CRAIG-0012-A1

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Res. Rec. Mod. Office Sudbury,
Feb. 24/72



# REPORT

# ON

# GEOPHYSICAL SURVEYS

# ON THE PROPERTY OF

# ATLAS EXPLORATIONS LTD.

# CRAIG TOWNSHIP, ONT.

Montreal, Que. July 5, 1971.

Rec. Res. Dist. Office Sudbury (WRITTEN SUBMISSION) Feb 24/72

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# REPORT

# ON

# GEOPHYSICAL SURVEYS

# ON THE PROPERTY OF

# LAFORA EXPLORATIONS LTD.

# CRAIG TOWNSHIP, ONT.

## INTRODUCTION

A combined electromagnetic and magnetometer survey was completed on the 22 claim group held by Almore Explorations Ltd. in Craig township, Ontario. The object of the surveys was to more accurately outline the geology, structure and potential areas of mineralization on the property.

The following report and accompanying maps describe the results of the surveys and give an interpretation of same.

## PROPERTY AND LOCATION

The property is situated in the east central portion of Craig township, Sudbury Mining Division of Ontario.

It consists of 22 unpatented claims in lots 3, 4 and 5 of Concession III and IV, as shown on the accompanying maps.

The claims are registered with the Department of Mines under the following claim numbers:

S 281943 to S 281951 inclusive

S 269066 to S 269074 "

S 291586 to S 291589 "

The last four claims have been recently staked and the survey only covers a portion of these claims.

Access to the property is by air to Bluewater Lake or the Spanish River and then overland by foot.

GEOLOGY

The majority of the property is covered with overburden with the exception of the hillsides where exposures are fairly common.

The geology of the property and area is largely based on government geological maps which indicate that the claims are almost entirely underlain by Algoman granites. Outcrops observed during the survey bore this out. From geological maps the contact of the granite and the gneisses

and schists to the north lies almost along the north boundary of claims 281948, etc.

A basic intrusive dyke has also been mapped as striking northeast across the southern portion of the claim group. Two mineral occurrences are reported on the property, one in a quartz vein and the other showing sulphides on the bank of a creek at the north end of the surveyed area.

SURVEY METHODS AND INSTRUMENT DATA

The survey was carried out using a network of picket lines cut in a northwest direction at 300 foot intervals, as shown on the accompanying maps. Stations were at 100 foot intervals along the lines.

The electromagnetic survey was carried out using the Geonics EM-17 horizontal loop equipment with a 300 foot coil interval. In the horizontal loop type of survey both the in-phase and out-of-phase components of the secondary field are measured, whose special characteristics make possible a fairly accurate evaluation of the conductivity. A conductor caused by sulphide mineralization will produce a curve going from positive readings through

zero to negative and back again to positive. Both the in-phase and out-of-phase readings show the same general curve. The ratio between the in-phase and out-of-phase readings over a conductor is an indication of the conductivity of the body. A good conductor would cause a greater deviation of the in-phase component than the out-of-phase component. The opposite is true of a poor conductor.

The magnetic readings were taken over the same network of lines with a Sharpe MF-1 Fluxgate magnetometer measuring the variations of the vertical component of the earth's magnetic field. Readings were plotted as gammas on a separate map after correction for diurnal variation.

RESULTS OF THE GEOPHYSICAL SURVEYS AND INTERPRETATION

The electromagnetic survey indicates one possible conductive zone, but it occurs on one line only (3W). There is no magnetic association with the conductive zone but it would appear to lie within the granite body. All other responses obtained appear to be caused by topography rather than conductivity.

The magnetic survey shows a northeast trending anomaly extending across the south portion of the property. This shows a negative anomaly on the north which is probably the north contact of the basic intrusive. To the south the anomaly consists of rather erratic highs, probably due to local concentrations of magnetite within the intrusive dyke. To the north of the negative anomaly there are some small areas of highs which may represent alteration along the contact of the intrusive dyke.

There are a few other small magnetic anomalies within the granite to the north but these are likely due to variations in the overburden and local concentrations of magnetite within the granite.

## CONCLUSIONS AND RECOMMENDATIONS

The electromagnetic survey outlined one narrow conductive zone but there is a lack of continuity to the zone. It appears to be within the granite body and thus is probably not too significant. No responses were obtained in the vicinity of the known mineral occurrences and one must assume that the size of these occurrences is limited.

The magnetic survey outlined what is believed to be a basic intrusive dyke extending northeasterly across the south part of the property. From the magnetic readings the intrusive appears to be disturbed and there may be considerable alteration along the contacts. Such an intrusive dyke with alteration could be a favorable area for mineral deposition.

Any further exploration should be largely confined to the area around this intrusive dyke and it is recommended that geological mapping and prospecting be carried out in this area and in the vicinity of the conductive zone indicated.

Respectfully submitted,

G.H.D. CONSULTANTS LTD.

F.J. Bergmann, P. Eng.

Montreal, Que.,
July 5, 1971.

Rec'd. Rec. Gen. Office
Aug. 1971

#4-17

ONTARIO

**THE MINING ACT REPORT OF WORK**

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

To the Recorder of Sudbury — Almore Explorations Ltd. — Mining Division

I, Graham A. Duff for Almore Explorations Limited
name of Recorded Holder — Miner's Licence

209 - 185 Bay Street, Toronto 116, Ontario
Post Office Address

do hereby report the performance of 720 days of Magnetometer (MAG.)
type of work

not before reported to be applied on the following contiguous claims Magnetometer

| Claim No. | Days | Claim No. | Days | Claim No. | Days |
|---|---|---|---|---|---|
| S 281943 | 40 | S 281949 | 40 | S 269069 | 40 |
| S 281944 | 40 | S 281950 | 40 | S 269070 | 40 |
| S 281945 | 40 | S 281951 | 40 | S 269071 | 40 |
| S 281946 | 40 | S 269066 | 40 | S 269072 | 40 |
| S 281947 | 40 | S 269067 | 40 | S 269073 | 40 |
| S 281948 | 40 | S 269068 | 40 | S 269074 | 40 |

All the work was performed on Mining Claim (s) Claims
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

Report and maps to be forwarded to Toronto within 60 days.

Date June 16, 1971

Signature of Recorded Holder or Agent
Graham A. Duff for Almore Explorations Limited

---

Graham H. Duff

**The Mining Act**
**Certificate Verifying Report of Work**

I, Graham A. Duff
209 - 185 Bay Street, Toronto 116, Ontario
209 - 185 Bay Street, Toronto 116, Ont. (Post Office Address)

hereby certify:

1. 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.
2. That the annexed report is true.

SUDBURY
JUN 24 1971

Dated Jun 16 19 71
June 16

Signature
Graham A. Duff

S 269066
S 269066

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

## ASSESSMENT WORK DETAILS

Type of Survey: Magnetometer
A separate form is required for each type of survey

Township or Area: Craig Township

Chief Line Cutter or Contractor: Harold V. Barry
Name
1265 Arvo Street, Sudbury, Ontario
Address

Party Chief: Peter Ferderber
Name
Prospecting Geophysics,
3518 Vendome Ave. Montreal, Quebec.
Address

Consultant: GHD Consultants Limited
Name
209 - 185 Bay Street, Toronto 116, Ont.
Address

Geological field mapping by: _____
Name
_____
Address

COVERING DATES

Line Cutting: May 1971 - 300' spacing, readings every 100'

Field: May & June 1971
Instrument work, geological mapping, sampling etc.

Office: June 1971

INSTRUMENT DATA

Make, Model and Type: Scintrex

Scale Constant or Sensitivity: _____
*Or provide copy of instrument data from Manufacturer's brochure.*

Radiometric Background Count: _____

Number of Stations Within Claim Group: _____

Number of Readings Within Claim Group: 1370

Number of Miles of Line cut Within Claim Group: _____

Number of Samples Collected Within Claim Group: _____

| CREDITS REQUESTED | 20 DAYS per claim | 40 DAYS per claim | Includes (Line cutting) |
|---|---|---|---|
| Geological Survey | ☐ | ☐ | |
| Geophysical Survey | ☐ | ☒ | Show Check ✓ |
| Geochemical Survey | ☐ | ☐ | |

DATE June 16/71 SIGNED: _____
Graham H. Duff

*Performance and coverage credits do not apply to airborne surveys*

**SPECIAL PROVISION CREDITS for PERFORMANCE & COVERAGE**

**MINING CLAIMS TRAVERSED**
List numerically

S 281943 to S 281951 incl.

S 269066 to S 269074 incl.

NO CREDITS FOR S 281943

TOTAL CLAIMS 18

If space insufficient, attach list

Send in Duplicate to:

FRED W. MATTHEWS
SUPERVISOR-PROJECTS SECTION
DEPARTMENT OF MINES & NORTHERN AFFAIRS
WHITNEY BLOCK
QUEEN'S PARK
TORONTO, ONTARIO

Rec. Land. Res. Head Office

Aug 1/71

Graham H. Duff for
Almore Explorations Ltd.

#116

ONTARIO

**THE MINING ACT REPORT OF WORK**

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

To the Recorder of Sudbury Mining Division

I, Graham H. Duff for Almore Explorations Limited A 37159
name of Recorded Holder Miner's Licence

185 Bay Street, Suite 209, Toronto 116, Ontario.

185 Bay Street, Suite 209, Post Office Address

do hereby report the performance of 360 days of I.P. EM.
type of work

not before reported to be applied on the following contiguous claims

| Claim No. | Days | Claim No. | Days | Claim No. | Days |
|---|---|---|---|---|---|
| S 281943 | 20 | S 281949 | 20 | S 269069 | 20 |
| S 281944 | 20 | S 281950 | 20 | S 269070 | 20 |
| S 281945 | 20 | S 281951 | 20 | S 269071 | 20 |
| S 281946 | 20 | S 269066 | 20 | S 269072 | 20 |
| S 281947 | 20 | S 269067 | 20 | S 269073 | 20 |
| S 281948 | 20 | S 269068 | 20 | S 269074 | 20 |

All the work was performed on Mining Claim (s) S 269066
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

**READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.**

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

**The Required Information is as Follows:** (Attach a list if this space is insufficient)

Report and map to be forwarded to Toronto within 60 days.

Date June 16, 1971

Graham H. Duff
Signature of Recorded Holder or Agent

Graham H. Duff for Almore Explorations Limited

**The Mining Act**
**Certificate Verifying Report of Work**

I, Graham H. Duff

209 - 185 Bay Street, Toronto 116, Ontario.

209 - 185 Bay Street (Post Office Address)

hereby certify:

1. 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
2. That the annexed report is true.

RECEIVED
JUN 24 1971
MINING LANDS BRANCH

Dated June 16, 1971

H. Duff
Signature

S 269066

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

## ASSESSMENT WORK DETAILS

Type of Survey: EM Survey
A separate form is required for each type of survey

Township or Area: Craig Township

Chief Line Cutter or Contractor: see under Mag. Survey
Name
Address

Party Chief: Harry Ferderber
Name
Prospecting Geophysics
3518 Vendome Ave. Montreal, Quebec
Address

Consultant: GHD Consultants Limited
Name
209 - 185 Bay Street, Toronto 116, Ont.
Address

Geological field mapping by:
Name
Address

COVERING DATES

Line Cutting: See Mag. Survey

Field: May & June 1971
Instrument work, geological mapping, sampling etc.

Office:

INSTRUMENT DATA

Make, Model and Type: Ronka

Scale Constant or Sensitivity:
*Or provide copy of instrument data from Manufacturer's brochure.*

Radiometric Background Count:

Number of Stations Within Claim Group:

Number of Readings Within Claim Group: 1370

Number of Miles of Line cut Within Claim Group:

Number of Samples Collected Within Claim Group:

CREDITS REQUESTED

| | 20 DAYS per claim | 40 DAYS per claim | ----- Includes (Line cutting) |
|---|---|---|---|
| Geological Survey | ☐ | ☐ | |
| Geophysical Survey | ☒ | ☐ | Show Check ✓ |
| Geochemical Survey | ☐ | ☐ | |

DATE June 16, 1971 SIGNED: Graham H. Duff

Performance and coverage credits do not apply to airborne surveys

**SPECIAL PROVISION CREDITS for PERFORMANCE & COVERAGE**

**MINING CLAIMS TRAVERSED**
List numerically

S 281943 to S 281951 incl.

S 269066 to S 269074 incl.

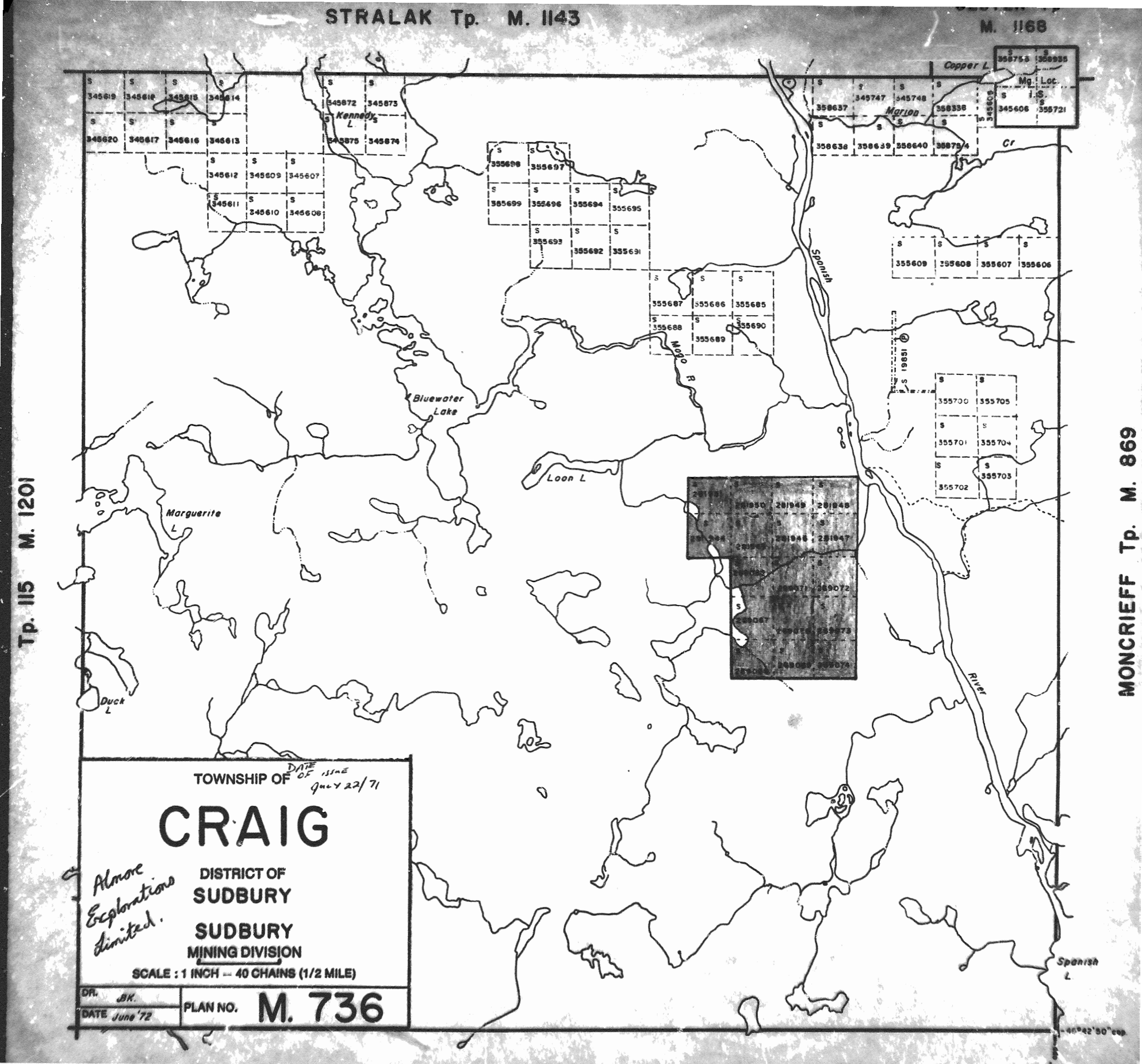
If space insufficient, attach list

NO CREDIT FOR S 281943

TOTAL CLAIMS 18

Send in Duplicate to:

FRED W. MATTHEWS
SUPERVISOR-PROJECTS SECTION
DEPARTMENT OF MINES &
NORTHERN AFFAIRS
WHITNEY BLOCK
QUEEN'S PARK
TORONTO, ONTARIO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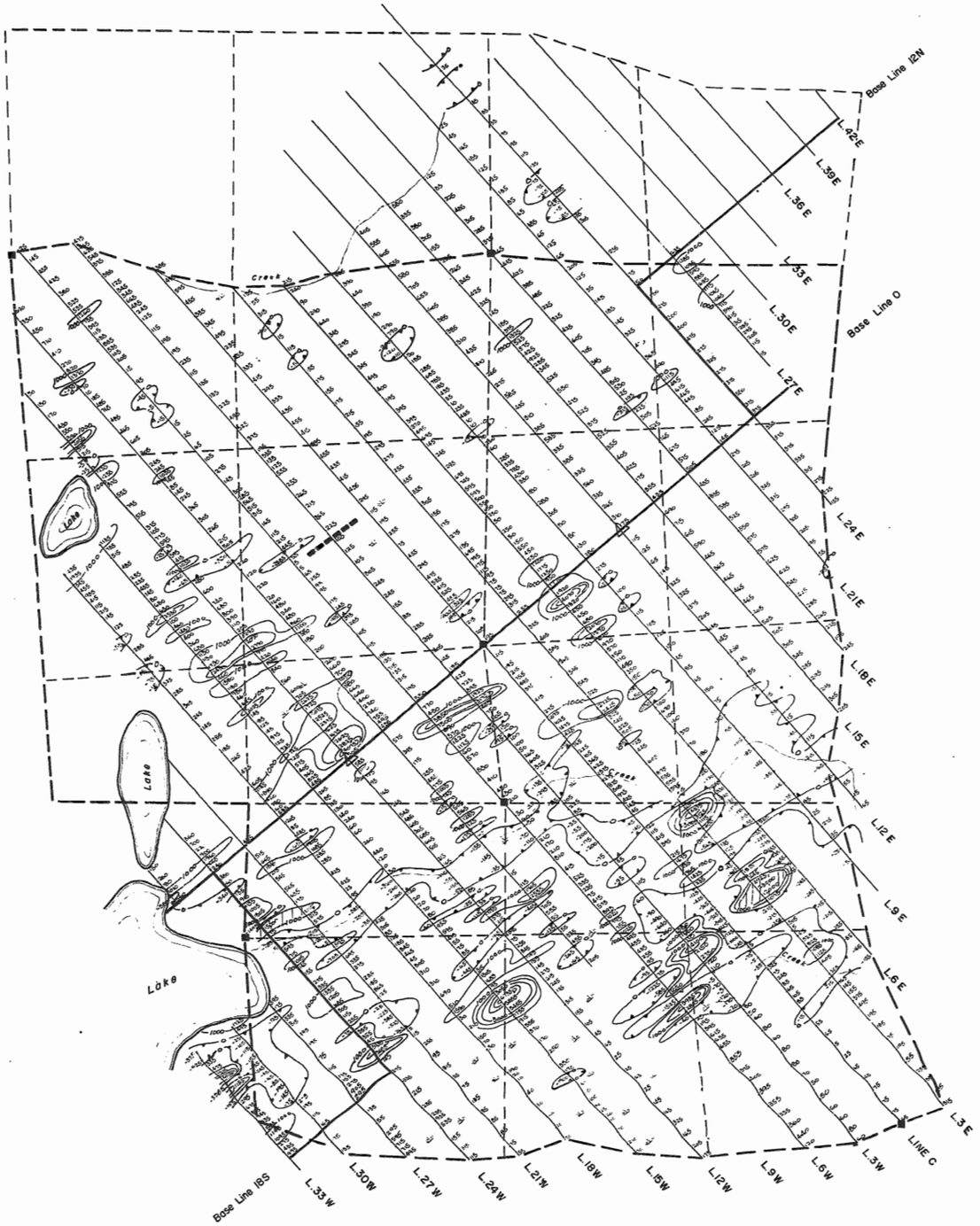
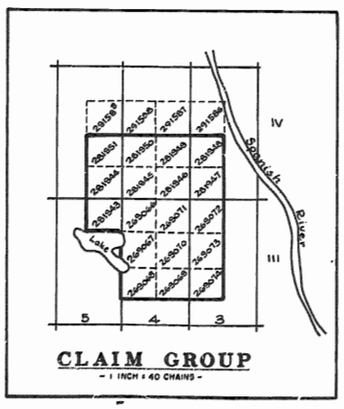
M. 1168
Tp. 115 M. 1201
MONCRIEFF Tp. M. 869
Copper L
Kennedy L
Marion
Cr
Spanish
Mogo R
Bluewater Lake
Loon L
Marguerite L
Duck L
River
Spanish L
TOWNSHIP OF
DATE OF ISSUE July 22/71
CRAIG
Almore Explorations Limited.
DISTRICT OF
SUDBURY
SUDBURY
MINING DIVISION
SCALE : 1 INCH — 40 CHAINS (1/2 MILE)
DR. BK.
DATE June '72
PLAN NO. M. 736




**CLAIM GROUP**

- 1 INCH = 40 CHAINS -

## LEGEND

- MEASUREMENT STATIONS ALONG PICKET LINES
- +100 / -100 RELATIVE VALUES OF THE VERTICAL COMPONENT FORCE OF THE EARTH'S MAGNETIC FIELD (In Gammas)
- MAGNETIC CONTOURS
- △ BASE STATION
- ELECTRICAL CONDUCTOR

# MAGNETOMETER SURVEY

- for -

## ALMORE EXPLORATIONS LIMITED

CRAIG TOWNSHIP, ONTARIO

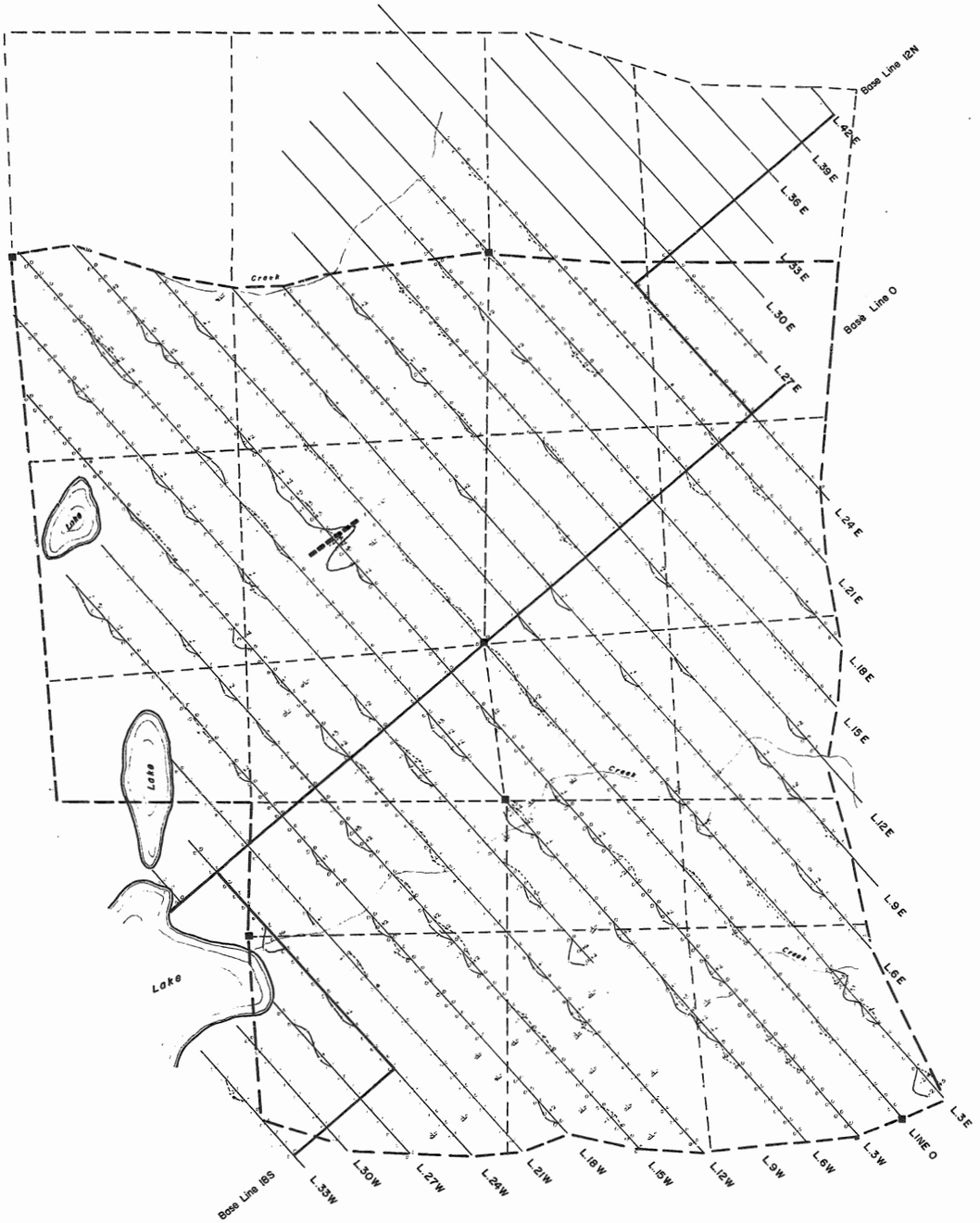
SCALE 0 400 800 1200 FEET

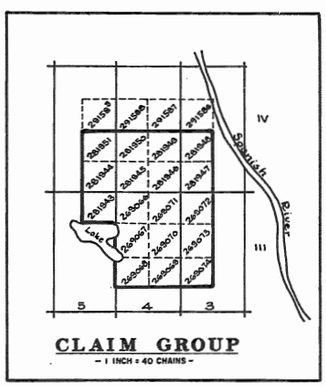
July 1971

2.515

GHD Consultants Limited

CRAIG-0012-A1, #1




**CLAIM GROUP**

– 1 INCH = 40 CHAINS –

## LEGEND

- MEASUREMENT STATIONS ALONG PICKET LINES
- ELECTROMAGNETIC READINGS - In Phase Component (%)
- ELECTROMAGNETIC READINGS - Out of Phase Component (%)
- PROFILE - In Phase Component (Scale 1" = 20 %)
- PROFILE - Out of Phase Component (Scale 1" = 20%)
- COIL SEPARATION - 300 Feet
- INSTRUMENT - GEONICS EM-17
- ELECTRICAL CONDUCTOR

HORIZONTAL LOOP

# ELECTROMAGNETIC SURVEY

- for -

## ALMORE EXPLORATIONS LIMITED

CRAIG TOWNSHIP, ONTARIO

SCALE 0 400 800 1200 FEET

July 1971

2.515

GHD Consultants Limited

CRAIG-0012-A1,#2

T Shaw