



42A10NE0065 2.3588 WALKER

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FEB 23 1980

MINING LANDS SECTION

R E P O R T
O N

EAST RAILWAY PROJECT

MAGNETOMETER AND ELECTROMAGNETIC SURVEYS

WALKER TOWNSHIP

DISTRICT OF COCHRANE

LARDER LAKE MINING DIVISION

ONTARIO

November 21, 1980

W. G. Wahl Limited

GENERAL

The following geophysical report details the results of the magnetometer and electromagnetic surveys undertaken by W. G. Wahl Limited on behalf of Surveymin Limited.

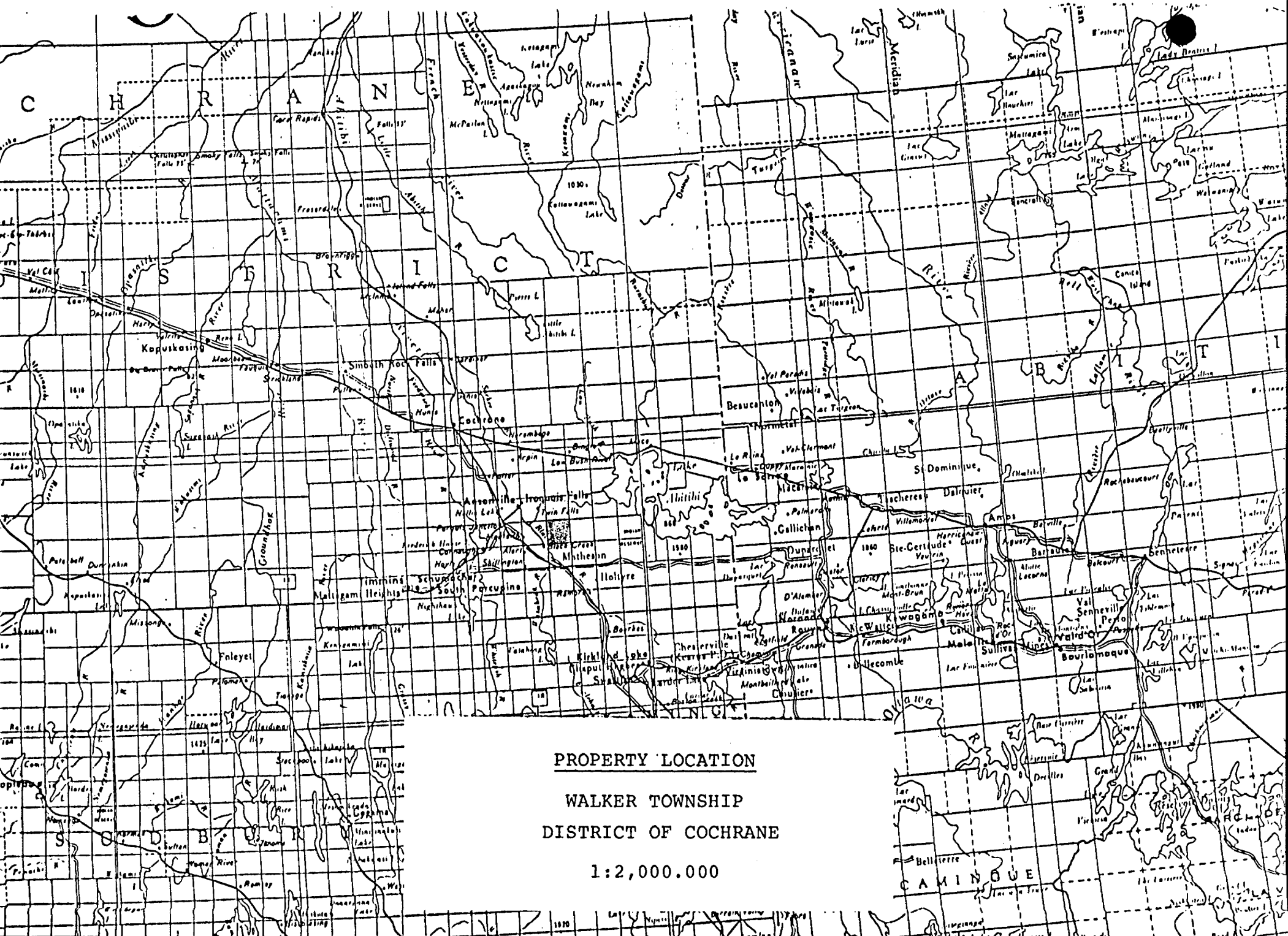
The property is situated in the south-west corner of Walker Township, District of Cochrane, and is accessible by truck approximately 1 mile east from the village of Monteith on Highway 626, then east onto a concession line between Concessions I and II about 0.5 miles to the property.

The East Railway property consists of the following four unpatented mining claims, all of which are duly recorded with Mr. G. J. Koleszar, Mining Recorder, Larder Lake Mining Division.

L. 522469	-	N.E.¼,	N½,	Lot 9,	Conc. I,	Walker Township.
L. 522470	-	N.W.¼,	"	"	"	"
L. 522471	-	S.W.¼,	"	"	"	"
L. 522472	-	S.E.¼,	"	"	"	"

LINE CUTTING

The Line Cutting was conducted under the direct supervision of Mr. Orville Hicks of Timmins, Ontario, during the period from October 15, 1980 to October 16, 1980. The survey grid consisted of 0.8 kilometres of baseline trending E-W and 7.2 kilometres of grid line trending N-S, established at one hundred Metre intervals along the entire baseline. Twenty-five metre stations were established on all lines.



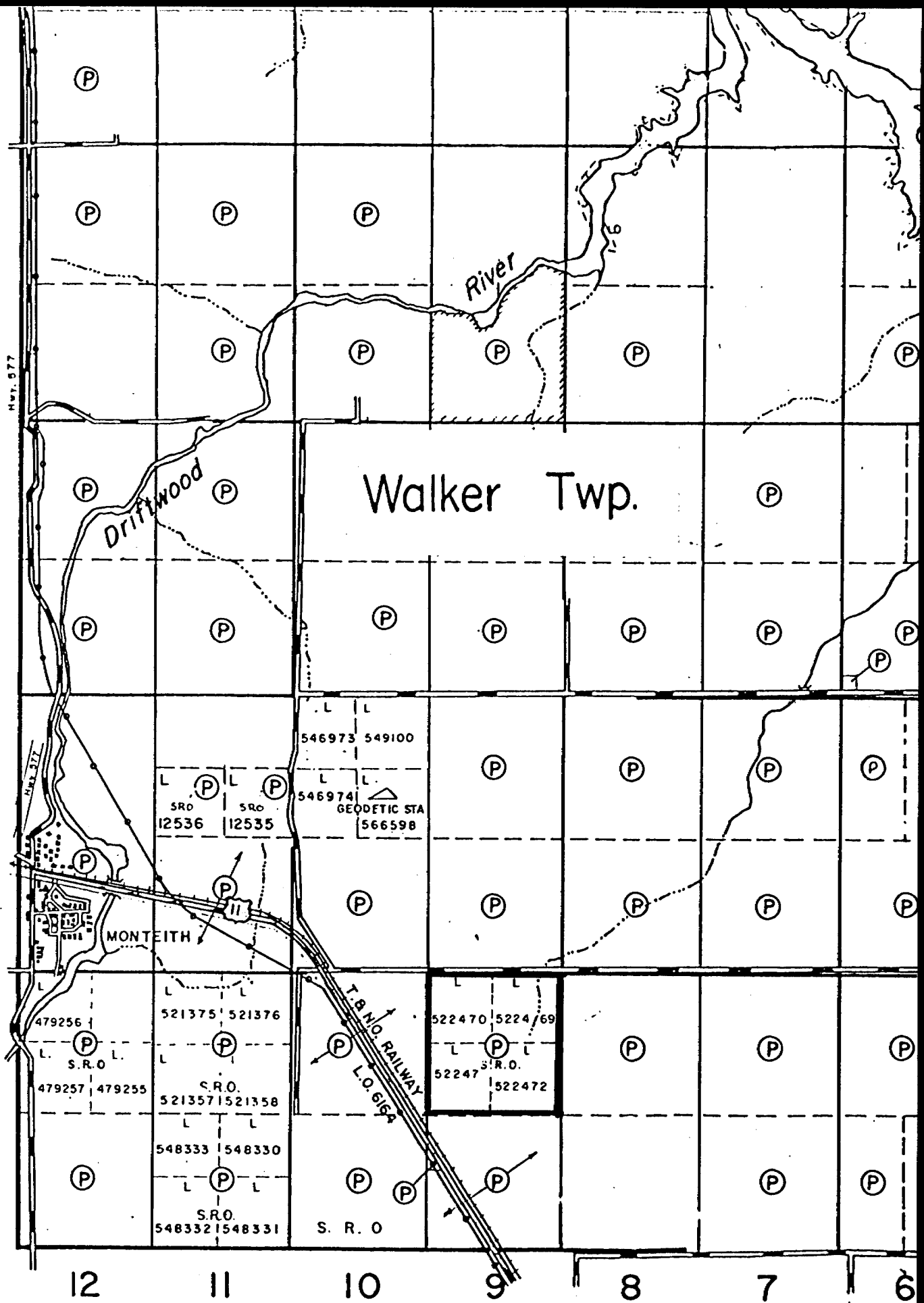
PROPERTY LOCATION

WALKER TOWNSHIP
 DISTRICT OF COCHRANE

1:2,000,000



Clergue Twp.



CLAIM MAP

(1 inch to 2 miles)

MAGNETOMETER SURVEY

The magnetometer survey was carried out by M. E. Wilson of W. G. Wahl Limited during the period from October 18 to October 19, 1980, employing a Scintrex MP-2 total field proton precession magnetometer in conjunction with a Scintrex MBS-2 total field magnetic base station attached to a Simpson M2750 strip chart recorder.

The magnetic data was observed at a 12.5 metre station interval on all lines of the established grid. The data was corrected for diurnal fluctuations, reduced to a local datum and presented as a contoured interpretation of these data.

MAXMIN II HORIZONTAL LOOP ELECTROMAGNETIC SURVEY

The horizontal loop electromagnetic survey was carried out by R. Harwood of W. G. Wahl Limited during the period from October 18 to October 19, 1980, employing an Apex Parametrics MaxMin II horizontal loop survey unit in the maximum coupled mode. The inphase and quadrature response parameters were recorded at 444 Hz and 1777 Hz utilizing a 150 metre coil separation and a 25 metre station interval. These data are presented in profile form.

VLF ELECTROMAGNETIC SURVEY

The VLF electromagnetic survey was conducted by M. E. Wilson of W. G. Wahl Limited during the period from October 18 to October 19, 1980, employing a Crone Radem VLF EM unit.

This unit measured the inclination or dip angle and the total field strength. The VLF station used was Cutler, Maine, having a frequency of 17.8 KHz. All observations were taken facing east at 25 metre stations.

DISCUSSION

The survey area is underlain by an unsubdivided, intermediate to mafic metavolcanic sequence which has been intruded by an early precambrian diabase dike. The more mafic horizons within the metavolcanic sequence are characterized by regions of above background magnetic relief of up to 1528nT; whereas, the intermediate metavolcanics exhibit a general regional background intensity in the range of 300 to 400nT. The early precambrian diabase dike was mapped trending N-S lying parallel to and coincident with line 3E and is characterized by a total magnetic field intensity of 700nT.

The entire volcanic sequence has been faulted by a north-northwesterly trending fault zones mapped in the western half of the survey area. This fault zone transects a region of background magnetic relief and is defined by an abrupt termination of established magnetic trends mapped adjacent to the fault zone.

The horizontal loop electromagnetic data defined several regions within the survey area which have been interpreted to be a bedrock rise. No anomaly conductivity response parameters were recorded during the electromagnetic survey.

CONCLUSION

The north-northwesterly trending fault zone mapped in the western half of the survey area is thought to be geologically younger, possibly occurring subsequent to or simultaneously with the major structural deformation which occurred along the Pipestone Fault System inferred to lie along the southern boundary of the property.

Conductivity along both of the fault zones is unremarkable.

RECOMMENDATIONS

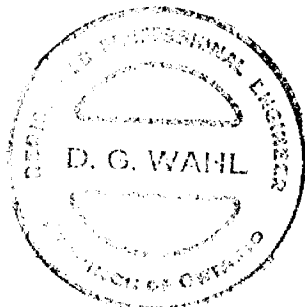
In light of the proven structural significance of the Pipestone Fault System as a known channel-way for gold bearing mineralizing solutions, and the subsequent disruption of this system by the magnetically inferred fault zone mapped during the geophysical surveys, it is recommended that additional geophysical investigations be carried out in the vicinity of this fault zone in order to determine if there has been any remobilization along this fault zone.

The additional ground geophysics will consist of "fill-in" magnetics and selected I.P. traverses all of which will be carried out in the vicinity of the geologically inferred fault zone in order to further define the relative location of the fault zone and to determine if there is any conductivity expression associated with the fault zone.

All of which is respectfully submitted.

Sincerely yours,

W. G. WAHL LIMITED



A handwritten signature in cursive script, appearing to read 'D. G. Wahl', written in dark ink.

D. G. Wahl, P.Eng.
Consulting Engineer

DGW/ml

4+00N

3+00N

2+00N

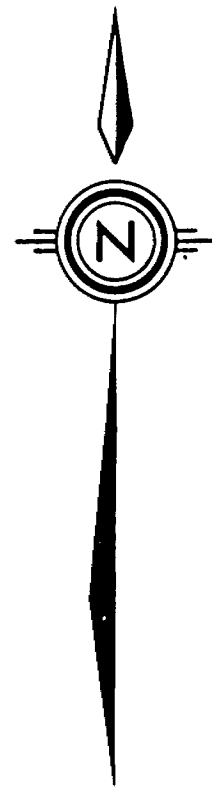
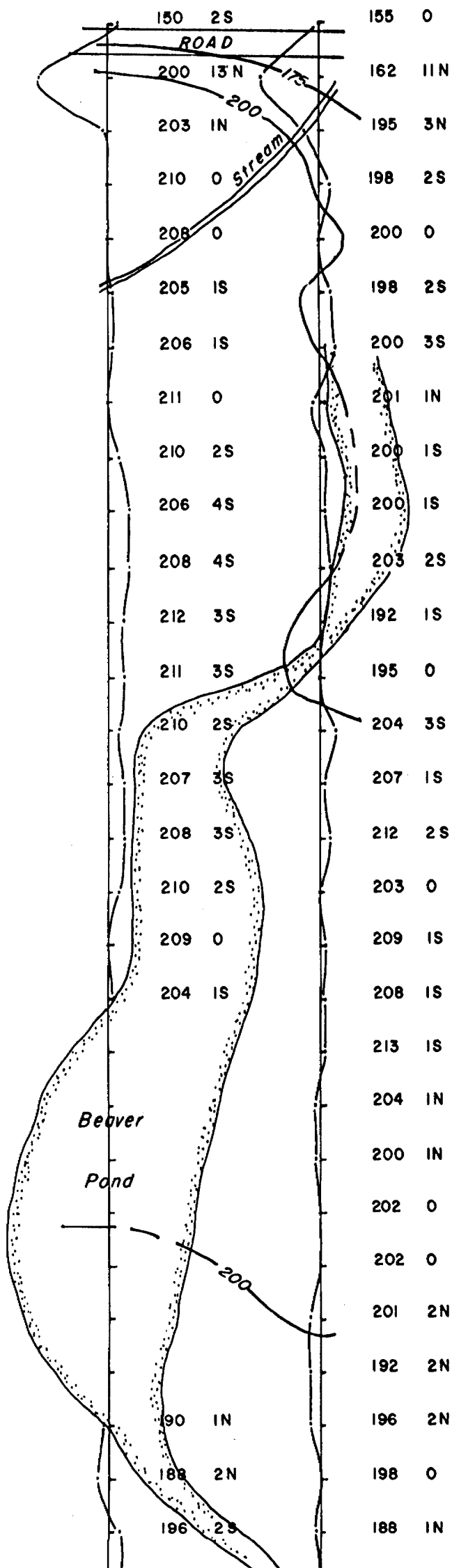
1+00N

BL

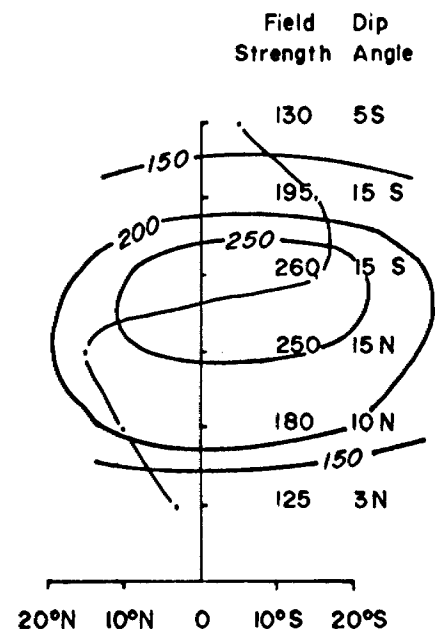
1+00S

2+00S

3+00S

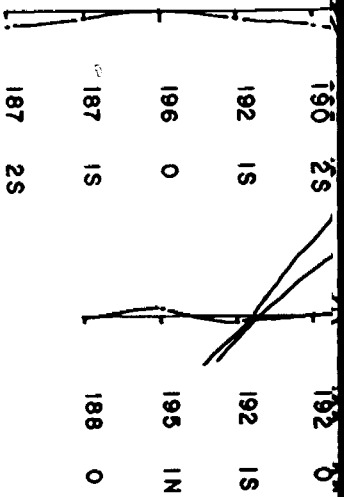


LEGEND



SCALE 1cm = 10°

4+00S



L4E

L5E

SURVEYMIN LIMITED

EAST RAILWAY PROJECT

V.L.F.

ELECTROMAGNETIC SURVEY

42 A/10

W.G. WAHL LIMITED



SCALE 1 : 2500



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(s) GEOPHYSICAL
Township or Area WALKER TOWNSHIP
Claim Holder(s) SURVEYMIN LIMITED
1107-330 BAY ST., TORONTO
Survey Company W. G. WAHL LIMITED
Author of Report D. G. WAHL, P. Eng
Address of Author 1000-350 BAY ST., TORONTO
Covering Dates of Survey OCTOBER 15, 1980 to November 21, 1980
(linecutting to office)
Total Miles of Line Cut 8.0 Km.

MINING CLAIMS TRAVERSED
List numerically

Table with columns for prefix, number, and checkmarks. Contains entries: L 522469, L 522470, L 522471, L 522472.

SPECIAL PROVISIONS
CREDITS REQUESTED

Table with columns for Geophysical, Geological, Geochemical and DAYS per claim. Includes entries for Electromagnetic (20), Magnetometer (40).

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 21/80 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. Qualifications 63.2859

Table with columns: File No., Type, Date, Claim Holder. Includes handwritten 'D' in the Claim Holder column.

TOTAL CLAIMS 4

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations Mag - 600 ; MAX MIN 268 ; VLF 64 Number of Readings Mag - 600 MAX MIN 444 Hz - 536
Station interval Mag - 12.5 m ; MAX MIN 25m ; VLF 25m Line spacing 100 m
Profile scale MAX MIN - 1cm = 10% VLF - 1cm = 10°
Contour interval Mag 100 nT VLF - 25%

MAGNETIC

Instrument SCINTREX MP-2
Accuracy - Scale constant ± 1 nT
Diurnal correction method Relative time interpolation based on strip chart recording
Base Station check-in interval (hours) SCINTREX MBS-2 Base Station
Base Station location and value Baseline - Grid line intercepts were standardized to base station recording

ELECTROMAGNETIC

Instrument APEX PARAMETRICS MAXMIN II ; CRONE BADEM VLF
Coil configuration Co-planar, maximum coupled mode
Coil separation 150 m
Accuracy MAX MIN ± 1% ; VLF - ± 1/2° Dip Angle ± 2% Field Strength
Method: Fixed transmitter Shoot back In line Parallel line
Frequency MAXMIN - 444 Hz and 1777 Hz ; VLF - Cutler, MAINE 17.8 KHz
(specify V.L.F. station)
Parameters measured MAXMIN - In-phase and Out-of-phase ; VLF - Dip Angle and Field Strength

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____
Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____
Method Time Domain Frequency Domain
Parameters - On time _____ Frequency _____
- Off time _____ Range _____
- Delay time _____
- Integration time _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____



W. G. WAHL LIMITED

CONSULTANTS: GEOLOGY - GEOPHYSICS

350 BAY ST. - 10TH FLR. - TORONTO, CANADA M5H 2S6
TEL. (416) 363-8761 - CABLE: WAHLCO - TORONTO

November 21, 1980

Mr. J. A. Harquail
President
Surveymin Limited
330 Bay Street
Suite 1107
Toronto, Ontario
M5H 2S8

Dear Mr. Harquail:

Submitted herewith is our report entitled:

EAST RAILWAY PROJECT
MAGNETOMETER AND ELECTROMAGNETIC SURVEYS
WALKER TOWNSHIP
DISTRICT OF COCHRANE
LARDER LAKE MINING DIVISION
ONTARIO

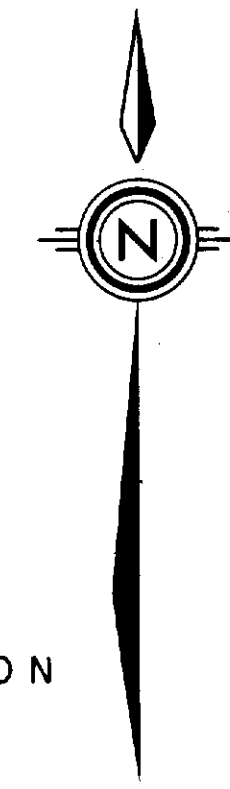
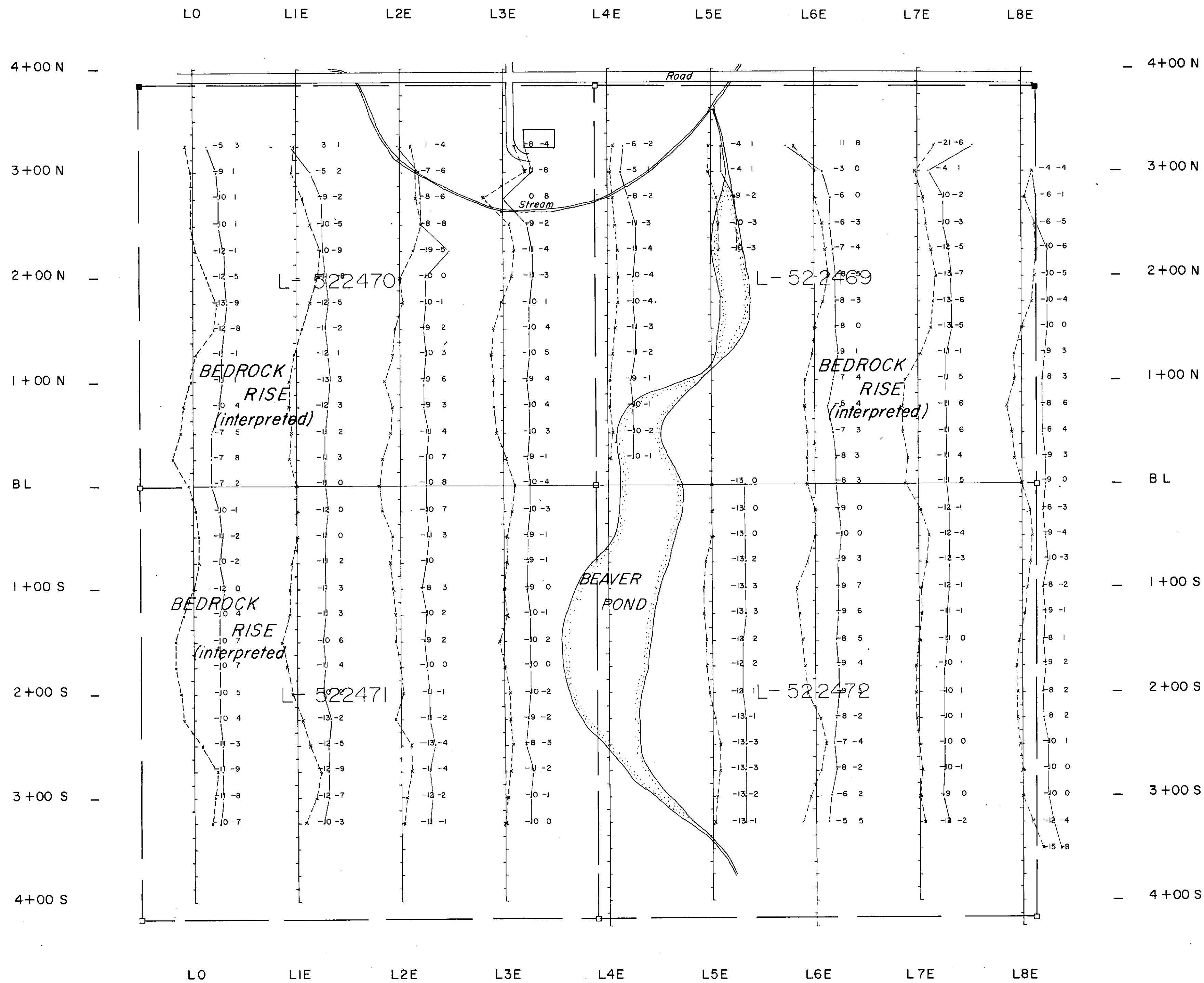
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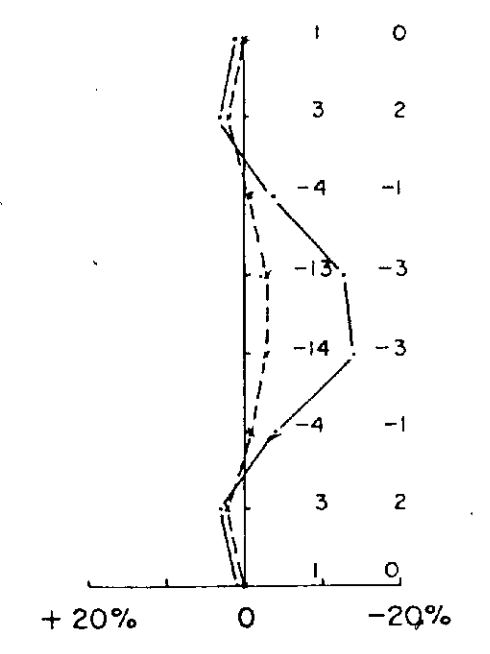
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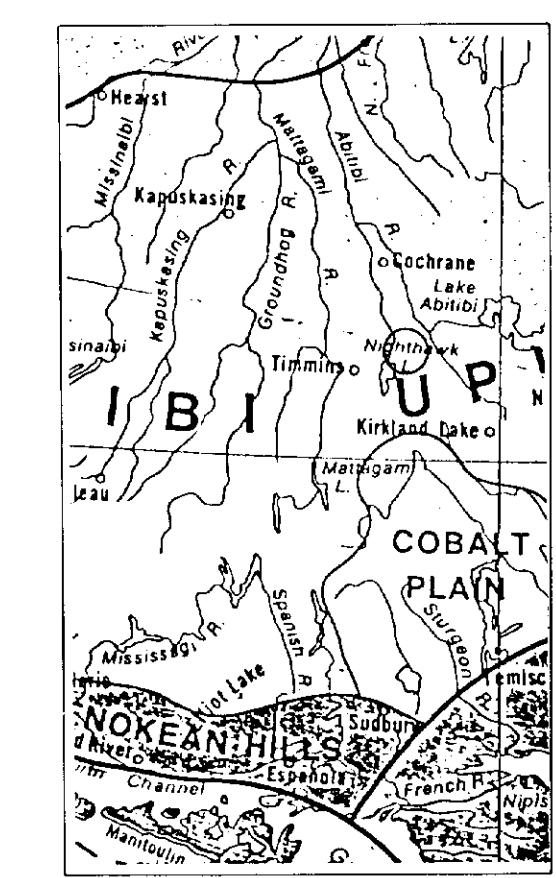
LEGEND

- In-Phase
- - - Quadrature
- ⊕ Conductor Axis

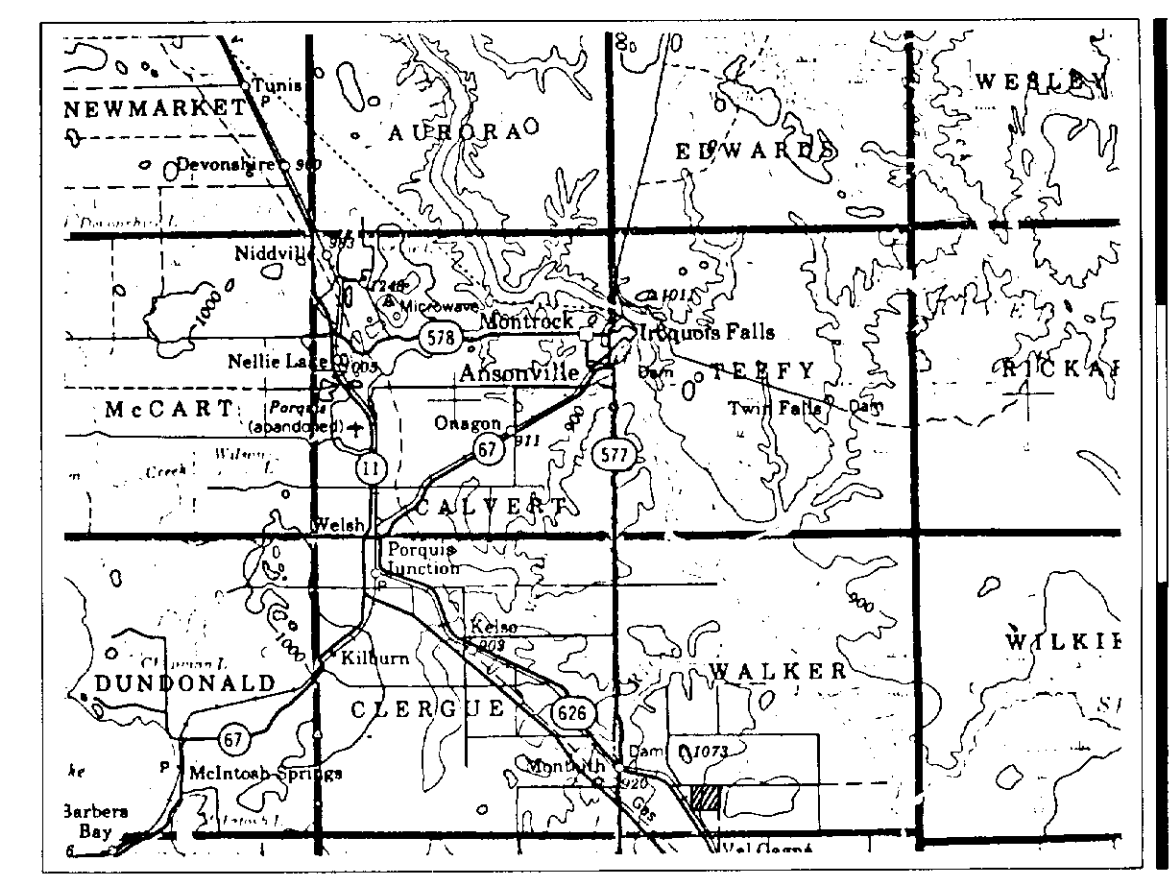


Tx or Rx 150m Rx or Tx

Tx-Rx Separation
Drawn to Scale



LOCATION MAP
1:5,000,000



INDEX MAP
1:250,000

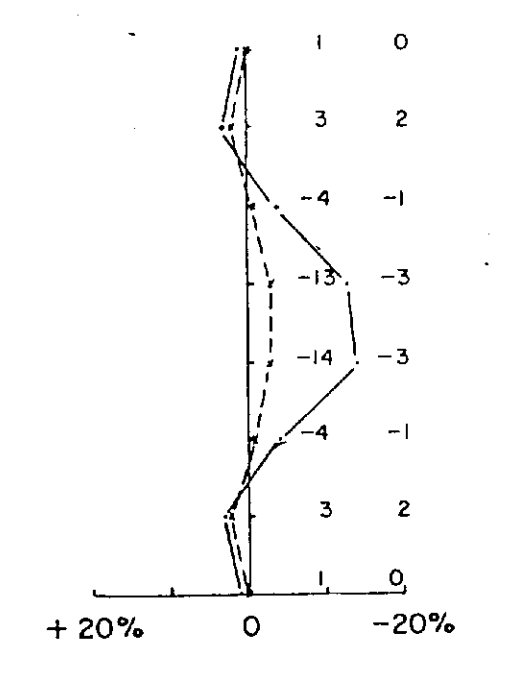
SURVEYMIN LIMITED				
	EAST RAILWAY PROJECT		DRAWN BY R.J.H.	REV.
	MAXMIN II		TRACED BY R.J.H.	REV.
	HORIZONTAL LOOP SURVEY		APPROVED	REV.
	444 hertz		N.T.S. 42 A/10	REV. OCT 1980
		Scale 1: 2500	DWG. NO.	



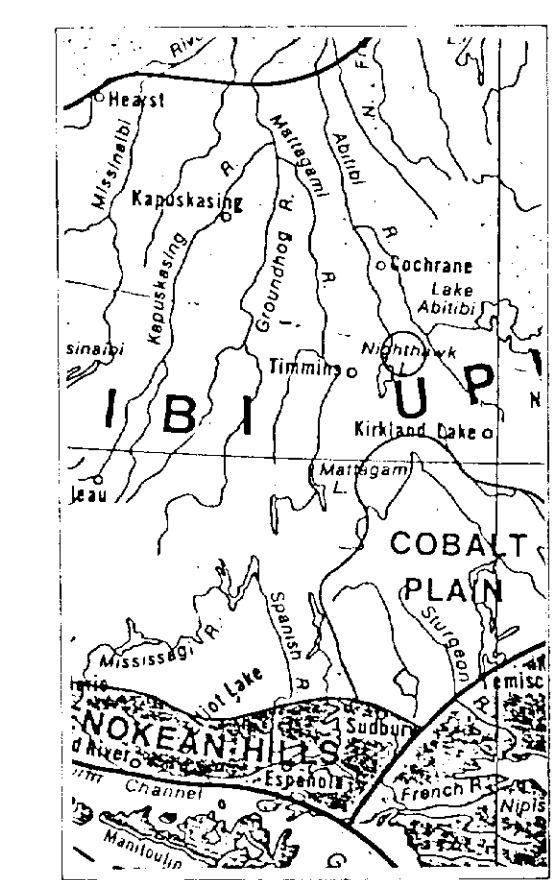


LEGEND

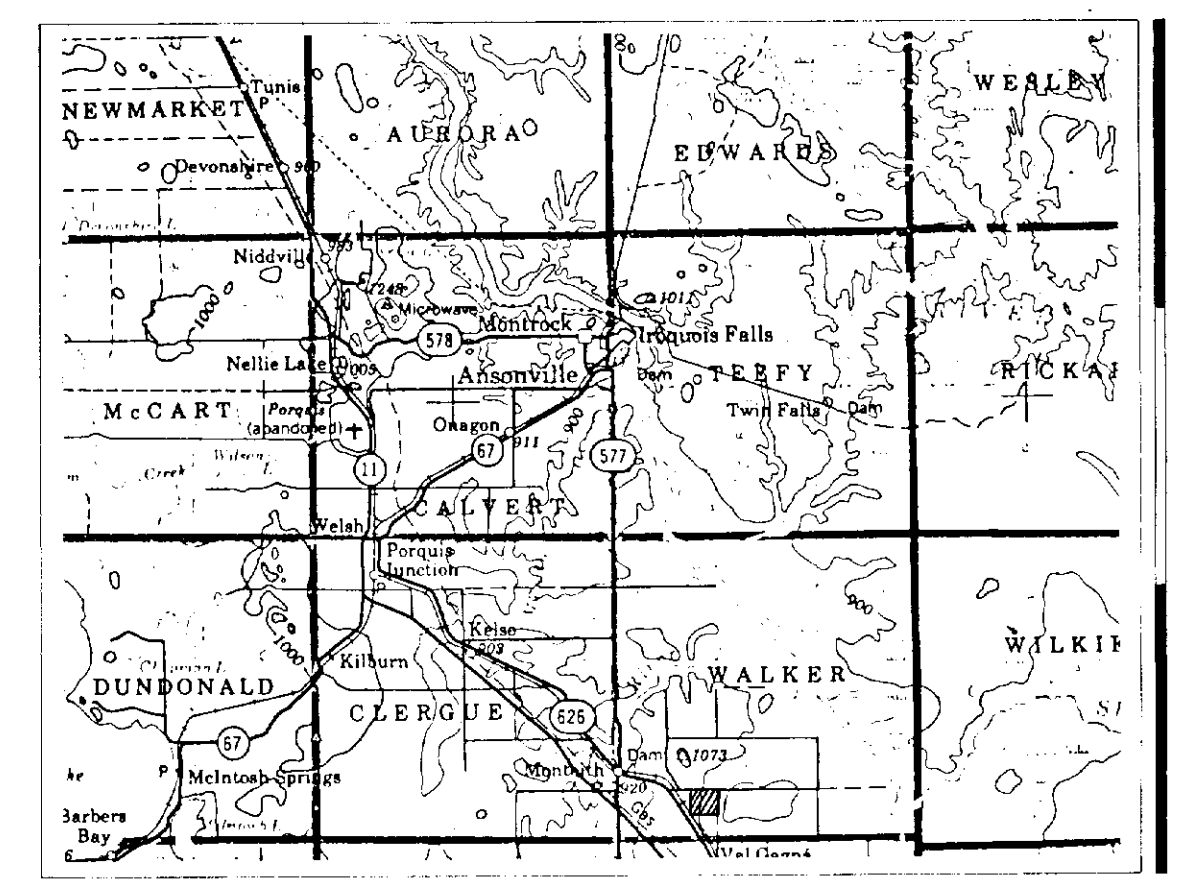
- In-Phase
- - - Quadrature
- ⊙ Conductor Axis



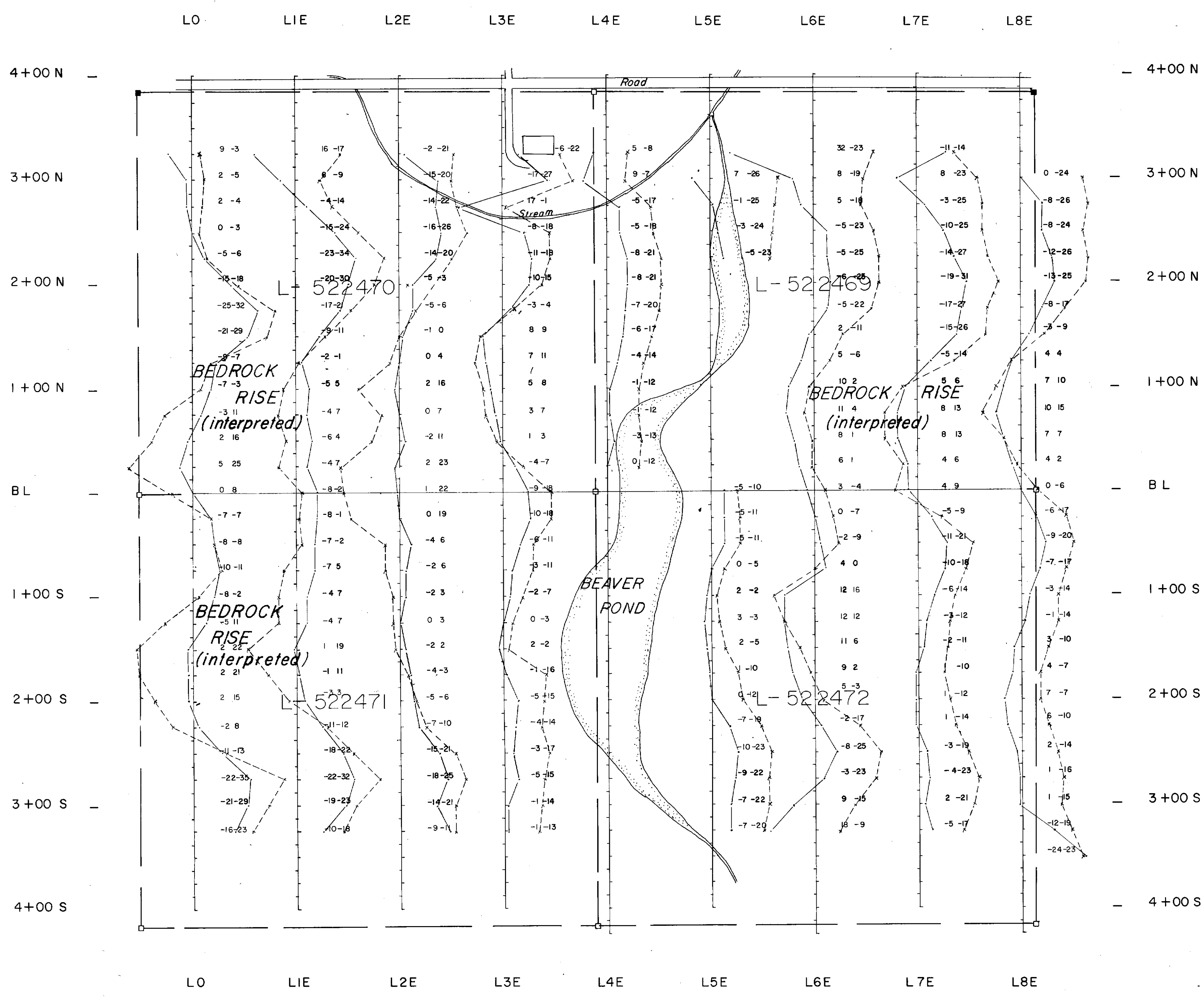
Tx-Rx Separation
Drawn to Scale



LOCATION MAP
1:50,000

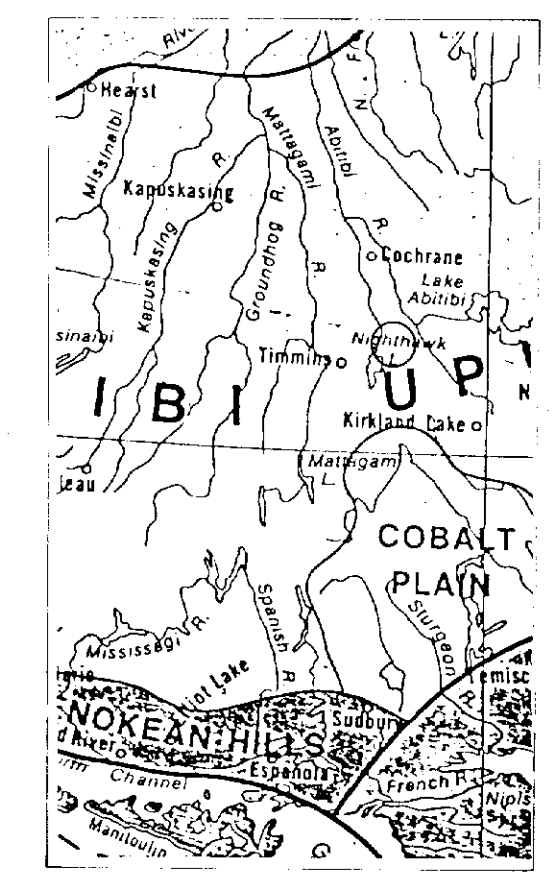
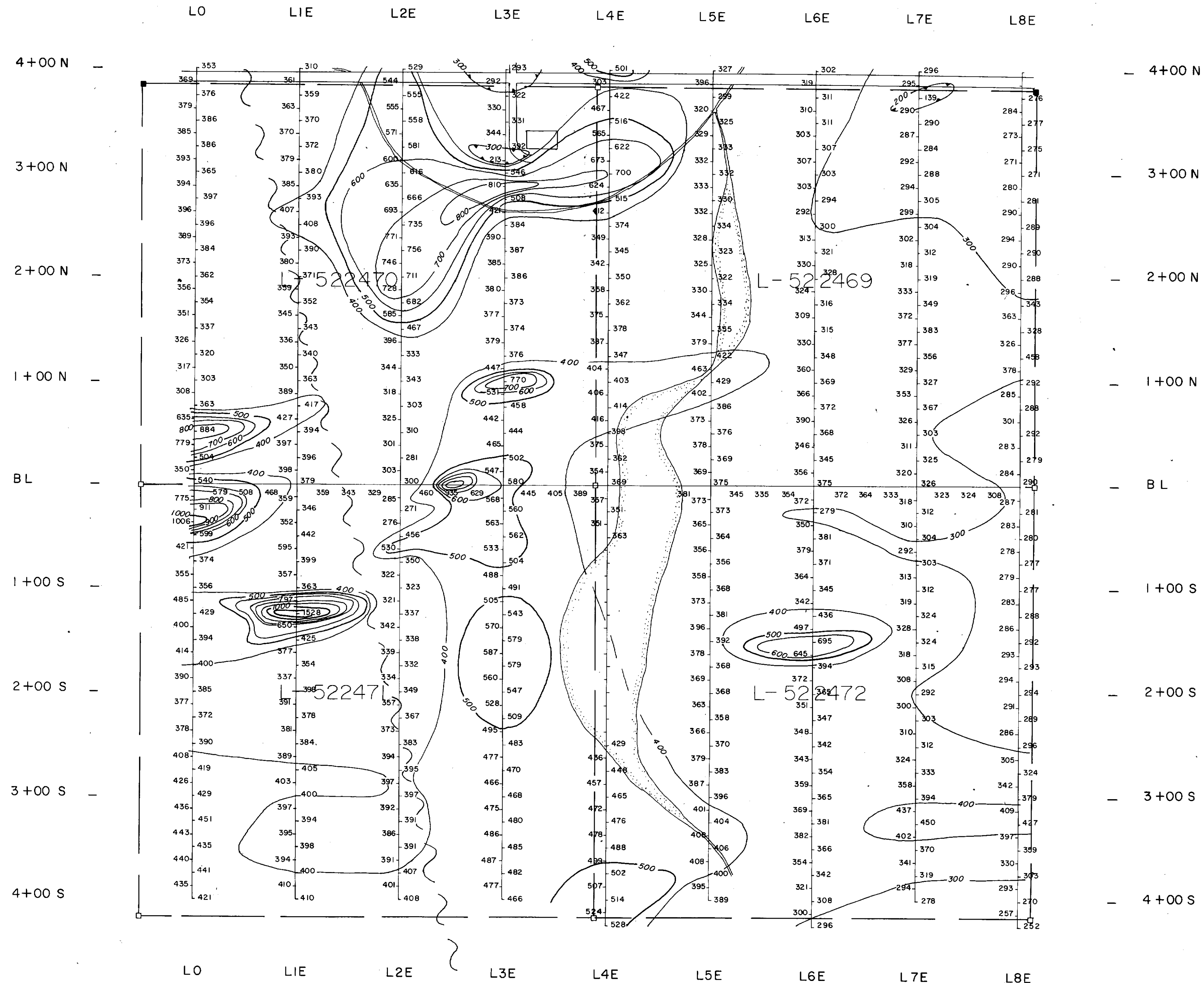
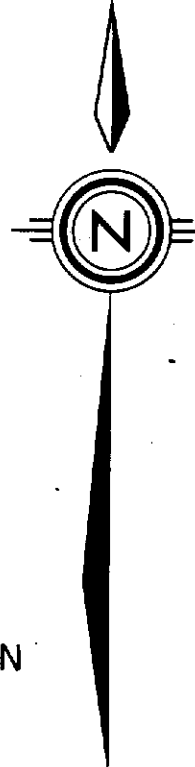


INDEX MAP
1:250,000

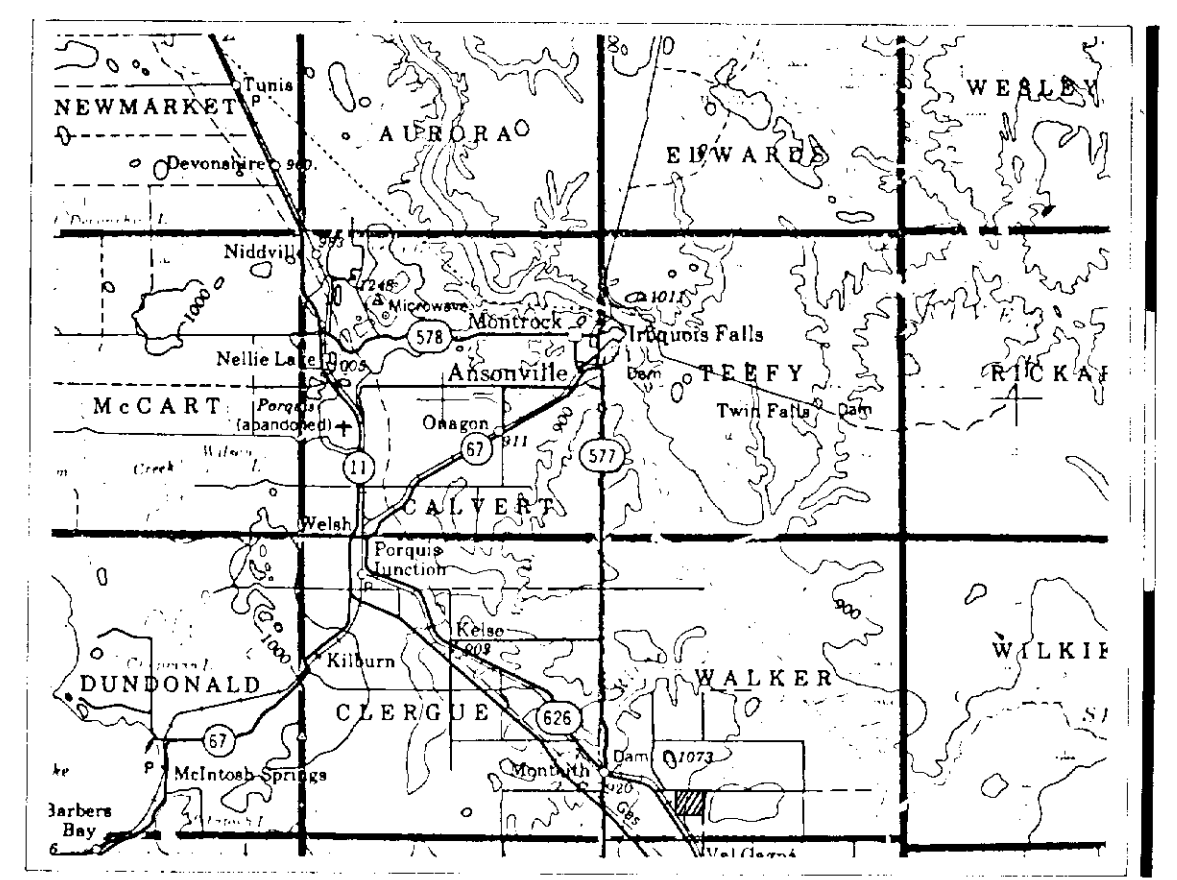


SURVEYMIN LIMITED				
	EAST RAILWAY PROJECT		DRAWN BY R.J.H.	REV
	MAXMIN II		TRACED BY R.J.H.	REV
	HORIZONTAL LOOP SURVEY		APPROVED	REV
	1777 hertz		N.T.S. 42 A/10	REV OCT 1980
		W.G. WAHL LIMITED		Scale 1:2500





LOCATION MAP
1:50,000



INDEX MAP
1:25,000

SURVEYMIN LIMITED			
	EAST RAILWAY PROJECT		DRAWN BY M.E.W.
	TOTAL FIELD PROTON MAGNETOMETER SURVEY		TRACED BY M.E.W.
	(background 59,000nT)		APPROVED REV
			NTS 42 A/10
W.G. WAHL LIMITED			Scale 1:2500

