

2.1345 RECEIVED

NOV 6 1973

PROJECTS  
SECTION



42A15NW8627 2.1345 JAMIESON

010

GEOPHYSICAL SURVEYS, HANNA TOWNSHIP

CLAIM GROUP 72

TIMMINS AREA

PORCUPINE MINING DIVISION, ONTARIO

B. LTD. A 14672

Toronto, Ontario  
November 2, 1973

This report may not be reproduced, in whole or in part, without the written permission of Derry, Michener & Booth.

## INTRODUCTION

Work is submitted for claims P-362940, P-362943 and P-262944 of claim group 72, Hanna Township, Ontario. These claims are held "in trust" by Duncan R. Derry Limited, 401 Bay Street, Toronto, Ontario.

Ground geophysical surveys were carried out during January and February of 1973 over areas of interest as indicated by a Turair airborne survey flown in 1972 by Seigel Associates on behalf of the Deepex Joint Venture. Scintrex Surveys Ltd. conducted the ground magnetic, electromagnetic and gravimetric surveys.

## LOCATION AND ACCESS (See Location Map attached)

The claims are located in the west half of lot 4 and the east half of lot 5, Concession II, Hanna Township, Porcupine Mining Division, approximately 10 miles southeast of Cochrane.

The property may be reached by road from Cochrane (Hwy. 11) to a point near the north end of Warrick Lake, hence on foot by bush trail for about one mile.

## GEOLOGY (Ref. ODM Map p.2205)

The area is believed to be largely underlain by undifferentiated metavolcanics of Early Precambrian age. Drilling by others, about 1/2 mile to the west, intersected gabbro and peridotite with some mafic to intermediate volcanics, metasediments and weak sulfide mineralization. Assumed faults trend southeast-northwest across the claims, and the western contact of an extensive felsic intrusive body occurs near the northeast corner of the claim group. There is no known outcrop on the claims.

## PREVIOUS WORK

In 1972, Turair airborne surveys were flown over claim group 72 by Seigel Associates on behalf of the Deepex Joint Venture. Cromarty Explorations, some years previously, carried out ground geophysics and diamond drilled five holes on claims located one-half mile due west of the Deepex claims. Minor sulphide mineralization and 160 vertical feet of overburden were reported in the drill hole.

## SURVEYS

A grid of 3 line miles was cut with line spacing at 400 foot intervals from a base line 1,600 feet long cut at N146°E. This grid was used for subsequent geophysical surveys.

The geophysical surveys were conducted by Scintrex Surveys Ltd. on behalf of the Deepex Joint Venture. A Scintrex MF-2 vertical intensity Fluxgate type magnetometer, a Scintrex CG-2 gravity meter and a Scintrex SE-71 three frequency Turam unit were used (refer to attached sheets "Instrument Specifications"). The Turam survey utilized a fixed source transmitter consisting of a horizontal 2,000 foot x 2,000 foot wire loop situated southwest of the base line, and two mobile receivers, each a wound wire coil, separated by 100 feet of cable.

Magnetometer and Turam readings were taken at 100 foot intervals along each grid line. Out of a total of 130 magnetic and 110 electromagnetic readings, 89 and 86 respectively, were taken within claims P-362940, P-362943 and P-362944. A base station at BL-0 was used after completion of each profile, to check diurnal variation.

On the basis of Turam and magnetometer results, a gravity survey was conducted over lines 12NW and 8NW. A total of 29 readings were taken at 100 foot intervals along the two lines; of these, 10 were within the boundaries of claim P-362940.

## RESULTS AND CONCLUSIONS

In a report by Scintrex Surveys Ltd. to Duncan R. Derry Limited, dated June 1973, the survey results are given as follows:

"The Turair conductor occurs on three lines with only one peak being sufficiently well defined to permit quantitative evaluation. This intercept (B 151) shows moderate conductivity-width and suggests that the current axis may be as deep as 350 feet subsurface. The zone is underlain by metavolcanics and three drill holes about 3/4 miles to the west by McIntyre Porcupine revealed sulphides with some Cu, Zn, Ag and Ni.

The groundgrid consisted of five lines turned off from a base line, the latter cut in a N146°E direction.

The Turam results show strong background distortions of 15% FSR and  $8^\circ\Delta$  phase in the SW part of the grid most likely reflecting conductive horizons within the overburden.

Two somewhat stronger bands (marked A1, A2, and B1, B2) are marked on plate 20E. Zone B1-B2: 32% FSR and  $16^\circ\Delta$  phase corresponds to conductivity-widths from 4-5 mhos. The depth to the current axis does not exceed 200'.

The conductors are conformable with magnetic lows and therefore, gravity traverses were suggested over a part of zone B1-B2.

The magnetic results show a moderate relief of 200 gammas with a general E-W strike. The magnetic gradients suggest depths of 200 feet and over.

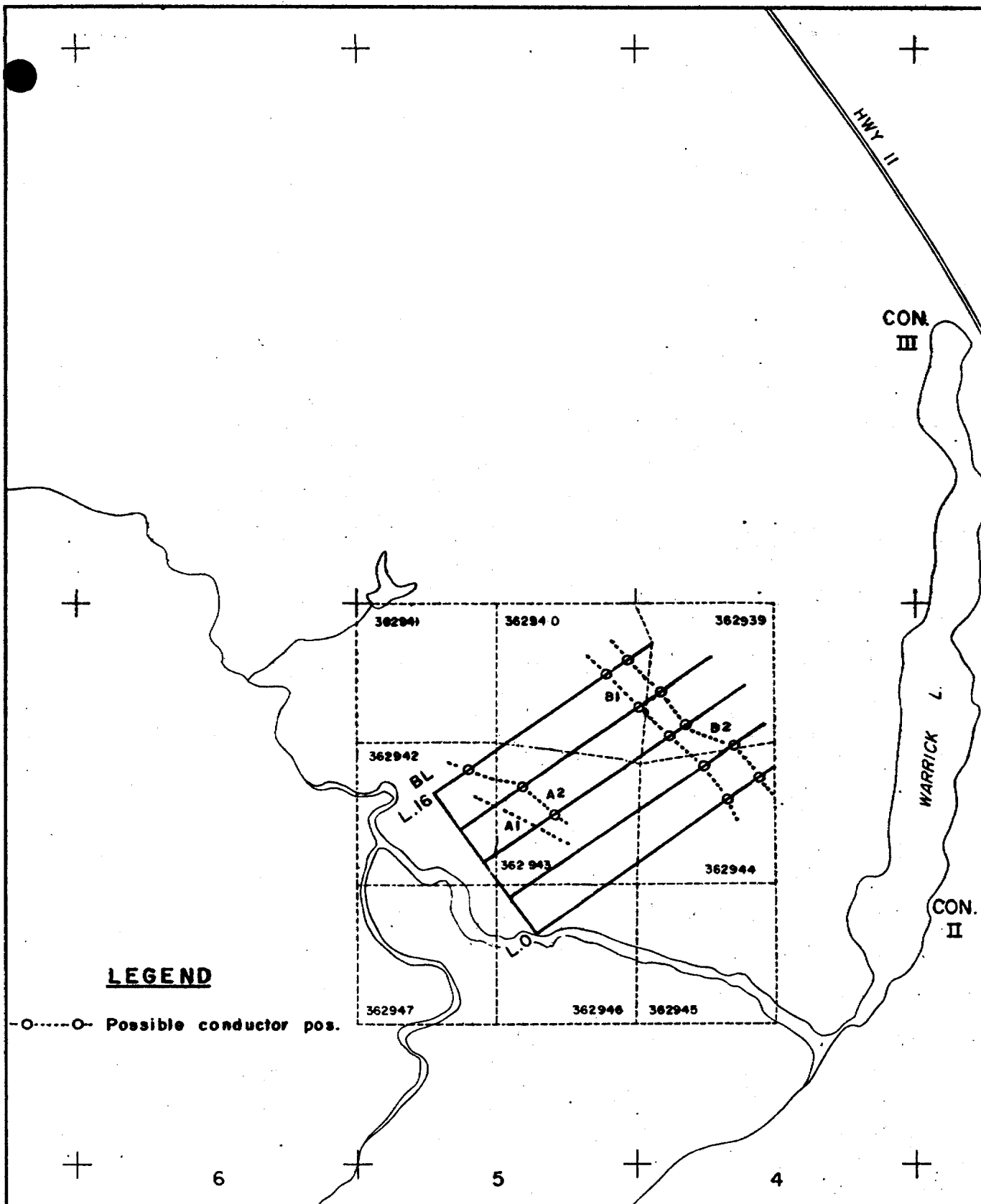
The gravity results show a gradient to the NE of approximately .2 mgal/100 feet. Superimposed on this are lows of .7 and .8 mgals coinciding with the conductors.

It is therefore suggested that the geophysical picture reflects a basement trough of 50-60 feet depth filled with conductive clay.

Oval E Leigh

O. E. Leigh

Toronto, Ontario  
October 25, 1973



**LEGEND**

-O-----O- Possible conductor pos.

**DEEPEX PROJECT - GROUND FOLLOW UP**

GRID No. 72, HANNA TOWNSHIP, TIMMINS AREA, ONTARIO

**LOCATION MAP**

SCALE : 1" = 1320'



42A15NW8627 2.1345 JAMIESON

020

GEOPHYSICAL SURVEYS AND DIAMOND DRILLING

HANNA TOWNSHIP

CLAIM GROUP 74

TIMMINS AREA

PORCUPINE MINING DIVISION, ONTARIO

C. LTD. A 14872

Toronto, Ontario  
November 2, 1973

This report may not be reproduced, in whole or in part, without the written permission of Derry, Michener & Booth.

## INTRODUCTION

Work is submitted for claims P-362950 and P-362953, Hanna Township, Ontario. These claims are held "in trust" by Duncan R. Derry Limited, 401 Bay Street, Toronto, Ontario.

Ground geophysical surveys were carried out during January and February of 1973 over areas of interest as indicated by a Turair airborne survey flown in 1972 by Seigel Associates on behalf of the Deepex Joint Venture. Scintrex Surveys Ltd. conducted the ground magnetic and electromagnetic surveys on behalf of the Deepex Joint Venture.

Diamond drilling was carried out in April, 1973 on claim P-362950 by Heath & Sherwood Drilling on behalf of the Deepex Joint Venture. One hole (DDH 74-1) was drilled to a depth of 702 feet.

## LOCATION AND ACCESS (See attached Location Map)

Claims P-362950 and P-362953 are located in the west half of lot 12, Concession I, Hanna Township, Porcupine Mining Division. The property lies approximately 9 miles due south of Cochrane, Ontario and may be reached by helicopter from there or by Hwy. 11 and some 4 miles on foot by bush trail.

## GEOLOGY (Ref. ODM Map P-698)

The property is underlain by mafic to felsic metavolcanics of Archean age. A diabase dyke trends north-south near the eastern boundary of the claims. Previous drilling by others immediately to the east of the property indicated a vertical depth of overburden of between 120 feet and 136 feet and some pyrite mineralization.

## PREVIOUS WORK

In 1972, Turair airborne surveys were flown over claim group 74 by Seigel Associates on behalf of the Deepex Joint Venture.

Baska Uranium, some years previously, carried out ground geophysical surveys followed by diamond drilling. Four holes, drilled to depths of between 251 feet and 660 feet intersected pyrite, minor chalcopyrite, pyrrhotite and graphite mineralization in acid tuffs.

## SURVEYS

A grid of 2 line miles was cut with line spacing at 400 foot intervals from a base line 1,600 feet long cut N134°E. Five lines were cut off to the southwest of the base line. This grid was used for subsequent geophysical surveys.

The geophysical surveys were conducted by Scintrex Surveys Ltd. on behalf of the Deepex Joint Venture. A Scintrex MF-2 vertical intensity Fluxgate type magnetometer and a Scintrex SE-71 three frequency Turam unit were used (refer to attached sheets "Instrument Specifications").

The Turam survey utilized a fixed source transmitter consisting of a horizontal 2,000 foot x 2,000 foot wire loop situated northeast of the base line, and two mobile receivers, each a wound wire coil, separated by 100 feet of cable.

Magnetometer and Turam readings were taken at 100 foot intervals along each grid line. Out of a total of 74 magnetic and 77 electromagnetic readings, 76 and 67, respectively, were taken within claims P-362950 and P-362953. A base station at BL-4S was used, after completion of each profile, to check diurnal variation.

## RESULTS AND CONCLUSIONS

In a report by Scintrex Surveys Ltd. to Duncan R. Derry Limited, dated June 1, 1973, the survey results are given as follows:

"The Turair zone occurs on four lines showing generally poor conductivity width. Depth to the current axis was established to be as great as 250 feet. The zone appears to be underlain by metavolcanics with graphite and sulphide mineralization.

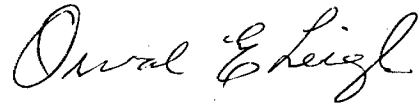
The Turam results show a NW-SE striking band of at least 3 parallel conductors. The strongest amplitudes are 60% FSR and 13 1/2°  $\Delta$  phase (line 12S). The centre part of the zone is 200 feet wide. The depth of the current axis may be 200 feet. The conductivity-width values are as high as 25 mhos. The zone is open to the NW and SE.

The magnetic results show an increase in relief as well as base level to the SE. This might be attributed to a possible diabase dike to the south of line 20S. There is, however, no apparent correlation with the conductor.



Drilling executed on a conductor approximately 1/4 mile SE of the present grid likely revealed some py, po, cp, and graphite.

One hole was drilled as a result of the present survey; this is DDH-74-1 on line 20S station 850'W to intersect bands A1 and A2 (see plate 21E). This hole intersected the basement at approximately 170' (vertical) depth. Several bands of graphitic tuff within a mainly dacitic environment were found. The overburden contained: clays, sands, gravels, and compact sandy clay."

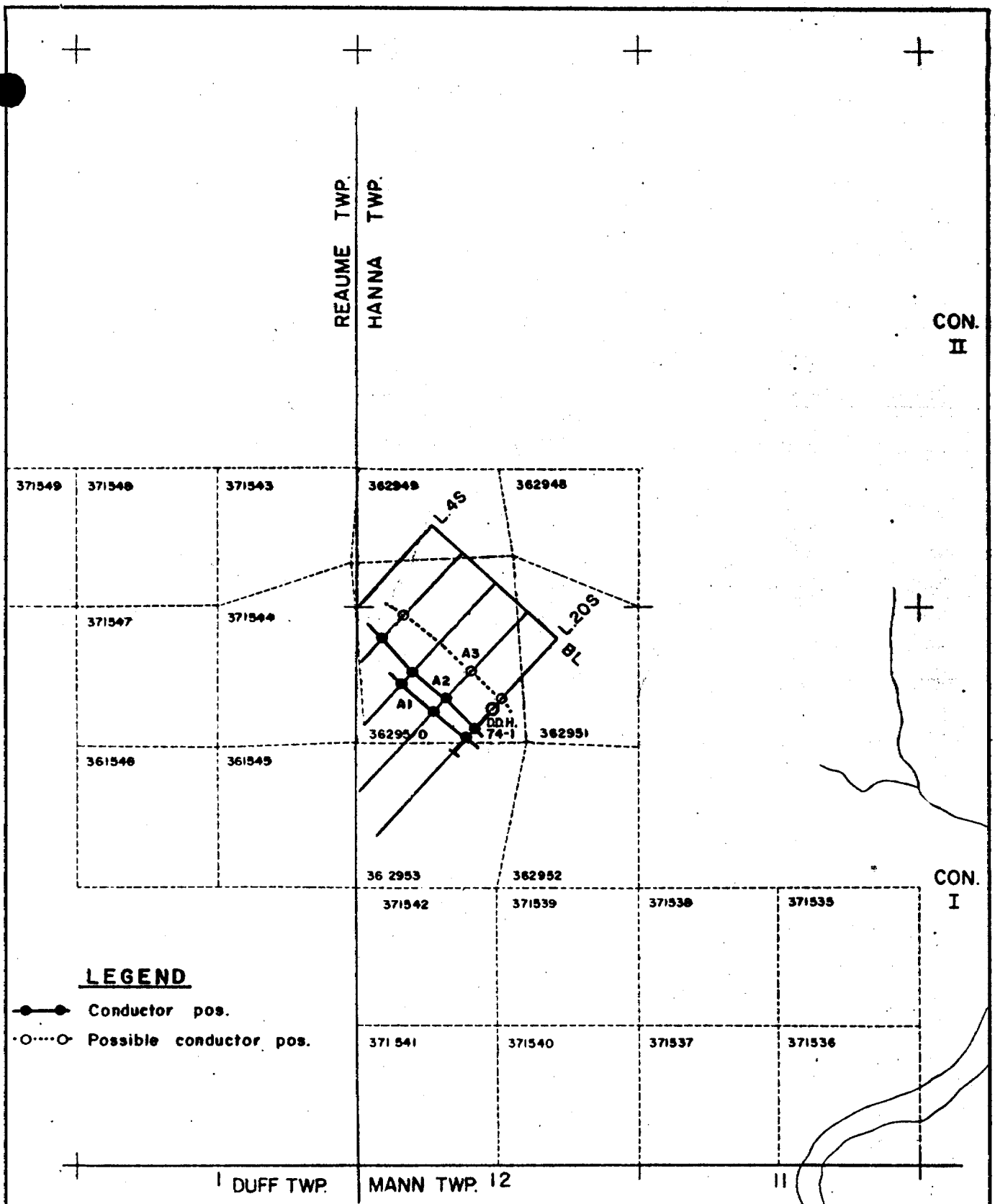


O. E. Leigh

Toronto, Ontario  
October 25, 1973

Maps and Attachments  
to Accompany the Report

- 1 Plan - Location Map
- 1 Plan - Turam EM and Magnetic Survey
- 1 Sheet - Additions to Legend
- 3 Sheets - Instrument Specifications
- 1 M.N.R. Technical Data Sheet
- 1 Plan - Drill Section and Geophysical Profiles
- 5 Sheets - Diamond Drill Record 74-1



**LEGEND**

- Conductor pos.
- Possible conductor pos.

**DEEPEX PROJECT - GROUND FOLLOW UP**

GRID No. 74, HANNA TOWNSHIP, TIMMINS AREA, ONTARIO

**LOCATION MAP**

SCALE : 1" = 1320'

**DERRY, MICHENER & BOOTH**  
**DIAMOND DRILL RECORD**

CO-ORDS: L20S  
8+50W  
AZIMUTH: Grid W (223°)

HOLE NO: 74-1


DIP: DRILL TYPE & SIZE: BBS-2 AQ LOCATION: Hanna Twp., Ontario  
Claim No. 362950  
ELEVATION: DIP TESTS: 250' - 47 1/2° (corrected) DATE STARTED: April 20, 1973  
450' - 49° DATE COMPLETED: April 29, 1973  
LENGTH: 702' 650' - 50° LOGGED BY: P. E. Piazza  
SECTION: DATE LOGGED: April 22-29, 1973  
PURPOSE: To test a 25 mho Turam anomaly. No associated magnetics.

FOOTAGE		DESCRIPTION	SAMPLE NO.	FOOTAGE		LENGTH							
from	to			from	to								
0'	226'	Overburden; 0-65' clay, 65-95' sand, 95-182' gravel with some boulders, 182-226' compact sandy clay and pebbles.											
226'	228'10"	No core.											
228'10"	244'10"	GRAPHITIC TUFF. Black, fine-grained, finely bedded, 70-80° C/A. Minor disseminated pyrite (<1/2%), py flattened along slip planes. Weakly graphitic to 239'.											
		228'10"-239' Tuff, less graphitic, medium-grained, well bedded, 70-80° C/A. 231'6"-231'8" contorted bedding 40-50° C/A.											
		239'-240' Dacite tuff, light grey, flow lines (?).											
		240'-244'10" Same as 228'10"-239', 1/8-1/4" calcite veinlets and 1/8" pyrite stringers parallel to bedding, <2% disseminated pyrite. Lower contact brecciated (Dacite fragments).											

FOOTAGE		DESCRIPTION	SAMPLE Nº:	FOOTAGE		LENGTH						
from	to			from	to							
244'10"	300'5"	DACITE TUFF. Medium-grained, light pale greenish-grey colour, faint lineations of darker minerals suggest bedding 70-80° C/A. Weakly calcareous. Gradually becomes finer-grained in lower 2'. Numerous quartz-calcite veinlets generally 15-20° C/A. Rare specks of pyrite.										
		254' 1/2" Quartz-calcite veinlet, 15° C/A.										
		272' 1/4-1/2" Quartz-calcite veinlet, 15° C/A, contains specks of pyrite, trace of weathering.										
		274'8"-274'10" Quartz-calcite veinlet.										
300'5"	324'10"	GRAPHITIC TUFF AND DACITE. Interbedded prominent black (1/32"-1/2") graphitic bands and green-grey tuff. Some minor brecciation and fracturing. Weathering evident near fracturing, slightly calcareous. Flow lines (?) and bedding 50-60° C/A.										
		301'2"-304'4" Graphitic tuff as per 228'10"-244'10", but more siliceous. 1/8" calcite veinlets, 40° C/A.										
		304'4"-317'8" Dacite (flow) breccia, greenish-grey fragments. Pyrite-graphite matrix. Pyrite forms about 20% of matrix and 2-5% of rock.										
		317'8"-324'10" Interbanded fine-grained grey to black graphitic tuff and greyish-white siliceous sediments. Brecciation in upper 2' part contains some pyrite and graphite in matrix.										

FOOTAGE		DESCRIPTION	SAMPLE Nº:	FOOTAGE		LENGTH	Cu %	Zn %	Au oz./t.	Ag oz./t.		
from	to			from	to							
324'10"	392'6"	DACITE TUFF. As per 244'10"-300'5". Trace of disseminated pyrite and pyrrhotite. Numerous quartz-calcite veins up to 1 foot (generally 1-2") from 342'9" to 388'. Pyrrhotite, pyrite and trace of chalcopyrite associated with these veins. Quartz-calcite veins with chalcopyrite blebs are: 365'5"-366'7", 378'3"-378'5, 383'2"-383'3". Less than 1% disseminated sulphides from 359-374', plus pyrrhotite, pyrite and trace of chalcopyrite in quartz-calcite veins.	12	350'	359'	9'	0.056	0.05	0.005	0.1		
			13	359'	364'	5'	0.034	0.05	0.005	0.1		
			14	364'	369'	5'	0.094	0.05	0.01	0.1		
			15	369'	374'	5'	0.021	0.05	0.005	0.1		
			16	374'	380'	6'	0.065	0.06	0.005	0.17		
392'6"	395'5"	GRAPHITIC TUFF. (Argillaceous). Very finely contorted bedding about 60° C/A. Well mineralized with fine pyrite (<10%).										
395'5"	503'4"	DACITE TUFF. Medium-grained, grey colour. Same as 244'10"-300'5" but darker in colour. Upper and lower 10' finer-grained and light green-grey colour. Very weakly magnetic and slightly calcareous. Minor, very disseminated pyrrhotite and pyrite. Numerous quartz-calcite veinlets (1/8") with traces of sulphides at various angles to C/A. Wider quartz-calcite veinlets as follows: 407'8"-407'10", 426'5"-426'6 1/2", 428'2"-428'4 1/2" (25° C/A), 440'3 1/2"-440'4 1/2" (30° C/A), 465'7"-465'11".										
		502'-503'4" Pyrrhotite-pyrite in stringers (<1/8") at about 45° C/A. Very thin black graphitic bands.										
503'4"	527'11"	TRANSITION ZONE. 503'4"-505'6" Graphitic tuff, finely bedded graphitic rock, alternating light and dark beds. Minute pyrite stringers and quartz-calcite veinlets.										

FOOTAGE		DESCRIPTION	SAMPLE №:	FOOTAGE		LENGTH						
from	to			from	to							
503'4"	527'11"	505'6"-507'1" Dacite (flow) breccia similar to 304'4"-317'8", but darker and lacking pyrite in matrix.										
	(Cont.)											
		507'1"-508'9" Graphitic tuff as per 503'4"-505'6"; 2-3% pyrite-pyrrhotite and trace of chalcopyrite.										
		508'9"-510'6" Massive pyrite, crystalline, vuggy, graphite in vugs.										
		510'6"-513'8" Same as 503'4"-505'6".										
		513'8"-526' Same as 505'6"-507'1".										
		526'-527' Same as 503'4"-505'6".										
527'11"	536'11"	INTERMEDIATE FLOW. Medium-grained, greenish-grey, bands of prominent spherulitic texture and flow contacts. Spherulites (0.2 inches), light grey colour in darker green matrix.										
536'11"	574'	DACITE TUFF. Similar to 244'10"-300'5".										
		537' 1" graphitic tuff with py-po, 60° C/A.										
		550'10", 568'4", 576'9" - quartz-calcite veinlets 35° C/A.										
574'	655'7"	DACITE TUFF AND BRECCIA. Similar to 304'4"-317'8", minor spherulite texture in places and black graphitic argillite around fragments. Rock generally light green to grey-green colour, fine-grained. Minor disseminated pyrite-pyrrhotite < 1/2%.										

FOOTAGE		DESCRIPTION	SAMPLE Nº:	FOOTAGE		LENGTH						
from	to			from	to							
655'7"	676'8"	FELDSPAR PORPHYRY INTRUSIVE. Grey matrix with sub-hedral feldspar phenocrysts up to 1/4". Upper and lower contact sharp, 65° C/A.										
676'8"	702'	DACITE FLOW. Light green-grey colour, aphanitic, slightly altered (talc). Lineations 45-65° C/A. Very minor disseminated pyrite.										
702'		END OF HOLE.										
		Discussion of Results:										
		Wide conductive zone is caused by three bands of graphitic tuffs within dacite tuffs and flows.										
		The conductive zone between 503'4"-527'11" contains 21" of vugy massive pyrite.										
												





42A15NW8627 2.1345 JAMIESON

030

GEOPHYSICAL SURVEYS, JAMIESON TOWNSHIP

CLAIM GROUP 31a

TIMMINS AREA

PORCUPINE MINING DIVISION, ONTARIO

B. S. LTD. A 14672

Toronto, Ontario  
October 25, 1973

This report may not be reproduced, in whole or in part,  
without the written permission of Derry, Michener & Booth.

## INTRODUCTION

Work is submitted for claims P-362959 and P-362960 of claim group 31a, Jamieson Township, Ontario. These claims are held "in trust" by Duncan R. Derry Limited, 401 Bay Street, Toronto, Ontario.

Ground geophysical surveys were carried out during March and April of 1973 over the areas of interest as indicated by a Turair airborne survey flown in 1972 by Seigel Associates on behalf of the Deepex Joint Venture. Scintrex Surveys Ltd. conducted the ground magnetic and electromagnetic surveys on behalf of the Deepex Joint Venture.

## LOCATION AND ACCESS (See attached Location Map)

The claims are located in the north half of lot 8, Concession III in Jamieson Township, Porcupine Mining Division, eleven miles northwest of Timmins, Ontario.

The property may be reached directly by helicopter from Timmins or by road to the Jameland Mine, then by bush trail about one mile due east.

## GEOLOGY (Ref. ODM Map p. 698)

The region is underlain by Early Precambrian age metavolcanics ranging from mafic to felsic in composition. The claims are bounded on the east by the Kamis Kotia River and on the south by the Little Kamis Kotia River. Due east of the Kamis Kotia River is a mafic and ultramafic intrusion of younger age rocks.

## PREVIOUS WORK

Dominion Gulf Company carried out ground magnetic and vertical loop electromagnetic surveys over the area in the late 1950's and outlined several short, weak conductors.

In 1972, Turair airborne surveys were flown over claim group 31a by Seigel Associates on behalf of the Deepex Joint Venture.

## SURVEYS

A grid of 1.9 miles of line was cut with line spacing at 400 foot intervals from a 1,200 foot long east-west base line. This grid was used for subsequent geophysical surveys.

The geophysical surveys were conducted by Scintrex Surveys Limited on behalf of the Deepex Joint Venture. A Scintrex MF-2 vertical intensity Fluxgate type magnetometer and a Scintrex SE-71 three frequency Turam unit were used (refer to attached sheets "Instrument Specifications"). The Turam survey utilized a fixed source transmitter consisting of a horizontal 2,000 foot x 2,000 foot wire loop situated 1,300 feet south of the base line, and two mobile receivers, each a wound wire coil separated by 100 feet of cable.

Magnetometer and Turam readings were taken at 100 foot intervals along each grid line. A total of 100 magnetic and 82 electromagnetic readings were taken within claims P-362959 and P-362960. To check diurnal variation for the magnetic survey, a base station at BL-0 was used after completion of each profile.

## RESULTS AND CONCLUSIONS

In a report by Scintrex Surveys Ltd. to Duncan R. Derry Limited, dated June 1, 1973, the survey results are given as follows:

"This Turair zone is one of a group of systems of parallel conductors with predominantly phase difference responses. Depth indications suggest that the current axis are within 50-200 feet of the surface. No particular encouraging geophysical characteristics were present and the ground follow-up was mainly supported by favourable geology.

The base line was established in a N90°E direction and 4 lines cut to the north and the south. The Little Kamis Kotia and Kamis Kotia rivers are located directly south and east of the grid respectively.

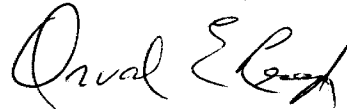
The electromagnetic results reveal a general distortion pattern of up to 5% FSR and 2-3°  $\Delta$  phase.

One weak and broad zone can be distinguished marked A1 and A2, of low conductivity-width (2-3 mhos) and of shallow depth.

The strong reversal on line 8W coincides with a creek.

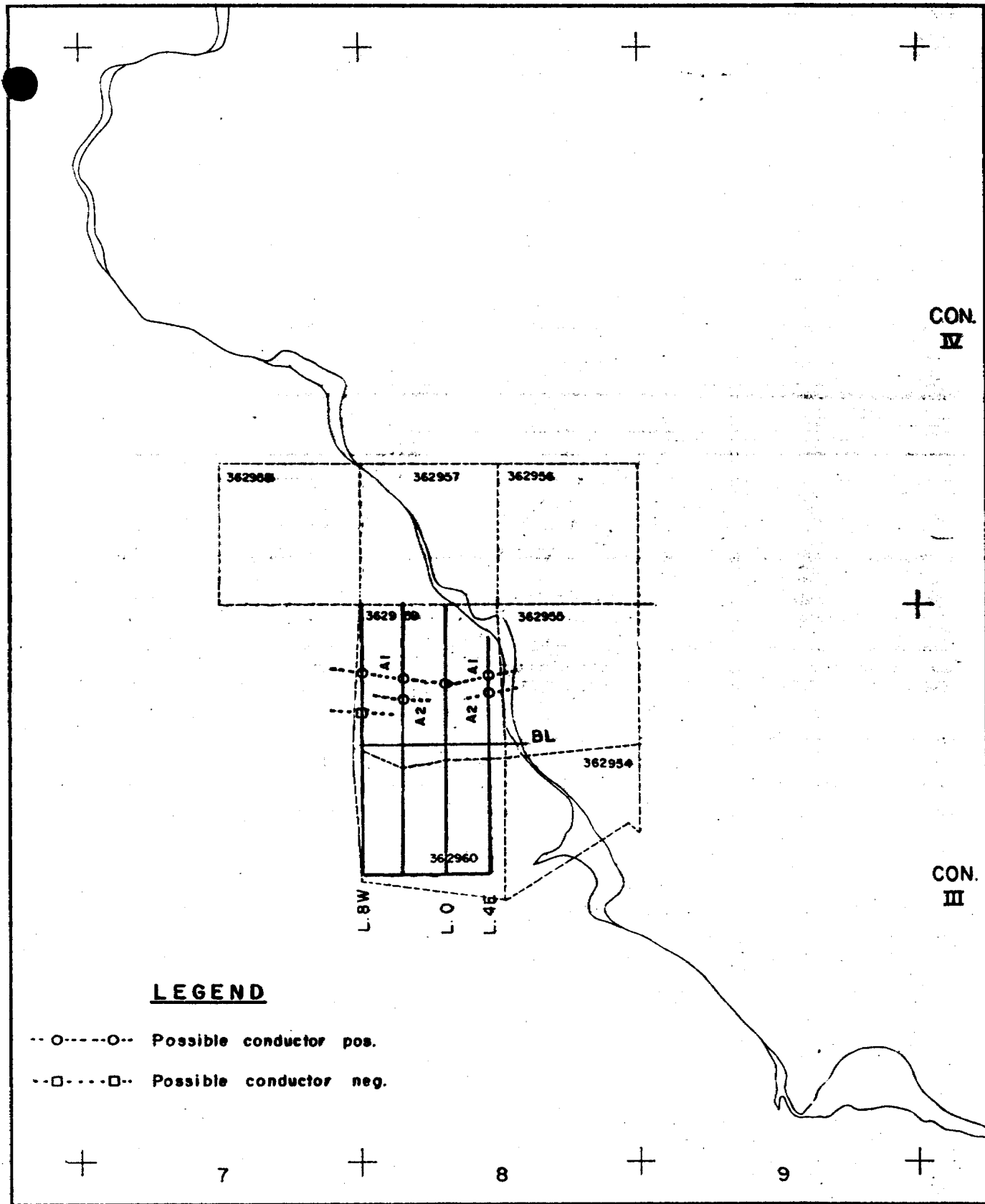
The magnetic results show a low relief over most of the grid with a strong increase in magnetic intensity at the southern end of the lines and over most part of line 8W.

No further work can be recommended based on the geophysical results."



O. E. Leigh

Toronto, Ontario  
October 25, 1973



**LEGEND**

- o-----o-- Possible conductor pos.
- Possible conductor neg.

**DEEPEX PROJECT - GROUND FOLLOW UP**  
 GRID No. 31a, JAMIESON TOWNSHIP, TIMMINS AREA, ONTARIO  
**LOCATION MAP**  
 SCALE : 1" = 1320'



GEC 42A15NW8627 2.1345 JAMIESON

900

file 2.1345

RECEIVED

NOV 6 1973

PROJECTS SECTION

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-Magnetometer & Turam E.M. & Gravity

Township or Area Hanna Township

Claim holder(s) Duncan R. Derry Limited  
held "in trust"

Author of Report O. E. Leigh

Address Suite 2302, 401 Bay St., Toronto M5H 2Y4

Covering Dates of Survey Jan - Feb 1973

(linecutting to office)

Total Miles of Line cut 3

MINING CLAIMS TRAVERSED  
List numerically

P - 362940 <sup>1/2</sup>  
(prefix) (number)

P - 362943 <sup>1</sup>

P - 362944 <sup>1/2</sup>

*Area of claims not covered = 1  
3 x 20 = 60 ÷ (3+1) = 15  
30 day em*

SPECIAL PROVISIONS  
CREDITS REQUESTED

DAYS  
per claim

Geophysical

--Electromagnetic 40

--Magnetometer 20

--Radiometric \_\_\_\_\_

--Other Gravity 20 - 10 days  
(P-362940 only)

Geological \_\_\_\_\_

Geochemical \_\_\_\_\_

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

ENTER 20 days for each additional survey using same grid.

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: Nov. 2, 1973 SIGNATURE O. E. Leigh  
Author of Report or Agent

PROJECTS SECTION

Res. Geol. \_\_\_\_\_ Qualifications 63.1833

Previous Surveys 63.738 E.M. and Mag performed 1964 diff instruments

63.738 mag performed 1956 different instruments  
L.D.

Checked by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

TOTAL CLAIMS 3

OFFICE USE ONLY

If space insufficient, attach list

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

## GEOPHYSICAL TECHNICAL DATA

### GROUND SURVEYS

Number of Stations 89 Number of Readings 185  
Station interval 100 feet  
Line spacing 400 feet  
Profile scale or Contour intervals Mag. 1"=500 gammas, 1"=10° phase difference, 1"=20% FSR  
(specify for each type of survey) Gravity 1"=0.5 milligals

### MAGNETIC

Instrument Scintrex MF-2, vertical intensity, fluxgate type  
Accuracy - Scale constant 0.5% of full scale  
Diurnal correction method closed loop system plus base stn values  
Base station location BL-0

### ELECTROMAGNETIC

Instrument Scintrex SE-71 three frequency Turam unit  
Coil configuration horizontal  
Coil separation 100 feet and 200 feet  
Accuracy +0.5% F.S.R., +0.25° phase difference  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 400 HZ  
(specify V.L.F. station)  
Parameters measured field strength ratio and phase difference

### GRAVITY

Instrument Scintrex CG-2 Prospector Gravity meter  
Scale constant 0.09831  
Corrections made height Bouger  
Base station value and location no absolute base station was used

Elevation accuracy 0.1 feet

### INDUCED POLARIZATION - RESISTIVITY

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

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

RECEIVED

NOV 6 1973

PROJECTS  
SECTION

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-Magnetometer & Turam E.M.

Township or Area Hanna Township

Claim holder(s) Duncan R. Derry Limited,  
held "in trust"

Author of Report J. O. E. Leigh

Address Suite 2302, 401 Bay St., Toronto M5H 2Y4

Covering Dates of Survey Jan & Feb 1973  
(linecutting to office)

Total Miles of Line cut 2

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	<u>DAYS</u> <u>per claim</u>
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: Nov. 2, 1973 SIGNATURE: *Orval E. Leigh*  
Author of Report or Agent

PROJECTS SECTION

Res. Geol. \_\_\_\_\_ Qualifications 63.1833

Previous Surveys \_\_\_\_\_

Checked by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

MINING CLAIMS TRAVERSED  
List numerically

P. = 362950.1  
(prefix) (number)

P - 362953 2/3 Not covered

Area of claims not covered = 1/2

$20 \times 2 = 40 = (2 + 1/2)$   
 $= 16 \text{ days mag}$   
 $32 \text{ days em}$

TOTAL CLAIMS 2

OFFICE USE ONLY

If space insufficient, attach list



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

## GEOPHYSICAL TECHNICAL DATA

### GROUND SURVEYS

Number of Stations 76 Number of Readings 143  
Station interval 100 feet  
Line spacing 400 feet  
Profile scale or Contour intervals Mag. 1"=500 gammas, 1"=10° phase difference, 1"=20% FSR  
(specify for each type of survey) Gravity 1"=0.5 miligals

### MAGNETIC

Instrument Scintrex MF-2, vertical intensity, fluxgate type  
Accuracy - Scale constant +0.5% of full scale  
Diurnal correction method closed loop system plus base stn values  
Base station location BL-4S

### ELECTROMAGNETIC

Instrument Scintrex SE-71 three frequency Turam unit  
Coil configuration horizontal  
Coil separation 100 feet and 200 feet  
Accuracy +0.5% F.S.R., +0.25° phase difference  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 400 HZ  
(specify V.L.F. station)  
Parameters measured field strength ratio and phase difference

### GRAVITY

Instrument Scintrex CG-2 Prospector Gravity meter  
Scale constant ~~0.09831~~  
Corrections made ~~height Bouguer~~  
Base station value and location no absolute base station was used

Elevation accuracy ~~0.1 feet~~

### INDUCED POLARIZATION - RESISTIVITY

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

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

RECEIVED

NOV 6 1973

PROJECTS  
SECTION

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-Magnetometer & Turam E.M.  
Township or Area Jamieson Township  
Claim holder(s) Duncan R. Derry Limited  
held "in trust"  
Author of Report O. E. Leigh  
Address Suite 2302, 401 Bay St., Toronto M5H 2Y4  
Covering Dates of Survey March, April 1973  
(linecutting to office)  
Total Miles of Line cut 1.9

MINING CLAIMS TRAVERSED  
List numerically

P - 362959 (prefix) (number)  
P - 362960 1/2

20x2 = 40' (2 1/2)  
= 16 days mag and  
3.2 day e.m.

TOTAL CLAIMS 2

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	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: Nov. 2/73 SIGNATURE: O. E. Leigh  
Author of Report or Agent

PROJECTS SECTION  
Res. Geol. \_\_\_\_\_ Qualifications 63.1833  
Previous Surveys \_\_\_\_\_

Checked by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

OFFICE USE ONLY

If space insufficient, attach list

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

## GEOPHYSICAL TECHNICAL DATA

### GROUND SURVEYS

Number of Stations 100 Number of Readings 182  
Station interval 100 feet  
Line spacing 400 feet  
Profile scale or Contour intervals Mag. 1"=500 gammas, 1"=10° phase difference, 1"=20% FSR  
(specify for each type of survey) Gravity 1"=0.5 milligals

### MAGNETIC

Instrument Scintrex MF-2, vertical intensity, fluxgate type  
Accuracy - Scale constant +0.5% of full scale  
Diurnal correction method closed loop system plus base stn values  
Base station location BL-0

### ELECTROMAGNETIC

Instrument Scintrex SE-71 three frequency Turam unit  
Coil configuration horizontal  
Coil separation 100 feet and 200 feet  
Accuracy +0.5% F.S.R., +0.25° phase difference  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 400 HZ  
(specify V.L.F. station)

Parameters measured field strength ratio and phase difference

### GRAVITY

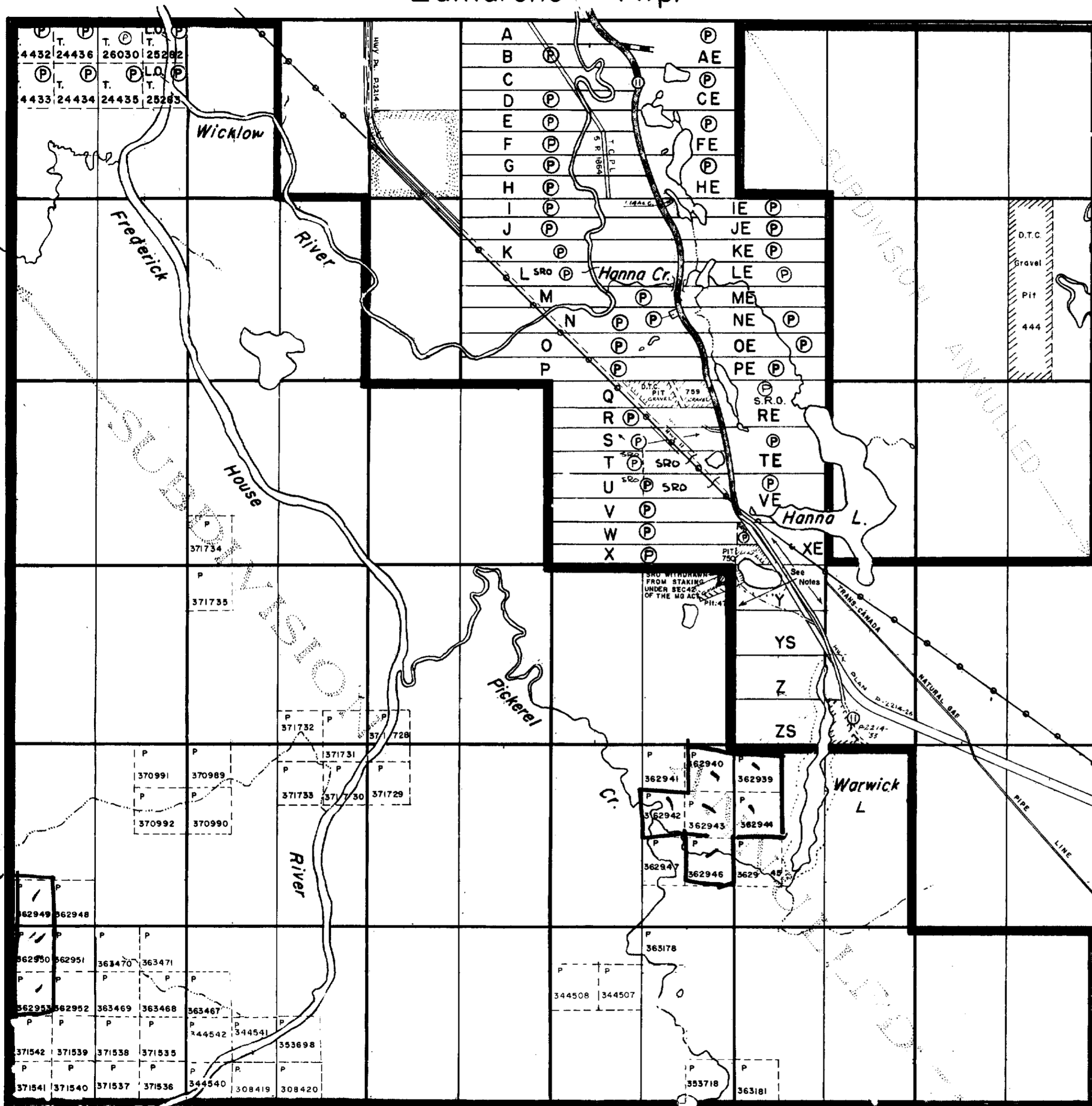
Instrument ~~Scintrex CG-2 Prospector Gravity meter~~  
Scale constant ~~0.09831~~  
Corrections made ~~height Bouguer~~  
Base station value and location ~~no absolute base station was used~~

Elevation accuracy ~~0.1 feet~~

### INDUCED POLARIZATION - RESISTIVITY

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

Lamarche Twp.



THE TOWNSHIP  
OF  
**HANNA**  
DISTRICT OF  
COCHRANE  
PORCUPINE  
MINING DIVISION  
SCALE: 1-INCH = 40 CHAINS

**LEGEND**

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
ROADS	
IMPROVED ROADS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
KING'S HIGHWAY	

**NOTES**

400' Surface rights reservation around all lakes & rivers.

REG. PLAN NO.-M. 57 COVERS LOTS "A" TO Z-S.  
IN CON. 3 TO CON. 6.

Surface Rights Only reserved to Dept of  
Lands & Forests  
shown thus:

See L. & F. File: 96605-122598 Re Gravel On  
Loc. XE & Loc. Y.

Area shown thus withdrawn from staking Section 42 Mining  
Act File 88769 & 88772

- MINING LANDS -  
DATE OF ISSUE  
NOV 7 1973  
MINISTRY  
OF NATURAL RESOURCES

FILE-  
2.1345

PLAN NO. - M 490

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH

Reaume Twp.

ST. John Twp.

Mann Twp.



42A15N6627 2.1345 JAMIESON

200

Macdiarmid Twp. - M. 294

THE TOWNSHIP OF











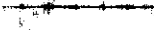




JAMIESON

DISTRICT OF COCHRANE

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 MUSKEG 
- MINES 
- CANCELLED 

NOTES

400' Surface Rights Reservation around all lakes and rivers

Flooding rights to areas along Mattogami River to H.E.P.C. - L.O. 7085

MINING LANDS -  
DATE OF ISSUE  
NOV 7 1973  
MINISTRY OF NATURAL RESOURCES

FILE - 2.1345

PLAN NO. - M.288

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

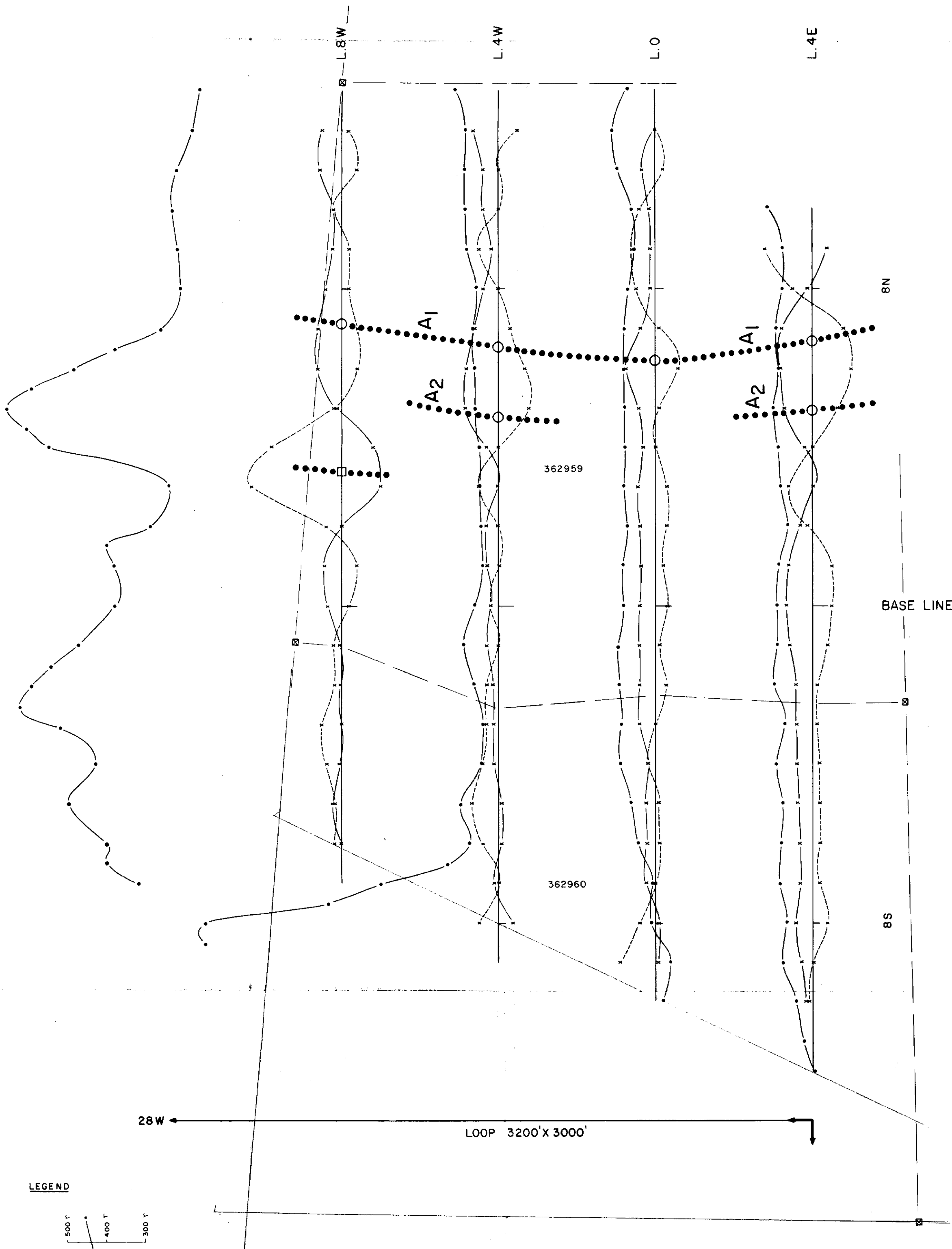
Robb Twp. - M.309

Jessop Twp. - M.289

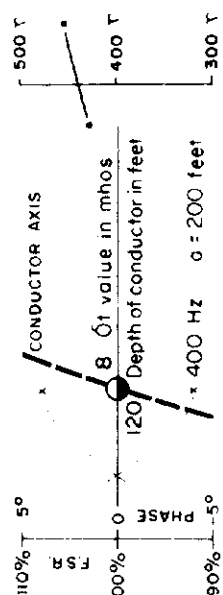
Godfrey Twp. - M.284



42A15N8627 2.1345 JAMIESON




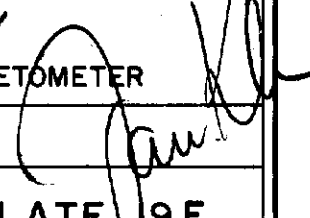
LEGEND



42A15NW6627 2.1345 JAMIESON

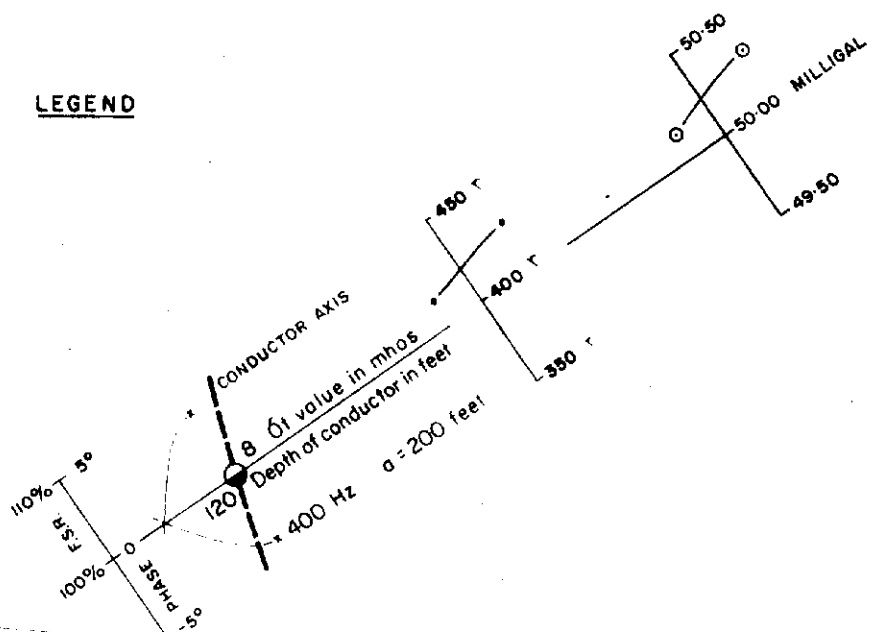
220


2.1345

DEEPEX PROJECT - GROUND FOLLOW UP	
GRID No. 31a, JAMIESON TOWNSHIP TIMMINS AREA, ONTARIO	
TURAM ELECTROMAGNETIC AND MAGNETIC SURVEY	
SCINTREX SE-71 EM and MF-2 MAGNETOMETER	
SCALE : 1" = 200'	
 SURVEY BY SCINTREX SURVEYS LIMITED JAN. - APRIL 1973	PLATE 9E 

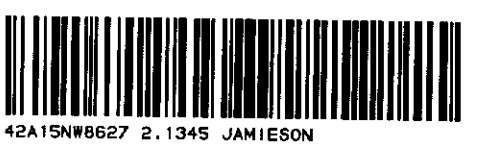


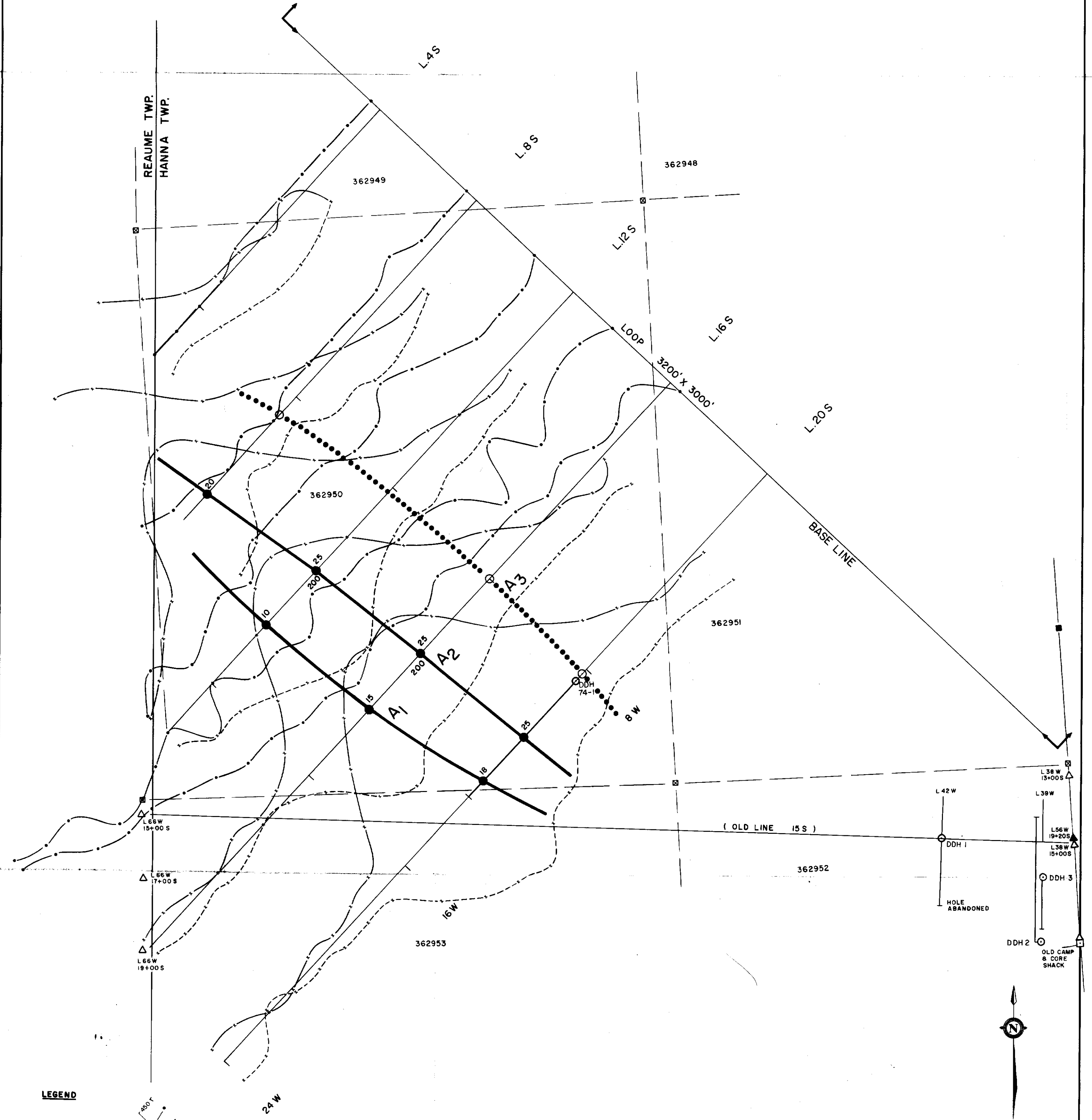
**LEGEND**



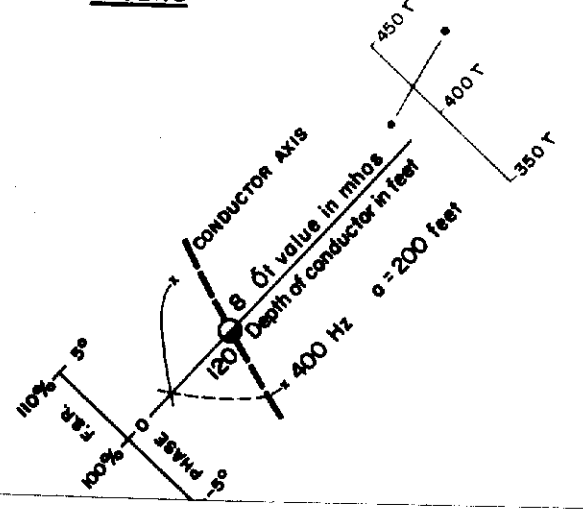
<b>DEEPEX PROJECT - GROUND FOLLOW UP</b>	
GRID No. 72 , HANNA TOWNSHIP TIMMINS AREA, ONTARIO	
<b>TURAM ELECTROMAGNETIC, GRAVITY AND MAGNETIC SURVEY</b> SCINTREX SE-71 EM , CG-2 GRAVIMETER , MF-2 MAGNETOMETER	
SCALE : 1" = 200'	
 SURVEY BY SCINTREX SURVEYS LIMITED JAN - APRIL 1973	PLATE 20E

2.1345





**LEGEND**



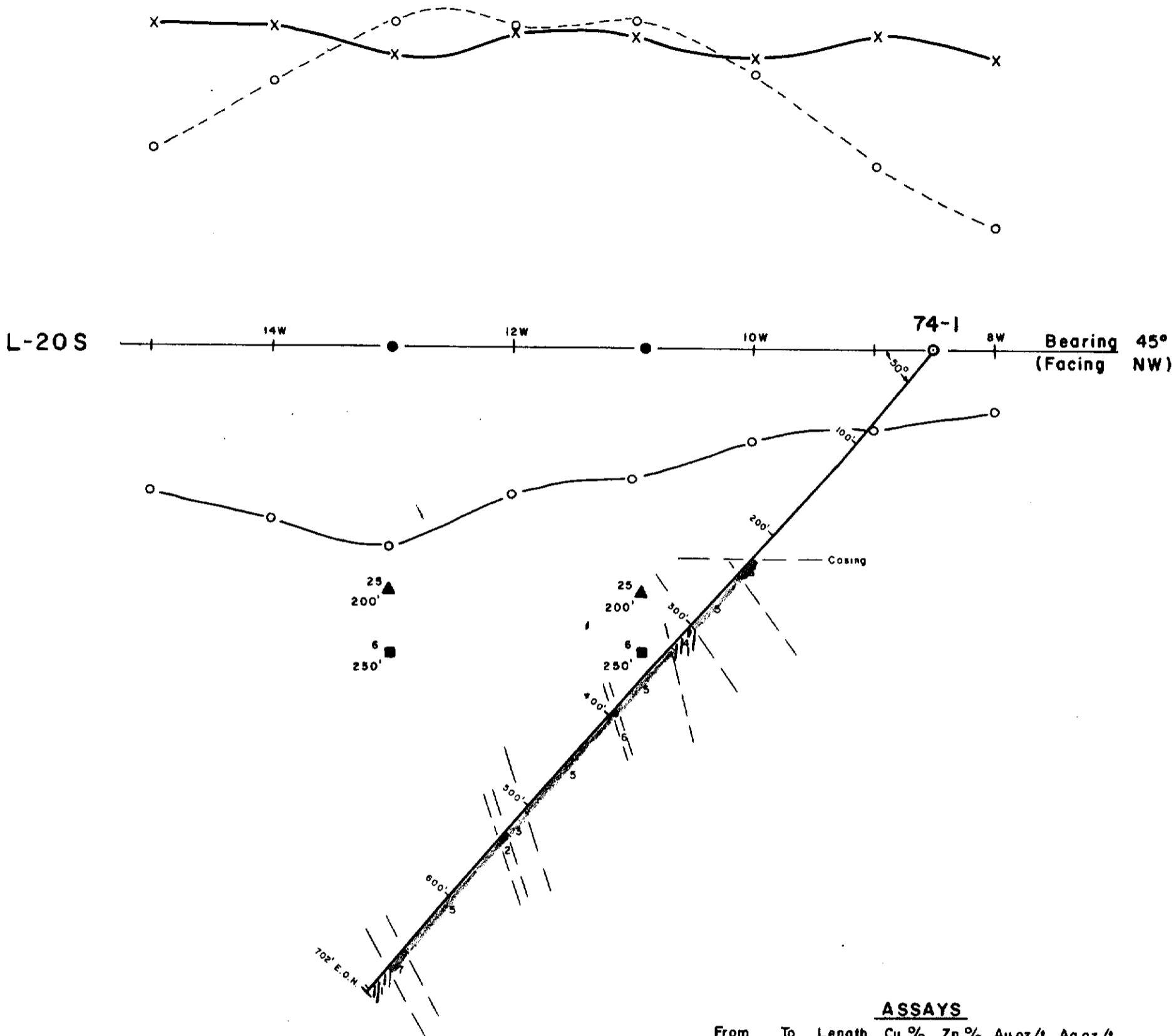
- LEGEND**
- OLD PICKETS ..... Δ
  - DEEPEX CLAIM POSTS ..... □
  - NEW PICKETS, NUMBER, BEARING ON BLAIS CLAIMS (NORANDA) ..... ▲
  - BLAIS CLAIM POST ..... ■
  - DIAMOND DRILL HOLE ..... DDH ○

<b>DEEPEX PROJECT - GROUND FOLLOW UP</b>	
GRID No. 74 , HANNA TOWNSHIP TIMMINS AREA, ONTARIO	
<b>TURAM ELECTROMAGNETIC AND MAGNETIC SURVEY</b>	
SCINTREX SE-71 EM and MF-2 MAGNETOMETER	
SCALE : 1" = 200'	
SURVEY BY SCINTREX SURVEYS LIMITED JAN. - APRIL 1973	<b>PLATE 21E</b>



2.1345





**LEGEND**

- Feldspar porphyry intrusive
- Graphitic tuff
- Dacite tuff; breccia
- Graphitic tuff; dacite
- Transition Zone  
Graphite tuff, dacite breccia, massive pyrite
- Intermediate flow
- Dacite flow, altered
- Diamond Drill Hole
- Conductor axis on surface
- Turam axis and depth
- Turair axis and depth
- Mag. profile: 1" = 100 gammas (B.L. 400 gammas)
- Turam - F.S.R.: 1" = 20%, B.L. = 100% (a = 100')

**ASSAYS**

From	To	Length	Cu %	Zn %	Au oz/t	Ag oz/t
350'	359'	9'	0.056	0.05	<0.005	<0.1
359'	364'	5'	0.034	0.05	<0.005	<0.1
364'	369'	5'	0.094	0.05	<0.01	0.1
369'	374'	5'	0.021	0.05	<0.005	<0.1
374'	380'	6'	0.065	0.06	<0.005	0.17

2.1345

DERRY, MICHENER & BOOTH		
DEEPEX PROJECT		
D.D.H. - 74-1		
DRILL SECTION AND GEOPHYSICAL PROFILES		
Scale: 1" = 100'	By: P.E. Piazza Date: May, 1973	Map No.

