GEOLOGICAL PROPERTY EVALUATION

O F

ANNETT OPTION

SHININGTREE I PROPERTY

ASQUITH TOWNSHIP

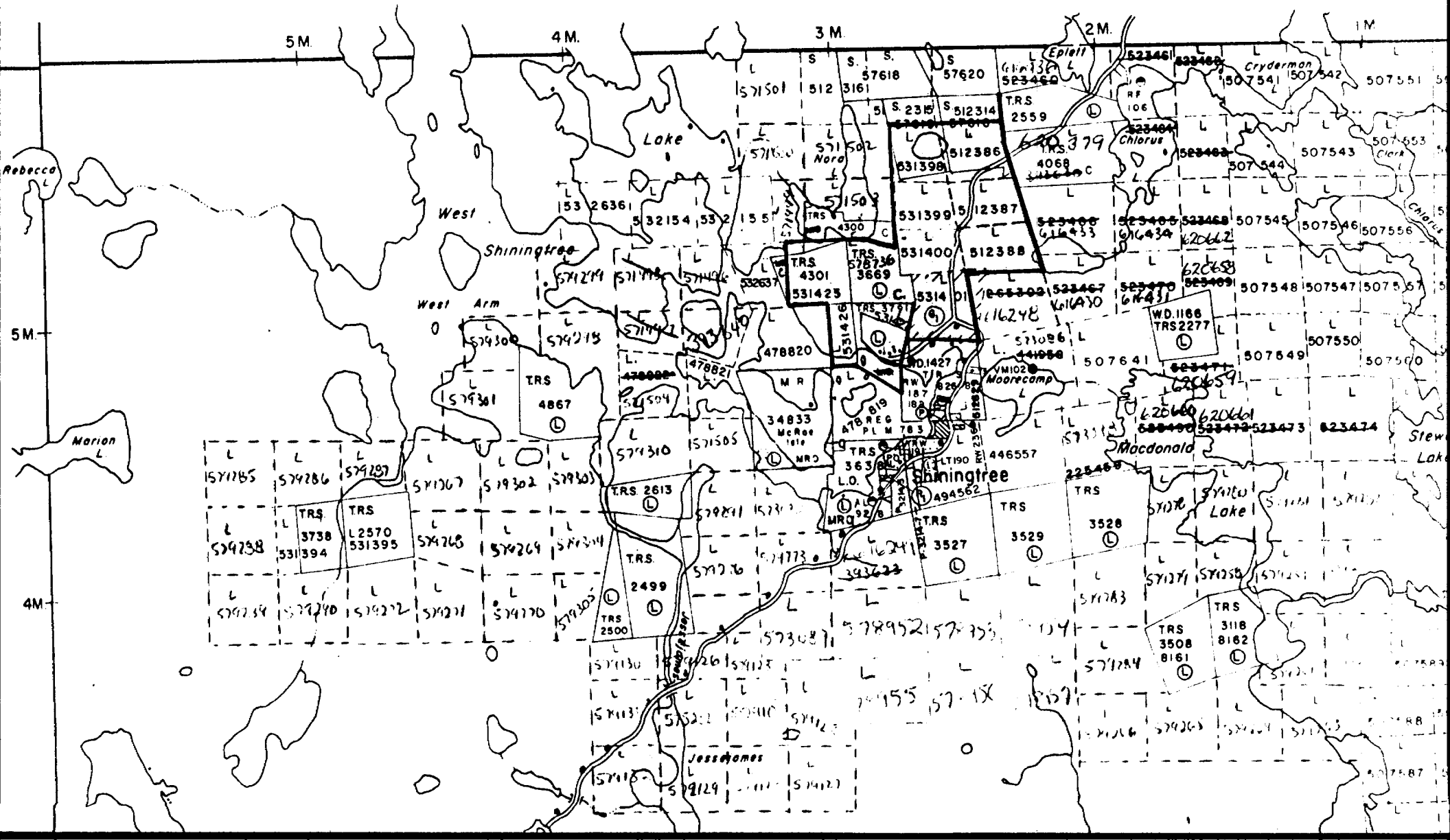
SHININGTREE, ONTARIO

LARDER LAKE MINING DIVISION

DISTRICT OF SUDBURY

NOVEMBER, 1981

Churchill Twp. - M. 719



PROPERTY EVALUATION OF THE ANNETT OPTION - SHININGTREE -I- PROPERTY

B- INTRODUCTION

The Annett Option - Shiningtree I Property consists of eleven contiguous claims in north-central part of Asquith Township, about 0.25 miles (400 metres) north of the village of Shiningtree, Ontario.

In December, 1980, Patino Mines (Quebec) Limited took an option on the eleven claims held by Mr. R. Annett of Shiningtree, Ontario. During the winter of 1980-81, electromagnetic and magnetometer surveys were conducted over the claim block. Subsequent to the geophysical surveys, detailed geological mapping was conducted by the author and Peter Born during June, 1981 on the previously cut lines.

Auriferous quartz veins are observed cross-cutting metasomatically altered and low-grade metavolcanic rocks in the Shiningtree Area. On the property discussed in this report, zones of intense alteration are produced as the result of CO2- and Cr-metasomation. These fuchsite-bearing carbonatized zones are observed at the contact between (i) the feldspar porphyry-gabbro bodies, and(ii) in association with komatiites.

C- PROPERTY, LOCATION, AND ACCESS

The claim group consists of eleven contiguous claims which are located in the north-central part of Asquith Township.

The claim numbers are: L 512386, 512387, 512388
531398, 531399, 531400, 53401
531425, 532426, 531427, and
578736.

.... 3

The claim block is situated about 0.25 miles (400 metres) north of the village of Shiningtree.

The property is accessible by Highway 560 which cuts through the eastern part of the property. Bushroads that run north and south from Highway 560 at the outermost eastern edge of the property also provide access to the grid. Access to the western edge of the property was by canoe following the eastern lakeshore of West Shiningtree Lake.

D- TOPOGRAPHY

The map area consists of moderate to low relief with glacial hummocks and eskers of sandy till and boulders. The outcrop exposure is poor and locally is covered by a thin veneer of humus which was removed for geological mapping. Outcrops and sub-outcrops constitute less than 10% of the surface area of the property. The property is surrounded by West Shiningtree Lake to the west and by Nora Lake to the north and west of claims L531425, 578736, 531399 and 531398. A small pond covers about one half of claim L531398.

About one third to one half the property is covered by grassy tag-alder or cedar-balsam swamps. The remaining part of the property is covered by an open mixed mature forest of mainly balsam, birch and poplar.

.... 4

E- PREVIOUS WORK

A total of 124 trenches are observed on the property however no record of trenching was filed. Most of the trenches occur in overburden however they do occur in proximity to the trenches containing gossaned fuchsite-carbonate alteration zones and quartz veining. The trenching was concentrated south of Nora Lake and in the southeast corner of the property.

During 1973-74, Vintage Mines Limited held some of the present property (L531399, formerly L373202) and a group of claims west of the property. Geological mapping, a electromagnetic survey and a diamond drilling program consisting of six holes for a total footage of 1,011 feet were conducted during that time. Diamond drilling results were disappointing and further prospecting was recommended.

Diamond drilling performed by R. Annett on claim L512387 was filed on claims: L512386 (80 days), L512387 (81 days) and L512388 (79 days) in November, 1979 and July, 1980. Also core specimens and assays were filed for 4 days, 2 days and 3 days credit on the above claims respectively.

F- SUMMARY OF DIAMOND DRILLING

The diamond drill hole drilled by R. Annett is located on L26+ 22S, 9+ 55E (Patino Grid) and had a bearing of 044^{0}. The summary of the units are described below:

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FOOTAGE

0-79.5	Feldspar porphyry
79.5 - 102.7	Fuchsite-carbonate-sericite alteration zone
102.7 - 120.7	Sericitized andesite
120.7 - 240	Altered basalt

The fuchsite alteration zone is characterized by 5 to 20% pyrite with minor amounts of galena and chalcopyrite. The zone has also been silicified and represents remanants of feldspar porphyry and strongly sericitized-silicified andesite.

Assay results from the zone are as follows

Footage	Au oz/t	Ag oz/t	Cu%	Zn%	Pb%
80-85	0.002	-			
85-90	0.02	0.10			
90-95	0.03	trace		sampled by R. Annett	
95-100	0.16	0.59			
100-105	0.005	0.05			
83.8-84.5	0.004	0.05	0.02	0.007	0.007
84.5-87.0	0.011	0.12	0.05	0.007	0.010
87.0-90.9	0.012	0.012	0.01	0.008	0.012
90.9-94.2	0.05	0.12	0.04	0.008	0.052
94.2-95.7	0.011	0.06	0.004	0.006	0.006
95.7-100	0.086	0.59	0.083	0.032	0.058
100-102.7	0.024	0.07	0.005	0.006	-
				re-sampled by A. Born	

During April and May of 1981, Patino Mines (Quebec) Limited drilled two holes 155 feet to the west of the Annett hole described above. The purpose of these holes was to investigate the extent of the fuchsite-bearing mineralized zone at depth (ie .80 to 150 feet below surface).

..... 6

The summaries of the holes are below:

STA-1 Location: L 26+22S 8+00E
Azimuth: 055° Dip: -45°

FOOTAGE

0-9	Overburden
9-110	Feldspar porphyry
110-133	Mafic dyke
133-167.3	Sericitized feldspar porphyry
167.3-200.0	Fuchsite-bearing alteration zone with quartz-carbonate veining
200.0-202.0	Sericitized metabasalt
202.0-258.0	Chloritized metabasalt

STA-2 Location: L 26+22S · 8+00E
Asimuth: 055° Dip: -67°

FOOTAGE

0-10	Overburden
10-152.5	Feldspar porphyry
152.5-223	Fuchsite alteration zone
223-231.7	Metabasalt
231.7-239.5	Mafic dyke
239.5-271.0	Metabasalt

Also three x-ray drill holes were drilled in the northeast corner of the property. The purpose of these holes was to examine the porphyry contact which is covered by swamp and to show the extent of the fuchsite-carbonate unit observed in outcrop along highway 560.

The summaries of the holes are as follows:

ST-I-4 Location: L 10+00 S 8+30E
Azimuth: 060° Dip: -45°

FOOTAGE

0-1	Overburden
1-23	Feldspar porphyry
23-23.5	Mafic dyke
23.5-45	Feldspar porphyry
45-102.5	Metabasalt

.... 7

ST-I-5 LOCATION: 11+60S 11+20 E
Azimuth: 240° Dip: -45°

FOOTAGE

0-53	Fuchsite-chlorite alteration zone, 25% quartz veining with minor cbt.
53-78	Chloritized-sericitized metabasalt
78-147	Mafic dyke, 25% anastomosing carbonate veining

ST-I-6 LOCATION: L8+00S 8+00E
Aximuth: 060° Dip: -45°

FOOTAGE

0-6	Overburden
6-56.5	Feldspar porphyry
56.5-58	Mafic dyke
58-84	Feldspar porphyry
84-102	Mafic dyke

Descriptions of the mineralized zones will be discussed under Economic Geology, below.

G- GENERAL GEOLOGY

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

The Early Precambrian rocks consist of mafic to felsic metavolcanic rocks, mafic to ultramafic intrusives, intermediate to felsic intrusive rocks and diabase dykes. (Carter, 1979) Mapping conducted by the author in the area, has also shown that komatiitic sequences and various types of pyroclasitic and tuffaceous units occur in the township. Middle Precambrian rocks are represented by Nipissing-type diabase.

.... 8

H- GEOLOGY OF THE ANNETT OPTION- ASQUITH TOWNSHIP

Table of Geological Units

Early to Late Precambrian
Mafic Intrusive Rocks
(8) Diabase

Alteration Zone Rocks
(7) Green carbonate and fuchsite-bearing alteration zone

Mafic Intrusive Rocks
(6) Mafic gabbro and pyroxenite

Felsic Intrusive (Hypabyssal) Rocks
(5) Feldspar porphyry

Ultramafic to Intermediate Metavolcanic Rocks and Related Volcano-sedimentary Rocks
(4) Chloritic tuff and exhalite
(3) Meta-andesite
(2) Meta-basalt
(1) Meta-komatiites

The oldest rocks on the property are represented by spinifex-textured and peridotitic (?) komatiites (1), basalts (2) and andesites (3). Locally, chloritic tuffs and exhalites (4) are observed and appear to occur within the basalts. The volcanic rocks are cross-cut by feldspar porphyry (5), mafic gabbro-pyroxenite (6) and diabase dykes (8). A fuchsite alteration zone (7) appears to be in association with the contacts between the mafic gabbro and feldspar porphyry as well as with the komatiite unit.

(1) Komatiites

One outcrop containing spinifex-textured flows and another outcrop consisting of a flow breccia with spinifex-textured fragments confirmed the ultramafic nature of other outcrops which lacked spinifex structures.

.... 9

The komatiites are characterized by a dark brown, deeply weathered rind to a light brown weathered surface. The fresh surface is generally black to dark green and komatiites tend to have a higher density.

Alteration comprises of carbonate and/or chlorite+serpentine+ talc assemblages. Locally serpentine veining has formed.

(2) Basalts

The mafic metavolcanic rocks are characterized by medium to light brown coloured weathered surfaces and medium to dark green fresh surfaces. The basalts consist of massive to schistose flow and pillowed sequences.

The pillows are generally bulbous and range in size from 1 to 3 feet (30 to 90 cm). Tops of the pillows are determined locally where concave surfaces are observed.

Locally, flow and pillow breccias are observed and the breccia zone is usually several inches thick.

The basalts are mainly chloritized which reflects the regional low-grade greenschist facies metamorphism. Locally, the basalts are carbonatized and exhibit a sugary appearance.

Some basalts have been classified as Mg-rich basalts and are characterized by a dark green to black fresh surface and talcose alteration. These basalts may represent basaltic komatiites considering their proximity to the spinifex-textured komatiites.

.... 10

(3) Andesite

The meta-andesites are distinguished from the metabasalts on the basis of colour, hardness and texture. The andesite has lighter coloured weather and fresh surfaces which are light brown, and light to medium green, respectively. The grain-size of the andesite is aphanitic to fine-grained. The unit consists mainly of massive flows with minor sequences of pillowed andesite. Locally, the andesite is vesicular. The andesites are generally chloritized and carbonatized.

Locally flow breccias (3fbx) are observed in association with underlying flows. The breccia consists of 60-70% angular to sub-angular, monolithic, comminuted lava fragments that range in size from 0.5 to 3.0 inches (1 to 8cm). The fragments are matrix-supported by a matrix of similar composition to the fragments.

(4) Chloritic tuffs and Exhalites

Chloritic tuffs (4t) are characterized by a finely laminated, light to dark green to grey weathered surface. They are well bedded on the mm-scale and thus exhibit a strong schistosity.

Minor outcrops of non-magnetic siliceous exhalites (4e) are observed near L16S, 13W. The weathered surface is brown-black while the fresh surface is black and cryptocrystalline. The unit is cherty-looking and weakly carbonated with 5-10% recrystallized pyrite cubes (which form weakly defined bedding features.) Locally, there are fragments within the unit which probably represent debris material.

.... 11

(5) Feldspar Porphyry

The feldspar porphyry is sub-divided into two types: syenitic and dioritic compositions.

The syenitic porphyry is characterized by light pink to red brick weathered surface and a pink coloured fresh surface. The unit is medium-grained with 5-10% potassium feldspar phenocrysts in a ground mass of 70-80% potassium feldspar, less than 5% quartz and 10% chlorite. Abundant chlorite veining cross-cuts the porphyry.

The porphyry of dioritic (granitic ?) composition has a grey to light pink weathered surface and light pink fresh surface. The unit is medium to fine grained and consists of 80% feldspar (K-feldspar and plagioclase) 10% quartz and 1-2% chlorite. The feldspar is locally sericitized and partially replaced by hematite. The porphyry is characterized by its low mafic content and 1-2% pyrite.

(6) Mafic gabbro and Pyroxenite

This unit forms small intrusive bodies and dykes which are intruded into the underlying volcanic rocks and feldspar porphyry. The rock weathers a dark-brown colour with a smooth surface and is black on the fresh surface. It is aphanitic to medium-grained, massive and equigranular (with some sub-ophitic textures).

The percentage of modal feldspar ranges from less than 10% (pyroxenite) to 10-20% (mafic gabbro). The mafic minerals are pyroxene

.... 12

and hornblende. Minor phases of gabbro with 30-40% feldspar and minor actinolite are observed. Minor pyrite (1-2%) is common in the unit.

(7) Alteration Zone Rocks

This unit occurs in association with: (i) the contact between the mafic gabbro-pyroxenite and the feldspar porphyry; (ii) the contact between the mafic gabbro-pyroxenite and basalt; (iii) the contact between the mafic gabbro-pyroxenite and komatiite; and (iv) the contact between the basalts and komatiites. It is evident that this alteration zone is in common association with rocks of ultra-mafic-mafic affinities- the source of the chromium.

The unit weathers deep red-brown rind and has a light emerald green fresh surface. The unit consists of predominantly equigranular carbonate (dolomite) however it is locally fuchsite-bearing and sericitized. Later cross-cutting anastromosing calcite and quartz veining form up to 25% of the total rock. It is the veining that generally carries the chalcopyrite, galena and pyrite with minor pyrite observed in fuchsite-filled fractures. Also, in zones of strong sericitization and fuchsite alteration, pyrite occurs in the host.

A thin section and chemical analyses (Appendix I) from the same rock type in Churchill Township were examined by Carter (1980). The rock type consists of dolomite, quartz, calcite with minor chromite interstitial to the grains. The chemical analyses show high Cr (1300 ppm) and Ni (680 ppm) values.

This alteration is the result of hydrothermal alteration due to intense CO2-metasomatism as well as Cr - and locally K-metasomatism of the basalts and komatiites. In most cases it appears to be related to intrusive events.

(8) DIABASE

Northeast to northwest trending diabase dykes cross-cut the metavolcanic rocks and range in approximate width from 20 to 100 feet (6 to 30 metres). The diabase weathers a red-brown colour and tends to form ridges parallel to the strike of the dyke. The diabase is well-jointed.

Texturally, the diabase is fine to medium grained and exhibits subophitic textures. The rocks consist of 30-50% sericitized-epidofized plagioclase and 50 to 70% chloritized pyroxene.

I STRUCTURE

The general lack of outcrop in the map area permitted a limited number of foliation and other structural measurements. The general trend of the rocks is northwest to west. The eastern portion of the property exhibits a northeasterly strike. Variations in the dips appear to infer several synclincal and anticlinal structures which are especially traceable in the kaomaliitic and tuffaceous units. The general trend of the fold axis in northwest-southeast.

.... 14

J- ECONOMIC GEOLOGY

AREA "A"

Intensive trenching has been done in the area around L14S, 21W where a massive quartz vein (30 feet by 60 feet (10m by 20 m) is observed. Massive clots of coarse-grained pyrite are associated with the quartz veining. The veining is hosted by chloritized basalts. Many of the surrounding trenches occur in over burden and appear to have been used to examine the extent of the quartz veining. Assay results were poor with only trace amounts of Au and minor Ag.

AREA "B"

A gossaned, fuchsite-bearing outcrop is observed at L12S, 11E along highway 560. The unit is cross-cut by 25% anastomosing quartz-carbonate veining and a "pod" of quartz. The rock is schistose and consists predominantly of chlorite and sericite alteration. The fuchsite zone extends a horizontal distance of 40 feet to West of the outcrop as determined from drill results (St-I-5). Fuchsite is generally associated with the quartz veining and the assay value was from the alteration zone (trace Au, 0.40 oz/t Ag over 1.6ft.)

AREA "C"

This area appears to show the most potential with extensive quartz-carbonate veining hosted by a fuchsite-bearing carbonate alteration zone. The alteration zone is believed to represent hydrothermally altered basalts due to the later intrusion of the feldspar porphyry and mafic gabbro-pyroxenite dykes and small bodies.

.... 15

At surface, near L 26+22 S, 11E, the quartz and calcite veins carry minor chalcopyrite, galena and pyrite. Drill results from STA-1,2 (Patino) and a hole drilled by R. Annett show that the alteration zone extends below the feldspar porphyry and appears to thicken to the west where it is cut off by a mafic gabbro body at 5+22 E on the surface. The fuchsite alteration zone extends further south (i.e. L 32+00 S) where it appears to be in contact with the mafic gabbro and basalt.

The fuchsite-bearing and sericitized alteration zones produced generally low gold and silver values. The highest values (0.02 to 0.16 oz/ton Au) occur where 2-5% chalcopyrite is observed.

K- DISCUSSION AND RECOMMENDATIONS

Several north-striking EM-16 anomalies occur in the vicinity of Area "C". These conductors may be due to drainage however the strong conductor underlying the gabbro body between L 22S and L 28S should be investigated. It is recommended a diamond drill hole be collared near STA 1,2 but drilled at azimuth of 235°, in order to investigate the western extent of the fuchsite-carbonate alteration zone and to explain the cause of the conductor.

A comprehensive research study on the literature on the potential of boron and mercury sampling of the soil and bedrock is recommended. A geochemical soil sampling and rock sampling for mercury

..... 16

anomalies is also recommended over the Areas A, B and C. Sampling of quartz for Au and Ag has produced poor results and perhaps Hg dispersion patterns may aid as a pathfinder for Au.

Respectively submitted,

Alice Born.

Alice Born

REFERENCES

Carter, M.W.; 1980: Geology of Connaught and Churchill Townships, District of Sudbury, Ontario, Geol. Survey Rpt. 190, 81 p. Accompanied by Geol. Map 2414, Scale 1:31 680 or 1 inch to ½ mile

APPENDIX I

CHEMICAL ANALYSIS (ACTUAL AND ADJUSTED TO A WATER-FREE BASIS), SPECIFIC GRAVITY, CATION PERCENTAGES, AND TRACE ELEMENT COMPOSITION OF LIGHT GREEN MASSIVE 'GREEN CARBONATE' ROCK, SAMPLE NUMBER O13-6, 0.4 km SOUTHEAST OF GOSSELIN LAKE NEAR HIGHWAY 560, SOUTH-EASTERN CHURCHILL TOWNSHIP.

Chemical Analysis (in weight percent)	Actual	Adjusted	Cation percentages		Traces (ppm)	
SiO_2	49.80	51.80	Si_4+	47.20	Ag	< 1
Al_2O_3	9.80	10.19	Al_3+	10.94	Au	30 (ppb)*
Fe_2O_3	1.45	1.51	Fe_3+	1.03	As	
FeO	5.27	5.48	*Fe_2+	4.32	Ba	410
MgO	5.80	6.03	Mg_2+	8.19	Be	< 1
CaO	11.90	12.40	Ca_2+	12.10	Bi	
Na_2O	2.29	2.38	$Na+$	4.20	Co	35
K_2O	0.75	0.78	$K+$	0.91	Cr	1300
TiO_2	0.59	0.61	Ti_4+	0.42	Cu	20
P_2O_5	0.06	0.06	P_5+	0.05	Ga	15
S	0.02	0.02	S_6+	0.04	Hg	
MnO	0.18	0.19			Li	20
CO_2	8.25	8.58	CO_2	10.67	Mn	
H_2O^+	2.41	0.00			Mo	< 1
H_2O^-	0.21	0.00			Nb	
					Ni	680
TOTAL	98.80	100.00	TOTAL	100.10	Pb	15
Spec. Gr.	2.77				Rb	
					Sb	
					Sc	15
					Sn	2
					Sr	200
					Ti	
					V	50
					Y	60
					Zn	100
					Zr	250

*Represents Fe_2+ and Mn_2+ combined.

1. Light green, massive 'green carbonate' from 0.4 km southeast of Gosselin Lake, near Highway 560, southeastern Churchill Township.

From Carter (1980)

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditu

41P11SW0249 2.4362 ASQUITH

900

#568

claims traversed
orm, attach a list.
lculated in the
may be entered
s Cr." columns
below.

Type of Survey(s)
Geological

Township or Area
Asquith Twp.

Claim Holder(s)
TIMMINS GOLD RESOURCES, 1417 Watersedge Rd. Mississauga, Ont. L5J 1A4

Prospector's Licence No.
T 1166

Survey Company
PATINO MINES (QUEBEC) LTD.

Survey Dates (linecutting to office): 01 Day | 06 Mo. | 81 Yr. | 01 Day | 12 Mo. | 81 Yr.

Total Miles of line Cut
8.95

Name and Address of Author (of Geo-Technical report)
ALICE BORN % Box 8000 CHIBOUGAMAU, QUE G8P 2L1

Special Provisions Credits Requested

Instructions
For first survey:
Enter 40 days. (This includes line cutting)
For each additional survey: using the same grid:
Enter 20 days (for each)

	Days per Claim
Geophysical	
- Electromagnetic	
- Magnetometer	
- Radiometric	
- Other	
Geological	20
Geochemical	

Man Days

Instructions
Complete reverse side and enter total(s) here

	Days per Claim
Geophysical	
- Electromagnetic	
- Magnetometer	
- Radiometric	
- Other	
Geological	
Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.

	Days per Claim
Electromagnetic	
Magnetometer	
Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	512386	20
	512387	20
	512388	20
	531398	20
	531399	20
	531400	20
	531401	20
	531425	20
	531426	20
	531427	20
	578736	20

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

DEC 16 1981
MINING LANDS SECTION

LAND MINING DI...
RECEIVED
DEC 7 1981
AM 7 8 9 10 11 12 1 2 3 4 5 6

Total number of mining claims covered by this report of work: 11

For Office Use Only

Total Days Cr. Recorded: AB 220
Date Recorded: DEC 7 1981
Mining Recorder:
Date Approved as Recorded: 82.07.19
Regional/Branch Director:

Report Completed

Date of Report: Dec 1 '81
Recorded Holder or Agent (Signature): Alice Born

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

RECEIVED
DEC - 7 1981
MINING LANDS SECTION

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Geological
Township or Area Asquith Twp.
Claim Holder(s) Timmins Gold Resources, 1417 Watersedge Rd.
Mississauga, ONT. L5J 1A4
Survey Company PATINO MINES (QUEBEC) LTD
Author of Report ALICE BORN
Address of Author Yo Box 8000, CHIBOUGAMAU, QUE
Covering Dates of Survey JUNE 1 – DEC. 1, 1981
(linecutting to office)
Total Miles of Line Cut 8.95 miles

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	20
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: December 1 1981 SIGNATURE: Alice Born
Author of Report or Agent

Res. Geol. _____ Qualifications 2.4026

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	512386.
L	512387.
	512388.
	531398.
	531399.
	531400.
	531401.
	531425.
	531426.
	531427
	578736

TOTAL CLAIMS 11

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

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 _____

Ontario Resources

Report Approval

2.4362

Mining Lands Comments

☐ To: Geophysics

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☑ To: Geology - Expenditures Ms. Kusha.

Comments

☑ Approved ☐ Wish to see again with corrections | Date June 17/82 | Signature E Kusha

☐ To: Geochemistry

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1593 (R1/10)

2.4362

December 14, 1981

2.4362

Office of the 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 Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims L.512386 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 very truly,

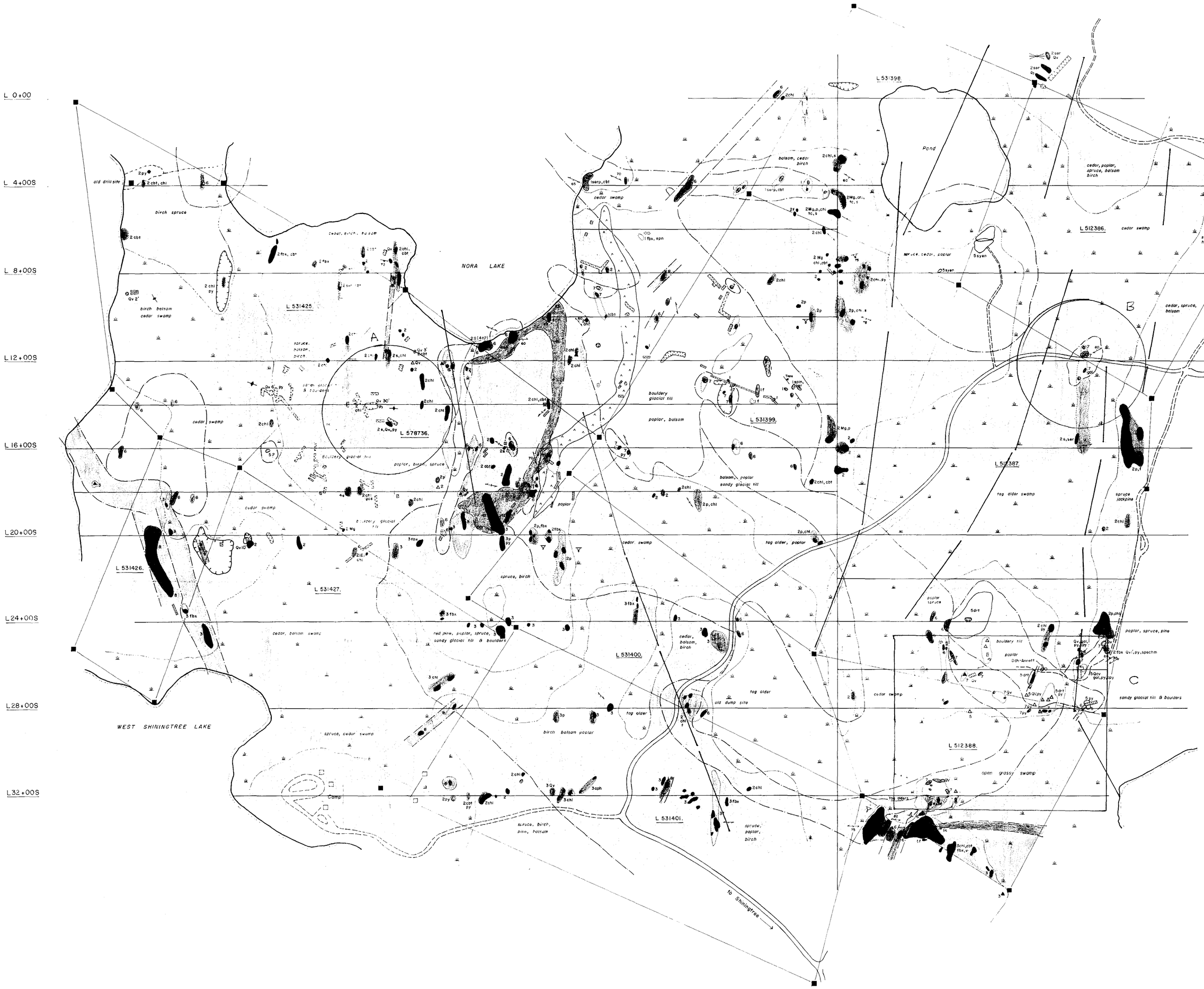
E.F. Anderson
Director
Land Management Branch

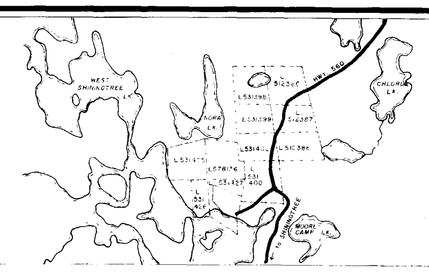
Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

J. Skura/bk

cc: Timmins Gold Resources
Mississauga, Ontario

cc: Patino Mines (Quebec) Ltd.
Chibougamau, Quebec
Attention: Alice Born





LOCATION MAP

ANNETT OPTION
SHININGTREE PROPERTY
ASQUITH TOWNSHIP, ONTARIO

SCALE 1 inch to 1/2 mile

LEGEND

EARLY TO LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

8 Diabase

ALTERATION ZONE ROCKS

7 Green carbonate (dolomite and calcite) fuchsite-bearing alteration zone

MAFIC INTRUSIVE ROCKS

6 Mafic gabbro and pyroxenite

FELSIC INTRUSIVE (HYPABYSSAL) ROCKS

5 Feldspar porphyry — 5 syen - syenitic composition; 5 drt - dioritic composition

ULTRAMAFIC TO INTERMEDIATE METAVOLCANIC ROCKS AND RELATED VOLCANO SEDIMENTARY ROCKS

Chloritic tuff and exhalite		4t	- tuffs
		4e	- exhalite
Andesite	3 chl - chloritized	3f	- flows
	3 cbt - carbonitized	3 fbx	- flow breccia
	3 aph - aphanitic	3v	- vesicular
Basalt	2 chl - chloritized	2p	- pillowed
	2 cbt - carbonitized	2f	- flows
	2 ser - sericitized	2 fbx	- flow breccia
	2 tc - talcose	2s	- schistose
	2 Mg - Mg rich basalt (possibly komatiitic)		
1 Komatiites	1 spn - spinifex textured	1 serp	- serpentized
	1 per - peridotitic komatiites	1 cbt	- carbonitized

SYMBOLS

Qv, Qcv, Qp	Quartz or Quartz carbonate veining
	Extent of outcrop area
	Extent of sub-outcrop area
	Extent of swamp area
	Extent of glacial hummocks
	Boulder
	Frost heave
	Esker
	Trench, pit
DDH	Diamond drill hole
	Claim post, known, inferred location
	Geological contact; known, assumed
	Pillowed, tops
	Quartz veining; vertical, dipping
	Foliation; vertical, dipping
	Flow contacts, vertical, dipping
py	pyrite
hm	hematite
gal	galena
cpy	chalcopyrite
gos	gossan
EM-16 conductor axis	

PATINO MINES (QUEBEC) LIMITED
Exploration Department

GEOLOGY

ANNETT OPTION
SHININGTREE I PROPERTY

ASQUITH TOWNSHIP, ONTARIO

Scale 1 in = 200 Ft.
Feet 0 200 400 Feet

Drawn by:	ALICE HORN	Date: JULY 1981	Map Number
Conducted by:	ALICE HORN & PETER HORN	Date: JUNE 1981	
Checked by:	ALICE HORN	Date: JULY 1981	

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41P11SW0249 2.4362 ASQUITH

200