



NAREX Ore Search Consultants Inc.

4900 Sheppard Avenue East, Suite 208, Scarborough
Ontario, Canada M1S 4A7 Tel. (416) 293-2990



41P11SE0166 2.7105 ASQUITH

010

NRX-84-32

ONITAP RESOURCES INC.

GEOCHEMICAL SURVEYS

Seager Lake Property

Asquith Township

LARDER LAKE MINING DIVISION

District of Sudbury

Ontario

RECEIVED

AUG 28 1984

MINING LANDS SECTION

August 1984

Dua



41P11SE0166 2.7105 ASQUITH

010C

TABLE OF CONTENTS

	<u>PAGE:</u>
A. INTRODUCTION	1.
Location Map	2.
Plan of claims	3.
B. LOCATION AND ACCESS	1.
C. TOPOGRAPHY AND DRAINAGE	4.
D. PREVIOUS WORK AND HISTORY	4.
E. GENERAL GEOLOGY	5.
F. GEOLOGY OF THE PROPERTY	5.
G. ECONOMIC GEOLOGY	5.
H. GEOPHYSICAL RESULTS	6.
I. OVERBURDEN AND SOILS	6.
J. PRESENT SURVEY	7.
K. DISCUSSION OF RESULTS	8.
L. CONCLUSIONS AND RECOMMENDATIONS	8.
REFERENCES	9.
Appendix A	(I to VII)
Appendix B	(VIII to X)

ACCOMPANYING MAP

Map 1 - Soil Geochemical Survey Scale 1 inch: 200 feet.



A. INTRODUCTION

This report for Onitap Resources Inc. covers four (4) claims in Churchill and Asquith Townships, Larder Lake Mining Division, District of Sudbury, Ontario. These four claims are part of a larger block of 14 contiguous claims of the Seager-Stewart Group. The claim numbers are L 578737, 643219, 643220 and 643221.

During June-July 1984 a grid was cut over the claims and and subsequent geochemical soil survey was completed by NAREX Ore Search Consultants Inc. The survey was conducted over cut lines which were spaced at 400 foot intervals across the claims. A total of approximately 4 miles of grid and baseline were cut and picketed every 100 feet.

B. LOCATION AND ACCESS:

The Shining Tree area is located in the District of Sudbury, 77 miles due north of Sudbury or 65 miles due south of Timmins. (Fig. C-1)

Access is via secondary roads from the main Timmins-to-Sudbury highway #144. Secondary Highway #560, bisects the area of interest. The village of Shining Tree is located within this area.

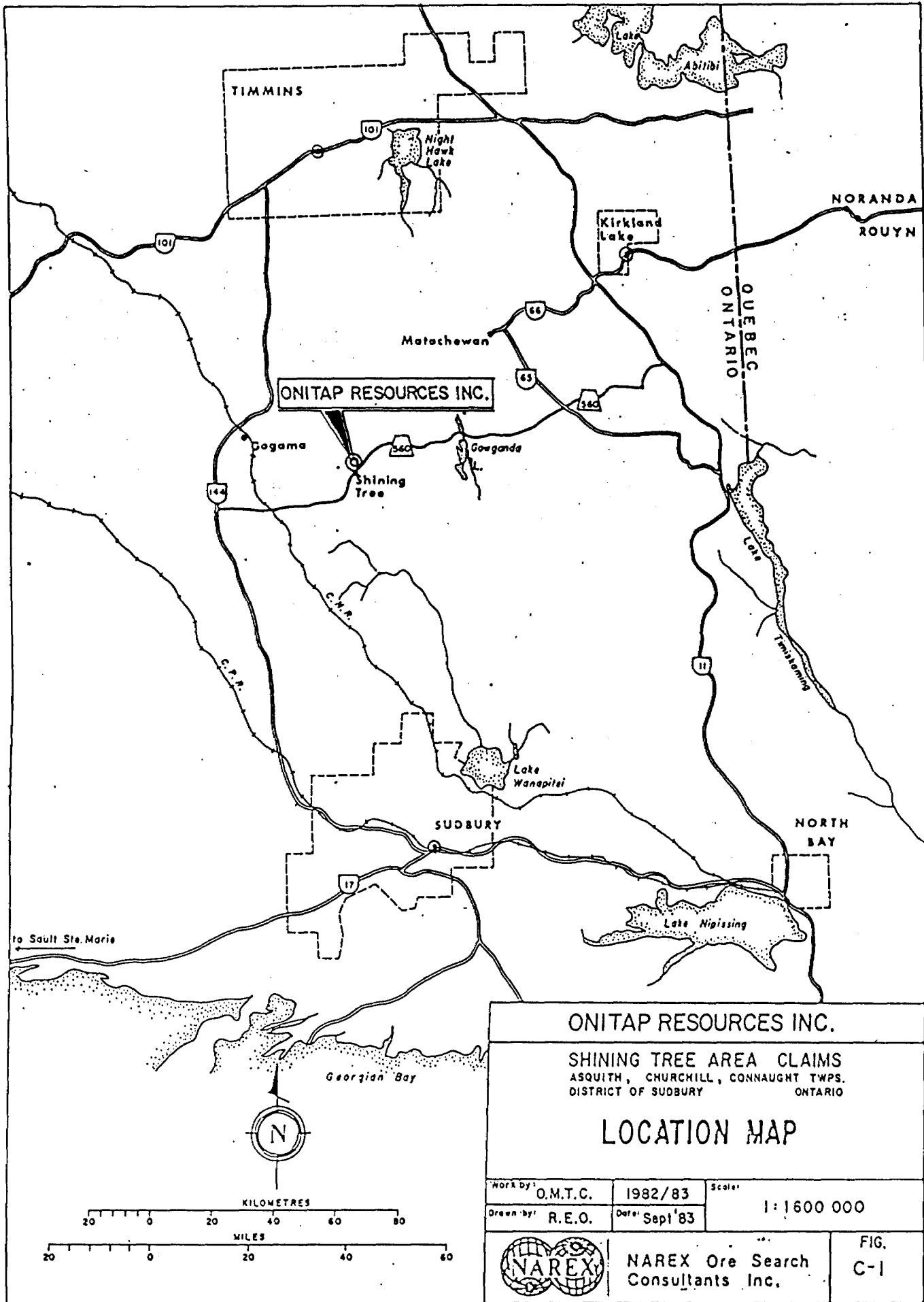
Shining Tree is a community of some 50 residents, hosting a general store, several gas stations and three tourist camps. The nearest float plane base is at Gogama on highway #144, some 23 air miles to the northwest. The regional Ministry of Natural Resources offices and base are located at Gogama.

The claim group is located on the boundary between Asquith and Fawcett Townships, in the central part of Asquith Twp. which is about three miles (4.8 km) southeast from the village of Shiningtree, Ontario.

The property is accessible by boat via Moorecamp Lake, MacDonald Lake, Seager Creek and then Seager Lake. Several portages are necessary in the route so a boat was left on the north shore of Seager Lake in order to reduce the number of portages. The Buckingham Road which is passable only by foot, extends from Highway 560, and to the east of Moorecamp and MacDonald Lakes, and cuts across the northeast corner of the property.

.../..





ONITAP RESOURCES INC.

ONITAP RESOURCES INC.

SHINING TREE AREA CLAIMS
ASQUITH, CHURCHILL, CONNAUGHT TWPS.
DISTRICT OF SUDBURY ONTARIO

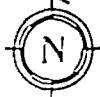
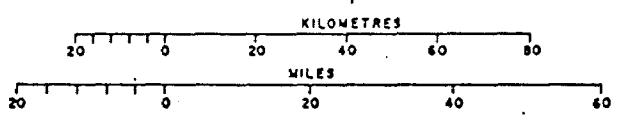
LOCATION MAP

Work by:	O.M.T.C.	1982/83	Scale:
Drawn by:	R.E.O.	Date: Sept '83	1:1600 000



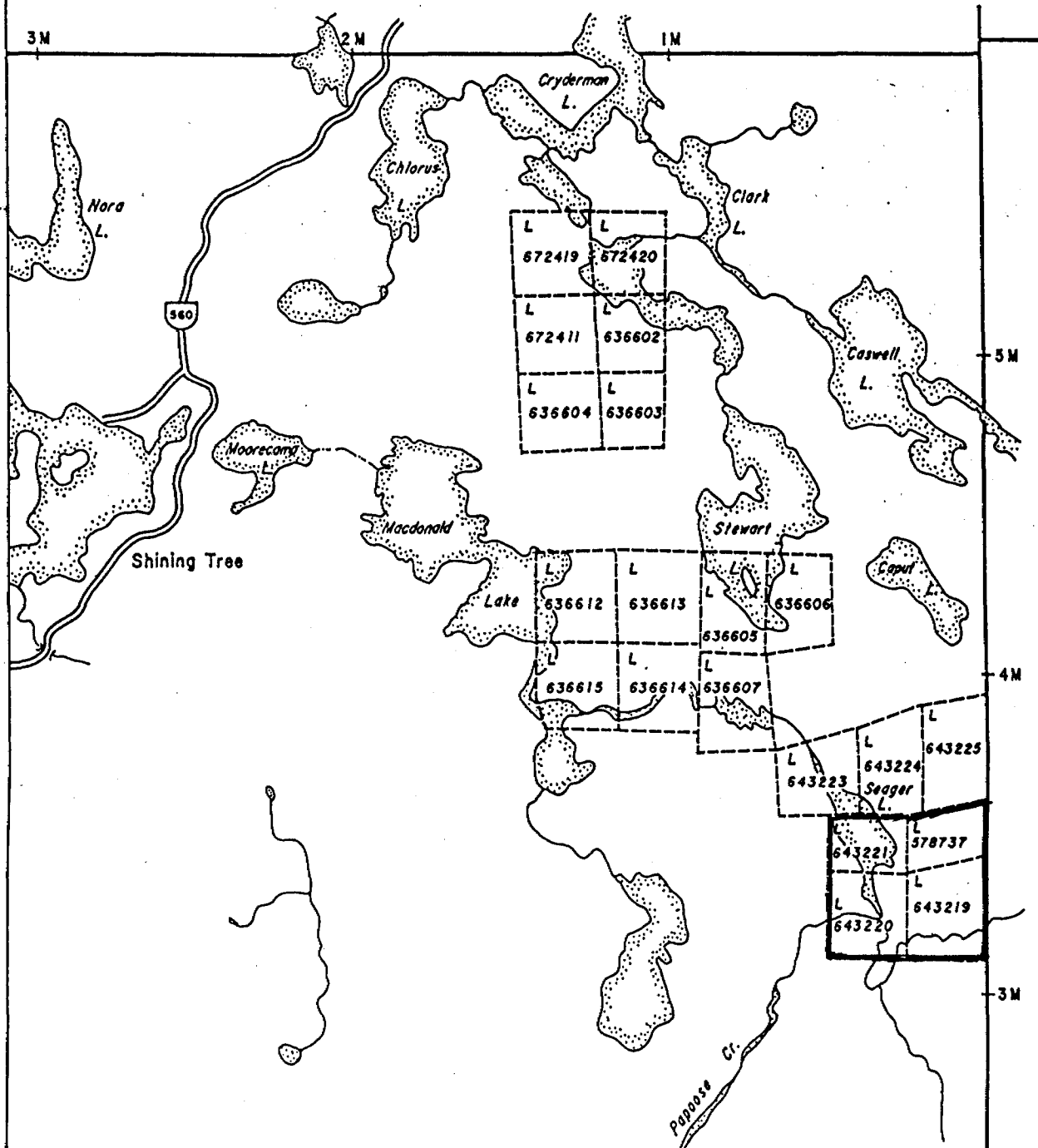
NAREX Ore Search
Consultants Inc.

FIG.
C-1

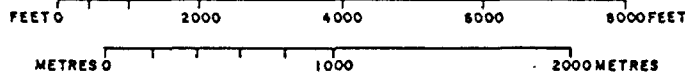


to Sault Ste. Marie

CHURCHILL TWP.



FAWCETT TWP.



ONITAP RESOURCES INC.

SHINING TREE AREA CLAIMS
ASQUITH TWP., DISTRICT OF SUDBURY, ONTARIO

PLAN OF CLAIMS

(SEAGER - STEWART GROUP)

BLOCK 6

Scale:

1" = 1/2 Mile

Drawn by: S.J.M.

Date: May '83



NAREX Ore Search
Consultants Inc.

FIG.
C-7

C. TOPOGRAPHY AND DRAINAGE

The area in the vicinity of the property is quite typical of the Precambrian Shield, with gently rolling relief. Rock outcrop represents about 5 - 15% of the surface, the rest is covered with a mantle of muskeg, bouldery clay and sandy clay, till, and dotted with small swampy lakes.

The higher ground of the area is covered with a mature growth mixture of birch, poplar, spruce and balsam and an undergrowth of alder and hazel. The intermediate flat areas consist usually of open spruce and balsam forest. The low-lying or swampy areas consist of an intermixed growth of balsam, cedar, tamarack and alders.

A part of Seager Lake occupies the western part of the claim block.

The property is wooded in all areas not occupied by lake or swamp, containing predominantly black spruce, balsam, some white pine and birch trees.

There have been forest fires in the area some years ago as evidenced by the charcoal layer below the organic material near surface in several places.

D. PREVIOUS WORK AND HISTORY

The Seager-Stewart Lakes group, Asquith Twp.,

The claim group surrounds the old Buckingham Mine, which had some development work in the 1920's on a quartz vein carrying visible gold. The only previous work reported on the claims was by Canadian Erie Mines, which carried some trenching in 1936. They reported the presence of a vein (to the south of the Buckingham Mine), which carried gold values ranging from 0.005 to 0.12 oz. Au/t and a shear zone with values of 0.02 to 0.21 oz. Au/t over a 12 foot width. Patino Mines (Quebec) Ltd. held this showing in 1980-1981 and carried out a geological mapping and geophysical survey programme. They failed to find these showings, but did outline an EM-16 shear-zone type conductor in the immediate area. No further follow-up work was done by Patino. Prospecting by NAREX Ore Search Consultants during the summer of 1982 to the north of the Buckingham property resulted in a sample which assayed 0.32 oz. Au/t from a 1.3 foot wide quartz vein.

In September 1983, a 251 foot hole was drilled. Several sheared basalt sections, carrying anomalous Au values were intersected.

.../..



E. GENERAL GEOLOGY

Asquith Township is underlain by Early to Middle Precambrian rocks which are overlain by a thin veneer of Pleistocene and recent deposits.

The Early Precambrian rocks consist of felsic to mafic metavolcanic rocks, mafic to ultramafic intrusive, felsic intrusive rocks and diabase dykes. Mapping conducted by the author in the Township area has also shown that komatiitic sequences and various types of pyroclastic and tuffaceous units do occur. Middle Precambrian rocks are represented by Nipissing diabase rocks.

F. GEOLOGY OF THE SEAGER LAKE PROPERTY

The geology of the property mainly consists of basalt flows intercalated with chloritic tuffs in the central part and with more felsic pyroclastic rocks (tuffs and agglomerates) in the northwest part of the map area. The entire sequence is cut by various gabbro and pyroxenite dykes.

G. ECONOMIC GEOLOGY

No fuchsite alteration zone was located in the trenches observed on the property. Only minor quartz veining occurred within the trenches and assays results were poor (trace amounts of Au, N.D. to 0.03 oz/t Ag).

In all of these samples only trace amounts of Au and low values for Ag were detected. Most of the quartz veins, pits and trenches are found within basalt flows and to a lesser within chloritic tuffs. The quartz veins are generally barren of sulphides and vary from 2-6" in width. The basalt host rocks are very carbonatized (calcite and dolomite), schistose and usually sheared. The tuffs are also carbonatized, chloritized and sometimes sheared with trace pyrite stringers, but no strong fuchsite plus carbonate alteration zones was recognized.

Also of interest, but for possible sulphide mineralization are the felsic pyroclastic rocks in the northwest part of the property. Here, lapilli tuffs, crystal tuffs and agglomerates are gossaned with 2-3% remobilized pyrite and hematite. However, this seems to be a thin unit which is not traceable laterally or along strike for any distance.

.../..



H. GEOPHYSICS RESULTS:

The main weak EM-16 conductor axis is traceable from L8 + 00 W to L12 + 00 E (roughly parallel to the baseline and 600 feet to the south). Because the conductor is weak and corresponds to a creek bed along its entire length, it is probably caused by a drainage effect. A similar case can be made for the short conductor between L16 + 00 W and L12 + 00 W (map). An alternative explanation for these conductors which is less likely is that a weakly conductive shear zone underlies the creek beds. If this is the case then the shear zone would be the explanation for the conductor. However, there is little field evidence to support this idea.

I. OVERBURDEN AND SOILS

The overburden on the property consists of light brown to buff coloured poorly consolidated glacial till deposited about 11,000 years ago by continental ice sheets. The thickness of the glacial till in this area ranges from a few inches to probably 30 - 40 feet in swamps.

The surficial parts of the till have weathered to form a thin mantle of soil whose thickness ranges from 1 - 6 inches. The area has what would be classified as a podzolic soil.

The surficial organic A - horizon soil which consists of loose leaves, moss and partly-decomposed plant debris. The A₁ - horizon (humus) underlies the A₀ layer and is characterized by a dark colour and consists mainly of decomposed organic material. The horizon is generally thin with from 1-3 inches present in swampy areas to less than 1/2 inch thick in well drained areas. In these areas a distinctive charcoal layer is part of the A-horizon and indicates that much of the organic material was destroyed by previous forest fires.

Where A₁ is not directly underlain by bedrock, it grades into a light coloured A₂- horizon of fine silty material and sand. This represents the leached soil zone and is generally widespread and 2 - 4 inches thick.

The A₂ horizon is underlain by the B₁ horizon and is well developed throughout the property area except in swampy areas where it may lie below a thick A - horizon. The progression shows a B₁-horizon which is chocolate brown or reddish brown colour consisting of an admixture of different proportions of very fine grained sand, clay and silty material with some pebbles. Its thickness ranges from 2" to about 4" and it is best developed in well-drained areas with undulating topography. In some areas the soil colour is particularly reddish and this was thought to be related to high concentrations of hydrous oxides of iron.



Ideally the B₁-horizon grades into the B₂-horizon which has a lighter¹ brown colour. The B₂-horizon is generally more sandy than the B₁-horizon. In areas of impeded subsurface drainage, both the B₁- and B₂-horizons are poorly developed and tend to have mottled colours. The thickness of the B₂-horizon ranges from about 2" to over 10".

The C-horizon underlies the B₂-horizon. It consists mainly of glacial till which has been only slightly affected by soil forming processes. The horizon has a very light brown to earth colour and its main constituents are uncolidated sands and gravel, rock fragments, and pebbles.

Generally, a lodgement till of some type would be present in the lower-most portion of the till directly overlying the bedrock.

J. PRESENT SURVEY

The survey completed by NAREX Ore Search Consultants was carried out in June, 1984. The survey entailed sampling of the B₁-horizon where it was present and elsewhere the A₁-horizon. The B horizon is well developed throughout most of the property except in to very low swampy areas where A₁ samples were taken. In some cases it was not possible for any samples to be taken since only living plant matter was present in the top 12 inches below the surface.

Sample location sites are plotted on Map #1. Samples were collected at 100-foot intervals along the grid and base lines. The lines are generally oriented east-west and are spaced at 400-foot intervals across the property.

A total of 185 samples were obtained from the property. The samples were subsequently hang dried and submitted to Assayers (Ontario) Limited for geochemical analysis for gold (parts per billion).

The analytical results and costs of the survey are tabulated in Appendix A and are also presented on a contour map accompanying this report. The survey and analytical methods are described in Appendix B for the sampling program.

.../..



K. DISCUSSION OF RESULTS

Gold values obtained from soil samples of the three blocks ranged from less than 5 ppb to 159 ppb. Background gold content appears to be in the range of 5 ppb for both B₁ and A₁ horizons; comparing the two horizons in several localities indicates that the values of the B₁ horizon are approximately double that of the corresponding values in the A₁ horizon.

The geochemical survey outlined a few localized anomalies. Of the 185 samples (plus 33 no samples) 26 had values of greater than 10 ppb, of these 3 were greater than 40 ppb with the highest being 159 ppb.

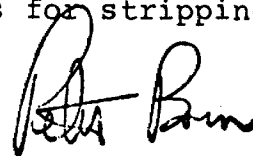
The area with the highest values is in claim L643219 with several small pockets of high Au values. This area is mainly underlain by mafic chloritized tuffs and these are several trenches in the immediate area. Another high value occurs on L 16W @ 10 + 00 N which is also under by felsic tuffs.

L. CONCLUSIONS AND RECOMMENDATIONS

Several general observations can be made with respect to the distribution of gold in soil over the property. It seems that the areas of highest anomalous gold are very localized, with the directions reflecting the trends of the underlying tuffaceous pyroclastic rocks. In the main area of interest (claim 643219) there are numerous pits and trenches in the area of the greatest Au-anomalies.

It is recommended that a program of stripping, trenching and sampling be utilized in the areas of the highest Au values in an effort to find the source the geochemical Au anomalies. Wherever the overburden is too thick for stripping, short inclined diamond drill holes would be needed to test the underlying bedrock. In total there are 4 target areas.

A follow-up geophysical self-potential (S.P.) survey would outline any conductive areas of disseminated sulphides. If necessary this could be followed by an I.P. survey to better define drill targets ore areas for stripping etc...



August 1984

Peter Born, M.Sc.
Project Geologist



REFERENCES

Carter, M.W.

- 1980: Geology of Connaught and Churchill Townships, District of Sudbury; Ontario Geological Survey Report 190, 81p. Accompanied by Geological Map 2414, scale 1:31,680 or 1 inch to 1/2 mile.

Carter, M.W.

- 1979: Asquith Township, District of Sudbury; Ontario Geological Survey Preliminary Map. P.2312 Geol. Series, scale 1:15,840 or 1 inch to 1/4 mile. Geology 1976.

Curtin, G.C. Lakin, H.W., Neuerberg, G.J. and Huber, A.E.,

- 1968: Utilization of humus rich forest soil (mull) in geochemical exploration for gold, U.S. Geol. Survey Circ. 562, 11 p.

Gleeson, C.F.,

- 1979: Consider geochemistry when seeking gold., The Northern Miner, Exploration issue, March 8, 1979.

All Authors - Ontario Ministry of Natural Resources,
Division of Mines, Work Assessment Files.

All Years -Northern Miner Press.



APPENDIX A

SOIL GEOCHEMISTRY - ANALYTICAL RESULTS AND
ASSAYING COSTS

Note: Sample numbers
refer to line and station
location which corresponds
directly to coordinates on
maps.

Prefix S - denotes Seager Lake samples.





ASSAYERS (ONTARIO) LIMITED

(II)

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. NX-10/ #3287

Date: July 30, 1984

Received 298 Samples of Soil

Submitted by Narex Ore Search Consultants Inc.

Sample No.	Au ppb	Sample No.	Au ppb
S 16E18N B	6	S L4W 7N B	17
19N B	34	8N	30
S BL 5W A	<5	9N	<5
BL 6W A	10	10N	<5
BL 7W B	<5	11N	6
S L4E BL B	<5	12N	<5
S BL 3W A	21	13N	<5
S L4W BL A	<5	14N	<5
1S B	17	15N	<5
2S	<5	S L4W 16N B	<5
3S	5	S L7W 1N B	<5
4S	<5	S L8W BL	N.S.
5S	20	1S	N.S.
6S B	<5	2S	N.S.
1N A	<5	3S	N.S.
2N A	<5	4S	N.S.
3N A	<5	5S	N.S.
4N B	19	6S	N.S.
5N	<5	7S	N.S.
S L4W 6N B	37	S L8W 8S B	N.S.

ASSAYERS (ONTARIO) LIMITED

Per 



ASSAYERS (ONTARIO) LIMITED

(III)

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. NX-10 /#3287 Date: July 30, 1984

Received _____ 298 Samples of Soil

Submitted by Narex Ore Search Consultants Inc.

Sample No.	Au ppb	Sample No.	Au ppb
S L12E 2N A	9	S 16E 4S B	<5
3N A	10	5S	<5
4N B	<5	6S	14
5N	<5	1N B	13
6N	14	2N A	<5
7N	<5	3N B	<5
8N	<5	4N	<5
9N	<5	5N	<5
10N	<5	6N	<5
11N	<5	7N	6
12N	13	8N	5
13N	11	9N	<5
14N	8	10N	21
15N	<5	11N B	8
16N	<5	12N A	<5
S L12E17N B	<5	13N B	<5
S 16E BL B	15	14N	11
1S B	<5	15N	16
2S A	<5	16N	<5
S L12E 3S B (river)	N.S.	s 16E17N B	37

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

(IV)

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. NX-10 /#3287 Date: July 30, 1984

Received _____ 298 Samples of Soil

Submitted by Narex Ore Search Consultants Inc.

Sample No.	Au ppb	Sample No.	Au ppb
S L4E11N B	N.S.	S L8E 8N A	<5
12N A	<5	9N B	<5
13N B	<5	10N	<5
14N A	<5	11N	10
15N A	<5	12N	<5
17N B	<5	13N	<5
S L8E 0 B	<5	14N	17
1S B	<5	15N	<5
2S	<5	16N	17
3S	N.S.	17N	<5
4S	N.S.	18N B	<5
5S	<5	S L12E 0 A	<5
6S	<5	1S A	<5
1N	<5	2S B	7
2N	<5	3S A	<5
3N	<5	3S B	N.S.
4N	<5	4S	<5
5N	<5	5S	<5
6N	13	6S	15
S L8E7NB	5	S L12E7N B	8

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

(V)

JUL 30 1984

Certificate of Analysis

Certificate No. NX-10/#3287 Date: July 30, 1984

Received _____ 298 Samples of Soil

Submitted by Narex Ore Search Consultants Inc. Att'n: Dr. Narex

Sample No.	Au ppb	Sample No.	Au ppb
S L O B L B	6	S L O 14N B	10
1S	<5	15N B	<5
2S	<5	16N A	<5
3S	<5	17N B	<5
4S	<5	S L4E 1S B	23
5S B	<5	2S	<5
6S A	<5	3S B	<5
1N B	<5	4S	<5
2N	<5	5S	<5
3N	<5	6S	<5
4N	<5	1N B	159
5N	<5	2N A	<5
6N B	<5	3N B	140
7N A	<5	4N	<5
8N B	N.S.	5N	<5
9N	N.S.	6N B	<5
10N	N.S.	7N	<5
11N B	N.S.	8N	<5
12N A	<5	9N	<5
S L O 13N A	<5	S L4E10N B	6

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

(VI)

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. NX-10/#3287 Date: July 30, 1984

Received _____ 298 Samples of Soil

Submitted by Narex Ore Search Consultants Inc.

Sample No.	Au ppb	Sample No.	Au ppb
S L16W 4N B	<5	LIM 2 A	<5
5N	<5	LIM 3 A	<5
6N	<5	LIM L8E BL B	<5
7N B	<5	1N	<5
8N A	<5	2N	<5
9N B	<5	3N B	7
10N	45	4N A	51
11N	<5	5N B	<5
12N B	<5	6N	<5
13N A	<5	7N	15
14N B	6	8N	7
15N	<5	LIM L12E 9N B	18
S L16W 16N B	<5	LIM L12E BL B	<5
S BL 11W A	<5	1N	8
12W	6	2N B	15
13W A	<5	3N B	7
14W B	<5	4N A	5
S BL 15W B	14	4N B	35
LIM 1 A	<5	LIM L12E 5N B	<5
LIM 1 B	<5	LIM L12E 6N B	11

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

(VII)

Certificate of Analysis

Certificate No. NX-10 ?#3287 Date: July 30, 1984

Received 298 Samples of Soil

Submitted by Narex Ore Search Consultants Inc.

Sample No.	Au ppb	Sample No.	Au ppb
S L8W 1N B <i>Lake</i>	N.S.	S L12W 4S B	N.S.
2N B	<5	5S	N.S.
3N A	<5	6S B	N.S.
4N A	<5	1N A	<5
5N A	<5	2N B	5
6N B	<5	3N	10
7N <i>Lake</i>	N.S.	4N	<5
8N "	N.S.	5N	<5
9N "	N.S.	6N	<5
10N "	N.S.	S L12W 7N B	<5
11N "	N.S.	s L16W BL B	<5
12N "	N.S.	1S	13
13N "	N.S.	2S	<5
14N "	N.S.	3S	N.S.
15N "	N.S.	4S	N.S.
16N "	N.S.	5S	N.S.
S L12W BL	N.S.	6S	N.S.
1S	N.S.	1N	6
S L12W 2S	N.S.	2N	22
S L12W 3S B	N.S.	S L16W 3N B	25

ASSAYERS (ONTARIO) LIMITED

Per 



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527

301 3281

SOLD TO

Narex Ore Search Consultants INC.
Att'n: Dr. Naert
208-4900 Sheppard Ave. East
Scarboro, ON
M1S 4A7

**S
H
I
P
T
O**

DATE	SHIPPED VIA	FED. LICENCE NO.	PROV. LICENCE NO.	YOUR ORDER NO.	OUR ORDER NO.	TERMS	SALES REP.
July 30/84						NET 30	
QUANTITY	DESCRIPTION				UNIT PRICE	AMOUNT	
258	Au Assay Geochem				\$ 8.50	\$ 2,201.50	
258	Sample Prep.				1.30	336.70	

\uparrow only 185 samples for this report $\therefore 185 @ \$9.80 = \$1813 = 121$ days expenditure
 cost
 $\frac{\$1813}{\$15} = 121$ days.

APPENDIX BSAMPLING AND SAMPLE PREPARATION

All samples were collected along grid lines separated at 400-foot intervals across the property. The sampling interval was every 100 feet. Samples were taken only from the A₁ horizon and consisted of black inhomogeneous mixture of completely decomposed plant debris. In total 185 samples were collected.

All samples were collected in Kraft paper sample bags, using a small hoe. They were all air dried in the field camp before being transported to the assay lab (Assayers Ontario Limited) where they underwent thorough air drying again before removal from the bags for sieving or ashing.

After drying the samples collected from the A₁ soil horizon were ashed in a muffle furnace overnight at 500°C in order to remove organic matter which could form organic colloids and dangerous reactions with HClO₄ during digestion. The ashed samples were then sieved through a 60-mesh (250 μ) stainless steel sieve and the minus 60-mesh size fraction of each sample was retained for the various digestions and analyses. In general, all ashed samples passed through the 60-mesh sieve except for occasional grains of sand that were incorporated in the material during sampling.

The standard procedure for a sample is to first do a fire assay and then redissolve the bead and then to use Atomic absorption (AA) to give another value which has accuracy of 5 ppb.

Described below is the standard methods used. This is taken from Ontario Geological Survey Miscellaneous Paper 110 (1983) in a paper by C. Riddle, Analytical Methods for Gold:

Routine Fire Assay

(Flux fusion, extraction into lead, parting of Dore bead, gravimetric determination, factoring).

The standard crucible assay requires the following steps:

- a) weight out pulp (14.583 g, ½ assay ton)
- b) add stock flux (listed below) approximately 100 g.
- c) mix ore and reagents in crucible
- d) place in furnace (preheated to 1025°C) and heat for 35 minutes
- e) pour molten charge into cast iron mold



- f) inspect crucible for lead loss
 - g) note slag colour for possible interference
 - h) note size and appearance of lead button
 - i) break slag and free lead button (20-25 g)
 - j) cube lead button with hammer
 - k) place lead cube in furnace on preheated cupel (950°C) and heat in vented atmosphere for approximately half an hour, until lead is absorbed in cupel
 - l) remove silver bead and note any peculiarities
 - m) brush and accurately weigh silver bead using fine balance
 - n) digest silver in hot nitric acid and wash residue with distilled water
 - o) anneal and accurately weigh (to 2 micrograms) gold using fine balance
 - p) record all results and observations
 - p) calculate silver weight and report gold and silver results
- The stock flux contains the following:

litharge	80 g
sodium carbonate	40 g
silica	12 g
borax glass	12 g
flour	2.5 g

Geochemical Gold Determination

(Dore bead preparation, acid digestion, graphite furnace atomic absorption, calibration calculation)

The logic behind the fire assay concentration is to (1) take a large enough sample to get enough of the precious metal present to give good precision, and (2) to transform the possibly complex matrix of the ore into a simple metal alloy.

The method used for concentrating precious metals for AA analysis is as follows:

- a) weigh out 10 g of sample pulp
- b) mix with approximately 75 g of standard flux
- c) add 2 drops silver nitrate (AgNO_3) solution (this furnace charge makes a bead of approximately 15 mg)
- d) follow "regular gold and silver assays" from step (c) to step (e)



e) pass on beads to AA laboratory for analysis.

Blanks and control standards are processed with every batch of samples.

Dissolution of the silver bead is accomplished with nitric acid in a 10 by 75 mm test tube placed in an aluminum rack and set on a hot-plate. The silver is precipitated as the chloride with hydrochloric acid, whereby the gold is dissolved in the aqua regia. The acid mixture is diluted with water, mixed and the AgCl allowed to settle on the bottom of the test tube. An aliquot of the supernatant liquid is atomized in a graphite furnace and the atomic absorption signal observed as a recorder trace.

The concentration of gold in the sample solution is read with the aid of a calibration graph. The net concentration is obtained by subtracting the average overall-blank value. The gold content in rock is calculated according to the formula:

$$Au = CV/W \times 1000$$

Where

Au = ppb of gold in rock,

C = net concentration of gold in micrograms/ml in solution,

V = volume in ml of the sample solution (usually 2 ml) and

W = weight of sample in grams (usually 10 g)

The optimum working range is 0.05-0.20 micrograms Au per millilitre in solution. The detection limit is 2 ppb in rock.





41P11SE0166 2.7105 ASQUITH

900

Mining Lands Section

File No 2.7105

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

Leg. L.D.

S Hurst

Signature of Assessor

84-09-07

Date

1984 10 05

Your File: 266
Our File: 2.7105

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated September 11, 1984.
Geochemical Survey and data for Assaying on
Mining Claims L 643219 et al in the Township
of Asquith.

The assessment work credits, as listed with the
above mentioned Notice of Intent, have been approved
as of the above date.

Please inform the recorded holder of these mining
claims and so indicate on your records.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

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

S. Hurst:sc

cc: Onitap Resources Inc
Suite 208
49000 Sheppard Avenue East
Scarborough, Ontario
M1S 4A7

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

cc: Resident Geologist
Kirkland Lake, Ontario

**Technical Assessment
Work Credits**

File
2.7105

Date
1984 09 11

Mining Recorder's Report of
Work No. 266

Recorded Holder	ONITAP RESOURCES INC
Township or Area	ASQUITH TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ 40 days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	L 643219-20

Special credits under section 77 (16) for the following mining claims

20 DAYS CREDIT

L 578737
643221

No credits have been allowed for the following mining claims

not sufficiently covered by the survey Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19)—60:

**Technical Assessment
Work Credits**

File 2.7105

Date 1984 09 11 Mining Recorder's Report of Work No. 266

Recorded Holder	ONITAP RESOURCES INC
Township or Area	ASQUITH TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	\$1,710.00 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS: L 578737 643219-20-21 114 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 77(19)

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

not sufficiently covered by the survey Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19)—60:



Sept 20/84

1984 09 11

Your File: 266
Our File: 2.7105

George J. Koleszar
Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

Rd S. Hurst:mc

Encls.

cc: Onitap Resources Inc
Suite 208
4900 Sheppard Avenue East
Scarborough, Ontario M1S 4A7

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario



Ministry of
Natural
Resources

Notice of Intent
for Technical Reports

1984 09 11

2.7105/266

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

1984 09 04

Your File: 266
Our File: 2.7105

Mr. George J. Koleszar
Mining Recorder
Ministry of Natural Resources
4 Government Road East
P.O. Box 984
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geochemical Survey submitted under Special Provisions (credit for Performance and Coverage) and data for Assaying on Mining Claims L 643219 et al in the Township of Asquith.

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

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

A. Barr:sc

cc: Onitap Resources Inc
Suite 208
4900 Sheppard Ave East
Scarborough, Ontario
M1S 4A7

cc: Peter Born
165 Frederick Street
Bradford, Ontario
L3Z 1K1

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken L 578737, 643219, 643220, 643221

Total Number of Samples 185 + 33 no samples

Type of Sample B Horizon
(Nature of Material)

Average Sample Weight 200 grams

Method of Collection _____

Soil Horizon Sampled B

Horizon Development Good

Sample Depth 4"

Terrain Undulating - outcrops areas

Drainage Development _____

Estimated Range of Overburden Thickness 1-6 feet

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

-60 mesh

General See appendix B

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others Au

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ AA tests)

Name of Laboratory Assayers Ontario Ltd.

Extraction Method See Appendix B

Analytical Method In report

Reagents Used _____

General _____



NAREX Ore Search Consultants Inc.

4900 Sheppard Avenue East, Suite 208, Scarborough
Ontario, Canada M1S 4A7 Tel. (416) 293-2990

August 27, 1984

Re: 147

Ministry of Natural Resources
Land Management Branch
Room 6643
Whitney Block
Toronto Ontario M7A 1W3

Dear Sir,

Please find enclosed the following items:

- 1) Maps and Report in duplicate of Geochemical Surveys claims L 578737 et al, Churchill and Asquith Twps. This also includes expenditure credits for these claims.
- 2) 2 maps & location sketches in duplicate & original correspondence for geophysical survey Onitap Resources Inc. - Toronto reference 2.6796. This report has been filed but these maps include 2 new lines that were omitted in the original submission for which a work report has been filed. Subsequently the credits were reduced from 40 to 10 days. These are for claims L 760488 - 30 days EM + linecutting credit. This survey was submitted to Land Management May 25, 1984.

RECEIVED	
Land Management Branch	
CIRCULATE <input type="checkbox"/>	
COMMENTS PLEASE <input type="checkbox"/>	
BY	
AUG 28 1984	
F. E. YENOT	
J. R. BOYD	
W. L. GOOD	✓
J. H. HOGAN	
W. J. BROOK	
R. 6643	

RECEIVED

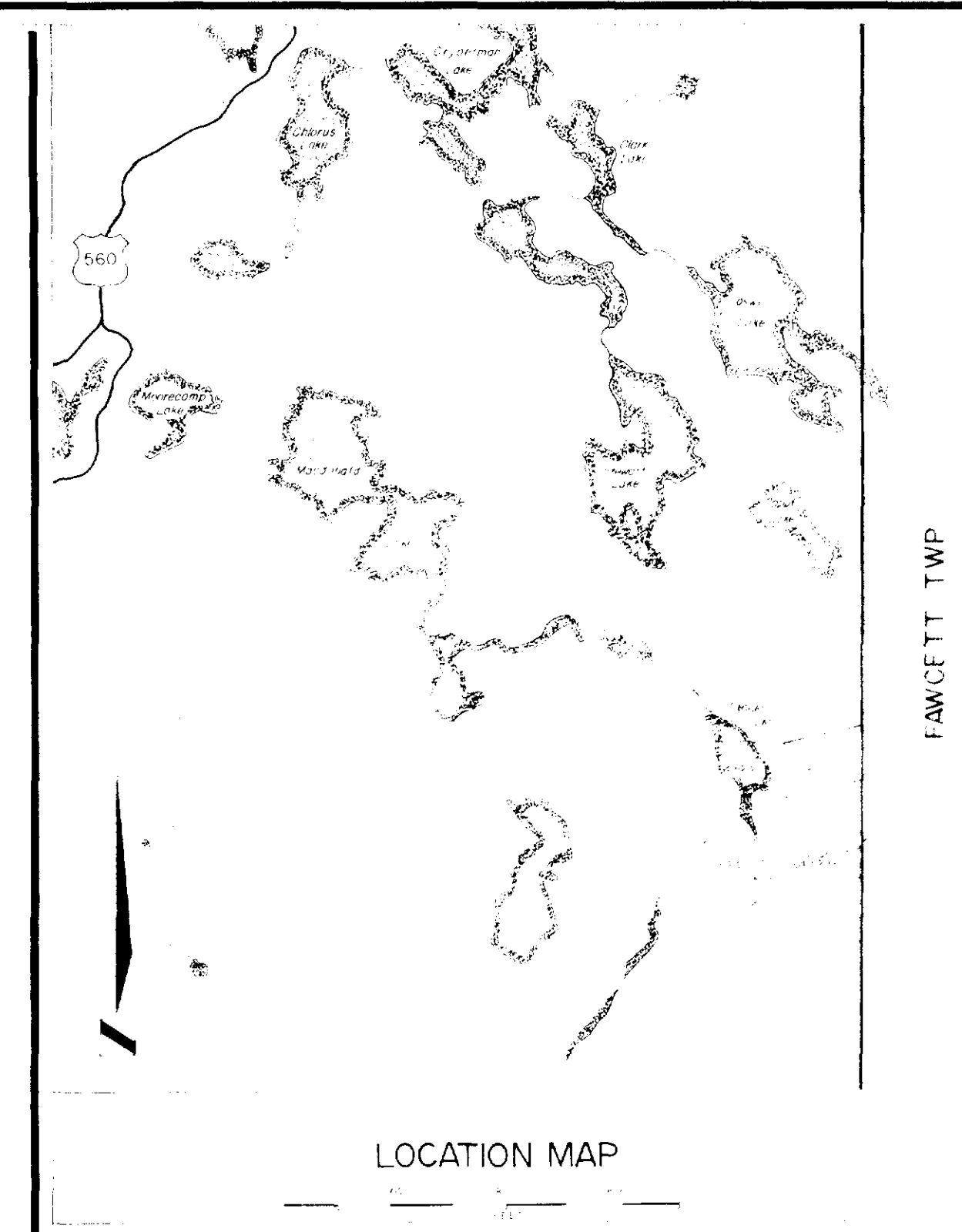
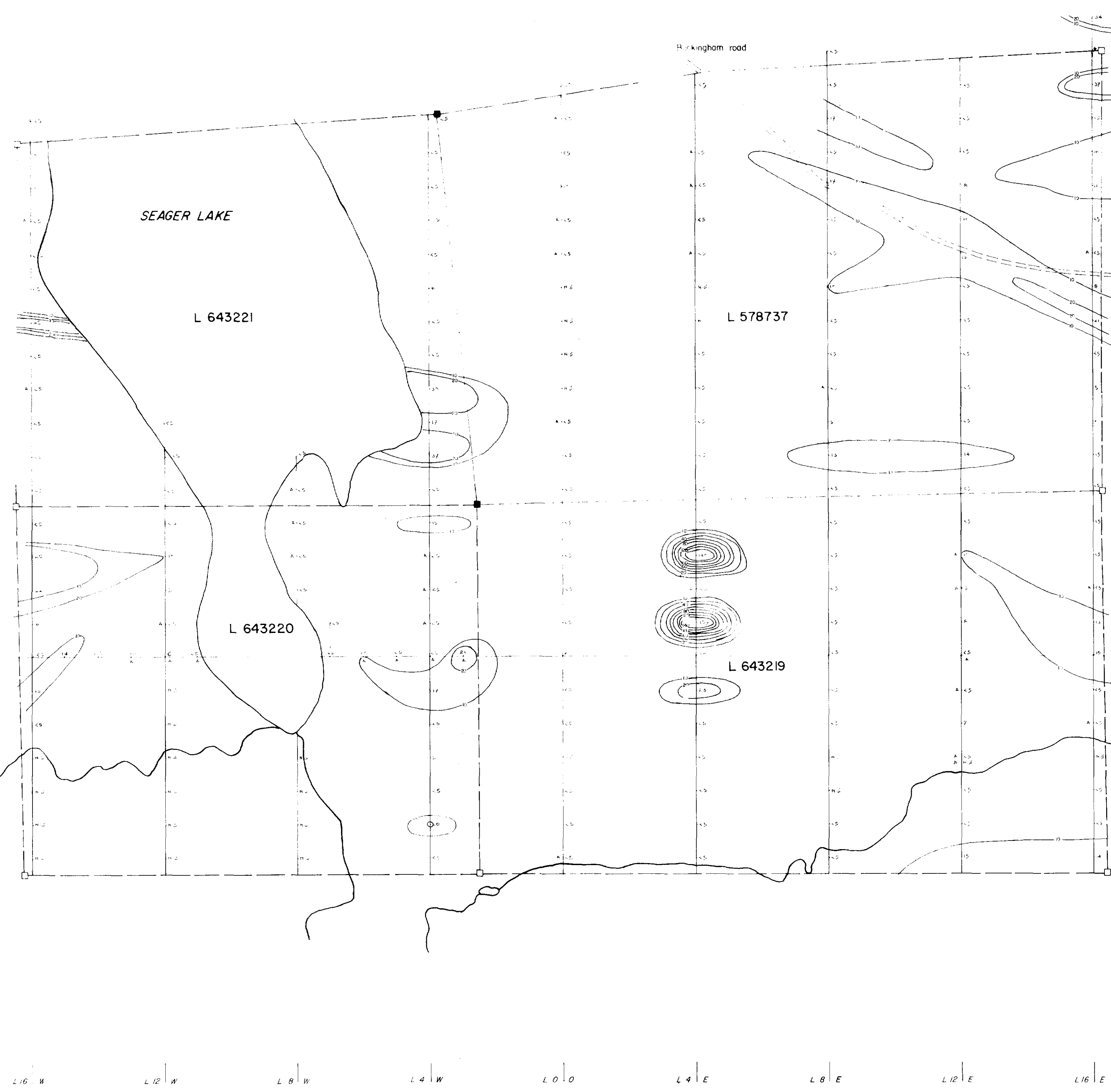
AUG 28 1984

MINING LANDS SECTION

PB/cb
Encl.

Yours truly,

Peter Born
Project Geologist



A = A horizon sample, all others are B horizon samples
 N.S. = no sample

ONITAP RESOURCES INC.
 SHINING TREE AREA
ASHORTH TOWNSHIP, DISTRICT OF SIMCOE, ONTARIO
 SEAGER-STEWART GROUP
SOIL GEOCHEMICAL SURVEY
Au in p.p.b.

John B...

DATE: P. BORN July 1984
 DATE: M.F.O. July 1984

