A. INTRODUCTION

The Seager Lake Property consists of six contiguous claims (L531428, 531429, 531430, 531431, 531432 and 578737) which are located in Asquith Township, in the Shiningtree Area, Ontario. The claim block was held under option from M. R. Annett of Shiningtree by Patino Mines (Quebec) Limited during December, 1980 to November, 1981.

Geological mapping was conducted on the property during July, 1981 by Patino staff geologists (Peter Born and Alice Born).

B- LOCATION AND ACCESS

The claim group is located on the boundary between Asquith and Fawcett Townships, in the central part of Asquith Township 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 Seag r 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.

C- TOPOGRAPHY

About one third of the property is covered by cedar or open grassy swamps, especially in the vicinity of Papoose Creek and the creek that

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drains from Seager Lake into Granite Lake. The other two thirds of the property is covered by open mixed forest of spruce, balsam, birch and shrub maple. Where the outcrop is extensive, it tends to form ridges 20 to 50 feet high. Elsewhere, the surface is covered by sandy and bouldery glacial till. Seager Lake occurs in the northwest corner of the property and Papoose Creek drains east and west from the lake.

D- PREVIOUS WORK

The only previous work available in the assessment files way by Canadian Erie Mines Ltd. (1936) in a report written by K. Burke in which the property is referred to as the <u>Kubiak Property</u>.

A summary of the results are described below:

Areas of interest contain several quartz veins and shears within the basalts and sediments vein #1 is present in the northern half of L578737 however it was not located during the present geological mapping. It consists of quartz stringers occurring in a drag folded shear. Assays were from 0.005 to 0.12 oz/t Au.

Shear #2 extends from the south end of Seager Lake (L531429) in an eastward direction for 2500 feet in L531430. This shear varies in width from 2 to 15 feet. A dump sample from the pit at L 8 + 00 W, 2 + 00 S produced 0.02 oz/t Au.

A sample from the trench at 24 + 00E, 4 + 00S yielded 0.21 oz/t Au.

A sample from a pit at L 8+00E, 3+00S gave 0.05 oz/t Au over 13.6 feet and 0.05 oz/t Au from a grab sample. Samples from the dump near the pit yielded values of 0.25 oz/t Au.

In December, 1980, magnetometer and electromagnetic surveys were conducted by Exploration Services Reg'd on the grid in the map area, for Patino Mines (Quebec) Limited.

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 SEAGAR LAKE PROPERTY

TABLE OF GEOLOGIC UNITS

Early to Middle Precambrian

- (5) Felsic intrusive rocks Syenite
- (4) Mafic Intrusive rocks Pyroxenite Mafic Gabbro
- (3) Mafic Intrusive rocks Gabbro

- (2) Felsic Metavolcanic and Related Pyroclastic Rocks -Felsic Tuffs and Rhyolite flows
- (1) Mafic Metavolcanic and Related Pyroclastic Rocks-Mafic Tuffs and Basalts.

The general geology 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 (see map).

(1) Mafic Metavolcanic and Related Pyroclastic Rocks

The predominant rock types are chloritized and variably carbonatized basalt flows (1). They are generally massive to slightly schistose with some pillowed sections near the southern shore of Seager Lake. One distinctive unit within the basalts is a semi-continuous debris flow unit near the creek which flow east out of Seager Lake.

Intercalated with the basalt flows are mafic tuffs (IT) which are fine-grained, aphanitic, finely-laminated (MM scale), moderately bedded and schistose pyroclastics. The tuffs are generally both chloritic and carbonatized while exhibiting a light green fresh surface with a fairly characteristic chocolate brown weathered surface.

(2) Felsic Metavolcanic and Related Pyroclastic Rocks

The felsic tuffs (2T) unit is comprised of crystal tuff, lapilli tuff and agglomerate varieties. The fine-grained tuffs are schistose and exhibit fine laminations with typical white coloured fresh and

weathered surfaces. Lapilli tuff and agglomerates are generally schistose and chloritized with rather whitish coloured weathered surfaces. One area of interest is on L16+00 W at 8 N where some lapilli and crystal tuffs are slightly gossaned with specular hematite (2-6%) present. The bombs are siliceious, aphanitic and of a rhyolite-dacite composition.

Felsic flows (2) of dacite-rhyolite composition form a narrow traceable horizon in the southwest part of the map area. The rocks are generally fine-grained, aphanitic, schistose with a light pink-white weathered surface and a light-green white fresh surface.

(3) Mafic Intrusive Rocks - Gabbro

Several gabbro dykes are located in the western half of the property.

Usually the gabbro is medium grained, massive and chloritized with altered feldspars (sericitized, etc.). The weather surface is characteristically light brown while the fresh surface is medium green in colour.

(4) Mafic Intrusive Rocks - Pyroxenite and Mafic Gabbro

This unit is characterized by its red-brown weathered surface and dark green to black fresh surface. It is distinguished from unit (3) by its more mafic composition and lack of alteration, however its stratigraphic relationship with unit (3) is not conclusive. The pyroxenite is aphanitic to fine-grained and probably consists of less than 10% feld-spar.

(5) Felsic Intrusive Rocks - Syenite

The only outcrop of syenite occurs at L 4+00 W, 6+00N and appears to be related to the mafic gabbro-pyroxenite (4) nearby. It consists of 30% feldspar laths in a chloritized ground-mass.

G- STRUCTURE

The general trend of the metavolcanic and pyroclastic rocks in the area is variable. Considerable displacement of these units has occurred due to the bifurcating nature of the mafic dyke rocks (units 3 and 4) intruded into the metavolcanic rocks. There is an open fold structure which is outlined by the felsic and mafic tuffaceous units (IT, 2T) in the southwest area of the property. The fold has a northeast striking fold axis.

A north-south striking fault occurs between L 4+00E and L8+00E and has an approximate strike length of 2600 feet (793 m) within the property. There appears to be sinistral movement of the units along the fault.

H- 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).

The shear zones described by Burke (1936) are probably tuffaceous units and minor shear zones in the area and do not represent any potential Au-mineralization areas.

A strong gossan zone was observed on L16W, 8 to 10N. The gossaned rocks consist of crystal to lapilli-sized tuffs with pyritiferous and hematized matrices.

Assays for the zone yielded trace Au, 0.04 oz/t Ag, 0.02% Cu and 0.007% Zn.

I DISCUSSION AND RECOMMENDATIONS

Although the map area is mainly made up of basalt flows and tuffs which contain minor shears and quartz-veining, the potential for finding any significant amount of Au-mineralization is believed to be minimal.

This appears to be the case for the following reasons:

- 1- None of the previous Au assays on veins and shears were reproducable. Only trace amounts of gold were detected.
- 2- Although most of the host rocks for quartz veins and shears are carbonatized, there is however not distinctive larger-scale alteration zones associated with them.
- 3- Contrary to previous references to the property, there seems to be no major E-W shear zone which has some Au-mineralization cross-cutting the property. Certainly small, local shears are however present. Many of the previously referred to sheared rocks are probably schistose chloritic tuffs.

- 4- It is believed that there are no major conductive zones within the property which would correspond to conductive shear zones which might represent possible zones for Aumineralization.
- 5- The extensive dyke swarms and displacements make it difficult to follow any stratigraphically controlled Aumineralization.

The gossan zone observed on the western edge of the property should be investigated. If possible, the extent of the unit to the west and northwest of the map area should be studied in order to determine the cause of alteration and potential of the unit.

Respectfully submitted,

Peter Born

Ministry of Natural Resources

Report of Work (Geophysical, Geological, Geochemical and Expenditur

or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying



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Technical Assessment Work Credits

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Recorded Holder	
TIMMINS GOLD RESOUR	CES
Township or Area ASQUITH TOWNSHIP	
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Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	L 531429 to 32 inclusive L 578737
Magnetometerdays	
Radiometric days	
Induced polarization days	
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Geological days	
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Special provision 🛣 Ground 🕱	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
Special credits under section 86 (15a) for the following	mining claims
10 days L 531428	
No credits have been allowed for the following mining c	
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 86(18)-60:



Ministry of Natural Resources

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

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) Geolog	ical	\$
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Claim Holder(s) Timmins 4		MINING CLAIMS TRAVERSED List numerically
1417 Water	sedge Rd, Mississinga Hines (Quebec) Limited	
Survey Company Potino	Hines (Quebec) Limited	531428 34
Author of Report Mice Bra		(prefix) (number) 53/429
Address of Author Lox Becco	Chibougamon Quebec	
	(linecutting to office)	531430
Total Miles of Line Cut	7. 4	531431
		531432
SPECIAL PROVISIONS CREDITS REQUESTED	DAYS Geophysical per claim	578737
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survey.	-Radiometric	
ENTER 20 days for each	-Other	
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AIRBORNE CREDITS (Special pr	ovision credits do not apply to airborne surveys)	
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GEOPHYSICAL TECHNICAL DATA

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

Number of Stations		
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Base Station check-in interval (hours)		
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Integration time		
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Electrode array		
Electrode spacing		
Type of electrode		

INDUCED POLARIZATION

1982 11 12 2.4365

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

Dear Sir:

RE: Geological Survey submitted under Special Provisions &n Mining Claims L 531428 et al in the Township of Asquith

The Geological Survey assessment work credits as listed with my Notice of Intent dated September 14, 1982 have been approved as of the above date.

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

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

cc: Timmins, Gold Resources Mississauga, Ontario

cc: Resident Reologist
Kirkland Lake, Ontario



Oct 5, 1982

Your file:

Our file: 2.4365

September 14, 1982

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

Dear Sir:

ments 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.

Yours very truly,

E.F. Anderson Director Lands Administration Branch Whitney Block, Room 6450 Queen's Park Toronto, Ontario M7A 1W3 Phone: 416/965-1316

/em

Encl.

cc: Timmins Gold Resources Mississaug, Ontario

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



Notice of Intent for Technical Reports

2.4365

September 14, 1982

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 Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



Geotechnical
Report
Approval

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

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.531428 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) Limited Chibougamau, Quebec Attention: Alice Born

