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MAR 3 1975

PROJECTS UNIT

LORMAC EXPLORATIONS LIMITED

SUITE 1609, 44 VICTORIA STREET

TORONTO, ONTARIO

DETAILED GEOCHEMICAL SURVEY

OF FOUR CLAIMS OF THE TECK TOWNSHIP PROPERTY

KIRKLAND LAKE, ONTARIO

BY

MICHAEL OGDEN, B.A.Sc., P.Eng.
TORONTO, ONTARIO

FEBRUARY 27, 1975

## INTRODUCTION

The original report to the company by Dr. R. B. Graham, a year ago, recommended a geochemical survey. Its implementation has been delayed somewhat by test work to ascertain the most suitable method and by the conduct of a geological survey of the whole property.

#### REFERENCES

Graham, R.B.; Lormac Explorations Limited, April 19, 1974

Ogden, Michael; Geological Survey of the Teck Township Property,

December 12, 1974.

#### PROPERTY, LOCATION AND ACCESS

The block of 8 contiguous claims numbered L373162 to L373169, inclusive, lies just north of the old Temiskaming and Northern Ontario tracks (O.N.R.) about half a mile northwest of the west edge of the Town of Kirkland Lake. Access is provided by the old Goldthorpe Road to a power line which is a quarter of a mile beyond the Macassa Mill. The power line is followed to the north for 2,000 feet, to the property. An east-west base line extends along the south boundary of the property, with the 800 west picket being in the middle of the power line right-of-way.

#### GEOLOGY

The oldest rocks on the property are probably the medium to basic finegrained volcanics found only in the northwest corner and mapped as Keewatin greenstones.

The north half of the property is underlain by a great mass of medium to coarse grain, almost black, even textured gabbro which has some finer grain dioritic phases along contact areas. Some serpentinization has occurred in the northeast corner.

Along the south edge of the property a mass of porphyritic basic syenite extends into the claim block for 200 to 400 feet. This is a dark red rock with considerable augite and distinctive fingernail size phenocryst of feldspar. Another phase of it, found only in the southeast claim is even darker with more augite and is an even textured, medium grain, basic syenite.

Lying between the gabbro to the north and the syenite on the south boundary, there is a series of Timiskaming sediments. Fist-sized cobbled conglomerate is the predominant rock extending through the centre of the gap between the two intrusive masses. There are minor amounts of tuff on both the north and south contact of the sedimentary series. The old shaft, at 400 north and 175 feet west, is in sheared tuff with a little disseminated pyrite. The shearing is parallel to the common trend at about 60° true with a steep dip to the south.

#### HISTORY

The present property of 8 claims was the north part of 14 claims put together from various people to form the <u>Casakirk Gold Mine Limited in 1936</u>.

The shaft had been sunk to 127 feet before that.

A crosscut was driven north on the 3,000-foot level of Macassa in 1940. It got to within 600 feet of the south boundary from where a 1500-foot long flat hole was continued on into the claim block. A small quartz vein was encountered about 50 feet north of the boundary but no assays are available.

Another drill hole probed the contact area from 2500 feet west and 50 feet south. It returned 0.07 ounces of gold and 1.45 ounces of silver from a broken 2-foot section of quartz-carbonate, amongst a 7-foot section of badly broken rock and lost core near the contact between syenite and tuffs.

A geological survey was done last fall by the writer.

#### FAULTING

The North Break or Narrows Break Fault of Kirkland Lake can be extrapolated to extend across the property, along or near the syenite sediment contact. The above drill hole tends to confirm that concept for it shows that the contact area sometimes has fair gold values.

#### MINERALIZATION

No gold mineralization is known to the writer to be exposed at surface. The best assays are from the drill hole at half a mile west in the property, at about 200 feet north of the south boundary where 0.07 ounces of gold per ton and 1.45 ounces of silver were found at a depth of 200 feet.

Some minor pyrite mineralization can be seen near the shaft but the best assay of four samples was forty parts per billion or 0.012 ounces per ton.

#### THE CASAKIRK DIAMOND DRILL HOLE

Located at 2500 feet west or thereabouts and 50 feet south. Drilled with a dip of  $40^{\circ}$  toward N  $25^{\circ}$  W, the dip at 550 feet being  $37^{\circ}$ . It was drilled to 550 feet from 14 to 21 June, 1941.

- 0 5 ft. Casing
- 5 234 " Syenite porphyry

97½ feet = 1 inch of 0.01 oz. Au.

118 " = 6 inch quartz stringer 0.02 Au.

1274 = 3 inch quartz/carbonate 0.03 Au. and 0.65 Ag.

 $143\frac{1}{2}$  " = 7 inch quartz/carbonate 0.01 Au.

234 - 322 ft. Tuff with varying amounts of carbonate stringers

 $311-318\frac{1}{2}$  feet mostly ground core over  $7\frac{1}{2}$  feet

311-312 " ground core

312-316 " ground core

316-317 " 50% quartz/carbonate, 0.07 oz. Au., 1.45 oz. Ag.

317-318½ " ground core

322 - 345 " Greywacke with jasper pebbles

345 - 350 " Conglomerate

350 - 375 " Greywacke

 $365\frac{1}{2}$  feet quartz/carbonate veins and sulphides over 6 inches =

0.04 Au., 0.8 Ag.

375 - 550 " Conglomerate with various carbonate slips

449-450 feet ground core

550 " End of hole.

#### THE GEOCHEMICAL SURVEY

The initial test work for the survey was done last September when a series of soil samples of both the A and B horizon were collected at 20-foot intervals in the vicinity of the old shaft near the east boundary. The samples were collected from two north-south lines, one 50 feet west of the shaft and the other 50 feet east of it. Other samples were taken at wider intervals towards the base line to give some idea of normal background.

Silver by hydrochloric acid leach was seldom detected (i.e. less than 0.2 p.p.m.). Molybdenum by similar leach was very low (1 or 2 p.p.m.) and lead was erratic (3 to 59 p.p.m.).

Total mercury in the A horizon seemed to work with values of 100 p.p.b. or better, near the shaft, rather than 1 to 4 p.p.b., with the odd 50 elsewhere. Similarly, the B horizon mercury seemed to work.

Hence, the survey was done by taking the humus or "A" horizon at 50-foot intervals on lines 200 feet apart.

A further check was done during the survey, over a little gold vein on an outcrop 600 feet south of the highway, on the township line between McVittie and Gauthier, a couple of miles short of Larder Lake (i.e. 20 miles east of the property). Both A and B horizons were collected at 20-foot intervals to both the south and north of the vein for 100 feet, then at 50-foot intervals to 500 feet away. The "B" horizon results vary between 20 and 80 p.p.b. mercury, with no consistent trend. The "A" horizon varies between 90 and 350 p.p.b. mercury, with a tendency to be higher near the base of hills or in swamp.

The usefullness of a mercury concentration in the humus is thus in doubt.

However, the survey was completed before the results of the little gold vein test were available.

Samples were taken of the leafy humus, or A horizon, at 50-foot intervals along each line from 2 to 44 west, i.e. 22 lines.

They were shipped to Barringer Research Limited of Rexdale, where they were allowed to <u>air dry</u>, and were then analyzed for total mercury in parts per billion.

Although most of the target area was well tested in this manner, unfortunately, some six lines of samples were lost at Barringer.

The original intention had been to test for gold content also, in parts per billion, using X-Ray Assay Laboratories' facilities. The problem here was that insufficient sample was left for a good gold analysis.

However, some results were obtained.

#### SURVEY RESULTS

The accompanying map "Geochemical Survey" on a scale of 100 feet to the inch displays the results in detail.

A mercury anomaly exists from line 18W or 20W to 28W, some 900 feet. for it is indicated by two high values on line 18W, six on line 20W at 300 to 600 north, two on line 22W, only one on lines 24 and 26 at 350 to 400 north which casts some doubt, and by two or four more high results from 300 to 550 north on line 28W.

There is some apparent correlation between spruce swamp and anomalous results in the east half of this zone but it is not consistent toward the west.

However, the fascinating aspect of this anomaly is that it lies parallel to the syenite-sediment contact 150 feet north of where that contact zone has been intersected in a drill hole with gold values at 200 feet below the surface. This would give the zone a south dip of  $50^{\circ}$  to  $60^{\circ}$ .

The general level of the mercury results increases to the west and diminishes to the east, but no other clearcut anomalous zones seem apparent.

#### CONCLUSIONS

- 1. There is a good correlation between the fair gold assay in the old drill hole and the geochemical anomaly.
- 2. The assay of 0.07 ounces of gold per ton, or about \$13 per ton, was obtained from a 7½-foot zone of badly broken rock and much lost core in the drill hole. Therefore, it may not be an accurate measure of the true amount of gold in this zone if all of the zone were to be properly sampled.
- 3. The mineralized zone should be redrilled in at least two places, resampled, and all the sludge retained as a check on the lost core.
- 4. To do this, the near surface location of the mineralized zone should be located. It may be a fault and an EM survey might pick it up, or detailed geochemistry.

#### RECOMMENDATIONS

- 1. Find the collar of the old drill hole.
- 2. Check survey the vicinity of the apparent fault zone by EM-16 or vertical loop to try to detail its trace on the surface. If this fails, do a detail geochemical survey at 33-foot intervals from 20W to 28W to try to delimit the zone with accuracy.
- 3. Test drill the zone with 2 or 3 short holes of about 150 feet in length. Be careful to retain sludge in areas of poor drilling.

## COST ESTIMATES

Check surveys and hole location would take a week or two at cost of \$1500 to \$3000.

The drilling and supervision of three holes of about 150 feet in length for a total of 500 feet would take about three weeks at an overall

cost of \$11,000. This would break down into:

Drilling of 500 feet -	\$5,000
Mobilization and demobilization -	2,000
Cementing -	1,000
Engineering and assaying -	3,000

Respectfully submitted,

Michael Ogden

Toronto, Ontario

February 27, 1975

# GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

RECEIVED by Lands MAR 3 1975

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.

PROJECTS UNIT

<b>L</b> .					
Type of Survey	GEOCH	EMICAL			
		TOWNSMI	/3		
Claim holder(s)	ORMAC EX	PLOPATIONS	LTO		IS TRAVERSED merically
Address RR	9-4 5700 Survey <b>5.8.127</b>	UFFVILLE, 15/74 to Finecutting to office)	ONT.	ム - 373 ム - 373	162 1/3 NC 163 (number) 164 /4 NC
SPECIAL PROV	<u>'ISIONS</u>		DAYS per claim	4 - 373	1653/4
ENTER 40 days line cutting) for survey.	(includes	GeophysicalElectromagnetiMagnetometerRadiometric	c	area of covered:	lains not 12/13
ENTER 20 days additional survey same grid.		-Other Geological Geochemical	32 days	4024:160-	(4+1):32
	Electromagn	ion credits do not apply to etic Radio ays per claim) TURE	- 1		
PROJECTS SECTI Res. Geol Previous Surveys No		_ Qualifications_	Carried		
Checked by	oredita !	date			
***		date			
Approved by		date		TOTAL CLAIMS	4

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"



#### GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS			
Number of Stations	Nur	nber of Readings_	
Station interval		Challenger and the second seco	
Line spacing	**************************************		
Profile scale or Contour intervals	for each type of survey)	1971 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977	
(specify	for each type of survey;		
MAGNETIC			
Instrument			
Accuracy - Scale constant			
Diurnal correction method			
Base station location			
ELECTROMAGNETIC		7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
Instrument			
Coil configuration			
Coil separation			
Accuracy			
Method:   Fixed transmitter		☐ In line	☐ Parallel line
Frequency			
Parameters measured	(specify V.L.F. station)		
GRAVITY			
Instrument			
Scale constant Corrections made			
Corrections made			
Base station value and location			
Elevation accuracy			
INDUCED POLARIZATION - RESISTIVITY			
Instrument			
Time domain	Frequency	domain	
Frequency			
Power	_		
Electrode array			
Electrode spacing			<b>.</b>
Type of electrode			
· ·			

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#### GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken <u>L-37</u>	3/62,-163,-164, \$ 165
Total Number of Samples 538  Type of Sample Humus (Nature of Material)  Average Sample Weight 62  Method of Collection 134 Hand	ANALYTICAL METHODS  Values expressed in:  per cent p. p. m. p. p. b.  Cu, Pb Zn, Ni, Co, Ag, Mo As, (circle)  Others  Field Analysis (
Sample Depth	Analytical Method  Reagents Used  Pield Laboratory Analysis  No. (  PPB  12 Au  tests)  Extraction Method  Analytical Method  Reagents Used
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing)  Mesh size of fraction used for analysis	Commercial Laboratory (
General	General

SELF POTENTIAL	
Instrument	Range
Corrections made	
RADIOMETRIC	
Instrument	
Energy windows (levels)	
	Background Count
Overburden	
	(type, depth — include outcrop map)
OTHERS (SEISMIC, DRILL WELL LO	GGING ETC.)
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for understand	ing results)
AIRBORNE SURVEYS	
Instrument(s)	(specify for each type of survey)
Accuracy	(specify for each type of survey)
Aircraft used	
Sensor altitude	
	thod
Aircraft altitude	Line Spacing
Miles flown over total area	Over claims only



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TORONTO, ONTARIO

GEOLOGICAL SURVEY

OF THE TECK TOWNSHIP PROPERTY

KIRKLAND LAKE, ONTARIO

BY

MICHAEL OGDEN, B.A.Sc., P.Eng.

DECEMBER 12, 1974

### INTRODUCTION

The geological survey was started to compliment and help interpret a detail geochemical survey being conducted over the southern half of the property. Once underway, it was considered wise to complete the work, at lesser line interval, over the whole property. Thus fresh data as to the nature and distribution of rock types has been obtained plus an idea of the amount of trenching and prospecting that has been done on the ground over the years.

The field geological observations were made by Michael Ogden and Dr. R. Bruce Graham during the period September 21 to 23 and by Michael Ogden during October 23 to 26.

#### PROPERTY, LOCATION AND ACCESS

The block of 8 contiguous claims numbered L373162 to L373169, inclusive, lies just north of the old Temiskaming and Northern Ontario tracks (O.N.R.), about half a mile northwest of the west edge of the Town of Kirkland Lake. Access is provided by the old Goldthorpe Road to a power line which is a quarter of a mile beyond the Macassa Mill. Then walk north on the power line for 2,000 feet to the property. An east-west base line extends along the south boundary of the property, with the 8W picket in the middle of the power line right-of-way.

#### GEOLOGY

The base map and nomenclature for the survey have been taken directly from 0.D.M. Map 1945-1, a compilation map by James Thomson in 1945, based on work by himself and others. This, an excellent map for a reconnaissance survey, even shows the old claims, which have been moved a bit by subsequent restakings.

The new survey is thus similar to the old, but with more outcrop detail, and the favourable fault contact zone between the syenite and the sediments has been mapped in detail along the southern portion of the property.

The oldest rocks on the property are probably the medium to basic fine-grained volcanics found only in the northern corner and mapped as Keewatin greenstones.

The series of intrusive rocks are believed to be Algoman, the north half of the property, being underlain by a great mass of medium to coarse grain, almost black, even textured gabbro which has some finer grain dioritic phases along some contact areas. Some serpentinization has occurred in the northeast corner.

Along the south edge of the property a mass of porphyritic basic syenite extends into the claim block for 200 to 400 feet. This is a dark red rock with considerable augite and distinctive fingernail size phenocryst of feldspar. Another phase of it, found only in the southeast claim is even darker with more augite and is an even textured, medium grain, basic syenite.

Lying between the gabbro to the north and the syenite on the south boundary, there is a series of Timiskaming sediments. Fist-sized cobbled conglomerate is the predominant rock extending through the centre of the gap between the two intrusive masses. There are minor amounts of tuff on both the north and south contact of the sedimentary series. The old shaft, at about 400 north and 150 feet west, is in sheared tuff with a little disseminated pyrite. The shearing is parallel to the common trend at about 60° true with steep dip to the south.

There is an interesting outcrop of flat lying limey sandstone a couple of hundred feet north of the property, on the power line right-of-way. It is composed of book thick beds of grey and yellow sediments with one rusty brown coloured band. It resembles a Paleozoic sediment.

#### HISTORY

The present property of 8 claims was the north part of 14 claims put together from various people to form the Casakirk Gold Mine Limited in 1936. The shaft had been sunk to 127 feet before that.

A crosscut was driven north on the 3,000-foot level of Macassa in 1940. It got to within 600 feet of the south boundary from where a 1500-foot long flat hole was continued on into the claim block. A small quartz vein was encountered about 50 feet north of the boundary but no assays are available.

Another drill hole probed the contact area from 2500 feet west and 50 feet south. It returned 0.07 ounces of gold and 1.45 ounces of silver from a broken 2-foot section of quartz-carbonate, amongst a 7-foot section of badly broken rock and lost core at the contact between syenite and tuffs.

Nothing else seems to have been done until now.

## FAULTING

The North Break or Narrows Break fault of Kirkland Lake can be extrapolated to extend across the property, along the syenite/sediment contact. The above drill hole tends to confirm that concept or at least it shows that the contact area sometimes has fair gold values.

#### MINERALIZATION

No gold mineralization is known to the writer to be exposed at surface. The best assays are from the drill hole at half a mile west in the property, at about 200 feet north of the south boundary where 0.07 ounces of gold per

ton were found in a two-foot section of broken quartz-carbonate vein; 1.45 ounces of silver was also found here at the vertical depth of about 200 feet.

Some minor pyrite mineralization can be seen near the shaft but the best assay of four samples was 40 parts per billion or 0.0012 ounces per ton.

Respectfully submitted

Michael Ogden, B.A.Sc., P.Eng.

December 12, 1974

ASSESSMENT WORK

A side of Geologie

Lick Tup

LORMAC EX



030

(Incorporated under the laws of Ontario)

Underwriter-Optionee

Marchment & Mackay Limited, 330 Bay Street, Toronto. Registrar and Transfer Agent

Guaranty Trust Company of Canada, 88 University Avenue, Toronto.

#### **NEW ISSUE**

1609 - 44 Victoria Street, Toronto

Number of Shares	Price per share	Net amount to Corporation	Maximum offering price to public
200,000 shares underwritten	17½¢	\$ 35,000.00	35¢ per share
100,000 shares optioned	22½¢	\$ 22,500.00	45¢ per share
100,000 shares optioned	271/2¢	\$ 27,500.00	55¢ per share

The underwritten and optioned shares hereby offered, will be offered to the public in the Province of Ontario by the Underwriter-optionee, a registered security dealer, as principal. There is no obligation on the part of the Underwriter-optionee to purchase all or any of the optioned shares.

These shares will be offered to the public at such prices as may from time to time be determined by the Underwriter-optionee subject to the maximum offering prices as above stated.

The Underwriter-optionee may be said to realize a gross profit on the sale of any shares sold equal to the difference between the price paid to the treasury of the corporation and the sale price to the public.

#### PURPOSE OF OFFERING

The purpose of this offering is to provide funds to finence an exploration program recommended by the consulting engineer as set forth under the heading "Mining Property", together with general administrative and operating expenses from time to time. Further reference is also made to the heading "Use of Proceeds" in this Prospectus.

#### SECONDARY OFFERING

A total of 75,000 additional shares, the proceeds of which will accrue solely to the offering shareholder, will be offered for sale to the public following the distribution of all underwritten and optioned shares, particulars of which are set forth under the heading "Secondary Offering" in this Prospectus.

THERE IS NO MARKET FOR SHARES OF THE CORPORATION AND THE SECURITIES HEREBY OFFERED ARE SPECULATIVE.

NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES HEREBY OFFERED, AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

Prospectus dated this 15th day of July, 1974.



42A01NE0221 2.1722 TECK	<b>030C</b>
History and Business	1
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Description of Share Capital	2
Capitalization	3
Escrowed Shares	3
Principal Holders of Securities	4
Prior Sales	4
Dividends	4
Auditor	5
Registrar and Transfer / gent	5
Offering	5
Offering	δ
Secondary Offering	6
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Officers and Directors	7
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## HISTORY AND BUSINESS

Lormac Explorations Limited (hereinafter for convenience referred to as "Lormac" or "the Corporation") was incorporated under the laws of Ontario by Articles of Incorporation for which Certificate of Incorporation was issued on January 25th, 1974. The head office is located at Suite 1609, 44 Victoria Street, Toronto, Ontario, and the principal objects of the Corporation are to engage in all phases of the exploration and development of mining properties. The Corporation has not carried on work on any properties to date.

By Agreement in writing dated April 19th, 1974 Lormac has acquired from Marchment & Mackay Limited (see also headings "Office and acquired from Marchment & Mackay Limited (see also headings "Office acquired from Marchment & Mackay Limited (see also headings "Office acquired from Marchment & Mackay Limited (see also headings "Office acquired from Marchment & Mackay Limited (see also headings "Office acquired from Marchment & Mackay Limited (see also headings "Office acquired from Marchment & Mackay Limited (see also headings)") from Marchment & Mackay Limited (see also headings "Offering" and "promoter") eight Mining Claims located in the Township of Teck in the Kirkland Lake area and recorded in the Office of the Mining Recorder for Larder Lake Mining Division as numbers 1373162-9 in-1373162-9 clusive. The total consideration pail was the allotment and issue of 750,000 fully paid shares in the capital stock of the Corporation, all of which is to be received by the said Vendor, subject to an existing royalty of 5% of the net sales price (as defined) of all ore removed from the property in favour of Michael Ogden, Trustee, R. R. 4 Stouffville, Ontario. The Claims are in good standing under extension to November 3th, 1974.

## Location and Access

The property comprises approximately 327 acres two and one-half miles west of the Town of Kirkland Lake and about one-half mile north of Macassa Mine, the nearest producing mine. The Ontario Northland Railway crosses the south-cast corner of the group and two good roads pass nearby. In addition, a hydro transmission line crosses the property and a small creek flows through the south-western section of the Claims.

#### History

The Kirkland Lake area has been known for gold since 1911 and many producing mines have been in the immediate area over the years. In 1936 on emploratory shaft was sunk on the property to a depth of about 127' but no reports are available for any work which may have been performed as a result. In 1940 Macassa Mines Ltd. in conjunction with Hollinger Consolidated Gold Mines Limited drove a crosscut north from the Macassa property at the 3,000 foot level and a hole was dril ed from the end of the crosscut 720' into the Claim group. A narrow quartz vein was intersected about 50' north of the south boundary of our property but assay results are not known. Outcrop areas are relatively plentiful, comprising about thirty per cent (30%) of the terrain. There are no present mining facilities on the property at the present time other than the shaft referred to.

## Swamary

A Report has been prepared for the Corporation by Dr. R. Bruce Graham, Ph.D.P. Eng. dated June 10th, 1974 which is available for inspection in the public offices of the Ontario Securities Commission in Toronto upon which Report the Corporation has relied for the information therein, and from which the following summary has been prepared:

There is surface and underground evidence that a fault zone occurs in sediments along the north contact of the syenite intrusive in the southern part of the Property. A vein on the property intersected in a hole drilled from a crosscut on the 3,000 foot horizon of the Macassa Mine is approximately on strike with the Narrows break which is a gold bearing structure on the Lake Shore and Teck Hughes Properties a mile to the east. This structure is projected to merge with the fault zone about 1,000' west of the east boundary of the property. The fault zone from here west through the southern part of the Claim group is regarded as favourable prospecting ground. This is supported by 7 foot section of ground core in a surface drill hole on the extension of this zone 1,300 feet west of the projected junction.

As a first exploration stage a program of geochemical prospecting is recommended with the objective of delineating specific target areas for follow up diamond drilling from the surface. Sampling should be carried out at 100 foot intervals along the north-south lines for 1,000 feet. A contingency for 2,000 feet of diamond drilling should also be provided, and concurrently the feasibility of carrying out underground exploration from the 3,000 foot level should be determined and an estimate of the cost prepared, which would be contingent on the results of the surface program. The total cost of work to this stage is estimated at \$23,400.00 as follows:

Line cutting	\$ 700
Sampling and Assaying	4,000
Contingencics	700
Provision for 2,000 feet of	16,000
diamond drilling Supervision, assaying and estimate re underground	2,000
exploration programme	
TOTAL	\$23,400

#### PRELIMENARY EXPENSES

It is estimated that the expenses of the Corporation for the first year of operation will be \$4,500.00 for administration and \$23,400.00 for exploration and development work, subject to increase if further work is warranted and funds are available. No monies have been spent to the date hereof.

#### DESCRIPTION OF SHARE CAPITAL

The authorized capital of the Corporation is 3,000,000 shares without par value to be issued for a consideration not exceeding \$1,000,000.00, of which 750,002 have been issued to the date hereof. All chares are of one class only and rank equally in every respect including the right to one vote each at all meetings of shareholders and the right to participate equally in the assets of the Corporation in the event of winding up or liquidation. All shares issued to date are fully paid and not subject to call for any further payment. There is no other form of security of the Corporation existing at the present time and none is contemplated.

#### CAPITALIZATION

Description of security	Amount authorized	Amount out- standing as at May 15th, 1974 (see statements attached)	Amount out- standing as a date of this Pros- poctus	Amount out- standing if all securi- ties being issued are sold
Common shares no par value	3,000,000 (\$1,000,000		7.0,002 (37,501.)	1,150,002

\*On the basis of all shares underwritten and optioned being sold (see heading "Gffering" herein).

#### ESCROWED SHARES

At the date hereof a total of 675,000 fully paid common shares of the Corporation are held in escrow by Guaranty Trust Company of Canada, 88 University Avenue, Toronto, Ontario, subject as to release only with the consent of the Campany and the Ontario Seturities Commission, and as to transfer, pledge or any other dealings within the terms of escrow only with the consent of the Ontario Securities Commission.

Number of escrowed shares	Percentage of total issued capital as at	
PMA_DATEA-650GENERALE AND ARTHUR AND ARTHU	date of this Prospectus	
675,000 common	90%	

By Agreement between Marchment & Mackay Limited as Vendors of the mining property, and Lormac, the above noted escrowed shares may be required to be tendered back to the Corporation in the event the mining property for which such shares were issued is abandoned or title thereto is permitted to lapse by reason of a discontinuance of development work.

## PRINCIPAL HOLDERS OF SECURITIES

As at the date of this Prospectus, the following is the only holder of more than 10% of the issued stock of the Corporation:

Name and address	Description of class	Type of ownership	Number of shares	Percentage of class issued
Marchment & Mackay Limits 1608, 330 Bay St. Toronto, On	ted shares no par value ,	Record and heneficial	750,000 (675,000 escrowed)	100%

Marchment & Mackay Limited is also the Underwriter-optionee of the shares being offered by this Prospectus and the promoter of the Corporation (as to which see headings "Offering", "Secondary Offerings" and "Promoter" herein) in which a greater than five per cent (5%) interest is held by W. R. Marchment, 53 King George's Road, Islington, Ontario, 1. P. Mackay, 31 Alexander Street, Toronto, Ontario and C. L. Ornstein, 260 Wellesley Street East, Toronto, Ontario.

Following the sale of all underwritten and optioned shares and the secondary offering, the respective percentage of shares held and to be held by the principal shareholders and the public will be as follows:

Shareholders	Percentage of class before offering	Percentage of class after offering
Principal share-	100%	58.7%
holders	nil	41.3%
Public		

## PRIOR SALES

Since incorporation the only shares of the Corporation sold for cash have been as follows:

No. of shares	Price per share	Total proceeds	
	\$ .50	\$1.00	

#### DIVIDENDS

No dividends have ever been paid by the Corporation to date.

#### AUDITOR

The Auditor of the Corporation is T. H. Bernholtz, C.A., Suite 804, 330 Bay Street, Toronto, Ontario.

#### REGISTRAR AND TRANSFER AGENT

The Registrar and Transfer Agent of the Corporation is Guaranty Trust Company of Canada, 83 University Avenue, Toronto, Ontario.

#### OFFERING

The Corporation has entered into an Agreement dated April 19th, 1974 as amended by Agreement dated May 15th, 1974, with Marchment & Mackay Limited, Suite 1608, 330 Bay Street, Toronto, Ontario, as Underwriter-optionee, whereby the latter acting on its own behalf has agreed to purchase the following treasury shares:

#### Underwritten Shares

No. of shares	Price per share	Net amount to Comporation	Maximum offering price to public
200,000	17 <sup>1</sup> .¢	\$35,000.00	35¢ per share

The purchase price of \$35,000.00 is payable on the effective date of the Agreement being two business days following receipt of advice from the Ontario Securities Commission of acceptance for filing of a Prospectus of the Corporation permitting the sale to the public of the shares herein referred to.

In consideration of the said firm purchase of shares the Corporation has granted to the Underwriter-optionee the option to purchase further treasury snares as follows:

#### Optioned Shares

No. of Price per shares share		Net amount to Corporation	Maximum offering pric∈ to public	Time within which option exercisable from effective date	
100,000	22½¢	\$22,500.00	45¢ per share	3 months	
100.000	27½¢	\$27,500.00	55¢ per share	6 months	

The underwritten and optioned shares covered by this offering as

outlined herein, will be offered to the public in Ontario during the course of distribution by the Underwriter-optionee, as principal, which shares will be offered at such prices as the Underwriter-optionee may determine from time to time within the limits of the maximum offering prices stated. The Corporation is advised that there are no Agreements by way of sub-underwriting, sub-option or assignment in effect or contemplated with respect to any of the aforesaid shares. Marchment & Mackay Limited is a Broker-Dealer carrying on business in the City of Toronto, in which the only persons holding a greater than 5% interest in the issued capital thereof are William Roy Marchment, 51 King George's Road, Islington, Ontario, Robert Pascoe Mackay, 31 Alexander Street, Toronto, Ontario and Charles Ornstein, 260 Wellesley Street East, Foronto, Ontario.

#### SECONDARY OFFERING

Offering Shareholders	No. of shares held at date of Prospectus	No. of shares offered	No. of shares held after offering	
Marchment & Mackay Limited	75,000 (free)	75,000 (free)	nil	
	675,000(escrowed)	nil	675,000 (escro	

330 Bay Street, Toronto, Ontario

Marchment & Mackay Limited will sell its free shares as principal following the sale of all underwritten and optioned shares, with the proceeds from the sale of such shares accruing solely to the offering shareholder and not to the treasury of the Corporation.

## USE OF PROCEELS

The proceeds from the sale of underwritten shares in the amount of \$35,000.00 will be used to finance the recommended exploration program of Dr. Graham estimated at \$23,400.00 as outlined in the heading "Mining Property", and will provide for the cost of incorporation and this issue estimated at \$6,500.00, together with estimated administrative expenses for the first year of exploration in the amount of \$4,500.00. Although there is no obligation on the Underwriter-optionee to purchase all or any of the share options given to it, the Corporation will receive an additional \$45,000.00 if all such options are exercised, in which case the additional funds will be used for general operating and administrative expenses and further exploration work if warranted. Any surplus funds will be used from time to time to conduct further exploration work on this or other properties which may be acquired by the Corporation, but no funds will be spent on the acquisition of additional properties, or for investment in other Corporations without an appropriate amendment to this Prospectus having first been accepted by the Ontario Securities Commission if shares of the Corporation are still then in the course of distribution to the public.

#### PROMOTER

The Promoter of the Corporation pursuant to the definition contained in Section 1.(1)15 of The Securities Act is Marchment & Mackay Limited, 330 Bay Street, Toronto, in which a greater than 5% interest is held by W. R. Marchment, 53 King George's Road, Islington, Ontario, R. P. Mackay, 31 Alexander Street, Toronto, Ontario and C. L. Ornstein, 260 Wellesley Street East, Toronto, Ontario.

#### OFFICERS AND DIRECTORS

The following are the present officers and directors of the Corporation together with their principal occupations over the preceding five year period:

President and Director

Russel Edwin Vance, 34 Meadow Avenue, Scarborough, Ontario, Department Supervisor with Hiram Walker G & W. Mr. Vance is also a Director of other mining Corporations.

Secretary-Treasurer and Director

James M. DaCosta, 155 Rosedale Heights Drive, Toronto, Ontario, Barrister & Solicitor practicing in the City of Toronto and a Director of other mining Corporations, including McAdam Mining Corporation Limited and Grasset Lake Mines Limited.

Director

Clarence Allen Floyd, 2 Courtwright Road, Etobicoke, Ontario, Sole proprietor of Automation and Mining Development Services and a Director of other mining Corporations.

Director

W. Russell Miller, 9 Foxcote Crescent, Etobicoke, Ontario, Prospector, self-employed and a Director of other mining Corporations including Beaverbridge Mines Limited and Benvan Mines Limited.

## REMUNERATION OF OFFICERS AND DIRECTORS

No officer or director of the Corporation is presently receiving any remuneration for services as such, but directors will be entitled to receive a fee of \$50.00 for each meeting of directors

tended, together with their reasonable expenses in connection therewith, and head office, administrative and secretarial services will be paid to the Secretary-Treasurer in an amount not exceeding \$250.00 per month. No contributions will be made by the Corporation to any pension, insurance or other benefit plan on behalf of any officer or director.

#### MATERIAL CONTRACTS

The following material contracts relating to the affairs of the Corporation entered into since incorporation may be inspected at the head office of the Corporation at ordinary business hours during the period that the shares being offered for sale to the public, as referred to in this Prospectus, are in the course of distribution to the public:

- (a) Agreement dated April 19th, 1974 between the Corporation and Marchment & Mackay Limited as to which see heading "Mining Property".
- (b) Underwriting-option Agreement dated April 19th, 1974 with Marchment & Mackay limited covering sale of treasury shares referred to in heading "Offering", as amended by Agreement of May 15th, 1974.
- (c) Agreement dated April 24th, 1974 with Marchment & Mackay Limited and Guaranty Trust Company of Canada, as to which see heading "Escrowed Shares".

# INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL THANSACTIONS

No officer or director has any direct or indirect personal interest in any material transaction involving the Corporation at the date hereof.

# PURCHASERS' STATUTORY RIGHTS OF WITHDRAWAL AND RESCISSION

The Securities Act contains provisions in Sections 64 and 65 enabling a purchaser of securities offered in the course of distribution to the public to rescind the contract of purchase while the purchaser is still the owner of the securities,

(a) if the Prospectus and any amended Prospectus, as of the date of receipt by the purchaser, contains an untrue statement of a material fact or omits to state a material fact in order to make any statement contained therein not misleading, but only if action is commenced within 90 days from the last to occur of the receipt of the Prospectus or amended Prospectus or the contract of purchase and

(b) if the person or corporation from whom the securities were purchased is notified in writing or by telegraph of the purchaser's intent to rescind not later than midnight of the second day, exclusive of Saturdays, Sundays and holidays, after receipt by the purchaser of the Prospectus or amended Prospectus.

A Prospectus or amended Prospectus sent by prepaid mail is deemed conclusively to be received in the ordinary course of mail. The receipt thereof by a person or corporation acting as agent or who thereafter commences to act as agent of the purchaser shall be receipt by the purchaser as of the date of the agent's receipt thereof; however, for purpose of the aforegoing, a person or corporation is not considered to be acting as agent of the purchaser unless the person or corporation is acting solely as an agent of the purchaser and has not received and has no agreement to receive compensation from or on behalf of the Vendor with respect to the purchase and sale. This right of rescission is not available to a registrar or to a purchaser who sells or otherwise transfers beneficial ownership of the securities purchased before the expiration of the time within which rescission may be effected.

Reference is made to The Secuties Act, R.S.O. 1970, c.426 and amendments thereto for the complete text of s.64 and 65 containing the provisions from which the above summary is made.

## AUDITOR'S REPO T

To The Directors Lormac Explorations Limited Toronto, Ontario

I have examined the balance sheet of Lormac Explorations Limited as at May 15, 1974 and in connection therewith reviewed such supporting evidence as I considered necessary in the circumstances.

In my opinion, the accompanying balance sheet presents fairly the financial position of the Corporation as at May 15, 1974 in accordance with generally accepted accounting principles.

Toronto, Ontario July 15,1974 T. H. bernholtz Chartered Accountant

## LORMAC EXPLORATIONS LIMITED

## BALANCE SHEET

# AS AT MAY 15, 1374

## **ASSETS**

Cash in bank				\$ 1.00
Mining claims	s and properties (Note	1)		7,500.00
Incorporation cost of of	n, organization and Sering, estimated	•		6,500.00 \$14,001.00
	LIABILITIES	AND CAPITAL		
Accounts pays	able, estimated			\$ 6,500.00
Capital stoc	k (Note 2)			
Authorized	:			
3,000,000	shares, without par vexceed \$1,000,000.00	alue, not to		
Allotted a	nd issued			
For cash	2	? shares		1.00
For proper	750,000	) thares		7,500.00 \$14,001.00
The accompan	ying notes are an inte	egral part of	this balance	sheet.
Approved on	behalf of the Board or	Lirectors:		
" R	.E. Vance "	Director		
" J	.M. DaCosta "	Director		

#### LORMAC EMPLORATIONS LIMITED

#### NOTES TO BALANCE SHEET

#### AS AT MAY 15, 1974

- Note 1. The mining properties consist of eight mining claims in Tech Township, Larker Lake Mining Division, Province of Ontaric and are recorded at the consideration attributed to 750,000 shares by the Board of Directors for a value of 07,500. The agreement also provides that a royalty is mayable consisting of 5% of the net sale price of all ore removed from the property.
- Note 2. By agreement dated April 19, 1974 as amended by agreement dated May 15, 1974, the underwriter has agreed to firmly purchase 200,000 shares of the Corporation's capital stock at 17% per share, payable on the second business day following the date upon which the Ontario Securities Commission issues a final receipt for the filing of the prospectus (referred to as the "effective date"). In consideration of the firm purchase, the Corporation has granted the underwriter an option to ourchase all or any part of an additional 200,000 shares as follows: 100,000 shares at 22% per share payable within three months after the effective date and a further 100,000 shares at 27% per share payable within six months after the effective date.
- Note 3. A statement of source and application of funds from incorporation date (January 25, 1974) to May 15, 1974 has not been included as the Corporation has not yet commenced operations.

TERE ARE NO OTHER MATERIAL FACTS.

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by Part VII of The Securities Act and the regulations thereunder.

"Russel E. Vance" Chief Executive Officer "James M. DaCosta" Chief Financial Officer

On behalf of the Board of Directors.

"Clarence A. Floyd"
Director

"W. Russell Miller"
Director

PROMOTER

MARCHMENT & MACKAY LIMITED

"W. R. Marchment"

"R. P. Mackay"

To the best of our knowledge, information and belief the foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by Part VII of The Securities Act and the Regulations thereunder.

UNDERWRITER OPTIONEE

MARCHMENT & MACKAY LIMITED

"W. R. Marchment"

"R. P. Mackay"

. Dated the 15th day of July, 1974.

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LORMAC EXPLORATIONS I.IMITED

OGDEN PROPERTY

TECKTOWNSHIP

KIRKLAND LAKE

ONTARIO

Toronto, Ontario

April 19, 1974

R. Bruce Graham & Associates Ltd.



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#### SUMMARY

The Ogden Property is centrally located in TeckTownship, Kirkland Lake Area, Ontario.

It lies 2,700 feet north of the Macassa ore zone on the north edge of the gold bearing sediments, felsic volcanics and intrusives which occur along the gold-bearing Kirkland Lake Fault System.

There is surface and underground evidence that a fault zone occurs in sediments along the north contact of the syenite intrusive in the southern part of the Property.

A vein on the property intersected in a hole drilled from a crosscut on the 3,000 foot horizon of the Macassa Mine is approximately on strike with the Narrows break which is a gold bearing structure on the Lake Shore and Tec Hughes properties a mile to the east. This structure is projected to merge with the postulated vein and fault 500 feet west of the east boundary of the property. The fault zone from here west through the southern part of the claim group is regarded as favourable prospecting ground. This is supported by a 7 foot section of ground core in a surface drill hole on the extension of this zone 2,200 feet west of the projected junction. The ground core could be due to faulting and 1 foot within this section assaying 0.07/ton Au and 1.45 oz/ton Ag

lends support to the assumption that this horizon could have economic potential.

As a first step, a program of trace element geochemical prospecting is recommerded, based on present knowledge of the minerology of the Kirkland Lake area.

A contingency for 2,000 feet of diamond drilling to follow up the geochemical program is also recommended along with an investigation into the feasibility of carrying out underground exploration from the 3,000 foot level.

The cost of the above program is estimated at \$23,400.00.

#### LORMAC EXPLORATIONS LIMITED

#### OGDEN PROPERTY

#### TECKTOWNSHIP

#### KIRKLAND LAKE, ONTARIO

#### INTRODUCTION

The following report describes the geology and the gold potential of the Ogden Property in TeckTownship, Ontario.

The information on which this report is based is derived mainly from the excellent studies of the Kirkland Lake Gold Area by E. W. Todd published in the 37th Annual Report of the Ontario Department of Mines, Pt. 2 and by J. E. Thompson in the 57th Annual Report of the Ontario Department of Mines, Pt. 5.

Information obtained from these sources was supplemented by discussions with Howard Lovell, Resident Geologist for the area and Michael Ogder. Additional information was obtained from unpublished reports by J. K. Gustafson dated December 26, 1940 and May 24, 1941 and the results of the one surface hole recorded from the property.

#### PROPERTY

The Ogden Property consists of a group of 8 contiguous mining claims recorded as:

L373162 to L373169.

The property comprises 327 acres more or less.

#### LOCATION

The Ogden Property is centred 2.6 miles south and 2.9 miles east of the northwest corner of TeckTownship.

The central part of the town of Kirkland Lake lies 2.5 miles east of the southeast corner of the claim group. The town of Swastika lies 2.5 miles south of the southwest corner.

The workings of the nearest producing mine, the Macassa, lie 2,500 feet to the south.

#### ACCESS

Access is convenient. The Ontario Northland Railway crosses the southeast corner of the claim group. The highway to Kirkland Lake and Noranda lies 1/2 mile to the south. A secondary road leading north passes 1/3 of a mile east of the east boundary.

#### FACILITIES

A hydroelectric transmission line crosses the property.

Transportation facilities are convenient. The town of Kirkland

Lake is geared to the mining industry as this area has been producing gold for over 60 years.

No mining facilities are known to be present on the property other than an exploration shaft sunk to a depth of 127 feet.

#### HISTORY

Gold was first discovered at Kirkland Lake in the autumn of 1911. Subsequent discoveries resulted in a great prospecting

rush in 1913 following which the mines of the camp were gradually developed into the famous golden mile.

Numerous mines produced at various times but the bulk of the production came from seven mines extending from Macassa on the west to Toburn, a little over 2 miles to the east. Production reached its peak between 1934 and 1940. At that time it was the second largest gold producing area in Canada. The camp is currently active but on a much reduced scale.

Casakirk Gold Mines Limited was organized in 1936 to consolidate a group of claims which included the present Ogden Property.

The companies charter was cancelled in 1965 and the claims of the Ogden Group were acquired in May, 1973.

#### PREVIOUS WORK

The prospect shaft was sunk sometime previous to 1936 and is located approximately 200 feet west and 450 feet north of the southeast corner of the claim group. This shaft was possibly sunk to investigate shearing immediately to the north. There is no record of the results from this work.

In 1940, Macassa Mines Ltd. in conjunction with Hollinger Consolidated Gold Mines Ltd. drove a crosscut north from the Macassa workings on the 3,000 foot level, which terminated 600 feet south of the south boundary of the property. A hole was drilled from the end of the crosscut 720 feet into the claim group 300 feet west of the eastern boundary. A narrow quartz vein was intersected about 50 feet

north of the south boundary. Assay results from the vein are not known.

In June, 1941, a 550 foot surface hole was drilled from a point 2,500 feet west of the east boundary and 50 feet south of the south boundary N.25° W into the Ogden Group for a horizontal distance of 440 feet.

Five veinlets were encountered varying in width from 1 inch to 1 foot. The latter was recovered from a 7 foot section of ground core in sediment. The 1 foot section assayed 0.07 oz. Au per ton and 1.45 oz. Ag per ton. The others assayed from 0.01 to 0.03 oz. Au per ton over widths of 1 foot and all occur in syenite porphyry.

#### TOPOGRAPHY

Outcrop areas are relatively plentiful, comprising about 30% of the terrain. These areas are separated by drift and muskeg.

A drift filled valley with sparse outcrop lies along the southern part of the property.

A creek flows out of the southwestern part of the claim group into Amikougami Creek, 500 feet to the west. This is a north trending fault controlled water course.

The west arm of Kirkland Lake lies 1,800 feet east of the east boundary of the property.

#### GENERAL GEOLOGY

A sinuous easterly trending series of Archean felsic volcanics and sediments averaging some 2 miles in width extends from Eby Township east for 35 miles into Quebec and beyond. This series is cut by numerous intrusives ranging from syenite to granite.

The above formations are flanked by basic volcanics and related basic intrusives.

The youngest rocks are dykes of diabase and lamprophyre.

The contact between the sedimentary formations and the basic volcanics is marked by an unconformity.

It is inferred that the series of felsic volcanics and sediments occupy a synclinal axis with the south limb having been removed by thrust faulting.

The Kirkland Lake - Larder Lake fault system crosses through the belt of felsic volcanics and sediments. It has profoundly affected their present distribution.

This fault system in Teck Township and Lebel Township to the east has a regional trend of  $N.70^{\circ}$  E. Dips near surface are from vertical to steeply south with a flattening below a depth of 2000 feet.

Both vertical and horizontal movements took place along this system, which has in turn been offset by younger northerly trending cross faults.

#### GEOLOGY OF THE PROPERTY

The northwest corner of the claim group is underlain by basic volcanics. This is succeeded to the south by a concordant dioritegabbro mass 1,500 to 1,900 feet wide trending  $N.80^{\circ}$  E.

This intrusive is in contact to the south with a tuff-agglomerate sequence 100 to 250 feet wide which atrikes N.70° E. and dips 40° to 60° to the south. Conglomerate and greywacke underlie the remaining portion except in the southeastern part. The bed rock here consists of syenite porphyry and basic syenite.

The contact between the syenite and sediments lies in a drift filled valley 200 to 300 feet wide which trends N.70° E. The contact dips from vertical to slightly north.

It is possible that a fault underlies the valley, along the syenite-sediment contact. This is based on the following:

- (1) Shearing has been noted immediately north of the prospect shaft;
- (2) Ground core and gold-bearing quartz vein material 70 feet north of the syenite contact occur in the surface drill hole suggesting the presence of a fault;
- (3) Shearing has been noted in the underground hole at the north contact of the syenite and a second zone occurs 550 feet further north;
- (4) The above lie approximately on strike with a zone of shearing and carbonatization encountered underground at the Lake Shore and Tec Hughes mines.

#### ECONOMIC GEOLOGY

Faults in the area are of great economic importance owing to the fact that the ore bodies in the camp occur along the fault system and they have a closer relationship to faults than to rock type.

Ore has been found in all rock types within the producing area. The physical nature of the rock has influenced the deposition of the ore. The most substantial ore bodies occur in the syenite and related intrusives.

The ore deposits are vein type deposits and occur as fissure, stockwork, breccia and gash veins. They lie in faults and braided and inter-linking breaks between faults and as horse-tail structures.

The vein intersected by drilling on the 3000 foot level, 50 feet north of the south boundary of the Ogden Property lies roughly on strike with the Narrows Break ore bodies of Lake Shore and Teck Hughes a mile to the extension of the Narrows Break into this area has been postulated by both Thompson and Guftason.

If this postulation is correct, the Narrows Break could be a linking structure between the Kirkland Lake Fault and the indicated shear zone crossing the southern part of the Ogden Property. The junction between the two would be located about 500 feet west of the eastern boundary. The continuation to the west could thus be a favourable horizon for gold deposition. This is supported by the intersection in the surface hold of 1 foot assaying 0.07 oz/ton Au and 1.45 oz/ton Ag in a 7 foot section of core that was mainly ground. This intersection lies 2,200 feet west of the postulated junction between the contact shear and the Narrows Break.

#### CONCLUSIONS

The Ogden Property lies some 2,700 feet north of the gold-bearing Kirkland Lake fault system on the north side of the sequence of sediments, felsic volcanics and syeni:ic intrusives, which contain the known ore occurrences of the camp.

There is also evidence that the Narrows Break, which is ore bearing on the Lake Shore and Teck Hughes Properties a mile to the st, could extend into the Ogden Group. The projection of the Narrows Break would merge with this fault 500 feet west of the east boundary.

The fault paralleling the syenite contact is thus regarded as favourable prospecting ground. Added support is given to this conclusion by the results obtained in the surface drill hole previously described.

#### RECOMMENDATIONS

In view of the fact that surface prospecting has undoubtedly been carried out thoroughly in the past and that the favourable zone is largely drift covered, future exploration is restricted to 3 approaches:

- Systematic drilling across the favourable horizon from surface;
- Cross cutting and drifting from underground along the north contact of the syenite on the 3,000 foot level with exploratory drilling;
- 3. Geochemical investigations.

To adequately explore the lavourable zone by the first two methods would require a considerable expenditure of money as systematic drilling would be required due to the fact that there are no specifically delineated target areas.

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As a first exploration stage, a programme of geochemical prospecting is recommended with the objective of delineating specific target areas for follow up diamond drilling from surface.

The geochemical survey should consist of soil sampling for trace elements, selenium, tellurium, silver and mercury. The selection of these elements is based on the mineralogy of the Kirkland Lake ores.

The sampling should be carried out at 100 foot intervals along north-south lines 200 feet apart from the south boundary north for 1000 feet.

A contingency for 2000 feet of diamond drilling should also be provided.

Concurrently with the above programme, the feasability of carrying out underground exploration from the 3,000 foot level should also be determined and an estimate of the cost of such a programme should be prepared.

The implementing of the underground program would be contingent on the results of the surface program.

Line Cutting	\$ 700
Sampling & Assaying	4,000
Contingencies	700
	5,400
Provision for 2,000 feet of diamond drilling	16,000
Supervision, assaying and estimate re underground exploration programme	2,000
TOTAL	\$23,400

ASSESSMENT WORK

Rec'd from

A alst at Gerla

R. Bruce Graham, Ph.D., P.Eng., R. Bruce Graham and Associates Limited

Toronto, Ontario April 19, 1974

#### CERTIFICATE

Re: Lormac Explorations Limited

- I, R. Bruce Graham, of the City of Toronto, in the County of York, Province of Ontario, hereby certify:
- That I am a Geologist and reside at 54 St. Leonards Avenue, Toronto, Ontario.
- 2) That I received my technical training at the University of Manitoba, B.Sc., and the University of Toronto, M.A. and Ph.D. (Geol). I have been practising my profession as a geologist for over 20 years.
- 3) That I am not an officer of the company; and that I have no direct or indirect interest whatsoever in the mining claims, the subject of this report, nor have I any direct or indirect interest in the securities of the company, nor do I expect to receive any direct or indirect interest in the securities or properties of the company.
- 4) That the writer did not personally examine the property as the snow cover made such an examination impractical.
- 5) That the accompanying report is based on discussions with Howard Lavell, Resident Geologist for the area and Michael Ogden, and the following:

Todd, E.W.; Kirkland Lake Gold area; Ont. Dept. Mines, Vol. XXXVII, Pt. II, 1928.

Thompson, Jas. E.; Geology of Teck Township and the Kenogami Lake Area, Kirkland Lake Gold Belt; Ont. Dept. Mines, Vol. LVII, Pt. V, 1948.

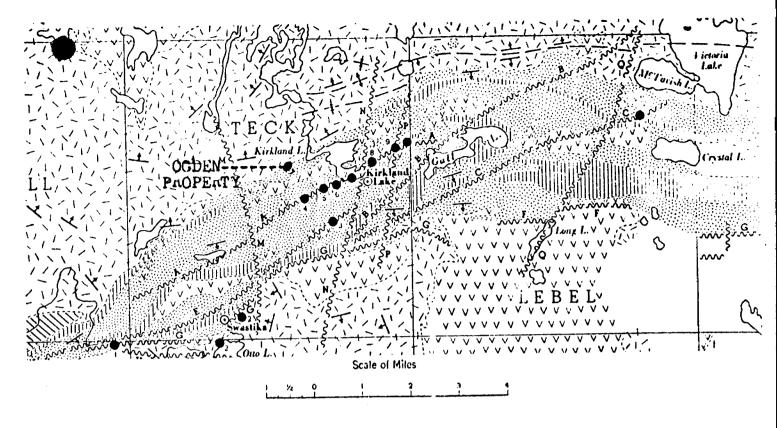
Thompson, Jas. E.; Geology of the Main Ore Zone at Kirkland Lake; Ont. Dept. Mines, Vol. LVII, Pt. V, 1948. et al:

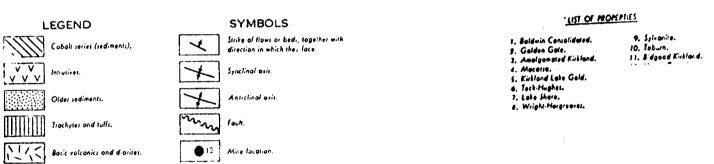
Report on Casakirk Gold Mines Ltd., Kirkland Guftason, J.K.; Lake, Ont. Hollinger Expl. Co. Ltd., Dec. 26,1940. Second report on Casakirk Gold Mines Ltd., Kirkland Lake, Ont., Hollinger Expl. Co. Ltd., May 24, 1941.

DATED at Toronto this 19th day of April, 1974.

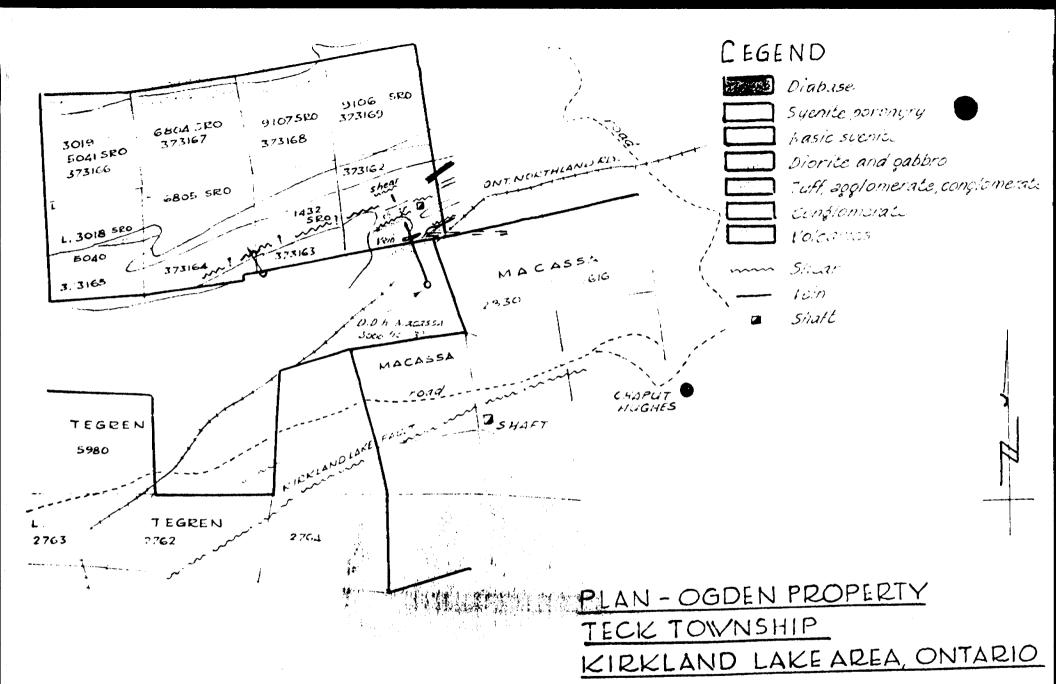
R. Bruce Graham, Ph.D., P.Eng

Consulting Geologist.





Generalized Geclogical Map of The Kirkland Lake Gold Belt (After O.D.M. Vol. LV11 Pt.V 1948 Fig.;)



SCALE: 1" = 1320'

Geological Branch ODE AGECOSMENT FILES RESEARCH OFFICE

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	date	s of survey	y (linecutting & o	ochemical Surveys an ffice). Type of instru eipts must be filed in	ument used. Total duplicate with the	Minister w	ithin 60 days of reco	ordi <b>ng.</b>
				address of Ontario Lo				
			Information is as		h a list if this spac	e is insuffi	cient)	
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	,,,	•		- I and intimate know	ledge of the facts	set forth in	the report of work a	

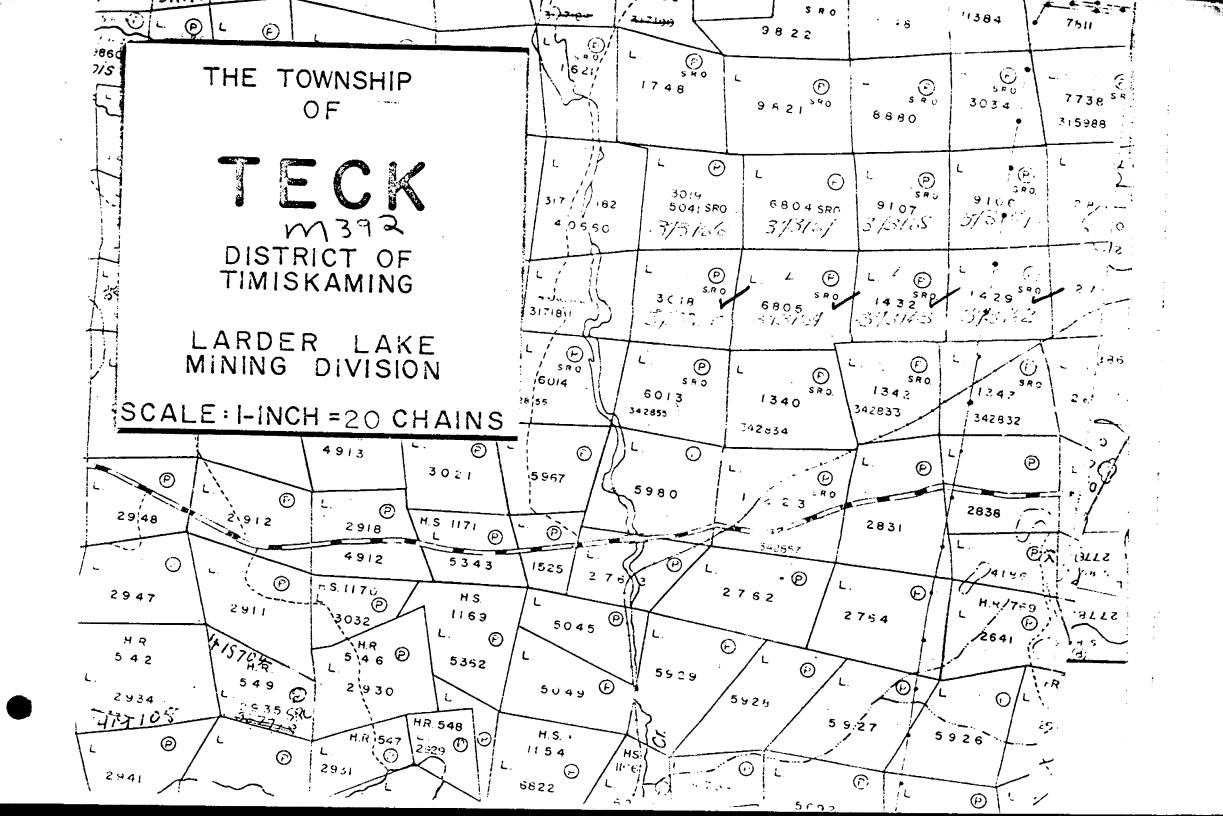
1. That I have a personal and intimate knowledge of the facts set to it. It. to, having performed the work or witnessed same during and/or after its completion.

2. That the annexed report is true.

Duted F. F. 13 28 1975

11 1/w Signature

RECORDED MAR 4--- 1975 (file x 573162)





## THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

To the Record		LARDIST	1 11/1/	· <u></u>	
•			4		Mining Division
1, <i>h</i> .2.13		EXPLORATION COORDER TO SERVICE TO	Mat.T.		646
44 1	110708	14 57	PM. 160	9 70	ctor's Licence 170 N/ 76
		nce of 160	Post Office Add	ress lys of GIFOR	
do nereby rep	oil the performa	ince of	da	•	pe of work
not before rep	orted to be app	lied on the following con	tiguous claims	•	•
Claim No.	Days	Claim No.	Days	Claim No.	Days
3/62	20.	373/68	20	Teck:	top
3/63	20	373/69	20		7
3164	20	J / W. 4	<b>#</b> .1	***********	******
3165	20	*********	******	**********	******
	-	***************************************	•••••	********	••••••
2166	20	*******	******	••••••	•••••
3.16.7	2.4.	*********	•••••	•••••	******
All the work v	vas performed o	n Mining Claim (s)	ALL UI	" TMISM	· · · · · · · · · · · · · · · · · · ·
(In the case o	t geological and	dor geophysical survey (	(s) where more t	han 18 claims are invo	lved attach a schedule
addresses of t For Diamond of owner or opera	he men who per and other Core D ator of drill. Da	Opening up of Mines, Si formed the work and the <u>Drilling</u> - Footage, No. ( tes when drilling was do	dates and hours and angle of hol ne. Signed core	of their employment. es and diameter of cor	e. Name and address o
For Compress	ed Air or Other	Power Driven or Mechani	cal Equipment		
their employme	ent.	ames and addresses of m			
For Power Str	ipping - Type of	equipment. Name and ad	dress of owner	or operator. Amount ex	pended. Dates on which
Work was done With each of	e. Proof of actual types	al cost must be submitted of work sketches are red	d within 30 days	s of recording.	t of the work in relation
to the nearest	claim post. In	the case of diamond or a	ther core drilling	ng the sketch must be	submitted in duplicate
dates of surve	y (linecutting (	Geochemical Surveys an & office). Type of instri	ument used. To	tal amount of expendi	ture. Technical report
maps, expenditi	ure breakdown,	receipts must be filed in	duplicate with	the Minister within 60	days of recording.
		nd address of Ontario La	nd surveyor.		
The Required	Information is	as Follows: (Attack	a list if this s	pace is insufficient)	
_		,	<b>n</b> .	,	
PRP	ORT	+ MAPS	By	·	<b>.</b>
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	- 4	5704 FF V	ice Address)	JAJA V	
hereby certify:		\1 031 Off		1019110	11/12/1
1. The	it I have a perso	onal and intimate knowle	dge of the facts	set forth in the report	of work annexed here-
to, having perf	ormed the work	or witnessed same during	g and/or after it	ts completion.	11/12/1/2 19/4 of work bridges of here
2. The	it the annexed r	eport is true.	1	11 11-	_
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Dated	n	IY . KK		Signature -	
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Ministry of Natural Resources

June 19, 1975

Mr. G. A. McCormack Regional Director Ministry of Natural Resources P. O. Box 3000 140 Fourth Avenue Cochrane, Ontario POL 1C0 Our file number 2.1722 . Your file number .

Dear Sir:

Re: Mining Claims L. 373162 et al, Teck Township, File 2.1722

The Geochemical assessment work credits as listed with my Notice of Intent dated May 30, 1975 have been approved as of the above date.

A copy of this letter should be sent to the Mining Recorder who should inform the recorded holder of these mining claims and so indicate on his records.

Similarly a copy of this letter together with the enclosed duplicate technical report and maps should be sent to the Resident Geologist.

Yours very truly,

Film, The

for
J. R. McGinn
Director
Lands Administration Branch

Whitney Block, Room 1617 Queen's Park Toronto, Ontario M7A 1X1

Phone: 416-965-6918

DN/nw

cc: Lormac Explorations Ltd.

Toronto, Ontario

cc: Mr. Michael Ogden Stouffville, Ontario cc: Mining Recorder

Kirkland Lake, Ontario

7 18 19 110 11 111 21 1 1 21 3 14 15 15

cc: Resident Geologist

Kirkland Lake, Ontario

# GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

RECEIVED DEC 1 8 1974

PROJECTS UNIT.

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 GEOL	GICAL	
Township or Area 750		
Claim holder(s) LOMMAC		MINING CLAIMS TRAVERSED
• *	17517	List numerically
Author of Report Micris		
-	Y STOUFFUILLE	(prefix) (number)
	1 21 To Oct 26/74	(prenz) (mumber)
	(linecutting to office)	1 - 9~3//2
Total Miles of Line cut	A	L - 373/62
		L - 373/63
SPECIAL PROVISIONS	DAYS	1 - 373/64
CREDITS REQUESTED	Geophysical per claim	
ENTERD 40 de . / 1 1	-Electromagnetic	1 - 373/65
ENTER 40 days (includes line cutting) for first	-Magnetometer	1 - 373/66
survey.	-Radiometric	
ENTER 20 days for each	Other	1 - 373/67
additional survey using	Geological 20	L - 373168
same grid.	Geochemical	4 - 373/69
AIDRODNE CDEDITS (Special resu	ision credits do not apply to airborne surveys)	
MagnetometerElectromag	days per claim)	
DATE: DEC 17/14/SIGN	milla.	
DATE: 15 SIGN	ATURE: Author of Report or Agent	
DDOLECTS SECTION		
PROJECTS SECTION  Res. Geol.	Onelifications	
	Qualifications	
rrevious Surveys		
		1
Checked by	date	
GEOLOGICAL BRANCH		
Approved by	date	
GEOLOGICAL BRANCH		
		TOTAL CLAIMS
Approved by	date	IVIAL GLARVIS

## GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken 4-37	3162, -163, -164, \$ -165
Total Number of Samples 538  Type of Sample Humus (Nature of Material)  Average Sample Weight 68.  Method of Collection 184 Hann	ANALYTICAL METHODS  Values expressed in:  per cent p. p. m. p. p. b.  Cu, Pb. Zn, Ni, Co, Ag, Mo As, (circle)
Soil Horizon Sampled  Horizon Development  Sample Depth  Suprace	Others Au  Field Analysis (tests)  Extraction Method
Terrain MIKED SWI SPRUCE 3 WARDS  # HIGH GRUUND.  Drainage Development 1208  Estimated Range of Overburden Thickness 50 157	Analytical Method  Reagents Used  Field Laboratory Analysis  No. (
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing)  Mesh size of fraction used for analysis	Reagents Used
General	General

## GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

RECEIVEby hand MAR 8 1975

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 GEOCHEMICAL	,i
Township or Area TECH TOWNSHIP	
Claim holder(s) LORMAS EXPLORATIONS 1712	MINING CLAIMS TRAVERSED List numerically
Author of Report MICHAEL OGDBAI  Address 1717-4 5 TOUR F V 11 L 13  Covering Dates of Survey 5227 15 / 24 to FEB 28 / 75  (lineculting to office)  Total Miles of Line cut 5.7	/- 373/62 (prefix) (number) /- 373/63 /- 373/65
SPECIAL PROVISIONS CREDITS REQUESTED Geophysical DAYS per claim	
ENTER 40 days (includes line cutting) for first survey.  -Electromagnetic  -Magnetometer  -Radiometric	
ENTER 20 days for each  additional survey using  same grid.  Geochemical 40	
AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)	
MagnetometerElectromagneticRadiometric	
DATE: F5/3 28/75 SIGNATURE Author of Records	
PROJECTS SECTION	
Res. Geol Qualifications	
Previous Surveys	
Checked bydate	
GEOLOGICAL BRANCH	
Approved bydate	
GEOLOGICAL BRANCH	······································
Approved by	TOTAL CLAIMS



Ministry of Natural Resources

March 17, 1975

Mr. G. A. McCormack Regional Director Ministry of Natural Resources P.O. Box 2050 140 Fourth Avenue Cochrane, Ontario POL 1C0 Our file number 2.1669
Your file number

Dear Sir:

Re: Mining Claims L. 373162 et al, Teck Township, File 2.1669

The Geological assessment work credits as shown on the attached statement have been approved as of the above date.

A copy of this letter should be sent to the Mining Recorder who should inform the recorded holder of these mining claims and so indicate on his records.

Similarly a copy of this letter together with the enclosed duplicate technical report and maps should be sent to the Resident Geologist.

Yours very truly,

for

J. R. McGinn

Director

Lands Administration Branch

Whitney Block, Room 1617 Queen's Park Toronto, Ontario M7A 1X1

Phone: 416-965-6918

OJ/mw

cc: Lormac Explorations Ltd.

Toronto, Ontario

cc: Mr. Michael Ogden Stouffville, Ontario

cc: Mining Recorder

Kirkland Lake, Ontario

cc: H.B.&O. Engineering Ltd.

Stouffville, Ontario Attn: Mr. M. Ogden

cc: Resident Geologist

Kirkland Lake, Ontario



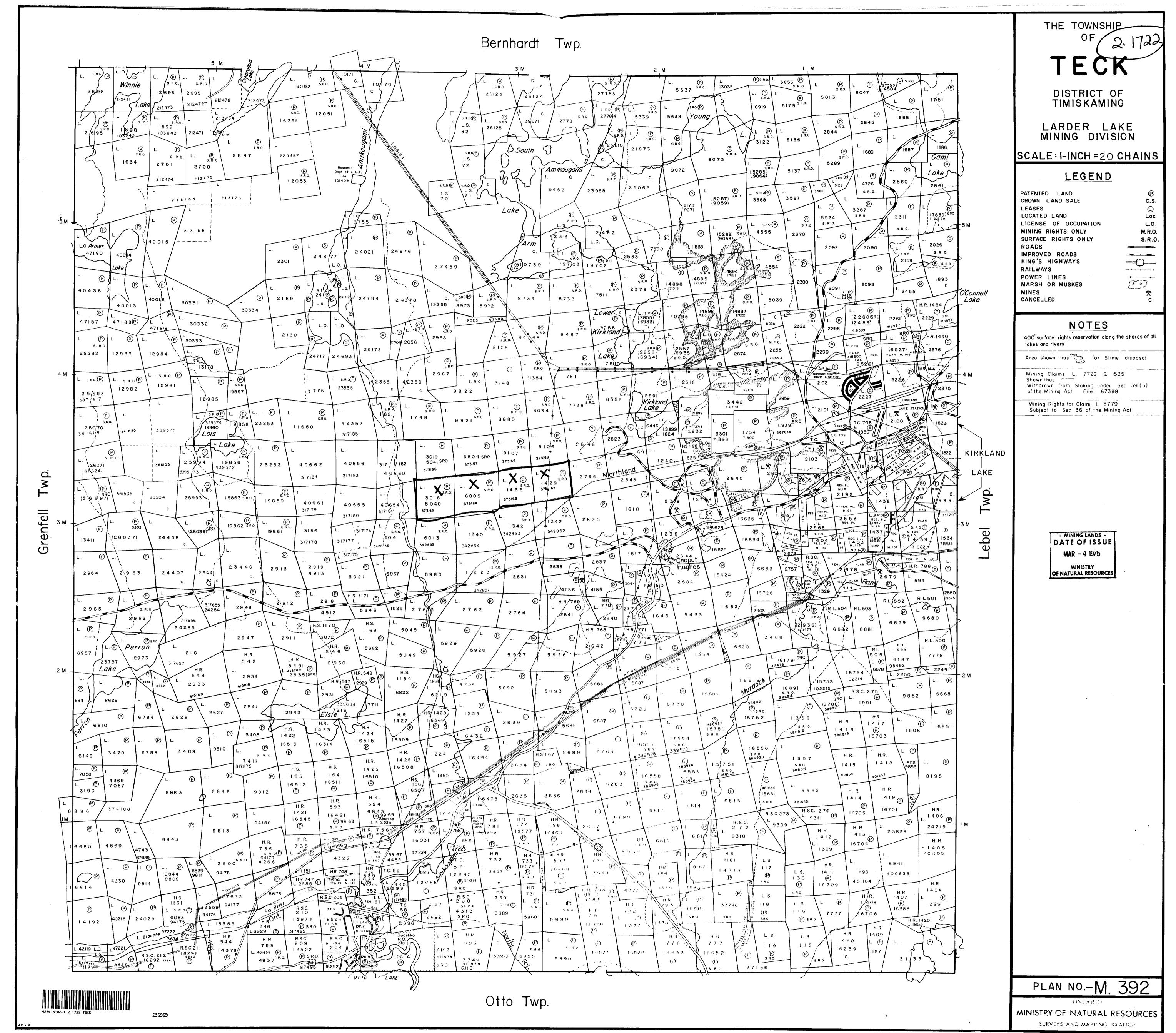
#### Lands Administration Branch

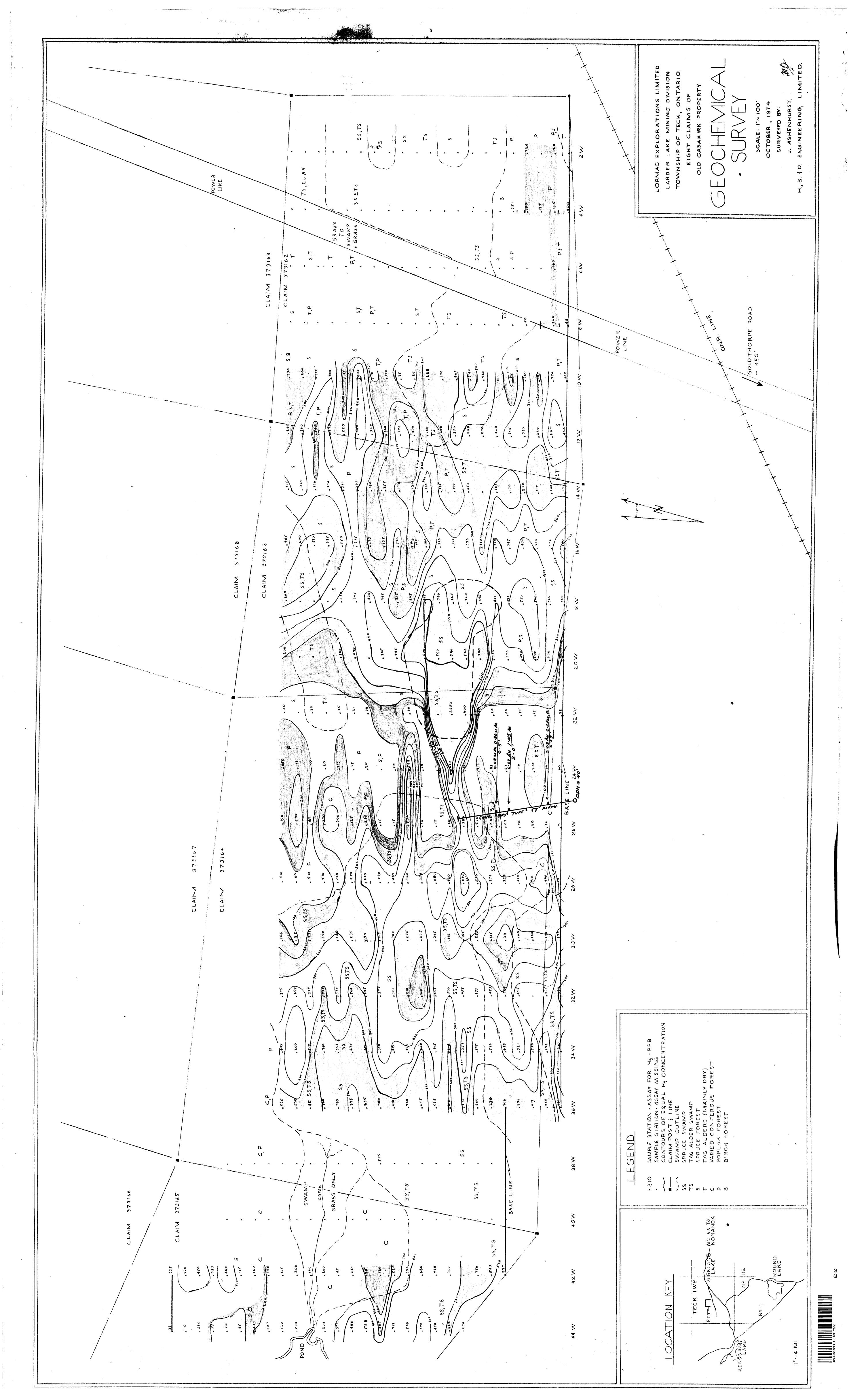
Projects Unit

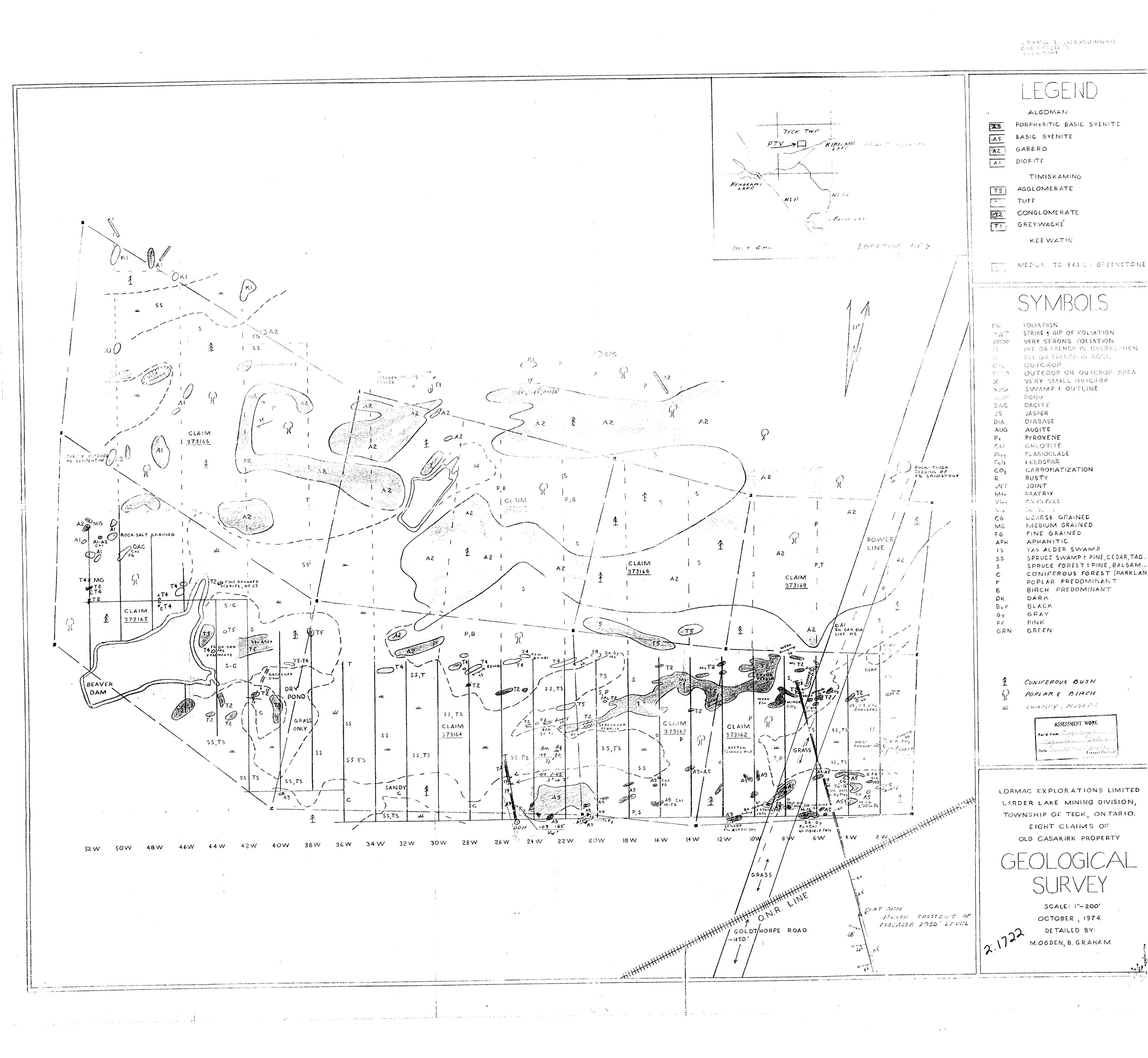
# Technical Assessment Work Credits

File			
2.	166	Q	

Recorded Holder  Lormac Explorations Limited			
Township or Area  Teck Township			
Type of survey and number of Assessment days credit per claim	Mining Claims		
Geophysical  Electromagnetic days	L. 373162 to 69 inclusive		
Magnetometer days			
Radiometric days			
Induced polarization days			
Section 86 (18) days			
Geological days			
Geochemical days			
Man days ☐ Airborne ☐			
Special provision 🔀 Ground 🗌			
Notice of Intent to be issued:			
Credits have been reduced because of partial coverage of claims.			
Credits have been reduced because of corrections to work dates and figures of applicant.			
No credits have been allowed for the following mining claims as they were not sufficiently covered by the survey:			







42A01NE0221 2.1722 TECK

The second secon