



52J02SE2101 52J02SE0069 SQUAW LAKE

010

COPCONDA-YORK RESOURCES INC.
 GEOPHYSICAL SURVEYS
 ON THE
ST. ANTHONY GROUP & COUTURE LAKE GROUP
 STURGEON LAKE AREA
 ONTARIO

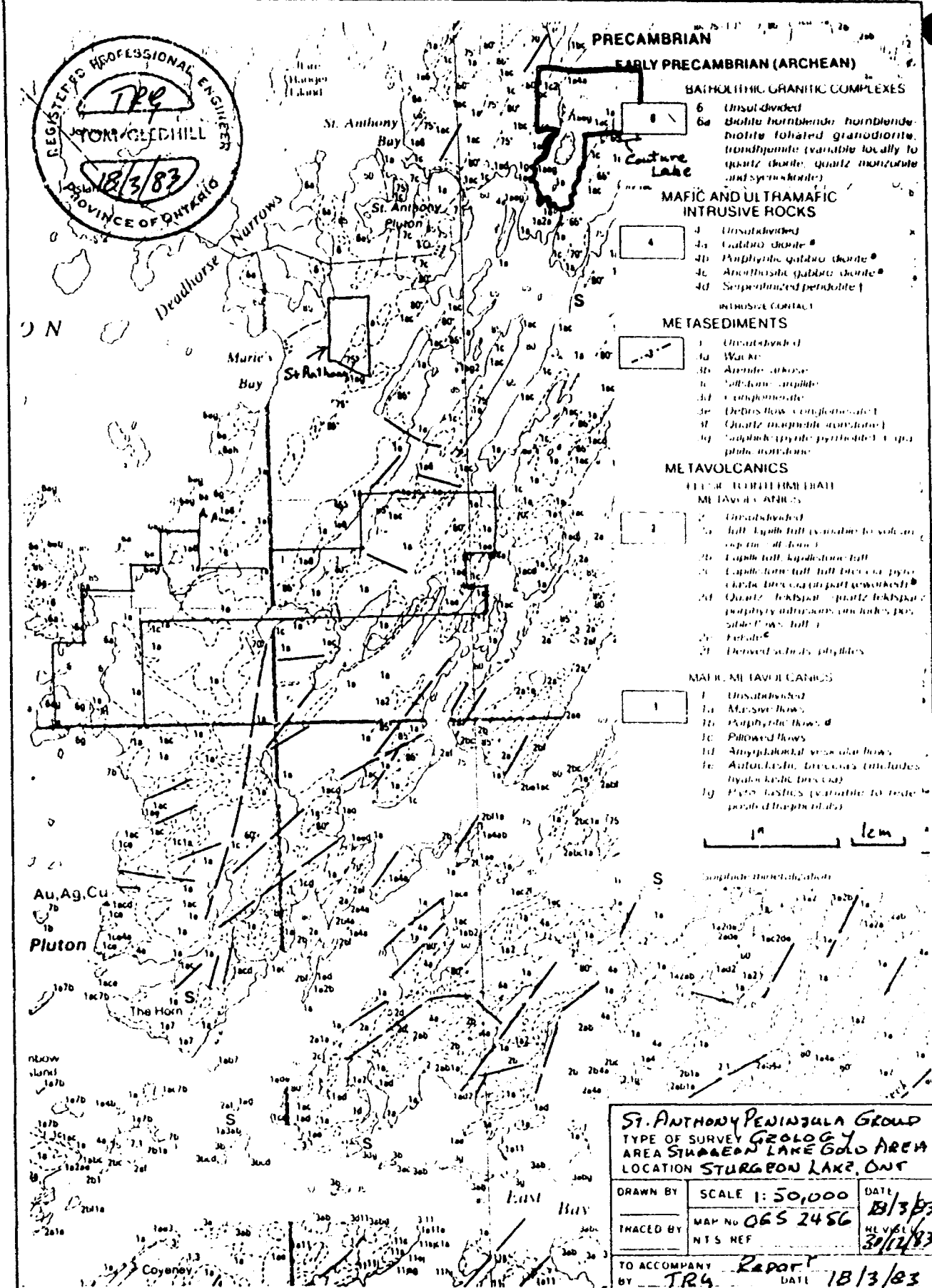
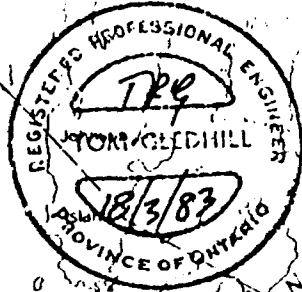
Patented

December 30, 1983.

RECEIVED
 12 30 1983
 MINING LANDS SECTION

2.6493

Tom Gledhill, B.A., P.Eng.



PRECAMBRIAN
EARLY PRECAMBRIAN (ARCHEAN)

BATHOLITHIC GRANITIC COMPLEXES

- 6 Unsubdivided
- 6a Biotite hornblende hornblende-miohite foliated granodiorite, trondhjemite (variable locally to quartz diorite, quartz monzonite and syenite)

MAFIC AND ULTRAMAFIC INTRUSIVE ROCKS

- 4 Unsubdivided
- 4a Gabbro diorite
- 4b Porphyrific gabbro diorite
- 4c Anorthositic gabbro diorite
- 4d Serpentinized peridotite

METASEDIMENTS

- 3 Unsubdivided
- 3a Water
- 3b Arsenic arsenite
- 3c Sulfuric amphibole
- 3d Conglomerate
- 3e Debris flow conglomerate
- 3f Quartz magnetite ironstone
- 3g Amphibole pyrite pyrrhotite cuprite ironstone

METAVOLCANICS

FLUORO TO BEHTIME DIAL

METAVOLCANICS

- 2 Unsubdivided
- 2a Tuff, Lapilli tuff (variable to soft in upper part of flow)
- 2b Lapilli tuff, lapilli-tuff
- 2c Lapilli-tuff, tuff, tuff breccia, pyroclastic breccia (in part worked)
- 2d Quartz, felsic, quartz, felsic, porphyry intrusions, includes possible flows, tuff
- 2e Felsic
- 2f Derived volcanic pyrites

MAFIC METAVOLCANICS

- 1 Unsubdivided
- 1a Basaltic flows
- 1b Porphyritic flows
- 1c Pillowed flows
- 1d Amygdaloidal vesicular flows
- 1e Autoclastic breccias (includes hydrothermal breccias)
- 1g Pyrite, talc (variable to rare pyrite fragments)



ST. ANTHONY PENINSULA GROUP
TYPE OF SURVEY GEOLOGY
AREA STURGEON LAKE GOLD AREA
LOCATION STURGEON LAKE, ONT

DRAWN BY	SCALE 1: 50,000	DATE
TRACED BY	MAP NO 065 2456	18/3/83
	N.T.S. REF.	ML V. 61
		30/12/83
TO ACCOMPANY	REPORT	
BY TR4	DATE 18/3/83	

Copconda-York Resources Inc.
Geophysical Surveys
on the
St. Anthony Group and Couture Lake Group
Sturgeon Lake Area
Ontario

SUMMARY

Geophysical surveys were carried out over each of the claim groups. The magnetics confirm the interpreted geology. On the St. Anthony group a VLF conductor occurs along the granite/volcanic contact, the loci for gold deposits in the area. The Couture Lake Group contains 4 VLF conductive zones.

The results on the St. Anthony Group are encouraging and mapping and trenching are recommended. Further mapping is recommended on the Couture Lake Group.



Tom Gledhill

I. INTRODUCTION

Geophysical surveys were carried on the two claim groups southwest and northeast of the St. Anthony gold mine. Magnetic and VLF-EM surveys covered the groups and a single drill hole was drilled in the southern most claim of the Couture Lake group. The results of this work are discussed in this report.

II. PROPERTY, LOCATION AND ACCESS

St. Anthony Group. Two patented claims TB10627 and TB20189 are located 1/2 mile southwest of the St. Anthony mine in the northwest portion of Sturgeon Lake. Access is by bush road from the St. Anthony property or by bush aircraft from Ignace to Marie's Bay on Sturgeon Lake, 1/4 mile southwest.

Couture Lake Group. This group comprises six contiguous unpatented claims :

Pa640200, 640201, 640202 and 640303
Pa612460 and 612461

It is located in a bay on Couture Lake about 3/4 of a mile from the St. Anthony mine. Access is by bush plane from Ignace to Couture Lake.

III. GEOLOGY

St. Anthony Group lies on the volcanic/ granite contact, the location of most of the gold occurrences.

Couture Lake Group lies within the mafic volcanics mapped as massive flows, breccias and pyroclastics.

IV. SURVEY INSTRUMENTS AND PROCEDURES

A Geonics EM-16 unit was used for the survey with NAA Cutler, Maine (17.8 Khz). Readings were taken of the in-phase and quadrature component. The in-phase and quadrature have been plotted as profiles.

The total field magnetic survey was carried out with a Geonics C-816 proton magnetometer. Measurements were recorded to the nearest gamma and corrected for diurnal drift with a series of closed loops.

V. DISCUSSION OF RESULTS

St. Anthony Group

A VLF conductor, A, strikes northeast and parallels the interpreted granite/volcanic contact. The magnetic pattern reflects the approximate location

of the contact lying just west of the baseline. It is along this contact that most of the gold in the area occurs.

Couture Lake Group

The magnetic map shows a pattern that conforms to the Lake and the mapped strike of the volcanics. Several of the magnetic features have a flanking VLF-EM conductor.

The VLF-EM zones all parallel the baseline.

Zone B and B¹ lie on the west flank of a magnetic band between L0 and L20N.

Zone C - this zone is not well defined and may cut the formations at a low angle.

Zone D is similar to Zone C and occurs along the same magnetic feature. It lacks good definition.

Zone E lies on the west shore and in coincidence with a broad magnetic feature. This zone appears to have two parallel conductors within it.

VI. CONCLUSIONS AND RECOMMENDATIONS

The St. Anthony group has a single conductive zone. This zone should be trenched and sampled. Mapping and other exploration work should be carried

out as soon as the weather permits.

The Couture Lake Group

There are 4 conductive zones outlined on the survey grid. The magnetics are characteristic of such a volcanic terrain. The single drill hole indicates the volcanics are intruded by acidic dykes that may be related to the granite pluton.

Mapping and prospecting should be conducted in the early spring. If drilling is recommended, most of it will have to be carried out during the winter.

Respectfully submitted,

Tom Gledhill

Tom Gledhill, B.A., P.Eng.

December 30, 1983.



Drill Core Log

Property Couture Lake
Squaw L. Area

Hole No. C-4 #1

Latitude -25°3' Bearing 125° Page 1 of 1

Departure -1350'W Dip 45°

Location Pk 612461 Length 200 ft Core Size R&X 1 1/2"

Elevation Lake Surface Started April 1/83 Completed April 15/83

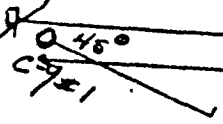
FROM	TO	FORMATION	SAMPLE NO.	LENGTH FT.	Aug 1983
0	-15.3	Casing - Lake to Lake Bottom			
15.3	95.0	Intermediate Volcanics chl, minor py minor py-gtz fractures numerous			
95.0	96.0	Feldspar Porphyry Dyke			
96.0	114.0	Intermediate Volcanics chl, minor py, gtz fracture			
114.0	154.0	Hybrid Zone Feldspar Porphyry and Intermediate Volcanics			
154.0	186.0	FELDSPAR PORPHYRY			
186.0	200.0	Intermediate Volcanics chl, minor gtz veins end of hole			
Sampled		115.0 - 119.0 Hybrid Zn	1001	4.0'	
		25.0 - 27.0 Int. Vol. minor py gtz	1002	2.0'	

Core Stored @
Unionville Office

95% CORE RECOVERY

Drilled by Kenora D.D. Ltd.

Logged by Tom G. Child & P. King



139'

11 Post

Couture Lake.
Pa 612461

Claim boundary

1" = 200'

DD Hole.	
TYPE OF SURVEY	
AREA Squawb.	
LOCATION Starveon I. Ont	
DRAWN BY	DATE
TRACED BY	REVISED
MAP NO.	
N.T.S. REF.	
SCALE 1" = 200'	
TO ACCOMPANY	DATE

DD Hole.		
TYPE OF SURVEY		
AREA Squawb.		
LOCATION Starveon I. Ont		
DRAWN BY	SCALE 1" = 200'	DATE
TRACED BY	MAP NO.	REVISED
	N.T.S. REF.	
TO ACCOMPANY	DATE	



Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

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

Type of Survey(s) Geophysical
 Township or Area Squaw Lake Area
 Claim Holder(s) Concordia - York Resources Ltd.
Suite 4701 No. 7 Highway
Unionville, Ontario L3R 9M7
 Survey Company Sledhill Consultants Inc.
 Author of Report Tom Caldwell
 Address of Author 21 Sandalwood Place Park Hill
 Covering Dates of Survey 30/3/83 -> 31/12/83
 (linecutting to office)
 Total Miles of Line Cut 6

MINING CLAIMS TRAVERSED
List numerically

Pa (prefix)	(number)
	612460
	612461
	640200
	640201
	640202
	640203

SPECIAL PROVISIONS
CREDITS REQUESTED

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

ENTER 20 days for each
additional survey using
same grid.

	DAYS per claim
Geophysical	
- Electromagnetic	<u>40</u>
- Magnetometer	<u>20</u>
- Radiometric	
- Other	
Geological	
Geochemical	

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

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

DATE: March 16/84 SIGNATURE: Tom Caldwell
Author of Report or Agent

Res. Geol. _____ Qualifications 63.1085

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 6

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 320 Number of Readings 320
 Station interval 100ft Line spacing _____
 Profile scale _____
 Contour interval _____

MAGNETIC

Instrument Geometrics C-816
 Accuracy - Scale constant 1 gamma
 Diurnal correction method 1-2 hour closed loops
 Base Station check-in interval (hours) " " " "
 Base Station location and value St. Anthony Avenue. Patented.
Coquette Lake Geomass. - 10 magnet Show @ 425E
60,035 gamma.

ELECTROMAGNETIC

Instrument EM-16 (Geonics)
 Coil configuration N/A
 Coil separation N/A
 Accuracy ± 1/2 %
 Method: Fixed transmitter Shoot back In line Parallel line
 Frequency N.A. Cullen name 17.8 KHz
(specify V.L.F. station)
 Parameters measured In phase & quadrature

GRAVITY

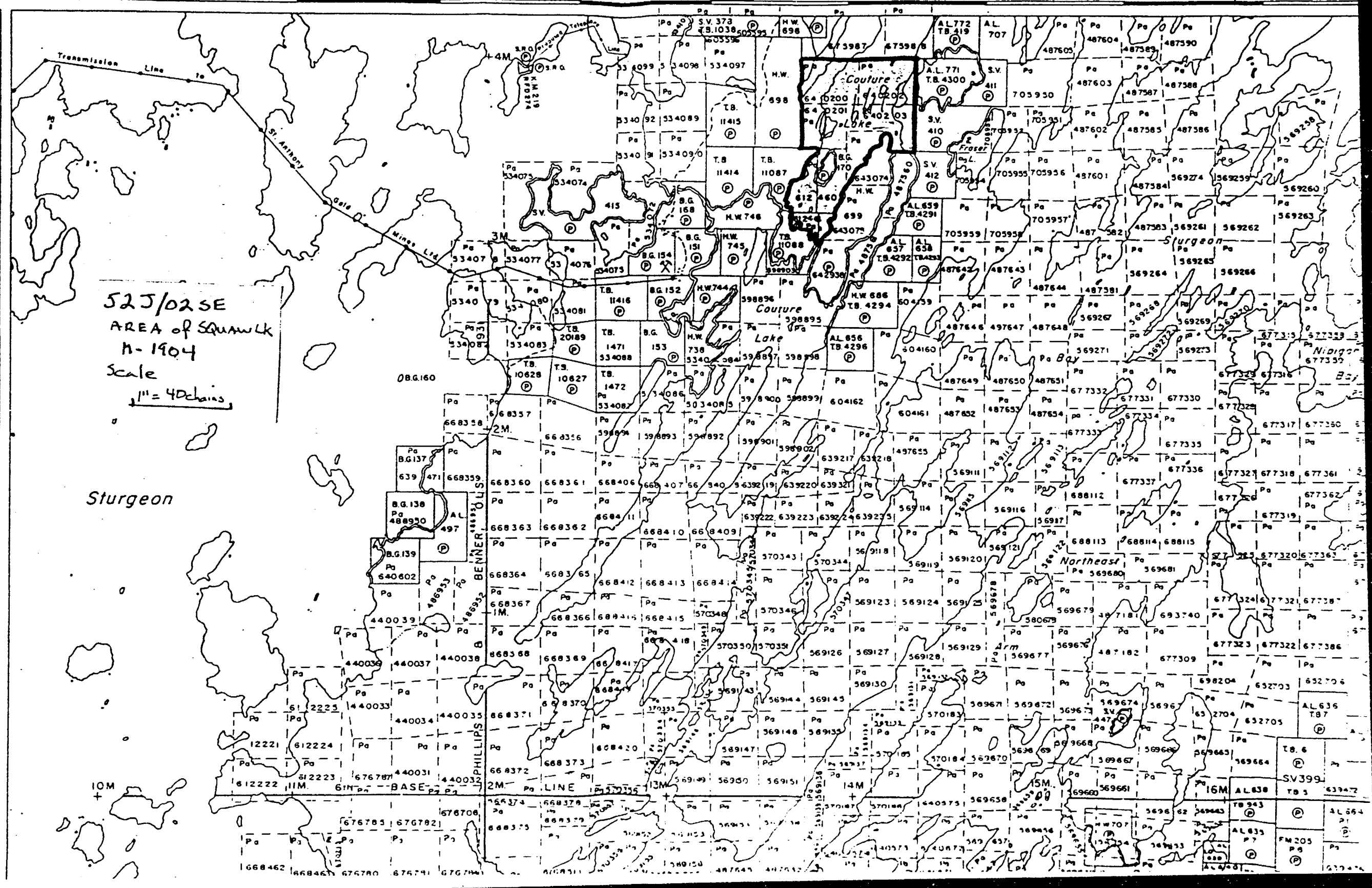
Instrument _____
 Scale constant _____
 Corrections made _____
 Base station value and location _____
 Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____
 Method Time Domain Frequency Domain
 Parameters - On time _____ Frequency _____
 - Off time _____ Range _____
 - Delay time _____
 - Integration time _____
 Power _____
 Electrode array _____
 Electrode spacing _____
 Type of electrode _____

90°45'

50°07'30"



52J/02SE
 AREA of SQUAWK
 N-1904
 Scale
 1" = 40 chains

Four Bay
 Lake Area - G-2543

Sturgeon

Northeast

Arm

10M

11M

12M

13M

14M

15M

16M

17M

18M

19M

20M

21M

22M

23M

24M

25M

26M

27M

28M

29M

30M



Ministry of Natural Resources

Report of Work
Geophysical, Geological,
Geochemical and Exploratory

#84-40

Instructions: This report is to be prepared in accordance with the instructions in the "Instructions" section of the "Form" and the "Expenditure Days Credits" section of the "Form". Do not use the blank areas below.

The Mining Act 2.6493

Type of Survey(s): Geophysical Survey Township or Area: Squaw L. M-1904

Claim Holder(s): Copcondo York Resources Inc Inspector's License No: T 1428

Address: Unionville Professional Bldg

Address: 4701 No. 7 Highway

Address: Unionville, Ontario L3R1M7

Survey Company: Slidhill Cons. Inc. Date of Survey (from & to): 30 3 83 to 31 12 83 Total Miles of line Cut: _____

Name and Address of Author (of Geo-Technical report): Tom G. Slidhill 21 Sandalwood

Credits Requested per Each Claim in Columns at right

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

Man Days	Geophysical	Days per Claim
Complete reverse side and enter totals 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 Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
Pa	612460	60			
	612461	60			
	640200	60			
	640201	60			
	640202	60			
	640203	60			

PATRICIA, MINING DIV
RECEIVED
JAN 19 1984
A.M. 7:8, 9, 10, 11 12:1, 12:31, 4:08 P.M.

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.

Pa. 612460

Total number of mining claims covered by this report of work: 6

For Office Use Only

Total Days Cr. Recorded: 360 Date Recorded: Jan. 19, 1984 Mining Recorder: [Signature]

Date Approved or Recorded: Jan 19/84 Branch Director: [Signature]

Date: Dec 31/83 Recorded Holder or Agent (Signature): Tom Slidhill

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: Tom Slidhill, 21 Sandalwood Place, Don Mills Ont M3B1L5

Date Certified: Jan 19 1984 Certified by (Signature): [Signature]

1984 03 20

Mining Recorder
Ministry of Natural Resources
P.O. Box 669
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims PA 612460 et al in the Area of Squaw Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block
Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-6918

A. Barr:dg

cc: Copconda York Resources Inc.
4701 No. 7 Highway
Unionville, Ontario
L3R 1M7

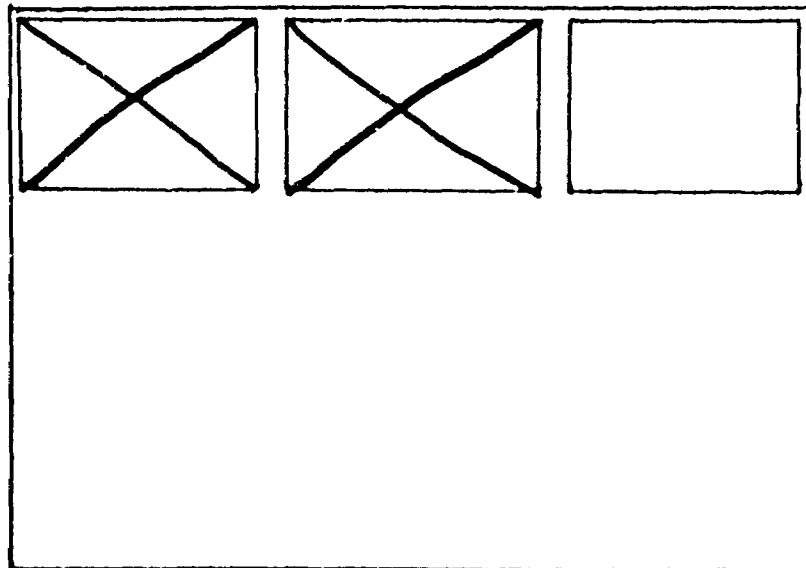
cc: Gledhill Consultants Inc.
21 Sandalwood Place
Don Mills, Ontario
M3B 1L5

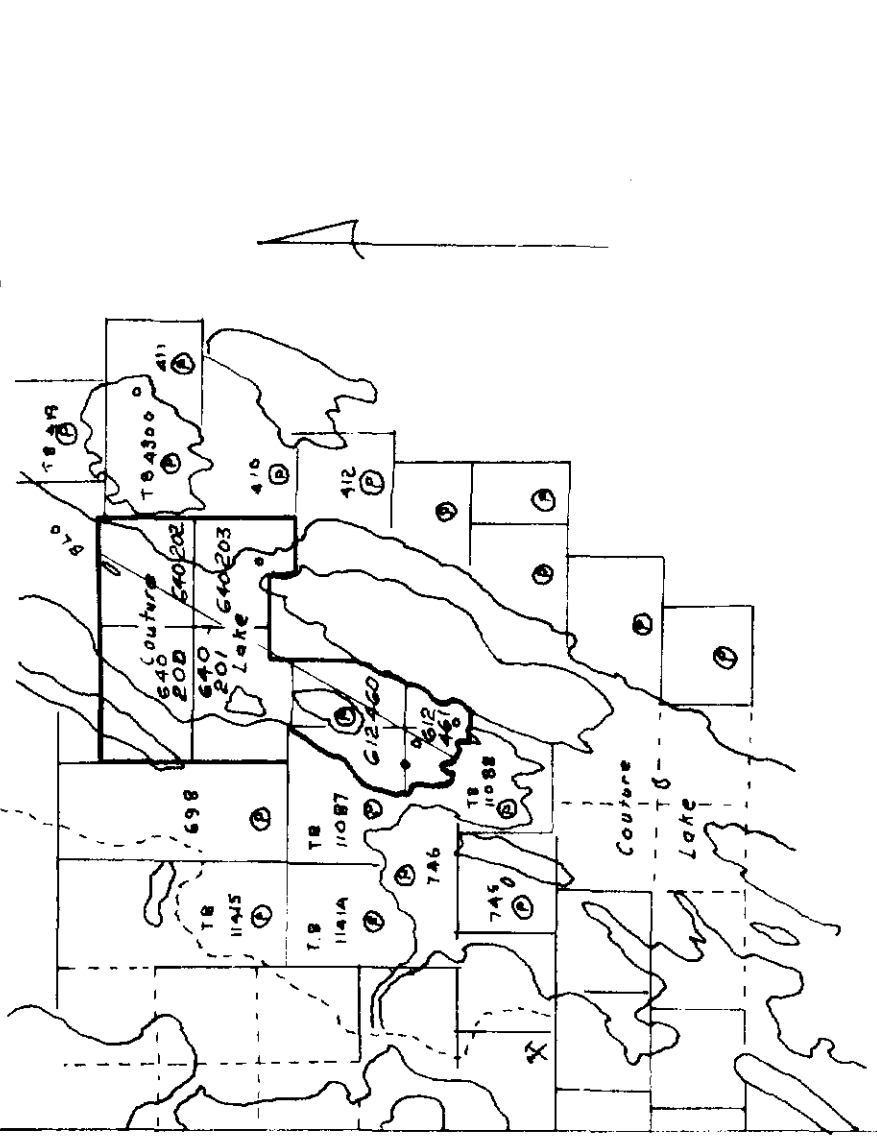
SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

525/02SE-0069 # 1-2

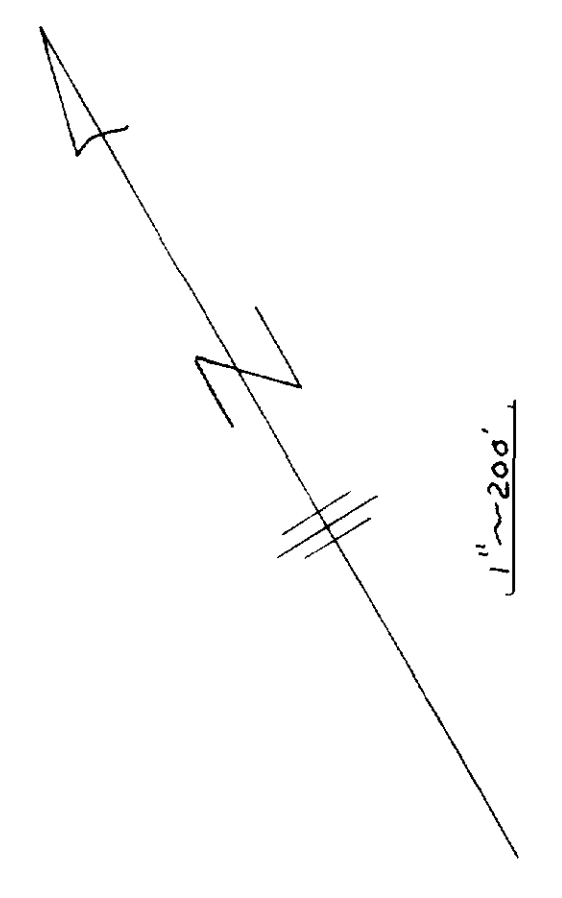
LOCATED IN THE MAP
CHANNEL IN THE
FOLLOWING SEQUENCE

(X)





Squaw Lake Area - M. 1904
 PATRICIA
 MINING DIVISION
 SCALE: 1-INCH = 40 CHAINS



INSTRUMENTATION: GEOMETRICS G. 816 PROTON
 PRECISION MAGNETOMETER

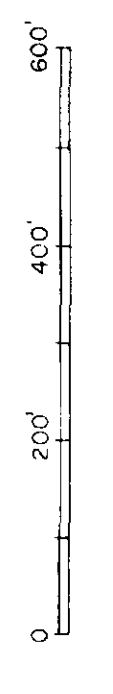
(Note: Add 60,000 to plotted values to obtain absolute total
 geomagnetic field)

TOTAL FIELD MAGNETIC SURVEY

- Contour interval..... 25 gammas
- 25 gamma contour.....
- 100 gamma contour.....
- 500 gamma contour.....
- Depression.....

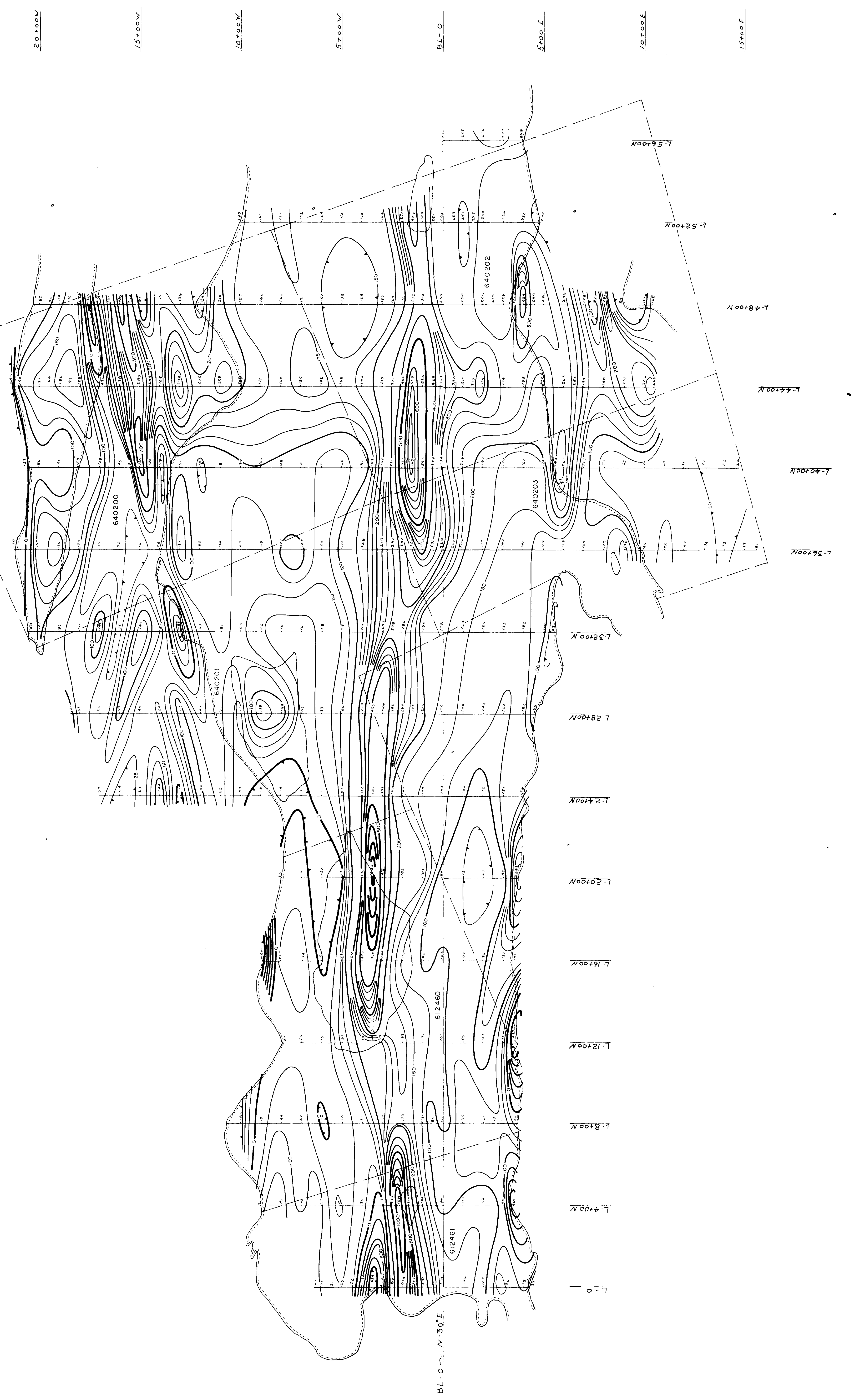
COPCONDA-YORK RESOURCES INC.
 COUTURE LAKE GROUP
 Patricia M.D., Ontario

TOTAL FIELD MAGNETIC SURVEY

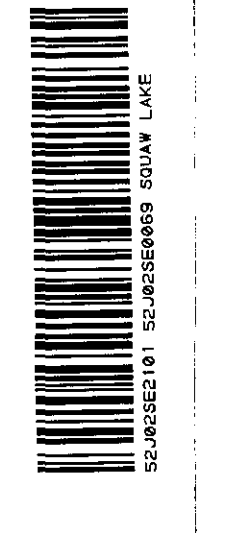


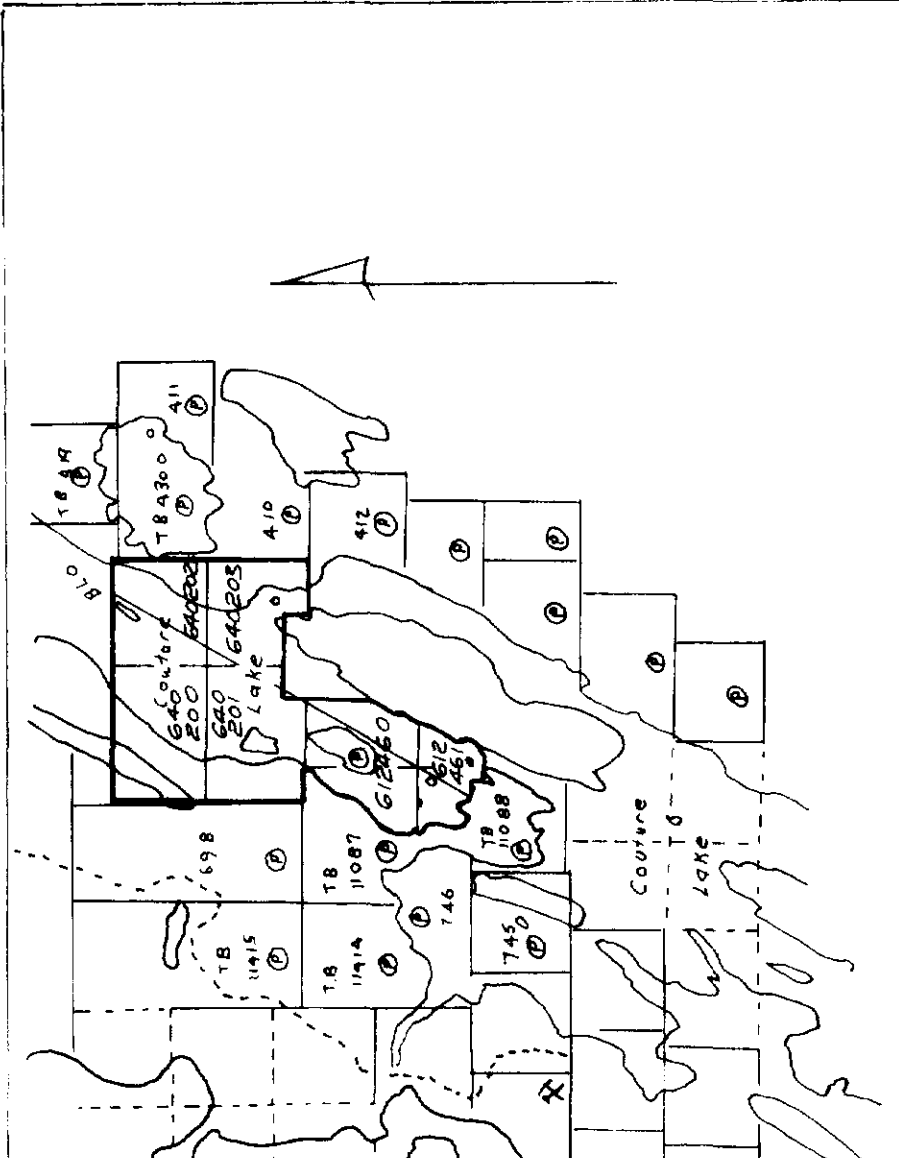
26493

DATE: APRIL 1983

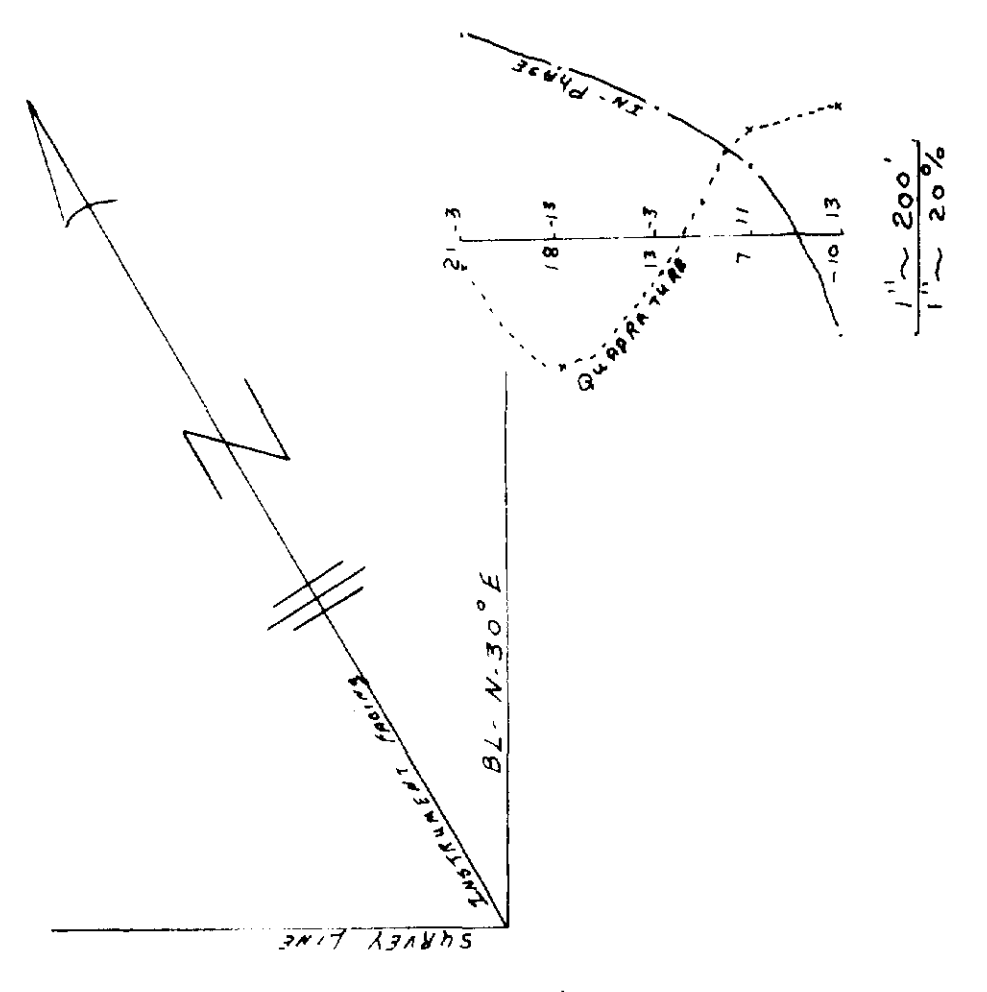


525/02SE-0069, #1



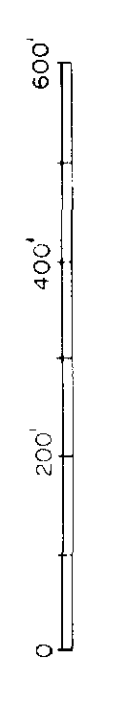


Squaw Lake Area - M.1904
 PATRICIA
 MINING DIVISION
 SCALE: 1-INCH = 40 CHAINS



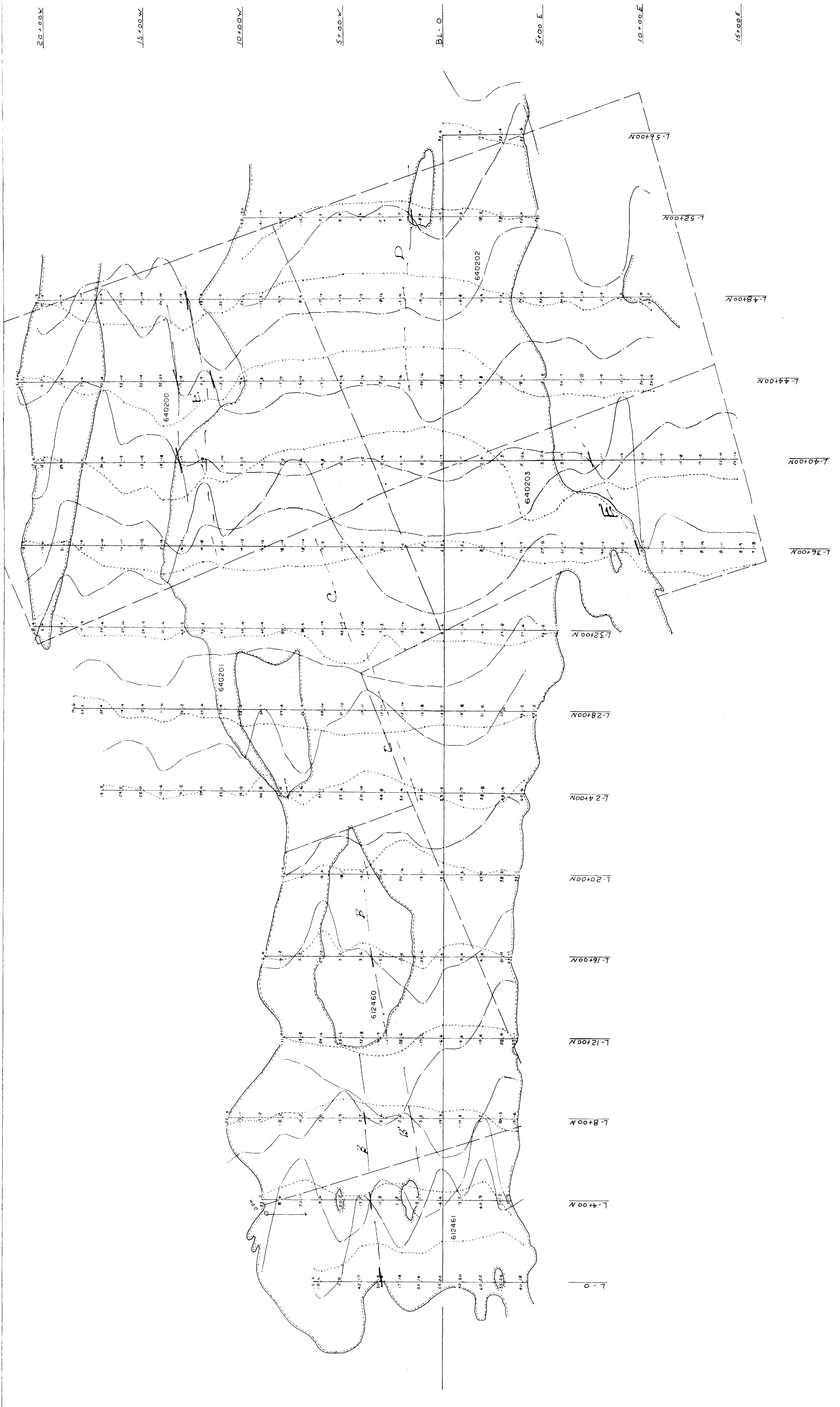
VLF SURVEY
 INSTRUMENTATION: GEOMICS EM-16
 TRANSMITTER: WBA CUTLER, MAINE (17.8 KHZ)

COPCONDA - YORK RESOURCES INC.
 COUTURE LAKE GROUP
 Patricia M.D., Ontario
 VLF EM SURVEY



26423

DATE: APRIL 1983



525/02SE-0069 #2

