



42A11SE0438 2.5598 WHITNEY

010

KIDD CREEK MINES LTD.  
REPORT ON GEOPHYSICAL WORK

WHITNEY 51

WHITNEY TOWNSHIP

N.T.S.: 42-A-11

**RECEIVED**

APR 21 1983

**MINING LANDS SECTION**

APRIL, 1983

D. LONDRY

**RECEIVED**

APR 7 1983

**MINING LANDS SECTION**

SUMMARY

A good conductor was outlined within a zone of high magnetic susceptibility on the Whitney 51 property. The good magnetic correlation suggests that the conductor is sulphides, mainly pyrrhotite. One of the holes drilled to test the magnetic trend on claim P 577602 returned a value of .94 oz/ton gold over 2.5 feet.

An I.P. survey is recommended to locate any less conductive areas which may reflect alteration zones. A weak magnetic high striking east-northeast in the south half of the property may represent such a zone.



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010C

ii

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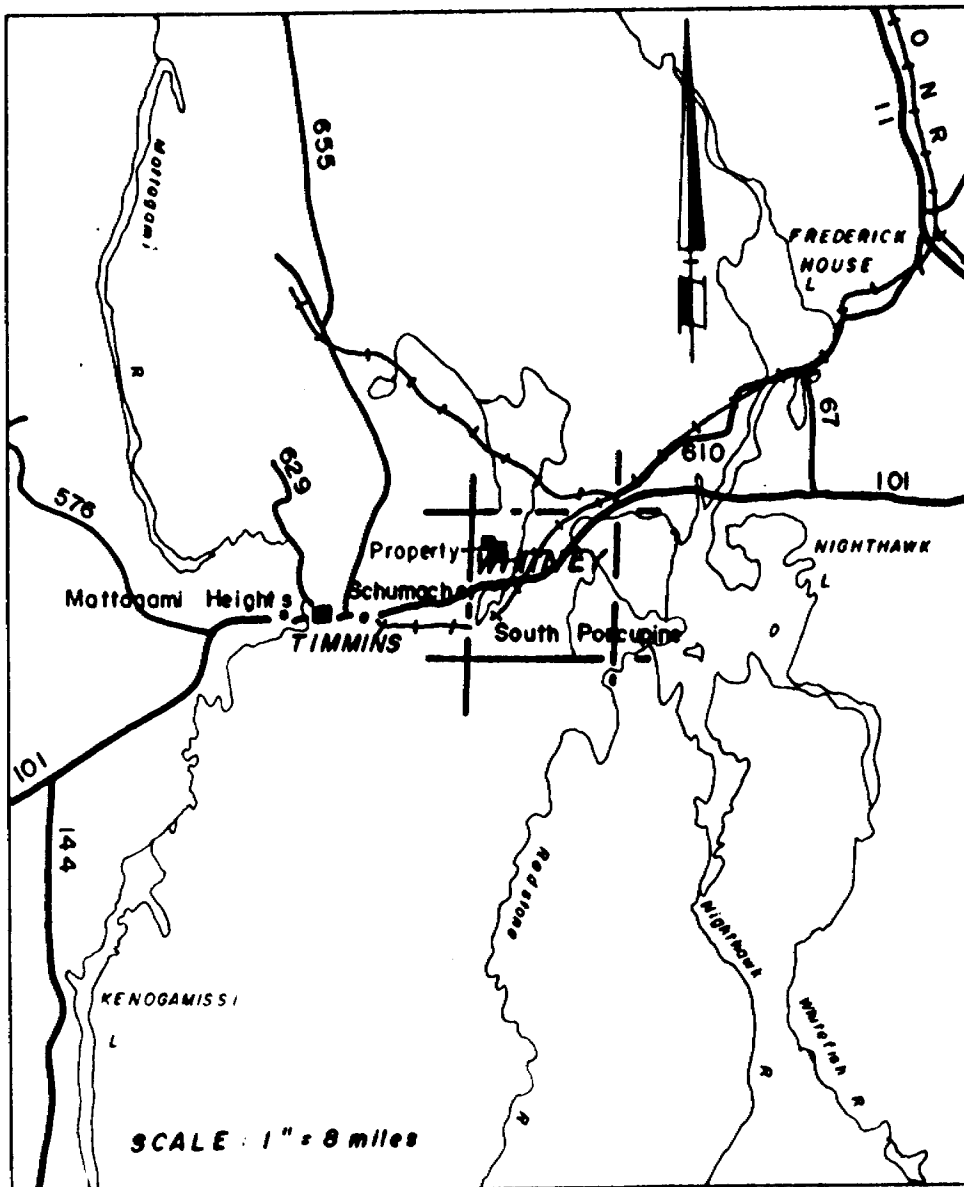


Figure 1 : Location map

## INTRODUCTION

During January and February, 1983, magnetic and horizontal loop electromagnetic surveys were carried out by Kidd Creek Mines Ltd. on five claims in Whitney Township, Porcupine Mining Division, Ontario. The claims located in Lots 11 and 12, Concession V, are numbered as follows:

P 568896

P 576512

P 577602

P 611478

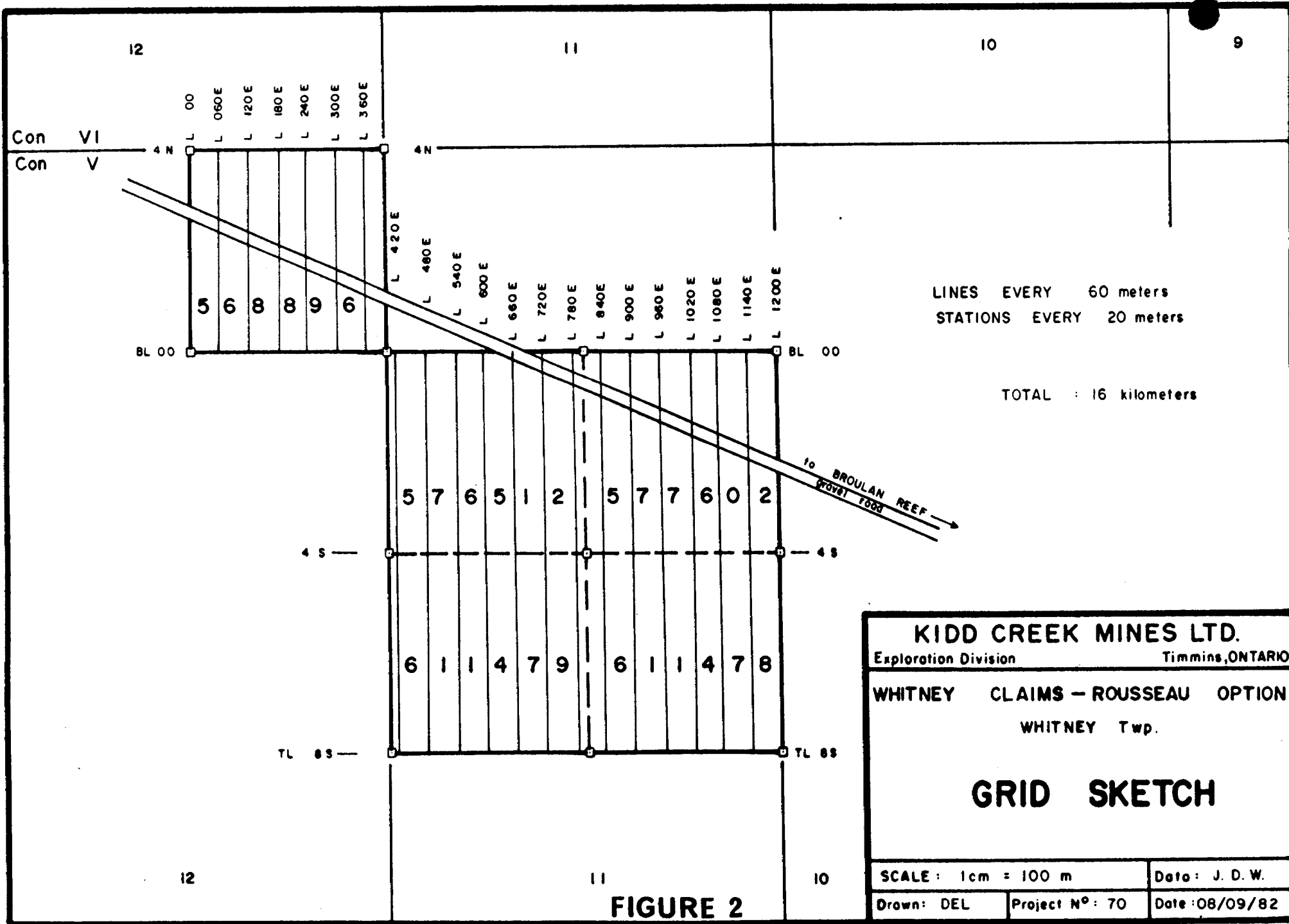
P 611479

The property is located approximately 14 kilometres northeast of the City of Timmins (Figure 1). It is accessible by a gravel road which runs off Highway 101, just west of the Cochrane Temiskaming Resource Centre in Pottsville.

## SURVEY DESCRIPTIONS

An east-west base line was established along the north boundary of the four east claims and along the south





<b>KIDD CREEK MINES LTD.</b>	
Exploration Division	Timmins, ONTARIO
<b>WHITNEY CLAIMS - ROUSSEAU OPTION</b>	
WHITNEY Twp.	
<b>GRID SKETCH</b>	
SCALE : 1cm = 100 m	Date : J. D. W.
Drawn : DEL	Project N <sup>o</sup> : 70
	Date : 08/09/82

**FIGURE 2**

boundary of the northwest claim. Cross lines were cut every 60 metres and picketed every 20 metres (Figure 2).

The magnetic survey was carried out with an EDA PPM-350. This instrument is a proton precession magnetometer which measures the earth's total field to an accuracy of .1 gamma. The diurnal drift was monitored with an EDA PPM-400 base station magnetometer located at 860 East on the base line. Readings were taken every 20 metres in areas of low magnetic gradient and every 10 metres in areas of high magnetics. A total of 845 readings were taken along 14.28 kilometres of line.

The electromagnetic survey was run with an Apex Parametrics Max Min II. A coil separation of 120 metres was used and readings were taken at 444 and 1777 Hertz. A total of 623 readings were taken at 20 metre intervals along 14.28 kilometres of line.

#### PREVIOUS WORK

In 1960, A.S. Bayne & Company mapped the two north claims held by James H. Dillon and recommended geophysical work and drilling. In 1960 and 1961, four holes were drilled to test a west-northwest striking unit reflected by high magnetics. The best intersection averaged .94 oz/ton gold over 2.5 feet. An old shaft is located within this same zone

to the west of these claims on the south boundary of the northwest claim.

In 1964, Prospecting Geophysics Limited carried out horizontal loop EM and magnetic surveys for Hollander Mines Limited along lines spaced every 300 feet on the two south claims. A coil separation of 200 feet was used in the EM survey. A conductive zone with good magnetic correlation was outlined on three of the lines. Four holes were drilled to test this conductor; the best intersection ran .24 oz/ton gold over 1.5 feet.

#### MAGNETIC RESULTS

A magnetic high, up to 1400 gammas above background, strikes west-northwest across claims P 577602 and P 576512, and along the south boundary of claim P 568896. This zone was the target of the 1960 drilling and is described as 'spherulitic lavas' containing disseminated sulphides.

The 1964 drill program on the two south claims was aimed at a weak magnetic high striking east-northeast in the centre of claims P 611479 and P 611478. A similar weak trend is located along the south part of claim P 576512.

Isolated highs occur in the southwest corner of claims P 611479 and the northeast corner of claim P 577602. Both of these areas are topographic highs and the source of the

magnetic anomalies may be explained by geological investigation in the summer.

#### HEM RESULTS

Two conductive zones are labelled A and B on the horizontal loop EM maps. A summary of the interpretation of these anomalies is given in Tables 1 and 2.

Conductor A coincides with the stronger part of the magnetic anomaly which strikes west-northwest. The conductivity is good and gets better to the west, before running off the grid.

Conductor B is a poor conductor with a conductivity thickness of less than 1. It is very doubtful that this anomaly has a bedrock source. Anomalous quadrature readings on claim P 611478 are also probably due to bedrock topography.

The anomalous response which follows the road reflects a natural gas pipeline.


  
DOUGLAS LONDREY

TABLE 1: ANOMALY A 444 Hertz, 120 Metre Coil Separation

line	Anomaly Center	Anomaly Width	Indicated Depth	I. P Max.	O. P Max.	Response Parameter	Conductivity Thickness	Remarks
420 E	0+85S	narrow	48 metres	-11	-5	20	47	north dip direct mag 1400 gammas
480 E	0+85S	narrow	48 metres	- 4	-3	5	12	direct mag 400 gammas
540 E	1+00S	narrow	79 metres	- 2	-1	15	36	direct mag 250 gammas
600 E	1+10S	narrow	48 metres	- 1	-2	3	7	direct mag 200 gammas
780 E	1+45S	narrow	48 metres	- 1	-2	3	7	direct mag 150 gammas
840 E	1+60S	narrow	48 metres	- 4	-3	5	12	direct mag 150 gammas

TABLE 2: ANOMALY B 1777 Hertz, 120 Metre Coil Separation

Line	Anomaly Center	Anomaly Width	Indicated Depth	I. P Max.	O. P Max.	Response Parameter	Conductivity Thickness	Remarks
420 E	2+60S	narrow		- 3	-9	1.2	< 1	no mag correlation
480 E	2+50S	narrow		- 3	-9	1.2	< 1	no mag correlation
540 E	2+43S	narrow		- 3	-10	1.0	< 1	no mag correlation
600 E	2+47S	narrow		- 3	-11	.9	< 1	no mag correlation



Ministry of  
Natural  
Resources

Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

#1



42A11SE0438 2.5598 WHITNEY

900

#156

The N

Type of Survey(s) <b>GEOPHYSICAL</b>		Township or Area <b>WHITNEY</b>	
Claim Holder(s) <b>KIDD CREEK MINES LIMITED</b>		Prospector's Licence No. <b>T-1</b>	
Address <b>571 MONETA AVE., BOX 1140, TIMMINS, ONT.</b>			
Survey Company <b>KIDD CREEK MINES LTD.</b>		Date of Survey (from & to) <b>4 / 1 / 83</b> Day   Mo.   Yr.	Total Miles of line Cut <b>10 MILES</b>
Name and Address of Author (of Geo-Technical report) <b>D. LONDRY, BOX 1140, TIMMINS, ONT.</b>			

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical		
		Days per Claim	
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20	
	- Magnetometer	40	
	- Radiometric		
	- Other		
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric		
	- Other		
	Geological		
	Geochemical		
Man Days	Geophysical		
		Days per Claim	
Complete reverse side and enter total(s) here	- Electromagnetic		
	- Magnetometer		
	- Radiometric		
	- Other		
	Geological		
	Geochemical		
	Airborne Credits	Geophysical	
			Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic		
	Magnetometer		
	Radiometric		

Prefix	Mining Claim		Expend. Days Cr.	Prefix	Mining Claim		Expend. Days Cr.
		Number				Number	
P		568896					
		576512					
		577602					
		611478					
		611479					

**RECEIVED**

JUN 7 1983

MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$  ÷ 15 = Total Days Credits

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

FORCUPINE MINING DIVISION

**RECEIVED**

JUN 2 1983

A.M. P.M.

RECORDED

JUN 2 1983

Total number of mining claims covered by this report of work.

For Office Use Only

Total Days Cr. Recorded **300**

Date Recorded **June 2/83**

Date Approved as Recorded **83.09.26**

Mining Recorder *[Signature]*

Regional Mining Recorder *[Signature]*

Date **JUNE 2/83**

Recorded Holder or Agent (Signature) *W. Gasteiger*

Certification Verifying Report of Work

I hereby certify 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 and the annexed report is true.

Name and Postal Address of Person Certifying  
**W. GASTEIGER, BOX 1140**

DATE CERTIFIED **JUNE 2 1983**

Certified by (Signature) *W. Gasteiger*





GEOPHYSICAL TECHNICAL DATA

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

Number of Stations Mag 735 HL 609 Number of Readings Mag 845 HL 623
Station interval 20 metres, 10 metre detail Line spacing 60 metres
Profile scale HL 444 Hz 1cm= 20% 1777 Hz 1cm= 20%
Contour interval Mag, 20 gammas

MAGNETIC

Instrument EDA PPM-350, FDA Base Station Magnetometer PPM-400
Accuracy - Scale constant .1 gamma
Diurnal correction method Automatically corrected from base station magnetometer
Base Station check-in interval (hours) Base station magnetometer read every 30 seconds
Base Station location and value Line 8400 East, 0 North, 59298 gammas

ELECTROMAGNETIC

Instrument Apex Parametrics Max Min II
Coil configuration Horizontal Loop
Coil separation 120 metres
Accuracy + 1%
Method: [ ] Fixed transmitter [ ] Shoot back [X] In line [ ] Parallel line
Frequency 444, 1777 Hertz (specify V.L.F. station)
Parameters measured Secondary field measured as a percent of the primary field

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

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_

(specify for each type of survey)

Accuracy \_\_\_\_\_

(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken \_\_\_\_\_

Total Number of Samples \_\_\_\_\_

Type of Sample \_\_\_\_\_  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_

**SAMPLE PREPARATION**

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_

General \_\_\_\_\_

**ANALYTICAL METHODS**

Values expressed in: per cent   
p. p. m.   
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others \_\_\_\_\_

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (\_\_\_\_\_ tests)

Name of Laboratory \_\_\_\_\_

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

General \_\_\_\_\_



Mining Lands Comments


To: Geophysics *MR. BARLOW*

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Sept 1/83</i>	Signature <i>[Signature]</i>
--	---	-----------------------	------------------------------

To: Geology - Expenditures

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Geochemistry

Comments

*L.D.*

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

P 568896

2.5598

1983 06 10

Mr. William L. Good  
Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical (Electro-magnetic and Magnetometer) survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims P568896 et al in the Township of Whitney.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

A.Barr:efb

cc: Kidd Creek Mines  
Timmins, Ontario

Attn: D. Londry

2.5598

P-568896

	C.N.	Mag.
P-568896	✓	✓
576512	✓	✓
577602	✓	✓
611478	✓	✓
611479	✓	✓

✓

✓

576512

✓

✓

577602

✓

✓

611478

✓

✓

611479

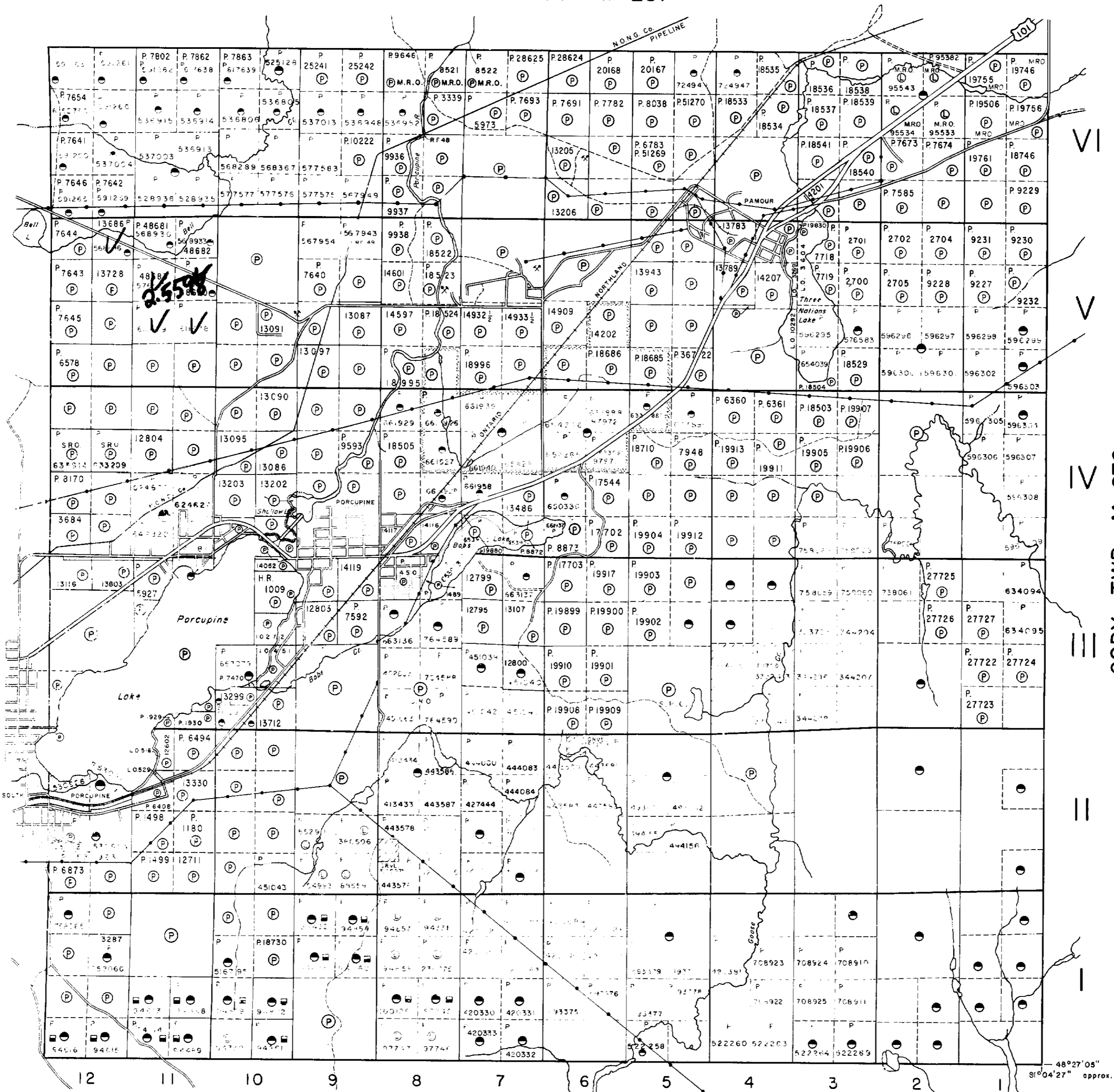
✓

✓

D.K.

HOYLE TWP. M-287

TISDALE TWP. M-315



200

W TWP. M-311

THE TOWNSHIP  
OF

WHITNEY

DISTRICT OF  
COCHRANE

PORCUPINE  
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	(Road symbol)
IMPROVED ROADS	(Road symbol)
KING'S HIGHWAYS	(Road symbol)
RAILWAYS	(Railway symbol)
POWER LINES	(Power line symbol)
MARSH OR MUSKEG	(Marsh symbol)
MINES	(Mine symbol)
CANCELLED	(Cancelled symbol)
S.R.O. PATENTED	(S.R.O. symbol)
M.R.O. LEASED	(M.R.O. symbol)

NOTES

400' Surface rights reservation along the shores of all lakes and rivers.

This township lies within the Municipality of CITY of TIMMINS.

The situation of cons and gravel on lands north of the R.R. from May 6, 1954 until further notice Form 100-N file 55013

Any restakings within stippled area in Lots 5, 6, 7, 8 Con 4 and 5 subject to rights and privileges granted to Fenner Porcupine Mines Ltd. for tailings disposal

AREAS WITHDRAWN FROM STAKING

S.R. - SURFACE RIGHTS	M.R. - MINING RIGHTS
DESCRIPTION	ORDER No. DATE DEPOSITION FILE

DATE OF ISSUE

SEP 22 1983

Ministry of Natural Resources  
TORONTO

ONTARIO

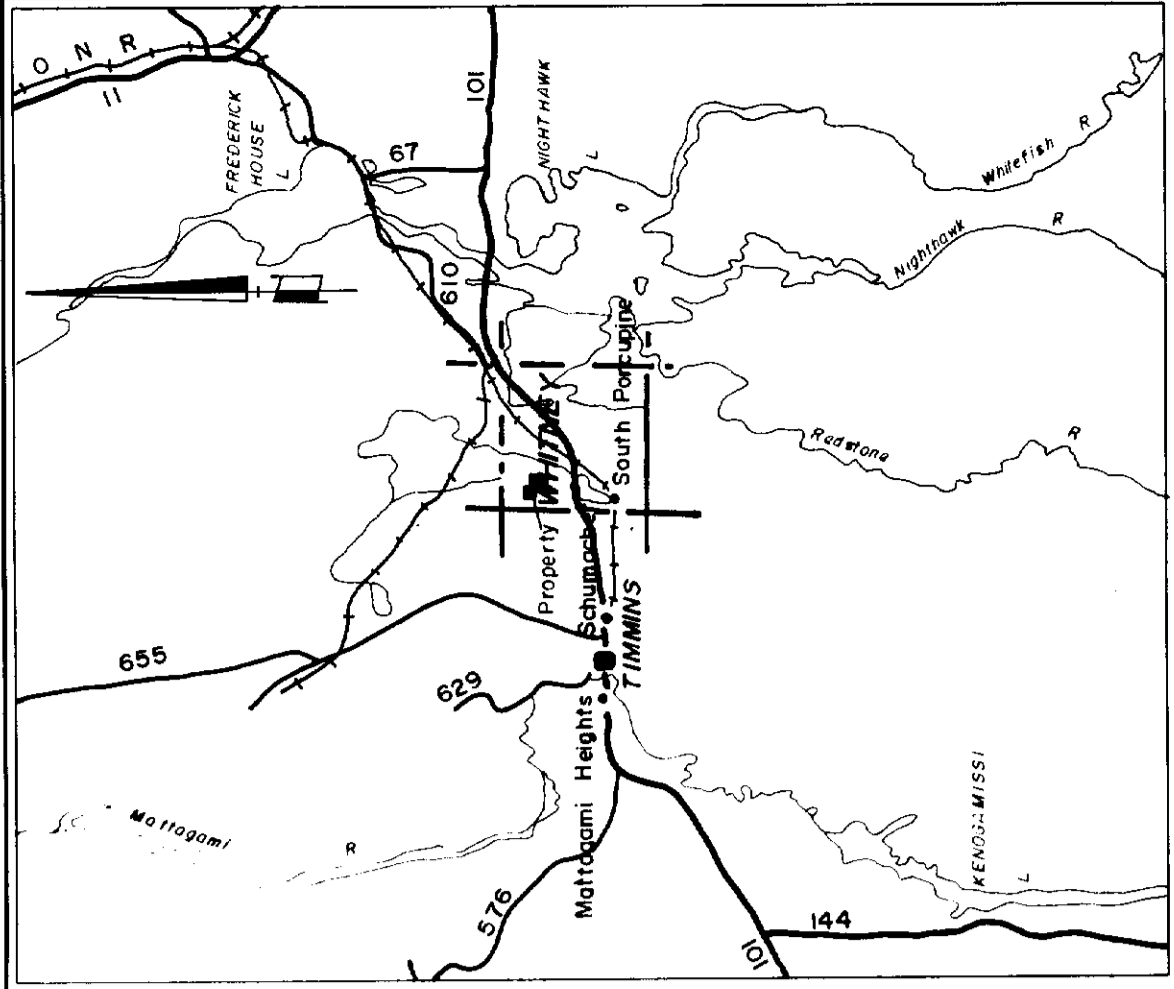
MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

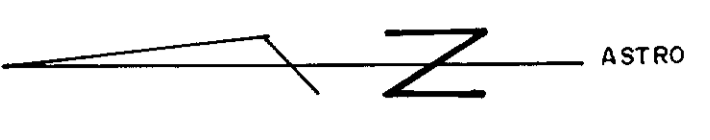
Date 10th. JULY 1974 (Rev.)

Whitney Block  
Queen's Park, Toronto

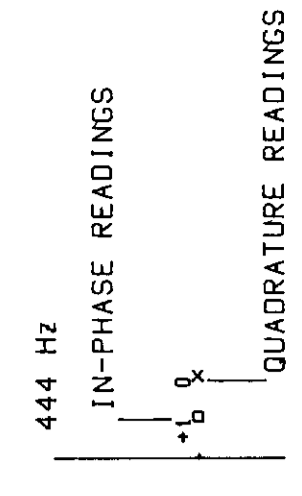
M.319



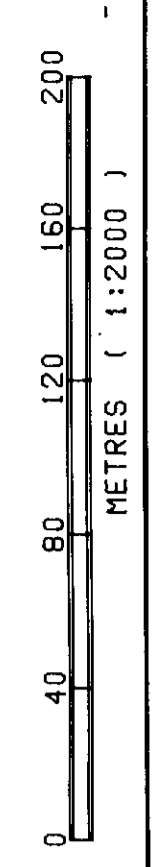
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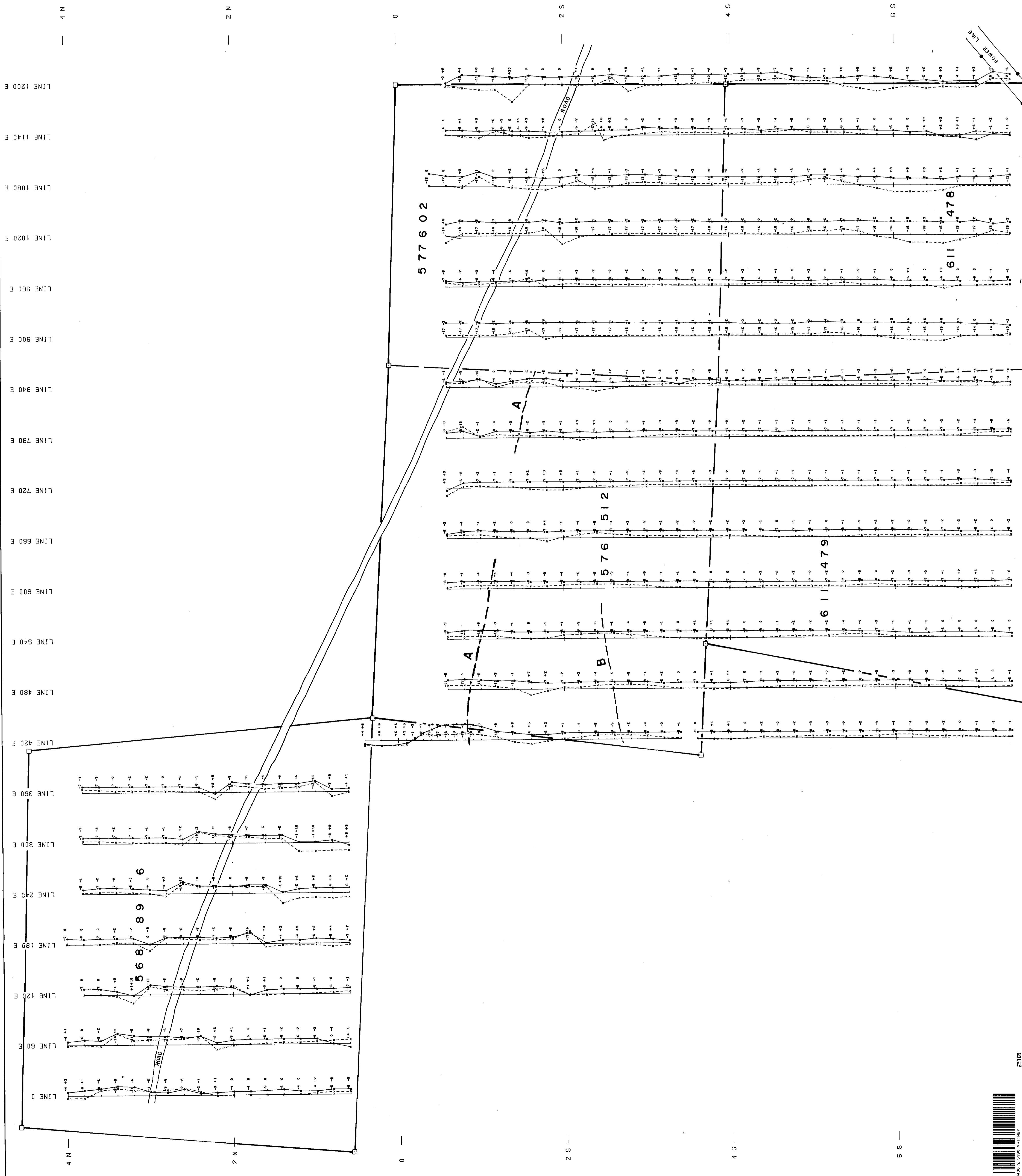
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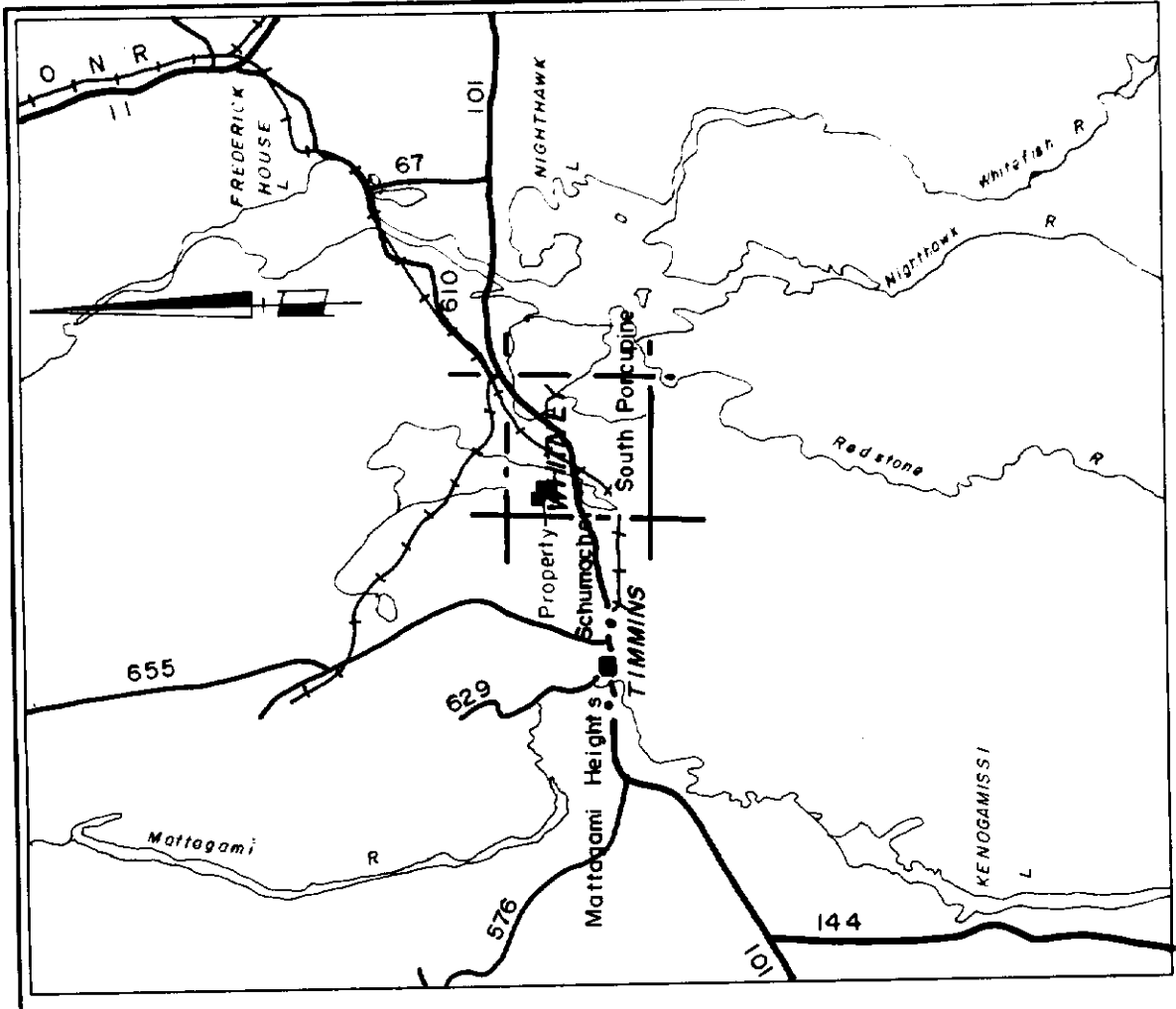
INSTRUMENT : APEX PARAMETRICS MAXMIN II  
 FREQUENCY : 444 Hz  
 COIL SPACING : 120 METRES  
 PROFILE SCALE : 1 CM = 20Z



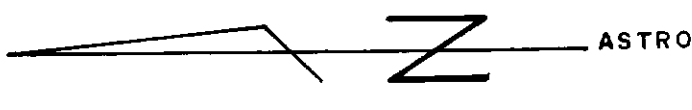
**KIDD CREEK MINES LTD.**  
 HORIZONTAL LOOP SURVEY  
 WHITNEY 51  
 ROUSSEAU OPTION  
 NTS:42-A-11  
 DATE: 1983





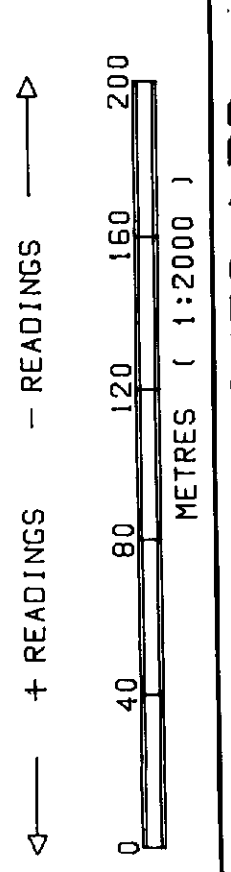


KEY MAP SCALE 1" = 8 miles

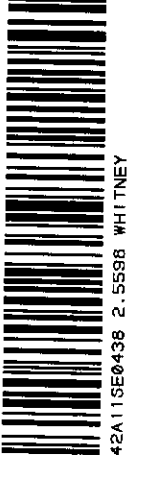
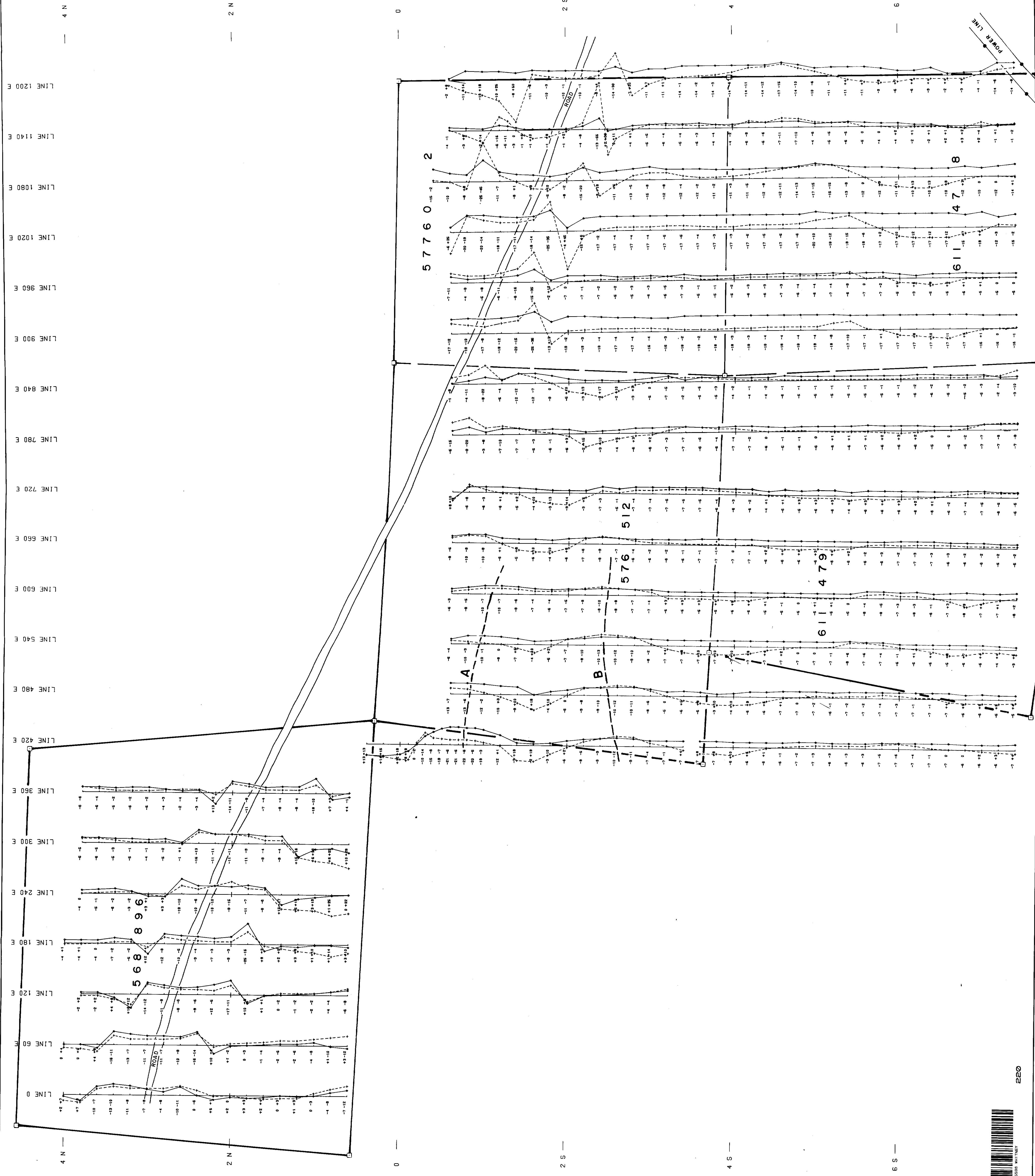


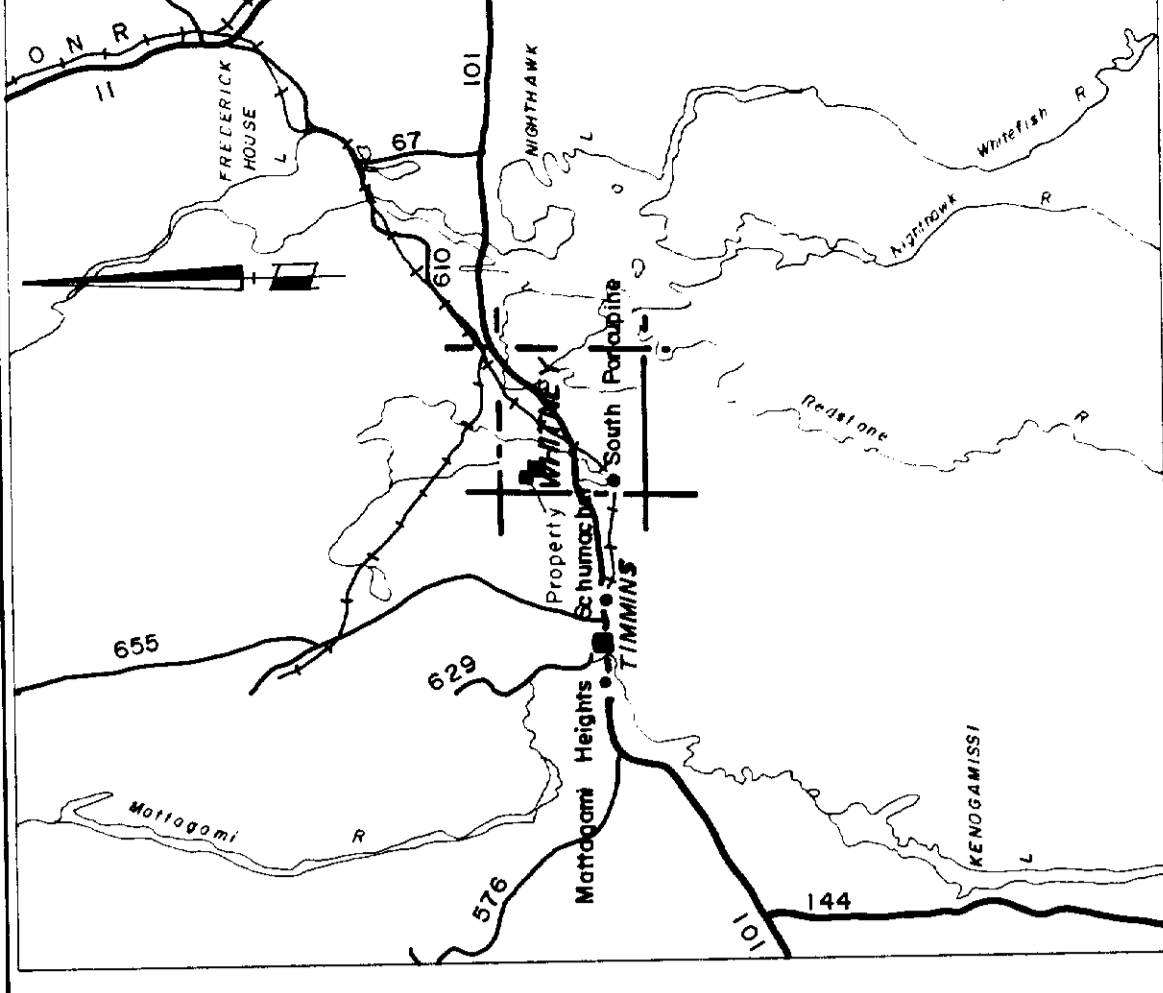
LEGEND

- 1777 Hz
- IN-PHASE READINGS
- QUADRATURE READINGS
- INSTRUMENT : APEX PARAMETRICS MAXMIN 11
- FREQUENCY : 1777 Hz
- COIL SPACING : 120 METRES
- PROFILE SCALE : 1 CM = 20%
- + READINGS - READINGS

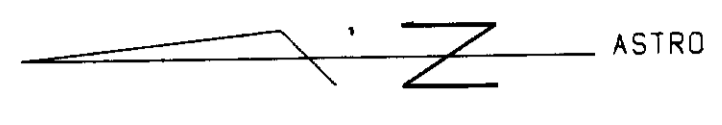


**KIDD CREEK MINES LTD.**  
**HORIZONTAL LOOP SURVEY**  
**WHITNEY 51**  
**ROUSSEAU OPTION**  
 NTS-42-A-11  
 DATE 2/25/83  
 PROJ. #70  
 1983



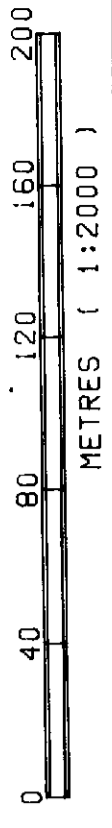


KEY MAP SCALE: 1" = 8 Miles

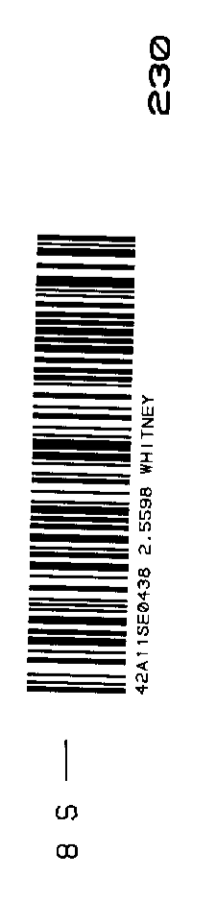
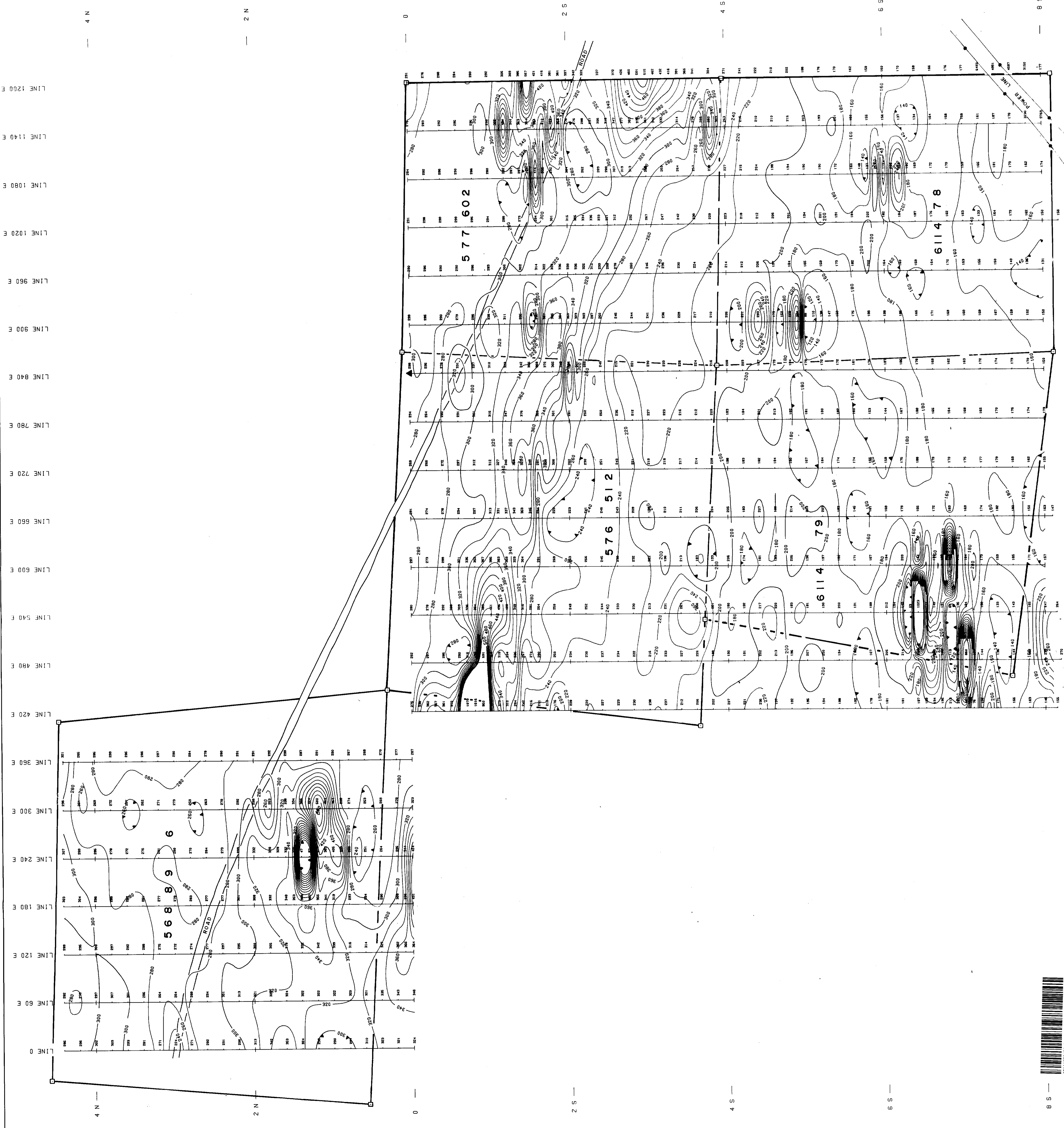


LEGEND

- INSTRUMENT : EDA 1944-1950
- TYPE : PROTON PRECESSION, TOTAL FIELD
- READINGS IN GAMMAS
- ARBITRARY ZERO LEVEL
- ▲ MAGNETIC BASE STATION
- MAGNETIC CORRECTION + 59000



KIDD CREEK MINES LTD.  
 MAGNETIC SURVEY  
 WHITNEY 51  
 ROUSSEAU OPTION  
 NTS-42-A-11  
 DATE 1983



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