GEOPHYSICAL REPORT

INDUCED POLARIZATION SURVEY

ON THE

"KYANITE PROPERTY"

ANTOINE/BUTLER TOWNSHIPS

SUDBURY MINING DISTRICT, ONTARIO

For

KYANITE MINING CORPORATION

RECEIVED

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GEOSCIENCE ASSESSMENT
OFFICE

Submitted by: R.J. MEIKLE & ASSOCIATES

R.J. MEIKLE

November, 2003



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INTRODUCTION

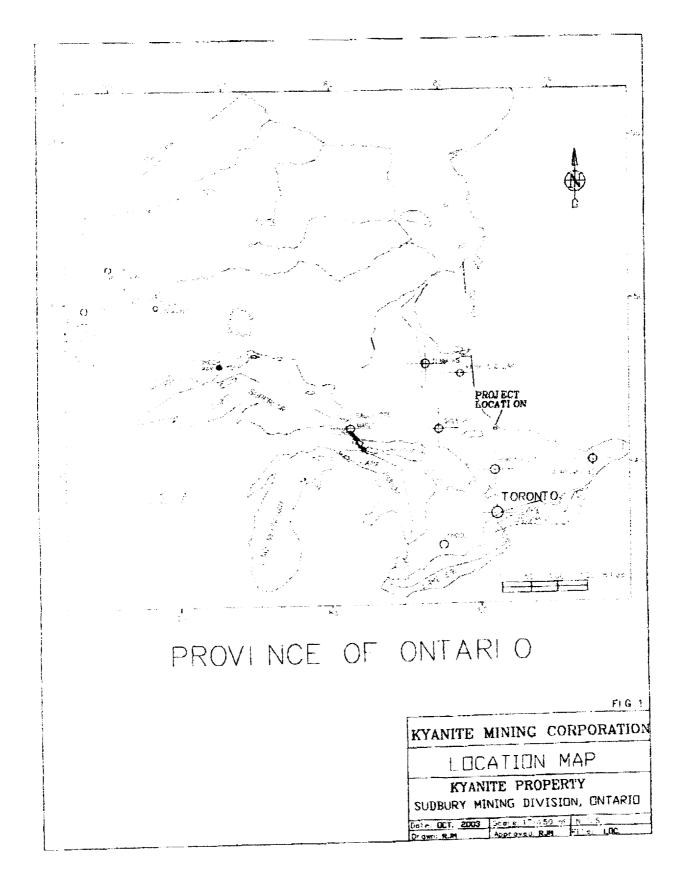
The subject of this report is an Induced Polarization Survey carried out on the "Kyanite Property", Sudbury Mining Division, Ontario, for Kyanite Mining Corporation. The work was carried out by R.J. Meikle & Associates, North Bay, Ontario.

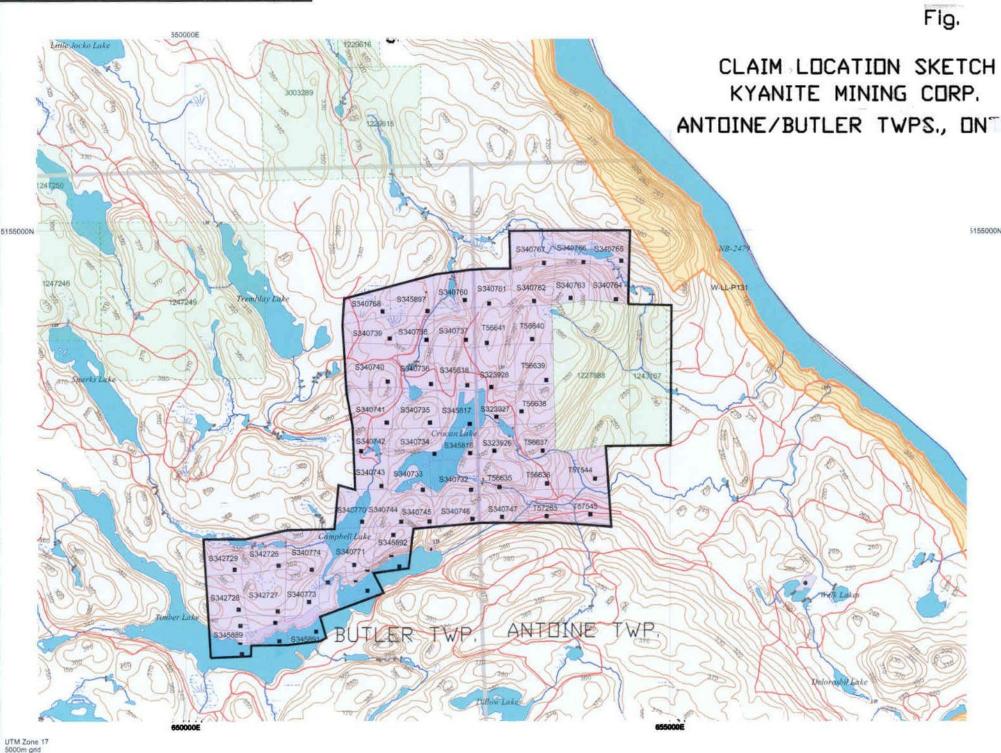
The Kyanite mineralization on the property is for the most part easily identified and outlined by surface mapping and as such, no geophysics has been done in the past. However, some of the drill holes drilled to outline the Kyanite deposit intersected copper, nickel, and gold in the adjacent "pyritized quartzite" geological unit. The I.P. Survey, subject of this report was carried out to test for areas of higher sulphide mineralization within this unit as well as obtain an I.P. "signature" over the other geological units to determine the scope of a larger scale geophysical program in the future.

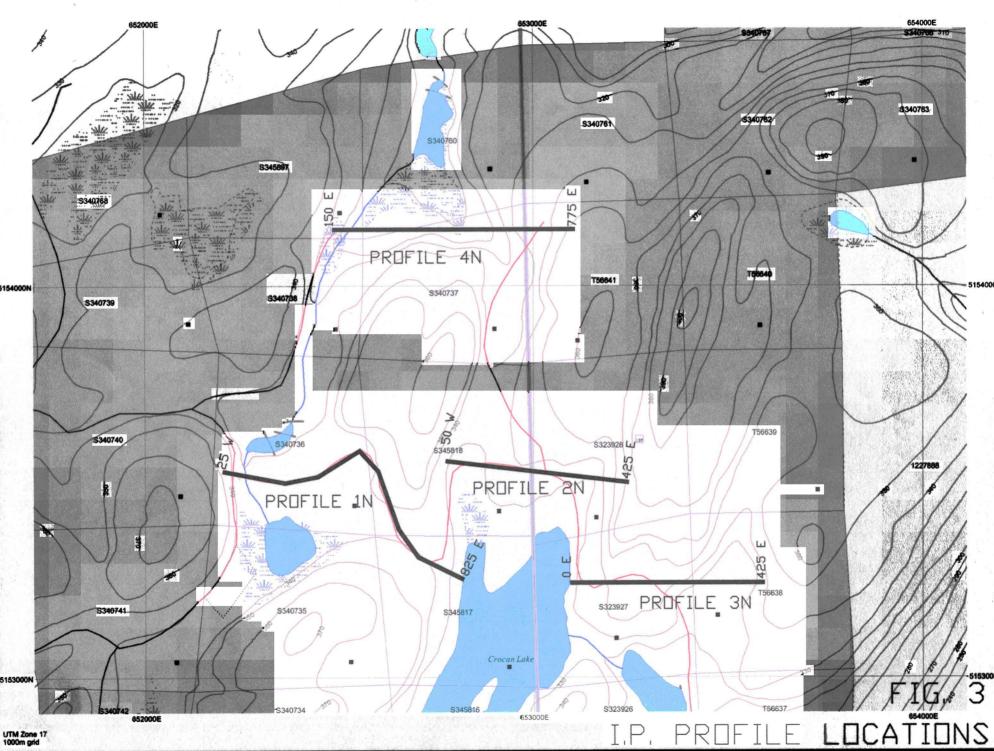
CLAIMS, LOCATION AND ACCESS

The I.P. Survey was carried out on parts of 10 leased mining claims, part of a larger group, registered in the name of Kyanite Mining Corporation. The claims are as follows, S345897, S340760, S340737, ST56641, S340736, S345818, S345817, S323928, S323927, T56638, straddling the boundary of Butler and Antoine Townships, Sudbury Mining Division, Ontario.

Access to the area is by Highway 63E approximately 32 km, east of North Bay, Ontario, and South on Highway 533, approximately 7km, then east approximately 3km on a gravel road to the claim group.







GENERAL GEOLOGY

The property is reported to be underlain by an alternating series of north-east striking Hornblende-Biotite Gneiss, Pyritized Quartzite, Kyanite-Muscovite Gneiss, Feldspathic Gneiss, and Pegmatites. All are reported to be dipping to the north-west. Previous work has focused on the massive Kyanite mineralization, with a geological reserve outlined.

GEOPHYSICAL PROGRAM

I.P. Survey

The I.P. Survey was performed on 4 east-west, south-east profiles, designed to provide a cross-section across the geological units described above. Parts of existing roads were utilized where the direction was suitable, stations were chained with marked flagging every 25 meters. A "Dipole-Dipole" electrode array was used with an "a" spacing of 25m, reading N=1 to 4.

The following is a brief description of the theory and parameters used for the survey:

General IP Theory

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

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

A typical signature for base metals such as copper, and or nickel would be a high chargeability associated with a higher concentration of sulphides, and a low resistivity due to the low conductivity of the sulphides.

Electrode Array

The electrode array used for the survey was the Dipole-Dipole Array. In this array two current electrodes (C1, C2) and two receiver or potential electrodes are moved down a line in unison. In this case the "a" spacing or distance between each dipole was fixed at 25 meters apart. For an N=1 reading, the closest C1 and P1 were 25 meters apart. The C1-C2 dipole remain in the same place while the potential dipole (P1-P2) moves ahead one "a" spacing and the array is ready for an N=2 reading, and so on.

IP Survey Parameters

The IP survey was carried out using the following parameters:

Method: Time Domain

Electrode Array: Dipole-Dipole

"a" spacing: 25 meters

Number of Dipoles Read: 1-4

Pulse Duration: 2 seconds on, 2 seconds off

Delay Time: 310 milliseconds

Integration Time: 140 milliseconds

Receiver: Scintrex IPR-12

Transmitter: Scintrex IPC-9, 200 watt

Data Presentation: Individual Psuedosections for each

of profiles 1-4.

Scale: 1:2500

SURVEY RESULTS

The I.P. Survey outlined several highly chargeable zones, some highly conductive, others with a moderate to high resistivity. They are described under each profile as follows:

Profile 1N

Anomaly 'A'

-anomaly 'A' is a broad generally resistive zone from 225mE to 600mE with a resistive section centered at 275mE and a moderately resistive zone centered at 525mE.

Anomaly 'B'

-anomaly 'B' is a highly chargeable, extremely conductive on the east end of the line. It is open to the east due to Crocan Lake.

Profile 2N

Anomaly 'C'

-anomaly 'C' is on the west end of profile 2N, open to the west. -it is highly chargeable and conductive.

Anomaly 'D'

-this is a broad highly chargeable, moderately resistive zone from 25mE to 275mE.

Anomaly 'E'

- -this is a highly chargeable, very conductive zone from 275mE to 400mE, open to the east.
- -this anomaly is very similar to anomaly ${}^{\backprime}B'$ on profile 1N to the east.

Profile 3N

Anomaly 'F'

- -anomaly 'F' is a broad moderately resistive, moderately chargeable anomaly with a higher chargeable zone centered at 200mE.
- -the zone is from 75mE to 230mE.

Profile 4N

Anomaly 'G'

-anomaly 'G' is a highly chargeable, conductive zone from 560mE to 620mE.

Anomaly 'H'

-anomaly 'H' is a moderately chargeable, moderately resistive zone on the west flank of anomaly 'G'.

Anomaly 'I'

-anomaly $\ '\ I'$ is a highly chargeable, moderately resistive zone on the east flank of anomaly $\ '\ G'$.

-this anomaly is reported to be coincident with a Kyanite zone.

CONCLUSIONS AND RECOMMENDATIONS

The I.P. Survey outlined several anomalies, both of the resistive and conductive types. Because of the presence of copper-nickel-gold mineralization in some of the previous drill holes it is strongly recommended that the geophysical responses obtained on the I.P. profiles be correlated with known geology and drill hole data.

Because the focus of previous exploration has been on Kyanite mineralization, it is important to determine what type of if any of the above described anomalies are coincident with the base metal and gold values.

The I.P. anomalies should be explained by trenching and or diamond drilling. Based on the results, a more comprehensive geophysical program comprised of Linecutting, Magnetics, and I.P. Survey should be completed.

CERTIFICATION

- I, Raymond Joseph Meikle of Timmins, Ontario hereby certify that:
- 1. I hold a three year Technologist Diploma from the Haileybury School of Mines, Haileybury, Ontario, obtained in May 1975.
- 2. I have been practising my profession since 1973 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, Greenland, Colorado, Nevada, Germany and Chile.
- 3. I have been employed directly with Teck Corporation, Metallgessellschaft Canada Ltd. Sabina Industries, .S. Middleton Exploration Services Ltd., self employed 1979-1997 (Rayan Exploration Ltd.) and with Geophysical Engineering & Surveys Inc., currently with R.J. Meikle & Associates.
- 4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the fieldwork conducted on the property during 2003.
- 5. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest or considerations from the property, other than for professional fees rendered.

Dated this 17th day of November, 2003 at North Bay, Ontario.

X.J. Meikle

APPENDIX 'A'

SCINTREX IPR-12

TIME DOMAIN I.P. RECEIVER

SCINTREX

IPR-12 Time Domain Induced Polarization/Resistivity Receiver

Brief Description

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

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

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

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



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

Benefits

Speed Up Surveys

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

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

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

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

High Quality Data

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

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

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 Batteries

An additional eight rechargeable Ni-Cad D cells may be installed in the console along with the Standard Rechargeable Batteries. Used to power the Display Heater or as back up power. Supplied with a second charger. More than 6 hours service at -30°C.

Use of Non-Rechargeable Batteries

Can be powered by D size Alkaline batteries, but rechargeable batteries are recommended for longer life and lower cost over time.

Operating Temperature Range

-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 Rechargeable

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



In Canada

222 Snidercroft Rd. Concord, Ontario Canada, L4K 1B5 Tel.: (905) 669-2280 Fax: (905) 669-6403 Telex: (905) 06-964570

In the U.S.A.

85 River Rock Drive Unit # 202 Buffalo, N.Y. Tel.: (716) 298-1219 Fax: (716) 298-1317

U.S.A. 14207 IPR-12/94



Work Report Summary

Transaction No:

W0370.01897

Status: APPROVED

Recording Date:

2003-DEC-01

Work Done from: 2003-OCT-22

Approval Date:

2003-DEC-05

to: 2003-OCT-25

Client(s):

215741

KYANITE MINING CORPORATION

Survey Type(s):

IΡ

LC

Work Report Details:											
CI	aim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date	
G	7000034	\$1,536	\$1,536	\$0	\$0	\$1,536	1,536	\$0	\$0		
G	7000066	\$3,068	\$3,068	\$0	\$0	\$3,068	3,068	\$0	\$0		
G	7000068	\$3,071	\$3,071	\$0	\$0	\$3,071	3,071	\$0	\$0		
s	1227888	\$0	\$0	\$5,117	\$5,117	\$0	0	\$0	\$0 2	2005-OCT-22	
s	1243167	\$0	\$0	\$2,558	\$2,558	\$0	0	\$0	\$0 2	2005-DEC-23	
		\$7,675	\$7,675	\$7,675	\$7,675	\$7,675	\$7,675	\$0	\$0		

External Credits:

\$0

Reserve:

\$0 Reserve of Work Report#: W0370.01897

\$0

Total Remaining

Status of claim is based on information currently on record.



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ANTOINE

Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines

Date: 2003-DEC-05



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

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

KYANITE MINING CORPORATION P.O. BOX 486, HIGHWAY 15 SOUTH DILLWYN, VIRGINIA 23936 UNITED STATES

Dear Sir or Madam

Submission Number: 2.26765 Transaction Number(s): W0370.01897

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 BRUCE GATES by email at bruce.gates@ndm.gov.on.ca or by phone at (705) 670-5856.

Yours Sincerely,

Ron C Gashinshi

Senior Manager, Mining Lands Section

Cc: Resident Geologist

Ronald Murray Blais

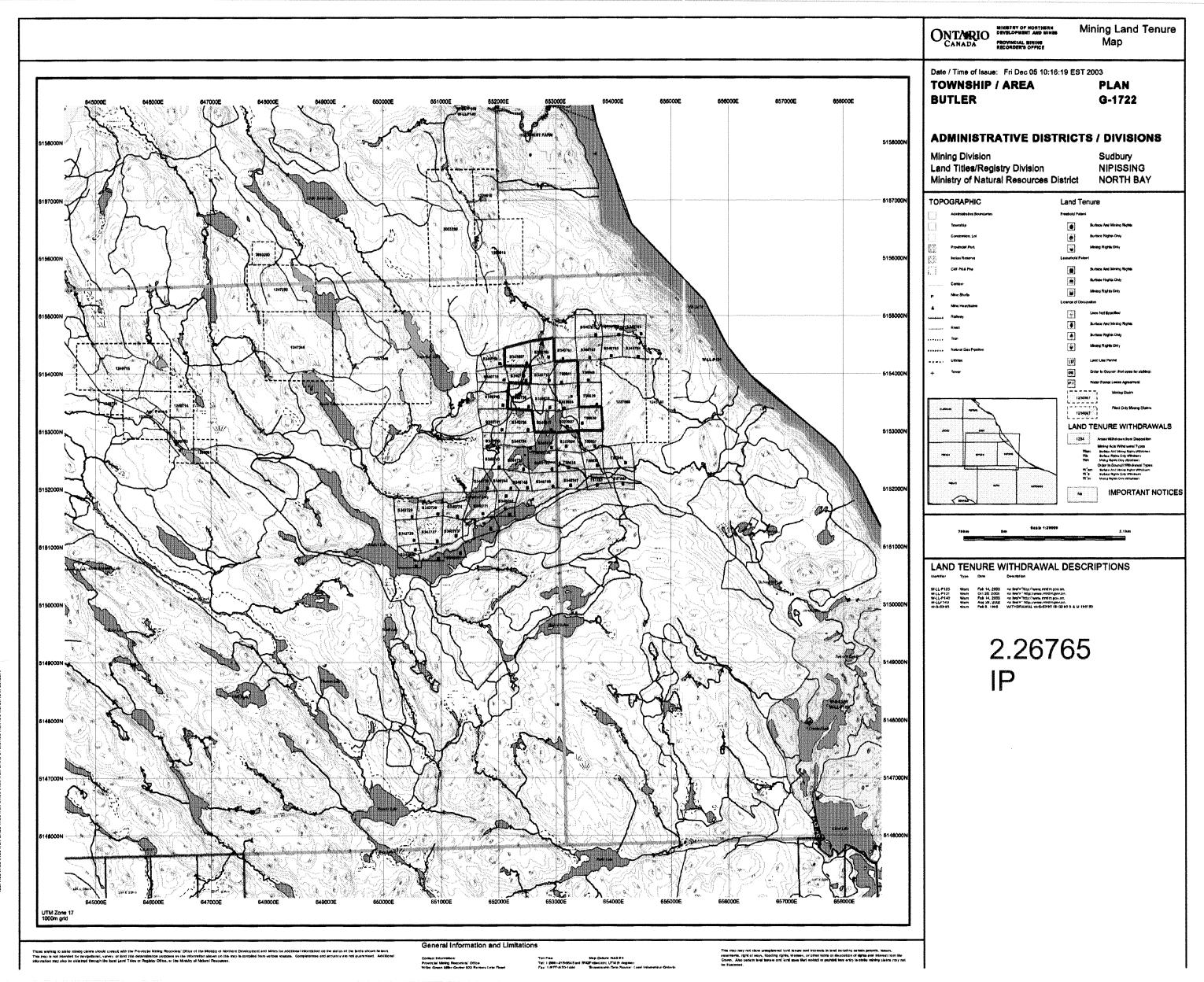
(Agent)

Assessment File Library

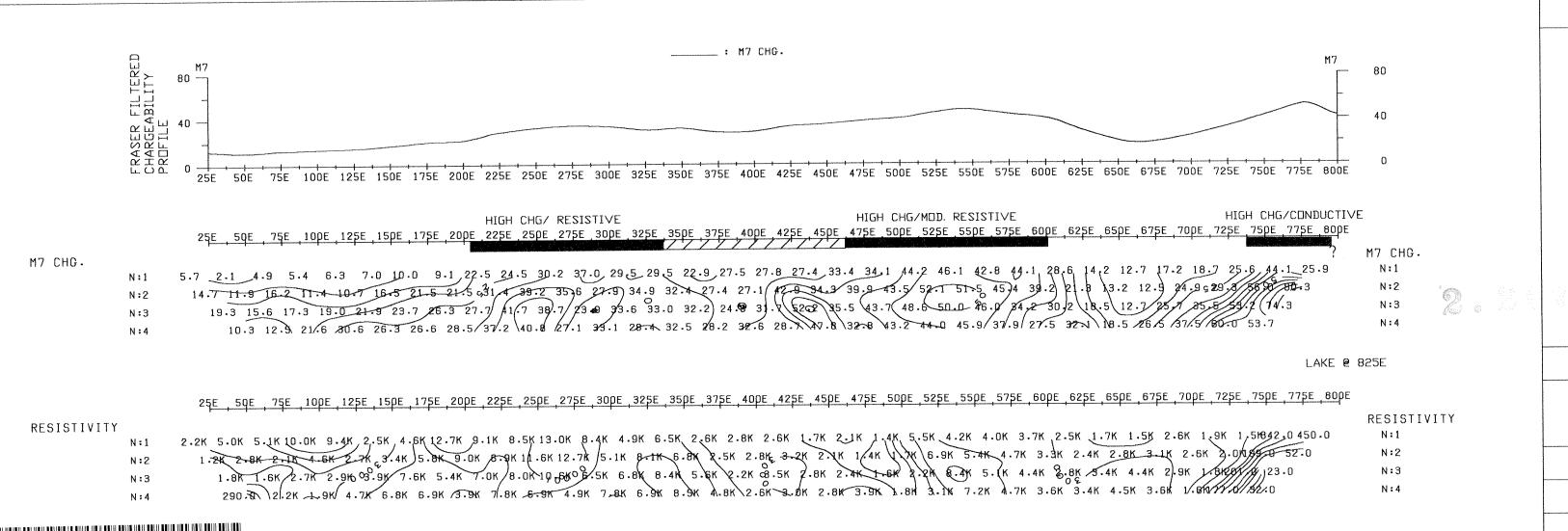
Kyanite Mining Corporation

(Claim Holder)

Kyanite Mining Corporation (Assessment Office)







LINE : 1 N INDUCED POLARIZATION SURVEY DIPOLE-DIPOLE ARRAY $N = 1, 2, 3, 4, \dots$ "A" SPACING = 25.0 METRES INSTRUMENTS RECEIVER: SCINTREX IPR-12 TRANSMITTER: SCINTREX IPC9, 200W KYANITE MINING CORP. ANTOINE TOWNSHIP

SUDBURY MINING DIVISION

DATE: 0CT./2003

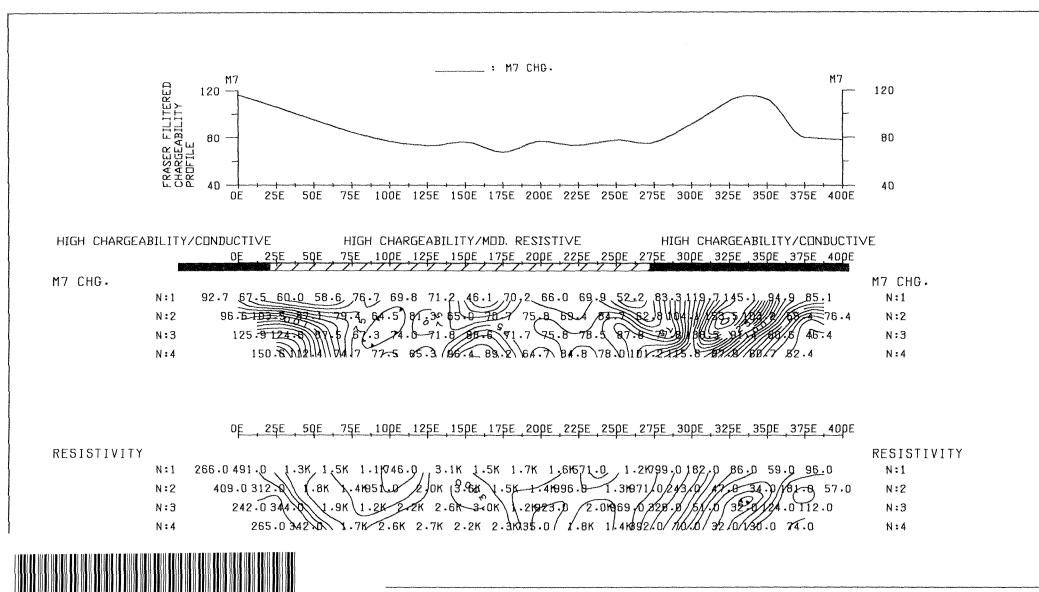
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2500 SCALE = 1:

R.J. MEIKLE & ASSOCIATES

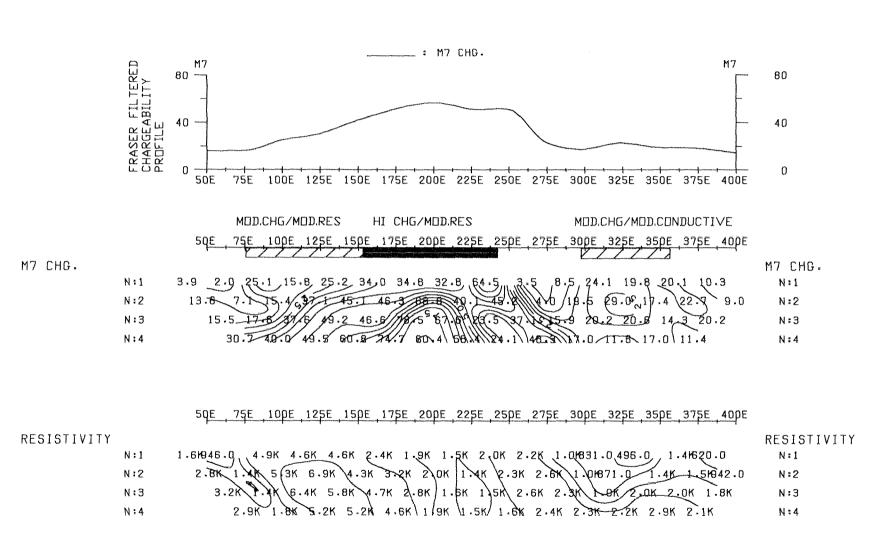


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LINE: 2 N INDUCED POLARIZATION SURVEY DIPOLE-DIPOLE ARRAY $N = 1, 2, 3, 4, \dots$ "A" SPACING = 25.0 METRES INSTRUMENTS RECEIVER: SCINTREX IPR-12 TRANSMITTER: SCINTREX IPC-9, 200W KYANITE MINING CORP. ANTOINE TOWNSHIP SUDBURY MINING DIVISION DATE : OCT./2003 REF : L2 SCALE = 1: 2500

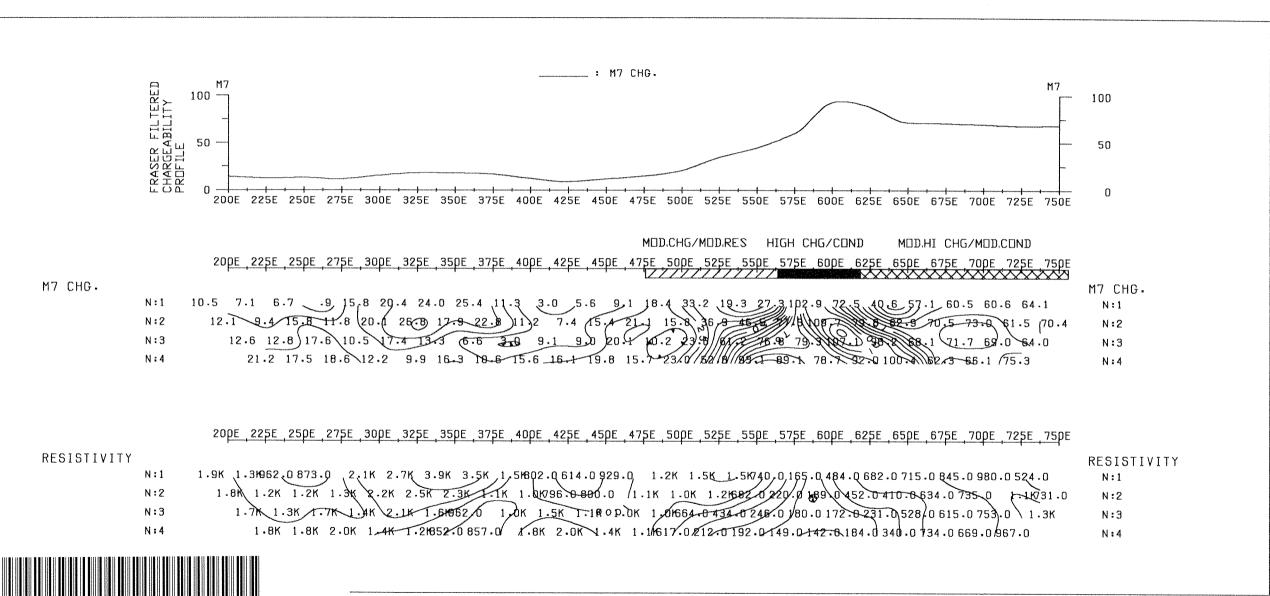
R.J. MEIKLE & ASSOCIATES



IINF: 3 INDUCED POLARIZATION SURVEY DIPOLE-DIPOLE ARRAY N = 1, 2, 3, 4, ..."A" SPACING = 25.0 METRE **INSTRUMENTS** RECEIVER: SCINTREX IPR-12 TRANSMITTER: SCINTREX IPC9, 200W KYANITE MINING CORP. ANTOINE TOWNSHIP SUDBURY MINING DIVISION DATE : OCT - /2003 REF : L3 SCALE = 1:2500

R.J. MEIKLE & ASSOCIATES





INDUCED POLARIZATION SURVEY DIPOLE-DIPOLE ARRAY $N = 1, 2, 3, 4, \dots$ SPACING = 25.0 METRES INSTRUMENTS RECEIVER: SCINTREX IPR-12 TRANSMITTER: SCINTREX IPC-9, 200W KYANITE MINING CORP. ANTOINE TOWNSHIP SUDBURY MINING DIVISION DATE : OCT./2003 REF : L4 SCALF = 1:2500 R.J. MEIKLE & ASSOCIATES

4 N

LINE :

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