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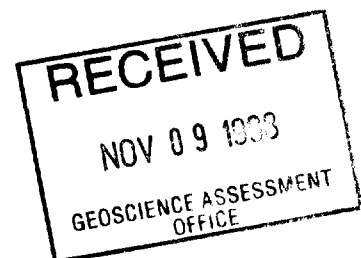
**MINERAL EXPLORATION REPORT
PHASE 3
MADAWASKA AREA
ONTARIO**

NTS: 31 E / 9E, Murchison Township,
District of Nipissing
UTM 733400E, 5045200N, Zone 17
Lat 45 31' 23"N, Long 78 00' 41"W

Southern Ontario Mining Division
Claims # 1150671 - 1150673, 1040836 - 1040841

For Claim Owners
Alan A. Reed, Allan A. Rubin, Edwin A. Hoover

Written by: Alan Reed
R.R.1
Madoc, Ontario
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MURCHISON

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INTRODUCTION

General

This report of photogeology exploration and a geological interpretation for claims situated near Madawaska, Ont. The work has been undertaken by Mr. Alan Reed client # 186410 (Lic. No. A 49686) of R. R. # 1 Madoc, Ontario the recorded holder of the claims under exploration. Dr. Simon Schaffel a geological consultant assisted the author of this submitted report in conducting the exploration. Wings of Flight of Markam were hired to conduct the oblique aerial photography. Samples were taken for geochemical assay and sent to American Analytical Laboratories of New York.

The granite pegmatite, quartz and biotite are the current focus of mineral exploration on these claims. The prospecting was undertaken October 12,13,14, 1997 and compilation of data on Oct. 30,31, Nov.1 1997. Air reconnaissance photography on April 10, 1998. Report compiled by author on June 21, 22, 23, 1998.

In the following sections, the geological setting and economic considerations of the site are discussed with reference to site observations/illustrations, onsite sampling and aerial photography interpretations. The author and assistant have spent numerous years exploring the site and conversed on many occasions.

Property Location and Access

The subject mining claims are situated in the north/south lots of 14, 15, 16, Concession IV, south half of lots 14, 15, 16 Concession V, Murchison Township, District of Nipissing, in the Southern Ontario Mining Division. The claims were recorded under Nos. 1150671, 1150672, 1150673, on May 30, 1991 and Nos. 1040838-1040841 recorded July 20, 1994.

The claims are easily accessible from the community of Madawaska via a well established logging road known as Victoria Lake Road which proceeds northward from Hwy. 60 at Madawaska. The claim group is situated approximately 4km north of the community (see Figure 1).

A haul road connects to the Victoria Lake Road provides vehicle access to a small quarry in the central part of the group claim.

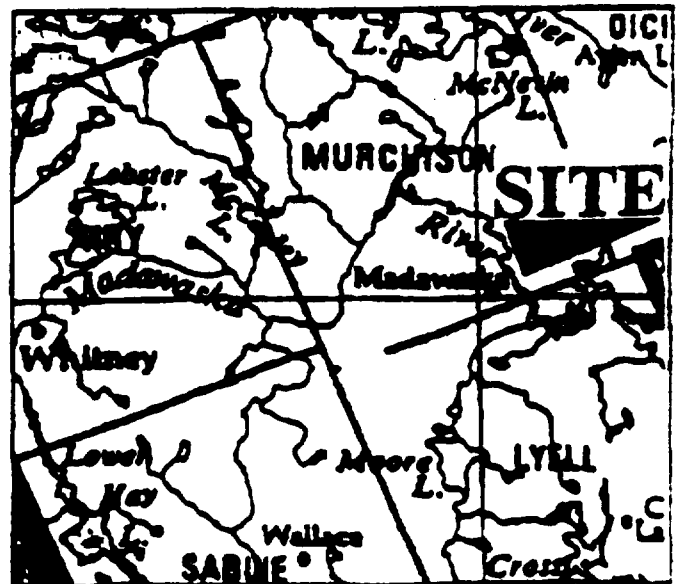
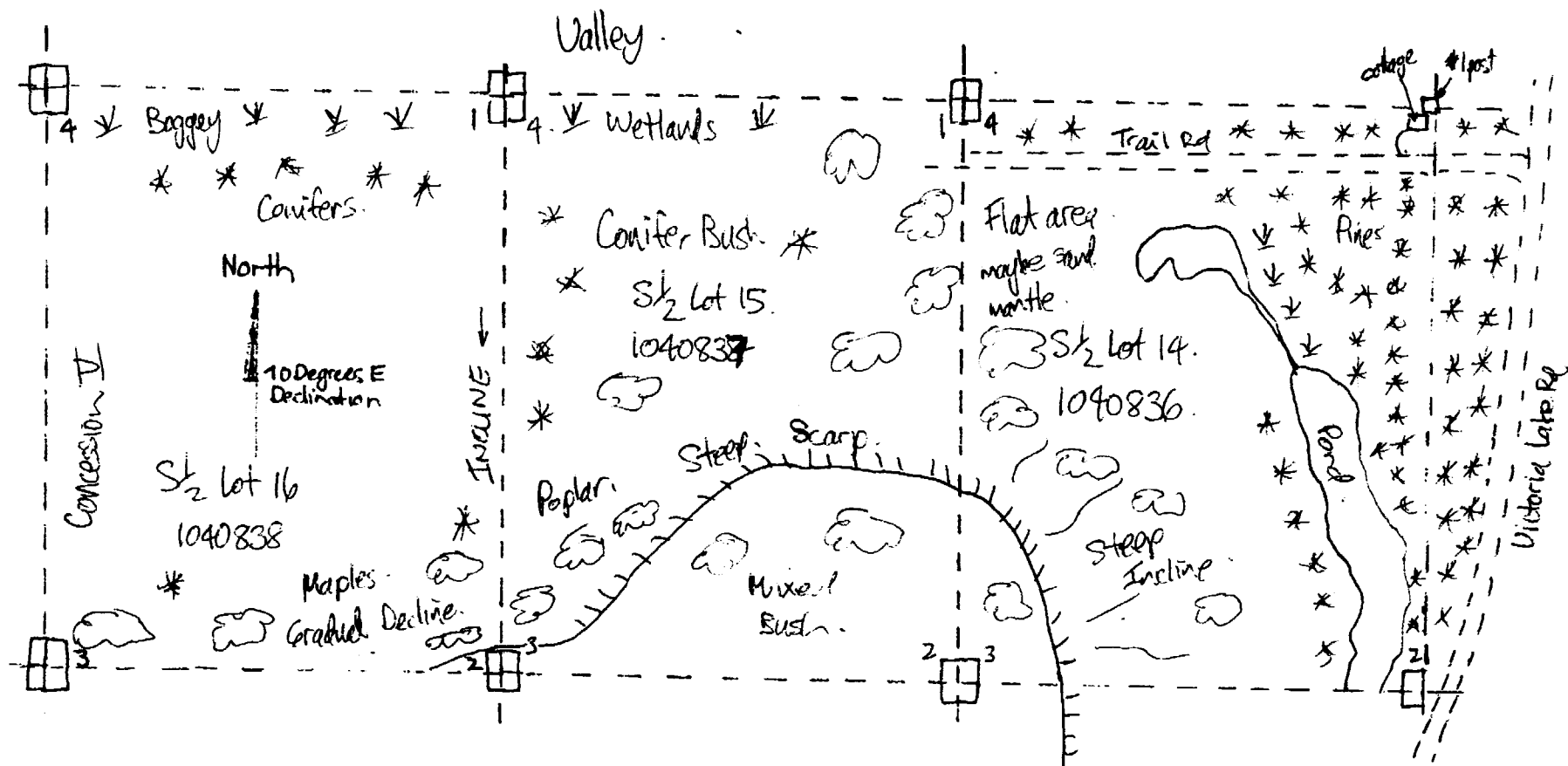


Figure 1: General property location.



Legend

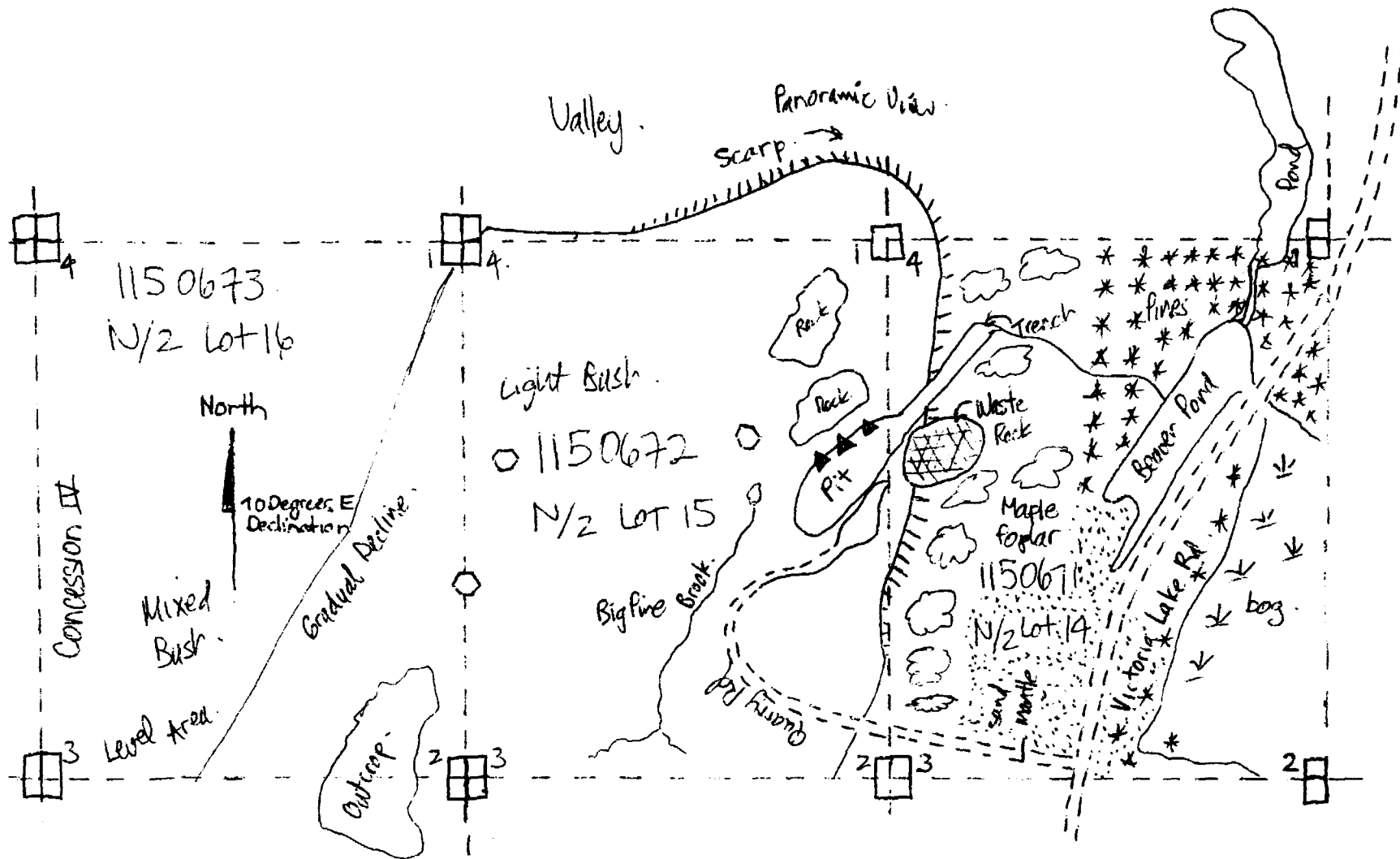
- ▲ Sample Location
- Qtz-Feld Peg. Float
- Claim Post (Found)
- ▭ Pit/Open Cut
- Grid Line
- ↗ Foliation
- ✕ Pegmatite Contact

Madawaska Claim Group

Murchison Township, District of Nipissing

Scale
1:5000
Reduced for 8½ x 11"
photo-copy.

Site Plan Figure 2



Legend

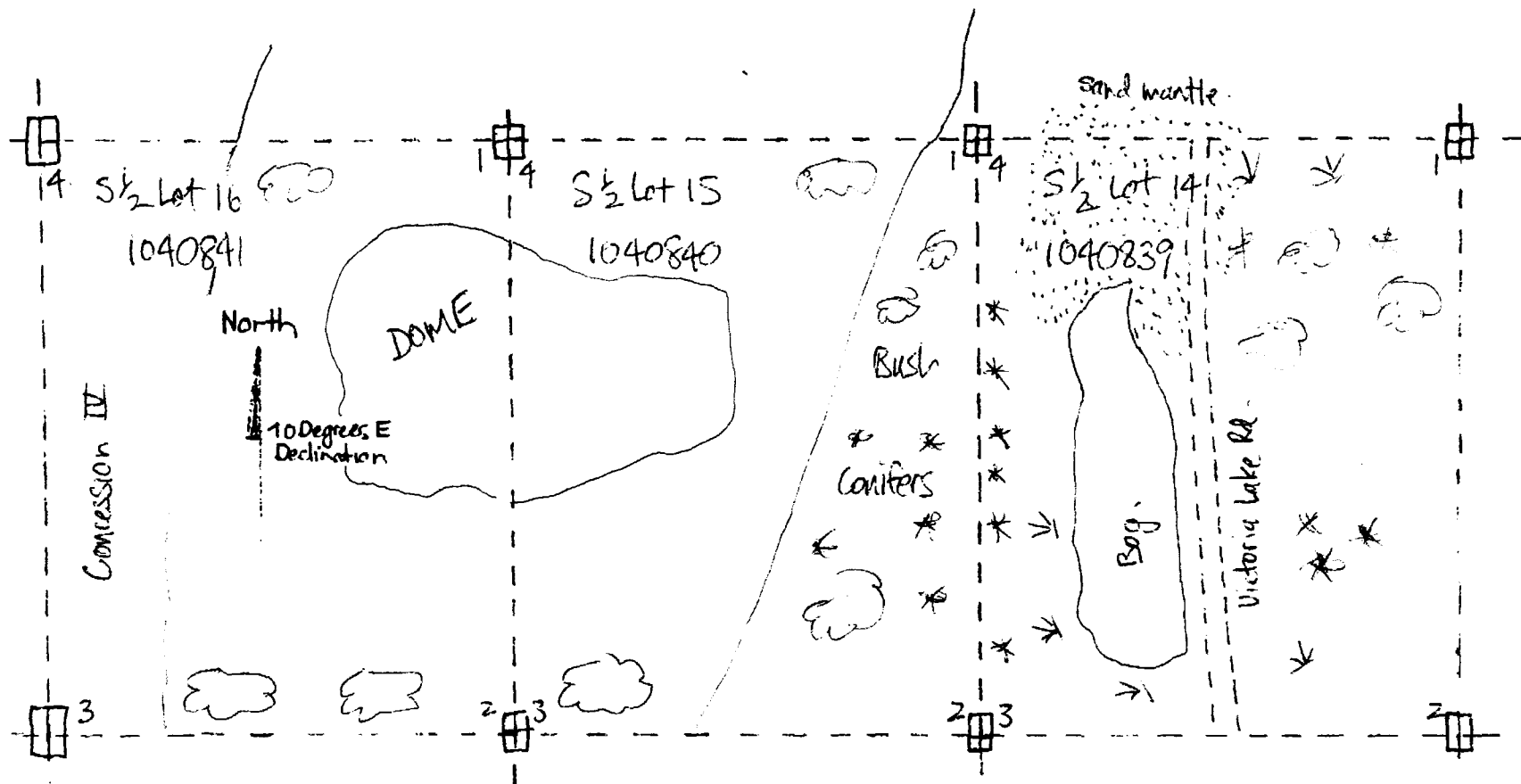
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Madawaska Claim Group

Murchison Township, District of Nipissing

Scale
1:5000
Reduced for 8 1/2 x 11"
photo-copy.

Site Plan
Figure 3



Legend

- ▲ Sample Location
- Qtz-Feld Peg. Float
- Claim Post (Found)
- Pit/Open Cut
- Grid Line
- ↗ Foliation
- ✕ Pegmatite Contact

Madawaska Claim Group

Murchison Township, District of Nipissing

Scale
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Reduced for 8 1/2 x 11"
photo-copy.

Site Plan

Figure 4

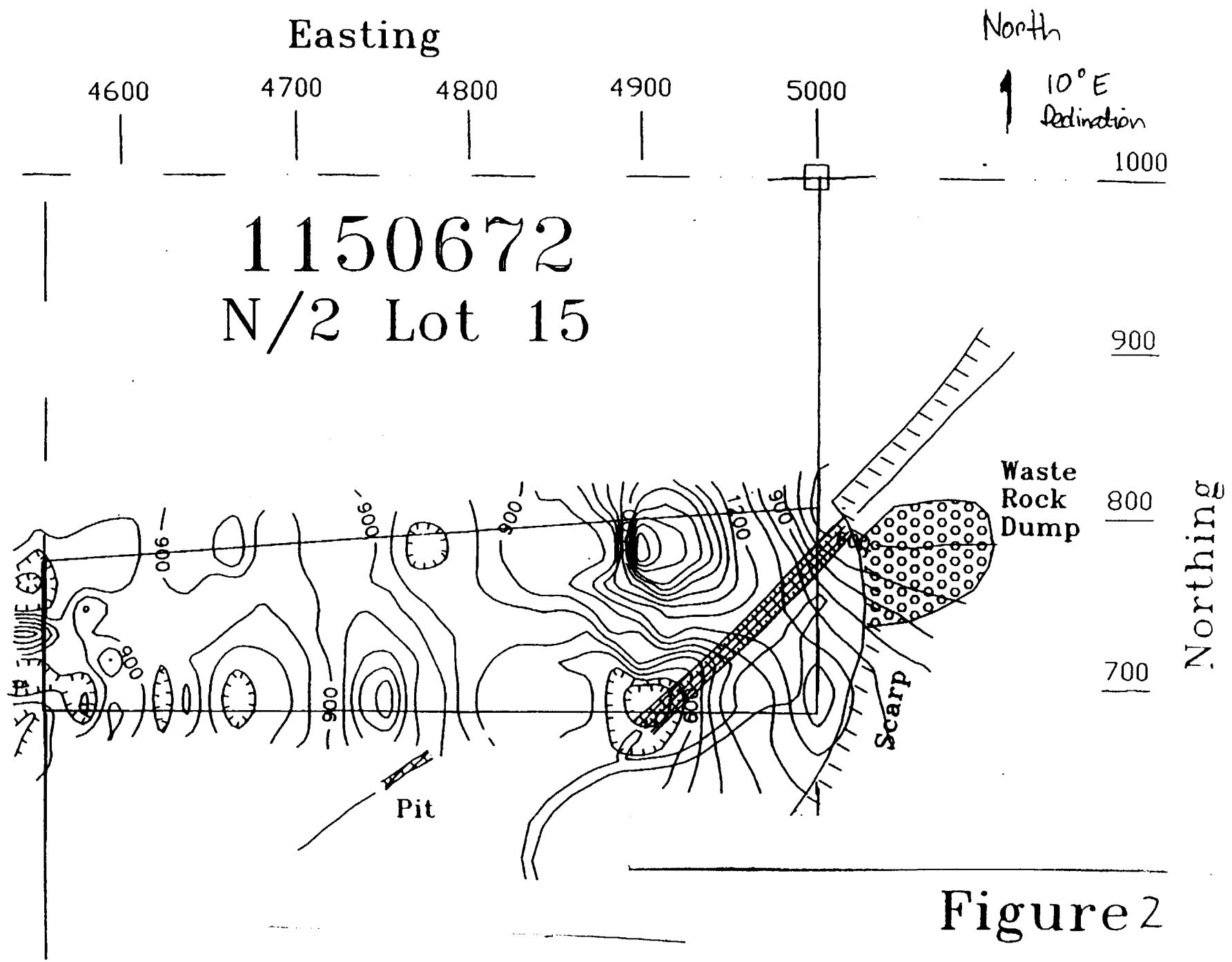
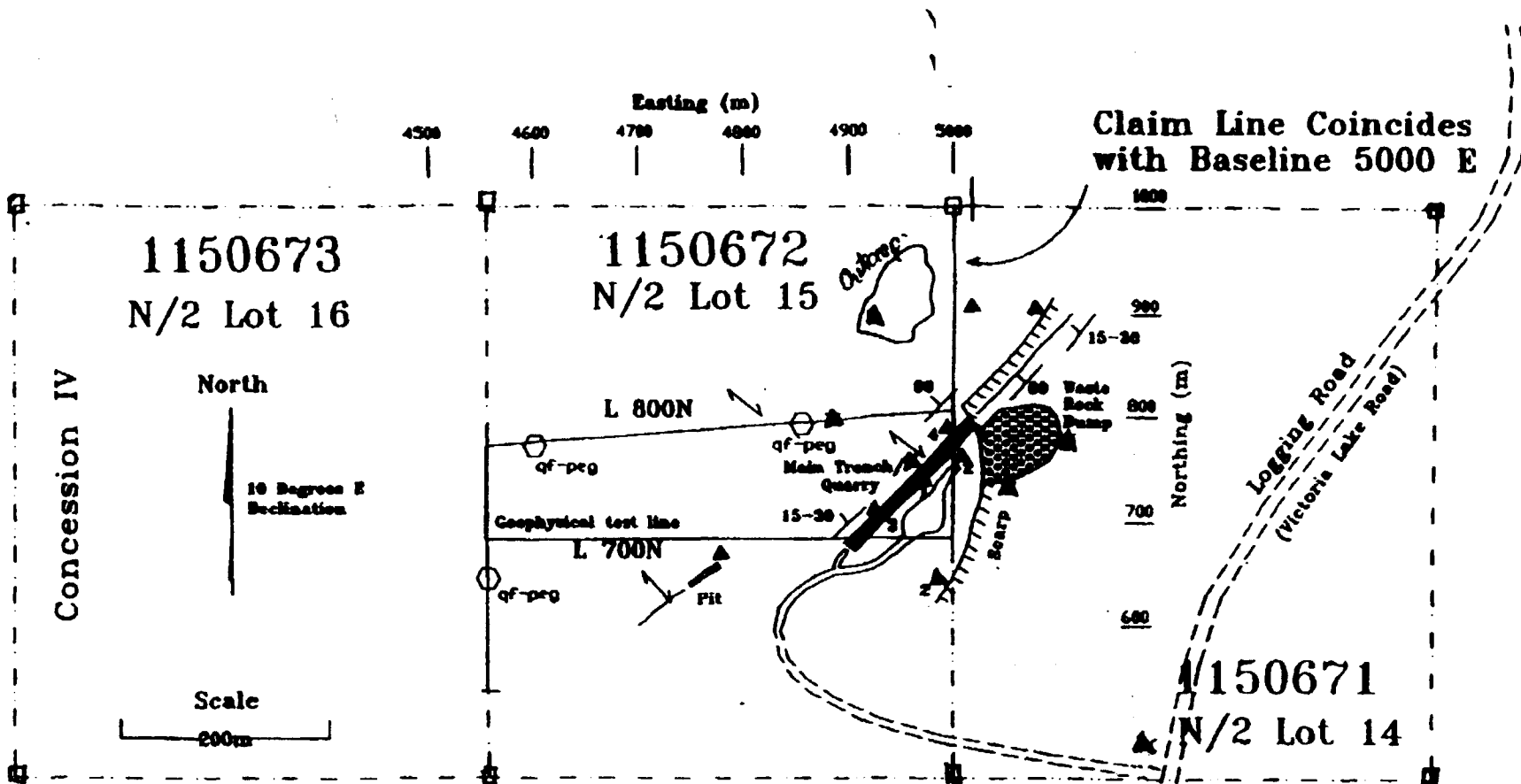


Figure 2



Legend

- ▲ Sample Location
- Qtz-Feld Peg. Float
- Claim Post (Found)
- ▨ Pit/Open Cut
- Grid Line
- ↗ Foliation
- ↘ Pegmatite Contact

Reed-Madawaska Claim Group

Murchison Township, District of Nipissing

Site Plan

Figure 3

Site Plan

North
 ↑
 10° E
 scale 1:10,000

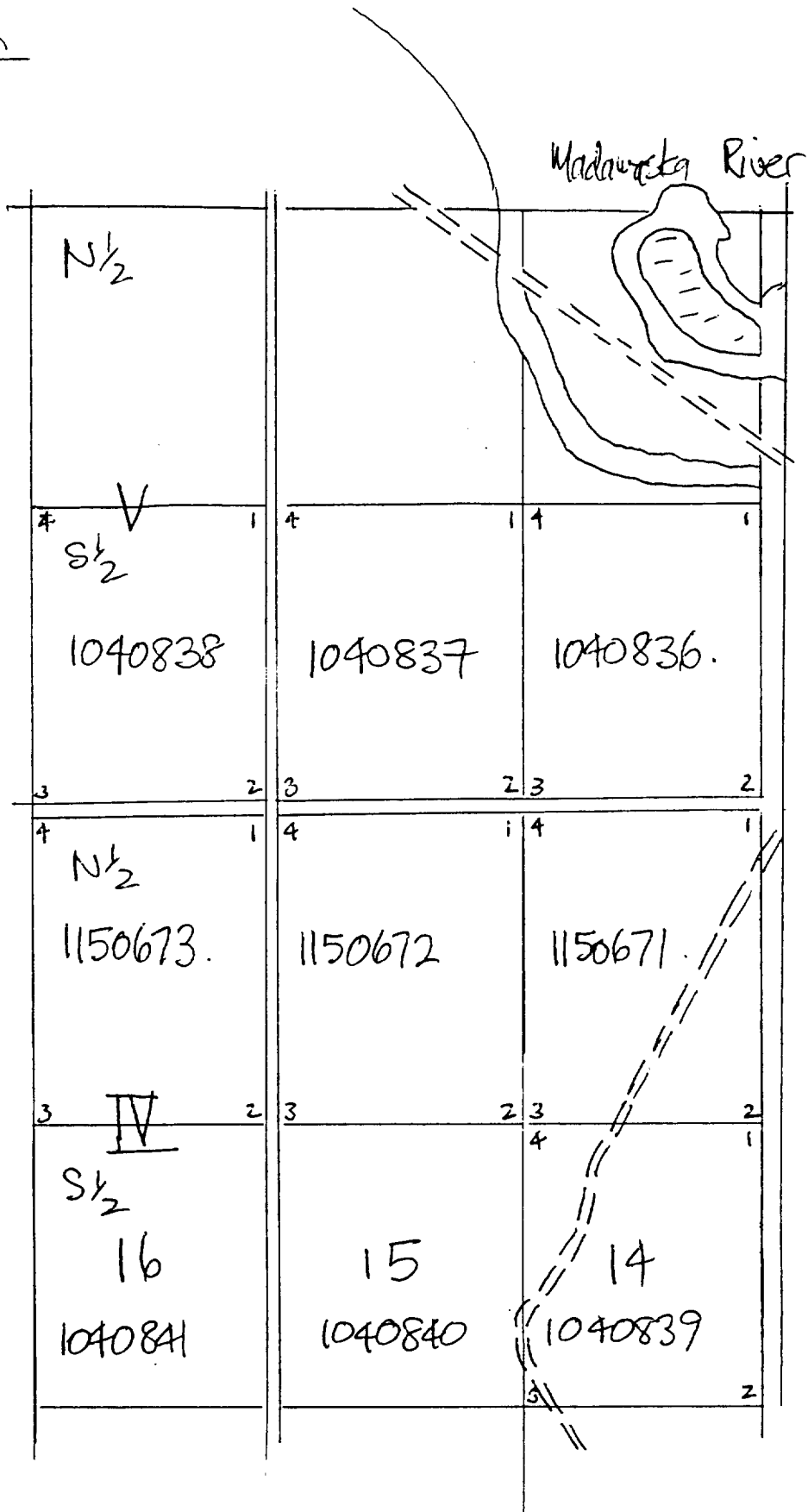


Figure 4
 Phase 3

Background

The geology of the area contains a well documented pegmatite deposit with recent work filed in November 1993 (Phase 1), October 1997 (Phase 2) Within the pegmatite deposit is a huge deposit of piezoelectric quartz. The writer initially visited this deposit in the Spring of 1987 and subsequently visited, observed and studied this deposit approximately forty different occasions. The report is based on the professional geologic experience of 40 plus years by Dr. Simon Schaffel who also is familiar with the site since 1980 with two dozen visits to this present date. Research into developing silicon crystal growth processes for solar array purposes and natural soil conditioners has been explored and ongoing further development at this time.

Previous Work

The claim owners have submitted and performed work in accordance to the Mining Act back in November 1993 and October 1997, the claims are in good standing with the Ministry. Based upon some reliable anecdotal information and compiling data indicates a diverse application for the resources of this study and the geological uniqueness of this deposit in Madawaska.

SCOPE OF WORK

Reconnaissance aerial photography exploration (see 4 color photo's, 1 infrared B&W) was undertaken by Wings of Flight which departed Markam Airport NU8 on April 10, 1998 @ 08:20 Hrs., local time, in a Cessna C-172 C-GBKO. Oblique hand held aerial photographic coverage taken in color of a 360 degree sweep using a Nikon/Nikkor 24mm 1:2.8 camera/lens and 5026 VPS/35mm film/format. The infrared photo was taken with a Nikon/Nikkor 50mm 1:1.2 camera/lens vertically covering 360 degrees. Aerial shots were taken at an altitude of 3500' - 4500' on April 10, 1998 during 10:15-11:05 Hrs. Wings of Flight landed in Peterborough Airport for fuel and lunch, arriving back at Markam Airport April 10, 1998 13:40 Hrs. local time. Total time including air time was 5Hrs., 20 minutes. These photo's were supplied to Dr. Simon Schaffel for interpretation. Reconnaissance observations and illustrations indicate this deposit has economic value and truly unique.

Description on these photo's included in the study findings (pg. 5). Geological interpretation written by the author was derived by onsite prospecting and discussions with Dr. Simon Schaffel of his report submitted to the claim holders in 1997. Compilation of data for writing of the report, preparation & organization of geological study prepared by Dr. Simon Schaffel were undertaken. The writer and Dr. Schaffel used standardized methods in their field work in the Madawaska claim area. These techniques involve use of Brunton compass, notebook, magnifying lens, observation, etc. The nature of observation is observation. Visual observation is the principal function not only in geology but in all of the sciences - biology, chemistry, physics. All interpretations and conclusions are based on careful and astute observations. This comes with experience. Dr. Schaffel has experience and ample time in geology and geological field work to be rated excellent in this category. The author has unique sensitivities to sense and observe anomalies in the field as prospectors of the past relied on. Those who discovered resources of this great nation to help develop the mining industry as we know it today. Samples were taken on 2/28 - 3/5 1997; 6/22 - 6/27, 1997; 9/19 - 9/22, 1997; 10/12 - 10/14, 1997; 4/23 - 4/28, 1998; 5/27 - 6/2, 1998 from within the group claim boundaries.

Three samples taken were received by American Analytical Laboratories of Farmingdale, New York on 2/26, 1998 and analyzed 3/10, 1998 (see Figure 3 and Geochemical data pg. 7, assays).

STUDY FINDINGS

Property Geology

The deposit is a granite pegmatite outcropping to an elevation of 1,000 feet from the logging road that traverses through the Northeast part of the group claim. The aerial photo's reveal the size of the deposit and give a perspective not apparent at ground level of economic potential from different directions. The aerial photo's indicate the presence of additional pegmatite bodies to the East and Northwest of the group claim. Photo # 1 approaches from the west towards the east and it's clearly apparent the size of the outcrop and dome structure, notice further east another similar structure. Photo # 2 approaches from the north heading south, the shaded area is the most vertical incline of the structure. One gets some perspective of the terrain as the trees have yet to have leaves. This steep face could be used to utilize gravity for quarrying purposes to assist in transporting materials for processing. Photo # 3

approaches from the east heading west, the quarry road is in the centre and the dome off to the left. Photo # 4 from the southeast shows the protruding dome and it's size. The old railway line is visible to the left. Photo # 5 is the black & white infrared shot taken vertically that reveals the tabular lingam like structure of the deposit, quarry road to the left and quarry in the centre, the logging trail also is visible to the right. There are other geologic structures whose signature strongly suggest potential economic bodies. All of these can only be verified by ground work and a full and thorough field investigation in future exploration. The pegmatite found at Madawaska is of the complex type recognized by a zonation of the minerals present. In the case of Madawaska - quartz and feldspar and the zones represent areas of concentration of highly pure minerals. A pegmatite body of this type permits recovery of pure minerals which is economically feasible.

The minor minerals which have been observed are muscovite mica, hematite, smoky quartz, autunite, spodumene. Undoubtedly, there are many other accessory minor minerals that will be found as the deposit is uncovered.

There are pure specimens of orthoclase and microcline- microperthite feldspars located in the claim area. Interesting to note is that the orthoclase is a natural source of aspartic acid which gives asparagus it's unique flavor. This is of extreme interest to the development of natural fertilizers for the industry in exploration of the claims. Field work has revealed masses of feldspar up to 2 meters in the midsection of claim # 1150672. In the southeast portion of #1150672 and southern portion of # 1150671 is a sand mantle derived from the weathering of the underlying pegmatite. This sand is medium to fine in size, brownish-yellow in color. The sand could be sieved for increased concentration and then marketed. Interest has already occurred from a company manufacturing soil amendments.

Commercially, the quartz is unquestionably very high quality and high grade because of it's purity (99.9%). This type of quartz is commonly referred to as high tech quartz. Principal multiple uses are in the electronic industry, heating, optical glass, ceramic and metallurgical industries. Rare-earth gases appear as bubble inclusions in the quartz. It is safe to assume that these gaseous bubbles occur in all the other minerals, especially the feldspars. These rare gases are in the earth's atmosphere but in miniscule amounts, usually measured in parts per million or billion. It is a known certainty that during the crushing operation the gases will be freed from their enclosed state within these materials. At that time concentrations will be greater than atmosphere occurrence. Recovery at that time can prove a most valuable asset as there is continuous demand for these gases.

EAST

BARRY'S BAY

DOME

NORTH

SOUTH

Photo #1

WEST

Angus
Old Railway

Oblique View



South



EAST

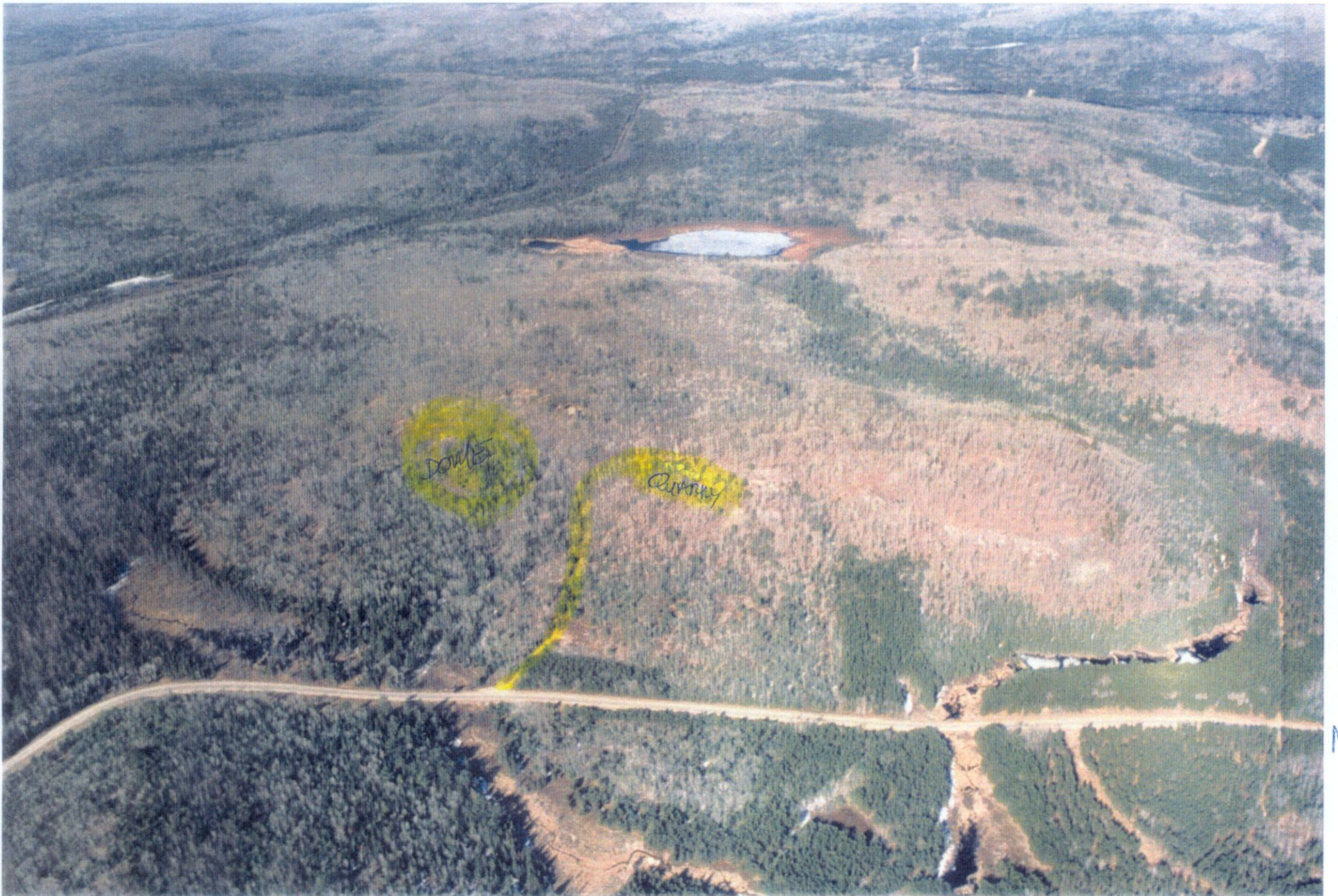
WEST

Oblique View

North

Photo # 2

Southwest



Oblique View

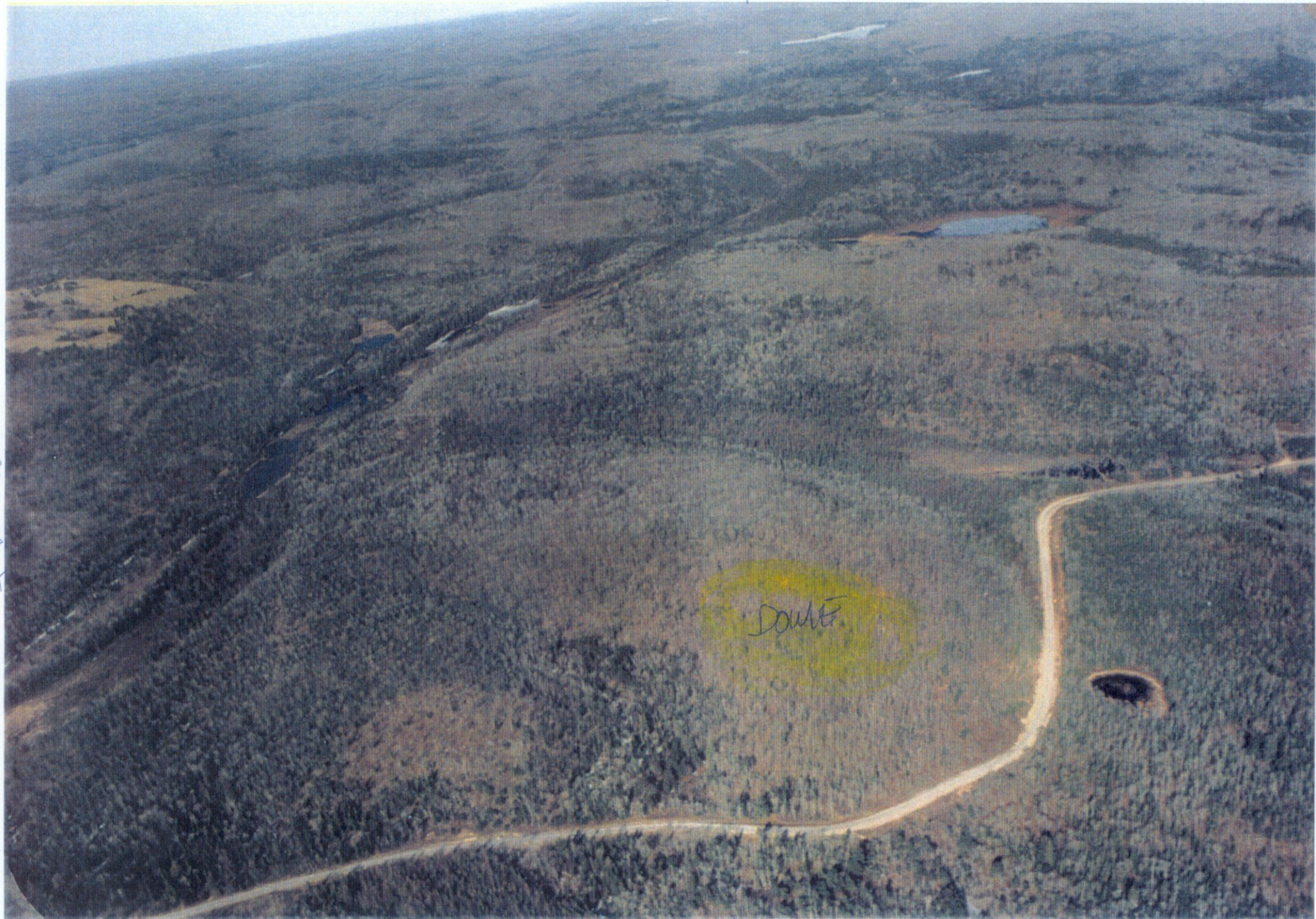
EAST

Photo * 3

N

3
2
1
T
+

North West



M

Oblique View

South EAST

Photo # 4

M

WEST "



EAST

3 EAST

Vertical View

photo x 5

NE
71

Geochemical Data

Quartz and feldspar samples were collected from the open pit at Madawaska on 2/28-3/5, 1997; 6/22-6/27, 1997; 9/19-9/22, 1997; 10/12-10/14, 1997; 4/23-4/28, 1998; 5/27-6/2, 1998. The sampling was along the main long axis of the pegmatite (see Figure 3). The sampling included quartz, feldspar, mica and accessory minerals. Of the prime importance were the two economic minerals- quartz and feldspar. These were the minerals analyzed chemically by the American Analytical Laboratories of Long Island, N.Y. This laboratory is one of the outstanding and finest chemical analytical laboratories in the New York Metropolitan area (assay enclosed). Three samples submitted ID: 9811091-9811093 were selected from the areas near the apices of the lenticular shaped pegmatite body. Samples were received by American Analytical Laboratories of Farmingdale, New York on 2/26/98 and analyzed 3/10/98. Instructions given to the lab were to give an acid bath to assure removal of any contaminants. All samples were to be crushed and blended and a fair sample drawn for analyses from the crushed material. The high percentages of potash (14%) and silica (63%) of the samples are concentrations indicative for economic potential (see assays).

Conclusions

Based on the gathered data and research to date the pursuance of ongoing research to further market and develop this deposit will be engaged. Detailed drilling will be required to determine exact locations of contacts and reserves available. In addition to the economic potential of the pegmatite and quartz rocks, the potential for gold mineralization should be appreciated. Detailed geological and geophysical work may help define the potential of the property.

It is of our opinion that the pegmatite located at Madawaska is one of the most unusual pegmatite deposits ever found.

End of Report

Qualifications

Dr. Simon Schaffel was the lead geologist for the project. Mr. Alan Arthur Reed provided assistance in prospecting, writing and data processing.

Dr. Simon Schaffel has been practicing as a qualified geologist for 40 years plus holds a B.S. from City College of New York, M.S. from Rutgers University, P.h.D from New York University all in Geology. He currently is Professor Emeritus at City College of New York in the Earth and Planetary Sciences Department. With additional education at Brooklyn Polytechnic Inst., Rice University and National Science Foundation Florida Marine Institute.

Dr. Simon Schaffel also is a:

Fellow of the Geological Society of America

Member of the Society of Economic Mineralogists and Paleontologists

Charter Member of the Geochemical Society of America

Member of the American Association of Petroleum Geologists

Life Member of the American Association Advancement of Science

Member of the American Museum of Natural History

Member of the American Ceramic Society

Member of the American Institute of Mining and Metallurgical Engineers

Member of the Smithsonian institution

Resident Fellow of the Explorers Club

COSTS PHASE 3

Direct Expenses

Field work involving mapping, supervision, exploration, study of the pegmatite body at Madawaska, plus assistant for Oct. 12,13,14, 1997

Dr. Schaffel 2.5 days

Alan A. Reed 2.5 days \$2,000.00

Analyses and compilation of data pertaining to the investigation of site above Oct.31, Nov.1 1997 compilation study report By Dr. Schaffel

3.0 days \$1950.00

Wings of Flight aerial photography, Rental of Cessna C-172, Pilot , Photographer, Camera, April 10, 1998 , Film processing \$2247.00

Compilation of data and written report by Alan A. Reed on June 21-23, 1998

3.0 days @ \$150.00 \$450.00

3 Sample analyses processed March 10,1998 by American Analytical Laboratories, New York

..... \$350.00

sub-total\$6997.00

Indirect Expenses

Misc. disbursements for phone, courier, faxes and photocopies

..... **\$80.00**

Total direct and indirect expenses \$6997.00

+ \$80.00

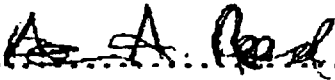
Total Phase 3

\$7077.00

The following individuals undertook the prospecting work of this exploration:

ALAN A. REED

R. R.1 MADOC , ONT 613-473-2969


.....

Simon Schaffel Ph.D

Hofstra University

Hempstead, New York 11550-1090

516-437-6705


.....

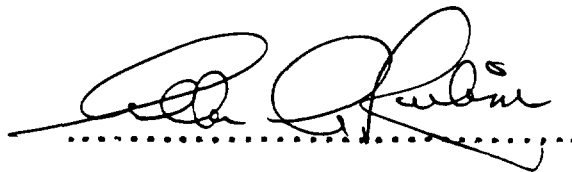
Allan A. Rubin

Wings of Flight

Markham Airport, Box 518

Markham, ON L3P 3R1

905-640-0500


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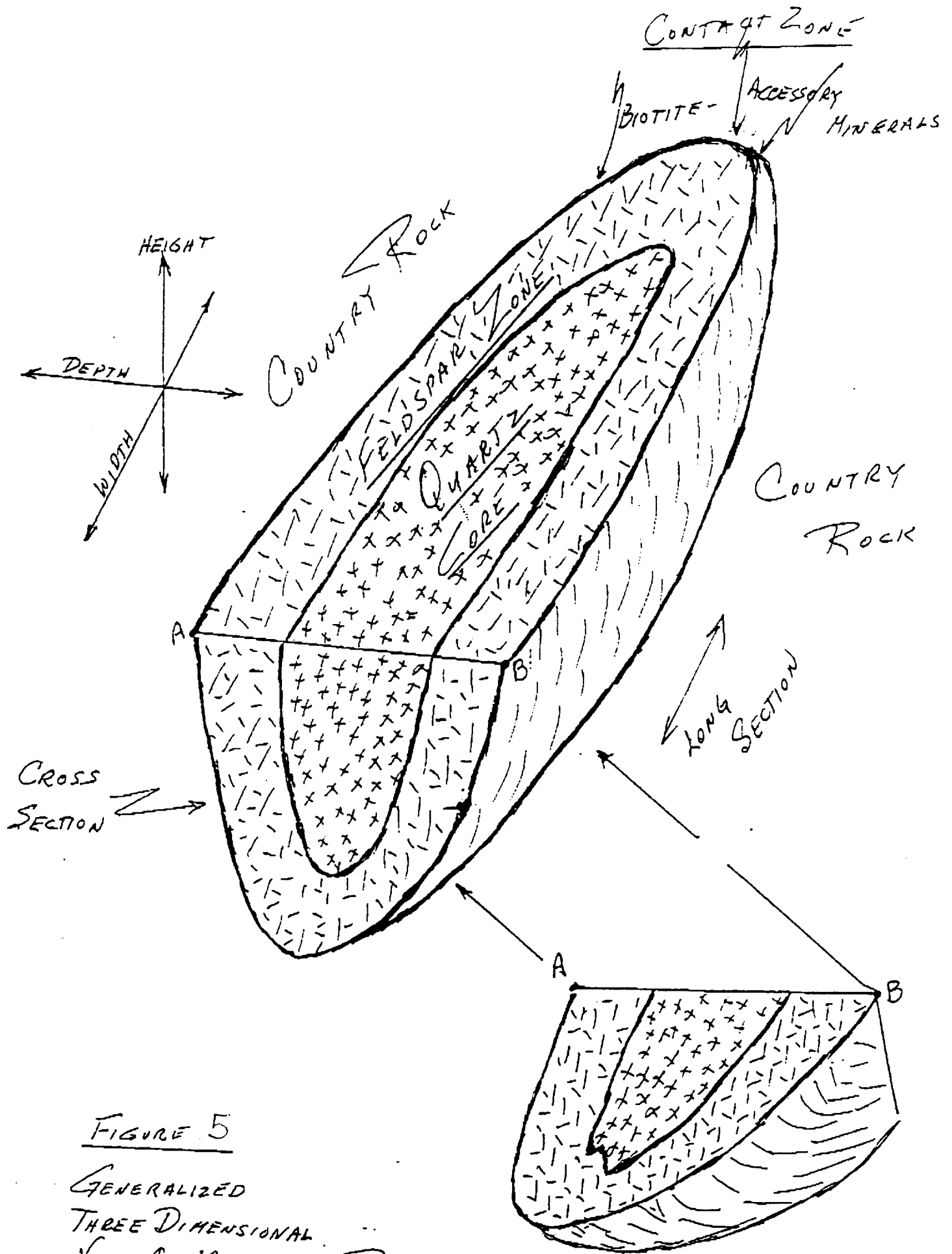


FIGURE 5

GENERALIZED
 THREE DIMENSIONAL
 VIEW OF MADAWASKA PEGMATITE

GEOLOGIC REPORT ON

MADAWASKA GRANITE PEGMATITE, ONTARIO

Simon Schaffel

MADAWASKA QUARRY, ONTARIO

Mohawk Quartz, Inc. controls an open pit deposit located at Madawaska, Ontario, Canada. The author initially visited this deposit in the Spring of 1980 and subsequently visited, observed and studied this deposit on approximately two dozen occasions to the present date. The statements, conclusions and analyses of this body is based on those visits plus additional information gleaned from literature and verbally from other persons who were familiar with the deposit. The veracity and accuracy of this report is solely the responsibility of the author. ~~There~~ has been agreement by other geologist who have observed the deposit. The report is based on the professional geologic experience of the author over a period of 40 plus years.

General Statement

The deposit is a granite pegmatite. Granites generally contain 2-3 minerals, i.e., quartz (essential) plus feldspar(s), and often muscovite/ biotite mica(s). The first two are almost always present. Pegmatites are a variety of granite wherein the most salient feature is the large size of mineral crystals. The dimensions of these crystals can sometimes be startling, e.g., 1) Two individual crystals of beryl (from a Maine pegmatite) at the entrance to the American Museum of Natural History, New York City, have a height of six feet and a girth of approximately three-four feet. 2) Spodumene crystals found in the Black Hills pegmatites, South Dakota, have lengths of forty feet. 3) An orthoclase feldspar crystal in a Russian quarry is so large that the entire operation, steam shovels; buildings; equipment etc.; is located within the mineral.

Granite pegmatites are classified as igneous in origin. Normally such a classification calls for the presence of molten rock - magma beneath the earth's surface or lava on the surface. Pegmatites are visualized as forming from highly

energized volatile solutions or gases that emanate from a large molten magma mass - often referred to as a magma chamber or structurally a batholith. These sources can be close or at great distances laterally and/or horizontally from the resultant pegmatite bodies.

Two types of granite pegmatites are recognized, i.e., simple and complex. The simple pegmatite has the minerals mentioned above but are intimately inter-mixed. The quartz areas and the feldspar and micas will be blended together throughout the deposit. The only divergence may be a concentration of biotite mica at the boundaries of the body with the country rock (that rock which was there first before the pegmatite was emplaced).

The second type of pegmatite, the complex, is the type found at Madawaska. The complex pegmatite body is recognized by a zonation of the minerals present (Figure 5). The analogy would be a coconut or better an M&M chocolate peanut. There is an outer zone of colored candy enclosing an inner zone of chocolate enclosing a peanut core. The pegmatite at Madawaska has a thin outer zone of mica (primarily biotite) and other minor minerals enclosing a zone of feldspar enclosing a core of quartz. Each zone is composed primarily of a dominant mineral, quartz or feldspar. Intimate mixtures occur generally only at the boundaries of one zone and the other. The zones, therefore, represent areas of concentration of highly pure minerals. In the case of Madawaska - quartz and feldspar. A pegmatite body of this type permits recovery of pure minerals which is economically feasible.

The principal minerals and their estimated percentages in the Madawaska pegmatite is as follows:

Quartz	-	55-65%
Feldspar	-	25-35%
Biotite	-	1- 5%

Minor and accessory minerals complete the remaining percentage. The minor min-

erals which have been observed are muscovite mica, hematite (specularite), smoky quartz, autunite, spodumene(?). Undoubtedly, there are many other accessory/minor minerals that will be found as the deposit is uncovered.

MINERALS:

Quartz The quartz (55-65%) occurs as a massive area forming the core of the body (Figure 5). The quartz core is entirely crystalline. Occasionally sharp lines and surfaces suggest that huge quartz crystals are present and in contact with each other. However, it is extremely difficult to delineate the entire hexagonal outline of a single crystal because of growth interference. The visual clarity of the quartz may indicate such crystal outlines, i.e., the cloudy-milky areas representing the crystal faces and the clear-transparent areas indicating the centers or terminations of such crystals. The diaphaneity (clarity) ranges from clear to opaque, but translucent is most common. The color spread is from colorless to milky white. Generally the two properties are related in that the colorless areas are transparent to translucent while the opaque areas are white to milky white. There is evidence that the opaque areas (white-milky white) result from inclusions of bubbles. Further, these bubbles are not simple air bubbles but rather exotic or rare-earth gas bubbles. The presence of these gases has no bearing on the high purity of the quartz.

Minor amounts of smoky to jet black quartz is present, generally removed from the core, which probably result from crystalline changes initiated by exposure to adjacent disintegrating radioactive minerals.

Feldspar The feldspar (25-35%) appears to be predominantly a potash and perthite type feldspar. The latter type, in addition to containing potassium, also contains sodium. Tentatively, the names for these two would be orthoclase

and microcline-microperthite feldspars. There is a suggestion only that some plagioclase feldspars (calcium bearing) are present representing an insignificant percentage.

Individual masses of feldspar reach dimensions of up to 2 meters (approximately 6-7 feet). Crystal outlines are vague but contact with other minerals appears to be sharp and distinct. Minute amounts of peristerite (albite) and oligoclase (sunstone) feldspars are present.

BIOTITE The biotite (1-5%) occurs as books in the outer zone and occasionally within the other zones. The average width was from 0.5 inches up to 8 inches (approximately 1.5-20 cm.). These books have a thickness of 1/8 to 1 inch. The biotite does not generally occur as disseminated grains throughout or within the quartz or feldspar areas. Biotite books commonly are found between or marking the contacts of quartz and quartz; quartz and feldspar; or feldspar and feldspar. There is more than a strong suggestion that because they do occur along these boundaries they demarcate the crystal faces of the quartz and feldspar. The biotite observed is somewhat friable (breaks easily) because of the present proximity to the surface and resultant weathering. This friable aspect of biotite will disappear with depth.

ECONOMIC USES OF MINERALS:

Quartz Commercially, the quartz is unquestionably very high quality and high grade because of its purity (99.9+%). This type of quartz is commonly referred to as high tech quartz. Principal multiple uses are in the electronic-electrical, heating, optical glass, ceramic and metallurgical industries.

The writer disagrees with the grading system imposed on the quartz by a glass manufacturer several years ago. That system designated three grades for the quartz based on the transparency, translucency or opaqueness. Stated previ-

ously, the clarity of the quartz is a function of the quantitative presence of gas bubbles. The chemical purity of the quartz is the same for all degrees of clarity. Furthermore, the degree of transparency-opaqueness is lost with size. The smaller the material is crushed the less apparent are the differences in visibility. Most buyers would specify finer grade sizes and they are less concerned or aware of the "degree of visibility" of the quartz. The user is not receiving a lower quality. When the quartz is processed by the user - whether for crystal growing, fusing, glass making, etc., all varieties of the mined quartz will attain the colorless, clear state that the user desires. This is inherent in the processing techniques of the users.

Feldspar The feldspar can be used primarily in the glass and ceramic industries. In addition, the potash feldspar has been used as a soil fertilizer enrichener. Powdered feldspar, because of its hardness, has been used as the abrasive material in household cleansers (Comet, Bon-Ami, Bab-O, Ajax, etc.). There is a ready and continuous demand for this mineral.

Biotite Uses for biotite are limited. It is sometimes used in the electronic-electrical and roofing industries. Odd uses calling for occasional requests warrants stockpiling this material. The biotite occurrence in thick books and large size can command a premium price.

Minor-Accessory Minerals These minerals may occur on occasion in concentrations such as pockets or vugs. These can represent considerable value in a rather small area. Removal may call for careful and special attention which may be time consuming. They fall under the following groups:

Mineral Specimens Museums and private collectors are continuously seeking newer, larger, unusual, rare minerals and crystals. Depending on the type mineral and its characteristics, a single specimen can often command a

very high price. There are instances of such specimens individually selling for 5 or 6 digit figures. The writer viewed the impression of two crystal faces of what is believed to signify the presence of a spodumene crystal which had been removed from the quarry wall. The sharpness and dimensions (two feet plus in length) indicates a crystal possibly worth several thousand dollars.

Gem Material Certain varieties of feldspars viewed by the writer can be used as gem material. These include peristerite and dark-brown-reddish varieties of microcline and oligoclase. The writer believes that sunstone and amazonite (golden and green varieties of oligoclase and microcline) will be found occasionally and are valued as semi-precious gem material.

The writer also found smoky quartz ranging from light grey to jet black. This variety of quartz (gem name - cairngorn) plus milky white quartz are used in the gem trade.

The writer further believes that pockets or vugs of tourmaline will be eventually found. These are considered precious if the proper shade and color is present. It is not uncommon for such vugs or pockets to yield material worth several millions of dollars.

Other gem material may be uncovered with continued operation. They may include kunzite (variety of spodumene); beryl, topaz, zircon, amethyst, rose quartz, etc.

Radioactive Minerals The observed presence of autunite (a uranium mineral) may result in the occasional pocket of some radioactive minerals. Such concentration warrant careful removal and subsequent sale to the proper parties. Generally such minerals are so rare that they are in continuous demand as collection specimens.

Rare-Earth Gases Previously mentioned was the presence of rare-earth gases as bubble inclusions in the quartz. It is safe to assume that these

gaseous bubbles occur in all of the other minerals, especially the feldspars. These rare gases are in the Earth's atmosphere but in miniscule amounts, usually measured in parts per million or billion. It is a known certainty that Mohawk Quartz will have to crush the quartz and feldspar to various grade sizes as specified by the users. During that crushing operation much of the rare gases will be freed from their enclosed state within these minerals. At that time the concentration of these gases will be much greater than their atmospheric occurrence. Recovery of these gases at that time can prove a most valuable asset to Mohawk. There is a continuous demand for these gases.

Sand The area of the mine has a sand mantle derived from the weathering of the underlying pegmatite. This sand is medium to fine in size, brownish-yellow in color. The latter property is due to a limonite-hematite staining. The presence of sand, which appears to develop over the pegmatite, can be used as a surface indicator of the underlying pegmatite. This then could be a valuable way of locating present and future areas of this or other pegmatites in the region.

The sand can be easily recovered by hydraulicking (washing down). The outwash of the sand and coarser material would occur at the lower levels of the hill and there would be a natural separation/concentration according to grade size. The sand could be sieved further for an increased concentration and then marketed. The impurities in the sand would restrict its use to moulding sand and lower grades of glass manufacture (disposable bottles).

The writer has not had an opportunity at this time to carefully analyze the sand. It is possible that the sand contains concentrations of minerals derived from the pegmatite which can radically increase its value.

CONCLUDING STATEMENT:

The writer has observed, studied and sampled pegmatites in a number of localities. These include deposits in Labrador; Quebec; Ontario; British Columbia; Brazil; Maine; Vermont; New Hampshire; Massachusetts; Connecticut; The Highlands of New York, New Jersey and Pennsylvania; Bedford, N.Y.; Amelia Courthouse, Va.; North Carolina; Georgia; The Black Hills of South Dakota; Wyoming; Montana; The Sierra Nevadas of California.

It is my opinion that the pegmatite located at Madawaska and controlled by Mohawk Quartz, Inc. is one of the most unusual pegmatite deposit ever found. The dimensions and purity of the quartz mass is truly outstanding. Although such masses of quartz are found elsewhere, very few have the size or quality of that herein described. It is truly unique.

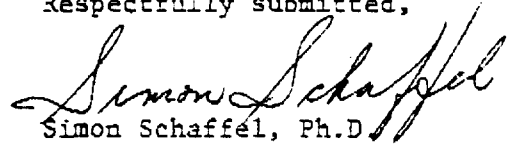
Reserve Following the demise of interest by previous controllers of this property the author spent some time in New England where he uncovered a pegmatite comparable to that at Madawaska. It is hoped that at some future date this New England occurrence will be added to the reserve of Mohawk Quartz.

The reserve of the Madawaska pegmatite and the principal mineral quartz was initially estimated by the author at 1,000,000 tons. The writer has not changed this estimate. The basis for this figure is indicated on the addendum page at the end of this report. This estimate is in contradistinction to those of others whose maximum figure was placed at only 1,000,000 pounds.

Although the pegmatite herein described is unique it cannot be a sole deposit in that region. Pegmatites are emplaced in rock zones of dilation. These represent zones where, because of certain forces, the fluids and gases can emplace themselves simultaneously as dilation occurs in the country rock. They never occur as singular bodies. They are usually in groups occurring en echelon horizontally and vertically. Therefore, additional pegmatite bodies should be

present locally. The writer, accompanied by another geologist, Dr. Murray Feisher, found such a body in a nearby adjoining hill. Dr. Stechler, who spent a life-time in this region, the true developer and founder of this deposit, indicated that he had found additional comparable bodies nearby. The writer has heard verbal reports from people in the region that such bodies occur in the neighboring Provincial Park. If these complementary pegmatites can be acquired through exploration the reserve of Mohawk would be enormous.

Respectfully submitted,



Simon Schaffel, Ph.D.
Professor of Geology
Professor Emeritus, City University
of New York
Adjunct Professor, Hofstra University
& College of Staten Island

Quartz Reserve
of Pegmatite Deposit Located at
Madawaska, Ontario

<p>1. Although the pegmatite is lentil-shaped it can be considered as tabular for computation purposes. The volume must first be determined. This is equal to the height times the depth times the width.</p>	<p>Volume = height X depth X width (h) (d) (w) height = 30 feet (conservative) depth = 500 feet width = 3000 feet Volume = (h) 30 X (d) 500 X (w) 3000 = (a) <u>45,000,000 cubic feet (ft³)</u></p>
<p>2. The weight of the volume must next be calculated as follows: Density of water is 1.00 and the weight of one cubic foot of water is 62.4 pounds. The density of quartz is 2.65 against the density of water and therefore the weight of one cubic foot of quartz is 165.36 pounds.</p>	<p>Density of water = 1.00 " of quartz = 2.65 Weight 1 ft³ water = 62.4 pounds " 1 ft³ quartz = 62.4 pounds X 2.65 = (b) <u>165.36 pounds</u></p>
<p>3. The total weight of the volume of quartz (i.) above.</p>	<p>(a) X (b) = Weight of total quartz 45,000,000 ft³ X 165.36 pounds = (c) <u>7,441,200,000 pounds</u></p>
<p>4. Expressed as short tons. Pounds divided by 2000.</p>	<p>(c) ÷ 2000 7,441,200,000 pounds ÷ 2000 = (d) <u>3,720,600 tons</u></p>
<p>5. Assume that body only contains 30% quartz (extremely conservative estimate). Total quartz reserve.</p>	<p>(d) X .30 3,720,600 tons X .30 = <u>1,116,180 tons quartz</u></p>

Client: Mohawk Quartz	Client ID: Madawaska (MO-FP ₂)
Date received: 2/26/98	Laboratory ID: 9811091
Date extracted: 3/10/98	Matrix: Rock
Date analyzed: 3/10/98	Contractor: 11418

METALS ANALYSIS

Al ₂ O ₃	K ₂ O	Na ₂ O	SiO ₂
19.2	14.4	2.54	63.8

Michael Versaldi

Laboratory Director

17



Client: Mohawk Quartz	Client ID: Madawaska (MO-FP ₁)
Date received: 2/26/98	Laboratory ID: 9811092
Date extracted: 3/10/98	Matrix: Rock
Date analyzed: 3/10/98	Contractor: 11418

METALS ANALYSIS

Al ₂ O ₃	K ₂ O	Na ₂ O	SiO ₂
19.9	14.0	2.50	63.6

Michael Verseth

Laboratory Director

18

Client: Mohawk Quartz	Client ID: Madawaska (MO-FP ₂)
Date received: 2/26/98	Laboratory ID: 9811093
Date extracted: 3/10/98	Matrix: Rock
Date analyzed: 3/10/98	Contractor: 11418

METALS ANALYSIS

Al ₂ O ₃	K ₂ O	Na ₂ O	SiO ₂
20.5	4.58	7.63	67.3

Michael Versaldi

Laboratory Director



Conclusions

Based on the gathered data and research to date the pursuance of ongoing research to further market and develop this deposit will be engaged.

COSTS PHASE 3

Direct Expenses

Oct. 12,13,14, 1997 field work, exploration	\$2,000.00
Oct.31, Nov.1 1997 compilation of data, study report	\$1950.00
April 10, 1998 air photography	\$2247.00
June 21, 22, 23, 1998 compilation of data and report	\$450.00
3 Sample analyses March 10,1998	\$350.00
TOTAL	\$6997.00

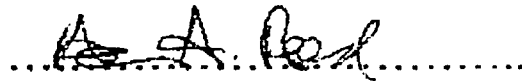
Indirect Expenses

Misc. disbursements for phone, faxes and photocopies	\$80.00
Total direct and indirect expenses	\$6997.00
	<u>\$80.00</u>
Total Phase 3	\$7077.00

The following individuals undertook the prospecting work
of this exploration:

ALAN A. REED

R. R. 1 MADOC, ONT 613-473-2969

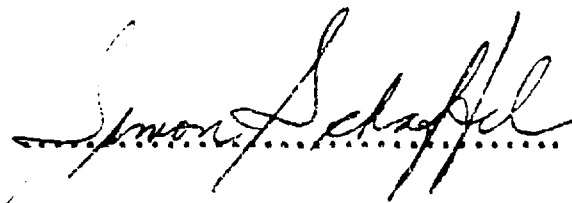


Simon Schaffel Ph.D

Hofstra University

Hempstead, New York 11550-1090

516-437-6705



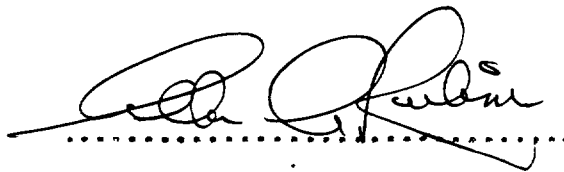
Allan A. Rubin

Wings of Flight

Markham Airport, Box 518

Markham, ON L3P 3R1

905-640-0500





Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Ontario (sections 65(2) and 66(3), R.S.O. 1990

19587

Transaction Number (office use)
W9890.00039
Assessment Files Research Imaging



31E09SE2002 2.18587 MURCHISON 900

sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this work and correspond with the mining land holder. Questions about this collection and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Instructions: - For work performed on Crown Lands before recording a claim, use form 0241
 - Please type or print in ink.

2.18587

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

Name <i>Alan A. Reed</i>	Client Number <i>186410</i>
Address <i>RR#1 Madoc, ON K0K-2K0</i>	Telephone Number <i>613-473-2969</i>
	Fax Number <i>905-655-8397</i>
Name	Client Number
Address	Telephone Number
	Fax Number

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

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

Work Type <i>prospecting, air photos, geological report, 3 sample assays; completion of report.</i>	Office Use
	Commodity
	Total \$ Value of Work Claimed <i>\$5190</i>
Dates Work Performed From <i>12/13/14</i> Day Month <i>10</i> Year <i>97</i> To <i>23</i> Day Month <i>06</i> Year <i>1998</i>	NTS Reference
Global Positioning System Data (if available)	Mining Division <i>Southern Ontario</i>
Township/Area <i>Murchison</i>	Resident Geologist District <i>Tweed</i>
M or G-Plan Number <i>G-1391</i>	

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

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

Name <i>Alan A. Reed</i>	Telephone Number <i>613-473-2969</i>
Address <i>RR#1 Madoc, ON K0K 2K0</i>	Fax Number <i>905-655-8397</i>
Name <i>Simon Schaffel Ph.D.</i>	Telephone Number <i>516-437-6705</i>
Address <i>54 Silver St. Elmont New York 11003</i>	Fax Number <i>516-352-3699</i>
Name <i>Wings of Flight Allan A. Rubin</i>	Telephone Number <i>905-640-0500</i>
Address <i>Markam Airport, Box 518 Markam ON L3P 3R1</i>	Fax Number

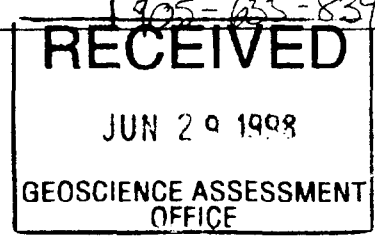
4. Certification by Recorded Holder or Agent

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

Signature of Recorded Holder or Agent <i>[Signature]</i>	Date <i>June 25/1998</i>
Agent's Address <i>RR#1 Madoc, ON K0K 2K0</i>	Telephone Number <i>613-473-2969</i>
	Fax Number <i>905-655-8397</i>

0241 (03/97)

deened: Sept. 27/98



M.L.

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

12790.00689

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$ 8,892	\$ 4,000	0	\$4,892
1 1040836	16ha	\$ 800-	\$ 800-		\$ 1887-
2 1040837	16ha	\$ 800-	\$ 800-		↓
3 1040838	16ha	\$ 800-	\$ 800-		★ Distribute
4 1040839	16ha	\$ 800-	\$ 800-		these funds.
5 1040840	16ha	\$ 800-	\$ 800-		over to the
6 1040841	16ha	\$ 800-	\$ 800-		9 claims.
7 1150671	16ha	\$ 30-	\$ 30-		★
8 1150672	16ha	\$ 330-	\$ 330-		
9 1150673	16ha	\$ 30-	\$ 30-		
10					
11					
12					
13					
14					
15					
Column Totals		\$ 5190-	\$ 5190-		\$ 1887-

I, Alan A. Reed, do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: Alan A. Reed Date: June 25/98

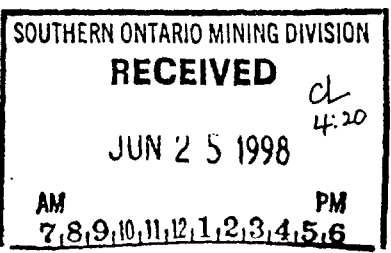
6. Instructions for cutting back credits that are not approved.

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

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

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

For Office Use Only

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



Statement of Costs for Assessment Credit

Transaction Number (office use) WA890.00039

Personal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Table with 4 columns: Work Type, Units of work, Cost Per Unit of work, Total Cost. Rows include Report Compilation, Geological Report, 3 Sample Assays, Air Photos, Field work, Associated Costs (Phone, taxes, photocopies), Transportation Costs, Food and Lodging Costs, and Total Value of Assessment Work (\$7077.00).

Calculations of Filing Discounts:

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

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

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, Alan A. Reed, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying

Declaration of Work form as Recorded Holder. I am authorized to make this certification.

Signature: Alan A. Reed, Date: June 25/98

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

December 7, 1998

ALLAN AUBREY RUBIN
67 LUNAU LANE
THORNHILL, ONTARIO
L3T-5N1

Telephone: (888) 415-9846
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Dear Sir or Madam:

Submission Number: 2.18587

Status

Subject: Transaction Number(s): W9890.00039 Approval After Notice

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

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

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

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at gatesb2@epo.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Blair Kite".

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

Work Report Assessment Results

Submission Number: 2.18587

Date Correspondence Sent: December 07, 1998

Assessor: Bruce Gates

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9890.00039	1040836	MURCHISON	Approval After Notice	November 08, 1998

Section:

18 Other INDUS

The revisions outlined in the Notice dated September 24, 1998, have been received. We have reviewed this submission and have combined the original work report and the amended work report and approved the work as an Industrial mineral submission.

We have allowed the following costs:

Report by Schaffel - \$1950 + \$2000 - (\$1,200 lack of a detailed geology map, etc.) = \$2,750

Report Compilation = \$300

Assays = \$45

Associated Costs = \$80

Total = \$3,175

Assessment work credit has been redistributed, as outlined on the attached Distribution of Assessment Work Credit sheet, to better reflect the location of the work.

Correspondence to:

Resident Geologist
Tweed, ON

Assessment Files Library
Sudbury, ON

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

ALLAN AUBREY RUBIN
THORNHILL, ONTARIO

EDWIN ARTHUR HOOVER
MARKHAM, ONTARIO

ALAN ARTHUR REED
MADOC, Ontario

Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: December 07, 1998

Submission Number: 2.18587

Transaction Number: W9890.00039

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1040836	100.00
1040837	100.00
1040838	100.00
1040839	100.00
1040840	100.00
1040841	100.00
1150671	100.00
1150672	2,375.00
1150673	100.00
Total: \$	3,175.00

G-1391
MURCHISON TWP (2011)

MURCHISON-- SOUTH HALF

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY
S.R.O. - SURFACE RIGHTS ONLY
M+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
SEC 36/80	W 5/81	1/9/81	M.B.S.	149759
PARK RESERVE	W.61/83	12/9/83	M.B.S.	188554

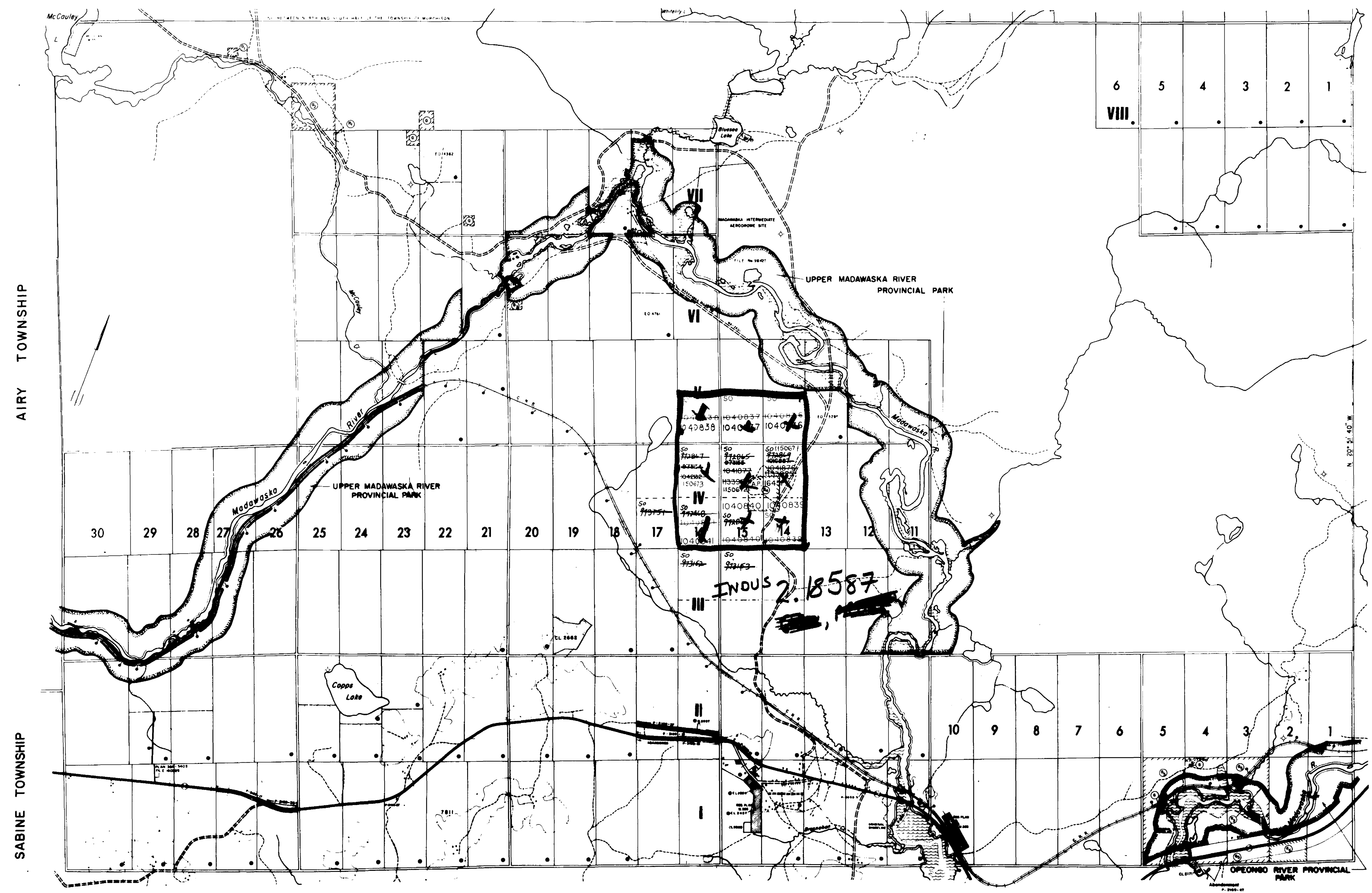
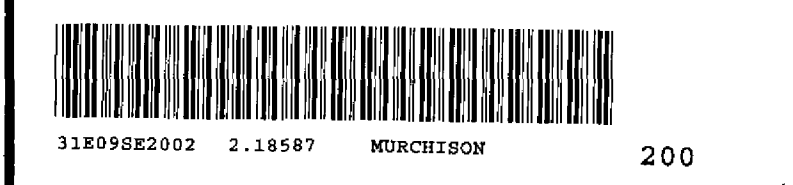
* SUBJECT TO TIMBER OPERATIONS
APRIL 1, 1989 TO MARCH 31, 1990 *

NOTES

SUBDIVISION OF THIS TOWNSHIP INTO LOTS & CONCESSIONS WAS PARTIALLY ANNULLED 7th MARCH, 1955

SAND and GRAVEL

- QUARRY PERMIT
- MTC PIT 5A26
- MTC PIT 5A19
- GRAVEL FILE 27919
- QUARTZ FILE 122379
- MTC PIT 5A22
- MTC PIT 5A23



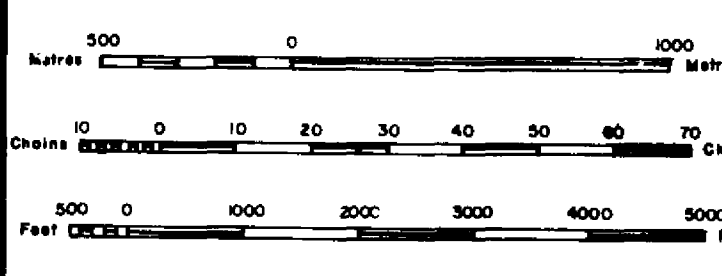
LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES: TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES: LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT
- LAND USE PERMITS

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
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	○
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 280, SEC. 63, SUBSEC. 1.



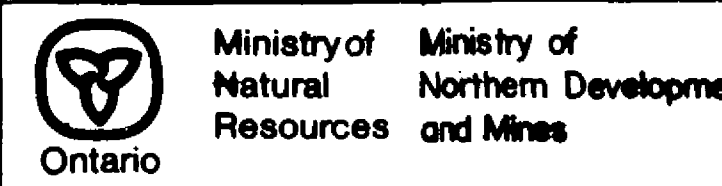
DATE OF ISSUE 1:20 000

JUN 7 6 1998

PROVINCIAL RECORDS OFFICE SUDBURY

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.

TOWNSHIP: MURCHISON SOUTH HALF
M. B. S. ADMINISTRATIVE DISTRICT ALGONQUIN PARK
MINING DIVISION
SOUTHERN ONTARIO LAND TITLES / REGISTRY DIVISION
NIPISSING



Date: SEPTEMBER 1986

G-1391

RES. GEO. TWEED
M.N.R. DIST. ALGONQUIN PARK