

TO MINING RECORDER

ENCLOSED ARE

ASSAY REPORTS

STRIPPING + TRENCHING

2.1593 7 2 CLAIMS MAPS

GEOLOGY REPORT.

REPORT FOR 95 SERSON.

RECEIVED

APR 4 1995

MINING LANDS BRANCH

flex Carpenter.

# 2. 1593 2 J.P. SHERIDAN, P.Eng. Suite 1614 - 150 York Street

Toronto, Ontario M5H 3S5

**PECEIVED** 

APR 4 1995

Minic LANDS BRANCH

Tel: (416) 363-4477

Fax: (416) 363-1902

# Expenses - Preston Property

The following expenditures were made on the Preston Property between June 15th and December 15th, 1994.

Prospecting, Stripping, Sampling & Assaying

Jean Yves Lavoie 6 months 6 \$5,000/mnth
Jean Paul Vallee 6 months 6 \$4,000/mnth
Alex Carpenter 2 months 6 \$1,000/mnth \$ 30,000.00 24,000.00 2,000.00

Room & Board 12 man months @ \$1,000/mnth 12,000.00

3 days (2 days travelling time) J.P. Sheridan @ \$200/day

600.00 Total Expenses

\$ 68,600.00

#7225**666** In addition, numerous vehicles, including a CAT 215 backhoe, a D7 tractor, a front end load, a pick-up truck and a car we used for which no

The work essentially consisted of gaining access to and stripping areas in the vicinity of the Preston porphyry, which revealed two showings. Preliminary samplings of the showings were done and assays done for

# To be carried out in the Spring of 1995

A 500 ton bulk sample will be taken from the surface on each of the showings, the samples crushed and sampled in detail and stock piled for

# Résults Todate

The sampling and assaying todate have revealed two showings with erratic high grade gold and copper assays (in excess of 1 ounce and 3% copper) in a typical Preston porphyry environment.

All of which is certified correct,

# TIMMINS FOREST PRODUCTS LTD.

Telephone 1-705-268-2040

Fax 1-705-268-6285

January 04, 1995

RE: Patented Mining Claim

P8540, LO.325, HF393, HF392, LO327, HR907, LO328

Deloro Twp.

Owner: Diepdaume Mines Ltd.

Dear Mr. Carpenter:

During the months starting mid-June to mid-August of 1994, Timmins Forest Products Ltd. proceeded to do road building, ditching, trenching, maintenance, ect...on the above-mentioned patented mining claims.

Equipment used were a 740 Champion grader. Also, TD25 international tractor and a Case Backhoe. The total cost for this project was \$32,637.00

Trusting this is satisfactory to you.

Sincerely,

Albert Boudreau

What Bardney

rg

# TIMMINS TESTING LABORATORIES (T.T.L.) LIMITED

62 Norton Avenue Willowdale, Ontario M2N 4A3 (416) 225-3981 P.O. Box 1392 Timmins, Ontario P4N 7N2 (705) 235-5450

JeTOBER 14, 1994.

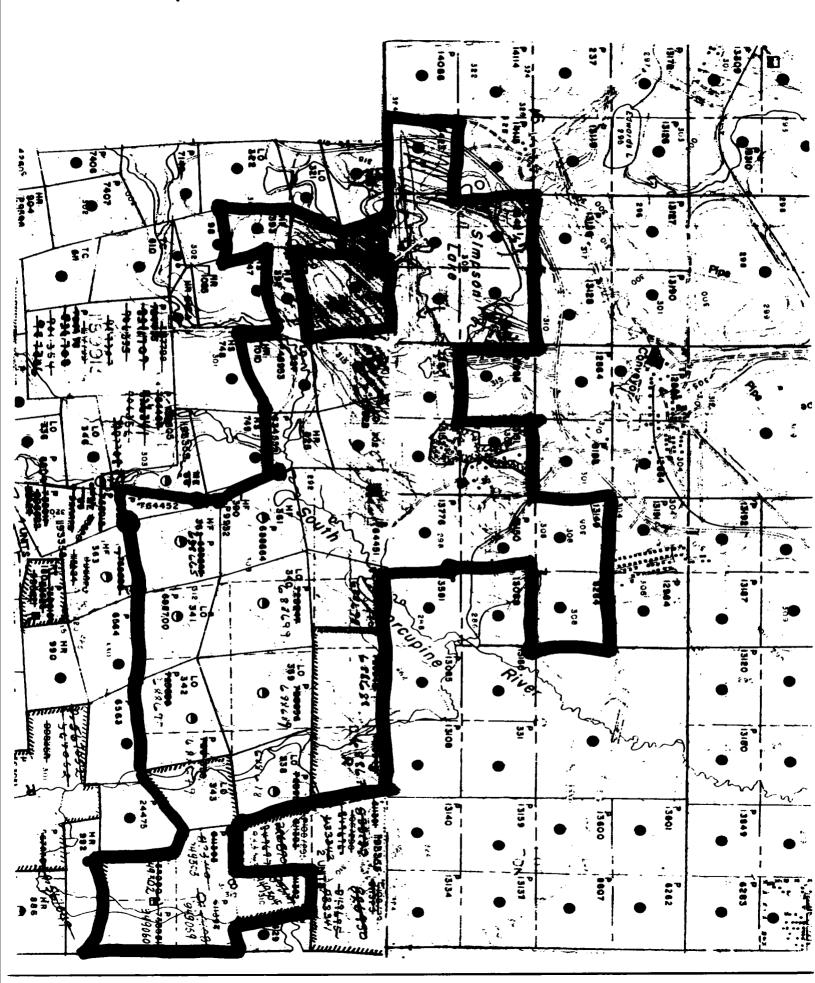
MR. J.P. SHERIDAD 150 YORK STREET SUITE 1614 TORONTO, ONT. MEH 355

# INVOICE

_	4	1	•
9	ASSAYS	FOR AU Q 8.00 / ASSAY	72.00
9	••	FOR CU. Q 6.50 /ASSAY	58.50
9	. 4	FOR Ni @ 4.50/ASSAY	40.50
	•	For Zn Q 4.50/ASSAY	40.50
7	Samples	Hondling @ 2.75/sample	a4.75
		SAMPLE NO. 14901 @	•

236.25

# PROPERTY LOCATION



# SEOLOG

#### Development

The property has been extensively explored by diamond-drilling. Before the formation of Pincortez Mines the previous owners had drilled 8 holes with a total length of 8,965 feet. An additional 15 holes with a combined footage of 20,075 were drilled to explore the same zone at greater depth. In the summer of 1958, 2 holes were drilled in the most easterly claim, in an area covered with overburden.

FFCEIVED

By

H. C. Lane<sup>1</sup>

2-1553 7

1995 APR 4

۶t

·a

n

:e

15

Location and Ownership

Mana Pretton PRANCH ne Mine is in the southeastern part of Tisdale township and the adjacent part of Deloro township. It adjoins the south boundary of the Dome property and lies two miles west of the town of South Porcupine. The property was first staked in 1909 by the group of prospectors, including J. S. Wilson and H. A. Preston, who staked part of the Dome and adjacent claims. Preston East Dome Mines Limited was incorporated in 1911 to take over three claims which included part of the Preston Porphyry. During 1934 to 1936, four additional claims were added to the property including one claim formerly held by New York Porcupine Mines Limited. The property was further enlarged in 1959 by the purchase of nine claims from Midcamp Mines Limited.

Financial support for the company was provided in 1936 by J. H. Hirshhorn and associates through Beta Securities Limited, and mill construction was financed through a bond issue. The name of the company was changed to Preston Mines Limited in 1960 and at that time Preston East Dome, Stanleigh Uranium Mining Corporation Limited, and Rio Algom Mines Limited were amalgamated. The Rio Tinto-Zinc Corporation of London, England, holds a controlling interest in Preston Mines.

# History and Development

The following history is largely taken from James (1941, p.503). The first exploration was in 1911 and 1912 when No.1 shaft, inclined at 63° was sunk to a vertical depth of 95 feet. The company was inactive from 1912 to 1934, when a few surface holes were drilled. Reorganization of the company in 1936 was followed by surface drilling, which was successful in locating ore. No.2 shaft, which is the main production shaft, is located about 1,000 feet southeast of No.1 shaft, and initially provided access to the 200-foot and 300-foot levels. This shaft has now been deepened to 2,388 feet. No.3 subshaft extends from 2,166 to 4,170 feet below surface.

<sup>&</sup>lt;sup>1</sup>H. C. Lane, Chief Geologist, Preston Mines Ltd. Published by permission of G. F. Green-acre, Manager, Preston Mines Ltd. Manuscript received 10 April 1961.

#### Tisdale Township

New York Porcupine Mines Limited formerly held the Martin claim, which is in the southwest quarter of the south half of lot 4, concession 1. The following description of work on this claim is given in an Annual Report of the Department (O.D.M. 1928, p.134):

 $\dots$  a three compartment shaft has been sunk to a depth of 272 feet, with levels at 125 and 250 feet.

DIAL

deti

acti

FELL

Pre

CT1

In it i a w

ligl isol

int.

GR

WO

on arc

Dre

FE

is

Pr

FLC

stı

ra ch

of di "I ar ac of

The following development work was done during the year 1927: 150 feet of crosscutting at the 125-foot level and 1,471 feet of drifting and crosscutting at the 250-foot level.

At a distance of 700 feet south of No. 1 shaft [New York Porcupine shaft], a winze, known as No. 2 winze, 8 by 12 feet, was started. In March 1928, it had reached a depth of 375 feet having been sunk at an incline of 70° to the south.

Milling was begun in 1939, and in 1942 the mill capacity was increased to 1,000 tons per day. The concentrate from a mineral jig containing all the gold in particles larger than 65 mesh, was treated by amagamation with mercury. In 1941, 59 percent of the total gold recovery was by amalgamation (Lord 1941, p.540). The balance of the gold was recovered by cyanidation and precipitation.

#### General Geology

The rocks of the Preston mine are entirely of Precambrian age.

The rocks encountered are classified according to their relative age in the following table of formations; the main periods of structural deformation and ore deposition are indicated in parentheses. Universal agreement as to the exact age of the porphyries in the l'orcupine area is probably not possible. For the purposes of this paper, they have been included in the Algoman, which is the most common interpretation.

#### TABLE OF FORMATIONS (PRESTON)

POST-ALGOMAN:

Diabase dikes.

Intrusive Contact

ALGOMAN:

(ore deposition)

(faulting, fracturing, and metamorphism)

Feldspar porphyry.

Intrusive Contact

TIMISKAMING:

Greywacke.

KEEWATIN:

Andesitic flows, agglomerate, pillow lava, tuff, talc-chlorite schist,

basalt.

#### ROCK TYPES

#### DIABASE

This diabase is a very fine-grained black, basic intrusive, occurring in well-defined dikes with very sharp contacts. Freshly broken surfaces exhibit a characteristic blocky appearance.

# FELDSPAR PORPHYRY

The term feldspar porphyry is preferred to quartz porphyry because at Preston, the quartz "eyes" are rare or absent, their place being taken by feldspar crystals. Throughout the mine, this rock varies greatly in colour and texture. In places it has undergone intense alteration, usually hydrothermal. Although it is universally referred to as porphyry, it is frequently non-porphyritic. It has a wide range of colour variations, it is most commonly greyish but ranges from light buff through varying shades of grey to almost black and, in at least one isolated instance, it is purplish. In a few small areas where shearing is most intense, the differentiation of porphyry from flow is difficult, if not impossible.

#### **GREYWACKE**

The Timiskaming sediments have not been intersected by underground workings. They are found only in a small area on the east side of the property on the southeast quarter of the north half of lot 3, concession I. These sediments are dark-grey in colour and are medium coarse in grain. They can be seen in a rockcut where the Dome gravel pit road crosses the northeast corner of the property.

#### FERRO-CARBONATE

Whether this rock type should be considered a separate stratigraphic entity is doubtful. It is dark-greenish to black, schistose, brecciated and carbonatized. Probably it was originally a volcanic rock.

### **FLOWS**

These rocks comprise a relatively large group and doubtless represent several stratigraphic subdivisions. On the original Preston claims distinction into separate flows is seldom possible over more than a very small area. Dynamic and chemical alteration has been so widespread as to have caused the obliteration of most of the original structures, which normally enable distinctions into individual flows to be made. Where alteration has been intense the rock is "bleached" and (or) schisted. Frequently remnants of pillow rims, spherulites, and flow-top breccias may be seen. On the northern part of the Midcamp section adjacent to the Paymaster boundary the flows are much less altered. A series of conformable flows can be seen in the 12–101 Crosscut. These flows exhibit a

## Tisdale Township

strike of N85°E, dip steeply north and face north. Good exposure of flow top breccias may be seen in the crosscut. The same structure may be seen on the 15th and 18th levels further to the west. The width of the individual flows is about 100 feet.

#### **TUFF**

This rock is very similar to the flows and is part of the same volcanic series. The chief means of distinction is the very fine banding which is often confused with schistosity. It is not possible to distinguish tuff over more than a small area, rarely more than 50 feet along strike.

#### TALC-CHLORITE (SCHIST)

This is a dark-green to black rock, frequently but not always schistose; in some areas it is quite massive. It is always soft, indicating the high percentage of talc present. This is probably an altered phase of the Keewatin volcanics. Considerable thicknesses of this material are found in the Destor-Porcupine (Porcupine Creek) Fault, undoubtedly the product of dynamic metamorphism.

#### BASALT

This formation is listed at the base of the Keewatin. So far it has been encountered in underground workings and in drillholes but not on surface. It is a dark, dense, massive, medium-grained rock. It exhibits none of the usual volcanic textures or structures. There is some suggestion that this rock is an intrusive, but so far, no good intrusive contacts have been noted. On the 5th level drive to the Cincinnati Porcupine Mines Ltd. property in Deloro township (see Section 9, Chart K, back pocket), a dense, fine-grained black rock was encountered, which was tentatively identified as basalt. In this drift interesting distinction was noted; patches of this rock are strongly magnetic due to the presence of finely disseminated magnetite, and here it is intruded by porphyry.

#### **AGGLOMERATE**

To date, this rock type has not been identified in underground workings but occurs on surface on claims Nos. 13149 and 13150. It is a coarse fragmental of basic composition, dark-green in colour. The fragments are easily recognized and range in size up to a maximum of about 4 inches. The agglomerate is conformable with the Keewatin lavas and is therefore presumed to be of the same age.

#### METAMORPHISM

Considerable dynamic metamorphism accompanied, or followed by, metasomatism appears evident in certain areas of the mine. This is particularly noticeable along the footwall side of the Footwall Fault below the Preston Porphyry. A highly altered, schistose, brecciated, and carbonatized formation, 146

locally crossed this wa metamoresulted Certain the upp volcani

A to have levels versione of Footware

Th
In stop
found
against
top of
The te
comme
metam
Nowhe
inches
being p
what i

The mine if of the about

The versel; is larger fault seemtly. It has sumed also his about of successis at larger.

A Porph Creek has a on sev as mu locally known as ferro-carbonate, lies beneath the porphyry. On the 4th level a crosscut was driven 500 feet through ferro-carbonate. In the author's opinion, this was probably originally volcanic, possibly tuffaceous in part. Dynamic metamorphism attendant upon the faulting, accompanied by metasomatism, resulted in the conversion of the original volcanic rocks into ferro-carbonate. Certain remnants of fine-banding typical of tuff are evident in several places on the upper levels, notably the 4th. The opinion that these rocks were originally volcanic is shared by Butterfield (1941).

he

· is

es.

all

in

ge

CS.

ne

ic ut

he 9,

ch

as

ŀ٧

of

ıd

le

A talc-chlorite schist found in a number of areas in the mine is also thought to have been originally volcanic. This rock is particularly notable on the lower levels where it separates irregular bodies of the Lower West Porphyry, and in the zone of the Destor-Porcupine (Porcupine Creek) Fault. It also underlies the Footwall veins on the New York Porcupine claim.

This period of metamorphism and metasomatism is undoubtedly post-ore. In stoping operations in the 454 Stope on the New York Porcupine claim, it was found that the ore extended about 50 feet above the level, where it died out against the ferro-carbonate. In this area, the ferro-carbonate comes across the top of the ore, rising flatly to the west or, conversely, dipping flatly to the east. The term "died out" is used to differentiate this type of contact from the more common intrusive, flow or fault contacts. Conceivably a contact resulting from metamorphism would not be clearly defined but would indicate a gradual change. Nowhere in the mine has ore been found to extend more than a few feet (usually inches) into the ferro-carbonate. The assumption is that the metamorphism being post-ore has obliterated the ore along with the original wallrock, producing what is now known as the ferro-carbonate.

#### Structure

The most persistent, and undoubted significant, structural feature of the mine is the northeast plunge of the porphyry bodies and the conformable plunge of the orebodies. The axis of the plunge is about N50°E, and the plunge angle is about 50°. There is a reasonable variation both in the axis and angle of plunge.

The mine is situated on the south limb of an east striking anticline or conversely on the north limb of the conformable syncline to the south. This syncline is largely obliterated by the Destor-Porcupine (Porcupine Creek) Fault. This fault strikes N45°E across the south side of the property. On surface it is apparently obscured by the valley of the South Porcupine River (Porcupine Creek). It has been located at several points underground in drillholes. From its presumed position on surface, to its position as fixed by drilling from the 25th and 31st levels, it moves northwest with depth. The amount of movement laterally is about 2,200 feet in a vertical distance of 3,800 feet, giving the fault an overall dip of 63° to the northwest. Attempts to drill through have so far proved unsuccessful. The actual thickness of the fault zone has never been determined but is at least 100 feet thick where drilling was attempted.

A strong fault striking N15°W, and located on the underside of the Preston Porphyry, is presumed to be a branch off the Destor-Porcupine (Porcupine Creek) Fault. The actual point of juncture is not exposed anywhere. This fault has a variable dip but approximates 45° to the northeast; it has been intersected on several levels in drives to the west. In some exposures the fault zone exhibits as much as 40 feet of intense shearing. The fault plane in many places is marked

# Tisdale Township

by a tale schist. A very considerable infilling of white quartz is to be seen on the 2nd and 4th levels. This quartz is accompanied by appreciable amounts of pyrite mineralization, which is not gold-bearing. It is assumed that movements on this fault plane caused subsidiary fracturing in the porphyry, permitting the emplacement of the orebodies in the Preston Porphyry. Whether the fault plane also provided a channel for the orebearing hydrothermal solutions is another question. The fact that no ore remnants are found in the fault plane itself is used as a strong argument by opponents of this theory. The fact that the fractures are related to the faulting is fairly widely accepted.

During the driving of 9 M.D.E., 1,050-foot level, towards the Augdome property in 1941, a major fault was intersected and named the Ninth Level Fault. This intersection is about 1,400 feet east of No.2 Shaft. This fault was later intersected by 9 M.D.S., establishing its strike. It is parallel to the Destor-Porcupine (Porcupine Creek) Fault and exhibits a steeper dip, 75°NW. Therefore this fault should merge with the Destor-Porcupine (Porcupine Creek) Fault down dip at some point as yet undetermined.

Since there are no marker horizons in the mine, the extent of movement on these faults is not known. As most of the movement is believed to be pre-ore, they have constituted no problem as to the dislocation of orebodies. Very occasional minor post-ore faults are seen, but the total displacement is usually a few inches or, at most, a few feet. The chief significance of these major faults is that the favourable area for exploration is becoming increasingly smaller with depth. No ore has been found south of the Destor-Porcupine (Porcupine Creek) Fault on Preston, and the prospects of doing so are not considered to be good. In the case of the newly acquired Midcamp section a very considerable depth remains before the Destor-Porcupine (Porcupine Creek) Fault cuts off the favourable

Following the intrusion of the porphyry bodies there was a lengthy period of folding and faulting as exemplified by the faults described above. Fracturing that accompanied the later stages of this orogeny undoubtedly formed channels for ore deposition. Earlier fractures would undoubtedly have been closed by crustal movements prior to the influx of hydrothermal solutions. Matachewan diabase dikes occupy post-ore fractures that are apparently cross joints possibly due to tension. Older structures pass from one side to the other of these dikes without showing any displacement. A good example may be seen on the back of 12th level charging station. These dikes frequently display a remarkably consistent vertical dip. One is traceable from surface to the 25th level where it is almost exactly vertically below its position on surface.

As noted above it has not been possible to differentiate between individual flows over more than a small area in the older section of the mine. Obliteration of the classic flow structures and textures has resulted from the orogenic disturbances attendant upon the faulting and folding in areas adjacent to the porphyry bodies; particularly the Preston Porphyry. This does not hold true for the Midcamp section. On the surface, in the southwest quarter of the north half of lot 3, concession I, it is possible to trace for a distance of about 1,200 feet a band of amygdaloidal pillow lava, which bears some resemblance to the 99 flow of the Hollinger. This band trends N50°E and faces north. The north dip of this band causes it to pass into the Paymaster property at a relatively shallow depth, and it is not seen in underground workings.

Amo part of i recent ye 25 регсеі

The classified genetic, i Preston phyries"

Virtu bodies in by Butte pyrrhotit galena. E been seer been min detailed 1 of pillar i of two ma fissure-fil a few inc levels (or 700 feet. veins sho tourmalie tration of 6th levels no ore fc beneath t

The c stockworl sulphide ( are pyrite It would zone. Fr seen. Gol

<sup>1</sup>Ouota

#### ()re ()ccurrences

Among the mines of the camp, Preston is somewhat unique in that the major part of its early production came from orebodies wholly within porphyry. In recent years the picture has changed considerably. At present not more than 25 percent of the mill feed is porphyry-type ore.

The mine is divided into five main producing zones and all ore in the mine is classified into one or other of these zones. The division is spatial rather than genetic, but each zone has its own peculiar characteristics. The five zones are: Preston Porphyry, "North Greenstone", "Porphyry Greenstone", "West Porphyries", and "West Greenstones". A brief description of each type follows.

# PRESTON PORPHYRY ZONE

Virtually all ore mined prior to 1942 came from this zone, from footwall orebodies in the Preston Porphyry. They are described as replacement type lenses by Butterfield (1941). The sulphide minerals present in this type of ore are pyrrhotite, pyrite, and chalcopyrite, with very minor amounts of sphalerite and galena. Butterfield (1941) recorded the presence of arsenopyrite, but this has not been seen by the author. Free gold is widespread. These orebodies have largely been mined out so that it has not been possible for the author to develop a very detailed knowledge of them, but some knowledge has been gained from inspection of pillar remnants and exposures in No.2 shaft pillar. These ore occurrences are of two main types: the "replacement lenses" described by Butterfield, and single fissure-filling veins, e.g. Vein 1387 and Vein 1866. These latter vary in width from a few inches to a maximum of about 6 feet. They extend vertically through two levels (or about 300 feet) and in the case of 1866 reach a maximum length of 700 feet. They dip steeply north and display the usual eastward rake. These veins show crude tourmaline banding, with narrow discontinuous bands of black tourmaline running very roughly parallel to the walls of the veins. The concentration of gold in this porphyry seems to reach its maximum between the 5th and 6th levels and dies out gradually below that elevation. There has been little or no ore found in the Preston Porphyry below the 19th level at this mine, and beneath the 23rd level, it dips into the Dome property.

# "NORTH GREENSTONE" ZONE

The orebodies in this zone consist chiefly of large masses of white quartz or stockworks of quartz and tourmaline. In comparison with other ore types the sulphide content is usually much lower. The principal metallic minerals present are pyrite and pyrrhotite. Carbonate, usually calcite, is occasionally present. It would appear that more than one injection of quartz has taken place in this zone. Frequent instances of a younger vein cutting through an older one are seen. Gold values are very erratic in this type of ore. Channel samples frequently

<sup>&</sup>lt;sup>1</sup>Quotations marks are used to denote local names used on the Preston property.

## Tisdale Township

reveal large areas that are barren, whereas close by, coarse visible gold is sometimes seen. It is possible that at least one generation of quartz is barren, or that the great disparity in gold values is simply due to the heterogeneous distribution of the gold. An interesting feature of this ore zone is the frequent occurrence, chiefly of wallrock, of large well-formed pyrite cubes. These crystals range in size from being just large enough to be readily visible to one occurrence (in 22 N.D.) of a cube 4 inches to a side. A character sample of this pyrite returned an assay value of 2.43 ounces of gold per ton. Two other samples returned comparable values.

Individual orebodies in the "North Greenstone" zone do not usually exhibit the normal northeast plunge. These bodies are more nearly vertical; the 2272 stope being almost directly below the 1755 stope, the intervening 600 feet being almost continuous ore.

There is a small horseshoe-shaped porphyry body known locally as the "North Porphyry", which appears on Preston ground at about the elevation of the 14th level (1,673-foot level) in the northeast quarter of the south half of lot 4, concession I, raking downward to the northeast. Some ore is associated with this porphyry on the 15th level, and good stopes were located in this porphyry on the 19th, 20th, and 21st levels. The porphyry has, so far, been traced to the 25th level, but no ore has yet been developed in it below the 21st level. One or two isolated spots of visible gold were seen on the 23rd level. The ore in the "North Porphyry" consists of stockworks of quartz lenses and stringers containing pyrrhotite and pyrite and occasional spots of free gold. These are similar to the "replacement lenses" of the Preston Porphyry.

#### "PORPHYRY GREENSTONE" ZONE

About 30 percent of the present ore reserve is in this type of ore; prior to 1942 it was not known. It bears a number of resemblances to the "North Greenstone" type with a few very significant differences. The bodies are usually stockworks of quartz veins and lenses in a complex matrix of schistose porphyry and volcanic rocks. The wallrock generally shows considerable hydrothermal alteration locally described as bleaching. Where schisting and bleaching are strongly developed, it is no longer easy to distinguish between volcanic rocks and porphyry; in some cases it is impossible. The orebodies exhibit the same northeast plunge as do the porphyries. The significant sulphide is pyrrhotite although pyrite and chalcopyrite are common. The quartz frequently exhibits a waxy lustre not seen elsewhere. Locally, considerable galena has been seen in association with spectacular pockets of free gold (e.g. 1892 drift). Tourmaline is scarce but minor quantities of scheelite are fairly common. It is very significant that porphyry is always found in, or very close to, the ore. Exploration in the zone is always directed with this thought in mind.

### "WEST PORPHYRIES" ZONE

The plural term porphyries is always used to describe this zone because, from east to west, at least three separate porphyry bodies are involved: The "Centre Porphyry", the "West Porphyry", and the "Lower West Porphyry".

The ore in this zone bears certain resemblances to that of the Preston Porphyry. The most common type occurs in east-west trending fissure fillings,

ranging in v minerals arcalcite. Co are pyrite; definite bar appears to return high

In som point was t values. A was in was wise. Fron

The "veins on the to the west Midcamp's It has prove Coarse visional presence of 100 feet shoon the 23rin the area

The or have been nomenclat is merely a (Porcupine sulphide ( principal s fine visible gold is ver about 30 fe (45° to 50° zone has b Below the feature of 30°, the ve strike faul have const irregular, side (hang 15-112A r. ranging in width from a few inches to a maximum of about 12 feet. The gangue minerals are quartz and tourmaline with minor amounts of albite, ankerite, and calcite. Considerable scheelite is found locally. The principal sulphide minerals are pyrite and chalcopyrite, with local patches of pyrrhotite. In some places a definite banding occurs, suggesting a reopening and redeposition. The banding appears to be chiefly tourmaline and(or) wallrock. Where banded, these veins return high gold values despite the scarcity of visible gold or sulphide minerals.

me-

≀hat

tion

nce.

e in

·om-

nibit

1272

eing

the

m of

iot 4.

with

hyry

o the

ne or

ı the

conmilar

ior to reen-

stock-

v and

alter-

ongly

hyry;

olunge

te and

t seen

spec-

minor

iyry is

ılways

cause.

vry". n Por-

: The

allings,

(in -ned

In some places a peculiar unevenness of gold content is evident. A case in point was the 2379 stope; where located on the level, this vein showed no gold values. A test raise was driven on the vein to the 22nd level. The first 30 feet was in waste, then visible gold was encountered with no obvious change otherwise. From this point to the 22nd level the raise continued in good-grade ore.

The "Lower West Porphyry" which produced high-grade, fissure-filling veins on the New York Porcupine claim from the 25th to the 20th levels extends to the west on to the Midcamp section. A flat-lying (20°N) vein was found on the Midcamp section just west of the original New York Porcupine west boundary. It has proved to be 250 feet in length and ranges from 2 to 24 inches in width. Coarse visible gold is common. There is little or no sulphide mineralization. Occasional spots of scheelite have been seen. Drill intersections indicate the presence of this vein 60 feet vertically below the level. A test raise followed it 100 feet slope distance above the level. A number of random drill intersections on the 23rd and 24th levels indicate the probability of other veins of this type in the area.

# "WEST GREENSTONES" ZONE

The ore zones in the flows immediately adjacent to the Paymaster boundary have been named the "West Greenstones" zone to conform with the system of nomenclature already in vogue. The ore is in the form of "sulphide veins" and is merely a continuation, up dip and along strike, of the ore zones at Paymaster (Porcupine Paymaster). Mineralogically they consist of finely disseminated sulphide (mostly pyrite) in a siliceous matrix. Occasionally pyrrhotite is the principal sulphide present. A very few widely separated occurrences of very fine visible gold have been noted. Compared to older areas in the mine, free gold is very rare. These veins range in width from a few inches to a maximum of about 30 feet. The average width is about 6 feet. They exhibit the same plunge (45° to 50°) but strike more nearly northeast. Up to the present time this ore zone has been traced from about 100 feet above the 12th level to the 21st level. Below the 21st level the known ore dips off on to Paymaster. One noticeable feature of these veins is that they cross the strike of the flows at an angle of about 30°, the veins striking about N50°E, and the flows about N85°E. An occasional strike fault of small displacement (a few feet) has been noted, but so far they have constituted no problem in ore dislocation. Gold content in the veins is very irregular, but there appears to be a concentration of higher values on the east side (hangingwall in relation to the plunge). This is notable in the 18-112A and 15-112A raises.



TIMMINS TESTING LABORATON

/		TIMMINS TESTI	NG LABORA	4T0A. 20	<del></del>	-			020
1/1	young	<del></del>	<del></del>					<del>-</del>	<del></del>
ATE	SAMPLE NO.	SAMPLE DESCRIPTION	COMPANY	SAMPLE WT.	BEAKER		PPM	, z	OZ/TON
2/10/14	14401	Chains		1 ax	31	2.305		0.083	
	14902			4	32	0.005		0.083	
	903			"	33	0.008		0.133	
	904			4,	34	0.008		0.133	
	105			"	35	0.005		0.083	
	906			•	36	0.003		0.050	
	907	1 6 1.51		"	31	NO		NEO	
	908	B. 159	137	4	38	1/0		~ 10	
	909			"	39	~10		N/O	
		'SPPN = .145							
<u> </u>		7							
	14401					~/_0		~/0	
	ر چې					0.008		0.00%	
	45	T BEATWEE				0,009		0.000	
	1	RECEIVED				0:009		سره به نه ن	
	.5	APR 4 1995				0.009		0.000	-
	,	INFR 'S IJJ				0.018		ع. رو. و ع. رو. و	<del></del>
		MINING LANDS BRAN	СН						
						0.035		0.024	
	,					0.020		0.014	
					1	0.020			
i	17,,	ASSNY 10P.PM	2 2 4 0			,			
		753KY JUF.FII	0.060	<del> </del>	<del></del> -	N/0		~10	
							-	~/0	
					<del>                                     </del>	~20		~/0	
	<del></del>					~/0			
	•			<b> </b>		N/0		N/D	
	~					~/0		N/0	
	٠,٠			<b> </b>		1/0		N/0	
	+ 5			<u> </u>	<del> </del>	TR		TE	
	·			<u> </u>	-	0.003		0.005	
						0.035		0.50	
· -				·	ļ	<del> </del>			
						<del>                                     </del>	<del></del>	<del>                                     </del>	
	(SO)	Ld. AssAt .1	PH· .o:	<u> </u>		<del>                                     </del>	<del></del>		
					<u> </u>	1			
	4901			<b></b>	<b></b>	1/0		N/0	<del></del>
	02				<del> </del>	.002		.001	<del></del> -
	03			<b> </b>	<u> </u>	1/0		~/0	
	04			<del></del>	<del> </del>	N/O	<del></del>	~/0	
	05			<del> </del>	<del> </del>	,010		.005	
	06			<u> </u>	<u> </u>	~/0		~10	
	07			<b></b>	<b>ļ</b>	,002.		0001	
	08			<b></b>	<del> </del>	, 033		.012	<del></del> -
	09					~/0		~(0	<del></del>

Echantilhous Pris aurour du Lac SIMPSON

# TIMMINS TESTING LABORATORIES LIMITED

				Α.	1				
ATE	SAMPLE NO.	SAMPLE DESCRIPTION	COMPANY	SAMPLE WT.	BEAKER NO.	READING	PPM	Z .	OZ/TON
%0/94	14910								1/0
	911								NO
	912							<u> </u>	0.01
•	913							ļ	0.006
	914								N/D
	915							<del> </del>	1/0
	916							<del> </del>	1/0
	917							<u> </u>	0.059
	918			<u> </u>					N/0
	919		<del></del>					<del> </del>	1/0
	920						<del></del>	<del> </del>	0.10
	921				<del> </del>				N/0
	922								~/0
	923							<del> </del>	0.014
	924							<del> </del>	N/0
	925			<del>                                     </del>				╁	N/0
	926			<u> </u>				<del> </del>	1/0
	<del> </del>			<del>                                     </del>				<del> </del>	· · · · · · · · · · · · · · · · · · ·
				<del> </del>					
Cu	Ass	ay						<del> </del>	
				ļ	<b></b>				
	14910						<del></del>	_	
	911			1				<del>-</del> -	
	9/2			<del> </del> -	-				
	913								
	915			<del> </del>	<del> </del>				
	914					-:		1.28	
	917			<del> </del>	<del>                                     </del>			7.20	
	918							0.36	
	919						<del></del>	0.125	
<u>-</u> -	920							0.07	
	921							N/D	
	922							0.029	
	923							N/0	
<del></del>	924							~/0	
· · · · · ·	925							~/2	
<del>-</del> - <u>-</u>	926							0.02	·
	1								
					ļ	<b></b>			
				1	•	1			

SAMPLE NO \*1

ECHANTILLON PRISE PRES de LA RAISE

A DROITE du CHEMIN ENVION 25' DEPASSE LA

RSE.

NO

SAMPLE \* 2 ECHNUTILLOW PRIS A GAUCHE DU CHEMIN I DENTIFIÉE COMME NO 2 AVEC UN RUBAN Rouge SUR UN BOULEAU.

NP

Sample No + 3

ÉCHANTILLON PRISE du MEME coré que Le Noz A ENVIRON 15 PIEDS PLUS LOIN.

0.01 °2/5 AU

Sample No # 1

ECHANTILLON PRISE PLUS Lois que Le NO3 A droite du Chemin Avec Rugan Rouge SUR UNE ROCHE, Identifie comme le No \*3

0.006 °2/7 AU.

SAMPLE 8

CRAN A CHOITE LE LONG du Chemin AVANT de descendre LA COTE, Roche POSE SUR LE CRAN AUEC RUBAN Rouge.

Au: 0.05902/T

SAMPLE 8 A

Pris à LA MêME PLACE que 8, MAIS Les Roches sont Plus oxides (Koullees)

Cu: 0.36%

Sample 5

Roche (KAN) A GAUCHE du Chemin A TRAVERS L. Buis ou erait L'EBRANCheuse · RUBAN Rouge . AU; N/D

SAMPLE 1

Pris Le Long du chemin à gauche RUBAN Rouge.

Au: 1/2 Cu: 1.28%

SAMPLE6

PRIS JUSTE AVANT d'ARRIVER dANS LA COURBE COTE GAUCHE Le Long du chemin, RUBAN Rouge SOR UN ARAKE

Au: 1/0

SAMPLE #8 PRIS Le Long du chemin A Cu. NO droite A LA MEME PLACE que Au: NOTA. Le No 8 Preis Precedamment.

Sample 10 Pris A LA MêME PLACE QUE

Le SAMPLE 7. (1.28% Cu)

Cu: 0.07% Cu:0.029% Au: 0.002°2/7.

Au: 0.10°2/7. → 0.131°2/7

Sample #11 Completement Au Bout du

Cu. No Au No Chemia. Out crop a droité

Cu. No Au No Chemia. Out exop à droite dessus de La colline. Picket.

SAMPLE 12 AVANT d'ARRIVER AU BOUT dU Cu. .029% Chemin A SKOITE SUR LA AU. "10 COLLINE. BOUT de RUBAN SUR UN PETIT SAPIN.

SAMPLE #9 CRAN A GAUCHE du CHEMIN Cu: 125% COURBE QUI TOURNE A DROITE Au: "10 EN MONTANT LA COTE Désà Pris UN SAMPLE PLUS À

DROITE MENE PLACE QUE 10 ET 7

SAMPLE #14

Cu. 1/2 Av 1/0 Même chemin où Maxi a drille.

SUR LA COLLINE COMPLETEMENT

AU BOUT A DROITE SUR UN OUTCROP

RUBAN ROUGE SUR UN PETIT ARBRE.

SAMPLE "15 SITUE A COTE DU NO" 14

Cu. "/D AU "/D A GAUCHE DE CELUI-CI SUR UN

OUT CROP ENVIRON 10 PIÈDS.

MAXI BOAD.

SAMPLE "16 MAXI BOAD. PRIS PRESGU'AU BOUT Cu. 0.02% AU "D de chemin du coté gauche Presguen FACE des NO 14 ET 15 RUBAN Rouge SUR TREMBLE BENVER. Sè.

Sample # 13 Maxi Road. Presquen FACE OU

Cu 1/0 Maxi a daillé. Sur le Flanc de

Aux 0.014°2/T. La colline.

A

Gold ASSAY

Beaker: 0.10 % Au. v . 100 15 Sample 10 0.014 02/7. / # 13 \* 1014 16 " 4/0 # 14 17 # 15 4/0 18 4 # 16 19 ND

Cu ASSAY

20 Sande "10 192 .020 . V21 " 13 " V/D22 " V/D23 " V/D24 " V/D27 V/D28 V/D29 V/D20 V/D21 V/D22 V/D24 V/D25 V/D26 V/D27 V/D28 V/D29 V/D20 V/D20 V/D21 V/D22 V/D23 V/D24 V/D25 V/D26 V/D27 V/D28 V/D29 V/D20 V/D20 V/D21 V/D22 V/D23 V/D24 V/D25 V/D26 V/D27 V/D28 V/D29 V/D20 V/D20 V/D20 V/D21 V/D22 V/D23 V/D24 V/D25 V/D26 V/D27 V/D27 V/D28 V/D29 V/D20 V/D20 V/D20 V/D20 V/D21 V/D22 V/D24 V/D25 V/D26 V/D27 V/D27 V/D28 V/D29 V/D20 V/D20 V/D20 V/D20 V/D20 V/D20 V/D21 V/D22 V/D24 V/D25 V/D26 V/D27 V/D28 V/D29 V/D20 V/

OAMPLE # 10 Cu.
0.098% .07% 0.10% Cu. 1.28

Berker #2 Recheck: Au sample #10 qui donnais
0.10°4.

Flosk#3 Rochek Cu. sample # 7



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

Transaction Number 19560.00002

PORCUPINE MANING DIVISION

ıg

# **Mining Act**

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, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

9,41 9,495

- Instructions: Please type or print and submit in duplica
  - Refer to the Mining Act and Regulations f Recorder.
  - A separate copy of this form must be corr



- Technical reports and maps to - A sketch, showing the claims		LORO	900						
Recorded Holder(s)	RODAN SHER	OAN 1931							
Address 130 YORK ST. Mining Division	TORONTO.	ONT 416-							
PORCUPINE Dates Work Performed From: JUNE	DELORO 7 15+494 10: -	DEC 15	th 94						
Work Performed (Check One Work Group-Only)									
Work Group	Туре		<u>-</u>						
Geotechnical Survey		<u> </u>	• • •						
Physical Work, Including Drilling PROSPE	CTING - S	TAMPLINE							
Rehabilitation		RECEIVED							
Other Authorized Work									
Assays		APR 4 1995							
Assignment from Reserve		MINING LANDS BRANCH							
Total Assessment Work Claimed on the Attac	ched Statement of Costs \$	\$34,300,	00						
Note: The Minister may reject for assessment holder cannot verify expenditures claim	ent work credit all or part of the a imed in the statement of costs wi	ssessment work submitte thin 30 days of a reques	ed if the recorded at for verification.						
Persons and Survey Company Who Perfor	med the Work (Give Name and	Address of Author of Re	port)						
Name		Address							
JEAN YNESLOVOTE	DIEPDAUME N	nine Timm	ins Rows						
JEAN PAUL VOLLE	JEAN PAUL VOLLERDIE POAUME MINE TimmINS BOX 1392								
ALEX CARPENTER DIEPOAUME MINE 1 immins Box 1392									
T P. SHERDIAN 130 YOCK ST. TORONTO DWT									
(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 performed the work or witnessed same during and/or after its completion and annexed report is true. Name and Address of Person Certifying 1995 For Office Use Only Mining Recorder (LULL) Total Value Cr. Recorded Date Recorded

/																																					Deserve	Work Hepon Number for Applying	
28	-25 CLAIMS										127667 0	P =149304	P 949303	P 944302	196	K 60 546 3	164	3 6	0 7/4451	ŊΓ	97.00 1.99	867,827.0	8		689887 0	P 688679	P 688678	_		327	NF 393	P 8540	10 325	FIF 392	1	0 0 0		Claim Number (see Note 2)	
•											•	• 1	•	-	•			-	-	-	•	•	•	-	-	-	-	-	-	-	-	-	-	-		-	-		Number
Total Value Work Done	#343000°									3.0	95.00	95.00	950.00	750.00	0	730.00	000	076.00	950.00	950.00	950.00	950.00	950.00	450.00	950.00	950,00	950.00	950.00	1600,00	-	2450,00	2450.00	1-	240.00			51450 no	Assessment Work Done on this Claim	Value of
Total Value Work Applied	P/415.00										466.00	287.00	2000		25 62	457.00	457,00	400.00	400.00	399.00	4-00.00	400.00	400.00	400,00	400.00	400.00	400.00	400.00	01.00	200 22								Cielin	Value
Total Assigned From	MINING TANDS BHANCH  WINING LANDS BHANCH  WINING LA																																						
10th Madera	H & 0000.00	1080C	;	(2.5	ô	17			<b>)</b>			ACCOLOR	7/3/3	19200	493.00	\$4 S.00	493.00	550.00	550.00	A.C. 00 000	0000.00	}	The se	• •	VV0.00	ZS0.60	A 50.00	580,00	7.50,00	601.00		2450. 00	2450.00	2450.00	245g. gg	2450.00	2450.00	Claimed at a Future Date	Reserve: Work to be
1 2 3	Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (/) one of the following:  1.																																						
No	te 1:	E	xam <sub>(</sub> ) the	ple m	In the event that you have not specified your choice of priority, option one will be implemented.  Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.									rec	ord	ed	tra	nsf	ers	, of	otio	n a	gre	em	ent	ه, ۵		nor			of a	agn	961	nei	nts,	, etc	:., <b>u</b>	rith re:	spect

Note 2: If work has been performed on patented or leased land, Signature I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.



M histry of Northern Development and Mines

Ministère du Développement du Nord et des mines

# Statement of Costs for Assessment Credit

# État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction W9560.000

**2.** 1593

ersonal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and impoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario 3E 6A5, telephone (705) 670-7264. Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4<sup>8</sup> étage, Sudbury (Cetaris) PSE 645. Milesters (FISE) 670. (Ontario) P3E 6A5, téléphone (705) 670-7264.

# . Direct Costs/Coûts directs

Туре	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	20.000	
	Field Supervision Supervision sur le terrain	\$ 8000°	
Contractor's and Consultant's	Туре		
Droits de l'entrepreneur at de l'expert- conseil			• • • • • • • • • • • • • • • • • • •
Supplies Used Fournitures Itilisées	FLACCIUS V	300.00	
	'C'W?		
quipment ental ocation de	Туре	60000	:
.atériel			
	Total Di Total des coû	rect Costs Its directs	34300°

# 2. Indirect Costs/Coûts indirects

\* Note: When claiming Rehabilitation work Indirect costs are not ssessment work. ursement des travaux de réhabilitation, les allowable as a Pour le remboursement de coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Туре	Description	Amount Montant	Totals Total global
Transportation Transport	Туре		
	RECEIV	ED ?	
	APR 1 19		
Food and Lodging Nourriture et hébergement	MINING LANDS 8		
Mobilization and Demobilization Mobilisation et démobilisation		-	
	Sub Total of India Total partiel des coûts		
	(not greater than 20% of Dir o (n'excédent pas 20 % des c	•	
Total Value of Ass (Total of Direct and Indirect costs)		olite directs	

te: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandé le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

#### na Discounts

Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.

Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

al Value of Assessment Credit **Total Assessment Claimed**  $\times$  0.50 =

## Remises pour dépôt

- 1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- 2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale of	lemandée
×	0,50 =	

# tification Verifying Statement of Costs

eby certify:

the amounts shown are as accurate as possible and these costs incurred while conducting assessment work on the lands shown ne accompanying Report of Work form.

35		I am authorized
	(Recorded Holder, Agent, Position in Con	ODAM)
ake	this certification RECE	INEW

1995

### Attestation de l'état des coûts

J'atteste par la présente :

que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de		ie	suis	autorisé
	représentant, poste occupé dans la	соп	npegni	D)

à faire cette attestation.

Signature	Date
Ma Signature	1/11-9/05
Character and a second	TIAN 1910

PORCUPINE MINING DIVISION



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 Fax: (705) 670-5863

May 05, 1995

Our File: 2.15937

Transaction #: W9560.00002

Mining Recorder
Ministry of Northern Development & Mines
60 Wilson Avenue, 1st Floor
Timmins, Ontario
P4N 2S7

Dear Mr. White:

RE: APPROVAL OF ASSESSMENT WORK SUBMITTED ON MINING CLAIMS LO 328 et al. IN DELORO TOWNSHIP

A Notice of Deficiency was not issued on this Report of Work prior to the 90 day deemed approval date. Accordingly, as outlined in subsection 6(5) of the Mining Act Regulations, this Report of Work is deemed approved as of April 09, 1995.

If you require further information please contact Steven Beneteau at (705) 670-5858.

ORIGINAL SIGNED BY:

Ron C. Gashinski

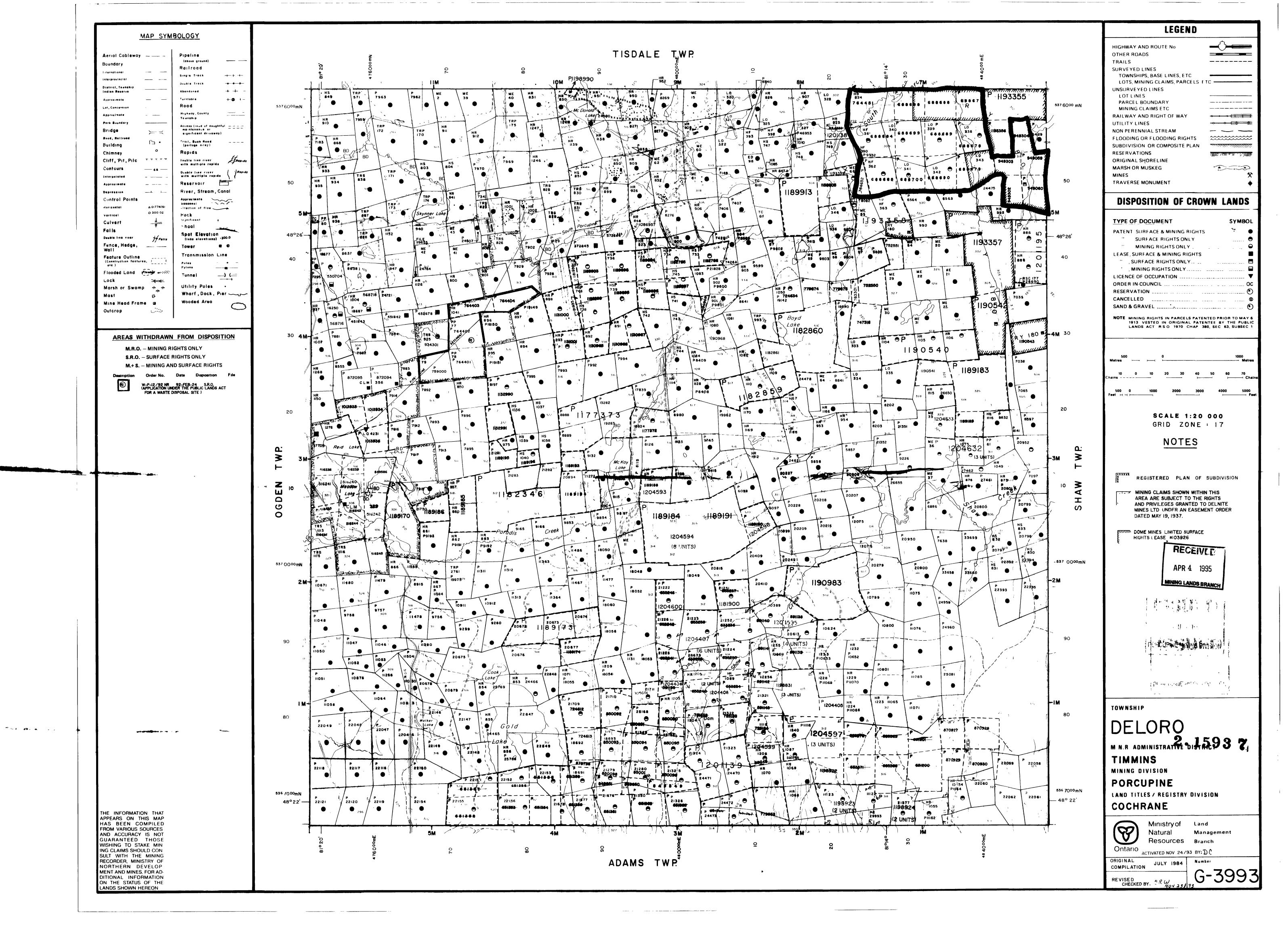
Senior Manager, Mining Lands Section Mining and Land Management Branch

Mines and Minerals Division

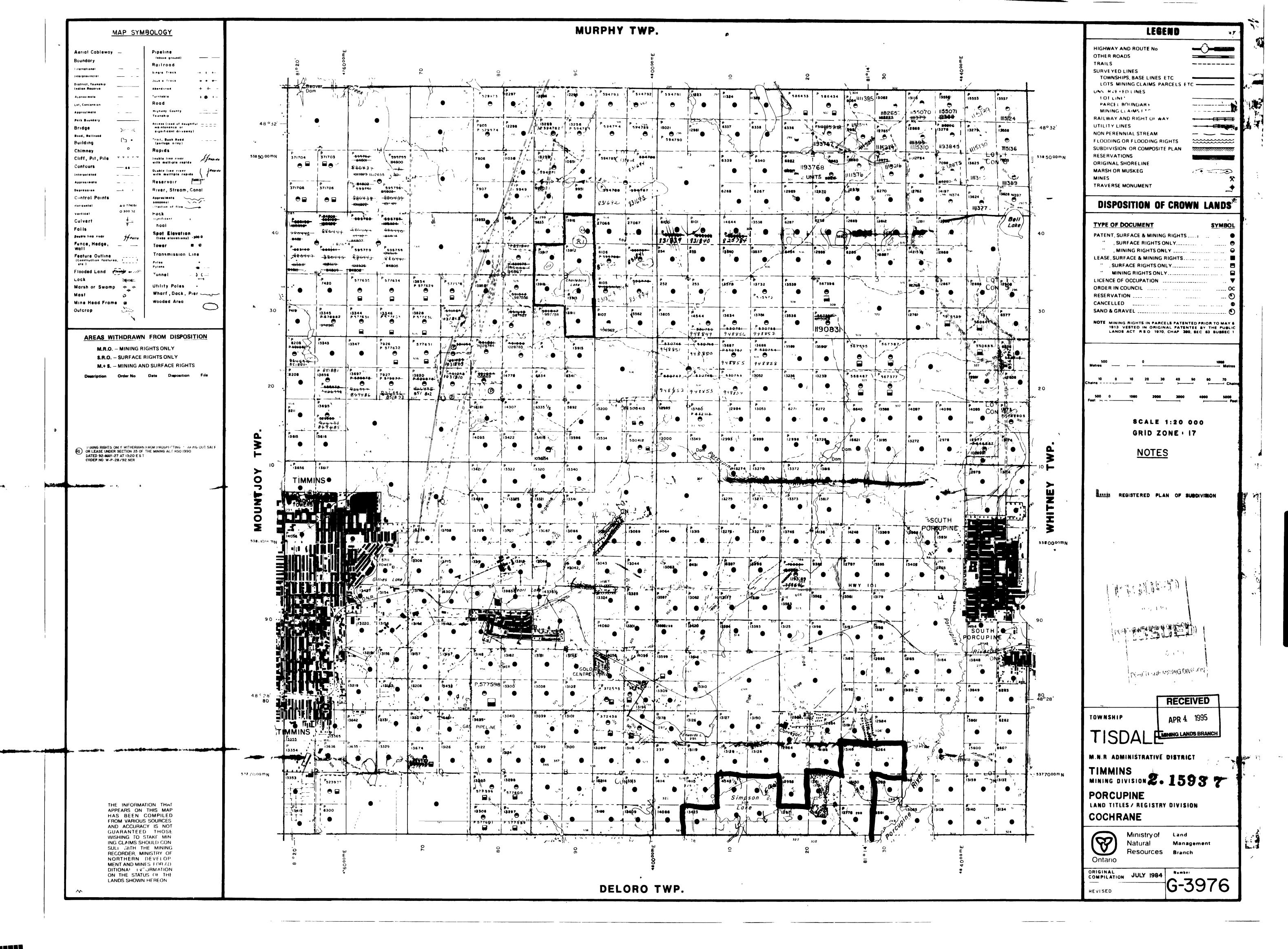
200 Cakil

SBB/jl Enclosure:

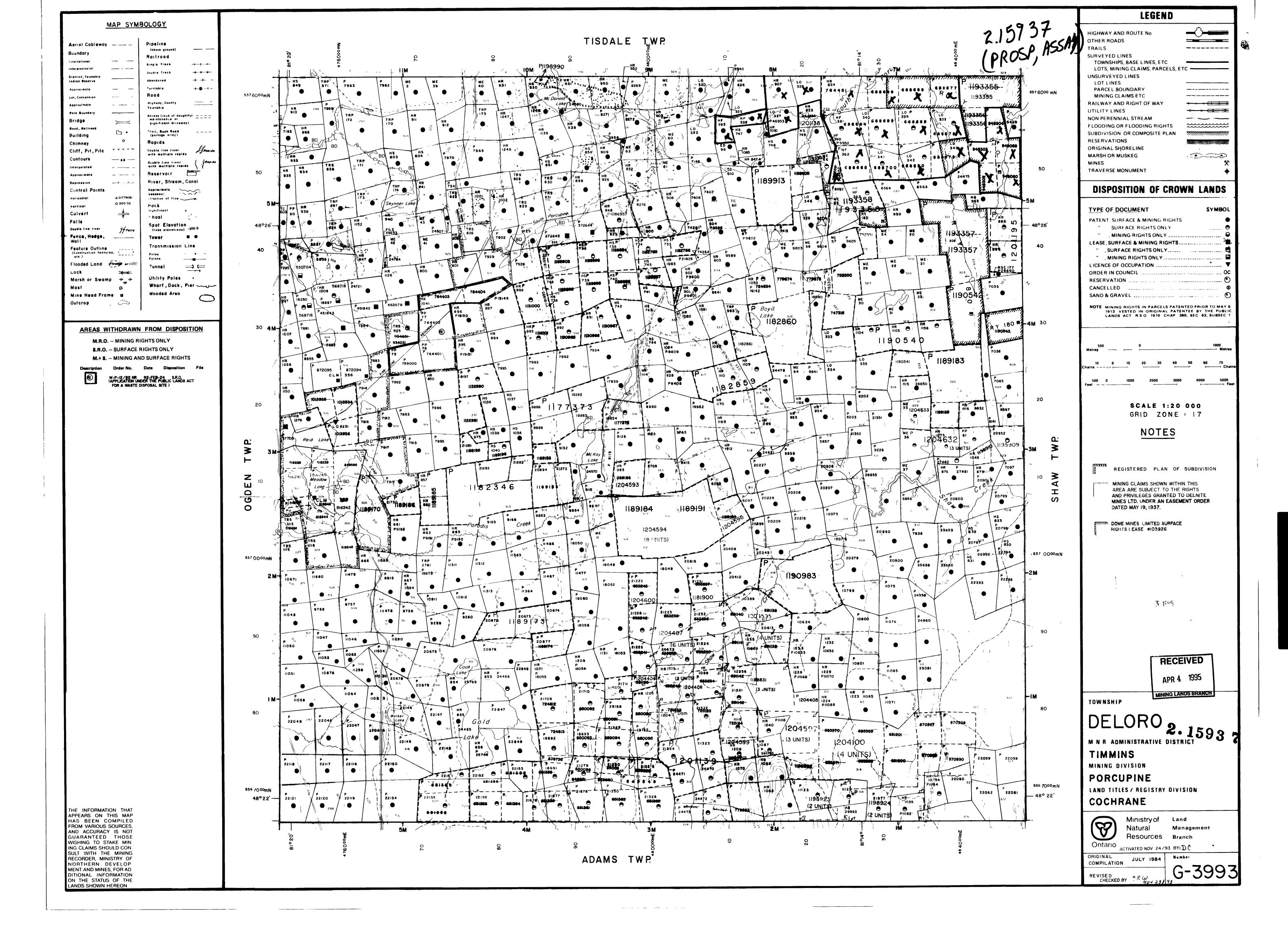
cc: Resident Geologist Timmins, Ontario Assessment Files Office Sudbury, Ontario



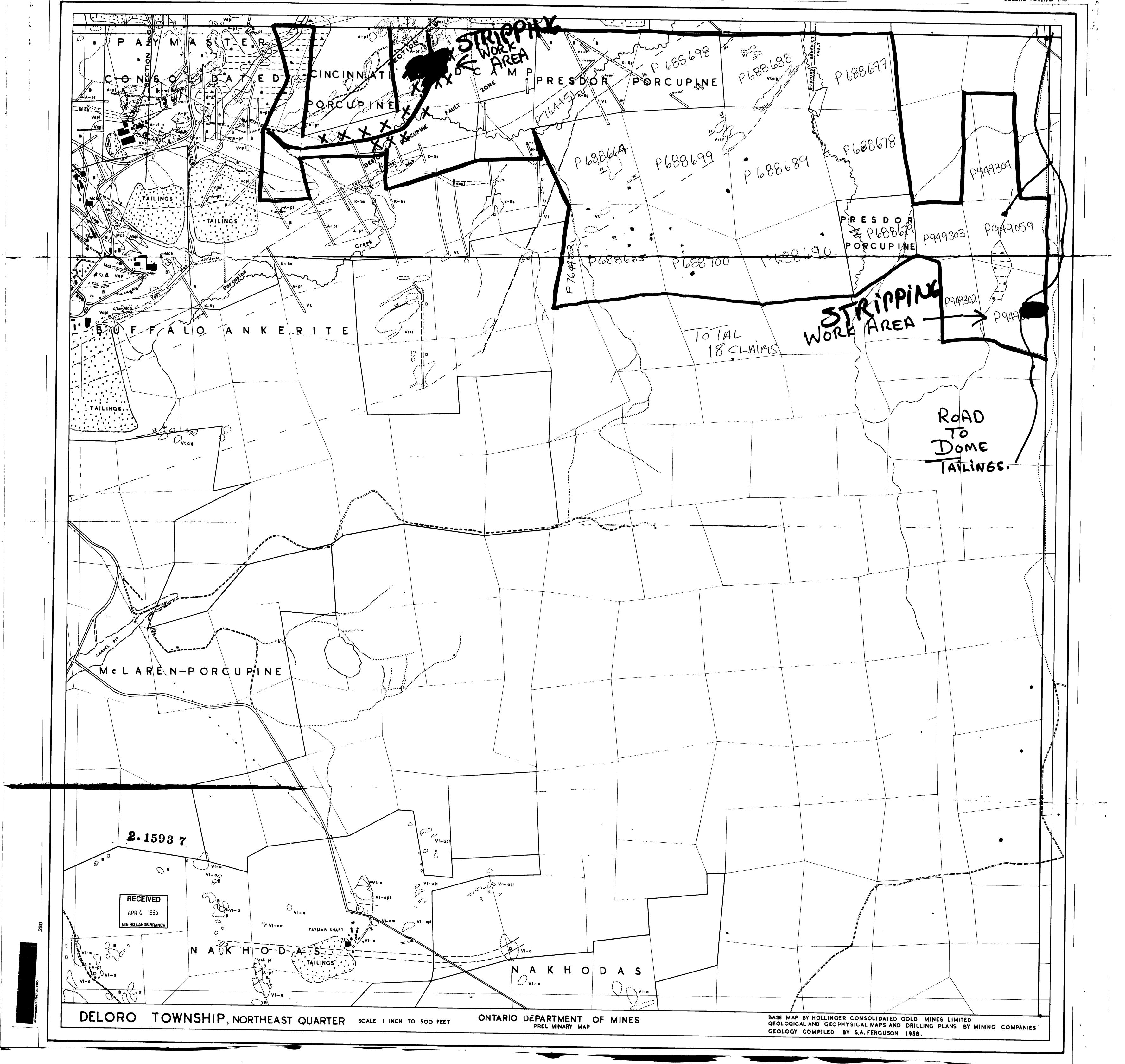


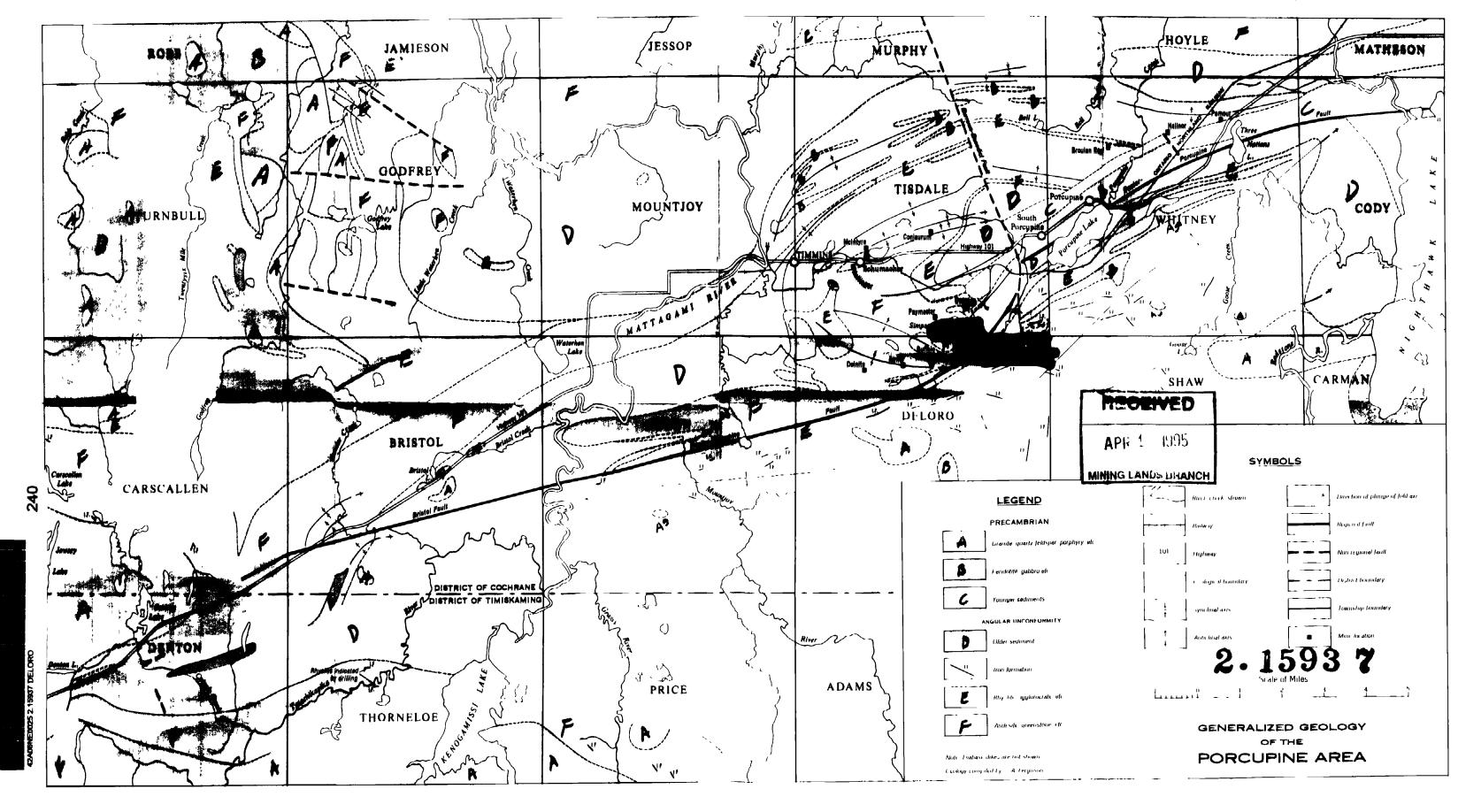












i