BERLAND RESOURCES LTD.

ROARING RIVER PROPERTY

ONTARIO

NTS 52H

[illegible] 2002

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2001 GEOPHYSICS REPORT

SUBMITTED BY:

WILLIAM MCCRINDLE, P. ENG.

December, 2001

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INTRODUCTION

In March of 2000, Berland Resources Ltd. signed a letter agreement with Stares Contracting Corporation of Thunder Bay, Ontario to option the 8 claim property with palladium and platinum potential. Berland can earn a 100% interest subject to a 2% NSR by making certain cash and share payments over three years. Since the original option was signed, the property was expanded to include 13 unpatented contiguous claims, 178 units covering 7,120 acres. One additional claim was recorded in July, 2001.

Prospecting in the fall of 2000 discovered mineralization in two outcrop locations and in a number of boulders. A base line running from the Garden Lake Road north at 25° was commenced by Stares Contracting in December and was terminated due to inclement weather at 1.7 km. In May of 2001, Berland contracted Peacock Exploration Services to cut the balance of the base and grid lines. A baseline south of the road was offset 400 meters to the west to run through the Mere showing. The total baseline length is 6.2 km. Grid lines were cut perpendicular to the baseline at 200 meter spacing, each line is 1,000 meters. In - fill lines on 100 m centers were cut on the south end of the grid and 5 lines were extended 300 meters to the west in July. The total base and grid lines covered 45.1 km.

Upon completion of the grid, Mtec Geophysical of Thunder Bay, Ontario was contracted to conduct a magnetometer survey over the entire grid and a high frequency test max-min I (HLEM) survey over 4 grid lines. Two lines crossed each of the Leigh and Mere showings. JVX Ltd. of Richmond Hill, Ontario was contracted to conduct an IP survey test over the two lines which cross the Mere showing.

A logistical report on the geophysical surveys, prepared by Mtec, accompanies this report as Appendix A. The IP results are reported as part of this report with logistics and maps in Appendix B. W. McCrindle of Berland planned and supervised the field program and authored this report.

LOCATION AND ACCESSIBILITY

The property is located approximately 60 kilometers due north of the North American Palladium Mine and 145 kilometers north of the city of Thunder Bay in the Thunder Bay Mining Division of Ontario. The property is accessible by all weather road as the Garden Lake Road, (highway 811) cuts the southern claims. The northern part of the property can be accessed by boat along Bilkey Lake and the Roaring River. The Garden Lake Road crosses the grid at the center of the base line.

MAPS

Figure 1 - Property Location Map is presented in the Mtec logistics report.- Appendix A
Figure 2 - Property Claim Map is in the Mtec logistics report - Appendix A

PROPERTY DESCRIPTION

In March of 2000, Berland Resources Ltd. signed a letter agreement with Stares Contracting Corporation of Thunder Bay, Ontario to option the 8 claim property with palladium and platinum potential. Berland can earn a 100% interest subject to a 2% NSR by meeting a series of cash option payments aggregating $42,000 over four (4) years and issuing 100,000 common shares in 4 tranches. To date $12,000 in cash and 75,000 common shares at a deemed value of $12,500 have been paid.

The property is comprised of 13 unpatented mining claims, (178 units) covering 7,120 acres. (see figure 2) The claims are listed in table #1. Much of the property is covered by small lakes and swamps. Upland regions are jack pine, spruce and poplar covered. Outcrop is sparse throughout the property. One new claim was staked in July, 2001 and is not included in this report.

CLAIM LIST - table #1

Claim Number	Township	Number of Units	Recorded Date	Expiry Date	Berland Ownership
1240556	Gillard Lake	9	March 24, 2000	March 24, 2002	100%-2%NSR
1240557	Gillard Lake	15	March 24, 2000	March 24, 2002	100% - 2% NSR
1240558	Gillard Lake	16	March 24, 2000	March 24, 2002	100% - 2% NSR
1240559	Gillard Lake	12	March 24, 2000	March 24, 2002	100% - 2% NSR
1240560	Gillard Lake	15	March 24, 2000	March 24, 2002	100% - 2% NSR
1240561	Gillard Lake	12	March 24, 2000	March 24, 2002	100% - 2% NSR
1240562	Gillard Lake	16	March 24, 2000	March 24, 2002	100% - 2% NSR
1240563	Gillard Lake	12	March 24, 2000	March 24, 2002	100% - 2% NSR
1241522	Gillard Lake	16	December 5, 2000	December 5, 2002	100% - 2% NSR
1241523	Gillard Lake	9	December 5, 2000	December 5, 2002	100% - 2% NSR
1241524	Garden Lake	15	December 5, 2000	December 5, 2002	100% - 2% NSR
1241527	Gillard Lake	15	January 5, 2001	January 5, 2003	100% - 2% NSR
1241528	Gillard Lake	16	January 5, 2001	January 5, 2003	100% - 2% NSR

Total 13claims, 178 units, 7,120 acres.

HISTORY

R. Stern and G. Hanson; 1989: Archean high - Mg Granodiorite: A derivative of light rare earth element - enriched monzodiorite of mantle origin. Journal of petrology, Vol 32, Part1 pp. 201-238, 1991.

Prior to Berland's prospecting work in the fall of 2000, no previous exploration reports were on file for the property. There is no evidence that the property had been staked in the past.

In the year 2000, the OGS released its Lake Bottom Sediment Report for the Garden Lake - Obongo Lake area and the Airborne Geophysical Treasure Hunt Data for the same area.

GEOLOGICAL SETTING

The Roaring River property is reportedly underlain by a plutonic complex of granitic to gabbroic rocks of varying textures and composition. The pluton is reported to be over 25 kms in length. The claims cover the area of highest magnetic intensity of the intrusive complex. The Roaring River Property was optioned based on the magnetic signature and the fact that gabbroic rocks were reported in one outcrop on the OGS map #2058 - Garden Lake area - west half.

DEPOSIT TYPES

The primary focus of the exploration is to locate a gabbroic intrusive bearing a platinum group element (PGE) deposit and/or a layered gabbro with reef type mineralized layers.

GEOPHYSICAL FIELD METHODS

See Appendix A - Logistical Report by Mtec Geophysics Inc.
See Appendix B - JVX logistics report and interpretative results.

GEOPHYSICAL SURVEYS

Magnetometer Survey

Total field magnetic posted data and contoured data maps at a scale of 1:5,000 are included in this report. The magnetic data is contoured at 200, 1000 and 5000 nT intervals. A datum of 58,000 nT was selected. The magnetics varies considerably across the property. The cause of the magnetic features is generally unknown at this stage due to the limited bedrock exposure.

An area of low magnetics lies south of line 80N. An irregular zone of fluctuating magnetic highs and lows parallels the baseline (25°N) from line 82N to 104N. A magnetic high is present on lines 83 N and 84N west of 90 E and seems to increase of f the grid to the north. A major magnetic high (>4,000 nT) above datum commences just west of the base line at line 112N and trends northeast to line 124N. A magnetic low expression runs parallel to and northwest of this high. A region of a major magnetic low lies in the central part of the grid near lines 106N and 108N. A major high is starting to be revealed at the northwest corner of the grid in the area of lines 126N to 132N.

All magnetic maps are included in the map pocket.

Electromagnetic Survey

The HLEM (max-min I) survey was conducted only on four test lines. At the Leigh showing, lines

78N and 80N were selected for the test. At the Mere showing lines 98N and 100N were used. Surveys were conducted to test the response of the mineralized bedrock exposed at the known showings to high frequency HLEM at 800 and 14,000 Hz. No distinctive anomalies were recognized. The HLEM maps are in the map pocket.

IP Survey

JVX Ltd. was contracted to spend one day surveying two grid lines (lines 98N and 100N) which crossed the Mere showing near highway 811. The field crew was able to drive in and out from their established camp located west of highway 527 and south of the mine. Blaine Webster of JVX reported the interpretative comments regarding the IP survey results which are located in Appendix B. The IP profiles are in the map pocket.

RECOMMENDATIONS

The magnetic anomalies, both high and low should be investigated further for a correlation to a specific rock unit member of the complex. Further analysis of the magnetic digital data can be conducted to search for possible structures within the complex. Additional lines could be IP surveyed but the cost and effectiveness must be compared to other available exploration methods. The high frequency HLEM offered no apparent advantage for use in this environment.

Respectively Submitted by,

BERLAND RESOURCES LTD.

William McCrindle, P. Eng.

BIBLIOGRAPHY:

1. Garden Lake - Obongo Lake Airborne survey digital data - OGS release August, 2000

2. OGS report 6009 - Garden Lake - Obongo Lake High Density Lake Sediment and Water Geochemical Survey Report - released April, 2000

3. OGS Total Magnetic Field Map for Ontario - Map 2585 West-Central Sheet

4. Assay results from Company's fall 2000 prospecting program.

5. Report dated June 27, 1989 - Archean High - Mg Granodiorite: A Derivative of Light Rare Earth Element-enriched Monzodiorite of Mantle Origin by Richard A. Stern and Gilbert N. Hanson

6. OGS: Garden Lake Area, west half, map 2058 published 1964

CERTIFICATE OF QUALIFIED PERSON

I, William McCrindle, P. Eng., of the City of Thunder Bay, do hereby certify that:

1. Planned and supervised the contractors on behalf of Berland Resources Ltd. to cut the grid and conduct this survey.
2. I am the President, a Director and shareholder of Berland Resources Ltd.
3. I hold a Bachelor of Applied Science degree in Geological Engineering from the University of Toronto (1961).
4. I am registered as a member of the Association of Professional Engineers of Ontario and have been since July 27th , 1984.
5. I worked as a geologist in education and as a consultant from 1961 to 1982. From 1983 to October 1997, I was an Officer and from 1983 to the present, a Director of Cumberland Resources Ltd. I retired from my involvement in education in February, 1995. In October 1997 I was appointed President and Director of Berland Resources Ltd.

Dated at Thunder Bay, Ontario

this 2nd day of December, 2001

William McCrindle, P. Eng.

APPENDIX A

Mtec Logistic Report

LOGISTICAL REPORT

Roaring River Property
For
Berland Resources Ltd.

by
Mike Milani

Mtec Geophysics Inc

September, 2001

TABLE OF CONTENTS

1.0 Introduction

Mtec Geophysics Inc. was contracted to undertake ground magnetic and HLEM surveys in the Roaring River area of Northwestern Ontario for Berland Resources Limited of Thunder Bay, Ontario. Field work was carried out between July 20, 2001 and July 25, 2001.

2.0 Location and Accessibilty

The property is located approximately 60 kilometers due north of the North American Palladium Mine and 145 kilometers north of the city of Thunder Bay in the Thunder Bay Mining Division of Ontario (Figure 1). The property is accessible by all weather road as the Garden Lake Road, (highway 811) cuts the southern claims. The northern part of the property can be accessed by boat along Bilkey Lake and the Roaring River.

3.0 Property Description

In March of 2000, Berland Resources Ltd. signed a letter agreement with Stares Contracting Corporation of Thunder Bay, Ontario to option the 8 claim property with palladium and platinum potential. Berland can earn a 100% interest subject to a 2% NSR by meeting a series of cash option payments aggregating $42,000 over four (4) years and issuing 100,000 common shares in 4 tranches. To date $12,000 in cash and 50,000 common shares at a deemed value of $11,000 have been paid.

The property is comprised of 13 unpatented mining claims, (178 units) covering 7,120 acres. (see figure 2) The claims are listed in table #1. Much of the property is covered by small lakes and swamps. Upland regions are spruce and poplar covered. Outcrop is basically sparse throughout the property. One new claim was staked in July, 2001 and is not included in this report.

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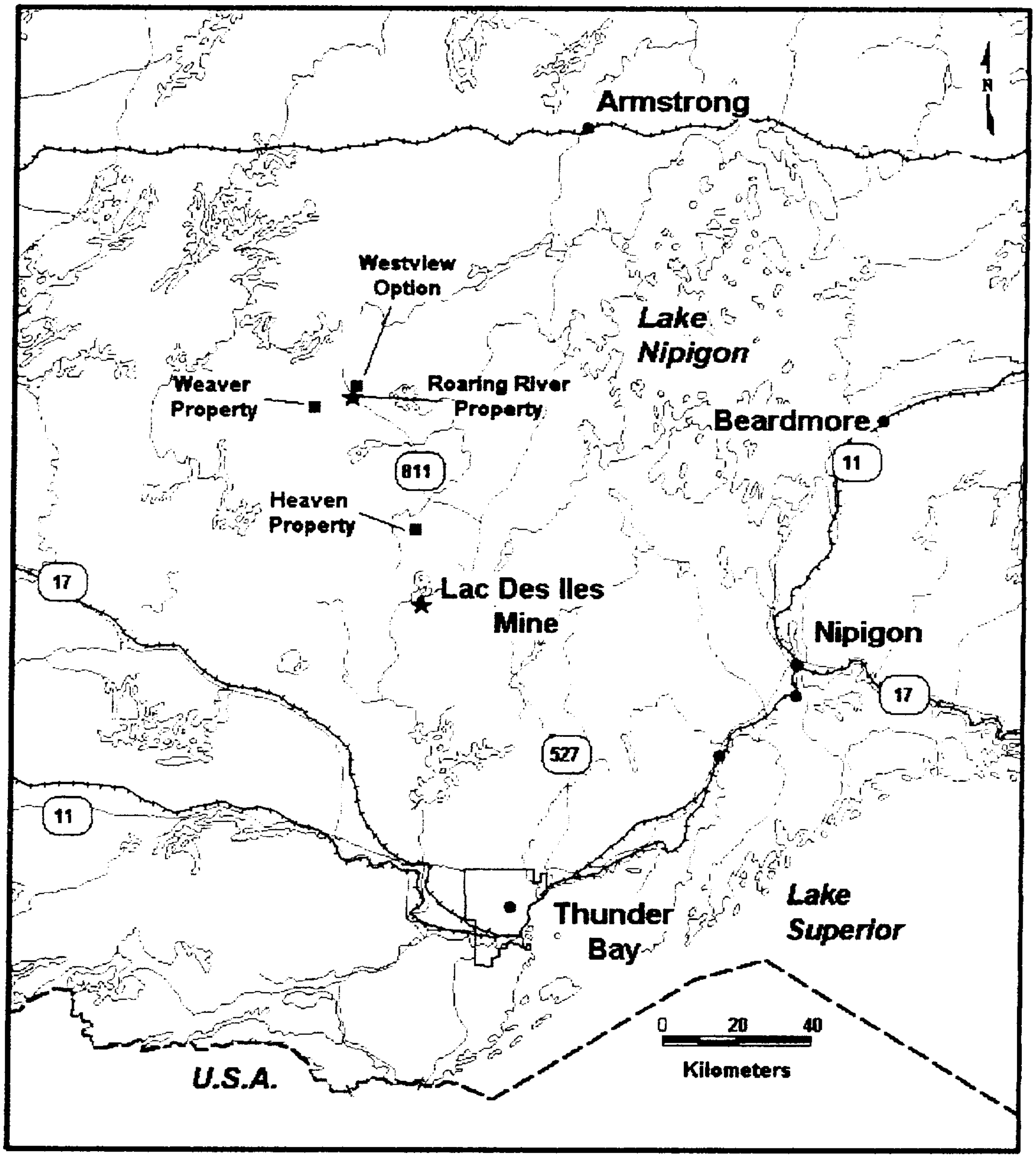
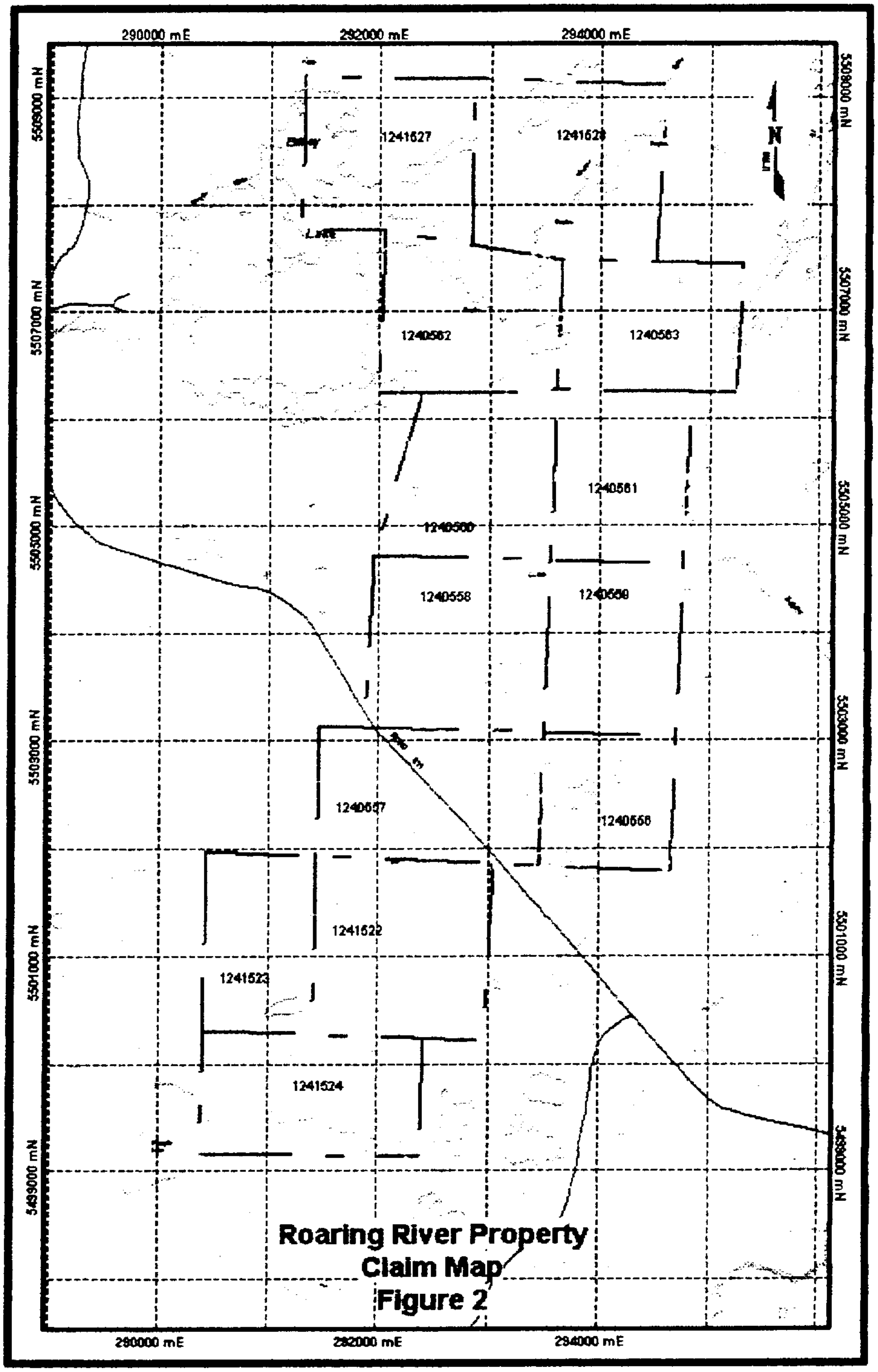
Total 13claims, 178 units, 7,120 acres.



BERLAND RESOURCES LTD.
Figure 1
Property Location Map
Thunder Bay Mining Division, Ontario



Roaring River Property
Claim Map
Figure 2

4.0 Survey Procedures and Equipment

4.0.1 Survey Description

The magnetometer and HLEM surveys were conducted on the claims on cut-line grids. Magnetic surveys were carried out using a GEM Systems GSM-19 proton precession magnetometer measuring variations in the total field at 12.5m intervals on the cross lines as well as all tielines and the baseline of the grid, with a sensitivity of 0.1 nT. Readings were recorded digitally, as were the corresponding diurnal variations, which were monitored and recorded using a base station.

The HLEM survey employed a MaxMin I instrument with a coil separation of 150m, with measurements of the in-phase and quadrature values at 880 and 14000 Hz at 25m station intervals, with an intrinsic resolution of +/-1%.

4.0.2 Data Processing and Presentation

The digitally recorded magnetic data were corrected for diurnal variations by subtracting the base station values. The resulting corrected data were gridded and contoured using Geosoft software. The posted magnetic data and the contoured data are presented on separate maps at a scale of 1:5000.

The HLEM data are presented in standard fashion as in-phase and quadrature profiles, with a profile scale of 1cm = 5% for both the 880 Hz and 14000 Hz frequencies. The results can be seen on separate maps for each frequency at a scale of 1:5000.

5.0 Personnel

The following Mtec Geophysics Inc. personnel were employed on this project.

Max-Min I Survey,
Magnetometer Survey:

Cal Debnam
642 Mud Lake Rd.
Murillo, ON.
(807) 935-3180

Matt Lambert
North Branch Rd.
Thunder Bay, ON.

6.0 Summary

The following chart details the grid that was surveyed.

CLAIMS/ GRID	**KM LINECUTTING**	**KM MAG**	**KM HLEM**
Roaring River	_	45.1	4.0 (150m coil separation)
Totals	_	**45.1**	**4.0**

With the submittal of this report and the accompanying data diskettes the obligations of Mtec Geophysics Inc. have been fulfilled for the Roaring River Property.

Sept., 2001 M. Milani
Mtec Geophysics Inc.

Appendix 1
(7)

GSM-19

OVERHAUSER Magnetometer/ VLF System

GSM-19

OVERHAUSER Magnetometer/VLF System

Features

- Sensitivity – 0.02 nT
- Absolute Accuracy – 0.2 nT
- Sample Rates up to 5 Hz
- Low Power Consumption

General

"Overhauser" Once you experience it, you'll never go back to proton. Overhauser technology brings you sensitivities one to two orders of magnitude better than proton, yet in a light weight package. This is because it consumes an order of magnitude less power than proton, allowing a lighter weight for batteries.

What is the Overhauser technique? The Overhauser sensor contains the electrons' fluid that has been added to a hydrogen rich in the form of "free radial". The resulting mixture yields a sensor with 5000 times gain in proton polarization. Since the Overhauser polarization effect does not require static magnetic fields, but uses radio frequency fields transparent to protons, measurement can be done concurrently with polarization. The result is a sensor with much greater sensitivity, that can be sampled much more rapidly than the standard proton sensor.

Overhauser systems therefore maximize resolution while minimizing power consumption. Even with Walking Gradiometer systems, sampling at rates of once per second or betterare posible; Even in cold temperatures of minus 40 zero degrees Celsius and greater, the internal rechargeable battery can still be relied on for a 10 hour day, or longer.

The GSM-19 Overhauser magnetometer is thus truly a *State-of-the-Art* Magnetometer/ VLF system. The GSM-19 offers the data quality, reliability, and extensive list of capabilities, and options, that allow it to meet a very wide spectrum of applications.

Standard Features

The GSM-19 console features a real time graphic display of the current profile. In addition digital display of the current reading, current position, and warning messages are provided. The console design, with internal rechargeable battery pack, allows the unit to be completely sealed against the elements. With the built in heater for the display the GSM-19 is ready to go wherever your surveys may take you.

Tuning is automatic worldwide, with provision for manual override. In high gradient conditions the GSM-19 monitors the signal decay rate and displays a warning message when the gradient becomes too great. Filters for rejection of 50 or 60 Hz noise are provided.

Diurnal corrections may be done in traditional fashion with one unit as a base station and a second unit used as the mobile field unit. At the end of the survey the two units are connected and the field unit creates a corrected data file (which still includes the raw data file) based on the temporal drift recorded by the base station.

As a standard feature the GSM-19 also offers the capability of making tie point measurements for automatic diurnal corrections. To use this feature the operator records a base value and then loops back to this point periodically during the survey to record another measurement, and thus build a file of the drift. In this way a single instrument may be used to make diurnal corrections.

The RS-232 port on the GSM-19 will output data as it is collected. This allows interface to GPS loggers that will accept RS232 data. The standard GSM-19 may be operated in a remote mode via computer. Memory storage is 512 K in the standard unit, and may be upgraded to 2 MB.

Grid coordinates are stored with either numeric or compass designations. A seven digit number may be used to designate lines and positions. Line and position spacing is entered so that with every reading the position may be automatically updated. An End of Line feature allows the next line to be quickly selected, plus changes the sign on the position spacing. If the previous line had been adding positions as the operator moved, then on the next line, positions will be subtracted as the operator moves. The operator may also easily manually enter his grid position for cases where gaps in the line are necessary.

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Website: www.terraplus.com

Equatorial Sensor

In equatorial regions, generally 30 degrees north or south of the equator, magnetic fields reach a nearly horizontal angle with the earth's surface. This requires a conventional proton sensor to be used in an inverted position, and requires the operator to collect data only on east/west lines to maximize the magnetic signal. This is a problem that is a magnitude worse for cesium magnetometers.

The Overhauser technique allows design of an optional sensor completely free of this problem, a sensor that requires no orientation no matter what the latitude of your exploration. This can be a major advantage when working in diverse areas around the world, and when needing to train local operators whose first language may not be your own.

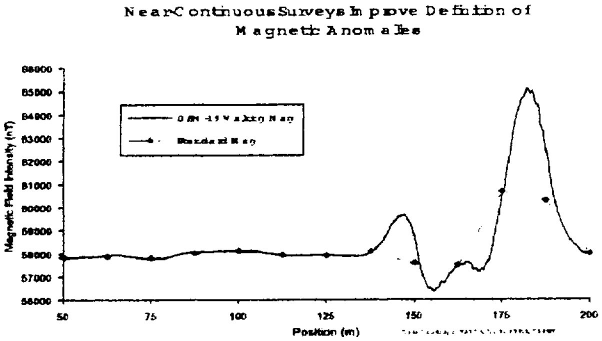
"Walking Mag Option"

The GSM-19 magnetometer was the first to offer the "Walking Mag" concept. The reason for this is the outstanding advantage the Overhauser sensor has in this application. With the "Walking Mag" option the operator may select a sample rate of up to two samples per second. At this rate Overhauser technology can still deliver a noise level that is quite acceptable, about 0.1 nT, and the lower power consumption means that a full day of surveying can still be done with just the internal rechargeable battery.

As shown in Figure 1 the near continuous data from the "Walking Mag" technique provides increased definition for any type of survey. For surveys with densely spaced grids, such as archaeological or environmental surveys, field productivity is markedly improved, typically by a factor of five.

When in the Walking Mag mode the operator still presets his line and station spacing. When a known station is passed a grid update key is pressed and the current reading is tagged with this station. Readings taken between these marked positions are then linearly interpolated for their grid position when data is transferred to a computer.

A further refinement of the Walking Mag concept is the Hip Chain Option. This option uses a hip chain to trigger the magnetometer to take a reading at discrete intervals. A Hip Chain consists of an optical encoder that records revolutions of a wheel wound with disposable cotton string. The string is tied off at the beginning of a line, and as the operator walks the string is pulled out, and the magnetometer is automatically triggered. With the Hip Chain option sample rates up to five samples per second are supported.



Omnidirectional VLF

The GSM-19 VLF features a three coil design, with new larger coils in 1997, to achieve a non orientation capability with excellent sensitivity. Up to three VLF stations may be recorded, along with the magnetic reading, with the pressing of a single key.

As each VLF station is read the total field strength is displayed. This value may be used to determine if a station's signal is strong enough to obtain useful data. At the end of each reading the in phase, out of phase, and horizontal components are displayed and recorded for each station.

To determine what stations are available the Scan feature may be used. The entire VLF spectrum is scanned and stations with their corresponding signal strength are displayed. Automatic tilt compensation is provided up to ten degrees. Beyond this a warning message appears with display of the amount of tilt in each direction, enabling the operator to correct his position and take the reading again.

For Walking Mag applications a Walking VLF option is also available. With this option a single VLF station may be measured at sampling rates up to once per second. In this mode both magnetic and VLF readings may be collected at the one hertz rate.

Simultaneous Gradiometer

Many mining, environmental, and archaeological applications may benefit from using the gradient measurement. For near surface anomalies, generally twenty meters depth or less, the gradient anomaly will be larger, and narrower, than the total field anomaly. This permits the more accurate location of the target, and gives better sensitivity. The gradient measurement has the added value of being free from diurnal drift.

The most accurate gradient measurements are made when both sensors are polarized and measured at precisely the same time. In this way any slight movement of the sensor staff pole will not affect the reading. With the GSM-19 Gradiometer Option the pressing of a single key will initiate measurement of both the total field and gradient. Both readings are displayed and stored.

Integrated DGPS

With the GPS Log Option the GSM-19 will display and store GPS data using standard NMEA format. Position accuracy is dependant on the user's DGPS system.

Also offered is an internally mounted GPS board that may be integrated with radio modem for DGPS mode. A range of GPS boards may be offered to meet customer specified accuracy. These are quoted on a case by case basis to take advantage of current technology. Complete systems, with base station, and DGPS software are provided.

Extended Remote Control

As an option the GSM-19 may be completely controlled through the RS232 interface. This option includes all controls available from the keypad, such as power on/off, tuning, etc. This option is most useful for observatory applications.

Marine Magnetometers

The Overhauser effect is a major benefit in marine applications. The GSM-19 has been developed into two marine models: the GSM-19M for shallow tow applications with cable lengths of up to 100 meters; and the standard GSM-19 for tow applications with cable lengths of 30 meters. Please see pages ?? for the GSM-19M.

A standard GSM-19 may be used with a marine sensor with up to a 30 meter cable. In this way the same console may be used for both land and marine applications. Users considering this option may want to focus on also including the Walking Mag option so that they will have sample rates that are more appropriate for marine applications.

Specifications

Overhauser Performance

Resolution: 0.01 nT

Relative Sensitivity: 0.02 nT

Absolute Accuracy: 0.2nT

Range: 20,000 to 120,000 nT

Gradient Tolerance: Over 10,000nT/m

Operating Temperature: -40°C to +60°C

Operation Modes

Manual: Coordinates, time, date and reading stored automatically at *min.* 3 second interval.

Base Station: Time, date and reading stored at 3 to 60 second intervals.

Walking Mag: Time, date and reading stored at coordinates of fiducial.

Remote Control: Optional remote control using RS-232 interface.

Input/Output: RS-232 or analog (optional) output using 6-pin weatherproof connector.

Operating Parameters

Power Consumption: Only 2Ws per reading. Operates continuously for 45 hours on standby.

Power Source: 12V 2.6Ah sealed lead acid battery standard, other batteries available

Operating Temperature: -50°C to +60°C

Storage Capacity

Manual Operation: 29,000 readings standard, with up to 116,000 optional. With 3 VLF stations: 12,000 standard and up to 48,000 optional.

Base Station: 105,000 readings standard, with up to 419,000 optional (88 hours or 14 days uninterrupted operation with 3 sec. intervals)

Gradiometer: 25,000 readings standard, with up to 100,000 optional. With 3 VLF stations: 12,000, with up to 45,000 optional.

Omnidirectional VLF

Performance Parameters: Resolution 0.5% and range to +200% of total field.
Frequency 15 to 30 kHz.

Measured Parameters: Vertical in-phase & out-of-phase, 2 horizontal components, total field coordinates, date, and time.

Features: Up to 3 stations measured automatically, in-field data review, displays station field strength continuously, and tilt correction for up to +10° tilts.

Dimensions and Weights: 93 x 143 x 150mm and weighs only 1.0kg.

Dimensions and Weights

Dimensions:

Console: 223 x 69 x 240mm

Sensor: 170 x 71mm diameter cylinder

Weight:

Console: 2.1kg

Sensor and Staff Assembly: 2.0kg

Standard Components

GSM-19 console, harness, battery charger, shipping case, sensor with cable, staff, instruction manual, data transfer cable and software.

Ordering Information

Description	Order Number
GSM-19 Overhauser Mag....	350-170-0051
Gradiometer Option	350-170-0042
VLF Option	350-170-0069
GPS Log Option	350-170-0170
Memory Upgrade per 512	350-170-0065
Analog Output	350-170-0080
Remote Option	350-170-0043
Walking Mag Option	350-170-0072
GSM-19 Shallow Marine Fish	.350-170-0105
Equatorial Sensor Option . .	3 50-170-0114

[illegible] ELECTROMAGNETIC SYSTEM SPECIFICATIONS

FREQUENCIES:	110, 220, 440, 880, 1760, 3520, 7040 & 14080 Hz.
COIL SEPARATIONS:	SET NO. 1: 12.5, 25, 50, 75, 100, 125, 150, 200, 250, 300 and 400 metres (the standard set). SET NO. 2: 10, 20, 40, 60, 80, 100, 120, 160, 200, 240 and 320 metres (selected with grid switch in receiver). SET NO. 3: 50, 100, 200, 300, 400, 500, 600, 800, 1000, 1200 and 1600 feet (selected with grid switch in receiver).
TRANSMITTER DIPOLE MOMENTS:	110 Hz: 220 Atm^2 1760 Hz: 160 Atm^2 220 Hz: 215 Atm^2 3520 Hz: 80 Atm^2 440 Hz: 210 Atm^2 7040 Hz: 40 Atm^2 880 Hz: 200 Atm^2 14080 Hz: 20 Atm^2
MODES OF OPERATION:	MAX 1: Horizontal loop or slingram - transmitter and receiver coil planes horizontal and coplanar. MAX 2: Vertical coplanar loop mode transmitter and receiver coil planes vertical and coplanar. MIN 1: Perpendicular mode 1 - transmitter coil plane horizontal and receiver coil plane vertical. MIN 2: Perpendicular mode 2 - transmitter coil plane vertical and receiver coil plane horizontal.
PARAMETERS MEASURED:	In-phase and quadrature components of the secondary magnetic field, in % of primary field.
READOUTS:	Analog direct edgewise meter readouts for in-phase, quadrature and tilt. Additional digital LCD readouts provided in the optional MMC computer. Interfacing and controls are provided for ready plug-in of the MMC.
RANGES OF READOUTS:	Switch activated analog in-phase and quadrature scales: 0±4 %, 0±20 % and 0±100 %, and digital 0±199.9 % autorange with optional MMC. Analog tilt 0±75 % and 0±99 % grade with MMC.
RESOLUTION:	Analog in-phase and quadrature 0.1 to 1 % of primary field, depending on scale used, digital 0.01 % with autoranging MMC; tilt 1 % grade.
REPEATABILITY:	0.01 to 1 % of primary field, typical, depending on frequency, coil separation and conditions.
SIGNAL FILTERING:	Powerline comb filter, continuous spheric noise clipping, autoadjusting time constant, and more.
WARNING LIGHTS:	Receiver signal and reference warning lights to indicate potential error conditions.
SURVEY DEPTH PENETRATION:	From surface down to 1.5 times coil separation for large horizontal target and 0.75 times coil separation for large vertical target, values typical.
REFERENCE CABLE:	Lightweight unshielded 4/2 conductor teflon cable for maximum operating temperature range and for minimum pulling friction.
INTERCOM:	Voice communication link provided for operators via the reference cable.
TEMP. RANGE:	Minus 40 to plus 60 degrees Celsius, operating.
RECEIVER BATTERIES:	Four standard 9 V - 0.6 Ah alkaline batteries. Life 25 hours continuous duty, less in cold weather. Optional 1.2 Ah extended life lithium batteries available (recommended for very cold weather).
TRANSMITTER BATTERIES:	Standard rechargeable gel-type lead-acid 12V-14Ah batteries (4 x 6 V - 7.2 Ah) in nylon belt pack. Optionally rechargeable long life 12 V - 14 Ah nickel-cadmium batteries (20 x 1.2 V - 7 Ah) with ni-cad chargers - best choice for cold climates.
TRANSMITTER BATTERY CHARGERS:	Lead acid battery charger: 14.4 V @ 1.25 A, Ni-cad battery charger: 1.4 A @ 16 V, nominal output. Operation from 110 - 120 and 220 - 240 VAC, 50 - 60 Hz, and 12 - 15 VDC supplies.
RECEIVER WEIGHT:	8 Kg carrying weight (including the two ferrite cored antenna coils), 9 Kg with MMC computer.
TRANSMITTER WT:	16 Kg carrying weight.
SHIPPING WEIGHT:	60 Kg plus weight of reference cables at 2.6 Kg per 100 metre, plus optional items if any. Shipped in two aluminum lined field / shipping cases.
STANDARD SPARES:	Spare transmitter battery pack, spare transmitter battery charger, two spare transmitter retractile connecting cords, spare set of receiver batteries.
OPTIONS AND ACCESSORIES, PLEASE SPECIFY:	◆ MMC, MaxMin Computer option ◆ Data interpretation and presentation programs ◆ Reference cables, lengths as required ◆ Reference cable extension adapter ◆ Handheld inclinometer for rough terrain ◆ Receiver extended life lithium batteries ◆ Transmitter ni-cad battery & charger option ◆ Minimal, regular or extended spare parts kit

Specifications subject to changes without notification

93 - 10 - 15

Telephone: (1) 905 852 5875 Facsimile: (1) [illegible] P.O. Box 818, [illegible] Canada [illegible]

APEX PARAMETRICS LIMITED [illegible]

APPENDIX 2

JVX Ltd.
60 West Wilmot Street, Unit 22, Richmond Hill, Ontario, Canada L4B 1M6 Tel:
Fax:

September 1, 2001

Berland Resources Ltd.
Suite 203-244 Camelot Street,
Thunder Bay, Ontario
P7A 4B1

Attention: Bill McKrindle

Re: Roaring River Test IP Lines 100N and 98N.

The following are a few comments on the pole dipole Roaring River Spectral IP survey.

The array used is JVX's "COMBO ARRAY" which uses n=1 to 3 with a 25 meter separation and n=4 to 8 with a 50 meter separation. The advantages of this method are:

1.) faster than a 25 m array.
2.) provides shallow resolution and deep penetration. This can be very important where there is conductive overburden.
3.) Provides extra data points so that inversions give better solutions.

Line 100N (Surveyed from 93E to 100+50E)

The IP anomalies are very weak and are associated with moderate resistivities. Three weak IP anomalies are located on the line. The IP anomalies are numbered so that they can be correlated from line to line.

IP-1 (96+00E – 96+50E)

IP-1 is a weak chargeability response associated with a weak resistivity high. The zero time chargeability approaches 250Mv/V indicating fine-grained sulphides are present. The anomaly is nicely shaped indicating a causative source.

Recommendation: Prospect and sample the anomaly.

IP-2 (94+50E – 95+00E)

IP-2 is a weak IP anomaly associated with a weak resistivity low. The source should be real.

Recommendation: Prospect and sample the anomaly.

IP-3 (92+50E – 93+00E)

IP-3 is a weak IP anomaly associated with a resistivity high. The MIP/TAU indicates a sulphide source.

Recommendation: Line should be extended to the south and the anomaly prospected and sampled.

The IP data indicate that the overburden between 98+00N and 100+50E may be maski9ng the chargeability response. If the magnetic survey locates targets in this area some gradient IP may be necessary to penetrate the overburden.

Line 98N (Surveyed from 93E to 100+50E)

The IP anomalies are very weak and are associated with moderate resistivities. Two weak IP anomalies are located on the line.

IP-1 (95+75E – 96+00E)

IP-1 is a weak broad chargeability response associated with a weak narrow resistivity high. The zero time chargeability only approaches 200Mv/V indicating an undefined source

Recommendation: Prospect and sample the anomaly. The narrow resistivity anomaly may be important.

IP-3 (93+50E – 93+75E)

IP-3 is a weak deep IP anomaly associated with a weak resistivity high.. The source appears to be undefined.

Recommendation: Prospect and sample the anomaly.

Overburden masking may be occurring between 97+50E and 99+50E .

Conclusions: Even though the IP anomalies are weak it is apparent there are sulphides present and getting more abundant as one moves north. The recently completed magnetic survey should be reviewed and any anomalies between 200 and 3000 nanoteslas should be examined for sulphide content and checked with IP surveys.

Please contact me if you have any questions on the IP survey. Please send the magnetometer [illegible] to me and I'll make a few recommendations at no charge.

Yours truly

JVX Ltd.

Blaine Webster

JVX Ltd.
60 West Wilmot Street, Unit 22
Richmond Hill, Ontario, Canada L4B 1M6
Tel: (905) 731-0972
Fax: (905) 731-9312
e-mail: jvx@tor.axxent.ca

FAX COVER SH

TO	Name Bill	Fax
	Dept./Firm	
FROM	Name Blaine Webb	Date Nov
	Dept./Firm	

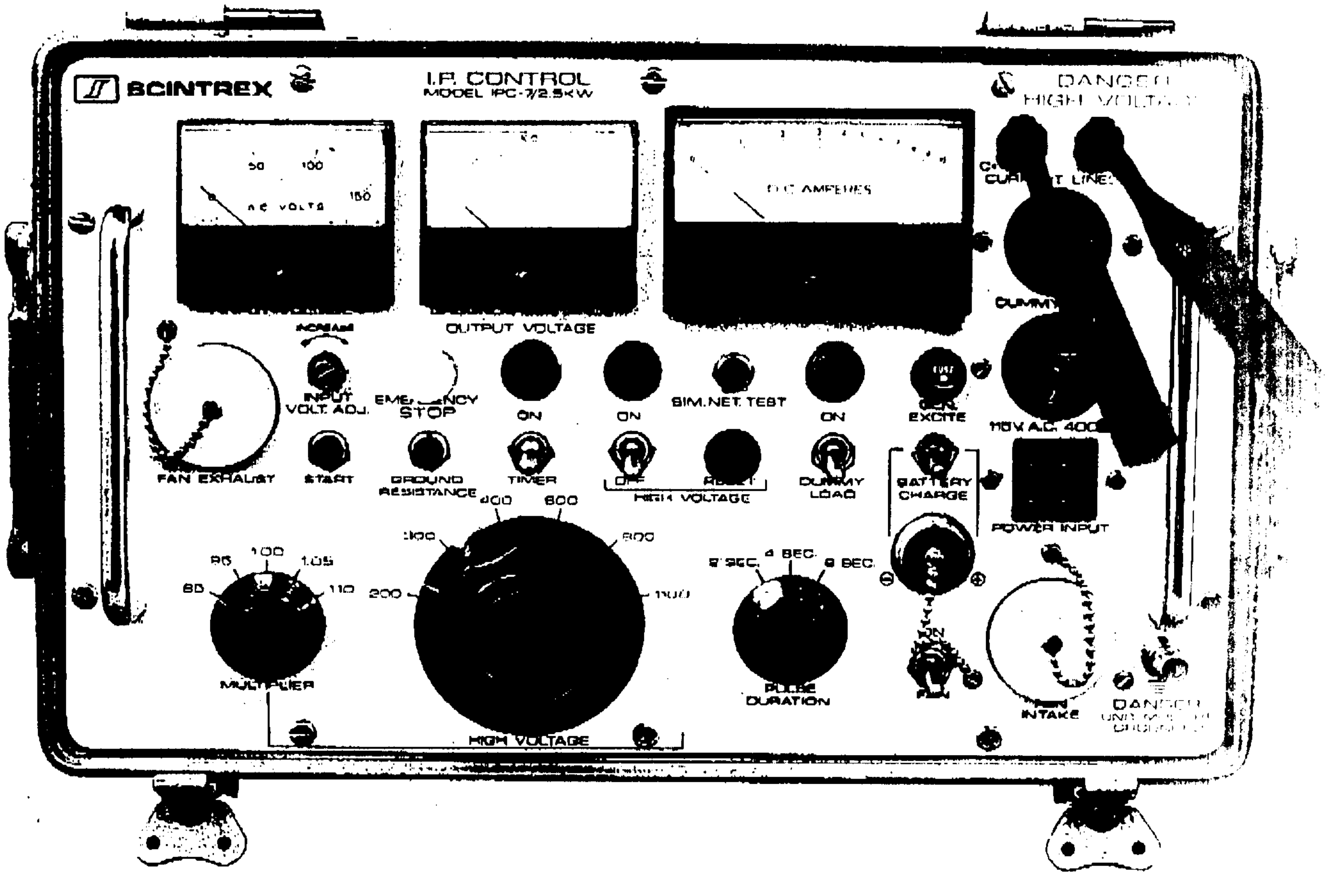
Total number of pages ________ (including this cover letter)
If you do not receive all the pages please call (905) 731-0972

Message:

Jvx Combo-Pole Dipole array

Array: $n=1,2,3$ $a=25$ m
$n=4,5,6$ $a=50$ m

SCINTREX IPC-7/2.5kW Induced Polarization and Commutated DC Resistivity Transmitter System



Function

The IPC-7/2.5 kW is a medium power transmitter system designed for time domain induced polarization or commutated DC resistivity work. It is the standard power transmitting system used on most surveys under a wide variety of geophysical, topographical and climatic conditions.

The system consists of three modules; A Transmitter Console containing a transformer and electronics, a Motor Generator and a Dummy Load mounted in the Transmitter Console cover. The purpose of the Dummy Load is to accept the Motor Generator output during those parts of the cycle when current is not transmitted into the ground, in order to improve power output and prolong engine life.

The favourable power-weight ratio and compact design of this system make it portable and highly versatile for use with a wide variety of electrode arrays.

Features

Maximum motor generator output, 2.5 kW; maximum power output, 1.85 kW; maximum current output, 10 amperes; maximum voltage output, 1210 volts DC.

Removable circuit boards for ease in servicing.

Automatic on-off and polarity cycling with selectable cycling rates so that the optimum pulse time (frequency) can be selected for each survey.

The overload protection circuit protects the instrument from damage in case of an overload or short in the current dipole circuit.

The open loop circuit protects workers by automatically cutting off the high voltage in case of a break in the current dipole circuit.

Both the primary and secondary [illegible] transformer are switch selectable for [illegible] matching to the ground load. This [illegible] maximum power efficiency

The built-in ohmmeter is used [illegible] the external circuit resistance [illegible] that the current dipole circuit [illegible] properly before the high voltage [illegible] on. This is a safety feature and [illegible] the operator to select the proper [illegible] voltage required to give an adequate [illegible] for a proper signal at the receiver

The programmer is crystal controlled [illegible] very high stability required for broadband (spectral) induced polarization measurements using the Scintrex [illegible] Broadband Time Domain Receiver

SCINTREX

IPR-12 Time Domain Induced Polarization/Resistivity Rece

Specifications

Inputs
1 to 8 dipoles are measured simultaneously.

Input Impedance
16 Megohms

SP Bucking
±10 volt range. Automatic linear correction operating on a cycle by cycle basis.

Input Voltage (Vp) Range
50 μvolt to 14 volt

Chargeability (M) Range
0 to 300millivolt

Tau Range
1 millisecond to 1000 seconds

Reading Resolution of Vp, SP and M
Vp, 10 microvolt; SP, 1 millivolt; M, 0.01 millivolt/volt

Absolute Accuracy of Vp, SP and M
Better than 1%

Common Mode Rejection
At input more than 100db

Vp Integration Time
10% to 80% of the current on time.

IP Transient Program
Total measuring time keyboard selectable at 1, 2, 4, 8, 16 or 32 seconds. Normally 14 windows except that the first four are not measured on the 1 second timing, the first three are not measured on the 2 second timing and the first is not measured on the 4 second timing. (See diagram on page 2.) An additional transient slice of minimum 10 ms width, and 10ms steps, with delay of at least 40 ms is keyboard selectable.

Transmitter Timing
Equal on and off times with polarity change each half cycle. On/off times of 1, 2, 4, 8, 16 or 32 seconds. Timing accuracy of ±100 ppm or better is required.

External Circuit Test
All dipoles are measured individually in sequence, using a 10 Hz square wave. The range is 0 to 2 Mohm with 0.1kohm resolution. Circuit resistances are displayed and recorded.

Synchronization
Self synchronization on the signal received at a keyboard selectable dipole. Limited to avoid mistriggering.

Filtering
RF filter, 10 Hz 6 pole low pass filter, statistical noise spike removal.

Internal Test Generator
1200 mV of SP; 807 mV of Vp and 30.28 mV/V of M.

Analog Meter
For monitoring input signals; switchable to any dipole via keyboard.

Keyboard
17 key keypad with direct one key access to the most frequently used functions.

Display
16 lines by 42 characters, 128 x 256 dots, Backlit Liquid Crystal Display. Displays instrument status and data during and after reading. Alphanumeric and graphic displays.

Display Heater
Available for below -15°C operation.

Memory Capacity
Stores approximately 400 dipoles of information when 8 dipoles are measured simultaneously.

Real Time Clock
Data is recorded with year, month, day, hour, minute and second.

Digital Data Output
Formatted serial data output for printer and PC etc. Data output in 7 or 8 bit ASCII, one start, one stop bit, no parity format. Baud rate is keyboard selectable for standard rates between 300 baud and 51.6 kBaud. Selectable carriage return delay to accommodate slow peripherals. Handshaking is done by X-on/X-off.

Standard Rechargeable Batteries
Eight rechargeable Ni-Cad D cells. Supplied with a charger, suitable for 110/230V, 50 to 60 Hz, 10W. More than 20 hours service at +25°C, more than 8 hours at -30°C.

Ancillary Rechargeable [illegible]
An additional eight recharge[illegible] cells may be installed in the [illegible] with the Standard Recharge[illegible] Used to power the Display [illegible] back up power. Supplied with [illegible] charger. More than 6 hours [illegible] -30°C.

Use of Non-Rechargeable [illegible]
Can be powered by D size [illegible] ies, but rechargeable batt[illegible] mended for longer life and [illegible] time.

Operating Temperature Ran
-30°C to +50°C

Storage Temperature Range
-30°C to +50°C

Dimensions
Console: 355 x 270 x 165 mm
Charger: 120 x 95 x 55mm

Weights
Console: 5.8 kg
Standard or Ancillary Rech[illegible]
Batteries: 1.3 kg
Charger: 1.1 kg

Transmitters available

IPC-9	200 W
TSQ-2E	750 W
TSQ-3	3 kW
TSQ-4	10 kW

SCINTR

In Canada

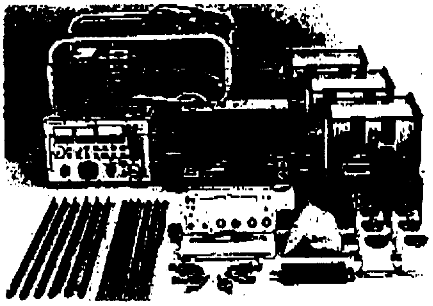
222 Snidercroft Rd.
Concord, Ontario
Canada, L4K 1B5
Tel.: [illegible]
Fax: [illegible]
Telex: [illegible]

In the U.S.A.

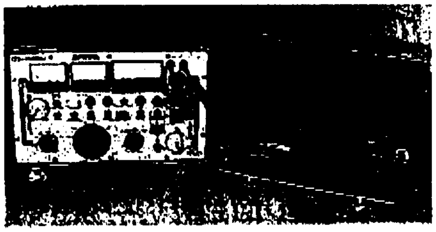
85 River Rock Drive
Unit # 202
Buffalo, N.Y.
U.S.A. 14207
Tel.: [illegible]
Fax: [illegible]

IPR-12/94

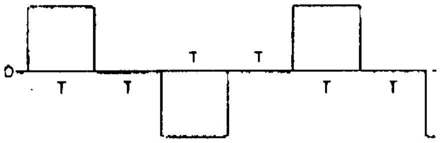
Technical Description of IPC-7/2.5 kW Transmitter System



Complete 2.5kW induced polarization system including motor-generator, reels with wire, tool kit, porous pots, simulator circuit, copper sulphate, IPR-8 receiver, dummy load, transmitter, electrodes and clips.



IPC-7 / 2.5kW transmitter console with lid and dummy load.



Time Domain Waveform

Transmitter Console	
Maximum Output Power	1.85 kW maximum, defined as [illegible] rent is on, into a resistive load
Output Current	10 amperes maximum
Output Voltage	Switch selectable up to 1210 [illegible]
Automatic Cycle Timing	T:T:T:T: on:off:on:off
Automatic Polarity Change	Each 2T
Pulse Durations	Standard: T = 2,4 or 8 seconds, [illegible] selectable Optional: T = 1,2,4 or 8 seconds [illegible] selectable Optional: T = 8,16,32 or 64 seconds [illegible] selectable
Voltage Meter	1500 volts full scale logarithmic
Current Meter	Standard: 10.0 A full scale logarithmic Optional: 0.3, 1.0, 3.0 or 10.0 A full scale linear, switch selectable
Period Time Stability	Crystal controlled to better than [illegible]
Operating Temperature Range	-30°C to +55°C
Overload Protection	Automatic shut-off at output current [illegible] 10.0 A
Open Loop Protection	Automatic shut-off at current [illegible]
Undervoltage Protection	Automatic shut-off at output [illegible] than 95 V
Dimensions	280 mm x 460 mm x 310 mm
Weight	30 kg
Shipping Weight	41 kg includes reusable wooden [illegible]
Motor Generator	
Maximum Output Power	2.5 kVA, single phase
Output Voltage	110 V AC
Output Frequency	400 Hz
Motor	4 stroke, 8 HP Briggs & Stratton
Weight	59 kg
Shipping Weight	90 kg includes reusable wooden [illegible]

SCINTREX

222 Snidercroft Road
Concord Ontario Canada
L4K 1B5

Telephone: (416) 669-2280
Cable: Geoscint Toronto
Telex: 06-964570

Geophysical and Geochemical
Instrumentation and Services

APPENDIX B

JVX logistics and interpretative report

Work Report Summary

Transaction No: W0240.00259 **Status:** APPROVED
Recording Date: 2002-FEB-11 **Work Done from:** 2001-MAY-01
Approval Date: 2002-FEB-21 **to:** 2001-AUG-30

Client(s):

303548 BERLAND RESOURCES LTD.

Survey Type(s):

EM IP LC MAG

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
TB 1240556	$844	$844	$0	$0	$0	0	$844	$844	2002-MAR-24
TB 1240557	$3,797	$3,797	$0	$0	$0	0	$3,797	$3,797	2003-MAR-24
TB 1240558	$904	$904	$0	$0	$0	0	$904	$904	2002-MAR-24
TB 1240559	$6,509	$6,509	$0	$0	$0	0	$6,509	$6,509	2003-MAR-24
TB 1240561	$663	$663	$0	$0	$0	0	$663	$663	2002-MAR-24
TB 1241522	$6,690	$6,690	$0	$0	$0	0	$6,690	$6,690	2002-DEC-05
TB 1241524	$7,775	$7,775	$0	$0	$0	0	$7,775	$7,775	2002-DEC-05
	$27,182	$27,182	$0	$0	$0	$0	$27,182	$27,182	

External Credits: $0

Reserve:

$27,182 Reserve of Work Report#: W0240.00259

$27,182 Total Remaining

Status of claim is based on information currently on record.

52H12NW2002 2.22964 GILLARD LAKE

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

Tel: (888) 415-9845
Fax:(877) 670-1555

Date: 2002-MAR-01

BERLAND RESOURCES LTD.
SUITE 906, 595 HOWE ST.
VANCOUVER, BRITISH COLUMBIA
V6C 2T5 CANADA

Submission Number: 2.22964
Transaction Number(s): W0240.00259

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Ron Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist

William Edward Mccrindle
(Agent)

Berland Resources Ltd.
(Assessment Office)

Assessment File Library

Berland Resources Ltd.
(Claim Holder)

52H12NW2002 2.22964 GILLARD LAKE 200

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
PROVINCIAL MINING RECORDER'S OFFICE

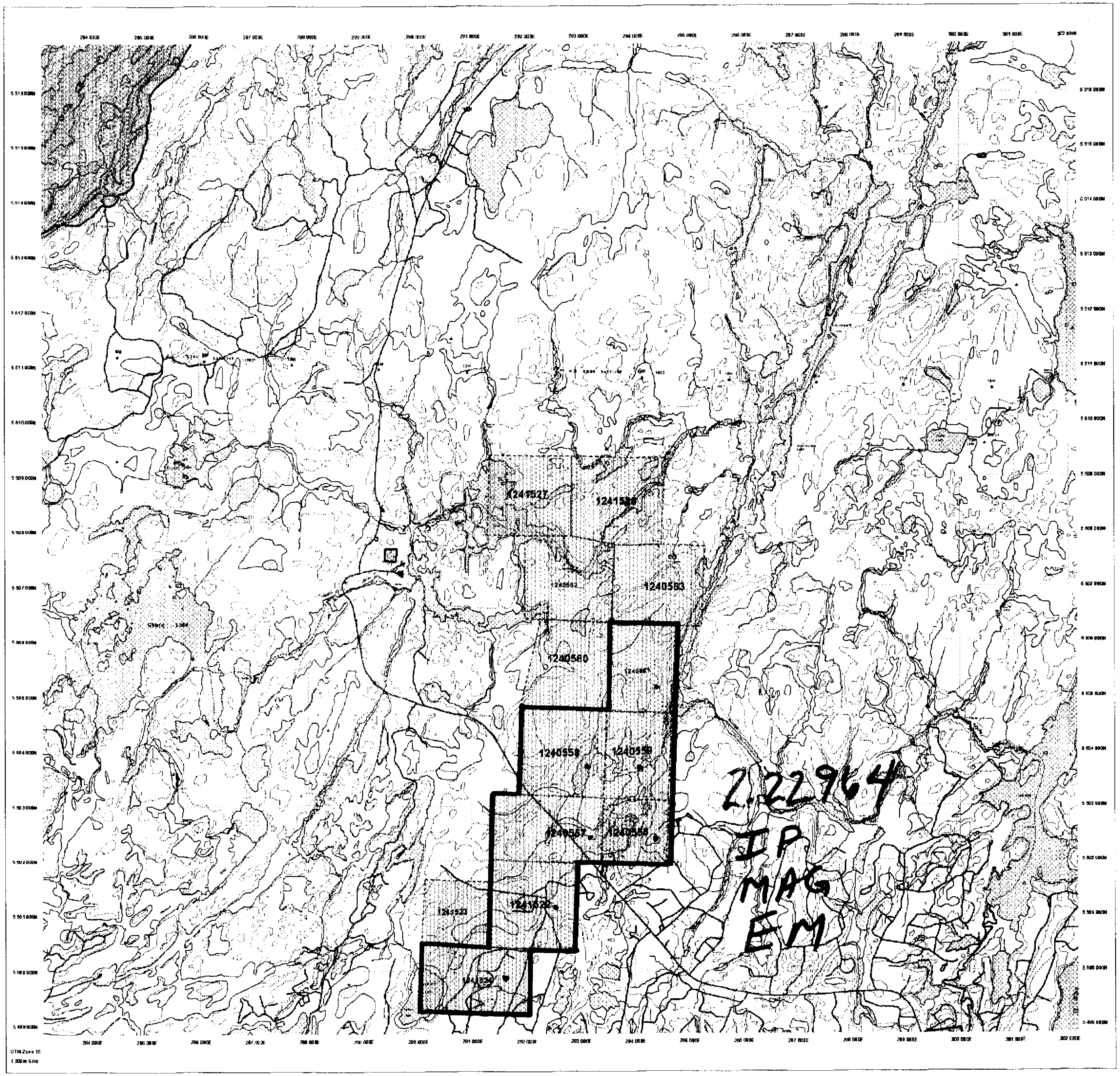
MINING LAND TENURE MAP

Date / Time of Issue Apr 27 2001 09:09h Eastern

TOWNSHIP / AREA PLAN
GILLARD LAKE AREA G-0722

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division	Thunder Bay
Land Titles/Registry Division	THUNDER BAY
Ministry of Natural Resources District	THUNDER BAY



TOPOGRAPHIC

- Administrative Boundaries
- Township
- Concession, Lot
- Provincial Park
- Indian Reserve
- Cliff, Pit & Pile
- Contour
- Contour - Approx., Auxiliary, Depression
- Shaft
- Mine Headframe
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Hydro Line
- Communication Line
- Wooded Area
- Monument - Cadastral, Historical, Horiz. Control

LAND TENURE

Freehold Patent
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Leasehold Patent
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Licence of Occupation
- Uses not Specified
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

- Land Use Permit
- Order In Council
- Water Power Lease Agreement
- Mining Claim

LAND TENURE WITHDRAWALS

Areas Withdrawn from Disposition
Mining Act Withdrawal Types
Wsm Surface and Mining Rights Withdrawn
Ws Surface Rights Only Withdrawn
Wm Mining Rights Only Withdrawn
Order In Council Withdrawal Types
W*sm Surface and Mining Rights Withdrawn
W*s Surface Rights Only Withdrawn
W*m Mining Rights Only Withdrawn

IMPORTANT NOTICES

0 Km 30 Km

LAND TENURE WITHDRAWAL DESCRIPTIONS

Identifier	Type	Date	Description
1548	Wsm	Jan 1 2001	S.R.O. WITHDRAWN ORDER W31/90 NCR
1862	Wsm	Jan 1 2001	SURFACE RIGHTS ONLY WITHDRAWN FROM STAKING ORDER WNCR-28/90 WASTE DISPOSAL SITE DATED DEC 17/90
8848	Wsm	Jan 1 2001	SURFACE AND MINING RIGHTS WITHDRAWN W-52/93 FILE 188542
W-LL-P2283	Wsm	May 17 1999	SEC.35 W-LL-P2283/99 ONT MAY 17/99 M+S (200 METRES FROM WATER'S EDGE IN DESIGNATED AREAS)

IMPORTANT NOTICES

Areas under which special regulations, limitations or conditions exist that affect normal prospecting, staking and mineral development activities.

Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Lands Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.

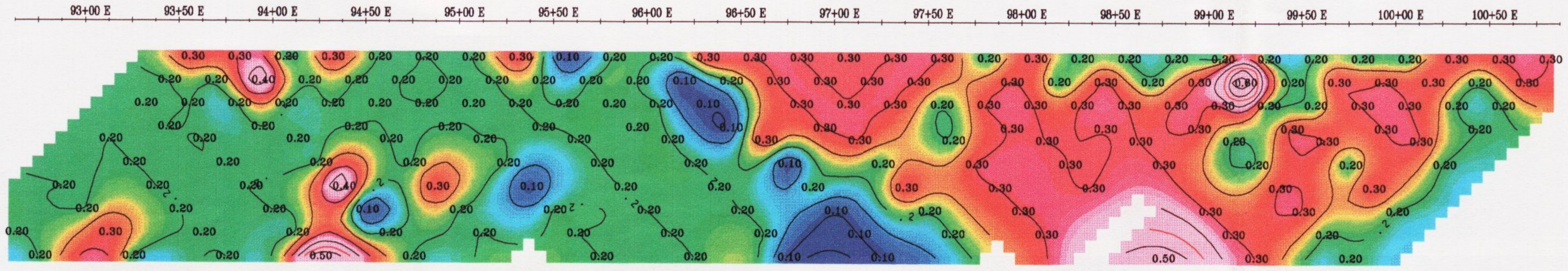
General Information and Limitations

Contact Information:
Provincial Mining Recorders' Office Toll Free
Willet Green Miller Centre Tel: 1 (888) 415-9845
933 Ramsey Lake Road Fax: 1 (877) 670-1444
Sudbury, ON P3E 6B5
Home Page: www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Map Datum: NAD 83
Projection: UTM (6 degree)
Topographic Data Source: Land Information Ontario
Mining Land Tenure Source: Provincial Mining Recorders' Office

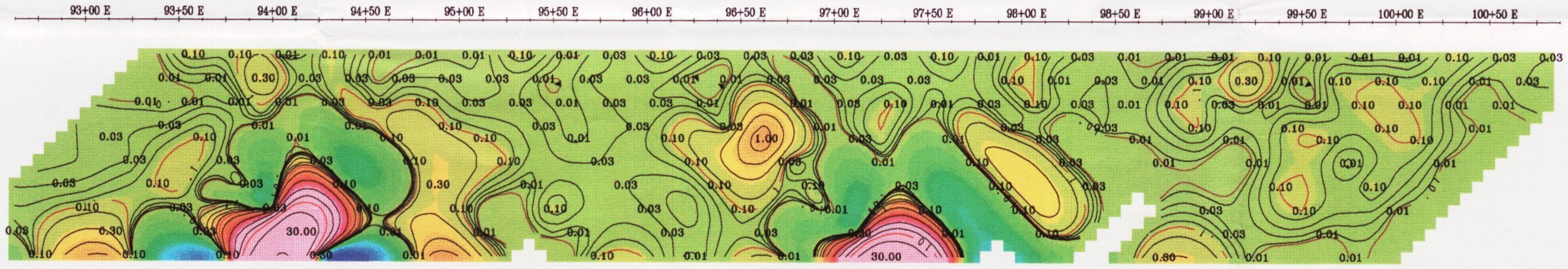
This map may not show unregistered land tenure and interests in land including certain patents, leases, easements, right of ways, flooding rights, licences, or other forms of disposition of rights and interest from the Crown. Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be illustrated.

JVX Spectral 'c'
(dimensionless)



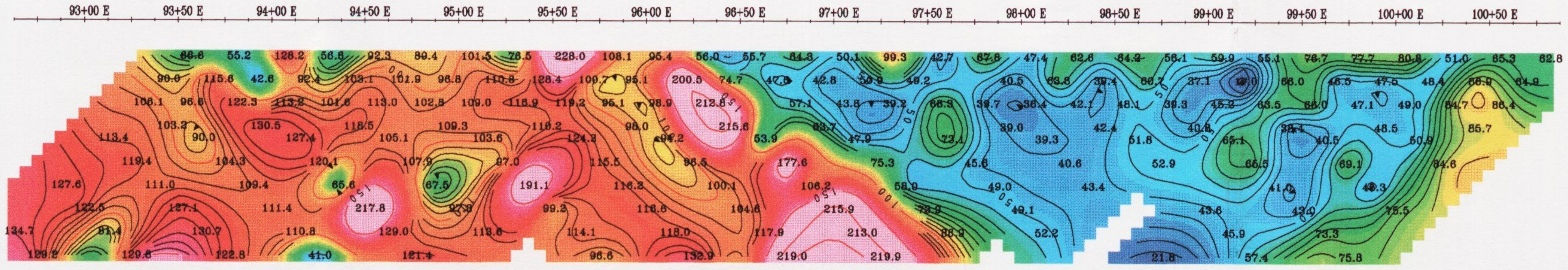
JVX Spectral 'c'
(dimensionless)

JVX Spectral Tau
(s)



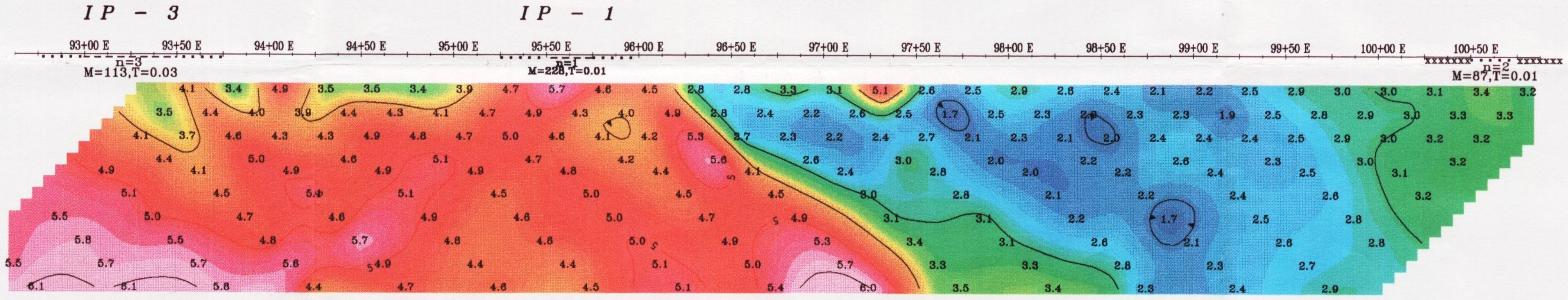
JVX Spectral Tau
(s)

JVX Spectral MIP
(mV/V)



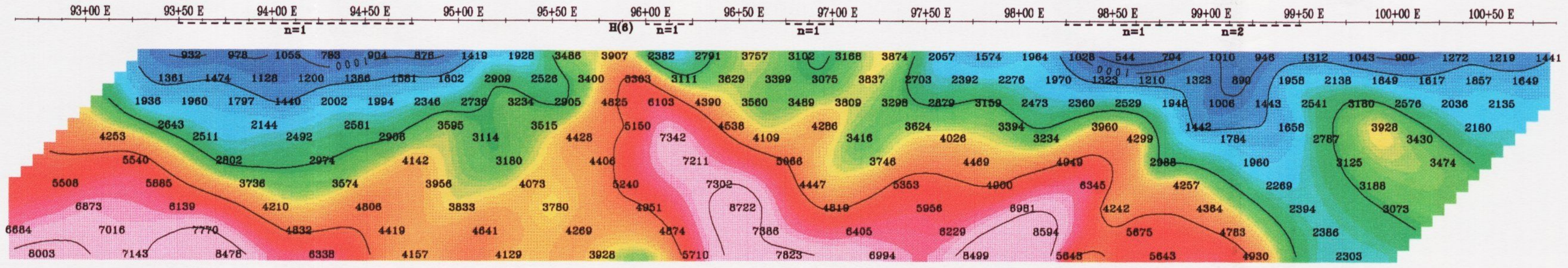
JVX Spectral MIP
(mV/V)

Mx Chargeability
(mV/V, 690ms-1050ms)



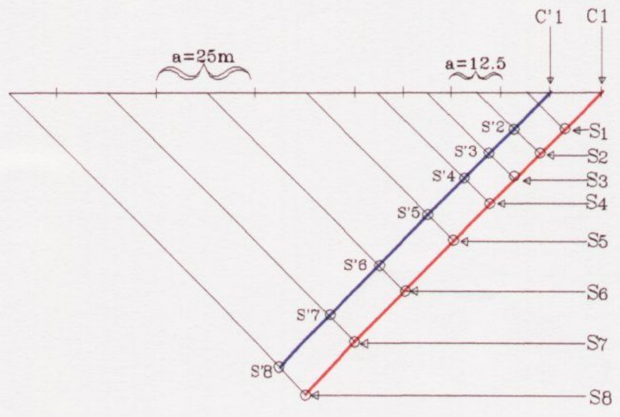
Mx Chargeability
(mV/V, 690ms-1050ms)

Apparent Resistivity
(ohm-m)



Apparent Resistivity
(ohm-m)

Line 98 N



Special Penetrating Array

Resistivity and Chargeability Anomalies

- ▬▬ Very strong
- —— Strong
- — — Medium
- - - - Weak
- ······· Very weak
- xxxx xxxx Extremely weak

Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

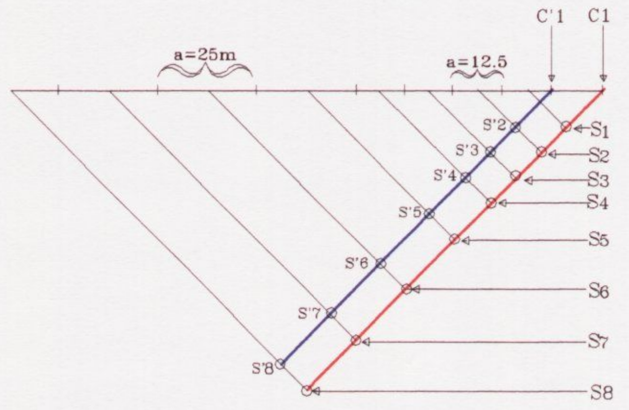
BERLAND RESOURCES LTD.

JVX SPECTRAL IP/RES SURVEY
ROARING RIVER PROPERTY
THUNDER BAY AREA; NTS 52 H/12

Line 98 N
01/08/01
Rx (2 sec): Scintrex IPR12, Tx (2 sec): Huntec M-4

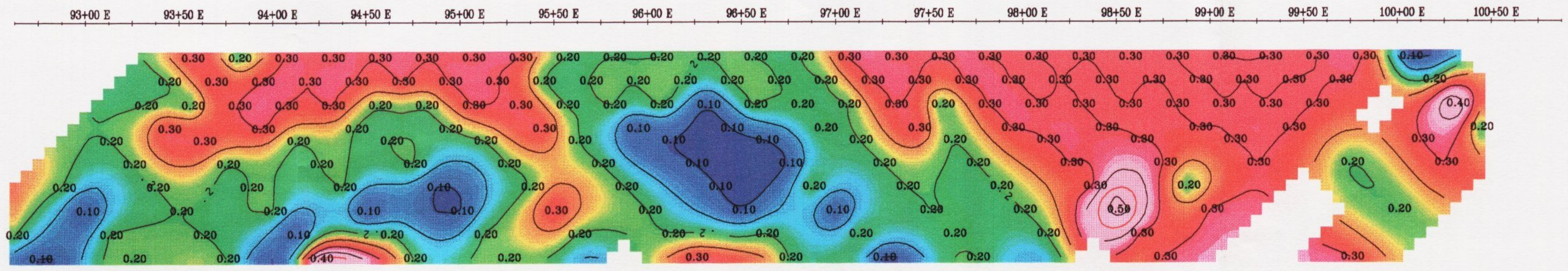
JVX Ltd. ref. no. 1-27

Line 100 N



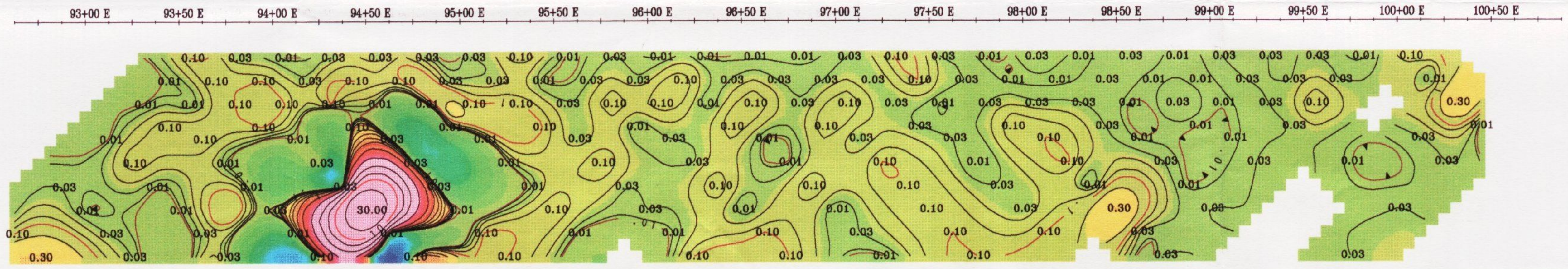
Special Penetrating Array

JVX Spectral 'c'
(dimensionless)



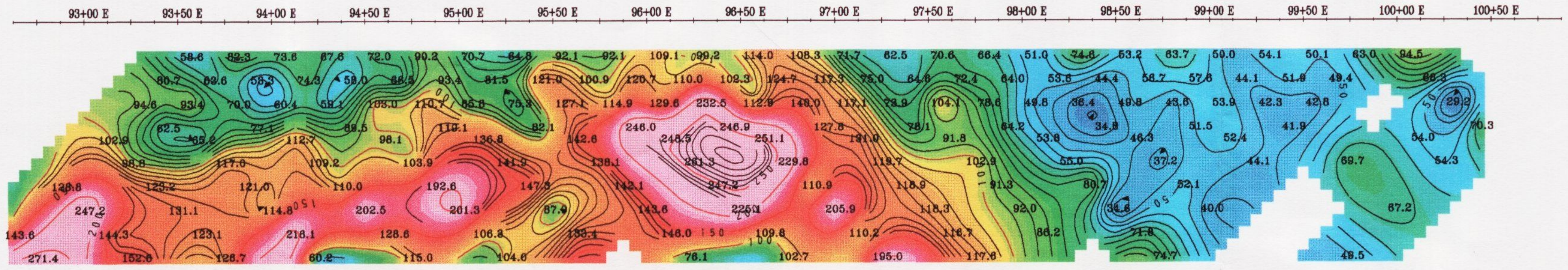
JVX Spectral 'c'
(dimensionless)

JVX Spectral Tau
(s)



JVX Spectral Tau
(s)

JVX Spectral MIP
(mV/V)



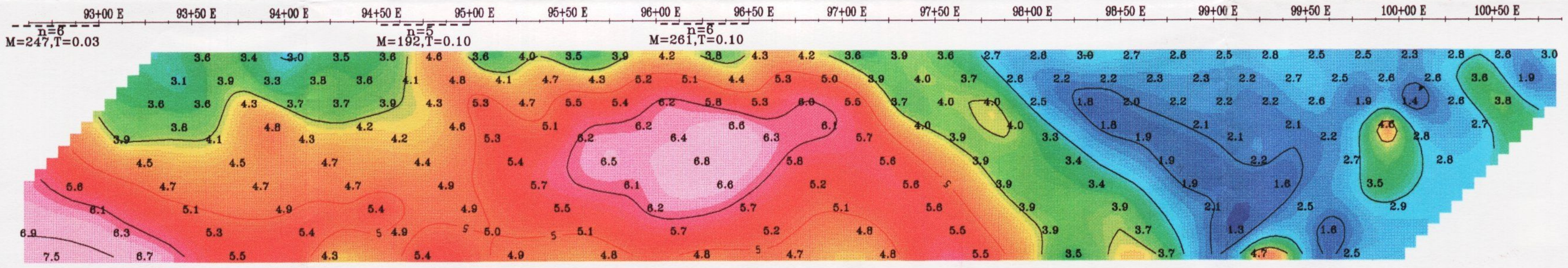
JVX Spectral MIP
(mV/V)

(Better shaped anomaly)
Anomaly would be 10mV/V if only
used 25m. dipoles n=1,8
Praobable fine grained sulphides

Possible Masking

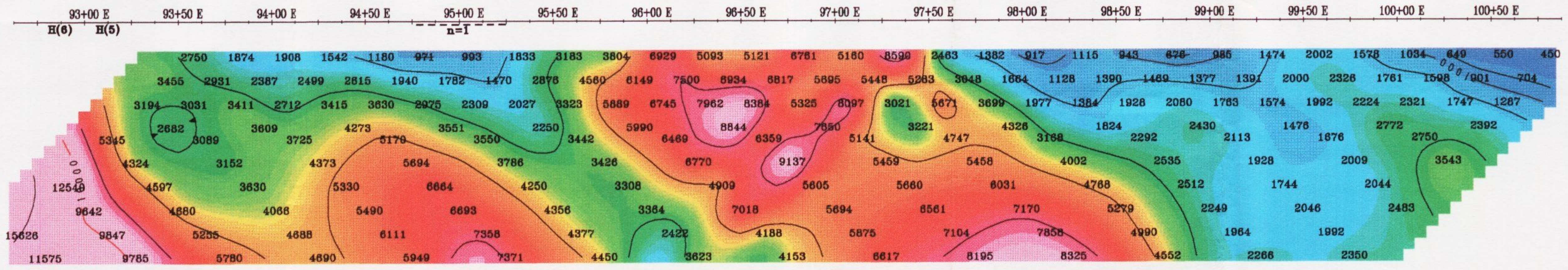
IP – 3 *IP – 2* *IP – 1*

Mx Chargeability
(mV/V, 690ms–1050ms)



Mx Chargeability
(mV/V, 690ms–1050ms)

Apparent Resistivity
(ohm–m)



Apparent Resistivity
(ohm–m)

Resistivity and Chargeability Anomalies

━━━	Very strong
───	Strong
— — —	Medium
- - - -	Weak
•••••	Very weak
xxxx xxxx	Extremely weak

Scale 1:2500
25 0 25 50 75 100 125 150
(meters)

BERLAND RESOURCES LTD.

JVX SPECTRAL IP/RES SURVEY
ROARING RIVER PROPERTY
THUNDER BAY AREA; NTS 52 H/12

Line 100 N
01/08/01
Rx (2 sec): Scintrex IPR12, Tx (2 sec): Huntec M–4

JVX Ltd. ref. no. 1–27

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BERLAND RESOURCES LTD.

HLEM Survey
Roaring River Project
Posted and Profiled Data
Profile Scale: 1 cm = 5%
Frequency: 880 Hz.

Date:18/09/2001
Author: P.N.
Instrument: Max-Min I
Survey by: Mlec Geophysics Inc.
Scale: 1:5000
Projection: Local Grid (meters)

52H12NW2002 2.22964 GILLARD LAKE 230

2.22964

BERLAND RESOURCES LTD.

HLEM Survey
Roaring River Project
Posted and Profiled Data
Profile Scale: 1 cm = 5%
Frequency: 14000 Hz.

Date:18/09/2001
Author: P.N.
Instrument: Max-Min I
Survey by: Mtec Geophysics Inc.
Scale: 1:5000
Projection: Local Grid (meters)

0 100 200 400
metres

BERLAND RESOURCES LTD.

Total Field Magnetometer Survey
Roaring River Project
Contour Intervals:
200, 1000, 5000 nT

Date:18/09/2001
Datum: 58000 nT
Instrument:GEM Systems GSM-19
Survey by: Mtec Geophysics Inc.
Scale: 1:5000
Projection: Local Grid (meters)

0 100 200 400
metres

2.22964

BERLAND RESOURCES LTD.

Total Field
Magnetometer Survey
Roaring River Project
Posted and Profiled Data

Profile Scale 1 cm = 1000 nT
Profile Base: 1000 nT

Date:16/8/2001
Datum: 58000 nT
Instrument: GEM Systems GSM-19
Survey by: Mtec Geophysics Inc.
Scale: 1:5000
Projection: Local Grid (meters)