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A GEOLOGICAL SURVEY OF THE DIMENSION STONE RESOURCES AND DETAILED SITE PLAN ON CLAIM SO1191585 OF THE WOODS ROAD PROPERTY THE PARRY SOUND DISTRICT OF ONTARIO

by

JAMES R. TRUSLER

LONG.: 80°08′45"W - 80°11′W
LAT.: 45°27′10"N - 45°28′10"N
NTS: 41H/8

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SUMMARY

The Parry Sound area of Ontario is underlain by complex gneisses and migmatites of Middle to Late Proterozoic age which are part of the Ontario segment of the Central Gneiss Belt of the Grenville Structural Province. A working model of thrust plates (called domains and sub-domains) which are separated by ductile thrust faults and moved in a northwesterly direction upon each other has been postulated by Davidson et al (1982). Easton (1992) has improved this model in his synopsis using a hierarchy of terranes and domains wherein the terranes include domains of similar age which are autochthonous with respect to each other. Age dating has indicated that four of these large scale terranes or plates are stacked on each other with the base being near Sudbury at the Grenville Front and the top being near Kingston.

Despite the recent wealth of scholarly publications a comprehensive geological map has not yet been made available for the area. However, the limited information available has enabled the clear identification of potentially favourable conditions for both flagstone and dimension stone. Several flagstone occurrences cluster along Davidson's thrusts and several potential dimension stone prospects have been identified within the interior of particular domains.

Although one may ordinarily not expect to find dimension stone within tectonite terranes, it is evident that the autochthonous nature of some of the domains combined with annealing effect of later superimposed amphibolite facies metamorphism preserved large competent blocks of migmatites and gneisses.

As a result of mapping dimension stone potential, and sawing and polishing specimens from many prospects. Seven properties in the Britt domain, and one in each of the Rosseau and Moon River domains have been staked and mapped by the writer resulting in the definition of a large number of potential quarry sites. The nineteen claim unit Woods Road property is one of these properties.

The property is underlain by the Bolger megacrystic granite pluton which comprises biotite-amphibole migmatite, tonalite and coronitic metagabbro. Thinly laminated biotite migmatite and felsic biotite migmatites are flat lying with profuse, uniform intrafolial folds having SSE plunging hinge lines on SSE dipping axial planes. Joints are widely spaced and several areas having very large resources could be developed for dimension stone on the property. Several areas on the property warrant site planning, detailed geological mapping and core drilling.

The bulk of the property was mapped geologically in 1993, and a report was submitted for assessment purposes at that time. Adjoining claim SO1191585, formerly part of a claim group held by 1886 Holdings Ltd., became available and was staked by the writer in October, 1994. A high percentage of this claim is underlain by uniform migmatites from which large 30 tonne dimension stone blocks could be recovered. The claim was mapped on a 1:5,000 scale for its dimension stone potential in 1995. It was determined that priority site for a quarry on the Woods Road property underlies this claim. Consequently a small 100 metre square location within the north half of lot 7, concession V was mapped on a scale of 1:509 using a pen notebook computer and Field Notes™ software.

A 150 kg sample was taken from the site and a series of ASTM tests were run on a cut sample set by Inchcape Testing Services. The test results were satisfactory and are being submitted in a report by Inchcape. The program of stripping and drilling has been deferred until at least April, but the detailed map will be used for an effective estimate of cost and waste factors in the test quarrying.

Test quarrying is being planned to commence later in 1996 and may involve removal of up to 3,000 tonnes from the one site.

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INTRODUCTION

In 1991, the writer commenced a project to evaluate the flagstone and dimension stone resources of the Parry Sound area. At the same time efforts by former Ministry of Northern Development and Mines geologists, principally Chris Marmont and Dave Villard, were being made to outline the substantial potential for these stone resources and make the public aware of the opportunity. In 1992, the regional investigation of flagstone resources by the writer proved discouraging. It was decided late in the field season to focus solely on the dimension stone potential.

By the end of 1992, many prospective dimension stone sites had been identified by either government publications or by the writer's prospecting. Nine of these dimension stone properties have now been staked by the writer, and an initial evaluation of each property involving geological mapping of the outcrops at a scale of 1:5,000 has been completed. The work provides an initial evaluation of potential quarry sites on each property. The project has been supported by the Ontario Prospector's Assistance Program in both 1992 and 1993.

In July, 1992 and July, 1993, the Woods Road property was staked for its dimension stone potential. Geological mapping was carried out in 1993. In the meantime an adjacent property being tested by Pacific Granitestone Ltd. lapsed and the writer staked four claim units in October, 1994 (claim1191585). This report is the result of mapping of claim 1191585 on a 1:5,000 scale and further the mapping of a selected site on a scale of 1:509 on computer. The map in the back pocket combines the results of mapping in both 1993 and 1995 and is also being submitted with the final report for the OPAP grant in 1995.

The format of the geological report is formulated in compliance with assessment submission requirements.

LOCATION AND ACCESS

The property is located in Carling Township, Parry Sound District, Southern Ontario Mining District, and Sudbury District Regional Geologist's area approximately 150 miles (240 km) north of Toronto (Figure 1). The property is bounded by longitudes 80°11'W on the west and 80°08'45"W on the east and latitudes 45°27'10"N on the south and 45°28'10"N on the north. The corresponding UTM co-ordinates in metres are 563,335 on the west, 566,838 on the east, 5,033,295 on the south and 5,035,210 on the north. The property is within National Topographic System area 41H/8 and is recorded on claim map M2297.

The Woods Road property is traversed by Hwy 69 some 13 km north of Parry Sound and can also be accessed by Station Road two kilometres north of its junction with old Hwy 69. The Canadian Pacific rail bed also traverses the property. Large portions of the property are essentially flat giving virtual access to 80% of the property using four wheel drive vehicles and 20% of the property in two wheel drive vehicles.

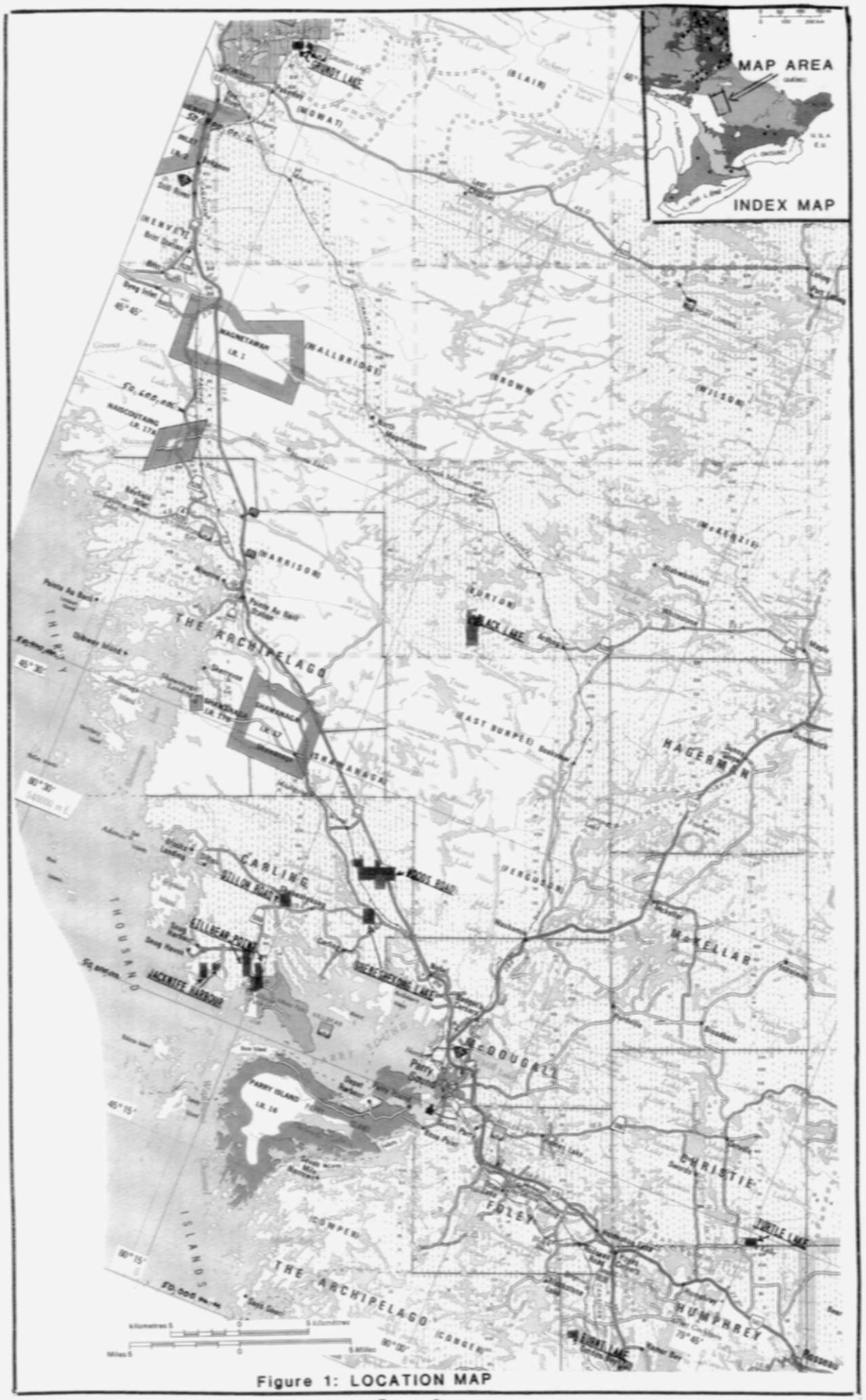


Figure 1: LOCATION MAP

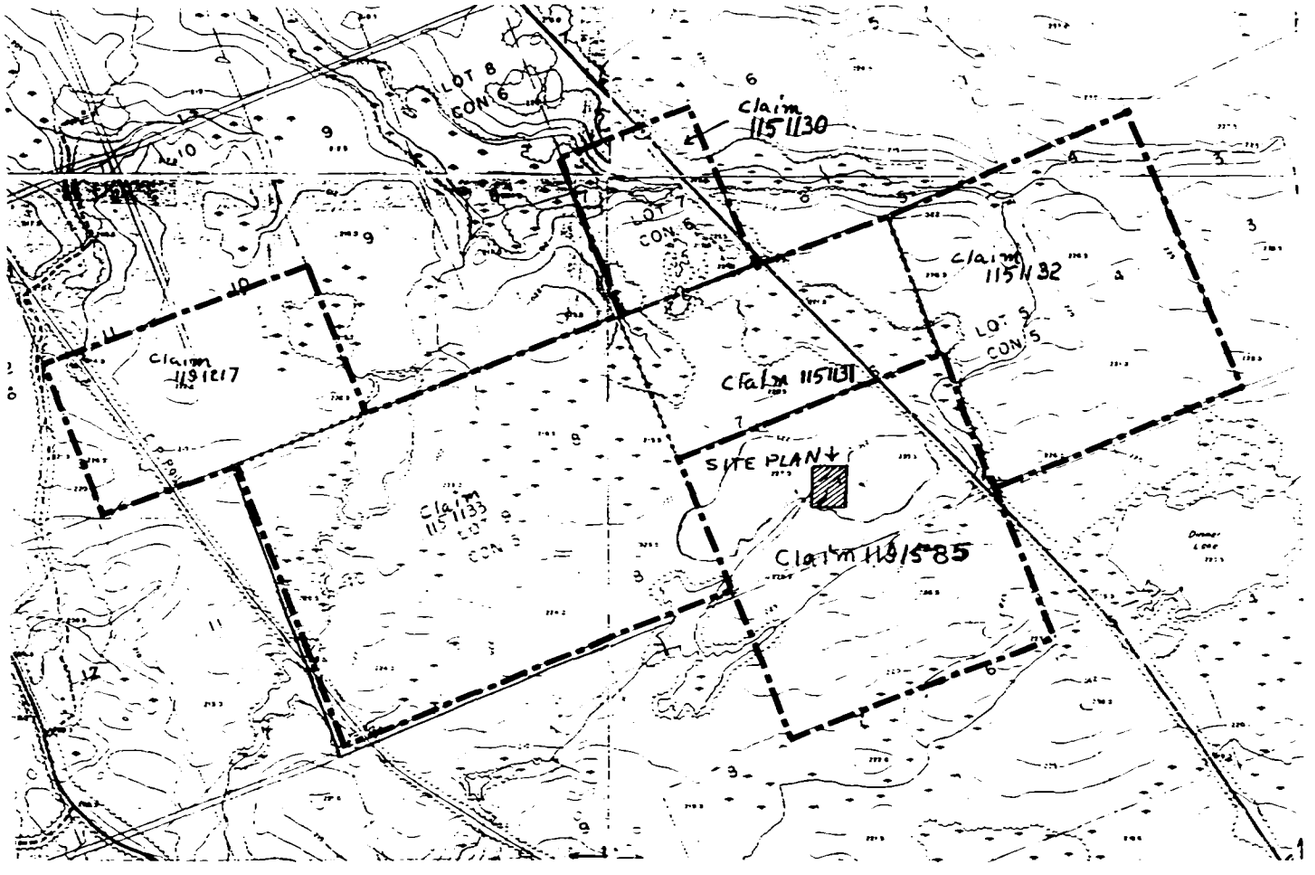
PROPERTY

The Woods Road property comprises approximately 947 acres and is more particularly described in TABLE 1 (Figure 2).

Assessment will be filed for the current work on the claims, and it is anticipated, as a result, that sufficient credits should be available to keep the entire claim group in good standing for some three years from the date of submission.

TABLE 1: WOODS ROAD PROPERTY

Claim No	Township	Lot	Conc.	Area	Recording Date
1151130	Carling	S/2 7	VI	50 ac	Aug. 11, 1992
1151131	Carling	N/2 6,7	V	100 ac	Aug. 11, 1992
1151132	Carling	4,5	V	200 ac	Aug. 11, 1992
1151133	Carling	8,9,10	V	300 ac	Aug. 11, 1992
1191217	Carling	S/2 10,11	VI	97 ac	July 22, 1993
1191585	Carling	S/2 6, 7	V		
		N/2 6, 7	IV	200 ac	Nov. 18, 1994



Scale: 1:20,000
Figure 2: Property Map

DATES WORKED METHODS USED ON CURRENT PROJECT

Preparation work on the project commenced in September, 1995, the field work commenced on Oct 5, 1995 and the map drafting and report writing was completed on January 27, 1996. Actual work days for assessment purposes break down as follows:

Woods Road Property: Claim SO1191585.

Preparation: Sept. 28,Oct. 3, 26,30,31, Nov.1,2,7, 9,10 &14, 1995(11 days)
Field:Oct 5, 6, 21,26, Nov. 22 & Dec. 29, 1995 (6 days)
Drafting: Jan.15-17, 1996 (3 days)
Reporting: Dec. 6, 20, 21, 22, 30, 1995, Jan. 26, 27, 1996 (7days)
Sample Preparation and Testing: Dec. 5, 12, 15, 1995 and January 8, 1996 (2½ days)

Preparation for field work involved production of 1:5,000 enlargements of data from Ontario Base Maps and 1:30,000 air photographs. A grid was overlain on the maps, and stations for recording observations at approximately 100 metre centres were plotted and coded. Due to the high percentage of outcrop, visual control was feasible in almost all cases, but traversing by pace and compass from known sites was sometimes supplemented by the use of a rangefinder. The magnetic declination used in the field work is 10°-15'W.

At each station rock types with variations were noted generally with a visual description of colour and textures. Foliations were described and measured where possible. The main emphasis was in measurement of joints and their separations. In this respect at each station joints were observed within a 50 to 100 foot radius of the station. The attitude of each joint was recorded with the minimum and maximum spacing observed and the average spacing estimated.

Observations were directly recorded on a dictaphone in the field. The verbal record was later transcribed to paper notes. Drafting of the data onto maps was later done from the paper notes.

After selecting several candidate sites for 1:500 mapping, the air photo enlargements were scanned at high resolution (600 dpi) and digitized as a tif file for use with digitized Ontario Base maps in a pen notebook computer. Field Notes™, the Windows™ based software was used directly in the field to coordinated the image files created from digitized air photos, the vector file layers of OBM data, the database and drawing input layers. The field data was directly output on a Canon BJC-600 Bubble Jet Printer. The digital data has been saved as dxf and dwg files for use in AutoCAD™.

Two difficulties were experienced with the system. Initially the image scanned was over a large area so that the resolution of the image file was poor below a 1:2000 scale. This was remedied by scanning select portions of the air photo enlargements at 600 dpi. The second difficulty was that the computer functioned poorly in freezing weather. That was remedied by converting the tif files to gif files using Graphic Workshop and massaging these files in L View Pro to produce a high resolution image at 1:500 scale. This image was printed out on the Bubble Jet Printer and used for direct field mapping in the cold weather. The data was then transcribed onto the computer in the evenings.

Samples comprising 150 kilograms were collected from the area of the site plan and transported to Smith Monument Co. for sawing. Most of the samples were cut to specifications under the direct supervision of the writer and then transported to Inchcape Testing Services. The writer attended on the sample testing for half a day.

PREVIOUS GEOLOGICAL WORK

A traverse of the shore of Georgian Bay was made by Alexander Murray in 1848, and he gives a brief account of the geology of the shoreline (Murray 1848, p.45,46). The shoreline of Georgian Bay was again examined by Robert Bell in 1876 (Bell 1876, p.198-207). The Huntsville -Bracebridge area was investigated by W.A. Parks (1900, p.121-126), and brief notes on the geology are given. Further field work was done in the area in 1905 by T.L. Walker (1905, p. 84-86). The International Geological Congress had a field excursion in Parry Sound area in 1913. Some local geological features are described by T.L. Walker (1913, p. 98-100). The adjacent portion of the Woods Road property was mapped in 1993 by Trusler (1993j). As well claim SO1191585 was part of a property previously held by 1886 Holdings Ltd. and mapped by Lashbrook (1990a).

The first comprehensive reconnaissance mapping in the area was done by Satterly (1942) who visited all the local known mineral deposits. Satterly (1955) also mapped Lount Twp. in detail showing for the first time the existence of mappable units in the Parry Sound area. Hewitt (1967) was able to accurately identify the complexity of petrographic units and correlate some of these in a reconnaissance mapping program.

Greater interest in resolving the geological complexity of the area was kindled by Lumbers who was progressively mapping Grenville terranes in Ontario from the Grenville Front to the south Lumbers (1975) and by Wynne-Edwards (1972). Wynne-Edwards suggested the first interpretive framework for the Central Gneiss Belt of the Grenville Structural Province. The controversy which arose from Wynne-Edwards "Sea of Gneisses" lead a profusion of other researchers into the area who have conducted specific detailed and reconnaissance mapping and synoptic studies. Since 1972 M. W. Schwerdtner and students have concentrated on resolving many of the structural geology problems of the area contributing a great amount to the understanding of the geology of the Central Gneiss Belt.

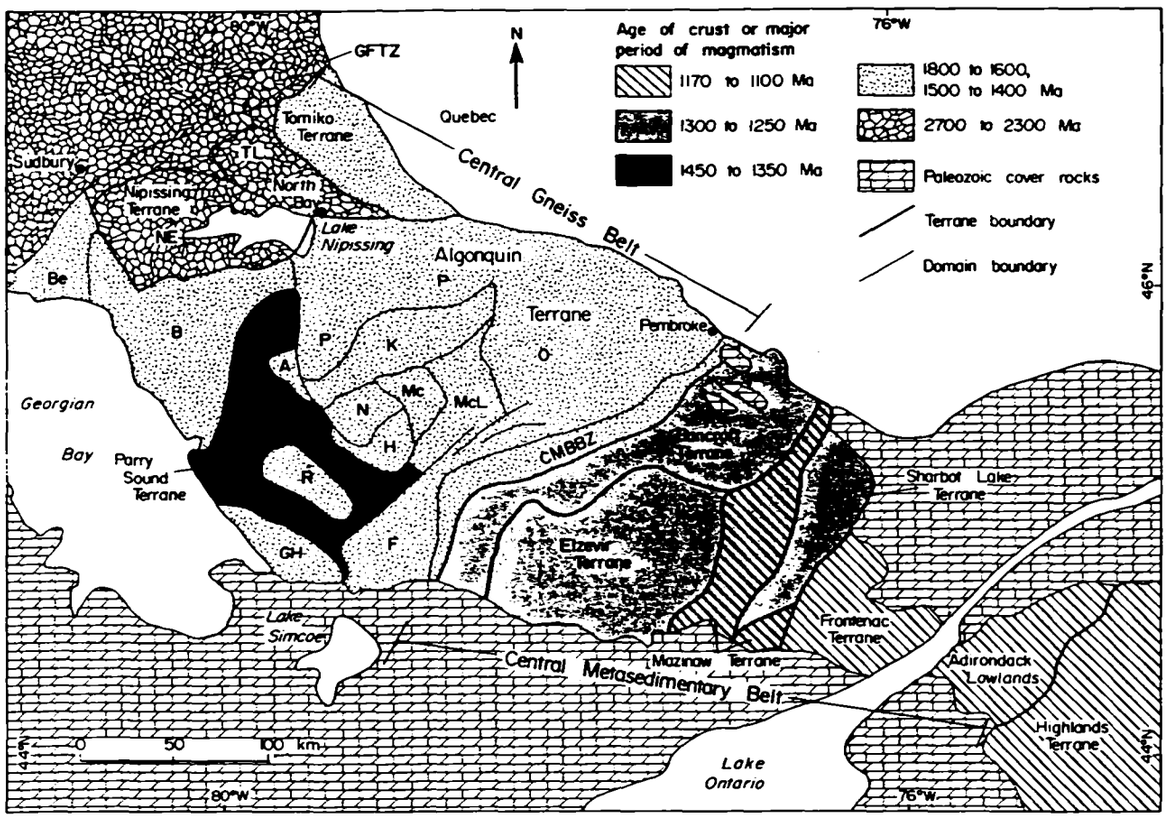
The framework for all current work in the area was provided by Davidson et al. (1982). This has been modified subsequently by Davidson and other workers, and Easton (1992) has synthesized this work eloquently. The tectonic terranes and domains separated by shear zones have become imbedded in the literature.

REGIONAL GEOLOGY

The Muskoka-Parry Sound region is part of the Ontario segment of the Central Gneiss Belt in the Grenville Structural Province (Wynne-Edwards 1972). No detailed geological map of the whole region, which was included in a recent major project on the Ontario Gneiss Segment by the Geological Survey of Canada, has been published to date.

Recent mapping by Davidson et al. (1982) has led to a tectonic model in which the thickening of Proterozoic crust is accomplished by deep-level thrusting and

associated reverse ductile shearing (Davidson 1984a, 1984b). According to this model, major crustal slices (called domains and sub-domains, (see Fig.3)) have been translated over large distances toward the margin of the Superior Structural Province.



Abbreviations

A	Ahmic Domain	GH	Go Home Domain	NE	Nepewassi Domain
B	Britt Domain	H	Huntsville Domain	O	Opeongo Domain
Be	Beaverstone Domain	K	Kiosk Domain	P	Powassan Domain
CMBBZ	Central Metasedimentary Belt Boundary Zone	Mc	McCraney Domain	PS	Parry Sound Domain
		McL	McClintock Domain	R	Rosseau Domain
F	Fishog Domain	MR	Moon River Domain	S	Seguin Domain
GFTZ	Grenville Front Tectonic Zone	N	Novar Domain	TL	Tilden Lake Domain

Figure 3: Lithotectonic terranes,domains Central Gneiss Belt (Easton, 1992)

This view has been further modified by some more local studies by Hanmer (1988) and Schwerdtner (1987). According to Hanmer the southeast to northwest thrusting was initiated at approximately 1160 Ma and continued for 100 Ma. However he claims that subordinate northeastward thrusting was coeval and that late synmetamorphic extensional shears cut these major thrusts and thrust sheets but are in turn cut by late movement on the thrusts. He further alludes to the comparison to the structural style of the Central Gneiss Belt and the Himalayas suggesting that the Grenville exposes the architecture and processes presently active in the roots of younger mountain belts. Schwerdtner's

observations agree with Hanmer's respecting a northeasterly component to deformation which he invokes to explain north-south buckle folds. However, Schwerdtner observed that not all foliations can be explained by the thrust model and that three sets of folding are superimposed and cross the domain boundaries. He claims that all the structural facts can be explained without large differential translations of crustal slices and most discordances in the regional gneissocity could have been created by décollement and repeated buckling.

Easton (1992) synthesized all previous studies stating that, "Recorded within the Grenville Province is the tectonic evolution of the southeast margin of Laurentia during the Mesoproterozoic. The Grenville Orogeny has overprinted the structural trends and metamorphic effects of the Archean and Paleoproterozoic geological province of Laurentia. It is now generally accepted that this orogenic event or events involved northwest directed thrusting and imbrication of the entire crust, presumably as a result of a terminal collision at about 1100 Ma. with a continental landmass somewhere to the southeast.

The Central Gneiss Belt consists mainly of upper amphibolite and local granulite facies, quartzo-feldspathic gneisses, chiefly of igneous origin with subordinate paragneiss. Distinctive lithotectonic terranes, some further subdivided into domains, have been identified within the Central Gneiss Belt. The terranes and domains are distinguished by differences in rock types, internal structure, metamorphic grade, geological history, and geophysical signature and are bounded by zones of intensely deformed rocks traceable for tens of kilometres."

The Algonquin terrane consists of 1800 to 1600 Ma gneisses intruded by 1500 to 1400 Ma granitic and monzonitic plutons that may represent an extension of the Eastern Granite-Rhyolite Province. Although imbricated by later thrusting the Algonquin terrane is probably parautochthonous. The Britt and Rosseau domains are part of the Algonquin terrane.

The Britt Domain (Figure 4) comprises a complexly deformed and metamorphosed series of rocks. Although some of the rocks are metasedimentary in origin the preponderance of the rocks were originally plutonic, but have been changed by dynamic and thermal metamorphism. The final stages of this metamorphism appear to have annealed the rock into a compact and durable material having some relict textures and many overlapping and lively features. Dips of these rocks are generally flat to 10°to the southeast. Some units are entirely composed of isoclinal sheath folds whereas other units are evidently deformed megacrystic granitic plutons.

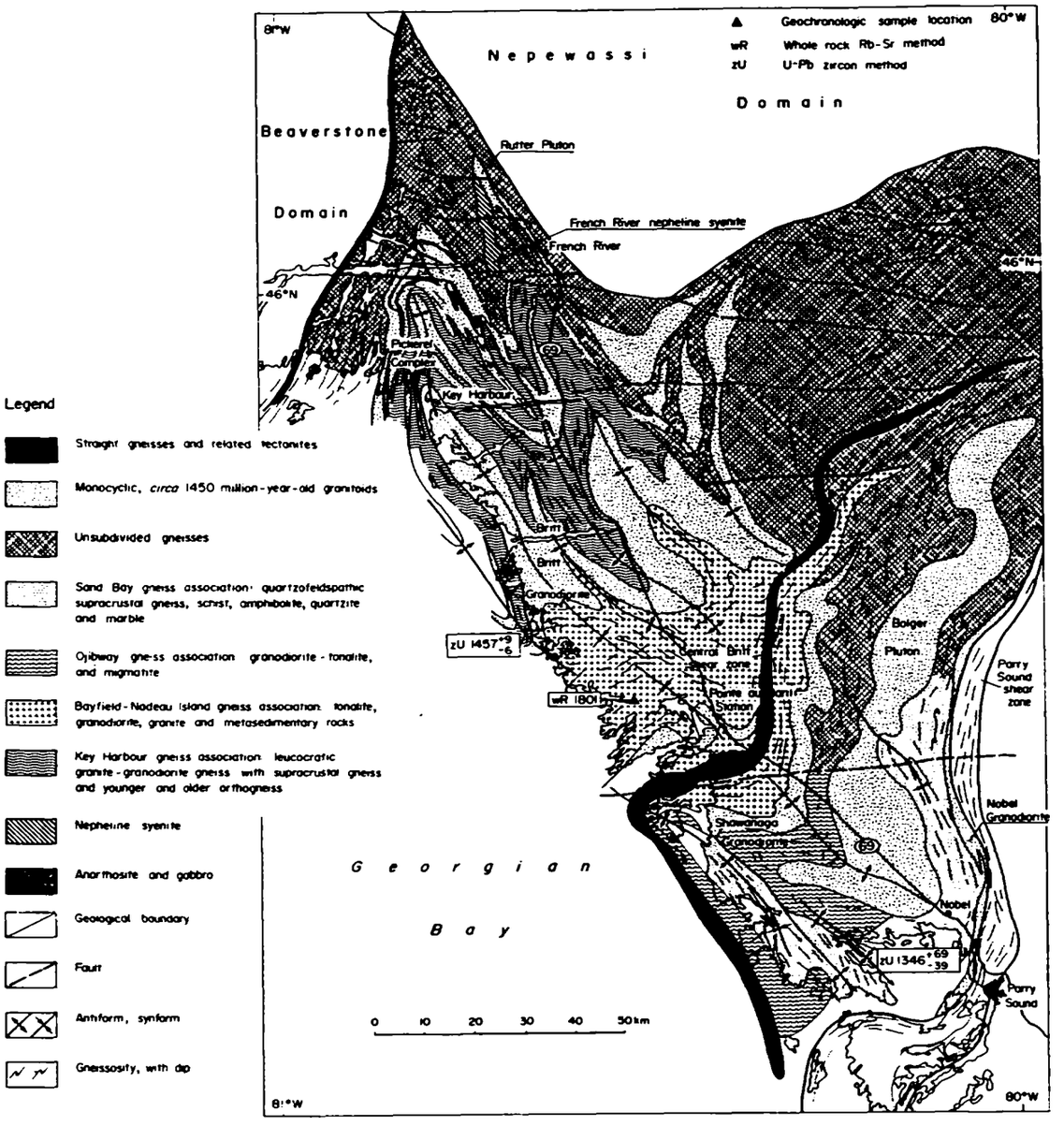


Figure 4: Geology of the Britt Domain (Easton (1992))

The Parry Sound and Moon River domains consist chiefly of juvenile crust 1450 to 1350 Ma in age and are parallochthonous. The Parry Sound domain rocks comprise dense high metamorphic facies rocks (amphibolite and granulite facies) which are emergent on the other domains. The rocks in the Parry Sound domain are dominantly amphibolite and pyroxenite gneisses which strike to the north east and dip 20°-60°to the southeast (at a much steeper angle than the postulated shear couple accompanying thrusting). The bedrock largely comprises veined, banded and homogeneous pink and grey

migmatitic gneisses produced by injection and granitization of metamorphic gneisses of various types. The rocks are mainly of upper amphibolite and granulite metamorphic facies.

Hypersthene-bearing charnokitic gneisses are present in the area. The origin of much of the amphibolite gneiss is obscure. Some which is associated with bands of marble is thought to be paragneiss whereas some is proximal to large bodies of gabbro and anorthosite and thought to be orthogneiss. Trusler and Villard (1980) found evidence that some of the mafic and felsic rocks are of volcanic origin. The high metamorphic grade of the rocks is attributed to a deep seated origin possibly involving underplating at an early stage.

The Bolger pluton in the Britt domain is dated at circa 1450 Ma and underlies the Black Lake, Woods Road and Shebeshekong Lake properties (Figure 4). The Dillon Road property is underlain by both the Bolger pluton and the Ojibway gneiss association. The Killbear Point and Jacknife Harbour properties are underlain by the Sand Bay gneiss association. The Grundy Lake property is underlain by an unnamed V-shaped pluton believed to be circa 1450 Ma.

Comparable regional maps do not cover areas about the Turtle Lake property and the Burnt Lake property which are situated in the Rosseau and the Moon River domains respectively.

DESCRIPTION OF ROCK UNITS

Since no comprehensive, detailed geological maps have been produced for the Parry Sound area, none of the previous workers have made an attempt to construct a table of rock units. None of the rock units have been correlated across domain boundaries. Trusler and Villard made an attempt to derive a Table of Rock units for the Parry Sound - Sans Souci area in 1980 and some of that information is used here to produce Table 2. These Formation names are not used in the mapping since these have been inadequately defined for inclusion in the literature. However, the area mapped by Trusler and Villard covers parts of the Britt, Parry Sound and Moon River domains and the lithologic variety is well represented.

The Sans Souci-Killbear Point Group correlates well with the Sand Bay gneiss association of Figure 4 which underlies the Killbear Point and Jacknife Harbour properties. Similar rocks which are younger underlie the Burnt Lake property. The Ojibway gneiss association which underlies part of the Dillon Road property correlates with the tonalite in Table 2. The remaining sites are megacrystic granites or migmatitic derivatives of megacrystic granites classified under quartz monzonite in Table 2.

The rocks on the property have been subdivided into mappable units as follows: biotite-hornblende migmatite, gabbro, and tonalite.

The biotite-hornblende migmatite is represented by quartzo-feldspathic rock ranging from less than 5% to greater than 40% mafic minerals and containing syntectonic and late tectonic pegmatitic material in varying proportions and thicknesses. The grain size ranges from fine to coarse with the more neosome phases generally being coarser. In any one area and especially in individual layers the mineralogy and textures are uniform. The mafic mineral tends to be biotite dominant. The gneissic fabric is very thinly laminated in some areas but ranges to thickly layered in other areas and is typically variegated pink and various shades of grey. However some areas are underlain by laminated gneisses variegated only in shades of grey. A pervasive feature of this rock is a 5-10% translucent red speckle caused by hematite on grain boundaries. Profuse, fine scale, intrafolial folding with a slight plunge to the southeast and shallow southeast dipping axial planes is a dominant feature of these rocks.

The tonalite is generally a gneissic, medium to coarse grained, thinly to thickly layered rock generally variegated light grey and greyish black and containing 20 to 40% mafic minerals overall with amphibole being the dominant mafic mineral. Usually approximately 10%, but occasionally up to 50% of the rock unit comprises introduced or anatectic, syntectonic quartzo-feldspathic material. Pinch and swell characteristics are common especially in neosome portions of this rock.

The gabbro is represented both by a very coarse grained, greyish black, coronitic metagabbro which has an ophitic and oikocrystic texture and amphibolite gneiss which is a coarse grained amphibole-plagioclase rock which is thinly to thickly layered, variegated medium grey and dark greyish black and very rarely contains a small amount of syntectonic material.

TABLE 2: TABLE OF ROCK UNITS FOR THE PARRY SOUND AREA

PHANEROZOIC

CENOZOIC
Quaternary
Recent
swamp, lake, and stream deposits

Pleistocene
bouldery, cobbly and silty sand till, silt, sand, pebble gravel, and cobble gravel
_____Unconformity (possible regolith)_____

PALAEOZOIC

Cambro - Ordovician
Calcareous fracture fillings
_____Unconformity_____

PRECAMBRIAN

Late Precambrian
Late Breccias- thin mylonites; quartz veined dilatant breccias of unknown origin

Late Pegmatite
massive granite pegmatite dikes
_____Intrusive Contact_____
High Rank Regional Metamorphism

Middle to Late Precambrian

Tectonites
Mylonite: very fine grained massive to thinly to thickly laminated rock frequently exhibiting compositional and graded layering and containing rotated porphyroclasts; generally marginal to schistose and gneissic rocks; matrix minerals generally are siliceous and comprise quartz, microperthite, biotite and/or amphibole and/or pyroxene

Tectonic Breccia: brecciated rock comprising lithic clasts within a fine to coarse grained schistose to gneissic cataclastic matrix with quartz, perthitic microcline, biotite and/or amphibole and/or pyroxene
_____Sheared Contact_____

Syenite and Monzonite Suite Intrusive Rocks
pink to grey and green, massive to porphyritic to lineated and gneissic biotite, hornblende-biotite and hornblende syenite and monzonite, charnokite and mangerite.
_____Intrusive Contact_____

Anorthosite Suite Intrusive Rocks

Anorthosite- massive to gneissic labradorite anorthosite, andesine anorthosite with up to 10% pyroxene, and gabbroic anorthosite

_____Intrusive Contact_____

Gabbro- massive to gneissic fine to coarse grained, black pyroxenite, anorthositic gabbro and gabbro

_____Intrusive Contact_____

Tonalite- massive to strongly lineated and gneissic light to dark grey pyroxene tonalite and diorite with minor gabbro

_____Intrusive Contact_____

Quartz Monzonite - Syenite Suite Intrusive Rocks

massive to gneissic medium to coarse grained biotite quartz monzonite, pyroxene quartz monzonite and foliated granite pegmatite, pyroxene syenite and foliated syenite pegmatite; megacrystic granite and derivatives.

_____Intrusive Contact_____

Parry Sound Group Metavolcanic Rocks[1]

Spider Lake Formation[1]: intermediate to felsic rocks, medium to coarse grained generally porphyritic, massive to gneissic rocks containing quartz, feldspar, almandite, amphibole and pyroxene; some fragmental units present.

Parry Sound Formation[1]: mafic, medium to coarse grained, schistose to gneissic, pyroxene-feldspar and amphibole-feldspar bearing massive and fragmental rock

Sans Souci - Killbear Point Group Metasedimentary Rocks[1]

Unsubdivided: thinly laminated to extremely thickly layered; interlayered medium to coarse grained schists and gneisses; lower amphibolite to granulite facies; intercalated with metavolcanics above

Killbear Point Formation[1]: thinly to extremely thickly layered, schistose and gneissic medium to coarse grained biotite, quartz, feldspar rocks

Bateau Island Formation[1]: very thickly layered, medium to coarse grained felsic gneiss with mafic biotite and amphibole rich parting planes; variously interpreted as an arkose or granite; cataclastic textures.

[1] The formation names have not been accepted and criteria for introduction of these names into the literature have not been fulfilled. Identification as to origin is tentative

PROPERTY GEOLOGY

The property principally is underlain by felsic rocks of unusual character of Middle to Late Precambrian age. The main unit on the property is the biotite-hornblende migmatite. Although, the progenitor of this rock is megacrystic granite, the only macroscopic feature evidencing its origin on the property is the relative uniformity of texture and chemical composition. The rocks have been subjected to intense small scale folding, anatexis or syntexis and polyphase tectonism and metamorphism. The final stage of amphibolite facies metamorphism appears to have succeeded any penetrative tectonic influences.

The individual rock units were described under the heading DESCRIPTION OF ROCK UNITS on Page 9 of this report. The biotite-hornblende migmatite is a granular aggregate of equant to elongated grains of quartz, feldspar and biotite, averaging over 10% mafic minerals and containing syntectonic and rarely, late tectonic pegmatitic material exhibiting cataclastic textures. The pegmatites occur in varying proportions and thicknesses. Evidently, this unit has evolved through polyphase metamorphism and tectonism with a final stage of amphibolite facies metamorphism annealing the rocks. The grain size ranges from fine to coarse with the more neosome phases generally being coarser. In any one area and especially in individual layers the mineralogy and textures are uniform. The mafic mineral tends to be biotite dominant, but some large tracts are hornblende dominant. The gneissic fabric is very thinly laminated in some areas but ranges to thinly layered in other areas and is typically variegated pink and various shades of grey, but in several areas is variegated light grey and greyish black. Minor scattered red hematite specks occur throughout this unit. Some of the pink and grey banded varieties of this rock contain less than 5% biotite and some light grey and greyish black varieties contain less than 10% biotite. Most of the claim mapped in this program has these features in large quarriable blocks.

The tonalite comprises a gneissic, medium to coarse grained, thinly to thickly layered rock, variegated light grey and greyish black and containing 20 to 40% mafic minerals overall with amphibole being the dominant mafic mineral. It is a medium to coarse grained, thinly to thickly layered rock containing significant variation in texture and composition of the syntectonic and late tectonic pegmatitic material. Some portions of the unit contain rich biotite segregations which weather low although amphibole is the main mafic mineral. It comprises usually approximately 10%, but occasionally up to 50% introduced or anatectic, syntectonic quartzo-feldspathic material. Pinch and swell characteristics are common especially in neosome portions of the gneissic rock. One large outcrop of this material is potentially able to be quarried for dimension stone. The tonalite does not form a mappable unit on claim 1191585.

Gneissic foliations were measured at each station where possible. Despite some exceptions, the general pattern displayed is of a relatively structurally uniform sequence. The gneissic foliations are very strong on the property, but the attitude is predominantly flat lying to slightly southeast dipping. The biotite-hornblende migmatite, in particular, contains profuse ubiquitous, intrafolial folding which plunges at approximately 10°

to the south-southeast and has gently south dipping axial planes.

The average sub-horizontal joint spacing, based on 51 data (27 new data), is 2.5 metres and the average vertical joint spacing based on 532 data (137 new data) is four metres. The statistical plot of vertical joints was constructed using 614 data(158 new data) and gave a high degree of scatter. The main joint direction is 155° and 35% of the data are clustered about this direction from 140° to 180°. A lesser concentration (20%) is clustered from 50° to 85° with local peaks at 55° and 80°. The remainder of the data are scattered with all but one of the five degree segments each containing at least 2% of the data (Map 1).

POTENTIAL DIMENSION STONE SITE

The bulk of claim 1191585 is suitable for extraction of large dimension stone blocks. The site selected for site planning offers an extensive exposed cliff face which will limit the production of waste in the initial quarry test and produce a minimally altered contour (Figure 5). The site is located along the boundary between lots 6 and 7 in the north half of concession 5 and is outlined on Figure 2. The biotite-hornblende migmatite in this location is biotite dominant with 15-20% biotite, is thinly laminated with profuse intrafolial folding, and is variegated medium greyish black and pink. A sample (Woods Road #1) was collected from the cliff face for ASTM tests for water absorption and bulk specific gravity, modulus of rupture and compressive strength. The test results were satisfactory.

The vertical drop within the site plan area is 5 metres, but the entire hill on which it is situate has a relief of 15 metres above the drainage. The site plan area could easily be expanded to the south northeast and southwest to take advantage of the existing cliff face as a quarry working face.

Two vertical joint sets are dominant within the site plan area. The first set includes the cliff with an azimuth from 50°to 55° and a joint separation ranging from 2 metres to over 10 metres. The second set ranges in azimuth between 170° and 180°and generally has joint separations between 2 and 3 metres. This joint set appears to be discontinuous along strike to the south. The gneissic foliation is uniformly striking at 50° and dipping 5° S. A subhorizontal joint set roughly parallels the gneissic foliation. It is apparent that the joint separation on the sub-horizontal set is at least two metres and possibly up to 4 metres. A drill hole is planned to confim this joint separation. The existing data is to be evaluated using AutoCAD™ in order to design the test site and estimate waste factors.

Photo 1 is a view of the site plan area looking northeast. The deciduous trees in the left background are rooted at the foot of the cliff. The picket in the foreground is the planned location of the drill hole. Photo 2 is also a view of the site plan area, but looking southwest along the extensive cliff face.

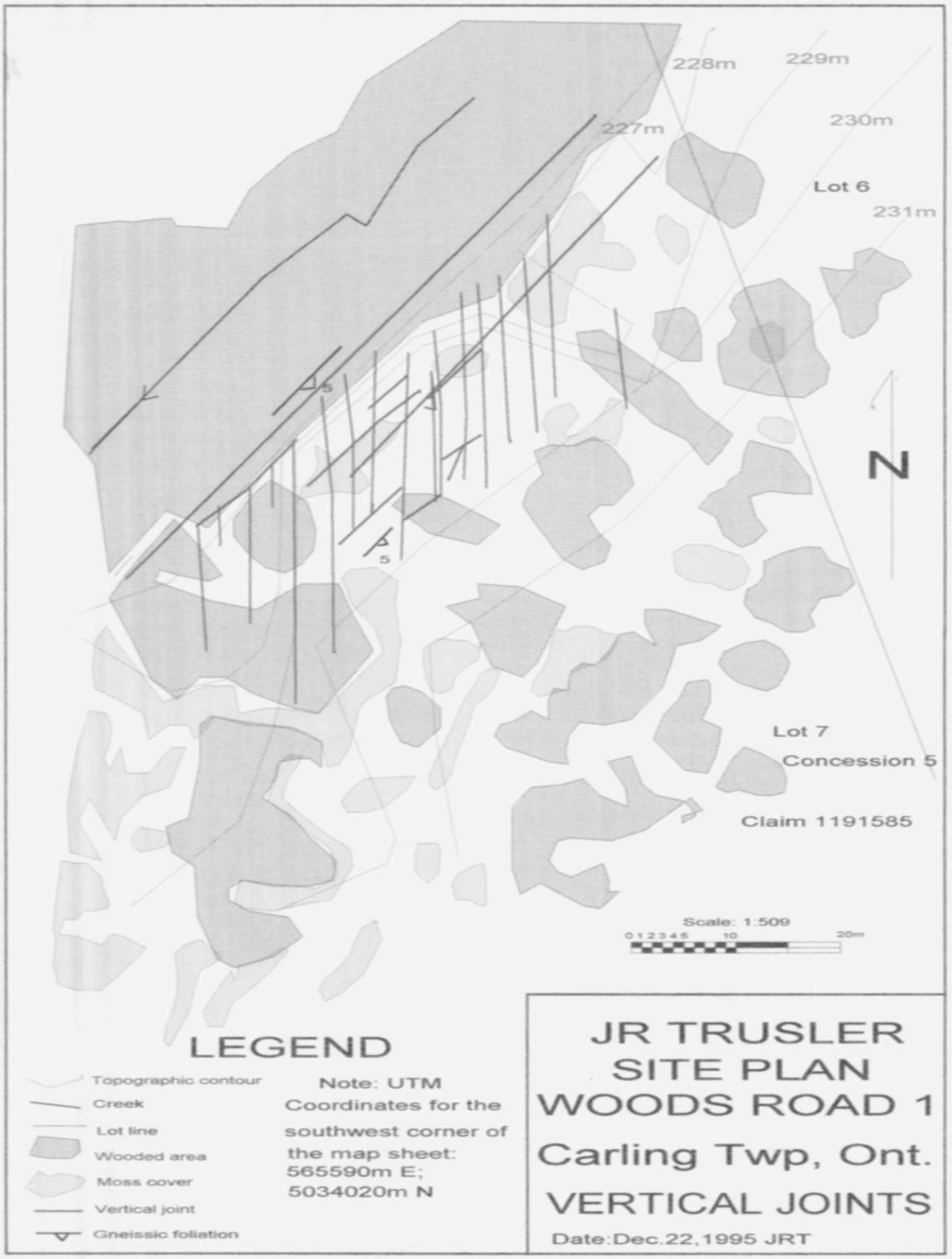

228m
229m
230m
227m
Lot 6
231m
N
Lot 7
Concession 5
Claim 1191585
Scale: 1:509
0 1 2 3 4 5 10 20m
LEGEND
Topographic contour
Creek
Lot line
Wooded area
Moss cover
Vertical joint
Gneissic foliation
Note: UTM Coordinates for the southwest corner of the map sheet: 565590m E; 5034020m N
JR TRUSLER
SITE PLAN
WOODS ROAD 1
Carling Twp, Ont.
VERTICAL JOINTS
Date:Dec.22,1995 JRT

Figure 5

Photo 1 Site Plan area looking northeast. Thinly laminated and folded pink and dark grey biotite-hornblende migmatite; Photo 2 Site Plan area looking southwest from north of map sheet at extensive northeasterly trending cliff face. No sub-horizontal joint is exposed within this 3 metre vertical section for a 160 metre length.

CONCLUSIONS

The Britt domain comprises a complexly deformed and metamorphosed series of rocks. Although some of the rocks are metasedimentary in origin the preponderance of the rocks were originally plutonic, but have been changed by dynamic and thermal metamorphism. The final stages of this metamorphism appear to have annealed the rock into a compact and durable material having some relict textures and many overlapping and lively features.

Nine dimension stone properties were staked in the Parry Sound area, and all have been mapped geologically. Many of the rocks underlying these properties are migmatitic derivatives of granitic intrusions and present a great variety of textures. In some cases it is evident that the paleosome constituent was megacrystic and subsequent neosome phases have distinct compositions and fabrics. The sites were chosen for their attractiveness and the apparent availability of accessible large blocks. The Woods Road property is the largest of these claim groups.

The property is underlain by the Bolger megacrystic granite pluton which comprises biotite-amphibole migmatite, tonalite and coronitic metagabbro. Thinly laminated biotite migmatite and felsic biotite migmatites are flat lying with profuse, uniform intrafolial folds having SSE plunging hinge lines on SSE dipping axial planes. Joints are widely spaced and several areas could be developed for dimension stone on the property, but the area within claim 1191585 is particularly suitable for the large scale removal of large dimension stone blocks. Several areas on the property warrant detailed geological mapping, site planning and drilling. A site plan has been prepared on a portion of claim 1191585 commencing with a map of joints on a scale of 1:509. ASTM tests of specimens from the site were satisfactory. Drilling, and calculation of waste factors in a test quarry are to preceed an effort to finance this next stage.

RECOMMENDATIONS

1. Drilling of the site plan area on claim 1191585 and an assessment of waste and cost factors involved with a quarry test.

2. A quarry test should be permitted and conducted involving the removal of 3,000 tonnes in 30 tonne blocks from the site plan area.

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AUTHOR'S CERTIFICATE

a. This report was prepared by:

James R. Trusler P.Eng.

Principal,
J R Trusler and Associates
143 Temperance St.
Aurora, Ontario L4G 2R5
(416) 727-5084

GEOLOGICAL ENGINEER.

b. Qualifications:

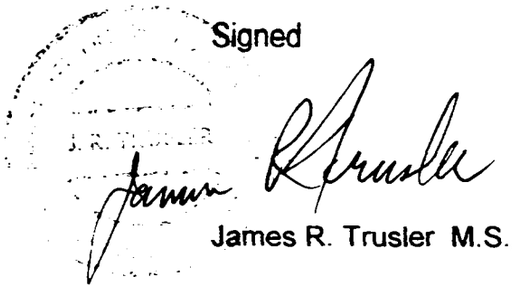
B A Sc - Geological Engineering, University of Toronto, 1967
M S - Geology, Michigan Technological University, 1972
Professional Engineer - Ontario
Fellow - Geological Association of Canada
Member - Canadian Institute of Mining, Metallurgy and Petroleum

c. This report is based on a review of all available relevant data; historical, and geological, on personal involvement as Regional Geologist, Algonquin Region, Ministry of Natural Resources from 1974 to 1980, and on a program of field mapping conducted within the area of this report in 1993. I have personally examined the properties and the surrounding area in the field.

d. I have used my experience gained in geological mapping, the exploration for minerals, visits to most dimension stone quarries in North America, the definition of mineral deposits and the evaluation of properties (over 30 years) in preparation of this report.

e. I hold an undivided 100% interest in the claims mentioned in this report, but do not expect to receive any remuneration for the report or as a result of statements made in this report.

Signed



James R. Trusler M.S., P.Eng.

Dated: **January 27, 1996**

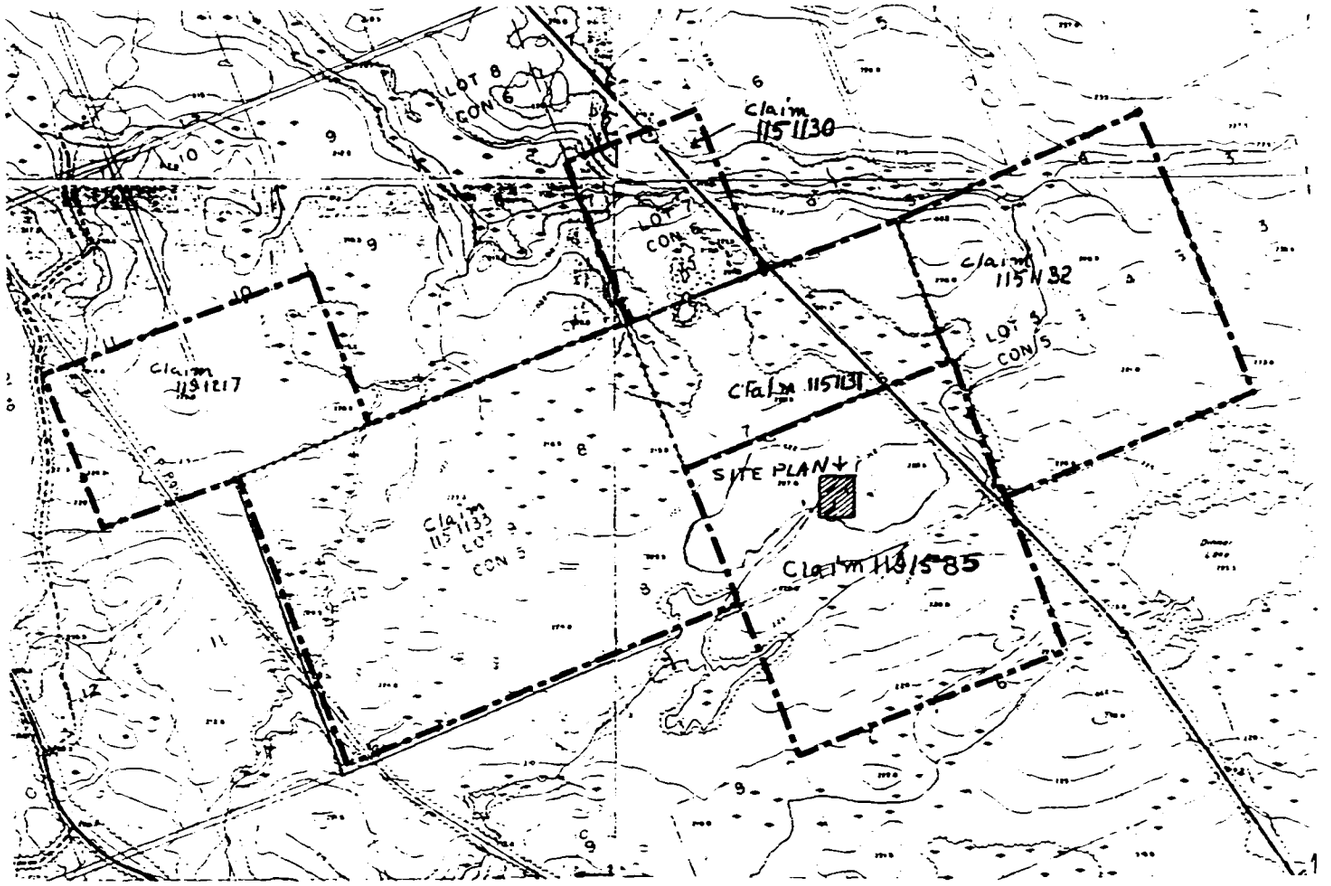
PROPERTY

The Woods Road property comprises approximately 947 acres and is more particularly described in TABLE 1 (Figure 2).

Assessment will be filed for the current work on the claims, and it is anticipated, as a result, that sufficient credits should be available to keep the entire claim group in good standing for some three years from the date of submission.

TABLE 1: WOODS ROAD PROPERTY

Claim No	Township	Lot	Conc.	Area	Recording Date
1151130	Carling	S/2 7	VI	50 ac	Aug. 11, 1992
1151131	Carling	N/2 6,7	V	100 ac	Aug. 11, 1992
1151132	Carling	4,5	V	200 ac	Aug. 11, 1992
1151133	Carling	8,9,10	V	300 ac	Aug. 11, 1992
1191217	Carling	S/2 10,11	VI	97 ac	July 22, 1993
1191585	Carling	S/2 6, 7	V		
		N/2 6, 7	IV	200 ac	Nov. 18, 1994



Scale: 1:20,000
Figure 2: Property Map

2.16420

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Res. Geo. Assessment Office

Transaction Number
W9690.00007

2.16420

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for r Recorder.
- A separate copy of this form must be compiel
- Technical reports and maps must accompany
- A sketch, showing the claims the work is ass

41H08NE0003 2 16420 CARLING

900

Recorded Holder(s) JAMES R. TRUSLER		Client No. 203403
Address 43 TEMPERANCE ST. AURORA, ONT L4G 2R5		Telephone No. 905-727-5084
Mining Division SOUTHERN ONTARIO	Township/Area CARLING	M or G Plan No. M2297
Dates Work Performed From: SEPT 1, 1995	To: JAN 31 1996	

Work Performed (Check One Work Group Only)

	Work Group	Type
✓	Geotechnical Survey	GEOLOGICAL REPORT WITH STRUCTURAL MAPPING 1:5,000 ; SITE PLAN PREP 1:500
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	SECTION 18 ONLY
	Assays	
	Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ 12,278 ✓

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
JAMES R TRUSLER	43 TEMPERANCE ST AURORA, ONT L4G 2R5

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FEB - 9 1996
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 Jan 31, 1996	Recorded Holder or Agent (Signature)

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
JAMES R TRUSLER 43 TEMPERANCE ST AURORA ONT L4G 2R5

Telephone No.	Date	Certified By (Signature)
905-727-5084	Jan 31, 1996	

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
	Feb 1/96		SOUTHERN ONTARIO MINING DIVISION RECEIVED FEB 1 1996 AM PM
	Deemed Approval Date May 1/96	Date Approved	
	Date Notice of Amendments Sent		

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
2.16420	1191585	4	12,278		813	11,465
	1151130	1		381		
	1151131	2		381		
	1191217	2		51		
	Total Number of Claims		Total Value Work Done: 12,278	Total Value Work Applied: 813	Total Assigned From: 813	Total Reserve: 11,465

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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. ☐ 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 priorized 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

(03/91)

Ministry of Northern Development and Mines

Ontario

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: W9690.00007

2.15420

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 quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e 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/Mapping		
	24 2/3 days @ $400	$9,868	
			9,868.00
Supplies Used Fournitures utilisées	Type Digital DEM Maps, photos	109.95	
	film, batteries	24.02	
	Stationery & miscellaneous	$27.00	
			160.97
Equipment Rental Location de matériel	Type Rental - Field Notebook Computer from Pen Systems	$1000	
			$1000
	Total Direct Costs Total des coûts directs		$11,328.97

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 personal vehicle		
	2365 km @ .30	$709.50	
			$709.50
Food and Lodging Nourriture et hébergement	food & lodging	239.27	$239.27
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Indirect Costs Total partiel des coûts indirects		948.77
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		948.77
	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)		$12,277.74

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FEB 9 1998
MINING LANDS BRANCH

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	Évaluation 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 Recorded Holder (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

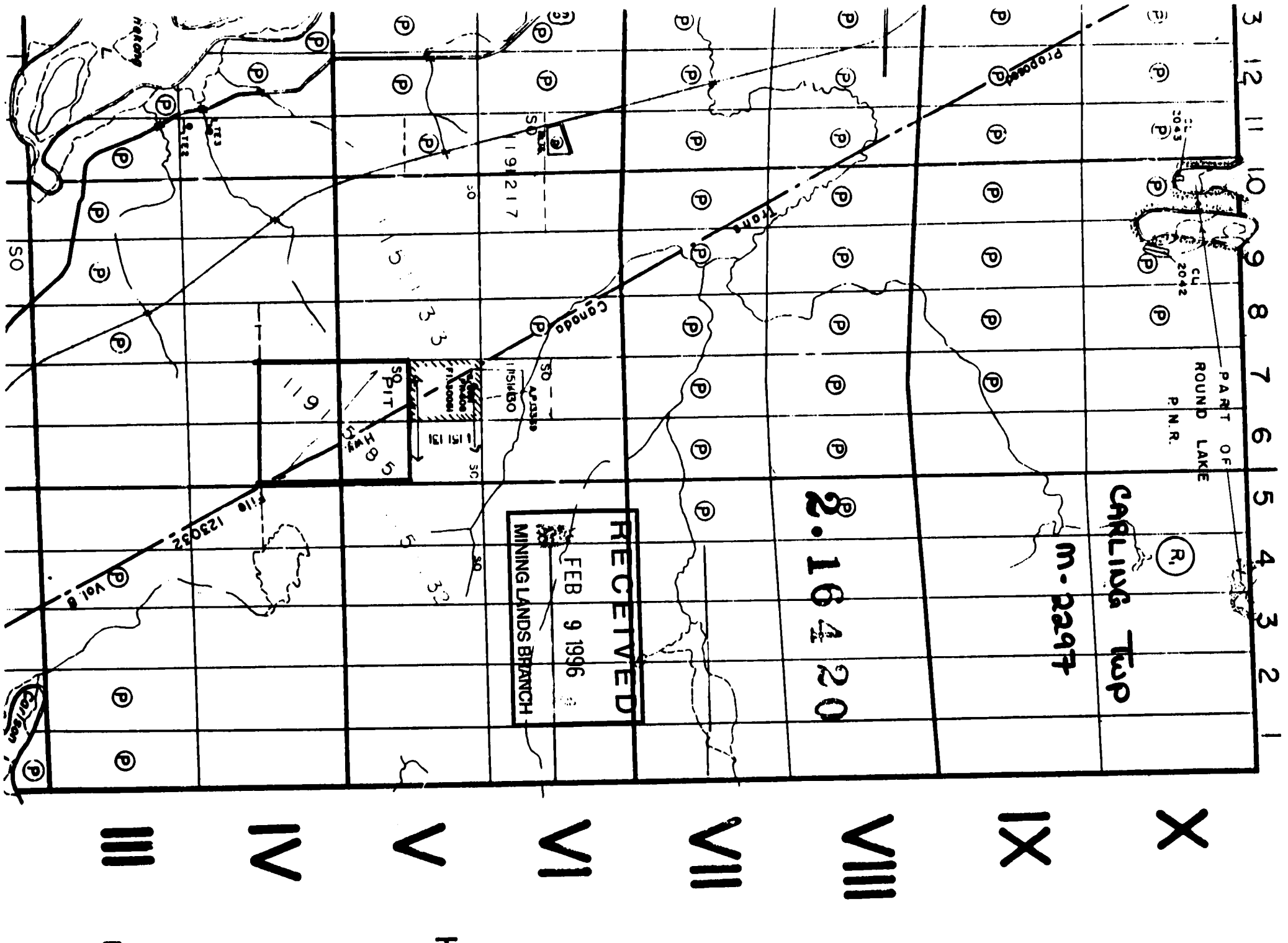
J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
	Jan 31, 1996

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre


CARLING Twp
M. 2297
2.16420
PART OF ROUND LAKE P.N.R.
CL 2042
CL 2043
Proposed
Trans Canada
SPIT
HWY 5
SO
RECEIVED
FEB 9 1996
MINING LANDS BRANCH
III
IV
V
VI
VII
VIII
IX
X
Ferguson Twp.

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

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

April 30, 1996

Our File: 2.16420
Transaction #: W9690.00007

Mining Recorder
Ministry of Northern Development & Mines
MacDonald Block, Room M2-17
900 Bay Street
Toronto, Ontario
M7A 1C3

Dear Mr. Denomme:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDIT ON MINING LAND, CLAIM SO.1191585 IN CARLING TOWNSHIP

Assessment work credit has been approved as outlined on the Declaration of Assessment Work Form accompanying this submission. The credit has been approved under Section 12, Geology, of the Assessment Work Regulation.

THE APPROVAL DATE IS APRIL 29, 1996.

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

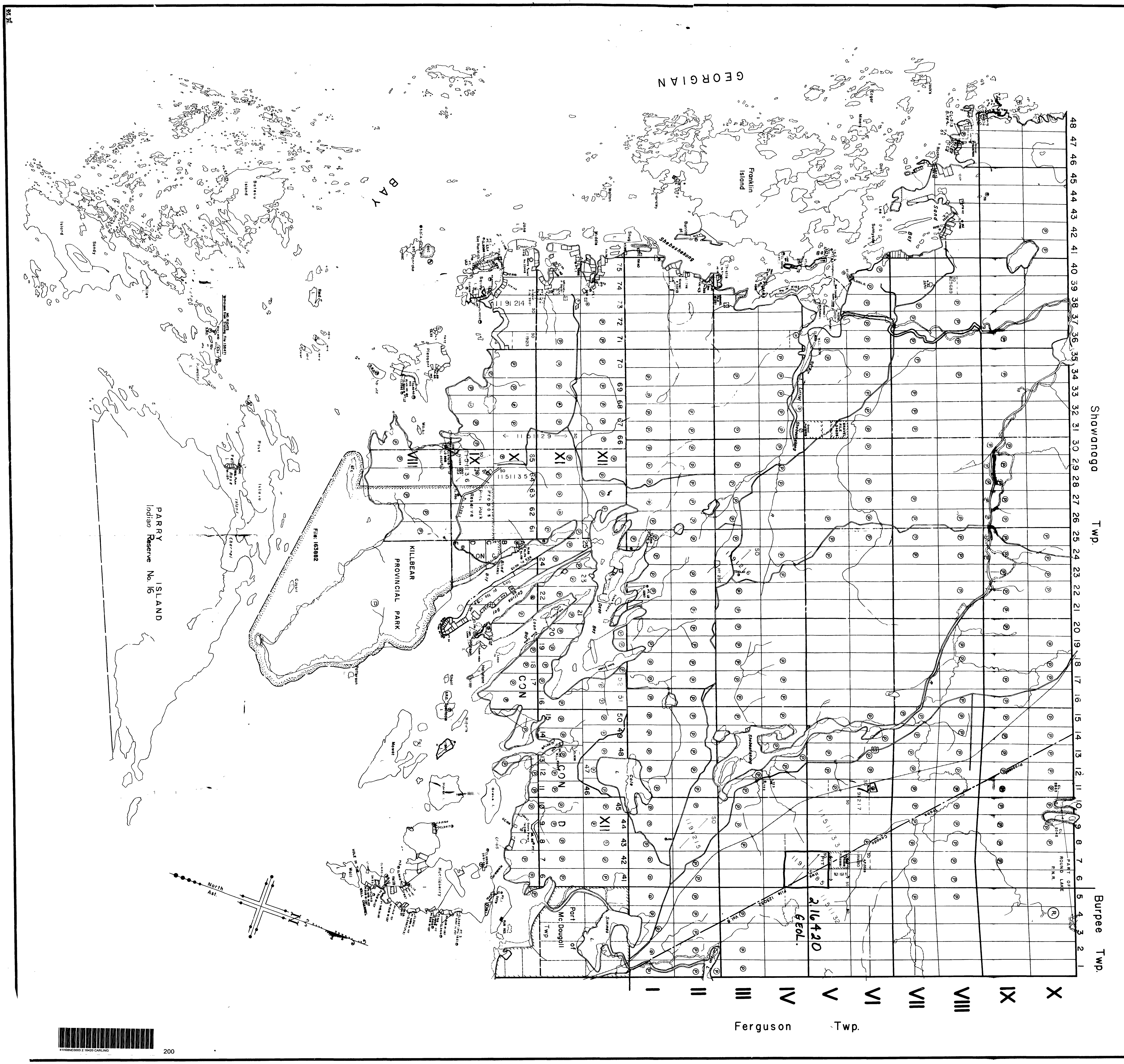
Yours sincerely,
ORIGINAL SIGNED BY:

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

LBJ/jl
Enclosure:

cc: Resident Geologist
Sudbury, Ontario

Assessment Files Library
Sudbury, Ontario



THE TOWNSHIP OF CARLING

DISTRICT OF PARRY SOUND

SOUTHERN ONTARIO

MINING DIVISION

SCALE : I-INCH = 40 CHAINS

LEGEND

2.16420.

PATENTED LAND	● or Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	⚒
CANCELLED	C.
PATENTED S.R.O.	⊖

RECE... BRANCH

NOTES

400' Reserve to the Dept of Lands & Forests shown thus:

For status of summer resort locations shown thus & islands in Georgian Bay Please contact Dept of Lands & Forests

This Map Is Not To Be Used
-FOR SURVEY PURPOSES-

Land under Georgian Bay withdrawn from staking by Order in Council dated April 30, 1912

Area indicated thus withdrawn from staking and reserved for proposed Provincial Park - No permit for gravel to be issued in this area

Withdrawn from Staking under Section 43 of the Mining Act (R.S.O.-1970).

	File	Date	Disposition
(43)	27126	19-Aug-70	S R & M.R
(R1) W.64/83	188533	15/9/83	S.R.& M.R.
(R2)		21/3/86	S.R.O.

SAND AND GRAVEL

Ⓠ Quarry Permit

DATE OF ISSUE
FEB - 5 19[illegible]
SOUTHERN ONTARIO MINING DIVISION

RES. GEO. SUDBURY
M.N.R. DIST. PARRY SOUND

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

PLAN NO. M-2297

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

LEGEND

1 **FELSIC GNEISS**[1] – layered to massive rock mainly composed of quartz, plagioclase and microcline with minor matrix biotite and variable accessory magnetite, hematite and almandine:
a) coarse grained equigranular rock, very weakly layered;
b) unit **1a** with coarse reddish-mauve speckles of hematite;
c) strongly layered fine to coarse grained cataclastic rock;
d) unit **1a** containing very large breccia fragments of pegmatite which show no internal strain;
e) fine to medium grained massive pink to rose coloured rock with thin biotite-rich partings;
f) unit **1e** more thinly layered and containing mauve hematite-bearing laminae.

2 **AMPHIBOLITE GNEISS** – layered to massive, fine to coarse grained, grey-ish black to black rock generally comprising 40 to 70% amphiboles with plagioclase in its unaltered state;
a) fine to coarse grained, thinly to thickly layered uniform gneiss occasionally with some biotite rich partings;
b) lit par lit migmatite comprising unit **2a** the paleosome constituent and parallel bands of late tectonic pegmatite;
c) migmatite breccia comprising clasts of late tectonic pegmatite within unit **2a**.

3 **BIOTITE HORNBLENDE MIGMATITE** – a fine to coarse grained, highly variable rock of multicomponent origin generally lit par lit layered and frequently comprising similar intrafolial folds; the paleosome constituent comprises biotite, hornblende, feldspar and quartz and frequently has a relict foliated or thinly laminated texture; the neosome constituent is generally coarser and comprises a syntectonic, cataclastic, originally pegmatitic aggregate of quartz, feldspar and minor hornblende and/or biotite:
a) variegated pale and dark grey with mafic content ≥20%;
b) variegated pale and medium grey with mafic content ≥10% ≤30%;
c) variegated pink and medium grey with mafic content ≥10% ≤20%;
d) variegated pale and light grey with biotite content ≤10%;
e) variegated pink and light grey with biotite content ≤10%;
f) intense pink schlieren with biotite content ≤5%;
g) minor purple hematite spotting;
h) late tectonic pegmatite ≥10%;
i) late tectonic pegmatite ≥10%;
j) hornblende dominant mafic mineral;
k) biotite dominant mafic mineral

4 **PURPLE AND PINK MIGMATITE** – variegated rock with laminations of medium to coarse grained unit **1a** or **3f** and as fine to medium grained reddish mauve layer comprising quartz, feldspar, biotite, almandine and hematite; often a milky to buff late tectonic granulated quartz-feldspathic pegmatitic material forms conformable layers which generally exhibit pinch and swell textures:
a) thinly laminated or layered pink and mauve or pink, mauve and buff rock;
b) **4a** with brecciated mauve fragments in pink or buff layers or crenulations of mauve layers in the pink or buff layers;
c) **4a** or **4b** with <5% biotite or hornblende-rich mafic layers.

5 **GABBRO** – coarse grained mafic to ultramafic rock:
a) Coronitic metagabbro having relict outlines of original pyroxene phenocrysts or oikocrysts and a massive to slightly foliated texture;
b) amphibolite gneiss - foliated and generally layered rock with ≥40% amphiboles.

6 **TONALITE** – coarse grained intermediate rock with ≥20% ≤50% mafic minerals generally with some relict plagioclase phenocrysts and a strained to uniform gneissic fabric:
a) variegated medium to dark grey and pale grey, regularly layered rock generally medium to coarse grained usually having patches of relict phenocrysts;
b) porphyritic rock with elongated pink feldspar phenocrysts within a foliated to gneissic medium to coarse grained matrix of amphibole, feldspar and quartz.

7 **MEGACRYSTIC GRANITE** – Porphyritic rock with relict, strained, orthoclase phenocrysts within a medium to coarse grained matrix of quartz, plagioclase, orthoclase and biotite and/or hornblende:
a) pink phenocrysts with prestrained diameters of ± 2cm;
b) pink phenocrysts with prestrained diameters of ± 5cm;
c) ≥ 5% ≤ 20% pink, fine to medium grained, syntectonic pegmatite;
d) folding, stretching, rolling and rodding of preexisting phenocrysts and pegmatite stringers

8 **GRANITE PEGMATITE** – fine to coarse grained quartz, microcline, plagioclase, and biotite-bearing rock varying in texture in response to its tectonic history:
a) very coarse, crystalline, unstrained, post-tectonic rock;
b) very coarse crystalline tectonic breccia;
c) medium to coarse grained cataclastic rock with occasional large clasts identical to unit **1d** in appearance

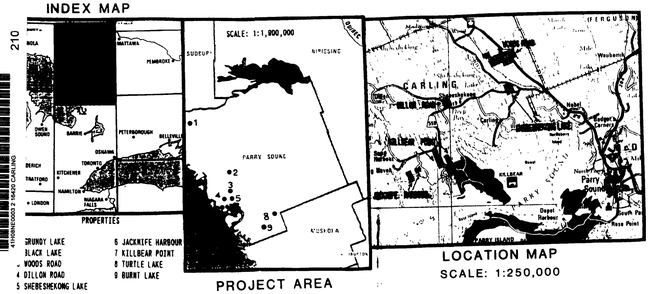
[1]No origin is inferred by this name
[2]No relative ages are inferred by this order of the legend

SYMBOL LIST

- Gneissic foliation: with dip; vertical ; horizontal
- Joints: horizontal; vertical with average spacing; with dip, minimum and maximum spacing and average separation.
- Schistocity or foliation
- Lineation: with plunge
- Property boundary
- Highway, road
- Secondary road
- Abandoned road or trail
- Road allowance
- Railroad
- Concession line
- Lot line
- Electric power line
- Topographic contour (5 metre interval ASL)
- Swamp
- Clearing
- Outcrop
- Quarry
- Buildings
- Geological contact inferred

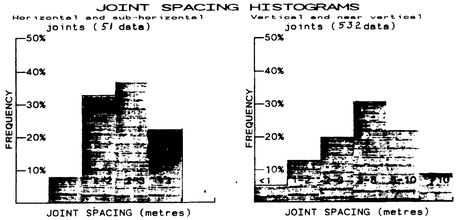
N

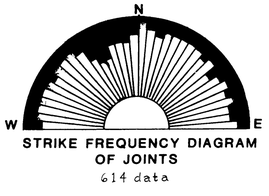
INDEX MAP



1 BRUNDY LAKE
2 BLACK LAKE
3 WOODS ROAD
4 DILLON ROAD
5 SHEBESHEKONG LAKE
6 JACKKNIFE HARBOUR
7 KILLBEAR POINT
8 TURTLE LAKE
9 BURNT LAKE

JOINT SPACING HISTOGRAMS





STRIKE FREQUENCY DIAGRAM OF JOINTS
614 data

SCALE
1:5,000
feet
metres

RECEIVED
FEB - 1996
MINING LANDS BRANCH

2.16420

JR TRUSLER & ASSOCIATES
MINERAL CONSULTANTS

WOODS ROAD PROPERTY

GEOLOGICAL MAP

DATE: Jan 17, 1996 | SCALE: 1:5,000 | DRAWN BY: JR TRUSLER