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52N02SE9938 2.2074 BATEMAN

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PROJECTS UNIT

GEOPHYSICAL INVESTIGATIONS

of

THE EAST BAY CLAIM GROUP

BATEMAN TOWNSHIP, PLAN M2139

RED LAKE MINING DIVISION

DISTRICT of KENORA

by

LOUIS C. CHASTKO

for

COCHENOUR WILLANS GOLD MINES, LIMITED

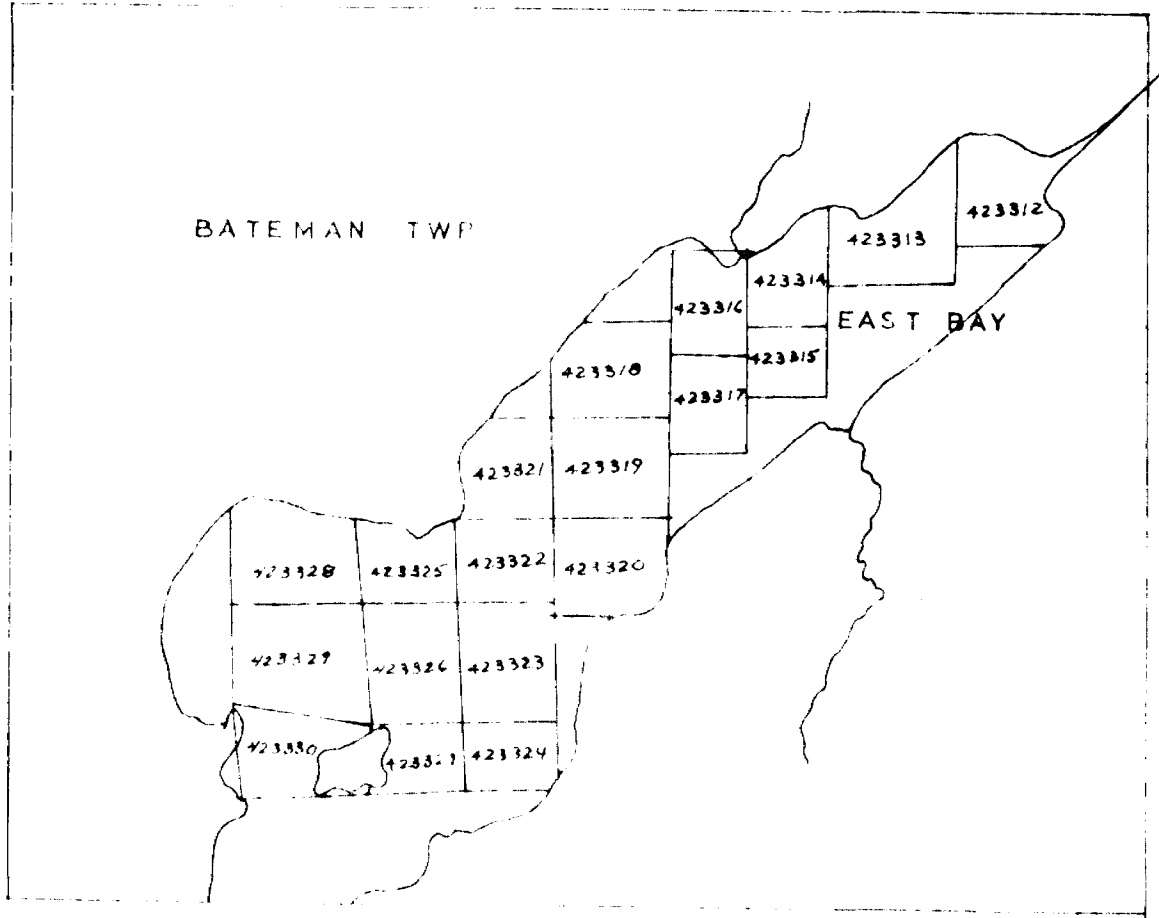
March, 1976

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APPENDAGED:

Report of Work and Technical Data
Magnetometer Survey Plan
V.L.F. E.M. Survey Plan



CLAIM LOCATION SKETCH

EAST BAY GROUP

BATEMAN TWP

O.D.M. CLAIM MAP- 2139

RED LAKE MINING DIVISION

SCALE 1" = 2640'

INTRODUCTION:

The geophysical investigations of this claim group was undertaken to outline and evaluate possible targets areas for base metals and for gold mineralization.

A topographically controlled base line and picket lines at 400 foot intervals were established on the claim group for survey control. A V.L.F. - E.M. and Magnetometer surveys were conducted along picket lines with readings being taken along picket lines at 100 foot intervals.

This report on the geophysical investigations of the East Bay Claim Group is being submitted for assessment work credits as requested by the Ministry of Natural Resources, Mines Division.

DESCRIPTION, LOCATION, & ACCESS TO PROPERTY:

The "East Bay" claim group is comprised of nineteen (19) contiguous unpatented mining claims, Nos. KRL 423312 - 423330 inclusive, all located under the waters of East Bay, Bateman Township, Red Lake Mining Division of the District of Kenora.

Access of the claim group is by waters of Red Lake or logging roads of the northern road to resources, approximately seven (7) miles up from highway 125.

SUBMISSION OF SURVEY:

The enclosed report of work is submitted for assessment work credit by Cochenour Willans Gold Mines, Limited, Cochenour, Ontario.

PROPERTY OWNERSHIP:

All nineteen claims, Nos. KRL 423312 - 423330, are recorded in the name of Cochenour Willans Gold Mines, Limited of Cochenour, Ontario. License A 33564. The property had previously held by Mackbuck Red Lake Gold Mines Limited.

DETAILS OF WORK PERFORMED:

Details of work performed is included herein on forms provided by the Ontario Ministry of Natural Resources following this report.

PRESENTATION OF RESULTS:

The results of the V.L.F. - E.M. and Magnetometer Surveys are presented on enclosed plans at a scale of 1 inch = 400 feet.

GENERAL GEOLOGY:

The geology of the claim group must be inferred or extrapolated from adjacent outcrops and drill hole information as all nineteen claims are located beneath the waters of East Bay of Red Lake.

The Ontario Department of Mines has published on report covering the general geology of the claim group area. A second report covers the general geology up to the southern boundary of the claim block.

The first Report being:
Forty Ninth Annual Report of the Ontario
Department of Mines, Vol. XLIX, Part II, 1940
"Geology and Mineral Deposits of the Red Lake
Area" by H.C. Horwood.
Accompanying Map No. 49 b, Red Lake Area
(East Sheet)

The second Report being:
Ontario Department of Mines Geological Report #6
"The South Half of Bateman Township"
by Stewart A. Ferguson, 1962.
Accompanying Map 2016, Bateman Township,
South Half.

Extrapolating the mapping and compilation work off Mr. Ferguson it is believed the claim block is largely underlain by typical precambrian mafic lava flows and pillowed volcanics with minor bands of associated sediments. This assemblage has been intruded by large mafic to ultra mafic complex known as the "East Bay Serpentine" along the "East Bay" fault. Later intrusions range from felsic granodiorite to granitic dikes and sills as well as diorite and lamprophyre dikes.

The formation in this area generally strike N.E. - S.W. and have a steep dip to the N.W.

ECONOMIC INTEREST:

The property is located on strike of the presently active McFinlay Red Lake property located approximately a $\frac{1}{2}$ mile to the south west and the Abino Red Lake property located approximately 4 miles to the south west.

Three types of gold mineralization occurs on the McFinlay Red Lake property.

- 1) Gold bearing bluish quartz veins with sulfides in sediment and lavas.
- 2) Fractured iron formation or siliceous sediment with quartz veins and sulfides.
- 3) Massive sulfides replacing iron formation or siliceous sediment.

Three types of gold mineralization are noted on the Abino property.

- 1) Gold bearing bluish quartz and quartz carbonate veins and basalt.
- 2) Sulfides and gold in banded cherty.
- 3) Shears and fractures in granodiorite, intrusions near the East Bay Serpentinite.

The Sulfide rich McFinlay Red Lake type gold bearing sedimentary unit may be represented by either zones A, B, or C, as outlined by the V.L.F. - E.M. survey.

The magnetic low surrounded by a magnetic high on claims 423323 and 423324 probably is indication of a granodiorite intruded in the East Bay Serpentinite and carry the Abino type gold mineralization.

DISCUSSION OF RESULTS:Magnetometer Survey

The magnetics on the claim group proved to be relatively flat with only several distinctive features. The distinctive high located along the south eastern portion of the grid which occur as four distinctive masses are believed to be parts of the East Bay Serpentinite intrusive. On the lower mass where the high surround a distinctive low trend. The low are believed to represent a granodiorite complex.

V.L.F. - E.M. Survey

All the V.L.F. conductive trend with the exception of those located along the lower south eastern portion of the grid are believed to represent sedimentary units and rafts caught up between lava flows and bands. The other group of anomalous conductivity is possibly due to shears and slips along the contacts of the East Bay Serpentinite.

CONCLUSIONS:

1) The magnetometer survey has outlined an area on claims 42323 - 42324 which is possibly underlain by a granodiorite - talc schist complex which may be host rock for gold mineralization.

2) The V.L.F. - E.M. survey has outlined three main conductive units and several lesser ones. One of these conductive trends probably is the equivalent of the gold bearing sedimentary unit found on the McFinlay Red Lake property.

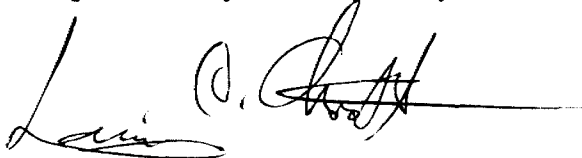
- Page 8 -

RECOMMENDATIONS:

1) Field mapping and/or diamond drilling could be used to test the potential of these conductive zones. It would be of benefit to ascertain which conductive trend is the equivalent of the gold bearing sedimentary unit found on the McFinlay Red Lake property.

2) A detailed magnetometer survey with line spaces of 200 feet and stations at 25 foot intervals on claims 42323 and 42324 over the suspected granodiorite zone should be carried out to outline the zone in more detail. If drilled attention should be paid to irregularities in the contact with the Serpentinite.

Respectfully submitted,



L.C. Chastko
Chief Geologist

34-11

GEOPHYSICAL - GEOL
TECHNICAL D



900

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 Geophysical
Township or Area Bateman Twp.
Claim holder(s) Cochenour Willans Gold Mines Ltd.
Cochenour, Ontario
Author of Report L.C. Chestko
Address Cochenour, Ontario
Covering Dates of Survey February 9th to 21, 1976
(linecutting to office)
Total Miles of Line cut 21.3

MINING CLAIMS TRAVERSED
List numerically

KRL (prefix)	(number)
423312	
423313	
423314	
423315	
423316	
423317	
423318	
423319	
423320	
423321	
423322	
423323	
423324	
423325	
423326	
423327	
423328	
423329	
423330	

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

ENTER 40 days (includes
line cutting) for first
survey.
ENTER 20 days for each
additional survey using
same grid.

Geophysical
--Electromagnetic 20
--Magnetometer 40
--Radiometric _____
--Other _____
Geological _____
Geochemical _____

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

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

DATE: March 6th, 1976 SIGNATURE: [Signature]
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.2591
Previous Surveys L.D.

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 19

If space insufficient, attach list

OFFICE USE ONLY

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

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 1029 Number of Readings 1029
Station interval 100 feet
Line spacing 400 feet
Profile scale or Contour intervals Magnetometer- 500 gammas VLF EM- 10%
(specify for each type of survey)

MAGNETIC

Instrument Jalander Fluxgate Model 5785
Accuracy - Scale constant 1:11, 2:33, 3:107, 4:390
Diurnal correction method Base station check along base line
Base station location at pickets along base line

ELECTROMAGNETIC

Instrument Geonics em 16
Coil configuration vertical and horizontal
Coil separation
Accuracy 1%
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 1860 KHz MPG
(specify V.L.F. station)
Parameters measured Vertical in phase and quadrature components

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Time domain Frequency domain
Frequency Range
Power
Electrode array
Electrode spacing
Type of electrode

GAIASHK - 0044-1

Corallen Lake Area M.2658

Blackbear Lake Area M.2657

THE TOWNSHIP
OF

2.2074








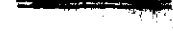







BATEMAN

DISTRICT OF
KENORA
PATRICIA PORTION

RED LAKE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

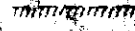
LEGEND

- PATENTED LAND 
- CROWN LAND SALE 
- LEASES 
- LOCATED LAND 
- LICENSE OF OCCUPATION 
- MINING RIGHTS ONLY 
- SURFACE RIGHTS ONLY 
- ROADS 
- IMPROVED ROADS 
- KING'S HIGHWAYS 
- RAILWAYS 
- POWER LINES 
- MARSH OR MUSKEG 
- MINES 
- CANCELLED 

NOTES

400' surface rights reservation around all lakes and rivers.

Assumed position of KRL: 11495 plotted from plan of survey by G.R. BRADSHAW shown in broken lines. File 133585.

Boundary of the IMPROVEMENT DISTRICT OF BALMERTOWN shown thus 

2640'

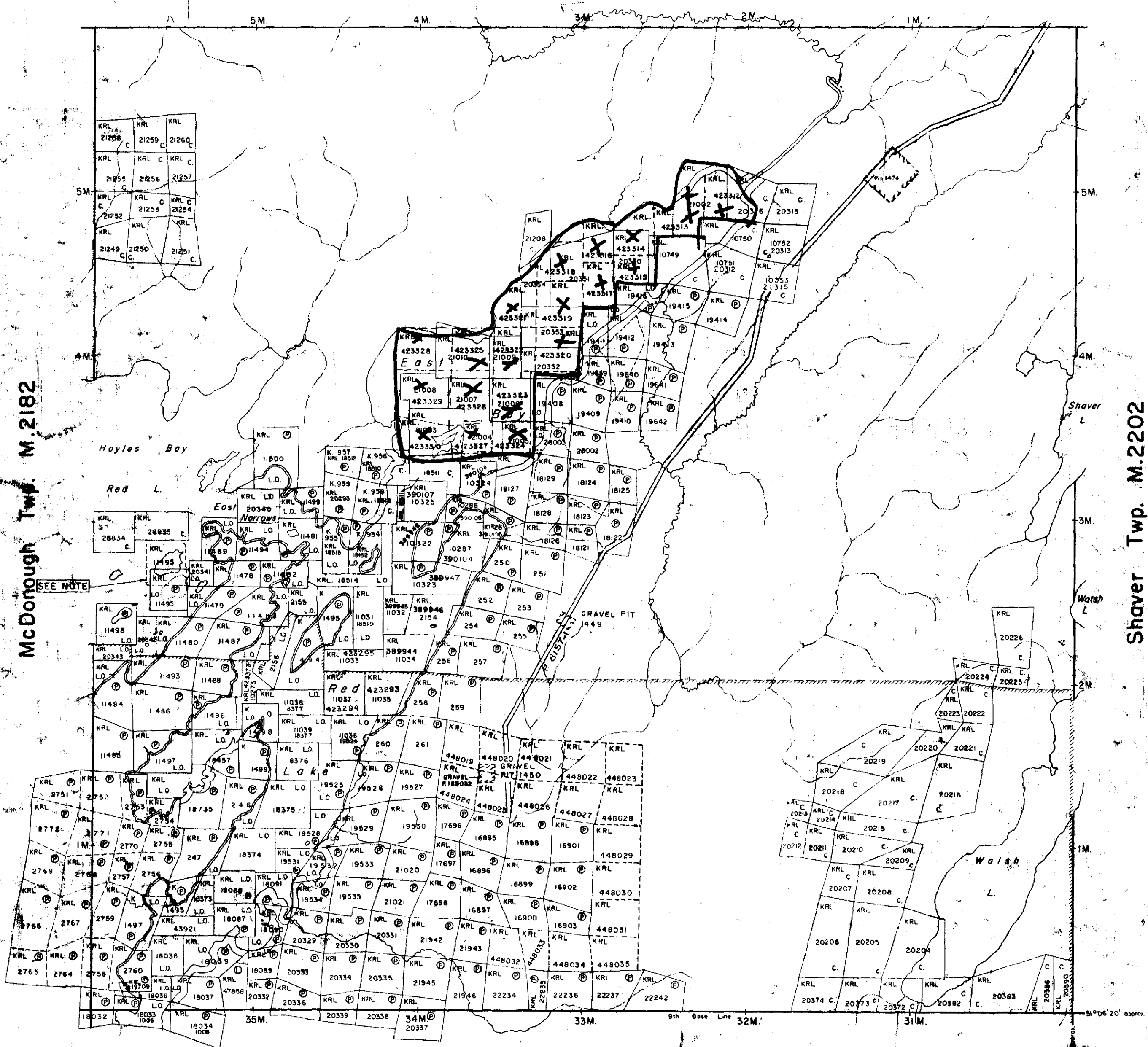
DATE OF ISSUE

APR - 6 1976

SURVEYS AND MAPPING
BRANCH

PLAN NO. **M.2139**

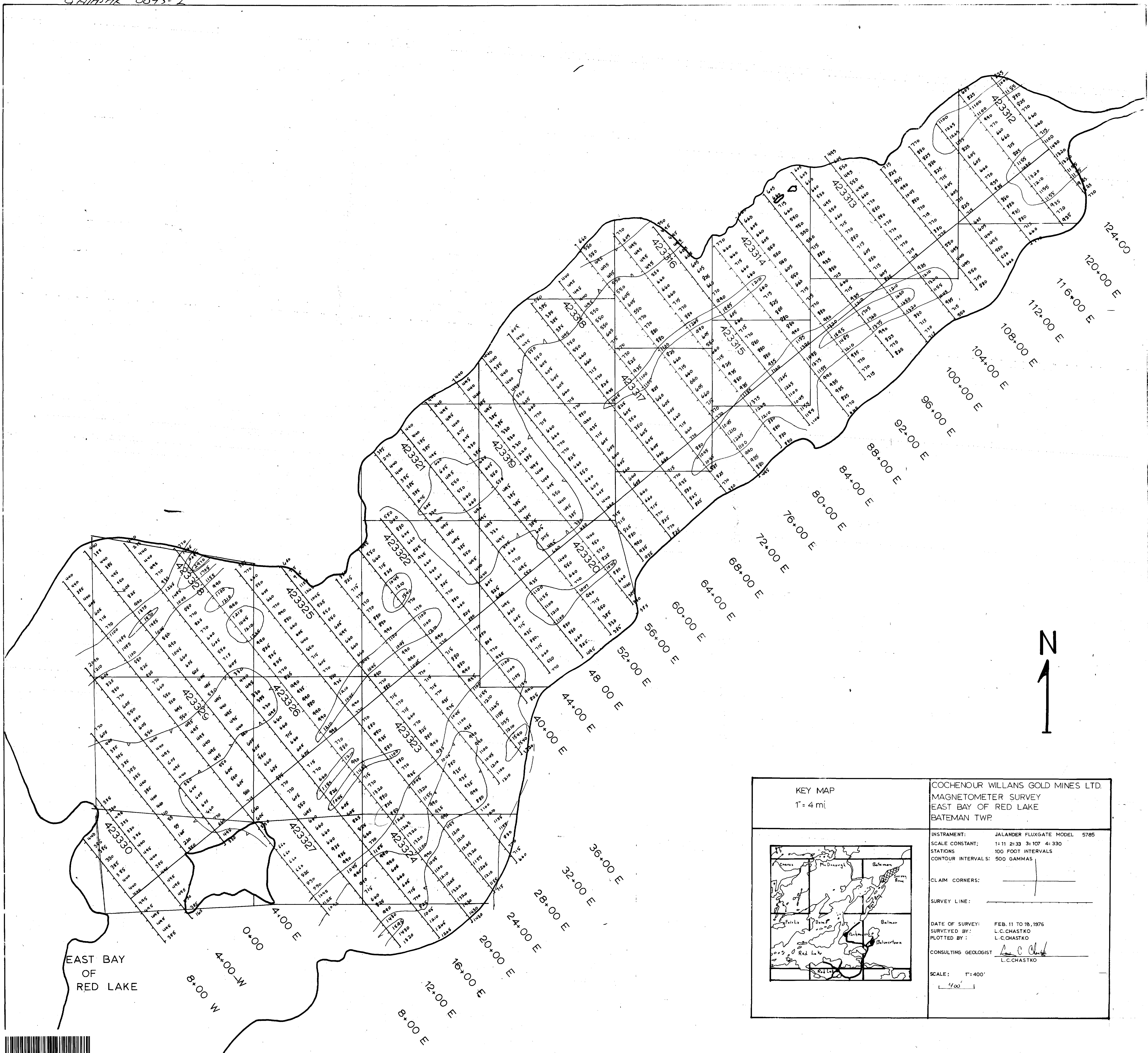
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

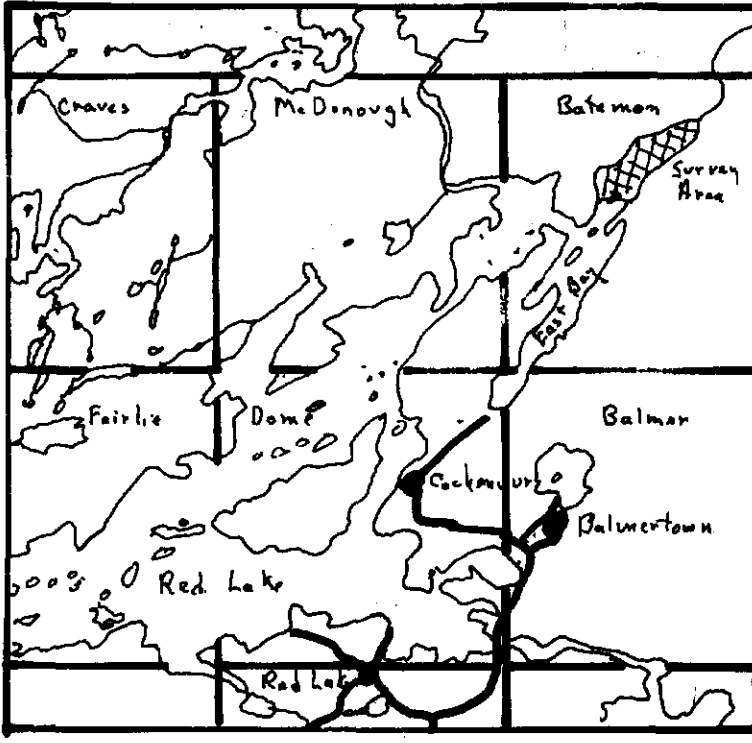
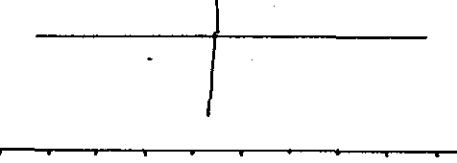

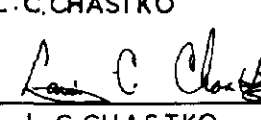
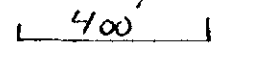


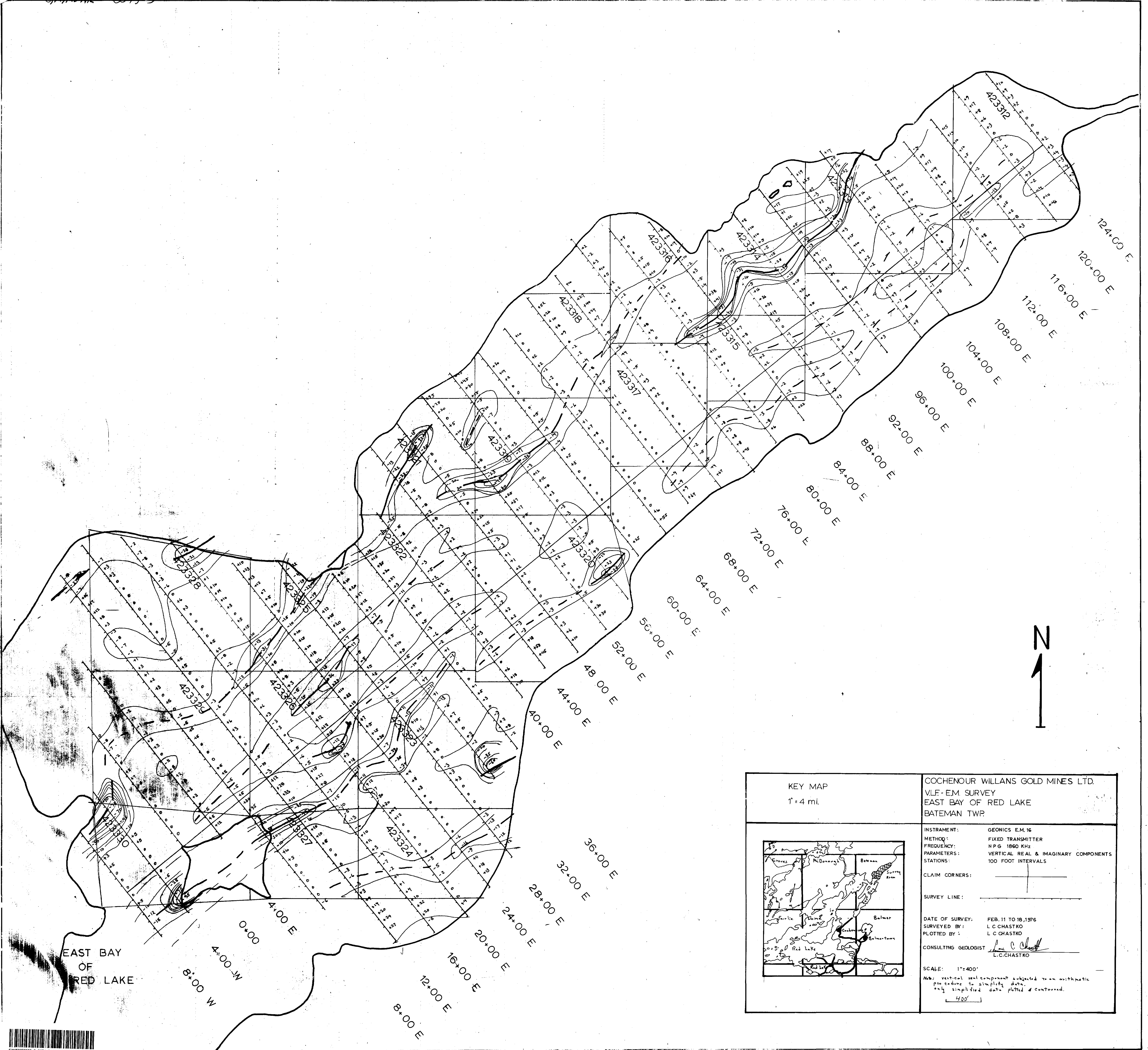
Balmer Twp. M.2137



52N025E9336 2.2074 BATEMAN



<p>KEY MAP 1" = 4 mi</p>	<p>COCHENOUR WILLANS GOLD MINES LTD. MAGNETOMETER SURVEY EAST BAY OF RED LAKE BATEMAN TWP.</p>
	<p>INSTRUMENT: JALANDER FLUXGATE MODEL 5785 SCALE CONSTANT: 1:11 2:33 3:107 4:330 STATIONS: 100 FOOT INTERVALS CONTOUR INTERVALS: 500 GAMMAS</p> <p>CLAIM CORNERS: </p> <p>SURVEY LINE: </p> <p>DATE OF SURVEY: FEB. 11 TO 18, 1976 SURVEYED BY: L.C. CHASTKO PLOTTED BY: L.C. CHASTKO CONSULTING GEOLOGIST:  L.C. CHASTKO</p> <p>SCALE: 1" = 400' </p>



<p>KEY MAP 1" = 4 mi.</p>		<p>COCHENOUR WILLANS GOLD MINES LTD. VLF-EM SURVEY EAST BAY OF RED LAKE BATEMAN TWP.</p>	
		<p>INSTRUMENT: GEONICS E.M. 16 METHOD: FIXED TRANSMITTER FREQUENCY: N.P.G. 1860 KHz PARAMETERS: VERTICAL REAL & IMAGINARY COMPONENTS STATIONS: 100 FOOT INTERVALS</p>	
<p>CLAIM CORNERS:</p>		<p>SURVEY LINE:</p>	
<p>DATE OF SURVEY: FEB. 11 TO 18, 1976 SURVEYED BY: L.C. CHASTKO PLOTTED BY: L.C. CHASTKO</p>		<p>CONSULTING GEOLOGIST: <i>L.C. Chastko</i> L.C. CHASTKO</p>	
<p>SCALE: 1" = 400'</p>		<p><small>Note: vertical real component subjected to an arithmetic procedure to simplify data. Only simplified data plotted & contoured.</small></p>	

