



52J02SW8645 2.1037 FOURBAY LAKE

2.1037

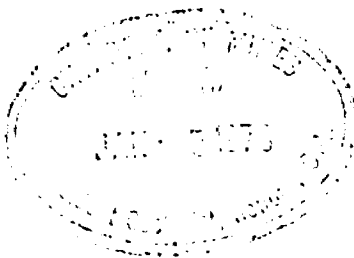
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OCT 11 1972

PROJECTS  
SECTION

010

A REPORT ON THE  
GENERAL GEOLOGY  
AS RELATED TO CERTAIN ANOMALIES  
ON THE PROPERTY OF  
SILVERSIDE MINES LIMITED  
STURGEON LAKE AREA, ONTARIO



Thunder Bay, Ontario  
August 10, 1971

M.W. Bartley, P.Eng.

## INTRODUCTION

Silversides Mines Limited commissioned M.W. Bartley & Associates Ltd. to map the exposed rock in the vicinity of magnetic and electromagnetic anomalies previously outlined on a group of mining claims at Sturgeon Lake, Ontario.

The geological mapping was done by D.C. Martin, geologist, during July and August, 1971

## CONCLUSIONS

Outcrop is not prevalent but exposures indicate that the claims are underlain by mafic and felsic volcanics.

Electromagnetic conductors correlate with shear zones containing varying quantities of pyrite and pyrrhotite.

The sources for the conductors might be determined by further detailed geophysical exploration, but a limited program of diamond drilling would produce more definitive results.

## RECOMMENDATIONS

Initially three diamond drill holes should be located and drilled to test the sources of conductors "A" and "B". The holes should be located on line 44 at 1350S, on line 32 at 900S, and on line 20 at 1350S. The three holes should be drilled at azimuths of  $360^{\circ}$  and declinations of  $45^{\circ}$ . Each hole should be approximately 400 feet long depending on material encountered.

If favourable geological conditions are encountered, the ground electromagnetic survey results should be reassessed to determine whether further geophysical work is required before further diamond drilling is undertaken.

#### PROPERTY AND LOCATION

The Silversides Mines Limited property consists of 31 claims registered as:

P.A. 244301 to P.A. 244305 inclusive

P.A. 247201 to P.A. 247208 inclusive

P.A. 244213 to P.A. 247230 inclusive

The claim group is situated immediately west of King Bay, Sturgeon Lake, and approximately five miles east of Highway 599 from Ignace to Savant. Easiest access is by float or ski-equipped aircraft from Ignace or Savant.

#### PREVIOUS EXPLORATION

A combined airborne magnetic and electromagnetic survey was carried out over 28 of the claims by Scintrex Limited during March, 1970.

Follow-up ground magnetic and electromagnetic surveys were done by Prospecting Geophysics Limited on 31 claims during March, 1971. These surveys outlined two areas containing conductive zones, all of which trend in a general east-west direction. The more significant area is in the east-central part of the property where three essentially parallel zones,

"A", "B" and "C", have been outlined. Three weaker conductors are located to the west. Details on these conductors are contained in the report by Prospecting Geophysics Limited dated March 30, 1971.

#### GEOLOGY

Outcrops are sparse but sufficient to indicate the general constitution of the bedrock.

The majority of the exposures are altered volcanics of mafic composition. Included are fine-grained, chloritized and carbonatized pillow lavas.

Minor occurrences of altered felsic volcanics appear to be stratigraphically concordant with the basic phases. One horizon, immediately north of the tie-line, is porphyritic and may represent an acid intrusive.

Carbonate and sulphides, principally pyrite, are ubiquitous but not plentiful.

#### GEOLOGY RELATIVE TO THE CONDUCTORS

The detailed geology as it can be ascertained from outcrops close to the electromagnetic conductors appears to be fairly uniform.

Zone "A" - The east end of the conductor on line 32W and 800 feet south of the baseline coincides with some trenches on an east-west trending shear in basalt and felsite. Minor amounts of pyrite are disseminated throughout the shear. The western portion of the conductor is bounded by massive mafic rock.

Zone "B" - On line 20W and 1300 feet south of the baseline the electromagnetic conductor correlates with a seven foot wide shear in basalt which can be traced for approximately 60 feet. This shear contains a heavy gossan but sulphide mineralization is not prevalent. The west end of the conductor is beneath overburden but nearby outcrops are massive basaltic rock.

There is a possibility that zone "B" unites with the western portion of zone "A".

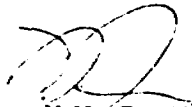
Zone "C" - This electromagnetic conductor on line 34W at 1900 feet south of the baseline and on line 36W at 1800 feet south of the baseline coincides with a shear zone varying from 6 to 11 feet in width in basalt. The shear at these locations contains narrow stringers of pyrite. The eastward trace of the conductor, on lines 28W and 24W, lies in a narrow, wet area where small outcrops of mafic and felsic rock were noted.

Zones "D" and "E" - These zones are beneath Leith Lake or beneath the boggy areas surrounding the lake.

Zone "F" - The electromagnetic conductor here is short and weak but not considered to be of significance.

Respectfully submitted,

Thunder Bay, Ontario.  
August 10, 1971.

  
M.W. Bartley, P. Eng.  
President.



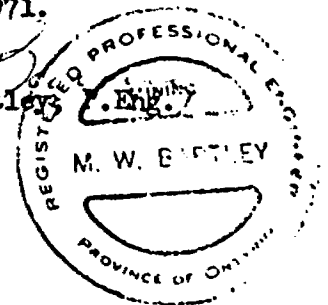
C E R T I F I C A T E

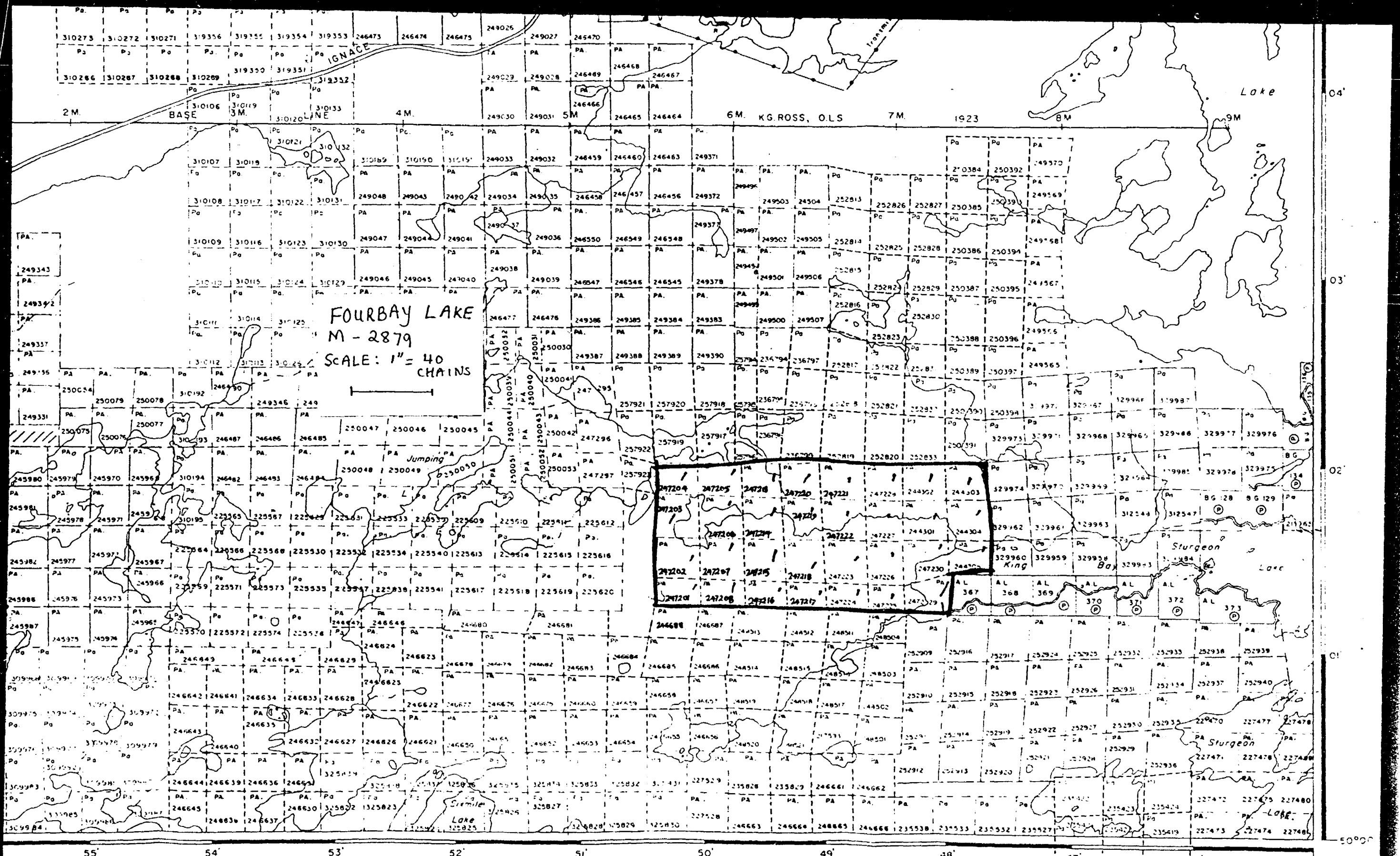
I, M. W. Bartley, of the City of Thunder Bay, in the Province of Ontario, do hereby certify that:

1. I am a geologist with an office at 202 Toronto-Dominion Bank Building, Thunder Bay, Ontario.
2. I am a member of the Association of Professional Engineers of the Province of Ontario.
3. I am a graduate of the University of Manitoba with a degree of Bachelor of Science in the year 1934, and a graduate of the University of Toronto with a degree of Doctor of Philosophy in the year 1940.  
I have been practising my profession since these dates.
4. I hold no interest whatsoever, directly or indirectly, in the securities or property of Silversides Mines Limited, nor do I expect to receive any.
5. The geological mapping was performed by D. C. Martin, B.Sc., under my supervision during July and August, 1971.

DATED at Thunder Bay, Ontario, this 10th day of August, 1971.

*M. W. Bartley*  
M. W. Bartley





FOURBAY LAKE  
M - 2879  
SCALE: 1" = 40  
CHAINS

Sixmile Lake Area - M.2877

90°45'



52J02SW8645 2.1037 FOURBAY LAKE

900

2.1037

PERFORMANCE & COVERAGE CREDITS

ASSESSMENT WORK DETAILS

MINING CLAIMS TRAVERSAL

List numerically

Township or Area Sturgeon Lake Area

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

Chief Line Cutter \_\_\_\_\_  
or Contractor \_\_\_\_\_ Name \_\_\_\_\_

Address \_\_\_\_\_

Party Chief D. C. Martin Name \_\_\_\_\_

202 Toronto-Dominion Bank Bldg., Thunder Bay, Ontario Address \_\_\_\_\_

Consultant M.W. Bartley & Associates Ltd. Name \_\_\_\_\_

202 Toronto-Dominion Bank Bldg., Thunder Bay, Ontario Address \_\_\_\_\_

COVERING DATES

Line Cutting \_\_\_\_\_

Field July 5 - July 30, 1971  
Instrument work, geological mapping, sampling etc.

Office August 1 - August 10, 1971

INSTRUMENT DATA

Make, Model and Type \_\_\_\_\_

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 \_\_\_\_\_

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 October 6, 1972

SIGNED \_\_\_\_\_

P.A. 244301 - P.A. 244305

P.A. 247201 - P.A. 247208

P.A. 247213 - P.A. 247228

P.A. 247230

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OCT. 11 1972

PROJECTS SECTION

Pa 247201 1/2 cover

247208

247216 10 days

247217

247224 each

247225

\* Others 20 days each

TOTAL 30

Send in duplicate to:

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

\* Qualifications: -  
in this file.



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 or Contractor \_\_\_\_\_  
Name  
 \_\_\_\_\_  
Address

Party Chief D. C. Martin  
Name  
202 Toronto-Dominion Bank Bldg., Thunder Bay, Ontario  
Address

Consultant M.W. Bartley & Associates Ltd.  
Name  
202 Toronto-Dominion Bank Bldg., Thunder Bay, Ontario  
Address

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Number of Readings Within Claim Group \_\_\_\_\_

Number of Miles of Line cut Within Claim Group \_\_\_\_\_

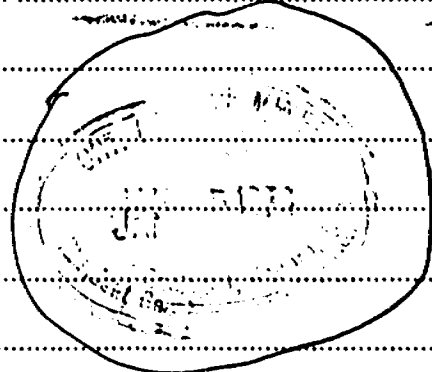
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Geological Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Geophysical Survey	<input type="checkbox"/>	<input type="checkbox"/>	Show Check ✓
Geochemical Survey	<input type="checkbox"/>	<input type="checkbox"/>	

DATE October 6, 1972  
 SIGNED [Signature]

P.A.A. 244301 - P.A.A. 244305  
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TOTAL 30

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 TORONTO, ONTARIO

Performance and coverage credits do not apply to airborne surveys

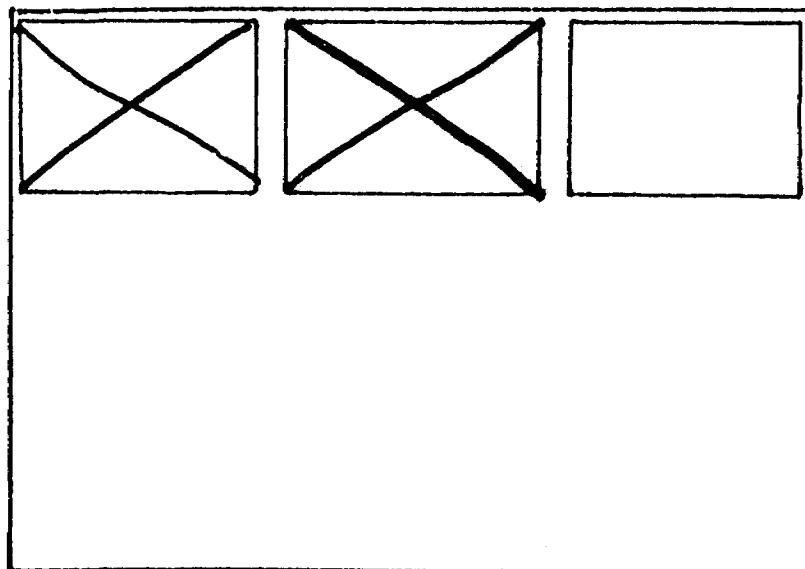


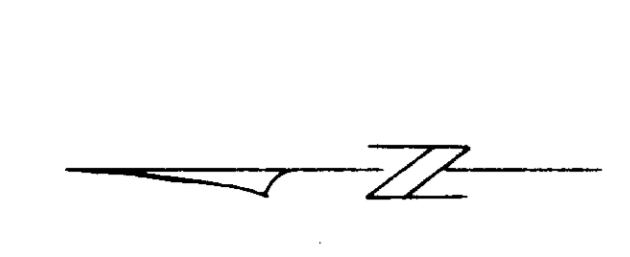
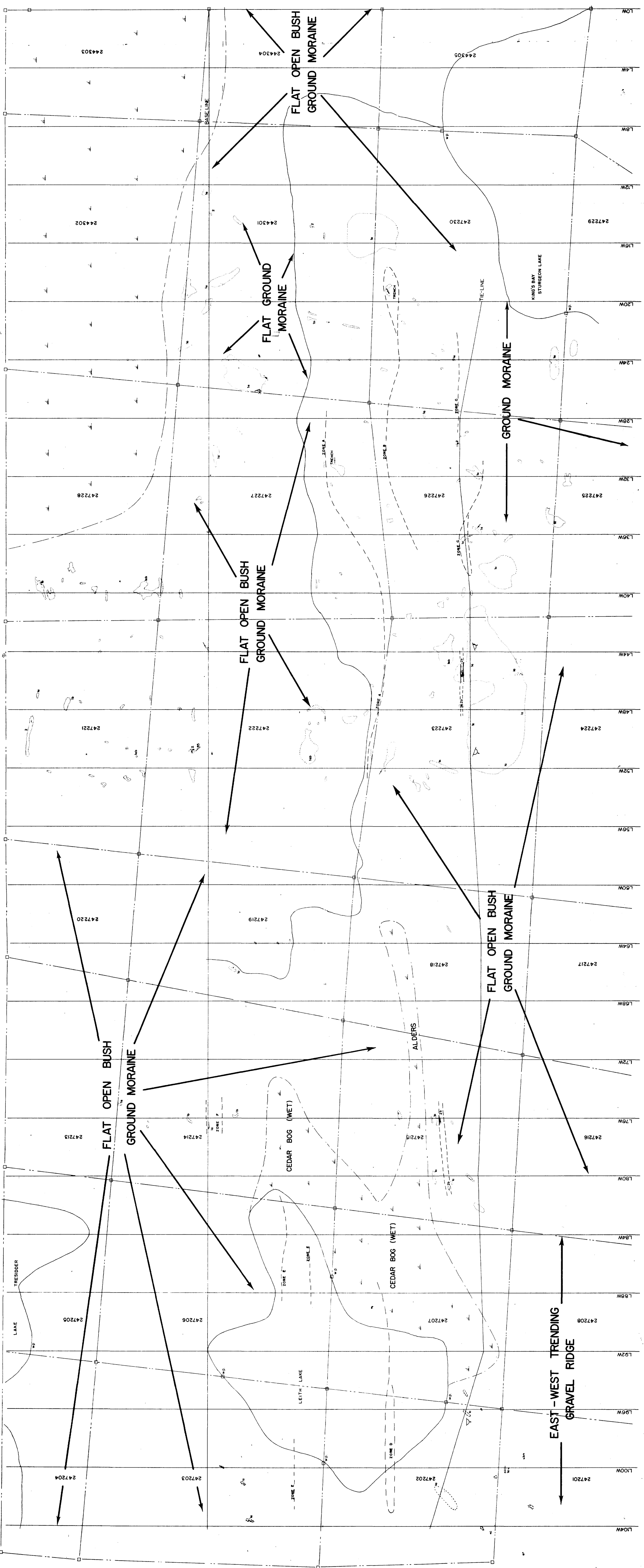
SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

52J/02 SW-0035-A1#1

LOCATED IN THE MAP  
CHANNEL IN THE  
FOLLOWING SEQUENCE

(X)





**MAP SYMBOLS**

- OUTCROP
- FROM GEOLOGIC CONTACT
- ASSUMED GEOLOGIC CONTACT
- FILLING, LOOK TO TOP
- PICKET LINE
- CLAW LINE
- CLAW CORNER
- SWAMP

**GEOLOGIC LEGEND**

- 19 FELSITE PORPHYRY
- 20 FELSITE
- 21 MASALT (FOLLOW LAKE)
- 22 COCKRITE
- 23 MASALT

*52J/02 SW-0035-A1 #1*

REVISIONS	
NO.	DATE
1	
2	

DRAWN BY: D.C. MARTIN  
 DATE: JAN 25, 1971  
 SCALE: 1" = 100' (HORIZONTAL)  
 1" = 100' (VERTICAL)

52J/02 SW-0035-A1 #1

52J/02 SW-0035-A1 #1

