Assessment Report for Geological and Geophysical Surveys on the Lake-of-Bays River Group, Savant Lake, Ontario

Copconda York Res. Inc.

Unionville, Ontario

R. T. Chataway

October 24/86

R.T. Chataway

Dual 2.7721

TABLE OF CONTENTS

INTRODUCTION

The assessment report for the Lake-of-Bays River Group of 6 claims held by Copconda-York Resources, Inc. of Unionville, Ontario describes the results of geophysical and geological surveys carried out in August and September, 1986. The field work was performed by Phantom Exploration Services of Thunder Bay under the supervision of the writer, R. T. Chataway.

The claim group is located in the Patricia Mining Division immediately southwest of Rome Lake on the Handcuff Lake claim map number G-2061. The claim numbers are Pa 770105, 770106, 770107, 816311, 940039, 940040, (6) all of which were surveyed utilizing a grid with lines 400 feet apart. Access to the group is from highway 599 via a bush road which traverses the claim group. The area has been cut for pulp wood recently and in some parts has been burned.

GEOLOGY

The property is underlain by Precambrian metavolcanics which are intruded by narrow felsic and mafic rocks. The following description of the local geology is taken from D. Saunders, B.Sc. who did the mapping of the claim group.

Pillowed volcanic flows underlie the entire South

portion of the property. For the most part, pillows indicate the sequence is overturned, although dips become more vertical to the north. Flow units and tuffaceous horizons generally strike 090 - 125°.

A major regional contact may occur between the pillowed sequence and a more sedimentary sequence in the north quarter of the claim group. The geology here includes tuffaceous intermediate rocks and mafic sediments as well as sulphide iron formations. The "megaporphyry" unit or very coarse grained feldspar porphyry occurs in this stratigraphy. This distinctive unit can be mistaken for an agglomerate at several outcrop locations.

Anorthosite Megaporphyry

This rock type outcrops with distinctive feldspar megacrysts (generally 2 - 4 inches across) set in a pale greenish matrix. The feldspars can be up to 6 inches across in coarse grained sections.

Primary minerals have generally been altered to anorthosite and sericite, however relict crystal closures and cleavage faces are occassionally observed. Megacrysts are usually so abundant that very little matrix is present, however, igneous type variations such as gradational contacts, matrix rich sections and porphyritic horizons in the adjacent volcanic type host rock (1 c,a) suggest the unit is a very thick flow

or differentiated subvolcanic intrusive. Further evidence to suggest this can be deduced from the intrusive relationships of subvolcanic dikes (Tf 3a dikes) which crosscut the volcanic package (these don't appear to be diabase).

Mapping shows the megaporphyry unit to be continuous across the entire property (3/4 mile). The unit is up to 100 feet thick in several locations.

RESULTS OF ROCK SAMPLING

The program was set up to test the area for gold but other precious metals and base metals were not ignored. A total of 38 samples were taken, some of which were channel samples cut with an abrassive blade.

Three samples, 86-03, 86-04 and 86-12 returned values of less than 15 ppb for each platinum and palladium in amphibolite metavolcanics. These values are geochemically anomalous which do not warrant any further follow-up. Six samples assayed for silver were below anomalous thresholds and are associated with gold values that are below average for this suite of rocks. One sample assayed for lead and zinc had values of 4 and 15 ppm respectively which dictate no further work is needed.

Samples from all rock types returned an average value of 35 ppb gold. Of these results only 10 samples

are above the arithmetic average with 5 of these in the anorthositic megaporphyry which has values from less than 5 to 205 ppb. The cherty tuffs and sulphide iron formation have anomalous gold values which require follow-up. However, these units appear to have been eroded and are under a cover of overburden. A basal till sampling program may be the way to exploit the conductive zone.

GEOPHYSICAL SURVEY RESULTS

Magnetometer survey

The survey covered all 6 claims with readings taken at 100 foot stations or closer when warranted by strong magnetic activity. The instrument used was a Scintrex MP - 2 proton magnetometer in conjuction with a M.B.S. -2 base station magnetometer for correcting the field data.

The pillowed flow mafic metavolcanics which underlie all of the property south of the base line show very little magnetic relief, generally less than 400 gammas.

The moderate highs (500 gamma anomalies) lie on lines 00C 12+00S and 4EC 2+50 to 3+00S. These are not explained by the geological survey but could be concentrations of magnetite or pyrrhotite in the mafic flows or interflow sediments.

A magnetic high trend which crosses the property intermittently from Line 24 W - 9+75N to Line 12E - 1+00N is associated with a sulphide-rich iron formation on Line 24 W but east of that point there is no evidence of iron formation. A single line anomaly on Line 16 W - 10N to 11N couldbe caused by a mafic dyke which outcrops 200 feet to the northwest, cross-cutting the stratigraphy in a north-south trend. On Line 12E at 8+00N and Line 8E at 7+00 to 9+00N
another area of high magnetics is underlain by the anorthosite megaporphyry unit. Closely paralielling the main mag high trend is a magnetic low zone to the north. The rocks are mainly mafic pillows where exposure is good but this could also be the product of alteration associated with shearring as represented by the VLF - EM 16 survey results. Magnetic depletion in a zone with silicification and amphibolite grade metamorphism would certainly be a favourable gold target.

Based on the available information from the geological survey, it is difficult to correlate the magnetic data with specific geological units. This is probably caused by one or more of the following conditions:

a) facies changes in the tuffaceous rocks
b) magnetic depletion in zones of alteration
c) cross-faulting or folding
d) lack of sufficient density of survey stations for the magnetic survey

Electromagnetic Survey

A Geonics VLF - EM 16 survey outlined a very strong

continuous conductor traversing the property from Line 24W - 9+75N to L12E - 3N. Seattle and Annapolis transmitting stations were used with very similar results on each survey. The profile lines define a near surface effect with a sharp south contact to a zone which may be up to 200 feet wide. On Line 24W, the conductor corresponds with the high magnetic anomaly and the sulphide iron formation. On Lines 8W, 4W and 00 the EM conductor corresponds with a magnetic low with a flanking magnetic high to the south. The length of the conductor is 3600 feet long and open at each end. The north contactof the 200 foot wide zone, where exposed, is a narrow sulphide iron formation which lies stratigraphically above the intermediate cherty tuffs and the anorthosite megaporphyry.

CONCLUSIONS

The partial defining of a 200 foot wide zone with a geophysical signature corresponding to favourable gold stratigraphy is very encouraging for this prospect. The magnetic survey is indicative of an iron formation with variable magnetite content. The electromagnetic survey indicates a sharp south contact with the pillowed flows and a gradational contact with the intermediate tuffs and cherty interflow sediments with the iron formation in between.

Assay results from 38 rock samples and channel samples indicate the rocks near the anomalous zone are

all above expected background values. The highest values occur in the anorthosite megaporphyry, mafic amphibolite rocks and cherty tuffs (highest value is 205 ppb gold).

RECOMMENDATIONS

Close prospecting of the anomalous zone and further work east and west of the claim block is recommended in order to further define a potential gold target in an area which has been virtually overlooked in the past.

CERTIFICATE OF QUALIFICATIONS

I, Robert T. Chataway, of the City of Mississauga do hereby certify:

1) That I am a geologist and reside at 2796 Quill Crescent, Mississauga, Ontario.

2) That I graduated from the University of British Columbia in 1970 with a degree of Bachelor of Science, Geology major and have been practising my profession since graduation.

3) That I am a Fellow, of the Geological Association of Canada.

4) That I have no interest in, nor do I expect to receive any interest, directly or indirectly in Copconda York Resources, Inc.

5) That the conclusions and recommendations are based on my previous experience in the claim area and a visit to the property while the work was in progress.

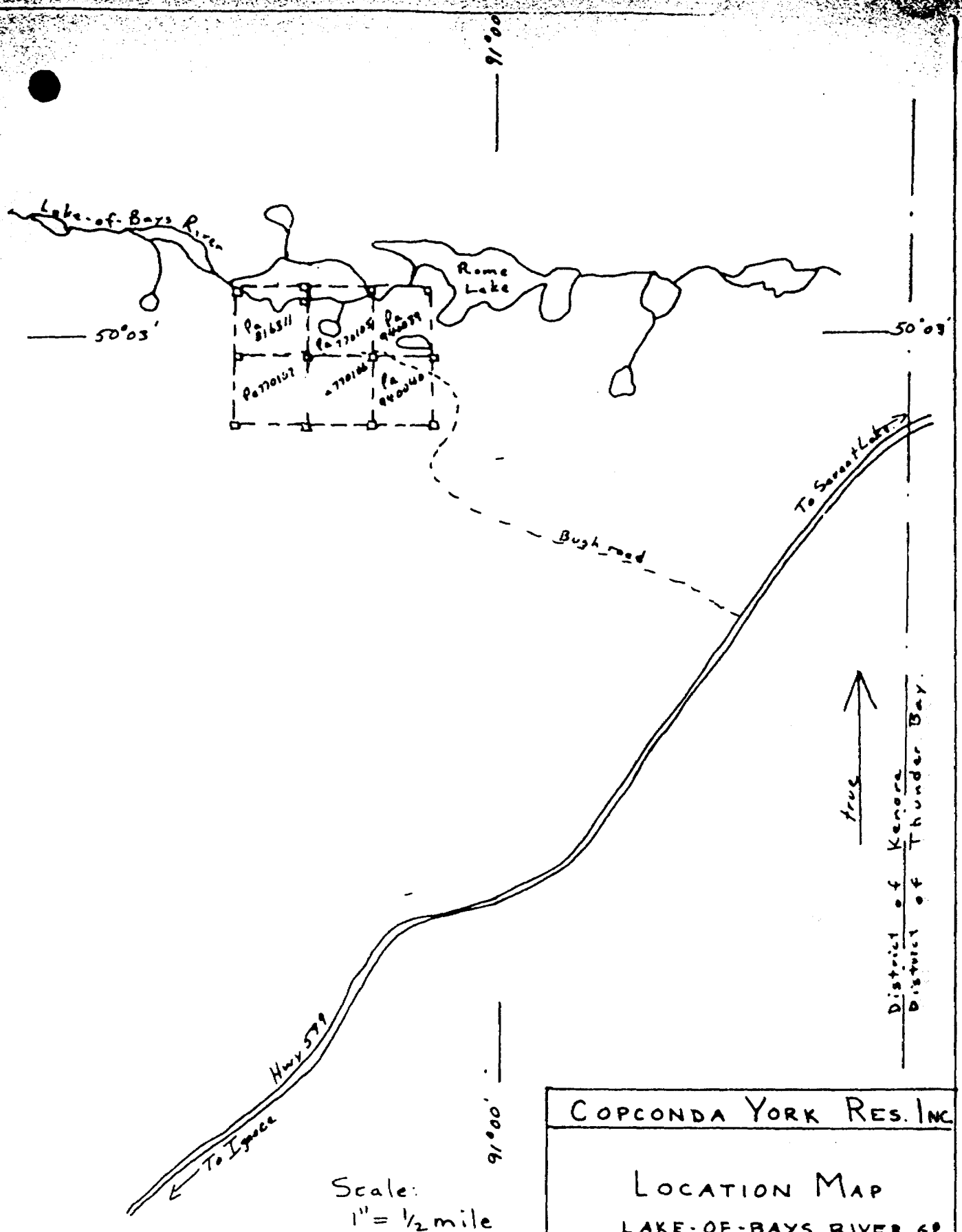
6) I hereby consent to the use of this report in a Statement of Material Facts of the Company and for the preparation of a prospectus for submission to the Ontario Securities Commission and other regulatory authorities.

R. T. Chataway Oct 24/86

R. T. CHATAWAY
B.Sc. Fellow, G.A.C.

Mississauga, Ontario
October 24, 1986

APPENDIX



Scale:
1" = ½ mile

SCALE- 1" = ½ mile

R.T. Chataway. October/86

COPCONDA YORK RES. INC.

LOCATION MAP

LAKE-OF-BAYS RIVER GP.

Sources: Handcuff Lake and Fourbay Lake Claim Maps G-2061 & G-2543

SAMPLE LOCATIONS, DESCRIPTIONS AND RESULTS

Location	Number	Au ppb	Other	Description
L12E 11+50E 2+00N	86-01	31		RW flow top inter pillow material 2-3% py-po
L12E 11+75E 7+80N	86-02	85		3" irregular qv , grey sugary quartz in CG ~~11~~
L12E Approx 13+50E 10+60N	86-03	22	Pt,Pd <15,<15 ppb	2-3% pqpy in cg amphibolitized flow? or intrusive
L4E 5+40E 5+80N	86-04	25	Pt,Pd 15, 15 ppb	4-5% py in RW zone in cg amp flow? - grab of best
L4E 4+40E 11+50N	86-05	16	Ag <.1 ppm	1-2% py in INT crystal tuff?
L4E 3+70E 7+90N	86-06	17	Ag <.1 ppm	2% py in granitic (f.g.) dike
L4E 4+00E 9+35N	86+07	15	Ag <.1ppm	2-3% po-py in INT sediment. sl. biotitic, local float?
LOE 1+40E 1+00N	86-08	19		4" sugary white q. . in pillowed volcanic
L4W 3+60W 8+60N	86-09	21		6" shear in m.g. volcanic irr. q.v. associated w/ shear, tr. sulphide
L4W 4+00W 10+20N	86-10	27		6" chip (grab) of black (Mn?) alt. in le~~11~~ near contact.

Location	Number	Au	Other	Description
L0E 1+40W 10+00N	86-11	16	Ag <.1 ppm	grab of bleached f.g. cherty tuff (2c), 3% dissem py,cp?
L8W 8+70W 13+40N	86-12	25	Pt, Pd. <15, <15 ppb	grab of m-cg volcanic? 2-3% pyrite, R.W.
L12W 11+80W 4+05N	86-13	28	-	grab of milky grey qv (4") in pillowed volcanic
L12W grabs along shoreline	86-14	14	Ag, Zn, Pb, <.1,15,4 ppm	grab of mixed agglomerates and intermediate (siliceous) greywacke, 3-5% py,po.
L16W 17+40W 13+10N	86-15*	21		4.3' channel of cg le horizon near N contact with lc 60:40 ratio matrix:crystal
L16W 17+40W 13+00N	86-16*	28		5.2' channel in very c.g. le (4" crystals) 40:60 matrix: crystal
L20W 20+90W 11+10N	86-17	31		4' chip across bull white q.v in sheared lc; no sulphides irregular vein
L20W 20+90W 11+10N	86-18	21		grab of carbonate altered sheared lc adjacent to q.v., RW, tr. sulp.
L20W 21+00W 12+30N	86-19	16		2' chip sample across RW lean sulphide IF., tr py
L20W 21+00W 23+35N	86-20	31		5' chip sample across RW lean sulphide IF, 2% py

SAMPLE LOCATIONS DESCRIPTIONS AND RESULTS

Location	Number	Au	Other	Description
L20W 22+00W 14+00N	86-21	25	Ag .4 ppm	5'chip across int (sil) meta. greywacke includes 10" ld bed, 2-3% total py
L20W 21+90W 14+25N	86-22 *	28		5' channel across RW mafic sediment sl. siliceous; 4-5% py-po
L24W 22+80W 13+20N	86-23	20		grab of shallow dipping narrow bull white quartz vein in le; no sulphides
L24W 23+80W 12+90N	86-24 *	61		1.5' channel of sericitized matrix of le unit, minor greenish fuchsite
L24W 23+70W 12+80N	86-25 *	44		5' channel of le unit, across strike near South contact; minor fuchsite
L24W 24+15W 11+80N	86-26	47		grab of lean mafic IF, fg sl cherty, 1-2% fg pyrite
L24W 23+85W 9+90N	86-27 *	5		6' channel across N contact of IF 3-5% py
L24W 23+85 9+85N	86-28 *	37		3-5' channel, continuous with 86-27 3-5% py
L24W 23+90W 9+70N	86-29 *	58		4.5' channel, near S contact of IF, 5% py.
L24W 24+15 11+80N	86-30	61		grab of recrystallized cherty tuff 3-5% coarse remob? pyrite, cpy. adjacent to 86-26.

SAMPLE LOCATIONS, DESCRIPTIONS AND RESULTS

Location	Number	Au	Other	Description
L24W 23+30W 12+95N	86-31	13		grab of fuchsite altered le unit in cross cutting alteration zone-fuchsite, Sausuritized.
L16W 17+60W [illegible]50N	86-32 *	205		3.5' channel of S contact of le unit 60:40, matrix:crystal 2-3" crystals
L16W 17+90W 12+45N	86-33	78		grab of porphyritic marker horizon south of main megaporphyry unit
L0E 1+60W 9+80N	86-34 *	92		6' channel of unaltered porphyry unit
L0E 1+70W 9+65N	86-35	5		grab of fuchsite altered le at the original sample location (1984)
L12E 12+70E 12+75N	86-36	20		grab of unaltered le
L12E 13+40E 8+00N	86-37	17		grab of unaltered le
L12E 15+10E 9+10N	86-38	20		grab of unaltered le

N.B. * SAW CUT SAMPLES

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

Certificate of Analysis

Certificate No. MI-1347/5361 Date September 24, 1986

Received Sept. 18/86 38 Samples of Rock

Submitted by Copcanda-York Resources Inc Att'n: Mr. I. Patterson
c.c. Mr. R. I. Chataway

Sample No.	Au ppb	Ag ppm	Pt ppb	Pd ppb	Pb ppm	Zn ppm
8601	31					
8602	85					
8603	22		<15	<15		
8604	25		<15	<15		
8605	16	<.1				
8606	15	<.1				
8607	17	<.1				
8608	19					
8609	21					
8610	27					
8611	16	<.1				
8612	25		<15	<15		
8613	28					
8614	14	<.1			4	
8615	21					
8616	28					
8617	31					
8618	21					
8619	16					
8620	31					

ASSAYERS (ONTARIO) LIMITED

Per

J. van Engelen Mgr.

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

Certificate of Analysis

Certificate No. MI-1347-02/5361 Date September 24, 1986

Received Sept. 18/86 38 Samples of Rock

Submitted by Copcanda-York Resources Inc. Att'n: Mr. I. Patterson
c.c. Mr. R. I. Chataway

Sample No.	Au ppb	Ag ppm
8621	25	.4
8622	28	
8623	20	
8624	61	
8625	44	
8626	47	
8627	<5	
8628	37	
8629	58	
8630	61	
8631	13	
8632	205	
8633	78	
8634	92	
8635	<5	
8636	20	
8637	17	
8638	20	

ASSAYERS (ONTARIO) LIMITED

Per .....

J. van Engelen Mgr.

900

52 J/03SE
AREA of
HANDCUFF LK
M-3296
Scale: 1"=40chains

FOURBAY LAKE G-2

PENASSI LAKE G-2526

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

#86-135

29516

Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): Geophysical

Township or Area: HANDCUFF LAKE

Claim Holder(s): COPCONDA-YORK RESOURCES LTD

Prospector's Licence No.:

Address: 4701 #7 Hwy., Unionville Ont L3R 1M7

Survey Company: Phantom Exploration Services

Date of Survey (from & to): 23 08 86 (Day Mo. Yr.) 24 08 86 (Day Mo. Yr.)

Total Miles of line Cut: 6

Name and Address of Author (of Geo-Technical report): Ian Spence 541 S. Marks St. Thunder Bay Ont

Credits Requested per Each Claim in Columns at right

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

	Days per Claim
Geophysical	
- Electromagnetic	20
- Magnetometer	40
- Radiometric	
- Other	
Geological	
Geochemical	

Man Days — Complete reverse side and enter total(s) here

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

Airborne Credits — Note: Special provisions credits do not apply to Airborne Surveys

	Days per Claim
Electromagnetic	
Magnetometer	
Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

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

Date: Aug 25/86

Recorded Holder or Agent (Signature): Ian Spence

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.
	PA 816311	
	PA 770107	
	PA 770106	
	PA 770105	R.S.
	~~PA 816310~~	R.S.
	~~PA 816309~~	R.S.

Prefix	Number	Expend. Days Cr.

PATRICIA MINING DIV.
RECEIVED
AUG 29 1986
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

PA. 770105

Total number of mining claims covered by this report of work: ~~5~~ 4

For Office Use Only

Total Days Cr. Recorded: 240

Date Recorded: August 29, 1986

Date Approved as Recorded:

Mining Recorder:

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: Ian Spence 541 S. Marks St. Thunder Bay Ont

Date Certified: Aug 25/86

Certified By, Signature: Ian Spence

Oct 28

Ministry of Natural Resources
Ontario

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

#86-136
2.7516
Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): GEOPHYSICAL
Township or Area: HANDCUFF LAKE
Claim Holder(s): Ian Spence
Prospector's Licence No.: E29093
Address: 541 South Marks St Thunder Bay Ont
Survey Company: PHANTOM EXPLORATION SERVICES LTD
Date of Survey (from & to): 21 08 86 (Day / Mo. / Yr.) to 24 08 86
Total Miles of line Cut: 2
Name and Address of Author (of Geo-Technical report): Ian Spence 541 S. Marks St THUNDER BAY ONT.

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical · Electromagnetic	20
	· Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	· Radiometric	
	· Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical · Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits
Total Expenditures: $ ÷ 15 = Total Days Credits

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

Date: Sept 1/86
Recorded Holder or Agent (Signature): Ian Spence

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
PA	940039	
	940040	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
SEP 12 1986
MINING LANDS SECTION

PATRICIA MINING DIV.
RECEIVED
SEP - 8 1986
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

Pa. 940039

Total number of mining claims covered by this report of work: 2

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
120	SEPTEMBER 8, 1986	
	Date Approved as Recorded: 86.11.25	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: IAN SPENCE

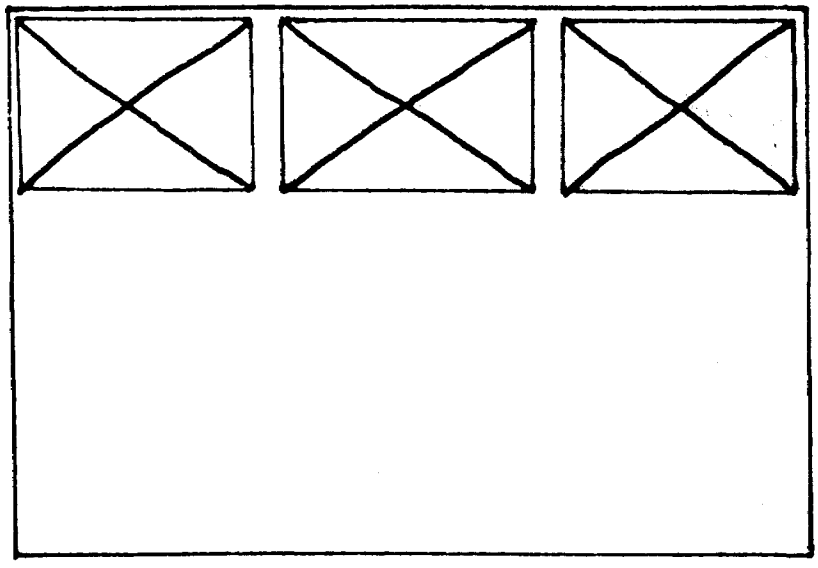
Date Certified: / Certified by (Signature):

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52J/03SE-0019 # 1-3

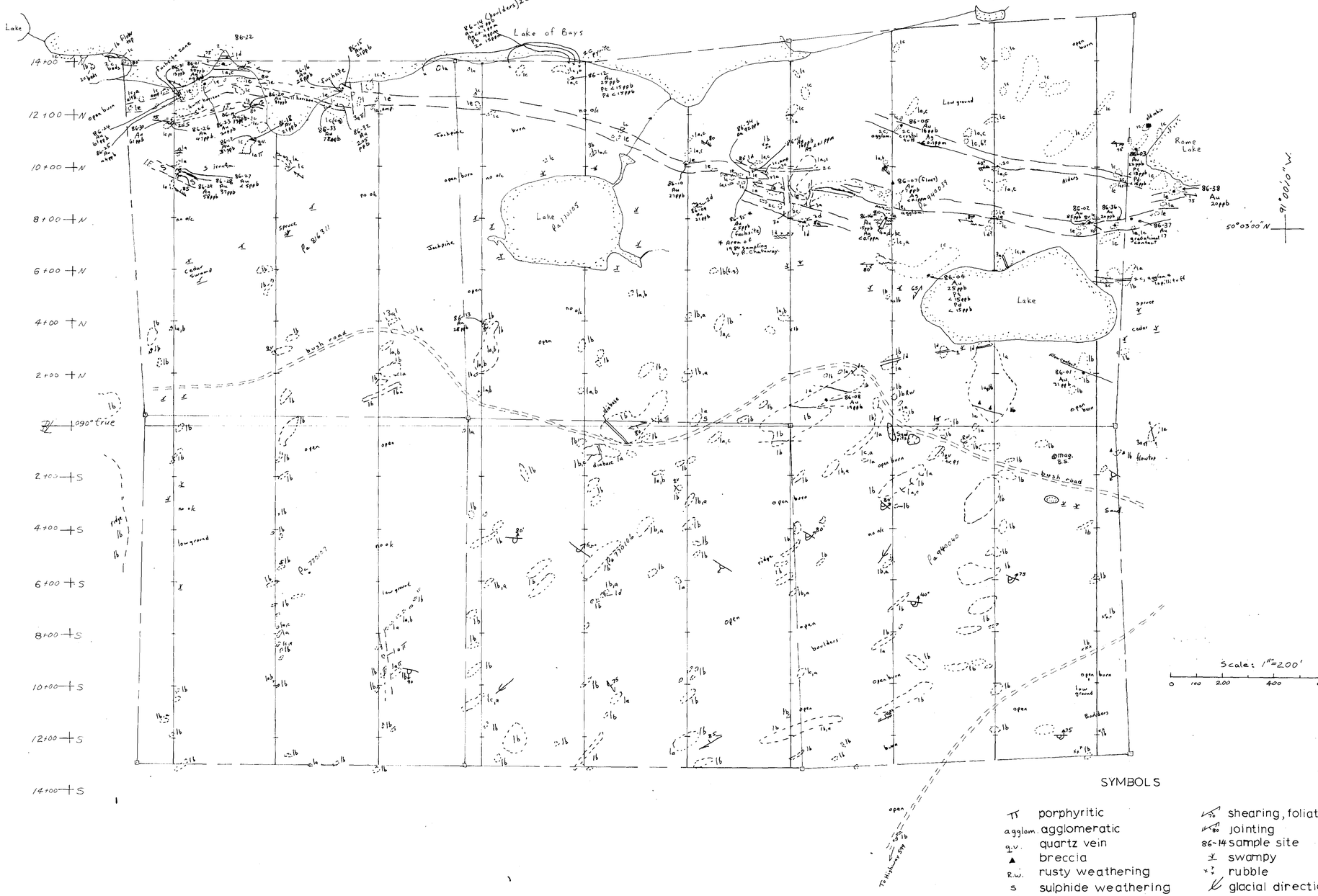
LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)



FOR ADDITIONAL INFORMATION SEE MAPS:

52J/03SE-0019 #4



LEGEND

4 FELSIC INTRUSIVE ROCKS
- 4a granite

3 MAFIC INTRUSIVE ROCKS
- 3a mafic dyke
- 3b diabase
- 3c feldspar porphyry

2 INTERMEDIATE VOLCANICS
- 2a massive flow
- 2b pillowed flow
- 2c tuff
- 2d cherty tuff

1 MAFIC VOLCANICS
- 1a unsubdivided-medium grained
- 1b pillowed flow
- 1c amphibolite
- 1d interflow sediments
- 1e anorthosite - megaporphyry
- 1F sulphide iron formation

Scale: 1"=200' feet (0, 100, 200, 400, 600)

SYMBOLS

- porphyritic
- agglom. agglomeratic
- q.v. quartz vein
- breccia
- R.w. rusty weathering
- s sulphide weathering
- outcrop
- pillows, tops, overturned
- shearing, foliation
- jointing
- 86-14 sample site
- swampy
- rubble
- glacial direction

COPCONDA YORK RESOURCES INC

Lake-of-Bays River Group

2.9516

GEOLOGICAL MAP

scale: 1" = 200 ft.	surv'd by: Phantom Ex.
date: September 86	Superv'd by: R.T. Chataway

52J03SE9244 2.9516 HANDCUFF LAKE

200

52J/03SE-0019, #1

R.T. Chataway Oct 24/86.

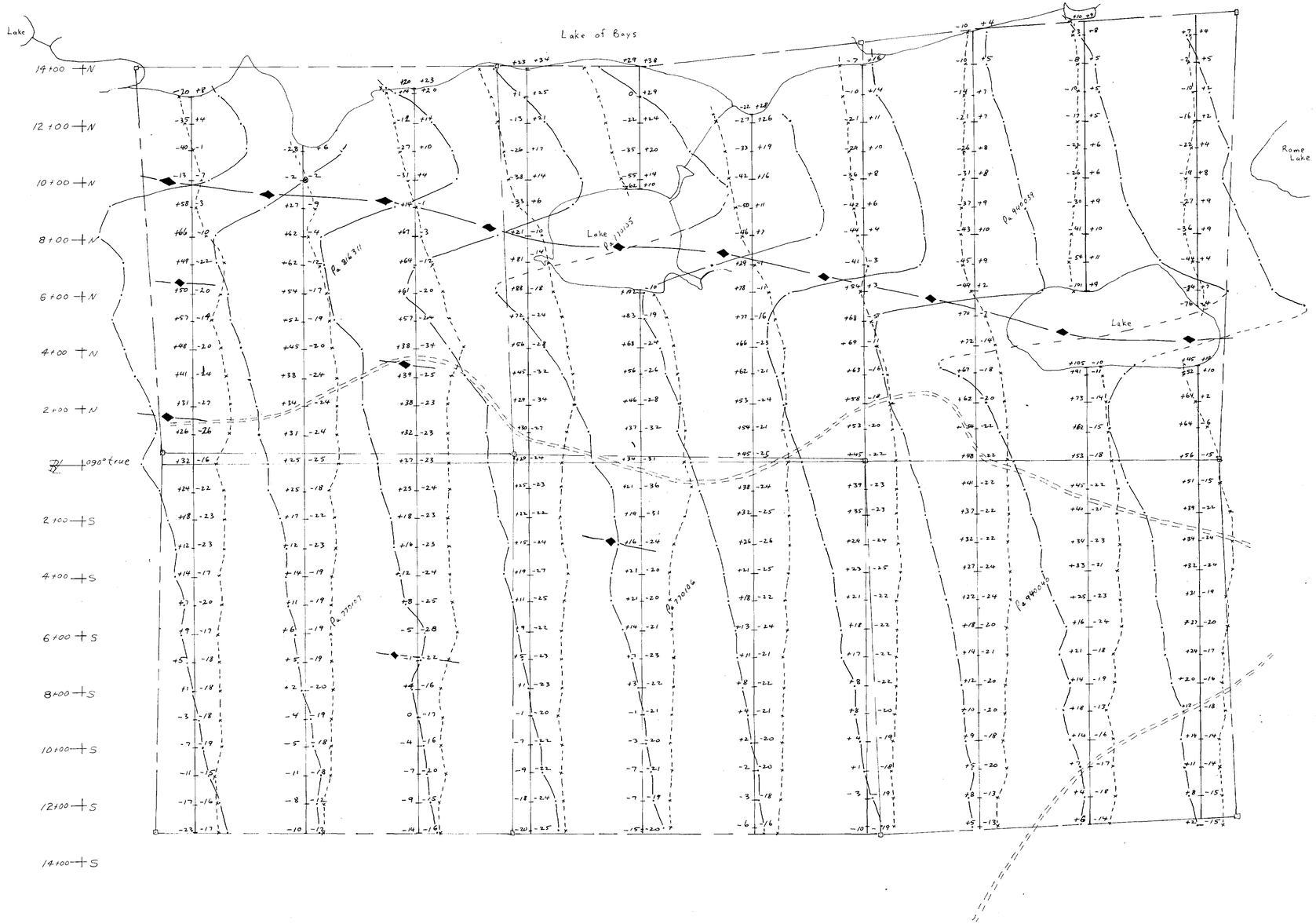
true

Contoured at: 59700 γ
59800 γ
59900 γ
60000 γ
61000 γ

Instrument: Scintrex MP-2 Proton Magnetometer and MBS-2 base station magnetometer

COPCONDA YORK RESOURCES INC.	
Lake-of-Bays River Group	
29516	
MAGNETOMETER SURVEY	
scale: 1" = 200 ft	surv'd by: Phantom EX.
date: Sept. 1986.	superv'd by: R.T. Chatterton

52J/03SE-0019, #2



north (true)

LEGEND

IP O.P. + −

1" = 40.%

conductor axis

Transmitter - Seattle

Readings taken facing northerly

Instrument - GEONICS EM16

Scale: 1"=200'

0 100 200 400 600 800 Feet

COPCONDA YORK RESOURCES INC

Lake-of-Bays River Group

29516

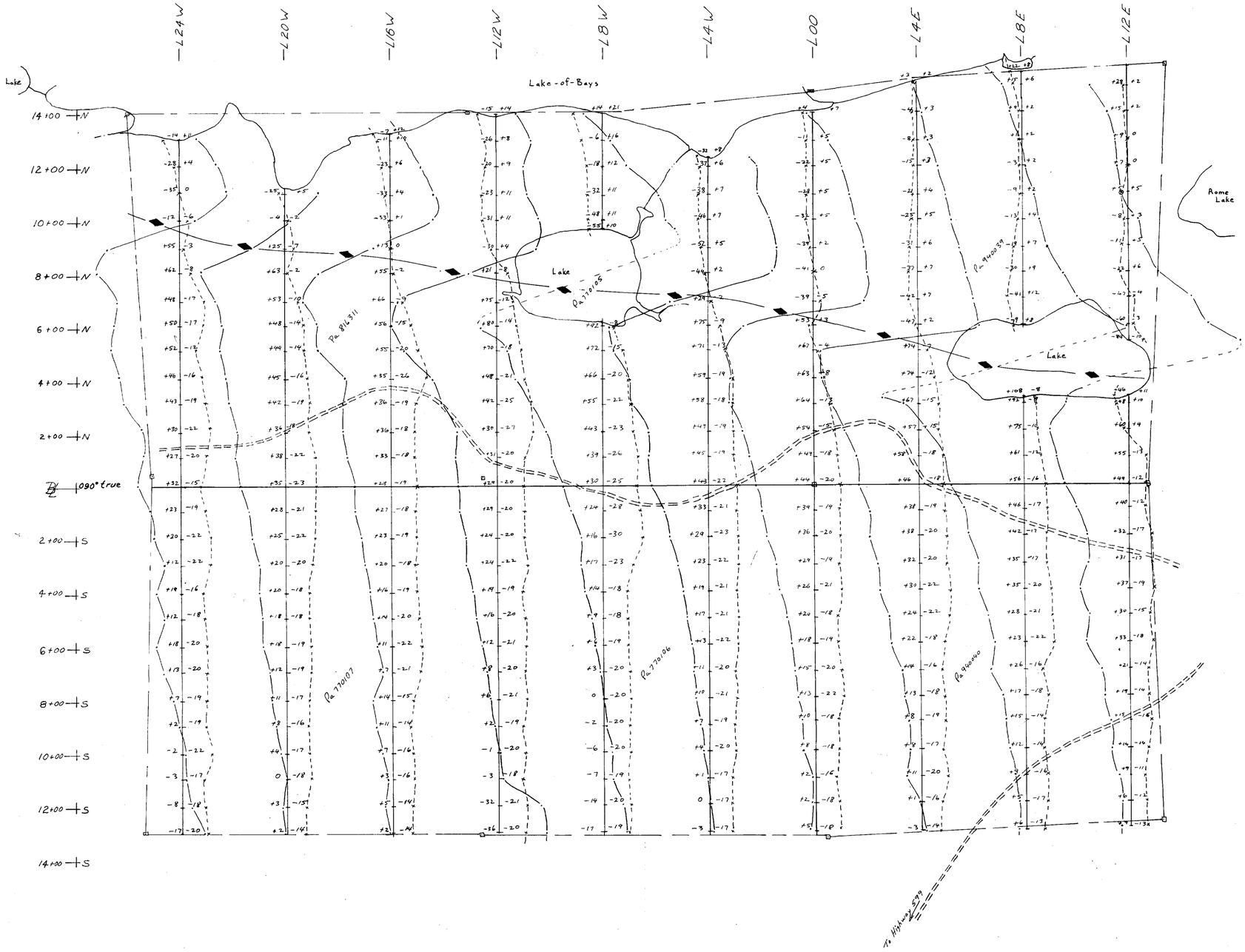
VLF EM 16 SURVEY

- Seattle - NLK

scale: 1" = 200 ft.	surv'd by: Phantom Ex.
date: September 86	Superv'd by: R.T. Chataway

52J/03SE-0019, #3

R.T. Chataway Oct 24/86.



true

LEGEND

I.P. O.P.

1" = 40 %

conductor axis

Transmitter - Annapolis

Readings taken facing northerly.

Instrument - GEONICS EM 16

Scale: 1" = 200'.

0 100 200 400 600 800 Feet.

COPCONDA YORK RESOURCES INC.

Lake-of-Bays River Group, Ontario.

29516

VLF EM 16 SURVEY

- Annapolis - NSS

Scale: 1" = 200ft.	Surveyed by: Phantom Expl.
Date: September, 1986.	Supervd by: R.T. Chataway

R.T. Chataway
Oct 24/86

52J/03SE-0019, #4