010

419.11SE0049 2 15627 LEONARD

2.156 27

RECEIVED

OCT 1 3 1994

MINING LANDS BRANCH

PAT DONOVAN

**LEONARD PROPERTY** 

Co, Cu, Ni, Ag

SHININGTREE AREA, LEONARD TOWNSHIP

**LARDER LAKE MINING DIVISION** 

NTS 41P/11 47°33' N., 81°02' W.

**CLAIM BLOCK 1185717** 

15 UNITS, 240 HECTARES

Dual. # 2.5698

PATRICK DONOVAN

**NOVEMBER, 1993** 

### **SUMMARY**

The Leonard Property is situated in the central part of Leonard Township in the District of Timiskaming, 17 kms west of the village of Shiningtree, Ontario. It includes one claim block (1185717) containing 15 units totalling 240 hectares.

All of the consolidated rocks in the area are of Precambrian age. These are covered by a mantle of Pleistocene and Recent deposits.

Early Precambrian rocks are comprised of a metavolcanic-metasedimentary sequence intruded by a quartz-monzonite pluton and northeasterly and northwesterly trending diabase dykes.

Middle Precambrian rocks are represented by Huronian sediments and Nipissing Diabase sills. These Huronian units belong to the Gowganda and the Lorraine Formations of the Cobalt Group which unconformably overly these Early Precambrian units. The Nipissing Diabase sills intrude between the older underlying Archean metavolcanic-metasedimentary sequence and the Huronian Supergroup.

Structurally, the metavolcanics and metasediments are folded about a northnorthwesterly trending axis. Major faults in the area trend similarly northnorthwesterly and postdate the Nipissing Diabase (1).

Silver, cobalt, nickel and copper mineralization, associated with quartz-calcite veining in the Nipissing Diabase is the chief potentially economic feature of the area.

Previous work on the claims was quite extensive in the early part of the 20th century. This consisted of prospecting, trenching, and the sinking of one shaft to 100 feet with crosscuts extending 100 feet east and west. Although calcite veining and niccolite mineralization was discovered, no production was undertaken; nor was the presence of considerable cobalt mineralization reported. Later assessment reports show that some geological mapping and geophysical surveys were completed over the property. Geological surveys on a more regional scale were completed over the entire Leonard and Fawcett Townships by Carter of the Ontario Division of Mines in 1972 (1).

More recently an airborne electromagnetic and total intensity magnetometer survey was completed over the area in 1990.

In 1992 the author initiated and completed a linecutting, VLF-EM, magnetometer and geological mapping program on the property (see 1992 Leonard property report by P. Donovan). This work outlined a number of areas which required further investigation by stripping and rock sampling.

Work covered by this report includes a modest mechanical stripping program with follow-up rock sampling over the most promising areas outlined in the 1992 exploration program.

The mechanical stripping was completed by H. Ferderber of Val d'Or, Quebec between July 28 and August 3, 1993. The rock sampling included both channel and chip sampling over the various uncovered vein extensions. This portion of the work was executed by the author with the help of Rob Campbell of Val d'Or. A number of very interesting veins were uncovered including the "C" vein on the Zone 4+50 North which is the main quartz-carbonate vein system. This "C" vein runs for 14 meters and is up to 30 cm wide at the south end. Also, the "D" vein runs for 5 meters parallel and east of the "C" vein. There are numerous other veins which are detailed in the text of this report.



## **TABLE OF CONTENTS**

Summary

Introduction

**Location and Access** 

Claim List

**Regional Geology** 

**Property Geology** 

**Economic Geology** 

**Previous Work** 

**Present Geology** 

Zone L 6+00 North Zone L 4+50 North

Recommendations

References

**Certificate of Qualification** 

## **List of Figures**

Figure 1 Location Map

Figure 2 Claim Map

Figure 3 Regional Geology Map

Figure 4 Location Map of 1993 Stripping

Figure 5 Geological Plan-Line 6+00 North Strip

Figure 6 Geological Plan-Line 4+50 North Strip

# **List of Tables**

- Table 1 Sample Description Zone L 6+00 North
- Table 2 Sample Description Zone L 4+50 North

List of Appendix

**Assay Results** 

## INTRODUCTION

This is a report of activities on the Leonard Property jointly held by Pat Donovan and Edward Ingham of Val d'Or, Quebec. The property is located in Leonard Township, 17 kms east of the village of Shiningtree, Ontario.

The property was staked by the author in 1991 after a property visit and a careful study from all previous and recent work on the property to determine the economic potential of the area.

In June of 1993 a small dozer was brought onto the property to begin a modest stripping, rock sampling and mapping program. Two areas were chosen for stripping based on the results from the 1992 exploration program.

## LOCATION AND ACCESS

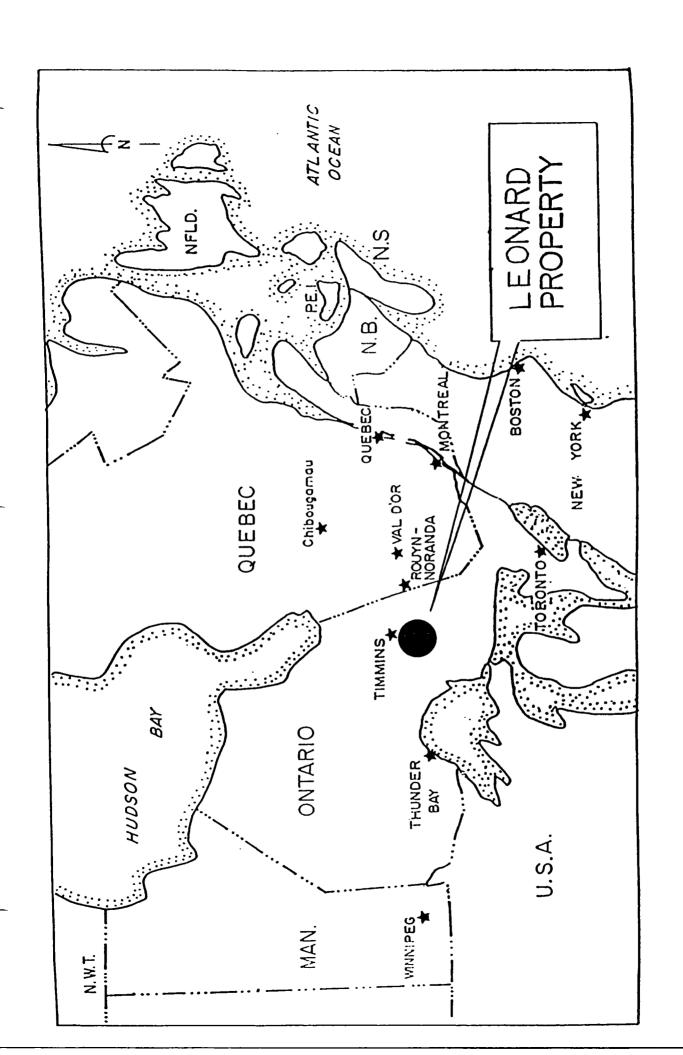
The property is located in Leonard Township, 17 kilometres east of Shiningtree and 106 kilometres south of Timmins in the District of Timiskaming. It lies just west of Fournier Lake and just east of the Ontario Hydro transmission line (see Figure 2).

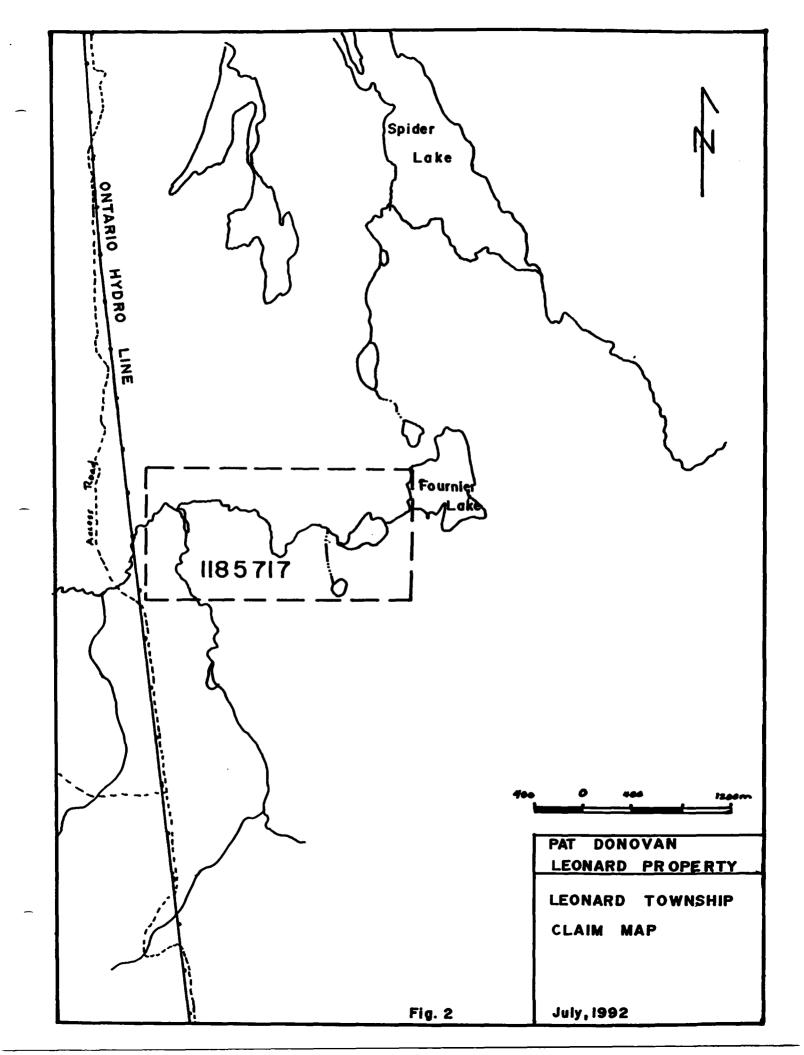
Access is good with a 4x4 road south from provincial highway 560 following the Ontario Hydro transmission line a distance of 15 kms. Also access can be gained by the Bay Road which departs from highway 560 approximately 7 kms west of Hydro Creek. This is a good all-weather road approaching to within 4 kms of the hydro line after which a 4x4 road leads to the above mentioned hydro line road and the western edge of the property.

#### **CLAIM LIST**

The Leonard property of Pat Donovan and Edward Ingham comprises one claim block of 15 units covering 240 hectares more or less.

The mining claim is 1185717 and is registered to Patrick Donovan of 23 Chemin Baie Jolie, Val d'Or, Quebec, J9P 4N7. The work on this claim was completed by the author with the assistance of H. Ferderber, dozer operator, and Rob Campbell both of Val d'Or. The stripping and follow-up sampling was completed between July 16 and August 3, 1993. During this period Three Bears Camp in Shiningtree was used as a base camp.





## **REGIONAL GEOLOGY**

The oldest rocks of the area are of the Early Precambrian (Archean) age forming the basement of the metavolcanic-metasedimentary sequence of the area. These units are within the Superior Geologic Province of the Canadian Shield, more specifically within the central portion of the Abitibi greenstone belt. The Early Precambrian metavolcanics consist of komatiitic, tholeitic, calc-alkalic and alkalic rocks with interlayered clastic and chemical metasediments and have a combined thickness of 19,000 meters (1).

The sequence commences with felsic metavolcanics followed by a layered cycle beginning with a mafic tholeiitic lower unit and closes with pyroclastic rocks and interlayered sediments and alkalic metvolcanics. Mafic intrusive rocks comprise syntectonic batholiths consisting of quartz-monzonite, and porphyroblastic granodiorite and trondhjemite, and late tectonic stocks of massive and porphyritic quartz diorite, trondhjemite, syenodiorite and diorite composition.

Middle Precambrian rocks comprise clastic and chemical sedimentary rocks of the Huronian Supergroup and intrusive Nipissing-type Diabase sills. The Huronian is represented by the Quirke Lake and Cobalt Groups with unconformably overly the Early Precambrian rocks. The Nipissing diabase lower sill was emplaced at the Early-Middle Precambrian uncomformity and is associated with cobalt-silver mineralization.

Early to Late Precambrian Diabase dykes cut the previous formations in northwesterly and northeasterly sets.

Major structural features in the region is a doubly plunging synclinorium of the metavolcanics-metasediments trending north-northwesterly to northwesterly.

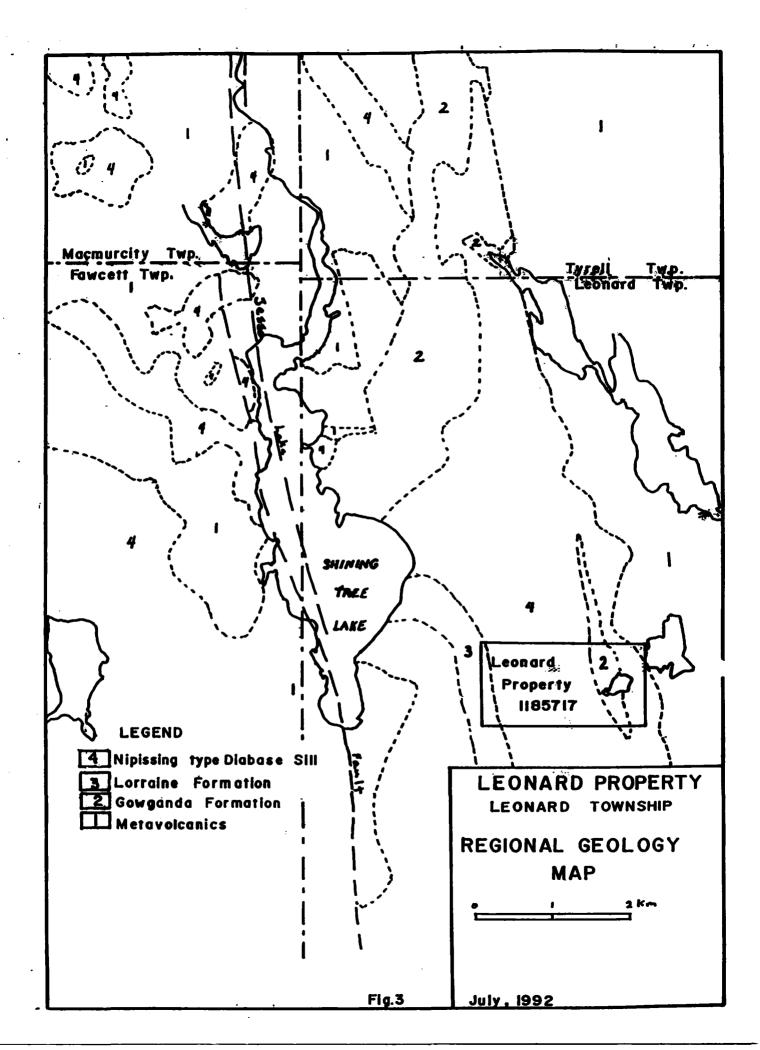
Numerous north trending faults that cross the area are part of the Onaping Lineament (2).

#### PROPERTY GEOLOGY

The property is underlain predominately by the lower unit Nipissing-type diabase. This unit occurs in the western part of the property and is a medium to fine grained massive greenish black rock with a reddish rusty brown weathered surface. These diabase sills intrude along the unconformity between the Huronian sediments and the Early Precambrian rocks.

Immediately east of the diabase, a thin wedge of intermediate volcanics occur. This rock is an andesite to dacite lapilli to fine tuffaceous unit. It is a reddish pink colour on the weathered surface and dark grey to brown on the fresh surface.

The eastern portion of the claim block is underlain by the Huronian



Supergroup, Gowganda Formation and is comprised of pebbly arenite to paraconglomerates with interbedded siltstones and argillites. The paraconglomerates or pebbly arenites contain sparse pink pebbles of granitic material up to 2cm in size within a dark grey fine argillaceous to medium arenitic matrix. The siltstone unit is a grey to pink, gritty, fine grained rock interbedded with the paraconglomerate or arenite and is slightly schistose. The argillites are massive black rocks which are very well laminated. These units strike in a generally north-south to north-northwest direction and dip steeply westward.

The extreme eastern part of the property is underlain by unaltered aphanitic tholeiitic basalt flows and minor lapilli tuffs. They are dark brown on the weather surface and dark grey to black on the fresh surface. Locally the flows are amygdaloidal. The lapilli tuffs are the same colour with <3mm subrounded fragments.

## **ECONOMIC GEOLOGY**

Within the area, deposits of asbestos, cobalt, silver, gold, lead, molybdenum, nickel, zinc and iron occur in characteristic associations and, in most cases, show a definite relationship to rock types.

Only gold was produced in the area and came from two mines: the Rhonda Mine in southwestern Macmurchy township which produced only in 1939, and the Tyranite Mine in northeastern Tyrrell township which produced from 1939 to 1942.

Considerable exploration work was carried elsewhere in the area including the property to which this report refers. In the past, significant cobalt bloom and smaltite mineralization was found within the present property limits dating back to 1912. The potential for uncovering economic cobalt, nickel, copper and possibly silver, appear good on this property.

#### **PREVIOUS WORK**

The first reported exploration in the area dates back to 1909 when Saville Exploration Syndicate discovered silver on the property located just south of the present Leonard Property. Stripping and trenching outlined a number of veins within a diabase sill which contained cobalt bloom, smallite, copper pyrite and small amounts of bismuth. No silver, however, was found in place (1).

In 1912, the Caswell-Eplett prospect was discovered. This prospect is within the present Leonard Property. Quite extensive work was done on this prospect to explore many veins within the diabase. Cobalt bloom occurs in many localities in several veins. An underground program was done with a vertical shaft sunk to 100 feet with 100 foot crosscuts excavated both east and west of the shaft. On the east crosscut a calcite vein 18 inches wide (45cms) and a vein of niccolite 4 to 6

inches wide (10-15 cms) was intersected. No significant cobalt or silver was reported. The plant consisted of a 20 hp upright boiler, a 5x5 foot hoist and a Rand drill (1). Some of this equipment including the boiler is still present on the property.

Also on the present property can be found the workings of the Neelands prospect. This prospect lies just north of the Caswell-Eplett prospect. Considerable trenching here exposed six or seven veins a few inches wide. These quartz-calcite veins occur within the Nipissing Diabase and some significant chalcopyrite and smaltite(?) mineralization. No significant silver mineralization was seen on the property.

In 1956 Newnorth Gold Mines Limited drilled five diamond drill holes just to the west of the present baseline in the Diabase. Very little economic mineralization was encountered in any of these holes. These drill sites could not be located.

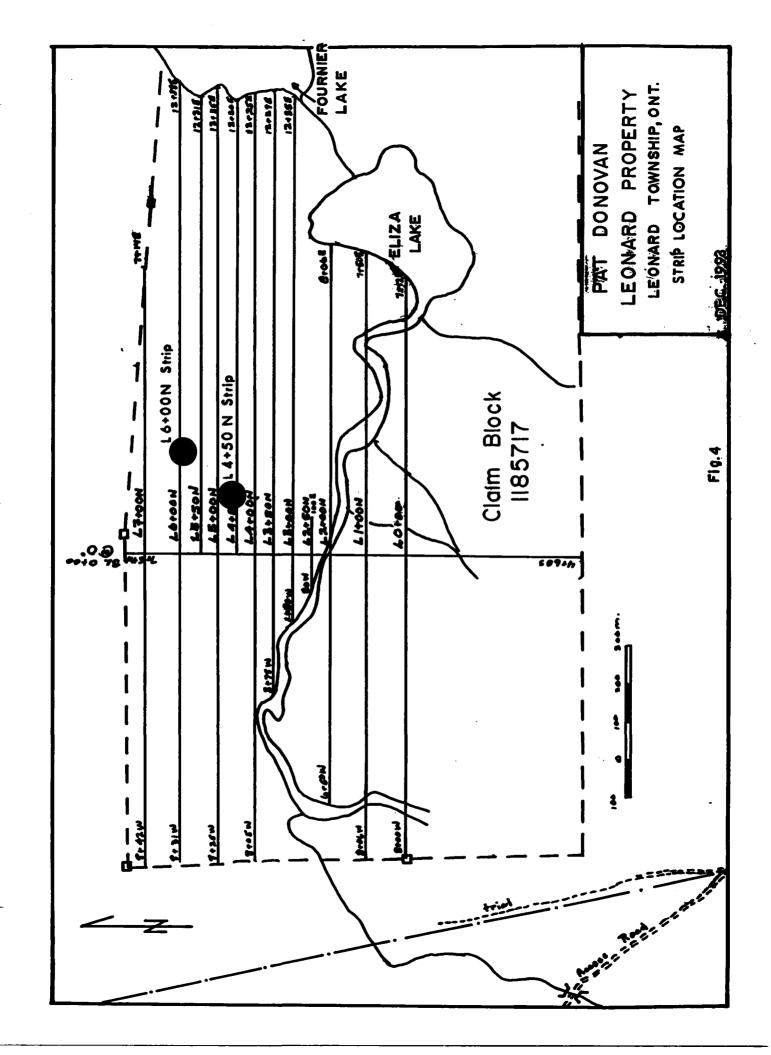
In 1976 Alamo Petroleum Ltd. conducted a geological survey, as well as, a JEM electromagnetic survey and a geochemical soil sampling program over most of the present Leonard Property. No significant new mineralization was located during this program. One JEM electromagnetic anomaly outlined during this time appears to very closely coincide with the anomalies "1a" and "1b" outlined in the 1992 geological survey.

In 1992, the author completed a linecutting program on the property followed by VLF-EM, magnetometer and geological surveys in order to attempt to discover significant economical mineralization. This work outlined and/or reoutlined the general areas of mineralization on the property. This area of mineralization extends from the shaft area on L3+75 North to L6+00 North and from 1+00 East to 2+75 East. Assay values obtained from grab samples were as high as 7.04% Co, 4.32% Cu and 0.59% Ni.

#### **PRESENT WORK**

In 1991 the property was staked by the author based on the presence of significant cobalt bloom found in trenches and pits within the claim block. In 1992 a program of exploration, in part funded by an Ontario Prospector Grant, was completed over the northern half of the Leonard Property claim block 1185717. This work included chain cut linecutting followed by VLF-EM, magnetometer and geological surveys. This program was somewhat successful and it was decided to complete a mechanical stripping program on the most promising areas on the property.

In 1993 the mechanical stripping program was completed between July 28 and August 3, 1993 including a channel-chip sampling program. A total of 32 samples were collected and assayed at Bourlamaque Assay Laboratory in Val d'Or,



Quebec. An area of approximately 750 m<sup>2</sup> was stripped in two zones zone L6N and L4+50N. The stripping was completed by H. Ferderber Geophysics Ltd of Val d'Or using a John Deere 450 dozer tractor.

### Zone L 6+00 North

In Zone L 6+00 North strip in the south, two parallel trending quartz-carbonate vein systems, the "East" (2" wide) and the "West" (1"wide), strike 340° to 10° within a 20 to 45 cm wide shear zone forming an ore zone south of the pit. The veins dip 70° to 80° East and the system narrows to 5 to 10 cm near the pit, striking 10° and dipping 60° East. The East Vein is more mineralized with cobalt bloom. Cobalt bloom is also evident along the west side of the pit. Some small crosscutting 1cm veinlets of carbonate, with disseminated sulphides were uncovered just north of the pit.

In the north, 10 to 15 m north of Line 6 North there are also two parallel trending (350°) veins exposed. The veins dip 68° to 70° to the east and are 2.0 to 10 cm wide. The "West" vein appears to end to the north while the "East" vein changes direction and is offset by a small fracture becoming wider, 5 to 10cm, rusty and exhibits cobalt bloom. There is a carbonate vein just east of the north end of the "East" vein.

TABLE 1: SAMPLE DESCRIPTION ZONE L 6+00 NORTH

| SAMPLE # | DESCRIPTION  | Assay<br>Result<br>Co(%) | Assay<br>Result<br>Ni<br>(%) |
|----------|--|--------------------------|------------------------------|
| 16929    | 9 cm chip-channel sample across<br>10-15 mm East vein containing<br>cobalt bloom, rusty, weathered,<br>sheared host rock   | .146                     | .026                         |
| 19930    | 7.5 cm chip-channel sample across East vein (carbonate), cobalt bloom  | .488                     | .060                         |
| 19931    | 20 cm chip-channel sample across<br>5 cm East and 5 cm West quartz-<br>carbonate veins and 10 cm of host<br>rock, minor carbonate and cobalt<br>bloom in East vein | .130                     | .020                         |
| 16932    | 2- 6 mm chip-channel across quartz-carbonate veins, weathered, slightly oxidized, cobalt bloom   | .140                     | .020                         |

| 16933 | 10-15 mm veinlet cross-cutting quartz-carbonate vein, 1% disseminated sulphides,cobalt bloom                       | .022 | .088 |
|-------|--|------|------|
| 16934 | 9 cm chip-channel sample across quartz-carbonate vein, trace cobalt bloom  | .066 | .012 |
| 16935 | East vein 7.5 cm chip-channel, rusty, oxidized, cobalt bloom   | .032 | .008 |
| 16936 | chip-channel sample across 15 cm of vein material and 5 cm of host hanging wall. Rusty and containing cobalt bloom | .044 | .012 |
| 16937 | 5 cm chip-channel of hanging wall of 7.5 cm vein. Weathered and contains cobalt bloom                              | .214 | .034 |

### Zone L 4+50 North

The Zone L 4+50 North is a series of carbonate and/or quartz-carbonate veins in fracture-shear zones, hosting smaltite and/or chalcopyrite mineralization. The vein systems have been labelled "A" through "N" for convenience. The carbonate veins, some quite oxidized, were sampled and their location flagged or marked by spray paint for identification in the field. A field designation of the samples "A-1", "B-1", "C-1,2,3", etc. These field labels will be listed in the Table 1 along with their assay sample number.

Vein "A" is a 5 cm wide carbonate vein near the southwest corner of the pit. Some pyrite and smaltite exposed over 1.2 meters but doesn't appear to continue along strike (192°) to the south. The dip is vertical.

Vein "B" is 4 cm wide, strikes at 20° and dips vertical. It contains approximately 3% combined Chalcopyrite and smaltite with malachite staining.

Vein "C" appears to be the main carbonate vein system at this location. It is exposed over a width of 30 cm at the south with 5 to 8 cm wide smaltite seams and cobalt blooms near the pit. The narrowest width of this vein is 5 cm where it intersects the "E" Vein. This "C" Vein strikes generally 360° but also 340° and 22°. It is locally highly fractured and these fracture zones are oxidized and leached. The vein is exposed over 15 meters dips between 70° to 80° East.

Vein "D" is 2.5 cm wide at the south end and bends and widens to 8 cm where it intersects with the "F" vein. The vein strikes approximately north-south and dips 75° East. It is locally oxidized and smaltite-rich with trace chalcopyrite.

Vein "E" is exposed at the northeast corner of the pit for approximately 30 cm then it is mainly barren. It is 8 cm wide in a fracture-shear zone dipping 80° East. This vein may intersect and join "C" vein.

Vein "F" has an average width of 5 cm in the west and joins with vein "C" after 6 meters. It is oxidized and leached in carbonate vein with smaltite.

Vein "G" is 1 to 4 cm wide offset at vein "C" and cut off by vein "D". This vein has a vertical dip.

Vein "H" is 8 to 10 cm wide in a rubble filled shear-fracture zone with 2.5 cm carbonate vein exposed over 30 cm. The vein dips 85° East.

Vein "I" is a 2.5 to 10 cm wide vein widening northward and joining with vein "D" and is offset by a felsic dyke. This oxidized and smaltite-rich vein dips 85° East.

Vein "J" is a narrow 0.6 to 1.25 cm wide vein within a felsic dyke. It is offset by vein "D".

Vein "K" is barren at the surface and is a 2.5 cm fracture-shear zone.

Vein "L" is a 2.5 to 5 cm wide oxidized vein with a trace of smaltite. The vein dips 85° East.

Vein "M" is a 1.25 to 4.0 cm wide oxidized vein with a 0.6 cm wide smaltite vein within it. The vein dips at 85°.

Vein " N" is two 6 mm wide veinlets 15 cm apart dipping vertical.

TABLE 2: SAMPLE DESCRIPTION ZONE 4+50 NORTH

| Vein | Field<br>Label | Sample | Description   | Assay<br>Results<br>Co (%) | Assay<br>Results<br>Ni (%) |
|------|----------------|--------|---|----------------------------|----------------------------|
| A    | A-1            | 16902  | 4.0 cm quartz-carbonate vein, 1% smaltite, to 1% chalcopyrite (cpy) | .018                       | .008                       |

| В | B-1 | 16903 | Chip-channel across a 4.0 cm quartz-carbonate vein, weathered, 2-3% cpy, 1-5% malachite staining                     | 0.010 | .008 |
|---|-----|-------|--|-------|------|
| С | C-1 | 16904 | 5 to 8 cm chip-channel o smaltite vein with Co bloom   | 6.60  | .442 |
|   | C-2 | 16905 | 30 cm chip-channel sample of quartz (30%), carbonate (70%) vein with seam of smaltite, 8% smaltite, Co bloom         | .785  | .094 |
|   | C-3 | 16906 | 13 cm chip-channel of quartz-<br>carbonate vein, weathered,<br>10% diss. smaltite                                    | 2.44  | .198 |
|   | C-4 | 16907 | 30 cm chip-channel sample, 8 cm of weathered, oxidized, leached quartz-carbonate and 10 cm of diabase on either side | .158  | .024 |
|   | C-5 | 16908 | 13 cm chip-channel of oxidized quartz-carbonate mixture, 5% smaltite   | .022  | .008 |
|   | C-6 | 16909 | 13 cm chip-channel sample of oxidized carbonate vein, 1% smaltite  | .010  | .006 |
|   | C-7 | 16910 | 13 cm chip-channel sample like 16909, 2-3% smaltite  | .030  | .012 |
|   | C-8 | 16911 | 5 cm chip-channel sample,<br>oxidized carbonate, minor quartz<br>tr-1% cpy., 2-5% smaltite                           | .006  | .004 |
| D | D-1 | 16912 | 2.5 cm chip-channel of carbonate vein with minor quartz, highly weathered-oxidized, up to 3% cpy.,2% smaltite        | .014  | .010 |
|   | D-2 | 16913 | 6.5 cm chip-channel sample of oxidized, carbonate-rich vein material, tr-1% smaltite                                 | .038  | .008 |
|   | D-3 | 16914 | 10 cm chip-channel sample of oxidized quartz (20%)-carbonate (80%), 3-4% smaltite                                    | .016  | .012 |

|   |     |       | ······································  |      |      |
|---|-----|-------|---|------|------|
|   | D-4 | 16915 | 10 cm chip-channel sample of oxidized carbonate, trace to 1% cpy, 1% smaltite                             | .004 | .004 |
|   | D-5 | 16916 | 7.5 cm chip-channel sample of oxidized carbonate vein with cobalt bloom, 1-2% smaltite                    | .014 | .006 |
|   | D-6 | 16917 | 7.5 cm chip-channel sample of quartz- carbonate vein, trace to 1% smaltite                                | .006 | .006 |
| F | F-1 | 16918 | 30 cm chip-channel sample across carbonate vein with minor silica, leached, oxidized, black, cobalt bloom | .114 | .016 |
|   | F-2 | 16919 | 5 cm chip-channel sample of mostly carbonate, oxidized  | .014 | .006 |
| 1 | 1-1 | 16920 | 7.5 cm chip-channel sample of oxidized quartz-carbonate vein, 1-2% smaltite                               | .010 | .006 |
|   | I-2 | 16921 | 7.5 cm chip-channel sample of carbonate vein, trace to 2% smaltite  | .006 | .004 |
| J | J-1 | 16922 | 20 cm chip-channel sample of 50% carbonate vein and 50% felsic intrusive, trace cpy                       | .004 | .004 |
| L | L-1 | 16923 | 5 cm chip-channel sample of oxidized carbonate, 1% smaltite   | .004 | .006 |
| М | M-1 | 16924 | 2.5 cm of oxidized quartz-<br>carbonate with 6-7 mm smaltite<br>seam                                      | .006 | .008 |

## RECOMMENDATIONS

It is recommended that a modest diamond drill program be completed over the property concentrating on the mineralization discovered to date. This is necessary because of the very weathered nature of the mineralization. The drill program could give better samples. Also this same drill program would enable the testing of the potential under the overburden just to the east of the known mineralization.

Respectfully Submitted,

Patrick J. Donovan B. Sc. FGAC

## **REFERENCES**

- 1) Carter, M.W.,1977; Geology of Fawcett and Leonard Townships, District of Sudbury and Timiskaming; Ontario Division of Mines, GR-146, Accompanied by Map 2359.
- 2)Carter, M.W.,1977; Geology of Shiningtree Area, District of Sudbury and Timiskaming; Ontario Geological Survey Report 240, Accompanied by Map 2510.
- 3) Middleton, R. S. and Blecash, J. M.,1976, Geology of Leonard Twp. Shining Tree Project, Alamo Petroleum Ltd.
- 4) Donovan, P.J., 1992, Leonard Township Property, Shiningtree Area.

## **CERTIFICATE OF QUALIFICATION**

I, Patrick J. Donovan of Val d'Or in the Province of Quebec, Canada, do hereby certify that:

I reside at 23 Chemin Baie Jolie, Val d'Or, Quebec.

I am a qualified geologist having received my academic training at St. Francis Xavier University in Antigonish, Nova Scotia, graduating in 1977 with a B.Sc.. I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum and am a Fellow of the Geological Association of Canada.

I have continuously been engaged in my profession for the last 16 years. I have examined the work files covering the subject property and the immediate area at the resident geologist's office of the Ontario Ministry of Northern Development and Mines in Cobalt, Ontario.

This report is based on the author's comprehensive study of all work records and on the geological maps and reports published for the area. Also, I have personally mapped the entire gridded portion and the stripped portion of the property.

Patrick J. Dono an B.Sc., FGAC

APPENDIX "A"
ASSAY RESULTS

TÉL.: (819) 824-4337 FAX: (819) 824-4745



# LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE BOURLAMAQUE ASSAY LABORATORIES LTD.

| Pat Donovan Exploration Services | CERTIFICAT D'ANALYSES CERTIFICATE OF ANALYSIS                    |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|
|                                  | N° 61583   |  |  |  |  |  |  |
| ECHANTILLONS Roche               | le 9 septembre         93           VAL D'OR (QUÉBEC)         19 |  |  |  |  |  |  |
| REÇU DE<br>RECEIVED FROM         | ANALYSES 32 Co, 32 Ni<br>ASSAYS                                  |  |  |  |  |  |  |

| <u>Echantillon</u>   | <u>Co_%</u>   | <u>Ni %</u>  |
|--|---|--|
| 16902<br>16903<br>16904<br>16905<br>16906<br>16907<br>16908<br>16909<br>16910<br>16911<br>16912<br>16913<br>16914<br>16915<br>16916<br>16917<br>16918<br>16919<br>16920<br>16921<br>16922<br>16923<br>16924<br>16929 | 0.018<br>0.010<br>6.60<br>0.785<br>2.44<br>0.158<br>0.022<br>0.010<br>0.030<br>0.006<br>0.014<br>0.038<br>0.014<br>0.014<br>0.014<br>0.014<br>0.014<br>0.014<br>0.014<br>0.014<br>0.014 | 0.008<br>0.008<br>0.442<br>0.094<br>0.198<br>0.024<br>0.008<br>0.012<br>0.004<br>0.010<br>0.006<br>0.012<br>0.006<br>0.016<br>0.006<br>0.006<br>0.006<br>0.006 |
| 10913 (  | 0.004   | 0.004  |
| 10913 (  | 0.016   | 0.012  |
| 16917<br>16918   | 0.006<br>0.144  | 0.006<br>0.016   |
| 16920  | 0.010   | 0.006  |
| 16922<br>16923   | 0.004<br>0.004  | 0.004<br><b>0.0</b> 06   |
| 16929<br>16930   |   |  |
| 1693I<br>16932   | 0.130<br>0.140  | 0.020<br>0.020   |
| 16933<br>16934<br>16935  | 0.022<br>0.066<br>0.032   | 0.008<br>0.012<br>0.008  |
| 16936<br>16937   | 0.044<br>0.214  | 0.012<br>0.034   |
|  |   |  |

ANALYSTE / ASSAYER

Ministry of **Northern Development** and Mines

# **Report of Work Conducted After Recording Claim**

**Mining Act** 

al information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about lection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, .ry, Ontario, P3E 6A5, telephone (705) 670-7284. 2.156 27

- Instructions: Please type or print and submit in duplicate.
  - Refer to the Mining Act and Regulations for requ

Recorder.

- A separate copy of this form must be completed



| _                | - A SKett  | ch, showing the claim  | S uio work   |  | 11SE0049 2.15627 LE | ONARD                      |  | 900          |
|------------------|--|--|--|--|---------------------|----------------------------|--|--------------|
| Rec              | corded Holder(s)   |  |  |  | 11020073 2.13027 CE |                            | Client No.                                     |              |
| A                | Glenn J. 1   | Millan   |  |  |                     |                            | 173 700  |              |
|                  |  | A-Philippo, I  | Noundista  | 20 Out   | 799                 | 4117                       | Relephone No.<br>SUN 7-38-1<br>M Dr G Plan No. | 6801         |
|                  | Lorder Jake  |  |  | mend   |                     |                            |  |              |
|                  | otes<br>fork From:<br>erformed   | JULY 16, 199   | <b>5</b>   |  | To: Ayoux           | + 3 10                     | 63   |              |
| Wo               | rk Performed (Chec   | ck One Work Group C  | Only)  |  |                     |                            |  |              |
|                  | Work Group   | G  | 4  | S  | Туре                |                            |  |              |
| <b>✓</b>         | Geotechnical Survey  | GEWOOLGAL!   | wohlins  | 21 - ambril  | 3                   |                            |  | ···          |
|                  | Physical Work,<br>Including Drilling   |  |  |  |                     |                            |  |              |
|                  | Rehabilitation   |  | _  |  |                     |                            | RECEIVED                                       |              |
|                  | Other Authorized<br>Work   |  |  |  |                     |                            | OCT 1 3 1994                                   |              |
|                  | Assays   |  |  |  |                     | MIN                        | IING LANDS BRANCH                              |              |
|                  | Assignment from Reserve  |  |  |  |                     |                            |  |              |
|                  |  | Claimed on the Atta  | ahad Otataa  |  | . #                 | 36                         | N  |              |
| -6               | rsons and Survey C   | Company Who Perfor   | med the W  | Vork (Give Na  | me and Addres       | s of Aut                   | hor of Report)                                 |              |
|                  | Name of Survey Consumer of Surve | me   | 33 Cr  | Bou 30   | Add                 | iress                      | hor of Report)                                 |              |
|                  | Nan  | me   | 33 Cr  |  | Add                 |                            | hor of Report)                                 |              |
|                  | Nan  | me   | 33 Cr  | Bou 30   | Add                 |                            | hor of Report)                                 |              |
|                  | Nan  | me   | 33 Cr  | Bou 30   | Add                 |                            | hor of Report)                                 |              |
| <b>Q</b>         | Nan  | Association (Constant)   | A01 9,   | Bou 30   | lie 390             |                            | hor of Report)                                 |              |
| (att             | Name of the state  | cessary)  cial Interest * See  work was performed, the ci  | Note No. 1   | on reverse sin this work   | Add                 |                            |  | ro)          |
| Ce               | Name of the control o | cessary) icial Interest * See work was performed, the ci   | Note No. 1   | on reverse sin this work   | Add                 | dress                      |  | re)          |
| Co in by         | Name of the control of the current recorded how the current recorded ho | cessary)  cial Interest * See work was performed, the ciaurent holder's name or held ider.  Report  conal knowledge of the facts d report is true.                         | Note No. 1   | on reverse sin this work icial interest  | side                | Recorded                   |  |              |
| (atti            | Name of the control o | cessary) icial Interest * See work was performed, the ci current holder's name or held ider. Report onal knowledge of the facts d report is true. Certifying               | Note No. 1   | on reverse sin this work icial interest  | side                | Recorded                   |  |              |
| Q (atti          | Name of the control o | cessary)  cial Interest * See work was performed, the cial line or held ider.  Report  chal knowledge of the facts d report is true.  Certifying  Date                     | Note No. 1   | on reverse sin this work report, this Work report, the same sin the same since th | side                | Recorded                   |  |              |
| Co I it b        | Name of the control o | cessary)  cial Interest * See work was performed, the cial line or held ider.  Report  chal knowledge of the facts d report is true.  Certifying  Date                     | Note No. 1   | on reverse sin this work report, this Work report, the same sin the same since th | side  Sept. 39      | Recorded                   |  |              |
| Ce little Ce Tel | Name of the control o | cessary)  cial Interest * See work was performed, the cial line or held ider.  Report  chal knowledge of the facts d report is true.  Certifying  Date                     | Note No. 1   | on reverse sin this work report, this Work report, the same sin the same since th | side  Sept. 39      | Recorded the works         | withessed same during                          | and/or after |
| (att Ce in b)    | Name of the control o | cessary)  cial Interest * See work was performed, the ciaurent holder's name or held ider.  Report  conal knowledge of the facts d report is true.  Certifying  Date  Date | Note No. 1   | on reverse sin this work report, it  | side  Sept. 39      | Recorded Recorded          | withessed same during                          | and/or after |
| (att Ce in b)    | Name of the control o | cessary)  cial Interest * See work was performed, the ciaurent holder's name or held ider.  Report  conal knowledge of the facts d report is true.  Certifying  Date  Date | Note No. 1  alms covered under a benefit set forth in the | on reverse sin this work report, it  | side  Sept. 39      | Recorded Processing Street | withessed same during                          | E 10A        |

| 0241 (03/1)                 | •   | , |  |  |  | ÷ |        |   |  |  |        |  |          |         |         | _        |           | April 19  |
|-----------------------------|---|---|--|--|--|---|--------|---|--|--|--------|--|----------|---------|---------|----------|-----------|---|
| Total Number of Claims      |   |   |  |  |  |   |        |   |  |  |        |  |          |         |         |          | 4145811-7 | Claim Number<br>(see Note 2)                          |
| •                           |   |   |  |  |  |   |        | • |  |  |        |  |          |         |         |          | 15        | Number<br>of<br>Claim<br>Units                        |
| Total Value Work<br>Done    | OODEB   |   |  |  |  |   |        |   |  |  |        |  |          |         |         |          | 009 C&    | Value of Assessment Work Done on this Claim           |
| Total Value<br>Work Applied | 83600   |   |  |  |  |   |        |   |  |  |        |  |          |         |         |          | 009C &    | Value<br>Applied<br>to this                           |
| Total Assigned From         |   |   |  |  |  |   |        |   |  |  |        |  |          |         |         |          |           | Value<br>Assigned<br>from<br>this Claim               |
| Total Recerve               |   |   |  |  |  |   |        |   |  |  | •      |  |          |         |         |          |           | Reserve:<br>Work to be<br>Claimed at<br>a Future Date |
| 1.<br>2.<br>3.<br>in t      | 2. Credits are to be cut back equalty over all claims contained in this report of work. |   |  |  |  |   |        |   |  |  |        |  |          |         |         |          |           |   |
|                             |   |   |  |  |  |   | atente |   |  |  | 385e C |  | te the f | ollowii | ng:<br> | <br>Date | _         |   |

# Statement of Costs - "Caswell-Eplett Prospect"

2.156 27

# Leonard Township - Ontario

# Summer - Fall Program, 1993

Item (Description):

Cost:

# A) Direct Field Costs: (\$8842)

| - power stripping (JD 450 bulldozer): 7 days | = \$5842 |          |
|--|----------|----------|
| - geological mapping & supervision           | = \$2500 | X 20%    |
| - sampling and assays                        | = \$500  | 71 20 70 |

# - B) Support Costs: (\$1768.00)

| - vehicle mileage (3000 km @ .30/km) | = \$900  |
|--------------------------------------|----------|
| - food & accomodation (20 days)      | = \$1500 |

Total Allowable For Assessment Credits: \$8842 \* 20% (\$1768) = \$10,610

Total Claimed: \$10.610.00

The above cost statement has been compiled from information provided by the author of the report at my request.

Glenn J. Mullan October 8th, 1994

ECEIVED

OCT 1 3 1994

MINING LANDS BRANCH

# After Hecording Claim WHY80.00446 . and Mines **Mining Act** ASWELL-EPLETT Personal Information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, idigury, Ontario, P3E 6A5, telephone (705) 670-7264. Instructions: - Please type or print and submit in duplicate. - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining - A separate copy of this form must be completed for each Work Group. - Technical reports and maps must accompany this form in duplicate. - A sketch, showing the claims the work is assigned to, must accompany this form. Work Performed (Check One Work Group Only) Work Group **Geotechnical Survey** Physical Work, Including Drilling 3rulando6 Rehabilitation RECEIVED Other Authorized Work OCT 1 3 1994 Assays **Assignment from** MINING LANDS BRANCH Total Assessment-Work Claimed on the Attached Statement of Costs Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification. Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report) Name 83, Ch. Bare Tolie Pat Donovera Associates Val d'or austre (attach a schedule if necessary) Certification of Beneficial Interest \* See Note No. 1 on reverse side I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder. **Certification of Work Report** I certify that I have a personal knowledge of the facts set forth in this Work report, having perform tion and annexed report is true nd Address of Person Certifying as above For Office Use Only Total Value Cr. Recorded # 7010. 510CT 11 PM 3 21

| _                           |          |                 |        |        |        |         |         |         |        |         |         |       |       |           |         |             |          |  |
|-----------------------------|----------|-----------------|--------|--------|--------|---------|---------|---------|--------|---------|---------|-------|-------|-----------|---------|-------------|----------|--|
|                             |          |                 |        | • •    |        |         |         |         |        | -       |         |       |       |           |         |             |          | Work Report<br>Number for<br>Applying<br>Reserve |
| Total Number of Claims      | ٠-       |                 |        |        |        |         |         |         |        |         |         |       |       |           |         |             | 4.185717 | Claim Number (see Note 2)                        |
|                             |          |                 |        |        |        |         |         | •       |        |         |         |       |       |           |         |             | 15       | Number<br>Of<br>Claim<br>Units                   |
|                             |          |                 |        | l      |        |         |         |         |        |         |         |       |       |           |         | <br>Γ       |          | <u> </u>   |
| Total Value Work            | olof &   |                 |        |        |        |         |         |         |        |         |         |       |       |           |         | ·           | m.010+8  | Value of Assessment Work Done on this Claim      |
| Total Value<br>Work Applied | ०१०५ क्र |                 |        |        |        |         |         |         |        |         |         |       |       |           |         |             | 0105 ह   | Value<br>Applied<br>to this<br>Claim             |
|                             |          |                 |        |        |        |         |         |         |        |         |         |       |       |           |         | <br>        |          |  |
| Total Assigned              |          |                 | •      |        |        |         |         |         |        |         |         |       |       |           |         |             |          | Value<br>Assigned<br>from<br>this Claim          |
| Total Reserve               |          |                 |        |        |        |         |         |         |        |         | •       |       |       |           |         |             |          | Reserve: Work to be Claimed at a Future Date     |
| Cre whi                     |          | ou are dims you | are to | be cut | back s | tarting | with th | e claim | listed | last, w | rorking | backw | ards. | ects of a | such de | <br>, pleas | e indic  | ate from   |

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

In the event that you have not specified your choice of priority, option one will be implemented.

W9480.00496

# Statement of Costs - "Caswell-Eplett Prospect"

Leonard Township - Ontario

2.156 27

Summer - Fall Program, 1993

Item (Description):

Cost:

A) Direct Field Costs: (\$8842)

- power stripping (JD 450 bulldozer): 7 days = \$5842 - geological mapping & supervision = \$2500 - sampling and assays = \$500 - B) Support Costs: (\$1768.00)

- vehicle mileage (3000 km @ .30/km)

- food & accomodation (20 days)

MINING LANDS BRANCH

= \$900 = \$1500

Total Allowable For Assessment Credits: \$8842 \* 20% (\$1768) = \$10,610

Total Claimed: \$10.610.00

The above cost statement has been compiled from information provided by the author of

the report at my request.

Gienn J. Mullan October 8th, 1994



Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Geoscience Approvals Office 933 Ramsey Lake Road 6th Floor Sudbury, Ontario P3E 6B5

Telephone: (705) 670-5853 (705) 670-5863

Our File: 2.15627

Transaction #: W9480.00495 W9480.00496

February 16, 1995

Mining Recorder Ministry of Northern Development and Mines 4 Government Road East Kirkland Lake, Ontario **P2N 1A2** 

Dear Mr. Spooner:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIM

L-1185717 IN LEONARD TOWNSHIP

The deficiency outlined in the Notice of Deficiency dated December 28, 1994 have been corrected. Accordingly, the assessment work credits have been approved as outlined on the Report of Work form. The credits have been approved under Section 10 (Physical) and Section 12 (Geology) of the Mining Act Regulations.

The approval date is February 13, 1995.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5858.

ORIGINAL SIGNED BY:

Ron C. Gashinski

Senior Manager, Mining Lands Section Mining and Land Management Branch

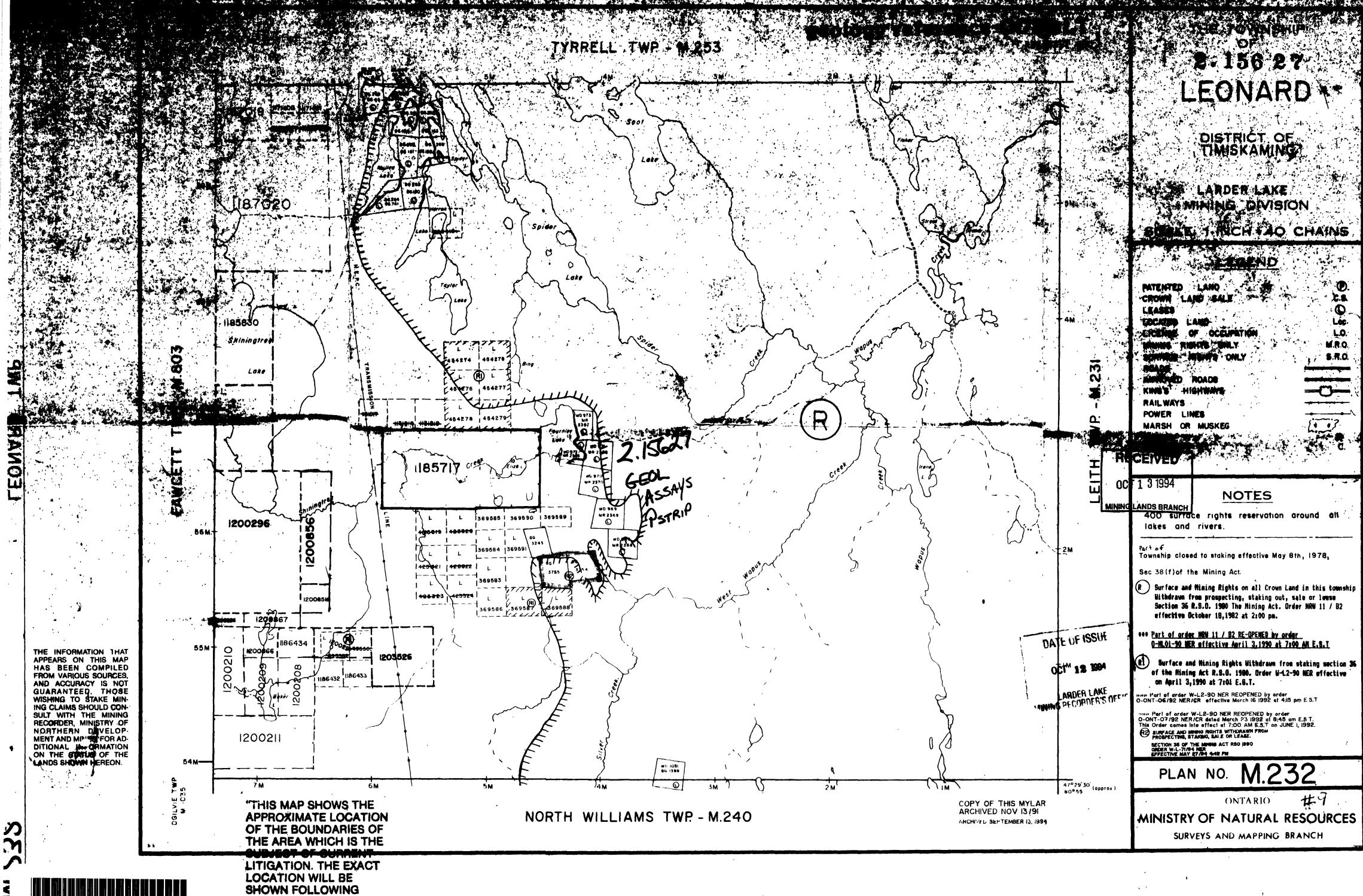
Roncodel.

Mines and Minerals Division

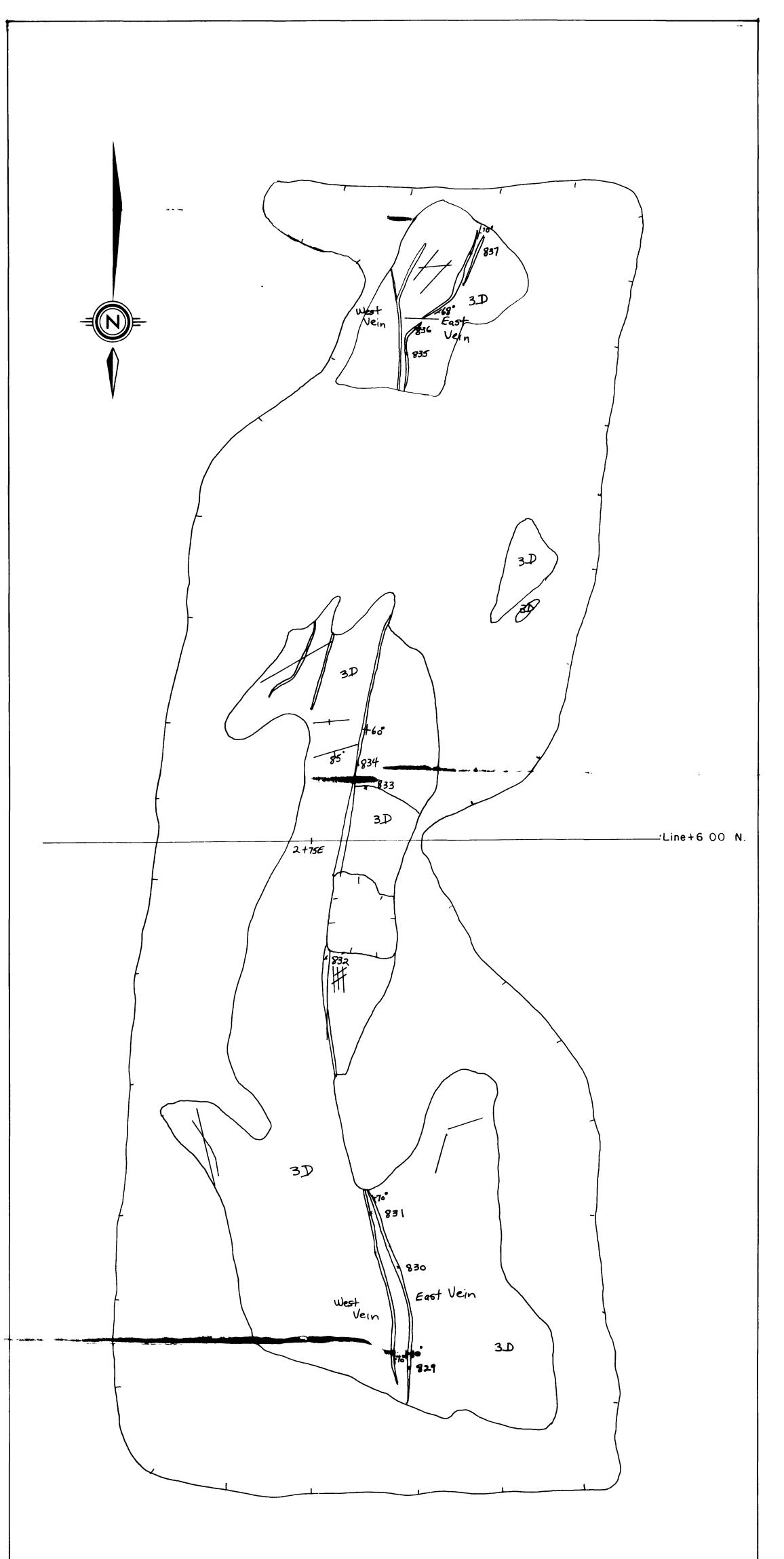
SBB/jl

Resident Geologist cc: Cobalt,Ontario

Assessment Files Library Sudbury, Ontario



**CONFIRMATION BY THE** PARTIES TO THE ACTION."



L**E**GE ND

3D

D:ABASE

823 ×

Sample Number and location

PAT DONOVAN LEONARD PROPERTY

LEONARD TOWNSHIP, ONTARIO

DEC. 1993

6.0m

GEOLOGICAL PLAN
LINE 6+00 N STRIP

3.0



