

GM 49190

REPORT ON THE RECONNAISSANCE AND DETAILED GEOLOGICAL MAPPING, CHEVRIER LAKE PROPERTY

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MINEFINDERS CORPORATION LIMITED
REPORT ON THE RECONNAISSANCE AND DETAILED GEOLOGICAL MAPPING
CHEVRIER LAKE PROPERTY, CHIBOUGAMAU, QUEBEC

ÉNERGIE ET RESSOURCES
SECTION MINIERE

28 SEP 1989

Bureau régional

Ministère de l'Énergie et des Ressources
Service de la Géoinformation

Date: 17 JAN 1990
No G.M. 49130

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SEPTEMBER 31, 1989

#int.00577
TM89 277014

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INTRODUCTION

Reconnaissance and geological mapping was carried out on the Chevrier Lake property, located in the Chibougamau-Chapais of Quebec between June 27th and July 31st, 1989. The purpose of the mapping was to define lithologies and structure favourable to precious and base metal mineralization. Several mineralized shear structures (i.e. Py \pm Po) were noted in the central and eastern sections of property during the geological mapping. Anomalous gold values up to 80 ppb were reported from these shear zones.

PROPERTY, LOCATION AND ACCESS

The Chevrier Lake property, consisting of 77 contiguous mining claims (1,232 hectares) is located in southeast Haüy Township, approximately 30 kms southeast of Chapais, Quebec (Figures 1-2, Table 1).

A principal forestry road, "Chemin Barette-L-209S " traverses the centre of the property at kilometre #25 (Figure 2). Out-lying areas of the property are easily accessible through the use of a motorized canoe or boat.

TOPOGRAPHY AND VEGETATION

The property is generally overlain by low to moderate relief. The moderate relief areas are covered generally by black spruce and jackpine with minor poplar and birch trees. The low lying areas are muskeg covered. Lac Muscocho covers the extreme

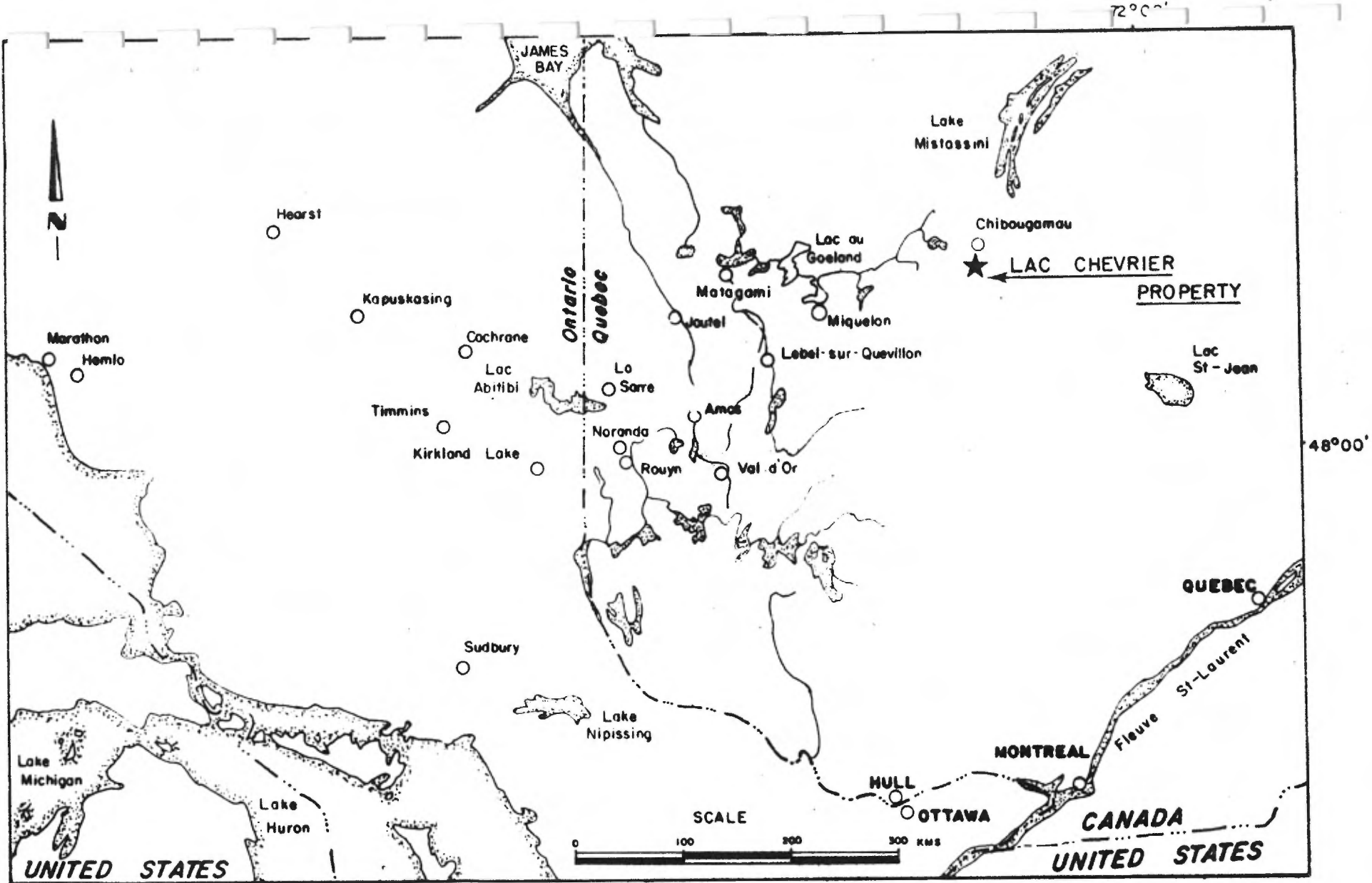


Figure 1



MINEFINDERS CORP.

**LAC CHEVRIER PROPERTY
GENERAL LOCATION MAP**

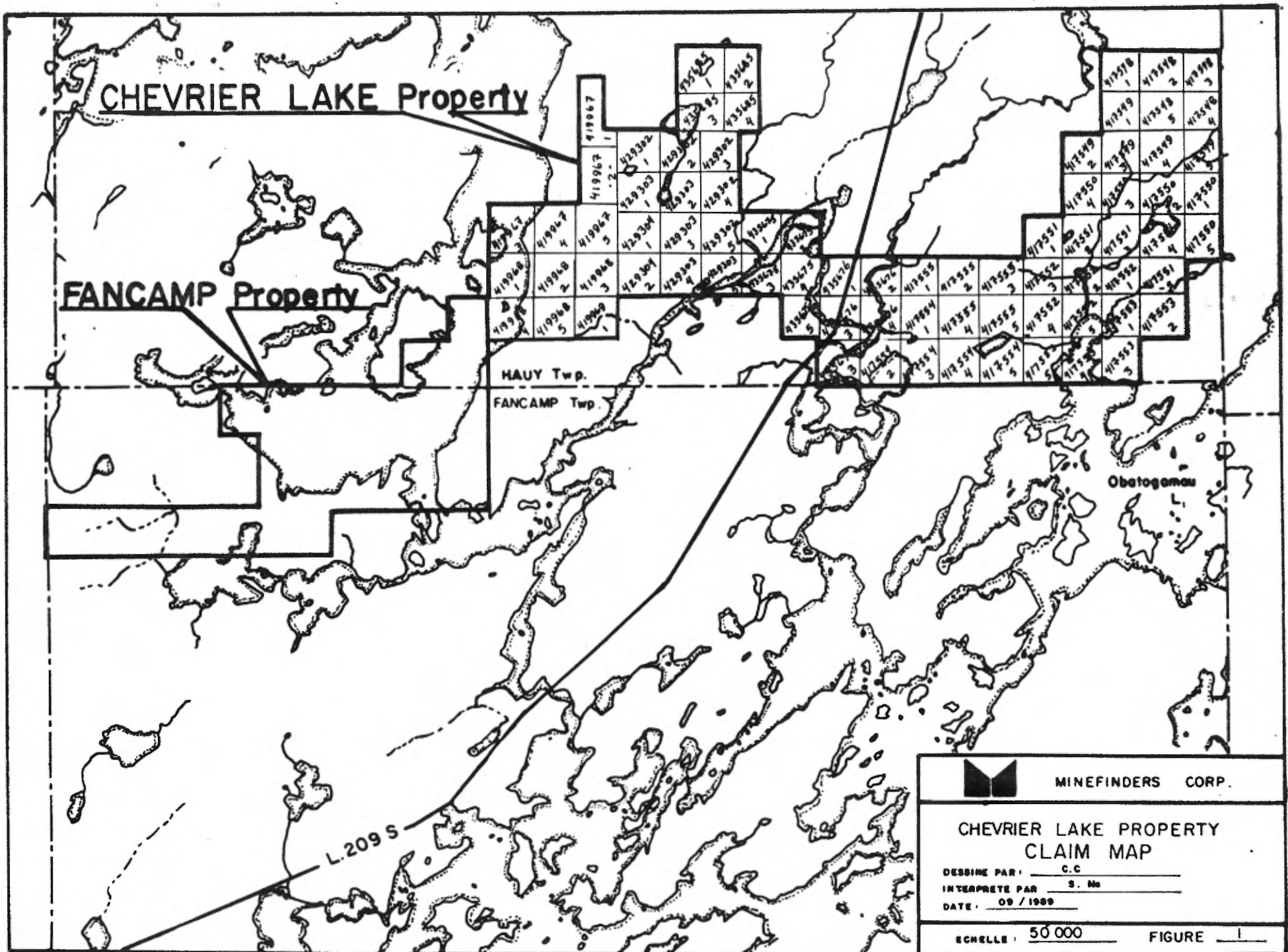


Figure 2: Claim Map

TABLE 1

CLAIM LIST - CHEVRIER LAKE PROPERTY

| <u>Claim No.</u> | <u>Claim No.</u> |
|------------------|------------------|
| 417548A | 419967A |
| 417548B | 419967B |
| 417548C | 419967C |
| 417548D | 419967D |
| 417548E | 419967E |
| 417549A | 419968A |
| 417549B | 419968B |
| 417549C | 419968C |
| 417549D | 419968D |
| 417549E | 419968E |
| 417550A | 419969A |
| 417550B | |
| 417550C | 429302A |
| 417550D | 429302B |
| 417550E | 429302C |
| | 429302D |
| 417551A | 429302E |
| 417551B | |
| 417551C | 429303A |
| 417551D | 429303B |
| 417551E | 429303C |
| | 429303D |
| 417552A | 429303E |
| 417552B | |
| 417552C | 429304A |
| 417552D | 429304B |
| 417552E | |
| | 435675A |
| 417553A | 435675B |
| 417553B | 435675C |
| 417553C | 435675D |
| 417553D | 435675E |
| 417553E | |
| | 435676A |
| 417554A | 435676B |
| 417554B | 435676C |
| 417554C | 435676D |
| 417554D | 435676E |
| 417554E | |
| | 435685C |
| 417555A | 435685D |
| 417555B | 435685E |
| 417555C | <u>435685F</u> |
| 417555D | |
| 417555E | |

77 claims,
1,232 hectares

western part of the property and Chevrier Lake covers the extreme southeastern corner of the property. The Rivière Obatogamau traverses the southwestern and central sections of the property.

PREVIOUS WORK

During the period 1951 to 1989, semi-extensive exploration has been carried out on the Chevrier Lake property by various companies and the provincial government. This work has been summarized in Table 2.

REGIONAL GEOLOGY

Stratigraphy

The property occurs within the eastern section of the Matagami-Chibougamau greenstone belt of the Abitibi Subprovince (Figure 3). The Archean rocks of the area consist of two mafic-to-felsic volcanic cycles (Roy Group) and the Opemisca Group volcanics and sediments (Figures 3-5)

The lower Roy Group (1st cycle) consists of a thick sequence of porphyritic pillowed basalts and co-magmatic differentiated gabbro sills (Obatogamau Formation) and a thin sequence of felsic pyroclastics, porphyritic dacites and iron formation (Waconichi Formation). The Dore Lake Complex is a sill-like layered complex intruded in the upper section of the Waconichi Formation.

TABLE 2
PREVIOUS WORK

| COMPANY | YEAR(S) | REFERENCE | TYPE OF WORK | REMARKS |
|--|---------|--------------------|---|---|
| Commonwealth Exploration Ltd | 1951-52 | GM-1841 GM-2341 | Prospecting, trenching (3 trenches) and X-Ray drilling (6 holes, 611.5 feet) of a shear zone(s) = Lipsett showing | Trench#1: 0.18oz/tAu/1.2feet 0.08oz/tAu/1.0feet 0.02oz/tAu/1.0feet Trench#2: 0.05oz/tAu/2.5feet 0.01oz/tAu/1.0feet Drill Hole C-1: 0.065oz/tAu/6.0feet |
| Cominco Limited | 1974 | GM-31615 | Airborne magnetic and electromagnetic survey | One(1) short out-of-phase conductor (conductor #56A) was reported in western part of the property. |
| Societe de developement de la Baie-James | 1976 | GM-34164 | Airborne magnetic and electromagnetic survey | No conductors were reported however several NW trending faults/shears were noted. |
| Dejours Mines Limited | 1984 | GM- | Airborne magnetic survey | Several magnetic highs and lows were noted. |
| | 1985 | GM- | Ground magnetic and electromagnetic (max-minII) surveys | One (1) short north-south trending conductor was detected within the "West Grid". Two diamond drill holes were proposed to test the conductor. |
| | 1985 | GM- | Reconnaissance mapping | Gold values up to 69ppb were reported with the south central section of the "East Grid" |
| | 1987 | GM- | Magnetic and induced polarization surveys | Several magnetic and I.P. anomalies were detected within the "East Grid" |
| | 1987 | GM- | Electromagnetic (VLF) and detailed geological mapping | Several VLF conductors and gold values up to 130ppb were reported. |
| Minefinders Corporation Limited | 1989 | | Reconnaissance mapping (scale 1:5,000) and detailed mapping (scale 1:1,250) | Gold values up to 80ppb were reported. |

The Upper Roy Group (2nd Cycle) consists of a thick sequence of pillowed basalts and gabbro sills (Gilman Formation) overlain by a moderately thin volcano-sedimentary assemblage (Blondeau Formation). The Cummings Complex occurs within the Blondeau Formation and consists of the Roberge Sill (dacite and peridotite) the Ventures Sill (gabbro) and the Bourbeau Sill (leucogabbro and quartz ferro-diorite) (Figures 3-5). The Chevrier Lake property is underlain by the Obatogamau, Waconichi and Gilman Formation.

The Opemisca Group consists of sediments and minor porphyritic K-rich andesites of the Stella, Hauy, and Chebistuan Formations.

The Proterozoic rocks of the Chibougamau area consist of conglomerates, arkoses and argillites of the Chibougamau Formation; and conglomerates, sandstones, argillites, dolomites, and iron formation of the Mistassini Group.

The Matagami-Chibougamau greenstone belt resembles a major synclorium developed on granitic gneisses during the Kenoran-Orogeny (Figure 3). Several phases of folding have been noted in the area principally about north-south axes and east-west axes. The Chibougamau Anticline occupies the central section of the area and is bordered on the north by the Chibougamau Syncline and on the south by the Chapais Syncline west of the Opemisca Pluton, these structures merge in a major syclinorium (Figure 4).

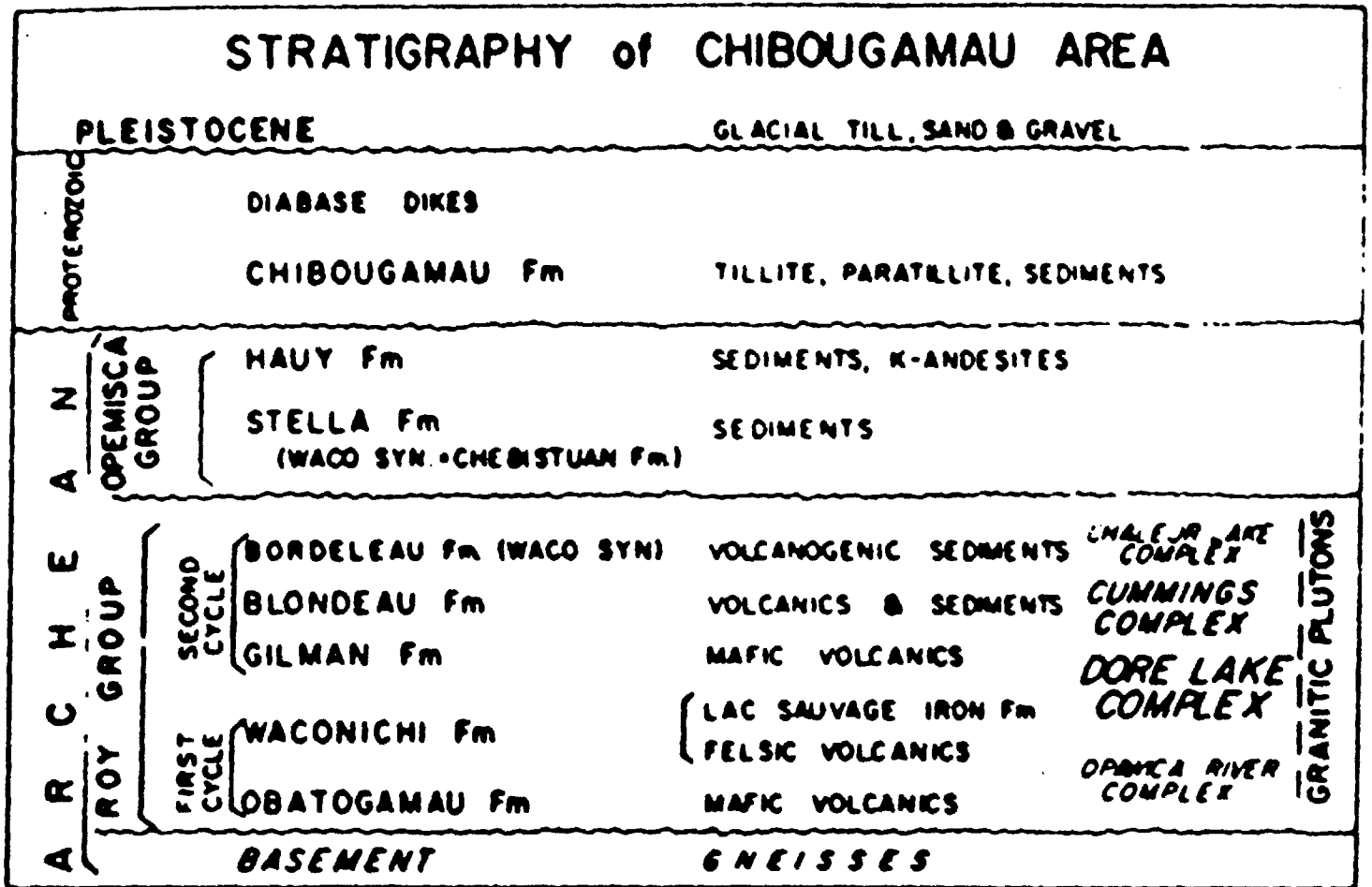


Figure 5: Stratigraphic Column, Chibougamau Area

The Waconichi Anticline and Syncline occurs north of the Chibougamau Syncline; the Lac Dauversiere Anticline occurs south of the Chapais Syncline, and the Lac Muscocho Syncline occurs east of Lac Muscocho. The property lies within the Muscocho Syncline.

The area is transected by four (4) major systems of faults: NE, EW, NW and N20° E, (Figure 4)). The most predominant set of faults within the area is the northeast striking set (ie. Mistassini Lake Fault, Tache Lake Fault, Dore Lake-McKenzie-Narrows Fault and Gwillim Lake Fault.

The east-west faults such as the Antoinette Fault, Kapunapotagen Fault and Faribault Fault are orientated parallel to subparallel to the host lithologies and are less evident than the northeast set.

The third set of faults are northwest-trending and are the principal ore bearing shear system.

The final set of faults are the north-south to N20E trending faults in proximity to the Grenville Front.

The property is situated south of the Kapunapotagen. Copper and/or gold mineralization in the region is of the vein type although one volcanogenic deposit, Lemoine Mine, produced Cu, Zn, Au, Ag between 1972 and 1983. Two of the vein type deposits (ie Gwillim Mine Au; and Joe Mann Mine, Au-Cu) are located within mafic intrusive complexes.

Anorthosites of the Dore Lake Complex contain all the copper, gold and silver mines of the Chibougamau - Doré Lakes area whereas the Cummings complex contains all the copper, gold and silver mines of the Chapais area. Generally the mineralization is in proximity to major NE trending regional fractures (Figure 4).

PROPERTY GEOLOGY

Introduction

A total of 84 Kms of reconnaissance and detailed geological mapping was carried out on the Chevrier Lake property between June 27th and July 31st, 1989. The detailed geological mapping was carried out at a scale of 1:1,250 using previously established grid systems.

The reconnaissance geological mapping and sampling was carried out at a scale of 1:5,000 over the ungridded portions of the property using the 400m spaced claim lines and borders of the lakes and rivers. The purpose of the geological surveys were to define areas of potential precious and base metal mineralization.

Lithologies

The property is predominantly underlain by mafic and intermediate flows and intrusives with minor intermediate to felsic, tuffs and intrusives (Map 1).

A complete description of each lithology noted within the property is given below:

VOLCANICS

Basalt(V7)

Basaltic flows are one of the more predominant lithologies noted within the property. These flows occur in the western, central and northeastern sections of the property and are generally medium to dark green, locally black in colour; aphanitic to medium grained locally porphyritic; massive or pillowed; vesicular; weakly to strongly schistose; and weakly to moderately chloritized. Locally, these flows have been sheared, brecciated and carbonatized (calcite \pm ankerite). Top direction appears to be towards the north - northwest. The vesicles have been infilled with carbonate and quartz. Within the porphyritic lavas, the phenocrysts are 0.5 - 2.0 cm and generally elongated parallel to the regional schistosity.

On the weathered surface, the units are generally light brown in colour.

All the units have been metamorphosed to upper greenschist facies, locally lower amphibolite facies as seen by the development of chlorite and hornblende. It is thought the lavas in the northeast part of the property belong the regional Gilman Formation whereas the flows in the central and western sections of the property are part of the regional Obatogamau Formation.

Andesites (V6)

Andesitic massive and pillowed lavas are the most predominant lithology noted within the property. These flows occur in the eastern and western parts of the property and are generally pale to medium green in colour; aphanitic to medium grained, locally porphyritic; massive or pillowed; vesicular; weakly to strongly schistose; and weakly to moderately chloritic. Locally the lavas have been sheared and carbonatized. The vesicles have been infilled with carbonate and quartz. Plagioclase phenocrysts are generally 0.5 to 1.0 cm and again have been elongated parallel to the regional schistosity. Top direction, taken from the pillowed flows indicates stratigraphic top is to the north. The units are generally tan colored and pitted on the weathered surface. All the lavas, have been metamorphosed to upper greenschist facies and in proximity to the intrusives, amphibolite facies. It is thought that the andesitic flows are part of the Obatogamau Formation.

Rhyolite (V2)

These units are limited in extent and are located in two (2) areas within the property, close to the Rivière Obatogamau bridge and the extreme northeast part of the property (ie lines 31E to 38E; 3+00N). The rhyolites are white to yellow-white in colour; aphanitic; massive; porphyritic; weakly to strongly schistose and weakly sausseritized. The quartz phenocrysts ("quartz eyes") are 1-2 mm in diameter; rounded to subrounded; white to clear in colour and are set within a white to yellow-

white fine grained; quartz-plagioclase feldspar rich matrix. On the weathered surface, these units are beige to tan coloured. These units are thought to represent the Waconichi Formation.

Andesite Block Tuff (V10)

These unit are limited to the extreme western and central areas of the property. They generally consist of lapilli to block size (ie 0.5-15cm) fragments of intermediate composition set within a light to dark green, fine grained matrix, locally containing hornblende phenocrysts (0.5 to 2cm). During weathering, the matrix has been preferentially eroded, leaving a rugose surface texture. Both units have been metamorphosed to upper greenschist facies. However, the western most band has been metamorphosed to lower amphibolite facies in proximity to the contact of the pluton. This unit is thought to be part of the Waconichi Formation.

INTRUSIVES

Gabbro (3G)

Units of gabbroic composition occur within the eastern section of the property. The gabbro are generally light to dark green; fine to coarse grained; massive to weakly schistose and are thought to be co-magmatic with the volcanic units. The dark green coarse grained, massive gabbros occur with the southeast part of the property whereas the light to medium green, fine to medium grained, massive gabbros occur with the central, eastern and northeastern sections of the property. On the weathered surface,

these units are light to dark green in colour depending upon the grain size. These intrusives are part of the Gilman Formation in the northeast and the Obatogamau Formation in the eastern sections of the property.

Diorite (2D)

These units are very limit in extent and were noted within the eastern third of the property. This unit is distinguishable from the volcanics by the presence of leucoxene and sharp geological contacts. These intrusives are light to medium green in colour; aphanitic to fine grained; massive and contain up to 10% white amorphous leucoxene grains (0.1 - 10mm). These units appear to be concordant to the stratigraphy and therefore are also co-magmatic with the volcanic flows.

Granodiorite (1D)

This unit outcrops in the extreme western part of the property along the shoreline of Muscocho Lake, hence the name Muscocho Pluton. This intrusive is light grey to rosy-grey; medium to coarse grained; massive and contains up to approximately 15% hornblende amphibole. On the weathered surface, the unit is pale white grey in colour and displays a granular like appearance. Along the contact of the pluton and the volcanics, both units have been metamorphosed to lower amphibolite facies.

STRUCTURE

The principal schistosity (S2) is generally east-west and steeply north dipping in the eastern and central sections of the property. This schistosity is generally north to northeast in proximity to the granodiorite pluton. This schistosity is associated with the second deformational event (D2) and the injection of the granodiorite pluton. A weaker north-south trending schistosity (S1) associated with the first deformational event (D1) was also observed at some localities. The orientation of the lithologies is generally parallel to the predominant schistosity. Crenulation cleavage (S3) was noted in the eastern central section of the property (ie lines 23E and 24E).

Two (2) fault/shear systems been reconized on the property: EW shears and N20°E shears/faults. The east-west system is associated with weak to strong shearing, chloritization, sericitization, carbonatization and pyrite ± pyrrhotite mineralization. The most significant shear zone or shear corridor ("North-central shear") occurs in the central part of the grid. Quartz ± carbonate (ankerite) veins, chlorite and Py ± Po mineralization up to 2% is associated with this shear.

Other minor shears were defined within the "East Grid". Chlorite, sericite and carbonate alteration is associated with these shears.

A N020°E trending structure has been reported just south of the property. From the available magnetic data, this structure extends across the western part of the "East Grid". Shearing, carbonate alteration (ankerite) and gold mineralization is associated with this structure.

MINERALIZATION

Several showings occur in proximity to the Chevrier Lake property and these have summarized as follows:

Diana Resources Ltd/Minnova Inc - Queylus Property

To date, five (5) areas of gold mineralization have been delineated within the limits of the Queylus property, immediately adjoining the Chevrier Lake property. Within the first showing, "East Showing", the gold mineralization is associated with two gold bearing structures within a stratiform-carbonate altered zone, 40 metres wide by 130 metres long.

The "north vein structure" occurs along the north contact of the zone and consist of a quartz vein 1 metre wide by 72 metres long. Channel sampling of this structure indicated an average grade 2.50 gr/mt Au (cut) and 12.29 gr/mt (uncut) over 2.0 metres for a length of 72 metres.

The "south vein structure" occurs along the southern edge of the stratiform-carbonate zone. This irregular quartz vein structure up to 5 metres wide has been traced for over 130 metres gold values up to 11.88 gr/mt/1.0 metre and 5.92 gr/mt/1.5 metres were reported from this structure.

Mineralisation consists of pyrite ($\leq 10\%$) and trace chalcopyrite along the margins of the quartz veins.

Diamond drilling has revealed that the north-vein structure pinches out at depth and the south vein structure persists along strike and at depth. Two holes drilled at the 100 metres level returned gold values of 5.91 gr/mt over 2.8 metres and 6.01 gr/mt over 1.5 metres.

The west showing consists of two strong subparallel shears, crosscut-ting mafic pillowed volcanics and a massive-magnetic gabbro.

Quartz veining carbonatization, chlorite and minor fuchsite are associated with the shears and mineralization consists pyrite and trace chalcopyrite. Channel sampling of the south shear yielded 3.47 gr/mt/1.43 m. and 5.14 gr/mt/1.05 m. and 5.07 gr/mt over 1.06 m.

Diamond drilling was carried out on the zone with gold values of 1.91gr/mt/1.5 m, 3.84 gr/mt/1.75 m; and 1.48 gr/mt/1.5 m being reported. The structure is open in all directions.

The LC- 16 structure located fifty (50) metres northwest of the "East Showing" was discovered by drilling an I.P. anomaly. The auriferous structure consists a carbonate zone with abundant quartz-tourmaline veining. Gold values of 3.02 gr/mt/1.1 m at 76 metres and 3.24 gr/mt/2.3 m. at 92.5 metres were intersected in diamond drill hole LC - 16.

The RO zone mineralized zone is associated a stratiform zone of carbonate alteration similar to that of the "East Showing". Geochemical analysis returned gold values of 548,623 and 1,964 ppb. Induced polarization anomalies are associated with this zone.

The northwest showing was discovered by the diamond drilling of a VLF conductor within a minor tuffaceous horizon. A gold value of 13.71 gr/mt/0.25 m was reported.

The Minnova Incorporated - Fancamp Property gold showing (Lipsett Showing), located immediately south of the property is associated with a N020°E shear structure containing carbonate-quartz veining and pyrite mineralization up to 10%. Gold values up to 0.18 oz/t 1.2 feet have been reported from this structure.

The north showing occurs immediately north of the property and is associated with a magnetic axis and a VLF conductor. Diamond drilling of this target returned a gold value of 0.8 gr/mt/2.44m.

Several areas of mineralization have been delineated within the Chevrier Lake property. The pyrite + pyrrhotite mineralization is associated with shearing containing quartz + carbonate (ankerite) veining.

The most important pyrite + pyrrhotite mineralization delineated to date is that associated with a corridor of shearing and carbonatization in the central section of the property ("North Central Shear"). A gold value of 80ppb was returned from this shear. Only gold values less than 10ppb were noted elsewhere within the property.

Several magnetic and induced polarization anomalies and electromagnetic (VLF + Max-Min II) conductors occur within the limits of the property. There appear to be a strong correlation between geophysical anomalies and gold mineralization within the adjoining properties and therefore, it is thought that these anomalies indicate mineralization within the Chevrier Lake property.

CONCLUSION AND RECOMMENDATIONS

From the recent data compilation and geological mapping, a number of potential gold bearing targets (ie magnetic and induced polarization anomalies, electromagnetic conductors, and mineralized shear (fault structure) have been delineated within and in proximity to the Chevrier Lake property. Therefore, it is recommended that a two-phase exploration program be carried out in order to test these targets or target areas.

The following program including budget has been proposed as follows:

Exploration Proposal

Phase I

- Proposal Central Grid - Linecutting (16.5kms)
 - Magnetometer Survey (16.5kms)
 - Electromagnetic (Max-Min II) Survey (16.5kms)
 - Induced Polarization Survey (5kms)
 - Detailed Geological Mapping (16.5kms)
- East Grid
 - Trenching

Phase II

- Proposed Central Grid - Trenching
 - Diamond drilling (5holes @ 500' = 2,500')
- West grid
 - Diamond Drilling (1 hole @ 500')
- East Grid
 - Diamond Drilling (6 holes 500' = 3,000')

BUDGET

| | |
|--|----------------------------|
| Linecutting | \$3,300.00 |
| Geophysics | \$11,600.00 |
| Geology/Trenching | \$10,000.00 |
| Diamond Drilling | \$90,000.00 |
| Assays | \$5,400.00 |
| Transportation | \$2,500.00 |
| Salaries (63 days X 2 men X \$400/day) | \$25,200.00 |
| Food and Lodging (56 days X 2 men X \$50/days) | \$5,600.00 |
| Supervision (5 days X \$250./day) | \$750.00 |
| Office and Field Supplies and Services | \$2,000.00 |
| Administration Fees (40% of salaries) | <u>\$10,080.00</u> |
| | |
| Total | <u>\$166,430.00</u> |

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APPENDIX I

SAMPLE LIST - CHEVRIER LAKE PROPERTY

APPENDIX 1

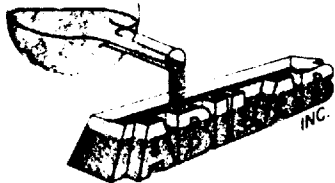
SAMPLE LIST - CHEVRIER LAKE PROPERTY

| FIELD NO. | LABORATORY NO. | LOCATION | LITHOLOGY | STRUCTURE | MINERALIZATION | GOLD VALUE (ppb) |
|------------|----------------|---------------|-------------------------------|--|----------------|------------------|
| H-SM-89-01 | ----- | 15+75E-12+25S | 3G,M | S024/80E; S346/73E | Py (tr) | ----- |
| H-SM-89-02 | ----- | 17+00E-10+00S | V7,M | Massive | ----- | ----- |
| H-SM-89-03 | 6501 | 17+00E-10+00S | QV | Irregular | ----- | <10 |
| H-SM-89-04 | ----- | 18+00E-10+00S | V7,M | S292/74E | ----- | ----- |
| H-SM-89-05 | ----- | 18+00E-6+75S | V7,M | Massive; J050/40S J229/79N; J292/55N; | ----- | ----- |
| H-SM-89-06 | ----- | 18+00E-6+25S | V6, \emptyset | S278/65N | ----- | ----- |
| H-SM-89-07 | ----- | 18+00E-2+00S | V7,M | S266/74N | ----- | ----- |
| H-SM-89-08 | ----- | 18+00E-5+25S | V6, \emptyset | S266/90 | ----- | ----- |
| H-SM-89-09 | 6502 | 19+00E-0+00 | V4,M | S310/75E | Py(1%) | <10 |
| H-SM-89-10 | 6503 | 19+00E-3+75S | V6, \neq | S290/75N | Py(1%) | <10 |
| H-SM-89-11 | 6504 | 34+50E-1+75N | V7, \emptyset | Massive | Po(1%) | <10 |
| H-SM-89-12 | 6505 | 34+25E-1+75N | QV | S ₀ 095/45S | ----- | <10 |
| H-SM-89-13 | ----- | 36+00E-4+50N | V7, M ₀ , 13G, M | Massive | ----- | ----- |
| H-SM-89-14 | 6506 | L34+00E-2+00N | V6 | ----- | Py, Po (<2%) | <10 |
| H-SM-89-15 | ----- | L34+00E-2+75N | V2 | S274/79N | ----- | ----- |
| H-SM-89-16 | 6507 | L34+00E-3+00N | V7 \emptyset /V2 contact | ----- | Py(tr) | <10 |
| H-SM-89-17 | 6508 | L34+00E-5+00N | 3G, M | Massive | Py, Po(tr) | <10 |
| H-SM-89-18 | 6531 | L34+00E-5+00N | V7 | S ₀ 090/90N | ----- | <10 |
| H-SM-89-19 | 6509 | L32+00E-3+50N | QV | S ₀ 280/60N | ----- | <10 |
| H-SM-89-20 | 6510 | L32+00E-3+75N | QV | S 270/60N | ----- | <10 |
| H-SM-89-21 | 6511 | L32+00E-3+75N | QV | 270/60N | ----- | <10 |
| H-SM-89-22 | 6512 | L32+00E-3+50N | QV | 270/60N | ----- | <10 |
| H-SM-89-23 | 6513 | L32+00E-3+25N | QV | 270/60N | ----- | <10 |
| H-SM-89-24 | 6514 | L28+00E-2+00N | V6, \emptyset | ----- | Py (<1%) | <10 |
| H-SM-89-25 | ----- | L28+00E-2+00N | V6, \emptyset | ----- | ----- | ----- |
| H-SM-89-26 | ----- | L23+00E-8+00S | 3G, M | Massive | PO (<1%) | ----- |
| H-SM-89-27 | ----- | L23+00E-4+50S | V6, \emptyset | S 269/70N | ----- | ----- |
| H-SM-89-28 | ----- | L23+00E-2+25S | V6, \neq | ----- | ----- | ----- |
| H-SM-89-29 | 6523 | L27+00E-2+40N | QV | S ₀ 268/87N | ----- | <5 |
| H-SM-89-30 | ----- | L20+00E-4+50N | V6, V7 | ----- | ----- | ----- |
| H-SM-89-31 | 6525 | L31+25E-2+50S | QV | S ₀ 260/74N | ----- | <5 |
| H-SM-89-32 | 6526 | L29+75E-1+00S | V7 | S 275/63N | Py(Tr) | <5 |
| H-SM-89-33 | 6527 | L27+75E-5+00S | Shear | S 259/79N | Py(Tr) | <5 |
| H-SM-89-34 | 6528 | L27+75E-5+00S | Shear | S 259/79N | Py(Tr) | <5 |

| FIELD NO. | LABORATORY NO. | LOCATION | LITHOLOGY | STRUCTURE | MINERALISATION | GOLD VALUE(ppb) |
|------------|----------------|------------------|------------------|-----------|----------------|-----------------|
| H-SM-89-35 | 6529 | L27+75E-5+00S | QV | S 297/87N | Py(Tr) | <5 |
| H-SM-89-36 | 6530 | L27+75E-5+00S | V2 | S 297/87N | ----- | <5 |
| H-SM-89-37 | 6532 | L21+00E-11+00S | Shear | S 270/68N | Py(Tr) | <5 |
| H-SM-89-38 | 6533 | L21+00E-11+00S | Shear | S 270/68N | Py(Tr) | <5 |
| H-SM-89-39 | ----- | L21+00E-1+50S | V6 | S 280/80N | ----- | ----- |
| H-SM-89-40 | ----- | L28+00E-11+00S | 3G,M | Massive | ----- | ----- |
| H-SM-89-41 | ----- | West | V2,M | Massive | ----- | ----- |
| H-SM-89-42 | ----- | West | V2,M | Massive | ----- | ----- |
| H-SM-89-43 | ----- | West | V2,M | Massive | ----- | ----- |
| H-SM-89-44 | 6534 | West | V6,M | Massive | ----- | <5 |
| H-SM-89-45 | ----- | Northwest | V6,M | Massive | ----- | ----- |
| H-SM-89-46 | ----- | Northwest | V6,M | Massive | ----- | ----- |
| H-SM-89-47 | ----- | Northwest | V6,M | Massive | ----- | ----- |
| H-SM-89-48 | 6535 | Obatogamau River | V7, † | S 255/74N | Py,Po(≤1%) | 20 |
| H-SM-89-49 | 6536 | Obatogamau River | V7, † | S 255/74N | Py,Po(≤1%) | 80 |
| H-SM-89-50 | ----- | Obatogamau River | V2,qe | 270/69N | ----- | ----- |
| H-SM-89-51 | ----- | Obatogamau River | V10,B | ----- | ----- | ----- |
| H-SM-89-52 | ----- | Obatogamau River | V7,M | 253/86N | ----- | ----- |
| H-SM-89-53 | ----- | Obatogamau River | V7, † | S 063/74S | Py(2-3%) | ----- |
| H-SM-89-54 | 6537 | Obatogamau River | V7, † | S 253/83N | ----- | <5 |
| H-TB-89-01 | ----- | L37+25E=5+75N | V7 | S 095/85N | ----- | ----- |
| H-TB-89-02 | ----- | L37+25E-5+75N | 3G,M | Massive | ----- | ----- |
| H-TB-89-03 | 6520 | L11+25E=9+75S | QV | ----- | ----- | <5 |
| H-TB-89-04 | ----- | L11+25E-10+00S | 3G,M/2D Leuc. | Massive | ----- | ----- |
| H-TB-89-05 | ----- | L11+00E-9+25S | V2,qe | Massive | ----- | ----- |
| H-TB-89-06 | 6521 | L12+75E-9+50S | V2,qe | Massive | Py(1-2%) | 80 |
| H-TB-89-07 | ----- | L12+75E-9+50S | V2,qe | Massive | ----- | ----- |
| H-TB-89-08 | ----- | L12+75E-9+50S | V7,M | Massive | ----- | ----- |
| H-TB-89-09 | 6522 | L13+75E-9+25S | 3G,M | Massive | Py(Tr) | <5 |
| H-TB-89-10 | ----- | L13+75E-8+75S | V6,M/2D | ----- | ----- | ----- |
| H-TB-89-11 | ----- | L16+75E-9+75S | 1D | Massive | ----- | ----- |
| H-TB-89-12 | ----- | L17+00E-9+75S | V7M/3G | Massive | ----- | ----- |
| H-TB-89-13 | 6538 | Lac Muscocho | 1D | ----- | ----- | <5 |

| FIELD NO. | LABORATORY NO. | LOCATION | LITHOLOGY | STRUCTURE | MINERALISATION | GOLD VALUE(ppb) |
|------------|----------------|--------------------------------------|---------------|-----------|-----------------|-----------------|
| H-GL-89-01 | ----- | L38+00E-4+25N | 3G | Massive | ----- | ----- |
| H-GL-89-02 | ----- | L8+00E-4+25S | 3G,M | Massive | ----- | ----- |
| H-GL-89-03 | ----- | South of Property Lipsett Showing | QV | ----- | Py(\leq 10%) | ----- |
| H-GL-89-04 | ----- | L9+00E-2+00S | 3G,M/2D,1euc. | ----- | ----- | ----- |
| H-GL-89-05 | 6516 | L9+00E-2+00S | QV,V7 \neq | 270/90 | Py(\leq 1%) | <5 |
| H-GL-89-06 | 6517 | L9+00E-2+00S | QV | 270/90 | Py(Tr) | <5 |
| H-GL-89-07 | 6518 | L32+00E-1+50S | QV | 270/90 | ----- | <5 |
| H-GL-89-08 | 6524 | L32+00E-p1+50S | QV | 360/90 | ----- | <5 |
| H-GL-89-09 | ----- | L32+00E-4+00S | 2D,M | ----- | Py(Tr) | ----- |
| H-GL-89-10 | ----- | L32+00E-5+25S | 2D/3G | ----- | ----- | ----- |
| H-GL-89-11 | ----- | L31+00E-5+00S | V7, \neq | ----- | ----- | ----- |
| H-GL-89-12 | ----- | L25+00E-7+00S | 3G,M | ----- | Py(\leq 1%) | ----- |
| H-GL-89-13 | ----- | L26+00E-0+75S | 3GM/V6M | ----- | ----- | ----- |
| H-GL-89-14 | 6539 | L24+00E-4+25S | V6 | ----- | Py(Tr) | <5 |
| H-GL-89-15 | 6540 | L12+00E-3+25S | V6, \neq | ----- | Py(\leq 1%) | <5 |
| H-GL-89-16 | 6541 | Obatogamau River | V7, \neq | ----- | Py(Tr) | <5 |
| H-GL-89-17 | 6542 | Obatogamau River | V7, \neq | ----- | Py(Tr) | <5 |
| H-GL-89-18 | 6543 | Obatogamau River | V7, \neq | ----- | Py(Tr) | <5 |

APPENDIX II
CERTIFICATES OF ANALYSIS
CHEVRIER LAKE PROPERTY



ABILAB INC., 1905, 3e Avenue, R.R. 2 - B.G. 90-8
Val d'Or (Qc) J9P 4N7 Tél.: 819-825-4723
Modem: 819-825-9948 Fax: 819-825-0625

CERTIFICAT D'ANALYSES N°: 3329 Date: 18 juillet 1989

Client: Malartic Hygrade Ltée

Echantillons: Chips (exploration)

Reçu de: M. Yvon Trudeau

Nombre d'analyses: 15

Date: 06 juillet 1989

Élément analysé: Au

| <u>Echantillons</u> | <u>Au ppb</u> |
|---------------------|---------------|
| 6501 | <10 |
| 6502 | <10 |
| 6503 | <10 |
| 6504 | <10 |
| 6505 | <10 |
| 6506 | <10 |
| 6507 | <10 |
| 6508 | <10 |
| 6509 | <10 |
| 6510 | <10 |
| 6511 | <10 |
| 6512 | <10 |
| 6513 | <10 |
| 6514 | <10 |
| 6515 | <10 |

ANALYSTE:

Daniel Belisle
Daniel Belisle



LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

MINEFINDERS CORPORATION LTD.

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

Projet Haüy

No 52897

ÉCHANTILLONS Roche
SAMPLES

VAL D'OR, QUÉ., le 9 août 19 89

RECU DE
RECEIVED FROM

ANALYSES
ASSAYS 10 Au

| <u>Echantillon</u> | <u>Au ppb</u> |
|--------------------|---------------|
| 6534 | N.D. |
| 6535 | 20 |
| 6536 | 80 |
| 6537 | N.D. |
| 6538 | N.D. |
| 6539 | N.D. |
| 6540 | N.D. |
| 6541 | N.D. |
| 6542 | N.D. |
| 6543 | N.D. |

FD (Haüy)

N.D. veut dire moins que 5 ppb.

[Signature]
ANALYSTE / ASSAYER



LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

MINEFINDERS CORPORATION LTD.

Projet Hauy

ECHANTILLONS
SAMPLES Carotte

RECU DE
RECEIVED FROM

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

No 52808

VAL D'OR, QUÉ., le 24 juillet 19 89

ANALYSES
ASSAYS 29 Au + 3 Au, 8 Cu, 8 Zn

| <u>Echantillon</u> | <u>Au ppb</u> | <u>Au ppm</u> | <u>Cu %</u> | <u>Zn %</u> |
|--------------------|---------------|---------------|-------------|-------------|
| 6516 | N.D. | - | - | - |
| 6517 | N.D. | - | - | - |
| 6518 | N.D. | - | - | - |
| 6519 | N.D. | - | - | - |
| 6520 | N.D. | - | - | - |
| 6521 | 80 | - | - | - |
| 6522 | N.D. | - | - | - |
| 6523 | N.D. | - | - | - |
| 6524 | N.D. | - | - | - |
| 6525 | N.D. | - | - | - |
| 6526 | N.D. | - | - | - |
| 6527 | N.D. | - | - | - |
| 6528 | N.D. | - | - | - |
| 6529 | N.D. | - | - | - |
| 6530 | N.D. | - | - | - |
| 6531 | N.D. | - | - | - |
| 6532 | N.D. | - | - | - |
| 6533 | N.D. | - | - | - |

For Au N.D. means less than 5 ppb.
G. means "greater than".

ANALYSTE / ASSAYER