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GEOLOGICAL REPORT
 ON THE
 HARAMA MARBLE PROPERTY
 PARKIN TOWNSHIP
 DISTRICT OF SUDBURY
 ONTARIO
 FOR
 ONTARIO QUARRIES INC.

Anal. # 2.64/2

E. Sawitzky
 Norwin Geological Ltd.
 December, 1992

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SUMMARY

The Harama marble deposit is located in Parkin Township, approximately 40 kilometers north of Sudbury, Ontario. The deposit occurs adjacent to a public access road, has a nearby water supply, and is relatively close to an electric power source.

The marble from this deposit is unique. The highly attractive and distinct textural patterns present a variety of potentially marketable products. This ranges from a marble breccia consisting of a spectacular mosaic of interlocking varied-sized blocks to bedded marble with both uniform laminations and folded to convoluted "gneissic" bedding planes. The marble tends to be multicoloured with pink, green and cream colours predominating.

Only preliminary comments can be made at this time regarding the jointing in this deposit. Although jointing is fairly common on surface due to solution weathering the field evidence and the appearance of the material extracted to date indicate that joint surfaces have been sealed or 'healed' by secondary carbonate.

Potential marble reserves from the deposit are estimated to be in the order of 930,000 tonnes, calculated to a 60 meters depth. Further exploration including diamond drilling, geological mapping or power stripping could lead to increased reserve potential.

It is recommended that further work be carried out on the property and include a detailed jointing analysis and a small diamond drill program to delineate the dimensions of this deposit.

1. INTRODUCTION

On November 18, 1992 Ontario Quarries Inc. requested Norwin Geological Ltd. to carry out geological and topographic surveys of the Harama Marble deposit with the objective of defining the reserves and the geological characteristics of the deposit relative to the use of the various rock units on the property as building stone.

Between November 19 and December 4, 1992, a programme of line-cutting, geological mapping and topographic surveying using rod and stadia was undertaken. The following report is a presentation of the results of the work carried out in evaluating the potential of the property.

2. PROPERTY LOCATION AND ACCESS

The property is located in the west central part of Parkin Township, District of Sudbury, Concession 1V, Lots 10 and 11, approximately 40 kilometres north of Sudbury, Ontario.

Access to the area is via a public service road leading north a distance of 5 kms from Hwy.545, 13 kms north of the town of Capreol (Figure 1).

3. CLAIM GROUP AND STATUS

The property consists of nine (9) unpatented contiguous mining claims in good standing, in Parkin township, District of Sudbury as listed in Table 1.

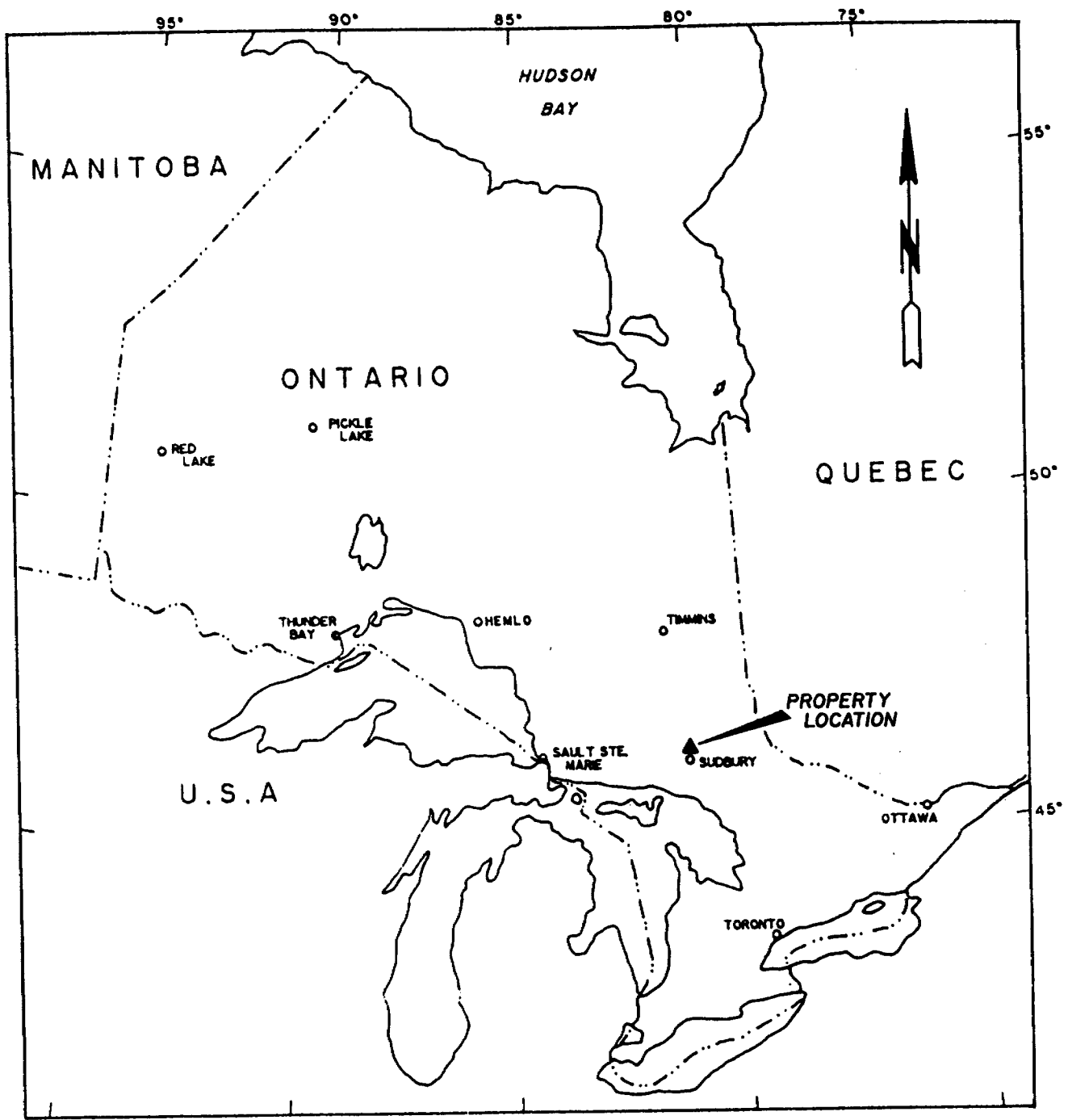


FIGURE I

GENERAL LOCATION MAP

ONTARIO QUARRIES INC.
HARAMA MARBLE PROPERTY
PARKIN TOWNSHIP ONT.

Table 1
Harama Marble Property
Parkin Township Claim Description and Status

<u>Claim Number</u>	<u>Man-Days Credit</u>
865264	200
865265	200
865266	200
865267	200
865269	200
1042298	60
1042299	60
1042300	60
734218	200

4. REGIONAL GEOLOGY

The property lies near the contact between Archean greenstone-granitoid rocks to the west and Proterozoic (Huronian) metasediments to the east which unconformably overly the Archean units. The Huronian metasediments have been subdivided into the following litho-stratigraphic formations in this area: Mississagi, Bruce, Espanola, Serpent, Gowganda, and Lorrain (Meyn, 1970, p. ix). The foregoing rocks have been intruded by dikes of Nipissing-type diabase and olivine-diabase.

The property is underlain by the Espanola and Serpent Formations of the Quirke Lake Group. The Espanola Formation in Parkin Township consists of two members (Meyn, 1970). The lower member is a limestone interbedded with siltstone and the upper

member is a fine-grained siltstone to sandstone. "The total thickness of the Espanola Formation is difficult to determine..... Total thickness is probably between 100 to 200 feet for the limestone..." (Meyn, opt cite, p. 17).

5. PROPERTY GEOLOGY

The geology underlying the claim group consists of interbedded limestone and fine grained wackes of the Espanola formation intruded by mafic intrusive rocks. Stripping and trenching carried out on the property has revealed two areas underlain by limestone deposits (Geology Map, backpocket). The two areas each contain a distinct 'type' of limestone; to the north the limestones are brecciated and to the south the limestones are bedded or laminated. Zone A refers to the area of bedded limestone while the area underlain by brecciated limestones is referred to as Zone B.

5.1 ZONE A - BEDDED LIMESTONE

Geological mapping of this area is preliminary because although extensive areas have received mechanical stripping a large part of the outcrop surface still retains a thin cover of soil. Power washing to clean off this soil is required for detailed mapping and joint analysis.

Underlying Zone A is a series of intercalated limestone, silty limestone, siltstone and mafic intrusive rocks. The relative proportion of each of these rock types is variable with the geology changing from east to west. Rock units and geological contacts trend east to southeast.

The west part of Zone A, i.e., west of the road, is underlain by predominately limestone and mafic intrusive rock (geology map,

backpocket). The mafic intrusive rocks occur as east to east-southeast trending dikes and sills of varying widths and appear to occupy about 30% to 35% by volume of the rock mass present. These mafic rocks weather a grey-green colour and have a dark blackish-green fresh surface colour. They are medium-grained, equigranular and diabasic in texture. The rocks are weak to moderately chloritized, saussuritized and amphibolitized. Sulphides occur as fine grained and disseminated pyrite ranging from trace to 1-2%. Minor country rock inclusions are present.

The limestones in this western sector are characteristically bedded or laminated. Minor massive and rare brecciated limestones are also present. These rocks weather a buff colour with fresh surface colours ranging from predominately buff to buff-green with varying amounts of pink and black. The rocks are fine grained and granular to gritty in texture. The limestones are thin to thickly bedded and laminated giving these rocks a planar fabric. The laminations (millimetre to several centimetres) have been boudinaged and fragments are distributed in an en echelon pattern. Locally developed folding imparts a convoluted to swirly structure to the rock. Country rock inclusions appear to be absent in this area. Topographic relief in terms of ridges and steep slopes, etc. is much more gentle and subdued in comparison to Zone B.

The eastern part of Zone A (east of the road) is underlain by limestones and mafic intrusive rocks similar to those to the west but it also includes fine grained wackes and transitional silty limestones which may represent a sedimentary facies change. The stratigraphy from the mafic intrusive contact in the south end of the area changes northwards from a narrow sequence of fine grained wackes to a narrow unit of silty limestone to a wide unit of laminated/bedded limestone then back to silty limestones and siltstones. The bedded/laminated limestones form about 50% to 80% of the volume of the rock mass in this area. A brief description

of each stratigraphic unit follows.

The mafic intrusive rocks in this area are a continuation of those in the west part of the property as described above.

Adjacent to the mafic intrusive is a four to five metre wide, thinly bedded, fine-grained wacke i.e., siltstone\ sandstone. The rock weathers a grey-green colour and has a dark green-grey fresh surface colour. At the contact with the mafic intrusive this rock becomes very granular and friable. Sulphides occur in the form of fine-grained disseminated pyrite ranging from trace to 1/2%.

A transitional unit of silty limestone which is approximately five metres wide follows. This unit is essentially a fine-grained, granular 'dirty' limestone with a high clastic component. The rock weathers a buff-grey colour and is grey on a fresh surface. This unit is thinly bedded to laminated and may contain trace to < 1/2% fine-grained pyrite.

The next unit is a uniformly laminated limestone, fine-grained and gritty in texture, and identical essentially to those limestones in the west part of Zone A. The rock weathers a buff colour and on fresh surfaces is buff-grey in colour with varying amounts of pink, green and minor black bands. The colour banding in the rock is fairly regular averaging 1 cm to 7.5 cm in width. Folding of bedding occurs locally with a resultant convoluted swirly structure being developed. Boudinage structures are present as well as trace amounts of sulphides.

The last stratigraphic unit is poorly exposed over approximately fifteen metres at the north edge of the trench. The unit consists of a heterogeneous mixture of fine-grained wackes intercalated with silty limestone and minor 'clean' limestone. Subunits vary in width from approximately one metre to four metres.

This unit appears to be transitional into the fine-grained wackes of Zone B to the north.

5.2 ZONE B - BRECCIATED LIMESTONES

In Zone B the limestones are in contact with fine grained wackes. The contact swings from a westerly trend in the southwest part of Zone B to a more northerly trend in the northeast part of Zone B. The contact is variable in nature with mixed rock types and shearing being present. The contact unit consists of strong to moderately foliated, brecciated rock of mixed marble-siltstone composition which varies in width between two to four metres. Secondary alteration consisting of chlorite and calcite is pervasive in this unit. The contact is poorly exposed north of Line 1+12.5.

The fine grained wackes underlying the south and east parts of Zone B are of an undetermined thickness as the strike and dip of these rocks could not be ascertained at this time. This is in part due to poorly preserved bedding and tectonic brecciation of these rocks. Further mapping outside the limits of Zone B would help to determine the trend of this unit. The rocks consist of very fine to lesser medium-coarse grained wackes with a typically buff-grey weathering surface and a light to dark grey, grey-green fresh surface. Secondary alteration (carbonate?) locally affects the colour of these rocks by bleaching or 'whitening' the rock colour. The resultant rock colour is often mottled. These units are commonly "brecciated" with fragments being polymictic, angular to subrounded and varying in size from several millimetres to three to five centimetres. The brecciation of these rocks should be examined in more detail to determine if the fragments are the result of primary deposition (ie. conglomerates) or due to secondary deformation. Secondary carbonate (calcite), chlorite and sulphides are locally present. The carbonate and chlorite occur in

stringers, as semi-pervasive alteration and fracture-fillings. Sulphides occur as very fine grained and disseminated pyrite ranging from trace to 1%, averaging $< 1/2\%$.

The limestones occur in the northwest part of the zone forming a large rectangular mass of rock with the present limits of exposed outcrop measuring approximately 45 metres long by 35 metres wide by 10 metres vertically. The deposit may extend further to the north and west where exposure is limited, however, the trend of this unit is unknown. The limestones in this area are devoid of any substantial intercalated beds of clastic rocks (wackes, etc.). This area is characterized by a buff, buff-green and pink coloured limestone displaying a brecciated texture and convoluted bedding.

This unit, characterized by its brecciation, consists of fragments ranging in size from less than 10 centimetres to large blocks several metres in diameter, averaging 25-35 centimetres. In one part of this unit, centred on Line 1+12.5 and between 0+25 and 0+35 west, the fragments are much smaller (10-15 cm) than in the rest of the unit. The fragments consist of (originally) massive to laminated limestone. The limestone is fine to medium grained and somewhat granular in texture. Thin (millimetre to centimetre) laminae of silty composition within the limestone imparts a bedded or planar fabric to the fragments. The laminae themselves have been boudinaged to form small fragments with an echelon pattern within the larger limestone fragments. The rocks weather a buff colour and have a pink, pinkish-green or buff-green fresh surface colour.

Within this unit are minor inclusions of unaltered country rock varying in size, composition and shape. The distribution of these inclusions appears to be concentrated south of Line 1+25N. Thin overburden precludes a final analysis of their distribution.

The limestones in this area form a series of ridges 'stepping down' to the west in elevation. The differential weathering of the limestones forms a very irregular outcrop surface, which is 'knobby to knotty'-like.

5.3 STRUCTURE

The general trend of the package of rocks under consideration i.e. Espanola Formation limestone-wackes is northwest (Meyn, Map 2180). However, geological contacts of specific rock units appear to trend westerly with foliations trending west to northwest. Meyn, (opt cite) has indicated a major northwest trending fault parallel to Mowat Creek which lies immediately to the west of the property.

Several widely spaced (generally > 10 metres) shears transect the limestone breccia in Zone B (Geology Map, backpocket). These narrow (few centimetres) shears trend approximately north-northeast (20° - 45°) and appear to parallel a set of regionally developed faults (Meyn, opt cite, Map 2180) with a similar trend.

Small-scale folds, on a scale of decimeters to metres, are developed locally in several places in both Zones A and B. Refolding of these folds has produced a swirly convoluted pattern in the limestones. Detailed mapping would be required to establish the distribution pattern of these folded areas.

In an earlier report (Sawitzky, 1991) it was hypothesised that a large scale fold structure may exist connecting Zones A and B. Recent stripping on the property in key areas suggests that this interpretation was incorrect. The intervening area appears to be underlain predominately by fine-grained wackes. This has implications with respect to reserve calculations and is discussed in Section 8.

5.4 JOINTING

A thorough and detailed joint/fracture study of the A and B Zones was not possible mainly because of the thin frozen overburden cover (approximately 20% of Zone B and 70% of Zone A). In Zone B, a preliminary study was initiated and where possible most of the major and significant surface joints\fractures were mapped on both horizontal and vertical surfaces as indicated on the accompanying Geology Map. The development of a knotty or knobby surface due to solution weathering of the limestone and strong differential weathering makes the analysis of jointing difficult between 1+30 and 1+45 north from 0+23 to 0+37 west.

ZONE B - JOINTING

Jointing appears to be developed in a set pattern with prominent joint orientations and spacings developed as follows:

- 1) Azimuth 270 - 285, dipping 85 - 90 north; prominent jointing direction, discontinuous, 0.5 m to > 3.0 m joint spacing, throughout.
- 2) Azimuth 340 - 350, dipping 80 - 90 northeast; common jointing direction, discontinuous, irregular joint spacing commonly > 2 m to 3 m with narrow zones of tight jointing from decimeters to 0.5 m, throughout.
- 3) Azimuth 040 - 050, dipping 80 - 85 northeast and northwest; moderately common joint direction, discontinuous, irregular joint spacing commonly > 2 m with narrow zones of tightly spaced joints ranging from approximately decimeters to 0.3 m, throughout.

A joint set with azimuth 290 - 310, dipping 80 - 90 northeast

occurs in several places throughout the outcrop. This set may be part of group 1) joint set. Joint spacing was not determined.

The horizontal joint development (sheeting) can be observed on two north trending vertical ridge faces and two east trending vertical faces. However, of these four faces only one was 'clean', allowing for joint measurements. These joints almost ubiquitously have a 10 - 15 degree dip to the east. Joint spacing is commonly > 2 m to 3 m. Weak to hairline joint planes may be developed locally between the latter widely spaced joints. The significance of these weak joint planes is as yet unknown.

6. BUILDING STONE ATTRIBUTES

Unquestionably the dominant attribute of this marble is its uniqueness. The marble has a very distinctive and varied textural pattern and colouration. This ranges from a marble breccia consisting of a spectacular mosaic of varied sized blocks to a bedded marble with both uniform laminations and folded to convoluted bedding planes. The marble tends to be multicoloured with pink-green hues predominating. The variability of the marble suggests the availability of a varied "product line" from the same deposit.

Several preliminary and general observations made regarding jointing in this area are:

- 1) Joint planes ubiquitously have a vertical dip +/- 10 degrees. Sheeting is uniform with a 10 to 15 degree east dip.
- 2) Joints appear to be commonly sealed by secondary carbonate, mainly calcite.

- 3) Joint planes are discontinuous along their strike length and represent a non-penetrative fabric. In some cases joints occur as 5 cm. to 8 cm. wide surface 'cracks' resulting from the differential weathering of secondary carbonate. However, these surface 'crack' will commonly diminish in width to < 0.1 cm across a vertical depth of 1.5 meters. They may be completely sealed below the level of surface weathering.

Another positive attribute of the deposit is the terraced topography dominated in Zone B by steep-sided natural ridges allowing for easy access for block extraction.

The potential tonnage available from Zone A is obviously large and can easily be increased with more exploration. The available reserves of Zone B appear to be more limited, however, diamond drilling may prove up more marble to the north and west of the present outcrop exposure. Also the vertical dimension of the deposit is likely to be substantial, enough to allow for many years of production.

The property is accessible by a public road (which will need some upgrading for block removal) a distance of 5 km from an all-weather highway and 13 km north of Capreol. An adequate supply of water for any purpose is readily available nearby.

7. TOPOGRAPHIC SURVEY

A topographic map of Zones A and B is presented in the backpocket of this report. The survey was carried out using a survey level and stadia rod. Survey data consists of readings taken along grid lines spaced generally at 12.5 m and with a station interval of 5 to 10 metres. Elevations are contoured at a 1 metre interval.

Zone A is underlain by a small knoll gently dipping to the east. Most of this area consists of gently rolling rock surface and only between 0+75 and 1+00 east along Line 0+00 does the topography become dominated by sharp and steep ridge faces.

Zone B forms a large knoll gently inclined to the east but dominated by prominent ridge faces throughout. The limestone breccia of this zone consists of several subvertical, northerly to easterly trending ridges with relief of from 3 metres to 10 metres.

8. RESERVE ESTIMATES

The "reserves" calculated, herein, are categorized as tonnage in place based on the surface work since no subsurface data is present and no evaluation has been carried out relative to the production of blocks, percentage utilization, etc.

Previous tonnage estimates (September, 1991) were based on several assumptions which included:

- 1) an estimate of the depth of the deposit
- 2) approximation of the surface area of the deposit
- 3) specific gravity of the marble
- 4) an interpreted fold structure. This was suggested in an earlier report (Sawitzky, 1991) however, recent stripping indicates this hypothesized structure is probably not present.

Although assumptions 2 and 3 have been redefined in the present calculations these variables are subject to further revision as exploration proceeds.

The potential tonnage of marble available from the property is as follows:

A) Assumptions (estimates) used in these calculations are:

- i) specific gravity of marble = 2.85 ('true' measured S.G. will probably not vary greatly from this figure).
- ii) depth estimates of 30 metres and 60 metres are used and are considered to be reasonable numbers.
- iii) Exposed surface area of Zone A =

length 155 metres;
width 25 metres.

Exposed surface area of Zone B = 45 metres x 35 metres x 10 metres (height).

Diamond drilling to the north and west of the presently exposed outcrop surface may extend the dimensions of the deposit and increase tonnages.

B) Tonnage Calculations:

Zone A

30 m Depth -

Length x Width x Depth = Volume

155 m x 25 m x 30 m = 116,250 cubic metres.

Tonnage = Volume x S.G.

= 116,250 cu/m x 2.85 = 331,312 tonnes

60 m depth -

Tonnage = 232,500 cu/m x 2.85 = 662,625 tonnes

Zone B

30 m Depth -

Length x Width x Depth = Volume

45 m x 35 m x 30 m = 47,250 cubic metres

Tonnage = Volume x S.G.

47,250 x 2.85 = 134,662 tonnes

60 m depth

Tonnage = 94,500 cu/m x 2.85 = 269,325 tonnes

9. RECOMMENDATIONS

1) Jointing must be studied in greater detail to ascertain its effect on the size of blocks that can be extracted from the limestone breccia underlying Zone B. This can be carried out by;

- a) detailed surface mapping of all jointing.
 - b) the removal of a minimal amount of surface rock from present ridge surfaces to develop clean vertical ridge faces for joint analysis. This will help determine to what degree jointing is developed in the limestone at a depth of approximately 10 metres, below the effects of surface weathering and solution.
- 2) A more detailed study of the jointing and distribution of rock types underlying Zone A should be carried out next spring after the outcrops in the area have been washed using a hydraulic pump.
- 3) ASTM testing of the limestones from Zones A and B should be carried out.

4) The rocks underlying the area between Line 0+75 and 0+25 north and from the baseline west are very poorly exposed or not at all. Further power stripping and diamond drilling would help to determine the proportion of limestone occurring in this area.










5) Thin-section study of unit 1 (Bx) to determine degree of microfracturing present, if any.

6) A small diamond drilling program is recommended consisting of several shallow drill holes, less than 60 metres in depth. The location of the proposed drill holes is shown in Figure 2 and the length and purpose is presented in Table 2.

Table 2
Proposed Diamond Drill Holes

<u>DDH Number</u>	<u>Estimated Hole Length (metres)</u>	<u>Purpose</u>
1.	25 metres	north strike extension of breccia
2.	60 metres	determine depth of deposit
3.	10 metres	determine rock type
4.	10 metres	determine rock type
5.	60 metres	determine rock type
6.	25 metres	determine eastern limit Zone B marble
7.	60 metres	delineate SW extension of marble
8.	60 metres	determine depth of marble in Zone A.

LEGEND

-  TRENCH
-  OUTCROP
-  ROAD
-  SWAMP
-  GRID LINE
-  DRILL HOLE
-  MARBLE
-  SILSTONE
-  GABBRO

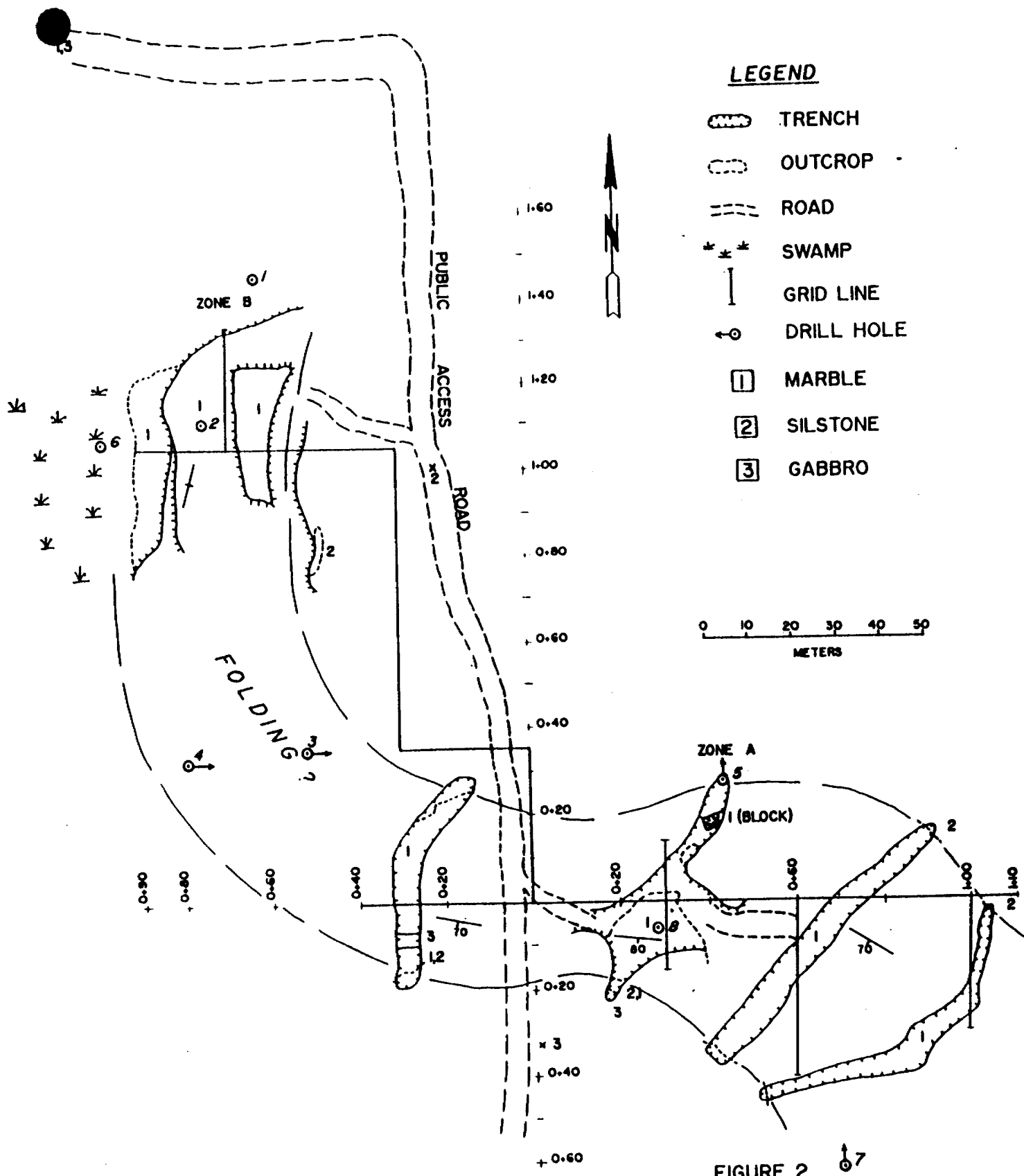
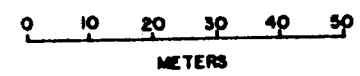



FIGURE 2 

ONTARIO QUARRIES INC.
 HARAMA MARBLE PROPERTY
 PARKIN TOWNSHIP ONTARIO
 PROPOSED DRILL HOLE LOCATIONS

10. BIBLIOGRAPHY

1. Meyn, 1970

Geology of Hutton and Parkin Townships, ODM Geol. Report
80.

2. Sawitzky, 1991

Harama Marble Property in-house company report.



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Inorganic Materials Section

TESTING OF MARBLE DIMENSION STONE

Construction Materials
Report No. 93-T16-U000645-001
(4 pages)

D.E. Renton
January 19, 1993

for

Ontario Quarries Inc.
1177 Lonsdale Avenue
Sudbury, Ontario
P3B 1K3

Attention: Rachel Prudhomme



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Testing of Marble Dimension Stone, #93-T16-U000645-001
For: Ontario Quarries Inc.

MATERIALS & TESTING

Cut-to-size test specimens of marble dimension stone were received at ORTECH (see Table 1 for sample identification numbers). After drying to constant weight in an oven at 60°C, the specimens were tested according to the procedures outlined in the following standards.

1. "Absorption and Bulk Specific Gravity of Dimension Stone" (ASTM C97-90).
2. "Compressive Strength of Dimension Stone" (ASTM C170-90, tested dry, in one direction of the rift).
3. "Modulus of Rupture of Dimension Stone" (ASTM C99-87).
4. "Abrasion Resistance of Stone Subjected to Foot Traffic" (ASTM C241-90).
5. "Flexural Strength of Dimension Stone" (ASTM C880-89).

RESULTS

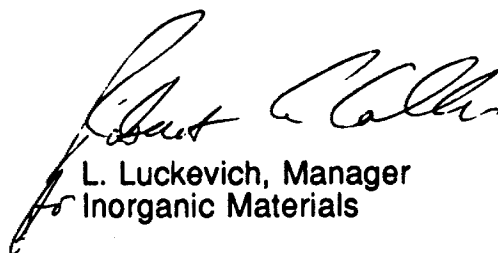
The results of these tests are recorded in Table 2.

CONCLUSIONS

These results indicate that the submitted sample of marble dimension stone complies with the specifications of ASTM C503-89 "Marble Dimension Stone (Exterior)".



D.R. Renton
Inorganic Materials



L. Luckevich, Manager
Inorganic Materials

Testing of Marble Dimension Stone, #93-T16-U000645-001
For: Ontario Quarries Inc.

TABLE 1

Identification Sample Numbers of Test Specimens

Specimen Size	ORTECH Sample Number
1. 2" x 2" x 2"	93-T16-C0218A,1-3
2. 2" x 2" x 2"	93-T16-C0218B,1-5
3. 4" x 8" x 2 1/2"	93-T16-C0218C,1-3
4. 2" x 2" x 1"	93-T16-C0218D,1-3
5. 12" x 1 1/2" x 1"	93-T16-C0218E,1-5

Testing of Marble Dimension Stone, #93-T16-U000645-001
 For: Ontario Quarries Inc.

TABLE 2

Properties of Marble Dimension Stone

Property	Test Results	Specification (ASTM C503-89)
Absorption, %	0.20 0.18 <u>0.21</u> 0.20	max. 0.20
Density (unit weight), lb/ft ³	169 168 <u>168</u> 168	min. 168 (III Serpentine)
Compressive Strength, psi	12280 14660 17950 13785 <u>11770</u> 14090(1)	min. 7500
Modulus of Rupture, psi	1790 1680 <u>1770</u> 1745	min. 1000
Abrasion Resistance (hardness value)	12.3 12.6 <u>12.7</u> 12.5	min. 10
Flexural Strength, psi	1049 1175 1241 872 <u>1133</u> 1094	min. 1000

(1) These test specimens tended to crumble (not split) at maximum loading.

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President

Work Report W937000048

SUMMARY OF EXPLORATION AND DEVELOPMENT WORK PERFORMED

Ontario Quarries Inc. acquired a block of contiguous claims in Parkin Township containing "marble" according to the industrial definition of the term in late fall of 1992. Since then there has been a tremendous amount of work conducted on the claims to determine the extent of the marble deposit, the quality, consistency, colour and texture of the stone, the engineering properties of the stone and its marketability in domestic and international markets. In summary, it has been determined that the deposit contains a stone that is highly desirable and unique in the dimension stone markets in America and abroad and is very significant in terms of its volume. The stone has excellent physical properties as it meets or exceeds ASTM standards for marble dimension stone for exterior use. There is quite a variation in colour, texture and pattern of marble within the same deposit. This along with the fact that the fracturing and jointing patterns in the stone had not yet been studied previous to our acquisition of the claims meant that there had to be detailed mapping done by a professional geologist to qualify the deposit further.

A very large amount of exploration and development work has been conducted on this block of claims in the last months. This work has been supported in great part by financial incentives from MNDM who greatly support this project and have encouraged us to continue in our efforts to develop a fully producing marble quarry. There was a Norfund project completed this year by us on these claims in the amount of \$164,400 (level of assistance: \$75,000). There was also a N.O.R.T. project of \$394,849 approved by the provincial government which is now 90 percent complete (level of assistance: \$195,000). There is also an O.M.I.P. project approved for this block of claims in the amount of \$509,250 for 1993 which is 80 percent complete (level of assistance: \$152,775). An finally, there is a Norfund project to purchase and operate two special diamond wire saws in order to permit the proper extraction of full-sized test blocks for marketing and technical studies (level of assistance: \$50,000). The saws were purchased and imported from a manufacturer in Italy as they are not available anywhere in North America.

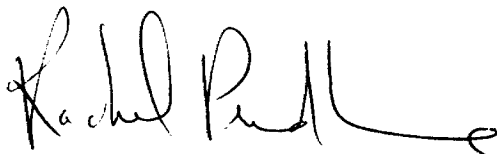
(continued on page 2)

As you can easily see from the previous, a very small portion of the total work done to date is being reported for assessment work at this time due to the small number of claims presently in need of work reports for renewal. In summary, the work that is being reported at this time involved geological mapping to a level of detail that is critical in the evaluation of a dimension stone deposit. Because fracturing and jointing are the most important properties that will determine whether or not a marble deposit can be quarried at a profit, it is necessary for a geologist to spend a great deal of time studying a relatively small area of the deposit in great detail. This level of detail is not normally needed on metallic mineral prospects, but it is essential to the evaluation of dimension stone. It also helps determine the types of products that will be viable for commercialization from the deposit (i.e. will the deposit support the fabrication of marble tiles for flooring, countertops, artifacts, monuments, cladding for buildings, etc.).

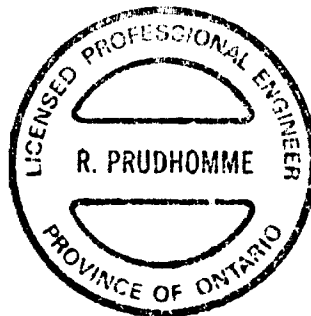
The work required to determine the above properties and to produce the report and map which were submitted with the work report to MNDM involved several days of field work and office work by a qualified geologist. The field work consisted of: establishing an accurate detailed grid, surveying for both line and grade elevations and geological work to identify rock patterns and structure. The office work included drafting maps, compiling data, writing the report and typing and editing of the report. There was a significant amount of travel required to complete the field work, maps and report (about 600 km). The result included a general indication of regional geology, specific details of the geology of the marble property itself, a detailed analysis of structure, jointing and topography of the deposit, reserve estimation, as well as a qualified opinion on the building stone potential of the property and recommendations for a diamond drilling program and methods of extraction for test blocks.

THE ABOVE INFORMATION IS CERTIFIED BY ME AS BEING TRUE AND ACCURATE.

October 18, 1993.



Rachel Prudhomme, M.Sc., P.Eng.
President, Ontario Quarries Inc.



ONTARIO QUARRIES Inc.

1177 Lonsdale Avenue
Sudbury, Ontario
Canada P3B 1K3

tel.: (705) 688-6600 / 560-4846
fax: (705) 524-9914

Rachel Prudhomme, M.Sc., P.Eng.
President

Work Report W937000048

BREAKDOWN FOR THE WORK THAT PERTAINS TO THE COSTS BEING CLAIMED

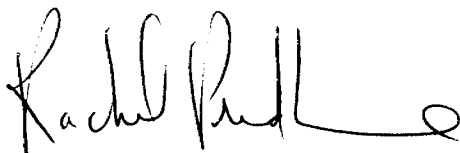
The following is a breakdown for the work that pertains to the costs being claimed in the format required in the deficiency list (MNDM File No. 2.15067):

Linecutting:	No linecutting was required, as the entire area mapped and studied had been completely excavated, stripped and washed by air-blasting with a compressor.
Geology:	5 man-days were spent on geology (@ \$300 / day)
Topography:	2 man-days to establish the grid line (1 @ \$300, 1 @ \$150) 2 man-days for surveying (spot elevations, contours and grades) (1 @ \$300, 1 @ \$150)
Report:	4 man-days for drafting (@ \$120 / day) 2.5 man-days for writing the report (@ \$300 / day) 0.5 man-days for typing and editing (@ \$120 / day)

Although the above man-days and costs are true and accurate, please note that we had negotiated a lump-sum deal with the geologist and therefore, he was committed to charging a lump sum fee of \$2,589.40 for the geological report and mapping.

The above information is certified by me as being true and accurate to the best of my knowledge. I can attest that I was present in the field and the man-days reported are true and accurate in terms of the field work. Man-days for office and drafting work are reported herein as they were presented to me by the geologist in charge of the work.

Dated: October 18, 1993.



Rachel Prudhomme, M.Sc., P.Eng.
President, Ontario Quarries Inc.





411155W9780 2.15067 PARKIN

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

~~Geoscience Approvals Section~~
Willet Green Miller Centre
933 Ramsey Lake Rd., 6th Floor
Sudbury, Ontario
P3E 6B5

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

Our File: 2.15067
Transaction #: W9370.00047
: W9370.00048

October 22, 1993

Mining Recorder
Ministry of Northern
Development and Mines
933 Ramsey Lake Road
3rd Floor
Sudbury, Ontario
P3E 6B5

Dear Sir:

RE: APPROVAL OF ASSESSMENT WORK ON MINING CLAIM S 865266 IN PARKIN TOWNSHIP.

The Assessment Credits for GEOLOGY and OTHER AUTHORISED WORK, sections 12 and 17 of the Mining Act Regulations, as listed on the above reports of work, have been approved as of OCTOBER 18, 1993.

Please indicate this approval on the claim record sheets.

If you have any questions please call Clive Stephenson at (705) 670-5856.

Yours sincerely

Ron Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

CDS
CDS/ls

✓ cc Assessment Files Office
Toronto

Resident Geologist
Sudbury

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
W9370.00047

2.15067

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.

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) ONTARIO QUARRIES INC.	Client No. 223661
Address 1177 LONSDALE AVE., SUDBURY P3B-1K3	Telephone No. 560-4846
Mining Division SUDBURY	Township/Area PARKIN
	M or G Plan No. G 2915
Dates Work Performed From: JAN. 2/93 To: JAN. 19/93	

Work Performed (Check One Work Group Only)

Work Group	Type
<input type="checkbox"/> Geotechnical Survey	
<input type="checkbox"/> Physical Work, including Drilling	
<input type="checkbox"/> Rehabilitation	
<input checked="" type="checkbox"/> Other Authorized Work	SECT. 17 - RESULTS OF BENEFICIATION - A.S.T.M. TESTING FOR INDUSTRIAL MINERALS
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

RECEIVED
JUN 15 1993
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ 1508.70

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
ORTECH INTERNATIONAL	2395 SPEAKMAN DR., MISSISSAUGA, ONT. L5K-1B3

RECORDED
JUN 3 - 1993
Receipt MH

RECEIVED
JUN 15 1993
MINING LANDS BRANCH

(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.	Date June 3/93	Recorded Holder or Agent (Signature) <u>Rachel Prudhomme</u>
--	-------------------	---

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 RACHEL PRUDHOMME, P.Eng 1177 LONSDALE AVE. SUDBURY P3B 1K3		
Telephone No. 560-4846	Date JUNE 3/93	Certified By (Signature) <u>Rachel Prudhomme</u>

For Office Use Only

Total Value Cr. Recorded <u>481,508</u>	Date Recorded <u>June 3, 1993</u>	Mining Recorder <u>A. Giroux</u>	<p>SUDBURY RECEIVED JUN - 3 1993 A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M. <u>11:05 a.m.</u></p>
	Deemed Approval Date <u>Sept. 1/93</u>	Date Approved	
	Date Notice for Amendments Sent		

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
9370.00047

2.150⁵67

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing 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 P3E 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 question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type ORTECH	1257.25	
	ASTM tests Building Stone		1257.25
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			1257.25

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type TO OBTAIN SAMPLES - 1/2-TON 4X4 (5 TRIPS)	169.75	
	TRANSPORT SAMPLES TO ORTECH IN MISSISSAUGA	40	
Food and Lodging Nourriture et hébergement	MEALS		70
Mobilization and Demobilization Mobilisation et démobiliation			
Sub Total of Indirect Costs Total partiel des coûts indirects			115
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			45
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			138.70

Note: 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 demandées dans 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.

Filing 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:

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

- Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- 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 demandée
	x 0,50 =

Certification Verifying Statement of Costs

I hereby certify: that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as PRESIDENT, ONTARIO QUARRIES INC. I am authorized (Recorded Holder, Agent, Position in Company)

to make this certification

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 _____ je suis autorisé (titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature: Kathleen Prud'homme Date: JUNE 3/93



Report of Work Conducted After Recording Claim

Transaction Number

W9370.00048

Ontario

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.

2.15067

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) ONTARIO QUARRIES INC.		Client No. 223661
Address 1177 LONSDALE AVE., SUDBURY P3B-1K3		Telephone No. 560-4846
Mining Division SUDBURY	Township/Area PARKIN	M or G Plan No. G 2915
Dates Work Performed From: Nov. 19/92		To: DEC. 4/92

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	GEOLOGICAL REPORT, DETAILED MAPPING
<input type="checkbox"/> Physical Work, including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

RECEIVED
 JUN 15 1993
 MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ 3107.28

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
NORWIN GEOLOGICAL SERVICES	NOTRE DAME AVE., SUDBURY

RECORDED
 JUN 3 - 1993
 Receipt: W/A

(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.	Date June 3/93	Recorded Holder or Agent (Signature) <i>Rachel Prudhomme</i>
--	--------------------------	---

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 RACHEL PRUDHOMME, P. Eng. 1177 LONSDALE AVE. SUDBURY P3B1K3	
Telephone No. 560-4846	Date JUNE 3/93
Certified By (Signature) <i>Rachel Prudhomme</i>	

For Office Use Only

Total Value Cr. Recorded 83,107	Date Recorded June 3, 1993	ACTING Mining Recorder <i>K. Groulx</i>	Received Stamp SUDBURY MINING DIV. RECEIVED JUN - 3 1993 A.M. 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 P.M. <i>2:11:05 ml</i>
	Deemed Approval Date Sept. 1/93	Date Approved	
	Date Notice for Amendments Sent		

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	S 865266	1
	1118311	1
	1118312	1
	1118313	1
	1118314	1
	1118315	1
	1118287	1
	1042299	1
	1042300	1
	9	

Total Number of Claims

Value of Assessment Work Done on this Claim	Value Applied to this Claim
3107.28	∅
	400
	400
	400
	400
	400
	400
	400
	400
	307
3107.28	3107

Total Value Work Done

Total Value Work Applied

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
3107.28	
3107.	

Total Assigned From

Total Reserve

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 prioritize the deletion of credits. Please mark (✓) one of the following:

1. Credits are to be cut back starting with the claim listed last, working backwards.
2. Credits are to be cut back equally over all claims contained in this report of work.
3. Credits are to be cut back as prioritized on the attached appendix.

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.

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

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature _____ Date _____



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

9370-00048

2.15067

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing 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 P3E 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 question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type Geological Report	2589.40	
			2589.40
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type AIR Compressor to clean surface for mapping	\$450	
			450.00
Total Direct Costs Total des coûts directs			2639.40

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type 97 km @ 35¢ (2) 1/2-TON TRUCK (TRUCK)	67.90	
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démoblisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			67.90
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excedant pas 20 % des coûts directs)			527.88
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs) Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			3167.28

Note: 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 demandées dans 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.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	x 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 demandée
	x 0,50 =

Certification Verifying Statement of Costs

I hereby certify: that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as PRESIDENT, ONTARIO QUARRIES INC. am authorized (Recorded Holder, Agent, Position in Company)

to make this certification

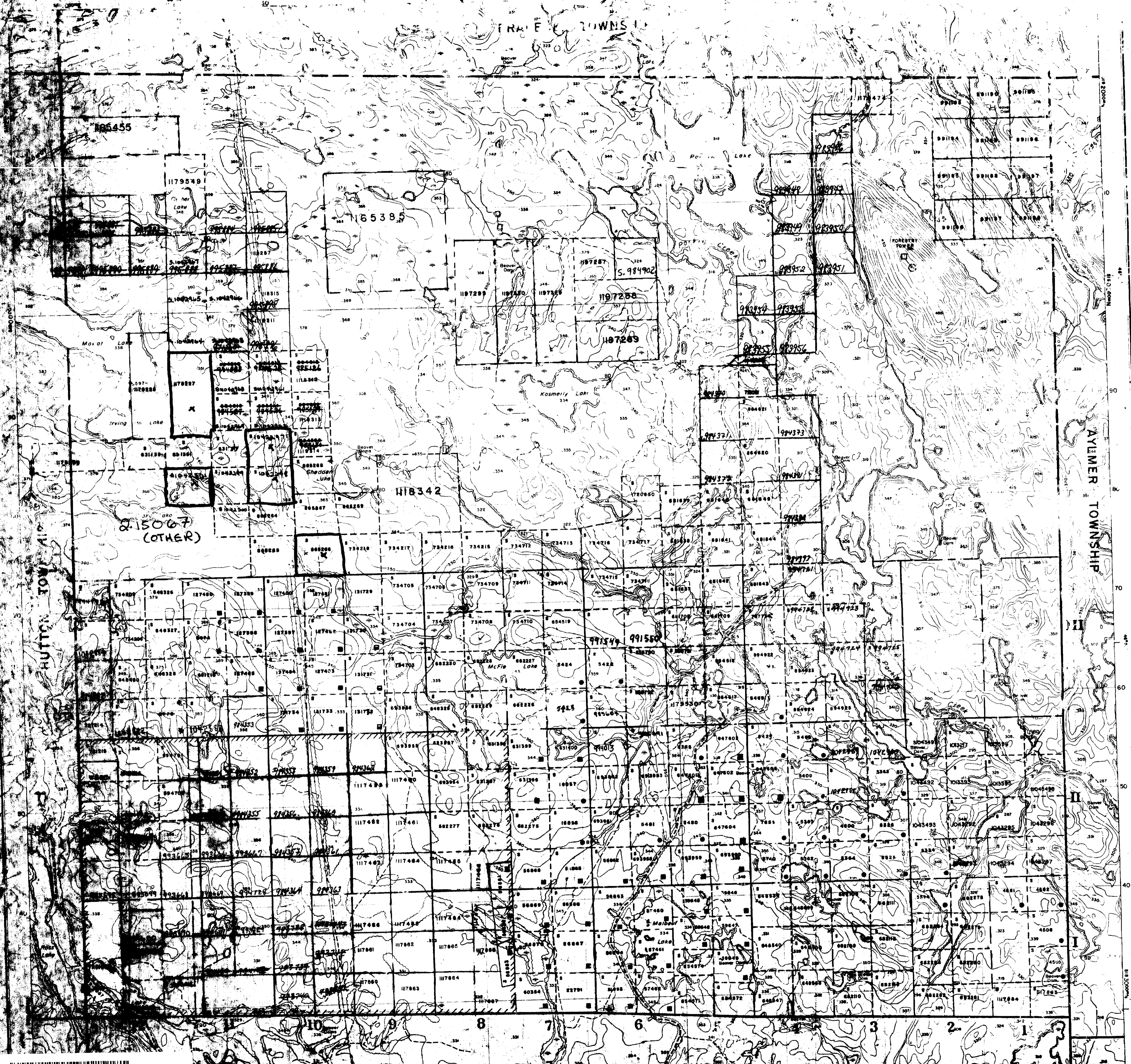
Attestation de l'état des coûts

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 _____ je suis autorisé (titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature: Rachel Prud'homme Date: June 3/93.



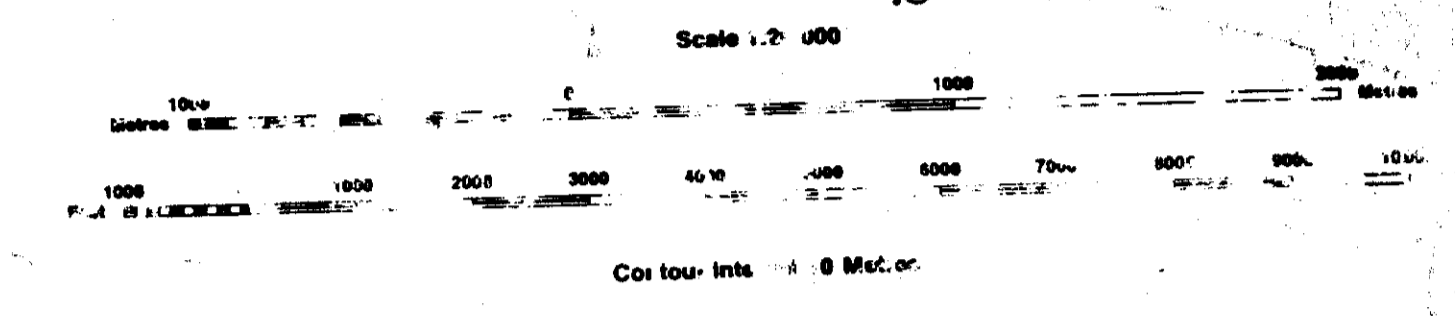
INDEX TO LAND DISPOSITION

Parkin
 6-2915

PARKIN

MINING DIVISION
 SUBURBY
 MINING DIVISION
 LAND REGISTRY DIVISION
 SUBURBY

2.15067



AREAS WITHDRAWN FROM DISPOSITION

Description	Q-J No.	Date	Page No.	File
MRU - Mining Rights Only				
SRO - Surface Rights Only				
M+S - Mining and Surface Rights				
SEC. 56/60	47/61	7/1/43	4 & 5	1845/9

SYMBOLS

Boundary	.....
Township, Meridian, Baseline	.....
Road allowance, surveyed	.....
shoreline	.....
Lot/Concession, surveyed	.....
unsurveyed	.....
Parcel, surveyed	.....
unsurveyed	.....
Road, highway, road	.....
railway	.....
utility	.....
Reservation	.....
Cliff, Pit, Pile	.....
Contour	.....
Intersect	.....
Approximate	.....
Depression	.....
Control point (horizontal)	.....
Flooded land	.....
Mine head frame	.....
Pipeline (above ground)	.....
Railway: single track	.....
double track	.....
abandoned	.....
Road, highway, county, township	.....
access	.....
trail, bush	.....
Shoreline (original)	.....
Transmission lines	.....
Wooded area	.....

DATE OF ISSUE
 JUN 4 1993
 SUBURBY
 MINING RECORDER'S OFFICE

MINING & SURFACE RIGHTS OPENED JUNE 1, 1992

DISPOSITION OF CROWN LANDS

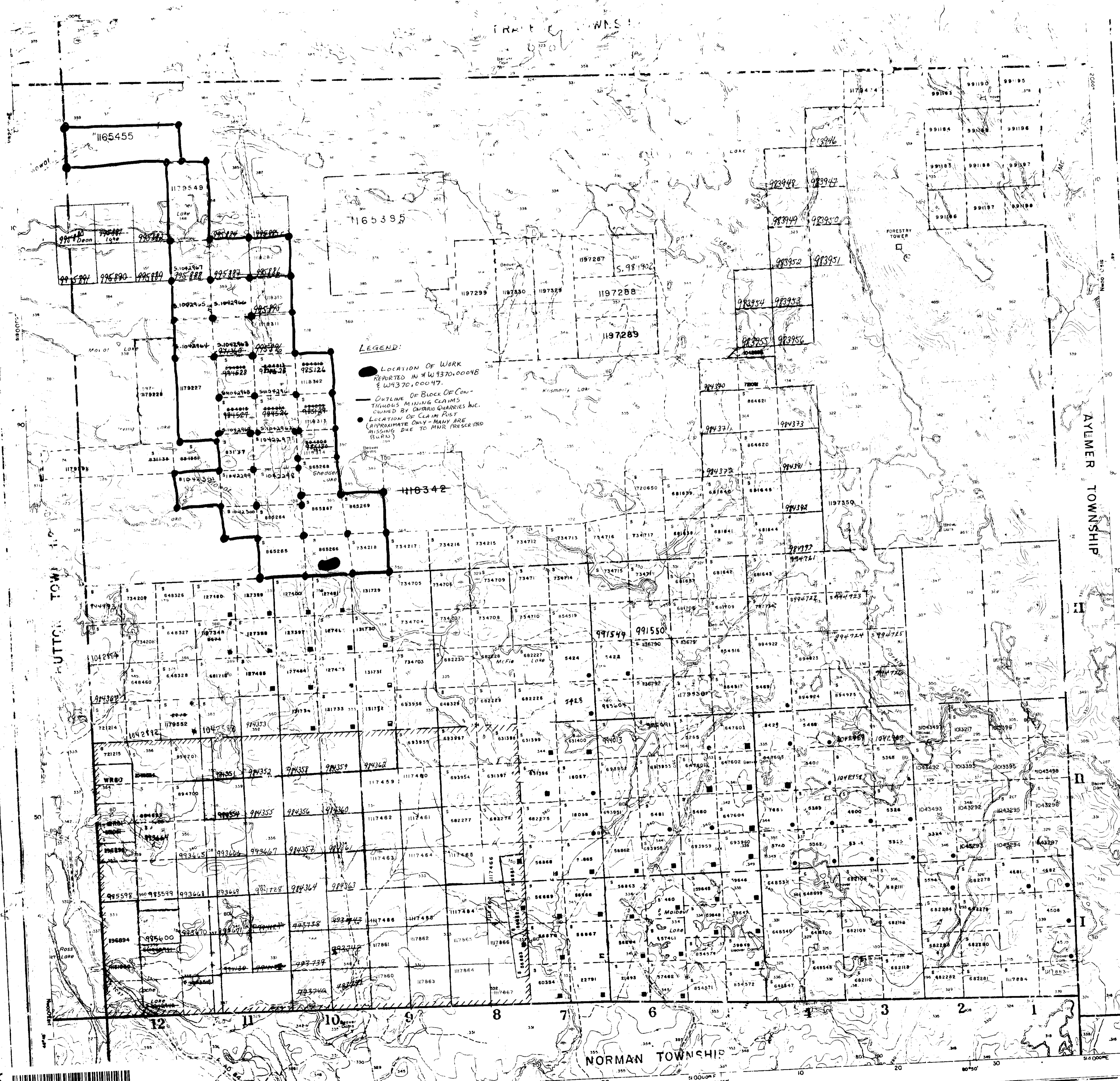
Patent	.....
Surface & Mining Rights	.....
Surface Rights Only	.....
Mining Rights Only	.....
Lease	.....
Surface & Mining Rights	.....
Surface Rights Only	.....
Mining Rights Only	.....
Licence of Occupation	.....
Order-in-Council	.....
Cancelled	.....
Reservation	.....
Sand & Gravel	.....

NOTE: TOWNSHIP SUBDIVISION PARTIALLY ANNULLED
 MARCH 8, 1949

IN AREA MARKED THIS STAKING ALLOWED
 AS IN UNSUBDIVIDED TOWNSHIP SECTION AS MINING ACT.

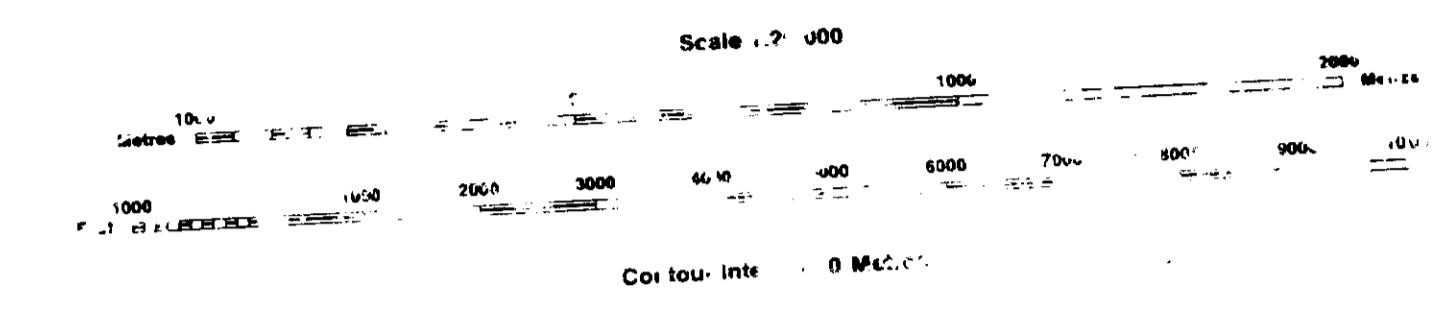
RECEIVED
 JUN 4 1993
 SUBURBY
 MINING RECORDER'S OFFICE





MINING RIGHTS DISPOSITION
 6-291
PARKIN

MINING RIGHTS DISPOSITION
 SUBURRY
 MINING RIGHTS
 DISPOSITION
 MINING RIGHTS DISPOSITION
 SUBURRY



AREAS WITHDRAWN FROM DISPOSITION
 MRG - Mining Rights Only
 SRO - Surface Rights Only
 M+S - Mining and Surface Rights

SYMBOLS

Description	Symbol
Boundary	—
Township, Meridian, Baseline	—
Road allowance; survey	—
shoreline	—
Lot/Concession; surveyed	—
unsurveyed	—
Parcel; surveyed	—
unsurveyed	—
Highway; road	—
railway	—
utility	—
Preservation	—
Cliff, Pit, Pile	—
Contour	—
intermittent	—
Approximate	—
Depression	—
Control point (horizontal)	—
Flooded land	—
Mine head frame	—
Pipeline (above ground)	—
Railway; single track	—
double track	—
abandoned	—
Road; highway, county, township	—
public	—
trail, bush	—
Shoreline (original)	—
Transmission lines	—
Wooded area	—

DATE OF ISSUE
 OCT 13 1993
 SUBURRY
 MINING RECORDERS OFFICE

MINING & SURFACE RIGHTS OPENED JUNE 1, 1992

2.15067

DISPOSITION OF CROWN LANDS

Patent	—
Surface & Mining Rights	—
Surface Rights Only	—
Mining Rights Only	—
Lease	—
Surface & Mining Rights	—
Surface Rights Only	—
Mining Rights Only	—
Licence of Occupation	—
Order-in-Council	—
Cancelled	—
Re-creation	—
Sand & Gravel	—

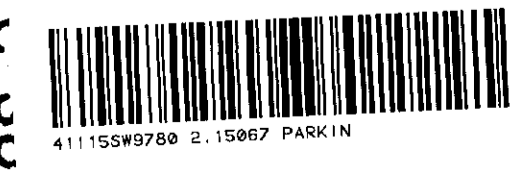
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

NOTE: TOWNSHIP SUBDIVISION PARTIALLY ANNULLED MARCH 8, 1949

IN AREA MARKED THUS STAKING ALLOWED AS IN UNSUBDIVIDED TOWNSHIP SECTION 45 MINING ACT

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.

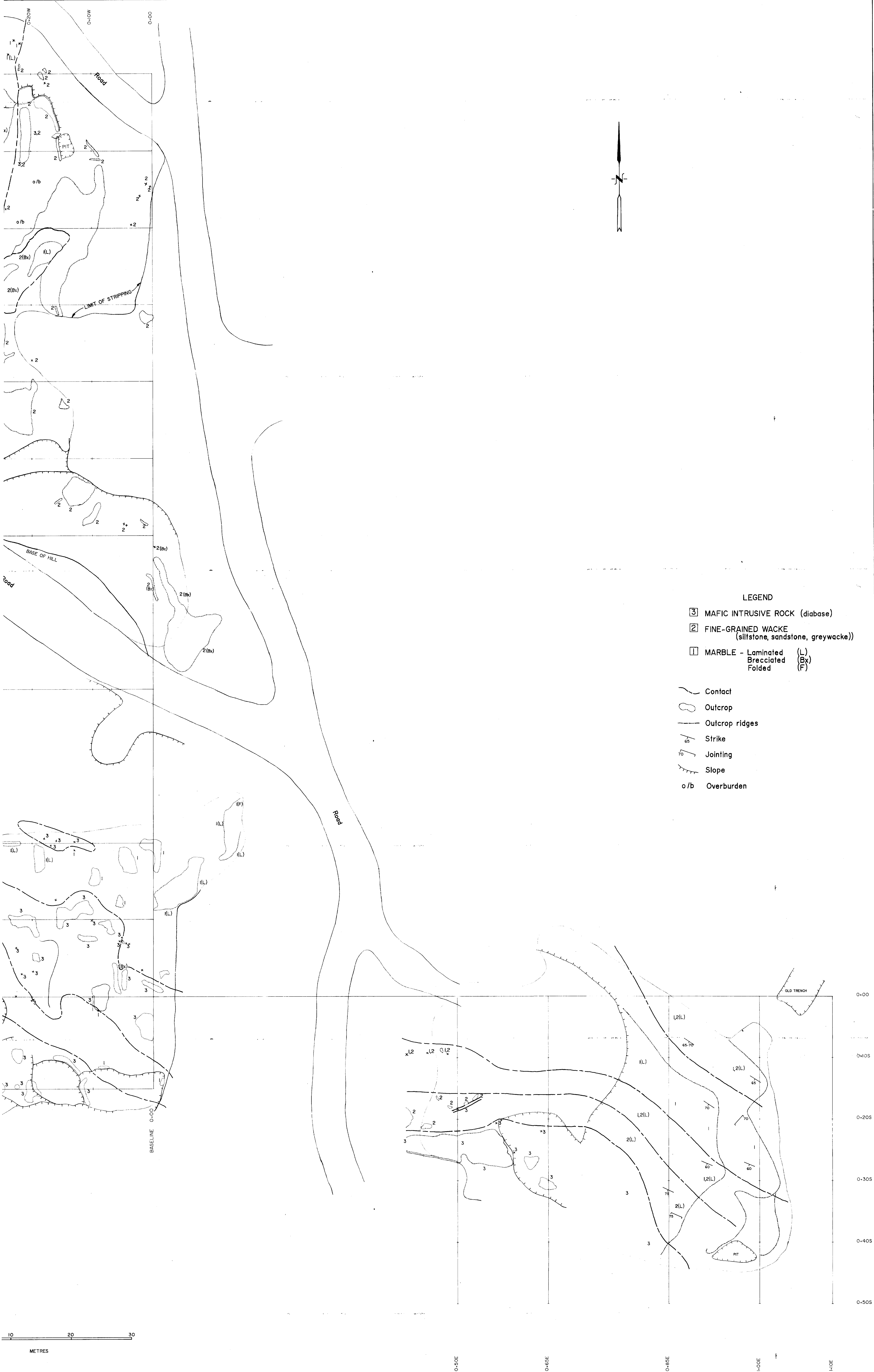


210

NORMAN TOWNSHIP

ZONE 17

66-07



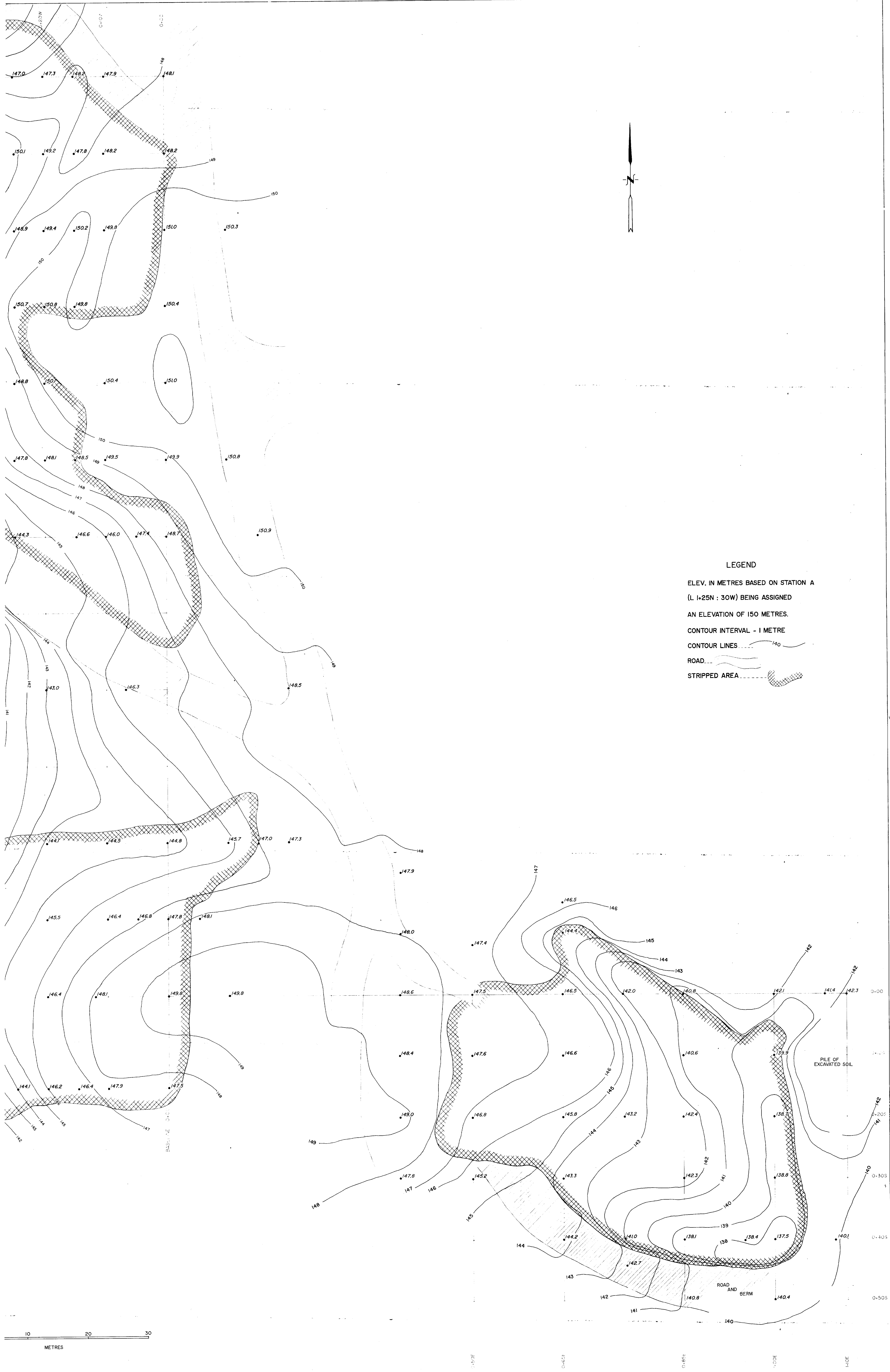
LEGEND

- ③ MAFIC INTRUSIVE ROCK (diabase)
- ② FINE-GRAINED WACKE (siltstone, sandstone, greywacke)
- ① MARBLE - Laminated (L)
Brecciated (Bx)
Folded (F)
- Contact
- Outcrop
- Outcrop ridges
- 65° Strike
- 70° Jointing
- ~ Slope
- o/b Overburden

10 20 30
METRES

0-50E 0-55E 0-50E 0-50E 0-50E 0-50E

0-00
0-10S
0-20S
0-30S
0-40S
0-50S



LEGEND

- ELEV. IN METRES BASED ON STATION A (L 1+25N : 30W) BEING ASSIGNED AN ELEVATION OF 150 METRES.
- CONTOUR INTERVAL - 1 METRE
- CONTOUR LINES
- ROAD
- STRIPPED AREA

0 10 20 30
METRES

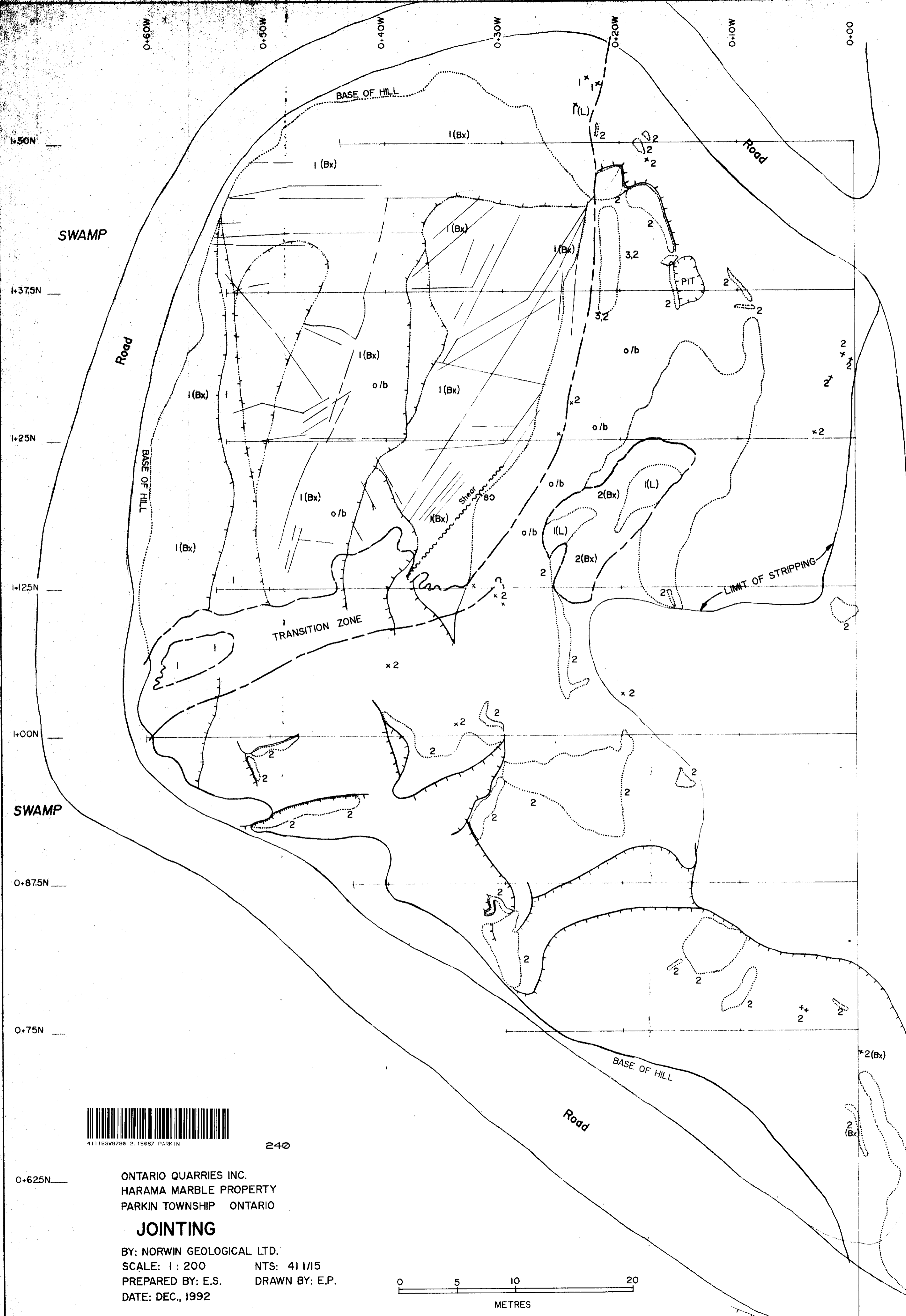
PILE OF EXCAVATED SOIL

ROAD AND BERM

0+00 0+100 0+200 0+300 0+400 0+505

149 148 147 146 145 144 143 142 141 140

142 141 140 139 138 137 136 135 134 133 132 131 130 129 128 127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112 111 110 109 108 107 106 105 104 103 102 101 100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0



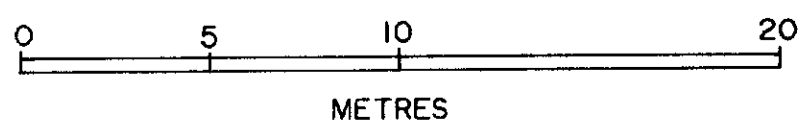
411155W9788 2.15067 PARKIN

240

ONTARIO QUARRIES INC.
 HARAMA MARBLE PROPERTY
 PARKIN TOWNSHIP ONTARIO

JOINTING

BY: NORWIN GEOLOGICAL LTD.
 SCALE: 1 : 200 NTS: 4111/5
 PREPARED BY: E.S. DRAWN BY: E.P.
 DATE: DEC., 1992



0+625N

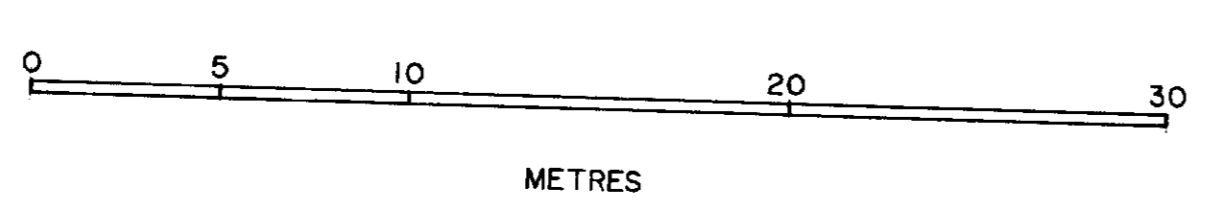
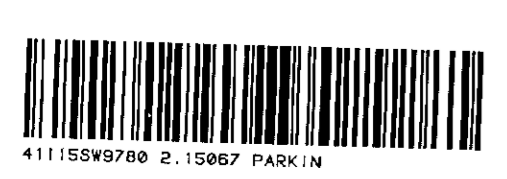
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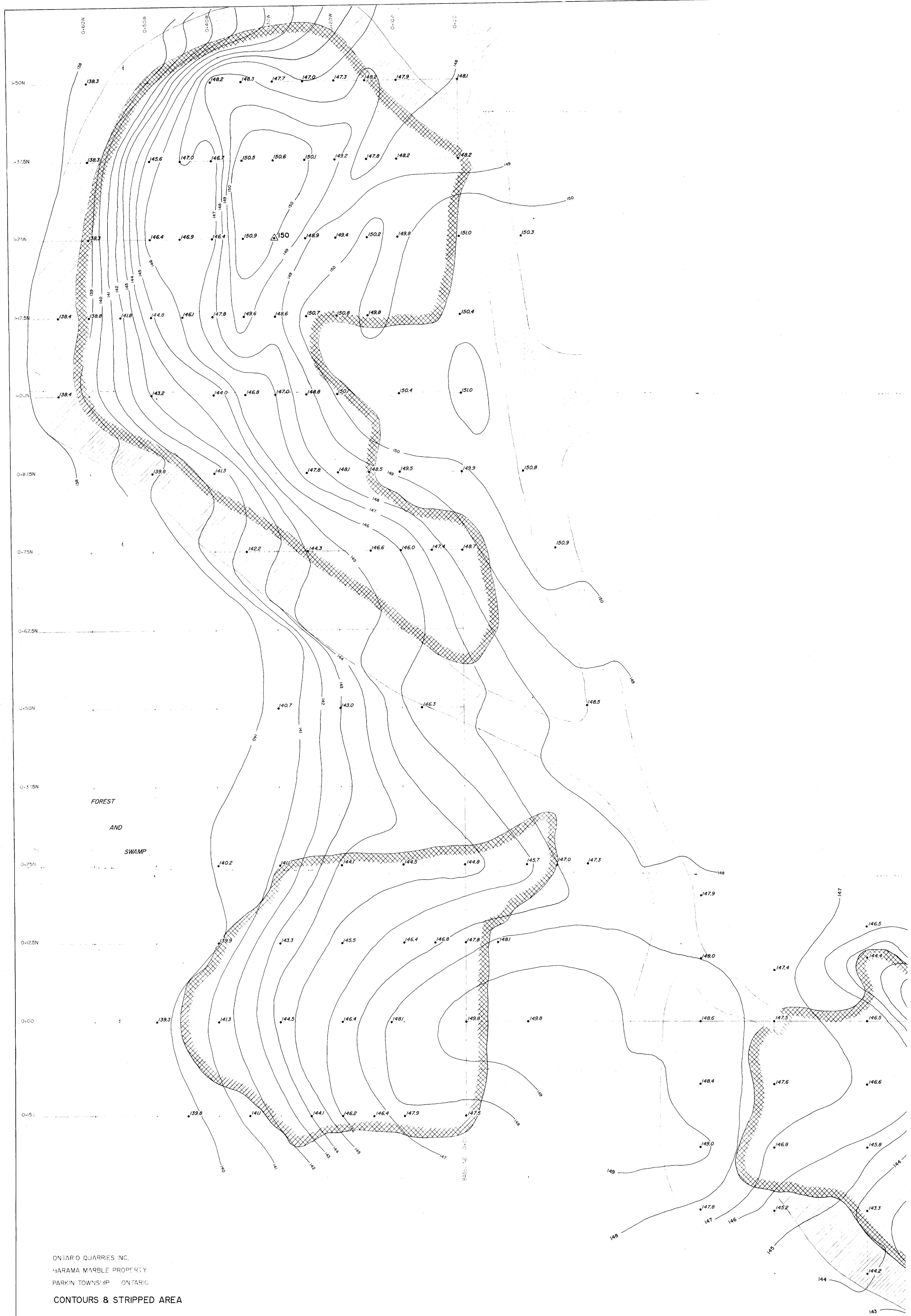


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 HARAMA MARBLE PROPERTY
 PARKIN TOWNSHIP ONTARIO

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ONTARIO QUARRIES INC.
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 PARKIN TOWNSHIP ONTARIO

CONTOURS & STRIPPED AREA

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