

**LOUBEL Exploration's Massey Project**  
Diamond Drilling Report  
Massey Township  
Porcupine M.D., Ontario  
NTS 42A/12

By

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October 29, 1997

2.18075



42A12SW0002 2.18075 MASSEY

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## **1.0 SUMMARY**

LOUBEL Exploration Inc. has completed 3 BQ size diamond drill holes for a total of 964 feet (294M) on a property in Massey Township between August 18 and September 05, 1997. Drilling was contracted to Nighthawk Drilling Ltd. of Timmins, Ontario. The core was logged by J. Boissoneault, and assisted by Mr. Chris Dupont.

The drillholes were located to test two coincident northerly - trending magnetic "highs" with associated zones of electrical conductivity over a total length of approximately 250 meters.

The coincident mag and E.M. anomalies were interpreted as being due to massive or semi-massive sulfide zones because field survey on the property has shown the presence of gossan zones, sulfide mineralization, and in the sulfides, copper in the form of chalcopyrite.

All 3 holes drilled intersected significant and extensive alteration to chlorite. The chlorite alteration increases as one goes north. The volcanics encountered were observed to be fragmental and brecciated. Rocks have undergone alteration from Feldspar to chalky clay minerals, and from pyroxene to amphibole.

In holes 97-03 and 97-02 an infusion of smoky blue/grey silica containing pyrite and pyrrhotite was observed. Analysis of the core indicated anomalous and increasing values of copper and zinc as one goes north along the silica infusion.

This alteration is indicative of hydrothermal activity commonly associated with the formation of some types of ore deposits. It is recommended that the other electromagnetic conductors on the property be drilled, and a search for deeper mineralized zones using I.P. be undertaken. Lithochemical studies are also recommended.

## **2.0 INTRODUCTION**

A re-interpretation of the VLF and Ground Magnetometer survey conducted in 1991 was undertaken by Loubel Exploration Inc. in the fall of 1997. This study concluded that several EM anomalies located in favourable geology merited drill testing. Two of the four selected EM anomalies were drilled and the results are the subject of this report.

## **3.0 LOCATION, ACCESS, PHYSIOGRAPHY**

The subject claims are located about 22 miles (35 km.) due west of the town centre of the City of Timmins, Ontario, in Massey Township. They may be reached by travelling southwest along Highway 101 to a point 1 kilometre beyond the Malette Timber Company plant, where a gravel road may be followed westward a further 22 miles. This road reaches within a half mile (1km.) of the northeast corner of the ground. Walking trails, claim lines, and cut grid lines permit access and location from there.

The ground, like most of Northern Ontario, especially near the clay belt, is monotonously flat, except on the claims themselves, where north-trending diabase dikes form modest ridges which rise some 50 feet (15 metres) above the local level of the land.

The area is covered by a moderately dense forest of mixed deciduous and coniferous trees and shrubs.

#### **4.0 PROPERTY**

The property consists of a contiguous block of unpatented mining claims situated in the northwestern part of the Township of Massey, Porcupine Mining Division, District of Cochrane, Ontario.

Figure 1, page 3, and Figure 2, page 4, show the general location of the area in the Province of Ontario, and the specific location of the claims in Massey Township, respectively. The claims themselves form a north-south oriented rectangle with a aggregate area of about 240 acres (approximately 97 hectares) and are numbered:

P.1176671, approximately 80 Acres  
P.1182726, approximately 160 Acres.

Both digital and the original records pertaining to these claims were searched at the Office of the Mining Recorder of the Ontario Ministry of Northern Development and Mines, Timmins. These records indicate that the claims:

- a. were staked on July 24 and July 25, 1991,
- b. were recorded on July 25, 1991,
- c. are currently registered in the name of John Raymond Boissoneault, 670 Spruce Street North, Timmins, Ontario,
- d. the claims were in good standing until July 24, 1997,
- e. no assessment work credits have been applied against the claims to extend this date but an order has been issued by the Mining Recorder granting an extension for performance of the deficiency of the work on the mining claims, to July 24, 1998.
- f. have no liens, encumbrances, cautions, or other impediment recorded against them but have been optioned by Mr. Boissoneault to Loubel Exploration Inc. of Noranda, Quebec.

Table 1 lists the claims, ownership, and current status of assessment work requirements prior to filing credits resulting from the work described in this report.



Figure 1: Outline Map of the Province of Ontario and Parts of the USA and the Province of Quebec, to Show the General Location of Massey Township.

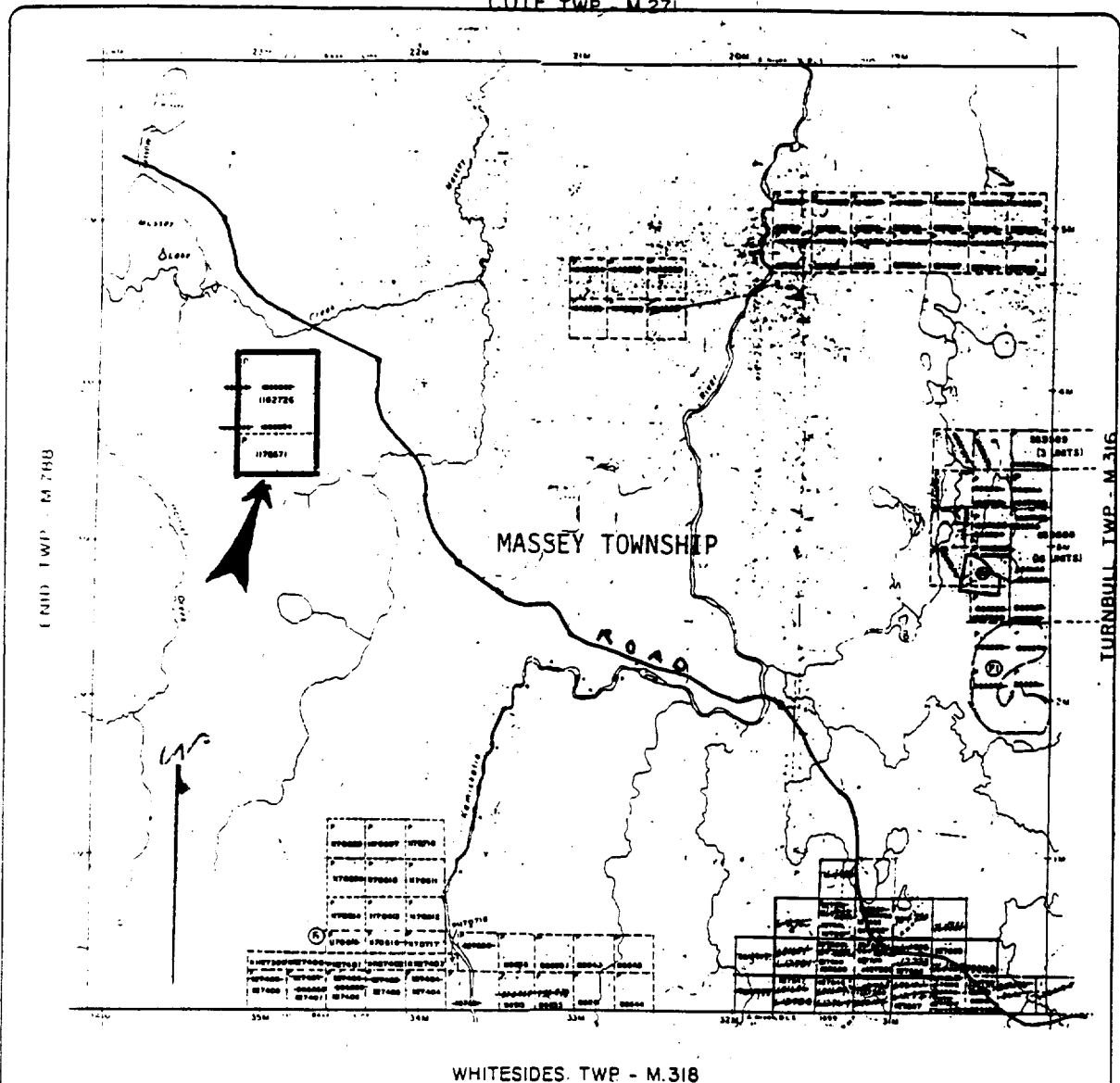


Figure 2: Photoreduction of the Department of Mines, Ontario, Claim Map of Massey Township dated June 17, 1992, showing the location of the present claim block (outlined and shown by arrow) and the presence of other valid claims in the township.

Reproduced from Plan M.296, based on a base map of 1979, which gives an inaccurate picture of the means of access to the claims at the present time.

SCALE: Indicated by mileage figures given on the township lines; the township is 6 miles (approximately 10 kilometers) to the side. (Approximately 1:70,000)

**TABLE 1 Claim Status**

Claim No.	Units	Rec. Date	\$ Filed	Due Date	Required	Reserves
P1176671	2	25 Jul 91	\$3414	25 Jul 98	\$1386.	\$ 0.00
P1182726	4	25 Jul 91	\$6829	25 Jul 98	\$2771	\$ 0.00

Notes:

- (1) Claims are registered in the name of J.R. Boissoneault
- (2) Claim status table is dated as of October 28, 1997.
- (3) Claims have been optioned to Loubel Exploration Inc.

#### **5.0 PREVIOUS WORK ON THE PROPERTY**

The Assessment Files at the Ontario Resident Geologist's office in Timmins were searched without locating any indication of previous geological or prospecting activity, or of geophysical or geochemical surveys, or of diamond drilling on or near the property prior to staking of the claims in 1991. Noranda Mines Limited are recorded as having staked the ground in 1988, but do not appear to have done any exploration on the ground before it was allowed to lapse.

## 6.0 DRILL PROGRAM

Nighthawk Drilling Ltd. Of Timmins, Ont. was contracted to drill the holes. A unitized skid mounted Longyear 38 drill rig was used for this work. A total of 964 feet (294.0 m) of BQ size core drilling was completed at 3 sites in the period from August 18 to September 5, 1997. The locations of the drill sites are shown on Figures 3A and 3B, which accompany the drill logs in Appendix 1. Drill sections are presented in Figure 4-97-01, Figure 5-97-02, Figure 6-97-03, which are also in Appendix 1.

### Drill Hole 97-01

This drill hole was sited at location 0 + 48S and L 398W and drilled at azimuth of 250° with an inclination of -55° for a total depth of 110 meters. The target was an EM/VLF anomaly located on claim P1182726 which was recognized in the geophysical interpretation as possibly caused by massive or semi-massive sulfides.

The overburden was found to be a 0.4 meters.

Fine to medium grained metagabbro persisted to a depth of 37 meters.

Dark fine grained amphibololite was noted from 37 to 44 meters with repeating zones of intensive silicification with numerous stringers of disseminated pyrite and pyrrhotite. Some smoky grey quartz stringers were observed.

The remaining core to 110 meters was highly chloritized with one area containing silicified bands up to 3.0 meters in width containing sparse dissemination of pyrite and pyrrhotite.

### Drill Hole 97-02

This drill hole was sited at location 0 + 67N and L 503W and drilled at azimuth of 250° with an inclination of -45° for a total depth of 74 meters. The target was another EM/VLF anomaly located to the north and east of the first anomaly on claim P1182726 which was also recognized in the geophysical interpretation as possibly caused by massive or semi-massive sulfides.

The overburden was found to be at approximately 1.0 meters.

The hole was collared in granular, medium grained metagabbro, with slightly sheared and fractured sections with some chlorite. At 5.7 meters a sharp contact with greenish, fine grained to medium grained highly chloritized amphibolite was encountered. The zone was noted as extremely hard and massive.



From 10 to 18 meters, dark, fine grained amphibolite was encountered in a band which was intensely silicified. The silicified areas were well mineralized with continuous streaks of pyrite and pyrrhotite with the odd specks of chalcopyrite. The quartz had a smoky blue grey colour and contained anomalous zinc values.

The remaining core was dark, fine grained, greenish rock containing cemented fragments and some remnant amygdules. Section 25 to 30m was similar to sections 10 to 15m. Hole bottomed out in medium to coarse grained metadiortite with well formed gneissic bands.

#### Drill Hole 97-03

The drill hole was sited at location 0 + 32N and L 469W and drilled at azimuth of 250° with an inclination of -45° for a total depth of 110 meters. The target was the fault zone located on claim P1182726 which was recognized in the geophysical interpretation as a possible cause to the offset of the EM/VLF anomaly and contained sulfide mineralization at surface.

The overburden was found to be at 1.0 meters.

The hole was collared in a granular medium to coarse grained metagabbro that was lightly chloritized and becoming coarser down hole. The core was generally unmineralized until at about 26 meters down hole after which some stringers of pyrite and pyrrhotite with the odd tiny speck of chalcopyrite was observed in a silicified zone down to 45 meters in a metagabbro.

At 45 meters, dark, fine grained, extremely hard amphibolite was encountered and the occurrence of sulfides diminished.

There is some sparse mineralization of pyrite down the hole at 88 to 93 meters. Otherwise, the bottom of hole was relatively unmineralized and ended in a gneissic metadiortite.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

The 3 diamond drill holes tested 2 Airborn EM conductors in the west central part of the property which had been precisely located by the VLF method. No economically significant Cu or Ni mineral accumulations were noted in the cores. Rather the causative sources for the airborne EM anomalies at both locations were attributed to pyrite/pyrrhotite disseminated zonal mineralization.

The lithologies traversed by the diamond drilling suggest that the area is situated on the apron of a mafic eruptive centre. The flows and pyroclastic units encountered suggest intensive tectonic activity has taken place along the intrusive front. This concept is compatible with the local geology, and with geology interpreted from airborne magnetic data, which indicate that a north-trending volcanic intrusive contact is located slightly east of the current drill locations. These contacts have long been favoured as exploration targets for base metal massive sulphide deposits.

The alteration present in all of the cores is encouraging from the viewpoint of base metal massive sulphide exploration. Extensive alteration to chlorite is a common wall rock feature in proximity to volcanogenic massive sulphide deposits in the Abitibi Greenstone Belt. The presence of increasing anomalous values of Cu and Zn in the zone of silicification as well as disseminated pyrite in the quartz vein in diamond drill hole 97-02 and 97-03 indicates that intense hydrothermal activity has occurred in this area. Further exploration along these alteration zones could lead to the discovery of significant mineralized zones.

It is recommended that further exploration on this property be conducted by drilling the other 2 Airborn EM targets. It would be highly advisable to conduct a deep penetrating I.P. Survey, and geochemical studies of the alteration horizons along the intrusive/volcanic contact to the north.

## 8.0 REFERENCES

Barrie, C.T., Geology of the Kamiskotia Area: Ontario Geological Survey Open File Report 5829, 1992.

Boissoneault, J.R., Geological and Geophysical Report of the Massey Township Claim Blocks in the Porcupine Mining Division, 1993.

Kirwan, J.L., Geology of the Porcupine Area, University of London, 1968.

Luhta, L.E., Timmins Resident Geologist's District Annual Report, Ministry of Northern Development and Mines, Ontario Geological Survey, pp. 229-260.

Aeromagnetic/Airborne Electromagnetic Map, Timmins Area, Massey Township, Sheet 81075, Ministry of Northern Development and Mines, 1998.

Geological Survey of Canada Aeromagnetic Contour Map 2300G, 1972.

Geological Survey of Canada Aeromagnetic Contour Map, Kamiscotia lake Sheet 292G, 1958.

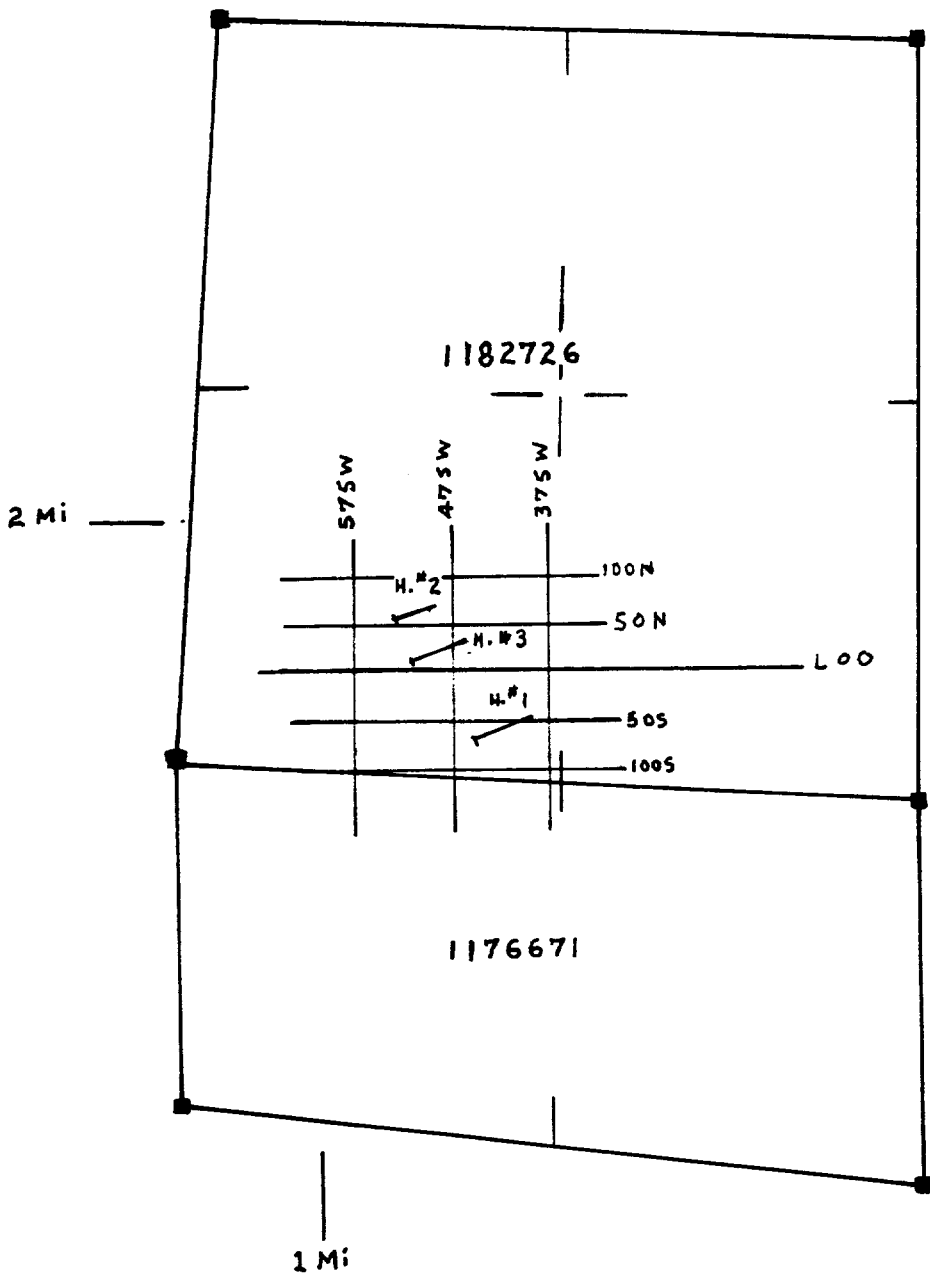
Geological Survey of Canada Aeromagnetic Contour Map, Kamiscotia Lake Sheet 299G, 1958.

Ontario Geological Survey Map 2205, Timmins-Kirkland Lake Sheet, 1972.

Ontario Ministry of Natural Resources, Vertical Air Photograph 61-4821-61-145, 1961.

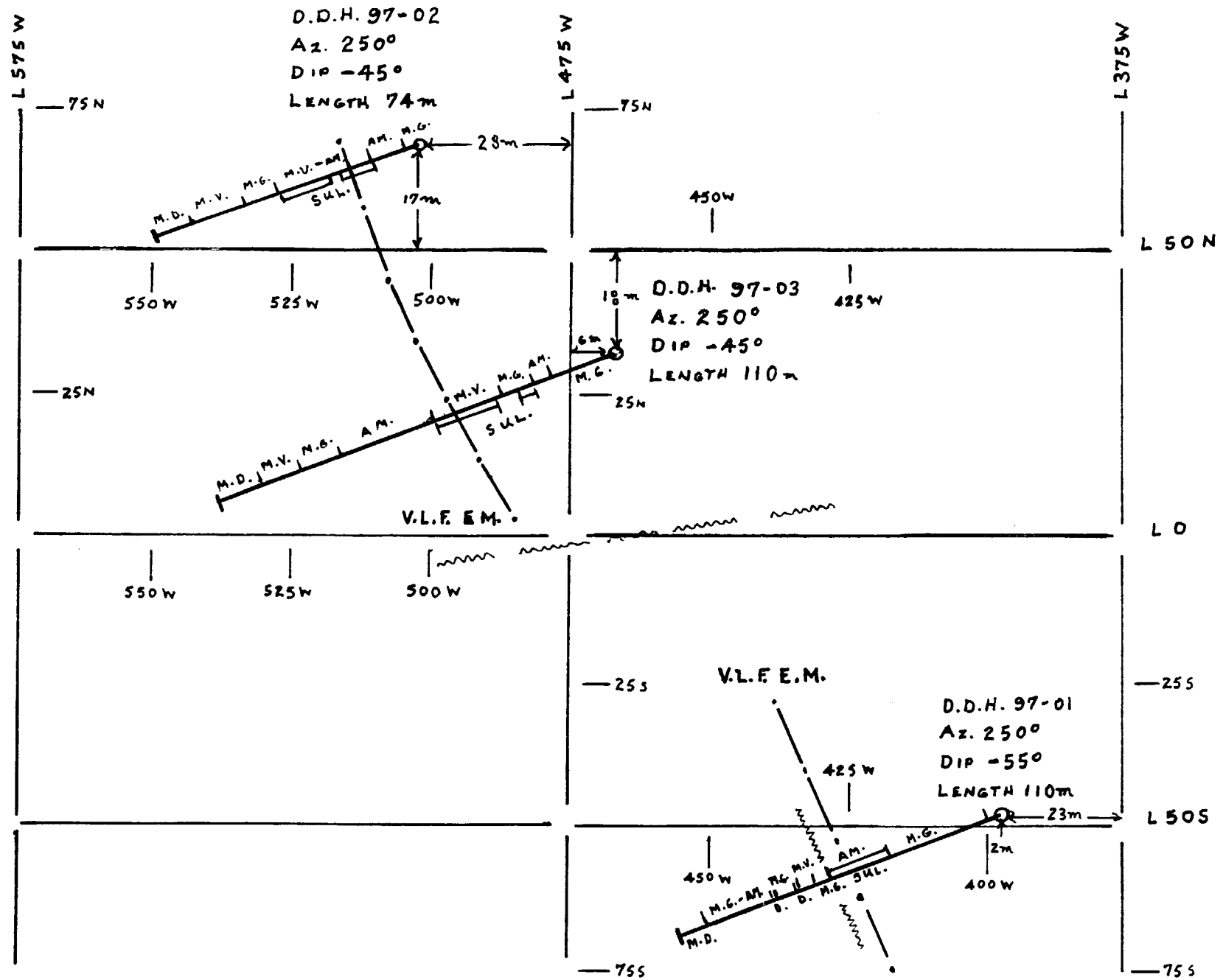
Wolfe, W.J., Distribution of Copper, Nickel, Cobalt and Sulfer in Mafic Intrusive Rocks of the Kamiscotia - Whiteside Area, District of Cochrane, 1970.

**APPENDIX # 1**



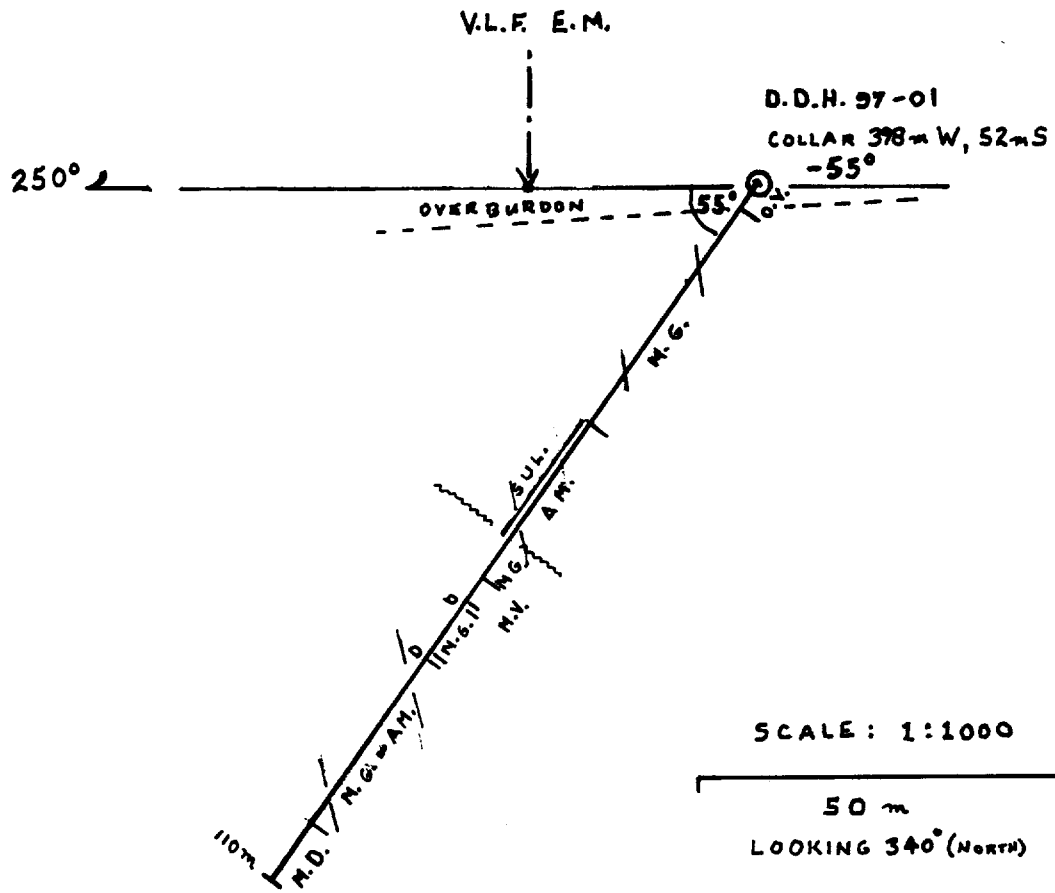
SCALE: 1:8000  
200 m

LOUBEL Exploration Inc.	
Massey Project	
Massey Township, Ontario	
Property Boundaries	
Drill Hole Location Plan	
Scale 1:8000	Date 10/29/97
Drwn. By: J.R.B.	Figure No. 3A



LOUBEL Exploration Inc.	
Massey Project	
Massey Township, Ontario	
Surface Projection of Drill Hole Collar Locations	
Scale 1:1000	Date 10/29/97
Drwn. By: J.R.B.	Figure No. 3B

# CROSS SECTION, HOLE 97-01



## SYMBOLS

- M.G. - META GABBRO
- AM. - AMPHIBOLITE
- M.V. - META VOLCANIC (BASALT)
- M.O. - META DIORITE
- SUL. - SULFIDES
- ESTIMATE OF CORE ANGLE
- FAULT
- D. - DIKE

LOUBEL Exploration Inc.	
Massey Project	
Massey Township, Ontario	
Diamond Drill Hole # 97-01	
Cross Section Loc. 0+48S & 398W	
Scale 1:1000	Date 10/29/97
Drwn. By: J.R.B.	Figure No. 4







DIAMOND DRILL RECORD

Hole No 97-01 Sheet No 3 of 4

Property Loubel Exploration Inc.  
 Location Massey Township  
claim # 1182726  
Massey Project  
 Latitude \_\_\_\_\_  
 Departure \_\_\_\_\_  
 Bearing 250 degrees

Dip  
 -55      23 meters  
 -55      98 meters  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Total Footage      110 meters

Elev. Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Date Started 18 Aug. 1997  
 Date Completed 22 Aug. 1997  
 Drilled by Nighthawk Drilling  
 Logged by J. Boissoneault

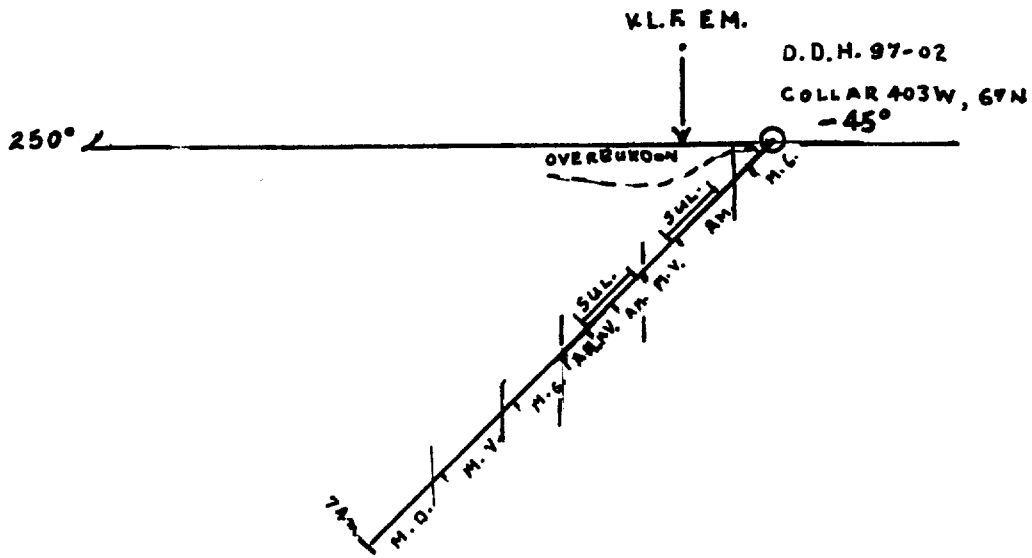
Footage		Formation	Sample Number	Sample Footage	Assay Cu	Assay Ni	Assay Au	Assay Zn	Remarks
From	To								
67.5	69	Fine grained mettagabbro like section 63.5 m to 65 m.							Cu, Ni, Zn, in PPM Au in PPB
69	74	Medium grained metagabbro grades into a pinkish medium grained metadiorite (remnants of albite crystals in a chalky groundmass with quartz, hornblende). Gneissic bands and shears at 45 degrees. Some irregular quartz veins, some pink in color relatively unmineralized.							
74	75	Chloritic sections with small hornblende crystals (Dyke)?							
75	80.5	Dark granular, medium grained metagabbro. Slightly gneissic with bands at 50 degrees. Very light silicification in some areas but only the odd fine pyrite grains.							
80.5	95	Alternating sections of fine grained, dark, and slightly chloritized Massive amphibolite and slightly gneissic medium grained metagabbro. Weakly developed shearing at 40 degrees. Slicified streaks up to 3.0 meters wide confined mainly to the metagabbro sections and containing sparse dessimation of pyrite and pyrrhotite.							2.18075
95	102	Dark granular, medium grained metagabbro. Slightly gneissic Bands of silica at 40 degrees. Odd quartz veins or stringers some containing coarse pyrite. A few extremely fine grained lightly sheared and chloritized sections, almost massive.							

Date of Examination 23 Aug. 1997

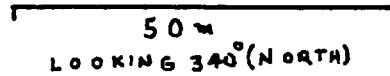
*J. Boissoneault*



CROSS SECTION, HOLE 97-02



SCALE : 1 : 1000



SYMBOLS

- M.G. - META GABBRO
- AM. - AMPHIBOLITE
- M.V. - META VOLCANIC (BASALT)
- M.D. - META DIORITE
- SUL. - SULFIDES
- ESTIMATED CORE ANGLE

LOUBEL Exploration Inc.	
Massey Project	
Massey Township, Ontario	
Diamond Drill Hole # 97-02	
Cross Section Loc. 0+67N & 503W	
Scale 1:1000	Date 10/29/97
Drwn. By: J.R.B.	Figure No. 5

DIAMOND DRILL RECORD

Hole No 97-02 Sheet No 1 of 3

Property Loubel Exploration Inc.  
 Location Massey Township  
claim # 1182726  
Massey Project  
 Latitude \_\_\_\_\_  
 Departure \_\_\_\_\_  
 Bearing 250 degees

Dip	
-45	21 meters
-45	74 meters
Total Footage <u>74 meters</u>	

Elev. Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Date Started 25 Aug. 1997  
 Date Completed 27 Aug. 1997  
 Drilled by Nighthawk drilling  
 Logged by J.Boissoneault

Footage		Formation	Sample Number	Sample Footage	Assay Cu	Assay Ni	Assay Au	Assay Zn	Remarks
From	To								
0	0.5	Casing							Cu, Ni, Zn, in PPM Au in PPB
0.5	5.7	Granular medium grained metagabbro (hornblende crystals in a groundmass <sup>of</sup> chalky white material containing silica). Slightly sheared and fractured sections with some chlorite. White barren quartz veins and the odd pyrite at 40 degrees.							
5.7	10	Sharp contact with greenish fine grained to medium grained highly chloritized amphibolite (50% to 60% hornblende in a matrix of silica and chlorite) Some silicified streaks and barren quartz veins at 45 degrees. Slightly sheared and fractured sections with chloritization, but generally extremely hard and massive.							
10	18	Dark fine grained amphibolite. Bands of intensive silicification (up to 70% silica), from 0.5 m to 3.0 m wide at 45 degrees, an repeating throughout the section. Silicified areas, well mineralized with continuous streaks and dissemination of pyrite and pyrrhotite with the odd speck of chalcopyrite at 50 degrees. Concordant quartz stringers and shears containing biotite mica and chlorite, but generally quite massive and very hard. Smoky blue/grey quartz colour.	6766 6767 6768 6769 6770 6771 6772 6773	10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18	38 186 142 262 870 524 142 272	40 40 110 52 58 74 52 64	5 Nil 15 3 3 Nil Nil 5	80 486 442 890 4830 4250 882 2050	
18	25	Dark fine grained lightly chloritized rock with remnants of white amgdules of quartz, some with epidote centers. (meta-basalt). Faint streaks of chlorite and the odd barren quartz stringer at 50							

Date of Examination 30 Aug. 1997

*John Boissoneault*

DIAMOND DRILL RECORD

Hole No 97-02 Sheet No 2 of 3

Property Loubel Exploration Inc.  
 Location Massey Township  
claim # 1182726  
Massey Project  
 Latitude \_\_\_\_\_  
 Departure \_\_\_\_\_  
 Bearing 250 degrees

Dip	
-45	21 meters
-45	74 meters
Total Footage <u>110 meters</u>	

Elev. Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Date Started 25 Aug. 1997  
 Date Completed 27 Aug. 1997  
 Drilled by Nighthawk Drilling  
 Logged by J. Boissoneault

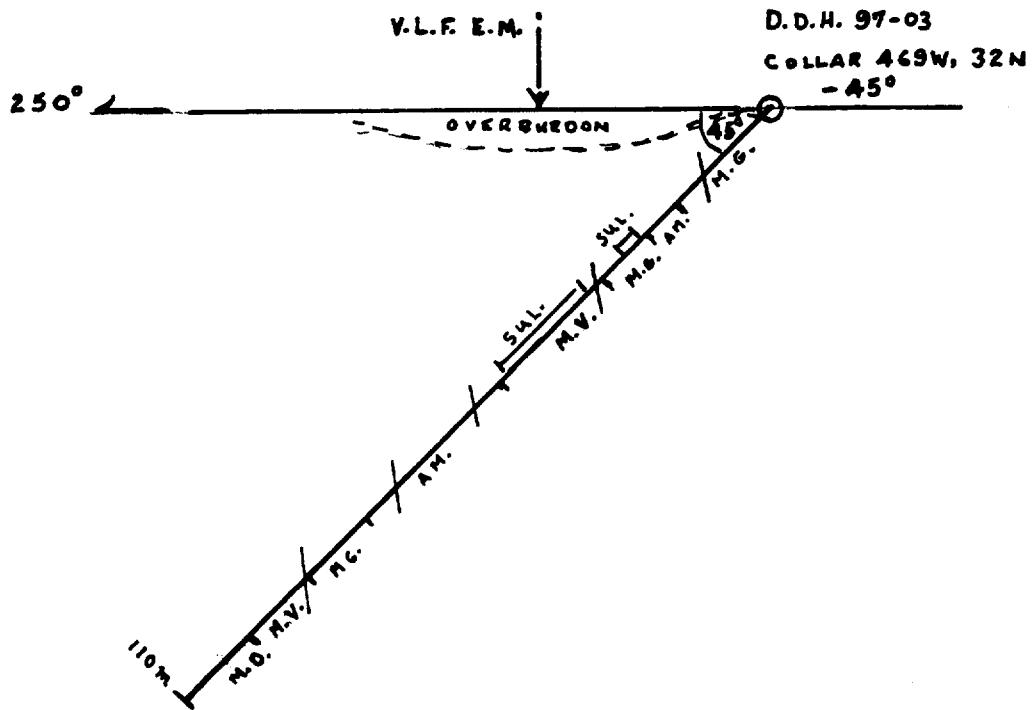
Footage		Formation	Sample Number	Sample Footage	Assay Cu	Assay Ni	Assay Au	Assay Zn	Remarks
From	To								
18	25	relatively unmineralized.							Cu, Ni, Zn, in PPM Au in PPB
25	30.5	Dark fine grained amphibolite similar to sections at 10 m to 18 Less intensive silicification, but well mineralized with stringers a dissimination of pyrite and minor pyrrhotite. Thin streaks of silica and quartz veins at 45 degrees to 50 degrees. Some narrow medium grained sections with the outline of chloritic fragments. ( tectonic breccia or inclusions in a meta-basalt).	6851 6852 6853 6854 6855	25.5-26.5 26.5-27.5 27.5-28.5 28.5-29.5 29.5-30.5	150 74 164 106 113	40 32 34 41 22	10 5 7 Nil Nil	110 80 97 100 262	
30.5	35	Dark greenish fine grained rock containing some remant amygdules (meta-basalt). Fine, well foliated and chloritized sections at 50 degrees alternating with medium grained sections with grey quartz veins and thin streaks of pyrite at 50 degrees near the end. Outlines of dark fragments in several places.	6856	33.7-34.7	235	103	Nil	144	
35	48.5	Medium grained, pale greenish grey, slightly gneissic metagabbro. dark bands at 55 degrees. Some finer grained more intensively chloritized sections. Quartz stringers, some of them pink in color and usually barren, conform to the gneissic bands.							
48.5	64	Dark, fine grained lightly chloritized rock with the odd quartz filled amygdule (meta-basalt). Slightly sheared in places, with bands of chlorite and barren quartz stringers at 55 degrees to 60 degrees. Sparse disseminations of fine pyrite.							

Date of Examination 30 Aug. 1997

*John Boissoneault*



CROSS SECTION, HOLE 97-03



SYMBOLS

- M.G. - META GABBRO
- AM. - AMPHIBOLITE
- M.V. - META VOLCANIC (BASALT)
- M.D. - META DIORITE
- SUL. - SULFIDES
- ESTIMATED CORE ANGLE

LOUBEL Exploration Inc.	
Massey Project	
Massey Township, Ontario	
Diamond Drill Hole # 97-03	
Cross Section Loc. 0+32N & 469W	
Scale 1:1000	Date 10/29/97
Drwn. By: J.R.B.	Figure No. 6



DIAMOND DRILL RECORD

Hole No 97-03 Sheet No 1 of 3

Property Loubel Exploration Inc.  
 Location Massey Township  
claim # 1182726  
Massey Project  
 Latitude \_\_\_\_\_  
 Departure \_\_\_\_\_  
 Bearing 250 degees

Dip	
-45	20 meters
-45	110 meters
Total Footage <u>110 meters</u>	

Elev. Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Date Started 28 Aug. 1997  
 Date Completed 02 Sept. 1997  
 Drilled by Nighthawk drilling  
 Logged by J.Boissoneault

Footage		Formation	Sample Number	Sample Footage	Assay Cu	Assay Ni	Assay Au	Assay Zn	Remarks
From	To								
0	1	Casing							Cu, Ni, Zn, in PPM Au in PPB
1	9	Granular medium to coarse grained metagabbro. (hornblende crystals in a chalky white groundmass containing quartz grains). Lightly chloritized and becoming coarser down section. Massive and relatively unmineralized							
9	17	Medium grained metagabbro. Slightly sheared and chloritized at 40°. A few barren quartz veins in the first three meters at 50°.							
17	19.5	Dark fine grained, extremely hard amphibolite. (over 70% hornblende). Lightly sheared and chloritized in places with concordant quartz stringers at 50° to 60°. Chloritic bands contain sparse dissemination of fine pyrite at 50° to 60°.	6862	17-18	136	40	Nil	-	
19.5	22	medium grained metagabbro similar to section 9m to 17m.							
22	23.5	dark fine grained amphibolite similar to section 17-19.5.							
23.5	25	Medium to coarse grained slightly gneissic metagabbro. Strongly sheared and intensely chloritized at 60°, but sometimes in contorted zones of chlorite shist. Areas with chloritic fragments in a mostly silicious matrix (tectonic brecciation or inclusions near contact). Some irregular streaks and disseminations of pyrrhotite and pyrite.							

Date of Examination 05 Sept. 1997

*John Boissoneault*

DIAMOND DRILL RECORD

Hole No 97-03 Sheet No 2 of 3

Property Loubel Exploration Inc.  
 Location Massey Township  
claim # 1182726  
Massey Project  
 Latitude \_\_\_\_\_  
 Departure \_\_\_\_\_  
 Bearing 250 degrees

Dip	
-45	20 meters
-45	110 meters
Total Footage <u>110 meters</u>	

Elev. Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Date Started 28 Aug. 1997  
 Date Completed 02 Sept. 1997  
 Drilled by Nighthawk Drilling  
 Logged by J. Boissoneault

Footage		Formation	Sample Number	Sample Footage	Assay Cu	Assay Ni	Assay Au	Assay Zn	Remarks
From	To								
25	26.4	Metagabbro is intensely silicified and contains grey quartz veins, along with stringers and disseminations of pyrrhotite and pyrite varying from 30° to 60°. Odd tiny speck of chalcopyrite.	6857	25.5-26.5	3470	594	5	110	Cu, Ni, Zn, in PPM Au in PPB
26.4	32	Medium grained gneissic metagabbro. Generally slightly sheared and chloritized, but with highly chloritic bands at 60°. Odd barren quartz vein. Epidotized near end of section.							
32	45.5	Dark, very fine grained, extremely hard amphibolite. (at least 60% hornblende in a matrix of silica and chlorite). Some greenish lightly sheared but well chloritized zones alternating with zones strong silicification containing quartz veins, all at 50° to 60°. Remnants of amygdules suggest a meta basalt. Well mineralized in several places with streaks of pyrrhotite and stringers of pyrite. Odd speck of chalcopyrite.	6858 6859 6860 6861 6863 6864 6865	32-33 33-34 34-35 41-42 37.5-38.5 42-43 43-44	274 118 67 95 138 21 29	51 50 34 23 31 12 30	Nil 12 7 27 - 5 7	- - 212 - 79 103 93	
45.5	52	Grain size increases down section to medium grained. Bands suggesting cemented shears, lightly chloritized. Odd quartz vein at 60°.							
52	78.4	Medium grained amphibolite, (30% to 60% hornblende crystals in a matrix of white chalky material, silica and chloritic fragments). Lightly sheared and chloritized. Alternating silicious zones and fine dark chloritic sections, lightly sheared at 50° to 60°. Generally unmineralized							

Date of Examination 05 Sept. 1997

*John Boissoneault*

## DIAMOND DRILL RECORD

Hole No 97-03 Sheet No 3 of 3

Dip

Property Loubel Exploration Inc.  
 Location Massey Township  
claim # 1182726  
Massey Project  
 Latitude \_\_\_\_\_  
 Departure \_\_\_\_\_  
 Bearing 250 degrees

-45      20 meters  
 -45      110 meters  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Total Footage 110 meters

Elev. Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Date Started 28 Aug. 1997  
 Date Completed 02 Sept. 1997  
 Drilled by Nighthawk Drilling  
 Logged by J. Boissoneault

Footage		Formation	Sample Number	Sample Footage	Assay Cu	Assay Ni	Assay Au	Assay Zn	Remarks
From	To								
78.4	88	Coarse grained metagabbro or metadiorite, (chalky feldspathic grains in a matrix of silica, chlorite and hornblende). Slightly shearing with highly chloritic bands at 50° to 60°. Silicious sections containing a few stringers of fine pyrite.	6866	87-88	12	54	3	60	Cu, Ni, Zn, in PPM Au in PPB
88	93	Medium grained amphibolite. Lightly sheared and chloritized at 60°. Siliceous sections containing sparse disseminations of fine pyrite and bands of epidotization. Barren white quartz stringers at 50°.	6867	89-90	80	25	3	49	
93	99.5	Dark, hard, fine grained amphibolite, (in excess of 60% hornblende). Lightly chloritized with remnants of amygdules of silica (some of them pink). Areas with highly chloritic fragment outlines in a siliceous groundmass. (inclusions in a meta-baslt?). Some thin barren quartz veins at 60°. A few thin fractures with pyrite.							
99.5	104	Dark, hard amphibolite, Fine grained sections, similar to 93m-99.5m, alternating with medium gained sections, similar to 88m to 93m. Generally unmineralized.							
104	110	Medium grained gneissic metadiorite, (green chlorite and hornblende crystals in a groundmass of chalky feldspar and silica). Well sheared and chloritized, with chlorite bands and barren quartz stringers at 50° to 60°. Relatively un mineralized.							
110		End of hole							

Date of Examination 05 Sept. 1997

*John Boissoneault*

Personal information  
 Mining Act, the info  
 Questions about t  
 933 Ramsey Lake



and 66(3) of the Mining Act. Under section 8 of the  
 ent work and correspond with the mining land holder.  
 of Northern Development and Mines, 6th Floor,

Instructions:

- Please type or print in ink.

900 aim, use form 0240.

1. Recorded holder(s) (Attach a list if necessary)

Name <b>John R. Boissonneault</b>	Client Number <b>109563</b>
Address <b>670 Spruce Street North Timmins Ontario P4N 6P3</b>	Telephone Number <b>705-264-3177</b>
	Fax Number
Name	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

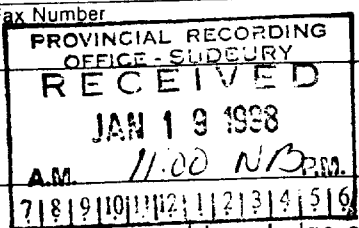
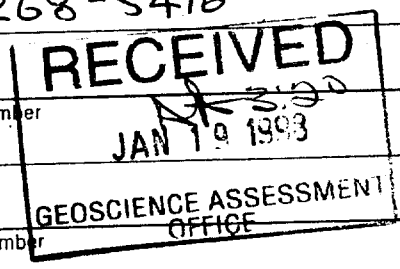
- Geotechnical: prospecting, surveys, assays and work under section 18 (regs)       Physical: drilling, stripping, trenching and associated assays       Rehabilitation

Work Type <b>Diamond Drilling, stripping and associated assaying.</b>	Office Use
	Commodity
	Total \$ Value of Work Claimed <b>\$31,896</b>
Dates Work Performed From <b>01 07 97</b> To <b>30 11 97</b>	NTS Reference
Global Positioning System Data (if available)	Mining Division <b>Porcupine</b>
Township/Area <b>MASSEY</b>	Resident Geologist District <b>Timmins</b>
M or G-Plan Number <b>M296</b>	

- Please remember to:
- obtain a work permit from the Ministry of Natural Resources as required;
  - provide proper notice to surface rights holders before starting work;
  - complete and attach a Statement of Costs, form 0212;
  - provide a map showing contiguous mining lands that are linked for assigning work;
  - include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name <b>LOUBEL Exploration Inc. (Chris Dupont)</b>	Telephone Number <b>705-268-5416</b>
Address <b>69 Westmount Blvd, Timmins, Ont P4N 4N6</b>	Fax Number
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number



4. Certification by Recorded Holder or Agent

I, **Chris Dupont** (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: **Chris Dupont**      Dated: **April 19/98**      Date: **12 January 98**

Agent's Address <b>69 Westmount Blvd Timmins Ont</b>	Telephone Number <b>705-268-5416</b>	Fax Number
---	---	------------

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W9860 00036 *revised*

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank Value of work to be distributed at a future date
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$ 8,882	\$ 4,000	0	\$ 4,882
1 1182726	4	31896	10771	5386	15739
2 1176671	2	0	5386	0	0
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals		31,896	16,157	5386	15829

2.10075

I, CHRIS DUPONT (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 8/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Record Holder or Agent Authorized in Writing: Chris Dupont Date: January 02/98

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards.
- 3. Credits are to be cut back equally over all claims listed in this declaration.
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

RECEIVED  
JAN 22 1998  
7:00  
GEOSCIENCE ASSESSMENT  
OFFICE

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	
	0241 (03/97)	

... appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

**Statement of Costs for Assessment Credit**

Transaction Number (office use)  
49860-00036

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2018030

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
Diamond Drilling	964ft of Diamond Drilling, 1 Km of road brushed out, 160 samples		31,896
	Core logging core splitting report writing		
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
Food and Lodging Costs			
<b>Total Value of Assessment Work</b>			<b>31,896</b>

**Calculations of Filing Discounts:**

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK                      × 0.50 =                      Total \$ value of worked claimed.

**Note:**

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 90 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

**RECEIVED**  
 JAN 19 1998  
 GEOSCIENCE ASSESSMENT OFFICE

**Certification verifying costs:**

I, CHRIS DUPONT (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Agent for LOUBEL Exploration (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature: [Signature] Date: 175 ... 98

March 27, 1998

JOHN RAYMOND BOISSONEAULT  
670 SPRUCE STREET NORTH  
TIMMINS, ONTARIO  
P4N-6P3

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

Telephone: (888) 415-9846  
Fax: (705) 670-5881

Dear Sir or Madam:

**Submission Number:** 2.18075

**Status**

**Subject: Transaction Number(s):** W9860.00036 **Deemed Approval**

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at [jeromel2@epo.gov.on.ca](mailto:jeromel2@epo.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Blair Kite  
Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

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**Submission Number:** 2.18075

**Date Correspondence Sent:** March 27, 1998

**Assessor:** Lucille Jerome

**General Comment:**

In all future submissions, please provide a detailed breakdown of your costs.

---

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9860.00036	1182726	MASSEY	Deemed Approval	March 25, 1998

**Section:**

16 Drilling PDRILL

**Correspondence to:**

Resident Geologist  
South Porcupine, ON

Assessment Files Library  
Sudbury, ON

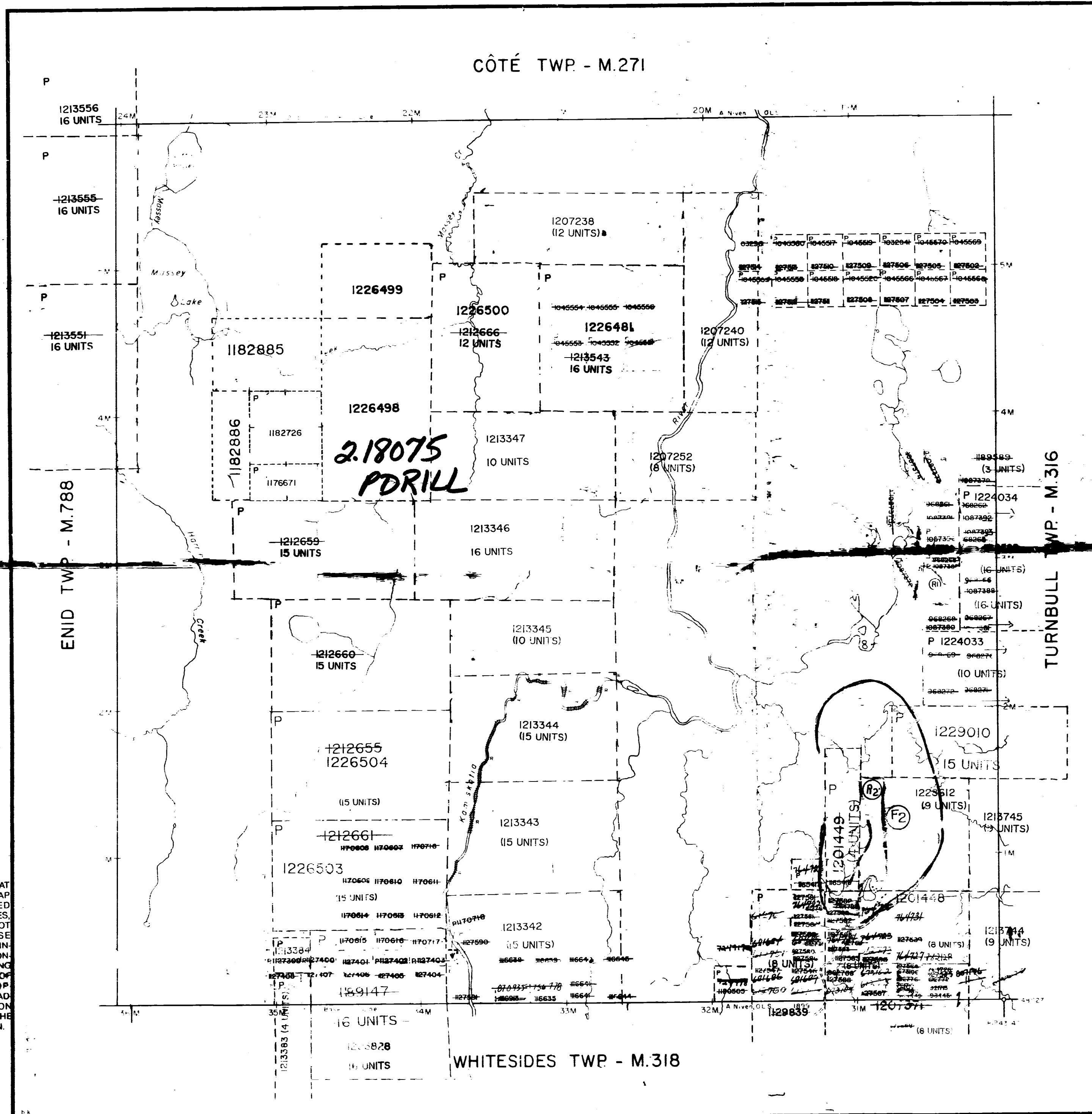
**Recorded Holder(s) and/or Agent(s):**

Chris Dupont  
TIMMINS, ON, CAN

JOHN RAYMOND BOISSONEAULT  
TIMMINS, ONTARIO

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THE TOWNSHIP  
OF  
**MASSEY**  
DISTRICT OF COCHRANE  
**DATE OF ISSUE**  
MAR 25 1998  
PROVINCIAL RECORDING  
OFFICE - SUDBURY  
MINING DIVISION  
SCALE: 1-INCH 40 CHAINS

**LEGEND**

PAVED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAY	
RAILWAYS	
POWER LINES	
MARSH	
CANCELLED	

**NOTES**

400' surface rights reservation around all lakes and rivers.

F1 - THIS TWP SUBJECT TO FOREST ACTIVITY IN 1992/93. FURTHER INFORMATION AVAILABLE ON FILE.

(R) PENDING APPLICATION UNDER THE AGGREGATE RESOURCES ACT. NOTICE RECEIVED 31-NOV-22.

(F2) THIS TWP SUBJECT TO FOREST ACTIVITIES IN 1994/95. FURTHER INFORMATION AVAILABLE ON FILE.

(F2) THIS TWP IS SUBJECT TO FOREST ACTIVITY IN 1995-96. FURTHER INFORMATION AVAILABLE ON FILE.

(R) PENDING APPLICATION UNDER THE AGGREGATE RESOURCES ACT. NOTICE RECEIVED 97-JAN-9.

PLAN NO. **M.296**  
DEPARTMENT OF MINES  
ONTARIO

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDS DIVISION OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.