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REPORT ON THE  
1995 GEOPHYSICAL PROGRAM

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MINING LANDS BRANCH

FOR  
KRL RESOURCES CORP.

ON THE

SHINING TREE PROPERTIES

LARDER LAKE MINING DIVISION, ONTARIO

Submitted by: R.J. Meikle  
Rayan Exploration Ltd.  
Feb. 28, 1995

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## INTRODUCTION

Rayan Exploration Limited of Timmins Ontario, was hired on a contract basis by, KRL Resources Corp., to conduct a geophysical work program on their "Shining Tree Area Properties". The portion of the Shining Tree Properties covered by this work program are situated within Natal, Knight, Tyrrell, and Macmurchy Townships, Larder Lake Mining Division, Districts of Sudbury and Timiskaming, Ontario (Fig.1).

The geophysical program was carried out on four separate grids, - "Perkins Option", - "Filo Option", - "Obradovich Option", and the "Cook Option".

The program consisted of a Magnetometer, VLF-EM, HLEM and an Induced Polarization Survey, all of which were carried out during the months of Jan. and Feb., 1995.

The purpose of this project was to further test areas known to contain significant gold and base metal mineralization. A diamond drill program was planned to test any significant geophysical results.

This report will outline the survey parameters used and results of the geophysical surveys conducted on each of the four separate properties.

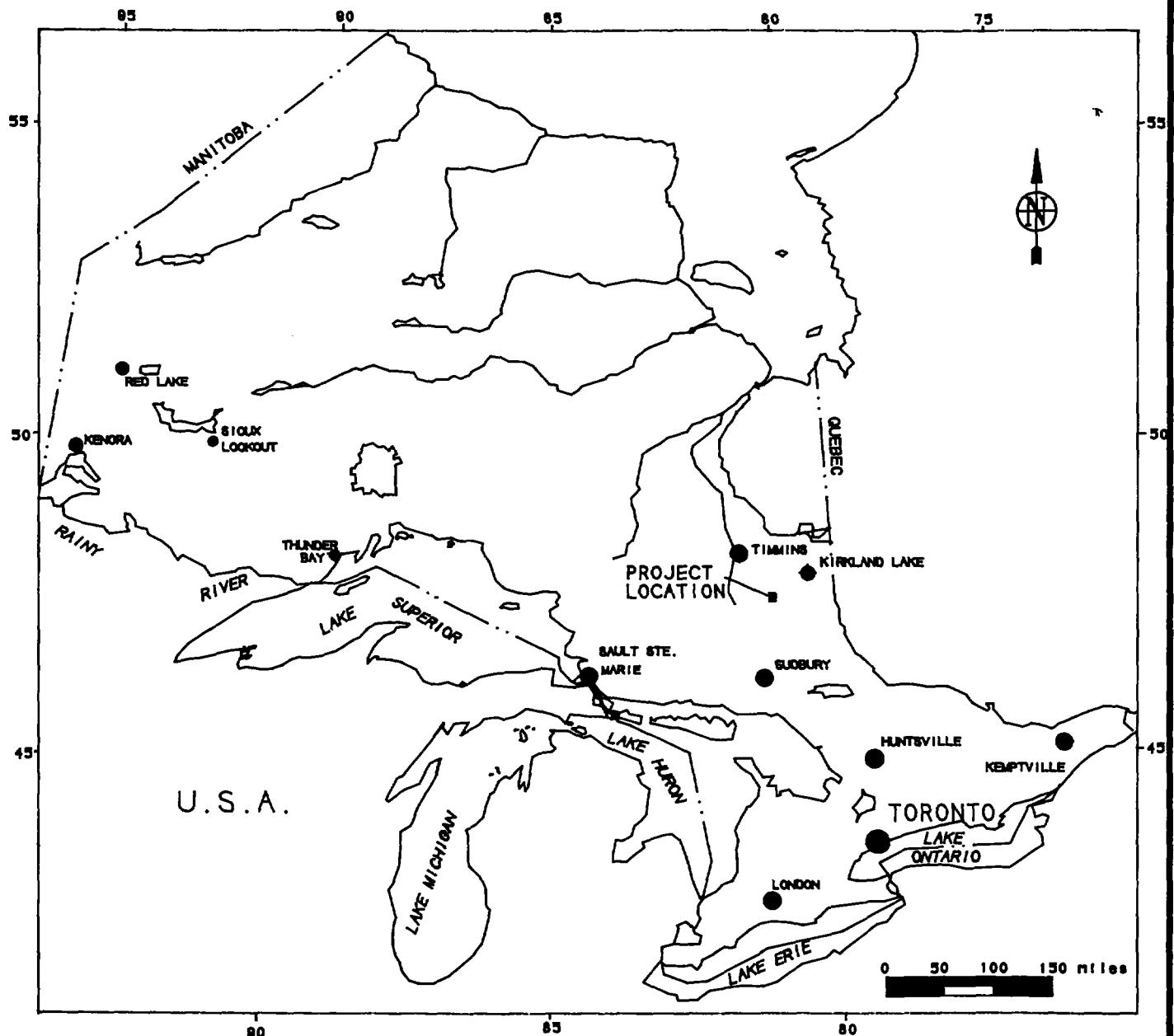
### LOCATION AND ACCESS

The four grids covered by this work program are located within Natal, Knight, Tyrrell, and Macmurchy Townships, Larder Lake Mining Division, Districts of Sudbury and Timiskaming, Ontario.

The Shining Tree Properties, are located approximately 80 km. south from the city of Timmins, Ontario. Locally, the work area is situated about 20 km. northeast of the village of Shining Tree, or 20 km. west of the village of Gowganda (Fig.2).

During the survey period, the work crew stayed in the village of Gowganda, and the property was accessed from there. A 25 km. ride on Highway 560, west from Gowganda provided excellent access to the central portion of the property. This Highway cut east west through the block.

From here, the remainder of the block was accessed by snowmobile. In this area, a network of old logging and drill roads heading north and south of the highway, were utilized. This provided good access to much of the remainder of the property.



## PROVINCE OF ONTARIO

Fig #1

<b>KLR RESOURCES CORP.</b>	
SHINNING TREE AREA PROP.	
LOCATION MAP	
Date: _____	Scale: 1" = 150 mi N.T.S.: 41P/NE
Drawn: R.M.	Approved: R.M. File: LOC

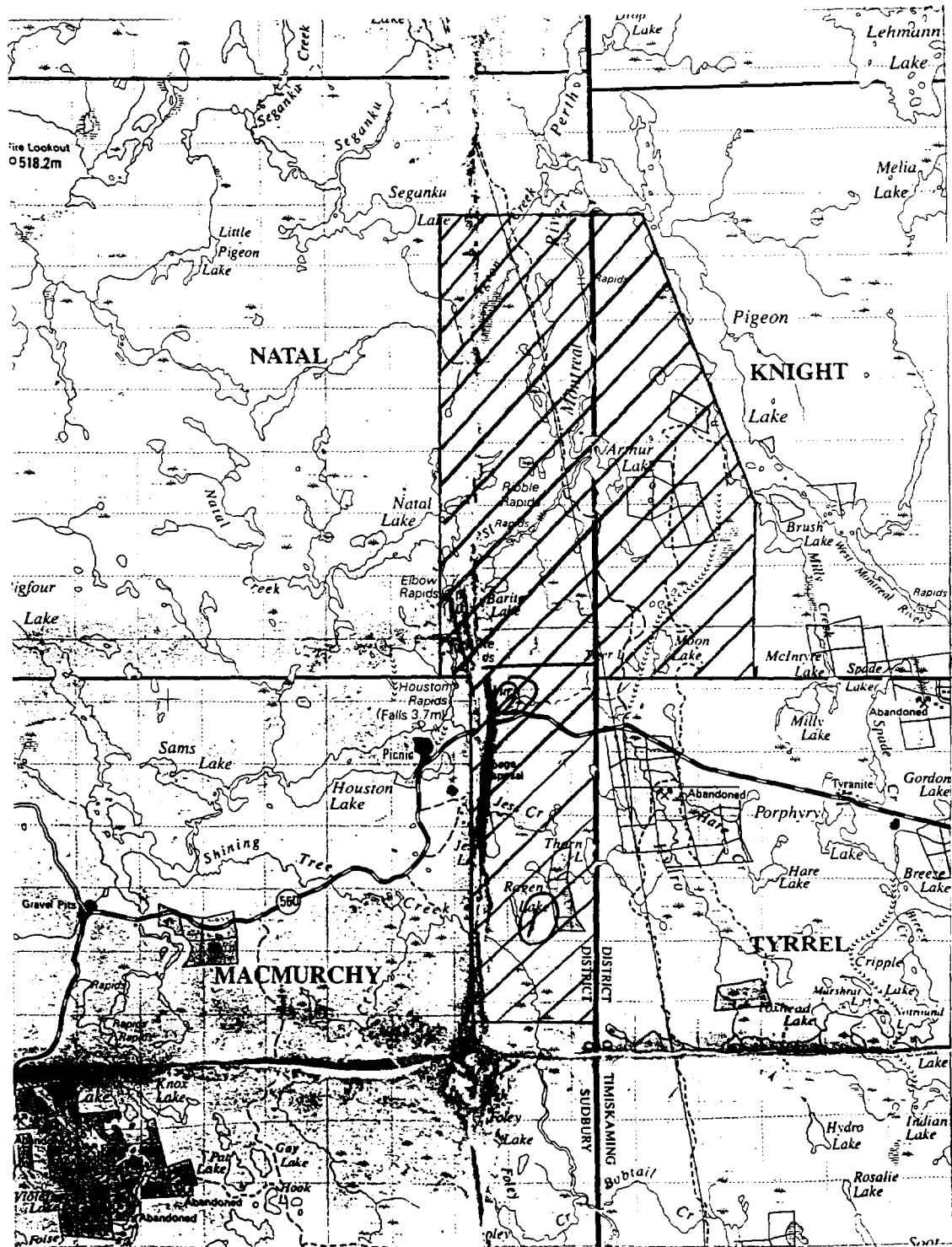


Fig. 2

Client: KLR RESOURCES CORP

Property: SHINNING TREE AREA

**Title:** REGIONAL LOCATION  
MAP



### PROPERTIES

The Shining Tree Property currently being worked by KRL Resources Corp. is made up of a variety of different claim groups and option deals (Fig. 3). Of these, the current geophysical program covered only four of the areas. A brief description of the four claim blocks, as well as the type of geophysical coverage is listed below.

#### **FILO OPTION**

- 9 claim units located in Knight Township.
- 44 claim units located in Natal Township
- Geophysical coverage: HLEM and VLF-EM

#### **PERKINS PROSPECT**

- 30 claim units located in Natal Township
- Geophysical coverage: Mag, Max-Min and IP

#### **COOK OPTION**

- 1 claim unit located in Macmurchy Township.
- 1 claim unit located in Natal Township
- Geophysical coverage: IP and Mag.

#### **OBRADOVICH OPTION**

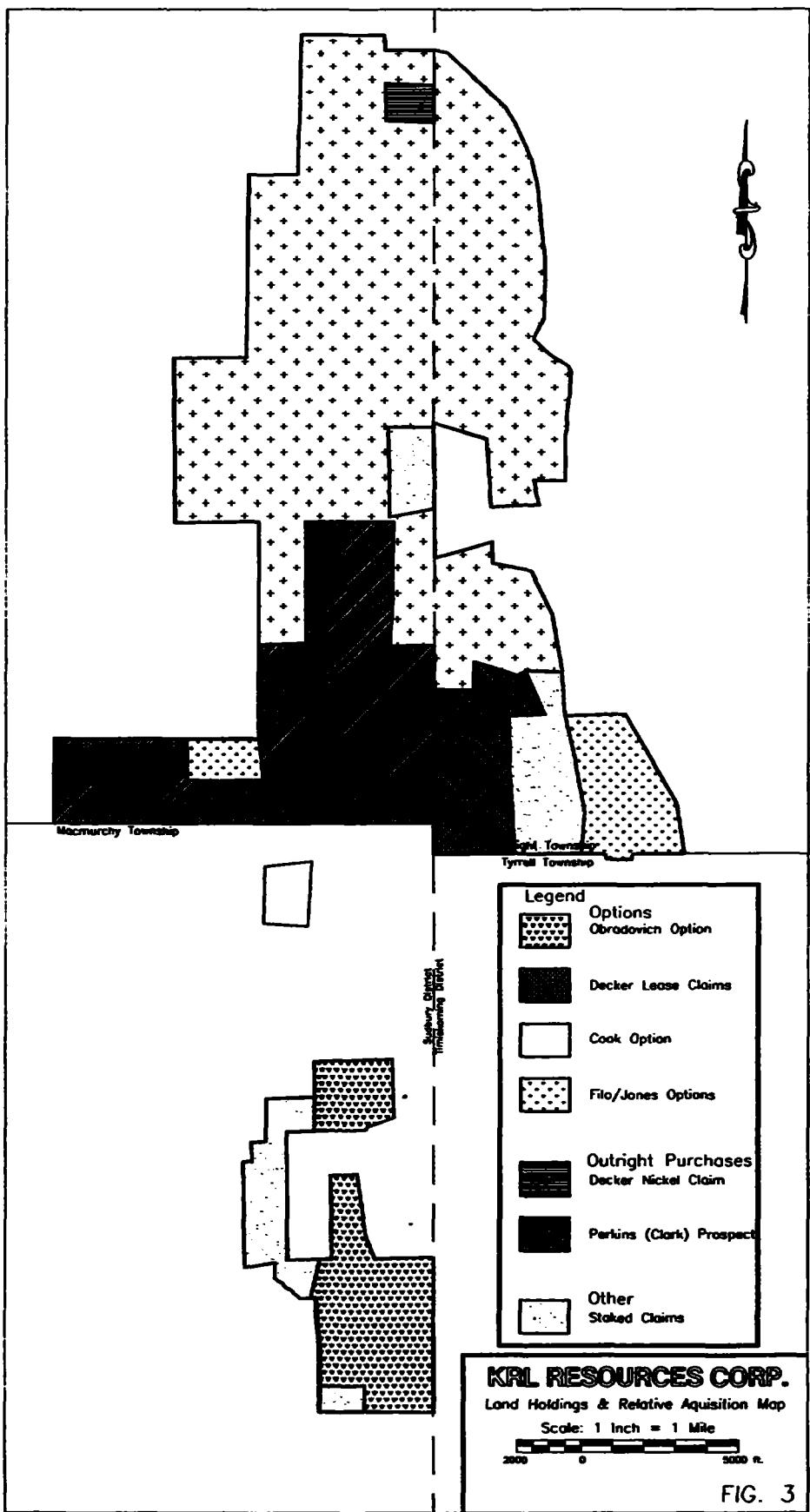
- 19 claim units located in Macmurchy Township.
- Geophysical Coverage: IP

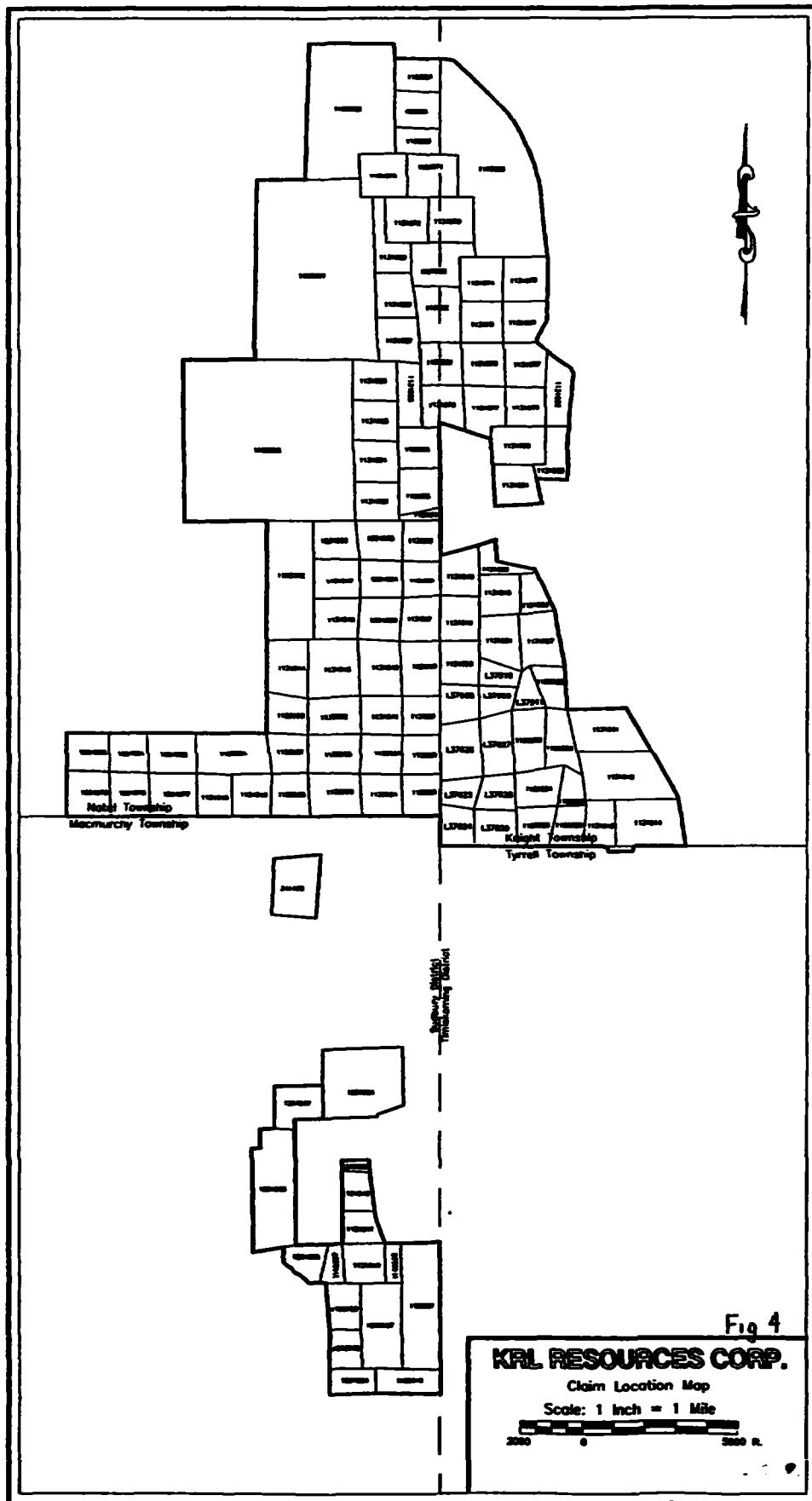
### PERSONNEL

The people directly involved in the geophysical program covered in this report were all employed by Rayan Exploration Limited, of Timmins, Ontario, and are listed below.

Wayne Pearson.....	Timmins
Eddy Brunet.....	Timmins
Aural Chamont.....	Timmins
Donny McKinnon.....	Timmins
Lanny Anderson.....	Timmins

All work was supervised by R.J.Meikle.





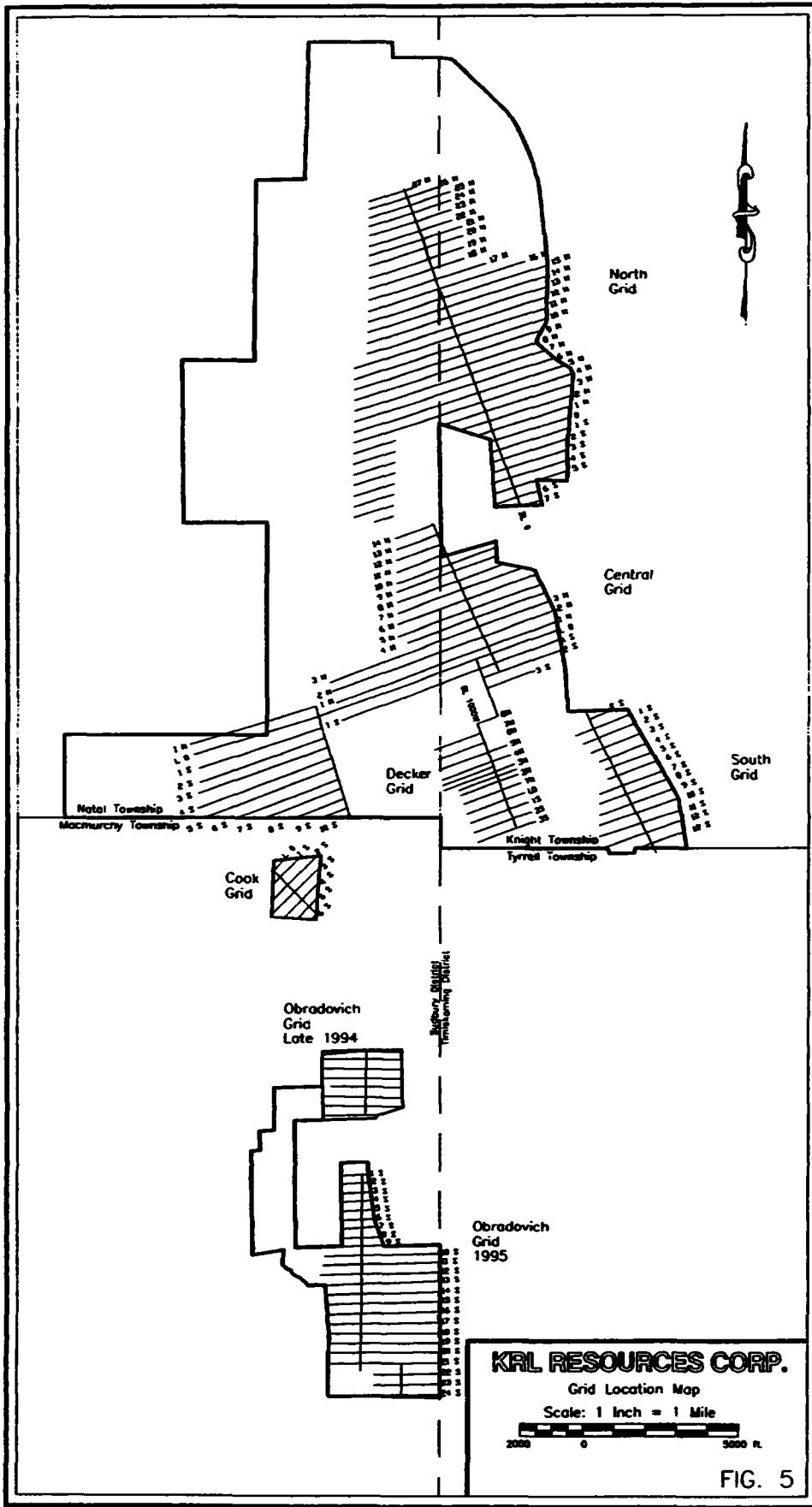
PREVIOUS WORK

The following is a brief account of the work previously filed on the Shining Tree Properties, which is currently held by KRL Resources Corp.

A number of companies have been active in the immediate area. Some of these include Timiskaming Nickel Ltd., McIntyre Porcupine Mines, Ecstall Mining Company and Getty Mines Limited. These companies have worked the ground at different times between 1948 and 1976. A variety of different geophysical and geological programs were conducted, some of which reported encouraging results. Some of these results includes various geophysical targets as well as assay results of .005 oz/Au., .02 oz/Ag., .02 oz/Zn. 024 oz/Pb and .13 oz/Cu.

Recent sampling of the property done by KRL Resources limited has reported significant values in Au. and Cu. These include Au. values ranging from .124 oz to 5.3 oz/ton, and Cu. values as high as 6.11% Cu.

Overall, work previously conducted on the properties indicates an excellent gold and base metal potential.



### GEOPHYSICAL PROGRAM

Rayan Exploration Limited was hired on a contract basis by KRL Resources Corp. to conduct a geophysical work program on their "Shining Tree Area Properties". This consisted of Magnetometer, VLF-EM, HLEM and Induced Polarization Surveys. These surveys were carried out during the months of January and February, 1995. Four separate grid areas were surveyed. For the types of surveys done in each area, refer to the "Properties" portion of this report. A general description of the instrument specifications, as well as the survey parameters used is discussed in further detail below.

#### MAGNETOMETER SURVEY:

The magnetometer survey was carried out on portions of the Perkins Prospect and the Cook Option. This includes 2.5 km. on the Cook Option, and 20 km. on the Perkins Prospect, for a total of 22.5 km.

An EDA Omni Plus Proton Precession magnetometer was used to carry out the magnetometer survey. The instrument is synchronized with an EDA recording base station to help eliminate magnetic diurnal variation. This should ensure an accuracy of less than 10 Nt.

The Proton Precession method involves energizing a wire coil immersed in a hydrocarbon fluid. This causes the protons in the proton rich fluid to spin or precess simulating spinning magnetic dipoles. When the current is removed the protons precess about the direction of the earth's magnetic field, generating a signal in the same coil which is proportional to the total magnetic field intensity. In this way, the horizontal gradient of the earth's magnetic field can be measured and plotted in plan form with values of equal intensity joined to form a contour map.

This presentation is useful in correlating with other data sets to aid in structural interpretation. Individual magnetic responses can be interpreted for dip, depth and width estimates after profiling the data.

The following parameters were employed for the survey:

Instrument - EDA Omni Plus Proton Precession Magnetometer

Station Interval - 12.5m

Line Interval - 100m

Diurnal Correction Method - EDA Recording Base Station

Data Presentation - Perkins Prospect and Cook Option

- Plan, Magnetic Contour Map

- 1:5000 scale

- Contour interval = 20 nano-teslas

### VLF - EM Survey

The VLF survey was conducted on the Filo Option, and consisted of 1.5 km. of survey to locate a previous VLF conductor.

A Geonics EM-16 VLF, instrument was used, recording both the In-phase (dip angle) and Quadrature values at 25m intervals.

The following is a brief description of the VLF method. While VLF stands for Very Low Frequency, it is for mineral exploration purposes a very high frequency compared to other commonly used Electromagnetic Surveys. The commonly used frequencies are in the order of 18-20 kilohertz. The VLF-EM technique employs fixed transmitter stations located at various places around the world to facilitate navigation. Because of this, one has a limited choice as to what transmitter station that can be used, depending on distance from and azimuth to the transmitter station.

For this survey, Annapolis Maryland, (NSS) was used. It has an operating frequency of 21.4 khz and an azimuth of approximately of 160 degrees TN from the property. Very briefly, the transmitting station emits a concentric, circular wave pattern, expanding about the transmitter dipole. Being thousands of miles away from the transmitter, we deal with the tangent of this wave pattern which in this case would have a direction normal to the azimuth of 160 degrees. Thus any conductors having a general NS strike direction would be intersected by this signal which induces a signal in the conductor which in turn opposes the

primary signal from the transmitter station. This elliptically polarizes the resultant field enabling detection of the conductor using a receiver coil to determine the attitude of the resultant field at various points along the grid lines.

The resultant field dips away from the conductor axis on both sides of the conductor producing a cross-over on the conductor axis. For an NS conductor, a true cross-over would occur where the field dips south and changes to a east dip as you progress from west to east. For this survey, a +/- system is used where a (+) dip angle means the field is dipping to the west (indicating anomaly is to east) and a (-) dip angle means the field is dipping to the east (indicating anomaly is to west). This is the case only if all readings were taken facing east as per this survey.

The quadrature values, while not useful alone, can help distinguish between bedrock conductors which generally have a smaller out-of-phase response than overburden or short wavelength conductors. Also, the polarity of the quadrature is diagnostic, ie; if the polarity follows or is the same sense as the In-phase it gives more credibility to the conductor. Reverse quadrature often indicate overburden responses.

The following parameters were employed for the survey:

Instrument - Geonics EM-16 VLF  
Transmitter Station - Annapolis, Maryland (USA)  
- Call symbol NSS

Frequency - 21.4 KHZ  
Azimuth to station - approx. 160 degrees TN  
Reading Direction - All reading taken facing east  
Station Interval - 25m  
Line Interval - 100m

**Data Presentation - Plan, profiled map, Filo Option**

- Scale - 1:5000
- profile scale 1 cm = 20%
- Appendix - H

**HORIZONTAL LOOP EM SURVEY**

The HLEM survey was conducted on both the Filo Option and Perkins Prospect. A total of 3 km. on the Filo Option, and 5 km. on the Perkins Prospect, resulting in 8 km. overall.

The Horizontal Loop EM survey was carried out with an Apex Max-Min II instrument. These surveys are commonly called "Max-Min" surveys in recent times.

The Max-Min II instrument can operate at five frequencies (3555HZ, 1777HZ, 888HZ, 444HZ, 222HZ)., and is capable of coil separations from 25 meters to 200 meters. Although it can be used in the vertical loop mode as well as minimum coupled, it is most often used in the Maximum Coupled, Co-Planer mode which is in effect a Horizontal Loop Electromagnetic Survey.

The instrument records the "In-Phase" and "Out-of-Phase" components of the anomalous resultant field from a conductor as a percentage of the primary field strength. Both components are used in the interpretation of the results. Generally, the larger the ratio of peak negative responses between In-Phase and Out-of-Phase, the higher the conductivity of the anomaly. A ratio of 1:1 is considered a medium conductor.

The purpose of reading more than one frequency is to obtain more information about the conductor itself as well as the

conductivity of the overburden etc. The higher frequencies will respond to weaker conductive features such as faults, conductive overburden etc. As a result the signal from these frequencies can attenuate very quickly, possibly not penetrating to the bedrock at all. The lower frequencies having a longer wavelength tend to penetrate deeper and generally only respond to anomalies with a higher order of conductance,. Thus as with most geophysical techniques it is a trade off as to depth of penetration vs. conductance threshold detectable. The use of multi frequency surveys helps to alleviate this problem at a minimal extra cost.

The Max-Min survey was carried out using an Apex Max-Min II instrument reading 1777HZ, and 444HZ with a constant coil spacing of 100 meters. The Maximum Coupled mode was employed with the coils co-planer. A reading interval of 25 meters was used. Because of the relatively flat surface topography, no slope or topographic corrections were necessary. The entire survey was read with unit serial no. 1057 with twice daily phase mix testing to ensure that the data would be consistent across the surveyed area.

The following parameters were used for the HLEM survey.

Instrument: Apex Max-Min II

Station Interval: 25 M

Line Interval: 100 M

Frequencies: 444 Hz., 1777 Hz.

Coil Separation: 100 M

Data Presentation: - Profiled Plan Map: Filo Option  
: Perkins Prospect

- Scale: 1:5000

- Profile Scale: 1 cm.= 10 %

### INDUCED POLARIZATION SURVEY

The Induced Polarization Survey was conducted the Perkins Prospect, Cook Option and Obradovich Option. This resulted in a total of 25 days of Induces Polarization being conducted. Individually, this breaks down to 9 days on the Perkins Prospect, 2 days on the Cook Option and 14 days on the Obradovich Option.

The IP method involves applying voltage across two electrodes in a pulsed manner i.e. 2 seconds on, 2 seconds off. A second "dipole" or electrode pair, measures the residual potential or voltage between them after the voltage is shut off or during the 2 second off cycle. The potential is recorded at different times after the shut off. If, for example, there is sulphide mineralization within the measuring dipoles, they will be polarized or charges set up on the sulphide particles. This polarization gives the zone a capacitor effect, thereby blocking the current delay giving a higher chargeability reading.

A typical signature for many gold showings would be a chargeability high, resistivity high and magnetic low. This would be characteristic of a mineralized, highly altered carbonated and/or silicified zone. However, this is by no means the only geological setting for gold, therefore every profile should be looked at individually and correlated with all other geophysical-geological data.

### Electrode Array

The electrode array used for the survey was the Dipole-Dipole Array. In this array two current electrodes (C1, C2) and two receiver or potential electrodes are moved down a line in unison. In this case the "a" spacing or distance between each dipole was fixed at 25 meters apart. For an N=1 reading, the closest C1 and P1 were 25 meters apart. The C1-C2 dipole remain in the same place while the potential dipole (P1-P2) moves ahead on "a" spacing and the array is ready for an N=1 reading.

### IP Survey Parameters

The IP survey was carried out using the following parameters:

Method: Time Domain  
Electrode Array: Dipole-Dipole  
"a" spacing: 25 meters  
Number of Dipoles Read: 1-4  
Pulse Duration: 2 seconds on, 2 seconds off  
Delay Time: 310 milliseconds  
Integration Time: 120 milliseconds  
Receiver: Scintrex IPR-12  
Transmitter: IPC-9 200 kva.  
Data Presentation: Contoured Psuedo Sections on plates:  
- Obradovich Option: 3 Plates  
- Perkins Prospect: 2 Plates  
- Cook Option: 1 Plate  
Scale: 1:2500

### SURVEY RESULTS

The geophysical program conducted on the Shining Tree Properties for KRL Resources Corp. was successful in outlining a number of areas of interest. The results obtained for the four different areas surveyed will be discussed separately and any significant geophysical responses occurring within them, will be also be discussed individually and in further detail below.

#### **FILO OPTION**

The geophysical surveys conducted on the Filo Option took the form of a VLF-EM and HLEM survey. This was successful in outlining a previously detected VLF conductor running through the grid in roughly a north south direction. The VLF results show the zone to extend from L2N/275E to L4N/300E, and remaining open in both directions. The HLEM conducted on these same lines shows a one line conductor on L3N/274E, which is coincidental with the VLF conductor.

There is an in-phase response on L3n/250e and L4n/162n, with no quadrature response. This anomaly could be a result of topography but should be investigated as it appears to line up with the response on L2n.

If the HLEM/VLF conductor is the primary focus on this property, there is sufficient data to diamond drill test it at this time.

**PERKINS PROSPECT**

This ground was covered with a Magnetometer, HLEM and Induced Polarization Survey. These surveys were successful in outlining several areas of interest.

The limited amount of HLEM Survey was done to check out a surface showing at approximately 930W/340n, reported to be a Cu/Massive Sulphide mineralized zone. The I.P. Survey outlined a strongly chargeable/conductive anomaly on L3n/875-1000w, with the strongest chargeability centred at 850w, coincident with a weak HLEM conductor on L3n/950w. It is most likely that the coincident IP/HLEM anomaly is related to the sulphide showing approx. 40m to the north. The poor conductivity shown on the HLEM survey and the strong chargeability on the IP Survey would suggest that the mineralization is more likely of a disseminated nature, rather than massive sulphide mineralization of any significant width. There is a similar HLEM/IP anomaly on L2n/1012w, L1n/1050w, appearing to be the same continuous anomaly. Because of the likely possibility that this anomaly is related to the sulphide showing mentioned above, it should be investigated further and explained.

The HLEM Survey also outlined a weak conductor running parallel to and approximately 125 meters west of the above described HLEM/IP Anomaly. It has a weak quadrature response only on the HLEM Survey. The IP Survey response shows a narrow very conductive zone coincident with the HLEM conductor but not chargeable. This type of response parameter is indicative of that

associated with a fault zone. The Magnetometer Survey shows the anomaly to be in a relative magnetic low on the east flank of a parallel linear magnetic high.

The Magnetometer Survey shows both the east and west grids on the Perkins Option to have a relatively complex magnetic susceptibility pattern with several linear grid north-south lows and highs.

The I.P. Survey outlined several chargeability anomalies, some conductive and others resistive. Generally there is good line to line correlation of the different anomalous zones. The various IP anomalies are described as follows:

#### Anomaly 'A'

This anomaly is a highly chargeable/conductive zone striking across the east end of the grid at approximately 550w is coincident with a power line, and is thought to be caused by it.

#### Anomaly 'B'

This anomaly is quite resistive with moderate chargeability for the most part with a strong chargeability on L1n/687w. It strikes from L3n/675w - L0n/650w, open on both ends.

#### Anomaly 'C'

This is a broad, mod. chargeable/resistive anomaly parallel to and on the east flank of the conductive HLEM/IP anomaly 'D'.

Anomaly 'D'

This is a strongly chargeable/conductive anomaly with a coincident HLEM response. It extends from L3n/950w - L1n/1050w, open on both ends. As mentioned under the HLEM results above, it could possibly be related to a sulphide showing at approximately 340n/930w which contained significant Cu values.

Anomaly 'E'

This is a mod. resistive anomaly, strongly chargeable on L2n and mod. chargeable on L1n,L3n, at approx. 13w, open to the north.

Anomaly 'F'

This is a weakly chargeable/resistive anomaly extending from L3s/2030w - L9s/2060w, open to the south. It is broad on L4s and there is no response on L5s where the resistivities quite low. While the magnetic survey does not indicate any obvious reason for the interruption between L4s and L6s, there must be structural feature such as a fault in this area.

Anomaly 'G'

This is a strongly chargeable/mod. resistive, one line response on L7s/2280w.

Anomaly 'H'

This is a mod. chargeable/resistive anomaly on a contact with a conductive area to the east, running grid north-south along the west end of the grid lines at approx. 2800w. The contact is quite apparent with the unit to the west being quite resistive. While the resistive unit has a higher background, possibly due to grain size, and or wide spread disseminated mineralization, Anomaly 'H' appears to be a distinct, linear, more mineralized zone on the contact.

One of the more obvious priority targets would be Anomaly 'D'. It should be explained by trenching and or drilling to determine if it is related to the sulphide showing.

The remaining I.P. anomalies described above should be prospected and the ones with higher chargeability explained by trenching and or drilling. A compilation with available geological information would help resolve the geology and possibly explain the rather complex resistivity. Discussions with KRL field personnel indicate that the geology is quite complex with diabase and gabbroic dikes cutting through the property. It is important to attempt to identify which I.P. and Magnetic responses are associated with them.

The NW tending anomalies in the southwest part of the grid should be tested as possible extensions of the I.P. anomaly on the Cook grid, coincident with the gold occurrence and appearing to be on strike to the southwest.

**COOK OPTION**

The Cook Option grid was covered by a Magnetometer Survey and an I.P. Survey. The Magnetic Survey shows a complex magnetic susceptibility pattern of linear, grid n-s highs and lows. It is difficult to correlate with the I.P. anomalies.

The I.P. Survey outlined several anomalies described as follows:

**Anomaly 'A'**

This is a broad weakly chargeable/mod. resistive anomaly on L1s/25e-130e, L3s/60e, L4s/50e, L5s/?, open north and south, and to the east on Lines 4s and 5s. It was not detected on L2s which is underlain by Ashburn Lake which appears to have a conductive lake bottom, possibly masking the anomaly if it does exist on this line. The I.P. Anomaly appears to be in a relatively magnetic low area.

**Anomaly 'B'**

This anomaly is a strongly chargeable/conductive zone on L3s from 175e, open to the east and along strike.

**Anomaly 'C'**

This is a strongly chargeable/mod. resistive anomaly on L3s/150w-open to west, and mod. chargeable/mod. resistive on L4s/150w and L5s/125w. The anomaly is not fully covered to the west on all lines. It is tending NW and is coincident with a known gold occurrence on L3s/155w, which is believed to trend NW as well.

**Anomaly 'D'**

This anomaly is a strongly chargeable/resistive zone on L5s/100w-25w. It has a 2000nT coincident magnetic response.

The above anomalies should all be followed up. The highest priority would probably be Anomaly C which is possibly coincident with the gold occurrence outlined by extensive trenching. The I.P. Survey suggests that the zone extends in a NW/SW direction off the property. As such the response on L4s and L5s should be explained.

Anomaly 'B' is quite chargeable and conductive and could be caused by massive sulphides and or graphite. There is not enough coverage to resolve the strike direction at this time.

Anomaly 'D' is strongly chargeable and resistive. It does not appear to be similar to 'C', but it is on strike and should be explained.

**OBRADOVICH OPTION**

The I.P. Survey indicates that the property is highly resistive for the most part with the exception of a conductive area in the NE part of the grid east of the baseline on Lines 2s to 4s, and on the west ends of lines 10s to 15s. There is a relatively low resistive area in the central part of the grid approximately 400m wide from L9s to L13s where it narrows and extends to L17s.

The I.P. Survey outlined numerous chargeability anomalies, most within the resistive areas. It is difficult to correlate the anomalies from line to line. Some of the more weakly chargeable zones within the resistivity highs could be caused by rock type(grain size etc.), and or disseminated sulphides. Much of the weaker chargeability anomalies within the resistivity highs marked on the I.P. sections may in fact be indicative of the background and not anomalous. The more discrete and more chargeable zones will be described below as well as any chargeability anomalies within the conductive areas.

It is important to keep in mind that some of the reason for the complex and irregular resistivity pattern may be caused by the change in topography in the area with numerous bedrock ridges and overburden filled valleys in between.

The following is a description of some of the more prospective anomalies:\

Anomaly 'A'

This is a mod. chargeable/mod. resistive anomaly on L1s/25w and weaker on L2s/60w. It is in contact with a conductive area to the east.

Anomaly 'B'

This is a NW tending, resistive anomaly in contact with a lower resistive unit to the east. It has the strongest chargeability response on L4s/105w and L5s/0e with more moderate chargeability on L6s/75e and L7s/25e, assuming they are the same zone.

Anomaly 'C'

This is a NW tending anomaly running from L9s/580e - L12s/712e. It is strongly chargeable and very resistive within a resistive unit.

Anomaly 'D'

This is a NS tending anomaly running from L14s/520e - L20s/480e. It is moderately chargeable and resistive. It appears to be a distinct linear zone within the broad resistivity high area.

Anomaly 'E'

This is a one line response on L14s/7e. It is strongly chargeable and moderately resistive.

Anomaly 'F'

This is interpreted to be a NW tending anomaly running from L9s/60e to L11s/330e. It possible that it continues to the SE and is the same feature as Anomaly 'E' but the resolution between is not good enough. The anomaly may also extend to the NW but resolution with the high resistivity unit is poor. It is strongly chargeable, and moderately resistive on Lines 9s and 10s.

There are several anomalies not described above which could be of interest and should be interest. The anomalies should be prospected and a thorough compilation of all data be done to prioritize them. A magnetometer survey should be done to help correlate and resolve the geology. It is important to attempt to explain as many anomalous responses as possible to differentiate between true chargeability responses caused by mineralization and background type responses caused by different rock types etc.

**CERTIFICATION**

I, Raymond Joseph Meikle of Timmins, Ontario hereby certify that:

1. I hold a three year Technologist Diploma from the Haileybury School of Mines, Haileybury, Ontario, obtained in May 1975.

2. I have been practising my profession since 1973 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, Germany and Chile.

3. I have been employed directly with Teck Corporation, Metallgesellschaft Canada Ltd. Sabina Industries, .S. Middleton Exploration Services Ltd., self employed 1979-1985 (Rayan Exploration Ltd.) and currently with Rayan Exploration Ltd.

4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the field work conducted on the property during 1995.

5. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest or considerations from the KRL Property other than professional fees for services rendered.

Dated this 28th day of February, 1995  
at Timmins, Ontario.

  
R.J. Meikle

**APPENDIX A**

# SCINTREX

## IPR-12 Time Domain Induced Polarization/Resistivity Receiver

### Brief Description

The IPR-12 Time Domain IP/Resistivity Receiver is principally used in exploration for precious and base metal mineral deposits. In addition, it is used in geoelectrical surveying for groundwater or geothermal resources, often to great depths. For these latter targets, the induced polarization measurements may be as useful as the high accuracy resistivity results since it often happens that geological materials have IP contrasts when resistivity differences are absent.

Due to its integrated, lightweight, microprocessor based design and its large, 16 line display screen, the IPR-12 is a remarkably powerful, yet easy to use instrument. A wide variety of alphanumeric and graphical information can be viewed by the operator during and after the taking of readings. Signals from up to eight potential dipoles can be measured simultaneously and recorded in solid-state memory along with automatically calculated parameters. Later, data can be output to a printer or a PC (direct or via modem) for processing into profiles and maps.

The IPR-12 is compatible with Scintrex IPC and TSQ Transmitters, or others which output square waves with equal on and off periods and polarity changes each half cycle. The IPR-12 measures the primary voltage ( $V_p$ ), self potential (SP) and time domain induced polarization ( $M_i$ ) characteristics of the received waveform. Resistivity, statistical and Cole-Cole parameters are calculated and recorded in memory with the measured data and time.

Scintrex has been active in induced polarization research, development, manufacturing, consulting and surveying for over thirty years. We offer a full range of instrumentation, accessories and training.



*The IPR-12 Receiver measures spectral IP signals from eight dipoles simultaneously then records measured and calculated parameters in memory.*

### Benefits

#### Speed Up Surveys

The IPR-12 saves you time and money in carrying out field surveys. Its capacity to measure up to eight dipoles simultaneously is far more efficient than older receivers measuring a single dipole. This advantage is particularly valuable in drillhole logging where electrode movement time is minimal.

The built-in, solid-state memory records all information associated with a reading, dispensing with the need for any hand written notes. PC compatibility means rapid electronic transfer of data from the receiver to a computer for rapid data processing.

Taking a reading is simple and fast. Only a few keystrokes are virtually needed

since the IPR-12 features automatic circuit resistance checks, SP buckout and gain setting.

#### High Quality Data

One of the most important features of the IPR-12 in permitting high quality data to be acquired, is the large display screen which allows the operator easy real time access to graphic and alphanumeric displays of instrument status and measured data. The IPR-12 ensures that the operator obtains accurate data from field work.

The number and relative widths of the IP decay curve windows have been carefully chosen to yield the transient information required for proper interpretation of spectral IP data. Timings are selectable to permit a very wide range of responses to be measured.

**APPENDIX B**

**INDUCED POLARIZATION AND D.C.  
RESISTIVITY TRANSMITTER****2.0 SPECIFICATIONS**

Maximum Output Power	200W defined as when current is on and into a resistive load.
Output Voltage	Switch selectable at nominal settings of 15, 150, 210, 300, 425, 600 or 850 V.
Output Current	1.5 A maximum.
Meter Ranges	Switch selectable at 50 mA, 150 mA, 500 mA, 1500 mA full scale with accuracy of $\pm 3\%$ of full scale.
Automatic Cycle Timing	T:T:T:T; on:off:on:off.
Automatic Polarity Change	Each 2T.
Pulse Durations	T is switch selectable at 1, 2, 4, 8, 16 or 32 seconds.
Period Time Stability and Accuracy	Crystal controlled to better than 0.002 percent of the selected pulse duration.
Open Loop Protection	High voltage is automatically turned off if the output power is less than 2 W. This can be overridden manually for testing purposes. This protection is not effective at the 15 V output.
Synchronization Output	Optically isolated, suitable for external synchronization of the IPR-11 multichannel IP Receiver.
Internal Power Sources	Two battery packs are standard, each containing 4 GC 660-1 lead-acid gel-type batteries giving 24 V at 12 Ah.
	One Penlite battery, Eveready E91 or equivalent.
External Power Sources	24 V DC supply at maximum 10A.

**APPENDIX C**

# OMNI PLUS VLF/Magnetometer System

EDA



## Major Benefits of the OMNI PLUS

- Combined VLF/Magnetometer/Gradiometer System
- No Orientation Required
- Three VLF Magnetic Parameters Recorded
- Automatic Calculation of Fraser Filter
- Calculation of Ellipticity
- Automatic Correction of Primary Field Variations
- Measurement of VLF Electric Field

**APPENDIX D**

# APPEX

# MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.

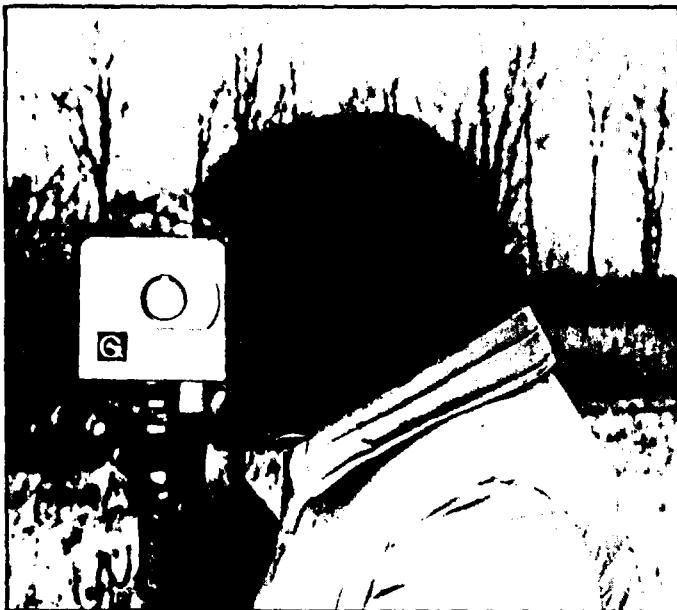


BU SP 120, 40, 30, 16, 7

**APPENDIX E**

# VLF (PLANE WAVE) EM INSTRUMENTS

## VLF EM



## EM16

One of the most popular and widely used electromagnetic instruments, the EM16 VLF receiver makes the ideal reconnaissance EM. This can be attributed to its field reliability, operational simplicity, compactness and mutual compatibility with other reconnaissance instruments such as portable magnetometers and radiometric detectors.

The VLF method of EM surveying, pioneered by Geonics, has proven to be a simple economical means of mapping geological structure and fault tracing. The applications are many and varied, ranging from direct detection of massive sulphide conductors to the indirect detection of precious metals and radioactive deposits.

### FEATURES

- The EM16 is the only VLF instrument that measures the quad-phase as well as the in phase secondary field. This has the advantage of providing an additional piece of data for a more comprehensive interpretation and also allows a more accurate determination of the tilt angle.
- The secondary fields are measured as a ratio to the primary field making the measurement independent of absolute field strength.
- The EM16 is the only VLF receiver that can be adapted to measure VLF resistivity.

## Specifications

MEASURED QUANTITY	In-phase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity)
SENSITIVITY	In-phase : $\pm 150\%$ Quad-phase : $\pm 40\%$
RESOLUTION	$\pm 1\%$
OUTPUT	Nulling by audio tone. In-phase indication from mechanical inclinometer and quad-phase from a graduated dial.
OPERATING FREQUENCY	15.25 kHz VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	On/Off switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.
POWER SUPPLY	6 disposable 'AA' cells
DIMENSIONS	42 x 14 x 9 cm
WEIGHT	Instrument: 1.6 kg Shipping : 5.5 kg

## VLF RESISTIVITY METER



## EM16/16R

The EM16R is a simple, button on attachment to the EM16 converting it to a direct reading terrain resistivity meter. The EM16R interfaces a pair of potential electrodes to the EM16 enabling the measurement of the ratio of, and the phase angle between, the horizontal electric and magnetic fields of the plane wave propagated by distant VLF radio transmitters.

The EM16R is direct reading in ohm meters of apparent ground resistivity. If the phase angle is  $45^\circ$ , the resistivity reading is the true value and the earth is uniform to the depth of exploration (i.e. a skin depth). Any departure from  $45^\circ$  of phase indicates a layered earth. Two layer interpretation curves are supplied with each instrument to permit an interpretation based on a two layer earth model.

This highly portable resistivity meter makes an ideal tool for quick geological mapping and has been used successfully for a variety of applications.

- Detection of massive and disseminated sulphide deposits
- Overburden conductivity and thickness measurements
- Permafrost mapping
- Detection and delineation of industrial mineral deposits
- Aquifer mapping

## Specifications EM16R ATTACHMENT

MEASURED QUANTITY	Apparent Resistivity of the ground in ohm-meters ● Phase angle between $E_x$ and $H_y$ in degrees
RESISTIVITY RANGES	● 10 – 300 ohm-meters ● 100 – 3000 ohm-meters ● 1000 – 30000 ohm-meters
PHASE RANGE	0-90 degrees
RESOLUTION	● Resistivity : $\pm 2\%$ full scale ● Phase : $\pm 0.5^\circ$
OUTPUT	Null by audio tone. Resistivity and phase angle read from graduated dials.
OPERATING FREQUENCY	15.25 kHz VLF Radio Band. Station selection by means of rotary switch.
INTERPROBE SPACING	10 meters
PROBE INPUT IMPEDANCE	100 M $\Omega$ in parallel with 0.5 picofarads
DIMENSIONS	19 x 11.5 x 10 cm. (attached to side of EM16)
WEIGHT	1.5 kg (including probes and cable)

## **APPENDIX F**

**FORPRO**   
**Mining Exploration & Forestry**  
**X RESOURCES LTD.**

909 Government Road  
 P.O. Box 1513  
 South Porcupine, Ontario  
 P0N 1H0  
 PHONE: (705) 235-2474

Date JAN 30 / 95

KRL RESOURCES CORP.

SUITE 1022 - 470 GRANVILLE ST.

VANCOUVER B.C. V6C 1V5

Invoice 598

DESCRIPTION	AMOUNT
LINE CUTTING GRID	
ON MINING CLAIMS	
IN KNIGHT TP., NATAL TP.,	
AND MACMURCHY TP.	
(BLOCKS A B C D + E)	
52.325 KM @ \$250/KM	\$13,081.25
G.S.T 8% 915.69	
TOTAL 13,996.94	
JAN/95 ADVANCE - 10,000.00	
TOTAL OWING <u>3,996.94</u>	
GST #R101849669	REC
Thank You	TOTAL

**APPENDIX G**

RAYAN EXPLORATION LTD.  
676 MURRAY STREET  
TIMMINS, ONTARIO  
P4N 7B2  
TEL (705) 268-4866

28 Feb., 1995  
Job # R236  
Inv.# R236-3

In Account With: KRL Resources Ltd.  
1022 - 470 Granville St.,  
Vancouver, B.C.  
V6C 1V5

Attention: Mr. S. Young

Invoice re: Geophysical Surveys  
"Shining Tree Project"

At A Rate Of: Final billing

Filo option:

HELM Survey - 5km @ \$160.00/km	= \$ 800.00
VLF Survey - 1.5km @ \$80.00/km	= \$ 120.00

Perkins option:

HELM survey - 5km @ \$160.00/km	= \$ 800.00
Magnotometer Survey - 20km @ \$80.00/km	= \$1600.00
I.P. Survey - 8 days @ \$1250.00/day	= \$10000.00
- 1 day @ \$900.00/day	= \$ 900.00

Cook option:

Magnotometer Survey - 2.5km @ \$80.00/km	= \$ 200.00
I.P. Survey - 2 days @ \$1250.00/day	= \$2500.00

O'Bradovich option:

I.P. Survey - 13 days @ \$1250.00/day	= \$16250.00
- 1 day @ \$900.00/day	= \$ 900.00

Report and plotting = \$ 500.00,

Subtotal.....	= \$34570.00
GST 7%.....	= \$ 2419.90
-----	
Total.....	= \$36989.90
Less advance.....	= \$19260.00
-----	
Balance Owing.....	= \$17729.90

GST # R116488156

Yours truly,

R.J. Meikle

**APPENDIX H**





# **Ministry of Northern Development and Mines**

## **Report of Work Conducted After Recording Claim**

**Transaction Number**

W9580.00147

Res. Steel - Cobalt

## **Mining Act**

**Personal information collected on this form is obtained under the authority of the Ontario Land Survey Act. Any questions concerning this collection should be directed to the Provincial Manager, Mining Lands, 440 University Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7284.**

A series of vertical black bars of decreasing width from left to right, followed by the text "41P11NE005C7 2 15926 BERNHARDT".

41P11NE0057 2.15936 BERNHARDT

900

- Instructions:**

  - Please type or print and submit in duplicate.
  - Refer to the Mining Act and Regulations for a Recorder.
  - A separate copy of this form must be completed for each Work Group.
  - Technical reports and maps must accompany this form in duplicate.
  - A sketch, showing the claims the work is assigned to, must accompany this form.

41P11NE0057 2.15836 BERNHARDT

V.P., IV-5 Recorded Holder(s)	PAN 1W7 T. UBRAGOVIC	PAJ 150 A. DECKER	DAVID TUNES (GARD)	Client No. 152406/111382/124957
KRL ROSE CORP.	J. UBRAGOVIC	A. DECKER	TUNES (GARD)	Telephone No. 407-601685-0299
Address	122-410 GRANVILLE ST.	AVO:		M or G Plan No. :
Mining Division U.S. Gold Corp.	15 BALSAM K. L.	Township Line		
CARRY BR LAKE	NATAL, N.W.G.T., MICHIGAN			
Dates Work Performed	From: JAN 4/95	To: FEB 28/95		

**Work Performed (Check One Work Group Only)**

Work Group	Type
Geotechnical Survey	INDUCED POLARIZATION AND MAGNETICS OF GND.
Physical Work, Including Drilling	
Rehabilitation	
Other Authorized Work	 MAR 3 1995
Assays	RECEIVED APR 3 1995 MINING LANDS BRANCH
Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs \$ 50985

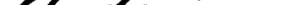
**Note:** The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

**Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)**

Name	Address
Ryan Exploration	22-637 Algonguin Blvd. W. Timmins, ON

(attach a schedule if necessary)

**Certification of Beneficial Interest** • See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date 1/16/24	Recorded Holder or Agent (Signature) 
--	-----------------	---

### **Certification of Work Report**

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying		
Wm. M. Kie 22-637 Algonguin Blvd W. Timmins, Ont.		
Telephone No.	Date	Certified By (Signature)
705-263-4466	1992/95	<i>[Signature]</i>

**For Office Use Only**

Total Value Cr. Recorded	Date Recorded	Mining Record	Received Stamp
\$24,614 reserve \$26,371	Mon. 14/95	For spooner	RECEIVED LARDER LAKE MINING DIVISION
	Deemed Approval Date	Date Approved	
	June 12/95		MAR 14 1995
	Date Notice for Amendments Sent		

Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
1200825	1	1758	158	0	0
1131942	1	1758	558	0	0
1131941	1	1758	558	0	0
1131940	1	1758	558	0	0
1145892	1	1758	158	0	0
1145893	1	1758	158	0	0
1146533	1	1758	158	0	0
1185723	1	1758	158	0	0
1202562	1	1758	158	0	0
1200 167	2	3517	317	0	0
1185697	3	5275	475	0	0
1185616	1	1758	158	0	0
1204267	1	1200	0	0	0
1204625	1	1200	0	0	0
1204265	1	1200	0	0	0
1204266	1	1014	0	0	0

Total Number of Claims	Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve To
CONTINUED	CONTINUED	CONTINUED	CONTINUED	CONTINUED

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------

Numéro de rapport sur les travaux exécutés pour l'affectation de la réserve	Numéro du claim	Nombre d'unités
	1131050	1
	1134040	1
	1134042	1
2.	15936	
	1134041	1
	1133932	1
	1134039	1
	1134043	1
	1133933	1
	1133936	1
	1133935	1
	1193304	2
	1134045	1
	1134046	1
	1133937	1
	1133938	1
	11341433	1
CONTINUED		

Valeur des travaux d'évaluation effectuée sur ce claim	Valeur affectée à ce claim
1535	1535
1537	1537
687	687
687	687
1007	1007
1037	1037
837	837
3070	3070
1535	1535
1535	1535
1535	1535
3548	3548
CONTINUED	CONTINUED

Valeur transférée de ce claim	Réserve : travaux à réclamer à une date ultérieure
Total transférés	Réserve totale
0	1537
0	1562
0	1037
0	1037
0	687
0	1037
0	1037
0	837
0	3070
0	1535
0	1535
0	1535
0	3548
continued	continued

**Les crédits que vous réclamez dans le présent rapport peuvent être réduits. Afin de diminuer les conséquences défavorables de telles réductions, veuillez indiquer l'ordre dans lequel vous désirez au'elles soient appliquées à vos claims. Veuillez cocher (✓) l'une des options suivantes :**

- Les crédits doivent être réduits en commençant par le dernier claim sur la liste.
  - Les crédits doivent être réduits également entre tous les claims figurant dans le présent rapport.
  - Les crédits doivent être réduits selon l'ordre donné en annexe.

**Note 1 : Exemples d'intérêts bénéficiaires : cessions non enregistrées, ententes sur des options, protocoles d'entente, etc. relatifs à l'**

**Note 2:** Si des travaux ont été exécutés sur un terrain faisant l'objet de lettres patentes ou d'un bail, veuillez remplir ce qui suit.

Je certifie que le titulaire enregistré possédait un intérêt bénéficiaire sur le terrain faisant l'objet de lettres patentes ou d'un bail, au moment où les travaux ont été exécutés.	Signature	Date
---	-----------	------

N° de rapport sur les travaux exécutés pour l'affectation de la réserve	N° de claim	Nombre d'unités
	1131026	1
	1131056	1
	1131057	1

**2. 1593 6**

Valeur totale des travaux exécutés	Valeur totale des travaux affectés	Valeur des travaux d'évaluation exécutés sur ce claim	Valeur affectée à ce claim	Valeur transférée de ce claim	Valeur totale des travaux à réclamer à une date ultérieure
50985	24614	220	220	220	220

Total transféré	Réserve totale	RECEIVED APR 3 1995 MINING LANDS BRANCH	Valeur transférée de ce claim	Réserve : travaux à réclamer à une date ultérieure
3414	26371	525	525	220

Les crédits que vous réclamez dans le présent rapport peuvent être réduits. Afin de diminuer les conséquences défavorables de telles réductions, veuillez indiquer l'ordre dans lequel vous désirez au elles soient appliquées à vos claims. Veuillez cocher (✓) l'une des options suivantes :

- Les crédits doivent être réduits en commençant par le dernier claim sur la liste.
  - Les crédits doivent être réduits également entre tous les claims figurant dans le présent rapport.
  - Les crédits doivent être réduits selon l'ordre donné en annexe.
- Si vous n'avez pas choisi d'option, la première sera appliquée.

Note 1 : Examples d'intérêts bénéficiaires : cessions non enregistrées, ententes sur des options, protocoles d'entente, etc. relatifs aux claims.

Note 2: Si des travaux ont été exécutés sur un terrain faisant l'objet de lettres patentes ou d'un bail, veuillez remplir ce qui suit:

Je certifie que le titulaire enregistré possédait un intérêt bénéficiaire sur le	Signature	Date
--	-----------	------



Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des mines

## Statement of Costs for Assessment Credit

## État des coûts aux fins du crédit d'évaluation

### Mining Act/Loi sur les mines

Transaction No./N° de transaction

W9580.00147

2.1593 6

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4<sup>e</sup> étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

#### 1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'œuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees  Droits de l'entrepreneur et de l'expert- conseil	Type <i>Cicophys. Cn</i>		
	Contractor <i>Contractor</i>	36989	
	Engineer <i>Engineer</i>	13986	50985
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs		50985	

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

#### 2. Indirect Costs/Coûts indirects

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement	RECEIVED		
	APR 3 1985		
Mobilization and Demobilization Mobilisation et démobilisation	MINING LANDS BRANCH		
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)		Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)	50985

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

#### Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
x 0.50 =	

#### Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
x 0,50 =	

#### Certification Verifying Statement of Costs

I hereby certify:  
that the amounts shown are as accurate as possible and these costs  
were incurred while conducting assessment work on the lands shown  
on the accompanying Report of Work form.

that as J.K. FILI I am authorized  
(Recorded Holder, Agent, Position in Company)

to make this certification

#### Attestation de l'état des coûts

J'atteste par la présente :  
que les montants indiqués sont le plus exact possible et que ces  
dépenses ont été engagées pour effectuer les travaux d'évaluation  
sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de \_\_\_\_\_ je suis autorisé  
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	Date <u>1985</u>
-----------	------------------

**ASSESSMENT WORK CREDIT FORM**

**FILE NUMBER: 2.15936**

**TRANSACTION NUMBER: W.9580.00147**

**DATE: APRIL 27, 1995**

<b>Claim Number</b>	<b>Value of Work Performed on this Claim</b>
L.1200825	0
1131942/	1890
1131941/	2520
1131940/	2520
1145897/	630
1146533/	1260
1185723/	1890
1202562	0
1200167/	5040
1185697/	7604
1185616/	1260
1204267	0
1204265	0
1204266	0
1131050/	1535
1134040	1537
1134042/	1562
1134041/	1037
1133932/	1037
1134039/	687
1134043/	687
1133933/	1007
1133936/	1037
1133935/	837
1193304/	3070
1134045/	1535
1134046/	1535
1133937/	1535
1133938/	1535
341433/	3598
1131076/	270
1131077/	525
1131056/	934
1131057/	871
	50,985



Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines

Geoscience Approvals Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (705) 670-5853  
Fax: (705) 670-5863

May 02 , 1995

Our File: 2.15936  
Transaction #: W9580.00147

Mining Recorder  
Ministry of Northern Development & Mines  
4 Government Road East  
Kirkland Lake, Ontario  
P2N 1A2

Dear Sir:

**Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS  
L.1131942 ET AL IN NATAL, KNIGHT AND MACMURCHY TOWNSHIPS**

Assessment work credits have been approved as outlined on the attached Assessment Work Credit form. The total credit approved has not changed from the original submission, however, the credits now reflect more accurately where the work was performed.

The credits have been approved under Section 14, Geophysics, Mining Act Regulations.

The approval date is April 27, 1995.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5855.

ORIGINAL SIGNED BY:

Ron C. Gashinski  
Senior Manager, Mining Lands Section  
Mining and Land Management Branch  
Mines and Minerals Division

LJ/jl  
Enclosure:

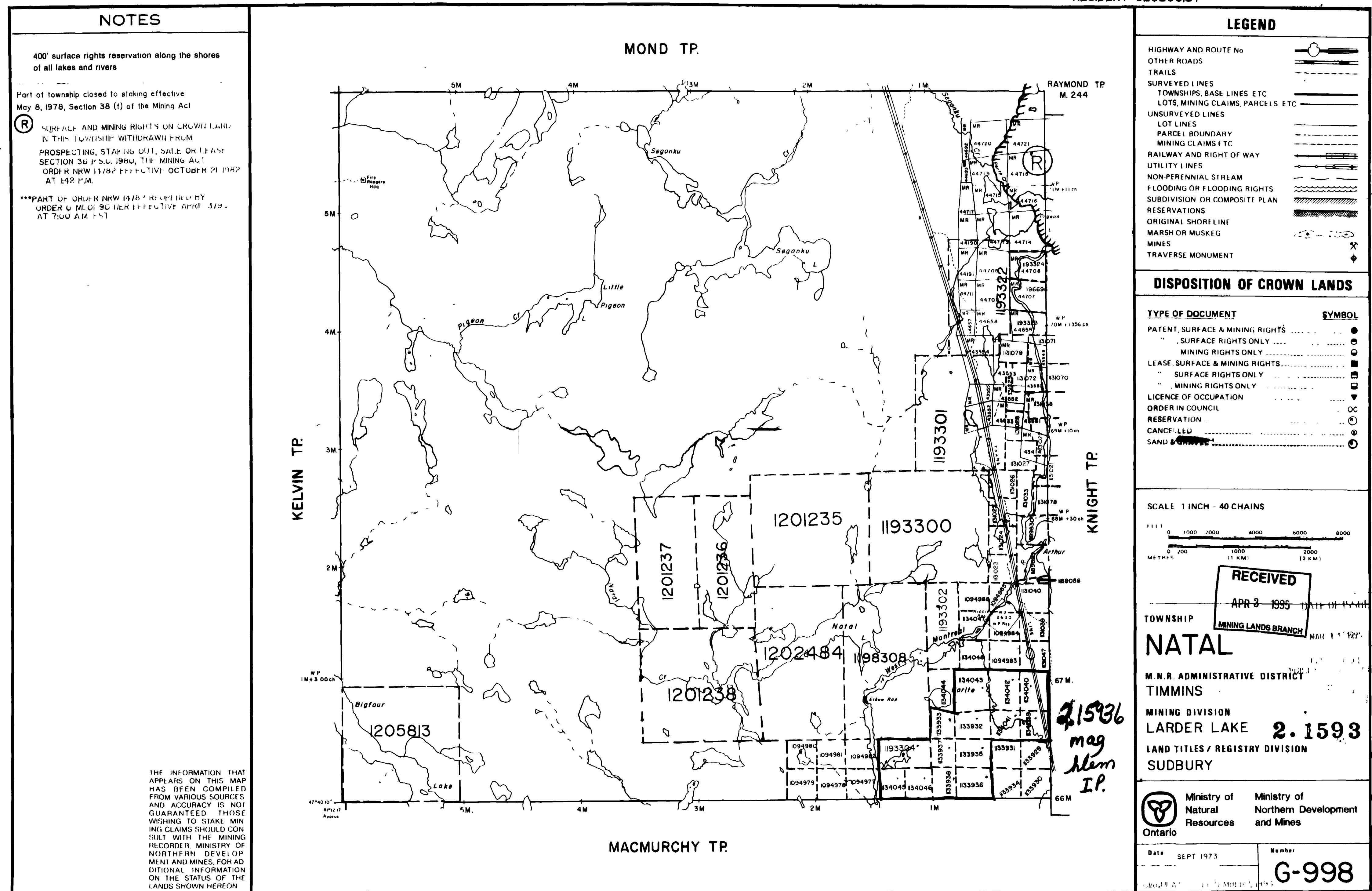
cc: Resident Geologist  
Cobalt, Ontario

✓Assessment Files Library  
Sudbury, Ontario



## Geology Reference- COBALT

RESIDENT GEOLOGIST

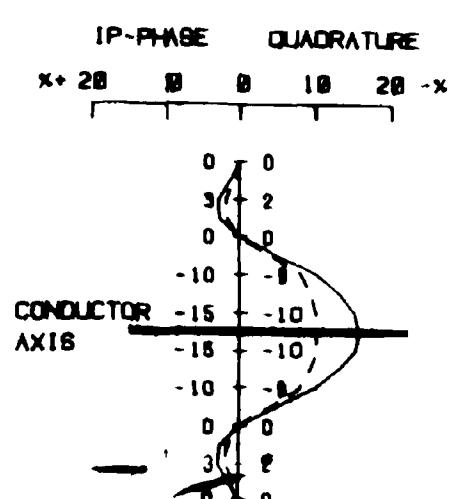
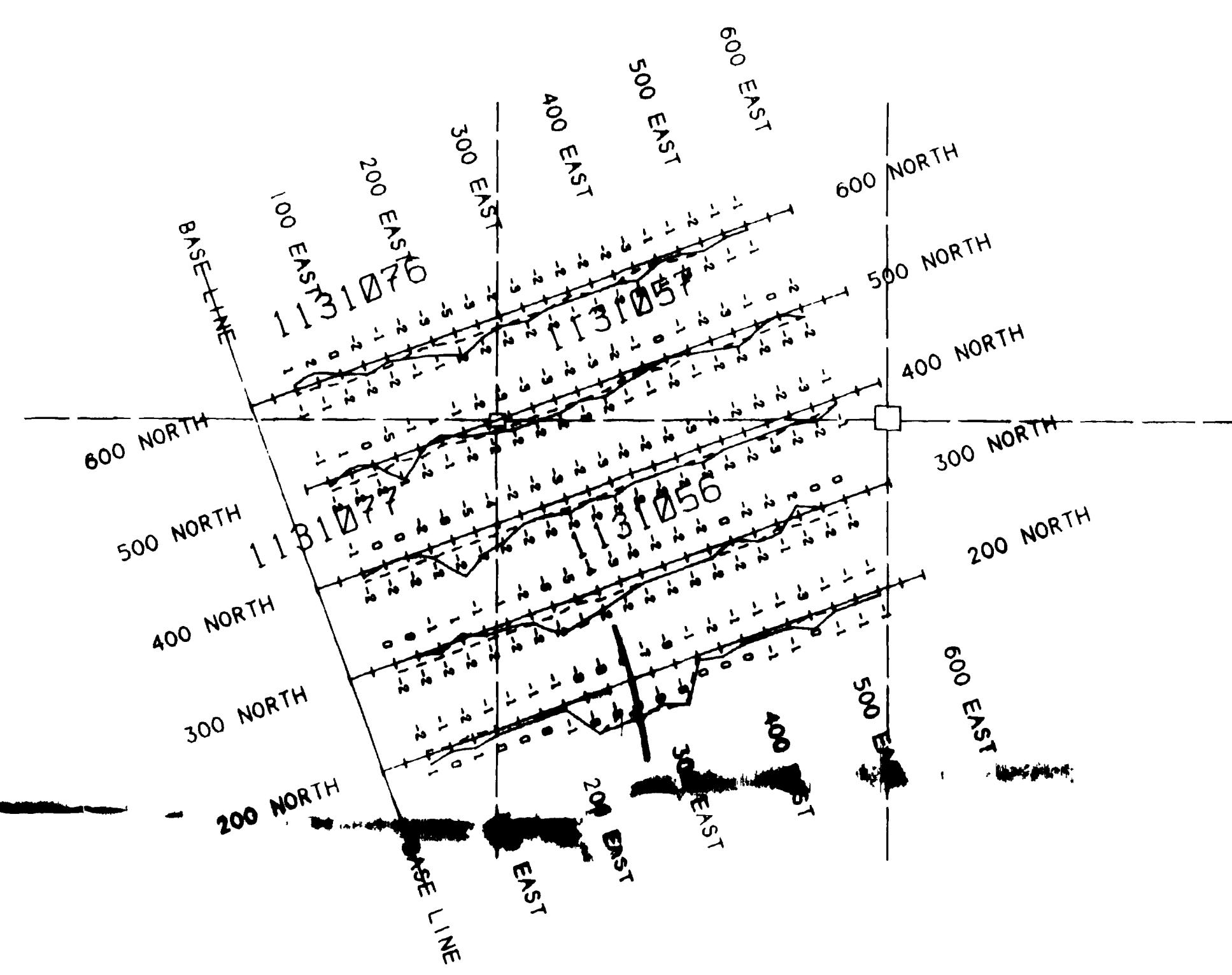
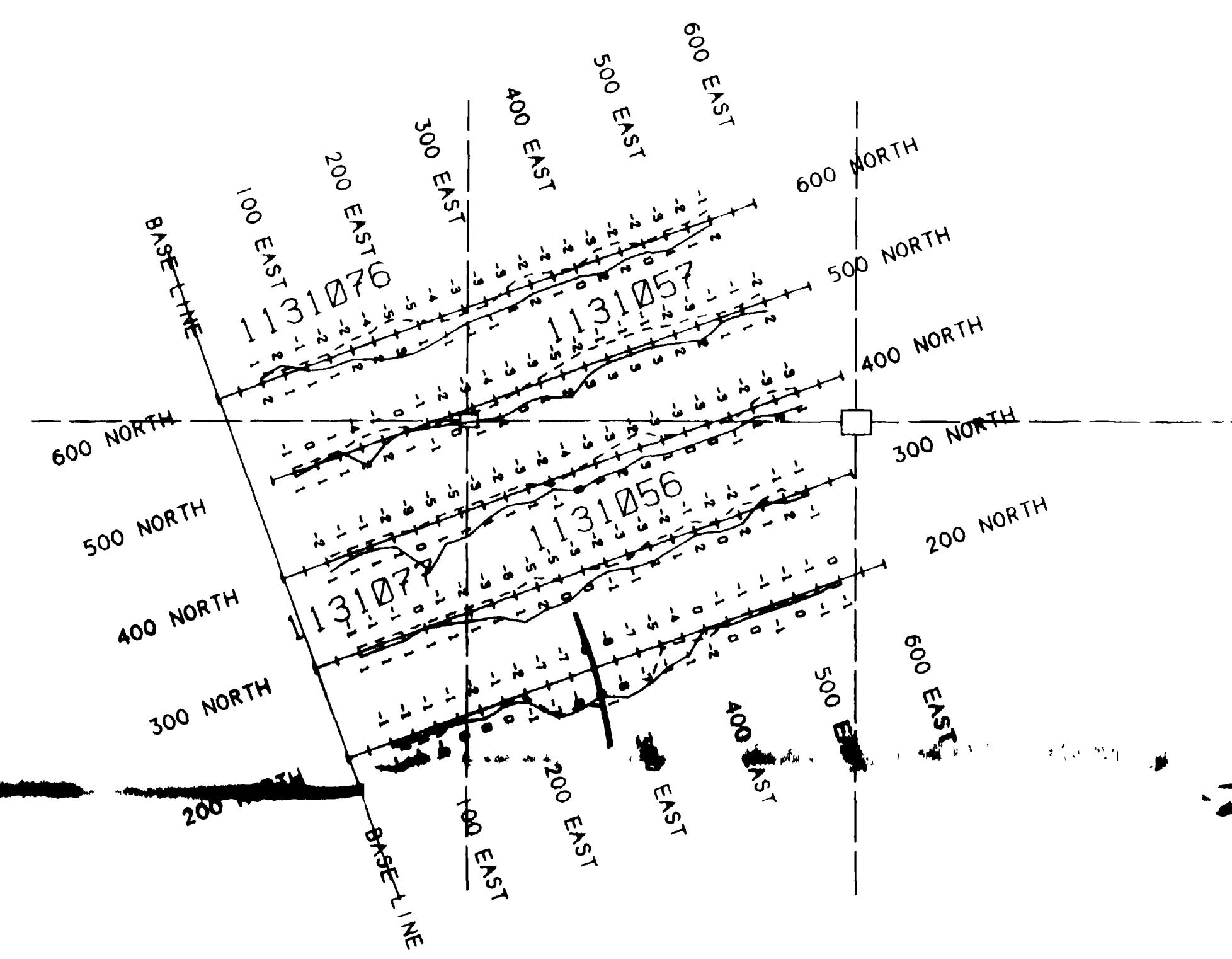




# KNIGHT TOWNSHIP

1777 Hz

444 Hz



HLEM LEGEND  
INSTRUMENT: APEX - MAXMIN II  
MODE: MAXIMUM COUPLED CO-PLANAR  
READING INTERVAL: 25 M  
COIL SEPARATION: 100 M  
FREQUENCY: 1777 AND 444 Hz  
PROFILE SCALE: 1cm = 10%

CONDUCTORS  
GOOD ———  
MED - - -  
POOR .....

## TOPO LEGEND

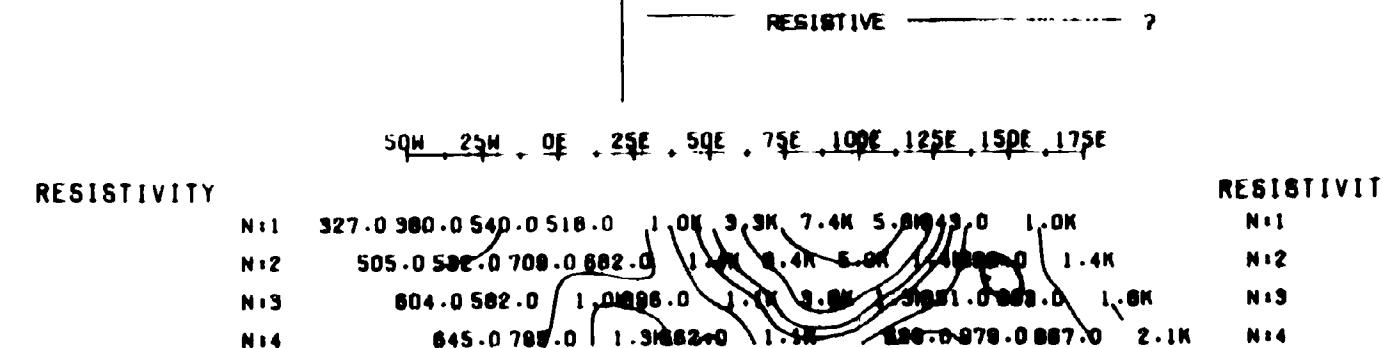
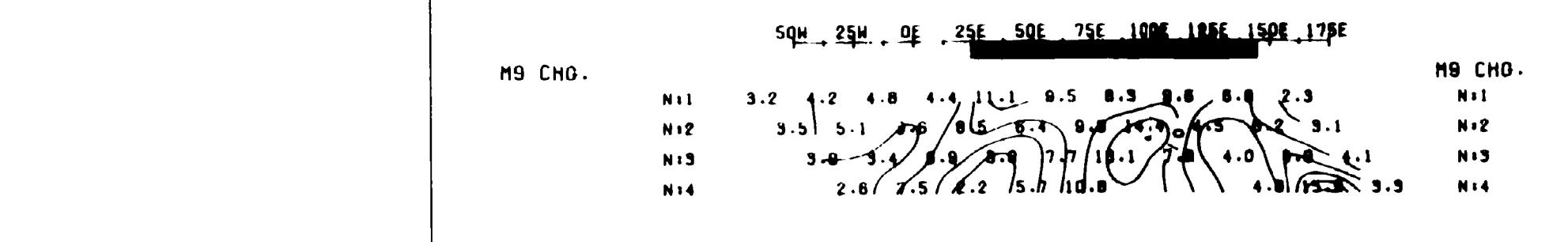
Claim Post Assumed  
Claim Line

8.1593 6 RECEIVED  
APR 3 1995  
MINING LANDS BRANCH

Client: KRL RESOURCES CORP.	
Property: FILO PROSPECT - NORTH GRID B	
Title: HORIZONTAL LOOP SURVEY	
Processed: RJM	Checked: RJM
Date: JAN. 1995	Township: KNIGHT
Province: ONT.	N.T.S.
Scale: 1:5,000	Drawing: 444-1777

**RAYAN**  
EXPLORATION LTD  
CONTRACT/CONSULTING GEOPHYSICS  
TIMMINS, ONTARIO  
(705) 288-4886

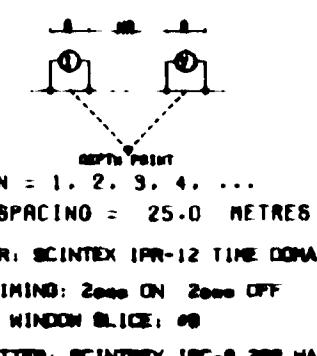




LINE : 100 S

INDUCED POLARIZATION SURVEY

DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...  
\*R SPACING = 25.0 METRES  
RECEIVER: SCINTEX IPN-12 TIME DOMAIN  
RX-TX TIMING: 2sec ON 2sec OFF  
PLOTTED WINDOW SLICE: #9  
TRANSMITTER: SCINTEX IPC-8 200 WATT

KRL RESOURCES CORP.

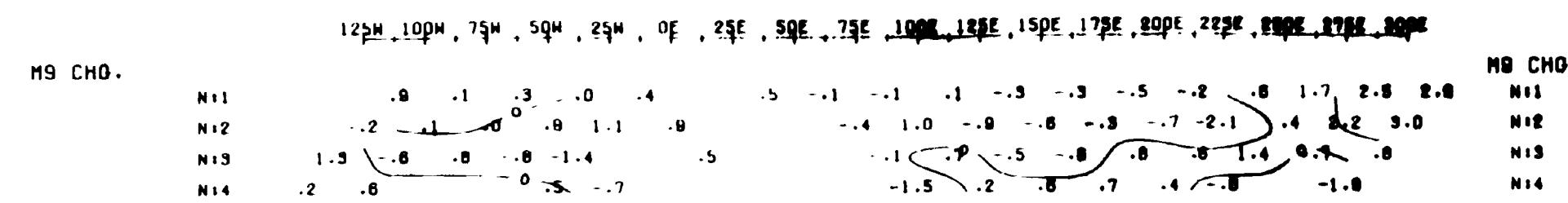
COOK GRID

MACMURCHY TWP.

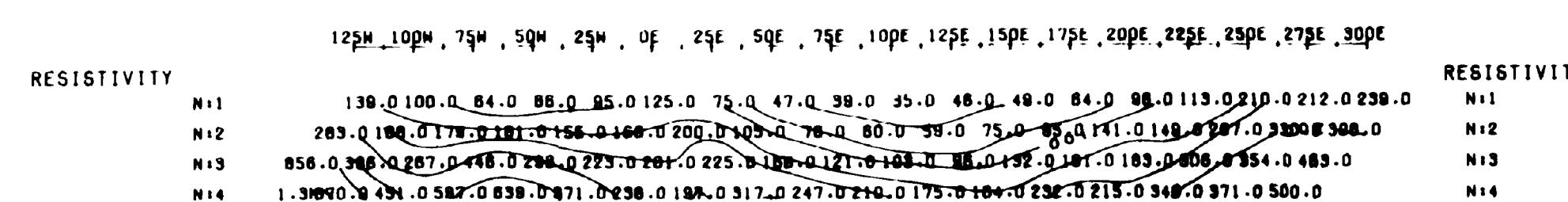
DATE : JAN. 1995 REF : LIS

SCALE = 1: 2500

RAYAN EXPLORATION LTD.



IN SUFFICIENT SIGNAL DUE TO CONDUCTIVE  
LAKE BOTTOM SEDIMENTS



RESISTIVITY

N11

N12

N13

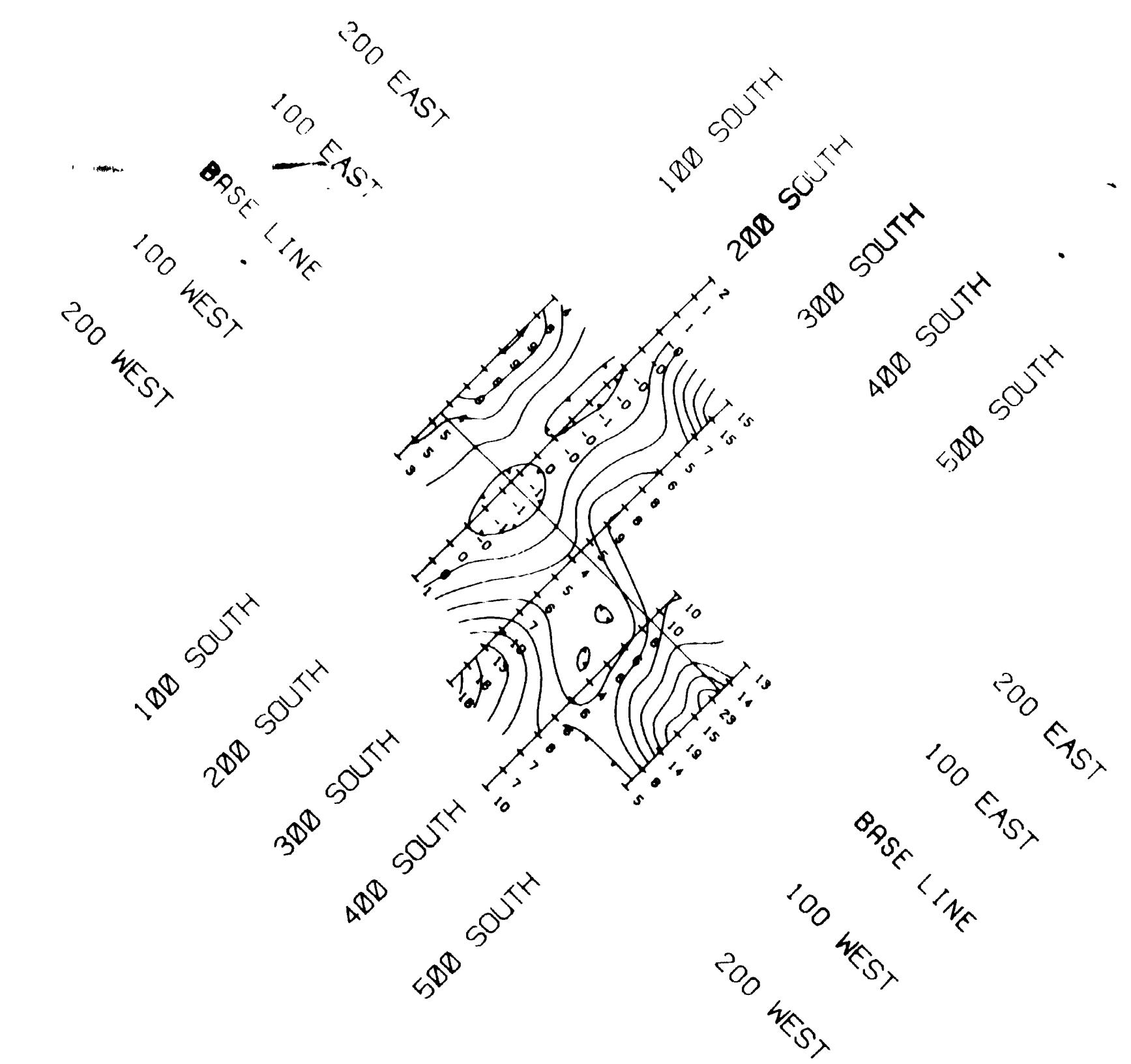
N14

RESISTIVITY

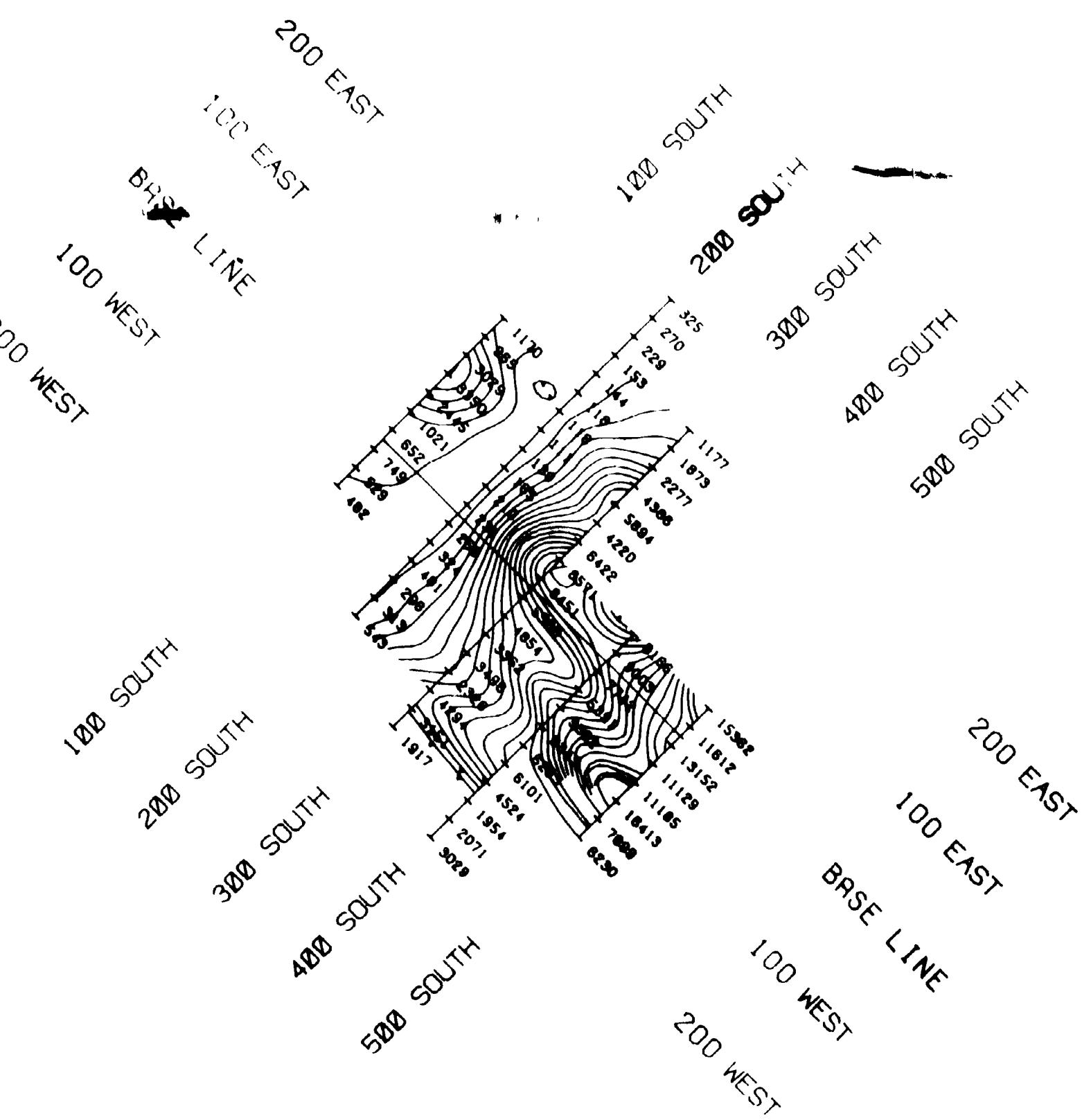
N11

N12

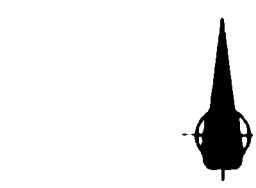
N13



FRASER FILTERED I.P. CHARGEABILITY



FRASER FILTERED I.P. RESISTIVITY



LEGEND

DATA: FRASER FILTERED CHARGEABILITY/RESISTIVITY

SOURCE: I.P. DIPOLE-DIPOLE SURVEY

\*A\* SPACING- 25M

N = 1-4

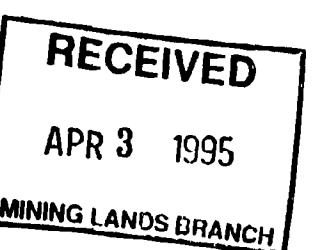
TIME DOMAIN

CONTOUR INTERVAL - 2 MILLISECONDS (CHG)

200 1K 5K 10K 15K 20K  
(RESISTIVITY)

FILTER METHOD: FRASER, \*B\*, TRIANGLE

2-1593 6



Client:		KLR RESOURCES CORP.	
Property:		COOK PROSPECT	
Title:		FRASER FILTERED	
CHARGEABILITY & RESISTIVITY			
Processed	RJM	Checked	RJM
Date	FEB 1995	Township	MACMURRAY
Province	ONI	N T S	41P/NW
Scale	1:5,000	Drawing	FFCIG



LINE : 300 N	
INDUCED POLARIZATION SURVEY	
<b>2.159 36</b>	
DIPOLE-DIPOLE ARRAY	
RECEIVED APR 26 1995	
N = 1, 2, 3, 4, ... *R SPACING = 25.0 METRES	
RECEIVER SCINTEX IPH-12 TIME DOMAIN	
RX-TX TIMING ZONE ON ZONE OFF	
PLOTTED WINDOW SLICE #9	
TRANSMITTER SCINTEX IPC-9 200 WATT	
KRL RESOURCES CORP.	
PERKINS GRID	
NATAL - KNIGHT TOWNSHIP	
DATE : 21/01/95 REF : L3N	
SCALE : 1 : 2500	
RAYAN EXP.	

LINE : 200 N	
INDUCED POLARIZATION SURVEY	
DIPOLE-DIPOLE ARRAY	
RECEIVED APR 26 1995	
N = 1, 2, 3, 4, ... *R SPACING = 25.0 METRES	
RECEIVER SCINTEX IPH-12 TIME DOMAIN	
RX-TX TIMING ZONE ON ZONE OFF	
PLOTTED WINDOW SLICE #9	
TRANSMITTER SCINTEX IPC-9 200 WATT	
KRL RESOURCES CORP.	
PERKINS GRID	
NATAL - KNIGHT TOWNSHIP	
DATE : 21/01/95 REF : L2N	
SCALE : 1 : 2500	
RAYAN EXP.	

LINE : 100 N	
INDUCED POLARIZATION SURVEY	
DIPOLE-DIPOLE ARRAY	
RECEIVED APR 26 1995	
N = 1, 2, 3, 4, ... *R SPACING = 25.0 METRES	
RECEIVER SCINTEX IPH-12 TIME DOMAIN	
RX-TX TIMING ZONE ON ZONE OFF	
PLOTTED WINDOW SLICE #9	
TRANSMITTER SCINTEX IPC-9 200 WATT	
KRL RESOURCES CORP.	
PERKINS GRID	
NATAL - KNIGHT TOWNSHIP	
DATE : 23/01/95 REF : L1N	
SCALE : 1 : 2500	
RAYAN EXP.	

LINE : 0 N	
INDUCED POLARIZATION SURVEY	
DIPOLE-DIPOLE ARRAY	
RECEIVED APR 26 1995	
N = 1, 2, 3, 4, ... *R SPACING = 25.0 METRES	
RECEIVER SCINTEX IPH-12 TIME DOMAIN	
RX-TX TIMING ZONE ON ZONE OFF	
PLOTTED WINDOW SLICE #9	
TRANSMITTER SCINTEX IPC-9 200 WATT	
KRL RESOURCES CORP.	
PERKINS GRID	
NATAL - KNIGHT TOWNSHIP	
DATE : JUN 1995 REF : L1N	
SCALE : 1 : 2500	
RAYAN EXPLORATION LTD.	

LINE : 100 S	
INDUCED POLARIZATION SURVEY	
DIPOLE-DIPOLE ARRAY	
RECEIVED APR 26 1995	
N = 1, 2, 3, 4, ... *R SPACING = 25.0 METRES	
RECEIVER SCINTEX IPH-12 TIME DOMAIN	
RX-TX TIMING ZONE ON ZONE OFF	
PLOTTED WINDOW SLICE #9	
TRANSMITTER SCINTEX IPC-9 200 WATT	
KRL RESOURCES CORP.	
PERKINS GRID	
NATAL - KNIGHT TOWNSHIP	
DATE : JUN 1995 REF : L1S	
SCALE : 1 : 2500	
RAYAN EXPLORATION LTD.	

KRL RESOURCES CORP.

I.P. SURVEY

PERKINS PROSPECT - EAST PART

NATAL & KNIGHT TWPS.

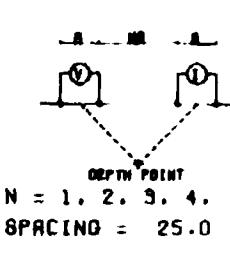
SHINING TREE AREA

PLATE 1 OF 1

LINE : 500 S

## INDUCED POLARIZATION SURVEY

## DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...

\*N\* SPACING = 25.0 METRES

RECEIVER: SCINTEX IPR-12 TIME DOMAIN

RX-TX TIMING: ZONE ON 2sec OFF

PLOTTED WINDOW SLICE #9

TRANSMITTER: SCINTEX IPC-9 200 WATT

KRL RESOURCES CORP.

PERKINS GRID

NATAL - KNIGHT TOWNSHIP

DATE : JAN. 1995 REF : LSS

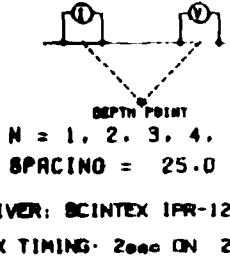
SCALE = 1: 2500

RAYAN EXP.

LINE : 600 S

## INDUCED POLARIZATION SURVEY

## DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...

\*N\* SPACING = 25.0 METRES

RECEIVER: SCINTEX IPR-12 TIME DOMAIN

RX-TX TIMING: ZONE ON 2sec OFF

PLOTTED WINDOW SLICE #9

TRANSMITTER: SCINTEX IPC-9 200 WATT

KRL RESOURCES CORP.

PERKINS GRID

NATAL - KNIGHT TOWNSHIP

DATE : JAN. 1995 REF : LSS

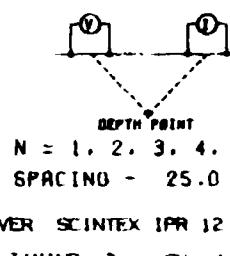
SCALE = 1: 2500

RAYAN EXPLORATION LTD.

LINE : 700 S

## INDUCED POLARIZATION SURVEY

## DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...

\*N\* SPACING = 25.0 METRES

RECEIVER: SCINTEX IPR-12 TIME DOMAIN

RX-TX TIMING: ZONE ON 2sec OFF

PLOTTED WINDOW SLICE #9

TRANSMITTER: SCINTEX IPC-9 200 WATT

KRL RESOURCES CORP.

PERKINS GRID

NATAL - KNIGHT TOWNSHIP

DATE : JAN. 1995 REF : L7S

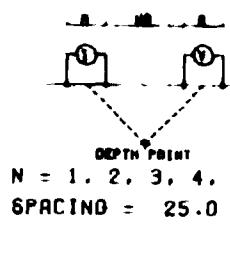
SCALE = 1: 2500

RAYAN EXPLORATION LTD.

LINE : 800 S

## INDUCED POLARIZATION SURVEY

## DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...

\*N\* SPACING = 25.0 METRES

RECEIVER: SCINTEX IPR-12 TIME DOMAIN

RX-TX TIMING: ZONE ON 2sec OFF

PLOTTED WINDOW SLICE #9

TRANSMITTER: SCINTEX IPC-9 200 WATT

KRL RESOURCES CORP.

PERKINS GRID

NATAL - KNIGHT TOWNSHIP

DATE : JAN. 1995 REF : L8S

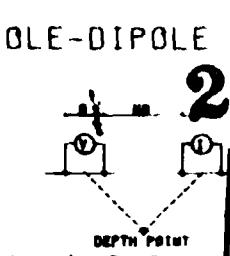
SCALE = 1: 2500

RAYAN EXPLORATION LTD.

LINE : 900 S

## INDUCED POLARIZATION SURVEY

## DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...

\*N\* SPACING = 25.0 METRES

RECEIVER: SCINTEX IPR-12 TIME DOMAIN

RX-TX TIMING: ZONE ON 2sec OFF

PLOTTED WINDOW SLICE #9

TRANSMITTER: SCINTEX IPC-9 200 WATT

KRL RESOURCES CORP.

PERKINS GRID

NATAL - KNIGHT TOWNSHIP

DATE : JAN. 1995 REF : L9S

SCALE = 1: 2500

RAYAN EXPLORATION LTD.

KRL RESOURCES CORP.

I.P. SURVEY

PERKINS PROSPECT

NATAL &amp; KNIGHT TWP.

SHINING TREE AREA

PLATE 2 OF 2 1:2500

2.159 36

RECEIVED

N = 1, 2, 3, 4, ... APR 26 1995

RECEIVER: SCINTEX IPR-12

RX-TX TIMING: ZONE ON 2sec OFF

PLOTTED WINDOW SLICE #9

TRANSMITTER: SCINTEX IPC-9 200 WATT

KRL RESOURCES CORP.

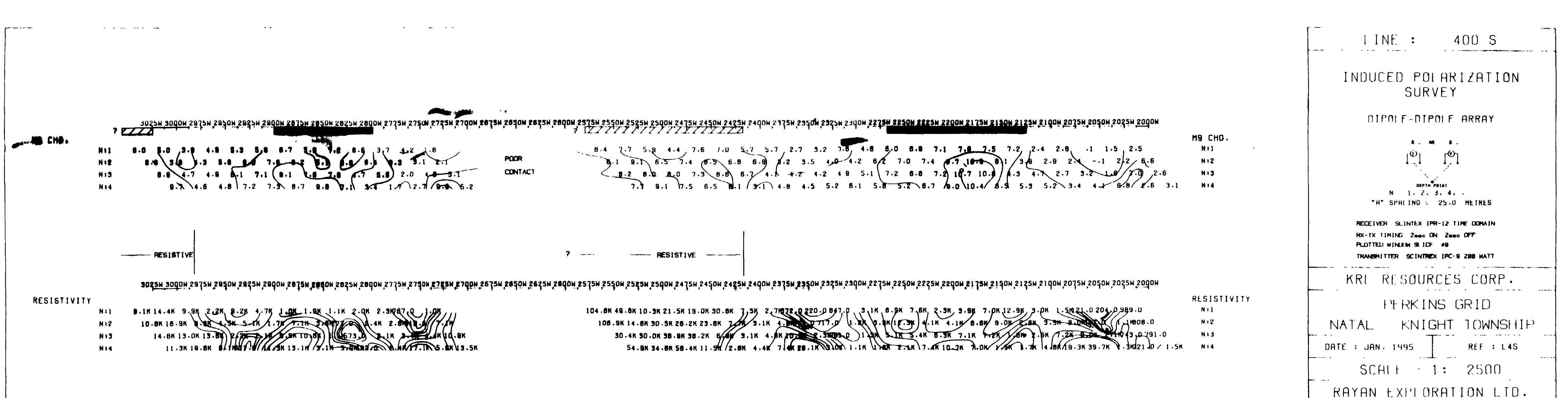
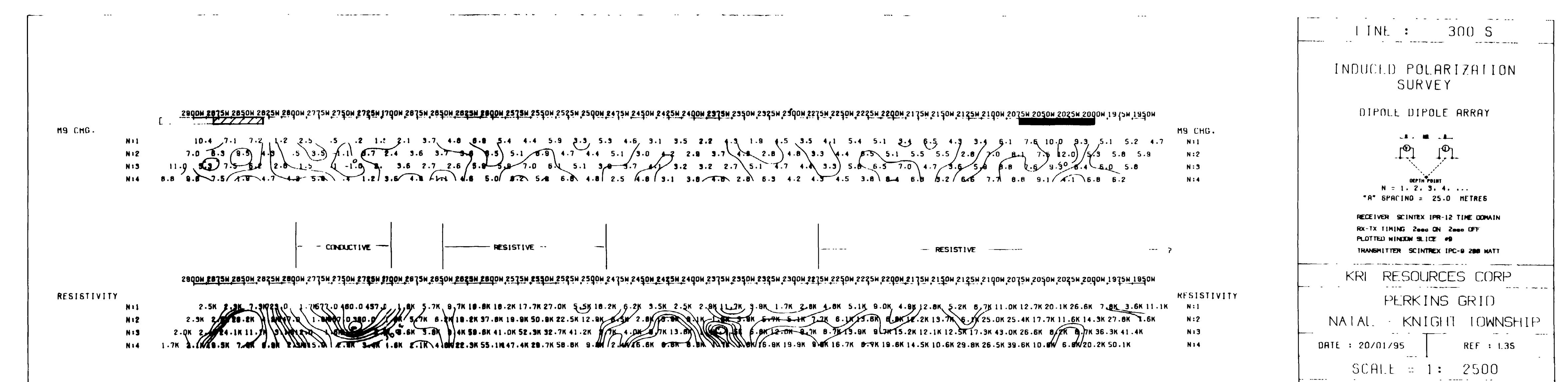
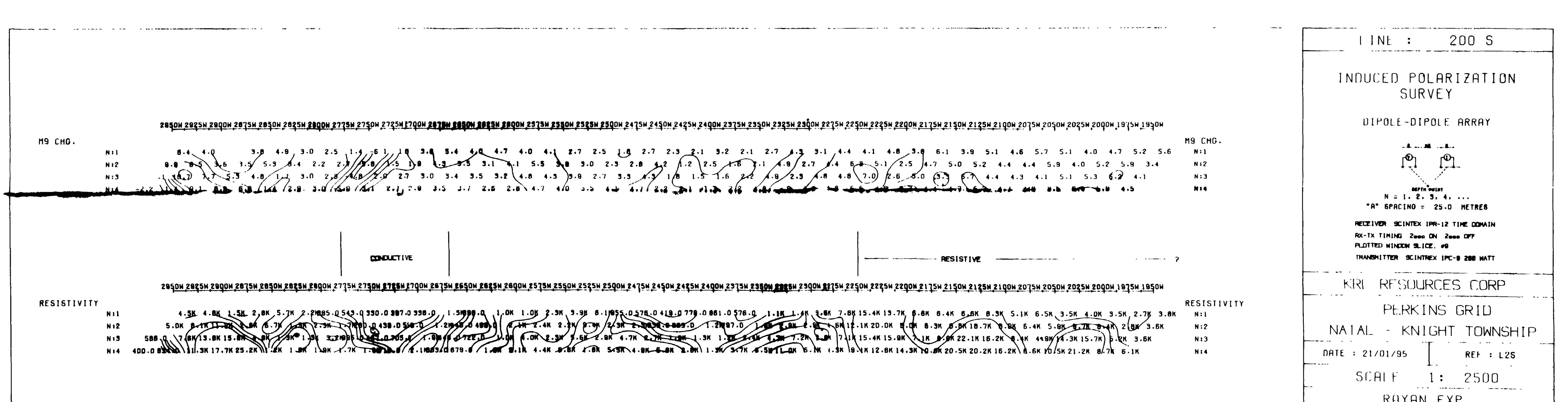
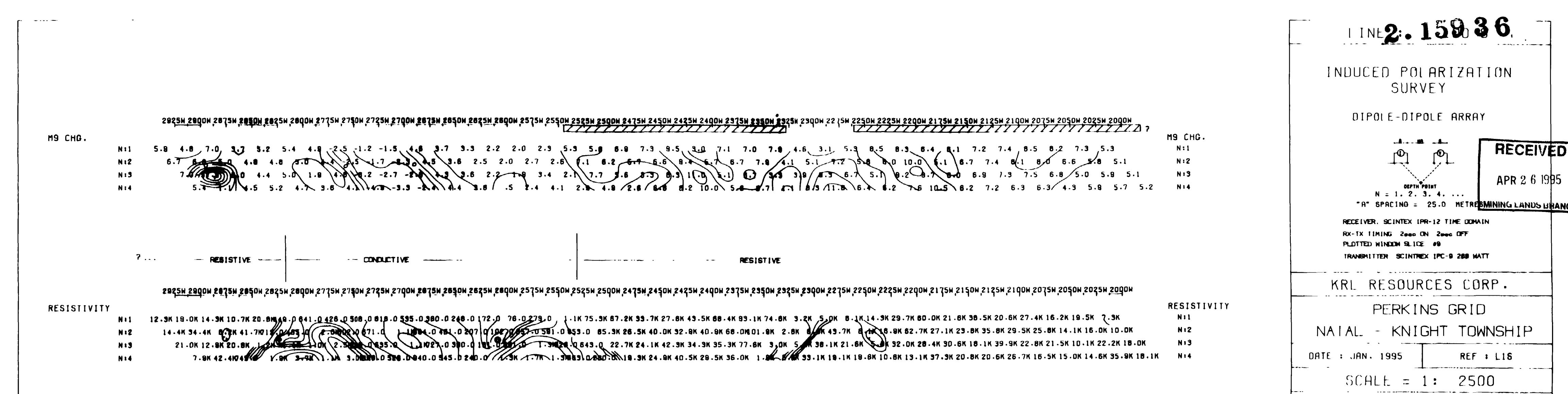
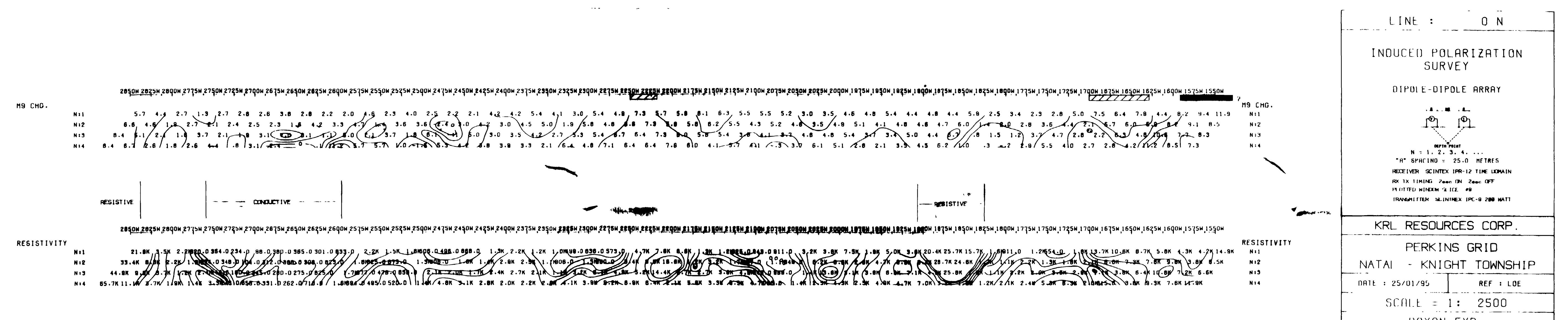
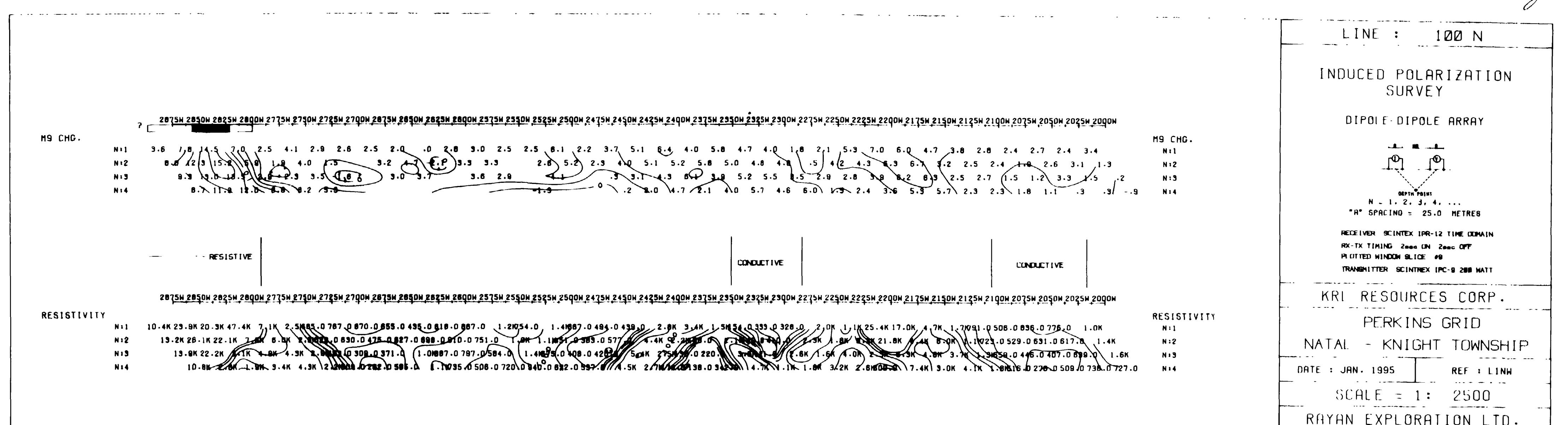
PERKINS GRID

NATAL - KNIGHT TOWNSHIP

DATE : JAN. 1995 REF : L9S

SCALE = 1: 2500

RAYAN EXPLORATION LTD.

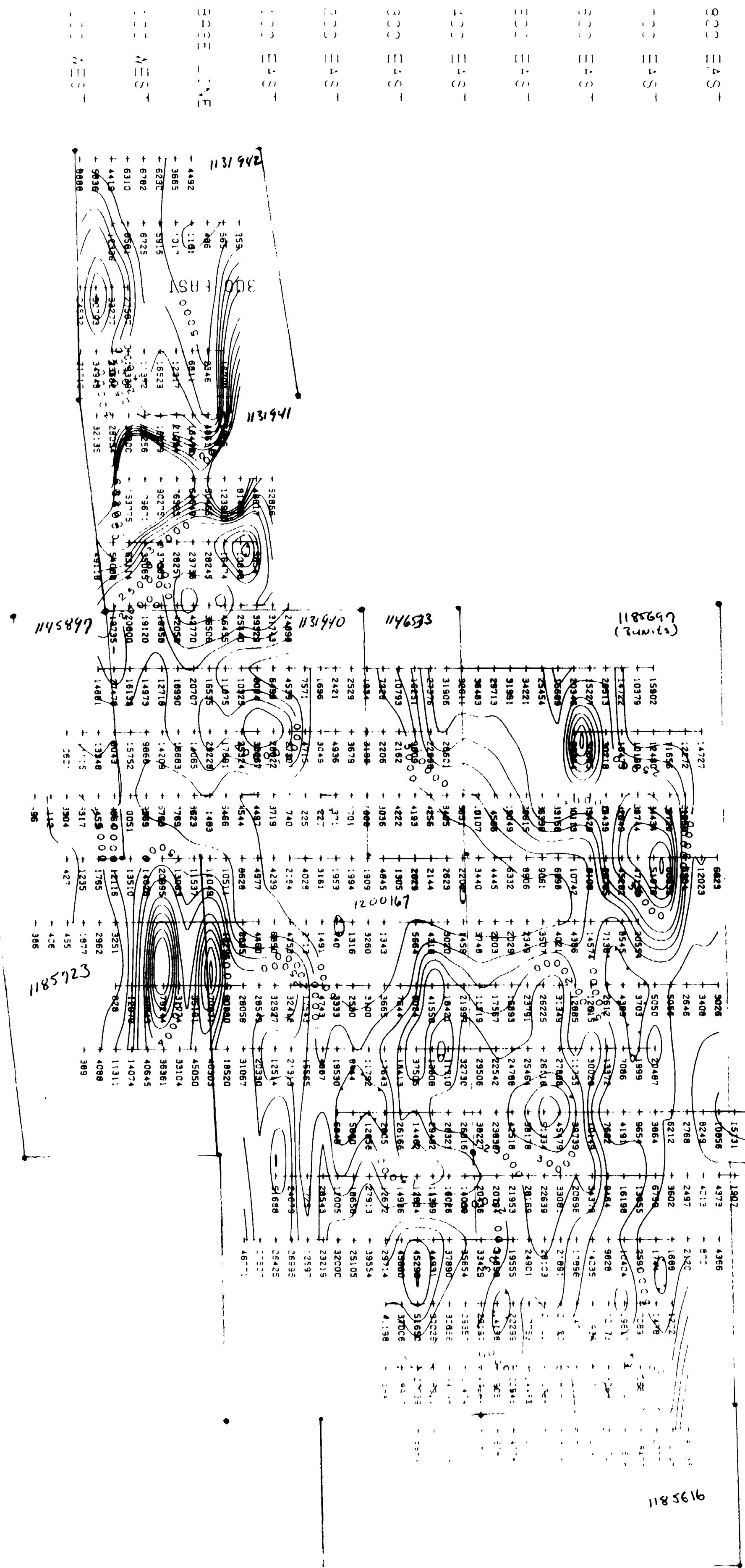
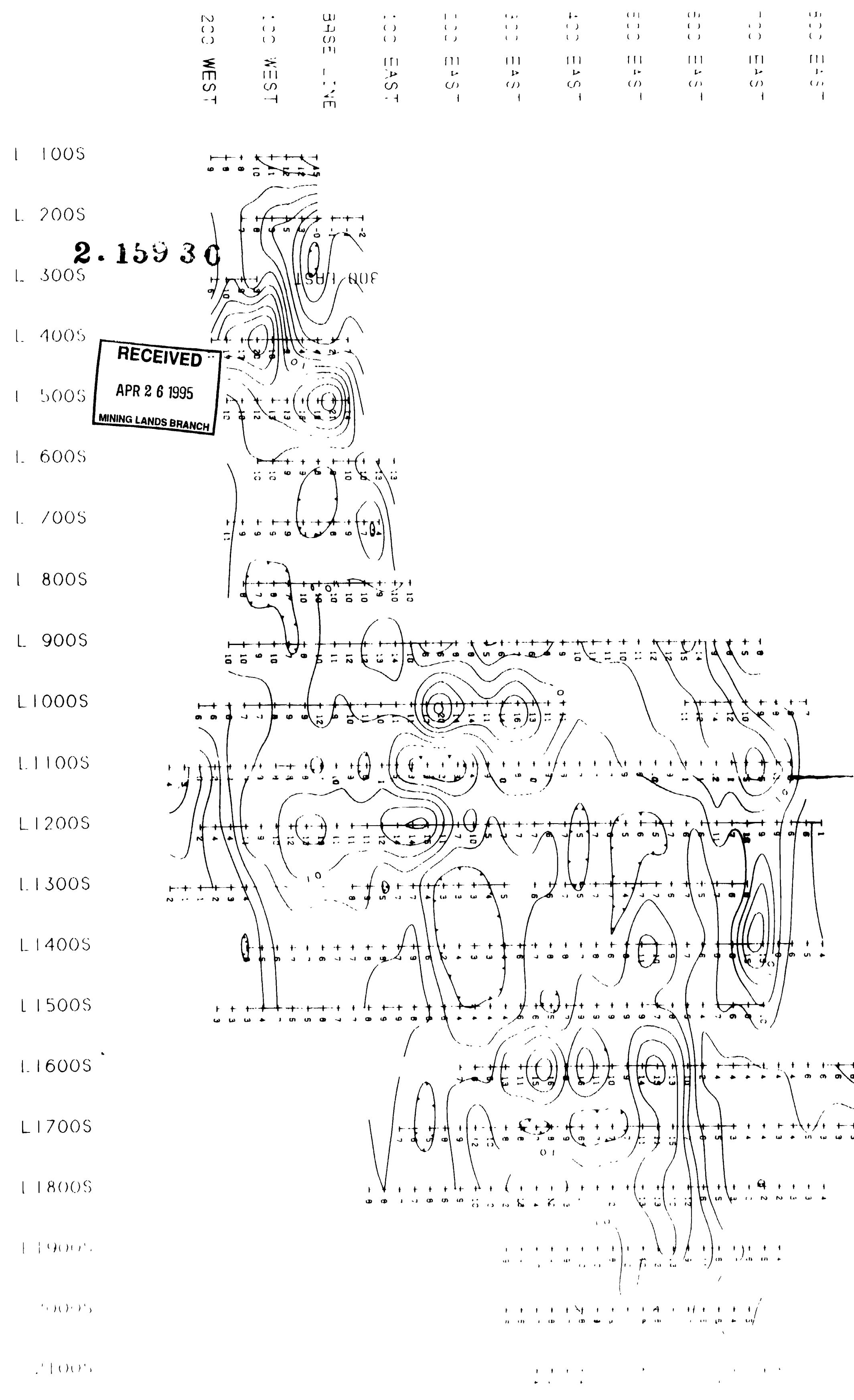


## FRIKI SOURCES CORP.

## INTERVIEW SURVEY

## DEFINITIVE PROSPECTUS

# NAT AL & FIGHT I WPS



L 100S  
L 200S  
L 300S  
L 400S  
L 500S  
L 600S  
L 700S  
L 800S  
L 900S  
L 1000S  
L 1100S  
L 1200S  
L 1300S  
L 1400S  
L 1500S  
L 1600S  
L 1700S  
L 1800S  
L 1900S

## LEGEND

## DATA FRASER FILTERED CHARGEABILITY/RESISTIVITY

SOURCE: I.P. DIPOLE-DIPOLE SURVEY

'A' SPACING- 25M

## TIME DOMAIN

## CONTOUR INTERVAL

### ZER, YR, ZR, YZR, YZK (RESISTIVITY)

FILTER METHOD FRASER. 'B'. TRIANGLE


## OBRAZOVÝCH OBLÍBEN

R, A, v, R, | + | + | R | )

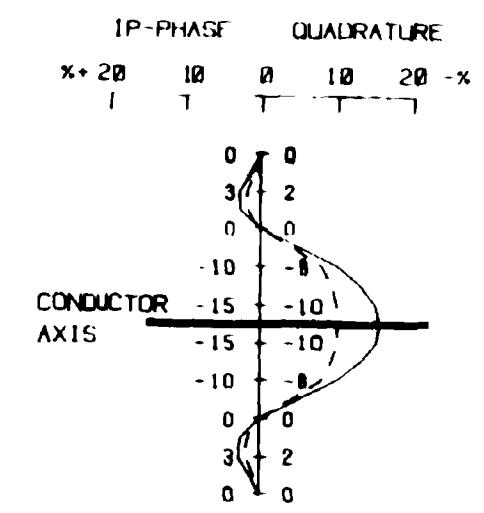
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SEARCHED	INDEXED	FILED
SERIALIZED	FILED	SEARCHED
APR 10 1968		
FBI - MEMPHIS		

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EDUCATION LTD  
CONTRACT CONSULTING CORPORATION  
MEMPHIS, TENNESSEE  
42101-1234-111111111111  
*[Handwritten signature over stamp]*



JM



HLEM LEGEND  
IN-PHASE - - -  
QUADRATURE - - -

INSTRUMENT APEX - MAXMIN II  
MODE MAXIMUM COUPLED, CO-PLANAR  
READING INTERVAL 25 M  
COIL SEPARATION 150 M  
FREQUENCY 444 Hz

CONDUCTORS  
GOOD - - -  
MED - - -  
POOR - - -

TOPO LEGEND

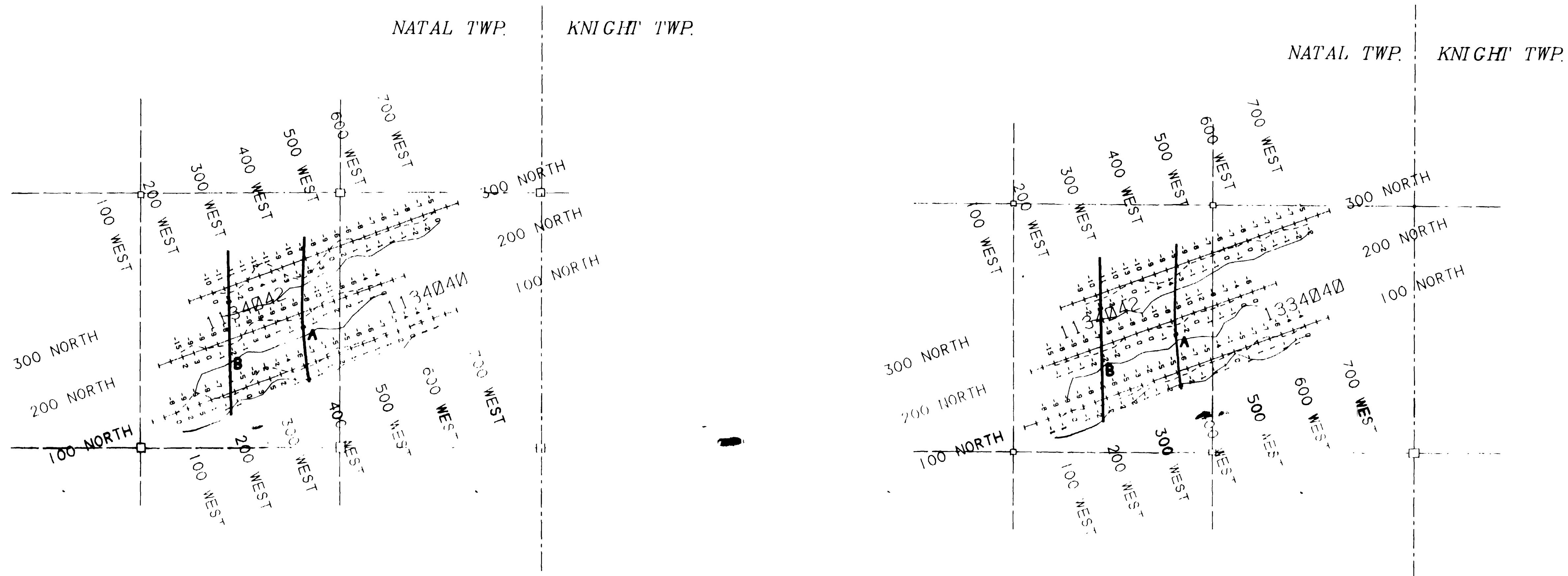
Claim Post Assumed  
- - - - -  
Claim Line

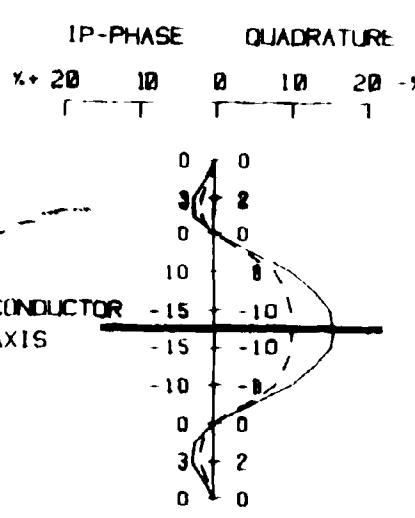
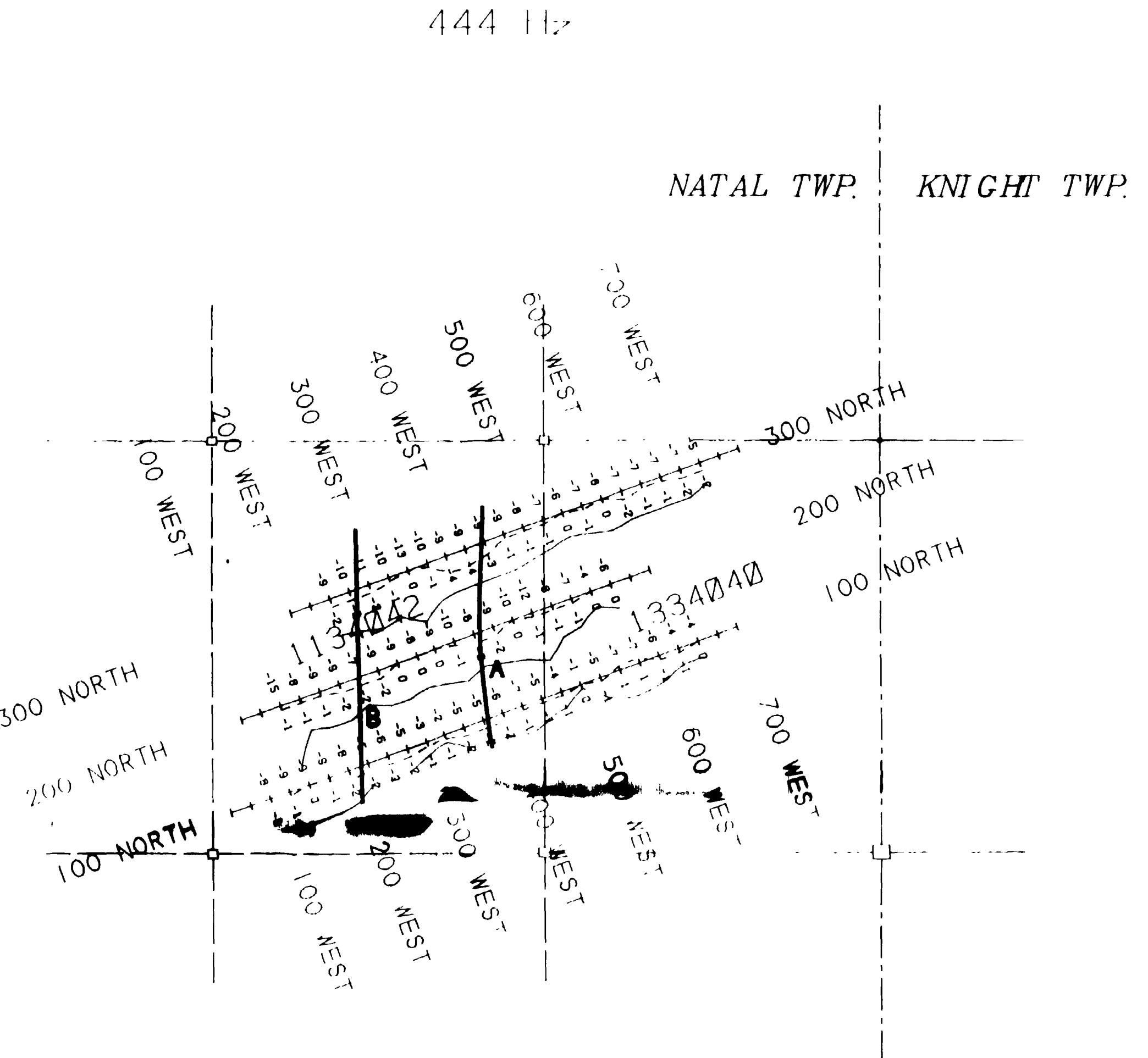
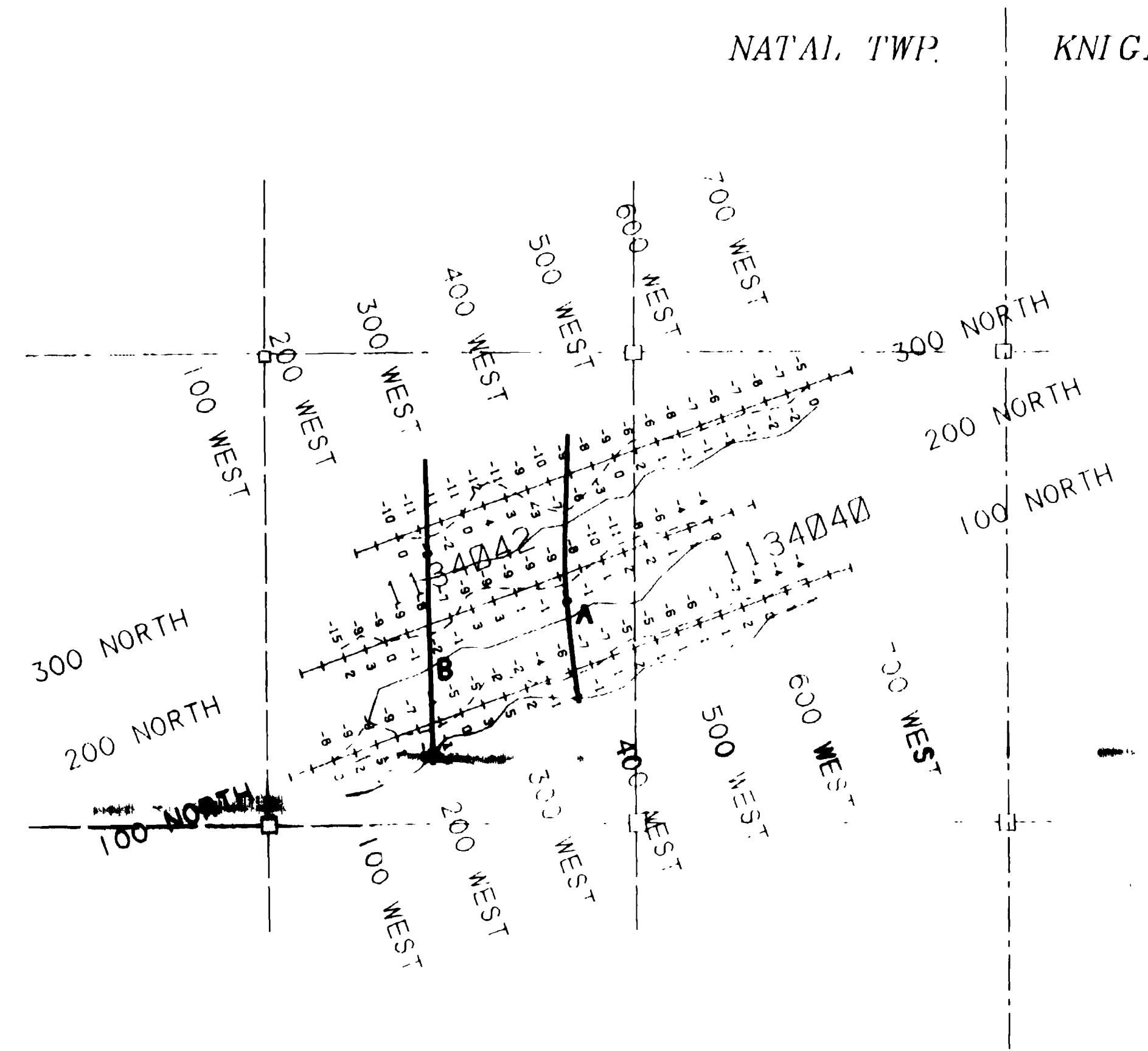
2.1593 6



Client	KRL RESOURCES CORP.		
Property	PERKINS PROSPECT		
Title	HORIZONTAL LOOP SURVEY		
Processed	RJM	Checked	RJM
Date	JAN 1995	Township	NATAL
Province	ONT	NTS	
Scale	1:5,000	Drawing	

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TIMMINS ONTARIO  
(705) 268-4866





HLEM LEGEND

INSTRUMENT APEX - MAXMIN II  
MODE MAXIMUM COUPLED CO-PLANAR  
READING INTERVAL -25 M  
COIL SEPARATION 150 M  
FREQUENCY 444 Hz

IN-PHASE QUADRATURE

CONDUCTORS

GOOD ——————  
MED - - - - -  
POOR ..... .

TOPO LEGEND

Claim Post Assumed  
Claim Line

**2.1593 6**

RECEIVED  
APR 3 1995  
MINING LANDS BRANCH

KRL RESOURCES CORP.			
Property	PERKINS PROSPECT		
Title	HORIZONTAL LOOP SURVEY		
Processed	RJM	Checked	RJM
Date	JAN 1995	Township	NATAL
Province	ONT	NTS	
Scale	1:5,000	Drawing	

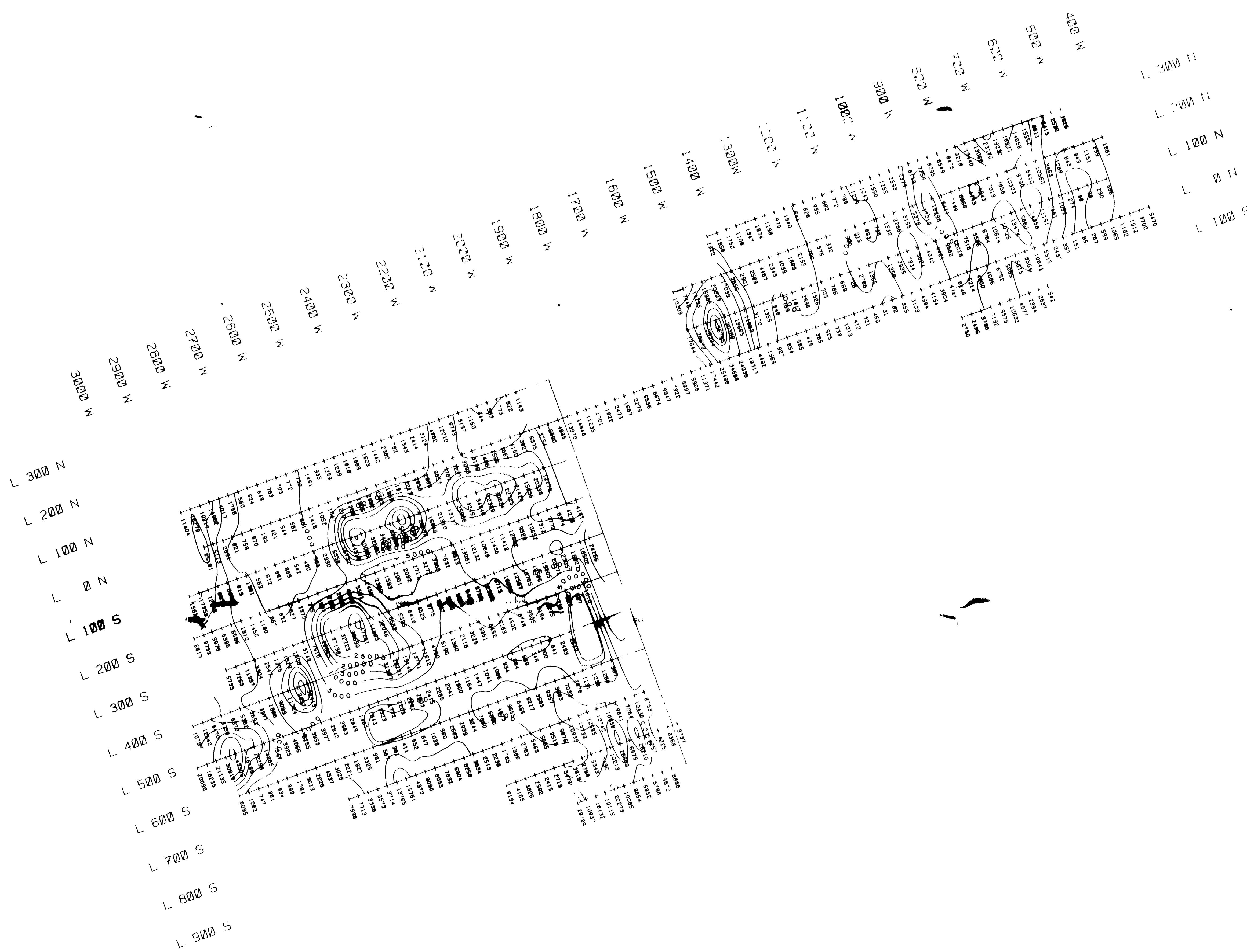
**RAYAN**  
EXPLORATION LTD  
CONTRACT/CONSULTING GEOPHYSICS  
TIMMINS, ONTARIO  
17851-266-4866



41711NE0087 21583M BERNARDOT

320

J Merri



LEGEND

DATA FRASER FILTED RESISTIVITY

SOURCE I P DIPOLE DIPOLE SURVEY

"A" SPACING- 25M

N = 1-4

TIME DOMAIN

CONTOUR INTERVAL - 200,1K,5K,10K... (OHM-M)

FILTER METHOD FRASER B TRIANGLE

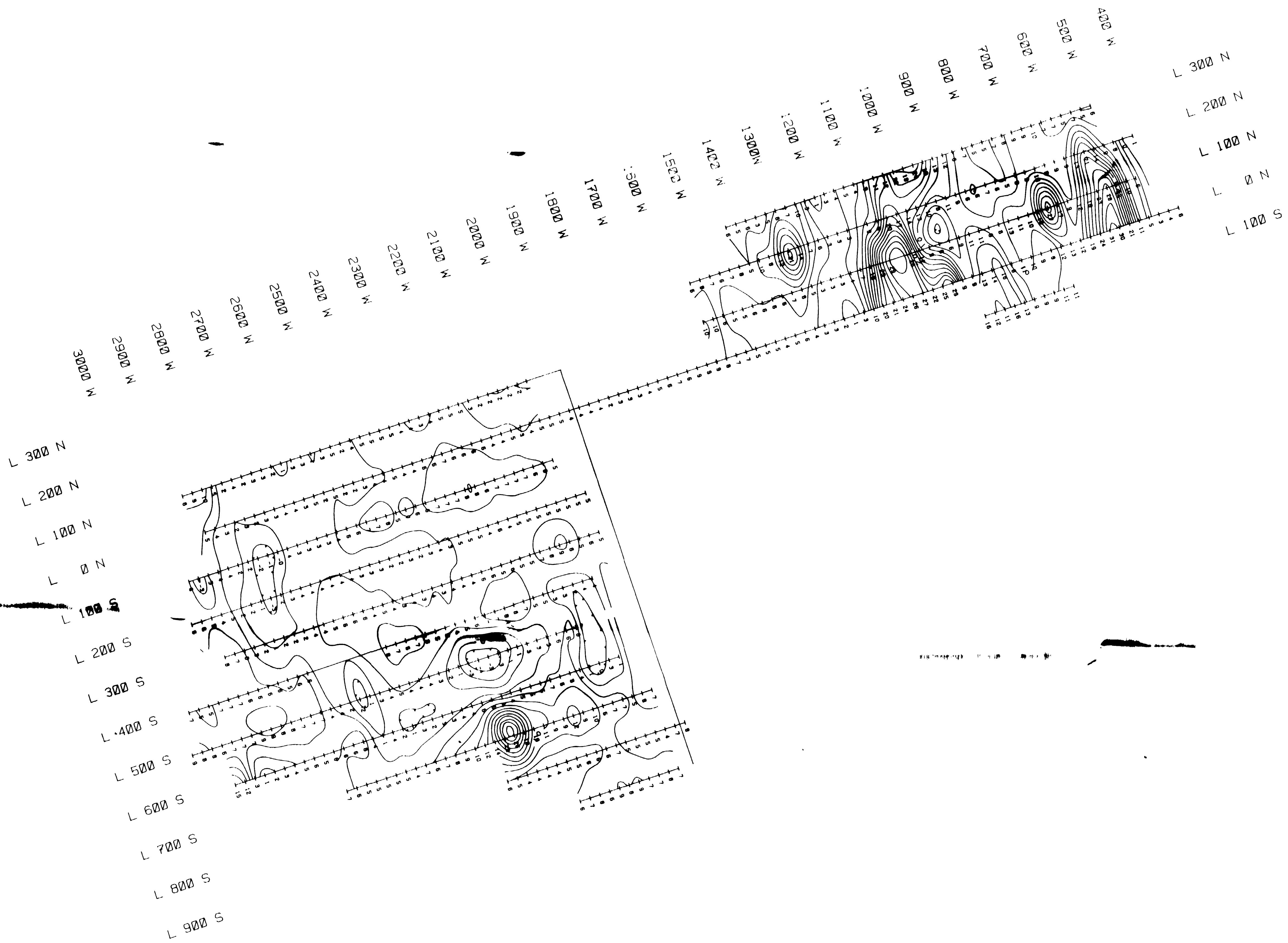
2.1593 6

RECEIVED  
APR 3 1995  
MINING LANDS BRANCH

Client	KLR RESOURCES CORP.	
Property	PERKINS PROSPECT	
Title	FRASER FILTERED RESISTIVITY	

Processed	RJM	Checked	RJM
Date	FEB 1995	Township	NAIAL/KNIGHT
Province	ONT	NTS	41P/NW
Scale	1:5 000	Drawing	1PRES





LEGEND

DATA: FRASER FILTERED CHARGEABILITY/

SOURCE: I.P. DIPOLE-DIPOLE SURVEY

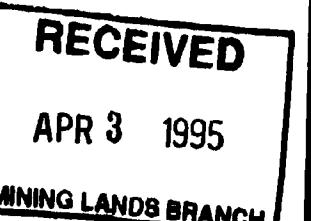
"A" SPACING- 25M

N = 1-4

TIME DOMAIN

CONTOUR INTERVAL - 2 MILLISECONDS (CHG)

FILTER METHOD: FRASER    "B". TRIANGLE



B.1583 C

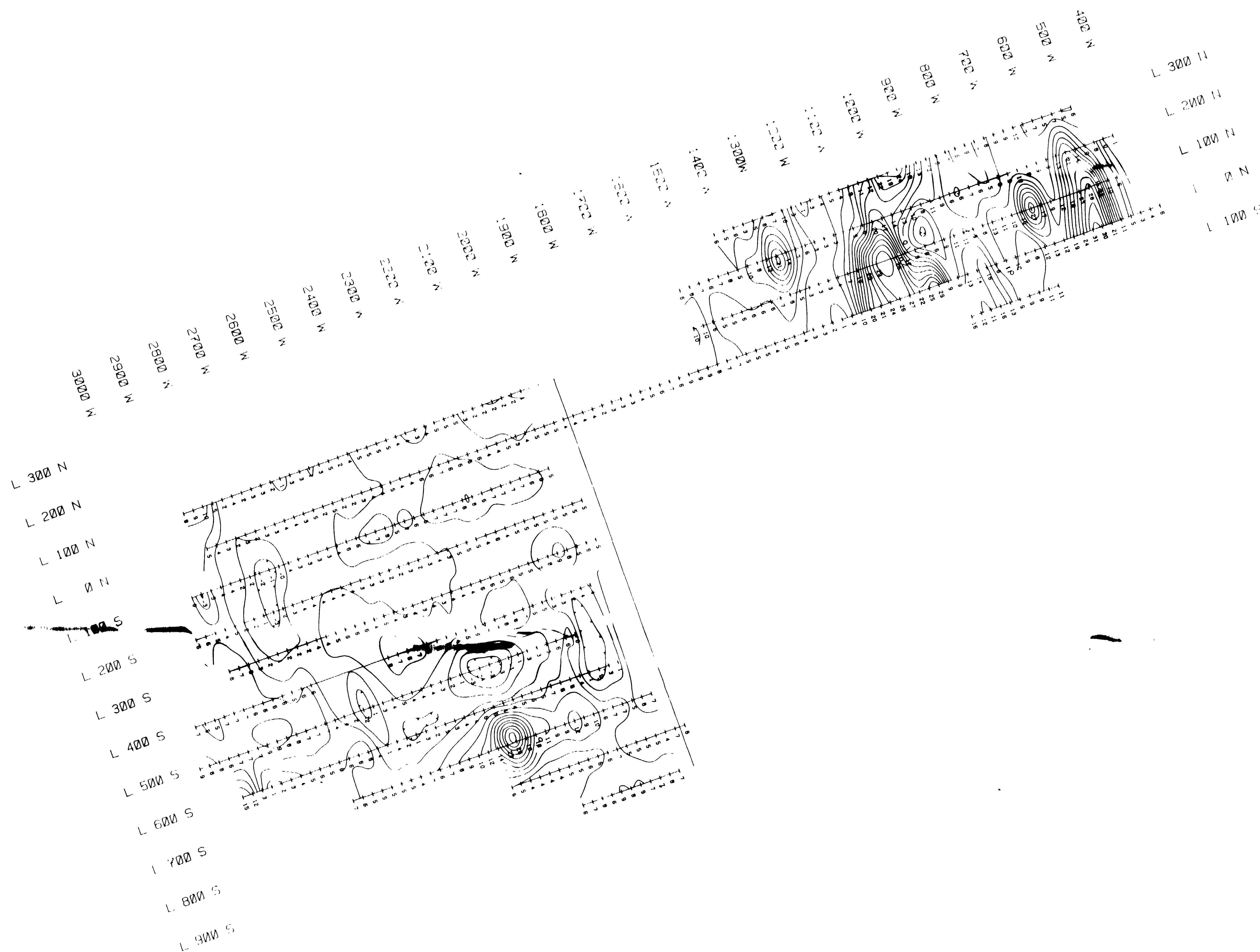
KLR RESOURCES CORP.

PERKINS PROSPECT

Title  
FRASER FILTERED  
CHARGEABILITY

Processed	RJM	Checked	RJM
Date	FEB 1995	Township	NATAL/KNIGHT
Province	ONT	NTS	41P/NW
Scale	1 5,000	Drawing	FFCHG

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CONTRACT CONSULTING GEOPHYSICS  
TIMKINS, ONTARIO  
(705)-268-4866



LEGEND

DATA: FRASER FILTERED CHARGEABILITY/

SOURCE: I.P. DIPOLE-DIPOLE SURVEY

"A" SPACING- 25M

N = 1-4

TIME DOMAIN

CONTOUR INTERVAL 2 MILLISECONDS (CHG)

FILTER METHOD: FRASER 'B' TRIANGLE

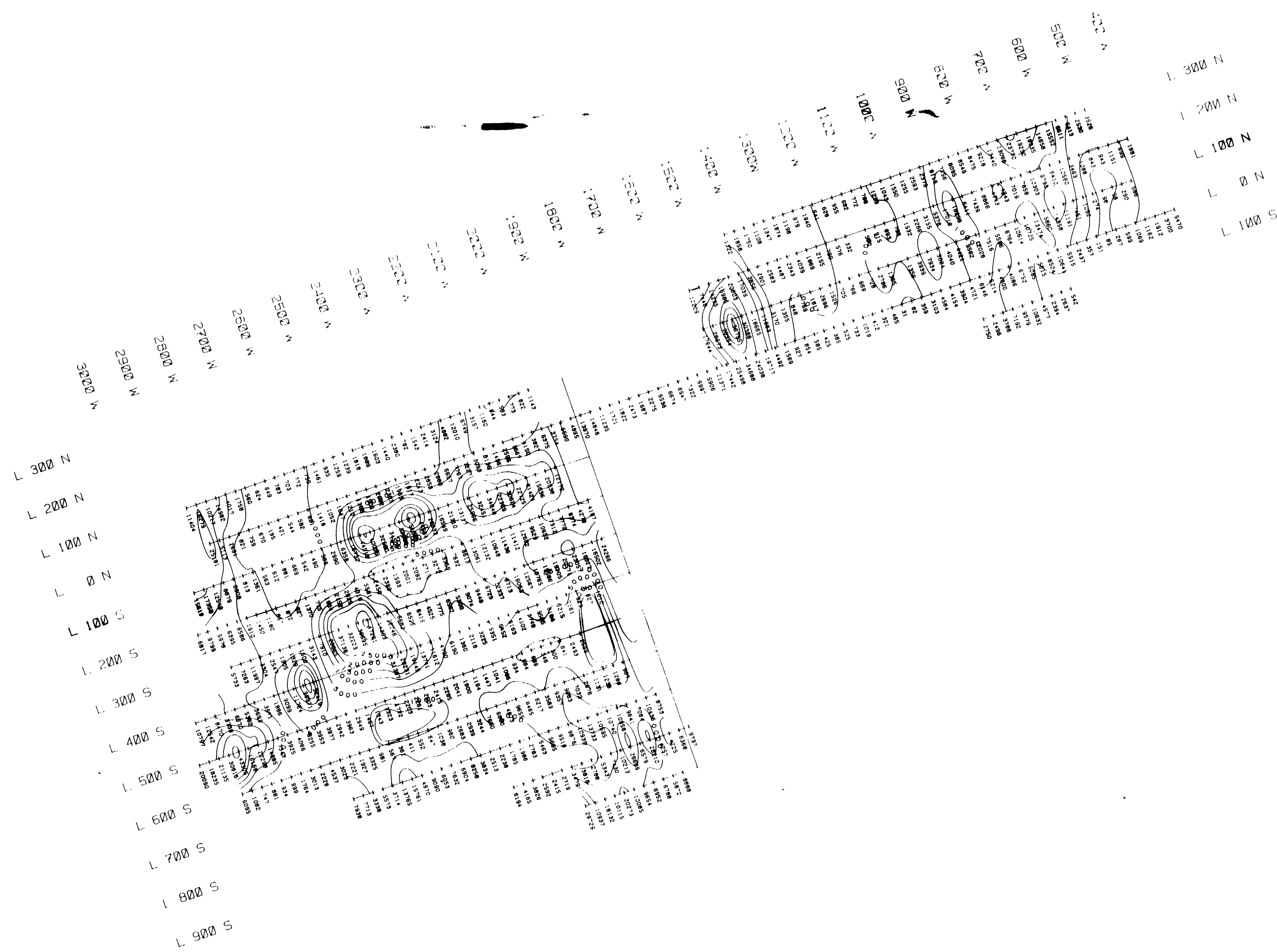


2.15936

Client	KLR RESOURCES CORP.	
Property	PERKINS PROSPECT	
Title	FRASER FILTERED CHARGEABILITY	
Processed	RJM	Checked
Date	FEB 1995	Township
Province	ONI	NATL/KNIGHT
Scale	1:5,000	41P/NW
		Drawing
		FFCHG

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EXPLORATION LTD  
CONTRACT GEOPHYSICS  
TIMMINS, ONTARIO  
(705) 288-4866

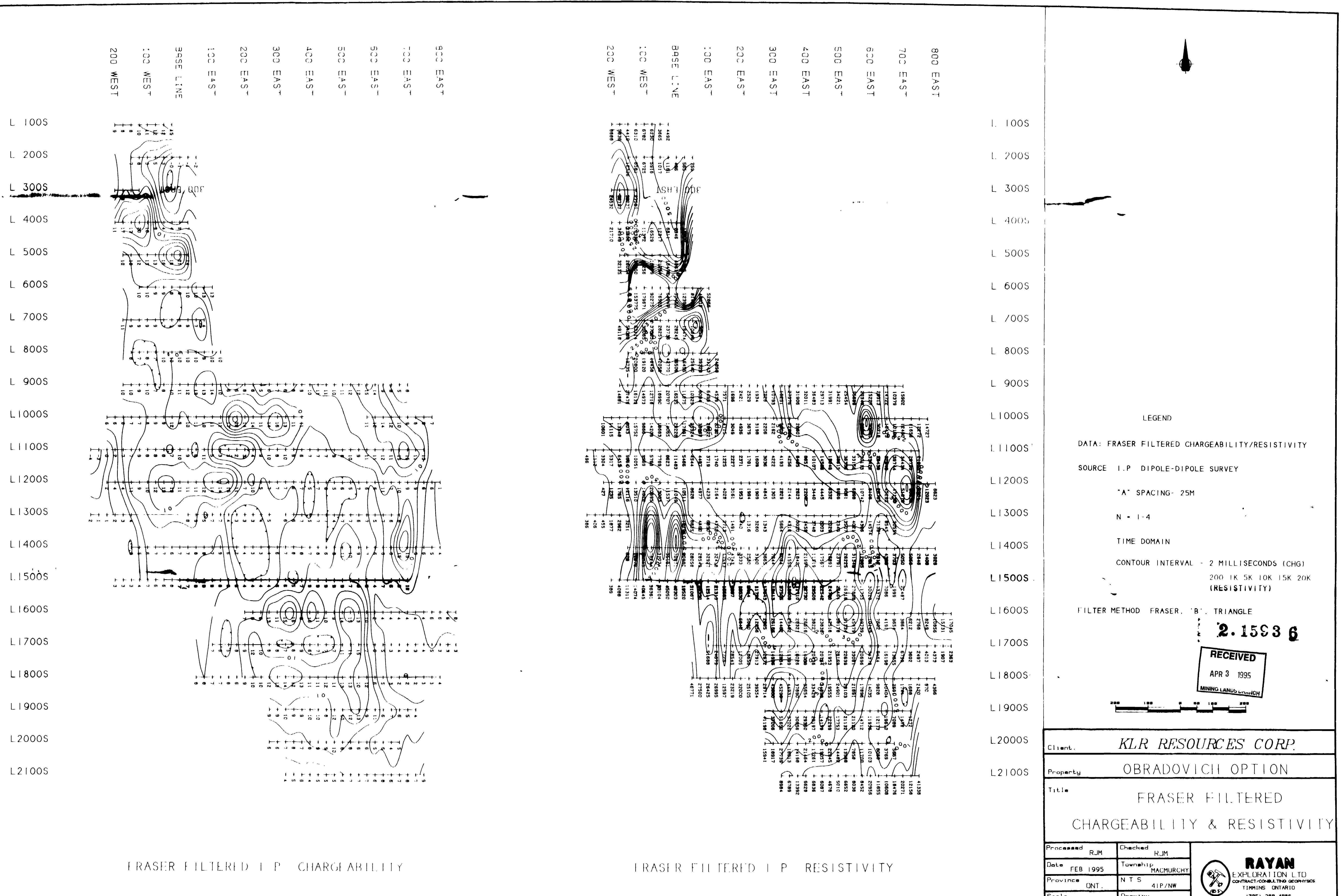




Client	KLR RESOURCES CORP.		
Property	PERKINS PROSPECT		
Title	FRASER FILTERED		
RESISTIVITY			
Processed	RJM	Checked	
Date	FEB 1995	Township	NATAL/KNIGHT
Province	ONT	NTS	41P/NW
Scale	1 5,000	Drawing	FFRES

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EXPLORATION LTD  
CONTRACT-CONSULTING GEOPHYSICS  
TIMMINS, ONTARIO  
(705) 269-4866


J.M.

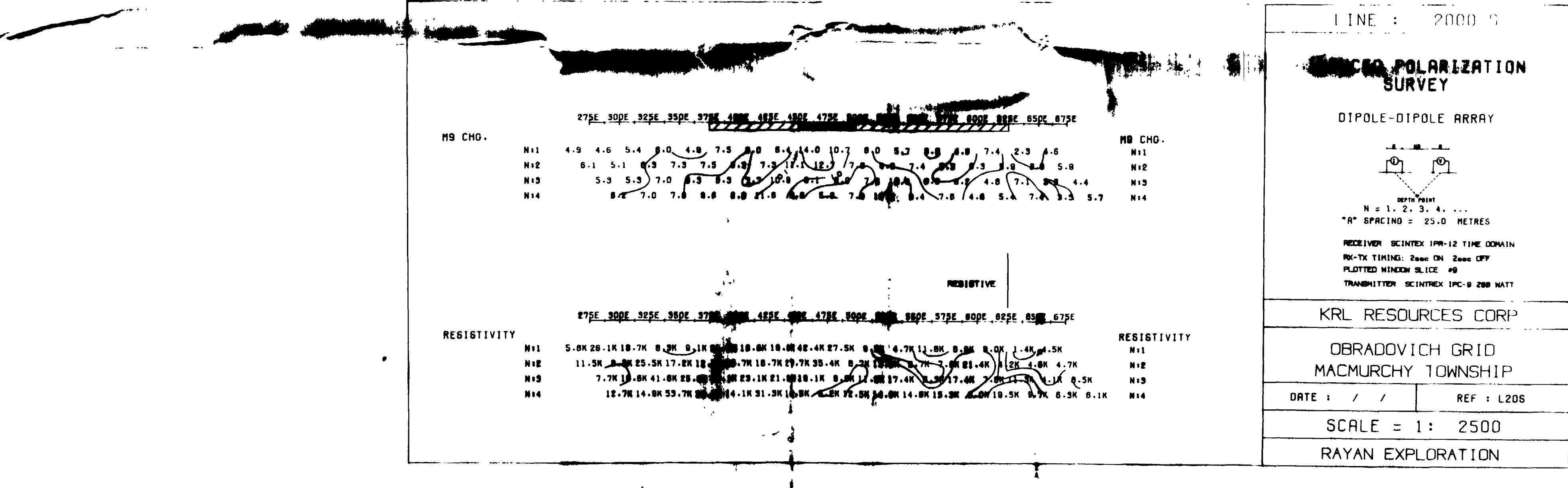
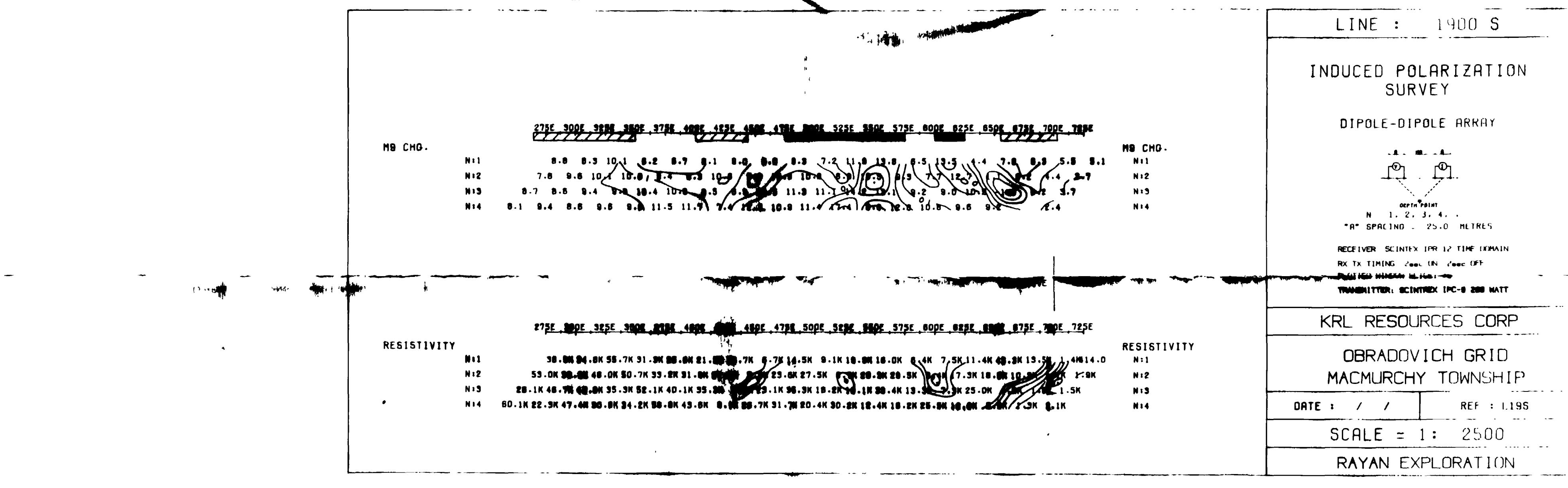
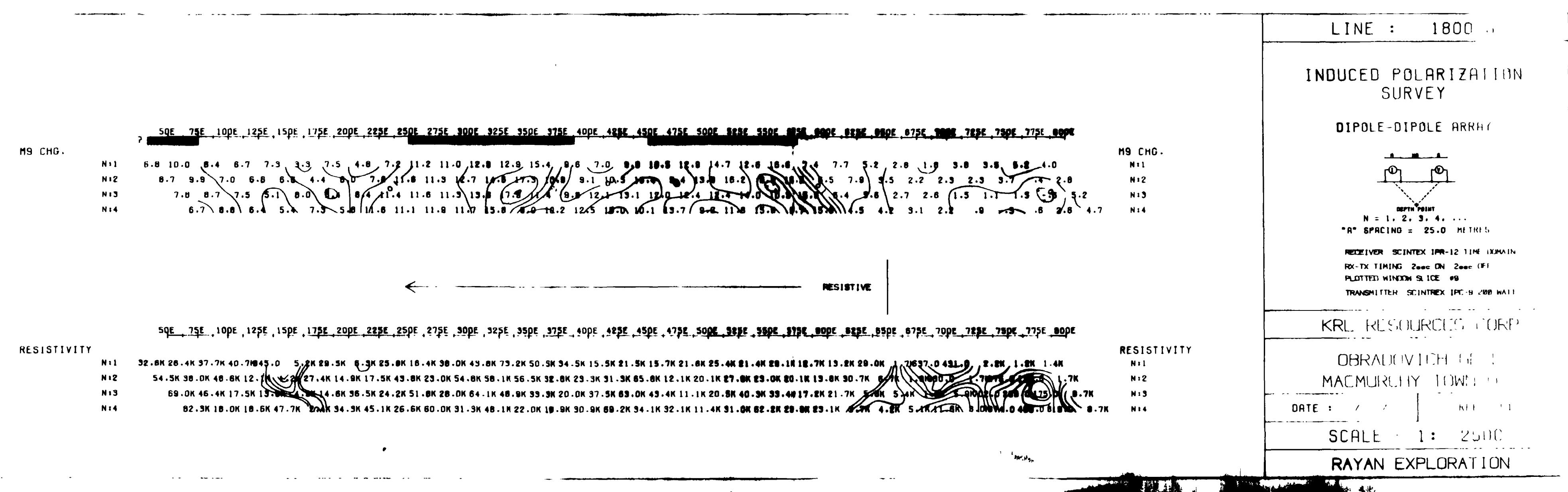
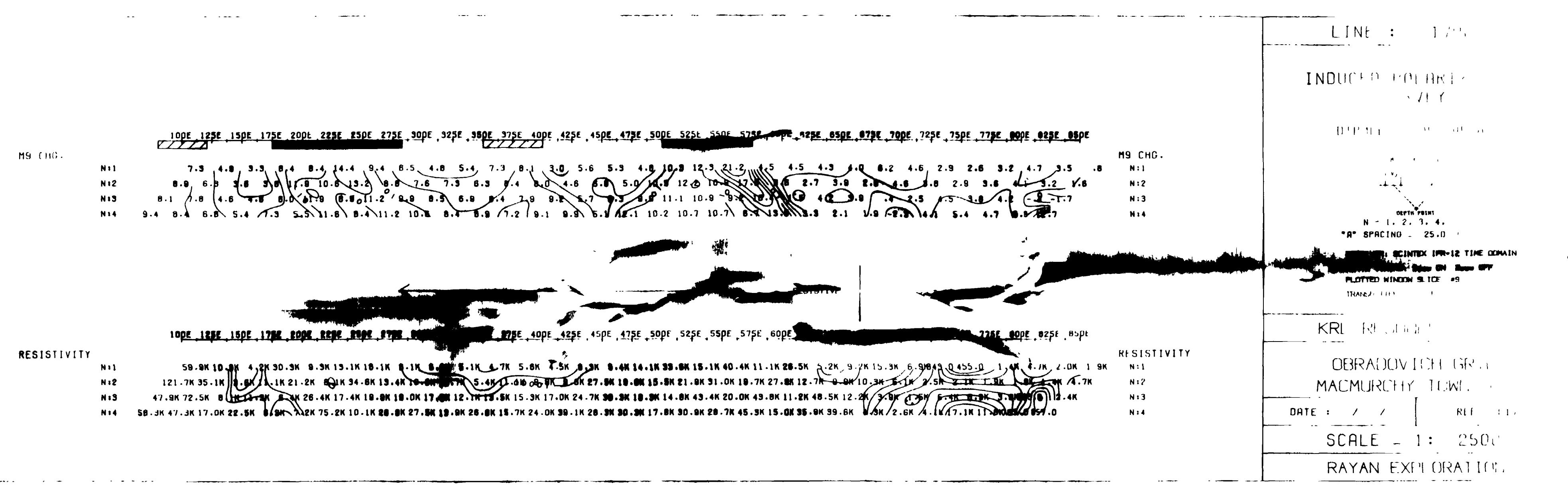


WADSWORTH TOWNSHIP  
SITTING TREE AREA

— A — 1 — 3

RECEIVED  
APR 3 1995  
MINING LANDS BRANCH





# KRL RESOURCES CORP

**RECEIVED**  
APR 3 1995  
**MINING LANDS BUREAU**

# OBRADOVICH PROSPECT

2.1593 6

# MACMURCHY TOWNSHIP

# SHINING TREE AREA

PLATE 3-3

J. M.

