
4130113	Premier	0,00	47,89	0,00	0,00	8,64	0,21	0,01		2,22	40,80	0,00		0,03	99,80	Mn-Ilménite
4130114	Premier	0,03	53,31	0,65	1,16	8,80	0,10	16,25		0,25	19,72	0,00		0,00	100,26	Cr-Picroilménite
4130114	Premier	0,02	49,08	0,02	0,01	6,97	0,08	0,05		2,00	42,05	0,02		0,05	100,32	Mn-Ilménite
4130114	Premier	0,00	48,42	0,00	0,00	6,65	0,21	0,04		7,84	35,53	0,35		0,02	99,06	Pyrophanite
4130114	Premier	0,00	48,69	0,00	0,00	7,11	0,18	0,02		2,22	41,50	0,07		0,02	99,80	Mn-Ilménite
4130115	Premier	0,00	48,20	0,03	0,00	8,39	0,22	0,00		2,01	41,33	0,06		0,04	100,28	Mn-Ilménite
4130116	Premier	0,02	42,44	0,02	0,03	19,31	0,30	0,04		1,12	36,99	0,00		0,00	100,27	Mn-Ilménite
4130116	Premier	0,01	46,69	0,02	0,02	10,52	0,00	0,07		1,16	40,71	0,00		0,02	99,22	Mn-Ilménite
4130116	Premier	0,01	46,91	0,01	0,01	9,66	0,11	0,00		2,04	40,12	0,07		0,00	98,93	Mn-Ilménite
4130116	Premier	0,00	16,63	0,04	0,00	71,96	0,01	0,04		0,01	14,90	0,00		0,09	103,68	Ilménite
4130116	Premier	0,01	46,03	0,02	0,00	12,95	0,07	0,03		0,46	40,89	0,05		0,04	100,55	Ilménite
4130117	Premier	0,02	47,81	0,01	0,00	9,37	0,21	0,03		2,56	40,35	0,00		0,00	100,35	Mn-Ilménite
4130117	Premier	0,00	46,95	0,01	0,00	10,79	0,25	0,05		1,33	40,78	0,00		0,04	100,20	Mn-Ilménite
4130118	Premier	0,03	50,13	0,65	0,92	11,05	0,17	12,70		0,22	23,11	0,05		0,02	99,05	Low-Cr-Picroilménite
4130118	Premier	0,00	45,79	0,01	0,01	12,69	0,24	0,03		1,42	39,70	0,06		0,03	99,98	Mn-Ilménite
4130118	Premier	0,00	46,43	0,01	0,01	11,49	0,28	0,04		1,49	40,18	0,02		0,03	99,98	Mn-Ilménite

Echantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	Nb2O3	MgO	CaO	MnO	FeO	ZnO	NiO	Na2O	Total	Interprétation
4130118	Premier	0,02	47,78	0,02	0,00	10,37	0,10	0,20		0,84	41,77	0,02		0,05	101,16	Ilménite
4130120	Premier	0,08	52,41	0,56	1,68	8,17	0,14	13,82		0,08	23,59	0,00		0,04	100,57	Cr-Picroilménite
4130120	Premier	0,03	45,61	0,03	0,04	13,40	0,12	0,06		2,68	38,22	0,00		0,05	100,24	Mn-Ilménite
4130120	Premier	0,01	47,66	0,03	0,00	9,09	0,11	0,03		2,30	40,50	0,00		0,04	99,76	Mn-Ilménite
4130121	Premier	0,03	50,69	0,65	0,88	10,65	0,13	12,77		0,25	23,45	0,02		0,00	99,52	Low-Cr-Picroilménite
4130121	Premier	0,02	48,74	0,01	0,07	7,08	0,07	0,07		4,14	39,56	0,03		0,04	99,83	Mn-Ilménite
4130122	Premier	0,03	45,73	0,00	0,01	13,43	0,20	0,06		0,76	40,25	0,07		0,03	100,57	Ilménite
4130122	Premier	0,00	47,41	0,02	0,00	9,52	0,07	0,08		2,34	40,13	0,05		0,02	99,66	Mn-Ilménite
4130123	Premier	0,00	47,53	0,02	0,02	8,27	0,12	0,01		1,77	40,95	0,00		0,04	98,73	Mn-Ilménite
4130123	Premier	0,02	47,24	0,01	0,02	11,67	0,06	0,02		0,95	41,51	0,00		0,04	101,54	Ilménite
4130124	Premier	0,00	49,01	0,02	0,04	5,96	0,01	0,05		1,87	42,11	0,09		0,03	99,19	Mn-Ilménite
4130124	Premier	0,01	47,47	0,02	0,00	9,76	0,22	0,08		2,63	39,88	0,08		0,03	100,17	Mn-Ilménite
4130126	Premier	0,03	48,58	0,01	0,04	7,48	0,10	0,10		4,11	39,37	0,05		0,01	99,86	Mn-Ilménite
4130126	Premier	0,03	46,90	0,03	0,00	10,34	0,15	0,01		1,95	40,20	0,00		0,03	99,65	Mn-Ilménite
4130126	Premier	0,02	47,98	0,03	0,00	8,37	0,11	0,02		1,46	41,65	0,00		0,05	99,69	Mn-Ilménite
4130127	Premier	0,03	46,29	0,02	0,04	11,33	0,05	0,19		0,47	40,84	0,08		0,02	99,37	Ilménite
4130127	Premier	0,01	46,44	0,01	0,01	12,56	0,04	0,10		0,85	40,74	0,00		0,01	100,77	Ilménite
4130127	Premier	0,00	45,89	0,04	0,01	12,03	0,27	0,03		1,65	39,57	0,02		0,02	99,54	Mn-Ilménite
4130127	Premier	0,02	47,34	0,03	0,00	9,06	0,07	0,06		1,79	40,67	0,01		0,02	99,06	Mn-Ilménite
4130128	Premier	0,03	48,30	0,01	0,04	7,85	0,00	0,05		3,37	39,97	0,02		0,03	99,65	Mn-Ilménite
4130128	Premier	0,00	46,32	0,01	0,03	11,43	0,35	0,10		3,42	38,03	0,03		0,04	99,76	Mn-Ilménite
4130128	Premier	0,03	38,98	0,01	0,02	25,86	0,69	0,09		1,32	33,59	0,05		0,00	100,63	Mn-Ilménite
4130129	Premier	0,03	47,17	0,02	0,00	10,57	0,32	0,03		2,53	39,81	0,04		0,02	100,54	Mn-Ilménite
4130129	Premier	0,02	48,89	0,02	0,00	8,32	0,13	0,03		1,71	42,19	0,00		0,02	101,32	Mn-Ilménite
4130130	Premier	0,07	52,64	0,63	1,30	9,40	0,05	15,64		0,29	20,22	0,02		0,03	100,27	Cr-Picroilménite
4130130	Premier	0,03	52,06	0,63	0,92	9,41	0,13	13,46		0,28	23,41	0,02		0,07	100,40	Low-Cr-Picroilménite
4130130	Premier	0,03	47,24	0,01	0,02	10,53	0,40	0,06		1,55	40,81	0,00		0,06	100,70	Mn-Ilménite
4130130	Premier	0,02	47,91	0,01	0,01	7,84	0,00	0,04		2,62	40,37	0,00		0,04	98,86	Mn-Ilménite
4130131	Premier	0,00	47,80	0,01	0,00	9,83	0,15	0,02		3,47	39,44	0,07		0,00	100,80	Mn-Ilménite
4130132	Premier	0,06	51,21	0,65	0,81	10,57	0,13	13,78		0,24	22,08	0,00		0,00	99,52	Low-Cr-Picroilménite
4130132	Premier	0,01	50,29	0,00	0,00	4,52	0,08	0,07		2,33	42,73	0,06		0,04	100,12	Mn-Ilménite
4130133	Premier	0,04	51,59	0,66	0,91	10,19	0,12	13,42		0,21	23,15	0,00		0,03	100,31	Low-Cr-Picroilménite
4130133	Premier	0,02	47,00	0,02	0,00	10,09	0,29	0,04		1,96	40,22	0,03		0,03	99,69	Mn-Ilménite
4130133	Premier	0,01	46,34	0,00	0,00	10,74	0,36	0,04		1,54	40,04	0,00		0,04	99,09	Mn-Ilménite
4130134	Premier	0,01	47,86	0,03	0,02	10,08	0,16	0,11		1,01	41,85	0,00		0,00	101,13	Mn-Ilménite
4130134	Premier	0,01	46,42	0,02	0,00	12,24	0,09	0,03		2,28	39,40	0,00		0,02	100,50	Mn-Ilménite
4130135	Premier	0,00	47,81	0,00	0,08	9,59	0,15	0,08		2,22	40,64	0,00		0,02	100,60	Mn-Ilménite
4130135	Premier	0,00	48,17	0,02	0,02	8,10	0,02	0,06		1,04	42,19	0,10		0,03	99,74	Mn-Ilménite
4130135	Premier	0,02	47,40	0,02	0,01	9,72	0,15	0,05		1,93	40,60	0,03		0,06	99,99	Mn-Ilménite

Echantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	Nb2O3	MgO	CaO	MnO	FeO	ZnO	NI0	Na2O	Total	Interprétation
4130136	Premier	0,00	48,61	0,01	0,00	7,58	0,15	0,01		2,01	41,68	0,00		0,04	100,09	Mn-Ilménite
4130137	Premier	0,05	44,72	0,04	0,07	14,79	0,04	0,18		0,37	39,57	0,00		0,04	99,87	Ilménite
4130137	Premier	0,02	47,98	0,03	0,01	8,23	0,40	0,01		2,50	40,63	0,00		0,02	99,82	Mn-Ilménite
4130139	Premier	0,04	47,40	0,02	0,00	11,04	0,06	0,09		0,98	41,49	0,00		0,02	101,13	Ilménite
4130140	Premier	0,08	52,15	0,64	1,84	6,91	0,15	13,79		0,20	23,43	0,00		0,08	99,26	Cr-Picroilménite
4130140	Premier	0,06	52,42	0,58	1,79	8,63	0,11	14,64		0,24	22,04	0,06		0,07	100,63	Cr-Picroilménite
4130140	Premier	0,00	50,40	0,01	0,03	4,27	0,05	0,14		1,97	43,09	0,00		0,02	99,98	Mn-Ilménite
4130140	Premier	0,04	49,73	0,09	0,02	5,21	0,07	0,12		2,06	42,49	0,07		0,02	99,91	Mn-Ilménite
4130140	Premier	0,03	47,91	0,05	0,00	9,60	0,08	0,03		4,07	38,95	0,00		0,06	100,77	Mn-Ilménite
4130141	Premier	0,00	47,48	0,00	0,00	9,34	0,44	0,06		2,05	40,51	0,13		0,01	100,01	Mn-Ilménite
4430001	Quévillon	0,03	50,43	0,31	0,24	10,38	0,15	10,29		0,25	27,09	0,02		0,03	99,21	Picroilménite
4430001	Quévillon	0,01	50,23	0,09	0,01	6,08	0,04	2,39		0,64	40,34	0,00		0,02	99,85	Mg-Ilménite
4430001	Quévillon	0,03	50,22	0,05	0,00	6,99	0,03	2,41		0,62	40,27	0,06		0,00	100,69	Mg-Ilménite
4430001	Quévillon	0,05	49,61	0,07	0,02	6,43	0,04	1,69		0,74	40,91	0,00		0,00	99,57	Low-Mg-Ilménite
4430001	Quévillon	0,03	49,39	0,08	0,00	7,38	0,05	2,39		0,63	39,57	0,01		0,02	99,53	Mg-Ilménite
4430001	Quévillon	0,02	49,30	0,14	0,02	7,55	0,01	3,03		0,49	38,54	0,00		0,05	99,16	Mg-Ilménite
4430001	Quévillon	0,04	49,22	0,02	0,00	7,26	0,04	0,88		0,89	41,81	0,00		0,02	100,18	Ilménite
4430001	Quévillon	0,02	48,95	0,13	0,01	8,36	0,00	2,72		0,47	38,80	0,04		0,01	99,52	Mg-Ilménite
4430001	Quévillon	0,03	48,86	0,10	0,03	7,34	0,05	1,55		0,77	40,48	0,11		0,01	99,34	Low-Mg-Ilménite
4430001	Quévillon	0,03	48,83	0,12	0,01	8,15	0,00	1,91		0,58	40,02	0,06		0,02	99,72	Low-Mg-Ilménite
4430001	Quévillon	0,03	48,73	0,08	0,03	7,27	0,02	1,02		0,73	41,33	0,00		0,01	99,24	Low-Mg-Ilménite
4430001	Quévillon	0,03	48,43	0,11	0,00	9,29	0,01	1,98		0,52	39,58	0,00		0,02	99,95	Low-Mg-Ilménite
4430001	Quévillon	0,01	48,43	0,06	0,00	7,96	0,06	0,37		1,01	41,91	0,00		0,01	99,83	Mn-Ilménite
4430001	Quévillon	0,03	48,15	0,10	0,02	9,19	0,03	2,25		0,63	38,73	0,00		0,00	99,12	Mg-Ilménite
4430001	Quévillon	0,03	47,73	0,06	0,02	9,36	0,00	2,05		0,65	38,67	0,02		0,02	98,59	Mg-Ilménite
4430001	Quévillon	0,01	48,69	0,09	0,02	8,42	0,02	1,67		0,59	40,27	0,03		0,03	99,85	Low-Mg-Ilménite
4430002	Quévillon	0,03	49,24	0,09	0,03	7,51	0,08	1,89		0,55	40,44	0,03		0,02	99,89	Low-Mg-Ilménite
4430002	Quévillon	0,02	48,41	0,13	0,00	8,40	0,01	2,15		0,59	39,19	0,09		0,02	99,02	Mg-Ilménite
4430002	Quévillon	0,02	48,23	0,10	0,01	8,51	0,01	1,89		0,47	39,60	0,02		0,01	98,86	Low-Mg-Ilménite
4430002	Quévillon	0,02	48,06	0,07	0,00	8,37	0,04	1,49		0,61	39,99	0,00		0,02	98,67	Low-Mg-Ilménite
4430002	Quévillon	0,03	47,03	0,05	0,00	10,71	0,00	1,05		0,55	39,90	0,00		0,01	99,32	Low-Mg-Ilménite
4430004	Quévillon	0,02	48,63	0,11	0,00	8,64	0,00	2,23		0,65	39,17	0,00		0,01	99,46	Mg-Ilménite
4430004	Quévillon	0,01	48,50	0,14	0,00	9,52	0,00	2,57		0,51	38,62	0,00		0,00	99,86	Mg-Ilménite
4430004	Quévillon	0,02	46,60	0,02	0,00	8,81	0,02	0,04		1,55	40,29	0,00		0,02	97,35	Mn-Ilménite
4430004	Quévillon	0,04	49,27	0,43	0,10	11,60	0,11	8,35		0,22	29,55	0,00		0,02	99,68	Picroilménite
4430005	Quévillon	0,03	49,30	0,00	0,05	5,04	0,06	0,21		2,88	41,07	0,00		0,03	98,66	Mn-Ilménite
4430005	Quévillon	0,05	48,69	0,04	0,02	5,32	0,15	0,06		5,84	37,80	0,00		0,00	97,95	Mn-Ilménite
4430005	Quévillon	0,02	48,63	0,02	0,04	5,62	0,11	0,07		0,57	43,06	0,00		0,01	98,16	Ilménite
4430005	Quévillon	0,05	47,97	0,01	0,07	8,51	0,03	0,18		1,32	41,52	0,00		0,00	99,65	Mn-Ilménite

Echantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	Nb2O3	MgO	CaO	MnO	FeO	ZnO	NiO	Na2O	Total	Interprétation
4430007	Quévillon	0,06	48,92	0,03	0,00	7,65	0,03	0,10		1,99	41,81	0,05		0,06	100,70	Mn-Ilménite
4430007	Quévillon	0,04	47,95	0,29	0,16	13,29	0,19	8,03		0,21	28,87	0,06		0,01	99,09	Picroilménite
4430007	Quévillon	0,01	46,87	0,25	0,15	14,64	0,18	6,99		0,21	29,72	0,02		0,04	99,07	Picroilménite
4430007	Quévillon	0,03	45,89	1,03	0,01	16,57	0,09	7,83		0,13	27,91	0,00		0,00	99,49	Picroilménite
4430007	Quévillon	0,04	49,73	0,13	0,01	7,18	0,03	2,94		0,52	39,04	0,02		0,02	99,67	Mg-Ilménite
4430007	Quévillon	0,04	49,57	0,79	0,55	11,09	0,17	11,21		0,27	25,14	0,01		0,01	98,83	Low-Cr-Picroilménite
4430007	Quévillon	0,04	48,94	0,06	0,00	7,71	0,01	1,56		0,64	40,63	0,00		0,00	99,58	Low-Mg-Ilménite
4430008	Quévillon	0,03	48,13	0,01	0,01	8,35	0,02	0,13		2,21	40,82	0,00		0,03	99,75	Mn-Ilménite
4430008	Quévillon	0,03	48,07	0,01	0,00	8,71	0,06	0,10		1,93	41,10	0,00		0,00	100,00	Mn-Ilménite
4430009	Quévillon	0,03	47,77	0,01	0,01	8,33	0,05	0,22		2,48	40,05	0,04		0,01	99,01	Mn-Ilménite
4430010	Quévillon	0,01	51,24	0,53	2,26	6,61	0,08	11,88		0,28	26,05	0,01		0,03	98,98	Hi-Cr-Picroilménite
4430010	Quévillon	0,03	49,45	0,12	0,04	7,00	0,02	1,83		0,57	40,72	0,00		0,01	99,80	Low-Mg-Ilménite
4430010	Quévillon	0,02	49,35	0,45	0,56	10,23	0,10	9,56		0,34	27,56	0,02		0,00	98,18	Low-Cr-Picroilménite
4430010	Quévillon	0,02	48,90	0,14	0,01	7,93	0,01	2,85		0,49	38,49	0,00		0,06	98,89	Mg-Ilménite
4430010	Quévillon	0,03	48,43	0,09	0,00	9,18	0,02	0,82		0,66	41,48	0,00		0,01	100,71	Ilménite
4430010	Quévillon	0,02	48,38	0,03	0,00	7,17	0,10	0,07		1,85	41,53	0,00		0,01	99,16	Mn-Ilménite
4430010	Quévillon	0,03	47,95	0,01	0,00	7,88	0,05	0,00		1,46	41,65	0,00		0,03	99,06	Mn-Ilménite
4430010	Quévillon	0,03	47,65	1,40	1,54	12,67	0,30	11,25		0,13	24,37	0,07		0,01	99,42	Cr-Picroilménite
4430010	Quévillon	0,04	47,33	0,02	0,00	9,07	0,06	0,12		1,52	40,82	0,02		0,00	99,01	Mn-Ilménite
4430010	Quévillon	0,04	47,27	0,55	0,10	13,93	0,09	8,06		0,22	28,35	0,00		0,02	98,61	Picroilménite
4430010	Quévillon	0,02	46,81	0,02	0,01	10,77	0,02	0,08		1,50	40,45	0,07		0,00	99,74	Mn-Ilménite
4430010	Quévillon	0,01	46,71	0,02	0,00	11,27	0,02	0,12		1,70	40,08	0,00		0,00	99,94	Mn-Ilménite
4430010	Quévillon	0,01	46,46	0,98	0,12	17,05	0,18	9,97		0,15	24,60	0,01		0,03	99,55	Picroilménite
4430010	Quévillon	0,05	46,26	0,01	0,00	10,58	0,05	0,07		1,52	39,94	0,00		0,02	98,49	Mn-Ilménite
4430010	Quévillon	0,01	45,82	1,00	0,02	16,88	0,03	7,53		0,18	28,31	0,07		0,01	99,86	Picroilménite
4430010	Quévillon	0,02	45,80	0,01	0,00	12,18	0,01	0,04		1,56	39,54	0,00		0,00	99,14	Mn-Ilménite
4430010	Quévillon	0,03	50,22	0,54	3,56	6,78	0,14	12,04		0,20	25,56	0,07		0,02	99,17	Hi-Cr-Picroilménite
4430010	Quévillon	0,04	50,17	0,77	0,46	9,81	0,10	10,96		0,20	26,14	0,04		0,02	98,71	Picroilménite
4430010	Quévillon	0,02	49,42	0,09	0,00	7,41	0,00	2,16		0,66	39,99	0,00		0,04	99,79	Mg-Ilménite
4430010	Quévillon	0,07	48,92	0,11	0,00	7,99	0,01	1,78		0,60	40,28	0,07		0,00	99,83	Low-Mg-Ilménite
4430010	Quévillon	0,01	47,81	0,05	0,00	8,30	0,03	1,20		0,69	40,19	0,00		0,03	98,31	Low-Mg-Ilménite
4430011	Quévillon	0,00	48,84	0,05	0,03	7,64	0,00	1,54		0,57	40,66	0,00		0,01	99,34	Low-Mg-Ilménite
4430011	Quévillon	0,02	48,51	0,91	1,58	10,07	0,02	9,92		0,23	27,09	0,02		0,05	98,43	Cr-Picroilménite
4430011	Quévillon	0,06	48,16	0,02	0,00	7,89	0,03	0,19		2,25	40,71	0,09		0,00	99,39	Mn-Ilménite
4430011	Quévillon	0,04	47,80	1,01	0,04	12,90	0,07	8,04		0,22	29,16	0,08		0,00	99,38	Picroilménite
4430011	Quévillon	0,02	47,80	0,01	0,00	8,76	0,04	0,10		1,38	41,42	0,01		0,00	99,53	Mn-Ilménite
4430011	Quévillon	0,02	47,03	0,00	0,00	10,63	0,04	0,13		3,73	38,28	0,01		0,00	99,87	Mn-Ilménite
4430011	Quévillon	0,03	46,93	0,01	0,00	8,92	0,01	0,24		3,04	38,71	0,08		0,01	97,98	Mn-Ilménite
4430011	Quévillon	0,01	46,86	0,01	0,00	10,41	0,08	0,08		1,45	40,55	0,02		0,01	99,46	Mn-Ilménite

Echantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Fe2O3	Nb2O3	MgO	CaO	MnO	FeO	ZnO	NiO	Na2O	Total	Interprétation
4430011	Quévillon	0,00	45,04	0,69	0,56	19,21	0,25	9,02		0,14	25,02	0,00		0,01	99,93	Low-Cr-Picroilménite
4430011	Quévillon	0,01	49,71	0,03	0,00	4,43	0,03	0,07		1,84	42,72	0,00		0,00	98,84	Mn-Ilménite

Échantillon	Propriété	SiO2	TiO2	Al2O3	Cr2O3	Nb2O3	MgO	CaO	MnO	ZnO	Na2O	FeOcal	Fe2O3cal	Total-cal
4130080	Premier	0,12	0,62	6,53	63,81	0,01	12,76		0,00	0,00	0,00	14,11	2,15	100,10
4130094	Premier	0,03	0,57	8,71	44,14	0,02	0,56		0,04	1,46	0,11	31,53	12,98	100,15
4130132	Premier	0,16	0,34	6,23	64,61	0,00	13,01		0,00	0,06	0,03	13,58	2,86	100,87

Cameca Quantitative Analysis
 Label : garnrg
 Fri Oct 31 01:32:08 2003
 Geo Analysis : garnet based on 24 Oxygens
 Compound Percents

	#1	#2	#3	#4	#5	#6	#7	#8
SiO2	36.846	38.094	37.706	37.426	37.914	35.819	36.469	35.084
TiO2	0.028	0.462	0.009	0.000	0.147	0.000	0.033	0.002
Al2O3	21.771	16.428	22.040	21.291	18.688	21.473	21.760	21.205
Cr2O3	0.062	0.009	0.000	0.008	0.000	0.000	0.000	0.002
Fe2O3	0.000	7.820	0.000	0.026	4.808	0.000	0.000	0.000
MgO	3.674	0.094	7.505	3.128	0.032	3.274	5.681	1.862
CaO	0.390	33.480	1.466	1.436	32.041	1.321	0.560	1.815
MnO	4.692	0.700	3.337	3.133	0.342	5.026	1.812	8.166
FeO	33.756	2.486	28.375	34.694	5.591	32.443	32.688	30.458
Na2O	0.021	0.014	0.025	0.031	0.004	0.024	0.038	0.036
K2O	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
	101.240	99.587	100.463	101.173	99.567	99.380	99.042	98.630
	#9	#10	#11	#12	#13	#14	#15	#16
SiO2	35.877	36.925	35.881	36.150	36.846	37.531	36.973	36.974
TiO2	0.002	0.040	0.000	0.000	0.301	0.009	0.365	0.025
Al2O3	21.676	21.867	21.599	21.452	18.135	22.353	16.658	22.313
Cr2O3	0.000	0.000	0.025	0.000	0.010	0.009	0.007	0.040
Fe2O3	0.000	0.000	0.000	0.000	4.880	0.000	7.228	0.000
MgO	4.340	6.314	3.357	2.896	0.064	7.921	0.103	7.285
CaO	0.364	1.186	0.388	0.290	30.261	1.202	32.806	1.589
MnO	4.219	2.165	1.939	1.730	1.158	1.263	1.130	0.804
FeO	32.834	31.096	36.648	37.638	6.510	30.132	3.331	30.782
Na2O	0.057	0.030	0.035	0.023	0.026	0.027	0.018	0.028
K2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	99.369	99.623	99.872	100.179	98.191	100.447	98.619	99.840
	#17	#18	#19	#20	#21	#22	#23	#24
SiO2	36.927	37.421	38.311	36.120	36.193	36.504	36.996	36.594
TiO2	0.000	0.007	0.149	0.000	0.009	0.009	0.223	0.003
Al2O3	22.413	22.148	18.949	21.412	21.587	21.389	17.957	21.556
Cr2O3	0.018	0.000	0.000	0.000	0.013	0.003	0.000	0.000
Fe2O3	0.000	0.000	4.549	0.000	0.000	0.000	5.390	0.000
MgO	8.644	8.293	0.042	2.716	3.334	2.238	0.055	2.789
CaO	1.293	0.782	31.862	2.466	0.739	0.864	32.106	0.753
MnO	0.846	1.748	0.927	5.270	3.721	7.889	0.958	6.671
FeO	29.509	29.401	5.079	31.686	34.605	31.245	4.595	31.582
Na2O	0.000	0.025	0.031	0.030	0.000	0.029	0.015	0.042
K2O	0.000	0.009	0.000	0.000	0.000	0.003	0.000	0.000
	99.650	99.834	99.899	99.709	100.192	100.173	98.295	99.990

	#25	#26	#27	#28	#29	#30	#31	#32
SiO2	37.504	37.422	36.485	35.402	37.095	37.005	36.577	37.133
TiO2	0.017	0.042	0.356	0.035	0.000	0.127	0.365	0.246
Al2O3	21.698	21.987	20.814	21.245	22.411	18.771	13.640	10.751
Cr2O3	0.055	0.024	0.000	0.000	0.058	0.000	0.021	0.000
Fe2O3	0.000	0.000	1.282	0.000	0.000	4.376	11.549	15.918
MgO	4.582	5.736	0.130	1.801	8.839	0.009	0.113	0.016
CaO	0.995	0.640	35.248	0.996	1.387	31.391	33.229	31.317
MnO	4.640	4.368	0.934	3.726	1.048	0.461	0.478	0.991
FeO	31.574	30.374	2.411	35.565	28.966	6.565	2.828	3.499
Na2O	0.018	0.035	0.020	0.033	0.030	0.000	0.029	0.013
K2O	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000
	101.084	100.628	97.680	98.803	99.834	98.706	98.829	99.884
	#33	#34	#35	#36	#37	#38	#39	#40
SiO2	36.378	37.371	40.298	35.903	37.892	36.852	37.825	41.505
TiO2	0.000	0.285	0.860	0.030	0.393	0.657	0.099	0.630
Al2O3	21.685	18.257	21.890	21.569	15.631	14.495	20.122	20.248
Cr2O3	0.027	0.000	1.231	0.001	0.034	6.623	0.000	4.183
Fe2O3	0.000	5.141	0.873	0.000	8.965	2.929	2.699	0.771
MgO	4.743	0.139	20.076	4.369	0.112	0.396	0.065	21.436
CaO	1.492	32.822	6.014	0.951	33.479	30.924	32.401	5.264
MnO	2.445	1.069	0.307	3.527	0.819	0.549	0.260	0.075
FeO	32.088	3.723	8.554	32.881	2.176	4.757	5.468	6.447
Na2O	0.036	0.020	0.073	0.025	0.015	0.019	0.015	0.062
K2O	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
	98.894	98.828	100.176	99.256	99.516	98.201	98.954	100.621
	#41	#42	#43	#44	#45	#46	#47	#48
SiO2	37.185	38.296	37.369	37.314	37.498	37.770	36.086	36.877
TiO2	0.000	0.114	0.244	0.133	0.254	0.126	0.016	0.023
Al2O3	21.946	18.581	19.474	19.258	20.314	20.627	21.449	21.667
Cr2O3	0.005	0.000	0.001	0.000	0.001	0.000	0.000	0.000
Fe2O3	0.000	5.193	3.339	3.725	2.074	1.925	0.000	0.000
MgO	6.683	0.138	0.080	0.011	0.175	0.057	3.026	4.191
CaO	1.444	33.637	33.801	32.366	31.190	33.408	0.549	1.086
MnO	1.708	0.450	0.347	0.281	0.803	0.415	5.872	1.591
FeO	30.950	3.277	3.462	5.404	6.221	4.216	32.883	35.072
Na2O	0.020	0.005	0.028	0.017	0.009	0.019	0.027	0.046
K2O	0.001	0.003	0.000	0.000	0.006	0.000	0.002	0.003
	99.942	99.694	98.145	98.509	98.545	98.563	99.910	100.556
	#49	#50	#51	#52	#53	#54	#55	#56
SiO2	38.245	38.734	38.569	35.510	36.477	35.833	38.375	36.469
TiO2	0.055	0.133	0.229	0.022	0.031	0.035	0.186	0.016
Al2O3	18.193	19.462	19.463	20.812	21.363	21.602	18.661	20.880
Cr2O3	0.000	0.000	0.000	0.005	0.026	0.000	0.000	0.000
Fe2O3	5.886	3.977	3.951	0.000	0.000	0.000	4.842	0.061
MgO	0.022	0.102	0.098	2.781	3.340	2.864	0.051	1.713
CaO	33.978	32.025	33.784	0.669	1.583	0.403	30.175	2.734
MnO	0.165	0.183	0.351	24.214	4.021	3.282	0.806	13.670
FeO	3.448	5.617	3.598	14.892	33.145	35.521	6.991	24.362
Na2O	0.016	0.019	0.016	0.045	0.018	0.021	0.011	0.049
K2O	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
	100.008	100.252	100.059	98.951	100.004	99.561	100.098	99.954

garnat2_30102003.asc

a	#57	#58	#59	#60	#61	#62	#63	#64
SiO2	38.075	37.500	35.507	36.887	36.163	36.167	35.994	36.039
TiO2	0.196	0.000	0.000	0.094	0.747	0.009	0.000	0.019
Al2O3	17.674	21.857	21.351	21.377	11.781	21.487	21.511	21.980
Cr2O3	0.001	0.012	0.000	0.000	0.010	0.000	0.029	0.001
Fe2O3	6.201	0.000	0.000	0.000	13.764	0.000	0.000	0.000
MgO	0.047	5.813	-2.447	2.618	0.086	2.860	3.702	5.589
CaO	30.645	1.326	0.515	7.355	34.215	0.502	0.529	0.840
MnO	1.257	3.523	4.222	1.816	0.416	2.017	2.897	2.419
FeO	5.787	30.553	34.987	29.754	1.309	37.288	34.358	32.494
Na2O	0.025	0.038	0.019	0.024	0.021	0.035	0.025	0.022
K2O	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002
	99.909	100.622	99.048	99.925	98.512	100.365	99.045	99.405
	#65	#66	#67	#68				
SiO2	38.498	38.449	36.150	37.447				
TiO2	0.279	0.303	0.035	0.053				
Al2O3	19.515	18.883	21.516	17.245				
Cr2O3	0.014	0.016	0.000	0.000				
Fe2O3	3.566	4.561	0.000	6.774				
MgO	0.053	0.018	3.512	0.055				
CaO	32.377	33.877	0.532	32.144				
MnO	0.601	0.239	3.998	0.587				
FeO	4.709	3.307	33.693	4.618				
Na2O	0.000	0.020	0.030	0.030				
K2O	0.000	0.000	0.000	0.000				
	99.612	99.673	99.466	98.953				

Cameca Quantitative Analysis
 Label : pyrorg
 Fri Oct 31 07:29:34 2003
 Geo Analysis : pyroxene based on 6 Oxygens
 Compound Percents

	#76	#77	#78	#79	#80
SiO2	54.229	54.340	54.459	53.910	54.693
TiO2	0.034	0.005	0.076	0.029	0.087
Al2O3	0.939	0.982	0.812	0.738	1.402
Cr2O3	0.222	0.159	0.318	0.159	0.526
Fe2O3	0.133	0.096	0.283	1.137	0.000
MgO	15.215	15.101	15.166	14.797	16.514
CaO	23.900	23.690	24.078	23.271	21.970
MnO	0.226	0.167	0.128	0.460	0.142
FeO	4.490	5.477	4.595	5.406	4.261
Na2O	0.521	0.440	0.556	0.523	0.487
K2O	0.000	0.009	0.000	0.000	0.056
	99.909	100.466	100.471	100.430	100.138

	#81	#82	#83	#84	#85	#86	#87	#88
SiO2	54.826	54.288	54.427	52.453	53.574	53.618	53.752	53.721
TiO2	0.024	0.035	0.054	0.212	0.028	0.033	0.000	0.014
Al2O3	0.806	0.729	1.121	3.637	1.296	1.051	1.066	0.934
Cr2O3	0.517	0.272	0.472	0.705	0.065	0.143	0.245	0.083
Fe2O3	0.266	0.993	0.062	0.982	1.410	0.600	0.655	0.876
MgO	16.366	15.671	15.913	17.242	14.855	14.082	15.606	14.745
CaO	23.293	21.791	22.615	19.550	22.458	23.346	21.646	23.308
MnO	0.089	0.212	0.077	0.177	0.208	0.374	0.331	0.273
FeO	3.949	5.645	4.633	4.930	5.886	5.953	6.068	5.086
Na2O	0.542	0.697	0.659	0.433	0.591	0.604	0.497	0.591
K2O	0.004	0.000	0.007	0.005	0.000	0.000	0.005	0.000
	100.682	100.333	100.040	100.326	100.371	99.804	99.871	99.631

	#89	#90	#91	#92	#93	#94	#95	#96
SiO2	54.321	53.775	54.352	54.135	54.616	53.985	54.478	39.0
TiO2	0.027	0.026	0.034	0.044	0.000	0.064	0.059	0.1
Al2O3	0.866	1.248	1.250	0.962	1.224	0.714	0.990	17.8
Cr2O3	0.350	0.181	0.350	0.516	0.752	0.369	0.247	3.7
Fe2O3	0.000	0.689	0.000	0.000	0.000	0.292	0.184	1.7
MgO	15.175	15.695	15.219	15.318	17.380	14.811	15.944	0.1
CaO	23.925	22.331	23.265	23.033	22.889	23.828	22.507	32.7
MnO	0.175	0.155	0.193	0.300	0.073	0.279	0.234	1.0
FeO	4.655	5.350	5.146	5.039	3.035	5.158	4.955	3.5
Na2O	0.511	0.481	0.578	0.558	0.406	0.483	0.592	0.0
K2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0
	100.005	99.931	100.387	99.905	100.375	99.983	100.190	100.0

	#97	#98	#99	#100	#101	#102	#103	#1
SiO2	54.232	53.553	35.423	54.271	53.879	53.823	53.596	54.3
TiO2	0.037	0.033	0.156	0.036	0.047	0.044	0.058	0.0
Al2O3	0.865	0.974	1.890	1.047	0.963	0.993	1.319	0.3
Cr2O3	0.116	0.059	2.239	0.484	0.409	0.116	0.542	0.5
Fe2O3	0.611	1.107	26.103	0.000	0.109	0.883	0.428	0.4
MgO	14.877	14.372	0.413	15.716	14.798	14.771	15.621	15.8
CaO	23.379	23.890	32.742	22.717	23.789	23.055	22.883	22.3
MnO	0.208	0.279	0.082	0.165	0.165	0.188	0.200	0.5
FeO	5.089	5.254	0.000	4.727	4.739	5.531	4.878	4.9
Na2O	0.670	0.492	0.021	0.591	0.582	0.606	0.407	0.5
K2O	0.000	0.007	0.000	0.000	0.002	0.000	0.003	0.0
	100.084	100.020	99.069	99.754	99.482	100.010	99.935	99.9

	#105	#106	#107	#108	#109	#110	#111	#1
SiO2	53.625	53.915	52.634	54.435	55.155	54.124	53.727	54.2
TiO2	0.266	0.047	0.186	0.044	0.356	0.007	0.064	0.0
Al2O3	4.996	0.854	3.118	1.072	1.585	0.981	1.181	0.8
Cr2O3	1.407	0.371	1.220	0.479	1.165	0.411	0.045	0.3
Fe2O3	0.000	0.572	0.243	0.000	0.360	0.582	1.028	0.2
MgO	15.037	15.453	17.808	15.964	18.145	14.992	15.120	14.8
CaO	21.840	23.052	18.988	23.200	18.916	23.054	22.231	23.7
MnO	0.000	0.134	0.159	0.140	0.065	0.206	0.235	0.2
FeO	1.446	4.712	5.451	3.999	2.807	4.721	5.855	4.8
Na2O	1.741	0.557	0.307	0.483	1.443	0.762	0.598	0.6
K2O	0.000	0.000	0.000	0.000	0.043	0.001	0.000	0.0
	100.358	99.667	100.114	99.816	100.040	99.841	100.084	100.1

	#113	#114	#115	#116	#117	#118	#119	#1
SiO2	54.499	37.285	54.159	53.063	53.583	54.590	54.095	54.2
TiO2	0.018	0.031	0.068	0.192	0.029	0.022	0.031	0.0
Al2O3	0.644	20.525	1.070	2.909	1.330	0.958	0.896	1.1
Cr2O3	0.109	0.005	0.451	1.202	0.281	0.151	0.541	0.5
Fe2O3	1.244	0.141	0.085	0.000	0.745	0.163	0.000	0.3
MgO	15.399	0.056	14.989	18.240	15.190	16.486	15.185	15.8
CaO	23.881	22.683	23.399	18.543	22.645	21.728	23.357	22.8
MnO	0.149	0.119	0.237	0.116	0.276	0.228	0.234	0.1
FeO	3.701	15.270	5.386	5.854	5.409	5.400	5.390	4.4
Na2O	0.709	0.012	0.538	0.292	0.500	0.527	0.397	0.5
K2O	0.000	0.001	0.001	0.000	0.001	0.000	0.005	0.0
	100.353	96.128	100.383	100.411	99.989	100.253	100.131	100.2

	#121	#122	#123	#124	#125	#126	#127	#128
SiO2	54.106	53.535	53.892	54.983	54.366	54.044	53.897	39.106
TiO2	0.107	0.068	0.042	0.336	0.039	0.037	0.022	0.286
Al2O3	1.047	1.268	1.028	1.630	0.863	1.014	1.239	17.089
Cr2O3	0.329	0.246	0.514	0.512	0.286	0.314	0.408	4.760
Fe2O3	0.556	0.537	0.343	1.181	0.587	0.202	0.540	1.587
MgO	15.619	14.979	15.465	17.995	15.135	14.991	15.249	0.114
CaO	23.678	22.340	22.209	20.117	24.103	23.682	22.575	33.678
MnO	0.155	0.161	0.080	0.091	0.169	0.214	0.212	0.471
FeO	3.776	6.286	5.700	2.277	4.608	4.469	5.377	3.118
Na2O	0.577	0.497	0.577	1.239	0.518	0.623	0.598	0.013
K2O	0.003	0.000	0.000	0.027	0.000	0.006	0.000	0.003
	99.953	99.917	99.850	100.388	100.674	99.596	100.117	100.225
	#129	#130	#131	#132	#133	#134	#135	#136
SiO2	54.368	52.974	54.011	54.141	54.043	53.861	54.284	54.286
TiO2	0.027	0.133	0.037	0.023	0.033	0.063	0.020	0.012
Al2O3	1.028	3.176	0.817	1.051	0.879	0.819	0.978	1.140
Cr2O3	0.570	1.096	0.332	0.553	0.400	0.140	0.150	0.293
Fe2O3	0.231	0.212	0.000	1.040	0.565	0.429	0.905	0.348
MgO	15.373	18.477	14.582	15.313	14.402	14.451	16.189	15.430
CaO	23.648	18.042	23.599	21.792	23.903	23.845	22.950	23.823
MnO	0.224	0.155	0.214	0.165	0.249	0.145	0.122	0.108
FeO	4.199	5.711	5.044	5.313	5.454	5.817	3.955	4.004
Na2O	0.627	0.332	0.600	0.876	0.571	0.466	0.556	0.600
K2O	0.000	0.001	0.003	0.000	0.000	0.009	0.004	0.000
	100.295	100.309	99.239	100.267	100.499	100.045	100.113	100.044

AÜ AÖ	#121	#122	#123	#124	#125	#126	#127	#128
SiO2	0.048	0.019	0.049	0.014	0.138	0.000	0.012	0.000
TiO2	52.288	51.979	48.984	48.918	52.867	46.758	50.815	50.492
Al2O3	0.648	0.000	0.013	0.022	0.706	0.007	0.033	0.000
Cr2O3	0.866	0.000	0.000	0.007	1.802	0.001	0.032	0.000
Fe2O3	9.521	2.714	8.109	8.372	7.058	11.931	4.425	5.267
Nb2O3	0.173	0.033	0.271	0.217	0.101	0.005	0.000	0.185
MgO	13.585	0.248	0.004	0.018	14.207	0.059	0.217	0.097
MnO	0.226	4.370	1.935	1.968	0.265	3.346	1.951	0.725
FeO	23.440	41.871	42.090	41.981	23.295	38.557	43.368	44.496
ZnO	0.000	0.000	0.000	0.000	0.000	0.026	0.023	0.013
Na2O	0.000	0.017	0.000	0.040	0.000	0.021	0.034	0.048
	100.795	101.251	101.455	101.557	100.439	100.711	100.910	101.323
	#129	#130	#131	#132	#133	#134	#135	#136
SiO2	0.000	0.011	0.009	0.015	0.026	0.000	0.000	0.006
TiO2	50.953	51.528	50.172	49.258	50.590	49.568	47.396	46.885
Al2O3	0.014	0.017	0.001	0.009	0.026	0.000	0.068	0.003
Cr2O3	0.000	0.019	0.010	0.026	0.021	0.005	0.000	0.022
Fe2O3	4.272	3.078	4.513	5.600	5.073	5.125	10.231	10.785
Nb2O3	0.208	0.191	0.244	0.264	0.235	0.190	0.155	0.198
MgO	0.019	0.018	0.058	0.027	0.076	0.051	0.089	0.016
MnO	0.632	1.180	1.233	0.966	1.208	1.029	1.488	1.354
FeO	45.153	45.130	43.767	43.285	44.161	43.440	41.000	40.772
ZnO	0.009	0.040	0.000	0.069	0.029	0.012	0.006	0.042
Na2O	0.000	0.029	0.053	0.039	0.021	0.001	0.057	0.037
	101.260	101.241	100.060	99.558	101.466	99.421	100.490	100.120
	#137	#138	#139	#140	#141	#142	#143	#144
SiO2	0.000	0.000	0.028	0.025	0.011	0.024	0.001	0.016
TiO2	48.224	47.160	53.176	0.565	48.286	48.309	48.584	49.653
Al2O3	0.004	0.019	0.499	8.706	0.007	0.016	0.028	0.020
Cr2O3	0.000	0.003	0.890	44.141	0.017	0.000	0.000	0.000
Fe2O3	8.714	10.425	8.046	18.612	8.464	8.268	8.216	6.500
Nb2O3	0.047	0.145	0.144	0.022	0.151	0.198	0.230	0.115
MgO	0.015	0.029	13.551	0.563	0.042	0.035	0.005	0.004
MnO	1.860	2.211	0.241	0.037	2.050	1.852	1.996	2.646
FeO	41.456	40.130	24.189	26.468	41.281	41.513	41.677	41.977
ZnO	0.000	0.010	0.046	1.461	0.000	0.019	0.000	0.001
Na2O	0.045	0.033	0.074	0.114	0.035	0.010	0.036	0.000
	100.365	100.165	100.884	100.714	100.344	100.244	100.773	100.932
	#145	#146	#147	#148	#149	#150	#151	#152
SiO2	0.020	0.009	0.013	0.004	0.000	0.009	0.014	0.045
TiO2	47.907	47.749	47.123	48.399	48.734	47.777	47.727	48.276
Al2O3	0.029	0.030	0.010	0.019	0.000	0.002	0.009	0.069
Cr2O3	0.010	0.000	0.000	0.000	0.216	0.013	0.000	0.000
Fe2O3	9.216	7.746	10.412	8.034	8.602	9.369	8.987	7.215
Nb2O3	0.261	0.133	0.324	0.326	0.063	0.194	0.435	0.040
MgO	0.000	0.012	0.000	0.004	0.077	0.056	0.036	0.027
MnO	1.279	2.318	2.314	1.789	3.297	2.224	5.816	1.881
FeO	41.809	40.588	40.037	41.716	40.449	40.616	36.968	41.506
ZnO	0.000	0.083	0.000	0.000	0.034	0.023	0.053	0.000
Na2O	0.024	0.023	0.000	0.043	0.021	0.064	0.000	0.023
	100.555	98.691	100.233	100.334	101.493	100.347	100.045	99.082

AÜ AÖ	#153	#154	#155	#156	#157	#158	#159	#160
SiO2	0.001	0.011	0.021	0.032	0.035	0.026	0.013	0.016
TiO2	48.690	47.787	47.875	46.554	48.302	49.083	48.503	54.614
Al2O3	0.006	0.022	0.004	0.016	0.009	0.020	0.002	0.164
Cr2O3	0.047	0.020	0.101	0.005	0.000	0.000	0.000	1.034
Fe2O3	8.515	10.045	8.966	10.891	8.847	6.116	7.579	5.608
Nb2O3	0.046	0.045	0.070	0.286	0.273	0.143	0.051	0.041
MgO	0.033	0.061	0.181	0.005	0.003	0.018	0.033	14.794
MnO	2.198	1.142	4.059	1.350	1.422	6.341	2.223	0.206
FeO	41.524	41.729	38.667	40.499	41.995	37.695	41.305	23.134
ZnO	0.000	0.000	0.022	0.000	0.008	0.145	0.000	0.000
Na2O	0.092	0.055	0.052	0.000	0.000	0.026	0.045	0.023
	101.152	100.917	100.018	99.638	100.894	99.613	99.754	99.634
	#161	#162	#163	#164	#165	#166	#167	#168
SiO2	0.078	0.015	0.000	0.000	0.055	0.017	0.033	0.003
TiO2	52.630	48.345	48.560	47.891	48.458	49.084	53.307	48.415
Al2O3	0.704	0.042	0.005	0.000	0.019	0.019	0.645	0.000
Cr2O3	1.707	0.000	0.000	0.001	0.004	0.006	1.161	0.000
Fe2O3	7.513	8.662	8.519	8.643	9.288	6.969	8.798	6.647
Nb2O3	0.090	0.181	0.099	0.205	0.061	0.075	0.102	0.211
MgO	14.077	0.076	0.050	0.012	0.074	0.046	16.252	0.037
MnO	0.190	1.451	3.451	2.218	0.957	1.999	0.245	7.838
FeO	23.343	41.897	40.085	40.798	42.489	42.047	19.718	35.530
ZnO	0.086	0.000	0.047	0.000	0.000	0.015	0.000	0.353
Na2O	0.065	0.036	0.018	0.033	0.023	0.045	0.000	0.021
	100.483	100.705	100.834	99.801	101.428	100.322	100.261	99.055
	#169	#170	#171	#172	#173	#174	#175	#176
SiO2	0.000	0.000	0.010	0.012	0.011	0.020	0.000	0.015
TiO2	48.687	48.200	46.906	46.034	46.694	42.442	16.630	47.807
Al2O3	0.000	0.029	0.010	0.022	0.018	0.021	0.036	0.012
Cr2O3	0.000	0.000	0.005	0.000	0.015	0.028	0.003	0.000
Fe2O3	7.112	8.394	9.660	12.950	10.522	19.311	71.958	9.368
Nb2O3	0.177	0.219	0.110	0.069	0.000	0.303	0.008	0.210
MgO	0.019	0.000	0.000	0.032	0.068	0.038	0.041	0.030
MnO	2.215	2.007	2.041	0.459	1.160	1.117	0.010	2.558
FeO	41.502	41.330	40.121	40.888	40.712	36.993	14.898	40.352
ZnO	0.066	0.056	0.065	0.052	0.000	0.000	0.000	0.000
Na2O	0.021	0.041	0.000	0.036	0.015	0.000	0.092	0.000
	99.799	100.276	98.928	100.554	99.215	100.273	103.676	100.352
	#177	#178	#179	#180	#181	#182	#183	#184
SiO2	0.000	0.000	0.021	0.000	0.033	0.007	0.034	0.076
TiO2	46.948	46.431	47.781	45.794	50.130	47.660	45.607	52.407
Al2O3	0.011	0.013	0.016	0.010	0.650	0.027	0.025	0.556
Cr2O3	0.000	0.007	0.000	0.014	0.921	0.000	0.042	1.678
Fe2O3	10.788	11.493	10.374	12.691	11.047	9.094	13.404	8.172
Nb2O3	0.251	0.278	0.095	0.237	0.174	0.108	0.115	0.143
MgO	0.051	0.041	0.201	0.032	12.701	0.028	0.064	13.823
MnO	1.334	1.489	0.838	1.419	0.223	2.297	2.682	0.080
FeO	40.782	40.183	41.769	39.697	23.105	40.499	38.218	23.588
ZnO	0.000	0.015	0.018	0.057	0.050	0.000	0.000	0.000
Na2O	0.036	0.029	0.049	0.032	0.015	0.043	0.047	0.043
	100.201	99.979	101.162	99.983	99.049	99.763	100.238	100.566

AÜ AÖ	#185	#186	#187	#188	#189	#190	#191	#192
SiO2	0.019	0.028	0.004	0.025	0.002	0.016	0.000	0.007
TiO2	48.739	50.693	47.414	45.734	47.534	47.244	49.009	47.468
Al2O3	0.012	0.647	0.022	0.000	0.017	0.014	0.015	0.017
Cr2O3	0.074	0.884	0.004	0.014	0.019	0.017	0.036	0.000
Fe2O3	7.077	10.654	9.521	13.430	8.272	11.673	5.960	9.757
Nb2O3	0.070	0.134	0.065	0.202	0.120	0.057	0.013	0.219
MgO	0.065	12.769	0.081	0.060	0.014	0.019	0.051	0.083
MnO	4.140	0.246	2.343	0.760	1.770	0.945	1.868	2.634
FeO	39.561	23.445	40.134	40.254	40.945	41.510	42.113	39.879
ZnO	0.031	0.021	0.050	0.065	0.000	0.000	0.093	0.080
Na2O	0.039	0.000	0.018	0.028	0.037	0.041	0.029	0.028
	99.827	99.521	99.656	100.572	98.730	101.536	99.187	100.172
	#193	#194	#195	#196	#197	#198	#199	#200
SiO2	0.027	0.024	0.025	0.000	0.013	0.017	0.031	0.000
TiO2	46.904	47.978	48.575	45.893	46.443	47.340	46.289	46.320
Al2O3	0.026	0.032	0.010	0.035	0.005	0.031	0.019	0.012
Cr2O3	0.000	0.000	0.038	0.013	0.014	0.000	0.042	0.029
Fe2O3	10.343	8.367	7.483	12.025	12.561	9.057	11.328	11.429
Nb2O3	0.151	0.110	0.101	0.270	0.040	0.066	0.050	0.345
MgO	0.009	0.017	0.096	0.029	0.099	0.062	0.190	0.101
MnO	1.949	1.462	4.114	1.651	0.850	1.786	0.473	3.417
FeO	40.204	41.653	39.366	39.574	40.735	40.671	40.840	38.033
ZnO	0.000	0.000	0.047	0.021	0.000	0.011	0.082	0.031
Na2O	0.034	0.051	0.007	0.024	0.014	0.018	0.021	0.038
	99.647	99.694	99.862	99.535	100.774	99.059	99.365	99.755
	#201	#202	#203	#204	#205	#206	#207	#208
SiO2	0.032	0.026	0.028	0.020	0.015	0.028	0.066	0.034
TiO2	48.303	38.983	47.169	48.885	47.914	47.235	52.640	52.055
Al2O3	0.006	0.013	0.023	0.023	0.010	0.011	0.625	0.633
Cr2O3	0.039	0.016	0.000	0.000	0.007	0.019	1.298	0.915
Fe2O3	7.846	25.864	10.570	8.318	7.842	10.528	9.397	9.408
Nb2O3	0.000	0.689	0.316	0.125	0.000	0.395	0.053	0.127
MgO	0.046	0.086	0.031	0.032	0.041	0.062	15.637	13.462
MnO	3.365	1.315	2.531	1.706	2.620	1.554	0.289	0.275
FeO	39.967	33.586	39.813	42.190	40.368	40.807	20.221	23.411
ZnO	0.016	0.049	0.038	0.000	0.000	0.000	0.017	0.017
Na2O	0.031	0.004	0.024	0.018	0.038	0.063	0.030	0.065
	99.651	100.631	100.543	101.317	98.855	100.702	100.273	100.402
	#209	#210	#211	#212	#213	#214	#215	#216
SiO2	0.004	0.162	0.007	0.061	0.015	0.006	0.038	0.011
TiO2	47.797	0.335	50.290	51.209	46.998	46.337	51.590	46.421
Al2O3	0.011	6.225	0.000	0.648	0.022	0.000	0.658	0.016
Cr2O3	0.000	64.605	0.000	0.806	0.000	0.000	0.908	0.000
Fe2O3	9.825	4.573	4.521	10.566	10.085	10.736	10.188	12.237
Nb2O3	0.150	0.000	0.078	0.131	0.294	0.361	0.115	0.091
MgO	0.017	13.007	0.074	13.781	0.043	0.041	13.420	0.028
MnO	3.474	0.000	2.334	0.241	1.959	1.538	0.213	2.278
FeO	39.440	12.040	42.725	22.076	40.217	40.037	23.146	39.396
ZnO	0.073	0.063	0.055	0.000	0.029	0.000	0.000	0.000
Na2O	0.004	0.029	0.037	0.000	0.031	0.037	0.033	0.023
	100.795	101.039	100.121	99.519	99.693	99.093	100.309	100.501

AÜ AÖ	#217	#218	#219	#220	#221	#222	#223	#224
SiO2	0.013	0.000	0.000	0.024	0.000	0.052	0.019	0.038
TiO2	47.860	48.170	47.814	47.398	48.608	44.717	47.981	47.403
Al2O3	0.029	0.024	0.000	0.019	0.013	0.043	0.032	0.018
Cr2O3	0.024	0.022	0.081	0.013	0.000	0.067	0.012	0.000
Fe2O3	10.077	8.095	9.587	9.722	7.581	14.789	8.230	11.042
Nb2O3	0.157	0.018	0.150	0.147	0.154	0.044	0.395	0.055
MgO	0.111	0.057	0.078	0.045	0.005	0.184	0.007	0.089
MnO	1.007	1.040	2.221	1.930	2.008	0.369	2.496	0.975
FeO	41.850	42.186	40.643	40.604	41.676	39.571	40.632	41.494
ZnO	0.000	0.096	0.000	0.030	0.003	0.000	0.000	0.000
Na2O	0.004	0.032	0.024	0.057	0.042	0.036	0.018	0.015
	101.132	99.740	100.598	99.989	100.090	99.872	99.822	101.129
	#225	#226	#227	#228	#229	#230		
SiO2	0.033	0.056	0.083	0.039	0.000	0.000		
TiO2	47.909	52.416	52.150	49.729	50.396	47.478		
Al2O3	0.048	0.579	0.635	0.088	0.014	0.003		
Cr2O3	0.001	1.792	1.838	0.023	0.030	0.000		
Fe2O3	9.595	8.625	6.914	5.207	4.270	9.335		
Nb2O3	0.078	0.109	0.148	0.067	0.046	0.440		
MgO	0.026	14.640	13.787	0.122	0.144	0.064		
MnO	4.069	0.244	0.200	2.057	1.967	2.046		
FeO	38.948	22.043	23.429	42.488	43.092	40.509		
ZnO	0.000	0.058	0.000	0.065	0.000	0.129		
Na2O	0.059	0.067	0.076	0.024	0.023	0.006		
	100.766	100.629	99.260	99.909	99.982	100.010		

Sample	Property	ILMÉNITES									SPINEL									PYROPE						DIOPSIDE																				
		Other Kim ilmenite	Pyrophanite	Mn-ilmenite	Hi-Cr Picrolilmenite	Cr-Picrolilmenite	Low-Cr Picrolilmenite	Picrolilmenite	Mg-ilmenite	Low-Mg-ilmenite	Cr-ilmenite	Total ilmenite	Total Cr-Picrolilmenite	DiChromite	DGChromite	Ti-Chromite	Picrochromite	AMChromite	Cr-Spinel	Ferrochromite	Gahnite	Picotite	Total chromite	Harz Pyrope	Lher Pyrope	Wehr Pyrope	Low-Cr Megacryst	Grenat écolitique	Other Kim garnet	Total pyrope	Other vivid diopside	Kosmochlor	Jadéite	Ti-Diopside	K-Diopside	Cr-Diopside	Low-Cr Diopside	Hypercalcic D.	Olivine	Total Diopside	Grand total					
4130001	Premier										0	0										0																			0	0				
4130002	Premier										0	0										0																				0	0			
4130003	Premier										0	0										0																				0	0			
4130004	Premier										0	0										0																				0	0			
4130005	Premier										0	0										0																				0	0			
4130006	Premier										0	0										0																				0	1			
4130007	Premier										0	0										0		1																		0	0			
4130008	Premier										1	0										0																				0	1			
4130009	Premier										0	0										0																				0	0			
4130010	Premier										0	0										0																				0	0			
4130011	Premier										0	0										0																					0	0		
4130012	Premier										0	0										0																					0	0		
4130013	Premier										0	0										0																					0	0		
4130014	Premier										0	0										0																					0	0		
4130015	Premier										0	0										0																					0	0		
4130016	Premier										0	0										0																					0	0		
4130017	Premier										0	0										0																					0	0		
4130018	Premier										0	0										0																					0	0		
4130019	Premier										0	0										0																					0	0		
4130020	Premier										0	0										0																					0	0		
4130021	Premier										1	0										0																					0	1		
4130022	Premier										0	0										0																					0	0		
4130023	Premier										0	0										0																						0	0	
4130024	Premier										0	0										0																						0	0	
4130025	Premier										0	0										0																						0	0	
4130026	Premier										1	1										0																						0	1	
4130027	Premier										0	0										0																						0	0	
4130028	Premier										0	0										0																						0	0	
4130029	Premier										0	0										0		1	1																		0	2		
4130030	Premier										0	0										0																						0	0	
4130031	Premier										0	0										0																						0	0	
4130032	Premier										0	0										0																						0	0	
4130033	Premier										0	0										0																						0	0	
4130034	Premier										0	0										0																						0	0	
4130035	Premier										1	0										0																						0	1	
4130036	Premier										0	0										0																						0	1	
4130037	Premier										0	0										0																						1	1	
4130038	Premier										0	0										0																						0	0	
4130039	Premier										0	0										0																						0	0	
4130040	Premier										0	0										0																						0	0	
4130041	Premier										0	0										0																						0	0	
4130042	La Croix										0	0									0																							0	0	
4130043	La Croix										0	0										0																							0	0
4130044	La Croix										0	0										0																							0	0
4130045	La Croix										0	0										0																							0	0
4130046	La Croix										0	0										0																							0	0
4130047	La Croix										0	0										0																							0	0
4130048	La Croix										0	0										0																							0	0
4130049	La Croix										0	0										0																							0	0
4130050	La Croix										0	0										0																							0	0
4130051	La Croix										0	0										0																							0	0

Sample	Property	ILMÉNITES										SPINEL							PYROPE							DIOPSIDE																			
		Other Kim ilmenite	Pyrophanite	Mn-ilmenite	Hi-Cr Picrolilmenite	Cr-Picrolilmenite	Low-Cr Picrolilmenite	Picrolilmenite	Mg-ilmenite	Low-Mg-ilmenite	Cr-ilmenite	Total ilmenite	Total Cr-Picrolilmenite	DiChromite	DGChromite	Ti-Chromite	Picrochromite	AMChromite	Cr-Spinel	Ferrochromite	Gahnite	Picotte	Total chromite	Harz Pyrope	Lher Pyrope	Wehr Pyrope	Low-Cr Megacryst	Grenat écologique	Other Kim garnet	Total pyrope	Other vivid diopside	Kosmochlor	Jedéite	Ti-Diopside	K-Diopside	Cr-Diopside	Low-Cr Diopside	Hypercalcic D.	Olivine	Total Diopside	Grand total				
4130052	La Croix										0	0										0																				0	0		
4130053	La Croix										0	0										0																					0	0	
4130054	La Croix										0	0										0																					0	0	
4130055	La Croix										0	0										0																					0	0	
4130056	La Croix										0	0										0																					0	0	
4130057	La Croix										0	0										0																					0	0	
4130058	La Croix										0	0										0																					0	0	
4130059	La Croix										0	0										0																					0	0	
4130060	La Croix										0	0										0																					0	0	
4130061	La Croix										0	0										0																					0	0	
4130062	La Croix										0	0										0																					0	0	
4130063	La Croix										0	0										0																					0	0	
4130064	La Croix										0	0										0																					0	0	
4130065	La Croix										0	0										0																					0	0	
4130066	La Croix										0	0										0																						0	0
4130067	La Croix										0	0										0																					0	0	
4130068	Premier										0	0										0																					0	0	
4130069	Premier										0	0										0																					0	0	
4130070	Premier										0	0										0																					0	0	
4130071	Premier										0	0										0																					0	0	
4130072	Premier										0	0										0																					0	0	
4130073	Premier										0	0										0																					0	0	
4130074	Premier										0	0										0																					0	0	
4130075	Premier										0	0										0																					0	0	
4130076	Premier										0	0										0																					0	0	
4130077	Premier										0	0										0																					0	0	
4130078	Premier										1	0										0																					0	1	
4130079	Premier										0	0										0																					0	0	
4130080	Premier										0	0										1																					0	1	
4130081	Premier										0	0										0																					0	0	
4130082	Premier										0	0										0																					0	0	
4130083	Premier										1	0										0																					0	1	
4130084	Premier										0	0										0																					0	0	
4130085	Premier										0	0										0																					0	0	
4130086	Premier										0	0										0																					0	0	
4130087	Premier										1	1										0																					0	1	
4130088	Premier										0	0										0																					0	0	
4130089	Premier										0	0										0																					0	0	
4130090	Premier										0	0										0																					0	0	
4130091	Premier										0	0										0																					0	0	
4130092	Premier										0	0										0																					0	0	
4130093	Premier										1	0										0																					0	1	
4130094	Premier										0	0										1																					0	1	
4130095	Premier										0	0										0																					1	1	
4130096	Premier										0	0										0																					0	0	
4130097	Premier										0	0										0																					0	0	
4130098	Premier										0	0										0																					0	0	
4130099	Premier										0	0										0																					0	0	
4130100	Premier										0	0										0																					0	0	
4130101	Premier										0	0										0																					1	1	
4130102	Premier										0	0										0																					0	0	

Sample	Property	ILMÉNITES										SPINEL								PYROPE						DIOPSIDE																																
		Other Kim ilmenite	Pyrophanite	Mn-ilmenite	Hi-Cr Picroliménite	Cr-Picroliménite	Low-Cr Picroliménite	Picroliménite	Mg-ilmenite	Low-Mg-ilmenite	Cr-ilmenite	Total ilmenite	Total Cr-Picroliménite	DiChromite	DGChromite	Ti-Chromite	Picrochromite	AMChromite	Cr-Spinel	Ferrochromite	Gahnite	Picofite	Total chromite	Harz Pyrope	Lher Pyrope	Wehr Pyrope	Low-Cr Megacryst	Grenat éclopétique	Other Kim garnet	Total pyrope	Other vivid diopside	Kosmochlor	Jadéite	Ti-Diopside	K-Diopside	Cr-Diopside	Low-Cr Diopside	Hypercalcic D.	Olivine	Total Diopside	Grand total																	
4130103 Premier											0	0										0																		0	0																	
4130104 Premier											0	0											0																		0	0																
4130105 Premier											0	0											0																		0	0																
4130106 Premier											0	0											0																		0	0																
4130107 Premier											0	0											0																		0	0																
4130108 Premier											0	0											0																		0	0																
4130109 Premier											0	0											0																		0	0																
4130110 Premier											0	0											0																		0	0																
4130111 Premier										2	2	0											0																		0	2																
4130112 Premier											0	0											0																		0	1																
4130113 Premier											0	0											0																		0	0																
4130114 Premier											1	0											0																		0	1																
4130115 Premier											0	0											0																		0	0																
4130116 Premier											0	0											0																		0	0																
4130117 Premier											0	0											0																		0	1																
4130118 Premier											1	0											0																		0	1																
4130119 Premier											0	0											0																		0	0																
4130120 Premier											1	1											0																		0	1																
4130121 Premier											1	0											0																		0	1																
4130122 Premier											0	0											0																		1	1																
4130123 Premier											0	0											0																		0	0																
4130124 Premier											0	0											0																		0	0																
4130125 Premier											0	0											0																		0	0																
4130126 Premier											0	0											0																		0	0																
4130127 Premier											0	0											0																		0	0																
4130128 Premier											0	0											0																		0	0																
4130129 Premier											0	0											0																		0	0																
4130130 Premier											2	1											0																		0	2																
4130131 Premier											0	0											0																		0	0																
4130132 Premier											1	0											1																		0	2																
4130133 Premier											1	0											0																		0	1																
4130134 Premier											0	0											0																		0	0																
4130135 Premier											0	0											0																		0	0																
4130136 Premier											0	0											0																		1	1																
4130137 Premier											0	0											0																		0	0																
4130138 Premier											0	0											0																		0	0																
4130139 Premier											0	0											0																		0	0																
4130140 Premier											1	1											0																		0	1																
4130141 Premier											0	0											0																		0	0																
4130142 Premier											0	0											0																		0	0																
Total											8	0	0	0	5	14	0	0	0	0	0	19	5	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	1	4	0	1	0	1	6	5	0	0	0	15	56	0	0	5	33

TILL SAMPLING FOLLOW-UP
PREMIER PROPERTY

APPENDIX 9
METALLURGICAL BALANCES

