

**Technical Report  
Resources Estimation  
November 2007  
on the Vulcain Property,  
Hainaut township, Outaouais  
Matamec Explorations Inc.**

Respectfully submitted to:  
Matamec Explorations Inc.

Date: November 22<sup>nd</sup>, 2007



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## Summary

1. Geostat received the mandate to estimate the resources of the Vulcain copper nickel deposit and write a NI43-101 technical report. The property is located in the Hainaut Township, Outaouais, Quebec province. The Vulcain claims block consists of 155 claims covering 9130 ha and is located 100 km West-North-West of Mont-Laurier. Matamec owns 100% of the rights on all claims. A 2% NSR royalty is due in equal shares to the original title holders M. André Gauthier and M. Jacques Duval.
2. The property includes the open pit Renzy Mine, which produced 716,000 short tons with grades of 0.72% Cu and 0.70% Ni from 1969 to 1974. Faced with a surplus of nickel in world markets, Falconbridge Ltd stopped buying the Renzy concentrate in April 1972, forcing the mine's closure.
3. For this study, Geostat used all the technical data available for the 2003 NI43-101 technical report prepared for Matamec Explorations Inc. The most recent location of holes was taken from the October 2004 report from Geostat and the last diamond drilling campaign done on February 2005. The Author visited the site between June 18<sup>th</sup> and June 20<sup>th</sup> of 2007 for the density estimation of mineralized zones and finally preparing this technical report.
4. The resources reported in this document are compliant with current standards as outlined in the National Instrument 43-101.
5. In 2003, Geostat prepared a NI43-101 technical report. The resources were all inferred at that time and drilling and surveying were proposed.
6. Since 2003, a drilling campaign (1,500m) and a survey of the depth of the lake confirmed the presence of resources. This permitted the actual report resource calculations and upgrade of the classification from the previous calculations made by Geostat in 2003. The new calculation gives **indicated resources** of 92,000 tonnes at 0.65 %Cu and 0.63 %Ni when cut at 0.5 %Ni equivalent or 51,000 tonnes at 0.72 %Cu and 0.79 %Ni when cut at 0.7 %Ni equivalent. **Inferred resources** are totalling 513,000 tonnes at 0.75 %Cu and 0.64 %Ni when cut at 0.5 %Ni equivalent or 280,000 tonnes at 0.89 %Cu and 0.82 %Ni when cut at 0.7 %Ni equivalent.
7. Geostat considers that this property has two main interests. First, the available exploration and finally, the development of the resources found at the lake Renzy site.
8. Geostat believes that the discovery of other deposits would greatly enhance the project interest and the exploration is far from being completed on the property. Some new geophysical surveys in relation to geological knowledge and interpretations (particularly by Leclerc A.) have recently led to a better understanding of the property potential.
9. The proposed drilling program is aiming at the 18 targets as indicated in section 9. It includes 40 diamond drill holes of about 100m each. This represents a cost of \$800,000 estimated at 200\$/m. In addition, some 770m of drilling are proposed around the present resources to possibly increase them. The costs is estimated at \$150,000 (200\$/m), all costs included. In order to define the targets more accurately, some geophysical surveys are also recommended. This part of the recommendations would cost between \$100,000 and \$150,000.

Yann Camus, Eng.  
Qualified Person

November 22<sup>nd</sup>, 2007

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## 1- Introduction

This technical report describes the basis and methodology used for modeling the Vulcain - Lake Renzy deposit. One will find herein the history of the project, along with the latest surveys and the latest data gained from technical studies and exploration efforts.

The author made a recent visit of the property, looked at the more recent core from 2005 and took 30 test samples in order to verify the results of the 2005 drilling campaign by Matamec.

In this document, the following terms are used:

**Matamec:** Matamec Explorations Inc.

**Geostat:** Systèmes Géostat International Inc., firm of consultants mandated to complete this study.

**ALS Chemex:** Laboratory used for analysis in Val d'Or.

Geostat personnel wrote this report in accordance to the National Instrument 43-101 Policy guidelines.

## 1.1 List of abbreviations

In this report, monetary units are in Canadian dollars (CA\$) unless otherwise specified in United States dollars (US\$). The metric system of measurements and units is used throughout the report except for gold quantities, which are reported in Troy ounces.

A table showing abbreviations used in this report is provided below.

tonnes or mt	Metric tonnes
tpd	Tonnes per day
tons	Short tons (0.907185 tonnes)
kg	Kilograms
g	Grams
oz	Troy ounce (31.1035 grams)
g/t	Grams/tonne or ppm
ppm, ppb	Parts per million, parts per billion
ha	Hectares
m	Meters
km	Kilometres
m <sup>3</sup>	Cubic meters

**Table 1: List of abbreviations**



## **2- Reliance on Other Experts**

No reliance on other experts was required for this report.

### 3- Property Description and Location

The Vulcain property, including the Renzy Lake copper nickel deposit, is located in the Hainaut Township, Outaouais, Quebec province. The Vulcain claims are located 100 km West-North-West of Mont-Laurier, 165 km south east of Val D'Or and 280 km West-North-West of Montreal. The center of Lake Renzy is at UTM coordinates 370,350mE and 5,185,980mN (UTM-18, NAD 83) on topographic map NTS 31 K/15. The complete list of claims is in appendix 1.

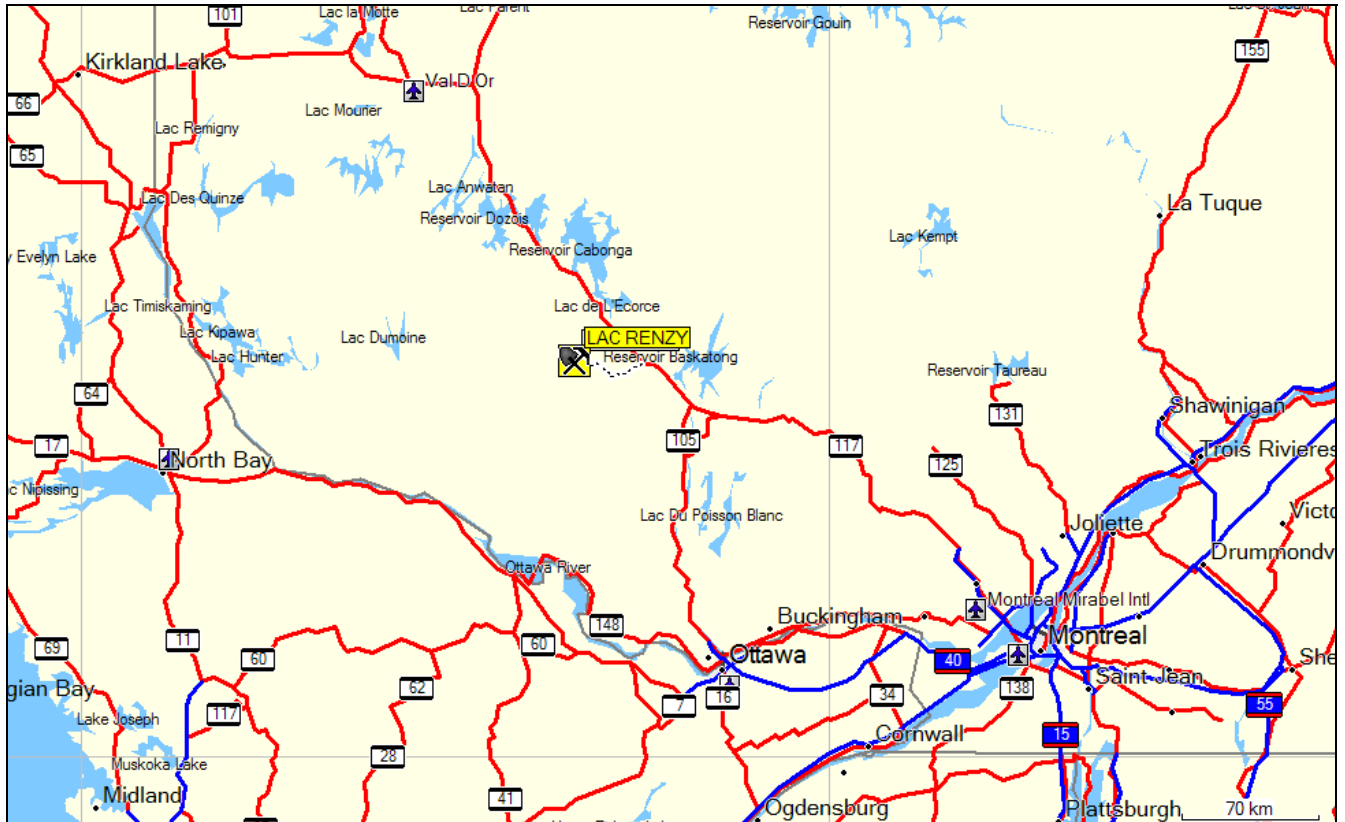


Figure 1: Location of the Renzy Lake and Vulcain property

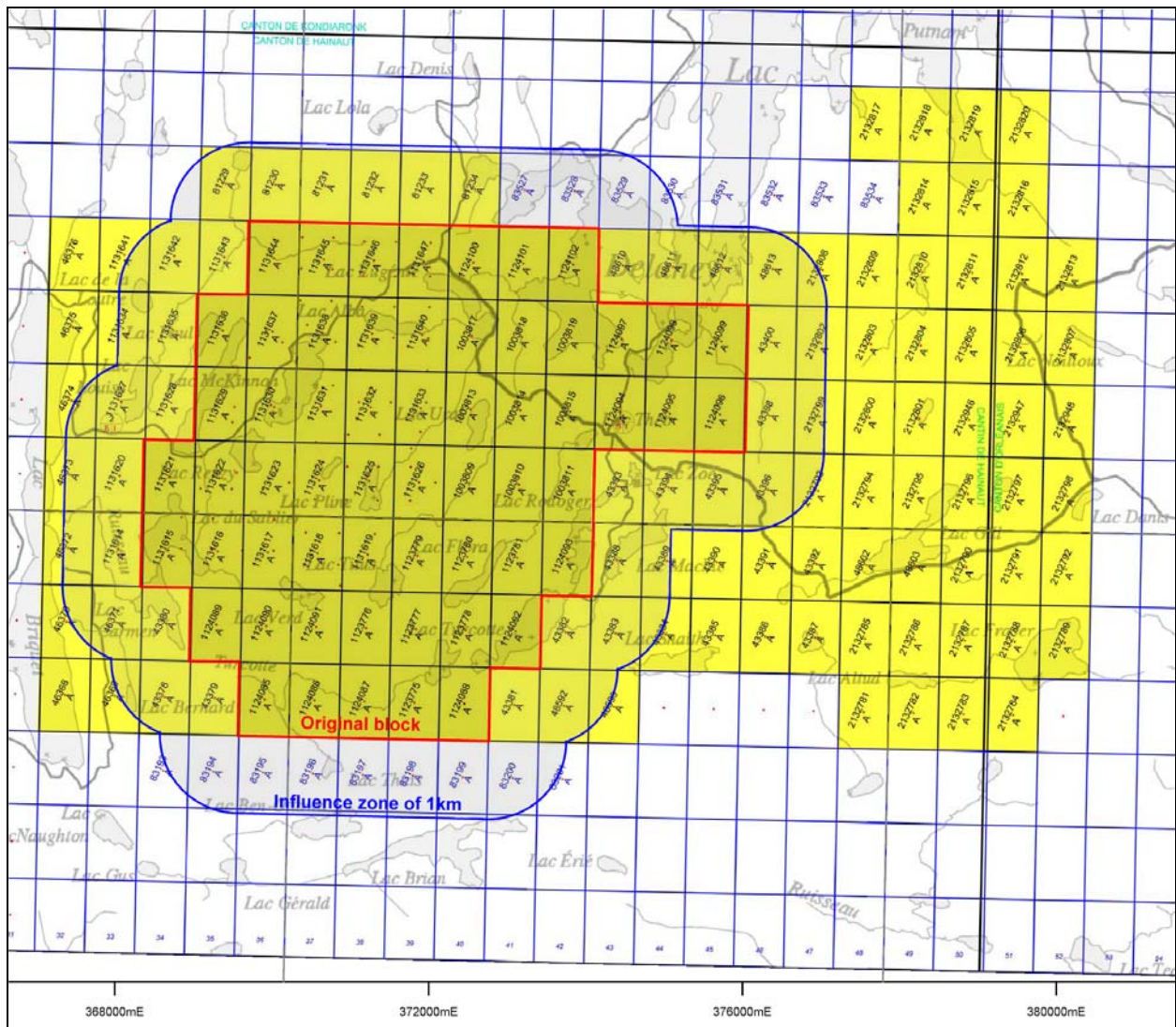


Figure 2: Claim map – Vulcain property (Matamec: yellow, Original block + 1km influence outlines)



**Figure 3: Part of the claim map of the Vulcain property with approximate location of the Lake Renzy 2007 resources and of the Alba prospect.**

The Vulcain property consists of 155 claims covering 9129.62 hectares. Matamec owns 100% of the rights on all claims (see previous figure and next table for details). On the original block (dated September 2003), and on claims less than one kilometre from the original block, a 2% NSR royalty is due in equal shares to the original title holders M. André Gauthier and M. Jacques Duval. Each 0.5% of this NSR royalty is redeemable for 250,000\$. The original block is outlined in red on figure 2, the 1 km distance is outlined in blue. Note that the resources calculated in this report are included in the original block, consequently, NSR royalties apply.

Additionally, Matamec has recently acquired 268 additional claim cells around but not adjoining the core Vulcain property. This addition totals 15,793.36 hectares in SRNC sheets 31K14, 31K15, 31K16 et 31K10. These claims are not covered by the present report.

Title No	Status	Expiry Date	Area (Ha)	Title No	Status	Expiry Date	Area (Ha)	Title No	Status	Expiry Date	Area (Ha)
43378	Active	2008-10-07	58.93	1003819	Active	2009-03-15	58.89	1131640	Active	2009-02-13	58.89
43379	Active	2008-10-07	58.93	1123775	Active	2009-05-08	58.93	1131641	Active	2009-02-13	58.88
43380	Active	2008-10-07	58.92	1123776	Active	2009-05-08	58.92	1131642	Active	2009-02-13	58.88
43381	Active	2008-10-07	58.93	1123777	Active	2009-05-08	58.92	1131643	Active	2009-02-13	58.88
43382	Active	2008-10-07	58.92	1123778	Active	2009-05-08	58.92	1131644	Active	2009-02-13	58.88
43383	Active	2008-10-07	58.92	1123779	Active	2009-05-08	58.91	1131645	Active	2009-02-13	58.88
43384	Active	2008-10-07	58.92	1123780	Active	2009-05-08	58.91	1131646	Active	2009-02-13	58.88
43385	Active	2008-10-07	58.92	1123781	Active	2009-05-08	58.91	1131647	Active	2009-02-13	58.88
43386	Active	2008-10-07	58.92	1124085	Active	2009-05-12	58.93	2132781	Active	2009-10-21	58.93
43387	Active	2008-10-07	58.92	1124086	Active	2009-05-12	58.93	2132782	Active	2009-10-21	58.93
43388	Active	2008-10-07	58.91	1124087	Active	2009-05-12	58.93	2132783	Active	2009-10-21	58.93
43389	Active	2008-10-07	58.91	1124088	Active	2009-05-12	58.93	2132784	Active	2009-10-21	58.93
43390	Active	2008-10-07	58.91	1124089	Active	2009-05-12	58.92	2132785	Active	2009-10-21	58.92
43391	Active	2008-10-07	58.91	1124090	Active	2009-05-12	58.92	2132786	Active	2009-10-21	58.92
43392	Active	2008-10-07	58.91	1124091	Active	2009-05-12	58.92	2132787	Active	2009-10-21	58.92
43393	Active	2008-10-07	58.9	1124092	Active	2009-05-12	58.92	2132788	Active	2009-10-21	58.92
43394	Active	2008-10-07	58.9	1124093	Active	2009-05-12	58.91	2132789	Active	2009-10-21	58.92
43395	Active	2008-10-07	58.9	1124094	Active	2009-05-12	58.9	2132790	Active	2009-10-21	58.91
43396	Active	2008-10-07	58.9	1124095	Active	2009-05-12	58.9	2132791	Active	2009-10-21	58.91
43398	Active	2008-10-07	58.89	1124096	Active	2009-05-12	58.9	2132792	Active	2009-10-21	58.91
43400	Active	2008-10-07	58.89	1124097	Active	2009-05-12	58.89	2132793	Active	2009-10-21	58.9
46368	Active	2008-11-21	58.93	1124098	Active	2009-05-12	58.89	2132794	Active	2009-10-21	58.9
46369	Active	2008-11-21	58.93	1124099	Active	2009-05-12	58.89	2132795	Active	2009-10-21	58.9
46370	Active	2008-11-21	58.93	1124100	Active	2009-05-12	58.88	2132796	Active	2009-10-21	58.9
46371	Active	2008-11-21	58.92	1124101	Active	2009-05-12	58.88	2132797	Active	2009-10-21	58.9
46372	Active	2008-11-21	58.92	1124102	Active	2009-05-12	58.88	2132798	Active	2009-10-21	58.9
46373	Active	2008-11-21	58.91	1131614	Active	2009-02-13	58.92	2132799	Active	2009-10-21	58.89
46374	Active	2008-11-21	58.9	1131615	Active	2009-02-13	58.92	2132800	Active	2009-10-21	58.89
46375	Active	2008-11-21	58.89	1131616	Active	2009-02-13	58.92	2132801	Active	2009-10-21	58.89
46376	Active	2008-11-21	58.88	1131617	Active	2009-02-13	58.92	2132802	Active	2009-10-21	58.89
48592	Active	2008-12-14	58.93	1131618	Active	2009-02-13	58.92	2132803	Active	2009-10-21	58.89
48593	Active	2008-12-14	58.93	1131619	Active	2009-02-13	58.91	2132804	Active	2009-10-21	58.89
48602	Active	2008-12-14	58.91	1131620	Active	2009-02-13	58.91	2132805	Active	2009-10-21	58.88
48603	Active	2008-12-14	58.91	1131621	Active	2009-02-13	58.91	2132806	Active	2009-10-21	58.88
48610	Active	2008-12-14	58.88	1131622	Active	2009-02-13	58.91	2132807	Active	2009-10-21	58.88
48611	Active	2008-12-14	58.88	1131623	Active	2009-02-13	58.91	2132808	Active	2009-10-21	58.88
48612	Active	2008-12-14	58.88	1131624	Active	2009-02-13	58.91	2132809	Active	2009-10-21	58.88
48613	Active	2008-12-14	58.88	1131625	Active	2009-02-13	58.91	2132810	Active	2009-10-21	58.88
81229	Active	2009-06-28	58.87	1131626	Active	2009-02-13	58.91	2132811	Active	2009-10-21	58.88
81230	Active	2009-06-28	58.87	1131627	Active	2009-02-13	58.9	2132812	Active	2009-10-21	58.88
81231	Active	2009-06-28	58.87	1131628	Active	2009-02-13	58.9	2132813	Active	2009-10-21	58.88
81232	Active	2009-06-28	58.87	1131629	Active	2009-02-13	58.9	2132814	Active	2009-10-21	58.87
81233	Active	2009-06-28	58.87	1131630	Active	2009-02-13	58.9	2132815	Active	2009-10-21	58.87
81234	Active	2009-06-28	58.87	1131631	Active	2009-02-13	58.9	2132816	Active	2009-10-21	58.87
1003809	Active	2009-03-15	58.91	1131632	Active	2009-02-13	58.9	2132817	Active	2009-10-21	58.86
1003810	Active	2009-03-15	58.91	1131633	Active	2009-02-13	58.9	2132818	Active	2009-10-21	58.86
1003811	Active	2009-03-15	58.9	1131634	Active	2009-02-13	58.89	2132819	Active	2009-10-21	58.86
1003813	Active	2009-03-15	58.9	1131635	Active	2009-02-13	58.89	2132820	Active	2009-10-21	58.86
1003814	Active	2009-03-15	58.9	1131636	Active	2009-02-13	58.89	2132946	Active	2009-10-22	58.89
1003815	Active	2009-03-15	58.9	1131637	Active	2009-02-13	58.89	2132947	Active	2009-10-22	58.89
1003817	Active	2009-03-15	58.89	1131638	Active	2009-02-13	58.89	2132948	Active	2009-10-22	58.89
1003818	Active	2009-03-15	58.89	1131639	Active	2009-02-13	58.89	<b>TOTAL</b>	155 Claims		9129.62

**Table 2: Claims of the Vulcain property (Registered title holder: MATAMEC EXPLORATIONS INC (18291) 100 %)**





Snow cover is shown in the next table:

	J	F	M	A	M	J	J	A	S	O	N	D
<b>Average Snow cover (cm)</b>	37	41	12	0	0	0	0	0	0	0	7	27

**Table 3: Average Snow Cover**

### 4.2.2 Temperature

In the area of Maniwaki, the average daily temperature is 4°C. The average temperature during July reaches 18°C, while the temperature in January reaches -12°C.

### 4.2.3 Winds

The anemometric data collected in Maniwaki shows that the winds have an average velocity varying from 6 to 9 km/h with an average of 7.5 km/h throughout the year.

### 4.3 Local resources

Labour force is found in the population clusters of 1250 residents in Grand-Remous at 80 km, 8000 residents in Maniwaki at 110 km and 14000 residents in Mont-Laurier at 115 km. Standard supplies and equipment are found in the area. Geological and mining firms are present in Val-D’Or at 240 km.

Board and lodging are available at Motel “Le Classic” located at 65 km of the site along the road 117.

### 4.4 Infrastructures

No building remains from the open pit exploitation. Some concrete foundations and pads are still visible near the Renzy Lake.



**Figure 4: Picture – site of the Renzy Mine with some foundations visible in front of the truck**

#### **4.5 Physiography**

The overburden depth on the Vulcain property is variable, ranging from zero to 30 metres. The property is covered with mixed forests.

Topographic relief is moderate, varying up from 500 to 360 meters above sea level.



**Figure 5: View of the typical topography, vegetation and lakes on the Vulcain property on the site of the Renzy Lake (summer 2007)**



## 5- History

(Modified from Leclerc A. document Nov 2005)

In May 1955, Arthur G. Thompson and J. Atamanick discovered the massive copper-nickel sulfides on an island on Renzy Lake during prospection for a possible Columbian (Niobium) deposit. An elliptical structure visible on aerial photography brought them to the lake site. The same year, the Renzy Lake Mines Ltd Company was created and mining rights were obtained.

In 1956, the Selco Exploration Company optioned the property and diamond drilled 10,000 meters in 255 holes. In 1957, Selco proceeded to a first resource estimation: 1.13 million tonnes with a combined grade (copper and nickel) of 1.3%. Selco abandoned its option because of the then low price of base metals.

From 1965 to 1968, Renzy Mines Ltd did some geophysical surveys and drilled 94 holes totalling 4000 linear meters in order to re-evaluate the deposit. In 1968, Sheridan Geophysics (New Hosco Mines Ltd) rented the property to drill more holes and to complete an induced polarisation survey before producing a feasibility study that concluded that the ore body was mineable. In 1969, infrastructures were built and the north part of the Renzy Lake was drained.

In December of 1970, Kleine writes: "... the mine was in production by mid-July, 1969." ...An eventual open pit, 330 feet wide by 1,500 feet long by up to 180 feet deep, was designed to remove the ore. The initial mining suggests that both [ore] zones are part of an en echelon orebody and that tonnages tend to be greater than the original estimates. The ore is being mined in 30-foot benches at the rate of 1,200 tons per day, five days a week, working a 10-hour shift each day."... Average mill feed is 850 tons per day." ... Plans are currently being drawn up to enlarge the concentrator to handle 1,200 tons per day." Concentrate was then shipped to Falconbridge's refinery in Ontario.

The 1955 discovery triggered many works from prospectors and mining companies as illustrated by the list of assessment works in the government library. Most of the works, geological and geophysical surveys and drill holes (406) were undertaken by Renzy Mines Ltd, United Renzy Nickel Ltd, Selco Exploration Co Ltd, Asarco Expl Co of Canada Ltd and by Sheridan Geophysics Ltd. At the same time, the Ministry of Mines from the Quebec government Quebec and universities did some regional and local works. The most important works were those of Forester in 1956, the RP 345 from Lyall in 1957, his postgraduate thesis in 1958, and the memorandum from Johnson in 1972.

In 1972, after 33 months of operation, the Renzy mine closed. The production restarts on December of 1973 but the mine definitely closes on January of 1974. In 1972 Johnson writes: ... "Faced with the problems of a lagging economy and the consequent surplus of nickel in world markets, Falconbridge stopped buying the Renzy concentrate in April 1972 and the Renzy mine ceased operations." It is therefore important to note that the mine closed following the non-renewal of the concentrate purchase agreement with Falconbridge. The mine did not close because of low base metal prices or because of lack of ore mineral.

During the lifetime of said mine, 716,000 short tons were extracted from the 1,012,000 short tons in diluted reserves with grades of 0.72 % Cu and 0.70 % Ni. We can therefore evaluate that

around 300,000 short tons of ore are left in the area of the previous open pit mining area. Additional reserves of possible category were estimated at 980,600 short tons with similar grades in Ni-Cu. These reserves were calculated in 1968 by Black and Riddell from Metals, Petroleum & Hydraulic Resources Consulting Ltd, of Toronto, for Renzy Mines Ltd. The reserves calculations were done in accordance to the existing Ontario Association of Professional Engineers recommendations. The same authors have also done all the engineering for the project.

Following the closure of the mine in 1974 and due to a weak economy, the area was abandoned for 20 years by the mining industry in favour of other areas considered more favorables. The next works were large-scale surveys of the Grenville geological province. The memorandum from G. Poirier in 1988 is one of these: « Étude métallogénique de gîtes de nickel, cuivre et platinoïdes de l'ouest de la province de Grenville ». Other regional studies were conducted since then by the Ministry and university researchers.

Exploration companies returned to the Renzy area around 1995. Bryson-Burke Resources conducted a regional survey of glacial till in the southwestern part of the Grenville. In 1995, André Gauthier became owner of the property. From 1996 to 2002, many small surveys of different types were done by consultants, most notably a survey of the glacial till along the Renzy fault.

In 1996, tailings were sampled by Gestion Aline Leclerc Inc. for André Gauthier. Assays varied from 314 to 1220 ppm for Cu, from 686 to 4748 ppm for Ni and from 54 to 303 ppm for Co.

In 2001, during a reconnaissance study, the prospectors Jacques Duval and Benoît Boudreau discovered a Cu-Ni-PGE (Platinum Group Element) prospect situated south of Lake Alba. An agreement was then negotiated between André Gauthier and the prospectors to include these prospect titles into the Vulcain property.

During 2002, the “Ministère des Ressources Naturelles de Québec” officially recognized that the holder of the titles was not responsible for the rehabilitation of the old mine site since they were never involved in any on-site mining operations or tailing production. The Renzy mine company is therefore considered solely responsible in this regard. In the company's absence, the Ministry did some rehabilitation work by default (See letter in appendix No 3).

In 2002, Geostat did some stripping with geology/mapping, the tailings were re-sampled (no economic values were found) and the resources were updated after the revision of historic data. The works concentrated on the claims covering the Renzy mine site. Geostat revised many historic documents. “The anomalies 3 and 4 were probably not located accurately enough and could be revisited”.

In 2002, MPB geoscientifik did some works outside the site covered by Geostat, on the Alba prospect. The goal was to update the data available and to verify the possibility of a small operation on the Alba prospect south of Lake Alba. Lines were cut, VLF and mag surveys were conducted with some stripping, a blast, some sampling and some detailed geological mapping.

Matamec Explorations Inc bought the Vulcain property from André Gauthier and Jacques Duval in September 2003. On this occasion, Geostat did an estimation of the remaining resources on the site of the former mine for the new owners; their estimation was 259,000 metric tonnes of inferred resources. This resource category was selected to illustrate the low confidence in the geological interpretation and in the locations of the first drill holes, in particular questions

concerning the topography, the depth of the open pit, the elevation of the drill holes collar but also the lack of geological data.

In May 2004, the Groupe conseil Cygnus Inc. made a geological and geophysical compilation on the property. All cartographic data were computerized. Information gathered included : topography, hydrography, access roads, geological contacts, faults, folds, outcrops, position of drill holes and drill holes traces, mineral prospect, etc. Difficulties were encountered because of significant discrepancies between topographical data of 1950-1960 and recent data.

In October 2004, Geostat Systems International Inc. verified all 406 diamond drill holes made on the property. Elevation of drill holes were found to be very imprecise and hole locations somewhat imprecise, especially for those holes at some distance from the former mine.

In September 2004, a geophysical helicopter mag/EM survey of the AeroTEM type was done on all the property. About 900 km of lines were surveyed. Lines were 75 meters apart in a north-south direction with east-west tie lines 500 meters apart. This survey was done in order to enhance the geological understanding and find potential drilling targets of massive and veinlets sulfides between 0 and 100 meters deep. The known mineralisation under Renzy Lake was apparent and 18 other targets were outlined. The Alba showing does not have a mag/EM signature.

In February 2005, 19 holes were drilled and identified RZ-05-01 to RZ-05-20, hole RZ-05-13 was implemented but not drilled. A total of 1,500 m was drilled, 484.16 m were assayed in 545 samples. Fifty-one samples were selected for thin sections.

## 6- Geological Setting

### 6.1 Regional geology

(Translated from Leclerc A. document Nov 2005)

The Grenville geological province is part of the Canadian Shield and consists of 3 belts of NE orientations subdivided into terranes separated by South-East inclined ductile shear zones (Martignole and Pouget, 1994). From a continental point of view, the Grenville front appears to be a thrust zone that has migrated toward the NW (Wynne-Edwards, 1972). This shear juxtaposed the parautochthon Archean terrane and the grenvillian Proterozoic terrane against the native terranes of lower metamorphism. It should be noted that recent studies show that the tectonic vector of transportation is not always toward the NW. In the Cabonga sector for example, recent studies outline the presence of an allochthon body introduced in two stages : the first stage involving thrust sheets while the second stage involved a lateral detachment by displacement faults.

The central part of the Grenville provinces is composed of the Dozois Reservoir parautochthon terrane and an allochthone belt composed of the Lac Dumoine terrane, Cabonga Reservoir terrane, Renzy terrane and Mont-Laurier terrane (See figure below). The Dozois Reservoir terrane is composed primarily of orthogneiss containing kilometric intrusions of leucogranite and meta-gabbros. The terrane is separated to the south from the Mont-Laurier terrane by the NE trending Baskatong shear zone. The Renzy Reservoir terrane is a klipp situated structurally on top of the Dozois Reservoir terrane. The Renzy terrane, which contains the Vulcain property, is composed primarily of paragneiss, specifically biotite-hornblende migmatites of granodioritic to tonalitic composition. These migmatites contain in turn concordant interlayers of ultramafites which are sometimes mineralised. The southern extent of the Vulcain property is composed of the Renzy shear zone, a series of anastomosing shears of transgress sinistral displacement. It is a major structural discontinuity of mafic to ultramafic mylonite interlayered with meta pelites similar to the Cabonga reservoir terrane. This sub vertical shear is marked by a granulite facies metamorphism, several million years older than the metamorphism characterizing the surrounding Dozois reservoir terrane.

The regional rocks have undergone two different episodes of deformation which permitted the development of large open synclines of NE direction including complex folding of lesser order. The gneissic structures have three principal directions: NE, NS and NW. The regional metamorphism is of the amphibolite facies, rising locally to the hornblende granulite facies. At Renzy, this metamorphism caused some recrystallization of the primary cumulate texture and permitted a slight remobilisation of the sulphides.

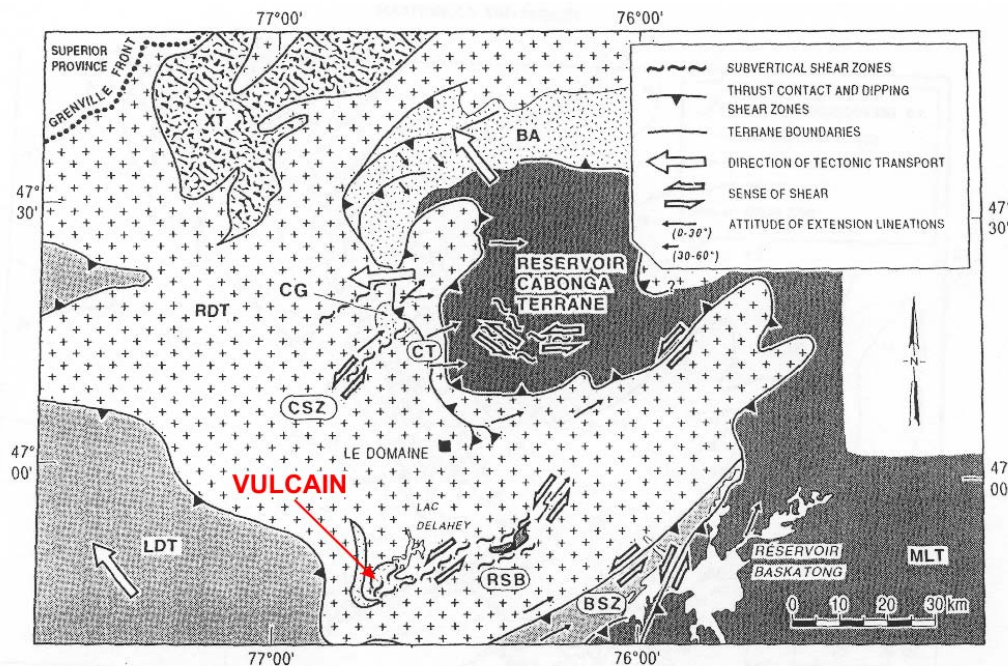


FIG. 2. Tectonic setting of the Cabonga allochthon. XT, X terrane; RDT, Réservoir Dozois terrane; LDT, Lac Dumoine terrane; RCT, Réservoir Cabonga terrane; MLT, Mont-Laurier terrane; CSZ, Cadgecrib shear zone; RSB, Renzy shear belt; BSZ, Basketong shear zone; CT, Cabonga thrust; CG, Cadgecrib gabbro; BA, Bouchette anorthositic gabbro.

**Figure 6: Tectonic context of the central part of the Grenville Province (Martignole and Pouget, 1994) with localization of the Vulcain property**

## 6.2 Local geology of the property

(Translated from Leclerc A. document November 2005)

This description is taken in part from 2 master’s degree thesis and 1 PhD thesis, all written at the time of discovery and production of the Renzy deposit. In 1971, the deposit was not yet flooded and all lithologies present were stripped and mapped by Johnson.

Note: The “meta” prefix applies to all rocks mentioned below and was deliberately taken out of the following text.

According to recent studies by Marc Constantin of Laval university, the property is part of the Renzy terrane, a klipp resting on the younger Dozois terrane and caught in the Renzy shear zone. This shear zone is sub-vertical and is oriented northeast. Foliations seen in this zone usually varies between East and Northeast. The dominant structure is characterized by the presence of large open syncline of Northeast orientation in which more complex minute folding is found.

The bedrock is essentially composed of paragneiss, granitic gneiss and charnockite with laminae of ultramafic rocks, sometimes metamorphosed (garnet amphibolites, dunites, pyroxenites, and lherzolites). These ultramafic rocks are associated with the copper (Cu) and nickel (Ni) mineralization with accessory Co, Au, Ag, Pd and Pt found at the old Renzy Mine. The presence of these ultramafic rocks is therefore interpreted as a series of layered sills, originally thought to be part of a ring-shaped ultramafic complex, and the Ni-Cu occurrences are all found inside these ultramafic sills. The sills vary from 10 to 300 metres wide and up to 3 km long. (See next figure).



The Lac Renzy intrusion is concordant to the foliation of the surrounding gneiss. This concordant nature suggest emplacement at shallow depth under low-pressure conditions.

Metamorphism affected similarly the paragneiss and the ultramafic sills implying a pre-Grenville origin of these two formations. In this area, metamorphism reached the hornblende granulite sub-facies. The hornblende-garnet-orthopyroxene-clinopyroxene assembly is found in the ultramafics. We can see the influence of the Grenville orogeny in this sector in the folding (at least two stages) of the ultramafics, the recrystallization of most of the primary cumulate textures and the deformation and slight remobilization of the sulphides.

Parsons (1966) believes that the Renzy peridotite might have been injected in a pre-existent fold structure at a late stage of folding. i.e. its actual form is essentially the same as at the time of its emplacement and therefore has not been affected by any posterior folds. If true, this statement implies that the location of all the magmatic sulphide segregations is linked to the present contour of the peridotite body and not related to the sills original contours, which have been folded after solidification. This concept is important for the exploration of magmatic sulphides in these ultramafic bodies.

The sill as a whole has the composition of an olivine clinopyroxenite, an intermediate product of the differentiation of a basaltic magma. The locally well defined primary bedding, the presence of cumulate textures (cumulus olivine, poecilitic orthopyroxenes) and the presence of mineral lineation parallel to the bedding suggest that crystallization processes have been a primary factor of the intrusion (Johnson, 1972).

The border zone is characterized by the intense amphibolitization of the ultramafic rocks and the appearance of garnets. This zone, up to 15m thick, consists of a coarse-grained rock (up to 5 mm diametre) composed of poecilitic hornblende surrounding minor quantities of olivine and pyroxenes.

In the interior layered zone the peridotites are of negative relief because they are more easily altered than the neighbouring pyroxenites. The layers vary from a few millimetres to 6 metres wide and have net to gradational contacts. Amongst the peridotites, one can find lherzolites and werhlites. These are reddish brown rocks on altered surface and vary from medium to coarse grained. They are composed of 50 to 70% olivine, 10 to 50% orthopyroxene and 10 to 50% clinopyroxene. One can find accessory minerals like sulphides, chromite and magnetite, while alteration minerals consists of significant amount of hornblende and minor amounts of serpentine and garnet. Among the pyroxenites exists a wide variety of facies varying from clinopyroxenite to orthopyroxenites and websterites. All these varieties may or may not contain olivine. The pyroxenites form positive relief. These rocks are of black or dark brown color on altered surface and are generally coarse grained.

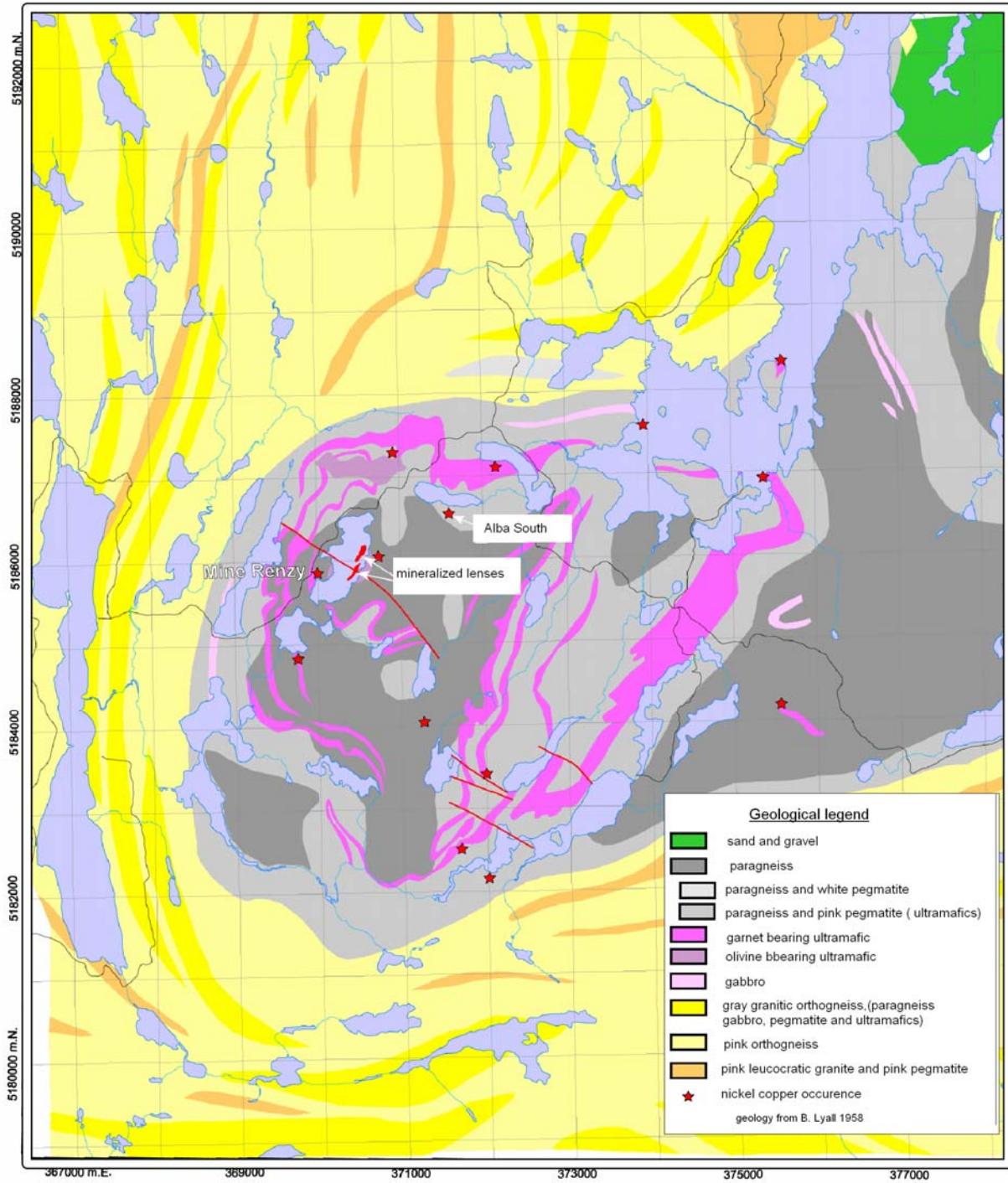


Figure 7 : Regional geology of the old Renzy mine according to Lyall (1958).

From a mineralogical point of view, these rocks are composed of a variable mixture of olivine, orthopyroxene and clinopyroxene. On the subject of metamorphic petrology, the important feature is the appearance of garnet. The olivine is the main cumulate stage. Its composition varies from Fo55 to Fo65 and contains a significant amount of NiO : between 0.10 and 0.16%. The orthopyroxene from all lithologies is of the hypersthene variety, containing numerous exsolutions of magnetite and rutile. The orthopyroxene is frequently poecilitic and contains crystals of olivine and clinopyroxene. The clinopyroxene is found in two forms: primary and secondary. The primary clinopyroxene presents irregular grains with a large amount of exsolution slices (magnetite with small quantities of rutile or ilmenite). The secondary variety is found in equigranular grains with straight edges and very few exsolutions. The electron microprobe analyses suggest that the secondary clinopyroxene is diopside (Ca<sub>44</sub>Mg<sub>47</sub>Fe<sub>9</sub>), while primary clinopyroxene is similar but with an iron content higher due to ferruginous exsolutions, making it closer in composition to an augite. Hornblende is present in all rocks in a proportion of 30 to 40%. It is an alteration product of the orthopyroxene and clinopyroxene, but preferentially replaces the clinopyroxene. It is black in fresh fractures. In thin section it shows light yellowish green or light to medium green pleochroism. One can also note the presence of a dark green, iron rich variety of spinel named hercynite.

In 1972, Johnson described the rocks found on the property:

Mafic and Ultramafic Rocks: Mafic and ultramafic rocks occur as bands or tabular bodies (henceforth grouped under the term "bodies") concordant with the foliation in the adjacent gneiss. These bands, which outline the local structure, range from 20 to 1000 feet wide and up to about two miles long. Some of the thin bands include interlayered gneiss; the contacts with the gneiss are not exposed but are inferred to be relatively sharp. The rocks are medium-to coarse-grained and dark grey or dark green to black.

Mineralogy/Olivine: Olivine, clinopyroxene, orthopyroxene, and hornblende are the essential mineral of the ultramafic rocks. Olivine constitutes from nil to 75% of the rock. Where abundant, it occurs as round to oval grains up to 4 mm. in length. Large grains commonly show good cleavage and, rarely, crystal faces. In rocks where olivine contents exceeds 40 per cent, individual olivine grains are usually separate, although they may have straight mutual boundaries, suggesting that the mineral is a cumulus phase with post-cumulus growth. Olivine has rare inclusions of clinopyroxene. In rocks with less than 40 per cent olivine, grains are usually smaller and are commonly embayed by orthopyroxene and secondary hornblende. Semi-quantitative electron-microprobe analysis of five different points of one sample (Sample 200) indicates olivine is Fo55 to Fo65, a composition similar to that in most gabbros and basalts. The microprobe analyses also show low contents of NiO, of 0.10 to 0.16 per cent, and MnO, of 0.26 to 0.33 per cent. Olivine is commonly veined, but only rarely replaced pseudomorphically, by serpentine (p. 28).



<b>Method of Classifying Ultramafic Rocks</b>			
Rock Type and Abbreviation	Mineral Content (%)		
	Olivine	Clinopyroxene	Orthopyroxene
Peridotite (Pd)	50-90	10-50	10-50
Wehrlite (We)	50-90	10-50	0-20
Pyroxenite (Px)	0-50	0-100	0-100
Olivine-clinopyroxenite (ol-cp)	10-50	40-90	0-20
Olivine-websterite (ol-wb)	10-50	15-70	20-70
Olivine-orthopyroxene (ol-op)	10-50	0-15	50-90
Websterite (wb)	0-10	15-70	20-80
Clinopyroxene (cp)	0-10	70-100	0-20
* Based on proportions of olivine, clinopyroxene, and orthopyroxene as determined by modes modified by recalculated hornblende (p.25).			

**Table 4: Classification of ultramafic rocks from Johnson**

## 7- Deposit Types

### 7.1 Ni/Cu Deposit types

(Most of the following information was extracted from: O.R. Eckstrand in “geology of the various types of mineralized deposits in Canada”)

The deposit type of the Vulcain property belongs to magmatic deposits of Nickel-Copper-PGE (platinum group elements), more precisely in the subgroup of nickel-copper sulphide deposits. These deposits are divided into four subtypes according to their geological environment and their Ni/Cu ratio.

#### 7.1.1 Ni/Cu Deposit subtypes

The subtype 1 deposits are contained in mafic sheet dykes associated to an astrobleme and with a Ni/Cu ratio of 1.

The subtype 2 deposits are contained in sheet dykes and/or mafic dykes associated to a rift or continental platform basalts and have a Ni/Cu ratio of about 1.

The subtype 3 deposits are contained in komatiitic lavas and related intrusions with a Ni/Cu ratio greater than 10.

The subtype 4 deposits are contained in others related mafic/ultramafic bodies with a Ni/Cu ratio of 2 to 3.

### 7.2 Old Renzy Mine Ni/Cu Deposit subtype

The Renzy deposit of the Vulcain property seems to be of the subtype 4. It is contained in tholeiitic intrusions but the Ni/Cu ratio is close to 1. One can also note that there is another deposit of the same subtype and with a Ni/Cu ratio of 1: the Selibe-Pickwe deposit in Botswana.

Examples of subtype 4 deposits are: The Lynn Lake deposit in Manitoba (20.2 MT at 1% Ni-0.5%Cu), the Giant Mascot deposit in British Columbia (2MT at 1.4%Ni-0.5%Cu), the Kotalahti deposit in Finland (23.2 MT to 0.7%Ni-0, 3%Cu), and the Selibe-Pikwe deposit in Botswana (49.4 MT to 1.04%Ni-1.12%Cu).

The subtype 4 mineralization range from Archean to the Mesozoic age and can be found in a variety of geological settings: Archean green belts, Proterozoic and Phanerozoic metamorphosed folded volcanic and sedimentary environments.

The subtype 4 intrusions are generally small in size (Lynn Lake pluton, 1.5 km by 3.5 km). They are highly differentiated, and range from peridotite to quartz diorite in composition. The majority of these intrusions appear to have been deformed and metamorphosed.

These deposit types generally contain small to medium tonnages of 0.5 to 1.0 MT. Only 4 deposits are more than 20.0 MT including the Lynn Lake deposit. All these deposits contain Nickel ranging from 0.07 to 2.08%. Most of these Cu-Ni deposits are composed of several neighbouring but separated ore bodies. These ore bodies contain a few hundred thousand to a few million tonnes of ore, and in rare cases, tens of millions of tonnes.

### 7.3 Other deposits in the area

To the author's knowledge, there are no other similar mineral deposits in the area except for a Cu-Ni showing discovered in 2002 near the South shore of the Lake Alba. In the Grenville sub province, others occurrences of this type are present, such as at "Lac Édouard" near the town of La Tuque and the Macassa Mine in Ontario.

## 8- Mineralization

### 8.1 The Old Renzy Mine mineralization

(Translated from Leclerc A. NI43-101 compliant report of 2005)

Mineralization consists of two lenses of NE direction, distributed in an "en echelon" way totaling 500 meters in length and from 35 to 65 meters in width with a maximum thickness of 50 meters. Mineralization is present in two pockets whose base is located 35 meters above the contact between the gneiss and ultramafics (See figure 7 of section 6.2).

The two ore lenses show a gradual change in mineralization ranging from disseminated to massive sulphide mineralization including meshed and semi-massive sulphide intermediate textures. This transition is also accompanied with higher copper grade vs. nickel grade towards the footwall. These observations imply that the introduction of sulphides from magmatic origin was made by an accumulation process from gravity and differentiation in the sulphide mass.

The ore extracted from the Renzy mine is massive. It contains 50% or more of sulphides with 50% or less of silicates and peridotite fragments. Starting from ultramafic rocks and by adding progressively the sulphide quantity, we gradually move from disseminated sulphides in a meshed texture, to finally get to semi massive or massive sulphides. The increase of sulphide mineralization is generally accompanied by an increase in sulphide and silicate grain size, which could make the extraction of metals easier.

Other forms of mineralization are also described at the Old Renzy Mine site. There was ore associated to pegmatites of 1.5 to 3 meters in width located in the center of the ore body. These pegmatites contain disseminated to massive sulphides and also lenses and veinlets at the border of the pegmatite intrusions. Some 30 cm wide veins are found at proximity of the pegmatite intrusions. These veins appear massive and the minerals are coarse-grained (remobilization). Chalcopyrite is the dominant sulphide accompanied by hornblende, chlorite and phlogopite.

About the pegmatites, Black & Riddell said (GM24380, 1968):

... " Lenticular bodies of stratiform pegmatites and gneisses encountered by the drilling were considered by Parsons to be representative of preserved beds lying between successive layers of the invading mafic magma. However, they may simply represent layers of pegmatitic or recrystallized mafic material. Their effect on the mineralization within the peridotitic mass does not appear to be profound".

... "Parsons considered the massive sulphides to be of primary origin and suggested that the disruption and redistribution of sulphides was due to the pegmatite intrusion. However, the irregularity of grades and the tendency for the mineralization to be zoned with respect to the fold structures tends to better support the hypothesis that the sulphides were originally segregated in a low-grade disseminated zone and that they were redistributed as a result of the heat and pressure differentials developed during the folding."

Another type of mineralization is also reported at the old Renzy mine site: the brecciated mineralization that is present at the margins of the ore body. The breccias are described as fragments of sub-rounded to angular ultramafic rocks in a sulphide matrix. The rounded fragments show reaction rims (magmatic erosion) with the sulphide matrix. The breccias can show foliation (magmatic flow ?). According to Mr Berger, this type of ore is significant in terms of genetics. The two figures below (8 and 9) show brecciated type mineralization described by Mr Berger, September 2004. He suggests they are of magmatic nature rather than tectonic, contrarily to the way they were described in the 1950's and 1960's studies. O.R. Eckstrand in "Geology types of mineral deposits in Canada", 1995, notes that Cu/Ni sulphide mineralizations of all subtypes which have undergone tectonic remobilization were converted into sulphide matrix breccias similar to magmatic breccias.

The magmatic breccias imply the presence of a feeder conduit in the form of a pipe or a dyke (feeder pipe or feeder dyke). This indicates that the Lake Renzy ultramafic rocks form a pocket caused by an episode of injection of magma through a feeder conduit, which conduit also allowed the arrival of very dense sulphurous liquid. These liquids have then interacted with the ultramafic rocks fragment margins. The feeder pipes sulphide content is generally very high in nickel and they have a large vertical extent. The presence of breccias on the Vulcain property confirms the very high potential of finding larger quantities of high-quality nickel mineralizations near the old Renzy Mine site.

Two recent drill holes done by Matamec seem to confirm the hypothesis of a feeder conduit.



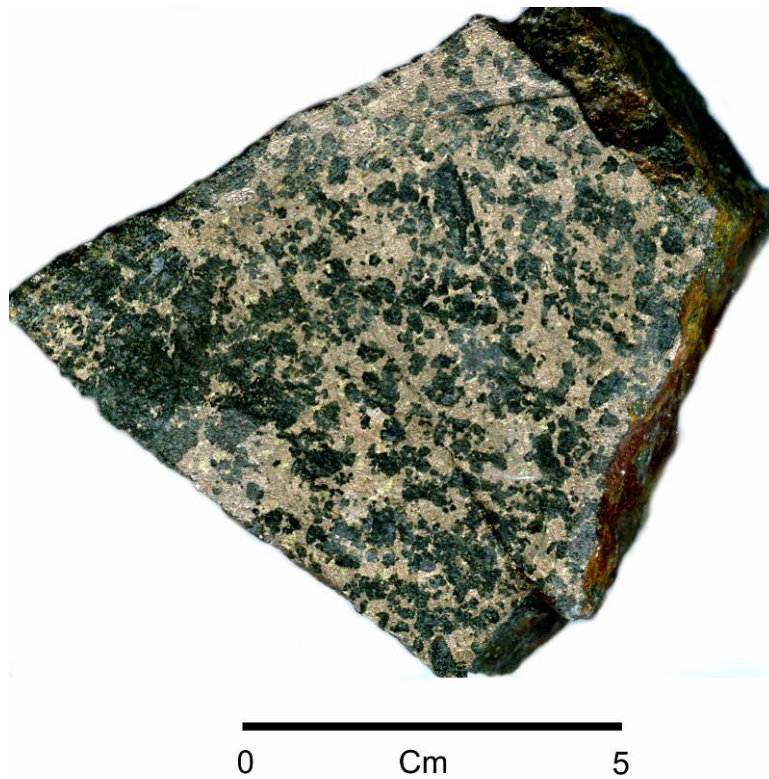


Figure 7: Massive, micro-brecciated sulphide mineralization from the old Renzy mine (pyrrhotite, chalcopyrite and pentlandite)

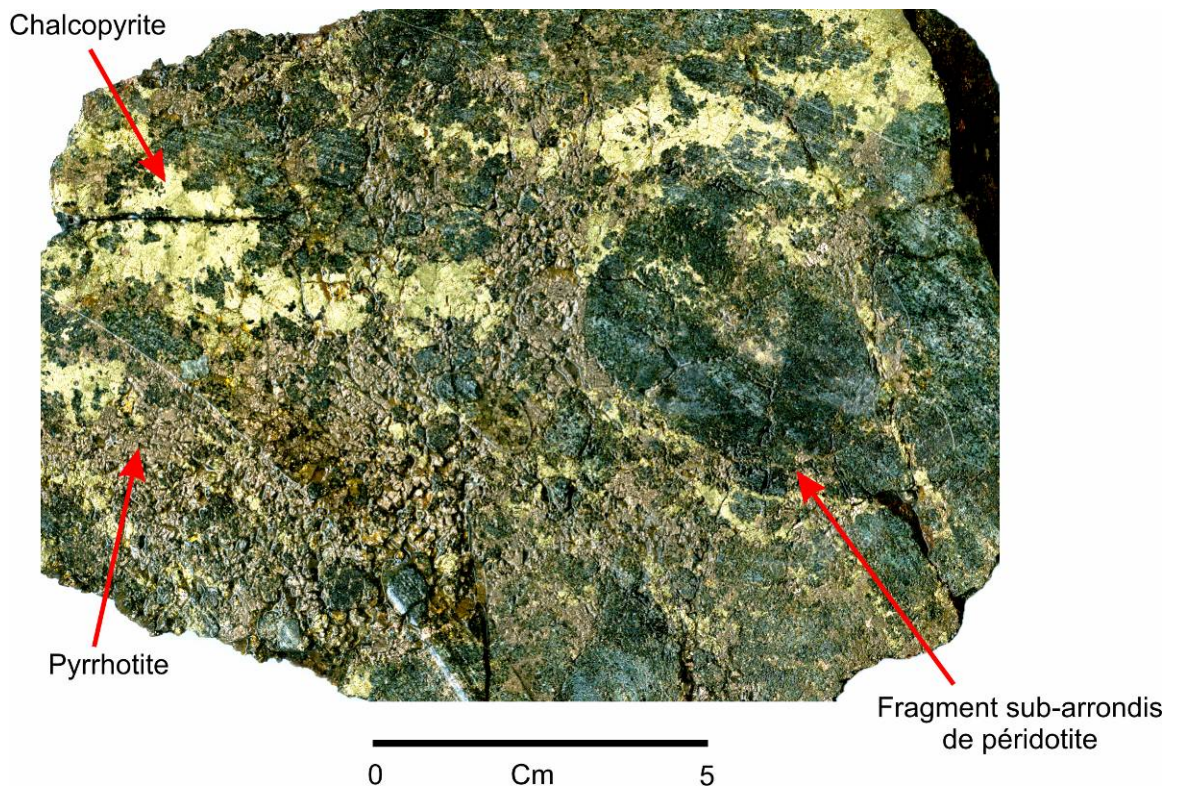


Figure 8: Sulphide matrix magmatic breccia (chalcopyrite, pyrrhotite and pentlandite)

### 8.1.1 Minerals

The old Renzy Mine deposit and the Cu/Ni showings on the Vulcain property are all associated with ultramafic intrusives. The mineralization consists mainly of pyrrhotite, chalcopyrite pentlandite with minor amounts of pyrite, magnetite, vallerite ( $Cu_2Fe_4S_7$ ), mackinawite, cubanite, bornite and gersdorffite.

The pyrrhotite grain size are sub-millimetric in the disseminated mineralization and are over centimetres in massive sulphide mineralization, accounting for 80 to 85% of total sulphides. The pyrrhotite crystals are present under two shapes: monoclinic and hexagonal and contain 0.37%Ni and 0.01%Cu (Johnson, 1972).

Chalcopyrite represents about 10% of total sulphides, it is present in the form of isolated grains or like bands (veinlets). Its grain size ranges from sub-millimetric to 3 cm. Bornite, mackinawite and cubanite are closely associated to chalcopyrite.

Pentlandite is the only nickel mineral present in proportion of 5% to 10% in the sulphides, and is associated with pyrrhotite. It is present in the forms of isolated grains, veinlets, aureoles around pyrrhotite, flame shapes or lenses inside pyrrhotite.

The pyrite (late mineral) is less than 1% of total sulphides. Magnetite is 1 to 4% of the opaque minerals, and is mainly concentrated along contacts between massive sulphides and ultramafic rocks and also around fragments of peridotite in breccias.

With the new geological model, the localization of the zones is better understood. The mineralization is in 3 main zones: the Exploited zone, the Main zone and the South Extension as seen in figure 10. Some details are found in the section: Mineral Resource and Mineral Reserve Estimates.

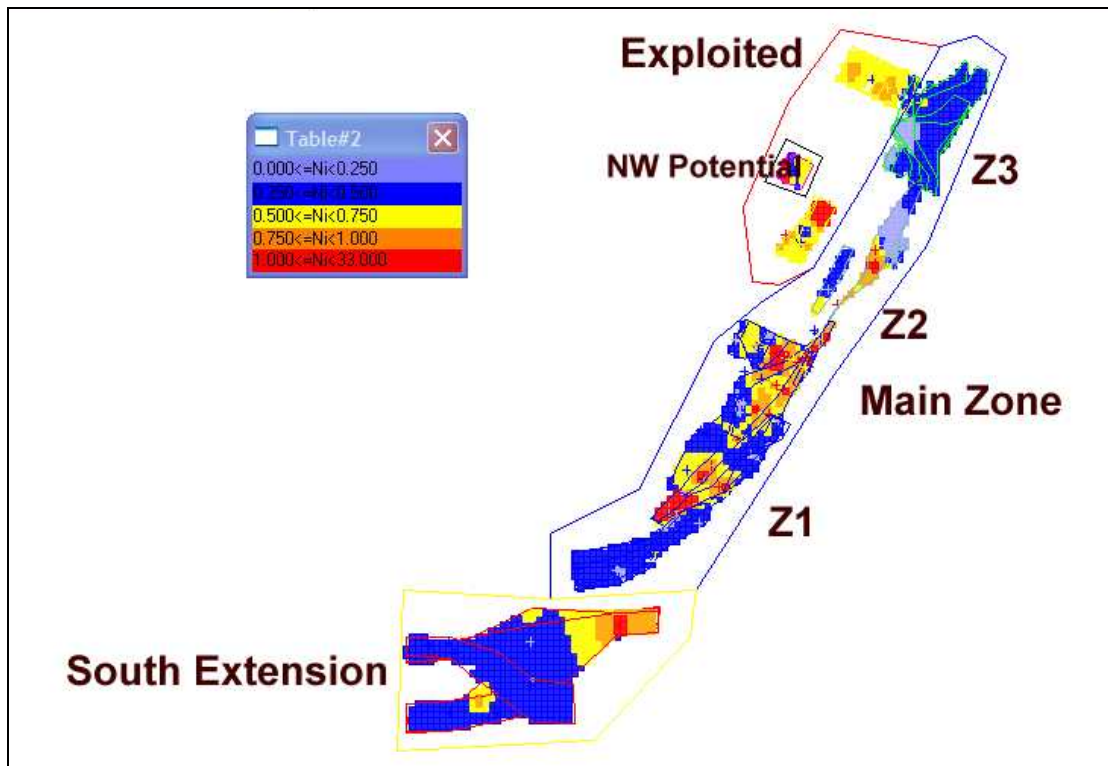


Figure 9: General map of the mineralization

## 9- Exploration

### 9.1 Summary – Geophysics and Recent Drilling Targets

The relevant geophysical surveys realized on the property are available at the Ministry of Natural Resources and Fauna of Quebec. They are divided over three distinct periods: 1956, 1966-67 and 2002 to 2005.

The first geophysical reports available are those of 1956, which is the year following the discovery of the mineral-bearing zone of the Renzy lake (May 1955). Magnetic and electromagnetic methods (EM) were carried out on the ground by the companies LAC DE RENZY NICKEL LTD (GM 05433-B), UNITED RENZY NICKEL LTD (GM 04586-A), LAKE RENZY MINES LTD. (GM 04086-A), DELAHEY LAKE NICKEL LTD. (GM 05372), THOMPSON (GM 04285) and ASARCO EXPL CO OF CANADA LTD. (GM 04301-B). The same year, the company ASARCO EXPL CO OF CANADA LTD (GM 04303) carried out an airborne magnetometric survey.

Almost 10 years later, in 1966 and 1967, RENZY MINES LTD. (GM 18144 and GM 22155) carried out the induced polarization surveys.

The more recent modern surveys began in 2001 with a HEM survey carried out for M. André Gauthier (GM 59006). In 2002, an induced polarization survey, a VLF and a magnetometric surveys were realized for Jacques Duval (GM 59982). In 2004, MATAMEC EXPLORATIONS INC. carried on a large scale heliport TEM a magnetometric survey on the whole property (GM 61386).

The last geophysical survey completed on the property consists of a HEM survey by MATAMEC EXPLORATIONS INC. carried out in 2005 (GM 62593). These works are shown on figure 11.

The results of each survey underlined the presence of various geophysical anomalies (Mag, EM, IP and VLF). In the sector of the old Renzy mine, the induced polarization anomalies (IP) of 1967 coincide with the exploited lenses of 1969 to 1972. The magnetism of the mineral-bearing peridotites is variable and can be weaker in some places than in the wall rocks. This can cause difficulties to find mineralization using magnetic anomalies only.

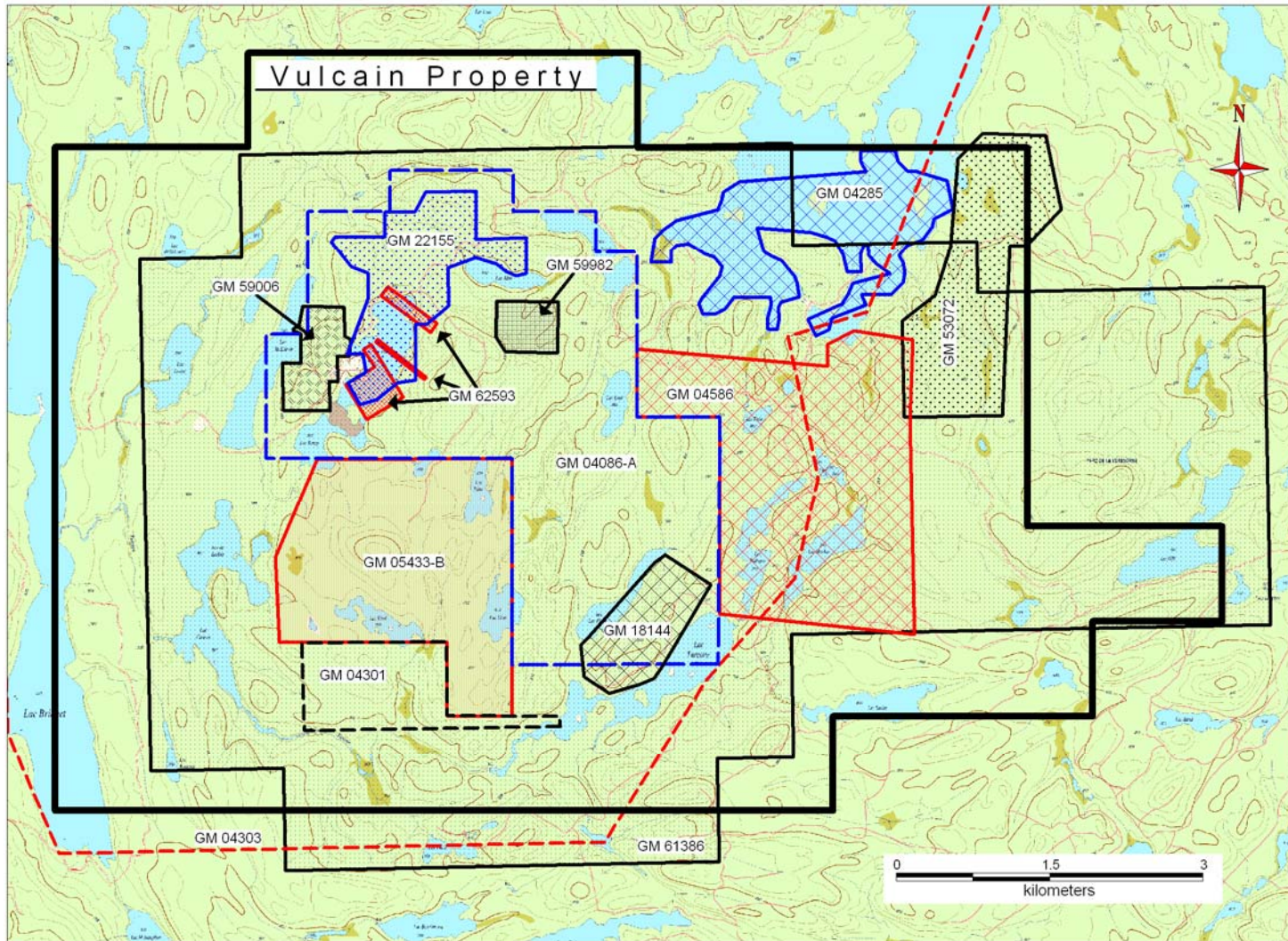
To the West and South of the Renzy lake lenses, some IP anomalies remain untested. The best anomalies coincide with Max-Min conductors of 2005 and the heliport TEM surveys. Going north, many IP anomalies of 1967 are found more than 1 kilometre further north of the lenses and more to the east, around Alba lake. The anomalies located north of Renzy Lake were not drilled recently because they were drilled in 1956, before the realization of the IP survey of 1967, on magnetic targets. Among these diamond drill holes, those located near the IP anomalies intercepts disseminated sulphides. In addition, Geisler (1967) of Renzy Mines Ltd., points out that the IP survey covering the sector located north of Renzy Lake was carried out with lines parallel to the peridotites, that is contrary to the desirable orientation. Otherwise, EM anomalies located South-East of Delahey Lake as well as IP anomalies located between the Turcotte and Flora Lakes remain untested.



More recently, the IP survey carried out in 2002 on the southern Alba showing, found an anomaly of approximately 250 meters where only 30 meters were investigated by trenching and diamond drilling. VLF and MAG anomalies from surveys made the same year do not coincide with the IP anomaly.

In addition, 18 favourable sectors were outlined by the study made by Berger (2004) with the help of TEM-MAG heliport survey and a large scale compilation . These sectors are spread over the whole property and include at least one drilling target each. According to the interpretation of Berger, at least 14 of these sectors contain TEM conductors (sectors 1 to 11, 15, 16 and 18 – see figure 12). No diamond drilling has been made on 11 of these 14 sectors.





Location of geophysical surveys (government file numbers)

Figure 10: Location of geophysical surveys



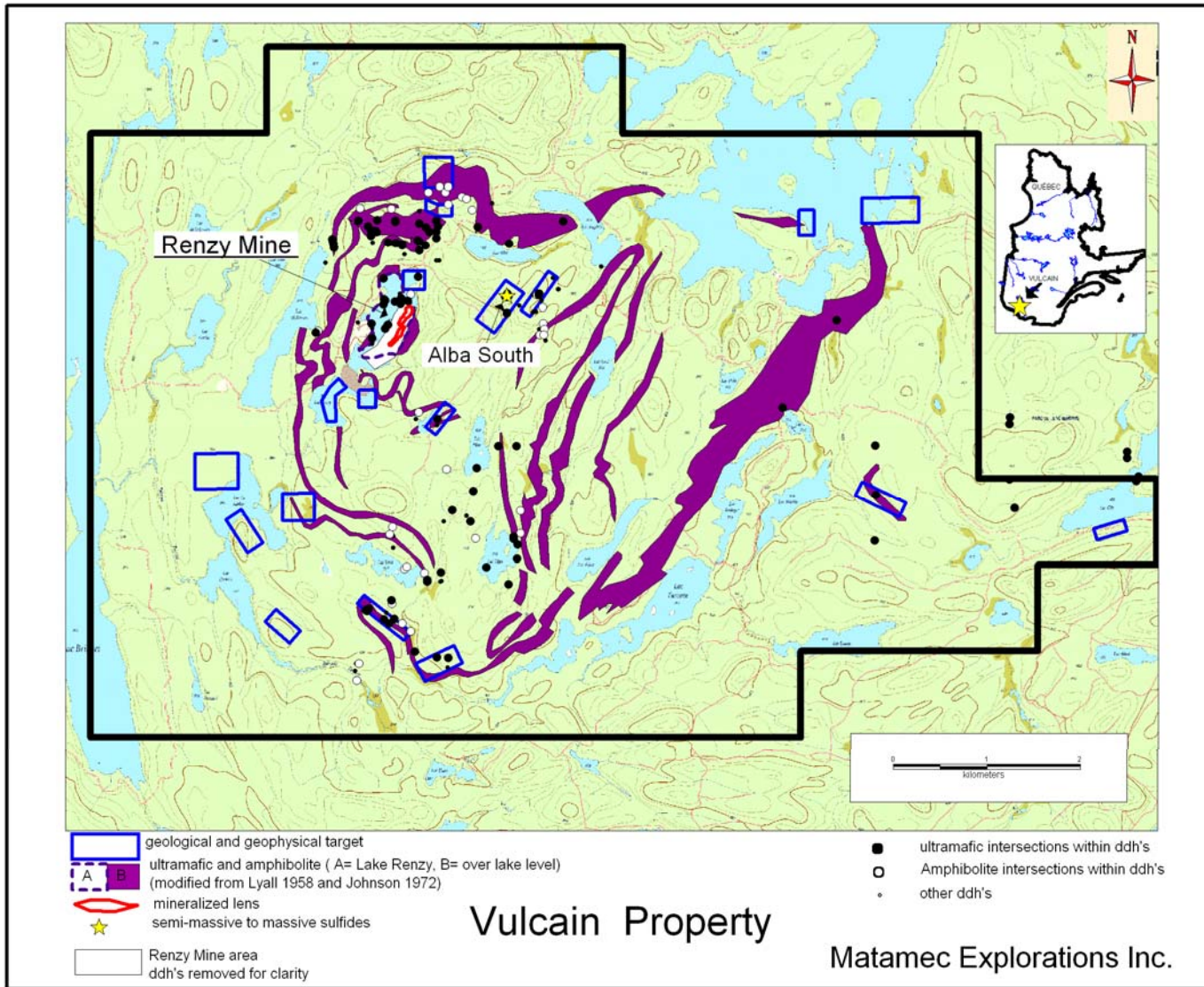


Figure 11: Location of the most recent geological and geophysical targets

## 9.2 Geological considerations for exploration

Many geological studies have been done on the Lake Renzy deposit and its region. These should be taken into account when doing local exploration. Besides works directly related to the Renzy Project, the Geological Commission of Canada has created some guidelines for the exploration of deposits with mineral-bearing horizons or intrusion breccias. These guidelines could help make a discovery. Here are the details.

In 1968, Black & Riddell investigated the potential for the region around the Lake Renzy Mine. They found that past exploration efforts were not sufficient and that some drilling was required.

Poirier (1988) categorizes the Lake Renzy mine in the Ni-Cu (Co) deposits with massive sulphides located at the base of a slightly differentiated, bedded ultramafic sill of hectometric to kilometric scale. The deposit of Lake Renzy, exploited between 1969 and 1972, was estimated at 2 MT containing 0,7% Ni and 0,7% Cu (Poirier, 1988). The deposit is located in a folded ultramafic sill, which was set up in a biotite and hornblende paragneisses. The sill includes an amphibolitic edge zone and an internal bedded zone composed of pyroxenite and peridotite (Johnson, 1972). Eckstrand (1972) groups the deposit of Lake Renzy with the deposits of Carman Bay, Alexo, Sothman and McWatters in the area of Timmins and that of Rankin in the North-West Territories (Johnson, 1972).

Clark (1998) believes that most of the economic potential lies in the exploration of the ultramafic sills but that “the age and the context of the wall rocks of mineralizations from the Grenville are not well-known”. Clark believes that the most favourable rocks are the most mafics. These are Peridotites, pyroxenites and gabbros with olivine. The presence of olivine is a positive factor. The tectonic and/or hydrothermal re-mobilization of primary sulphides is frequent. The massive sulphides are often near the disseminated sulphide zones and are interpreted as magmatic. In certain cases, it is possible that the deformation involved a re-mobilization of massive sulphides from their site of origin.

Clark believes dynamic magmatic systems with an abundant flow of magma (which allows a sulphurated and silicated mixture of the liquids) and the entrance points of the magma in a magmatic chamber are targets to be prioritized

Forrester (1957) points out that the presence of the olivine-rich zones in the Renzy ultrabasic appears to have been of paramount importance, for it is within this zone that the massive and disseminated sulphides were concentrated.

The Geological Commission of Canada developed a guide for exploration and defined two models for the following deposits: mineral-bearing horizon and intrusion breccias. Here are the look-for points of the guide :

- a) Presence of a vast laminated mafic-ultramafic intrusion, in particular within a stable cratonic environment where the host rock is older than the intrusion by 200 million years.
- b) Indications of the mixture, within the magmatic chamber, of a primitive magma and a more fractionated magma. For example the chromite or olivine reappearance in the form of phases

cumulus in a thick sequence of plagioclase-pyroxene cumulates inside an intrusion showing a stratification or the complex textures associated to formation metasomatism of intrusion breccias.

c) Presence of pegmatitic mafic rocks with stratiform relation or discordant which contain sulphides or oxides inside or on edge of intrusion cumulates.

d) Presence of PGM enriched and under-saturated with S rocks, of primitive nature (ex. magma of mantellic, ultramafic or tholeiitic origin) or of a fixed edge of boninitic composition (ex. Hamlyn and Keays, 1986).

e) Presence in magmatic sulphides of metal concentrations, which reveal a primitive character (Ni/Cu, Ir/Pd high ratios) and a high R factor ( $R = \text{ratio of silicated magma} / \text{sulphuretted bath}$ ; Campbell and Al, 1983; Naldrett, 1989; Barnes, 1990)

## 10- Drilling

Details about the history of drilling on the property are provided in section 5 (history) of this document.

In 2002 a first draft of the database was created by Geostat, based on all assessment works available at the Ministère des Ressources Naturelles du Québec. It appeared that the coordinates system used in the database were invalidated by different historic documents.

In October 2004, Geostat Systems International Inc. verified and validated the 406 diamond drill holes vs archived data (maps, logs, sections, etc.) . Elevation of the 406 drill holes are very imprecise and location of holes are somewhat imprecise especially far from the old mine. We consider the data valid enough to proceed with the estimation of resources of the inferred category. The hole information from 2005 is considered precise enough to calculate indicated or measured resources providing that the quantity of data is sufficient. Resources are presently considered indicated and inferred. More holes are needed to classify some resources as measured.

The 2007 database has a total of 425 drill holes with names from 1 to 115, 117 to 171, 116A and 116B (all drilled between 1956 and 1968), 1LEE to 5LEE (drilled by Lee in 1956), 1LRNL to 5LRNL, 8LRNL, 9LRNL, 11LRNL to 16LRNL (Lake Renzy Nickel Limited), 6LSTG, 7LSTG, 10 LSTG, 18LSTG to 22LSTG, 24LSTG to 28LSTG (LS Trenholme Group), 1MLC to 8MLC, 1PLC to 7PLC (Pioneer Consultants Limited, 1956), C-1CML to C-6CML, C-1LRNL to C-3LRNL, E16 to E91, E93 to E184, E167A (The E series is from 1956), EB0 to EB3 (The EB series is from 1957), K-1 to K-3, L-1, L-2, RZ-05-01 to RZ-05-12 and RZ-05-14 to RZ-05-20 (from 2005).

In total, 2023 assays are found in the 425 drill holes with 2023 assays for Cu, 2022 assays for Ni, 574 tests for SG (specific gravity), 545 assays for Au, Pt, Pd, Ag and Co.

## 11- Sampling Method and Approach

Though numerous works have been carried out on the property, including mining, we consider that this property is at a stage of exploration for mineral-bearing zones. No systematic drilling was recently made. The sampling of channels and drill holes carried out recently were analyzed in accredited laboratories with standardized methodologies.

For the 2005 drill hole campaign, this procedure is described by Leclerc A.:

The drill hole cores were described and mineral-bearing sections were selected for sampling by the author (Leclerc A.). The mineral-bearing zones were entirely sampled and measurements of R.Q.D. were taken in all the mineral-bearing intersections.

The goal of sampling was to analyze all the rock containing sulphides, even in small quantity, for nickel, copper, cobalt and also for gold, silver and platinoids, even if these last elements were known to be non-economic. Each type of mineralization (massive, semi massive, brecciated, net textured and disseminated) were sampled separately so each sample has good homogeneity. In general, chosen intersections have 1 meter in length, though intersections longer or shorter than 1 meter were used to isolate zones with distinctive mineralization (either low or high).

The beginning and the end of each sample were marked with red chalk. Each sample had a label tag with a number and the name of the laboratory noted on it.

The core samples were sawn into halves using a diamonds saw on a bench. Each chosen intersection was sawed individually. The continuous halves of a sample were then put in a plastic bag with the corresponding label tag. The number associated with the label was also marked on the plastic bag with a permanent marker.

The remaining half-core was left in the corebox as a sample witness, and was marked again with red chalk and the number was written on the last piece of core of that sample. The author (Leclerc A.) was present at the time of the handling and supervised the proceedings to prevent errors. At the end of the day, all the individual bags were placed in one or more larger bags identified with the name of the company and with that of the laboratory with the samples numbers present in each bag. In all, there was 545 samples with a length of 1 meter in general, taken from 484,63 meters of core. That length represents 32,4% of the total drilled length. These bags were later dispatched to the ALS Chemex laboratory of Val d'Or by bus and/or truck.

## 12- Sample Preparation, Analyses and Security

For the reasons stated in section 11, the discussion about the methods of preparation, analysis and safety of the samples will be short since no systematic big scale sampling was carried out. The sampling of channels and drill holes carried out recently was analyzed in accredited laboratories with standardized methodologies.

The sampling used for the data verification (section 13) was taken and kept under key by the author of this report until it reached the Geostat offices. Then it was sent by courier to ALS Chemex, 1322 Harricana, Val d'Or, Quebec, J9P 3X6 where it was analysed.

For the 2005 drill hole campaign, this procedure has been described by Leclerc A.:

At the laboratory ALS Chemex of Val d'Or, the samples were prepared for analysis. Each one of these samples was dried, crushed, quartered, pulverized and quartered again until the powdered sample (named pulp) was of sufficient quantity for the analysis. These pulps were then sent to the laboratory ALS Chemex of Vancouver. Two methods of analysis were used: the first 180 samples, from holes RZ-05-01 to RZ-05-09 were analyzed for base and precious metals. The 365 samples from holes RZ-05-10 to RZ-05-20 were analyzed for base and precious metals and for 21 other elements, including sulphur. The standardized methods of these laboratories and their quality controls can be obtained on request.



## 13- Data Verification

### 13.1 Introduction

The core of the 2005 drilling campaign was viewed by the author of this report and 30 samples were taken in the richest zones of each of the most interesting holes.



Figure 12: Picture 1 of mineralization

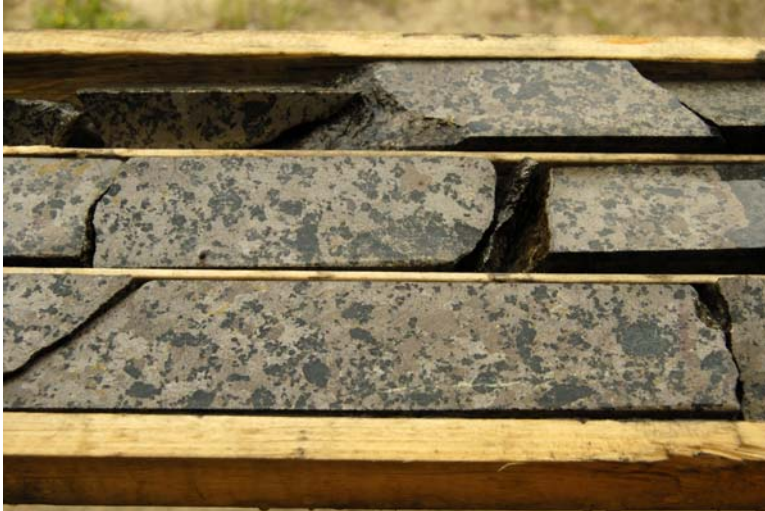


Figure 13: Picture 2 of mineralization



**Figure 14: Picture 3 of mineralization**

### 13.2 Comparison of test samples

Thirty samples were taken. The intervals correspond to intervals already sampled in 2005. We are mainly looking for evidence of a possibly significant bias in the data. The 30 samples were assayed for Cu, Ni, Ag and Co (ME-OG62), Pt, and Pd (PGM-ICP23). The samples were sent by the author to ALS Chemex, 1322B Harricana, Val D'Or, Québec, Canada.

In order to verify if we can assume the existence of a bias between the 2005 and the 2007 data, one of two appropriate tests is the Dependent t-test. The ingredient of the test is a list of N pairs of numbers. The null hypothesis is that the respective members of the N pairs are drawn from identical distributions. The procedure was the following:

- compute the list of differences
- calculate the mean  $X_D$  and the standard deviation  $s_D$  of the differences
- Test with the t-score:  $t = (X_D/s_D) * (N^{0.5})$

In order to verify if we can assume that there is a bias between the 2005 and the 2007 data, another appropriate test is the Wilcoxon test. The ingredient of the test is a list of N pairs of numbers. The null hypothesis is that the respective members of the N pairs are drawn from identical distributions. The procedure was the following:

- compute the list of differences
- sort the absolute values in ascending order
- add up the ranks assigned to the positive differences *or* the ranks assigned to the negative differences – whichever sort are less frequent. (call the sum T)
- Test with the z-score:  $z = (T - \mu(N)) / (\sigma(N))$  with  $\mu(N) = N * (N + 1) / 4$  and  $\sigma(N) = (N * (N + 1) * (2 * N + 1) / 24)^{0.5}$

The first of the next three tables shows the values obtained in 2005 by Matamec (1) and in 2007 by Geostat (2).

The second table shows the procedure of the Dependent t-test for repeated measures.

The third table shows the procedure of the Wilcoxon test.



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Hole Name	From	To	Cu1(%)	Cu2(%)		Ni1(%)	Ni2(%)		Au1(g/t)	Au2(g/t)		Pt1(g/t)	Pt2(g/t)		Pd1(g/t)	Pd2(g/t)		Ag1(g/t)	Ag2(g/t)		Co1(%)	Co2(%)	
RZ-05-01	16.57	17.27	1.20	1.13	-6%	0.64	0.61	-5%	0.057	0.054	-5%	0.048	0.010	-79%	0.060	0.093	+55%	2	2	0%	0.039	0.032	-18%
RZ-05-01	17.27	17.97	1.08	1.22	+13%	1.91	1.57	-18%	0.046	0.091	+98%	0.018	0.021	+17%	0.129	0.123	-5%	2	2	0%	0.083	0.073	-12%
RZ-05-03	14	15	1.16	1.52	+31%	0.74	0.84	+14%	0.151	0.196	+30%	0.078	0.022	-72%	0.067	0.203	+202%	2	2	0%	0.043	0.043	0%
RZ-05-04	12.6	13.6	0.45	0.43	-4%	0.34	0.33	-3%	0.049	0.051	+4%	0.043	0.042	-2%	0.044	0.042	-5%	0	1	Inf	0.028	0.021	-25%
RZ-05-05	18.85	19.85	1.67	1.61	-4%	1.32	1.32	0%	0.031	0.320	+932%	0.008	0.008	0%	0.187	0.214	+14%	1	3	+200%	0.067	0.063	-6%
RZ-05-05	20.85	21.85	1.49	1.38	-8%	0.88	0.79	-10%	0.092	0.105	+14%	0.177	0.239	+35%	0.073	0.074	+1%	0	2	Inf	0.045	0.039	-13%
RZ-05-06	21	22	0.82	0.93	+13%	0.69	0.63	-9%	0.066	0.044	-33%	0.066	0.016	-76%	0.077	0.072	-6%	0	1	Inf	0.038	0.033	-13%
RZ-05-07	15.95	16.6	1.72	1.45	-16%	2.56	2.29	-11%	0.037	0.037	0%	0.233	0.018	-92%	0.216	0.206	-5%	1	2	+100%	0.171	0.154	-10%
RZ-05-07	29.15	30.1	0.57	0.47	-18%	0.81	0.63	-22%	0.084	0.035	-58%	0.124	0.007	-94%	0.074	0.063	-15%	1	1	0%	0.045	0.036	-20%
RZ-05-07	30.4	31.1	0.94	1.09	+16%	0.71	0.96	+35%	0.056	0.039	-30%	0.027	0.033	+22%	0.054	0.056	+4%	1	2	+100%	0.040	0.052	+30%
RZ-05-09	29.45	30	0.42	0.42	+1%	0.61	0.61	0%	0.038	0.029	-24%	0.022	0.003	-89%	0.067	0.073	+9%	1	1	0%	0.038	0.038	0%
RZ-05-09	33	34	0.37	0.57	+54%	0.51	0.40	-22%	0.025	0.033	+32%	0.108	0.121	+12%	0.087	0.171	+97%	1	2	+100%	0.032	0.026	-19%
RZ-05-09	41.1	42.1	0.39	0.50	+27%	0.36	0.42	+17%	0.062	0.033	-47%	0.039	0.041	+5%	0.043	0.047	+9%	1	1	0%	0.020	0.023	+15%
RZ-05-10	26.65	27.5	1.09	1.68	+54%	2.88	2.72	-6%	0.046	0.026	-43%	0.079	0.043	-46%	0.186	0.198	+6%	2	3	+50%	0.202	0.185	-8%
RZ-05-11	21.45	22.1	7.22	6.99	-3%	1.01	1.20	+19%	0.170	0.769	+352%	0.000	0.003	Inf	0.046	0.064	+39%	13	15	+15%	0.084	0.092	+10%
RZ-05-11	26.9	27.85	3.11	2.37	-24%	2.33	2.33	0%	0.034	0.116	+241%	0.013	0.059	+354%	0.135	0.130	-4%	5	5	0%	0.171	0.160	-6%
RZ-05-11	27.85	28.9	3.39	4.02	+19%	2.16	2.21	+2%	0.257	2.580	+904%	0.136	0.301	+121%	0.132	0.161	+22%	8	8	0%	0.158	0.150	-5%
RZ-05-12	35	36.3	1.93	0.25	-87%	0.89	0.23	-74%	0.315	0.034	-89%	0.050	0.129	+157%	0.062	0.014	-77%	4	1	-75%	0.070	0.021	-70%
RZ-05-14	9.38	10.2	1.70	1.89	+11%	2.74	2.64	-4%	0.083	0.031	-63%	0.295	0.003	-99%	0.174	0.175	+1%	3	3	0%	0.193	0.177	-8%
RZ-05-14	16.45	17	4.79	5.08	+6%	2.12	1.96	-8%	0.106	0.114	+8%	0.254	0.033	-87%	0.239	0.179	-25%	9	10	+11%	0.158	0.137	-13%
RZ-05-14	17.3	18.1	0.55	0.55	+1%	1.41	1.25	-11%	0.018	0.023	+28%	0.044	0.003	-94%	0.156	0.129	-17%	1	1	0%	0.106	0.089	-16%
RZ-05-17	19.2	19.8	0.47	1.04	+123%	1.16	1.23	+6%	0.015	0.065	+333%	0.027	0.099	+267%	0.097	0.102	+5%	0	1	Inf	0.084	0.081	-4%
RZ-05-19	26.3	27.3	1.09	1.12	+2%	1.76	1.45	-18%	0.026	0.047	+81%	0.047	0.006	-87%	0.120	0.065	-46%	2	2	0%	0.130	0.098	-25%
RZ-05-19	28.2	29.05	0.41	0.51	+23%	0.69	1.16	+69%	0.059	0.023	-61%	0.081	0.015	-81%	0.048	0.090	+88%	1	1	0%	0.052	0.079	+52%
RZ-05-15	36.83	37.9	0.88	1.17	+34%	1.05	1.46	+39%	0.027	0.066	+144%	0.062	0.003	-96%	0.061	0.103	+69%	2	3	+50%	0.076	0.100	+32%
RZ-05-15	41.18	41.92	1.20	0.32	-74%	1.41	0.61	-57%	0.039	0.024	-38%	0.019	0.012	-37%	0.073	0.053	-27%	2	1	-50%	0.102	0.044	-57%
RZ-05-19	77	78.15	0.33	0.39	+18%	0.17	0.18	+8%	0.229	0.378	+65%	0.459	0.526	+15%	0.652	0.801	+23%	1	2	+100%	0.015	0.014	-7%
RZ-05-20	28.45	29.4	0.67	0.85	+27%	1.97	1.90	-4%	0.040	0.138	+245%	0.029	0.053	+83%	0.142	0.150	+6%	1	1	0%	0.140	0.131	-6%
RZ-05-20	71	72	0.32	0.34	+6%	0.16	0.18	+13%	0.324	0.398	+23%	0.598	0.592	-1%	1.010	1.100	+9%	1	1	0%	0.012	0.012	0%
RZ-05-20	75	76	0.38	0.41	+9%	0.26	0.28	+10%	0.178	0.158	-11%	0.552	0.602	+9%	0.502	0.567	+13%	0	1	Inf	0.015	0.015	0%
Weighted Averages			1.31	1.28	-2%	1.16	1.10	-5%	0.100	0.218	+118%	0.131	0.116	-11%	0.176	0.195	+11%	2.14	2.52	+18%	0.079	0.071	-10%
Count (-)					10			16				12			16			11		2			21
Count (+)					20			11				17			13			19		14			5

Table 5: Values for the 30 Test Samples (Matamec vs Geostat)

Hole Name	From	To	Cu1(%)	Cu2(%)		Ni1(%)	Ni2(%)		Au1(g/t)	Au2(g/t)		Pt1(g/t)	Pt2(g/t)		Pd1(g/t)	Pd2(g/t)		Ag1(g/t)	Ag2(g/t)		Co1(%)	Co2(%)		
RZ-05-01	16.57	17.27	1.20	1.13	-0.07	0.64	0.61	-0.03	0.057	0.054	0.00	0.048	0.010	-0.04	0.060	0.093	0.03	2	2	0.00	0.039	0.032	-0.01	
RZ-05-01	17.27	17.97	1.08	1.22	0.14	1.91	1.57	-0.34	0.046	0.091	0.05	0.018	0.021	0.00	0.129	0.123	-0.01	2	2	0.00	0.083	0.073	-0.01	
RZ-05-03	14	15	1.16	1.52	0.36	0.74	0.84	0.10	0.151	0.196	0.05	0.078	0.022	-0.06	0.067	0.203	0.14	2	2	0.00	0.043	0.043	0.00	
RZ-05-04	12.6	13.6	0.45	0.43	-0.02	0.34	0.33	-0.01	0.049	0.051	0.00	0.043	0.042	0.00	0.044	0.042	0.00	0	1	1.00	0.028	0.021	-0.01	
RZ-05-05	18.85	19.85	1.67	1.61	-0.06	1.32	1.32	0.00	0.031	0.320	0.29	0.008	0.008	0.00	0.187	0.214	0.03	1	3	2.00	0.067	0.063	0.00	
RZ-05-05	20.85	21.85	1.49	1.38	-0.12	0.88	0.79	-0.09	0.092	0.105	0.01	0.177	0.239	0.06	0.073	0.074	0.00	0	2	2.00	0.045	0.039	-0.01	
RZ-05-06	21	22	0.82	0.93	0.11	0.69	0.63	-0.06	0.066	0.044	-0.02	0.066	0.016	-0.05	0.077	0.072	-0.01	0	1	1.00	0.038	0.033	-0.01	
RZ-05-07	15.95	16.6	1.72	1.45	-0.28	2.56	2.29	-0.27	0.037	0.037	0.00	0.233	0.018	-0.22	0.216	0.206	-0.01	1	2	1.00	0.171	0.154	-0.02	
RZ-05-07	29.15	30.1	0.57	0.47	-0.10	0.81	0.63	-0.18	0.084	0.035	-0.05	0.124	0.007	-0.12	0.074	0.063	-0.01	1	1	0.00	0.045	0.036	-0.01	
RZ-05-07	30.4	31.1	0.94	1.09	0.15	0.71	0.96	0.25	0.056	0.039	-0.02	0.027	0.033	0.01	0.054	0.056	0.00	1	2	1.00	0.040	0.052	0.01	
RZ-05-09	29.45	30	0.42	0.42	0.00	0.61	0.61	0.00	0.038	0.029	-0.01	0.022	0.003	-0.02	0.067	0.073	0.01	1	1	0.00	0.038	0.038	0.00	
RZ-05-09	33	34	0.37	0.57	0.20	0.51	0.40	-0.11	0.025	0.033	0.01	0.108	0.121	0.01	0.087	0.171	0.08	1	2	1.00	0.032	0.026	-0.01	
RZ-05-09	41.1	42.1	0.39	0.50	0.11	0.36	0.42	0.06	0.062	0.033	-0.03	0.039	0.041	0.00	0.043	0.047	0.00	1	1	0.00	0.020	0.023	0.00	
RZ-05-10	26.65	27.5	1.09	1.68	0.59	2.88	2.72	-0.16	0.046	0.026	-0.02	0.079	0.043	-0.04	0.186	0.198	0.01	2	3	1.00	0.202	0.185	-0.02	
RZ-05-11	21.45	22.1	7.22	6.99	-0.23	1.01	1.20	0.20	0.170	0.769	0.60	0.000	0.003	0.00	0.046	0.064	0.02	13	15	2.00	0.084	0.092	0.01	
RZ-05-11	26.9	27.85	3.11	2.37	-0.74	2.33	2.33	0.00	0.034	0.116	0.08	0.013	0.059	0.05	0.135	0.130	-0.01	5	5	0.00	0.171	0.160	-0.01	
RZ-05-11	27.85	28.9	3.39	4.02	0.63	2.16	2.21	0.05	0.257	2.580	2.32	0.136	0.301	0.17	0.132	0.161	0.03	8	8	0.00	0.158	0.150	-0.01	
RZ-05-12	35	36.3	1.93	0.25	-1.68	0.89	0.23	-0.66	0.315	0.034	-0.28	0.050	0.129	0.08	0.062	0.014	-0.05	4	1	-3.00	0.070	0.021	-0.05	
RZ-05-14	9.38	10.2	1.70	1.89	0.19	2.74	2.64	-0.10	0.083	0.031	-0.05	0.295	0.003	-0.29	0.174	0.175	0.00	3	3	0.00	0.193	0.177	-0.02	
RZ-05-14	16.45	17	4.79	5.08	0.29	2.12	1.96	-0.16	0.106	0.114	0.01	0.254	0.033	-0.22	0.239	0.179	-0.06	9	10	1.00	0.158	0.137	-0.02	
RZ-05-14	17.3	18.1	0.55	0.55	0.00	1.41	1.25	-0.16	0.018	0.023	0.01	0.044	0.003	-0.04	0.156	0.129	-0.03	1	1	0.00	0.106	0.089	-0.02	
RZ-05-17	19.2	19.8	0.47	1.04	0.57	1.16	1.23	0.08	0.015	0.065	0.05	0.027	0.099	0.07	0.097	0.102	0.00	0	1	1.00	0.084	0.081	0.00	
RZ-05-19	26.3	27.3	1.09	1.12	0.02	1.76	1.45	-0.31	0.026	0.047	0.02	0.047	0.006	-0.04	0.120	0.065	-0.06	2	2	0.00	0.130	0.098	-0.03	
RZ-05-19	28.2	29.05	0.41	0.51	0.10	0.69	1.16	0.47	0.059	0.023	-0.04	0.081	0.015	-0.07	0.048	0.090	0.04	1	1	0.00	0.052	0.079	0.03	
RZ-05-15	36.83	37.9	0.88	1.17	0.30	1.05	1.46	0.41	0.027	0.066	0.04	0.062	0.003	-0.06	0.061	0.103	0.04	2	3	1.00	0.076	0.100	0.02	
RZ-05-15	41.18	41.92	1.20	0.32	-0.89	1.41	0.61	-0.80	0.039	0.024	-0.02	0.019	0.012	-0.01	0.073	0.053	-0.02	2	1	-1.00	0.102	0.044	-0.06	
RZ-05-19	77	78.15	0.33	0.39	0.06	0.17	0.18	0.01	0.229	0.378	0.15	0.459	0.526	0.07	0.652	0.801	0.15	1	2	1.00	0.015	0.014	0.00	
RZ-05-20	28.45	29.4	0.67	0.85	0.18	1.97	1.90	-0.07	0.040	0.138	0.10	0.029	0.053	0.02	0.142	0.150	0.01	1	1	0.00	0.140	0.131	-0.01	
RZ-05-20	71	72	0.32	0.34	0.02	0.16	0.18	0.02	0.324	0.398	0.07	0.598	0.592	-0.01	1.010	1.100	0.09	1	1	0.00	0.012	0.012	0.00	
RZ-05-20	75	76	0.38	0.41	0.03	0.26	0.28	0.03	0.178	0.158	-0.02	0.552	0.602	0.05	0.502	0.567	0.06	0	1	1.00	0.015	0.015	0.00	
Average					-0.0045			-0.0614				0.1099			-0.0226			0.0168			0.4333	0.079	0.071	-0.0080
Standard deviation					0.45			0.26				0.44			0.09			0.05			0.97			0.02
t for t-test					-0.05			-1.31				1.37			-1.33			1.89			2.44			-2.53
Result					OK			OK				OK			OK			OK			NOT OK			NOT OK

Table 6: Dependant t-test for repeated measurements

Rank of difference	Cu-diff	Abs-Cu-diff	Ni-diff	Abs-Ni-diff	Au-diff	Abs-Au-diff	Pt-diff	Abs-Pt-diff	Pd-diff	Abs-Pd-diff	Ag-diff	Abs-Ag-diff	Co-diff	Abs-Co-diff
1	0.003	0.003	0	0	0	0	0	0	0.0005	0.0005	0	0	0	0
2	0.004	0.004	0	0	0.002	0.002	-0.001	0.001	0.001	0.001	0	0	0	0
3	-0.016	0.016	0	0	-0.003	0.003	0.002	0.002	-0.002	0.002	0	0	0	0
4	0.018	0.018	-0.01	0.01	0.005	0.005	0.0025	0.0025	0.002	0.002	0	0	0	0
5	0.025	0.025	0.014	0.014	0.008	0.008	0.003	0.003	0.004	0.004	0	0	-0.001	0.001
6	0.034	0.034	0.02	0.02	0.008	0.008	0.006	0.006	0.005	0.005	0	0	0.003	0.003
7	0.059	0.059	0.025	0.025	-0.009	0.009	-0.006	0.006	-0.005	0.005	0	0	-0.003	0.003
8	-0.06	0.06	-0.03	0.03	0.013	0.013	-0.007	0.007	-0.005	0.005	0	0	-0.004	0.004
9	-0.07	0.07	0.05	0.05	-0.015	0.015	0.013	0.013	0.006	0.006	0	0	-0.005	0.005
10	0.095	0.095	-0.06	0.06	-0.017	0.017	-0.0195	0.0195	-0.006	0.006	0	0	-0.006	0.006
11	-0.101	0.101	0.06	0.06	-0.02	0.02	0.024	0.024	0.008	0.008	0	0	-0.006	0.006
12	0.105	0.105	-0.07	0.07	-0.02	0.02	-0.036	0.036	-0.01	0.01	0	0	-0.007	0.007
13	0.107	0.107	0.075	0.075	0.021	0.021	-0.038	0.038	-0.011	0.011	0	0	-0.007	0.007
14	-0.115	0.115	-0.09	0.09	-0.022	0.022	-0.041	0.041	0.012	0.012	0	0	0.008	0.008
15	0.14	0.14	0.1	0.1	-0.029	0.029	-0.0415	0.0415	0.018	0.018	1	1	-0.008	0.008
16	0.15	0.15	-0.1	0.1	-0.036	0.036	0.046	0.046	-0.02	0.02	1	1	-0.009	0.009
17	0.178	0.178	-0.11	0.11	0.039	0.039	0.05	0.05	0.027	0.027	1	1	-0.009	0.009
18	0.19	0.19	-0.16	0.16	0.045	0.045	-0.05	0.05	-0.027	0.027	1	1	-0.01	0.01
19	0.201	0.201	-0.16	0.16	0.045	0.045	-0.0565	0.0565	0.029	0.029	1	1	-0.011	0.011
20	-0.23	0.23	-0.16	0.16	-0.049	0.049	-0.0595	0.0595	0.033	0.033	1	1	0.012	0.012
21	-0.275	0.275	-0.18	0.18	0.05	0.05	0.0615	0.0615	0.042	0.042	1	1	-0.016	0.016
22	0.29	0.29	0.195	0.195	-0.052	0.052	-0.066	0.066	0.042	0.042	1	1	-0.017	0.017
23	0.295	0.295	0.25	0.25	0.074	0.074	0.067	0.067	-0.048	0.048	1	1	-0.017	0.017
24	0.355	0.355	-0.27	0.27	0.082	0.082	0.072	0.072	-0.055	0.055	-1	1	-0.017	0.017
25	0.573	0.573	-0.31	0.31	0.098	0.098	0.0785	0.0785	-0.06	0.06	1	1	-0.021	0.021
26	0.585	0.585	-0.34	0.34	0.149	0.149	-0.117	0.117	0.065	0.065	1	1	0.024	0.024
27	0.63	0.63	0.41	0.41	-0.281	0.281	0.165	0.165	0.084	0.084	2	2	0.027	0.027
28	-0.74	0.74	0.472	0.472	0.289	0.289	-0.215	0.215	0.09	0.09	2	2	-0.032	0.032
29	-0.885	0.885	-0.663	0.663	0.599	0.599	-0.221	0.221	0.1355	0.1355	2	2	-0.049	0.049
30	-1.68	1.68	-0.8	0.8	2.323	2.323	-0.2925	0.2925	0.149	0.149	-3	3	-0.058	0.058
Count <0		10		16		12		16		11		2		21
Count >0		20		11		17		13		19		14		5
Count =0		0		3		1		1		0		14		4
Sum of ranks T		173		169		166		191		159		109		98
mu N (30 samples)		232.5		232.5		232.5		232.5		232.5		232.5		232.5
sigma N (30 samples)		48.62		48.62		48.62		48.62		48.62		48.62		48.62
z score (30 samples)		-1.224		-1.306		-1.368		-0.854		-1.512		-2.540		-2.766
Standard Prob.		11.1%		9.6%		8.6%		19.7%		6.5%		0.6%		0.3%
1-Stand. Prob.		88.9%		90.4%		91.4%		80.3%		93.5%		99.4%		99.7%
Result		OK		OK		OK		OK		OK		NOT OK		NOT OK

Table 7: Wicoxon test

### **13.2 Results of the comparison of test samples**

Both of the statistic tests show that the 30 samples do not permit us to conclude that Cu, Ni, Au, Pt and Pd have a bias. The Cu is the most impressive since the average of the differences is nearly zero.

Both of the statistic tests show that Ag measured by Geostat in 2007 was superior to Ag from Matamec in 2005. The difference appears to be +18%. Both of the statistic tests show that Co measured by Geostat in 2007 was inferior to Co from Matamec in 2005. The difference appears to be -10%. This could be the result of a slightly different preparation of the samples at the laboratory. Both of the differences are very reasonable at this stage of the study. The positive difference in Ag could be welcome since +18% is substantial. The difference for Co is -10% which is not so important for the project.

Since the economic value of the project lies mainly in Ni and Cu at this stage, the present verification is satisfactory. Future works should be verified in the same manner. Older assays from previous works are impossible to verify in the same manner and should be used to calculate inferred resources only.

## **14- Adjacent Properties**

At this stage, there is no adjacent property information used in the works of the Vulcain property, but it is to be noted that Matamec Exploration has recently acquired 268 additional claim cells around but not adjoining the core Vulcain property. This addition totals 15,793.36 hectares in SRNC sheets 31K14, 31K15, 31K16 et 31K10.

## **15- Mineral Processing and Metallurgical Testing**

Geostat did not address the aspects of mineral processing and metallurgical treatment at this stage on the project. An extract of Black & Riddell is simply cited here.

### **15.1 Black & Riddell (1968) – A geological and engineering report to Renzy Mines Ltd. Pages 52-53**

Metallurgy - E-1 Summary: Open circuit laboratory flotation tests have been conducted on bulk and drill core samples from the Renzy orebody. This test work was carried out by Quebec Metallurgical Industries Ltd. (QMI) in 1956, Bureau of Mines, Ottawa in 1956-7, and Lakefield Research of Canada Ltd. in 1966-1967. In all, 53 tests were performed; 35 to produce bulk copper-nickel concentrate and the remainder to investigate separate copper and nickel concentrates. The Lakefield results demonstrated the ability to produce satisfactory commercial bulk concentrates and were therefore used by Kilborn Engineering Ltd. (20) to develop the flow sheet and design the mill used in the present study. More recently, Lakefield's results were review by D.R. Beaumont, who commented on their adequacy and estimated the concentrate grades and recoveries to be expected from anticipated mill heads taken from calculated tonnages and grades of the orebody. Beaumont also determined the yearly optimum bulk concentrate grade, which the mill should produce. No adjustments in flow sheet or mill design are necessary to accommodate his findings.

E-2 Mineralogy and ore analysis: The host for the Renzy orebody is a fresh peridotite, consisting essentially of olivine with a small amount of pyroxene and very little serpentine and carbonate. Mineralization is believed to be primary. It is interstitial and generally most prevalent in olivine rich sections. It consists of nickeliferous pyrrhotite (70%), chalcopyrite (20%), pentlandite (10%), and valerite (less than 1%). The nickel to sulphide ratio is approximately 1:10.5. The chalcopyrite is coarser than the pentlandite, some of which is a fine flame type, exsolved from pyrrhotite. This suggests that the copper sulphides will be easily liberated but that the nickel sulphides will require finer grinding.

An example of chemical analysis of a typical head sample made by Lakefield gave the following results:

Cu: 0,83%	Ni:0,80%	S: 9,70%	Fe: 20,4%		
Au: 0,01 oz/ton	Ag: 0,14 oz/ton	Pt : 0,003 oz/ton	Pd : 0,003 oz/ton		
Rh : 0,003 oz/ton					

It is known from other analyses that material of the foregoing type would also contain about 0,05% Cobalt. A spectrographic analysis covering a broader range of elements is given in the report by the Bureau of Mines, Ottawa.

## 16- Mineral Resource and Mineral Reserve Estimates

### 16.1 Definitions

The classification of Mineral Resources and Mineral Reserves used in this report relies with the definitions provided in National Instrument 43-101, which came into effect on February 1, 2001. We further confirm that we have followed the guidelines adopted by the Council of the Canadian Institute of Mining Metallurgy and Petroleum. The relevant definitions for the CIM Standards/NI 43-101 are as follows:

#### 1- Mineral Resource

*Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.*

**A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.**

*The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase 'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.*

#### 2- Inferred Mineral Resource

**An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.**

*Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.*

#### 3- Indicated Mineral Resource

**An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of**



**technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.**

*Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.*

#### **4- Measured Mineral Resource**

**A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.**

*Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.*

#### **5- Mineral Reserve**

*Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves. A Probable Mineral Reserve has a lower level of confidence than a Proven Mineral Reserve.*

**A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.**

*Mineral Reserves are those parts of Mineral Resources which, after the application of all mining factors, result in an estimated tonnage and grade which, in the opinion of the Qualified Person(s) making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, marketing, legal, environment, socio-economic and government factors. Mineral Reserves are inclusive of diluting material that will be mined in conjunction with the Mineral Reserves and delivered to the treatment plant or equivalent facility. The term 'Mineral Reserve' need not necessarily signify that extraction facilities are in place or operative or that all governmental approvals have been received. It does signify that there are reasonable expectations of such approvals.*

## 16.1 Database Used

For the model presented here, 251 of the 425 holes (and 1988 of the 2023 assays) that are located nearby have been used.

In October 2004, Geostat Systems International Inc. verified and validated the 406 diamond drill holes made before the RZ-05 series. Elevation of the 406 drill holes are very imprecise and location of holes are somewhat imprecise especially far from the old mine. These drill holes come from archives (maps, logs, sections, etc.). We consider the data valid enough to proceed with the estimation of resources of the inferred category. The hole information from the 19 2005 holes is considered precise enough to calculate indicated or measured resources providing that the quantity of data is sufficient.

The 2007 database has a total of 425 drill holes with names from 1 to 115, 117 to 171, 116A and 116B (all drilled between 1956 and 1968), 1LEE to 5LEE (drilled by Lee in 1956), 1LRNL to 5LRNL, 8LRNL, 9LRNL, 11LRNL to 16LRNL (Lake Renzy Nickel Limited), 6LSTG, 7LSTG, 10 LSTG, 18LSTG to 22LSTG, 24LSTG to 28LSTG (LS Trenholme Group), 1MLC to 8MLC, 1PLC to 7PLC (Pioneer Consultants Limited, 1956), C-1CML to C-6CML, C-1LRNL to C-3LRNL, E16 to E91, E93 to E184, E167A (The E series is from 1956), EB0 to EB3 (The EB series is from 1957), K-1 to K-3, L-1, L-2, RZ-05-01 to RZ-05-12 and RZ-05-14 to RZ-05-20 (from 2005).

In total, 2023 assays are found in the 425 drill holes with 2023 Cu analysis, 2022 Ni, 574 SG (specific gravity), 545 Au, 545 Pt, 545 Pd, 545 Ag and 545 Co.

## 16.2 Geological Interpretation and Modelling

The geological model was made on 20 sections. The sections are numbered from 1 to 20 and vary in orientation and thickness. The first 3 sections are North-South and looking east. The sections from 4 to 20 are North-West – South-East and looking at exactly 26° azimuth. The first 3 sections have 70 meters of thickness ( $\pm 35$  meters). Sections from 4 to 13 and from 19 to 20 have 30 meters of thickness ( $\pm 15$  meters). Sections 14 and 18 have 26.2 meters of thickness (15 meters on one side and 11.2 meters on the other side). Finally, sections 15 to 17 have thicknesses of 22.4 meters ( $\pm 11.2$  meters). This gymnastic is necessary to try and keep most of the drill holes on the center of the sections and have a geological model as precise as possible.

As described in the document “Estimation of Mineral resources and Mineral Reserves – Best Practice Guidelines” adopted by the CIM Council in 2003, the interpretation is then sliced again in an other direction in order to verify the spatial continuity of the geological model. Slices have been modelled on horizontal slices each 5 meters. Les slices are centered on elevations 325 to 385 meters.

The model measures approximately 750 meters long by 70 meters wide by 10 to 50 meters thick. The precise estimation of resources is made further in this report.

The next figures present the geological model. The colors are based on a Nickel equivalent (Nieg) formula where :

$$\text{Nieg} = \text{Ni} + (\text{Cu} * 0.25)$$

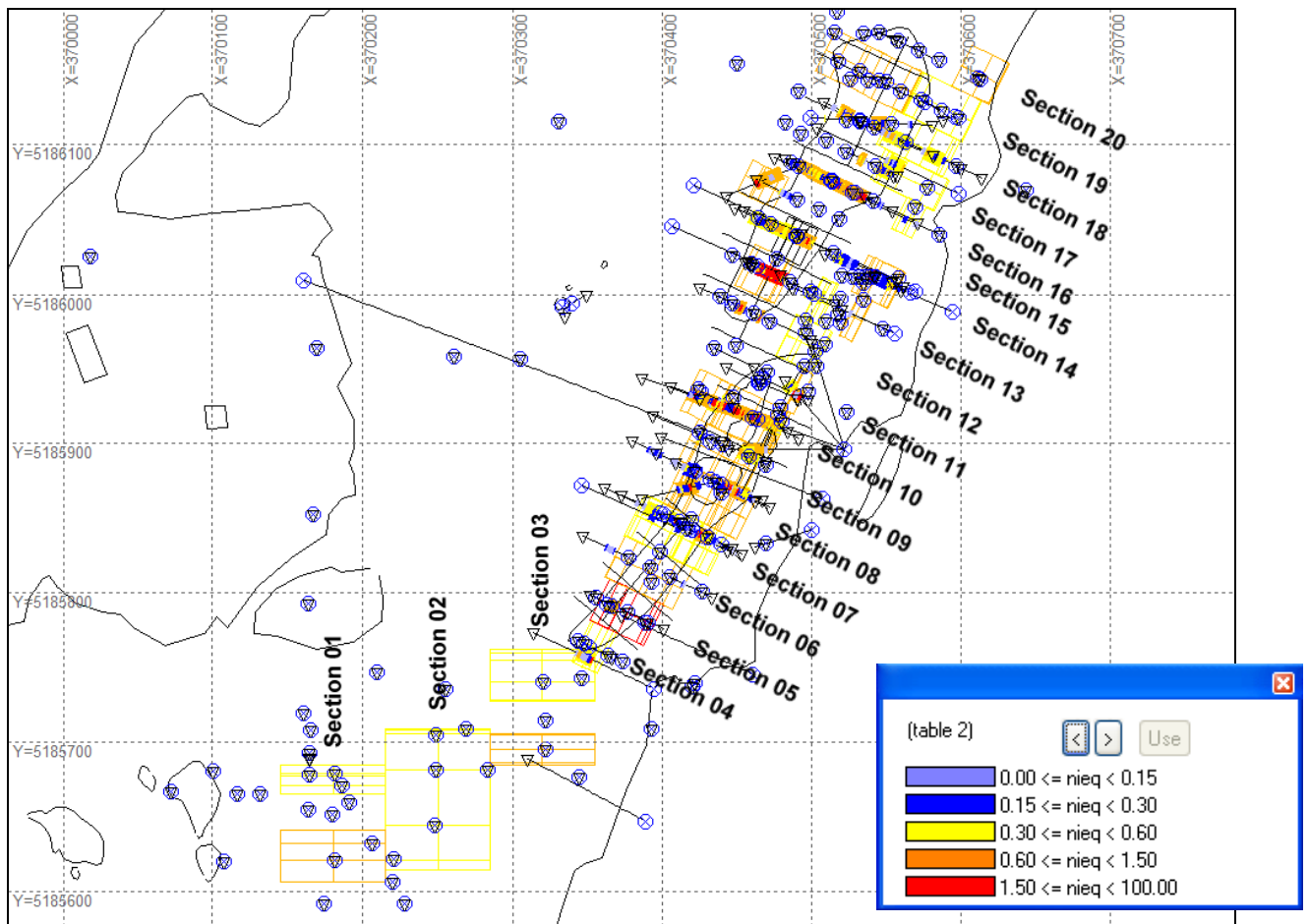


Figure 15: Location of geological sections and color table

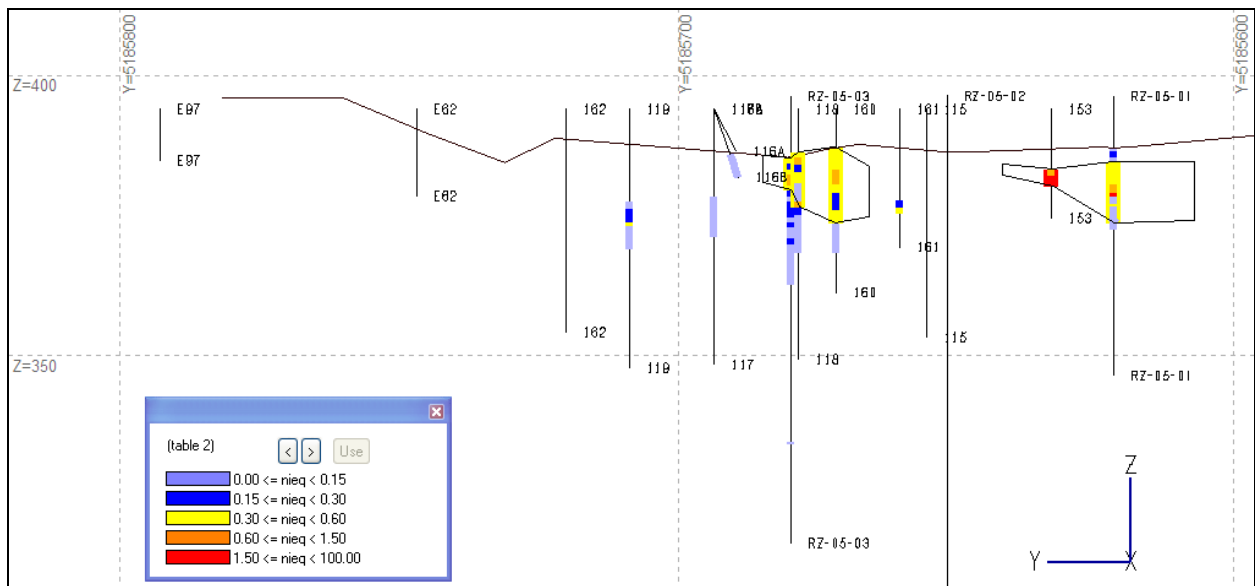


Figure 16: Geological section 01

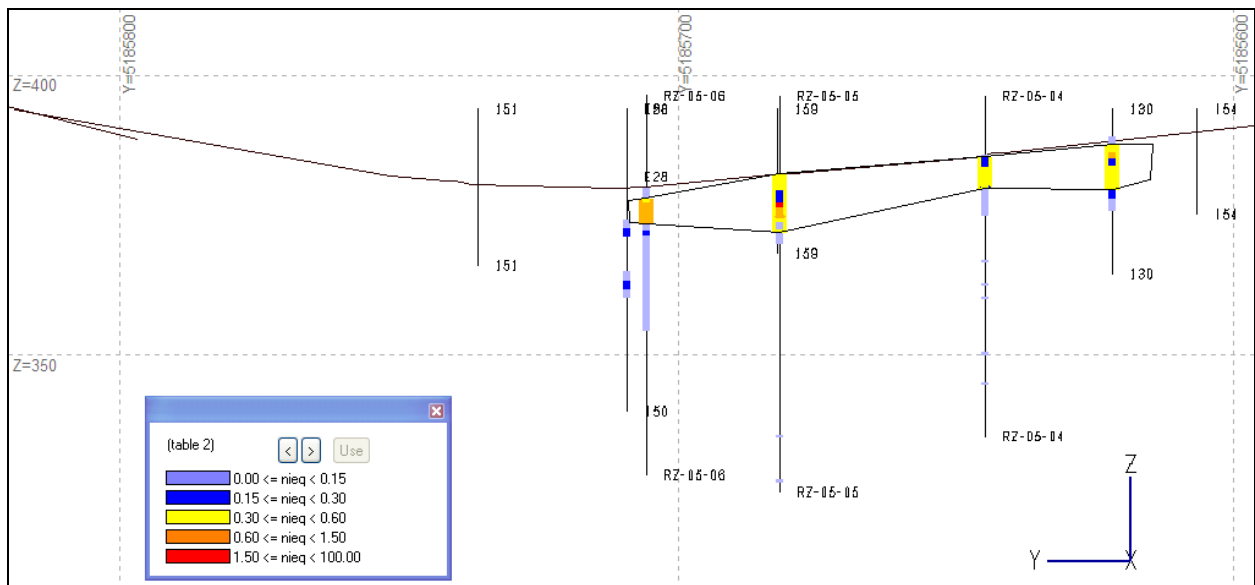


Figure 17: Geological section 02

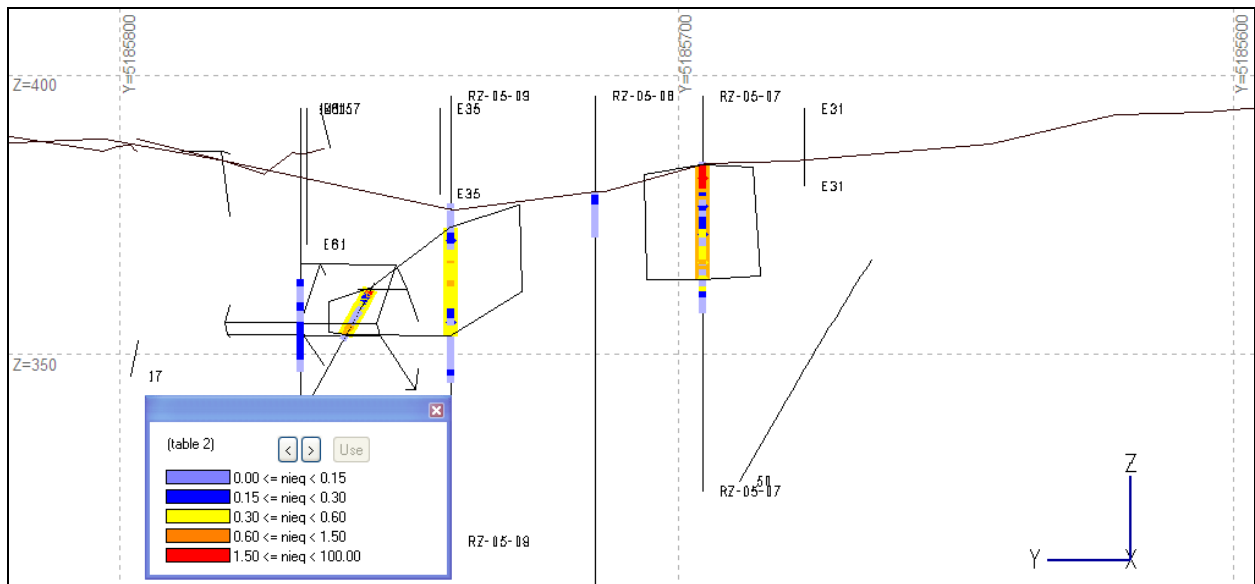


Figure 18: Geological section 03

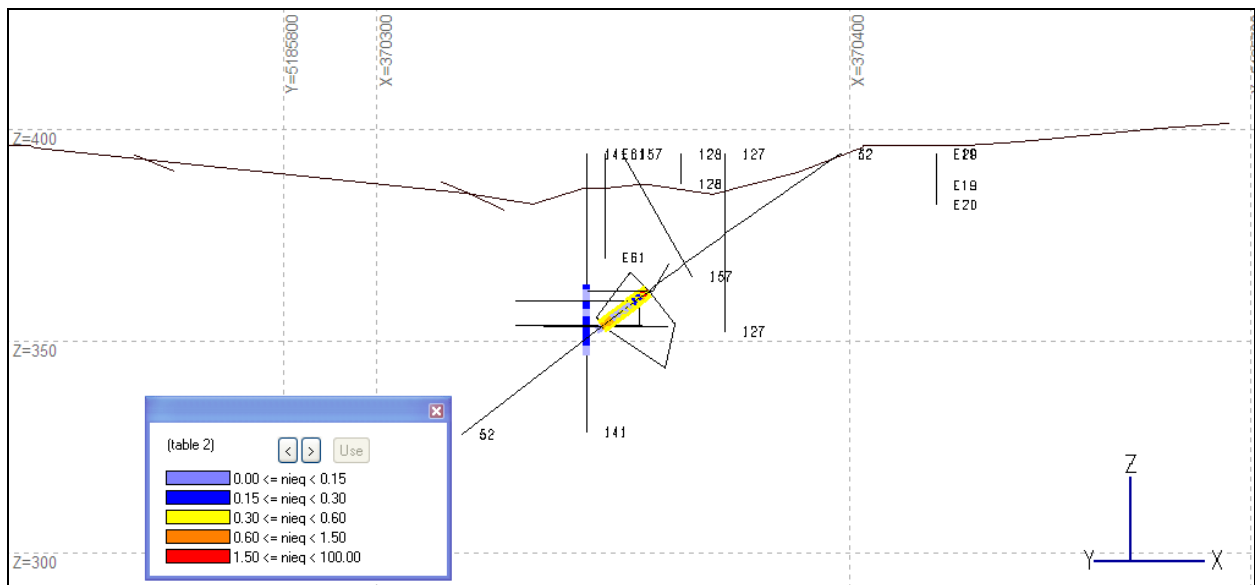


Figure 19: Geological section 04

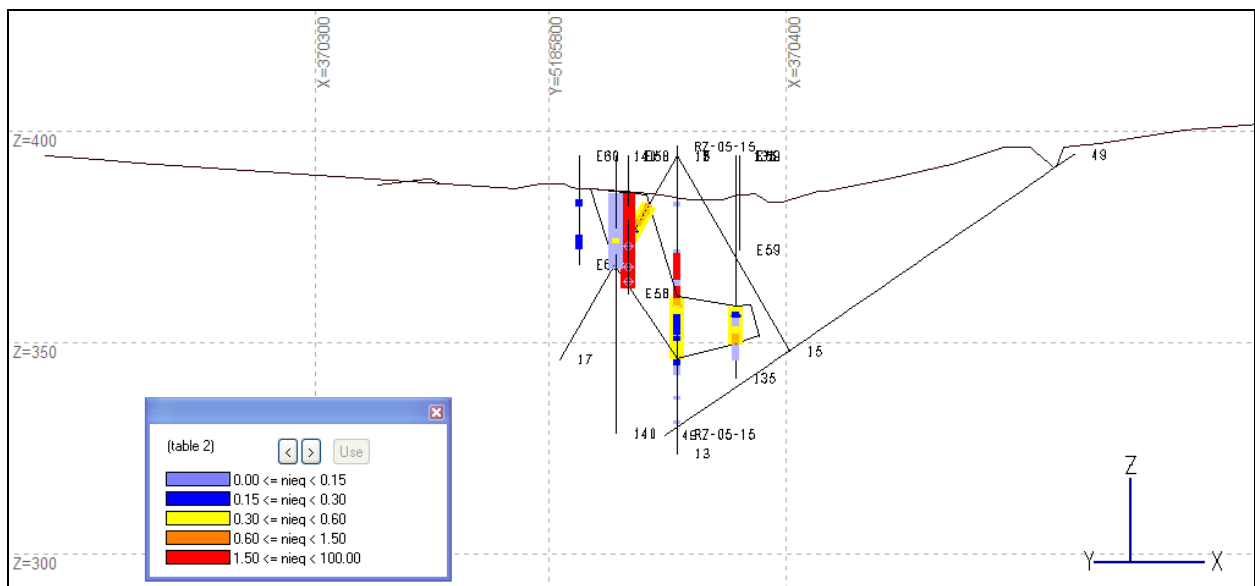


Figure 20: Geological section 05





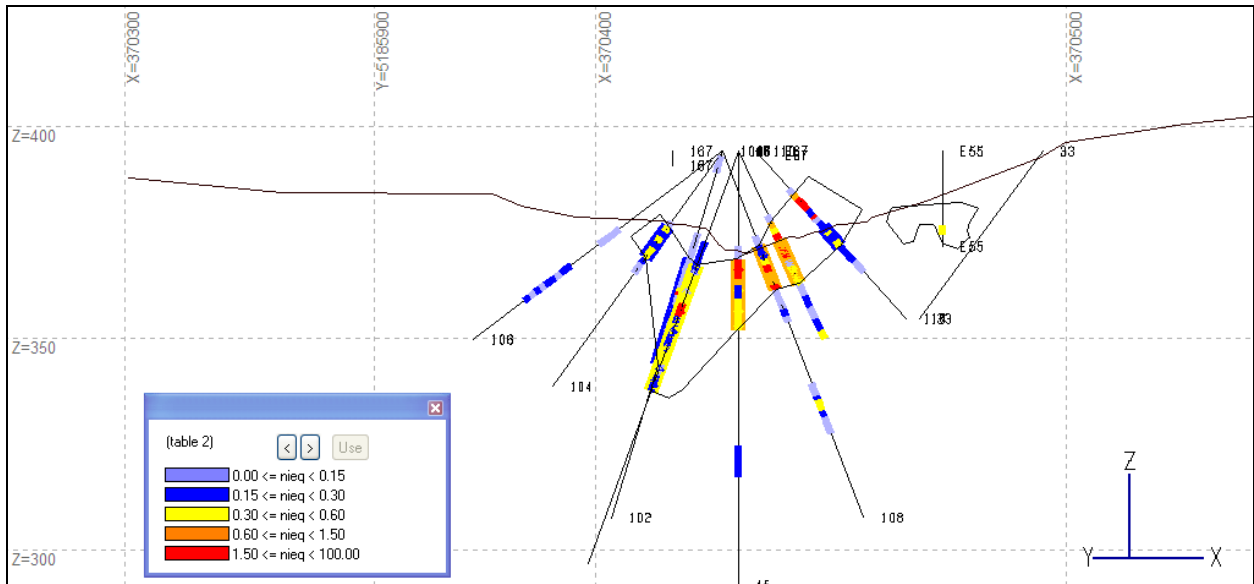


Figure 23: Geological section 08

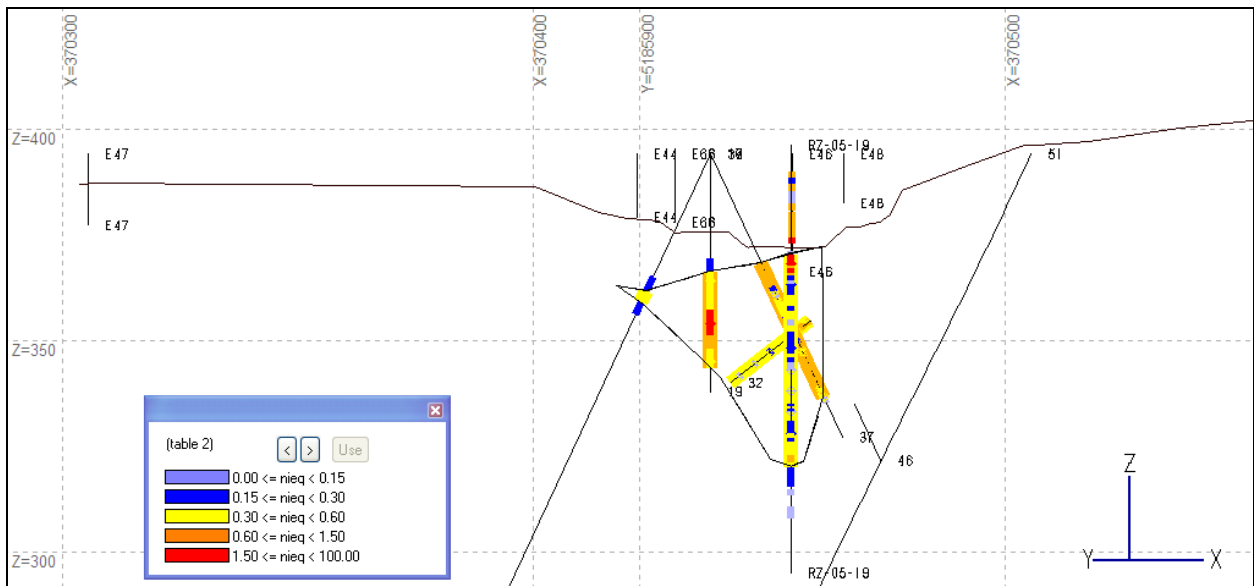


Figure 24: Geological section 09

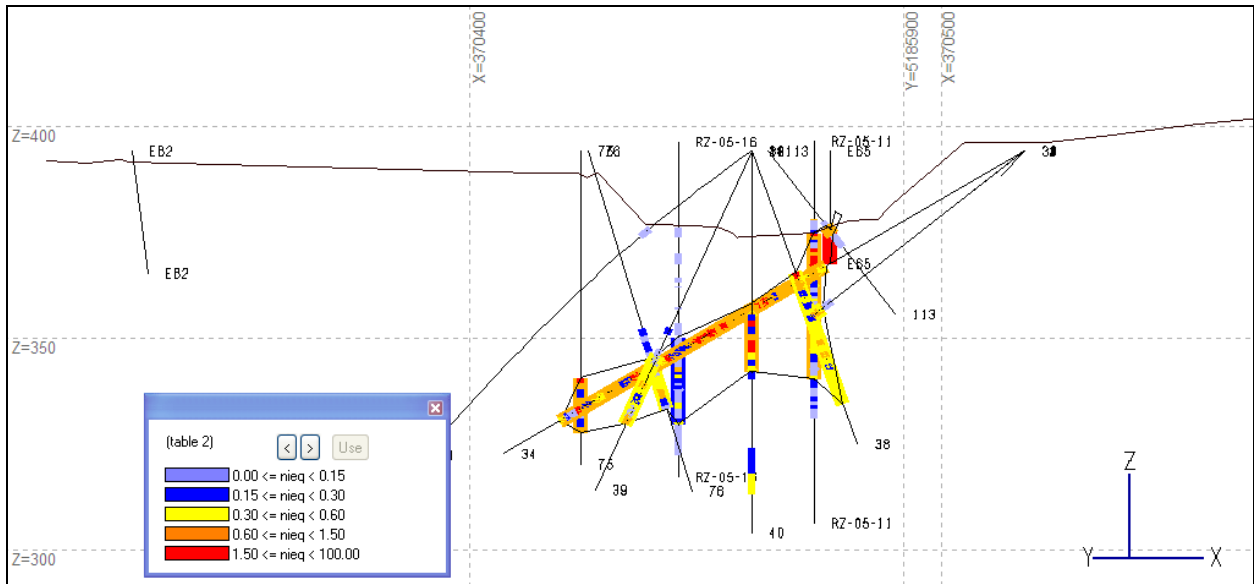


Figure 25: Geological section 10

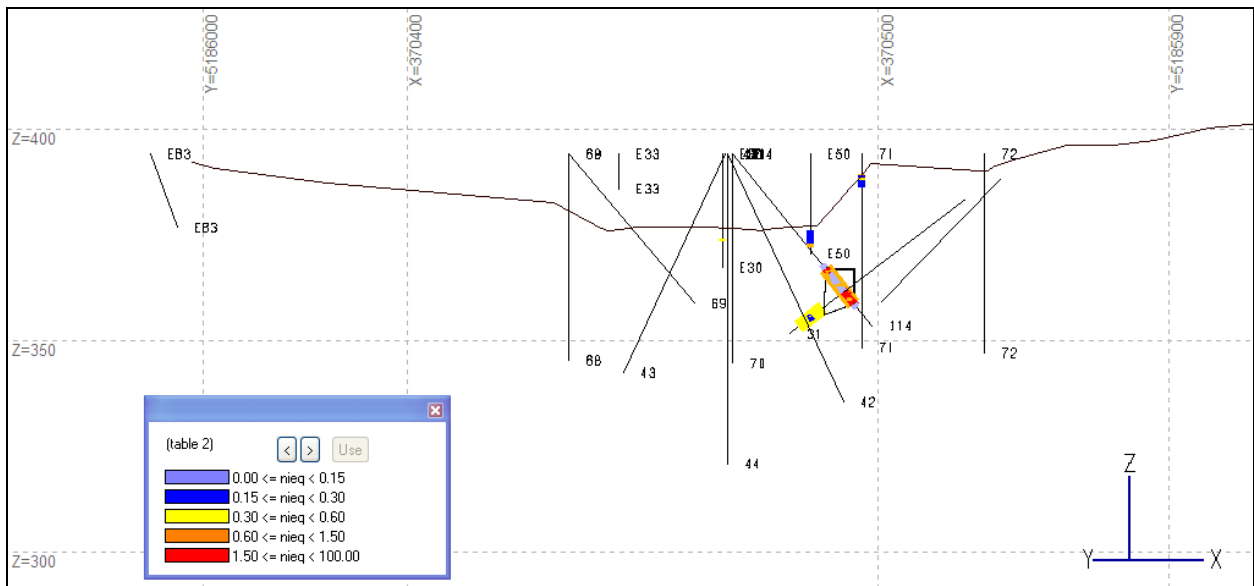


Figure 26: Geological section 11

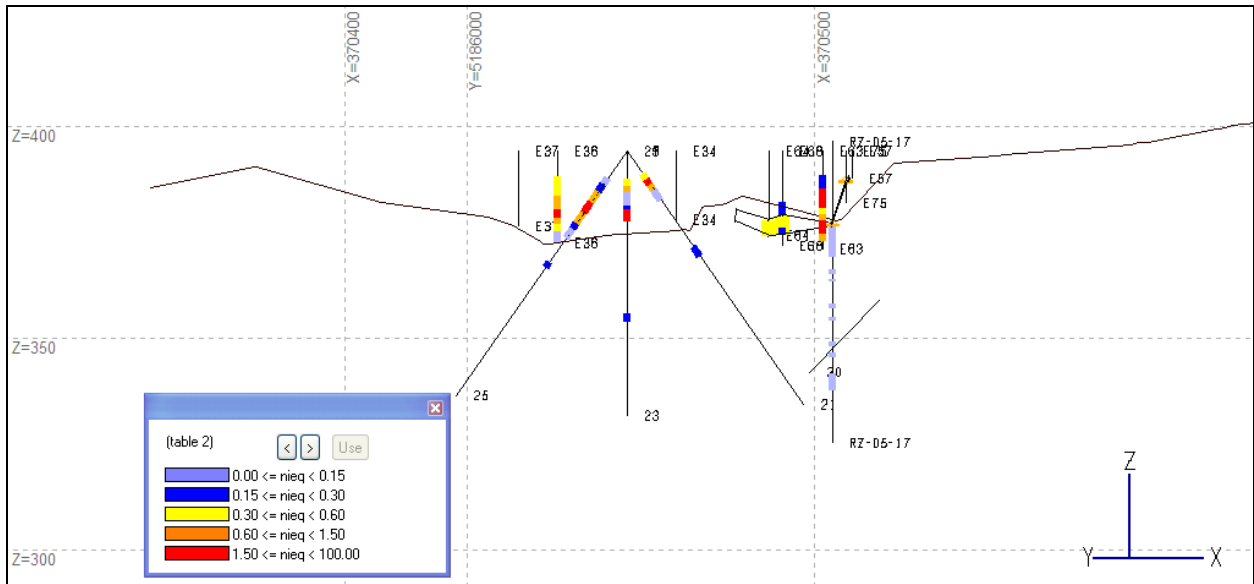


Figure 27: Geological section 12

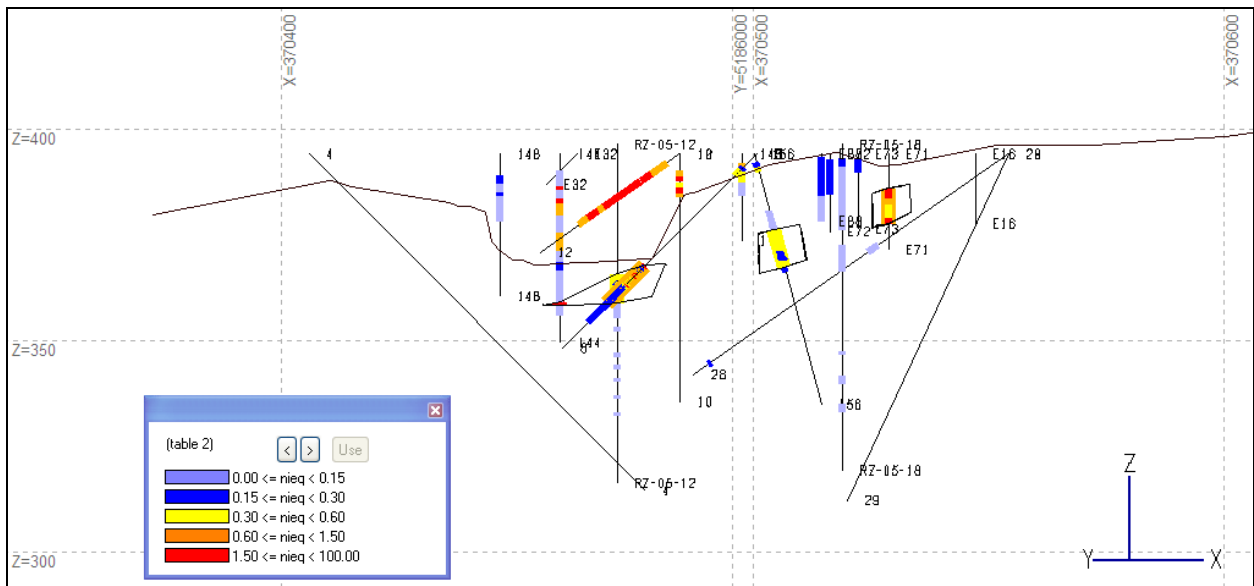


Figure 28: Geological section 13

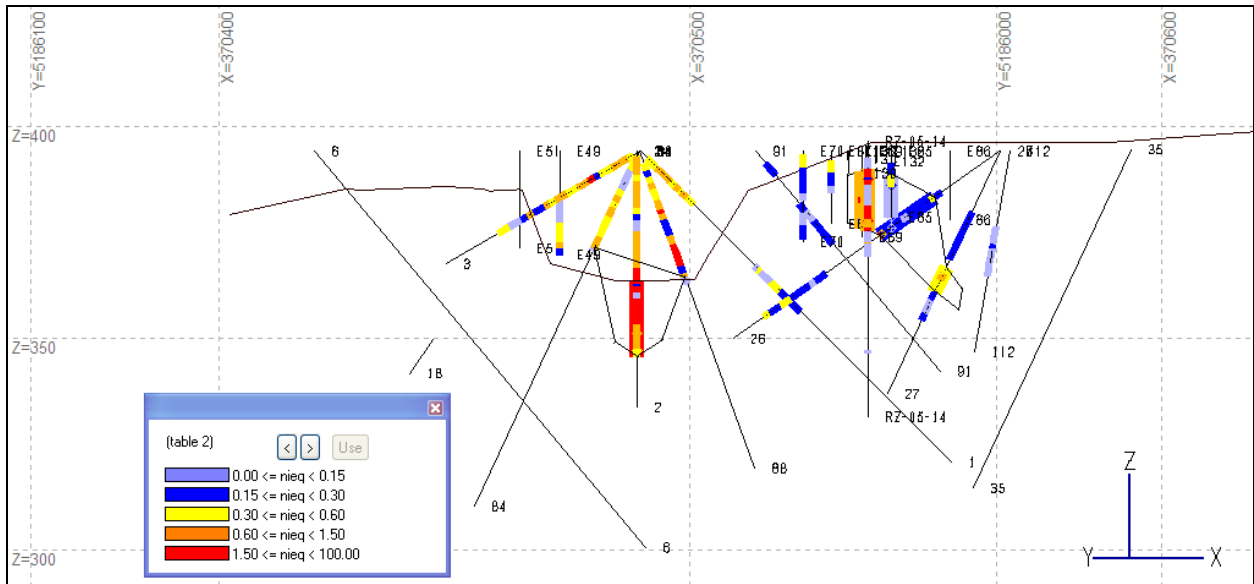


Figure 29: Geological section 14

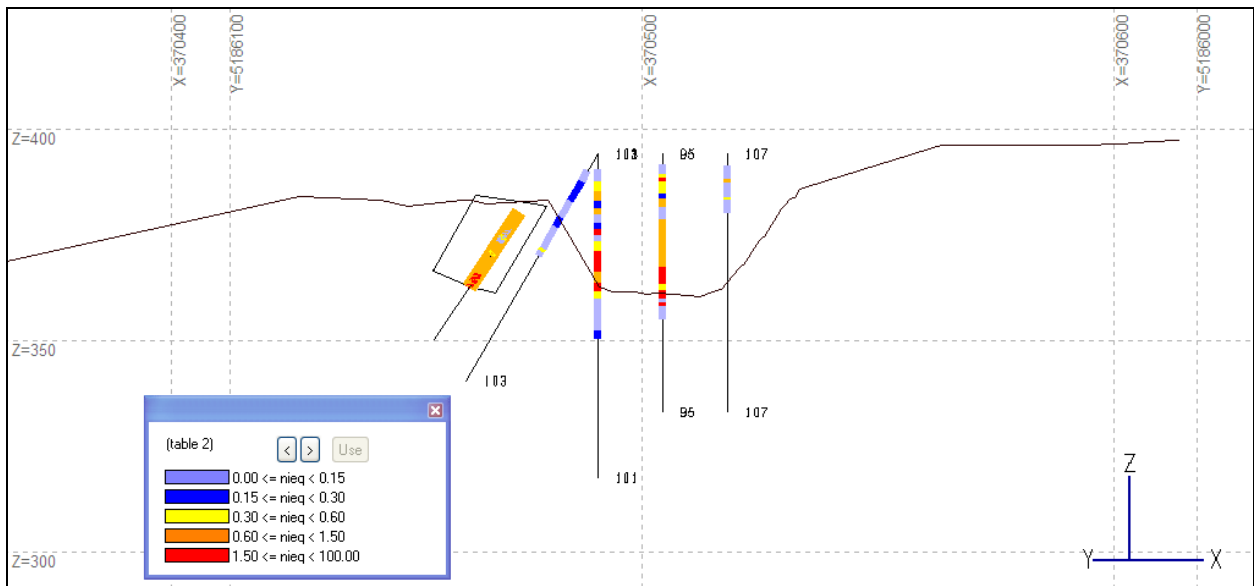


Figure 30: Geological section 15





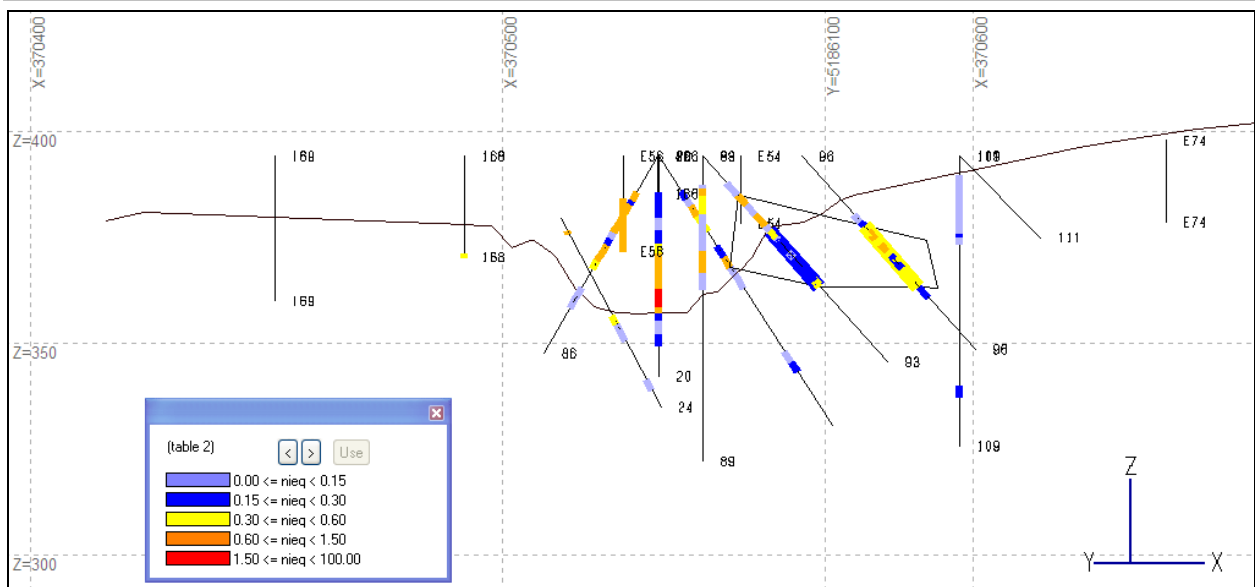


Figure 33: Geological section 18

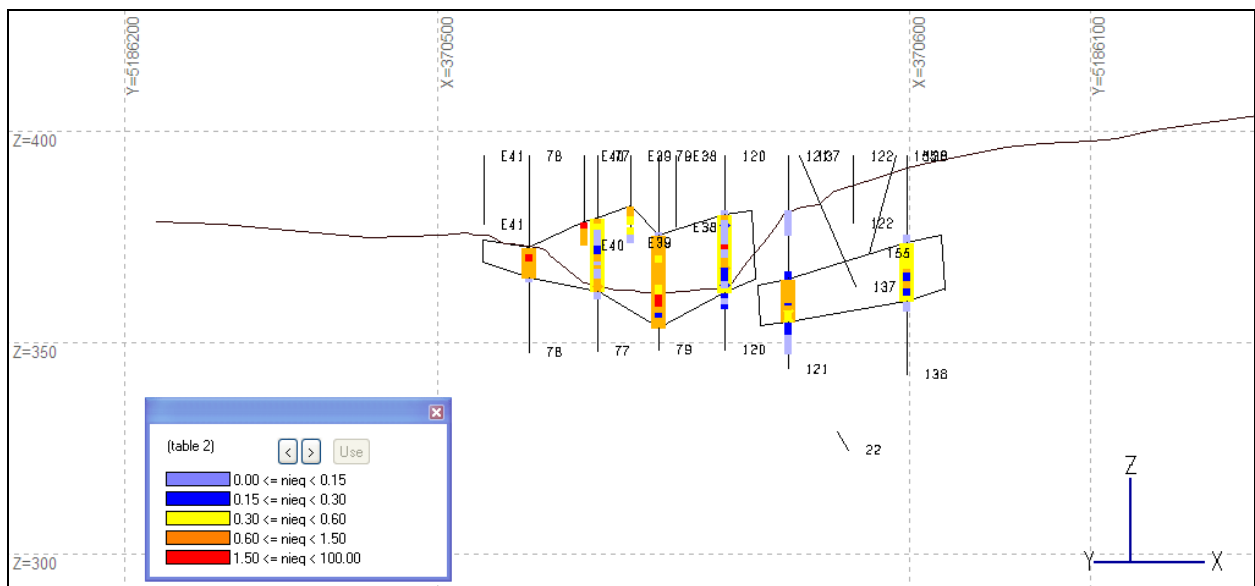


Figure 34: Geological section 19

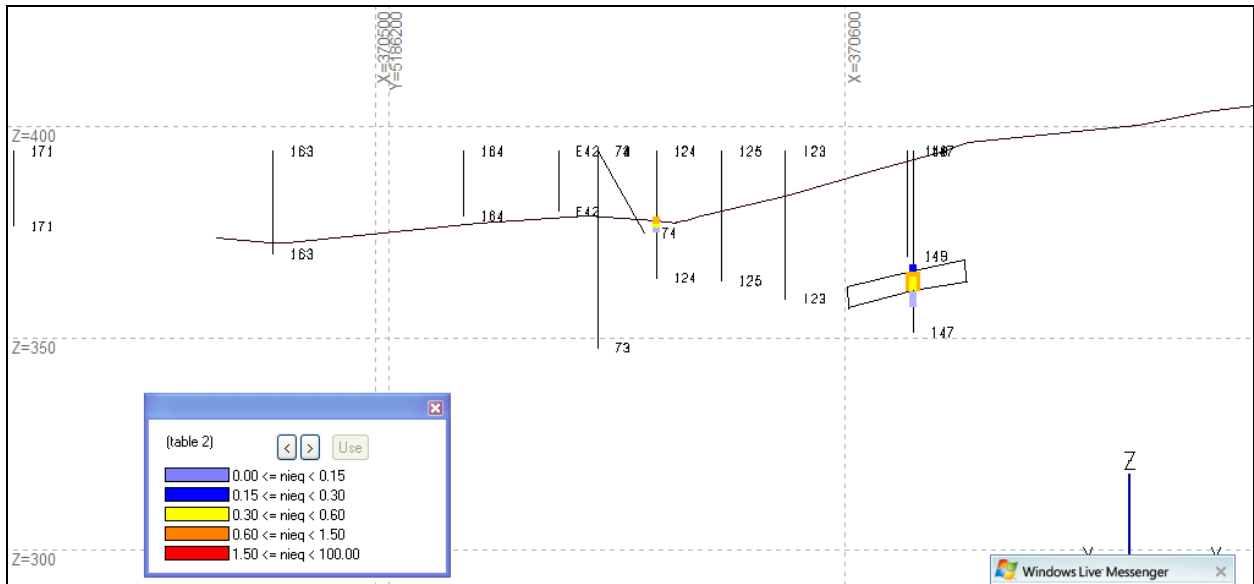


Figure 35: Geological section 20

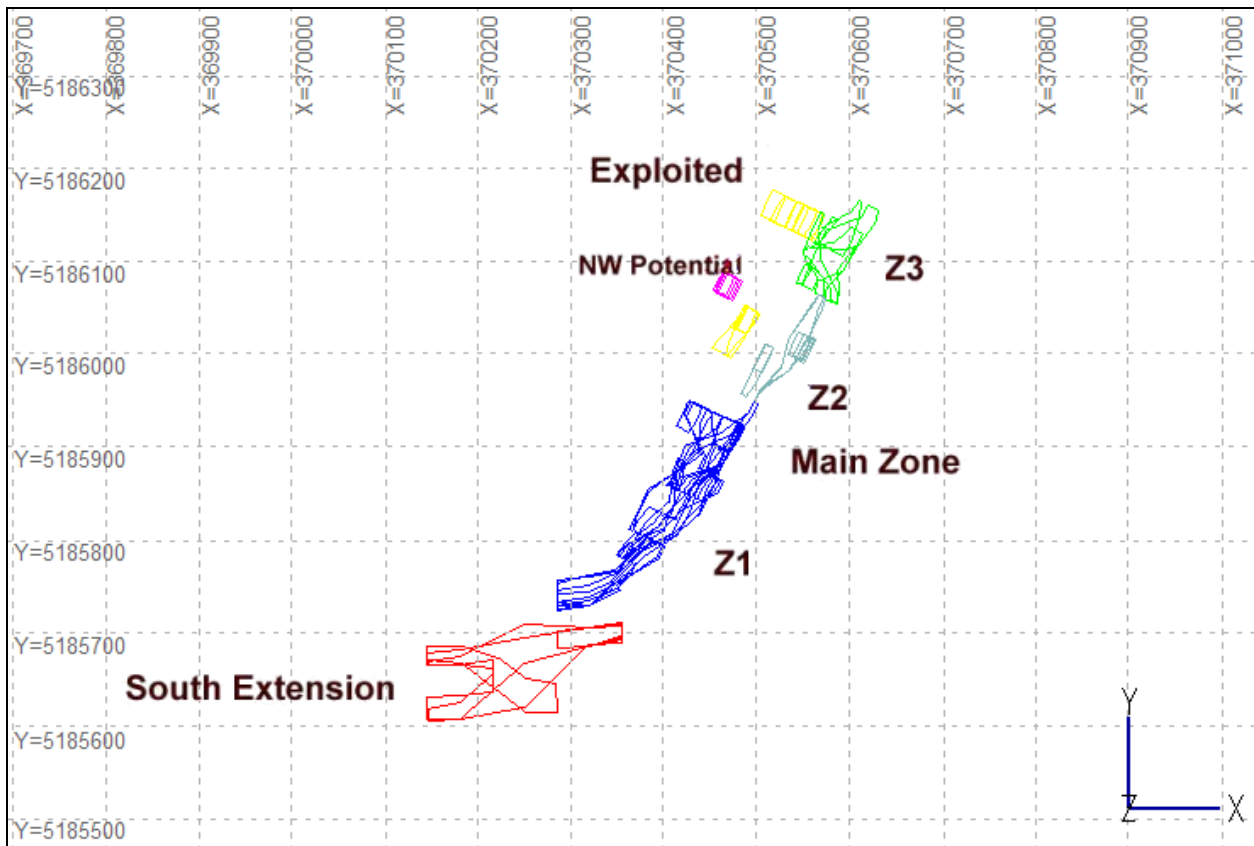


Figure 36: Geological model transposed in horizontal slices

### 16.3 Composites

80 zones were recognized in total from all of the holes intercepting the mineral body. Some of these intercepts are historic since they belong to mineral that has been mined. They are listed here because their values have been used to evaluate the grades in the remaining mineral down below. The list of the zones is presented in the next table.

In each of these intercepts, composite intervals of 5 meters length have been averaged in order to remove a possible bias due to smaller and possibly richer intervals. The list of the 272 composite lengths is shown on the second table below.

HoleName	From	To	Zone	Cu	Ni	SG	nieq	Au	Pt	Pd	Ag	Co
RZ-05-12	30.5	37.4	Exploited	0.593	0.274	1.09	0.422	0.069	0.043	0.02	1.21	0.023
8	37.25	49.99	Exploited	0.749	0.567	-1	0.754	-1	-1	-1	-1	-1
79	18.65	40.72	Exploited	0.787	0.802	3.25	0.999	-1	-1	-1	-1	-1
78	21.64	28.86	Exploited	0.631	0.848	-1	1.006	-1	-1	-1	-1	-1
77	14.63	32.06	Exploited	0.385	0.406	3.33	0.502	-1	-1	-1	-1	-1
2	30.48	48.55	Exploited	0.892	1.353	-1	1.576	-1	-1	-1	-1	-1
144	34.75	35.66	Exploited	3.37	1.28	-1	2.123	-1	-1	-1	-1	-1
120	13.93	32.22	Exploited	0.27	0.341	-1	0.409	-1	-1	-1	-1	-1
RZ-05-07	12.3	33	Extension	0.601	0.698	3.49	0.848	0.042	0.034	0.06	0.553	0.05
RZ-05-06	18.35	23	Extension	0.73	0.579	3.19	0.762	0.071	0.053	0.063	0	0.033
RZ-05-05	14	24.35	Extension	0.707	0.42	3.22	0.597	0.09	0.057	0.068	0.155	0.023
RZ-05-04	10.8	16.6	Extension	0.344	0.26	3.18	0.346	0.056	0.039	0.035	1.052	0.022
RZ-05-03	11	16.8	Extension	0.593	0.425	3.25	0.573	0.081	0.054	0.091	1.345	0.028
RZ-05-01	11.82	22.7	Extension	0.385	0.337	3.3	0.433	0.04	0.021	0.036	1.129	0.022
160	6.71	20.33	Extension	0.452	0.3	-1	0.413	-1	-1	-1	-1	-1
153	10.67	13.72	Extension	3.943	0.884	-1	1.870	-1	-1	-1	-1	-1
130	6.34	14.42	Extension	0.445	0.292	-1	0.403	-1	-1	-1	-1	-1
118	7.62	17.5	Extension	0.414	0.284	3.14	0.388	-1	-1	-1	-1	-1
RZ-05-20	26	43.3	Main-Z1	0.273	0.418	3.57	0.486	0.014	0.024	0.034	1.036	0.033
RZ-05-20	69.3	76	Main-Z1	0.346	0.235	3.08	0.322	0.177	0.351	0.539	1.603	0.015
RZ-05-19	25.6	75.87	Main-Z1	0.314	0.318	1.45	0.397	0.048	0.064	0.093	1.163	0.025
RZ-05-16	46	66.6	Main-Z1	0.184	0.154	3.07	0.200	0.016	0.006	0.012	0.432	0.017
RZ-05-15	35.3	50	Main-Z1	0.591	0.452	3.31	0.600	0.046	0.044	0.042	1.398	0.033
RZ-05-11	21.45	56	Main-Z1	0.772	0.575	3.62	0.768	0.051	0.047	0.063	1.741	0.044
RZ-05-10	26.3	38	Main-Z1	1.051	0.525	4.05	0.788	0.083	0.021	0.04	2.281	0.043
RZ-05-09	23.45	43.1	Main-Z1	0.261	0.26	3.16	0.325	0.045	0.061	0.056	1.051	0.019
E65	18.29	26.52	Main-Z1	2.684	1.54	-1	2.211	-1	-1	-1	-1	-1
E58	8.5	31	Main-Z1	5.749	7.392	0	8.829	0	0	0	0	0
E43	16.76	22.86	Main-Z1	0.17	0.496	-1	0.539	-1	-1	-1	-1	-1
94	10.06	36.85	Main-Z1	0.656	0.682	3.27	0.846	0	0	0	0	0
90	25.6	33.19	Main-Z1	0.361	0.51	3.39	0.600	-1	-1	-1	-1	-1
9	21.79	37.03	Main-Z1	0.272	0.296	-1	0.364	-1	-1	-1	-1	-1
87	19.6	27.49	Main-Z1	1.097	1.073	3.69	1.347	-1	-1	-1	-1	-1
81	20.12	41.15	Main-Z1	0.23	0.243	3.2	0.301	-1	-1	-1	-1	-1
80	37.25	49.38	Main-Z1	0.246	0.328	3.29	0.390	0	0	0	0	0
76	51.08	63.64	Main-Z1	0.275	0.266	-1	0.335	-1	-1	-1	-1	-1
75	53.28	66.26	Main-Z1	0.546	0.545	-1	0.682	-1	-1	-1	-1	-1
52	55.72	69.43	Main-Z1	0.533	0.384	-1	0.517	-1	-1	-1	-1	-1
47	29.47	62.51	Main-Z1	0.65	0.404	0	0.567	0	0	0	0	0
46	23.01	34.44	Main-Z1	0.488	0.706	-1	0.828	-1	-1	-1	-1	-1
45	25.3	42.06	Main-Z1	0.71	0.761	-1	0.939	-1	-1	-1	-1	-1
40	36	51.97	Main-Z1	0.415	0.713	0	0.817	0	0	0	0	0
39	53.1	71.02	Main-Z1	0.223	0.306	0	0.362	0	0	0	0	0
38	30.48	63.4	Main-Z1	0.471	0.467	-1	0.585	-1	-1	-1	-1	-1
37	28.35	63.4	Main-Z1	0.497	0.493	-1	0.617	-1	-1	-1	-1	-1
36	35.66	38.71	Main-Z1	0.22	0.32	-1	0.375	-1	-1	-1	-1	-1
34	54.25	127.41	Main-Z1	0.943	0.828	-1	1.064	-1	-1	-1	-1	-1
32	64.47	94.18	Main-Z1	0.319	0.324	0	0.404	0	0	0	0	0
31	63.4	71.14	Main-Z1	0.314	0.323	-1	0.402	-1	-1	-1	-1	-1
19	27.58	50.44	Main-Z1	0.749	0.902	-1	1.089	-1	-1	-1	-1	-1
17	13.11	29.87	Main-Z1	0.508	0.42	0	0.547	0	0	0	0	0
140	8.5	26.5	Main-Z1	0.013	0.047	0	0.050	0	0	0	0	0
135	35.36	44.5	Main-Z1	0.411	0.285	-1	0.388	-1	-1	-1	-1	-1
114	34.84	45.51	Main-Z1	1.199	1.035	3.6	1.335	-1	-1	-1	-1	-1
113	22.37	25.02	Main-Z1	1.196	0.713	3.41	1.012	-1	-1	-1	-1	-1
110	24.08	30.24	Main-Z1	0.245	0.212	3.07	0.273	-1	-1	-1	-1	-1
108	23.71	34.96	Main-Z1	0.943	0.596	3.3	0.832	-1	-1	-1	-1	-1
104	22.01	31.09	Main-Z1	0.21	0.24	-1	0.293	-1	-1	-1	-1	-1
102	26.52	52.73	Main-Z1	0.113	0.167	3.25	0.195	-1	-1	-1	-1	-1
RZ-05-17	19.2	19.8	Main-Z2	0.467	1.155	3.38	1.272	0.015	0.027	0.097	0	0.084
RZ-05-14	6.4	21.1	Main-Z2	1.246	1.015	3.37	1.327	0.047	0.151	0.081	2.446	0.075
E85	5.49	15.54	Main-Z2	0.06	0.093	0	0.108	0	0	0	0	0
E75	6.52	7.41	Main-Z2	0.51	0.85	-1	0.978	-1	-1	-1	-1	-1
E71	8.05	16.46	Main-Z2	1.133	1.141	-1	1.424	-1	-1	-1	-1	-1
E69	4.57	18	Main-Z2	1.132	0.416	0	0.699	0	0	0	0	0
E68	14.94	19.51	Main-Z2	0.347	0.243	-1	0.330	-1	-1	-1	-1	-1
E64	16.15	19.81	Main-Z2	0.41	0.33	-1	0.433	-1	-1	-1	-1	-1
E129	5.33	14.48	Main-Z2	0.35	0.297	-1	0.385	-1	-1	-1	-1	-1
27	30.18	36.58	Main-Z2	0.396	0.318	-1	0.417	-1	-1	-1	-1	-1
26	18.9	34.66	Main-Z2	0.179	0.132	0	0.177	0	0	0	0	0
156	18.5	27.71	Main-Z2	0.498	0.261	-1	0.386	-1	-1	-1	-1	-1
96	22.22	41.45	Main-Z3	0.449	0.33	3.16	0.442	-1	-1	-1	-1	-1
93	23.74	41.3	Main-Z3	0.129	0.142	1.65	0.174	0	0	0	0	0
55	48.92	62.64	Main-Z3	0.32	0.279	-1	0.359	-1	-1	-1	-1	-1
147	28.22	32.83	Main-Z3	0.605	0.497	-1	0.648	-1	-1	-1	-1	-1
146	14.69	23.53	Main-Z3	0.443	0.357	-1	0.468	-1	-1	-1	-1	-1
138	20.51	34.26	Main-Z3	0.421	0.301	-1	0.406	-1	-1	-1	-1	-1
121	28.96	39.14	Main-Z3	0.633	0.516	-1	0.674	-1	-1	-1	-1	-1
18	16.15	44.5	NW Potent	0.722	0.781	0	0.962	0	0	0	0	0

Table 8: List of intercepts in each diamond drill hole

HoleName	Zone	Length	X Centre	Y Centre	Z Centre	Cu	Ni	nieq	Au	Pt	Pd	Ag	Co
RZ-05-12	Exploited	5	370476.91	5186023.45	363.27	0.29	0.216	0.289	0.036	0.007	0.016	0.59	0.0184
RZ-05-12	Exploited	1.9	370476.91	5186023.45	359.82	1.391	0.426	0.774	0.157	0.139	0.029	2.842	0.0358
8	Exploited	5	370476.42	5186011.43	365.89	1.238	0.948	1.258	0	0	0	0	0
8	Exploited	5	370473.19	5186012.87	362.36	0.604	0.393	0.544	0	0	0	0	0
8	Exploited	2.74	370470.69	5186013.98	359.62	0.12	0.19	0.220	0	0	0	0	0
79	Exploited	5	370545.5	5186142.2	372.85	0.561	0.693	0.833	0	0	0	0	0
79	Exploited	5	370545.5	5186142.2	367.85	0.646	0.686	0.848	0	0	0	0	0
79	Exploited	5	370545.5	5186142.2	362.85	0.913	0.756	0.984	0	0	0	0	0
79	Exploited	5	370545.5	5186142.2	357.85	1.266	1.022	1.339	0	0	0	0	0
79	Exploited	2.07	370545.5	5186142.2	354.31	0.212	0.919	0.972	0	0	0	0	0
78	Exploited	5	370517.8	5186155.1	369.86	0.751	0.978	1.166	0	0	0	0	0
78	Exploited	2.22	370517.8	5186155.1	366.25	0.36	0.557	0.647	0	0	0	0	0
77	Exploited	5	370532.5	5186148.6	376.87	0.326	0.356	0.438	0	0	0	0	0
77	Exploited	5	370532.5	5186148.6	371.87	0.191	0.294	0.342	0	0	0	0	0
77	Exploited	5	370532.5	5186148.6	366.87	0.419	0.295	0.400	0	0	0	0	0
77	Exploited	2.43	370532.5	5186148.6	363.15	0.839	0.969	1.179	0	0	0	0	0
144	Exploited	0.91	370460.2	5186019.7	358.8	3.37	1.28	2.123	0	0	0	0	0
120	Exploited	5	370559.6	5186135.4	377.57	0.086	0.157	0.179	0	0	0	0	0
120	Exploited	5	370559.6	5186135.4	372.57	0.297	0.409	0.483	0	0	0	0	0
120	Exploited	5	370559.6	5186135.4	367.57	0.481	0.558	0.678	0	0	0	0	0
120	Exploited	3.29	370559.6	5186135.4	363.42	0.189	0.185	0.232	0	0	0	0	0
RZ-05-07	Extension South	5	370321.89	5185695.37	381.46	1.645	2.079	2.490	0.087	0.062	0.168	1.58	0.1422
RZ-05-07	Extension South	5	370321.89	5185695.37	376.46	0.157	0.163	0.202	0.022	0.012	0.02	0	0.0189
RZ-05-07	Extension South	5	370321.89	5185695.37	371.46	0.203	0.18	0.231	0.023	0.025	0.017	0.2	0.0175
RZ-05-07	Extension South	5	370321.89	5185695.37	366.46	0.415	0.412	0.516	0.038	0.039	0.04	0.37	0.0265
RZ-05-07	Extension South	0.7	370321.89	5185695.37	363.61	0.49	0.39	0.513	0.039	0.024	0.043	1	0.02
RZ-05-06	Extension South	4.65	370248.84	5185705.34	375.68	0.73	0.579	0.762	0.071	0.053	0.063	0	0.033
RZ-05-05	Extension South	5	370248.8	5185681.37	379.8	0.365	0.239	0.330	0.089	0.057	0.062	0.03	0.0145
RZ-05-05	Extension South	5	370248.8	5185681.37	374.8	1.056	0.618	0.882	0.081	0.057	0.075	0.22	0.033
RZ-05-05	Extension South	0.35	370248.8	5185681.37	372.13	0.62	0.18	0.335	0.233	0.057	0.05	1	0.01
RZ-05-04	Extension South	5	370247.94	5185644.47	382.98	0.335	0.268	0.352	0.052	0.039	0.036	0.74	0.0231
RZ-05-04	Extension South	0.8	370247.94	5185644.47	380.08	0.4	0.21	0.310	0.082	0.044	0.031	3	0.015
RZ-05-03	Extension South	5	370180.78	5185679.44	382.82	0.61	0.44	0.593	0.082	0.058	0.093	1.4	0.0288
RZ-05-03	Extension South	0.8	370180.78	5185679.44	379.92	0.49	0.33	0.453	0.08	0.027	0.076	1	0.023
RZ-05-01	Extension South	5	370180.79	5185621.45	381.99	0.503	0.37	0.496	0.065	0.031	0.049	0.85	0.0256
RZ-05-01	Extension South	5	370180.79	5185621.45	376.99	0.329	0.362	0.444	0.021	0.015	0.029	1.254	0.0212
RZ-05-01	Extension South	0.88	370180.79	5185621.45	374.05	0.03	0.01	0.018	0.004	0	0.003	2	0.004
160	Extension South	5	370185.6	5185671.4	384.79	0.534	0.36	0.494	0	0	0	0	0
160	Extension South	5	370185.6	5185671.4	379.79	0.42	0.266	0.371	0	0	0	0	0
160	Extension South	3.62	370185.6	5185671.4	375.48	0.383	0.264	0.360	0	0	0	0	0
153	Extension South	3.05	370205.9	5185632.7	381.81	3.943	0.884	1.870	0	0	0	0	0
130	Extension South	5	370220.2	5185621.7	385.16	0.479	0.327	0.447	0	0	0	0	0
130	Extension South	3.08	370220.2	5185621.7	381.12	0.389	0.234	0.331	0	0	0	0	0
118	Extension South	5	370163.8	5185678.1	383.88	0.489	0.332	0.454	0	0	0	0	0
118	Extension South	4.88	370163.8	5185678.1	378.94	0.337	0.235	0.319	0	0	0	0	0
RZ-05-20	Main-Z1	5	370419.87	5185848.96	367.69	0.683	1.132	1.303	0.021	0.042	0.08	1.484	0.083
RZ-05-20	Main-Z1	5	370419.87	5185848.96	362.69	0.083	0.124	0.145	0.008	0.019	0.02	0.68	0.013
RZ-05-20	Main-Z1	5	370419.87	5185848.96	357.69	0.102	0.111	0.137	0.01	0.012	0.011	1.01	0.0121
RZ-05-20	Main-Z1	2.3	370419.87	5185848.96	354.03	0.17	0.174	0.217	0.025	0.023	0.018	0.891	0.0163
RZ-05-20	Main-Z1	5	370419.87	5185848.96	324.38	0.357	0.24	0.329	0.185	0.322	0.577	2.148	0.0153
RZ-05-20	Main-Z1	1.7	370419.87	5185848.96	321.03	0.315	0.218	0.297	0.155	0.438	0.43	0	0.0138
RZ-05-19	Main-Z1	5	370457.91	5185890.97	368.03	0.867	1.617	1.834	0.029	0.049	0.119	1.97	0.1202
RZ-05-19	Main-Z1	5	370457.91	5185890.97	363.03	0.267	0.154	0.221	0.052	0.019	0.015	1.6	0.0154
RZ-05-19	Main-Z1	5	370457.91	5185890.97	358.03	0.333	0.305	0.388	0.028	0.032	0.041	1.44	0.0262
RZ-05-19	Main-Z1	5	370457.91	5185890.97	353.03	0.272	0.246	0.314	0.054	0.089	0.116	1.608	0.0212
RZ-05-19	Main-Z1	5	370457.91	5185890.97	348.03	0.243	0.152	0.213	0.058	0.028	0.019	1.08	0.0135
RZ-05-19	Main-Z1	5	370457.91	5185890.97	343.03	0.082	0.041	0.062	0.014	0.006	0.005	0.48	0.0044
RZ-05-19	Main-Z1	5	370457.91	5185890.97	338.03	0	0	0.000	0	0	0	0	0
RZ-05-19	Main-Z1	5	370457.91	5185890.97	333.03	0.083	0.036	0.057	0.024	0.02	0.037	0.404	0.0035
RZ-05-19	Main-Z1	5	370457.91	5185890.97	328.03	0.332	0.186	0.269	0.136	0.169	0.228	1.2	0.0153
RZ-05-19	Main-Z1	5	370457.91	5185890.97	323.03	0.65	0.44	0.603	0.088	0.217	0.334	1.752	0.0267
RZ-05-19	Main-Z1	0.27	370457.91	5185890.97	320.4	0.57	0.338	0.481	0.087	0.31	0.326	3	0.02
RZ-05-16	Main-Z1	5	370447.87	5185931.02	347.69	0.117	0.099	0.128	0.014	0.007	0.01	0.2	0.012
RZ-05-16	Main-Z1	5	370447.87	5185931.02	342.69	0.367	0.216	0.308	0.031	0.007	0.018	0.58	0.021
RZ-05-16	Main-Z1	5	370447.87	5185931.02	337.69	0.08	0.102	0.122	0.01	0.003	0.006	0.47	0.0141
RZ-05-16	Main-Z1	5	370447.87	5185931.02	332.69	0.15	0.166	0.204	0.009	0.008	0.011	0.53	0.0182
RZ-05-16	Main-Z1	0.6	370447.87	5185931.02	329.89	0.381	0.416	0.511	0.016	0	0.029	0	0.034
RZ-05-15	Main-Z1	5	370377	5185787	358.48	0.611	0.627	0.780	0.021	0.02	0.037	1.526	0.0464
RZ-05-15	Main-Z1	5	370377	5185787	353.48	0.805	0.432	0.633	0.061	0.042	0.043	1.374	0.0325
RZ-05-15	Main-Z1	4.7	370377	5185787	348.63	0.344	0.286	0.372	0.057	0.07	0.048	1.287	0.0182
RZ-05-11	Main-Z1	5	370477.88	5185919.5	372.35	1.399	0.797	1.147	0.04	0.047	0.122	2.62	0.0632

Table 9: List of composites (part 1/4)



HoleName	Zone	Length	X Centre	Y Centre	Z Centre	Cu	Ni	nieq	Au	Pt	Pd	Ag	Co
RZ-05-11	Main-Z1	5	370477.88	5185919.5	367.35	2.346	1.777	2.364	0.076	0.076	0.099	4.41	0.1308
RZ-05-11	Main-Z1	5	370477.88	5185919.5	362.35	0.29	0.259	0.332	0.048	0.022	0.031	1.35	0.0226
RZ-05-11	Main-Z1	5	370477.88	5185919.5	357.35	0.419	0.43	0.535	0.026	0.039	0.059	0.76	0.034
RZ-05-11	Main-Z1	5	370477.88	5185919.5	352.35	0.375	0.309	0.403	0.051	0.043	0.033	0.68	0.0228
RZ-05-11	Main-Z1	5	370477.88	5185919.5	347.35	0.361	0.313	0.403	0.059	0.05	0.052	1.09	0.02
RZ-05-11	Main-Z1	4.55	370477.88	5185919.5	342.58	0.161	0.099	0.139	0.054	0.052	0.043	1.231	0.0087
RZ-05-10	Main-Z1	5	370398.9	5185827.4	367.51	2.435	1.164	1.773	0.192	0.049	0.09	4.598	0.0857
RZ-05-10	Main-Z1	5	370398.9	5185827.4	362.51	0.02	0.048	0.053	0.002	0	0.002	0.26	0.0112
RZ-05-10	Main-Z1	1.7	370398.9	5185827.4	359.16	0.015	0.052	0.056	0.001	0	0.002	1.412	0.0119
RZ-05-09	Main-Z1	5	370320.81	5185740.44	370.34	0.158	0.154	0.194	0.027	0.02	0.015	1	0.0154
RZ-05-09	Main-Z1	5	370320.81	5185740.44	365.34	0.314	0.383	0.462	0.032	0.045	0.05	1	0.0245
RZ-05-09	Main-Z1	5	370320.81	5185740.44	360.34	0.317	0.279	0.358	0.059	0.078	0.077	1.09	0.0201
RZ-05-09	Main-Z1	4.65	370320.81	5185740.44	355.51	0.257	0.223	0.287	0.064	0.104	0.085	1.118	0.0141
E85	Main-Z1	5	370543	5186011.1	386.01	0.121	0.186	0.216	0	0	0	0	0
E85	Main-Z1	5	370543	5186011.1	381.01	0	0	0.000	0	0	0	0	0
E85	Main-Z1	0.05	370543	5186011.1	378.49	0	0	0.000	0	0	0	0	0
E65	Main-Z1	5	370479.7	5185914.3	373.21	3.416	1.52	2.374	0	0	0	0	0
E65	Main-Z1	3.23	370479.7	5185914.3	369.1	1.551	1.571	1.959	0	0	0	0	0
E58	Main-Z1	5	370366.5	5185791.4	382.7	15.939	20.493	24.478	0	0	0	0	0
E58	Main-Z1	5	370366.5	5185791.4	377.7	9.933	12.771	15.254	0	0	0	0	0
E58	Main-Z1	5	370366.5	5185791.4	372.7	0	0	0.000	0	0	0	0	0
E58	Main-Z1	5	370366.5	5185791.4	367.7	0	0	0.000	0	0	0	0	0
E58	Main-Z1	2	370366.5	5185791.4	364.2	0	0	0.000	0	0	0	0	0
E43	Main-Z1	5	370392.8	5185807.7	374.74	0.19	0.594	0.642	0	0	0	0	0
E43	Main-Z1	1.1	370392.8	5185807.7	371.69	0.08	0.05	0.070	0	0	0	0	0
94	Main-Z1	5	370405.1	5185810.5	381.44	0.949	1.336	1.573	0	0	0	0	0
94	Main-Z1	5	370405.1	5185810.5	376.44	1.212	0.893	1.196	0	0	0	0	0
94	Main-Z1	5	370405.1	5185810.5	371.44	0.525	0.66	0.791	0	0	0	0	0
94	Main-Z1	5	370405.1	5185810.5	366.44	0.135	0.14	0.174	0	0	0	0	0
94	Main-Z1	5	370405.1	5185810.5	361.44	0.474	0.498	0.617	0	0	0	0	0
94	Main-Z1	1.79	370405.1	5185810.5	358.04	0.62	0.35	0.505	0	0	0	0	0
93	Main-Z1	5	370557.75	5186103.64	374.5	0.125	0.178	0.209	0	0	0	0	0
93	Main-Z1	5	370560.77	5186102.2	370.78	0	0	0.000	0	0	0	0	0
93	Main-Z1	5	370563.79	5186100.76	367.07	0.125	0.156	0.187	0	0	0	0	0
93	Main-Z1	2.56	370566.07	5186099.67	364.26	0.398	0.318	0.418	0	0	0	0	0
90	Main-Z1	5	370378	5185823.4	365.9	0.275	0.285	0.354	0	0	0	0	0
90	Main-Z1	2.59	370378	5185823.4	362.11	0.527	0.944	1.076	0	0	0	0	0
9	Main-Z1	5	370428	5185838.16	372.96	0.256	0.301	0.365	0	0	0	0	0
9	Main-Z1	5	370430.28	5185837.14	368.63	0.2	0.222	0.272	0	0	0	0	0
9	Main-Z1	5	370432.56	5185836.13	364.3	0.352	0.358	0.446	0	0	0	0	0
9	Main-Z1	0.24	370433.76	5185835.59	362.04	0.44	0.42	0.530	0	0	0	0	0
87	Main-Z1	5	370392.4	5185816.9	371.9	0.617	0.428	0.582	0	0	0	0	0
87	Main-Z1	2.89	370392.4	5185816.9	367.95	1.927	2.188	2.670	0	0	0	0	0
81	Main-Z1	5	370430.87	5185836.52	373.5	0.139	0.136	0.171	0	0	0	0	0
81	Main-Z1	5	370428.96	5185837.43	368.97	0.276	0.246	0.315	0	0	0	0	0
81	Main-Z1	5	370427.06	5185838.33	364.44	0.246	0.267	0.329	0	0	0	0	0
81	Main-Z1	5	370425.15	5185839.24	359.9	0.256	0.301	0.365	0	0	0	0	0
81	Main-Z1	1.03	370424	5185839.79	357.17	0.24	0.35	0.410	0	0	0	0	0
80	Main-Z1	5	370395.43	5185854.2	365.89	0.222	0.278	0.334	0	0	0	0	0
80	Main-Z1	5	370392.24	5185855.72	362.36	0.304	0.397	0.473	0	0	0	0	0
80	Main-Z1	2.13	370389.96	5185856.81	359.84	0.17	0.283	0.326	0	0	0	0	0
76	Main-Z1	5	370440.14	5185928.16	342.76	0.1	0.146	0.171	0	0	0	0	0
76	Main-Z1	5	370441.46	5185927.53	337.98	0.537	0.458	0.592	0	0	0	0	0
76	Main-Z1	2.56	370442.46	5185927.05	334.36	0.108	0.127	0.154	0	0	0	0	0
75	Main-Z1	5	370424.8	5185936.2	338.22	0.846	0.807	1.019	0	0	0	0	0
75	Main-Z1	5	370424.8	5185936.2	333.22	0.436	0.269	0.378	0	0	0	0	0
75	Main-Z1	2.98	370424.8	5185936.2	329.23	0.229	0.567	0.624	0	0	0	0	0
52	Main-Z1	5	370351.99	5185755.71	360.14	0.421	0.524	0.629	0	0	0	0	0
52	Main-Z1	5	370348.38	5185757.39	357.1	0.032	0.044	0.052	0	0	0	0	0
52	Main-Z1	3.71	370345.25	5185758.85	354.45	1.36	0.653	0.993	0	0	0	0	0
47	Main-Z1	5	370422.84	5185871.56	365.03	0.023	0.078	0.084	0	0	0	0	0
47	Main-Z1	5	370420.78	5185871.09	360.49	0.178	0.071	0.116	0	0	0	0	0
47	Main-Z1	5	370418.72	5185870.61	355.96	3.502	1.835	2.711	0	0	0	0	0
47	Main-Z1	5	370416.66	5185870.13	351.43	0.158	0.193	0.233	0	0	0	0	0
47	Main-Z1	5	370414.6	5185869.66	346.9	0.233	0.262	0.320	0	0	0	0	0
47	Main-Z1	5	370412.54	5185869.18	342.37	0.128	0.145	0.177	0	0	0	0	0
47	Main-Z1	3.04	370410.89	5185868.8	338.72	0.12	0.14	0.170	0	0	0	0	0
46	Main-Z1	5	370446	5185870.56	370.88	0.805	1.23	1.431	0	0	0	0	0
46	Main-Z1	5	370447.96	5185869.77	366.35	0.228	0.303	0.360	0	0	0	0	0
46	Main-Z1	1.43	370449.21	5185869.26	363.43	0.29	0.28	0.353	0	0	0	0	0
45	Main-Z1	5	370436	5185874.6	366.2	1.678	1.802	2.222	0	0	0	0	0

Table 10: List of composites (part 2/4)

HoleName	Zone	Length	X Centre	Y Centre	Z Centre	Cu	Ni	nieq	Au	Pt	Pd	Ag	Co
45	Main-Z1	5	370436	5185874.6	361.2	0.265	0.272	0.338	0	0	0	0	0
45	Main-Z1	5	370436	5185874.6	356.2	0.337	0.377	0.461	0	0	0	0	0
45	Main-Z1	1.76	370436	5185874.6	352.82	0.286	0.283	0.355	0	0	0	0	0
40	Main-Z1	5	370460.3	5185917	355.5	0.243	0.522	0.583	0	0	0	0	0
40	Main-Z1	5	370460.3	5185917	350.5	0.492	1.102	1.225	0	0	0	0	0
40	Main-Z1	5	370460.3	5185917	345.5	0.517	0.588	0.717	0	0	0	0	0
40	Main-Z1	0.97	370460.3	5185917	342.51	0.38	0.33	0.425	0	0	0	0	0
39	Main-Z1	5	370438.22	5185925.04	343.61	0.006	0.027	0.029	0	0	0	0	0
39	Main-Z1	5	370436.23	5185925.76	339.08	0.297	0.32	0.394	0	0	0	0	0
39	Main-Z1	5	370434.25	5185926.48	334.55	0.215	0.252	0.306	0	0	0	0	0
39	Main-Z1	2.92	370432.68	5185927.05	330.96	0.481	0.847	0.967	0	0	0	0	0
38	Main-Z1	5	370470.9	5185913.14	363.01	1.266	1.205	1.522	0	0	0	0	0
38	Main-Z1	5	370472.51	5185912.56	358.31	0.145	0.269	0.305	0	0	0	0	0
38	Main-Z1	5	370474.11	5185911.97	353.61	0.251	0.311	0.374	0	0	0	0	0
38	Main-Z1	5	370475.72	5185911.39	348.91	0.415	0.441	0.545	0	0	0	0	0
38	Main-Z1	5	370477.33	5185910.8	344.22	0.345	0.307	0.393	0	0	0	0	0
38	Main-Z1	5	370478.93	5185910.22	339.52	0.46	0.394	0.509	0	0	0	0	0
38	Main-Z1	2.92	370480.21	5185909.75	335.8	0.377	0.257	0.351	0	0	0	0	0
37	Main-Z1	5	370452.99	5185894.62	366.04	1.041	1.03	1.290	0	0	0	0	0
37	Main-Z1	5	370454.95	5185893.82	361.51	0.341	0.362	0.447	0	0	0	0	0
37	Main-Z1	5	370456.91	5185893.03	356.98	0.225	0.246	0.302	0	0	0	0	0
37	Main-Z1	5	370458.87	5185892.24	352.45	0.427	0.416	0.523	0	0	0	0	0
37	Main-Z1	5	370460.83	5185891.45	347.91	0.291	0.339	0.412	0	0	0	0	0
37	Main-Z1	5	370462.78	5185890.66	343.38	0.688	0.614	0.786	0	0	0	0	0
37	Main-Z1	5	370464.74	5185889.87	338.85	0.465	0.442	0.558	0	0	0	0	0
37	Main-Z1	0.05	370465.73	5185889.47	336.56	0.44	0.46	0.570	0	0	0	0	0
36	Main-Z1	3.05	370426.33	5185905.39	360.3	0.22	0.32	0.375	0	0	0	0	0
34	Main-Z1	5	370475.42	5185912.61	365.63	0.324	0.507	0.588	0	0	0	0	0
34	Main-Z1	5	370471.35	5185914.09	363.13	0.727	0.669	0.851	0	0	0	0	0
34	Main-Z1	5	370467.28	5185915.57	360.63	0.366	0.551	0.643	0	0	0	0	0
34	Main-Z1	5	370463.21	5185917.05	358.13	0.882	1.401	1.622	0	0	0	0	0
34	Main-Z1	5	370459.14	5185918.53	355.63	0.821	1.21	1.415	0	0	0	0	0
34	Main-Z1	5	370455.07	5185920.01	353.13	0.642	1.257	1.418	0	0	0	0	0
34	Main-Z1	5	370451	5185921.5	350.63	2.753	1.924	2.612	0	0	0	0	0
34	Main-Z1	5	370446.93	5185922.98	348.13	0.496	0.709	0.833	0	0	0	0	0
34	Main-Z1	5	370442.87	5185924.46	345.63	2.652	0.381	1.044	0	0	0	0	0
34	Main-Z1	5	370438.8	5185925.94	343.13	1.72	0.666	1.096	0	0	0	0	0
34	Main-Z1	5	370434.73	5185927.42	340.63	0.946	0.999	1.236	0	0	0	0	0
34	Main-Z1	5	370430.66	5185928.9	338.13	0.41	0.696	0.799	0	0	0	0	0
34	Main-Z1	5	370426.59	5185930.38	335.63	0.398	0.469	0.569	0	0	0	0	0
34	Main-Z1	5	370422.52	5185931.86	333.13	0.427	0.608	0.715	0	0	0	0	0
34	Main-Z1	3.16	370419.2	5185933.07	331.09	0.384	0.099	0.195	0	0	0	0	0
32	Main-Z1	5	370466.74	5185895.8	355.59	0.909	0.849	1.076	0	0	0	0	0
32	Main-Z1	5	370462.65	5185895.8	352.72	0.483	0.547	0.668	0	0	0	0	0
32	Main-Z1	5	370458.55	5185895.8	349.85	0.354	0.379	0.468	0	0	0	0	0
32	Main-Z1	5	370454.45	5185895.8	346.98	0.15	0.15	0.188	0	0	0	0	0
32	Main-Z1	5	370450.36	5185895.8	344.12	0	0	0.000	0	0	0	0	0
32	Main-Z1	4.71	370446.38	5185895.8	341.33	0	0	0.000	0	0	0	0	0
31	Main-Z1	5	370486.9	5185937.15	356.2	0.314	0.274	0.353	0	0	0	0	0
31	Main-Z1	2.74	370484.86	5185939.58	353.98	0.314	0.414	0.493	0	0	0	0	0
2	Main-Z1	5	370489.4	5186038.5	361.02	1.157	1.325	1.614	0	0	0	0	0
2	Main-Z1	5	370489.4	5186038.5	356.02	1.499	2.543	2.918	0	0	0	0	0
2	Main-Z1	5	370489.4	5186038.5	351.02	0.449	0.791	0.903	0	0	0	0	0
2	Main-Z1	3.07	370489.4	5186038.5	346.99	0.195	0.376	0.425	0	0	0	0	0
19	Main-Z1	5	370440.9	5185899.5	363.92	0.232	0.382	0.440	0	0	0	0	0
19	Main-Z1	5	370440.9	5185899.5	358.92	0.737	0.779	0.963	0	0	0	0	0
19	Main-Z1	5	370440.9	5185899.5	353.92	1.781	2.177	2.622	0	0	0	0	0
19	Main-Z1	5	370440.9	5185899.5	348.92	0.454	0.6	0.714	0	0	0	0	0
19	Main-Z1	2.86	370440.9	5185899.5	344.99	0.383	0.326	0.422	0	0	0	0	0
17	Main-Z1	5	370369.87	5185789.97	380.48	1.012	0.901	1.154	0	0	0	0	0
17	Main-Z1	5	370367.59	5185790.99	376.15	0.388	0.178	0.275	0	0	0	0	0
17	Main-Z1	5	370365.3	5185792.01	371.82	0.211	0.159	0.212	0	0	0	0	0
17	Main-Z1	1.76	370363.76	5185792.7	368.89	0.26	0.48	0.545	0	0	0	0	0
140	Main-Z1	5	370363.4	5185792	383	0	0	0.000	0	0	0	0	0
140	Main-Z1	5	370363.4	5185792	378	0.014	0.034	0.038	0	0	0	0	0
140	Main-Z1	5	370363.4	5185792	373	0.033	0.136	0.144	0	0	0	0	0
140	Main-Z1	3	370363.4	5185792	369	0	0	0.000	0	0	0	0	0
135	Main-Z1	5	370389	5185780.1	356.14	0.122	0.178	0.209	0	0	0	0	0
135	Main-Z1	4.14	370389	5185780.1	351.57	0.76	0.413	0.603	0	0	0	0	0
114	Main-Z1	5	370489.21	5185932.88	364.98	1.649	0.478	0.890	0	0	0	0	0
114	Main-Z1	5	370492.05	5185931.53	361.1	0.778	1.506	1.701	0	0	0	0	0

Table 11: List of composites (part 3/4)

HoleName	Zone	Length	X Centre	Y Centre	Z Centre	Cu	Ni	nieq	Au	Pt	Pd	Ag	Co
114	Main-Z1	0.67	370493.66	5185930.76	358.89	0.99	1.68	1.928	0	0	0	0	0
113	Main-Z1	2.65	370477.37	5185909.92	375.33	1.196	0.713	1.012	0	0	0	0	0
110	Main-Z1	5	370454.73	5185865.48	375.38	0.201	0.189	0.239	0	0	0	0	0
110	Main-Z1	2.68	370457.05	5185864.37	372.52	0.29	0.206	0.279	0	0	0	0	0
108	Main-Z1	5	370441.18	5185871.86	369.53	0.246	0.159	0.221	0	0	0	0	0
108	Main-Z1	5	370442.8	5185871.08	364.86	1.675	0.841	1.260	0	0	0	0	0
108	Main-Z1	1.25	370443.81	5185870.6	361.95	0.8	1.37	1.570	0	0	0	0	0
104	Main-Z1	5	370419.7	5185882.1	374.17	0.203	0.239	0.290	0	0	0	0	0
104	Main-Z1	4.08	370417.29	5185883.25	370.5	0.219	0.241	0.296	0	0	0	0	0
102	Main-Z1	5	370425.04	5185879.55	366.25	0.031	0.07	0.078	0	0	0	0	0
102	Main-Z1	5	370423.72	5185880.18	361.47	0.24	0.418	0.478	0	0	0	0	0
102	Main-Z1	5	370422.4	5185880.81	356.68	0.114	0.124	0.153	0	0	0	0	0
102	Main-Z1	5	370421.08	5185881.44	351.9	0.085	0.084	0.105	0	0	0	0	0
102	Main-Z1	5	370419.76	5185882.07	347.12	0.101	0.156	0.181	0	0	0	0	0
102	Main-Z1	1.21	370418.94	5185882.46	344.15	0.1	0.1	0.125	0	0	0	0	0
RZ-05-17	Main-Z2	0.6	370502.86	5185961	376.72	0.467	1.155	1.272	0.015	0.027	0.097	0	0.084
RZ-05-14	Main-Z2	5	370535.03	5186007.4	387.47	1.431	1.257	1.615	0.045	0.34	0.093	2.81	0.0898
RZ-05-14	Main-Z2	5	370535.03	5186007.4	382.47	1.211	0.463	0.766	0.064	0.052	0.032	2.45	0.0377
RZ-05-14	Main-Z2	4.7	370535.03	5186007.4	377.62	1.087	1.345	1.617	0.033	0.055	0.118	2.053	0.098
E75	Main-Z2	0.89	370509.1	5185966	387.03	0.51	0.85	0.978	0	0	0	0	0
E71	Main-Z2	5	370534.9	5185996.1	383.45	1.205	1.235	1.536	0	0	0	0	0
E71	Main-Z2	3.41	370534.9	5185996.1	379.25	1.027	1.003	1.260	0	0	0	0	0
E69	Main-Z2	5	370535.3	5186011.3	386.93	1.302	0.723	1.049	0	0	0	0	0
E69	Main-Z2	5	370535.3	5186011.3	381.93	1.737	0.396	0.830	0	0	0	0	0
E69	Main-Z2	3.43	370535.3	5186011.3	377.72	0	0	0.000	0	0	0	0	0
E68	Main-Z2	4.57	370496.3	5185974.3	376.77	0.347	0.243	0.330	0	0	0	0	0
E64	Main-Z2	3.66	370496.5	5185981.9	376.02	0.41	0.33	0.433	0	0	0	0	0
E129	Main-Z2	5	370569.2	5186058.3	386.17	0.406	0.279	0.381	0	0	0	0	0
E129	Main-Z2	4.15	370569.2	5186058.3	381.6	0.283	0.318	0.389	0	0	0	0	0
27	Main-Z2	5	370553.88	5186006.42	364.38	0.412	0.339	0.442	0	0	0	0	0
27	Main-Z2	1.4	370552.65	5186006.97	361.48	0.34	0.24	0.325	0	0	0	0	0
26	Main-Z2	5	370550.49	5186007.93	381.73	0.232	0.193	0.251	0	0	0	0	0
26	Main-Z2	5	370546.74	5186009.6	378.86	0.119	0.132	0.162	0	0	0	0	0
26	Main-Z2	5	370543	5186011.26	375.99	0	0	0.000	0	0	0	0	0
26	Main-Z2	0.76	370540.85	5186012.22	374.34	1.402	0.604	0.955	0	0	0	0	0
156	Main-Z2	5	370506.41	5185997.96	373.72	0.519	0.32	0.450	0	0	0	0	0
156	Main-Z2	4.21	370507.48	5185997.45	369.27	0.473	0.191	0.309	0	0	0	0	0
96	Main-Z3	5	370577.93	5186094.08	375.63	0.506	0.382	0.509	0	0	0	0	0
96	Main-Z3	5	370580.95	5186092.64	371.91	0.502	0.331	0.457	0	0	0	0	0
96	Main-Z3	5	370583.97	5186091.2	368.2	0.334	0.182	0.266	0	0	0	0	0
96	Main-Z3	4.23	370586.76	5186089.87	364.77	0.456	0.443	0.557	0	0	0	0	0
55	Main-Z3	5	370560.23	5186084.8	364.51	0.496	0.44	0.564	0	0	0	0	0
55	Main-Z3	5	370556.51	5186086.53	361.64	0.192	0.176	0.224	0	0	0	0	0
55	Main-Z3	3.72	370553.28	5186088.04	359.14	0.255	0.2	0.264	0	0	0	0	0
147	Main-Z3	4.61	370613.2	5186143.2	363.47	0.605	0.497	0.648	0	0	0	0	0
146	Main-Z3	5	370577.2	5186071.2	376.81	0.43	0.402	0.510	0	0	0	0	0
146	Main-Z3	3.84	370577.2	5186071.2	372.39	0.459	0.299	0.414	0	0	0	0	0
138	Main-Z3	5	370598.5	5186117.3	370.99	0.441	0.27	0.380	0	0	0	0	0
138	Main-Z3	5	370598.5	5186117.3	365.99	0.446	0.371	0.483	0	0	0	0	0
138	Main-Z3	3.75	370598.5	5186117.3	361.62	0.358	0.251	0.341	0	0	0	0	0
121	Main-Z3	5	370573.2	5186129.3	362.54	0.809	0.607	0.809	0	0	0	0	0
121	Main-Z3	5	370573.2	5186129.3	357.54	0.468	0.43	0.547	0	0	0	0	0
121	Main-Z3	0.18	370573.2	5186129.3	354.95	0.35	0.39	0.478	0	0	0	0	0
18	NW Potential	5	370479.27	5186080.16	380.81	0.602	0.719	0.870	0	0	0	0	0
18	NW Potential	5	370475.99	5186078.84	377.28	0.64	0.708	0.868	0	0	0	0	0
18	NW Potential	5	370472.72	5186077.51	373.74	0.813	0.213	0.416	0	0	0	0	0
18	NW Potential	5	370469.44	5186076.19	370.21	0.234	0.255	0.314	0	0	0	0	0
18	NW Potential	5	370466.16	5186074.86	366.67	0.748	1.11	1.297	0	0	0	0	0
18	NW Potential	3.35	370463.42	5186073.76	363.72	1.579	2.123	2.518	0	0	0	0	0

Table 12: List of composites (part 4/4)

## 16.4 Analysis of Grades Distribution and Capping Value

The analysis of the histograms shows that both Cu and Ni have logarithmic distributions. The cumulative frequency graphs in the log scale shows one high value for each variable that should be capped since the points at the right of the graphs jump upward compared to the rest of the values. Note that the maximums do not show on these graphs and they should be capped at the same value. The graphs shows the capping values calculated graphically.

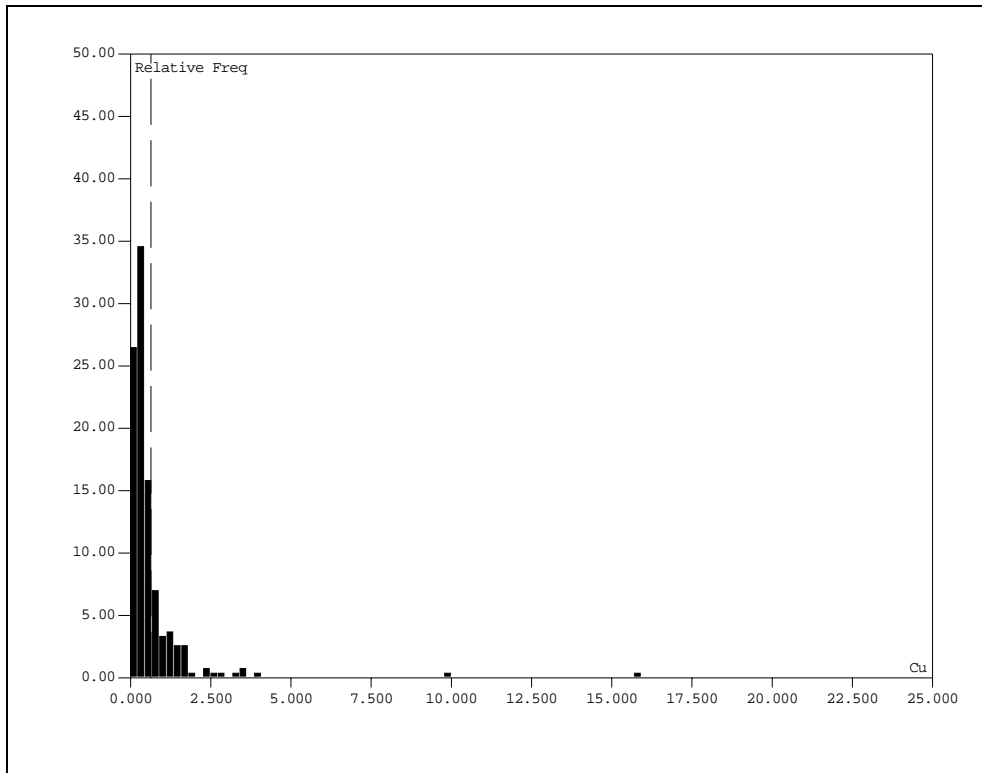


Figure 37: Histogram of Cu with normal scale

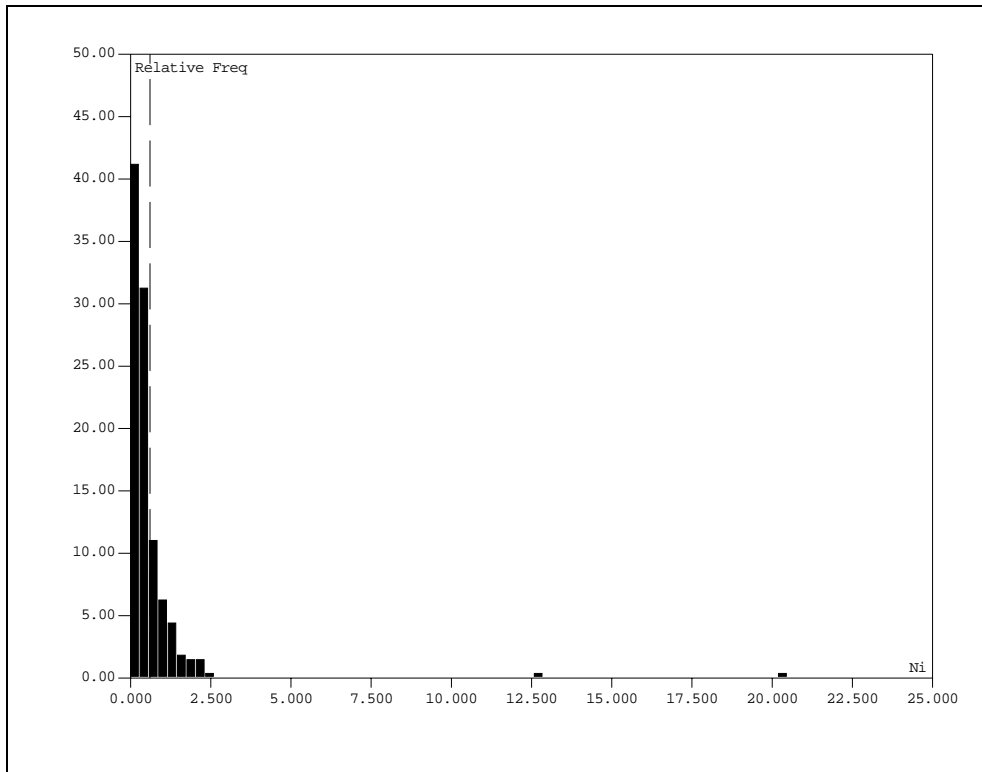


Figure 38: Histogram of Ni with normal scale

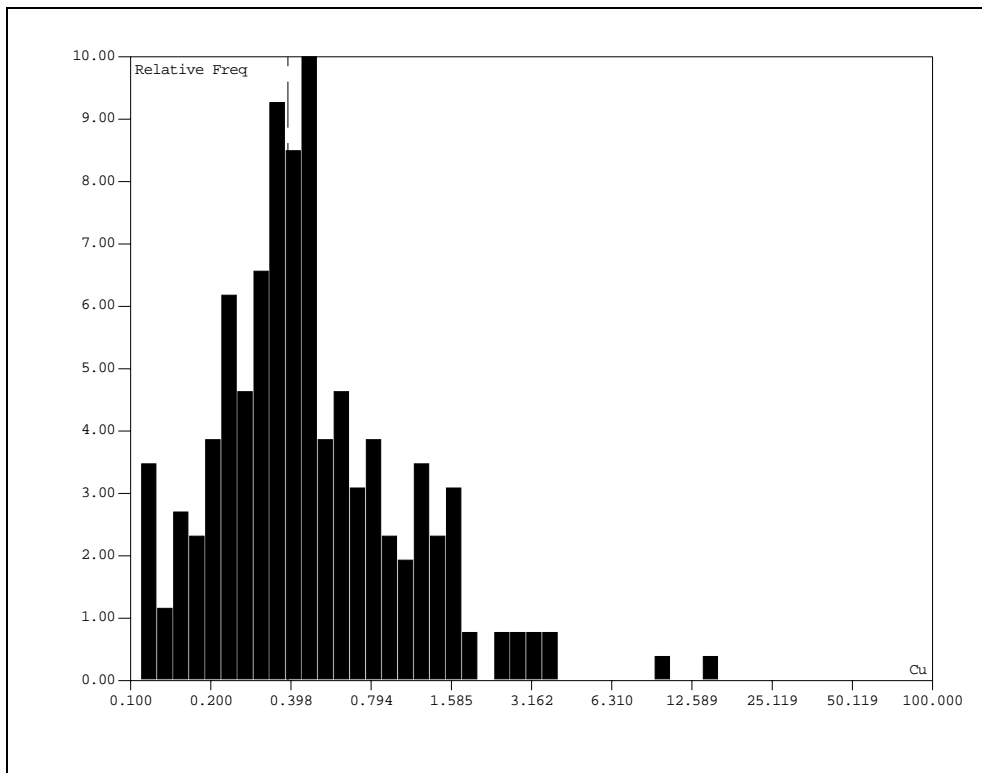


Figure 39: Histogram of Cu with logarithmic scale



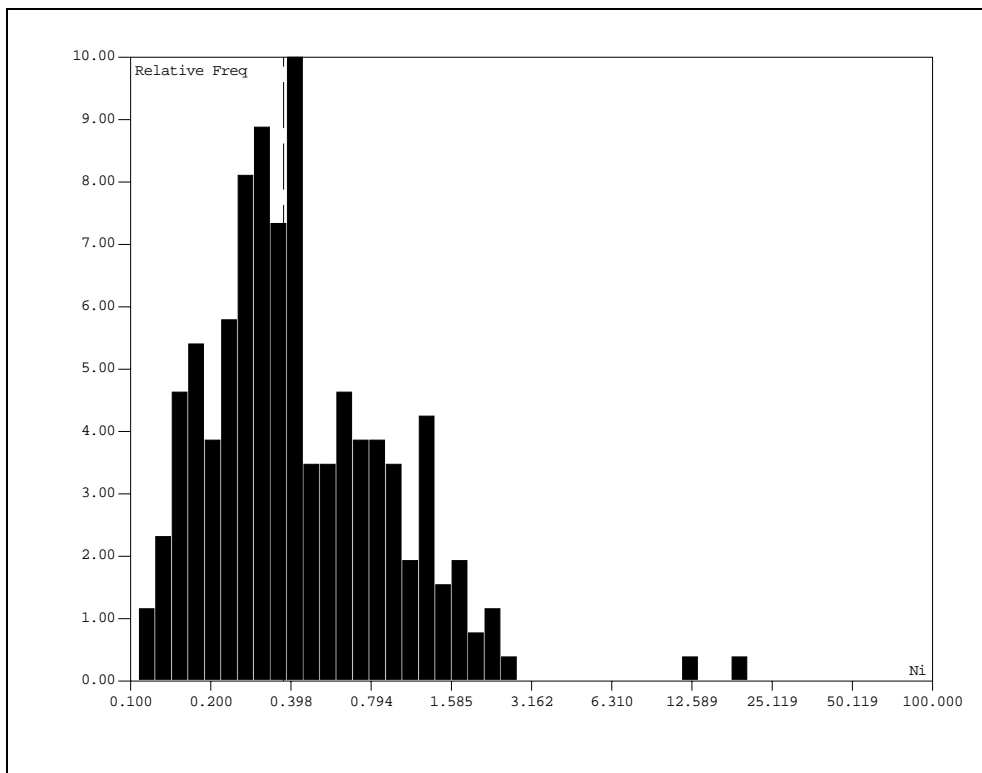


Figure 40: Histogram of Ni with logarithmic scale

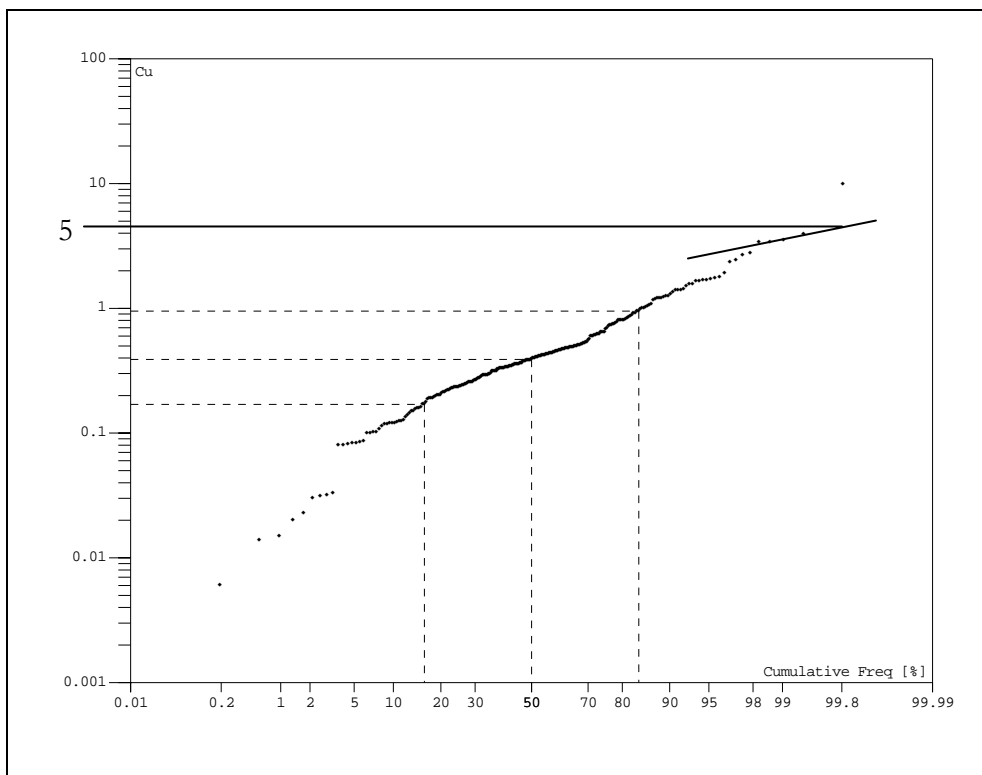
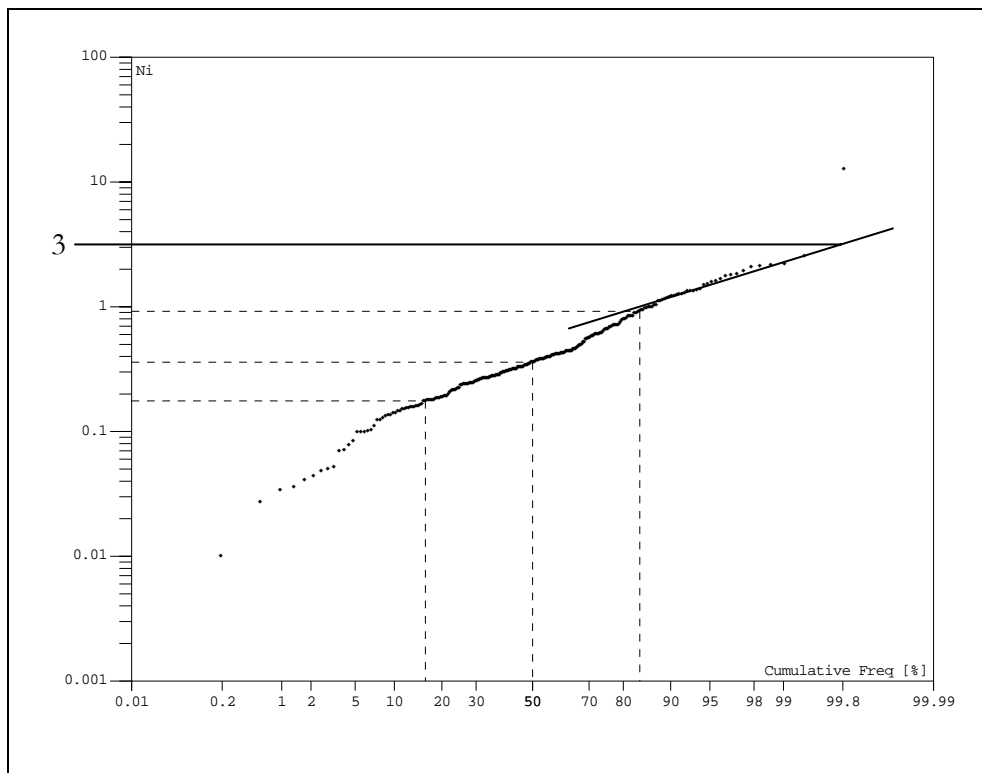


Figure 41: Cumulative frequency of Cu with logarithmic scale



**Figure 42: Cumulative frequency of Ni with logarithmic scale**

## 16.5 Spatial Continuity of the Grades Distribution

In order to verify the continuity of the data, variograms must be built. In order to make the best variograms possible, compositing has been done every 1 meter. The software Geostat+ was then used to verify the continuity. The first variogram we tried to achieve is a general variogram. Because the holes are mainly perpendicular to the mineralisation and the drill holes are not closely spaced, this variogram reflects mainly the continuity perpendicular to the mineralisation.

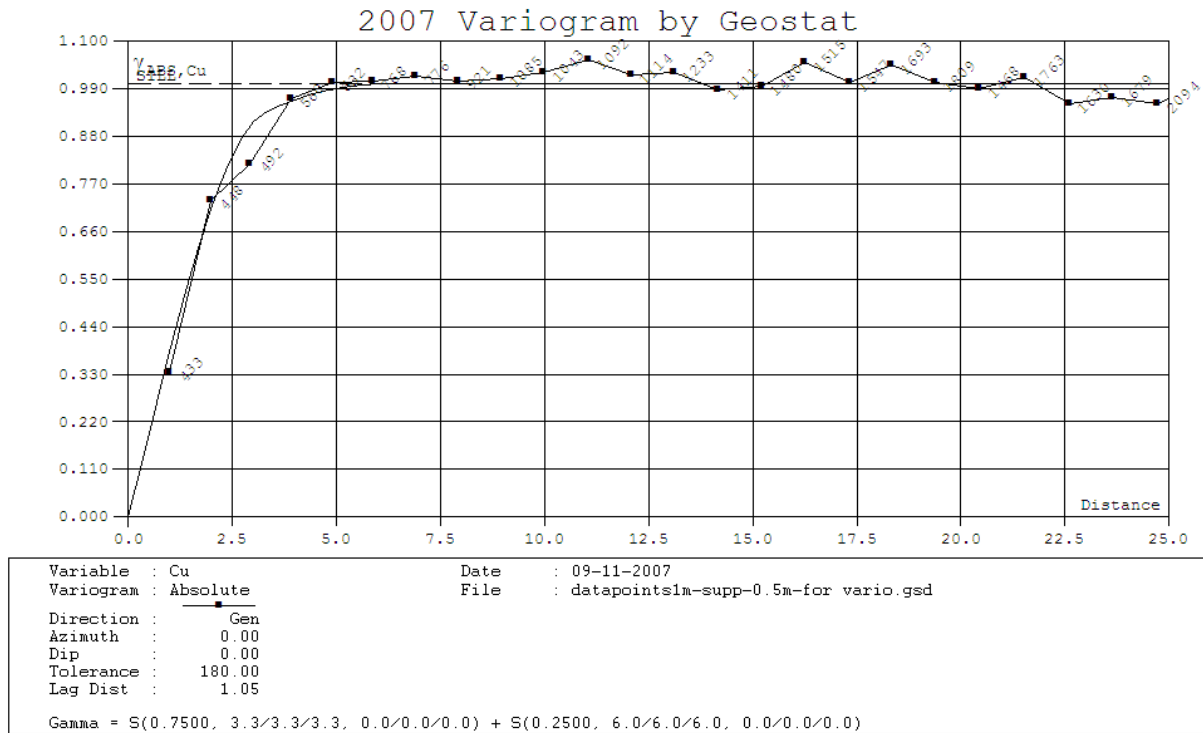
In this project, it was possible to build a reasonably good omnidirectional variogram for Cu and Ni using correlations (also known as correlogram). Probably because the calculated ranges are lower than the drilling grid, no satisfactory variogram parallel to the mineralisation could be obtained (only false nugget effect models).

The variograms for other commodities could not be built at all, probably because of the low volume of data in that direction. Because the calculated ranges are short (maximum of 6m), because we could not evaluate the range parallel to the mineralisation and because we expect the ranges are much higher parallel to the mineralisation, Geostat has not continued the geostatistics to evaluate the final resources. Twice as much data would be a start towards getting better results.

The results of the variogram models for Cu and Ni are shown in the next table.

Omnidirectional variograms for Cu and Ni		
Cu	C	Range
Spherical 1	0.75	3.3 m
Spherical 2	0.25	6 m
Ni	C	Range
Spherical 1	1	6 m

**Table 13: Variogram results**



**Figure 43: Omnidirectional variogram for Cu**

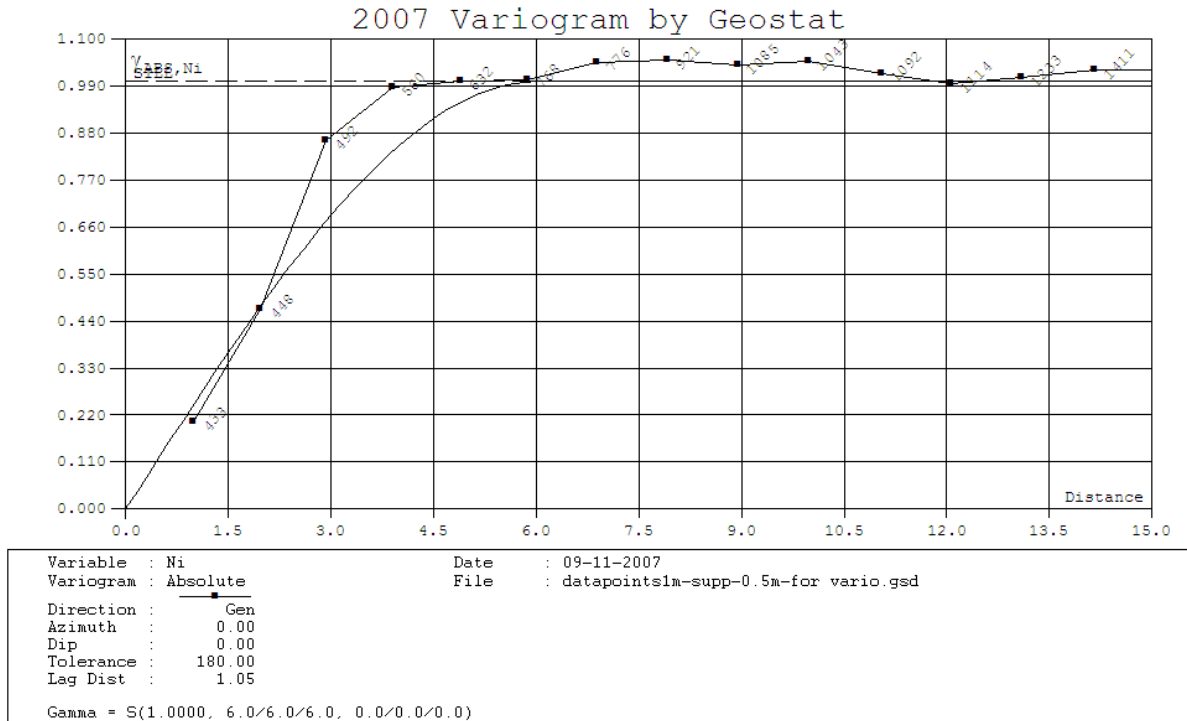


Figure 44: Omnidirectional variogram for Ni

### 16.6 Metal prices used for calculating the Nickel equivalent

In order to calculate a Nickel equivalent from Copper and Nickel, we have used the formula  $\%Ni_{equivalent} = \%Ni + (0.26 \times \%Cu)$  in 2002.

The next figures shows the 5 years charts of Copper and Nickel and shows that we can use 9\$US per pound for Nickel and 2.25\$US per pound for Copper. This leads to a ration of 4:1 meaning we can round the 2002 formula to  $\%Ni_{equivalent} = \%Ni + (0.25 \times \%Cu)$ .

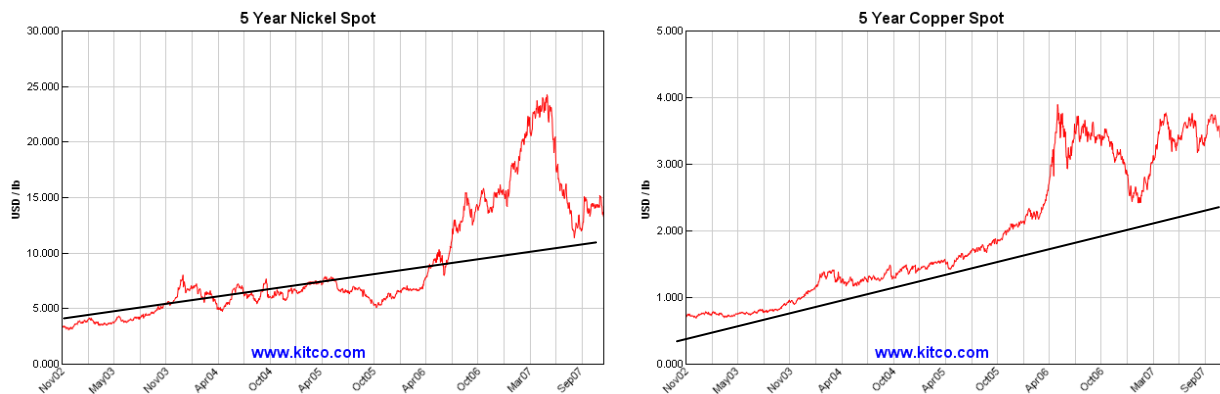


Figure 45: Ni and Cu price Graphs

## 16.7 Specific gravity

Specific gravity is referred to as density in this text.

The tests on density show a variation from 2.36 to 4.40 in mineralized zones. 95% of the densities are between 2.78 and 4.14. 90% of the densities are between 2.92 and 3.93. Because the mineralization in Cu and Ni comes from sulfides (density of 3.4 to 8.2), this is quite normal. In this project, Cu comes mainly from Chalcopyrite ( $\text{CuFeS}_2$ , density=4.35) and Ni comes mainly from Pentlandite ( $(\text{Fe, Ni})_9\text{S}_8$ , density=4.8). High grades of Cu and Ni should result in higher density. This is the reason we will try to make an acceptable regression of the density from Cu and Ni grades. We will then use this regression to predict the density of the resource.

The database came with 2021 assay with 574 densities, 573 of those densities having the corresponding %Cu and %Ni. When trying to make a regression of the density from the %Cu and %Ni we have to exclude the sets with values that do not match (high grades with lower than normal densities and low grades with very high density). This leaves 569 sets of %Cu, %Ni and densities to make the regression.

The regression reveals the formula:  $\text{Density} = 3.106 + 0.029 * \% \text{Cu} + 0.371 * \% \text{Ni}$

Densities vary from 2.36 to 4.40 with an average of 3.30 and median of 3.23  
 Densities predicted vary from 3.11 to 4.21 with an average of 3.30 and a median of 3.19  
 Residuals vary from -1.06 to 0.78 (error of the prediction for each set of %Cu and %Ni)  
 100% of the densities are predicted with 1.06 of precision  
 90% of the densities are predicted with 0.29 of precision  
 80% of the densities are predicted with 0.18 of precision

Since the average and median are very well reproduced and the level of precision is good, we will use this estimation of the density on the blocks estimated in the block model.



Figure 46: Measure of the volume of the rock samples for determination of the density

## 16.8 Resource Estimation and classification

After trying different estimation methods (nearest neighbour, inverse distance, inverse square distance), the inverse square distance was chosen as giving the best results.

The settings in BlkCAD for the estimations were:

Origin of the block model (center of the block): X=370,000m, Y=5,185,500m, Z=200m

Size of the blocks: 5m x 5m x 5m

Number of blocks (XYZ): 161 x 181 x 51

Search Ellipsoid: 100m x 100m x 100m Orientation: 0° x 0° x 0°

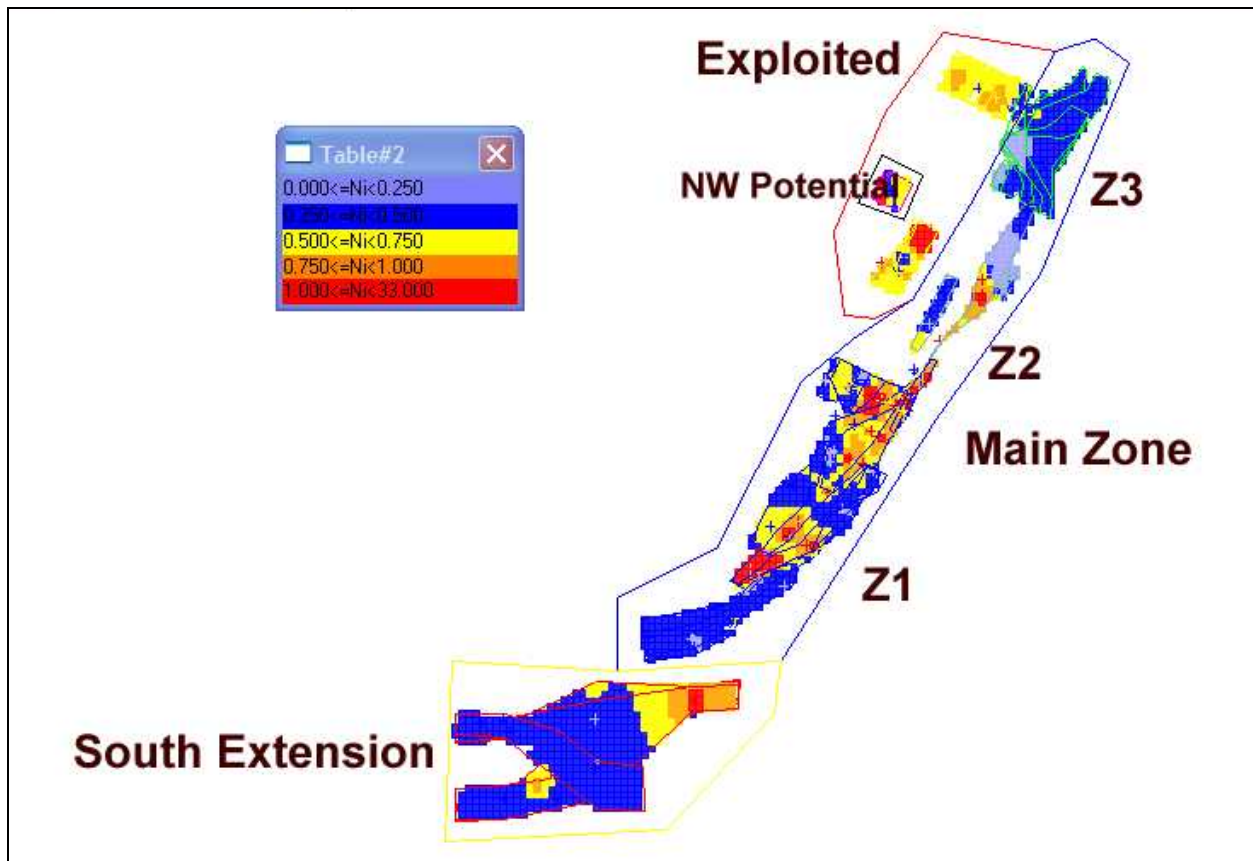
Minimum number of samples to use: 1

Maximum number of samples to use: 8

Maximum number of samples from one hole: 3

Block discretisation: 2 x 2 x 2

Use ellipsoid influenced distances in calculation: No



**Figure 47: Block model with the name of the different zones**

The Exploited zone is where one of the two pits was located. The Main Zone covers the area of the other pit. Most of the Exploited Zone is now gone but there are some remaining mineralization. The Main Zone was not completely mined and 7 of the 2005 drill holes intersected remaining mineralization. The richest and biggest part of the model is in Main Zone 1 near the junction with Main Zone 2. Main Zone 3 was never mined but seems somewhat less rich. The North-West Potential Zone is the result of only one old hole and should be drilled for verification. The South Extension was well confirmed by 6 of the 2005 drill holes.



The estimated resources were classified in accordance with the specifications of the 43-101 Policy, namely in measured, indicated, and inferred resources. Because only the location of the new 2005 drill holes are of a better precision, these holes have been used to calculate indicated resources. Other holes were not considered precise enough to reach indicated resources status.

Most of the resources are therefore presently considered inferred. Two patches of resource 260 meter from each other were classified indicated because:

- part of the 2005 drilling was based on a 25 to 35 meters grid
- the 2005 drilling corresponds very well to the results of older drilling

Indicated patch 1: In the Main Zone #1, the 2005 drill holes RZ-05-11 and RZ-05-19 are 35 meters apart and the sulfides results correspond well with the information from older drill holes. The resources around these holes were classified as indicated.

Indicated patch 2: In the South Extension, the 2005 drill holes RZ-05-05 and RZ-05-06 are 24 meters apart and the sulfides results and geology have similar depth. The resources at a maximum distance of 15 meters around these holes were classified as indicated.

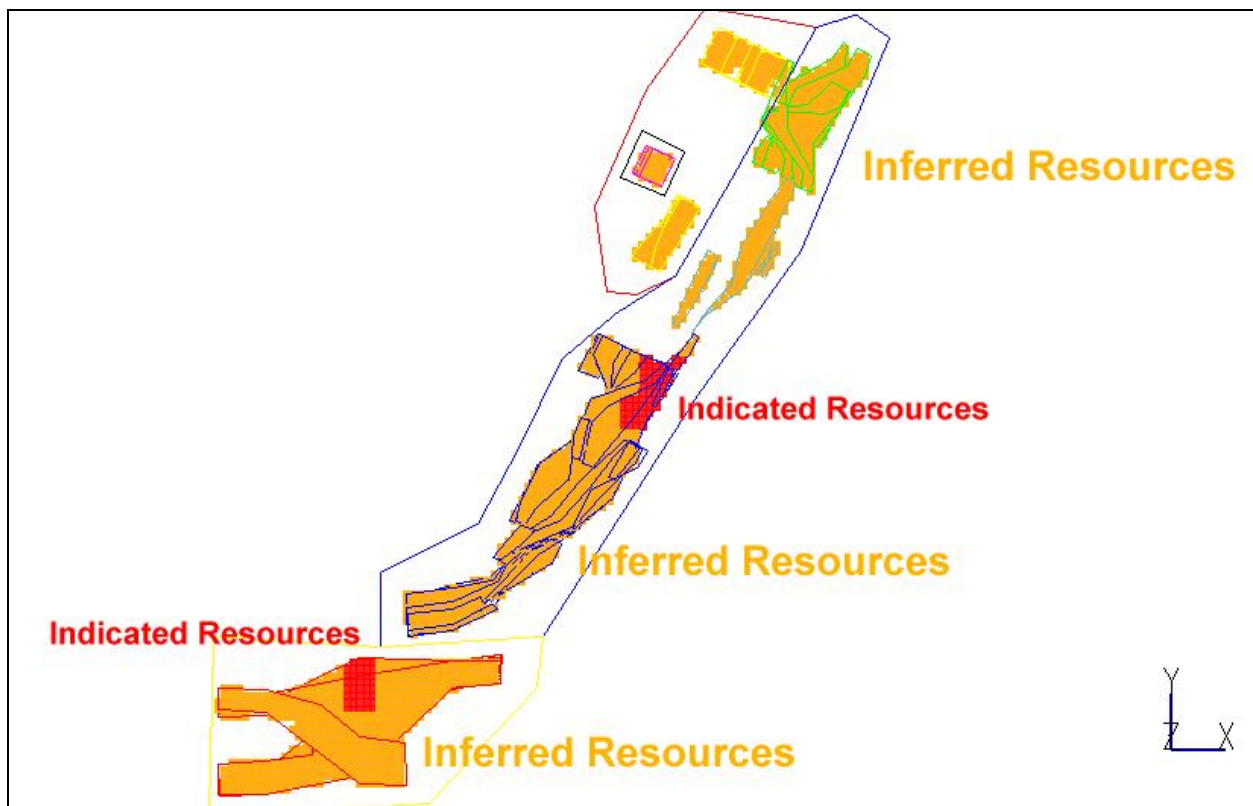


Figure 48: Resource block model with inferred in orange and indicated in red

The following table presents the results of the resource estimation:

Note that because of missing data for Au, Pt, Pd, Ag, and Co, overall grades are lowered by holes that were considered to contain none of these products.

**Geological resource with no economical cut off**

Zone	Tons	Classification	SpecificGravity	Cu (%)	Ni (%)	Au (g/t)	Pt (g/t)	Pd (g/t)	Ag (g/t)	Co (g/t)	Nieq (%)
Extension South	26,000	Indicated	3.27	0.67	0.39	0.113	0.054	0.061	0.39	0.022	0.56
Main - Z1	125,000	Indicated	3.30	0.48	0.50	0.015	0.019	0.026	0.39	0.008	0.62
<b>TOTAL INDICATED</b>	<b>151,000</b>	<b>Indicated</b>	<b>3.30</b>	<b>0.51</b>	<b>0.48</b>	<b>0.032</b>	<b>0.025</b>	<b>0.032</b>	<b>0.39</b>	<b>0.011</b>	<b>0.61</b>
Exploited	67,000	Inferred	3.43	0.79	0.81	0.011	0.009	0.003	0.20	0.003	1.01
Extension South	296,000	Inferred	3.27	0.65	0.41	0.050	0.028	0.037	0.69	0.021	0.57
Main - Z1	497,000	Inferred	3.29	0.51	0.46	0.013	0.014	0.015	0.34	0.007	0.59
Main - Z2	72,000	Inferred	3.27	0.53	0.41	0.004	0.010	0.008	0.19	0.007	0.54
Main - Z3	136,000	Inferred	3.24	0.41	0.33	0.000	0.000	0.000	0.00	0.000	0.43
NW Potential	26,000	Inferred	3.43	0.74	0.83	0.000	0.000	0.000	0.00	0.000	1.01
<b>TOTAL INFERRED</b>	<b>1,093,000</b>	<b>Inferred</b>	<b>3.29</b>	<b>0.56</b>	<b>0.46</b>	<b>0.020</b>	<b>0.015</b>	<b>0.018</b>	<b>0.37</b>	<b>0.010</b>	<b>0.60</b>

**Resource with an economical cut off of 0.5 % Ni equivalent (Ni+0.25\*Cu)**

Zone	Tons	Classification	SpecificGravity	Cu (%)	Ni (%)	Au (g/t)	Pt (g/t)	Pd (g/t)	Ag (g/t)	Co (g/t)	Nieq (%)
Extension South	23,000	Indicated	3.27	0.69	0.40	0.113	0.055	0.061	0.39	0.022	0.57
Main - Z1	70,000	Indicated	3.38	0.64	0.70	0.009	0.008	0.013	0.35	0.010	0.86
<b>TOTAL INDICATED</b>	<b>92,000</b>	<b>Indicated</b>	<b>3.36</b>	<b>0.65</b>	<b>0.63</b>	<b>0.034</b>	<b>0.020</b>	<b>0.024</b>	<b>0.36</b>	<b>0.013</b>	<b>0.79</b>
Exploited	67,000	Inferred	3.43	0.79	0.81	0.011	0.009	0.003	0.20	0.003	1.01
Extension South	124,000	Inferred	3.33	0.86	0.54	0.059	0.033	0.047	0.58	0.030	0.76
Main - Z1	242,000	Inferred	3.36	0.70	0.65	0.007	0.003	0.005	0.23	0.005	0.82
Main - Z2	25,000	Inferred	3.40	0.86	0.73	0.010	0.025	0.019	0.48	0.017	0.94
Main - Z3	32,000	Inferred	3.28	0.52	0.43	0.000	0.000	0.000	0.00	0.000	0.56
NW Potential	24,000	Inferred	3.44	0.76	0.87	0.000	0.000	0.000	0.00	0.000	1.06
<b>TOTAL INFERRED</b>	<b>513,000</b>	<b>Inferred</b>	<b>3.36</b>	<b>0.75</b>	<b>0.64</b>	<b>0.019</b>	<b>0.012</b>	<b>0.015</b>	<b>0.30</b>	<b>0.011</b>	<b>0.83</b>

**Resource with an economical cut off of 0.7 % Ni equivalent (Ni+0.25\*Cu)**

Zone	Tons	Classification	SpecificGravity	Cu (%)	Ni (%)	Au (g/t)	Pt (g/t)	Pd (g/t)	Ag (g/t)	Co (g/t)	Nieq (%)
Extension South	2,000	Indicated	3.33	0.72	0.54	0.078	0.053	0.062	0.07	0.031	0.72
Main - Z1	50,000	Indicated	3.42	0.72	0.79	0.009	0.008	0.014	0.39	0.012	0.97
<b>TOTAL INDICATED</b>	<b>51,000</b>	<b>Indicated</b>	<b>3.42</b>	<b>0.72</b>	<b>0.79</b>	<b>0.011</b>	<b>0.010</b>	<b>0.015</b>	<b>0.38</b>	<b>0.013</b>	<b>0.97</b>
Exploited	59,000	Inferred	3.45	0.82	0.86	0.010	0.008	0.002	0.18	0.003	1.07
Extension South	62,000	Inferred	3.39	0.99	0.70	0.045	0.029	0.053	0.55	0.042	0.94
Main - Z1	124,000	Inferred	3.43	0.87	0.83	0.007	0.002	0.004	0.20	0.004	1.04
Main - Z2	19,000	Inferred	3.44	0.95	0.83	0.011	0.030	0.021	0.54	0.019	1.07
Main - Z3	-	Inferred	-	-	-	-	-	-	-	-	-
NW Potential	15,000	Inferred	3.54	0.86	1.11	0.000	0.000	0.000	0.00	0.000	1.33
<b>TOTAL INFERRED</b>	<b>280,000</b>	<b>Inferred</b>	<b>3.43</b>	<b>0.89</b>	<b>0.82</b>	<b>0.016</b>	<b>0.011</b>	<b>0.015</b>	<b>0.29</b>	<b>0.013</b>	<b>1.04</b>

Table 14: Table of resources

## 17- Other Relevant Data and Information

### 17.1 Master's thesis at Laval University

Conducted under the supervision of Constantin (PhD. Geo.), the thesis of Jean-François Montreuil will study the metallogeny and petrology of the Lake Renzy Mine and of ultramafic intrusions of the Hainaut township using modern analytical tools and petrologic concepts. The study will try to resolve questions like:

Why are the massive sulfides about 35 meters above the ultramafic / gneiss contact?

Is there one or two ultramafic injections? If two, are they from a common magmatic event?

Why intrusions have sometimes low and sometimes high mineralization?

At the time of the report, some preliminary works are available. Dr Constantin wrote in a summary of a presentation titled: "Metallogeny and petrology of a newly recognized sulfide-poor PGE-rich zone below the Renzy lake Ni-Cu deposit, Grenville Province, western Québec".

"In 2005, 1.5km of new drill cores has allowed to identify a previously unrecognized sulfide-poor PGE-rich zone. Downhole Pd/S and Cu/Pd variations reveal two distinct zones with Pd/S higher than primitive mantle values occurring in the lower 20-40m of the pyroxenite. This lower zone is confined to a small depression in the floor ..."

"Two distinct magmatic pulses are thus identified : 1) an early primitive magma which settled at the floor and formed the PGE-rich pyroxenite with <5% disseminated sulfides; 2) the bulk of the sulfur-saturated magma depleted in PGE which formed the main pyroxenite and the massive sulfides. The lower PGE-rich portion has similarities with the platreef deposits of the Bushveld Complex : both have low sulfides content, are hosted in pyroxenite and are locally situated in structural depressions in the floor."

## 18- Interpretation and Conclusions

The Vulcain property includes the open pit Renzy Mine, which produced 716,000 short tons with grades of 0.72% Cu and 0.70% Ni from 1969 to 1974.

For this study, Geostat used all the technical data available for the 2003 NI43-101 technical report prepared for Matamec Explorations Inc. The most recent location of holes was taken from the October 2004 report from Geostat and the last diamond drilling campaign done on February 2005.

We consider that this property has two main interests. First, the exploration is far from being finished and second, the summary of geophysics and recent drilling targets (Section 9.1) points out 18 targets that should be verified by trenching with geological mapping and sampling of the bedrock.

Since 2003, the 2005 drill campaign confirms the presence of resources. Along with the survey of the depths of the lake, it permitted the actual report resources calculation and a better degree of confidence regarding the classification from the previous calculations made by Geostat in 2002. The new calculation gives indicated resources of 92,000 tonnes at 0.65 %Cu and 0.63 %Ni when cut at 0.5 %Ni equivalent or 51,000 tonnes at 0.72 %Cu and 0.79 %Ni when cut at 0.7 %Ni equivalent. Inferred resources are 513,000 tonnes at 0.75 %Cu and 0.64 %Ni when cut at 0.5 %Ni equivalent or 280,000 tonnes at 0.89 %Cu and 0.82 %Ni when cut at 0.7 %Ni equivalent.

In addition, 18 favourable sectors were outlined by the study made by Berger (2004) with the help of TEM-MAG heliport survey and a large scale compilation. These sectors are spread over the whole property and include at least one drilling target each. According to the interpretation of Berger, at least 14 of these sectors contain TEM conductors (sectors 1 to 11, 15, 16 and 18 – see figure 12). No diamond drilling has been made on 11 of these 14 sectors.

The results of the 2005 drill hole campaign demand new works detailed in section 19.

The recently discovered Alba showing on the property shows the importance of exploration around the actual Renzy Lake.

## 19- Recommendations

Geostat recommends continuing exploration on the property to enhance the valorization and precision of the current resources.

### 19.1 Exploration targets

Geostat believe that the discovery of other orebodies would greatly enhance the project interest and the exploration is far from being finished on the property. This part of the proposed drilling includes 40 drill holes of about 100m each. This could cost about \$800,000 (200\$/m). In order to define the targets more accurately, some geophysical works that investigate deeper could help. This part of the preparation would cost from \$100,000 to \$150,000.

The 18 targets on the property should be visited in order to identify any outcrop that could help the understanding of the geology and possibly to find a showing as interesting as the Alba showing. Since the property does not have an easy access everywhere, these works should also help to define how to access the site with a shovel and drill.

The 18 targets pointed out in Section 9.1 must be investigated adequately. Each target should be carefully studied to identify a methodological way to make trenches to optimize chance to make a discovery. Then, a diamond drilling program should be elaborated for each target with at least 1 diamond drill hole but maybe as much as 3 holes.

The actual stripped area of the Alba showing must be completed in order to see the horizontal extent of the mineralization. This showing could also eventually be drilled to verify its vertical extent.

### 19.2 Resources targets

The drilling proposed around the present resources to possibly increase them is of 770m. Costs could be estimated at \$150,000 (200\$/m), all included. Location of holes are in next figure.

Geostat suggests 3 holes of 50m each at the east of the Extension South Zone since few old holes are in this area and an intersection of 20.7m with 0.60 %Cu and 0.70 %Ni was encountered (including 4.3m with 1.69 %Cu and 2.32 %Ni).

Geostat suggests 2 holes of 35m each to the west of the Extension South Zone to verify the extent of the mineralization in that direction.

Geostat suggests 4 holes of 80m each on the sides of the Main Zone – Z1 to verify the possible extent of the mineralization in that area. Most of the present resources are in that area and historic holes prevents the interpretation to be continuous.

Geostat suggests 3 holes of 60m each to the North-East of the Main Zone – Z3 to verify the extent of the mineralization in that direction.

Geostat suggests 1 hole of 50m on the NW Potential Zone to verify the presence extent of the mineralization since only historic data indicate the presence of mineralization there and the interval is 28.35 meters at 0.722 %Cu and 0.781 %Ni.

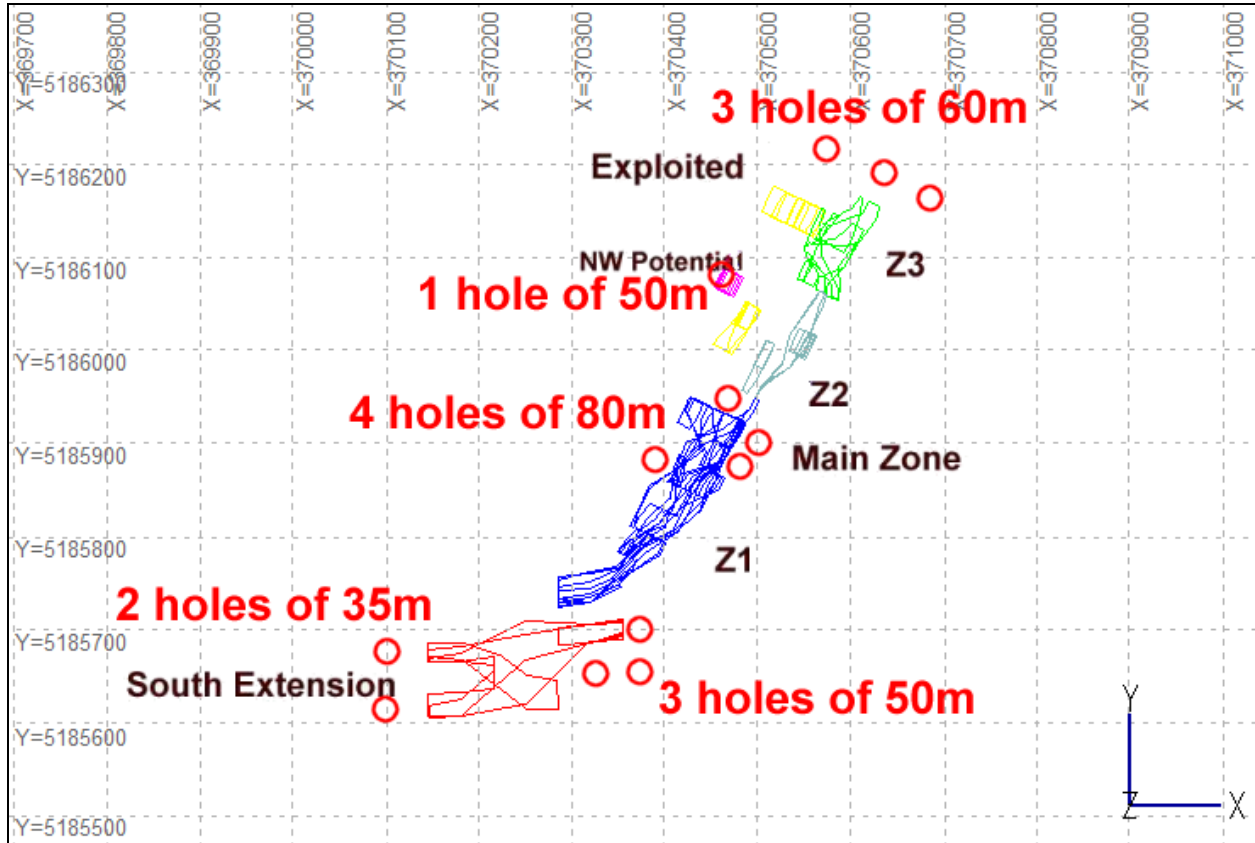


Figure 49: Location of holes with potential to increase present resources



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## 21- Date and Signature Page

**Technical Report  
Resources Estimation  
November 2007  
on the Vulcain Property,  
Hainaut township, Outaouais  
Matamec Explorations Inc.**

This report had been prepared by Yann Camus, Ing. on November 22<sup>nd</sup>, 2007


*Yann Camus, Eng*



## **Appendix 1: Claim list of the Vulcain property (2 pages)**





## Appendix 2: Certificate of Yann Camus, Eng.

### CERTIFICATE OF QUALIFIED PERSON

- a) Yann Camus, Eng.  
6285 Chambord  
Montréal (Québec) H2G 3B8  
Email : [ycamus@geostat.com](mailto:ycamus@geostat.com)  
I work for:  
Systèmes Géostat International Inc.  
10, boul. de la Seigneurie Est, Suite 203  
Blainville (Québec) J7C 3V5
- b) This certificate applies to the report titled “Technical Report Resources Estimation November 2007 on the Vulcain Property, Hainaut township, Outaouais Matamec Explorations Inc.” and dated 22<sup>nd</sup> of November 2007
- c) I have worked as a geological engineer for over 6 years with Geostat and did mineral resource estimations since then. I graduated with a geological engineer degree from the “École Polytechnique de Montréal” in 2000. I am a member of the Ordre des ingénieurs du Québec. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association, as defined in NI 43-101 and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purpose of NI 43 -101.
- d) I visited the Vulcain property between June 18<sup>th</sup> and June 20<sup>th</sup> of 2007 for the systematical measurement of the density of mineralised zones and the preparation of this technical report.
- e) I am responsible for the preparation of all the items in this report.
- f) I certify that there is no circumstance that could interfere with my judgment regarding the preparation of this technical report.
- g) I have had to work on this project in 2004 for the mandate of validating and revising drill hole information from all microfiches (logs, plans, sections, etc.) filed at the minister of mines.
- h) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- i) To my best knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.


Yann Camus, Eng

Dated this 22<sup>nd</sup> Day of November 2007



## Appendix 3: Letter from the Ministère des Ressources Naturelles of Québec referring to the rehabilitation of the Renzy mine site



Charlesbourg, le 1mai 2002

Monsieur André Gauthier  
4180 Avenue des Érables  
Montréal (Québec)  
H2K 3V8

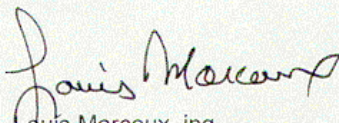
Monsieur,

Vous détenez le claim CLD P013985 dans le canton Hainaut depuis 1995. Ce titre minier couvre en bonne partie les installations de l'ancienne mine Renzy exploitée entre 1969 et 1972.

Le site de la mine Renzy a fait l'objet de travaux de nettoyage et de sécurisation en 1995 suite, à la révocation du bail minier 621 détenu par la société Minière Renzy ltée. Cette compagnie a été sommée d'effectuer les travaux de nettoyage du site et de faire la restauration du parc à résidus miniers sans succès. Le Ministère des Ressources naturelles a effectué les travaux par défaut.

Nous considérons que la compagnie minière Renzy ltée est toujours responsable de la restauration du site de la mine et du parc à résidus miniers. En tant que titulaire des droits miniers, vous n'avez aucune responsabilité de restauration du site étant donné que votre compagnie n'a jamais produit de résidus miniers sur ce site.

Veuillez agréer, Monsieur Gauthier, l'expression de nos sentiments distingués.



Louis Marcoux, ing

Service du développement et du milieu miniers

5700, 4<sup>e</sup> Avenue Ouest, bureau C-408  
Charlesbourg (Québec) G1H 6R1  
☎ : (418) 627-6365, poste 5612  
☎ : (418) 643-3803

## **Appendix 4: CD-ROM of the files used for the project**