



42A01NE0273 2.7819 GRENFELL

010

RECEIVED

FEB 18 1985

MINING LANDS SECTION

REPORT OF GEOPHYSICAL SURVEYS

DURING DECEMBER, 1984

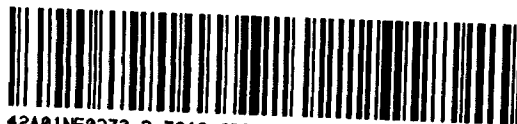
ON

THE KIRKLAND EXTENSION PROPERTY

GRENFELL TOWNSHIP

ONTARIO

BY: RON CRICHTON
KIRKLAND LAKE, ONTARIO
FEBRUARY 11, 1985.



010C

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INTRODUCTION

LOCATION

- The property described in this report consists of four unpatented mining claims located in Grenfell Township, Larder Lake Mining Division, Ontario. The claims are registered to John Gorzalznski and are numbered as follows:

L-760078

L-760081

L-760082

L-760083

ACCESS

- The property is readily accessed by Highway 11, a major motor-route. Highway 11 traverses the east-central portion of the property in a northwesterly direction some 13 miles northwesterly from the town of Kirkland Lake, Ontario.

HISTORY

- No assessment work has ever been recorded on this property. However, the property was worked by Kirkland Extension Mines Limited in the thirties. Jimmy Doig, a well known local entrepreneur was the principal of this company. They sank a number of pits on the eastern claims and sank a shaft about 50 feet deep near the south boundary of current claim L-760081. Recent assays attest to gold values probably obtained by the original owners that spurred on their development work. Nothing has ever been published concerning their work.

GEOLOGY

- The property is underlain by Keewatin greenstones of the Abitibi Supergroup on the north limb of a great flexure that occurs several miles to the south in Kenogami Lake. The rocks strike north-south, dip steeply with the tops facing east. Andesites, variolitic, porphyritic and diabasic lavas comprise the general rock types. Only a few rocks outcrop on the property so little can be said about local structure although a definite zone of alteration occurs around the shaft. This zone appears to strike east-west at a right angle to the general strike of the rocks and contains widespread, but low-grade metamorphism. Carbonate, infiltrated silicate, epidote and accessory pyrite with minor chalcopyrite constitute the mineralization in the alteration zone. Some shearing is present and mud seams occur with a variety of strikes and dips, indicating some movement within the zone. The shaft was sunk on a quartz-carbonate vein at least two feet wide. However, the vein can't be seen at the shaft site as the rock dump almost completely covers the outcrop. Vein quartz and altered wallrock are present in the dump and both yield low gold values upon assaying. Values up to 0.10 ounces per ton have been obtained here by Mr. Carl P. Forbes, a local prospector. Geo-physical surveys were undertaken to secure a better

interpretation of the geology of the property.

GEOPHYSICAL PROGRAM

GENERAL

- During late November and early December, 1984 a control system of base and picket lines were cut on the property. A base line was established just west of the shaft site and ran 1,290 feet south and 1,306 feet north. Picket lines were cut east-west at 400 foot intervals and stations were marked every 100 feet. The total amount of control line established on the property was 3.73 miles. Magnetic and electromagnetic surveys were then carried out to traverse the geology at high angles.

MAGNETIC SURVEY- A Geometrics proton precession magnetometer was used to conduct the magnetic survey on the property. This instrument measures the vertical component of the earth's magnetic field to within one gamma. Survey procedure involved reading the baseline and using the 400 foot stations as control points. Daily and hourly check readings were taken and adjustments for magnetic drift were made where necessary. The values are plotted on a map scaled at one inch to 200 feet. Contours were drawn at 100 gamma intervals with several larger value contour lines where space was limited.

ELECTROMAGNETIC SURVEY- A Ronka EM-16 survey unit was used to conduct a very low frequency electromagnetic survey on the property. This instrument measures the resulting dip angle of a secondary electromagnetic

field when the primary very low frequency signal encounters conductivity. Annapolis, Maryland at 21.4 KHz was used as the transmitting station and readings were taken at 100 foot intervals. Readings were read in percent and are plotted on a map scaled at one inch to 200 feet. North dips were read as positive and are plotted at a scale of one inch equalling 50%. Quadrature values are also plotted at one inch to 50%.

RESULTS OF MAGNETIC SURVEY- The magnetic survey outlined a zone of higher magnetic intensity that strikes northwest-southeast across the property. The shaft is centrally located in this anomalous zone. The nature of the anomaly can only be speculated on, but it could be due to a diabasic flow with a higher magnetite content than the surrounding rocks. It is interesting to note however, that the magnetic anomaly is linear and contains the showing where the shaft was sunk on the basis of gold values obtained.

RESULTS OF ELECTROMAGNETIC SURVEY- The electromagnetic survey proved to be futile in the eastern and central portion of the property. The Trans-Canada natural gas pipeline, the old Ferguson Highway, the hydro line, Highway 11 and an underground telephone line distort the VLF signals over an area many hundreds of feet wide. The shaft and the magnetic anomaly are contained within this area of distortion so

little can be concluded from the VLF readings. Several minor crossovers are present on the western portion of the property, but cannot be inter-related and are probably due to a lateral change of resistivity where swampy ground meets a higher elevation with more sand.

CONCLUSIONS

- The purpose of the geophysical program was partly accomplished since an area of anomalous magnetism was found associated with the shaft zone. The electromagnetic results are too distorted to draw any real conclusions from.

RECOMMENDATIONS

- A self-potential survey should be carried out over the magnetic anomaly in the vicinity of the shaft and pending results of this, could be expanded along the strike of the anomaly. The sulphide content visible at the shaft should be able to be detected by the self-potential method. A small geochemical survey might also prove useful in the vicinity of the shaft and along strike of the magnetic anomaly, pending results from a self-potential survey. Bulldozer stripping should be conducted at the shaft site to remove some of the rock dump to determine the attitude of the vein system that the shaft was sunk on. Further exploration would depend upon results from the above-mentioned work.

Respectfully Submitted by:

Ron Crichton

Ron Crichton

Feb. 11, 1985.

Land Ministry of Natural Resources
Public

Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)



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The 42A01NE0273 2.7819 GRENFELL 900

Type of Survey(s) **G-316 1926A** Township or Area **GRENFELL TWP.**
Claim Holder(s) **GEOMETRIC [MAGNETOMETER], ROCKA-EM-16 [EM]** Prospector's Licence No. **K-20139**

Address **JOHN GORZALCZYNSKI**

Survey Company **H2G RIERSON RD. KIRKLAND LAKE ONT.**
Date of Survey (from & to) **5 12 84** Total Miles of line Cut **3.73**
Day | Mo. | Yr. | Day | Mo. | Yr.

Name and Address of Author (of Geo-Technical report)
RON CRICHTON, 65 TWEEDSMuir RD. KIRKLAND LAKE ONT. P2N1S3

Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- Magnetometer ✓	20
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
	L 760078	10.2 ^{RC}			
	L 760081	10.2			
	L 760082	10.2 ^{RC}			
	L 760083	10.2 ^{RC}			

RECEIVED

DEC 27 1984

MINING LANDS SECTION

KIRKLAND LAKE
MINING DIV.
RECEIVED
DEC 30 1984
AM PM
7 8 9 10 11 12 3 4 5 6

Expenditures (excludes power stripping)

Type of Work Performed **FREE ASSAY COUPONS**
ROCK ASSAY - 19.250
Performed on Claim(s) **L 760081**

Calculation of Expenditure Days Credits
Total Expenditures **\$ 153.00** ÷ **15** = **10.2** 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.

Date **DEC-12-1984** Recorded Holder or Agent (Signature) **Ron Crichton**

For Office Use Only
Total Days Cr. Recorded **250.2** Date Recorded **DEC 12 1984** Mining Recorder
Date Approved as Recorded **85-05-21** Branch Director

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 **RON CRICHTON 65 TWEEDSMuir RD. KIRKLAND LAKE ONT. P2N1S3**
Date Certified **DEC-12-1984** Certified by (Signature) **Ron Crichton**

Mining Lands Section

File No 2.7819

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

- no qualifications, 7.6. file.
- no maps

Lgd.
L.D.

Dennis K.

Signature of Assessor

May 17/85

Date

May 10, 1985

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

RECEIVED
MAY 17 1985
MINING LANDS SECTION

Mr. Ray Pichette

Dear Sir:

Re: Qualifications of an author of a geotechnical report pertaining to my submission of magnetic and VLF-electromagnetic surveys completed on mining claims L-760078 et al in Grenfell Township, Larder Lake Mining Division. "File Number - 2.7819"

As per your correspondence, the highest grade I completed in school was grade 10.

However, I have worked in mining exploration since 1974 on numerous projects in a variety of capacities and feel my following outline should lend good credibility to my qualifications.

I have cut picket line grids for Shiningtree Gold Resources, Baden Explorations, Kerr-Addison, Dome, Goldmac Explorations, Inco, Newmont and Eden Roc Mineral Corp. Moreover, on a number of these jobs I assisted with or completed the geophysical surveying of the grids. My experience in geophysical surveying for the above-mentioned companies and several others would be in the order of at least 600 miles of magnetometer and VLF-EM surveying. Pay rates have varied over the years with my last geophysical job with Shiningtree Gold Resources paying \$55.00 per line mile in 1983.

I have worked on numerous trenching, stripping, sampling, geological

mapping and mining projects. My experience on large scale strip-ping and trenching programs is extensive as I was field-man and foreman for Shiningtree Gold Resources during 1981 and 1982. This work also entailed geological mapping related to large sampling programs. I also supervised the diamond drilling program subsequent to the mapping and sampling. I have done numerous rock-trenching jobs for companies, individuals and myself and have worked on shaft refurbishing projects.

Moreover, I have worked as an independent prospector since 1974 and have been involved with many option deals to both junior and major companies. It was my gold discovery in interflow sediments in Boston Township on claims owned by Shiningtree Gold that prompted Inco to option the property in late 1983.

Although I've never handed in maps and reports relating to geophysics my field copy maps were reproduced on mylar by draftsmen and these maps were submitted and passed by Land Management Branch. From the maps and report I have submitted to you it should be readily evident that I have a sound understanding of geophysics and am qualified to submit a geotechnical report.

Respectfully Submitted by;



Ron Crichton
65 Tweedsmuir Road
Kirkland Lake, Ont.
P2N 1J3

Phone: 705-567-4487

PREMIER EXPLORATIONS INC.

33 PREMIER AVENUE WEST
KIRKLAND LAKE, ONTARIO P2N 2S7
PHONE 705-567-5145

May 10, 1985

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

TO WHOM IT MAY CONCERN:

Dear Sirs:

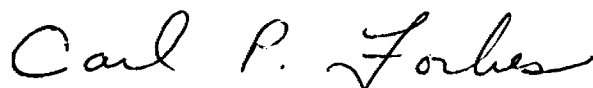
Re: Qualifications of Mr. Ron Crichton

I have known Mr. Crichton since 1974 and have worked on a number of jobs with him. He worked under me as foreman for several years when I was exploration manager for Shiningtree Gold Resources.

I have personally seen his capability doing geophysical surveys and rock trenching and stripping programs. He has a sound knowledge of geology and relating geophysical response to geology. He is one of the better prospectors I have had the opportunity to employ and can be entrusted with running just about any type of exploration program that there is.

I feel he is ably suited and well-qualified to submit geotechnical reports.

Best Regards,



Carl P. Forbes
PRESIDENT

CPF/jef

April 8, 1985
Box 40
Kirkland Lake, Ont.

To Whom It May Concern:

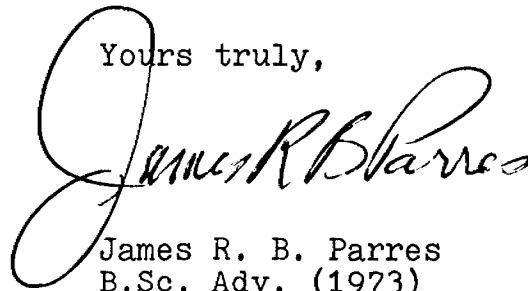
I have known Mr. Ron Crichton for 5 years. During this time he has performed numerous magnetometer and VLF-EM surveys under my supervision in various geological environments.

I have personally witnessed his field procedures and have found him to be an accurate and conscientious technician at all times.

Mr. Crichton has carried out field prospecting jobs for my company and has demonstrated a sound basic knowledge of rock types and mineralization.

I feel he is quite qualified to perform magnetometer and VLF-EM surveys and relate the results to geological terrain.

Yours truly,



James R. B. Parres
B.Sc. Adv. (1973)

REGISTERED

May 7, 1985

File: 2.7819

John Gorzalczynski
42 Grierson Road
Kirkland Lake, Ontario
P2N 1C7

Dear Sir:

RE: Geophysical (Magnetometer & Electromagnetic)
Survey and Data for Assaying submitted on
Mining Claims L 760078, et al, in the Township
of Grenfell

Enclosed is a copy of our letter dated February 28,
1985 requesting additional information for the above-
mentioned survey.

Unless you can provide the remaining required data by
May 17, 1985, I will have no other alternative but to
instruct the mining recorder to cancel the work credits
recorded on December 12, 1984.

For further information, please contact Mr. Ray Pichette
at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

S. Hurst:mc

cc: Mining Recorder
Kirkland Lake, Ontario

cc: Ron Crichton
65 Tweedmuir Road
Kirkland Lake, Ontario
P2N 1J3

Encl.

February 28, 1985

File: 2.7819

John Gorzalczynski
42 Grierson Road
Kirkland Lake, Ontario
P2N 1C7

Dear Sir:

RE: Geophysical (Electromagnetic & Magnetometer)
Survey and Data for Assaying submitted on
Mining Claims L 760078 and L 760081 to 83
inclusive in the Township of Grenfell

This will acknowledge receipt of the reports for the
above-mentioned survey.

In order to complete your submission, please provide:

- 1) plans, in duplicate, for the geophysical surveys.
On these plans please plot the actual reading at
each station and have the data either profiled
or contoured. Scale of these plans is to be between
1:1200 to 1:6000. *received*
- 2) plans, in duplicate, that show sample locations
and assay results for each sample *received*
- 3) the qualifications of the author of the report, *← This file.*
as per the enclosed guideline. *received*
- 4) certificates of analyses and signed receipts or
cancelled cheques as verification of the \$153.00
expenditure.

Please quote file 2.7819 when submitting this material.

For further information, please contact Dennis Kinvig
at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-4888
D. Kinvig:mc
Encl.

cc: Ron Crichton
65 Tweedmuir Rd
Kirkland Lake, Ontario
P2N 1J3
cc: Mining Recorder
Kirkland Lake, Ontario
File: #572

FILE # 2-7819

Mar. 13/85.

Land Management Branch:

Dear Sir:

In reply to your letter Dated: FEB-28-85
RE: "In order to complete your submission, please provide:"
Here are:

- plans, in duplicate, for geophysical surveys.
- plans, in duplicate, that show sample locations and assay results for each sample.
- certificates of analyses and receipt for verification of expenditure
18 assay X \$8.50 per sample = \$153.00

"ATTENTION"

- the qualifications of the author of the report, as per guideline =

RE: Qualifications of author of Geotechnical Survey report submitted for assessment work credits.

The qualifications of the author of the report, will be submitted by MR R. CRICHTON.

This may take some time since MR CRICHTON and the people he will need to contact to meet your qualifications are very busy in the field this spring, till break up, and are hard to contact & spare the time.

- qualifications of the author of the report, to follow.

Yours sincerely, J. Gajdosyanski.

ADDRESS.

JOHN GORZACZYNSKI
42 GRIERSON ROAD
KIRKLAND LAKE, ONT.
P2N 1C7



Ontario

Ministry of
Natural
Resources

Temiskaming
Testing
Laboratories

P.O. Box 799
Presley St.
Cobalt, Ontario

Tel: 679-8313

27819

Report Number

CB 8205

Laboratory Report

Date Oct. 2, 1984.

Issued To: Mr. Ron Crichton, 65 Tweedsmuir Rd., Kirkland Lake, Ont. P2N 1J3

Sample Number	Gold Oz. Per Ton	Gold Value Per Ton	Silver Oz. Per Ton
#6312	Nil		Nil
6313	0.007		Trace
6314	0.026		0.01
6315	0.009		Trace
6316	0.016		0.02
6317	0.008		Nil
6318	0.004		0.03
6319	0.013		Trace
6320	0.009		Trace



Ministry of
Natural
Resources

Mineral
Research
Branch

T.T.L.,
Cobalt, Ont.

Form MS. 007 (06/74)

ACKNOWLEDGMENT OF ASSAY COUPON CREDIT

Name Mr. R. Crichton, Date Oct. 2/84.

65 Tweedsmuir Rd., Kirkland Lake, Ont.

Address _____

18 Assay coupons were received to your credit.
18 Coupons have been applied to assay work.
0 Coupons remain to your credit in our files.

D.L. Larabie, *Per cm.*
Manager.

PLEASE REFER TO OUR FILE NUMBER C-3

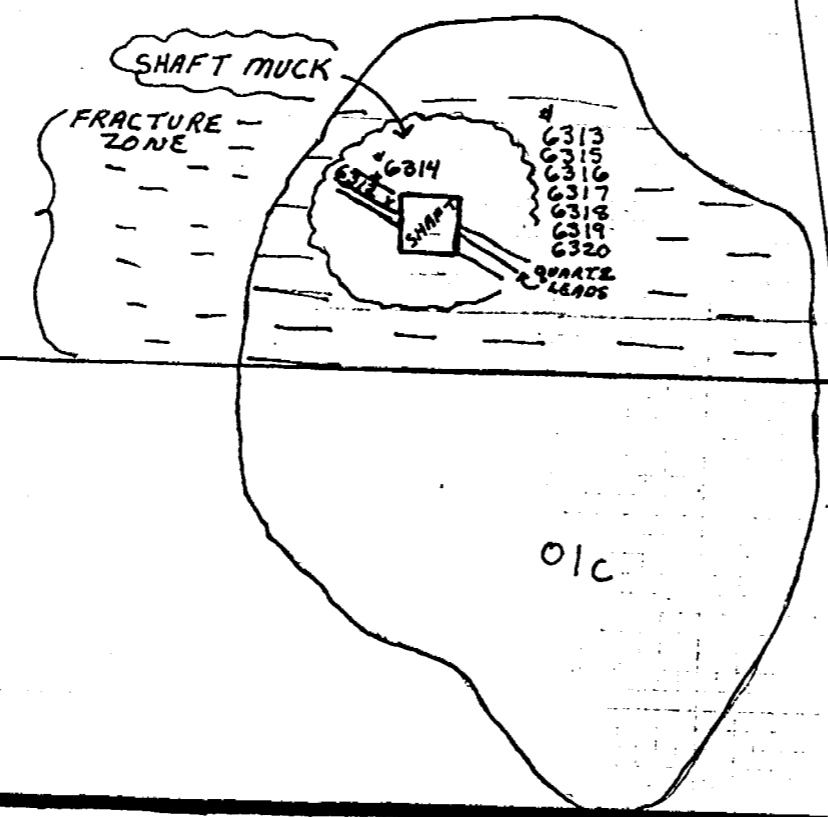
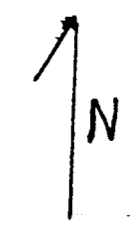
Fees Received Charged 18 coupons card #0694.

D.L. Larabie
Manager *m.*

Except by special permission, reproduction of these results must include any qualifying remarks made by this ministry with reference to any sample.

760078 L 760081
 760083 L 760082

SCALE 1" = 50'
 1" / 50'



27819

R. CRICHTON GOLD PROS
 GRENFELL TWP. PROPERTY
 RE: KIRKLAND EXTENSION
 SAMPLE PLAN

SAMPLE - #6312 & #6314 - CHIP SAMPLE

SAMPLE - #6313 - #6315 - #6316 - #6317
 #6318 - #6319 - #6320
 SHAFT MUCK SAMPLES

LABORATORY REPORT

	AU IN OZ.	AG IN OZ.
#6312	- NIL	- NIL
#6313	- 0.007	- TRACE
#6314	- 0.026	- 0.01
#6315	- 0.009	- TRACE
#6316	- 0.016	- 0.02
#6317	- 0.008	- NIL
#6318	- 0.004	- 0.03
#6319	- 0.013	- TRACE
#6320	- 0.009	- TRACE

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

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

Description	Order No.	Date	Disposition	F#s
①			S.R.O.	27993
② DEC 36/90	W. 46/81	11/6/81	S.R.O.	27993
③ DEC 36/90	W. 101/81	27/10/81	S.R. B.M.R.	
④ DEC 36/90	W. 102/81	6/11/81	M.R.O.	
⑤ DEC 36/90	W. 103/81	6/11/81	S.R. B.M.R.	

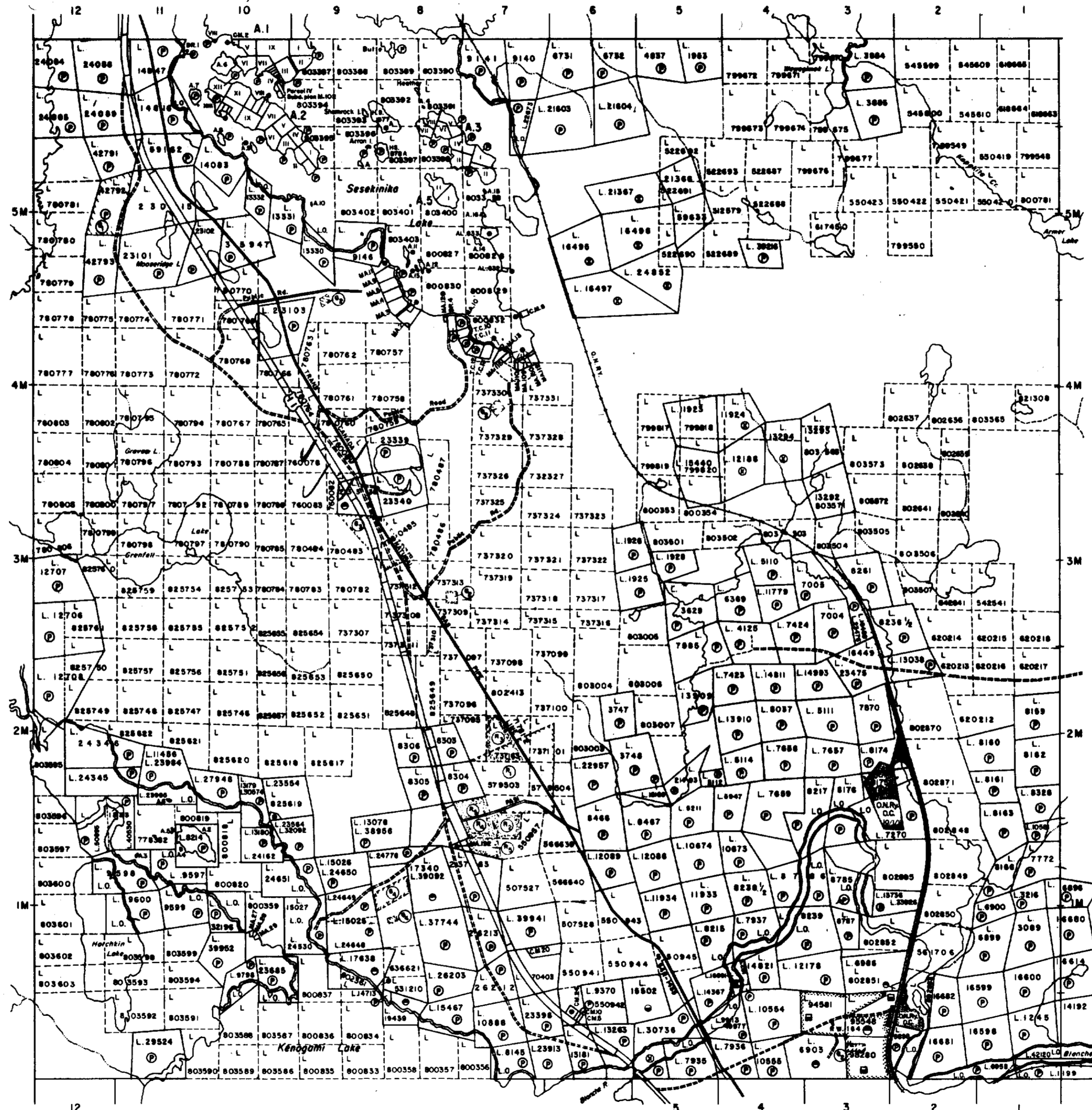
SAND AND GRAVEL

- ① GRAVEL FILE 127536
- ② GRAVEL FILE 127784
- ③ M.T.C. GRAVEL PIT
- ④ GRAVEL FILE 64647

NOTES

ALL ISLANDS IN SESEKINIKA LAKE ARE WITHDRAWN FROM STAKING BY ORDER-IN-COUNCIL DATED DEC.7,1921

MAISONVILLE TWP



LEGEND

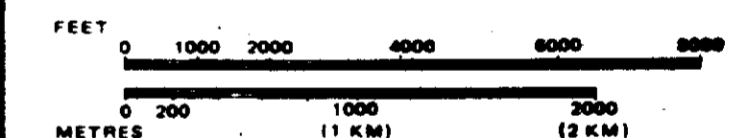
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS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

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	① or ②
" SURFACE RIGHTS ONLY	③
" MINING RIGHTS ONLY	④
LEASE, SURFACE & MINING RIGHTS	⑤
" SURFACE RIGHTS ONLY	⑥
" MINING RIGHTS ONLY	⑦
LICENCE OF OCCUPATION	L.O. or ⑧
ORDER-IN-COUNCIL	⑨
RESERVATION	⑩
CANCELLED	⑪
SAND & GRAVEL	⑫

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1912, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 200, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP

GRENFELL

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES / REGISTRY DIVISION

TIMISKAMING



Ministry of Land Management
Natural Resources Branch
Ontario

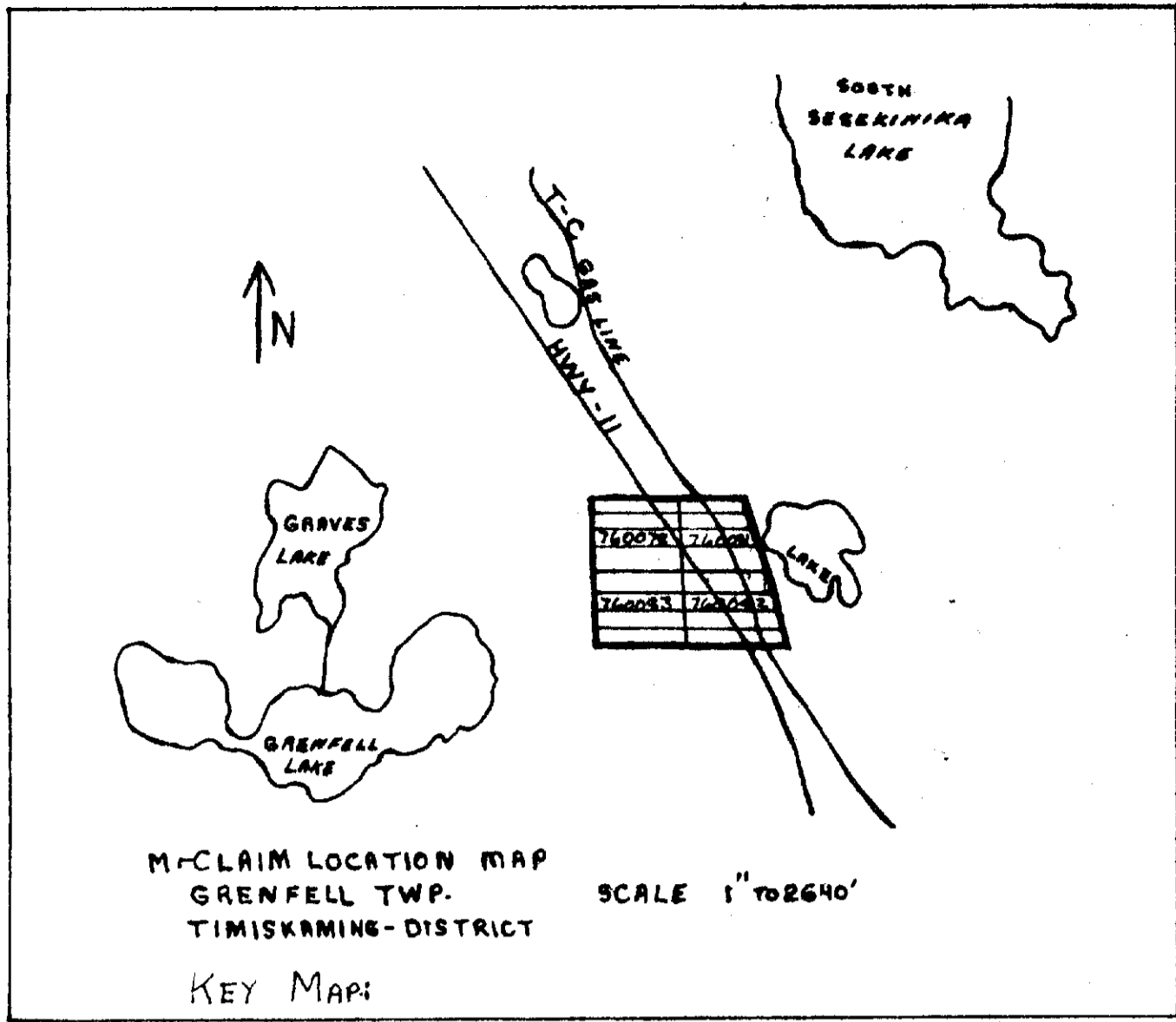
Date JANUARY, 1985

Number

G-3212



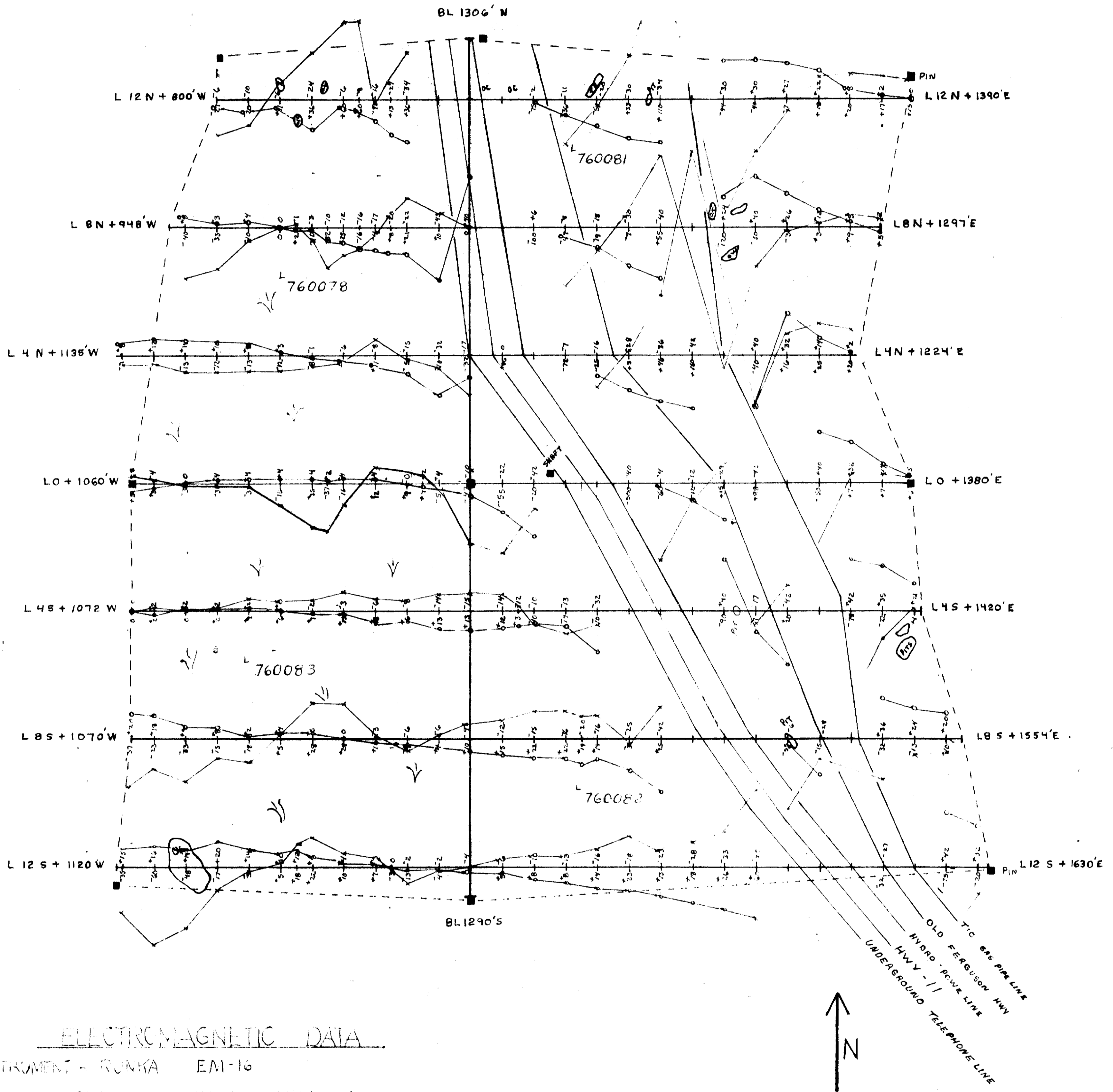
42A61NE0273 2.7819 GRENFELL



R-CRITCHTON GOLD PROSPECT
GRENFELL TOWNSHIP PROPERTY
RE: KIRKLAND EXTENSION
ELECTROMAGNETIC SURVEY

SCALE 1" = 200'

2.7819



ELECTROMAGNETIC DATA

INSTRUMENT - GUNKA EM-16
STATION USED - ANNAPOLIS MARYLAND
MAP PROFILE - 1" = 50'

QUADRATURE VALUES - 1" = 50% --- x ---
ANGLE VALUES RECORDED TO THE RIGHT
QUADRATURE VALUES RECORDED TO THE LEFT
POSITIVE VALUES PLOTTED TO THE RIGHT
NEGATIVE VALUES PLOTTED TO THE LEFT

SURVEY DATA

INSTRUMENT - RECONSON 10000 PPM
DRAWN BY R-CRITCHTON
CHECKED AND APPROVED BY R-CRITCHTON



42481M0273 2.7819 GRENFELL

