ASSESSMENT REPORT

ON THE

1995 GRADIENT INDUCED POLARIZATION SURVEY

ON THE M-1 GRID

MISHI LAKE JOINT VENTURE PROJECT

Situated in The Mishibishu Lake Area,
District of Sault Ste. Marie, Ontario

42C/3

Under Option To:

Granges Inc.
2230-885 West Georgia Street
Vancouver, British Columbia
V6C 3E8

September 8, 1995

T. Keast

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ABSTRACT

Between the period of March and April, 1995 a gradient array induced polarization survey was carried out by MPH Consulting Ltd. on the central and west portions of the M-1 Grid. A total of 43.23 kilometers of grid were covered by the survey. The purpose of the program was to help identify and evaluate areas with potential for hosting economic gold mineralization.

A number of anomalous areas of chargeability highs and resistivity highs were identified by the survey. Futher evaluation of these areas would involve mapping and prospecting and diamond drilling.

INTRODUCTION

The Mishi J.V. Project is situated in the Mishibishu Greenstone Belt approximately 100 km west of Wawa Ontario. The property consists of 494 mining claims and 3 leased claims. The claims are held by MacMillan Gold Corp. of 111 Richmond Street West, Ste. 1210 Toronto, Ontario and are under option to Granges Inc., 2230-885 West Georgia St., Vancouver, British Columbia. Granges Inc. is the operator of the project.

The Mishi Project has been the focus of numerous exploration programs by both MacMillan and Granges between the period of 1986 to 1990. During this period, a number of gold showings were identified through mapping and prospecting surveys, soil surveys geophysical surveys and diamond drilling programs. A number of these showings were drill tested in detail with the most significant result being the definition of the Mishi Main Zone mineral inventory.

The gold mineralization at the Mishi Main Zone is associated with the Mishibishu Deformation Zone (MDZ). This structure is known to extend in excess of 20 km in length. Due to the success associated with the discovery of the Main Zone, much of the exploration work focussed on the immediate area around the Main Zone. Much of the deformation zone situated on the Mishi property had not been fully evaluated.

Geophysical surveys, particularly magnetometer and induced polarization (I.P.) surveys have proven to be a cost effective method for evaluating the potential of the deformation zone. Between the period of March and April, 1995 a gradient array induced polarization survey was carried out by MPH Consulting Ltd. on the central and west portions of the M-1 Grid. A total of 43.23 kilometers of grid were covered by the survey. The purpose of the program was to help identify and evaluate areas with potential for hosting economic gold mineralization.

A number of anomalous areas of chargeability highs and resistivity highs were identified by the survey. Futher evaluation of these areas would involve mapping and prospecting and diamond drilling.

LOCATION AND ACCESS

The Mishi Lake Joint Venture property is located 100 km west of Wawa, Ontario (Figure 1). The property as a whole is encompassed by 85°30', 48°07'45" in the northwest corner, and 85°12', 48°01'15" in the southeast corner. The property encompasses 9056 hectares in total. From Wawa, the property can be reached by 50 km of paved highway (Hwy 17), followed by 50 km of gravel road which leads to the western portion of the property. The central and eastern portion of the property is accessed solely by helicopter due to the rugged topography and lack of trails.

CLAIM DATA

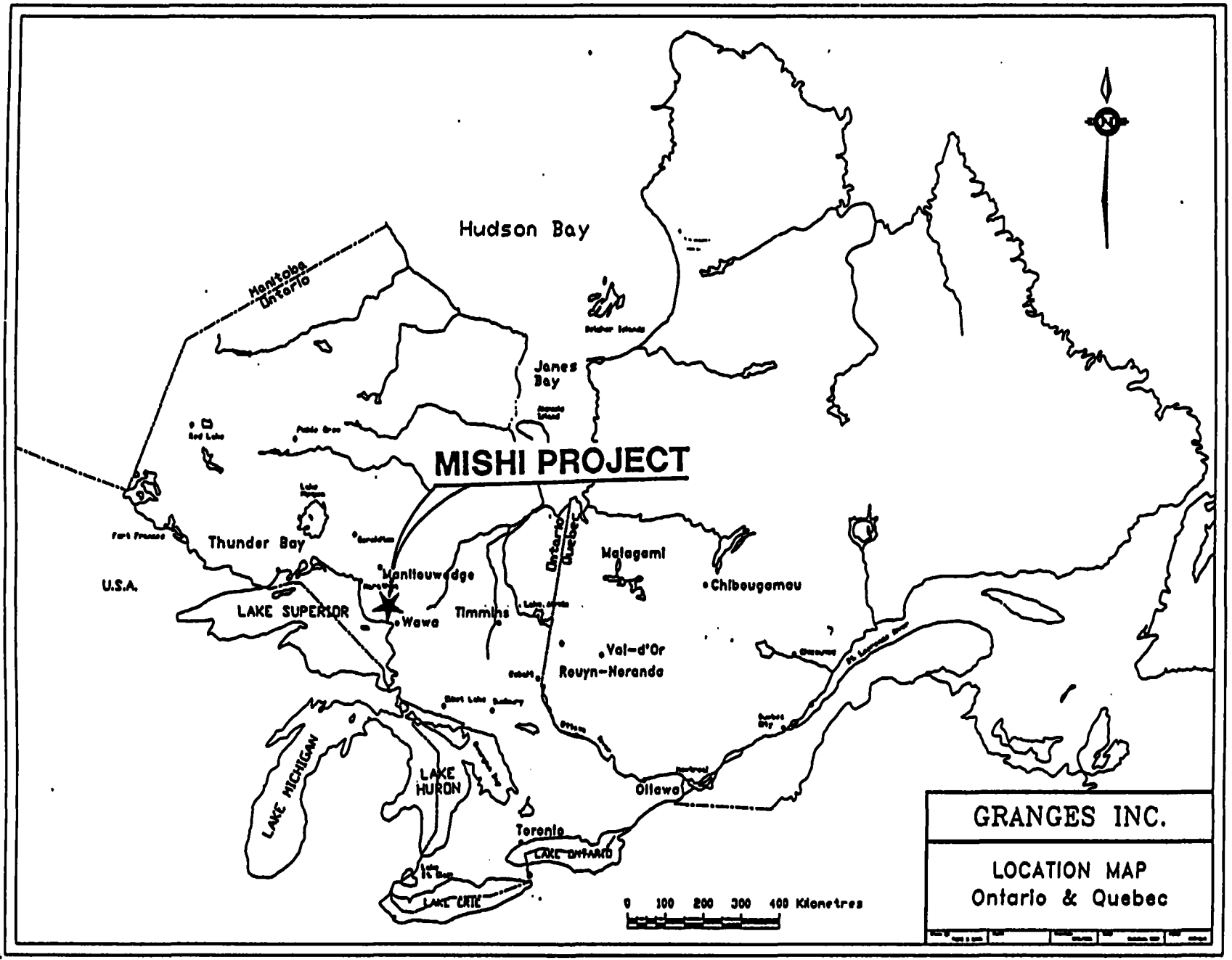
This report describes work performed on claims held by MacMillan Gold Corp. under option to Granges Inc., the operator of the project. The joint venture property consists of 494 contiguous mining claims and 3 leased claims located in the Sault Ste. Marie Mining Division. The claims are held by MacMillan Gold Corp, and are part of a joint venture with Granges Inc. All claims are in good standing. Claims on which work was performed as described in this report, lie within the Mishibishu Lake Area G-3772 (Figure 2).

GEOLOGY OF THE MISHIBISHU GREENSTONE BELT

The Mishi Lake Project is located in the northern portion of the Mishibishu Lake Greenstone Belt in northeastern Ontario. This belt is located in the Wawa Subprovince of the Superior Province of the Canadian Shield and is Archean in age. Detailed descriptions of the regional geology can be referenced in Bowen et al, 1985, Heather, 1985, 1986, and Williams et al, 1992.

GEOLOGY OF THE MISHI LAKE JOINT VENTURE PROJECT

The project area is situated in the northern portion of the Mishibishu Greenstone Belt along the east-west trending Mishibishu Deformation Zone (MDZ), a major gold-associated structure in the region. The deformation zone is characterized by the development of schists, hydrothermal alteration, the emplacement of quartz veins, and the introduction of gold in the last phase of alteration and quartz vein emplacement. Gold is distributed as free gold in quartz or intimately associated with sulphides, specifically pyrite or arsenopyrite. Pervasive alteration includes carbonatization silicification, sulphidization, and the development of micas.



GRANGES INC.

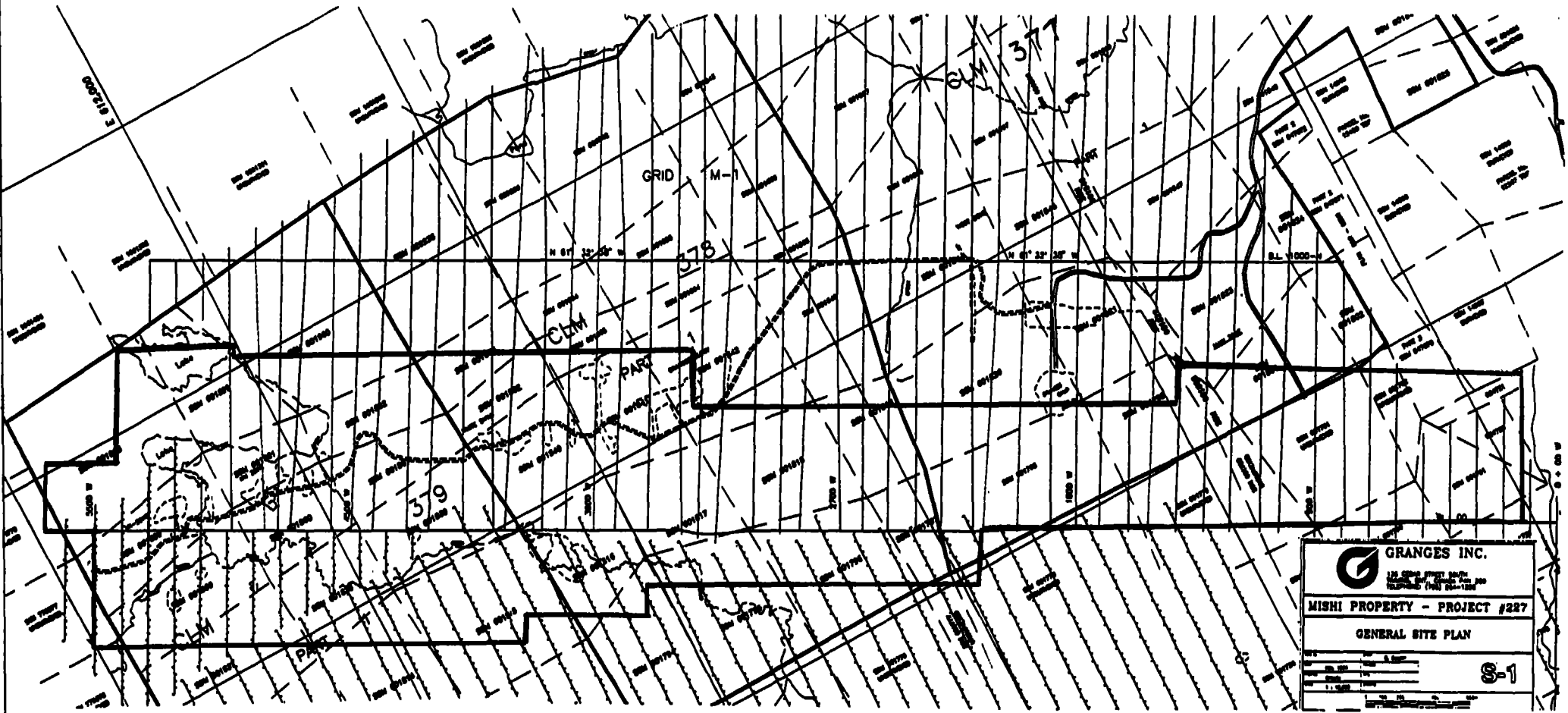
LOCATION MAP

MISHI PROJECT

MISHIBISHU LAKE AREA, ONTARIO
N.T.S.: 42C/3

SCALE: as shown
DATE: AUG. 1990

FIGURE: 1



—— Survey Outline

FIGURE 2

The volcanic and sedimentary rock succession in the belt strikes 90 to 120^0 and dips 40 to 70^0 north. The area of Mishi and Katzenbach Lakes, in the mid-portion of the property, are underlain by the Mishibishu Lake Monzonite, a major post-tectonic stock. Units are cut by north-south and northwest-southeast trending Keewanawan aged diabase dikes.

PREVIOUS WORK

Previous work in the area consists primarily of reconnaissance geological mapping performed by the Ontario Geological Survey, and exploration programs by MacMillan and Granges. Results from the O.G.S. programs are published in Bowen et al (1985; 1986a-e). MacMillan and Granges have performed linecutting, VLF surveys, prospecting, mapping, and diamond drilling, magnetometer and I.P. surveys between the period of 1984 to 1990. The majority of work, particularly diamond drilling was completed on the Main Zone and have been previously submitted for assessment credit (Zbitnoff, 1987, 1988a-c, O'Donnell, 1989, and Miree, 1991a-b).

THE 1995 GRADIENT IP SURVEY

A description of the survey is enclosed in Appendix A.

RESULTS AND RECOMENDATIONS

A number of anomalous areas of chargeability highs and resistivity highs were identified by the survey. Futher evaluation of these areas would involve mapping and prospecting and diamond drilling.

REFERENCES

Bowen, R.P. and Logothetis, J.
1985: Mishibishu Lake Area, Districts of Algoma and Thunder Bay; p.78-82 in Summary of Field Work 1985, Ontario Geological Survey, edited by John Wood, Owen L. White, R.B. Barlow, A.C. Colvine, Ontario Geological Survey, Miscellaneous Paper 126, 351p.

Bowen, R.P., Logothetis, J. and Heather, K.B.
1986a: Precambrian Geology of the Mishibishu Lake Area. Northwestern Section, Districts of Thunder Bay and Algoma; Ontario Geological Survey, Map P.2968, Geological Series-Preliminary Map, scale 1:15 840 or 1 inch to 1/4 mile.

1986b: Precambrian Geology of the Mishibishu Lake Area, North-Central Section, Districts of Thunder Bay and Algoma; Ontario Geological Survey, Map P.2969, Geological Series-Preliminary Map, scale 1;15 840 or 1 inch to 1/4 mile.

1986c: Precambrian Geology of the Mishibishu Lake Area, Northeastern Section, Districts of Thunder Bay and Algoma; Ontario Geological Survey, Map P.2970, Geological Series-Preliminary Map, scale 1:15 840 or 1 inch to 1/4 mile.

1986d: Precambrian Geology of the Mishibishu Lake Area, South-Central Section, Districts of Thunder Bay and Algoma; Ontario Geological Survey, Map P.2971, Geological Series-Preliminary Map, scale 1:15 840 or 1 inch to 1/4 mile.

1986e: Precambrian Geology of the Mishibishu Lake Area, Southeastern Section, Districts of Thunder Bay and Algoma; Ontario Geological Survey, Map P.2972, Geological Series-Preliminary Map, scale 1:15 840 or 1 inch to 1/4 mile.

Bowen, R.P.
1986: Mishibishu Lake Area, Districts of Algoma and Thunder Bay; p.107-100 in Summary of Field Work 1986, Ontario Geological Survey, edited by P.C. Thurston, Owen L. White, R.B. Barlow, M.E. Cherry, and A.C. Colvine, Ontario Geological Survey, Miscellaneous Paper 132, 435p.

Garrett, R.G.
1991: The Management, Analysis and Display of Exploration Geochemical Data in G.S.C. Exploration Geochemistry Seminar notes, March, 1991, p. 9-1 to 9-41.

REFERENCES (continued)

Heather, K.B.
1985: Gold Showings of the Mishibishu Lake Area, Thunder Bay District; p.83-89 in Summary of Field Work 1985, Ontario Geological Survey, edited by John Wood, Owen L. White, R.B. Barlow and A.C. Colvine, Ontario Geological Survey, Miscellaneous Paper 126, 251p.

1986: Mineralization of the Mishibishu Lake Greenstone Belt; p.283-291 in Summary of Field Work 1986, Ontario Geological Survey, edited by P.C. Thurston, Owen L. White, R.B. Barlow, M.E. Cherry, and A.C. Colvine, Ontario Geological Survey, Miscellaneous Paper 132, 435p.

Miree, H.L.
1991a: Diamond Drilling Report on the Mishi Lake Joint Venture Project Situated in Mishibishu Township, S.S. Marie Mining Division, Assessment Report, Dec. 16, 1991.

1991b: Diamond Drilling Report on the Mishi Lake Joint Venture Project Situated in Mishibishu Township, S.S. Marie Mining Division, Assessment Report, Dec. 17, 1991.

O'Donnell, A.J.
1989: Diamond Drilling Report on Mishibishu Lake Claims Situated in the Mishibishu Lake Township, S.S. Marie Mining District, Assessment Report, Oct. 16, 1989.

Sage, R.P. and Heather, K.B.
1991: The Structure, Stratigraphy and Mineral Deposits of the Wawa Area, O.G.S., Field Trip A6: Guidebook, May 21-26, 1991.

Zbitnoff, G.W.
1987: Diamond Drilling Report on Mishibishu Lake Claims Situated in the St. Germain Township, S.S. Marie Mining District, Assessment Report, Oct. 1, 1987.

1988a: Diamond Drilling Report on Mishibishu Lake Claims Situated in St. Germain Township, S.S. Marie Mining District, Assessment Report, Apr. 15, 1988.

1988b: Diamond Drilling Report on Mishibishu Lake Claims Situated in St. Germain Township, S.S. Marie Mining District, Assessment Report, May 15, 1988.

1988c: Diamond Drilling Report on Mishibishu Lake Claims Situated in St. Germain Township, S.S. Marie Mining District, Assessment Report, Oct. 31, 1988.

STATEMENT OF QUALIFICATION

I, **Todd Keast**, of the city of Timmins, in the province of Ontario, do hereby certify that:

1. I am a Project Geologist employed by Granges Inc., 2230-885 West Georgia Street, Vancouver, British Columbia.

2. I am a graduate of the University of Manitoba, Winnipeg, Manitoba, having received an Honors Bachelor of Science (Geology) in 1986.

3. I have practised in the field of mineral exploration since 1987.

4. I am a fellow of the Geological Association of Canada.

5. I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum.

Dated at Timmins, Ontario this 8th day of September, 1995.

Todd Keast
Project Geologist

APPENDIX A

Gradient IP Survey Report

MPH Consulting Limited

Geophysical Report on a Gradient Induced Polarisation Survey at Granges Inc.'s Mishi Project in 1995

NTS: 42C/3

Bob B.H. Lo, M.Sc., MBA, P. Eng.
Senior Geophysicist
MPH Consulting Limited
Toronto, Ontario

May, 1995

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1.0 Introduction

An induced polarisation survey was conducted over Granges Inc.'s Mishi Project in north-central Ontario (NTS: 42C/3) during the winter of 1995. The survey was conducted using the gradient array. Resistivity data were collected and processed at the same time as the IP survey. The targets are multiple, narrow, elongate shear structures which have distinct resistivity and chargeability contrasts with the surrounding host rocks.

2.0 Location, Access, and Topography

The Mishi Project is located in the Mishibishu Lake area near Wawa, Ontario. The centre of the property is located at approximately 48°06'N, and 85°27'W (see Figure 1). Access to the property is via a gravel road from Highway 17 West. Travel on the property is via old drill roads that can only be navigated with ATV's in the summer time. These trails are navigable in the winter with snow machines. The topography is more rugged in the western portion of the grid but overall, it is moderate and consists of gentle hills. The topographic relief does not exceed much more than 50 metres over the survey area.

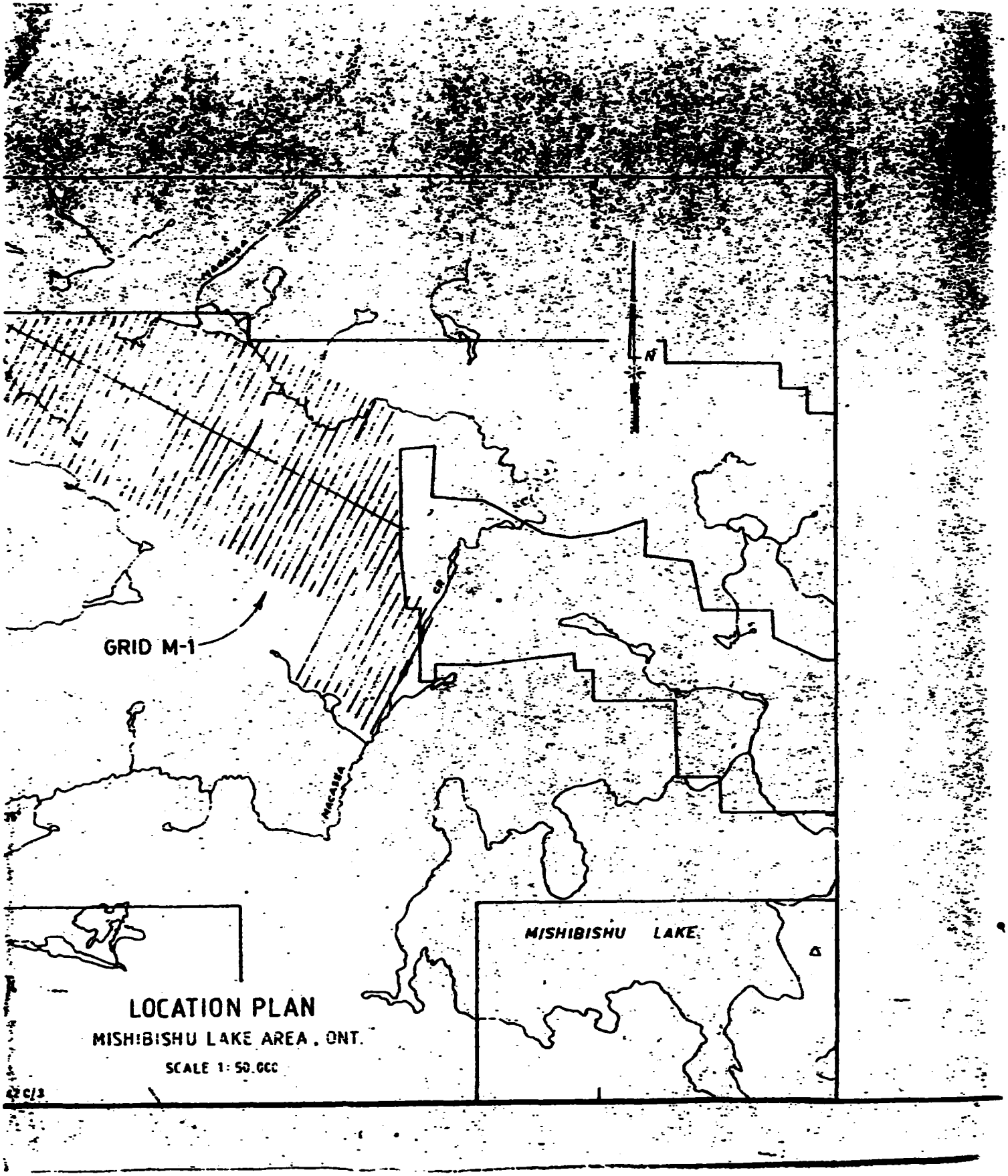
3.0 Claims and Geophysical Coverage

Figure 2 shows the coverage of the gradient IP survey. It consists of 57 lines of lengths between 375 and 1,200 metres totalling some 43.25 kilometres. The claims and a topographic base are superimposed upon the maps of the survey data from the project.

Specifically, the survey covered parts or all of claims:

924720
924721

SSM 601739
SSM 601760 to SSM 601761 inclusive
SSM 601778 to SSM 601782 inclusive

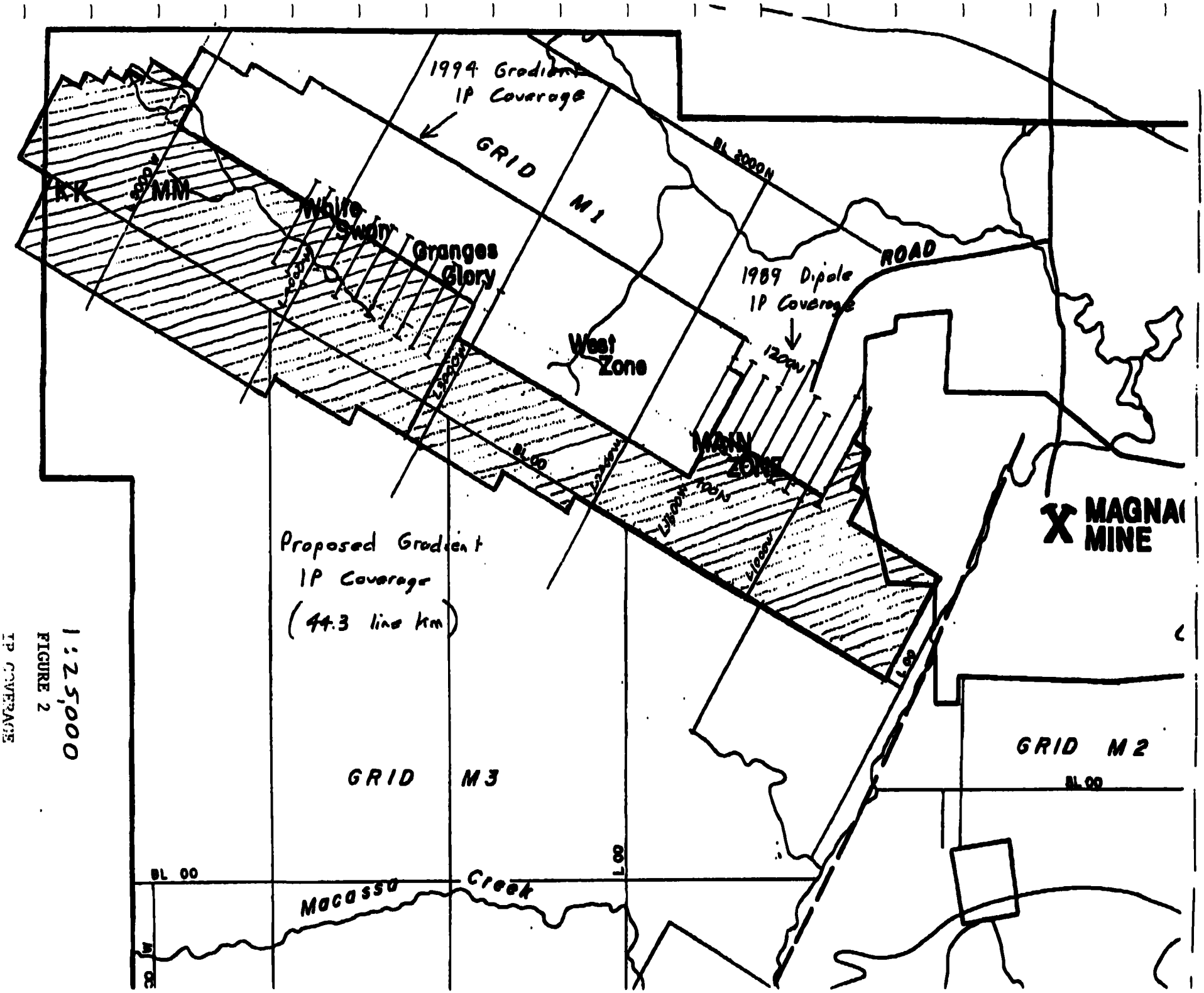


LOCATION PLAN

MISHIBISHU LAKE AREA, ONT.

SCALE 1: 50,000

42 C/3



1:5,000

FIGURE 2

SSM 601794 to SSM 601802 inclusive
SSM 601814 to SSM 601820 inclusive
SSM 601837 to SSM 601842 inclusive
SSM 601859 to SSM 601863 inclusive
SSM 601880 to SSM 601883 inclusive
SSM 601898 to SSM 601900 inclusive

SSM 847670

4.0 Project Geology

This information is obtained from a compilation map of the geology of the M1 grid of the Mishi Project. The regional trend is in a north-west to south-east direction. The property is underlain by a series of sedimentary rocks to the south. Progressing north, the lithologies change to intermediate lapilli tuff followed by quartz-feldspar porphyry and then mafic volcanics. The stratigraphic relationship between these units was not presented. Diabase dykes cross cut these units. Several shears that have more or less the same trend as the regional geology are located on the property.

5.0 The Physical Survey

A gradient array IP survey was carried out by MPH Consulting Limited in March and April of 1995. A total of 43.25 line kilometres were surveyed.

5.1 Personnel

MPH Consulting Limited of Toronto supplied the personnel. Charles Josey, a geophysical technician lead the crew. He was assisted by Henry Owdar, Geophysicist, who was being trained in field techniques. Local helpers as well as various people from MPH were employed to assist in planting pots and hammering stakes. The survey was supervised by Bob Lo, Senior Geophysicist, at MPH Consulting. Geophysical staff at Granges Inc. may reinterpret the results using known geology and other geophysical data at their disposal.

5.2 Instrumentation and Survey Parameters

For access to the property, a four-wheel drive truck and a snow machine were used from the old Granges base camp.

An Iris Elrec 6 receiver was used first with a Huntec MK IV, 2.5 kVA transmitter. Due to the Huntec transmitter's malfunction, an Iris VIP 3000 transmitter was used to complete the survey. Appendix A lists the technical specifications of the instruments. An eight second alternating square wave with 50% duty cycle was used as the transmitted wave form. The Elrec 6 measured the voltage decay curve at ten consecutive windows of 100 millisecond duration. An initial delay time of 100 milliseconds was used before the start of the measurement of the first window. Ancillary equipment consisted of a field computer with Geopak's Presentation software, various cables and wires, porous pots and stakes, etc. needed for an IP survey.

The area of interest was surveyed with a time domain, gradient IP array using dipole spacings of 12.5 metre and 25 metres. The 12.5 metre dipoles were suggested by Granges for optimal resolution versus signal to noise considerations. Because MPH used a multi-channel Iris Elrec 6 receiver, the 25 metre dipoles were collected at the same time as the 12.5 metre dipoles with little increase in effort. The receiver was placed at the centre of the array to minimise the amount of wire on the ground. This receiver location minimised the inductive pickup from spheric noise and crosstalk between the dipoles.

Two small lakes were encountered over the survey area. Holes were augured through the ice and the electrodes were lowered through the holes to the lake bottom.

To ensure a uniform electric field, the current electrodes were placed approximately one kilometre from the ends of the lines. Four different setups were used -- one for every 1.4 kilometres of strike length. The setups; 1) L5000W at 1400S and 1800N, 2) L3600W at 1375S and 1625N, and 3) L2200W at 1200S and 1700N, and 4) 800W at 1000S and 2000N. Lines 4300W, 3000W, and 1500W were repeated to test the uniformity of the electric field. Injection currents of over one ampere were obtained for all setups.

5.3 Data Presentation and Processing

The data is presented in the form of contour plans of apparent resistivity, chargeability (total chargeability) at a scale of 1:5,000.

No processing was required for the chargeability plots. The chargeability data are presented in Figure 3.

For the apparent resistivity plots, the values were calculated from the actual positions, voltages, and injection currents by using the below equation four times (once for each current injection point and potential reading point):

$$\rho = 2 \pi r V / I$$ where ρ = resistivitity, π = pi, V = voltage and I = current.

It has been MPH's experience that this calculation eliminates many of the levelling problems between the data collected from different current setups as it does not use the gradient array approximation. Repeat lines matched quite well as evidenced by the lack of seams in the data. The values at the repeat lines were averaged for the two setups. Apparent resistivity data are presented in Figure 4.

Presented in Figure 5 are the posted values of the IP and apparent resistivity values.

5.4 Geophysical Interpretation

Resistivity methods are used to map units of different resistivities (or conductivities) by injecting currents into the ground and then measuring the voltage potential elsewhere on the ground. The gradient array uses two widely spaced electrodes to yield a uniform electric field in the centre of the array. This yields an operationally very efficient field method once the current electrodes have been established as only the receiver has to be moved during the surveying. Induced Polarisation (IP) also has the same field procedure, but measures the overvoltage effects created between metallic mineral and electrolyte (pore fluid) interface.

An IP/resistivity survey is the most diagnostic geophysical survey for the detection of disseminated sulphides and has been used extensively on the exploration for porphyry systems and for disseminated sulphides which may be associated with gold mineralisation.

Figure 6 summarises the IP/resistivity survey using geological input from a compilation map. Several zones of high chargeabilities are noted on the map. These may represent zones of increased sulphides (or other chargeable material). Faults and shears are interpreted to be resistivity lows as these are likely water and clay filled. A high resistivity zone is interpreted to be a silicified zone. It is more or less concordant with the shears and faults. The rest of the survey is undifferentiated as the apparent resistivities and chargeabilities are not diagnostic of the underlying geology. Correlation with the magnetic data may yield more information with respect to the geology.

6.0 Summary and Recommendations

A combined induced polarisation, and apparent resistivity survey was conducted on Granges Inc.'s Mishi Project. It has located anomalous areas of chargeability highs and resistivity highs. Both are interesting targets as chargeability highs may be due to increased sulphide content and these sulphides may be associated with gold mineralisation. In the same manner, the high resistivity area could be due to silicification which is also a target in gold exploration.

The above interpretation is based on IP and resistivity data. Other geophysical data and geological data can be integrated into this interpretation. Other target areas may result from this integration. Drill testing of these targets should follow.

Bibliography

Granges Inc. *Compilation Geology -- Grid M1, Mishi Project, Mishibishu Lake Area, Ontario*, a compilation map by Granges Inc. at a scale of 1:5000, 1990.

Grant, F.S., and West, G.F., **Interpretation Theory in Applied Geophysics**, McGraw-Hill Book Company, Toronto, 1965.

Telford, W.M., Geldart, L.P., Sheriff, R.E., and Keys, D.A., **Applied Geophysics**, Cambridge University Press, 1976.

Statement of Qualifications

I, Bob B.H. Lo, hold the position of Senior Geophysicist at MPH Consulting Limited.

My work address is:
MPH Consulting Limited
Suite 1800
150 York Street
Toronto, Ontario
M5H 3S5

I reside at:
28 Nottinghill Drive
Markham, Ontario
L3T 4X9

I graduated from the University of Toronto with a Bachelor of Applied Science degree in the Geophysics option of Engineering Science in 1981. I also obtained a Masters of Science degree in Physics--Geophysics from the University of Toronto in 1985.

In 1992, I obtained a Masters of Business Administration degree from Laurentian University in Sudbury.

I am a Licensed Professional Engineer in the Province of Ontario.

I am an associate member in the Society of Exploration Geophysicists -- **SEG** (Tulsa), a member of the Canadian Exploration Geophysical Society -- **KEGS** (Toronto), and a member of the Prospectors and Developers Association of Canada -- **PDAC** (Toronto).

Since 1981, I have been involved in the use of geophysics for mineral exploration, geothermal site detection, and various engineering and environmental applications. I have conducted and supervised field surveys, planned, supervised, interpreted data and reported on projects, from Canada, the United States of America, and abroad.

W. J. ANDERSON
FOR B. LO.

Appendix A – Technical specifications of field instruments

HUNTEC 2.5 kVA TRANSMITTER 1

SECTION 1
INTRODUCTION

1.1 GENERAL DESCRIPTION

The Huntec 2.5 KW Alternator Set is a field portable unit designed as a source of 400 Hz 3-phase power for the M2 and M4 Induced Polarization Transmitter systems. When used in the M2 system, its internal regulator maintains its output at 120 volts line-to-line. In the M4 system, its output is determined by regulator circuits in the transmitter. The alternator is adapted to the appropriate transmitter system, M2 or M4,by a wiring change (see Sect. 4).

The alternator set consists of a 4-stroke gasoline engine driving, through a vee belt, a three phase alternator. These units are rigidly mounted to a sub-frame which is in turn mounted on flexible energy absorbing mounts to a simple carrying and protective tubular steel frame.

The output power is taken off via a 50 foot cable terminated with a connector.

1.2 SPECIFICATIONS

Electrical:

Voltage	120 line-to-line, adjustable ±5% (M2 mode)
	96-144 line-to-line, under control of transmitter (M4 mode)
Frequency	Nominal 400 Hz
Power	3.5 KW
Cable/Connector	50 ft. cable having 4 conductors (M2) or 6 conductors (M4), terminated with connector type CA06EA18 - 10S/MS3106E18-10S (M2) or with connector type MS3106E-20-22S (M4).

1.2 SPECIFICATIONS - Continued

ENGINE

Type	Briggs & Stratton 8 HP Model 190402 Type 2515. Speed 3600 rpm.
Fuel	Regular automotive grade gasoline
Tank capacity	1 gallon US, sufficient for about 4 hours of operation
Oil capacity	2 3/4 pints US
Lubricating Oil	Winter Under 40°F use SAE 5W-20 or SAE 10W. Below 0°F use SAE 10W diluted with 10% kerosene. Summer Above 40°F use SAE 30 or SAE 10W-30
Starter	Manual spin type with rewind

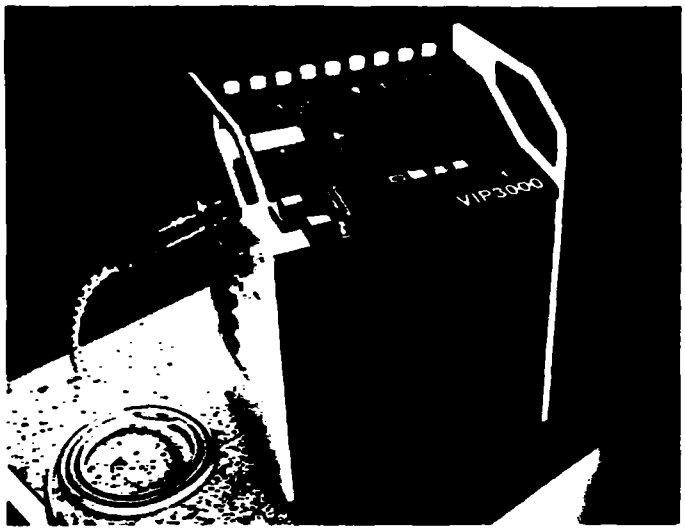
ALTERNATOR

Type	Leece-Neville 4425AA Alternator modified to give 120V A.C. output
Drive	Single V belt, Gates Rubber Co. 3V-400 Super H.C.

MECHANICAL

Overall height: 20 ins; 50.8 cm
width : 19 ins; 48.26 cm
length: 33 ins; 83.82 cm
weight without fuel & oil: 135 lbs.

Note: Engine Type # 0515 or 1515 up to Serial No. BSLN 37. Serial No. BSLN 38 introduced the 'Magnetron' ignition requiring no Breaker Points or Condensor



VIP 3000

IP Transmitter

VIP 3000

IP Transmitter

Features:

- Lightweight.
- High voltage output, 3000V.
- 8 dipoles.
- Universal power input.
- Time and frequency domain.
- Lightest 3000 watt unit on the market, 16kg.

General

Exclusive UNICLIP® output connectors were specially designed for speed and safety. They accept any kind of wire termination from a bare wire to a 4mm banana plug.

Automatic Circuit Opening

The output current circuit of the VIP 3000 (electrode connections) is fully opened during off time to prevent current leakage through the transmitter. This insures the best measurement quality in the worst field conditions.

Continuous Contact Resistance Monitoring

Contact resistance can be displayed before the transmitter is powered on. Contact resistance is also displayed continuously when transmitting.

Works With Almost Any Power Generator

The VIP 3000 IP transmitter can be powered by almost any motor generator providing a nominal 230V, 45-450Hz output, single phase, and a suitable KVA rating. Low cost commercial generator sets available at local hardware or equipment rental stores are perfectly suitable.

The VIP 3000 can also be powered by hydro lines. This is useful in underground IP operation in mines.

Programmable

Programming functions are also available, either through the front panel, with a suitable key, or from an external computer terminal. These functions are used to select the parameters and options that are not normally changed during a survey: Operating mode, time or frequency domain, cycle time, frequencies, etc.

Remote Control

The VIP 3000 can be linked to a computer for the automatic recording of current settings. Synchronization with a receiver or system is also possible in both directions (i.e., Rx to Tx or Tx to Rx).

Intelligent Current Regulation

The VIP 3000 internal microprocessor is capable of excellent current regulation in almost any load. Current is operator selectable in preprogrammed steps from 50mA to 5 amperes. Intelligent current adjustment algorithms are always in operation. For example, the contact resistance will occasionally be too high for the VIP 3000 to provide the requested current setting. In such cases, the VIP 3000 will display a warning message and will set the current to the maximum value allowable under that combination of current setting and contact resistance. Some reserve current capacity will always be maintained to insure that the current stays constant during the measurements, in spite of contact resistance fluctuations.

Specifications

Waveforms:

Time Domain +, off, -, off, (on = off) preprogrammed cycle. Automatic circuit opening in off time. Preprogrammed on times from 0.5 to 8 seconds by factor of two. Other cycles programmable by user.

Frequency Domain: Square wave, preprogrammed frequencies from 0,0625Hz to 4Hz by factors of 2. Alternate or simultaneous transmission of any two frequencies. Other frequencies programmable by user.

Output Voltage: 3000V maximum, automatic voltage range selection

Output Power: 3000VA maximum

Output Current: 5 amperes maximum, current regulated

Dipoles: 8, selected by push button

Output Connectors: UNICLIP® connectors accept bare wire or plug connectors of up to 4mm diameter.

Time and Frequency Stability: 0.01%, 1 PPB optional

Display: Alphanumeric liquid crystal display. Simultaneous display of output current, output voltage, contact resistance, and input horsepower.

Power Source: 175 to 270 VAC, 45-450Hz, single or 3-phase

Operating Temperature: - 40 to + 50°

Protection: Short circuit at 50ohms, Open loop at 60000 ohms, thermal input overvoltage and undervoltage

Dimensions: 410 x 320 x 240mm

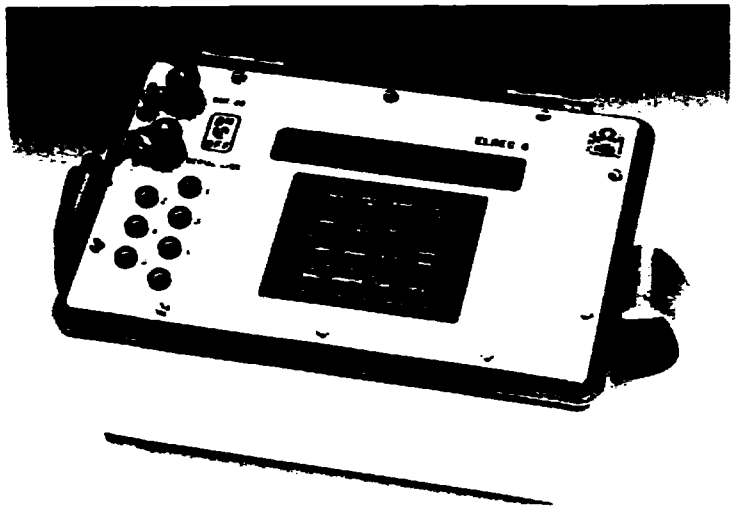
Weight: 16kg

Standard Components

VIP 3000 console and instruction manuals.

Ordering Information

Description	Order Number
VIP 3000	**500-190-0027**



ELREC 6

IP Receiver

ELREC 6

IP Receiver

Features:

- 6 input channels.
- Up to 10 chargeability windows.
- Symmetrical time domain with a pulse duration of 1 or 2s.
- Input overvoltage protection up to 1,000 volts.
- Analyzes IP decay curves.
- Fully automatic measuring processes.
- Internal memory can store 25 hundred measurements.

General

The Elrec 6 is a six-channel multi-window time domain induced polarization receiver that measures six receiver dipoles. The unit is extremely efficient in the field, especially when used with the multi-dipole cable.

IP decay curves are analyzed by various types of sampling: Up to 10 windows are available, with preset or programmable arithmetic or logarithmic widths. Multi window analysis provides a high degree of accuracy when defining decay curves.

Measurements are made through a fully automatic measuring process: Self test and calibration, auto synchronization and resynchronization at each cycle, plus continuous tracking of SP including linear drift correction. Also provided is automatic gain selection, digital stacking for noise reduction, and fully documented displays controlled by the microprocessor to ensure the highest degree of accuracy and reliability.

The operator can select various reading options regarding the parameters that are displayed: Display of running or cumulative average values for monitoring the noise; Display of normalized or true chargeability values for referral or nonreferral to a standard decay curve; And during the measurement possibility of simultaneously displaying the average chargeabilities of the six dipoles, or their standard deviations, or the primary voltage, average chargeability and standard deviation of each dipole.

The Elrec 6 automatically synchronizes with the signal through a waveform recognition process. Plus, the unit automatically resynchronizes at each new pulse to avoid errors due to a possible shift in the period of the transmitted signal.

Frequency Mode Option

The frequency effect and the phase shift between the fundamental and the third harmonics may be measured for a Frequency Domain waveform (ON+, ON-), or for a Time Domain waveform (ON+, OFF, ON-, OFF).

Specifications

Input Voltage Range: Each Dipole 10V maximum, sum of voltage dipoles 2 to 6, 15V maximum

Primary voltage: Resolution: 1μV after stacking. Accuracy: 0.3%; max 1%

Chargeability Resolution: .01 mV/V , Accuracy: 0.6%

Up to 10 Chargeability Windows: Mode 1: 10 preset arithmetic Windows, Mode 2: 10 programmable arithmetic windows (delay time and window width), Mode 3: 10 preset logarithmic windows, and Mode 4: 3 to 6 preset logarithmic Windows.

Signal Waveform: Symmetrical time domain (ON+, OFF, ON-, OFF) with a pulse duration of 0.5, 1, 2, 4 or 8s. Input impedance: 10 Mohm.

Input overvoltage protection up to 1,000 Volts.

Automatic stacking, automatic SP ±10V bucking with linear drift correction up to 1mV/s.

Sampling Rate: 10ms

50 and 60Hz power line rejection greater than 100dB

Accuracy in Synchronization: 10ms

Common Mode Rejection: 86dB (for Rs = 0)

Display of primary voltage, partial and average chargeabilities, standard deviation of primary voltage and of average chargeability, and computation of apparent resistivity (dipole to dipole, pole to dipole, gradient, VES, etc).

Grounding resistance measurement from 0.1 to 467kohm

Memory Capacity: 2,500 measurements

Dimensions: 31 x 21 x 21cm

Weight: 6kg

Operating Temperature Range: -40°C to +70°. The specifications listed above are given over the entire temperature range.

Power Supply: Six 1.5V D size alkaline dry cells (20 hours of operation at 20°C)

Standard Components

Elrec 6 console and instruction manuals.

Ordering Information

Description	Order Number
Elrec 6	500-190-0024

Appendix B – statement of expenditures

Statement of expeditures for gradient IP surveying at Granges Inc.'s Mishi Project in 1995.

mob-demob costs:	$2,200.00
line cutting 19.375 kms @ $300/km =	$5,812.50
magnetometer surveying	
19.875 kms @ $106/km =	$2,106.75
gradient IP	
43.25 kms @ $615/km	
less 0.95 km for missing digital data =	$26,014.50
technical report:	$ 1,000.00
	$37,133.75

Ministry of Northern Development and Mines

Report of Work Conducted After Recording Claim

Mining Act

DOCUMENT No. W9580.00055

...nal information collected on this form is obtained under the authority of the Mining Act. Questions about this collection should be directed to the Provincial Manager, Mining Lands Branch, Ministry of Northern Development and Mines, Ontario, P6B 6A5, telephone (705) 670-7264.

42C03SW0021 2.16207 MISHIBISHU LAKE

900

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for the 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.

Recorded Holder(s): MacMillan Gold Corp. and Granges Inc.	Client No. 164920/138156
Address: 136 Cedar Street South, Timmins, ONT. P4N 2G9	Telephone No. (705) 264-1228
Mining Division: Sault Ste. Marie	Township(s): Abbie and Mishibishu Lake Area(s)
Work Performed: From March 1995 (Feb. 25/95) To April 1995	Claim No(s). (or Patent No. or Lease No.): Q-3772

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	Linecutting and Gradient I.P. Survey
Physical Work, Including Drilling	
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

RECEIVED
SEP 21 1995
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 37,479.

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
Bob R.H. Lo	MPH Consulting Limited 123 York St, Suite 1200, Toronto, Ont M5H 3S6
Charles Josey	
Henry Ouder	

MacMillan Gold Corp.
1360 - 625 Howe Street
Vancouver, B.C.
V6C 2T6

Reverse side

Date: Sept 15/95 Recorded Holder or Agent (Signature): Todd Keast

...rk report, having performed the work or witnessed same during and/or after

Todd Keast c/o 136 Cedar Street South, Timmins, ONT. P4N 2G9

Telephone No.: (705) 264-1228 Date: Sept 15/95 Certified by (Signature): Todd Keast

For Office Use Only

Total Value of Assessment Work	Date Recorded	Mining Recorder	Date Approved
$37,479.00	Sept 19/95	ACTING P. Moore	
	Deemed Approval Date: Dec 18/95		
	Date Notice for Amendments Sent		

Mining Lands Branch
RECEIVED
'19 SEP 1995 PM
8 9 10 11 12 1 2 3 4 5 6

...ous page

Ministry of Northern Development and Mines

Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: DOCUMENT No. W9550.00055

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.16200

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining 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.

Recorded Holder(s)		Client No.
MacMillan Gold Corp. and Granges Inc.		162922/138756
Address		**Telephone No.**
136 Cedar Street South, Timmins, ONT. P4N 2G9		(705) 264-1228
Mining Division	**Township/Area**	**M or G Plan No.**
Sault Ste. Marie	Abbie and Mishibishu Lake Areas	G-3772
Dates Work Performed	From: March 1995	To: April 1995

Work Performed (Check One Work Group Only)

	Work Group	Type
X	Geotechnical Survey	Linecutting and Gradient I.P. Survey
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ 37,479.

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
Bob B.H. Lo	MPH Consulting Limited 150 York St, Suite 1800, Toronto, ON M5H 3S5
Charles Josey	
Henry Awdar	

(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	Recorded Holder or Agent (Signature)
	Sept 15/95	Todd Keast

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

Todd Keast c/o 136 Cedar Street South, Timmins, ONT. P4N 2G9

Telepone No.	Date	Certified By (Signature)
(705) 264-1228	Sept 15/95	Todd Keast

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Recording Stamp
$37,479.00	Sept 19/95	P. Morra	SAULT STE. MARIE MINING DIVISION RECEIVED 19 SEP 1995 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM
	Deemed Approval Date: Dec 18/95	Date Approved	
	Date Notice for Amendments Sent		

0241 (93/07)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Total Value Work Done	Total Value Work Applied	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date	Total Assigned From	Total Reserve
2	601672	1		400.		6/3 L86.				
C	601673	1		400.		Sub-Total				
2	601680	1		400.						
2.1	601681	1		400.						
6	601682	1		400.						
	601683	1		400.						
	601684	1		400.						
	601685	1		400.						
2.	601687	1		400.						
	601688	1		400.						
	601695	1		400.						
	601696	1		400.						
	601697	1		400.						
	601698	1		400.						
	601701	1		400.						
	601702	1		400.						
	601703	1		400.						
	601704	1		400.						
	601705	1		400.						
	601706	1		400.						
	601713	1		400.						
	601714	1		400.						
	601719	1		400.						
	601720	1		400.						
	601721	1		400.						
	601722	1		386.						
	601723	1		400.						
	601724	1		400.						
	601725	1		400.						
	601726	1		400.						
	601727	1		400.						
	601740	1		400.						
	601741	1		400.						
Total Number of Claims: 33										

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 prioritze the deletion of credits. Please mark (✓) one of the following:

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

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

Page 2 of 4

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: Todd Keast	Date: Sept 15/05

0241 (02/01)

Total Number of Claims	Claim Number (see Note 2)	Number of Claim Units	Work Report Number for Applying Reserve	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Total Value Work Done	Total Value Work Applied	Value Assigned from this Claim	Total Assigned From	Reserve: Work to be Claimed at a Future Date	Total Reserve
	601742	1			400.		Sub-Total 1,345.				
	601745	1			400.						
	601746	1			400.						
	601747	1			400.						
	601748	1			400.						
	601749	1			400.						
	601601	1			400.						
	601602	1			400.						
	601603	1			400.						
	601604	1			400.						
	601605	1			400.						
	601606	1			400.						
	601607	1			400.						
	601608	1			400.						
	601609	1			400.						
	601610	1			400.						
	601611	1			400.						
	601612	1			400.						
	601613	1			400.						
	601614	1			400.						
	601615	1			400.						
	601616	1			400.						
	601617	1			400.						
	601618	1			400.						
	601619	1			400.						
	601620	1			400.						
	601621	1			400.						
	601622	1			345.						
	601623	1			400.						
	601624	1			400.						
	601628	1			400.						
	601629	1			400.						
	601630	1			400.						
34	601631	1			400.						

2.

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 priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
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Page 3 of 4

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respe 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 Todd Keast	Date Sept 15/05

Work Report Number for Applying Reserve	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
	601632	1		400.		
	601633	1		400.		
	601634	1		400.		
	601635	1		400.		
	601636	1		400.		
	601637	1		400.		
	601638	1		400.		
	601639	1		400.		
	601640	1		400.		
	601641	1		400.		
	601642	1		400.		
	601643	1		400.		
	601644	1		400.		
	601645	1		400.		
	601646	1		400.		
	601647	1		400.		
	601648	1		400.		
	601649	1		400.		
	601650	1		400.		
	601651	1		400.		
	601654	1		400.		
		21		8,400.		
sub-total from page 1			$37,479.	2,348.	37,145.	
sub-total from page 2				13,186.		
sub-total from page 3				13,545.		
	102		$37,479.	$37,479.	$37,145.	
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

$162.00

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:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ 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
	Todd Hart	Sept 15/98

0841 (03/91)

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Ontario

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

DOCUMENT No. W9550

2.16207

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 quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e 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'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type: Linecutting	6,219.	Includes G.S.T.
	I. P. Survey	27,836.	
	Report	1,070.	35,125.
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		35,125.

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation	includes G.S.T.		2,354.
	Sub Total of Indirect Costs Total partiel des coûts indirects		2,354.
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		2,354.
	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)**		37,479

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.

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	Évaluation 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 Project Geologist 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
Todd Kant	Sept 15/95

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ontario

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

Our File: 2.16207
Transaction #W9550.00055

November 07, 1995

Mining Recorder
Ministry of Northern Development & Mines
60 Church Street
Sault Ste. Marie, Ontario
P6A 3H3

Dear Mr. Morra:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS CLM 377 ET AL. IN MISHIBISHU LAKE AREA

Assessment work credits have been approved as outlined on the original report of work forms for this submission. The credits have been approved under Section 14, Geophysics(IP), Mining Act Regulations.

The approval date is November 6, 1995. Please indicate this approval on the claim record sheets.

If you have any questions regarding this correspondence, please contact Bruce Gates at (705) 670-5856.

Yours sincerely,

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

BIG/jl
Enclosure:

cc: Resident Geologist
Sault Ste. Marie, Ontario

Assessment Files Library
Sudbury, Ontario

LEGARDE ADDITIONAL

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.N.R. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M. & S. – MINING AND SURFACE RIGHTS

Township	Order No.	Date	Disposition	File

SURFACE RIGHTS APPLICATION UNDER P.L.A. FOR AREA SHOWN THUS

REFERENCES

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT
- LAND USE PERMIT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	OC
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. [illegible], SECTION 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000
METRES 0 200 400 800

DATE OF ISSUE
SEP 21 1995
SAULT STE. MARIE
MINING RECORDER'S OFFICE

THE INSTRUMENTAL BEARING APPROX. [illegible]
ANNUAL CHANGE [illegible]

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, SAULT STE. MARIE, ON THE STATUS OF THE LANDS SHOWN HEREON.

AREA
MISHIBISHU LAKE
M.N.R. ADMINISTRATIVE DISTRICT
WAWA
MINING DIVISION
SAULT STE. MARIE
LAND TITLES / REGISTRY DIVISION
ALGOMA

Ministry of Natural Resources
Ontario
Ministry of Northern Development and Mines

Date FEBRUARY, 1987
Number G-3772

MISHIBISHU LAKE

DAVID LAKES

ALGOMA DISTRICT

THUNDER BAY DISTRICT

LEGARDE TWP.
FOR STATUS OF LAND SEE TWP. PLAN

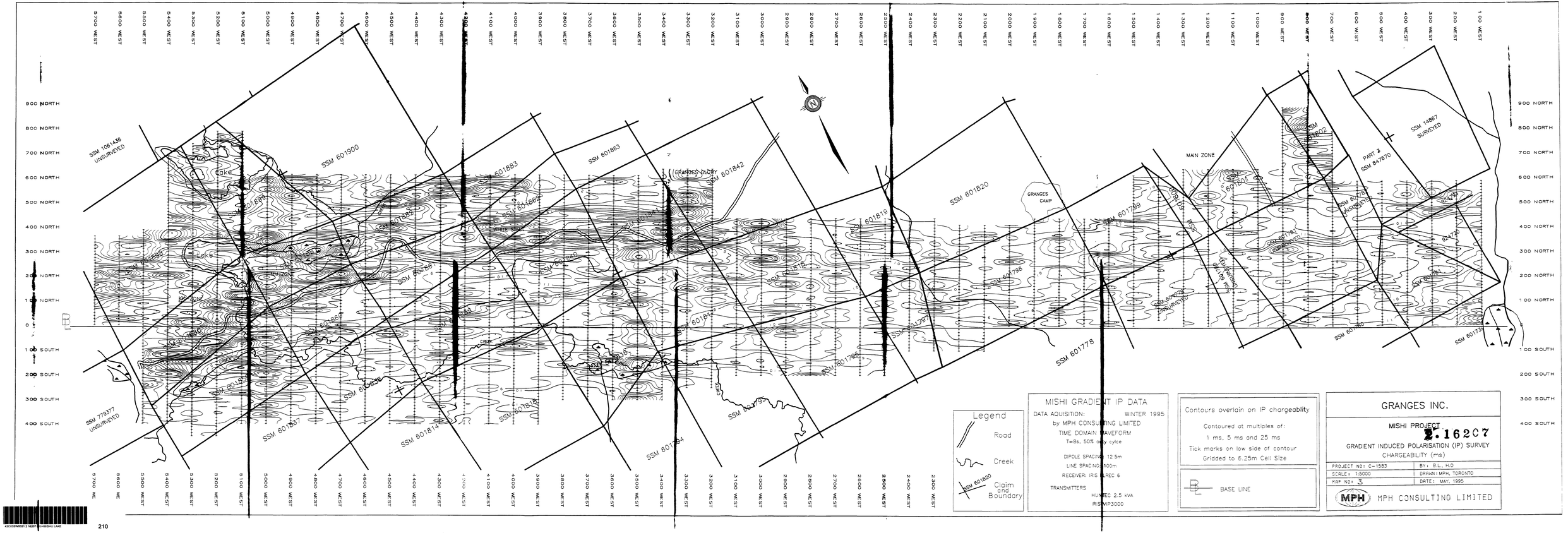
ST. GERMAIN TWP.
FOR STATUS SEE TWP. PLAN

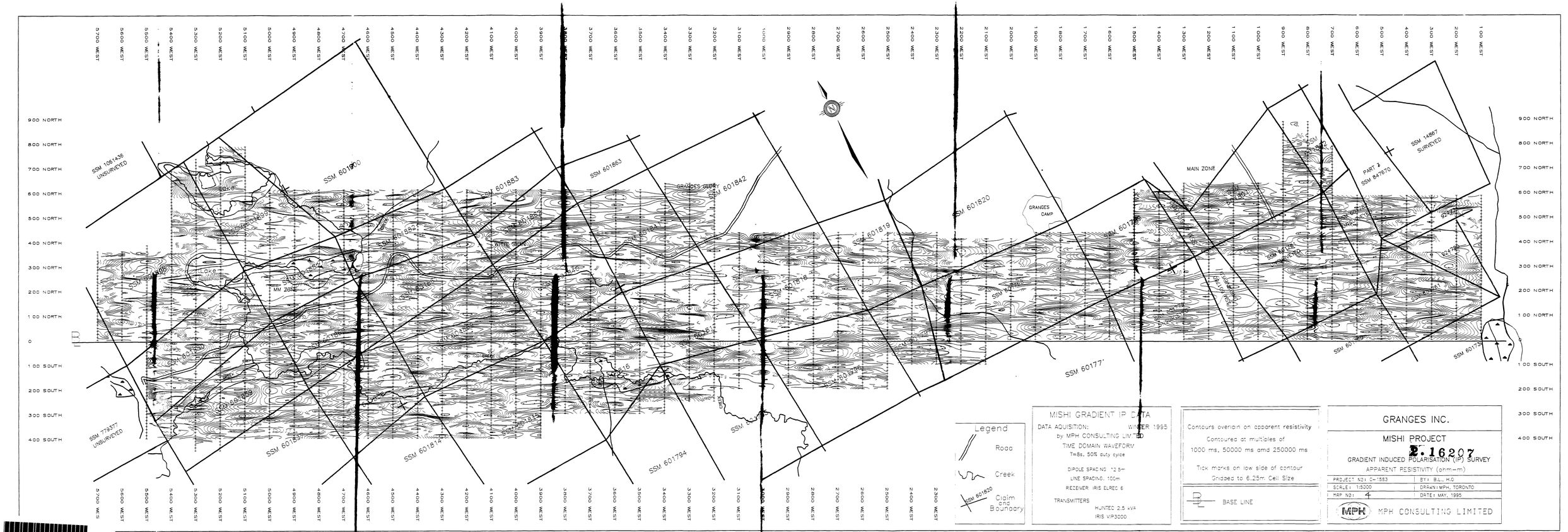
GROSEILLIERS TWP.
FOR STATUS SEE TWP. PLAN

PROJECTED LINE

POINT ISACOR

TRIM TO THIS LINE ALL AROUND


SSM 1067436 UNSURVEYED
SSM 601900
SSM 601883
SSM 601863
SSM 601842
SSM 601820
SSM 601778
SSM 601857
SSM 601814
SSM 601794
SSM 778377 UNSURVEYED
GRANGES CAMP
MAIN ZONE
PART 1 SSM 847670
SSM 14867 SURVEYED
Lake
Creek
Road
Claim and Boundary
Legend
MISHI GRADIENT IP DATA
DATA AQUISITION: WINTER 1995
by MPH CONSULTING LIMITED
TIME DOMAIN WAVEFORM
T=8s, 50% duty cylce
DIPOLE SPACING: 12.5m
LINE SPACING: 100m
RECEIVER: IRIS ELREC 6
TRANSMITTERS
HUNTEC 2.5 kVA
IRIS VIP3000
Contours overlain on IP chargeability
Contoured at multiples of:
1 ms, 5 ms and 25 ms
Tick marks on low side of contour
Gridded to 6.25m Cell Size
BASE LINE
GRANGES INC.
MISHI PROJECT
2.16207
GRADIENT INDUCED POLARISATION (IP) SURVEY
CHARGEABILITY (ms)
PROJECT NO: C-1583
BY: B.L., M.O
SCALE: 1:5000
DRAWN: MPH, TORONTO
MAP NO: 3
DATE: MAY, 1995
MPH CONSULTING LIMITED



42C05SW0021 2.16207 MISHIBISHU LAKE

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