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MURGOR RESOURCES INC.

LA TRÈVE PROJECT

2002 MINERAL EXPLORATION CAMPAIGN

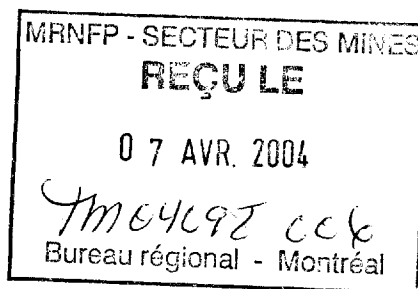
RESULTS OF PHASE 2 - FIELD SURVEY PROGRAM

LATRÈVE-I AND LATRÈVE-IV PROPERTY

(N.T.S. 32 G/13&14, 32 J/03&04)

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Expertise en Compilations Géoscientifiques*

*Strategies for Mineral Exploration
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MONTREAL, QC.

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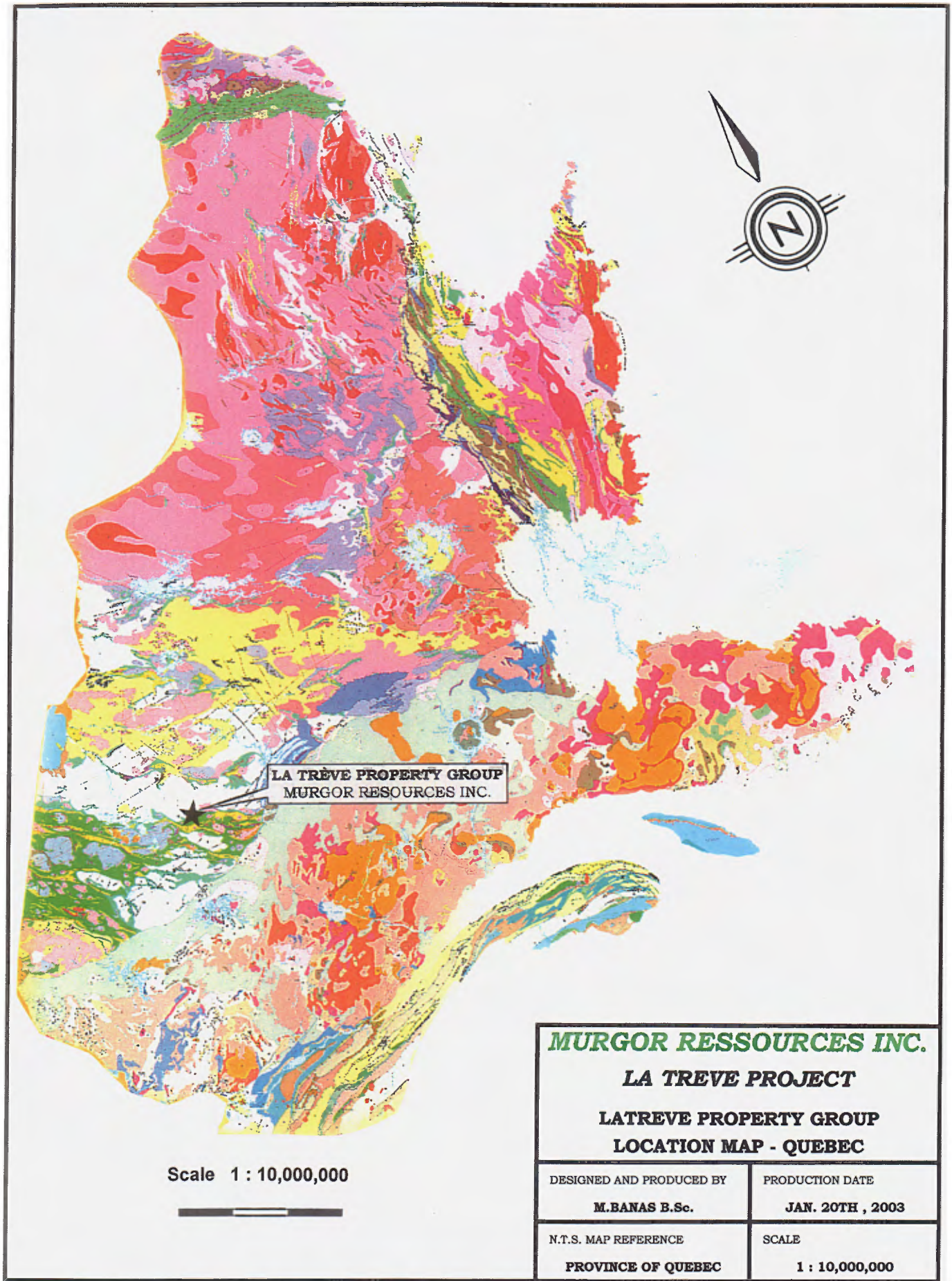


Figure 1. LaTreve Project - Location Map - Province of Quebec.

EXECUTIVE SUMMARY

The La Trève I and La Trève IV property, located north-west of Chapais, in the north-eastern portion of the Abitibi Sub-Province in Quebec, have undergone since 2000, a systematic and progressive evaluation for their Platinum Group Element (PGE) potential.

This report details the field work performed during Phase-2 of the 2002 Mineral Exploration Campaign. The description and analysis of results from a multi-disciplinary geoscientific survey, applied in the ground-proofing of priority exploration targets selected from the Phase-1 Airborne H.E.M.-MAG survey, are presented in this report.

- Analysis of the Phase-1 Airborne Survey data revealed thirteen (13) high priority exploration targets (mostly coincident Mag-EM anomaly's), five of which were selected for ground-proofing in 2002. These include; the area of the LT-4 PGE occurrence with possible E-W extensions, located on the LaTrève IV property; several conductors groups in the area of the LT-1 PGE occurrence; and three isolated anomaly's (B1, B2 and B3), that may represent basic intrusion-hosted sulphide mineralization. Except for B3, located to the south of the LaTrève I property border, the remaining targets are all located on the LaTrève I property.

Anomaly B1 lies on strike between LT-1 and LT-4. B2 and B3 are located respectively, 1.2 km to the north, and 1.3 km to the south of LT-1.

- Ground geophysics and geological reconnaissance along the target survey grids (1.7 total line-km per grid) which were centered over the related airborne-based H.E.M anomaly, have partially to completely validated the probable geological source, or in the least, have produced a complimentary geophysical measurement to that of the Phase-1 airborne data.
- On the LT-4 survey grid, detailed (scale 1:50) geological mapping of three mechanically stripped areas (Main Zone, Zone 2 & 3), has revealed a complex lithological setting. This includes heterolithic breccia, large (up to 10 meters in width) metasedimentary and metavolcanic enclaves containing horizons of sulfide facies iron formation, and several phases of fine to coarse grained gabbros and pyroxenites, some of which host PGE-Au-Cu-Ni mineralization.

A channel sampling traverse E-W across the "Main Zone" returned a grade of **1.17 g/T Pt+Pd+Au (Precious Metal Content-PMC) and 0.63% Cu+Ni+Co (Base Metal Content-BMC) over 6.95 meters (22.95 ft). This includes 1.50 g/T PMC and 0.97% BMC over 1.9 meters (6.27 ft).**

Equally anomalous PGE values at this location are found in both coarse-grained phases hosting semi-massive to massive sulphides, as well as fine-grained phases hosting very finely disseminated (3-7%) sulfides. The latter is very unsuspecting, and suggests that minor mineralised mafic to ultramafic horizons deserve necessary exploration attention and a thorough assessment.

- A variety of lithologies identified on the B2 exploration grid, implies that the main contact with the Lantagnac Pluton is located further north or northwest than previously mapped. The lack of geological exposure on the B1 and B3 exploration grids, did not permit at this time, a thorough qualitative analysis of these Priority-1 geophysical anomalies.
- A **NEW** PGE occurrence was discovered in a coarse-grained pyroxenitic gabbro adjacent to target B2, hosting very fine disseminated py (2-4%) with trace po and cpy. The best value obtained in a chosen grab sample, yielded **1.27 g/T PMC, 0.19% Cu and 0.10% Ni**.
As at LT-4 this occurrence is situated at the margin of an area with considerably lower magnetic susceptibility.
- To date, no distinctive geophysical signature has been identified directly to PGE mineralization at the the LT-1, LT-4 or the new B2 occurrences. Coincident EM-Mag anomaly's are located nearby, but may be unrelated.
- In conclusion, geoscientific information gained from the 2002 Mineral Exploration Program suggests that a combination of parameters exist that are integral to identifying areas with a higher PGE potential on the LaTrève property group. These key factors are;
 - 1) The presence of coarse-grained phases in gabbro and pyroxenite intrusions.
 - 2) The presence of crosscutting or juxtaposed late stage syenodiorite-affinity dykes related to the basic intrusions in (1). In the least, these dykes have been observed in the general vicinity of PGE-occurrences.
 - 3) The proximity to primary N80°E, or secondary N58°E and N130°E structures, or to the junction of any of these structures.
 - 4) The highly similar geological setting for both the LT-4 and B2 PGE mineralization, suggests furthermore, that in some cases, PGE occurrences are located on the margins, or within areas exhibiting considerably lower magnetic susceptibility.

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1.0 INTRODUCTION

The La Trève I, II and IV properties, located north-west of Chapais in the north-eastern portion of the Abitibi Sub-Province in Quebec, have undergone since 2000, a systematic and progressive evaluation for their Platinum Group Element (PGE) potential by MURGOR RESOURCES INC.

This report details the field work performed during Phase-2 of the 2002 Mineral Exploration Campaign.

The description and analysis of the results from a multi-disciplinary geoscientific survey, applied in the ground-proofing of priority exploration targets, selected from the Phase-1 Airborne H.E.M.-MAG survey, are discussed in this report. Recommendations for project development have also been included.

2.0 OVERVIEW OF THE LA TRÈVE PROJECT - MURGOR RESOURCES INC.

2.1 REGIONAL GEOLOGICAL SETTING – ECONOMIC PERSPECTIVE

*Reproduced in part from Barrie, C. T. (2000)

The LaTrève I to IV properties are located in the northeastern extension of the Abitibi Subprovince, the world's largest Archean Greenstone belt and the most prolific producer of base metals and gold (Figure 1).

The strata in this section of the subprovince, from Matagami to Chibougamau is predominantly 2.73-2.72 Ga, and comprises tholeiitic basalt, with lesser intermediate and felsic volcanic rocks, meta-sedimentary rocks as well as mafic to ultramafic plutons and sills (Figure 2).

Significant mining infrastructure including mills and rail lines is in place, and recent base metal discoveries and developments (Perseverance, Equinox VMS discoveries at Matagami) as well as the installation of a 200-300 ton/day portable mill in Barry township by Berouma Inc. to promote and facilitate production from of < 1 Mt deposits, should ensure that mining will continue for another decade in the region.

At Matagami, 80 km to the WNW of the LaTrève property area, the Matagami VMS District is underlain by the Bell River Complex, a large (750 km²) and thick layered mafic intrusive complex (up to 8 km), with PGE occurrences at its base.

Equidistant and to the ESE of the LaTrève property area, is the Doré Lake Anorthosite complex (DLC) of similar size, but with a much higher plagioclase content. It is equally overlain by VMS deposits, but these (i.e. Platino-Lemoyne, Scott Lake) are less voluminous than those of the Matagami District.

Antiformal folding of the DLC, has resulted in the basal units being "hidden" at depth, so that the PGE potential of these layers has yet to be verified.

To the north is the Opemisca Metasedimentary and Meta-Plutonic Terranes with U-Pb ages of 3.1-2.9 Ga. This represents a significant component of older crust in this region, a feature favourable to the formation of large mafic magma chambers that produce reef-type and contact intrusive breccia-type PGE deposits.

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In addition, these older (>3.0 Ga) crustal regions, tend to be geo-thermally cooler, more dense, and thinner due to extensional tectonism. Regions such as these are also favourable to the emplacement of dykes and "pipes" of kimberlitic composition, and have classically been targeted worldwide as diamond exploration targets.

2.2 MINERAL EXPLORATION HISTORY AND RECENT WORK

The LaTrève Property and surrounding area has been the focus of sporadic exploration work since 1956, culminating in MURGOR RESSOURCES INC. interest in these properties beginning in 2000.

The following is an historical summary of the significant statutory work for this area.

- 1956** – Copper and Nickel mineralization is discovered in the vicinity of the present LT-1 and LT-2 showings by grass-roots prospecting methods.
- 1958** – Rosario Explorations executes 3 diamond drill holes, northeast of LT-1. Two pyroxenite dykes are intersected in DDH #3.
- 1978** – A regional airborne magnetic and EM-Input survey is carried out by the Quebec Ministry of Natural Resources.
- 1982** – Noranda Exploration acquires 5 claims at the level of LT-1, and executes
1983 reconnaissance and detailed geological mapping, magnetometer, V.L.F. and Max-Min surveys. Several new mineralised occurrences are identified.
- 2000** – PGE mineralization is discovered at the LT-1 showing, and the property is optioned by MURGOR RESSOURCES INC. and VIRGINIA GOLD MINES.
- 2001** – MURGOR executes biogeochemistry survey over the LT-2 showing, and identifies an elongated 1,500-meter anomalous PGE halo.
PGE-Au-Cu-Ni mineralization is discovered at LT-4, 2.7 km west of LT-1.
- 2002** - MURGOR executes a property-wide airborne magnetic and EM survey, and a follow-up multi-discipline field survey over selected targets.
- 2002** – PGE-Au-Cu-Ni mineralization is subsequently discovered on the B2 Target, 1.2km north of LT-1.

2.3 MINING EXPLORATION MODELS – REVIEW AND UPDATE

2.3.1 C.T. Barrie – Magma Mixing Model

During the Phase 2 reconnaissance program, additional field evidence lends support to the magma mixing model for the generation of PGE sulphide mineralization, as proposed by C.T. Barrie (2000) for the La Trève Project.

There is an almost omnipresent juxtaposition of shear hosted and/or clearly crosscutting syenite to trondjemite dykes, in relationship to the preceding phases of mafic and

ultramafic intrusions. Even more complex and dynamic fluid phase magma mixing textures, have been previously described by Barrie at the LT-1 PGE occurrence.

The last phase of mafic and ultramafic intrusions and associated trondjemites, may be the result of the generation of co-eval basaltic (tholeiitic) and tonalitic magmas within a magma chamber, and/or along conduits from a medium crustal depth. These conduits as inferred by the LT-1 melagabbro dyke, are proposed "feeders" to the main Lantagnac and Berey plutons to the north-west, which may apply to other similar intrusions identified on the periphery of the Lantagnac pluton.

2.3.2 Multi-Phase Intrusion Model

In this scenario, the Lantagnac and Berey plutons represent a 1st phase of emplacement from a deeper parental magma source, or may very well be the primary magma source for the later sill and dyke phases identified peripheral to these intrusions.

Late syn- to post-tectonism, represented by regional faulting and radial fracturing about the plutons, was followed by the emplacement of pyroxenites, gabbros and diorites along these zones of weakness on the periphery of the intrusions.

This 2nd phase of intrusion, emanating from the Lantagnac magma source is likely the host to PGE-Au-Cu-Ni sulfides and necessarily the primary exploration target on the La Trève I and IV Property's.

Following additional tectonism, including shearing and faulting of the 2nd phase intrusions, a final sequence of sills and dykes composed of syenites, tonalites, granodiorites and trondjemites, was emanated from syenodiorite plutons emplaced several kilometers further east (see Figure 2). Their variable composition of this suite is relative to the amount of contamination, in degrees, by the assimilation of country rock, most of which is mafic in composition.

These have been observed crosscutting the previous gabbro and pyroxenite phase, in which they locally fill fractures and sheared faults as centimetric to decimetric dyke swarms (i.e. LT-4 Main Zone).

This model also lends credence to the possibility of the secondary concentration of PGE locally through hydrothermal cells related to the emplacement of these late stage intermediate dykes. This last intrusive suite may be the source of additional copper and gold added to the system.

3.0 2002 MINERAL EXPLORATION CAMPAIGN - LA TRÈVE PROJECT

In 2002, MURGOR RESOURCES INC. executed a two-phase exploration campaign on it's LaTrève I, III and IV property's. Phase-1 involved an airborne H.E.M-Magnetics survey spanning these properties over the Guettard, Lantagnac and Berey Townships. A total of 190 sq. km., or 1594 km. of surveyed flight-lines was covered by AEROQUEST LIMITED.

Following analysis of this data by JVX CONSULTANTS, Phase-2 was initiated to verify selected high priority targets via ground geophysical methods and geological evaluation. Field work was executed for MURGOR by geologists M.A. Atkins and M.P. Banas, and assisted by prospectors J.Duval and B. Boudreault.

3.1 PHASE 1 - AIRBORNE EM-MAGNETICS SURVEY TARGET DESCRIPTION

* Reproduced from JVX/Johnson, I. (2002)

FEATURES AND TARGETS OF POSSIBLE EXPLORATION INTEREST

Features around the La Treve I Showing

The strongest EM conductors near the La Treve I showing are part of conductor group C1 and have been drill tested by Rosario Exploration. They intersected massive pyrrhotite / pyrite but poor Cu-Ni values. Other EM conductors have not benefited from such attention in the past and these may be worth checking this time around. Based on the best EM anomaly of those that make up the conductor, ground checks should be centered at

LT1-1 (C2) : 465170 e, 5539250 n

LT1-2 (C3) : 465770 e, 5539090 n

LT1-3 (C4) : 465390 e, 5538760 n and 465660 e, 5538780 n

EM peak amplitudes for LT1-1 and LT1-2 are as good as most of those anomalies that make up C1 and this implies the conductors are at or near surface.

Little attention seems to have been paid to the area north of C1. There is a well formed EM anomaly at

LT1-4 : 466150 e, 5539840 n

The conductor has an intermediate to shallow dip to the north. There is a coincident 50 nT magnetic high. The target is near a small creek and local EM background levels suggest some thickness of overburden.

Given the possibility of a genetic relationship between reversely polarized intrusives and the PGE-Cu-Ni showings, it may be worth checking

LT1-5 : 465430 e, 5539440 n

LT1-6 : 466030 e, 5540140 n

The first is 225 m north of the La Treve I showing. It may have been intersected by Rosario drill hole #3. The drill log shows diorite within intermediate volcanics. The second is more speculative – it may be part of the Lantagnac intrusion.

The failure of the 2001 IP survey to pick up anything over the showing is a mystery. Before results from the IP survey area abandoned, it may be worthwhile to look at the raw IP data for line 0.

Features around the La Treve IV Showing

The showing is associated with a sharp, one line EM/magnetic anomaly on the south side of a strong magnetic low. This magnetic low is 100 to 200 m wide and 900 m

long. It probably represents a reversely polarized intrusion and may be genetically related to PGE-Cu-Ni accumulations that define the showing. If so, similar airborne geophysical features within or near this magnetic low are of possible exploration interest. Ground follow up might focus on small magnetic highs within the broader magnetic low (best seen in the vertical gradient and second vertical derivative) and magnetite anomalies. Possible ground targets of these types are centered at

LT4-1 : Small mag high – 462000 e, 5539290 n (1a) and 462170 e, 5539320 n (1b)

LT4-2 : Magnetite (+ small mag high ?) – 462250 e, 5539440 n

LT4-3 : Magnetite (+ small mag high ?) – 462760 e, 5539350 n

Of these, 1a is the best with a relatively sharp +50 nT magnetic high. The overburden is thin and/or very resistive. 1b is probably the eastern extension of 1a. Targets LT4-2 and LT4-3 are not as attractive. Overburden may be thick and/or conductive over LT4-3.

Targets away from the La Treve I and La Treve IV Showings

B1 : line 1230:3, fid 7711 464150 e, 5539070 n

This is a single line EM anomaly that suggests a thin sheet conductor with a shallow dip to the north. The conductance estimate is low – around 1 mho. There is a coincident 250 nT magnetic high with gradients that suggest the source is at or near surface. Weak EM and magnetic responses on line 124 to the east suggest the target has measurable strike length. The geophysical signature and regional setting of this target are similar to the many Input/Impulse conductors near the La Treve I showing. The target is roughly mid way between the La Treve I and La Treve IV showings.

B2 : line 1370:5, fid 5528 465900 e, 5540400 n

This is a single line EM anomaly 1.2 km north of the La Treve I showing and apparently within the Lantagnac gabbro/pryoxenite intrusion. The EM anomaly suggests a weak conductor with an intermediate dip to the north. There is a coincident 200 nT magnetic high.

B3 : line 1370:5, fid 5613 465900 e, 5537910 n

This is a single line EM anomaly 1.3 km south of the La Treve I showing. It is not classified as a standard EM anomaly because of negative inphase. There is however strong evidence of a vertical thin sheet conductor. A conductance estimate is difficult due to negative inphase that peaks 60 m north of the conductor. A 300 nT magnetic high coincides with the conductor. A less prominent magnetic low over the negative inphase part of the EM anomaly suggests part of the body is reversely polarized. EM and magnetic gradients suggest the source is at or near surface. This is an intriguing EM anomaly with good clarity and character. The negative inphase response distinguishes it from the many Input/Impulse conductors to the north and south.

3.2 STRUCTURAL ANALYSIS FROM MAGNETIC LINEAMENT STUDY

A structural analysis based on the study of lineaments interpreted from the Phase-1 Airborne magnetometer survey reveals a complex pattern of faults and/or shear zones. A section of survey area "B", covering the LT-1 and LT-4 PGE occurrences is presented in Figure 3.

A statistical analysis of the orientations of these lineaments suggests a bi-modal distribution of major and conjugate fault systems.

Primary, or major faults are oriented such as to form an acute strain ellipse with their axes at 78° and 108° . These structures are part of region-wide fracture system that transects major lithological contacts. These structures are often in excess of 2 km in length.

A secondary, or conjugate fault system has orientations on average of 58° and 130° . These features are although repeated throughout the LaTrève property group and are occasionally offset and/or abruptly terminated by the primary fault system. These secondary structures may represent dilational fracture zones in response to the apparent compressional nature of the major fault system.

It should be noted that many of the late stage intermediate dykes have orientations of 40° to 60° . These intrusions may have preferentially filled extensional fractures in relation to conjugate faulting.

An 800-meter wide "corridor" oriented $N80^{\circ}E$, is interpreted extending tangentially to the southern border of the Lantagnac Pluton. This feature is visible crossing the top half of Figure 3. This sector, somewhat devoid of any prominent structural features, may represent a region of more ductile deformation.

The PGE occurrences discovered to date on the LaTrève I and IV properties (identified with black stars) lie within, or at the margins of this proposed deformation corridor.

3.3 PHASE 2 - GEOLOGICAL AND GROUND GEOPHYSICAL SURVEYS

In order to verify and validate target anomalies defined by the Phase-1 airborne survey, a multi-disciplinary ground proofing program was accordingly designed and executed.

Discreet survey grids were chainsaw cut and centered with respect to the location of the interpreted airborne H.E.M. anomaly. This was performed over selected targets LT-4, B1, B2 and B3, for a total of 6.9 line-kilometers. Magnetometer and Horizontal Loop EM (HLEM) surveys were carried out along these survey grids for a total of 6.9 line-km of magnetometer and 6.3 line-km of HLEM readings.

Mechanized stripping of three (3) separate sites on the LT-4 grid (Main Zone, Zone 2&3) was completed with a total exposure of 450 square meters. A total of 27 meters of channel sampling tested mineralized zones on all three stripped zones. Detailed geological mapping at 1:2,000, 1:1,500 and 1:50 was carried out concurrently with prospecting over all survey grids.

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4.0 RESULTS FROM PHASE 2 : FIELD SURVEY PROGRAM

4.1 LA TRÈVE-4 : PGE-AU-CU-NI OCCURENCE

4.1.1 Geophysics

A 25 nanotesla (nT) elliptical airborne magnetic anomaly with a relative surface intensity of 1600 nT (the highest on the grid) is coincident with a weak H.E.M. conductor located approximately 40 meters west of the LT-4 PGE occurrence. The H.E.M. anomaly is localized adjacent to disseminated and semi-massive sulphides found in magnetic meta-sedimentary sulfide-facies iron formations, which could technically be the source of the anomaly.

The ground magnetic survey portrays a highly variable magnetic susceptibility that is indicative of the complex geology mapped over the survey grid (see Map Set, Appendix IV).

The pyroxenite hosted LT-4 PGE occurrence and other mafic to ultramafic rocks identified over the survey grid lie within or on the edge of regions having the lowest relative magnetic susceptibility.

Although no line was surveyed directly over the principal mineralised zone, The Horizontal Loop (MaxMin) EM survey did not detect any significant response to either the area of the LT-4 PGE occurrence, or the target airborne anomaly located B.L.0, Line 0. A subtle E-W negative out-phase anomaly at this location may be due to topographical effects, and increasing overburden to the north.

Tests along E-W lines, or with a 50-meter cable length, were not systematically performed at this time, but should be considered as part of any follow-up surveys. As well as being a poor conductor, the mineralization appears to have an equally low inductance factor.

4.1.2 Geology

The majority of rocks exposed over the LT-4 survey grid are fine to coarse-grained pyroxenitic gabbros. Detailed mapping of three separate mechanically stripped areas has however revealed local geological complexities (Figure 4). The easternmost stripped zone ("Main Zone"), and location of the PGE-sulphide mineralised zone is composed of at least 3 phases of ultramafic intrusions. They are most easily distinguished by their variable grain size; from coarse to fine-grained. Mafic volcanics (?), granodiorite, and local swarms of late stage syenitic to trondjemitic dykes are also present at this location (see geology map, Appendix III).

The PGE occurrence at the "Main Zone" is an East-West trending, and variably sulphide mineralised horizon. This zone extends across the entire exposed outcrop (approx. 11 meters) and is technically open to the east, and to the west. See Photo 1 through Photo 5.

At the eastern end of the outcrop, the zone appears as a 0.5 meter seam or sheared zone marking a contact between a coarse grained pyroxenite to the northeast, and a finer grained altered gabbro (or meta-volcanic rock?), to the southwest.

Associated metasomatic alteration in the adjacent rocks, as well as ductile breccia textures along this seam, give the appearance of a breccia pipe.

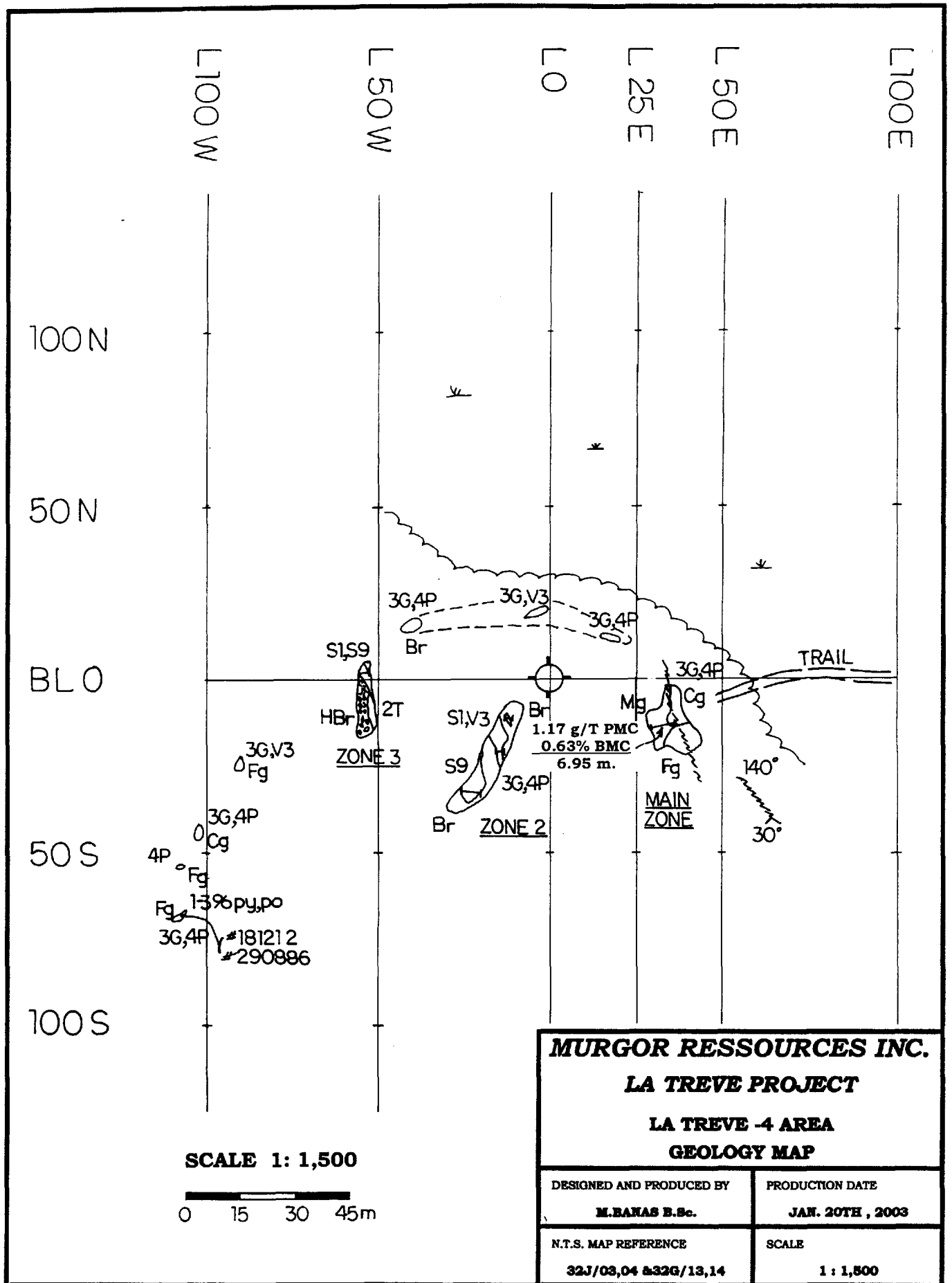


Figure 4. LT-4 Survey Grid. Area geology map - vicinity of the La Treve-4 PGE occurrence.


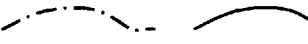
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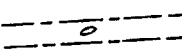

REF: B2 AND LT-4 GEOLOGY MAPS, FIGURES 4 & 7

GEOLOGY

| | |
|----|--------------------------------|
| 2T | TONALITE / TRONDJEMITE |
| 4P | PYROXENITE |
| 3G | GABBRO |
| S1 | METASEDIMENTARY ROCKS |
| S9 | SULFIDE FACIES IRON FORMATIONS |
| V3 | BASALTIC VOLCANICS (META-) |

MAP SYMBOLOGY

| | |
|--|---|
|  | LIMIT OF SUB-CROPPING ROCK |
|  | LITHOLOGICAL CONTACT - INFERRED, OBSERVED |

| | |
|---|------------------------------------|
|  | SHEAR ZONE, STRUCTURAL MEASUREMENT |
|  | DYKE, STRUCTURAL MEASUREMENT |
|  | |

| | | | |
|-----|---------------------------|-----|--------------|
| Cg | COARSE-GRAINED | py | PYRITE |
| Mg | MEDIUM-GRAINED | cpy | CHALCOPYRITE |
| Fg | FINE-GRAINED | po | PYRRHOTITE |
| Br | BRECCIA ZONE | mt | MAGNETITE |
| HBr | HETEROLITHIC BRECCIA ZONE | | |

"ZONE 2" IDENTIFICATION OF MECHANICALLY STRIPPED AREAS

885 SAMPLE ASSAY No. AND LOCATION



AIRBORNE H.E.M. ANOMALY (PHASE 1 - 2002)



FOREST / SWAMPY AREA LIMIT

CHANNEL SAMPLING TRAVERSES

The zone widens above a basal N140E shear, into a 2.5-meter-wide lens of semi-massive to massive sulphides hosted in a "pod" of coarse-grained pyroxenitic gabbro. It's relationship to the unmineralized coarse-grained pyroxenite lying below the shear, is not clear at this point.

Following up the sloping outcrop surface to the west, the PGE-rich zone continues into a medium, to increasingly finer-grained, and more intensely altered mafic rock. This unit may represent the upper portion of the ultramafic intrusion, or an altered basaltic volcanic flow.

Textures indicating relict ductile brecciation at the contact or transition between these two mafic phases were observed.

The width of the PGE-bearing mineralised horizon at the western end of the "Main Zone" outcrop has not been determined, and is basically open in all directions.

Zone 2, located 50 meters further west reveals fine to medium grained gabbros (pyroxenitic?) intercalated with metavolcanics and metasediments hosting sulphide facies iron formations, which are interpreted as being enclaves or rafts swept up by the intruding mafic and ultramafic magmas. Variable degrees of brecciation are observed at this location.

Zone 3, 35 meters further west still, comprises a heterolithic breccia hosting 10-100 cm. mostly angular clasts in an apparent mafic affinity matrix. At the northern end of the stripped zone is a large raft of sulphide facies iron formation. The breccia appears to be crosscut by a 1.5 meter wide tonalite dyke as well as several narrow mafic dykes (see Appendix III, geology map).

The lithological relationship between these stripped areas cannot yet be fully resolved without additional exposure.

4.1.3 Mineralization

Sulphide mineralization is pervasive across the LT-4 target area, and present in most rock types in the vicinity. These have been categorized and are described as follows.

- 1) Magmatic coarse-grained disseminated to semi-massive pyrite (py), pyrrhotite (po), chalcopyrite (cpy) and lesser pentlandite (pd) in coarse-grained pyroxenitic gabbros (melagabbros). This is the principal source of PGE-Au-Cu-Ni mineralization.
- 2) Magmatic (and hydrothermal?) very fine to finely disseminated py, and lesser po and cpy in fine to medium grained gabbros, pyroxenites and/or altered fine grained basaltic lava's (?). This mineralization type has been found to locally contain anomalous PGE values (>2.0 g/T PMC), and may be classified as a "No-See-Um" zone, considering the low sulphide content of 2-5% (combined py, po and cpy).
- 3) Fine disseminated py with minor po and cpy, stratified in sulphide-facies iron formations related to metasedimentary rocks (possibly enclaves within mafic intrusions).
- 4) Fine disseminated py with local trace po and cpy, of probable magmatic origin (with secondary fracture filling) appearing as background mineralization (trace to 2%) in most other mafic and ultramafic rocks located at the LT-4 target area.

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4.1.4 Geochemistry

Previous petrographic studies and whole rock geochemistry have indicated that the LT-4 melagabbro hosting PGE mineralization represents a slightly different magmatic, or magmatically mixed intrusive phase, compared to the melagabbro dyke hosting the PGE-mineralization at LT-1.

Sampling over the LT-4 target in 2002, involved almost exclusively diamond saw channel sampling of the newly exposed stripped areas.

Variably anomalous PGE-Au-Cu-Ni values are present in all mineralization types described in the previous section.

PGE-Au-Cu-Ni values of economic interest were identified at the "Main Zone" along a mineralised horizon extending from the coarse grained melagabbro, into finer grained pyroxenitic gabbro or altered basalt (Figure 4A).

An east-west channel sampling traverse along the mineralized horizon, combining traverse segments M2, M3, M4 and 1D (see Assay Value Map, Appendix III), yielded a grade of 1.17 g/T Pt+Pd+Au (PMC) and 0.63% Cu+Ni+Co over 6.95 meters (22.95 ft). This includes a higher grade section of 1.50 g/T PMC and 0.97% BMC over 1.9 meters (6.27 ft), which is located in a transitional medium to fine-grained section of silicified and chloritized melagabbro. Observed textures along this section suggest relict structures from an earlier regime of ductile brecciation. The sulphides here are disseminated at 3-7% combined py, po and cpy (see Table of Sample Descriptions, Appendix I).

4.1.5 Discussion of Results

The apparent correlation between the location of PGE-enriched ultramafic intrusions and depressed magnetic field responses suggesting lower susceptibilities at the LT-4 target, may be an integral factor in defining and delimiting exploration target areas on the La Trève properties (see Figure 5).

Low conductivity attributed to the Airborne H.E.M. anomaly and an equally low inductance related to no apparent response from the terrestrial H.L.E.M. system suggests that the PGE mineralization may be "blind" to most geophysical methods.

A gradient array Induced Polarisation (I.P.) survey system could be tested in order to more accurately determine the resistivity, polarisability and chargeability, if any of the PGE-mineralised horizon at the Main Zone.

PGE concentrations in variably low sulphide, as well as high sulphide bearing ultramafic rocks have not yet been clearly linked with any definite geological characteristics. As a consequence, all sulphide-bearing intrusive phases remain potential PGE exploration targets.

The increase in PGM values observed at the western limit of the exposed Main Zone is an obvious example. The presence of various relict breccia textures across the stripped outcrops relates a highly dynamic environment of intrusion.

Litho-geochemistry, soil geochemistry, including biogeochemistry techniques, should be systematically carried out over the LT-4 target grid.

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4.2 LA TRÈVE-1 : PGE-AU-NI-CU OCCURENCE

4.2.1 Geophysics

The area surrounding the LT-1 PGE-Au-Cu-Ni occurrence, is represented in part by a dense grouping of sub-parallel, generally E-W to WSW-ENE conductors which respond to both airborne H.E.M., and terrestrial geophysical systems such as I.P. and HLEM. No geophysical surveys were conducted at LT-1 during Phase-2.

Field reconnaissance during the Phase 2 program, concentrated primarily verifying the C-2 group (Section 3.1) which is aligned roughly E-W and extends westward 500 meters from the LT-1 sulphide-bearing melagabbro dyke. The conductors in this group coincide with variably mineralised gabbroic to pyroxenitic intrusions, and at one location with mafic volcanics and sulphide-facies iron formations (200 meters west of the LT-1 Showing).

The C-2 conductor group and the LT-1 showing are related to an interpreted moderate strength magnetic axis (see Figure 3). This is the only geophysical signature that is remotely associated with PGE-mineralization on the LaTrève I Property.

4.2.2 Geology

A summary investigation of the geology located along airborne H.E.M. targets C-3 and C-4 is described in this section.

A sulphide-bearing and sheared intrusive contact zone between mafic volcanics and a granodiorite dyke with sub-vertical northward dip, was identified at the southern margin of the C-3 conductor group. The zone was exposed by hand stripping over a width of 2.0 meters, and for 15.0 meters along strike. The mafic volcanics are moderately hematized, while the granodiorite has been reduced to different degrees of sericite, talc, biotite and blue quartz-eye schist. Sulphides consist of very fine disseminated pyrite with trace pyrrhotite and chalcopyrite, in total rising to 3% at the shear axis. No significant values were retrieved from this location.

Numerous gabbroic to pyroxenitic intrusive bodies (dykes and/or sills) were identified south of the LT-1 occurrence (area of conductor group C-4). Some of these appear oriented NNW and may be contemporaneous with the LT-1 melagabbro dyke. A detailed analysis of their exact relationship was not performed at this time.

4.2.3 Mineralization

Mineralization types encountered during the Phase 2 program are described below. The reader is referred to previous reports, annotated in the bibliographical section, regarding descriptions of mineralization at the LT-1 showing.

- 1) Shear and fracture filling by disseminated and stringer sulphides in mafic and ultramafic intrusions (and in mafic volcanics?). In many cases, py, po, and cpy are in concentrations often less than 5% combined. The sulphides have been mobilised into shear zones during late syn- to post-emplacement tectonism.

- 2) Very fine to finely disseminated py with trace amounts of po and cpy in hematized and sericitized contact shear zones between host mafic volcanic rocks and intermediate composition dykes.

4.2.4 Geochemistry

Limited sampling of the mineralised zones described above, did not reveal any significant results.

Anomalous copper and gold values however, were retrieved from mafic intrusive rocks along the proposed western extension of the structure hosting the LT-1 melagabbro (265 to 391 ppm Cu, up to 42 ppb Au). This is also the case for the sericite and hematized shear zone at the intrusive contact of a granodiorite dyke in the C-3 conductor group (up to 271 ppm Cu and 40 ppb Au). The sample descriptions are tabled in Appendix I, while complete assay values are presented in Appendix II.

4.2.5 Discussion of Results

No clear intrusive relationships were defined between the various mafic and ultramafic rocks observed west of the LT-1 showing. Whether these outcrops relate to different parts of a larger intrusive body, or are various and distinct intrusive phases, of which the melagabbro dyke at LT-1 is but one of these remains to be evaluated.

Many sheared and sulphide-bearing structures were observed in mafic and ultramafic intrusive phases. Conductor groups C-3 and C-4 are related in part to features such as these, but are not adequately explained by the relatively poor lateral NE-SW mineralization observed at surface. This may be answered by the presence of greater concentrations of sulphide mineralization at depth, as suggested by the airborne survey diagnostics predicting a conductor depth ranging from 5-35 meters.

4.3 B1 : PRIORITY-1 GEOPHYSICAL ANOMALY

4.3.1 Geophysics

The exploration target centre is located 75 meters west from the shoreline of Youman Lake, and as result it's assumed western extension was not surveyed at this time.

A strong linear magnetic anomaly (+1200 nT) with related gradient of 200 nT/meter, confirms the shallow depth of this near vertical magnetic dipole identified during the Phase 1 airborne survey. The source of the magnetism would be a 50-meter wide tabular feature possibly dipping steeply to the south.

The anomaly is interpreted to extend in an east-west direction for 120 meters along the base line, and appears to be truncated to the east and offset 75-100 meters to the north along an inferred N30W trending fault or shear (see Figure 6).

The H.L.E.M. survey has revealed a coincident and very strong 3-channel conductor, with a prominent negative In-Phase response and clear In-Phase/Out-Phase crossovers on

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Line 0 and 0+50 E. The zone of conductivity appears to have an influence of 70 to 110 meters in width, shows good depth extension, and classically would be related to richly disseminated or massive sulphide mineralization (see Map Set, Appendix IV).

The conductor axis is inferred to extend 100 meters westward under the lake, towards an INPUT anomaly identified during an earlier survey (circa: 1978, MER).

4.3.2 Geology

A consistent fine sandy glacio-lacustrine cover of unknown thickness overlies the area. A depth analysis to the top of the conductor, estimated from the Phase 1 airborne survey database, predicts an overburden cover of 7 meters.

No outcrop or subcropping rock was encountered in the area of the B1 survey grid.

4.3.3 Discussion of Results

The B1 target lies on a subtle magnetic lineament extending for 3.5 km roughly east-west, and to which the LT-1 and LT-4 PGE-Au-Cu-Ni occurrences are also associated.

In order to determine with a higher degree of confidence, the limit of the B1 Mag-EM anomaly, the survey grid should be extended in all directions in order to determine its westward and possibly offset eastward extensions.

The strong response of this target to the H.L.E.M. system, which is not the case observed at other known locations of sulphide mineralization on the property, suggests that the B1 target represents a different style and/or type of mineralization in the La Trève Property Group (see figure 6).

A gradient array I.P. system should be tested in order to confirm both the morphology and to define additional parameters regarding the conductive nature of this target.

4.4 B2 : NEW PGE-NI-CU-AU SHOWING

4.4.1 Geophysics

As at LT-4, the magnetic field intensity measured over the B2 target grid represents a locally variable magnetic susceptibility, again reflecting the diversity of rock types observed in the area.

The field intensity varies with a maximum difference of 2000 nT, and depicts elliptical magnetic highs and lows offset along NNW and ENE faults and/or shears (see Figure 8) interpreted from the 1st derivative maps (calculated vertical magnetic gradient).

Local Out-Phase anomaly's are probably due to the abrupt topographical variations present over the survey grid (see Map Set, Appendix IV). The airborne H.E.M. anomaly, with a predicted depth to source of 17.0 meters was not identified by the HLEM survey. Instead it may not have been adequately verified, or may be related to sheared and locally mineralised (1-2% sulphides) fine grained gabbros identified 50 meters east, or possibly, to magnetite-bearing sulphide facies iron formations, 60 meters to the north.

4.4.2 Geology

Formations identified during summary geological mapping include, in order of decreasing abundance in outcrop are; massive basaltic volcanics (meta-), fine to medium grained meta-gabbros and meta-pyroxenites, medium to coarse-grained pyroxenites, and at one location, metasedimentary enclaves(?) of chert and silicate-facies iron formation. These lithologies have been intruded by a series of sub-parallel syenitic to granodioritic dykes, with apparent widths of 1-20 meters. Dyke orientations of 210° and 220° were measured from contacts (Figure 7).

A new PGE occurrence was located in a coarse to medium grained pyroxenite, located just west of the survey grid at 1+25 W, 0+80 S. The formation is massive, dark green to black in colour, and composed of 60% pyroxene altered to hornblende, actinolite and chlorite, 15-20% plagioclase, and locally 5-10% biotite and muscovite. Very fine disseminated sulphides vary locally from trace, to 3% in rusty fractures or adjacent contacts with narrow granodiorite dykes. This formation subcrops over a 600-square meter area, on the highest topographic point on the survey grid. See Photo 7 in photo log.

4.4.3 Mineralization

Sulphide mineralization was observed in four (4) different geological settings over the B2 survey grid. These are in order of importance:

- 1) Disseminated magmatic sulphides in pyroxenite intrusions. Very fine to fine-grained pyrite and pyrrhotite with local trace chalcopyrite, up to 3% overall combined sulphides.
- 2) Hydrothermal generated disseminated fine-grained sulphides in mafic intrusive rocks adjacent crosscutting dyke contacts. Up to 5% combined pyrite and lesser chalcopyrite and pyrrhotite associated with silica, chlorite, serpentine and epidote alteration in the host mafic intrusion.
- 3) Disseminated and sheared stringer sulphides (1% py, trace cpy) in meta-gabbro and meta-basalt.
- 4) Disseminated sulphides (1-2% py, trace cpy) in fracture/brecciated zones associated with cherty and sulphide facies iron formation enclaves(?). Up to 5% recrystallized magnetite locally.

4.4.4 Geochemistry

Samples for geochemical analysis were retrieved from each of the previously described mineralization settings. Samples #290855 and #290879-880 represent types 3) and 4) respectively. The metasedimentary rocks exhibit sporadic, relatively anomalous Au (5-38 ppb) and Cu (32-113 ppm) values. Mineralised fine-grained meta-gabbro or -basalt contains an anomalous Ni background value of 139 ppm.

Samples #290881-884 were retrieved from the coarse-grained pyroxenite intrusion identified in the west, off the survey grid. A composite sample of the generally unmineralized portion of the intrusion returned a Ni quotient of 190 ppm.

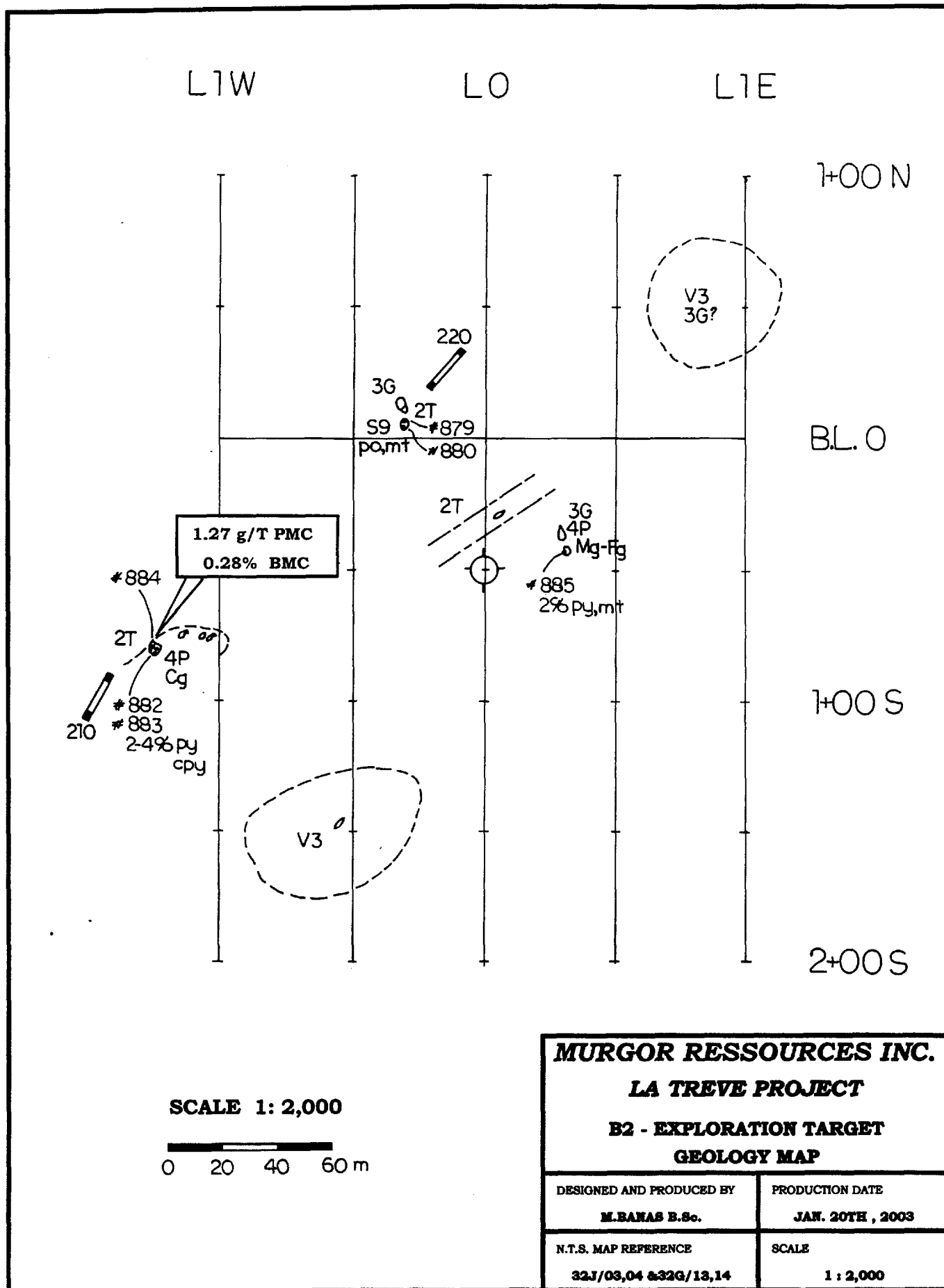


Figure 7. B2 Survey Grid. Area Geology Map - Location of NEW! PGE Occurrence.

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The sulphide-bearing horizon located 25 meters further west, returned anomalous PGE-Au-Cu-Ni values. The highest value was retrieved surprisingly, from sample #290882, containing 1-3% combined py, po and cpy, which graded 0.34 g/T Pt, 0.65 g/T Pd, 0.29 g/T Au, 0.18% Cu and 0.10% Ni (see Appendix I & II for details).

4.4.5 Discussion of Results

Sulphide mineralization is present in all the lithologies identified across the B2 target survey grid. Faulting and shearing would appear to predominantly mark the geological context between the formations in this area.

Two phases of ultramafic intrusion appear to be present here, one of which may be PGE-enriched. A coarse-grained pyroxenite phase returned a Precious Metal Content of 1.27 g/T Pt+Pd+Au.

Observations of geological importance to understanding complexities on the La Trève Property's are noted from reconnaissance work on the B2 grid (see Figure 8):

- a) The mixed lithological assemblage implies that the principal contact with the Lantagnac Pluton is certainly further to the north or northwest.
- b) The fracture and faulting system in this transitional border zone, may be more conducive to the emplacement of the more dynamic 2nd phase ultramafic intrusive suite in which volcanic and meta-sedimentary enclaves are present.
- c) Late stage syenitic to granodioritic dyke swarms are in proximity to PGE-Au-Cu-Ni mineralization.

4.5 B3 : PRIORITY-1 GEOPHYSICAL ANOMALY

4.5.1 Geophysics

The better resolution of this airborne Mag-EM target, via the terrestrial magnetic survey confirms the presence of a 180-meter long by 60-meter wide, east-west trending sub-vertical tabular source, possibly dipping to the north.

The structure appears offset at its centre point on the Base Line, near Line 0, along either a NNW-trending, or ESE-trending fault/shear that intersect just south of this point. The displacement along these structures appears senestral, as deduced from the 1st derivative of the magnetic field intensity (Figure 9).

The weak conductivity related to the airborne H.E.M. anomaly on this target was not detected by the HLEM survey. A minor In-Phase crossover at 0+15S on Line 0 may infer reverse polarisation from a disseminated magnetite source. The generally low amplitude profiles, disables any further interpretation of the conductive nature of the magnetic anomaly.

4.5.2 Geology

The area of the survey grid is under a continuous overburden cover. No outcropping of rock was identified on the survey grid. Several rounded and likely distal granitic boulders were noted however.

A 3.5-meter excavation pit executed by a lumber company at the time of the survey, 120 meters southeast of the airborne target centre revealed a succession of meter-thick sandy beds of glacio-lacustrine origin.

4.5.3 Discussion of Results

No evidence was found to confirm the geological nature of the magnetic and airborne EM anomaly at this target.

The depth to the top of this weak conductor is estimated to be in the order of 5-20 meters, based on topography and local overburden thickness (see interpretation in Figure 9).

A Gradient Array I.P. survey may penetrate the resistive overburden cover and help determine the conductivity or polarisability, if any of the magnetic source.

As at B1, presented in a previous section, diamond drilling will ultimately have to be applied in order to quantify the source of their respective geophysical anomaly's.

Relative to the potential of the other targets investigated during Phase 2, B3 should be relegated to 2nd priority status in the scope of any follow-up exploration work in 2003.

5.0 GENERAL DISCUSSION AND CONCLUSIONS

Analysis of the Phase-1 Airborne Survey data revealed thirteen (13) high priority exploration targets (mostly coincident Mag-EM anomaly's), five of which were selected for ground-proofing in 2002.

These included; the LT-4 zone and possible E-W extensions; several conductors adjacent to the LT-1 zone; and three isolated anomaly's (B1, B2 and B3), that may represent basic intrusion hosted sulphide mineralization. Anomaly B1 lies on strike between LT-1 and LT-4. B2 and B3 are located respectively, 1.2 km to the north, and 1.3 km to the south of LT-1.

Of continued interest, is the presence of dykes of intermediate composition, directly adjacent to, or within a short distance of the PGE-Au-Cu-Ni mineralised gabbros and pyroxenites. This last intrusive sequence appears principally as dykes (sills) of centimetric to decametric widths.

The Barrie magma mixing model is an attempt at explaining this phenomena, and suggests that these intermediate to calc-alkalic phases are integral components to the identification of areas with a higher PGE-Au-Cu-Ni potential.

The intrusive breccia textures observed at different locations on the LaTrève property group, have been proposed to date, as resulting from either; magma mixing of co-genetic and/or co-magmatic parental magma source; or, from separately evolved magma centers utilizing similar conduits for emplacement.

Although geochemistry and petrography studies point to a co-genetic origin for the various intrusive suites present on the LaTrève property group, it is equally feasible to assume that a later intermediate intrusive suite, omnipresent throughout the area, was generated from a separate magmatic center, presumably the syenodiorite plutons located 2-5 km east of these PGE occurrences.

All the same, it is presumed that same conduits could be used by subsequent or different intrusive phases, and that logically, intrusions of differing origin and chemistry juxtaposed.

Alternatively, a multiple intrusion model supposes that the intermediate intrusive phase is related to a separate magma source that postdates the PGE-bearing basic intrusive suite. In addition, it considers possible local increases in PGE hosted in mafics and ultramafics, through discreet hydrothermal cells created around the intruding intermediate dyke phase.

Compilation of geoscientific results from the 2002 Mineral Exploration Campaign suggests a complex faulting and shearing scenario involving major and secondary fault systems which locally appear tangential and radial with respect to the margins of the Lantagnac Pluton.

Some of these structures may have played an important role as zones of extension, facilitating the emplacement of post Lantagnac intrusive suites. PGE occurrences are notably proximal to major N80°E and secondary N58°E and N130°E structures.

The LT-1 melagabbro dyke and the fault at the of the LT-4 showing trend 140 to 155 degrees, while numerous crosscutting syenodiorite affinity dykes are oriented 40 to 60 degrees. These are similar to the axes of the interpreted conjugate fault system.

The Lt-4, Lt-1 and B2 PGE occurrences are related to an inferred tectonic zone trending N80°E along the southern margin of the Lantagnac Pluton, which may be the setting for additional PGE occurrences.

The PGE-bearing sulphides in gabbro and pyroxenite intrusions on the LaTrève I and IV property are clearly related precipitation from an immiscible sulphide fluid formed from the basic magma. Mobility of copper via metamorphism and recrystallization is locally apparent.

The immiscible sulphide fluid may have been generated as a result of mixing with a co-magmatic tonalitic magma prior to, or during emplacement. This is postulated for the LT-1 occurrence based on initial geological observations and petrographic studies.

Alternatively, the presence of meta-sedimentary rocks containing sulfide-facies iron formations in proximity to the LT-4 and B2 occurrences may have provided a source of sulfur in order to produce the immiscible phase. These rocks are interpreted as rafts swept up by the basic magma, and partly assimilated. This is supported by anomalous background PGE values detected in sulfide-rich portions of the iron formations, and possibly due to resorption of immiscible PGE from the basaltic magma.

Although a systematic geophysical evaluation of the PGE-mineralized zones was not completed in 2002, the available database suggests that any related geophysical responses are weak, and these zones are unusually blind to the geophysical methods applied to date on the ground.

It is important to consider that all the PGE occurrences found till now, where done so by traditional prospecting, and has so far been the most successfully applied exploration technique.

A thorough coverage of the general area of these mineralized zones via grass-roots prospecting is warranted.

Regardless of which genetic-metallogenic model is applied in the context of the setting for PGE mineralization on the LaTrève property group, there is a clear relationship between coarse grained gabbroic to pyroxenitic intrusive phases, and the proximity of the later stage syenitic to granodioritic suite (syenodiorites) in the higher probability of encountering PGE-concentrated sulphide mineralization within the mafic to ultramafic intrusions.

In conclusion, geoscientific information gained from the 2002 Mineral Exploration Program suggests that a combination of parameters may be strategic to identifying areas with a higher PGE potential. These key factors are;

- 1) The presence of coarse-grained phases in gabbro and pyroxenite intrusions.
- 2) The presence of crosscutting or juxtaposed late stage syenodiorite-affinity dykes relative to the basic intrusions in 1). In the least these dykes are at a reasonable distance to the PGE-occurrences.
- 3) The proximity to primary N80°E, and secondary N58°E and N130°E structures, or to junctions of any of these structures.
- 4) The highly similar geological setting for both the LT-4 and B2 PGE occurrences, suggests futhermore, that in this case, their locations are on the margins, or within areas of considerably lower magnetic susceptibility.

6.0 RECOMMENDATIONS FOR PROJECT DEVELOPMENT

Based on these observations, it is highly recommended to establish a 3.5 km-long by 1.2 km-wide survey grid extending across the entire southern margin of the Lantagnac intrusion, and in order to tie in the LT-1, LT-4 and B2 exploration targets.

In the least, it is recommended to extend the 2002 target survey grids, from which additional information would provide better correlation between the respective magnetic and electromagnetic signatures, and the underlying geology.

An integral part of returning to ground geophysical methods during the 2003 Mineral Exploration Campaign, is to complete a systematic and detailed study of the geophysical response related directly to PGE sulphide mineralization. This should involve incremental measurements orthogonally over the PGE showings with a multitude of available systems.

In areas of thicker overburden and/or poor outcrop exposure, biogeochemical methods that have already shown promise on the LaTrève-2 Property, should be tested and applied as an additional exploration tool, in validating the target for an eventual diamond drilling program. Targets B1 and B3 should be evaluated in this manner.

6.1 EXPLORATION STRATEGY FOR 2003 CAMPAIGN

The strategy applied for the 2003 Mineral Exploration Campaign will involve a balanced approach to defining more accurately the mineral potential of the LaTrève I, III and IV property's, while advancing significantly comprehension of the relationship between the various geological contexts in which economic-grade PGE-Au-Cu-Ni mineralization occurs, leading to the identification of similar environments.

Gold and diamondiferous targets will also be considered in developing exploration models.

A Multiple-Phase Approach is Recommended:

- Phase-1:** Systematic ground-proofing of all remaining high priority exploration targets defined during the 2002 Mineral Exploration Campaign (i.e. A-group airborne anomalies on LaTrève III, among others).
- Phase-2:** A detailed review of the LT-1, LT-2, LT-4 and the recently discovered B2 PGE-Au-Cu-Ni occurrences, will include precise follow-up ground geophysical surveys along expanded survey grids around these target areas. Surveys will include, magnetometer, H.L.E.M. (50 and 100 meter Tx-Rx separations) and gradient array I.P. (spectral frequency domain).
- A) Extension of the sites of mechanised stripping at LT-1 and LT-4, and initiation of stripping on the B2 target, in order to determine the full extent of PGE mineralization.
 - B) Geochemical surveying for overburden anomalies (testing of soil, humus and q-particle sampling methods). Systematic lithochemistry of target lithologies, including country rocks surrounding, and assimilated within mineralised horizons.
- Phase-3:** A diamond drilling program to test the depth extent of known PGE mineralized zones, as well as validated high potential, Priority-1 geophysical anomaly's.

An exploration budget of \$275,000 to \$325,000 will be required to successfully complete the proposed 2003 Mineral Exploration Campaign.



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BIBLIOGRAPHICAL REFERENCES

- Barrie, C.T. (2002). An Update on the Ni-Cu-PGE occurrences in the La Treve 1 area, Chapais Region, Quebec. Internal Report. Murgor Resources Inc.
- Barrie, C.T. (2001). Geochemistry and Petrography of the La Treve 1 and La Treve 2 Properties, Chapais Area, Quebec. Internal Report. Murgor Resources Inc.
- Barrie, C.T. (2000). Geology and PGE Mineralization of the La Treve 1 and La Treve 2 Properties, Chapais Area, Quebec. Internal Report. Murgor Resources Inc.
- Brugmann, G.E., et al (1989). Magma Mixing and Constitutional Zone Refining in the Lac des Iles Complex, Ontario: Genesis of Platinum-Group Mineralization. *Economic Geology*, Vol. 84, 1989, pp. 1557-1573.
- Johnson, I. (2002). Interpretation – Airborne EM/Magnetic Survey. La Treve Project, Chapais area, Quebec. NTS 32J/3, 32J/4. Internal Report prepared by JVX Ltd. for Murgor Resources Inc.
- Rowell, W.F. and Edgar, A.D. (1986). Platinum-Group Element Mineralization in a hydrothermal Cu-Ni Sulfide Occurrence, Rathbun Lake, Northeastern Ontario. *Economic Geology*, Vol.81, 1986, pp. 1272-1277.
- Savard, M. (2001). Virginia Gold Mines. La Treve Property – Technical Report. Fall 2001. Virginia Gold Mines, Internal Report.

CERTIFICATE OF PROFESSIONAL QUALIFICATIONS

I, MARC P. BANAS, residing at 4292 Langevin St., Montréal, Québec, do hereby certify that:

I am a graduate of McGill University in Montréal, Québec, having obtained a B.Sc. in Geophysics, with an associated minor in Geology in 1986.

I have been continuously engaged in my profession for the last 17 years.

I am a member of the Prospector's and Developers Association of Canada.

This report is supported by the author's experience in mineral exploration, and on a comprehensive and thorough study of public geoscientific reports covering the area of interest, and available at the Ministry of Natural Resources, the Geological Survey of Canada, as well as various internal reports supplied by MURGOR RESOURCES INC.

The author visited the "LaTrève" Property Group in October and November, 2002, during which an assessment of recent work was carried out.

I do not hold any interest, directly or indirectly in the LaTrève Property, nor do I detain directly, or indirectly, any shares or holdings related to MURGOR RESOURCES INC.



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- B) LT-4 : CHANNEL SAMPLING AND ASSAY VALUE MAP; 1:50**
- C) LT-4 : "ZONE 2" AND "ZONE 3" - GEOLOGY MAP; 1:50**

**APPENDIX IV : RESULTS OF GROUND GEOPHYSICS SURVEY - PHASE 2
GEOPHYSICS MAP SET**

LA TREVE I AND IV PROPERTY - 2002 SAMPLING PROGRAM
TABLE OF SAMPLE DESCRIPTIONS **APPENDIX I**

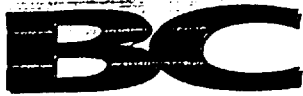
| SAMPLE # | SAMPLE TYPE / LENGTH CM. | LITHOLOGY | SAMPLE DESCRIPTION | SULPHIDES % OBSERVED |
|---|--------------------------|-----------|---|-----------------------|
| LATREVE - 4 ; TARGET SURVEY GRID | | | | |
| 290886 | PUNCTUAL GRAB | 4P(3G) | Black very fine-grained and very rusty Gossan - heavily fractured very fine disseminated sulphides. | 1-3% |
| 290853 | PUNCTUAL GRAB | QV,I1D | Contact zone between chlorite altered Pyroxenitic gabbro and a QV and tonalite dyke. | 2-4% py, po tr cpy |
| 290854 | PUNCTUAL GRAB | 3G(4P) | Fine to medium-grained gabbro/pyrox. Chlorite with minor ep. and silica. | tr |
| "MAIN ZONE" - CHANNEL SAMPLING TRAVERSE - 1A | | | | |
| 290855 | 22 | 3G(4P) | Medium grey to green, very fine to fine grained. Chlorite and silica alteration. Disseminated sulphides. | 2% 5% (local) |
| 290856 | 23 | 4P(3G) | As above, gossanous (rusty). Fine and clustered sulphides. | 2-10% |
| 290857 | 25 | 4P(3G) | Dark green, medium-grained. Irregular chlorite alteration. Sample straddles fault/shear zone. | tr |
| CHANNEL SAMPLING TRAVERSE - 1B | | | | |
| 290858 | 25 | 4P | Dark green, medium grained. Chl/ Sil alteration. Mottled texture. | tr - 0.5% |
| 290859 | 40 | 4P,M16 | As above, however heavily sheared. Ductile, rounded clasts in muscovite/talc schist. | tr - 0.5% |
| CHANNEL SAMPLING TRAVERSE - 1C | | | | |
| 290860 | 22 | 3G | Light grey, fine-grained, rusty and altered - ep, sil, chl | tr |
| 290861 | 33 | 3G | Dark green, fine-grained. Apparent ductile brecciation with 2-5 cm silica nodules. Fine disseminated sulphides. | 1--3% po, cpy |
| 290862 | 30 | 4P(3G) | Fine to medium grained section. Chlorite, epidote and silica alteration. Evenly disseminated sulphides. | 2-4% po+cpy |
| 290863 | 35 | 4P(3G) | Less altered than previous sample. Diminishing sulphide content across the sample. | 1% - tr |
| CHANNEL SAMPLING TRAVERSE - 1D | | | | |
| 290864 | 45 | 3G(4P) | Light grey, very fine to fine grained. Disseminated sulphides. | 2-10% po,py |
| 290865 | 45 | 3G(4P) | As above | 2-5% |
| 290866 | 45 | 3G(4P) | Dark green to grey. Brittle breccia. Silica alteration. | 2-5% py,po,cpy |
| CHANNEL SAMPLING TRAVERSE - 1E | | | | |
| 290867 | 62 | 3G(V3) | Light to medium grey, very fine to fine-grained. Sulphides locally along fractures, or as isolated clusters. | tr - 1% |
| CHANNEL SAMPLING TRAVERSE - 1F | | | | |
| 290868 | 68 | 3G(V3) | Black to dark grey, fine to medium. Locally disseminated sulphides. Rusty fractures. | 1-3% py, po |

| SAMPLE # | SAMPLE TYPE / LENGTH CM. | LITHOLOGY | SAMPLE DESCRIPTION | SULPHIDES % OBSERVED |
|---|--------------------------|-----------|---|----------------------|
| CHANNEL SAMPLING TRAVERSE - 1G | | | | |
| 290869 | 57 | 4P(3G) | Dark grey to black, coarse grained pyroxenitic gabbro. Dendritic and coarse disseminated sulphides. | 5-15% py,po,cpy |
| 290870 | 23 | 4P(3G) | Generally, as above | 5-10% |
| 290871 | 47 | 4P(3G) | As above, however sulphides are sheared, with higher chlorite alteration. | 2-4% |
| 292872 | 53 | 4P(3G) | Increased alteration. Rusty gossan. Zoning of po and cpy | 1-4% po,cpy |
| 290873 | 58 | 3G(4P) | dark green-grey, fine grained. Sulphides along fractures. | <1 - 1.5% po,cpy |
| CHANNEL SAMPLING TRAVERSE - M4 | | | | |
| 18039 | 25 | 3G | Gabbro | <5% |
| 18022 | 60 | 3G | Coarse-grained gabbro. Disseminated and massive sulphides. | po,cpy,py |
| 18023 | 40 | 3G | Medium-grained gabbro. Disseminated sulphides. | <5% |
| 18024 | 50 | 3G | Medium-grained gabbro. | <5% |
| CHANNEL SAMPLING TRAVERSE - M3 | | | | |
| 18025 | 50 | 3G(V3) | Rounded spherical and spotty texture. Occasional sulphide stringers. | <5% |
| 18026 | 60 | V3,3G | Volcanics(?). Bands of gabbro. Disseminated and clotty sulphides | cpy,po |
| 18027 | 40 | 3G | Fine-grained gabbro with sulphide stringers | 1-15%po,cpy |
| CHANNEL SAMPLING TRAVERSE - M2 | | | | |
| 18028 | 35 | V3,3G | Medium-grained altered volcanics and fine-grained gabbro | 5-10% cpy,py,po |
| 18029 | 40 | V3 | Volcanics with stringer sulphides. | 1-2% |
| 18030 | 85 | V3 | Volcanics with stringer sulphides. | 2-5% py,po |
| 18031 | 30 | V3 | Volcanics. Spotty texture, poikilitic or vesicular? | <1% |
| CHANNEL SAMPLING TRAVERSE - M5 | | | | |
| 18032 | 50 | 3G,V3 | Shear Zone. | <1% |
| CHANNEL SAMPLING TRAVERSE - M1, M6, AND M7 (SEE GEOLOGY MAP) | | | | |
| 18033 | 50 | 4P | Very coarse-grained gabbro/pyroxenite. | <1% |
| 18034 | 50 | 4P | Very coarse-grained gabbro/pyroxenite. | <1% |
| 18035 | 20 | 4P | Very coarse-grained gabbro/pyroxenite. Local disseminated sulphides. | 1-2% |

| SAMPLE # | SAMPLE TYPE / LENGTH CM. | LITHOLOGY | SAMPLE DESCRIPTION | SULPHIDES % OBSERVED |
|---|--------------------------|-----------|--|----------------------|
| 18036 | 50 | S1,V3,3G | Metasediments-volcanics with stringer gabbro intrusions. Metasomatic alteration and brecciation. | 1-4% py,cpy,po |
| 18037 | 50 | S1,V3,3G | As above. Fine grained sulphides. | <1% |
| 18038 | 25 | V3,3G | Shear Zone. | <1% |
| "ZONE 2" - CHANNEL SAMPLING TRAVERSE - C | | | | |
| 18014 | 20 | 3G | Vary-textured gabbro. | <1% |
| 18049 | 50 | 3G | Vary-textured gabbro. | 2% po |
| 18050 | 25 | S1,3G | Metasomatically altered metasediments | 2% py,po |
| CHANNEL SAMPLING TRAVERSE - A | | | | |
| 18040 | 50 | S1,S9 | Sulphide-facies iron formation. Chert. | 15-20% py,cpy,po |
| 18041 | 40 | S1,S9 | As above | 10% py,cpy |
| 18042 | 50 | S1,S9 | Chert, SM sulphides. | 35-45% py,cpy,po |
| 18043 | 50 | S1,S9 | Po-stringers | 5-15% po,py |
| 18044 | 50 | S1,S9 | Chert. | 25% py,cpy,po |
| 18045 | 30 | S1,S9 | Banded sulphides - up to 7 cm bands. | 35-40% py,cpy,po |
| 18046 | 50 | S1,S9 | Disseminated sulphides and stringers | 25% py,cpy,po |
| 18047 | 35 | S1,S9 | Disseminated and banded sulphides. | 20% py,cpy,po |
| CHANNEL SAMPLING TRAVERSE - B | | | | |
| 18048 | 50 | 3G | Vary-textured (mixed) gabbro, with 12cm pyritiferous chert band. | 2% py |
| CHANNEL SAMPLING TRAVERSE - D | | | | |
| 18015 | 40 | 3G | Mixed gabbro, stringer sulphides. | 1% py,po |
| 18016 | 15 | 3G,S9 | Banded sulphides locally. | <1% |
| 18017 | 15 | 3G | Mixed gabbro. | <1% |
| CHANNEL SAMPLING TRAVERSE - E | | | | |
| 18018 | 55 | 3G | Mixed Gabbro. | 1% py,po |
| 18019 | 30 | 3G,S9 | Mixed gabbro with IF inclusions. | <1% |
| | | | | |

| SAMPLE # | SAMPLE TYPE / LENGTH CM. | LITHOLOGY | SAMPLE DESCRIPTION | SULPHIDES % OBSERVED |
|---|--------------------------|-----------|---|----------------------|
| CHANNEL SAMPLING TRAVERSE - F | | | | |
| 18020 | 55 | 3G | Mixed gabbro with blebs of sulphide and magnetite. | 1-2% py |
| 18021 | 55 | 3G,S1,V3 | Mixed gabbro with sedimentary or volcanic inclusions (50%). | 2% po,py string. |
| 18051 | 50 | 3G (S1) | Gabbro with some inclusions ?. | <1% |
| "ZONE 3" - CHANNEL SAMPLING TRAVERSE | | | | |
| 18055 | 100 | 3G,I1D | Mixed tonalite and mafic intrusions. | <1% |
| 18054 | 100 | S1,S9 | Cherty enclave (metasedimentary) with 20% IF. | <1% |
| 18053 | 60 | 3G,S9 | Mafic rock with 5% IF. | <1% |
| 18052 | 60 | S1,S9 | Cherty layer with magnetic IF bands. Disseminated sulphides. | 2% py |
| LATREVE - 1 : TARGET SURVEY GRID | | | | |
| 290874 | PUNCTUAL GRAB | 3G(4P) | Black to dark green. Rusty cleavage. Very fine disseminated sulphides. | < 1% py, tr cp,po |
| 290875 | PUNCTUAL GRAB | S9,S1,V3 | Black, fine grained metasediments. SM sulphide bands with mt and po. | 20% |
| 290876 | PUNCTUAL GRAB | V3 | Dark green, hematized, with chlorite alteration.\ | tr |
| 290877 | PUNCTUAL GRAB | M8,I1G | Pale yellow, sericite-talc schist. Disseminated euhedral pyrite. | 0.50% |
| 290878 | PUNCTUAL GRAB | 4P(3G) | Fine to medium grained, with augite phenocrysts and coarse sulphides. | 1-2% py |
| B 2 : TARGET SURVEY GRID | | | | |
| 290879 | PUNCTUAL GRAB | S1,S9(V3) | Metasedimentary rock, chert with IF (5% magnetite). | tr po |
| 290880 | PUNCTUAL GRAB | S1,S9 | Rusty fractured shear zone next too #879, with 5% mt | tr |
| 290881 | PUNCTUAL GRAB | 4P | Dark green to black. Composite sample, coarse grained pyroxenite | <1% |
| 290882 | PUNCTUAL GRAB | 4P(3G) | Fine to medium grained altered gabbro. Rusty fractures, fine and coarse disseminated sulphides. Occasional cpy. | 1-3% |
| 290883 | PUNCTUAL GRAB | 4P(3G) | As above. Finer grained. Higher chlorite content | 1-3% |
| 290884 | PUNCTUAL GRAB | 4P,I1G | Contact zone. Pyroxenite/granodiorite dyke. Disseminated sulphides. Strong chl/ep/sil alteration. | 3-5% po,py,tr cpy |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| LEGEND | | TO SAMPLE DESCRIPTION ABBREVIATIONS | |
|---------------|-----------------|-------------------------------------|--|
| 4P | PYROXENITE | | |
| 3G | GABBRO | | |
| I1D | TONALITE | | |
| V3 | MAFIC VOLCANICS | | |
| IF | IRON FORMATION | | |
| CHL | CHLORITE | | |
| EP | EPIDOTE | | |
| SIL | SILICA | | |
| SM | SEMI-MASSIVE | | |
| QV | QUARTZ VEIN | | |
| | | | |



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PAGE 1 DE 1

| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | Pt PPB | Pd PPB | Cu PPM | Co PPM | Ni PPM |
|---------------|---------------|--------|--------|--------|--------|--------|--------|
| 290853 | | 20 | 22 | 462 | 4029 | 56 | 1090 |
| 290854 | | 6 | 8 | 10 | 213 | 51 | 84 |
| 290855 | | 11 | 35 | 70 | 1509 | 74 | 238 |
| 290856 | | 39 | 97 | 295 | 4669 | 83 | 384 |
| 290857 | | 5 | 78 | 177 | 1205 | 61 | 314 |
| 290858 | | 2 | <5 | 4 | 50 | 33 | 177 |
| 290859 | | <1 | 5 | 2 | 69 | 31 | 183 |
| 290860 | | 4 | 25 | 47 | 597 | 34 | 152 |
| 290861 | | 46 | 22 | 390 | 3169 | 121 | 1713 |
| 290862 | | 30 | 56 | 560 | 4376 | 123 | 2067 |
| 290863 | | 34 | 32 | 76 | 1061 | 46 | 511 |
| 290864 | | 134 | 98 | 379 | 2520 | 99 | 1587 |
| 290865 | | 138 | 145 | 446 | 2883 | 129 | 1953 |
| 290866 | | 582 | 517 | 1098 | 4963 | 80 | 655 |
| 290867 | | 4 | 8 | 16 | 357 | 88 | 100 |
| 290868 | | 3 | 11 | 15 | 488 | 83 | 78 |
| 290869 | | 172 | 560 | 1082 | 7310 | 361 | 4386 |
| 290870 | | 108 | 388 | 1117 | 4771 | 363 | 4580 |
| 290871 | | 28 | 80 | 228 | 1849 | 94 | 1859 |
| 290872 | | 24 | 132 | 450 | 2514 | 146 | 2410 |
| 290873 | | 22 | 36 | 110 | 1053 | 50 | 479 |
| 290874 | | 8 | 6 | 9 | 391 | 30 | 32 |
| 290875 | | 42 | <5 | 1 | 265 | 72 | 72 |
| 290876 | | 40 | <5 | <1 | 13 | 8 | 10 |
| 290877 | | 39 | <5 | <1 | 271 | 21 | 17 |
| 290878 | | 11 | 10 | 18 | 223 | 65 | 66 |
| 290879 | | 5 | <5 | <1 | 32 | 5 | 12 |
| 290880 | | 38 | <5 | <1 | 113 | 20 | 17 |
| 290881 | | 2 | 8 | 12 | 60 | 31 | 190 |
| 290882 | | 285 | 338 | 649 | 1865 | 76 | 971 |
| 290883 | | 61 | 94 | 232 | 896 | 47 | 509 |
| 290884 | | 62 | 90 | 218 | 779 | 60 | 356 |
| 290885 | | 3 | 13 | 16 | 95 | 31 | 139 |

APPENDIX II
GEOCHEMISTRY
- ASSAY VALUES

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**ALS Chemex
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PAGE 1 DE 1

| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | Pt PPB | Pd PPB | Cu PPM | Co PPM | Ni PPM |
|------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 290886 | | 6 | 9 | 3 | 120 | 38 | 16 |

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**CHIMITEC
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PAGE 1 DE 2

| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | Pt PPB | Pd PPB | Cu PPM | Co PPM | Ni PPM |
|---------------|---------------|--------|--------|--------|--------|--------|--------|
| 18014 | | 4 | <5 | 6 | 46 | 27 | 205 |
| 18015 | | 25 | 12 | 22 | 284 | 59 | 270 |
| 18016 | | 69 | 14 | 24 | 1586 | 239 | 1040 |
| 18017 | | 10 | 10 | 12 | 178 | 37 | 156 |
| 18018 | | 15 | 9 | 8 | 256 | 102 | 174 |
| 18019 | | 43 | 9 | 19 | 760 | 200 | 193 |
| 18020 | | 18 | 13 | 18 | 330 | 84 | 353 |
| 18021 | | 20 | 15 | 12 | 326 | 68 | 165 |
| 18022 | | 185 | 329 | 1050 | 5076 | 377 | 4354 |
| 18023 | | 34 | 133 | 357 | 2300 | 146 | 1549 |
| 18024 | | 25 | 73 | 161 | 898 | 73 | 937 |
| 18025 | | 29 | 93 | 195 | 1256 | 62 | 749 |
| 18026 | | 73 | 269 | 608 | 3074 | 165 | 2751 |
| 18027 | | 102 | 385 | 813 | 3910 | 194 | 2555 |
| 18028 | | 442 | 542 | 1280 | 7582 | 297 | 5121 |
| 18029 | | 104 | 269 | 692 | 4326 | 165 | 2171 |
| 18030 | | 130 | 221 | 1026 | 4826 | 303 | 4141 |
| 18031 | | 155 | 202 | 1210 | 4958 | 203 | 5961 |
| 18032 | | 23 | 15 | 23 | 196 | 55 | 83 |
| 18033 | | 4 | 15 | 20 | 102 | 26 | 123 |
| 18034 | | 8 | 13 | 19 | 296 | 34 | 52 |
| 18035 | | 10 | 23 | 38 | 394 | 40 | 90 |
| 18036 | | 12 | 15 | 19 | 182 | 48 | 52 |
| 18037 | | 10 | 15 | 19 | 208 | 40 | 52 |
| 18038 | | 45 | 47 | 909 | 7108 | 133 | 2319 |
| 18039 | | 77 | 50 | 113 | 1416 | 42 | 353 |
| 18040 | | 51 | 10 | 8 | 620 | 82 | 226 |
| 18041 | | 12 | <5 | 5 | 474 | 18 | 170 |
| 18042 | | 8 | <5 | 8 | 370 | 34 | 215 |
| 18043 | | 13 | 14 | 6 | 426 | 21 | 227 |
| 18044 | | 30 | 9 | 7 | 708 | 49 | 231 |
| 18045 | | 33 | 13 | 6 | 444 | 327 | 249 |
| 18046 | | 67 | <5 | 5 | 946 | 99 | 231 |
| 18047 | | 39 | <5 | 4 | 356 | 135 | 162 |
| 18048 | | 22 | 8 | 15 | 540 | 81 | 278 |
| 18049 | | 5 | 9 | 10 | 148 | 41 | 150 |
| 18050 | | 6 | <5 | 5 | 132 | 24 | 129 |
| 18051 | | 5 | 7 | 7 | 98 | 48 | 194 |
| 18052 | | 7 | <5 | 4 | 178 | 39 | 75 |
| 18053 | | 5 | 5 | 8 | 132 | 35 | 99 |

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PAGE 2 DE 2

| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | Pt PPB | Pd PPB | Cu PPM | Co PPM | Ni PPM |
|------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 18054 | | 9 | <5 | 6 | 146 | 33 | 68 |
| 18055 | | 17 | 8 | 11 | 182 | 34 | 40 |

LIST OF PHOTOS

- Photo 1. The LT-4 PGE-occurrence “Main Zone”, view looking west. Breccia pipe or brecciated contact zone is highlighted at the base of the outcrop.**
- Photo 2. LT-4, Main Zone: View looking north across sampling traverse 1C, where the mineralized zone widens above the basal shear zone.**
- Photo 3. LT-4, Main Zone: View looking north over original LT-4 discovery site.**
- Photo 4. Close-up view of traverse 1G showing disseminated and clustered sulphides.**
- Photo 5. LT-4, Main Zone: View looking west at the northern end of the zone. A basal sheared/fault closely marks contact between lower coarse-grained pyroxenite and meta-gabbro.**
- Photo 6. B2 Target Survey Grid: View looking southwest from station 0+75S at Line 1W. Coarse-grained pyroxenite with anomalous PGE values.**



Photo 1. The LT-4 PGE-occurrence “Main Zone”, view looking west. Breccia pipe or brecciated contact zone is highlighted at the base of the outcrop. Note the basal sheared fault, and the known limit of the PGE-rich zone.



Photo 2. LT-4, Main Zone: View looking north across sampling traverse 1C, where the mineralized zone widens above the basal shear and breccia contact/pipe. Note parallel rusty bands indicating semi-massive sulfide bands.



Photo 3. LT-4, Main Zone: View looking north over original LT-4 discovery site. Orthogonal sampling traverses 1G & M4 on fresh blasted surface.

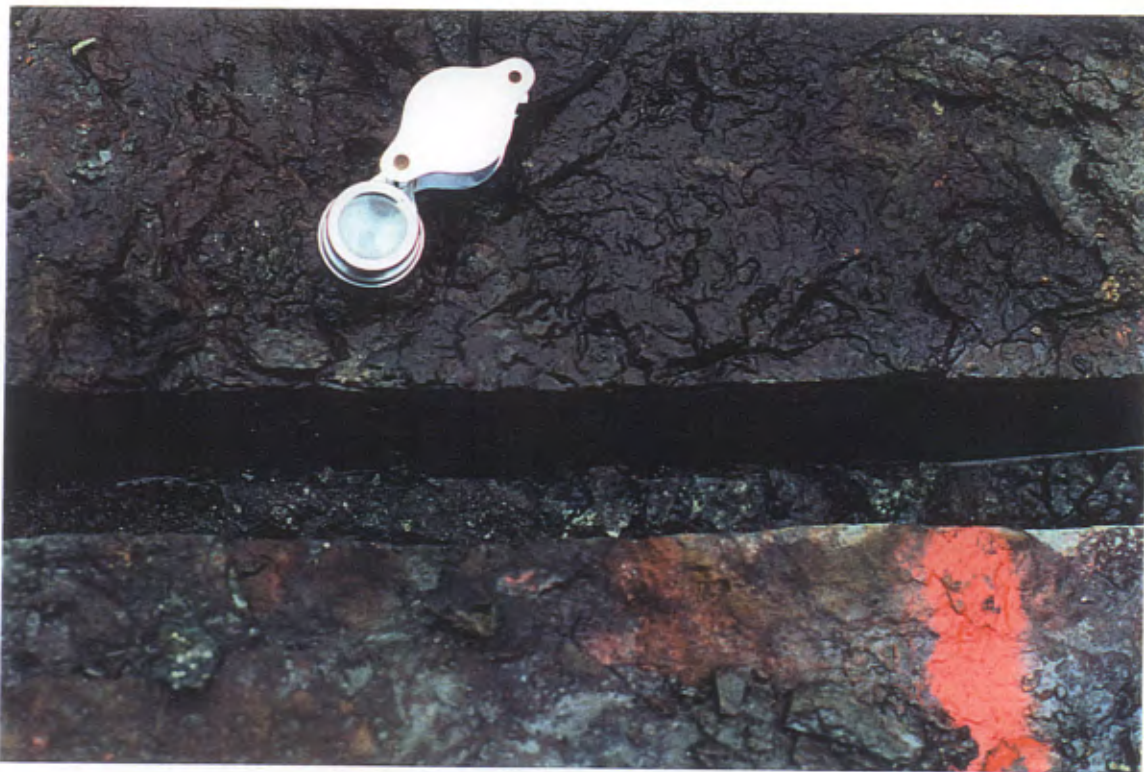


Photo 4. Close-up view of traverse 1G (from previous photo) showing disseminated and clustered sulphides (py, cpy, po) in matrix of coarse-grained, altered pyroxenitic gabbro.

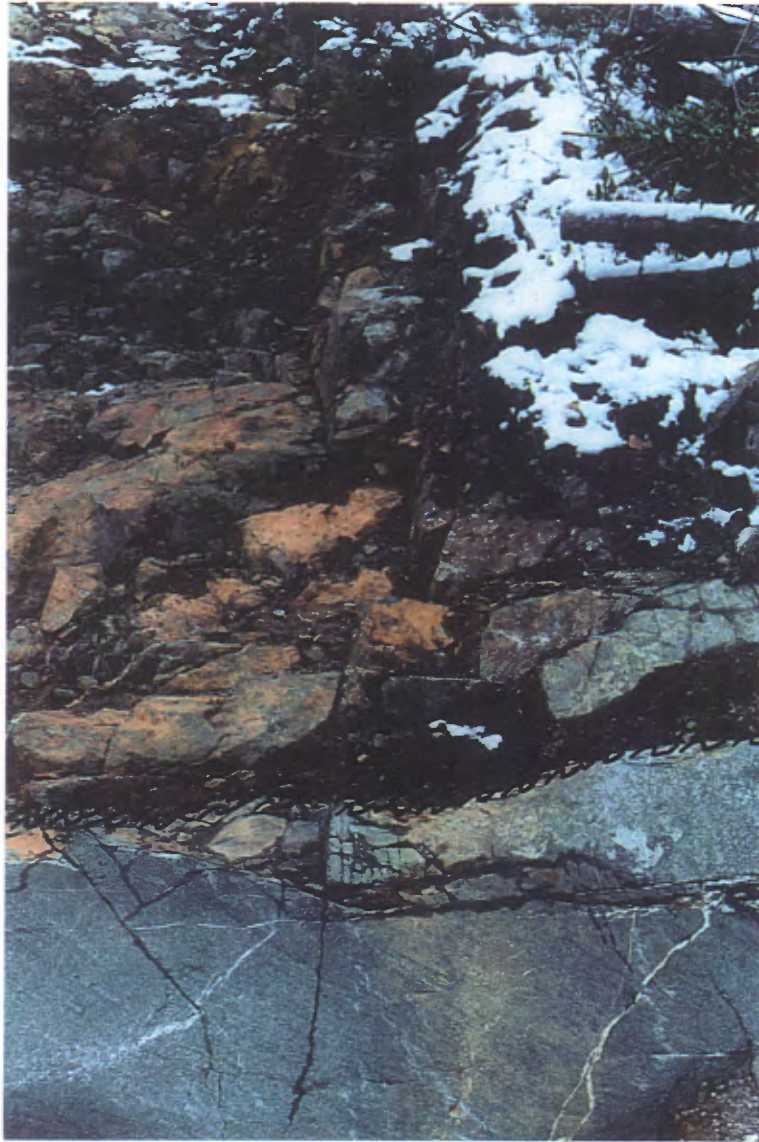
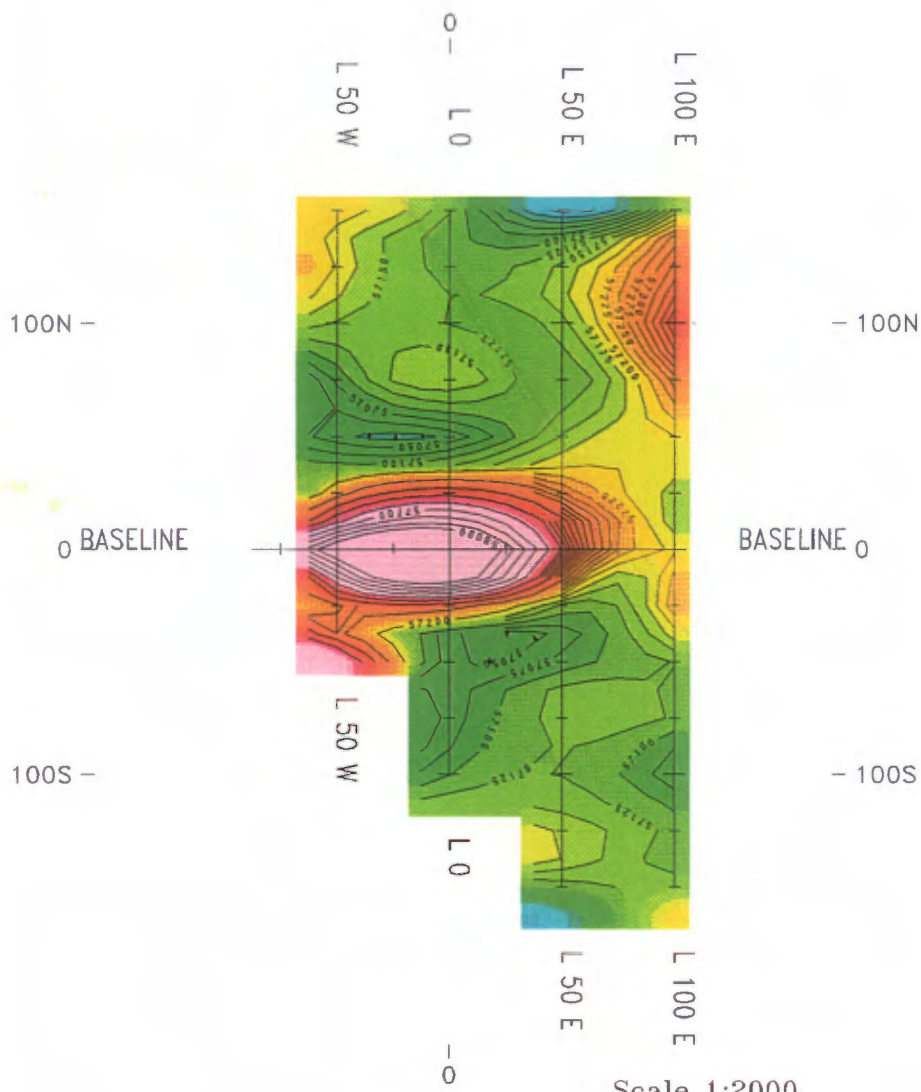


Photo 5. LT-4, Main Zone: View looking west at the northern end of the zone. The basal sheared/fault in foreground closely marks contact between lower coarse-grained pyroxenite and upper meta-gabbro or meta-volcanics. Note the flat fracture pattern that is more pervasive in the upper unit.



Photo 6. B2 Target Survey Grid: View looking southwest from station 0+75S at Line 1W. In the background is a small mound and hand-stripping sites, denoting the general area of coarse-grained pyroxenite with anomalous PGE values. This is the highest topographic point in the immediate area.

B1



INSTRUMENTS:

GEM Systems GEM-19

GEM Systems GEM-19 (base station)

Base level: 57100 nT

Contour interval: 25 nT

100=500 nT
nT

MURGOR RESOURCES inc.
B1

MAGNETIC SURVEY
TOTAL FIELD CONTOURS

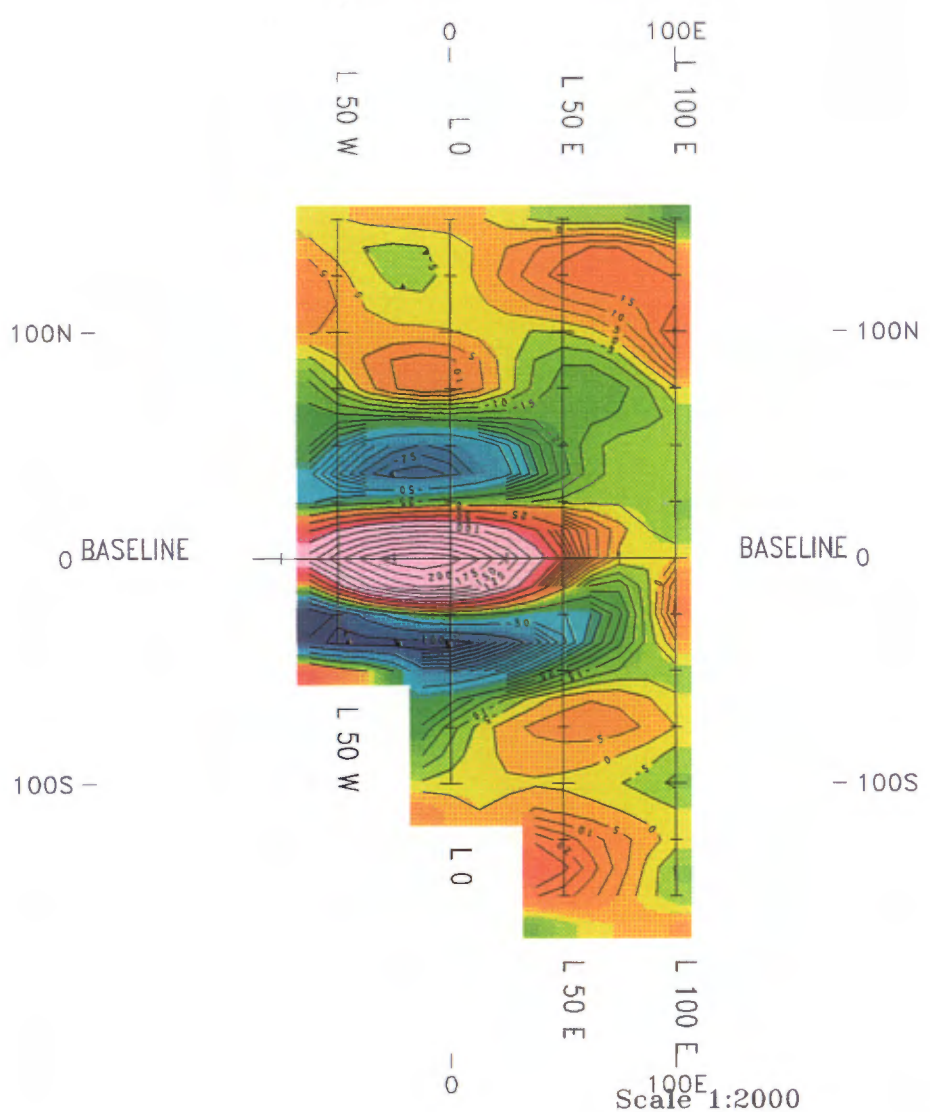
GEOPHYSIQUE TMC

Interpreted by:

Date 10/02

Scale 1 : 2000

Drawing no.



INSTRUMENTS:
GEM Systems GEM-19
GEM Systems GEM-19 (base station)
Base level: 57100 nT
Contour interval: 5 nT/m
25 nT/m

MURGOR RESOURCES inc.
B1

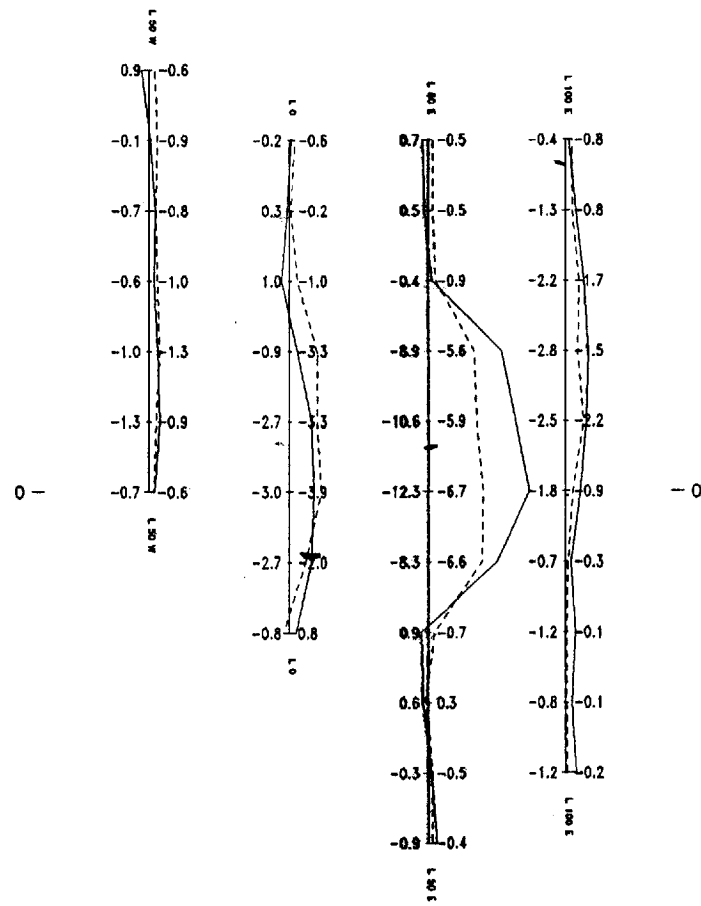
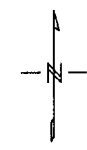
MAGNETIC SURVEY
CALCULATED VERTICAL GRADIENT CONTOURS

GEOPHYSIQUE TMC

Interpreted by: _____ Date 10/02

Scale 1 : 2000 Drawing no. _____

BP



LEGENDE

PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 5 %
 - - - - Out-of-phase 1 cm. = 5 %
 Lectures: In-Phase 4 | -4 Out-of-phase %
 Instrument APEX MAXMIN I

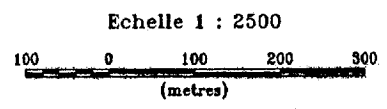
MURGOR RESOURCES inc.
PROJET B1
CANTON

LEVE ELECTROMAGNETIQUE
 Frequence: 880 Hz Cable: 100 m

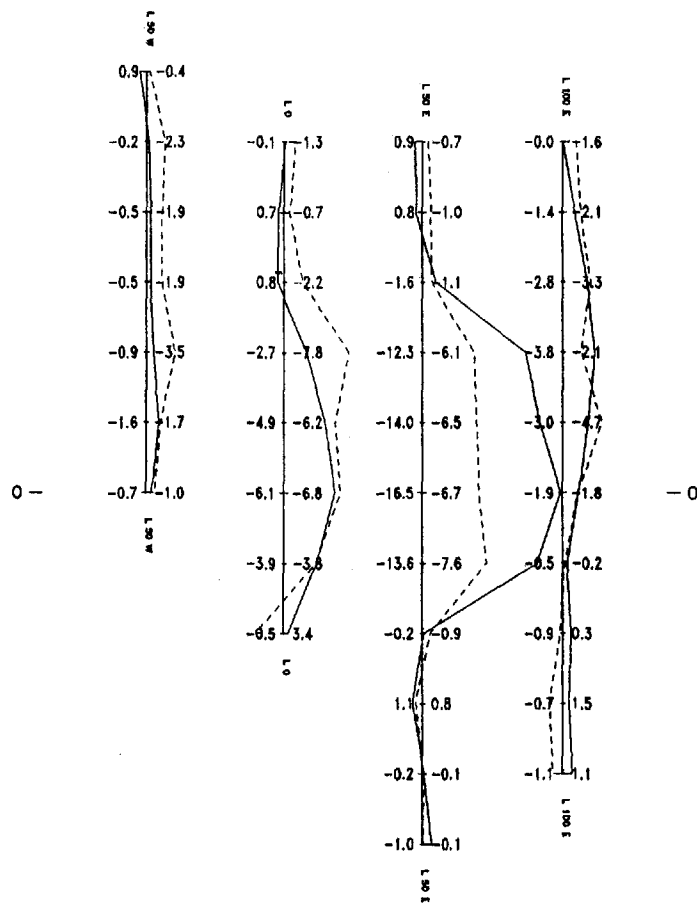
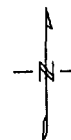
GEOPHYSIQUE TMC INC.

Interprete par: _____ Date 10/02

Echelle 1 : 2500 Plan no. _____



BP



LEGENDE

PROFILES ELECTROMAGNETIQUE

— In-phase 1 cm. = 5 %
 - - - Out-of-phase 1 cm. = 5 %

Lectures: In-Phase 4 | -4 Out-of-phase
 % %

Instrument APEX MAXMIN I

MURGOR RESOURCES inc.

PROJET B1

CANTON

LEVE ELECTROMAGNETIQUE

Frequence: 3520 Hz Cable: 100 m

GÉOPHYSIQUE TMC INC.

Interprete par:

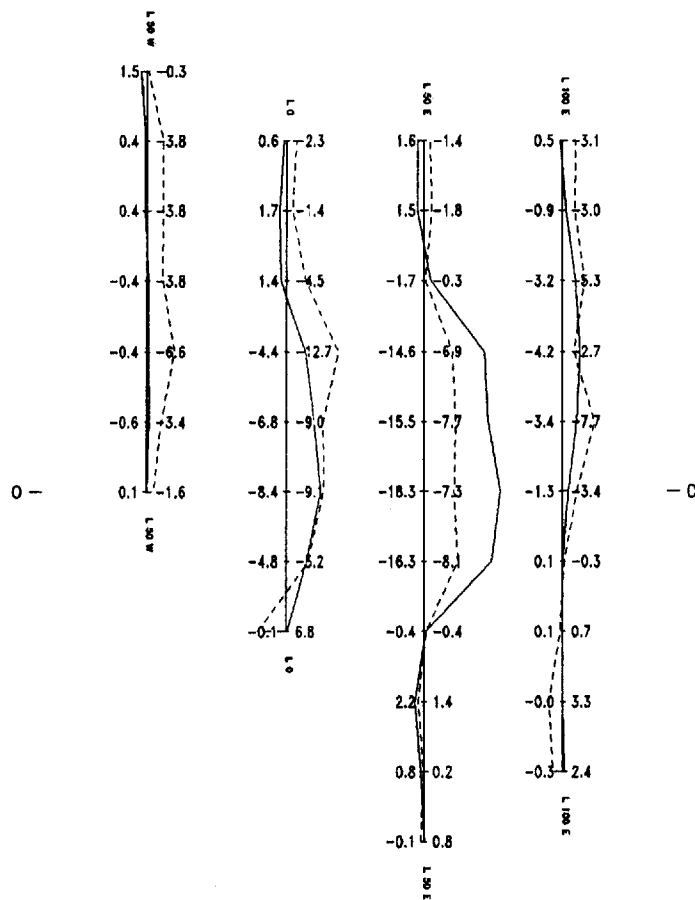
Date 10/02

Echelle 1 : 2500=100

Plan no.

Echelle 1 : 2500=100





LEGENDE

PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 10 %
 - - - - Out-of-phase 1 cm. = 10 %
 Lectures: In-Phase 4 | -4 Out-of-phase
 % %
 Instrument APEX MAXMIN I

MURGOR RESOURCES inc.

PROJET B1

CANTON

LEVE ELECTROMAGNETIQUE

Frequence: 7040 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

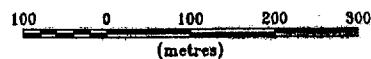
Interprete par:

Date 10/02

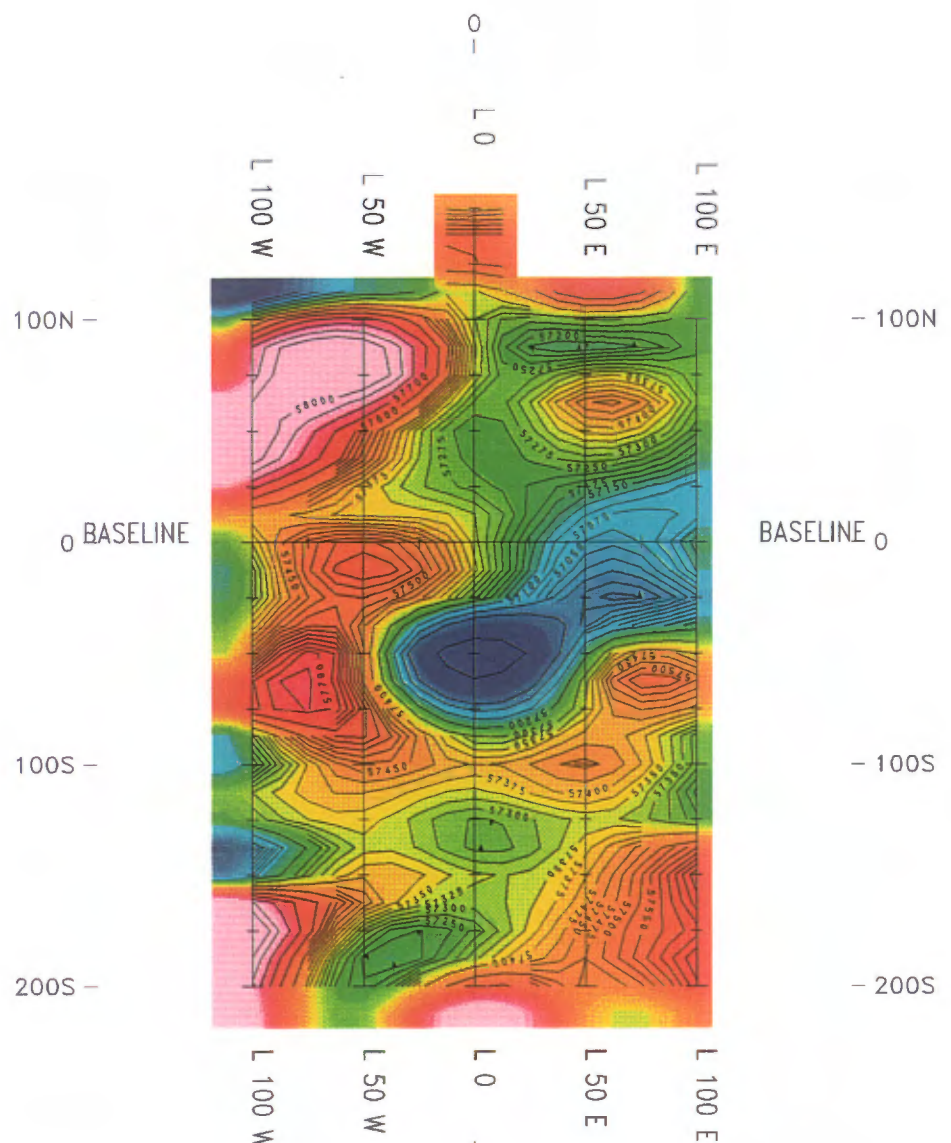
Echelle 1 : 2500

Plan no.

Echelle 1 : 2500



BP



INSTRUMENTS:

GEM Systems GEM-19
GEM Systems GEM-19 (base station)
Base level: 57100 nT
Contour interval: 25 nT
100=500 nT
nT

MURGOR RESOURCES inc.
B2

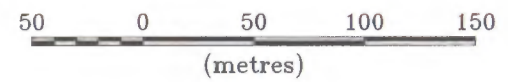
MAGNETIC SURVEY
TOTAL FIELD CONTOURS

GEOPHYSIQUE TMC

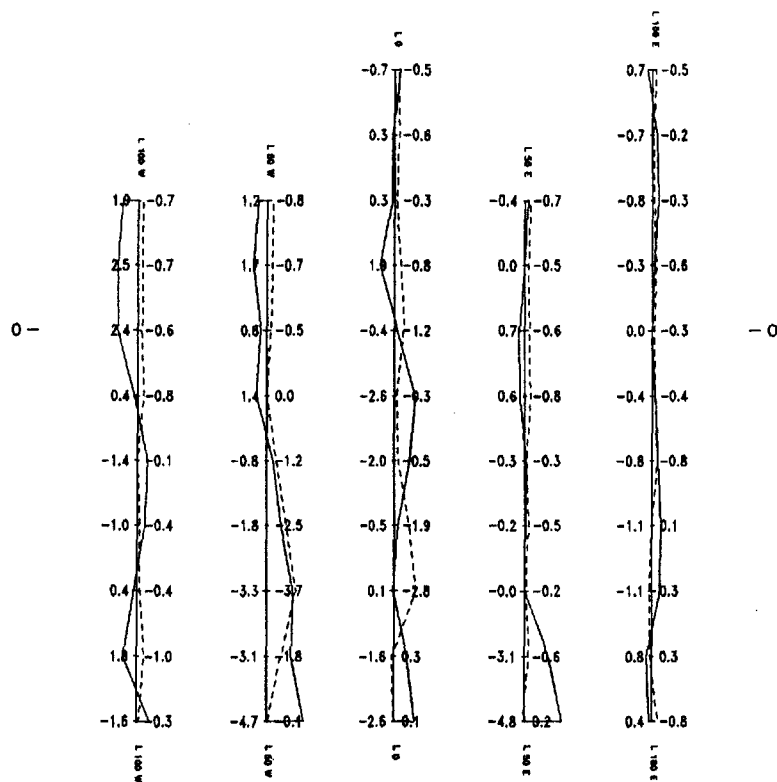
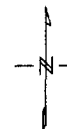
Interpreted by: _____ Date 10/02

Scale 1 : 2000 Drawing no. _____

Scale 1:2000



BP



LEGENDE

PROFILES ELECTROMAGNETIQUE

— In-phase 1 cm. = 5 %
 - - - Out-of-phase 1 cm. = 5 %

Lectures:
 In-Phase % 4 + 4 Out-of-phase %

Instrument APEX MAXMIN I

MURGOR RESOURCES inc.

PROJET B2

CANTON

LEVE ELECTROMAGNETIQUE

Frequence: 880 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

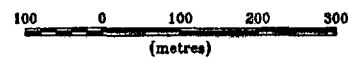
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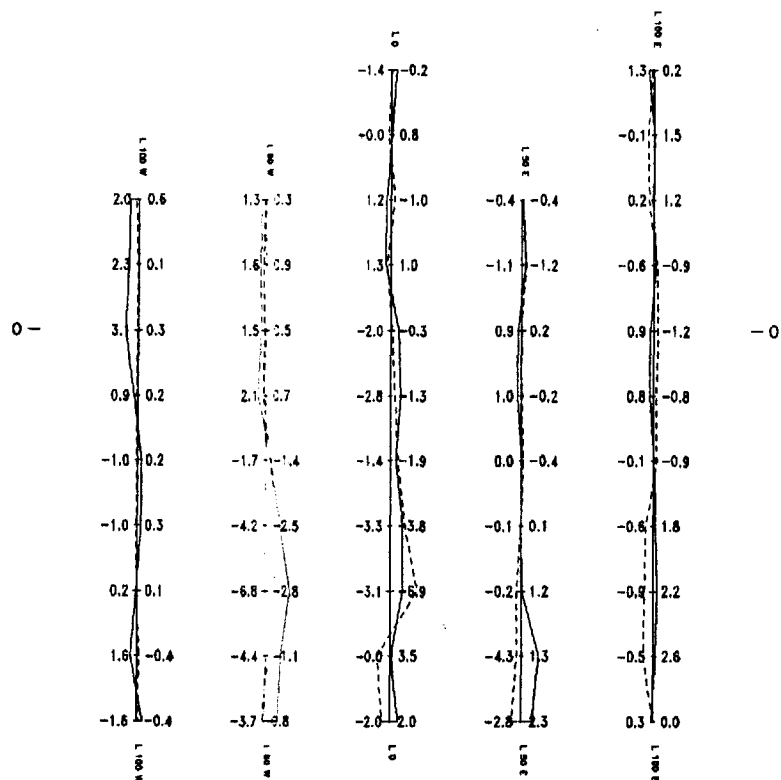
Date 10/02

Echelle 1 : 2500

Plan no.

Echelle 1 : 2500





LEGENDE

PROFILES ELECTROMAGNETIQUE

— In-phase 1 cm. = 10 %
 - - - Out-of-phase 1 cm. = 10 %

Lectures: In-Phase 4 | -4 Out-of-phase % %

Instrument APEX MAXMIN I

MURGOR RESOURCES inc.

PROJET B2

CANTON

LEVE ELECTROMAGNETIQUE

Frequence: 7040 Hz Cable: 100 m

GÉOPHYSIQUE TMC INC.

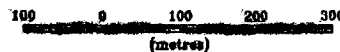
Interprete par:

Date 10/02

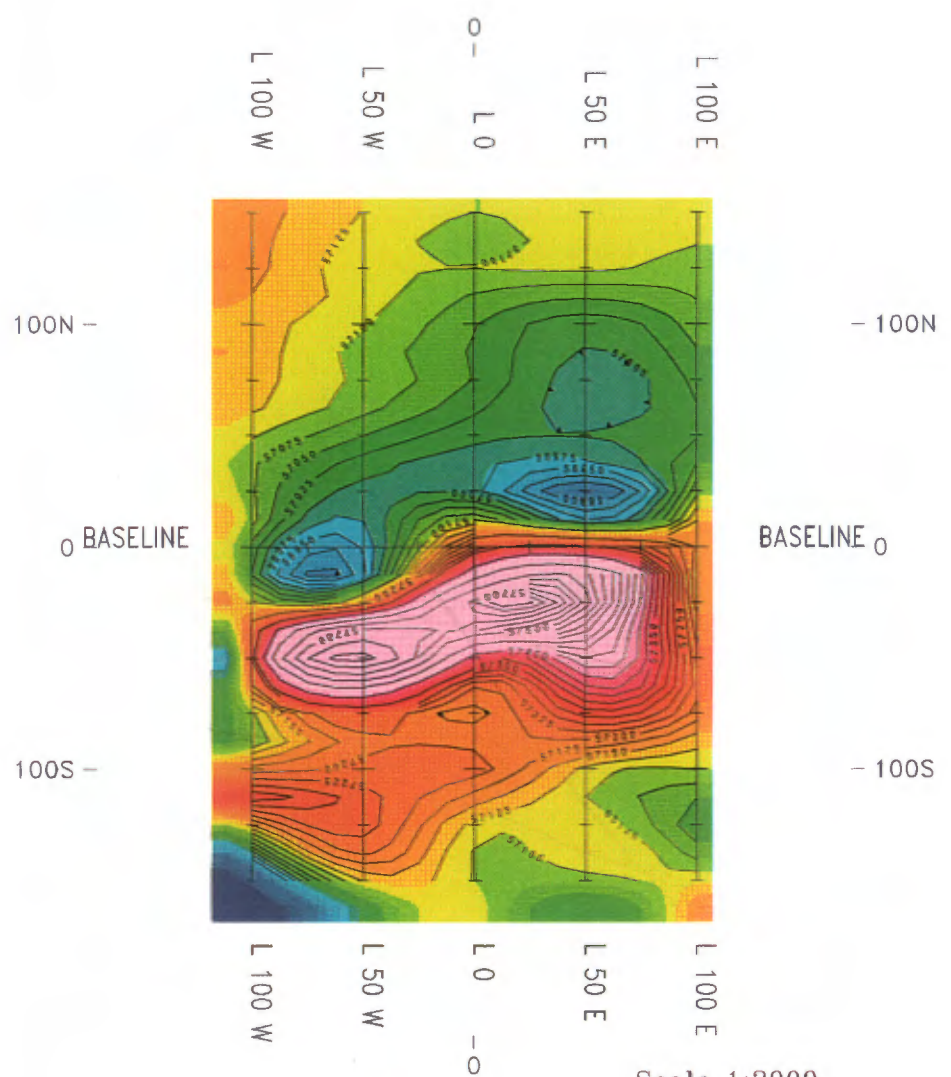
Echelle 1 : 2500

Plan no.

Echelle 1 : 2500



BP



INSTRUMENTS:

GEM Systems GEM-19
GEM Systems GEM-19 (base station)
Base level: 57100 nT
Contour interval: 25 nT
100=500 nT
nT

MURGOR RESOURCES inc.
B3

MAGNETIC SURVEY
TOTAL FIELD CONTOURS

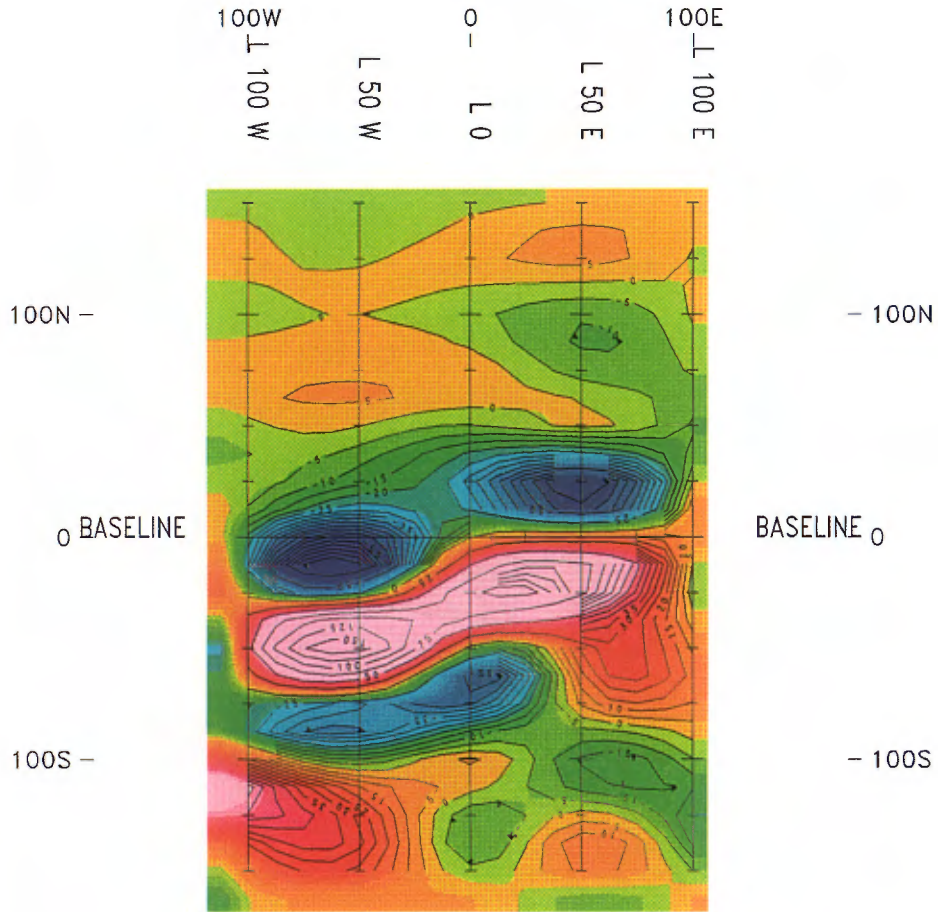
GEOPHYSIQUE TMC

Interpreted by: _____ Date 10/02

Scale 1 : 2000 Drawing no. _____

BP

B3



INSTRUMENTS:
 GEM Systems GEM-19
 GEM Systems GEM-19 (base station)
 Base level: 57100 nT
 Contour interval: 5 nT
 25 nT

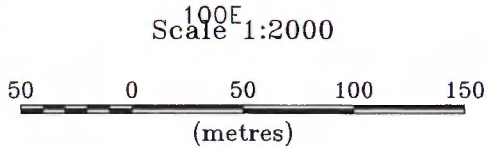
MURGOR RESOURCES inc.
 B3

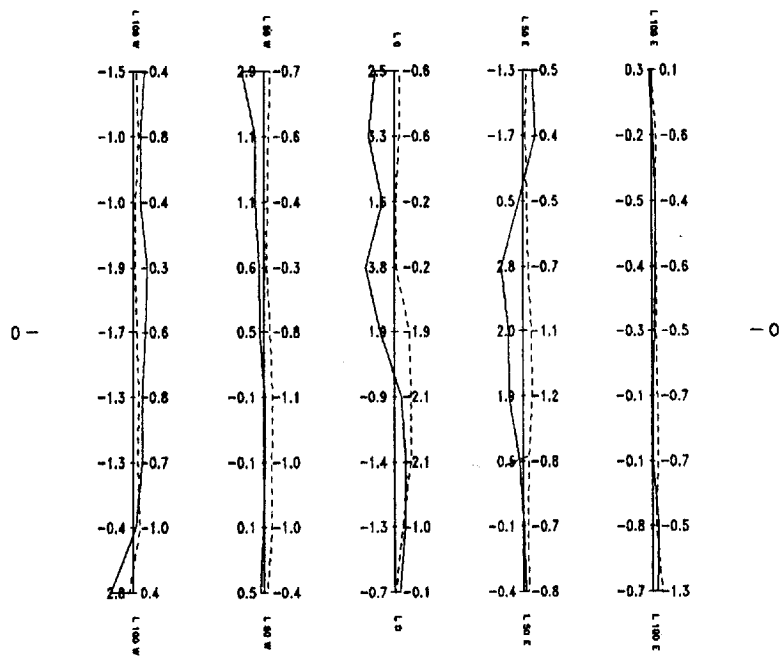
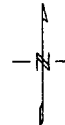
MAGNETIC SURVEY
 CALCULATED VERTICAL GRADIENT CONTOURS

GEOPHYSIQUE TMC

Interpreted by: _____ Date 10/02

Scale 1 : 2000 Drawing no. _____





LEGENDE

PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 5 %
 - - - - Out-of-phase 1 cm. = 5 %
 Lectures: In-Phase 4 + 4 Out-of-phase % %
 Instrument APEX MAXMIN I

MURGOR RESOURCES inc.
PROJET B3
 CANTON

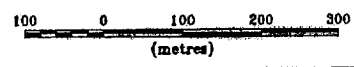
LEVE ELECTROMAGNETIQUE
 Frequence: 880 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

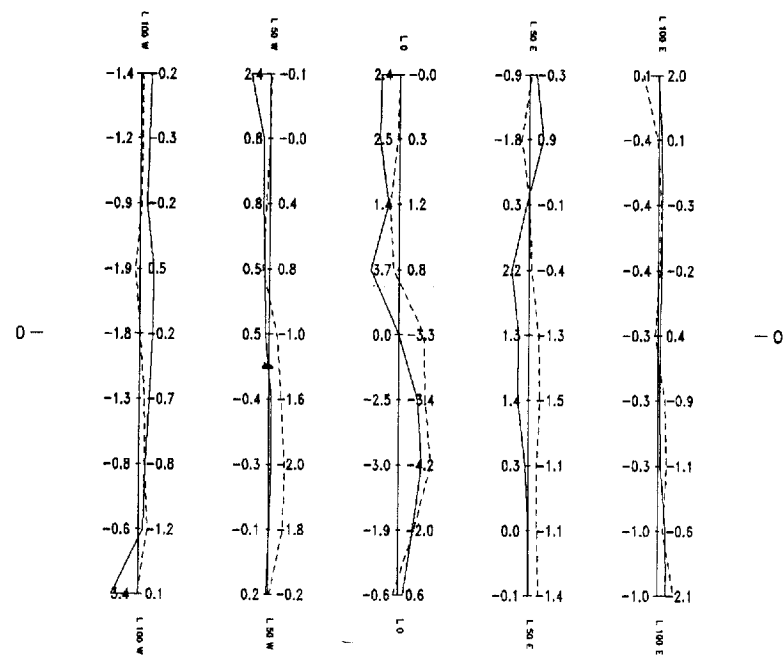
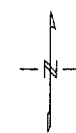
Interprete par: _____ Date 10/02

Echelle 1 : 2500 _____ Plan no. _____

Echelle 1 : 2500



BP



LEGENDE

PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 5 %
 - - - - Out-of-phase 1 cm. = 5 %
 Lectures: In-Phase 4 | -4 Out-of-phase % %
 Instrument APEX MAXMIN I

MURGOR RESOURCES inc.
PROJET B3
 CANTON

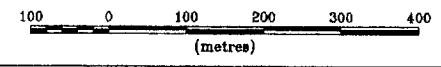
LEVE ELECTROMAGNETIQUE
 Frequence: 3520 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

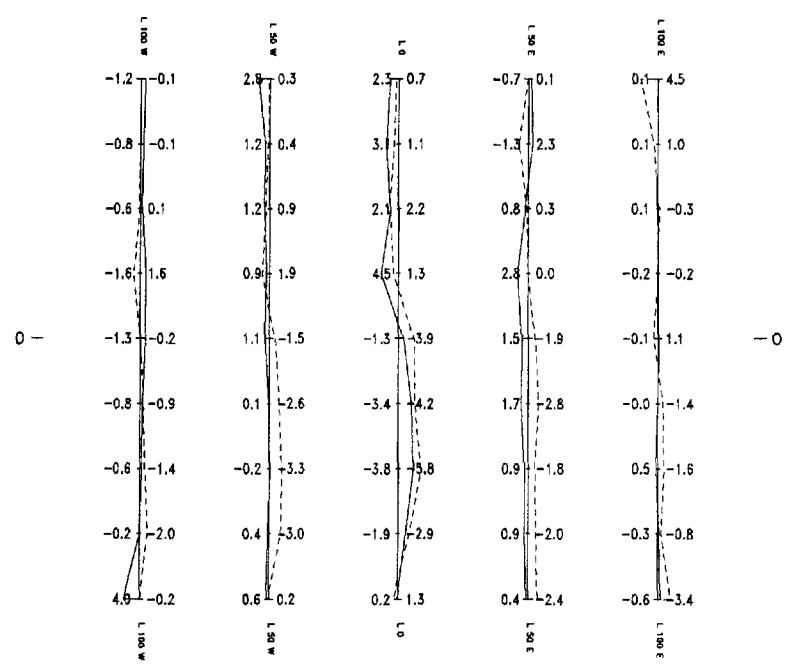
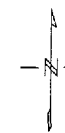
Interprete par: _____ Date 10/02

Echelle 1 : 2500=100 Plan no. _____

Echelle 1 : 2500=100



BP



LEGENDE

PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 10 %
 - - - - Out-of-phase 1 cm. = 10 %
 Lectures: In-Phase 4 | -4 Out-of-phase % %
 Instrument APEX MAXMIN I

MURGOR RESOURCES inc.
 PROJET B3
 CANTON

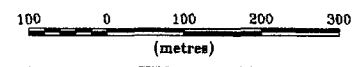
LEVE ELECTROMAGNETIQUE
 Frequence: 7040 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

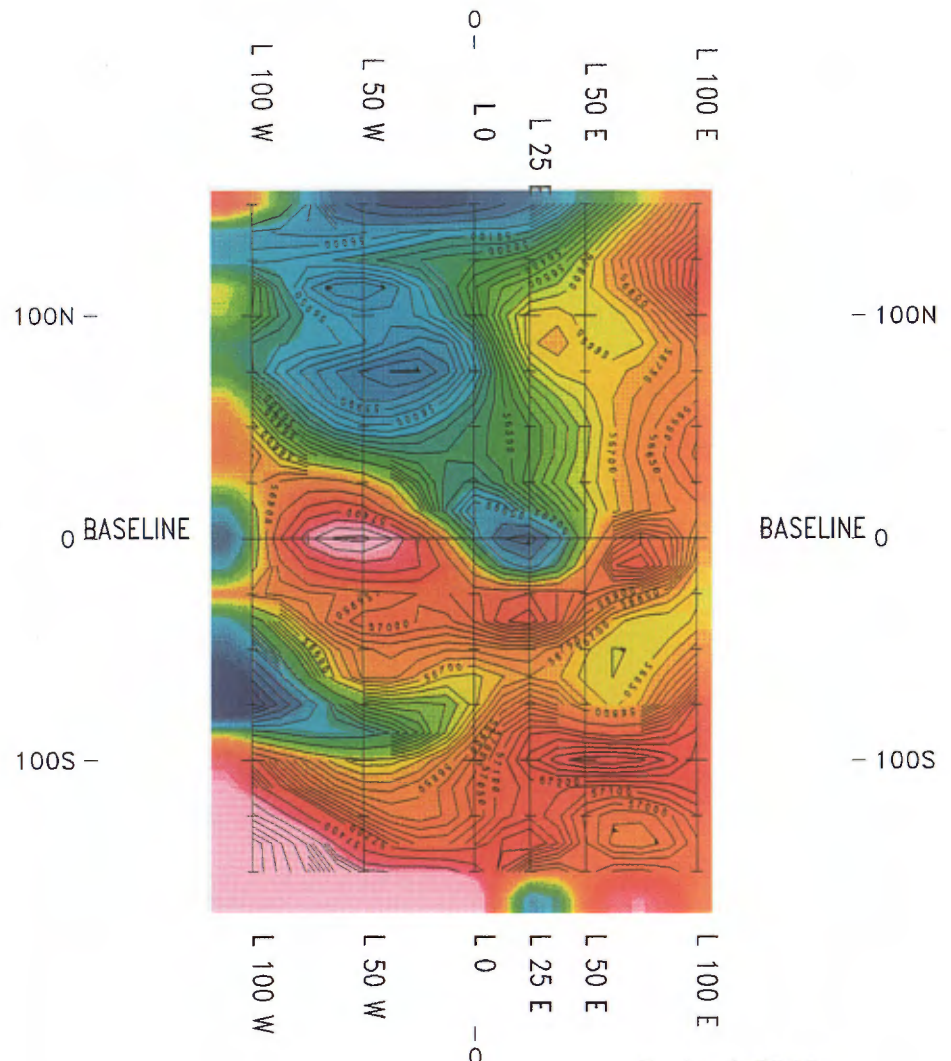
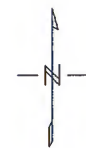
Interprete par: _____ Date 10/02

Echelle 1 : 2500 _____ Plan no.

Echelle 1 : 2500



BP



INSTRUMENTS:

GEM Systems GEM-19

GEM Systems GEM-19 (base station)

Base level: 57100 nT

Contour interval: 50 nT

200=1000 nT

nT

MURGOR RESOURCES inc.

LA TREVE 4

MAGNETIC SURVEY

TOTAL FIELD CONTOURS

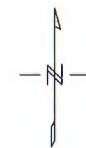
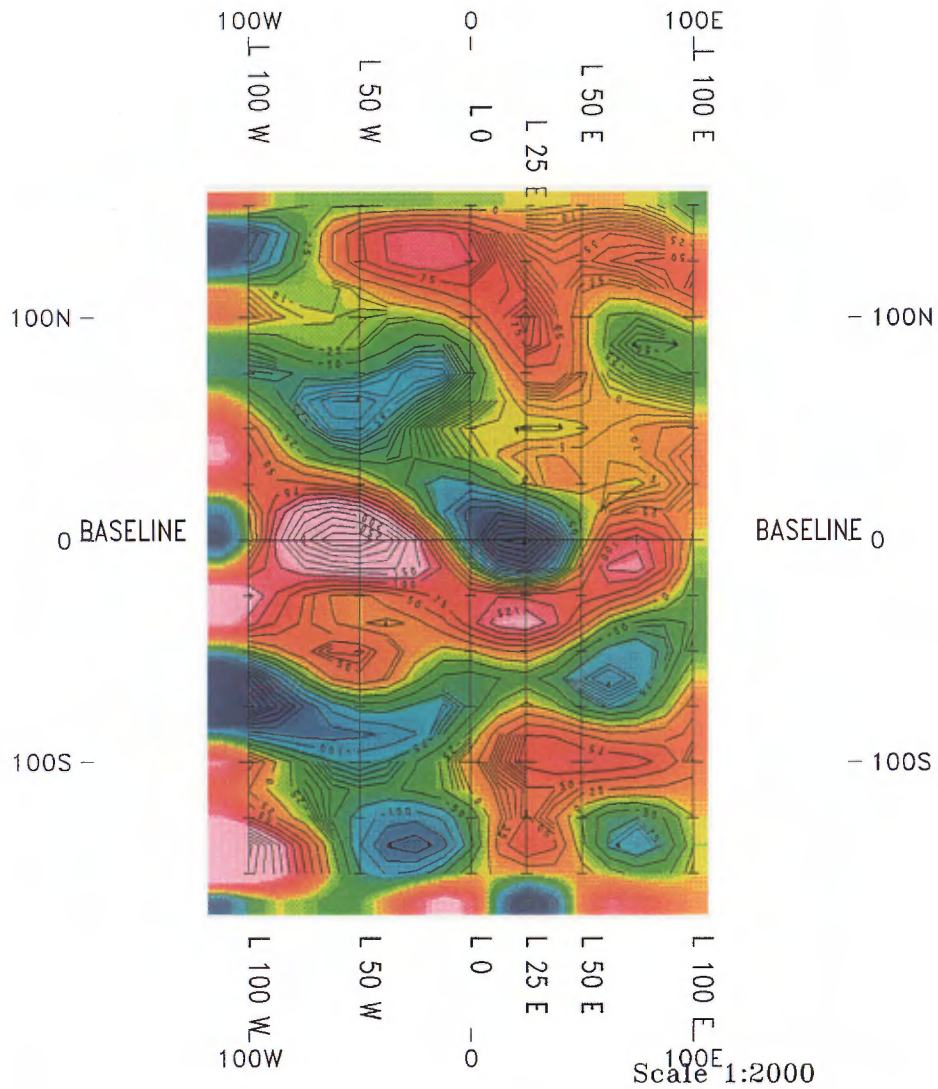
GEOPHYSIQUE TMC

Interpreted by:

Date 10/02

Scale 1 : 2000

Drawing no.



INSTRUMENTS:

GEM Systems GEM-19

GEM Systems GEM-19 (base station)

Base level: 57100 nT

Contour interval: 10=50 nT
nT

MURGOR RESOURCES inc.

LA TREVE 4

MAGNETIC SURVEY

CALCULATED VERTICAL GRADIENT CONTOURS

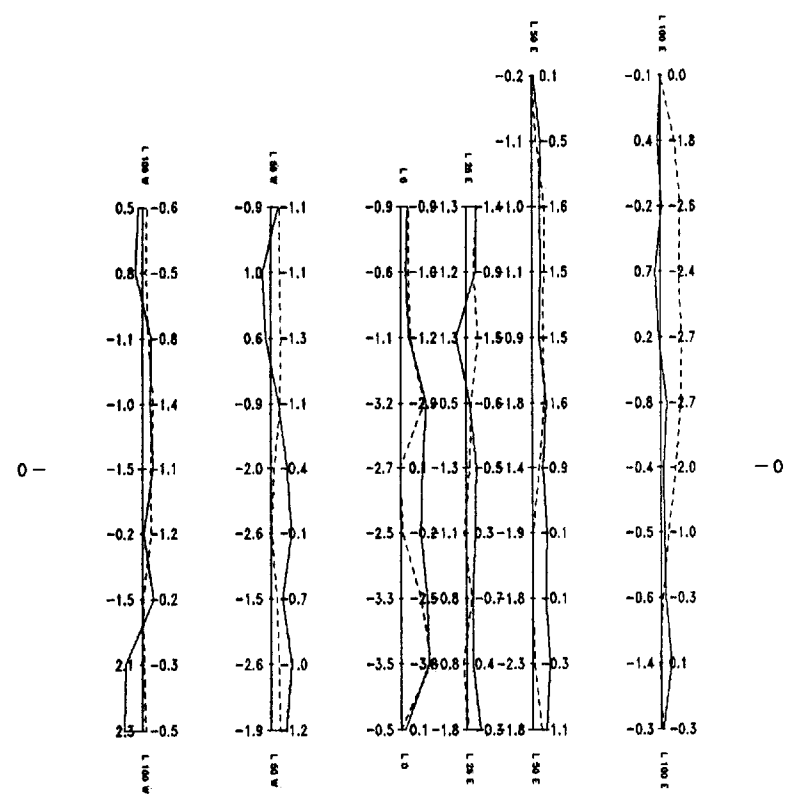
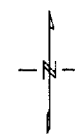
GEOPHYSIQUE TMC

Interpreted by:

Date 10/02

Scale 1 : 2000

Drawing no.



LEGENDE
PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 5 %
 - - - - Out-of-phase 1 cm. = 5 %
 Lectures: In-Phase 4 + 4 Out-of-phase % %
 Instrument APEX MAXMIN I

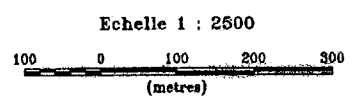
MURGOR RESOURCES inc.
PROJET LA TREVE 4
 CANTON

LEVE ELECTROMAGNETIQUE
 Frequence: 880 Hz Cable: 100 m

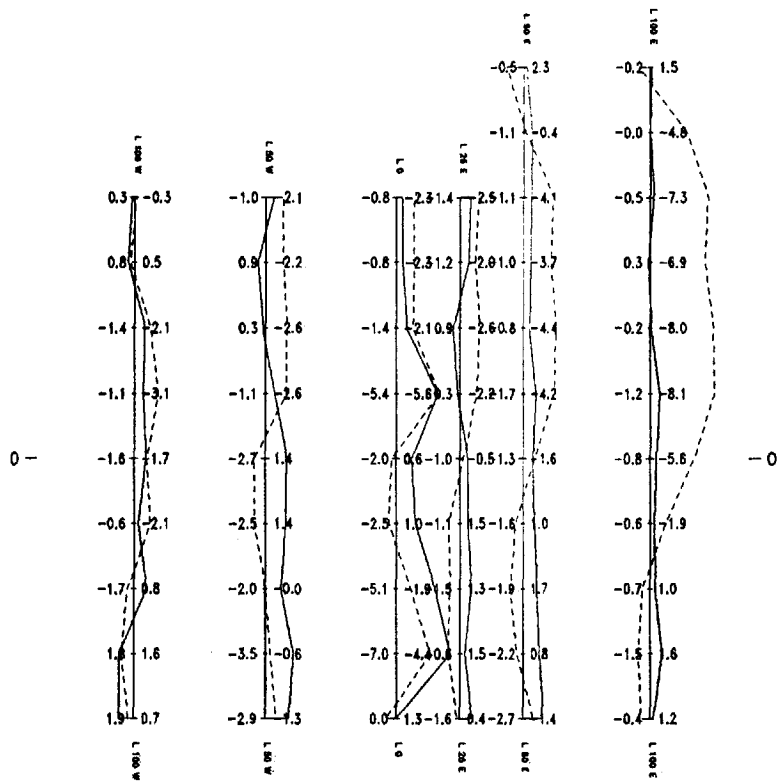
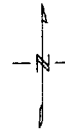
GEOPHYSIQUE TMC INC.

Interprete par: _____ Date 10/02

Echelle 1 : 2500 Plan no. _____



BP



LEGENDE

PROFILES ELECTROMAGNETIQUE
 ——— In-phase 1 cm. = 5 %
 - - - - Out-of-phase 1 cm. = 5 %
 Lectures: In-Phase 4 + -4 Out-of-phase % %
 Instrument APEX MAXMIN I

MURGOR RESOURCES inc.
PROJET LA TREVE 4
 CANTON

LEVE ELECTROMAGNETIQUE
 Frequence: 3520 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

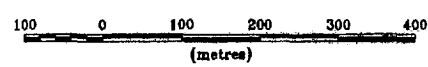
Interprete par:

Date 10/02

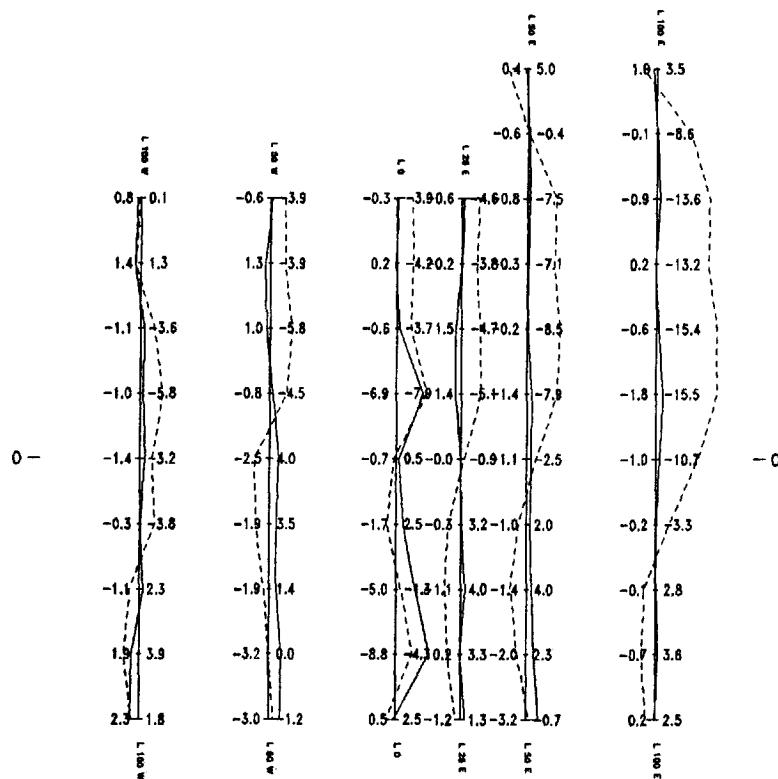
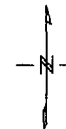
Echelle 1 : 2500=100

Plan no.

Echelle 1 : 2500=100



BP



LEGENDE

PROFILES ELECTROMAGNETIQUE

— In-phase 1 cm. = 10 %
 - - - Out-of-phase 1 cm. = 10 %

Lectures: In-Phase % 4 | -4 Out-of-phase %

Instrument APEX MAXMIN I

MURGOR RESOURCES inc.

PROJET LA TREVE 4

CANTON

LEVE ELECTROMAGNETIQUE

Frequence: 7040 Hz Cable: 100 m

GEOPHYSIQUE TMC INC.

Interprete par:

Date 10/02

Echelle 1 : 2500

Plan no.

Echelle 1 : 2500

