



42A06NE8905 2.7254 DELORO

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GEOLOGY OF CLAIMS P758990 & P758991
DELORO TOWNSHIP, ONTARIO

by

John L. Kirwan

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MINING LANDS SECTION

Earth Resource Associates,
P.O.Box 2150,
Timmins, Ontario, P4N 7X8

September 27, 1984

EARTH RESOURCE ASSOCIATES

JOHN L. KIRWAN

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INTRODUCTION

This is intended to be a brief report to describe the geology of two unpatented mining claims numbered P.758990 and P.758991, both situated in the eastern part of Deloro Township, Porcupine Mining Area, District of Cochrane, Ontario.

LOCATION, ACCESS

The two claims adjoin each other, the more easterly of the two touching the eastern township line of Deloro Township with Shaw Township to the east, immediately north of the 5-mile post on the line separating these two townships (see Figure 1, page 2). Access is most conveniently to a point about a half mile (0.8 km) south of the 5 mile post by means of a bush road about 2½ miles (4 km) long which

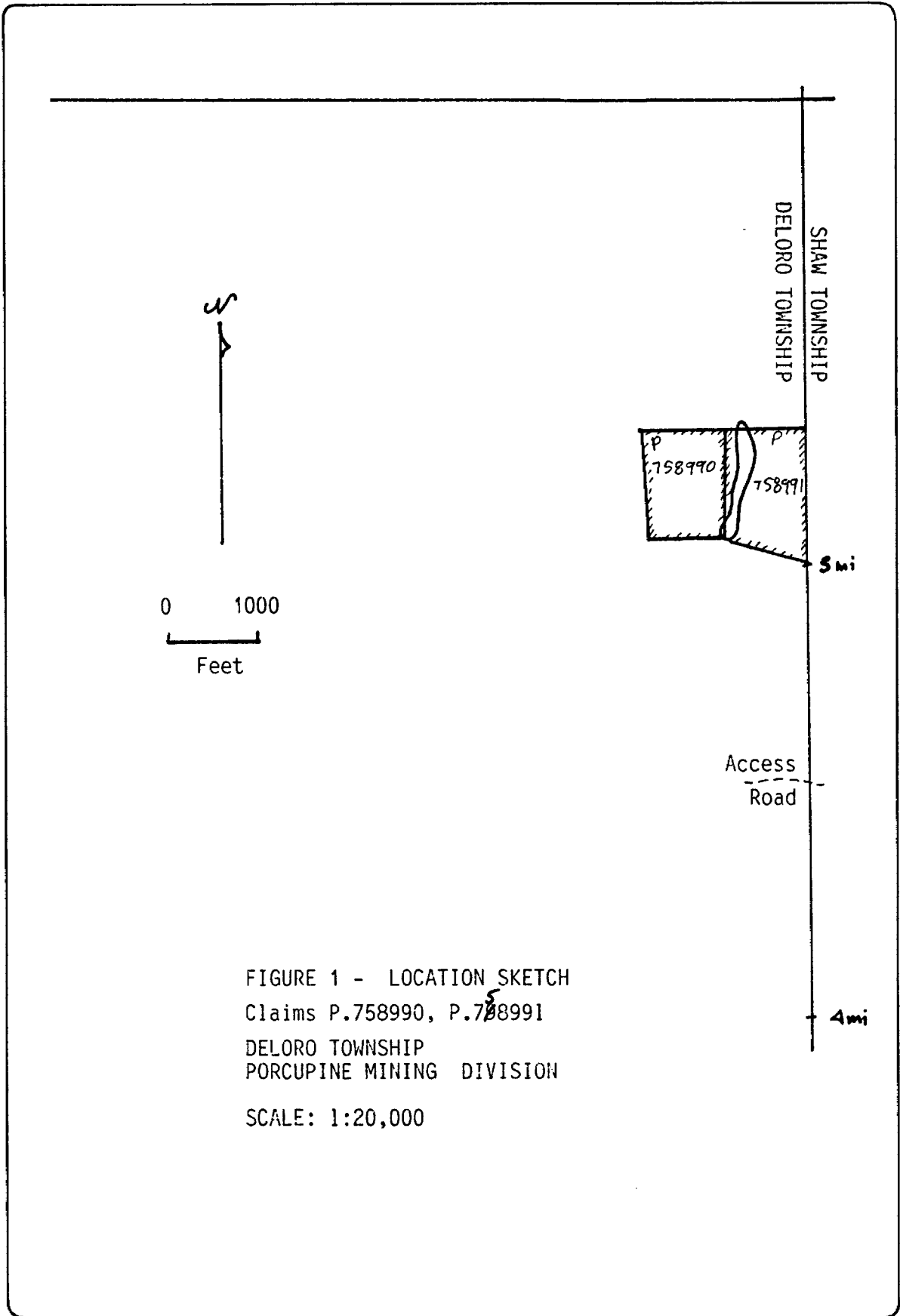


FIGURE 1 - LOCATION SKETCH
Claims P.758990, P.758991
DELORO TOWNSHIP
PORCUPINE MINING DIVISION
SCALE: 1:20,000

branches from an all-weather gravel road known as the Langmuir Road from a point 4½ miles (7 km) south of the Town of South Porcupine in the Regional Municipality of Timmins. From the point where the bush road crosses the Deloro-Shaw township line, the property may be reached on foot along a trail which follows an old wagon road, and the township line.

CHARACTER OF THE GROUND

The area is of low relief, generally consisting of swampy alder covered terrain interrupted by areas of outcrop with mixed forest consisting of poplars, birches and fir. The alders are particularly difficult to walk through, the flat-lying branches forming an impenetrable tanglewood in places. This inconvenience is compounded by the fact that Dome Mines Limited has cut the trees from much of the western parts of the area to prepare that part of the ground as a flood basin for a tailings area, leaving the cut trees as deadfall. The western part of the area, and an area east of the middle, are in the process of being flooded by the operations already referred to by Dome Mines Limited. It is expected, to judge from the areas of deadfall, that most of the ground marked by swamp symbols on the map which accompanies this report will be eventually flooded and form a lake behind the Dome tailings dam about a quarter mile to the northwest of the claims.

METHOD OF SURVEY

Pace and compass traverses were run in a north-south direction at intervals of about 100 metres (330 feet) along the lines shown. Outcrops were sketched in and geological observations as to rock-type, structure and alteration made. These are plotted up on the accompanying geological map at a scale of 400 feet to the inch (Figure 2). In all cases observed the claims appear to be properly staked in accordance with the Mining Code, and all claim lines were seen to be properly blazed and flagged.

GENERAL GEOLOGY

All the rocks observed on the claims consist of gently north-dipping, easterly-trending metavolcanics, pyroclastics and sedimentary rock of Precambrian (Archaean) age, all altered to the greenschist facies of regional metamorphism and some intruded by quartz veins and calcite stringers or else generally, in mappable layers, carbonatized. The volcanic rocks are of andesitic or basaltic composition, the meta-sediments are iron formations and phyllites, and the pyroclastics range from fine-grained tuffs to coarse felsic agglomerated. A general east southeast foliation is visible in the rocks, but there is some evidence that the actual strike is to the east northeast.

Andesite

This rock type was mapped only in the eastern part of the ground, near both the southeast and the northeast corners. It consists of a fine grained assemblage of hornblende now partly altered to chlorite, with fine pale green laths of feldspar and minor quartz, the green color in the feldspar being presumably due to its breakdown under the influence of regional metamorphism to albite and clinozoisite. No structures were observed in the andesites to indicate that they are, or are not, of volcanic origin. The high mafic content of the rock and the type of alteration in the feldspars suggest that the rocks may be chemically of basaltic composition.

Fragmentals

These are generally felsic in composition, and mappable as rhyolite to dacite. In the coarser-grained varieties the rock consists of fist-sized angular, flinty, cream-colored fragments held in a similar groundmass, with the fragmental nature of the rock only recognizable by differential weathering on the weathered surface. Finer-grained fragmentals were mapped as "spotted tuffs" in the field, appearing as an aggregate of fine fragments and single minerals in the 1 to 5 mm range, with very little sorting or stratification.

Sedimentary Rocks

Several areas of phyllite were found, those on the township line being typically slate-like and gray in color. Farther west the outcrops show more chlorite, though the phyllitic structure is nonetheless well-displayed.

The iron formation is found in one location only, in an old adit, now flooded, in which lean, siliceous, magnetite-bearing, banded iron formation occurs.

Carbonates

A broad band of carbonate is indicated on the accompanying map, though it is probable that the rock unit is more complicated than is indicated. On the township line this carbonate consists of almost pure calcium-magnesium and iron carbonates, being made up of an assemblage of rhombohedral crystals and with a distinctive rust-colored weathered surface. Westward the percentage of carbonate is less and talc is present. Whether the two are the same unit is not confidently known

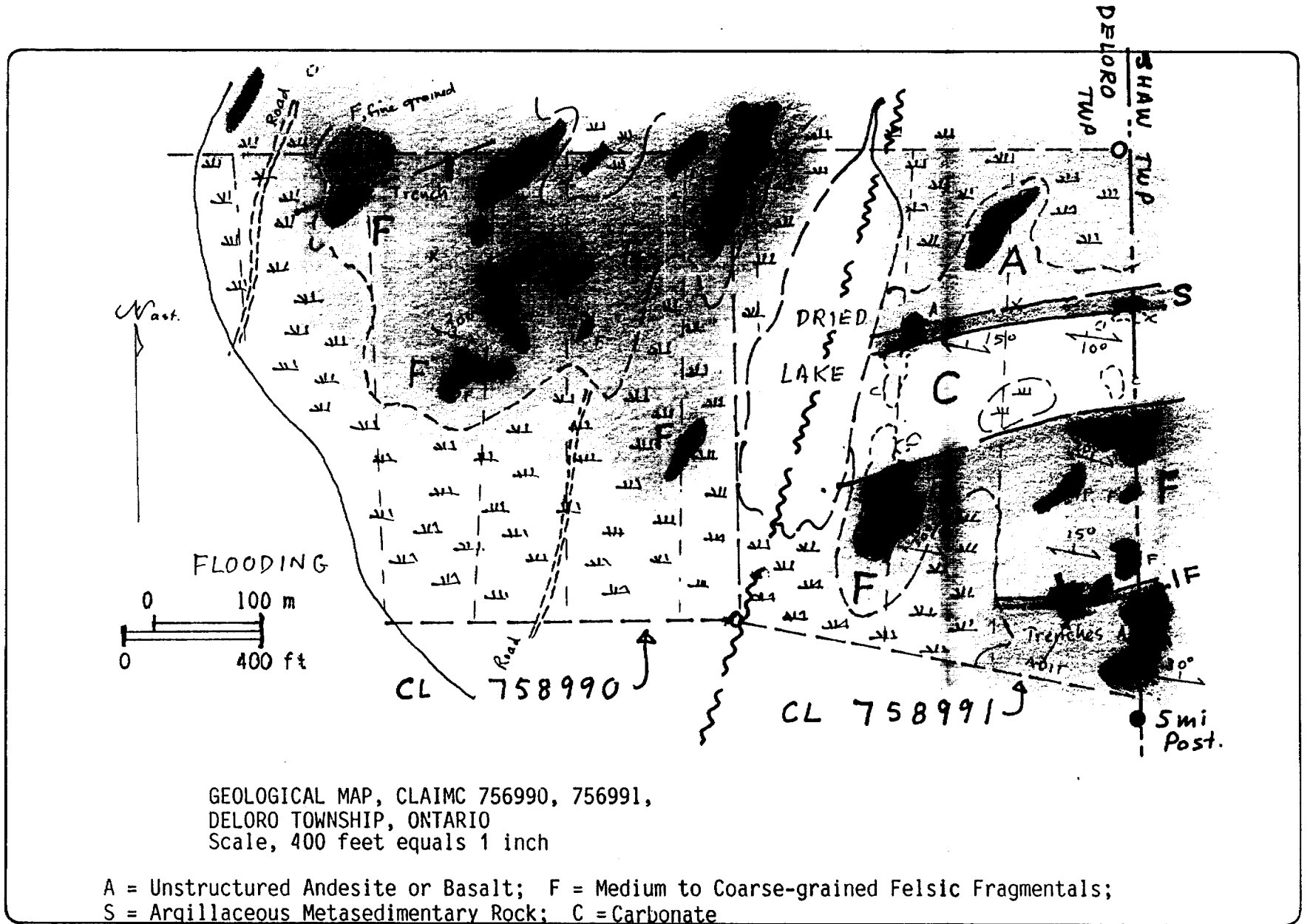
STRUCTURE

The rocks all dip gentle northward at angles of 10 to 25°, the lower angles being commonest.

A fault is inferred to underly the north-south oriented dried lake in the east central parts of the claims as evidenced by the physiographic linear in which the lake rests and by the inability to correlate rocks across the lake.

ECONOMIC GEOLOGY

File T-271 in the Ontario Geological Survey Resident Geologist's Assessment Files in Timmins contains an undated contemporary section through the adit which occurs in the southeasterly part of claim P.758991. This section shows a zone of quartz about 8 feet thick at the bottom of the adit, with the statement on the map: "Work done to 11th July Drift in Solid Quartz Hanging Wall not Reached. Average Assay Value Over \$20.00 per ton". This would indicate gold values




GEOLOGICAL MAP, CLAIMC 756990, 756991,
 DELORO TOWNSHIP, ONTARIO
 Scale, 400 feet equals 1 inch

A = Unstructured Andesite or Basalt; F = Medium to Coarse-grained Felsic Fragmentals;
 S = Argillaceous Metasedimentary Rock; C = Carbonate
 IF = Lean, siliceous Iron Formation

in the one ounce class (with gold at \$20.67 per ton as it was before 1934) or in the half ounce class (with gold at \$35 per ton). The adit at the time of the writer's visit was filled with water and the face described above inaccessible--as it must also have been during the visit of geologists from Amax Exploration in 1981 (Assessment File T-1978) who report that a sample from the iron formation assayed .025 ounces of gold to the ton.

Respectfully submitted,

A circular professional seal for John L. Kirwan, a Registered Professional Engineer in the Province of Ontario. The seal features his signature in cursive across the center and the text "REGISTERED PROFESSIONAL ENGINEER" around the top and "PROVINCE OF ONTARIO" around the bottom. The name "KIRWAN" is printed in the center.

John L. Kirwan

DECLARATION

I, John Laurence Kirwan, of the Town of Centre Harbor, State of New Hampshire, United States of America, and of the City of Timmins, Province of Ontario, Canada, do hereby state:

1. that I am a practising Consulting Geologist with offices in Old Meredith Road, Centre Harbor, NH, USA 03226.
2. that I am President of Earth Resource Associates (John L. Kirwan and Associates Limited) which was incorporated in the Province of Ontario in 1976.
3. that I have practised my profession as Geologist continuously since 1961 and as a Consulting Geologist continuously since 1972.
4. that I am a Professional Engineer of the Province of Ontario and of the State of New Hampshire and that my licence to practise is not under suspension or revocation in either jurisdiction. I am also a Fellow of the Geological Association of Canada and of several other professional and licensing bodies in Canada, the USA, England, Ireland and Brazil.
5. that I am a graduate with the Degree of Bachelor of Science in Geology and Mathematics from Carleton University in Canada and with the Degrees of Master of Science and Doctor of Philosophy from the University of London in England.
6. that I am familiar with the material contained in this report, having examined the original material myself, and with the property in question, having visited it on several occasions in the field, and
7. that I do not now have and do not anticipate receiving, any direct or indirect financial interest in the property described in this report.

Respectfully submitted,



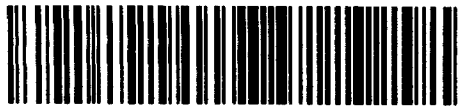
John L. Kirwan

DATES AND PERSONNEL ON THE SURVEY

The present geological survey of the claim was made during the period September 17 to 24, 1984 and included the following personnel:

John L. Kirwan, PhD, Geologist, 115 Golden Avenue, South Porcupine, Ontario. 4 days

Kenneth J. Lapierre, BSc, Geologist, P.O.Box 2150, Timmins, Ontario, 2 days.



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Mining Lands Section

File No 2. ⁷² ~~8754~~

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

LD

Doug
 Signature of Assessor

25/10/84
 Date

Assessment Work Breakdown

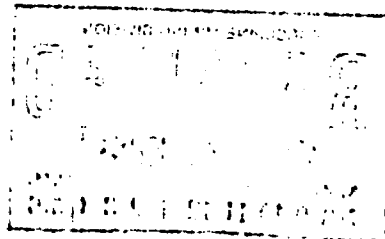
Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	÷	No. of Claims	=	Days per Claim
6				42				42		2		21

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	÷	No. of Claims	=	Days per Claim

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Type of Survey

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim		
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Type of Survey

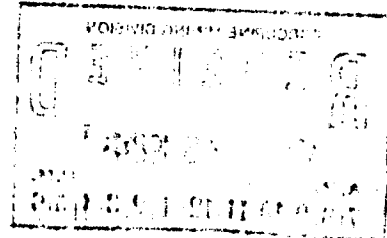
Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim		
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Type of Survey

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim		
[]	X	7	=	[]	+	[]	=	[]	+	[]	=	[]

Type of Survey

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim		
[]	X	7	=	[]	+	[]	=	[]	+	[]	=	[]



1984 10 12

Your File:
Our File: 2.7254

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We received reports and maps on October 2, 1984
for a Geological Survey submitted on Mining Claims
P 758990-91 in the Township of Deloro.

This material will be examined and assessed and a statement
of assessment work credits will be issued.

We do not have a copy of the report of work which
is normally filed with you prior to the submission
of this technical data. Please forward a copy
as soon as possible.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-6918

A. Barr:sc

cc: Canamax Resources Inc
283 Algonquin Blvd W
Timmins, Ontario
P4N 2R8

cc: Dr. John L. Kirwin
P.O. Box 2150
Timmins, Ontario
P4N 7X8

