

2,711  
W. N. INGHAM, PH.D.  
Consulting Geologist



42A03NE0038 2.711 MCARTHUR

010

RECEIVED

DEC 10 1971

PROJECTS  
SECTION

The President and Directors,  
Abitibi Asbestos Mining Company Limited,  
153 Perreault Avenue,  
Val d'Or, Quebec.

PRELIMINARY REPORT

MAGNETOMETER SURVEY

Duval Option Six Claims  
McArthur Township,  
Timmins Area, Ontario.

INTRODUCTION

This report describes a ground magnetometer survey carried out in May and June, 1971 on your group of six optioned claims in McArthur township, Timmins area, Ontario. Strong magnetic responses have outlined in detail several bodies of ultrabasic rock, the presence of which was previously known from scattered outcrops. The areas of high magnetic intensity outlined are serpentized peridotite, one of which is asbestos-bearing.

The six claims are near the centre of the south half of McArthur township, Porcupine Mining Division. Automobile roads extend south from Timmins, which, at a distance of 20 miles at the east side of Triple Lake, are two miles west of the property. The unpatented claims covered by the survey are registered with the Ontario Department of Mines under the numbers as follows:

319995 - 96 - 97 - 98 - 99 and 320000

### SURVEY DATA

An east - west base line was established centrally across the group of claims. Picket lines were cut and chained north and south from the base line at 200 foot intervals. A McPhar Fluxgate, M-700, magnetometer was used to take magnetic readings along the picket lines at not more than 100 foot intervals. This instrument has a sensitivity of 30 gammas per scale division. To complete the survey, 7.5 miles of lines were cut and chained, and 757 magnetometer readings were recorded. These are plotted and contoured on a plan at one inch to 100 feet, accompanying this report. The lines were cut by J. Duval and T. Cere, and the instrument was operated by C. Grantzidis, all residents of Val d'Or, Quebec. Field work was done during May 12 to June 8, 1971.

### SURVEY RESULTS


The survey reflects a very wide range in the magnetic intensity of the rocks underlying the property, the recorded values ranging from a low of minus 1,500 gammas to a high of 24,000 gammas.

An area of low magnetic readings, less than 500 gammas, occurs east - west across most of the southern half of the property. These could represent siliceous sediments or siliceous intrusive rocks, and a branch of this material appears to extend north-westerly across claim 320000, north of the base line.

A complex zone of abruptly changing magnetic intensity occurs in a roughly east - west direction across the central part of the claim group. The mainly high magnetic readings obtained coupled with outcrops indicate the zone is comprised of several plugs and sills of peridotite. One of these is a rounded body in the southwest part of claim 319995. It has an average magnetic response of 6000 gammas, and a peak value of 24,000 gammas. The latter reading could be caused by a small mass of magnetite iron formation included in the intrusive peridotite. Except for this isolated reading, all other highly magnetic areas, with a range from 2000 up to 10,000 gammas, are inferred to represent ultrabasic intrusive rocks such as peridotite, diorite, pyroxinite or gabbro. A second, more sill-like body of probably peridotite lies south of the above, and extends west across claim 319998.

The magnetic picture revealed more or less along the western half of the base line is diagnostic of a group of four peridotite bodies. These are elongated plugs or sills forming part of a composite mass with intervening zones of weakly magnetic rocks. One of these is known to be asbestos-bearing. It occurs along the base line from line 0 to line 777 west. The other three inferred peridotite masses should be closely prospected for possible areas of chrysolite development. It is noteworthy that this known asbestos mineralization is not necessarily associated with the highest magnetic values (magnetite content) of the serpentized peridotite body in which it occurs.

Submitted by

  
W. N. Ingham, Ph.D.,  
Consulting Geologist.


Val d'Or, Quebec.

June 15, 1971

W. N. INGHAM, Ph.D.  
Consulting Geologist

CERTIFICATE

1. I am Walter Norman Ingham, with office at 207 Dennison Blvd., Val d'Or, Quebec.
2. I graduated with the Degree of B. A. in Geology from McMaster University in 1938; I have the Degree M. A. in Geology from the University of Toronto, 1941; and I received the Degree Ph.D. in Economic Geology from the University of Toronto, 1944.
3. I am a member of the Canadian Institute of Mining and Metallurgy since 1947; and a Charter Fellow of the Geological Association of Canada.
4. I have supervised and interpreted a great many magnetometer surveys on various mining properties in Quebec and Ontario during the past 15 years.



W. N. INGHAM, Ph. D.,  
Consulting Geologist.

Val d'Or, Quebec,  
June 15, 1971.



SUBMISSION OF GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL SURVEYS  
AS ASSESSMENT WORK

In order to simplify the filing of geological, geochemical and ground geophysical surveys for assessment work, the Minister has approved the following procedure under Section 84 (8a) of the Ontario Mining Act. This special provision does not apply to airborne geophysical surveys.

If, in the opinion of the Minister, a ground geophysical survey meets the requirements prescribed for such a survey, including:

- (a) substantial and systematic coverage of each claim
- (b) line spacing not exceeding 400 foot intervals
- (c) stations not exceeding 100 foot intervals or
- (d) the average number of readings per claim not less than 40 readings

it will qualify for a credit of 40 assessment work days for each claim so covered. It will not be necessary for the applicant to furnish any data or breakdown concerning the persons employed in the survey except for the names and addresses of those in charge of the various phases (linecutting contractor, etc.). It will be assumed that the required number of man days were spent in producing the survey to qualify for the specified credit.

Each additional ground geophysical survey using the same grid system and otherwise meeting these requirements will qualify for an assessment work credit of 20 days.

A geological survey using the same grid system, and meeting the requirements for submission of geological surveys for maximum credits will qualify for an assessment work credit of 20 days. If line cutting has not previously been reported with any other survey and is reported in conjunction with the geological survey a credit of 40 days per claim will be allowed for the survey.

Similarly, a geochemical survey using the same grid system with the average number of collected samples per claim being not less than 40 samples, and meeting the requirements for the submission of geochemical surveys for maximum credits, will qualify for an assessment work credit of 20 days. If line cutting has not previously been reported with any other survey and is reported in conjunction with the geochemical survey a credit of 40 days per claim will be allowed for the survey.

Credits for partial coverage or for surveys not meeting requirements for full credit will be granted on a pro-rata basis.

If the credits are reduced for any reason, a fifteen day Notice of Intent will be issued. During this period, the applicant may apply to the Mining Commissioner for relief if his claims are jeopardized for lack of work or, if he wishes, may file with the Department, normal assessment work breakdowns listing the names of the employees and the dates of work. The survey would then be re-assessed to determine if higher credits may be allowed under the provisions of subsections 8 and 9 of section 84 of the Mining Act.

If new breakdowns are not submitted, the Performance and Coverage credits are confirmed to the Mining Recorder at the end of the fifteen days.

W.S.8

MCARTHUR TWP

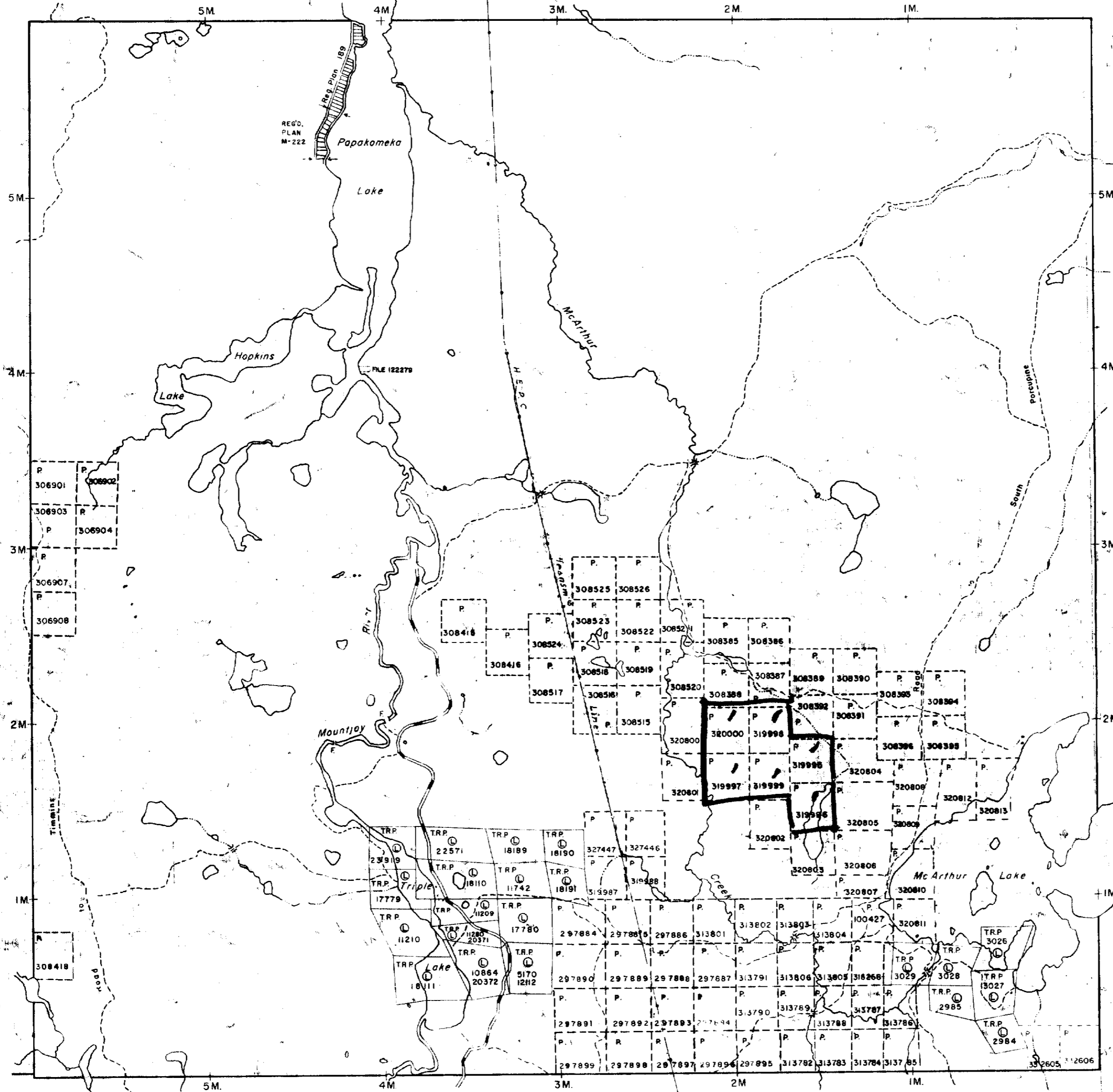
W.S.8

W.S.8

MCARTHUR TWP

W.S.8

Adams Twp. - M.261



Bartlett Twp. - M.262








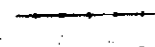

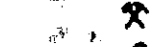





THE TOWNSHIP OF

**McARTHUR**  
*Calvin Map.*  
DISTRICT OF  
TIMISKAMING

PORCUPINE  
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 MUSKIE 
- MINES 
- CANCELLED 

NOTES

This township lies within the  
**TEMAGAMI PROVINCIAL FOREST**  
 400' Surface Rights Reservation around  
 all lakes and rivers.

2.711

DATE OF ISSUE

DEC 17 1971

ONT. DEPT. OF MINES  
AND NORTHERN AFFAIRS

PLAN NO. - **M.298**

**ONTARIO**  
**DEPARTMENT OF MINES**  
**AND NORTHERN AFFAIRS**



42A83NE0838 2.711 MCARTHUR

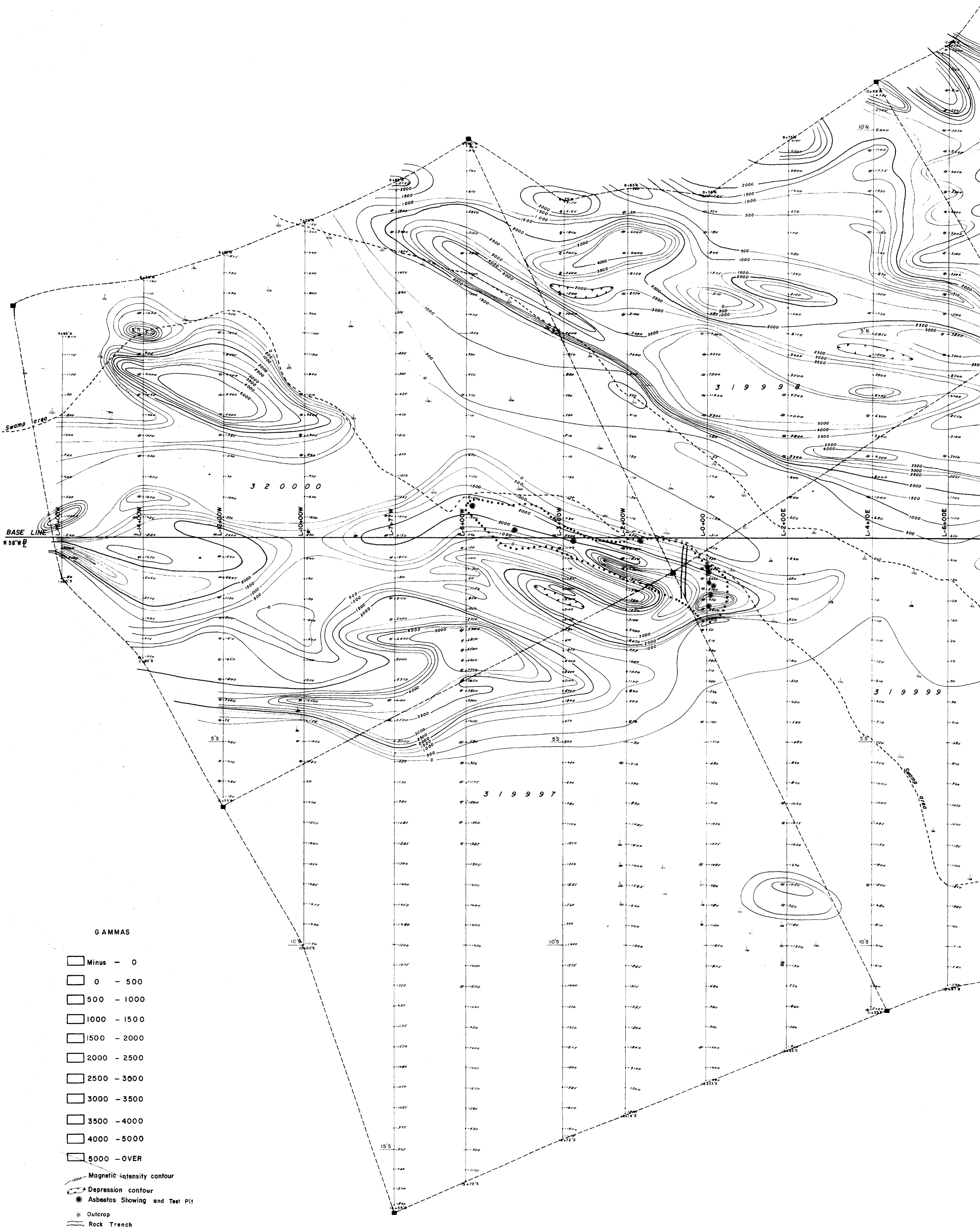
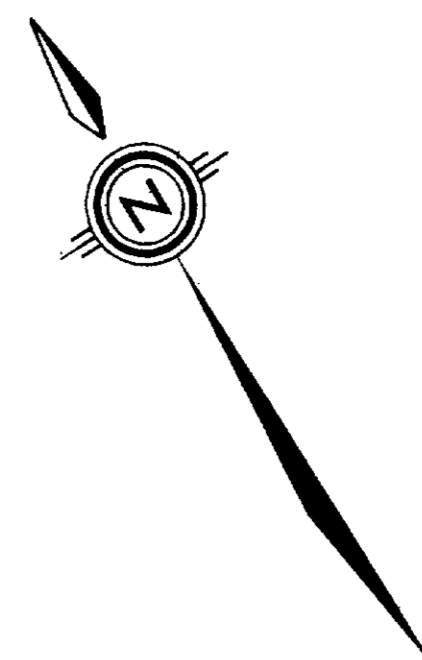
# ABITIBI ASBESTOS MINING CO. LTD.

## MAGNETOMETER SURVEY

McARTHUR TOWNSHIP

OPTION (6 CLAIMS)  
TIMMINS MINING DISTRICT

ONTARIO



GAMMAS

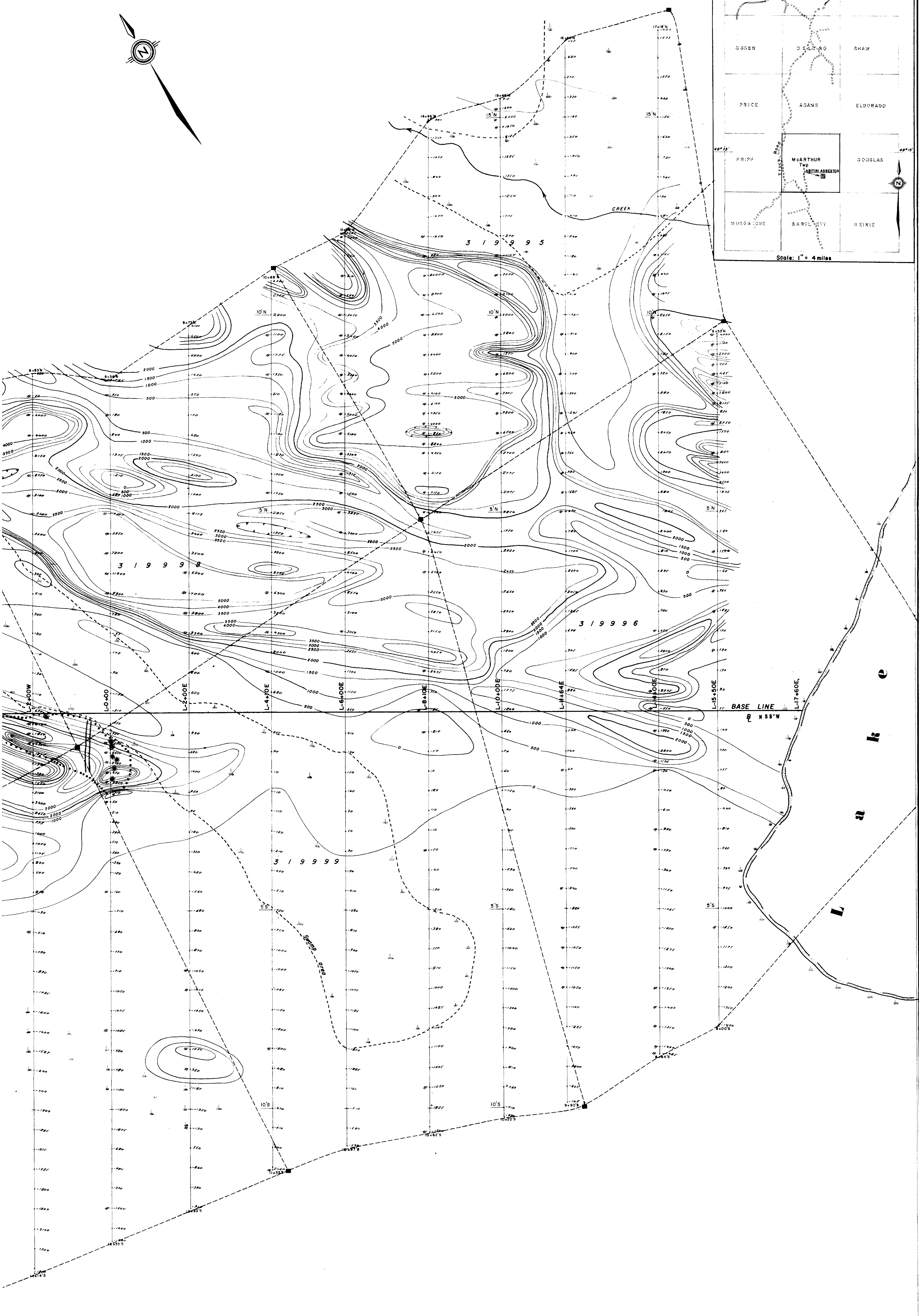
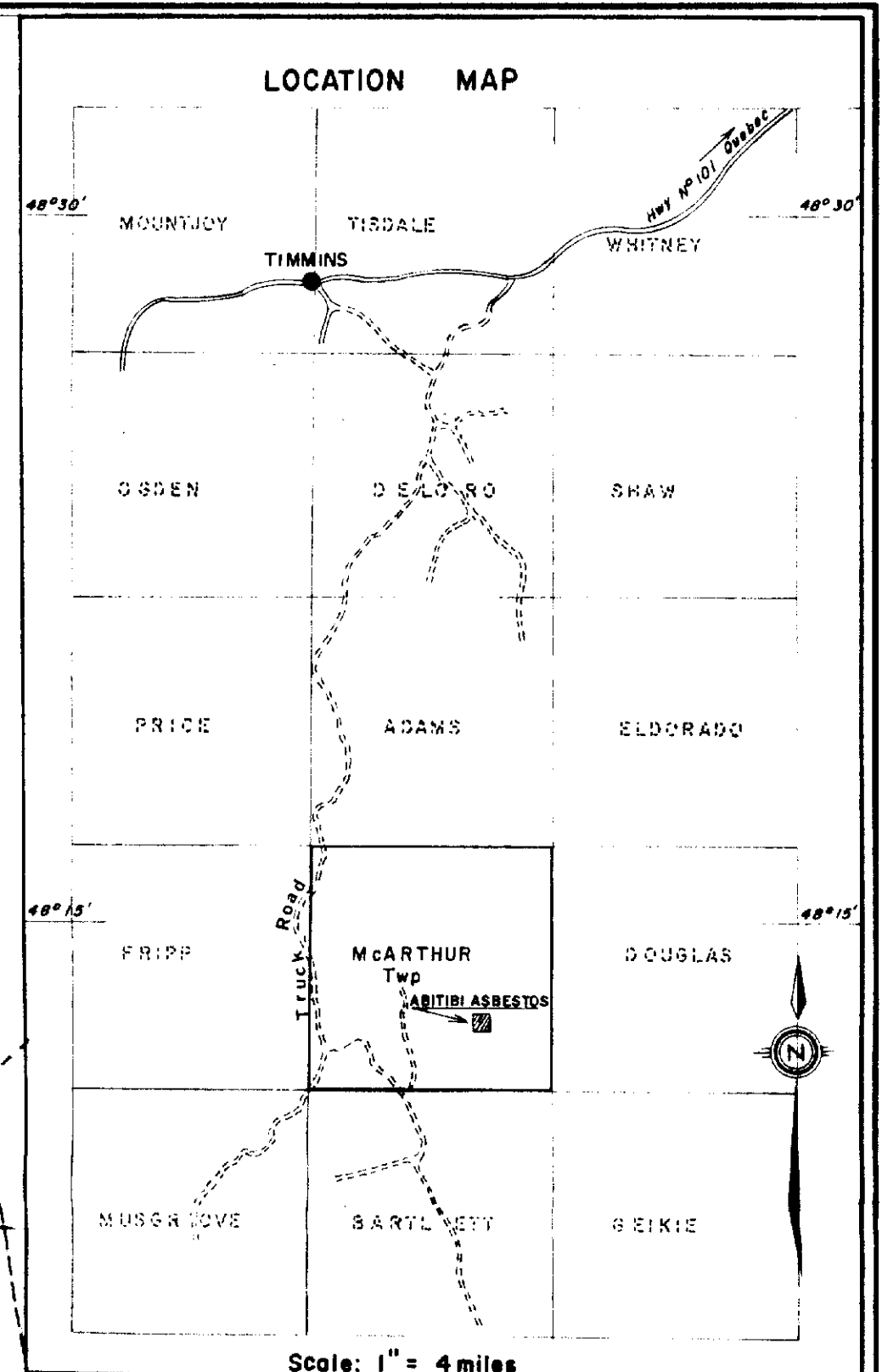
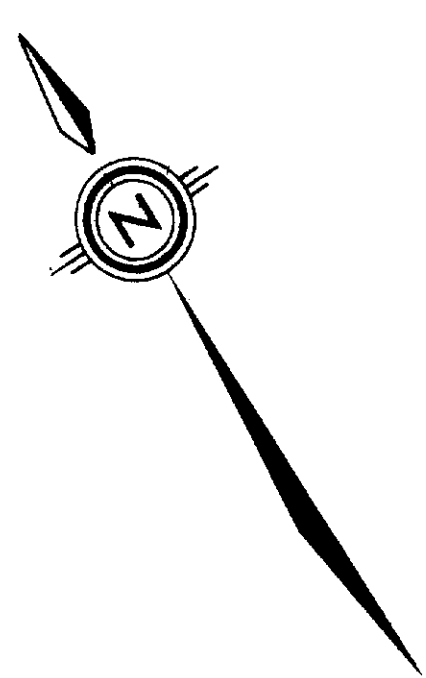
- Minus - 0
- 0 - 500
- 500 - 1000
- 1000 - 1500
- 1500 - 2000
- 2000 - 2500
- 2500 - 3000
- 3000 - 3500
- 3500 - 4000
- 4000 - 5000
- 5000 - OVER

- Magnetic intensity contour
- - - Depression contour
- Asbestos Showing and Test Pit
- ✱ Outcrop
- Rock Trench

INSTRUMENT USED: McPHAR FLUXGATE M-700







ORIGINAL SCALE 0 100 200 300 400 FEET  
(1" = 100')

INTERPRETATION BY: W. N. INGHAM, PH.D. Geologist  
FIELD SURVEY & DRAFTING BY: C. K. GRANTZIDIS

JUNE 1971

*W. N. Ingham*  
June 15, 1971