42A12SW2001 2.18855 FORTUNE 010

RECEIVED
SEP 24 1998
GEOSCIENCE ASSESSMENT OFFICE

OPAP FINAL REPORT

FOR

INDUCED POLARIZATION SURVEY WORK

ON THE

FORTUNE TOWNSHIP GOLD PROSPECT
FORTUNE TOWNSHIP
PORCUPINE MINING DIVISION
CLAIM MAP REFERENCE SHEET G3943
LONGITUDE 82 DEGREES 05 SECONDS WEST
LATITUDE 48 DEGREES 35 SECONDS NORTH

SUBMITTED ON BEHALF

OF

DAVID V. JONES
(PROSPECTORS LIC.# M21190)
(OPAP FILE NO. OP97306)

AND

J.KEVIN FILO
(PROSPECTORS LIC.# M25052)
(OPAP FILE NO. OP97305)

JAN.2/98

BY: J. K. FILO

42A12SW2001 2.18855 FORTUNE 010C

TABLE OF CONTENTS

INTRODUCTION.....1

PROPERTY, LOCATION AND ACCESS.....1

EXPLORATION METHOD.....1

PROPERTY HISTORY.....2

GENERAL GEOLOGY AND PROPERTY GEOLOGY.....3

DISCUSSION OF THE 1997 WORK PROGRAM AND RESULTS.....3

CONCLUSIONS AND RECOMMENDATIONS.....4

BIBLIOGRAPHY

CERTIFICATE

FIGURES

FIGURE 1: GENERAL LOCATION MAP
FIGURE 2: TOWNSHIP REFERENCE MAP
FIGURE 3: CLAIM MAP
FIGURE 4: ONT. DEPT. OF MINES MAP 2205
FIGURE 5: ONT. DEPT. OF MINES MAP LEGEND
FIGURE 6: ADAPTED MAGNETICS FROM KIDD CREEK ASSESSMENT
FIGURE 7: ADAPTED VLF EM MAP FROM KIDD CREEK ASSESSMENT
FIGURE 8: I.P.PSEUDOSECTION FOR LINE 1 WEST
FIGURE 9: I.P.PSEUDOSECTION FOR LINE 2 WEST

APPENDICES

APPENDIX 1: GEOPHYSICAL REVIEW BY R. MEIKLE
APPENDIX 2: INSTRUMENTATION SPECIFICATIONS
APPENDIX 3: HISTORICAL DATA FROM PRIVATE FILES

Ontario

GEOLOGY AND PRINCIPAL MINERALS OF ONTARIO

HUDSON BAY

JAMES BAY

MANITOBA

U.S.A.

QUEBEC

L. SUPERIOR

L. MICHIGAN

L. HURON

L. ONTARIO

L. ERIE

Moosonee

FORTUNE PROSPECT

Kenora

Timmins

Cobalt

Sault Ste. Marie

Ottawa

Toronto

London

Windsor

90°

85°

80°

75°

55°

50°

45°

95°

Major Mineral Deposits
Past and Present

- Gold
- Silver
- Iron
- Copper-Nickel
- Zinc-Copper
- Platinum-Palladium
- Uranium
- Industrial Minerals

Scale 1 : 8 000 000

50 0 50 100 150 200 Kilometres

50 0 50 100 150 Miles

LEGEND[a]

PHANEROZOIC
MESOZOIC
CRETACEOUS
- Sedimentary rocks

PALEOZOIC
DEVONIAN
- Sedimentary rocks

SILURIAN
- Sedimentary rocks

ORDOVICIAN
- Sedimentary rocks

CAMBRIAN
- Sedimentary rocks

PRECAMBRIAN

GRENVILLE PROVINCE

PROTEROZOIC
NEO- TO MESOPROTEROZOIC
- Migmatitic rocks and gneisses
- Mafic to ultramafic plutonic rocks
- Felsic plutonic rocks, derived gneisses and migmatites
- Metavolcanic and metasedimentary rocks

SUPERIOR AND SOUTHERN PROVINCES

NEO-TO MESOPROTEROZOIC
- Felsic intrusive rocks
- Mafic intrusive rocks
- Volcanic and sedimentary rocks

PALEOPROTEROZOIC
- Mafic intrusive rocks
- Metasedimentary and metavolcanic rocks

SUPERIOR PROVINCE

ARCHEAN
NEO- TO MESOARCHEAN
- Massive to foliated granodiorite to granite
- Foliated to gneissic tonalite to granodiorite
- Metasedimentary rocks and derived gneisses
- Metavolcanic and metasedimentary rocks

MESOARCHEAN
- Metavolcanic and metasedimentary rocks

[a] Phanerozoic units are lithostratigraphic, whereas Precambrian units are lithologic.

Fig. 1 General Location Map

© 1995 Queen's Printer for Ontario
Printed in Ontario, Canada

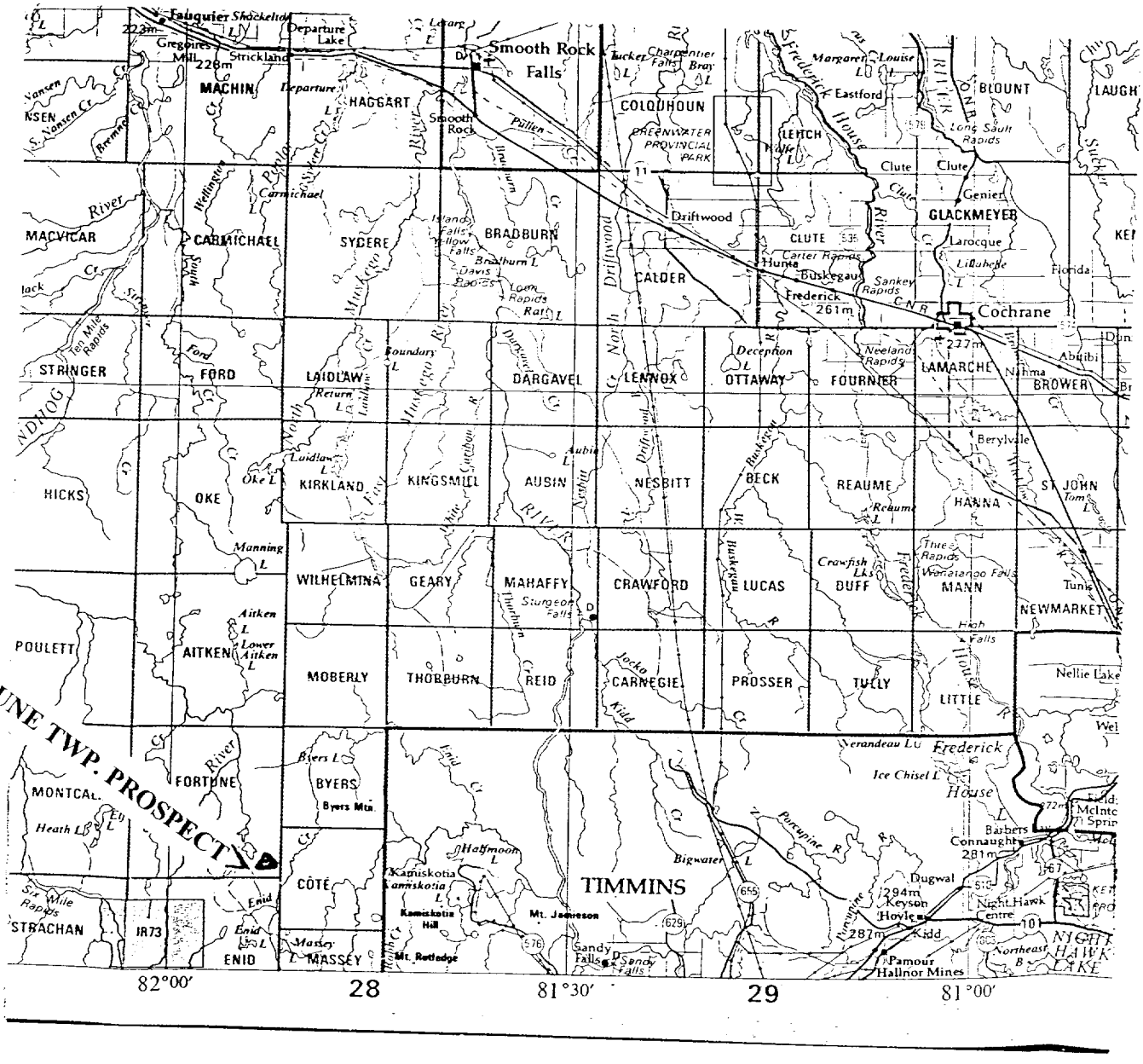


FIG. 2: Fortune Twp. Location Map at a scale of 1:600000

INTRODUCTION

The purpose of this report is to document the exploration work carried out by Messrs. Filo and Jones on their Fortune Twp. Gold Prospect during the 1997 field season. This report will be written in a format such that it will conform to the regulations necessary to satisfy all assessment and OPAP requirements.

Exploration work on the Fortune Twp. property consisted of induced polarization surveying to further evaluate a series of strong fraser filtered VLF anomalies previously outlined by Kidd Creek Mines. (figs.6 & 7)

The results of the recent exploration work are presented in the following portions of this report.

PROPERTY, LOCATION, AND ACCESS

The current property where all of the exploration was carried out consists of four single unit claims numbered 1201746,1201750,1228137, and 1228138 located in the SE corner of Fortune Twp.(fig.3). The location of this property is more accurately defined as 82 degrees 05 seconds west longitude and 48 degrees 35 seconds north latitude. The exact location of the property may be referenced by referring to fig.2.

Access to the property is obtained from Timmins by heading west along Highway 101 W. to the Mallette sawmill. At the saw mill one heads NW along the main Mallete haul road to the first major "Y" in the road and then north a short distance along a series of secondary all weather haul roads. The actual distance to the property from the City of Timmins itself is 83.5km.

EXPLORATION METHOD

During 1995 Messrs. Filo and Jones carried out mechanized stripping, sampling and drilling on the known gold occurrence on the subject property.

This work demonstrated that gold mineralization on the subject property was associated with pyrite, and quartz veining within strongly sheared mafic volcanics. Previous geophysics by Kidd Creek Mines showed numerous strong fraser-filtered VLF anomalies on the current subject property and other areas surrounding the current claim block. Some of these anomalies were interpreted to be strong shear zones. The priority anomalies are shown as A to C inclusive.(fig.6&7) The actual known gold occurrence on the property does not appear to have a VLF response despite the fact it is associated with a strong shear zone.

It was postulated by Filo and Jones that the Kidd VLF anomalies might represent better mineralized, and stronger

structures. Further, these targets could have gold mineralization similar to that found on the main occurrence. To confirm the presence of such a target induced polarization was carried out over a number of key VLF targets in the vicinity of the known gold mineralization. From known surface mineralization it was anticipated that an induced polarization target of interest would have a strong chargeability anomaly and perhaps a moderate to weak resistivity response. A good chargeability response would suggest possible sulphides and a moderate resistivity response would suggest a shear and possibly some quartz veining.

With this criteria in mind approximately 1.8 km. of I.P. surveying was initiated over key targets in the immediate vicinity of the known gold mineralization.

PROPERTY HISTORY

In the past, the current subject claims comprised portions of larger claim blocks that were worked by both companies and individual prospectors. The details on the work carried out are documented below with the accompanying assessment file reference:

Kidd Creek (T2548): In 1982, Kidd Creek worked this property to evaluate its gold potential. They carried out mag, and VLF-EM over the property, and mentioned the presence of two gold occurrences. A number of anomalies were detected, and an induced polarization survey was recommended to follow up the gold targets. Ironically, they fail to mention the exact location of the targets. However, a piece of confidential information in the personal files of K. Filo (Appendix 3) shows that this ground was prospected by I. Dea for Texasgulf at that time, and significant gold values are indeed present from this information.

B. Davis (T3012): In 1984 B. Davis carried out some stripping and trenching on the two claims controlled currently by Messrs. Filo and Jones, but no values were reported from this work.

Ivan Dea (T-3071): In 1986 Mr. I. Dea the same prospector who worked the claims for Kidd Creek carried out work on the claims held by Messrs. Filo and Jones at present. Work consisted of trenching and stripping. Once again no values from any sampling was reported.

Filo and Jones (OPAP REPORT 1995): In 1995 Messrs. Filo and Jones carried out mechanized stripping, sampling and diamond drilling on the main gold occurrence on the property. This work confirmed the presence of previously documented mineralization and provided information on the geological environment in this area.

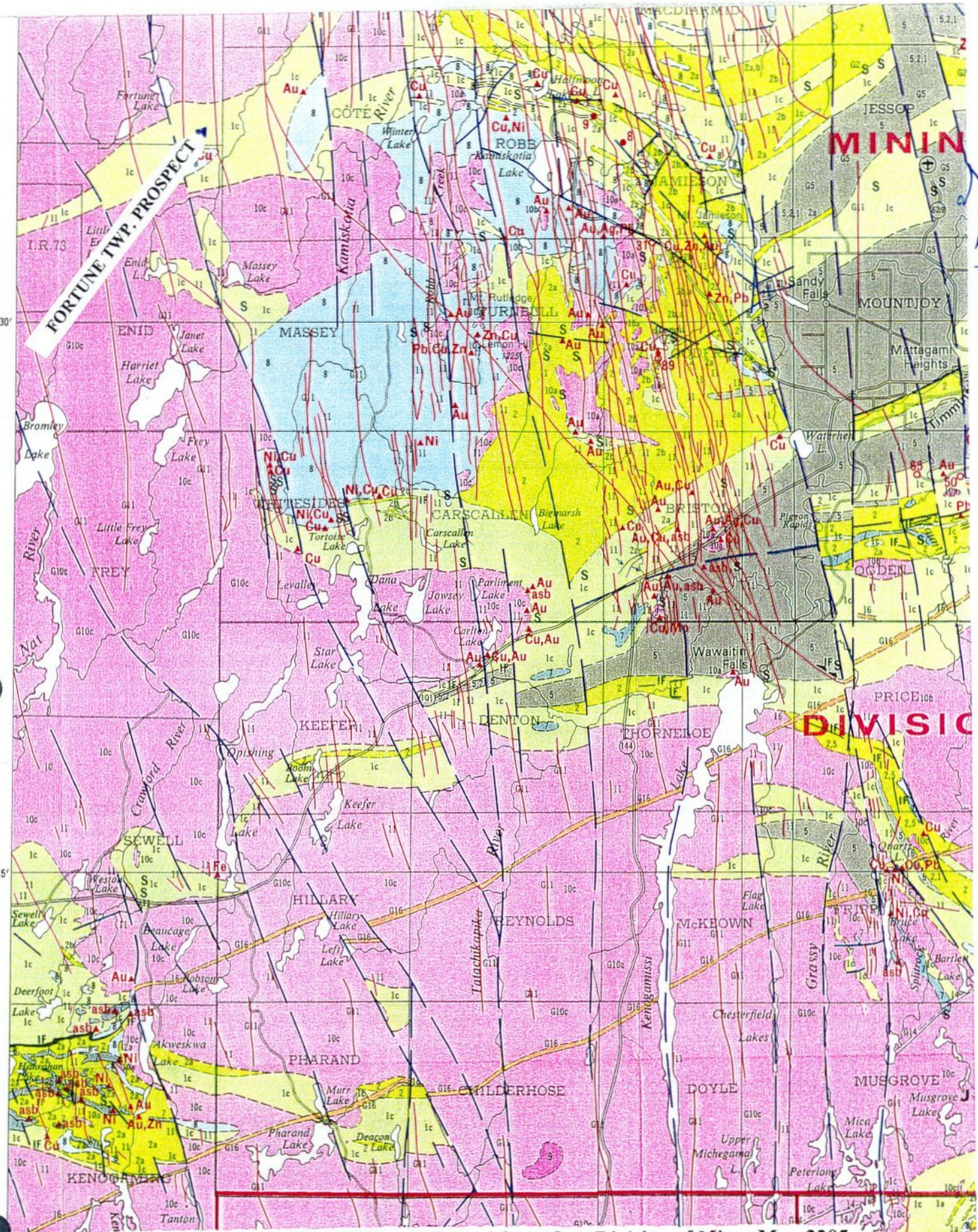


FIG. 4: Geological reference map adapted from Ont. Division of Mines Map 2205 at a scale of 1 in. to 4miles.

N.T.S. reference 33M, 33L, 43P, 43A

LEGEND

CENOZOIC

PLEISTOCENE AND RECENT

Till, varved clay, sand, gravel, peat.

UNCONFORMITY

MESOZOIC

19 Kimberlite: dikes.

INTRUSIVE CONTACT

PALEOZOIC

LOWER AND MIDDLE SILURIAN

18 Thornide Formation: limestone, dolomite, sandstone.
Wabi Formation: limestone, shale.

MIDDLE AND UPPER ORDOVICIAN

17 Dawson Point Formation: shale.
Farr Formation: limestone.
Bache Formation: limestone, shale.
Guigues Formation: sandstone.

UNCONFORMITY

PRECAMBRIAN

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

16 Diabase: dikes.

INTRUSIVE CONTACT

MIDDLE PRECAMBRIAN

ALKALIC INTRUSIVE ROCKS

15 Syenite, nepheline syenite.

MAFIC INTRUSIVE ROCKS[a]

14 Diabase, granophyre: sheets and dikes.

INTRUSIVE CONTACT

HURONIAN SUPERGROUP

COBALT GROUP

Lorrain Formation

13 Quartzite, arkose.

Gowganda Formation

12 Unsubdivided.
12a Firstbrook Member: argillite, greywacke, siltstone, arkose.
12b Coleman Member: conglomerate, arkose, greywacke, quartzite, argillite.

UNCONFORMITY

EARLY PRECAMBRIAN

MAFIC INTRUSIVE ROCKS[b]

11 Diabase: dikes.

INTRUSIVE CONTACT

FELSIC INTRUSIVE ROCKS[c]

10a Quartz porphyry, quartz-feldspar porphyry, feldspar porphyry, granophyre, felsite
10b Trondhjemite, granodiorite, quartz monzonite: simple batholiths and stocks[d]
10c Trondhjemite, granodiorite, quartz monzonite, quartz diorite, aplite, pegmatite, migmatite: complex batholiths.

9 Syenite, monzonite, feldspar porphyry[d]

METAMORPHOSED MAFIC AND ULTRAMAFIC ROCKS[e]

8 Gabbro, diorite, lamprophyre.

7 Peridotite, dunite, pyroxenite, serpentinite[f]

INTRUSIVE CONTACT

METASEDIMENTS[g]

6 Conglomerate, greywacke, siltstone, slate, argillite[h]

5 Greywacke, siltstone, slate, argillite and minor pebble conglomerate[i]

METAVOLCANICS[g]

ALKALIC METAVOLCANICS[h]

4 Trachyte, leucitic trachyte: flows, tuff, breccia.

ULTRAMAFIC METAVOLCANICS[a]

3 Serpentinized dunitic and peridotitic flows.

FELSIC METAVOLCANICS[j]

2 Unsubdivided.
2a Pyroclastic rocks.
2b Flows.

INTERMEDIATE AND MAFIC METAVOLCANICS[j]

1 Unsubdivided.
1a Intermediate flows.
1b Intermediate pyroclastic rocks.
1c Mafic flows and pyroclastic rocks.

IF Iron formation and ferruginous chert (occurs as a member of stratigraphic units 1, 2, 4, and 5).

S Sulphide mineralization.

---

[a] Formerly classified as Nipissing in part.

[b] North-trending dikes are part of Matachewan swarm.

[c] Formerly classified as Algoman.

[d] Several ages; some units appear to be intrusive equivalents of volcanic formations whereas others postdate volcanism.

FIG. 5: Legend to Accompany Fig. 4; also from Map 2205.

GENERAL GEOLOGY AND PROPERTY GEOLOGY

There is very little geological information available about Fortune Twp. In fig.4, the Ontario Dept. of Mines shows Fortune Twp. to be on the western edge of the Abitibi Greenstone Belt, and granitic rocks cover most of the township. A small sliver of westerly trending mafic volcanic rocks is present in the SE corner of the Twp., where the current subject block is located.

A property examination, and the 1995 work program confirmed the presence of pillowed and/or massive, strongly sheared, feldspar porphyritic mafic volcanics in the immediate showing area. Some gold bearing quartz veins are associated with NW trending shears within the volcanics. The shears associated with the gold bearing quartz veins were seen to have a halo of fine disseminated pyrite. This fine pyrite is in the volcanic wall rock, coarse cubic pyrite is present in the vein itself. In the immediate showing area there is also a large mafic dyke suspected to be a lamprophyre, with a trend of approximately 020 degrees Az. Drilling intersected geology similar to that mapped on surface.

DISCUSSION OF THE 1995 WORK PROGRAM AND RESULTS

As stated previously, the intent of this program was to re-evaluate known previously outlined VLF anomalies(A to C)in fig.7, proximal to known gold mineralization. It was postulated that certain VLF targets may have represented mineralized pyritic shears that could be associated with quartz and gold. This environment is typical of the known gold occurrence on the property.

Thus, an induced polarization survey was initated to verify potential structures and or associated mineralization similar to that found on known surface occurrences. A gold zone similar to the environment just described above would likely produce an I.P. response consisting of chargeability anomaly, and possibly a moderate to low resistivity anomaly.

The data from the recent survey shows there were a few resistivity lows associated with the VLF anomalies, these may represent structures, however no chargeability anomalies were detected. Thus, it appears unlikely that sulphides are associated with the shears. Gold mineralization on this property appears to be directly associated with sulphides as well as structure. Thus, because of the lack of a chargeability anomaly drilling was not carried out.

A more detailed account of the geophysical results can be reviewed in the accompanying appendix 1 and accompanying figures 8 and 9.

CONCLUSIONS AND RECOMMENDATIONS

The induced polarization survey confirmed the presence of some structures outlined by previous VLF surveys. However, no significant chargeability anomaly was detected during the survey. Surface data to date shows there is a strong relationship between gold mineralization on this property and sulphide mineralization (pyrite) on this property. Sulphide mineralization would have produced a chargeability anomaly; this type of anomaly was not indicated by the survey. Thus, a decision was made that drilling was not warranted over the portion of the property covered by the I.P. survey to date.

Numerous other anomalies exist outside the current property boundary, and these have not been evaluated. Some further prospecting and possibly some soil sampling should be considered for other known VLF anomalies just outside the current property boundary.

Respectfully Submitted,

J. K. Filo HBSc. Geo.(1980)

BIBLIOGRAPHY

Assessment Files: Various assessment files in the Timmins Resident Geologists Office and OPAP reports by the author as referenced in the Area and Property History section of this report.

Ont. Div. Of Mines
1972:Timmims-Kirkland Lake Geological Compilation Series, Map 2205. Scale 1in. to 4 miles.

CERTIFICATE

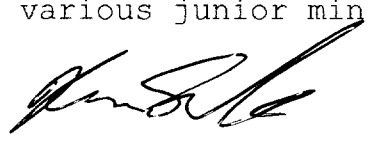
I, J.K. Filo of 535 Bartleman of the City of Timmins, Ontario do hereby certify:

1) I have written this final OPAP report on behalf of Mr. David V. Jones and myself with the assistance of Mr. D. Jones and Mr. Ray Meikle.

2) I have been directly involved with the field work pertaining to this project, and I have reviewed all of the recent data and pertinent historical data and government reports prior to writing this report.

3) I am a professional geologist with the Assoc. of Professional Engineers and Geoscientists of B.C., and I hold an Honours BSc. (1980) from Laurentian University in Sudbury.

4) I further certify that I have been practising my profession continuously since graduation, a period of seventeen years. During this time I was employed as both a mine geologist and exploration geologist in Canada, Mexico, and SE Asia. I have worked for various mining and exploration companies including Texasgulf Exploration, Urangessellschaft Canada Ltd., Amax Exploration, Cominco (Pine Point Mines), Giant Yellowknife Mines, Freeport McMoran Copper and Gold, and various junior mining companies.



Kevin Filo

APPENDIX 1

GEOPHYSICAL REVIEW

of an

INDUCED POLARIZATION SURVEY

FORTUNE TOWNSHIP GOLD PROSPECT

FORTUNE TOWNSHIP, PORCUPINE MINING DIVISION, ONTARIO

for

DAVID V.JONES & J.KEVIN FILO

Submitted by: R.J. Meikle
Geophysical Engineering & Surveys Inc.
Jan.2/98

INTRODUCTION

The following is a report on an I.P. Survey carried out on the "Fortune Township Prospect", Fortune Township, Porcupine Mining Division, Ontario. The I.P. Survey was done by Geophysical Engineering & Surveys Inc., Timmins, Ontario, for David V.JONES and J.KEVIN FILO.

This report deals with the parameters used for the I.P. Survey and an interpretation of the results. It is intended to be included as an appendix to a comprehensive report on the property by J.Kevin Filo.

The I.P. Survey was carried out to test and evaluate several VLF conductors previously outlined by Kidd Creek Mines. (figs. 6,7). Lines 200w and 100w were surveyed from 900n to 1750n.

PERSONNEL

The following personnel were directly involved in the I.P. Survey:

R.J. Meikle	Timmins, Ontario
D. Brazeau	Timmins, Ontario
A. Chaumount	Timmins, Ontario
K. Giroux	Timmins, Ontario
P. Machmer	Timmins, Ontario

I.P. SURVEY PARAMETERS

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 blocking the current delay giving a higher chargeability reading.

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

Electrode Array

The electrode array used for the survey was the Pole-Dipole Array. In this array, one current electrode (C1) and two receiver or potential electrodes (P1,P2), are moved down a line in unison. A second current electrode (C2), is placed normal to the expected strike direction an infinite distance away, at least one km. The two current electrodes are hooked up to a motor-generator and a current applied across them, usually less than 3 amperes. The applied voltage is pulsed in a 2 second on, 2 second off pattern controlled by the transmitter.

Thus we have a single pole current electrode following a pair or dipole of potential electrodes moving down the line. The advantage of this "Pole-Dipole" array over the "Dipole-Dipole" array is a deeper current pattern between the infinite and moving current electrode, resulting in better penetration of conductive overburden. Also, this array is considerably faster in areas of high electrode contact impedance due to frozen and or rocky ground conditions because only one current electrode placement is needed for each reading. A disadvantage of the "Pole-Dipole" array is a slightly more ambiguous interpretation due to the assymetry of the array.

The distance between the potential electrodes is fixed, usually 25 or 50 meters and this is called the "a" spacing. When the potential dipole is positioned with one "a" spacing between the C1 and the nearest P1, it is called a "N=1" reading with a theoretical plot point at the intersection of a 45 degree line drawn down in a section format from the C1 and nearest P1. When this N=1 reading is finished, the C1 remains stationary and the P1P2 dipole moves ahead one "a" spacing and a N=2 reading is obtained. Using the above plot convention it can be seen that the plot point is now further from the C1 and deeper. This is repeated for as many "N" readings as desired.

IP Survey Parameters

The IP survey was carried out using the following parameters:

Method: Time Domain
Electrode Array: Pole-Dipole
"a" spacing: 25 meters
Number of Dipoles Read: 1-4 inclusive
Pulse Duration: 2 seconds on, 2 seconds off
Delay Time: 310 milliseconds
Integration Time: 140 milliseconds
Receiver: Scintrex IPR-12
Transmitter: Scintrex TSQ-3 3KVA.
Data Presentation: Individual Psuedosections
Plate 1 of 1 Scale: 1:2500

SURVEY RESULTS

The I.P. Survey outlined a broad, moderately chargeable, resistive anomaly centred at 1225n on both Lines 200w and 100w. The Kidd Creek VLF survey shows a conductor on L200w at 1200N but the I.P. results indicate a resistivity high. The resistivity background is significantly lower south of the above anomaly and the VLF conductor could be a result of current channelling along this point which could be a geological contact.

A chargeable, resistive anomaly is partially outlined on the extreme north end of L200w but the line would have to be extended to resolve the anomaly.

CONCLUSIONS AND RECOMMENDATIONS

The I.P. Survey outlined two chargeable, resistive, anomalies described above. These anomalies may be indicative of disseminated sulphides within a silicified or alteration zone. It is possible that the shear zones described by Mr. Filo may be consistent with this type of setting. Further compilation and ground prospecting should be done to determine this.

The previous Kidd Creek VLF Survey results do not correlate well with the I.P. Survey. The strong Fraser Filtered VLF conductors shown on Fig. 7, do not always appear to be coincident with a resistivity low on the I.P. section. The new grid lines may not be tied in accurately to the old lines and or there may be a problem with the VLF data.

CERTIFICATION

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

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

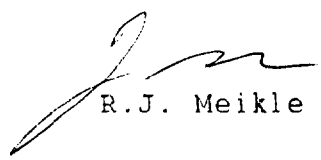
2. I have been practising my profession since 1973 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, Germany and Chile.

3. I have been employed directly with Teck Corporation, Metallgessellschaft Canada Ltd. Sabina Industries, R.S. Middleton Exploration Services Ltd., self employed 1979-1997 (Rayan Exploration Ltd.) and currently with Geophysical Engineering & Surveys Inc.

4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the field work conducted on the property during 1998.

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 2nd day of Jan., 1998
at Timmins, Ontario.



R.J. Meikle

APPENDIX 2

I.P. SURVEY INSTRUMENT SPECIFICATIONS

SCINTREX IPR-12 RECEIVER

SCINTREX TSQ-3, 3KVA TRANSMITTER

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

SCINTREX

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.
U.S.A. 14207
Tel.: (716) 298-1219
Fax: (716) 298-1317

IPR-12/94

SCINTREX TSQ-3 3000 W

Time and Frequency Domain IP and Resistivity Transmitter

Function

The TSQ-3 is a multi-frequency, square wave transmitter suitable for induced polarization and resistivity measurements in either the time or frequency domain. The unit is powered by a separate motor-generator.

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. The medium range power rating is sufficient for use under most geophysical conditions.

The TSQ-3 has been designed primarily for use with the Scintrex Time Domain and Frequency Domain Receivers, for combined induced polarization and resistivity measurements, although it is compatible with most standard time domain and frequency domain receivers. It is also compatible with the Scintrex Commutated DC Resistivity Receivers for resistivity surveying. The TSQ-3 may also be used as a very low frequency electromagnetic transmitter.

Basically the transmitter functions as follows. The motor turns the generator (alternator) which produces 800 Hz, three phase, 230 V AC. This energy is transformed upwards according to a front panel voltage setting by a large transformer housed in the TSQ-3. The resulting AC is then rectified in a rectifier bridge. Commutator switches then control the DC voltage output according to the waveform and frequency selected. Excellent output current stability is ensured by a unique, highly efficient technique based on control of the phase angle of the three phase input power.

Features

Current outputs up to 10 amperes, voltage outputs up to 1500 volts, maximum power 3000 VA.

Solid state design for both power switching and electronic timing control circuits.

Circuit boards are removable for easy servicing.

Switch selectable wave forms: square wave continuous for frequency domain and square wave interrupted with automatic polarity change for time domain.

Switch selectable frequencies and pulse times.

Overload, underload and thermal protection for maximum safety.

Digital readout of output current.

Programmer is crystal controlled for very high stability.

Low loss, solid state output current regulation over broad range of load and input voltage variations.

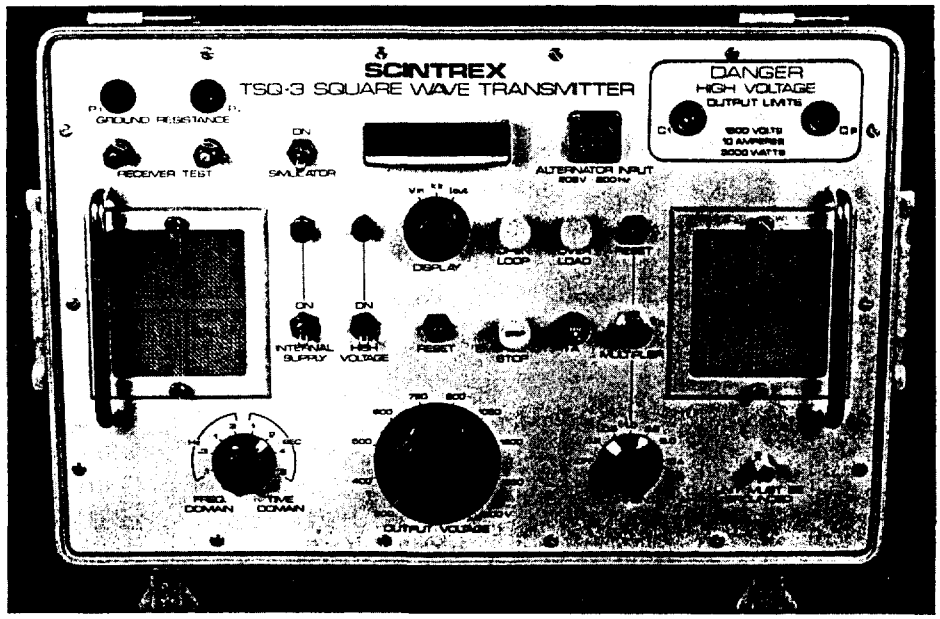
Rectifier circuit is protected against transients.

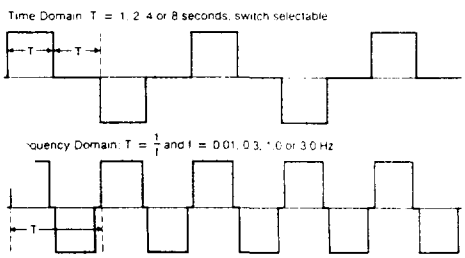
Excellent power/weight ratio and efficiency.

Designed for field portability; motor-generator is installed on a convenient frame and is easily man-portable. The transmitter is housed in an aluminum case.

The motor-generator consists of a reliable Briggs and Stratton four stroke engine coupled to a brushless permanent magnet alternator.

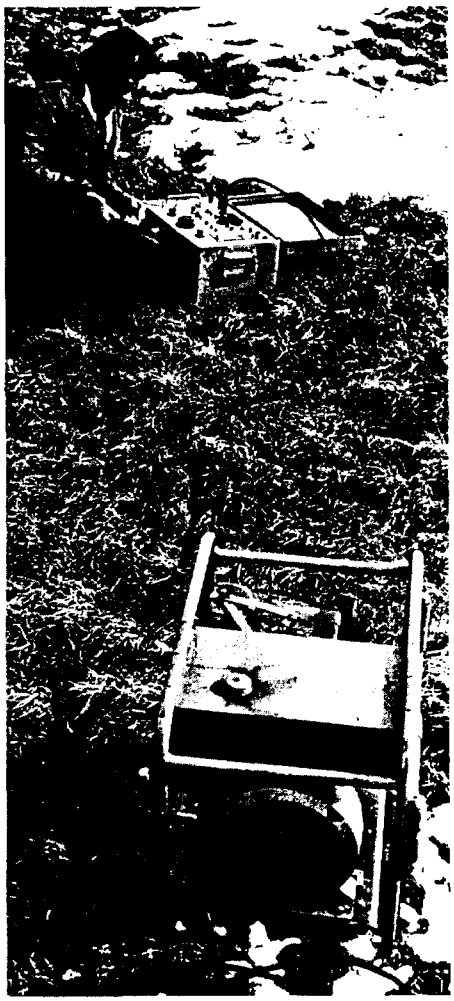
New motor-generator design eliminates need for time domain dummy load.





Waveforms output by the TSQ-3

Technical Description of TSQ-3/3000W Time and Frequency Domain IP and Resistivity Transmitter



TSQ-3 transmitter with portable motor generator unit

Transmitter Console	
Output Power	3000 VA maximum
Output Voltages	300, 400, 500, 600, 750, 900, 1050, 1200, 1350 and 1500 volts, switch selectable
Output Current	10 amperes maximum
Output Current Stability	Automatically controlled to within ±0.1% for up to 20% external load variation or up to ±10% input voltage variation
Digital Display	Light emitting diodes permit display up to 1999 with variable decimal point; switch selectable to read input voltage, output current, external circuit resistance. Dual current range, switch selectable
Absolute Accuracy	±3% of full range
Current Reading Resolution	10 mA on coarse range (0-10A) 1 mA on fine range (0-2A)
Frequency Domain Waveform	Square wave, continuous with approximately 6% off time at polarity change
Frequency Domain Frequencies	Standard: 0.1, 0.3, 1.0 and 3.0 Hz, switch selectable Optional: any number of frequencies in range 0 to 5 Hz.
Time Domain Cycle Timing	t:t:t:t;on:off:on:off;automatic
Time Domain Polarity Change	each 2t; automatic
Time Domain Pulse Durations	Standard: t = 1, 2, 4 or 8 seconds Optional: any other timings
Time and Frequency Stability	Crystal controlled to better than .01%
Efficiency	.78
Operating Temperature Range	−30°C to +50°C
Overload Protection	Automatic shut-off at 3300 VA
Underload Protection	Automatic shut-off at current below 75mA
Thermal Protection	Automatic shut-off at internal temperature of +85°C
Dimensions	350 mm x 530 mm x 320 mm
Weight	25.0 kg.
Power Source	
Type	Motor flexibly coupled to alternator and installed on a frame with carrying handles.
Motor	Briggs and Stratton, four stroke, 8 H.P.
Alternator	Permanent magnet type, 800 Hz, three phase 230 V AC
Output Power	3500 VA maximum
Dimensions	520 mm x 715 mm x 560 mm
Weight	72.5 kg
Total System	
Shipping Weight	150 kg includes transmitter console, motor generator, connecting cables and re-usable wooden crates

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 3: HISTORICAL DATA FROM PRIVATE FILES

TIME RECEIVED

Texasgulf Canada Ltd. EXPLORATION

mple date Sept-30-81 ASSAY REPORT Reported FORTUNE-TWP

I-DEA

GRMS

SAMPLE No.		g/Mg Ag	% Cu	% Zn	% Pb	% Sn	% S	% Se			g/Mg Au	S.G.
4A-6353-F		7.0				<.01				0.5oz	14.0	
4A-6354-F		3.0				<.01					4.0	

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

n 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W9860.00787
Assessment Files Research Imaging

42A12SW2001 2.18855 FORTUNE 900

ctions 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this work and correspond with the mining land holder. Questions about this collection t and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

structions: - For work performed on Crown Lands before **recording** a claim, use form 0240.
- Please type or print in ink.

Recorded holder(s) (Attach a list if necessary)

ame	DAVID V. JONES	Client Number	149868
ddress	BOX 1513	Telephone Number	705-235-2474
	SOUTH PORCUPINE ONTARIO	Fax Number	705-235-2213
ame	J. K. FILO	Client Number	131784
ddress	535 BARTLETTAN ST.	Telephone Number	705-268-0371
	TIMMINS P4P 4X2	Fax Number	705-268-5894

Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

K Geotechnical: prospecting, surveys, assays and work under section 18 (regs) ☐ Physical: drilling stripping, trenching and associated assays ☐ Rehabilitation

ork Type	GEOPHYSICAL (I.P.) + LINE CUTTING	Office Use	
		Commodity	
		Total $ Value of Work Claimed	$4270.
ates Work erformed	From 15 07 97 To 11 08 97 ✓ (Day / Month / Year)	NTS Reference	
lobal Positioning System Data (if available)	Township/Area FORTUNE TP	Mining Division	Porcupine
	M or G-Plan Number G-3943	Resident Geologist District	Timmins

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name	J. K. FILO	Telephone Number	
Address	SAME AS ABOVE AND	Fax Number	
Name	R.J. MEIKLE	Telephone Number	705-268-4866
Address	TIMMINS	Fax Number	
Name		Telephone Number	
Address		Fax Number	

4. Certification by Recorded Holder or Agent

I, DAVID V. JONES (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent			Date SEPT 23/98
Agent's Address		Telephone Number	Fax Number

0241 (03/97)

RECEIVED SEP 23 1998 11:25 AM PORCUPINE MINING DIVISION

RECEIVED SEP 24 1998 GEOSCIENCE ASSESSMENT OFFICE

Deemed December 22/98

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mi land where work was performed, at the time work was performed. A map showing the contiguous link must accompany form.

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of wo to be distributed at a future date
eg	TB 7827	16 ha	$26,825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8,892	$ 4,000	0	$4,892
1	1201750	1	1708	270	1438	
2	1228137	1	1281	2000	—	
3	1228138	1	1281	2000	—	
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
	Column Totals	3	4270	4270	1438	

I, DAVID V. JONES (Print Full Name), do hereby certify that the above work credits are eligible unc subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
	SEPT 23/98

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish t prioritize the deletion of credits:

- ☐ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary

For Office Use Only

Received Stamp

SEP 23 1998

11 25 AM

RECEIVED
SEP 24 1998
GEOSCIENCE ASSESSMENT OFFICE

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

and Mines

for Assessment Credit

W7860.00787

rsonal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under ction 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and nes, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
I.P. SURVEY	2 DAYS	$1450/DAY	2900.00
REPORT + MAPS			600.00
LINE CUTTING	2.0 KM	$260/KM	520.00
sociated Costs (e.g. supplies, mobilization and demobilization).			
G.S.T.			250.00
Transportation Costs			
Food and Lodging Costs			
Total Value of Assessment Work			4,270

RECEIVED
SEP 24 1998 9:45
GEOSCIENCE ASSESSMENT OFFICE

culations of Filing Discounts:

Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work. f work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

e:
ork older than 5 years is not eligible for credit.
... holder may be required to verify expenditures claimed in this statement of costs within 45 days of a uest for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the ister may reject all or part of the assessment work submitted.

RECEIVED
SEP 23 1998
PORCUPINE MINING DIVISION

ification verifying costs:

I, DAVID V. JONES (please print full name), do hereby certify, that the amounts shown are as accurate as may sonably be determined and the costs were incurred while conducting assessment work on the lands indicated on accompanying Declaration of Work form as RECORDED HOLDER (recorded holder, agent, or state company position with signing authority). I am authorized make this certification.

Signature [signature] Date SEPT 22/98

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

Telephone: (888) 415-9846
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

November 4, 1998

DAVID V. JONES
909 GOVERNMENT ROAD
BOX 1513
SOUTH PORCUPINE, Ontario
P0N-1H0

Dear Sir or Madam:

Submission Number: 2.18855

Subject: Transaction Number(s):		**Status**
	W9860.00787	Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at gatesb2@epo.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 13045

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.18855

Date Correspondence Sent: November 04, 1998 **Assessor:** Bruce Gates

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00787	1201750	FORTUNE	Deemed Approval	October 27, 1998

Section:
14 Geophysical IP

Correspondence to:

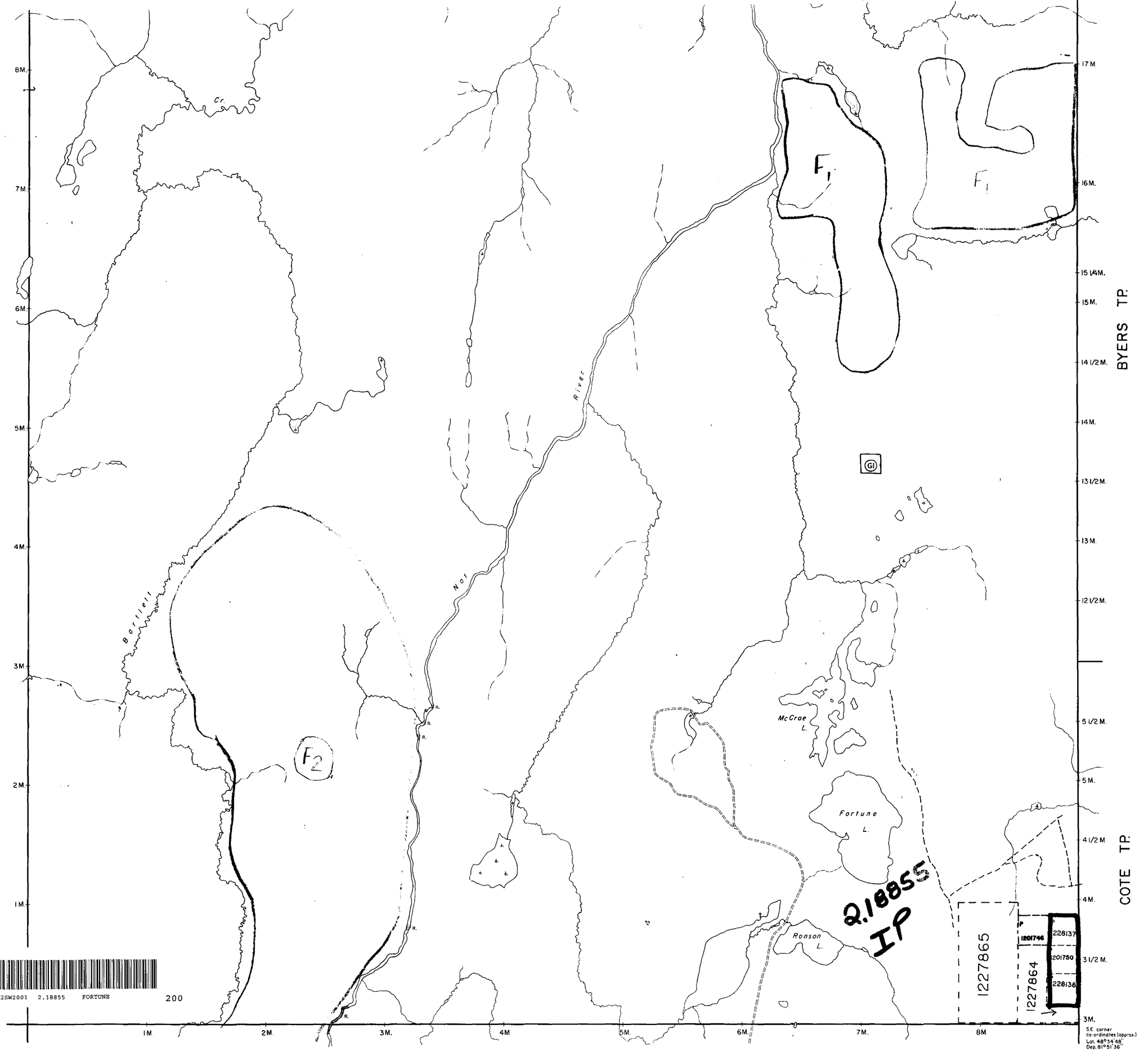
Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

DAVID V. JONES
SOUTH PORCUPINE, Ontario

JOHN KEVIN FILO
TIMMINS, Ontario



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, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

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
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

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	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	⊛
CANCELLED	⊗
SAND & GRAVEL	S

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000
METRE 0 200 400 600 800 1 KM 2 KM

DATE OF ISSUE
NOV 05 1998
PROVINCIAL RECORDING OFFICE - SUDBURY

TOWNSHIP

FORTUNE

M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS

MINING DIVISION
PORCUPINE

LAND TITLES / REGISTRY DIVISION
COCHRANE

Ministry of Natural Resources
Ontario

Ministry of Northern Development and Mines

Date JAN. 1977

Number G-3943

ACTIVATED JULY 30, 1992 BY P.D.

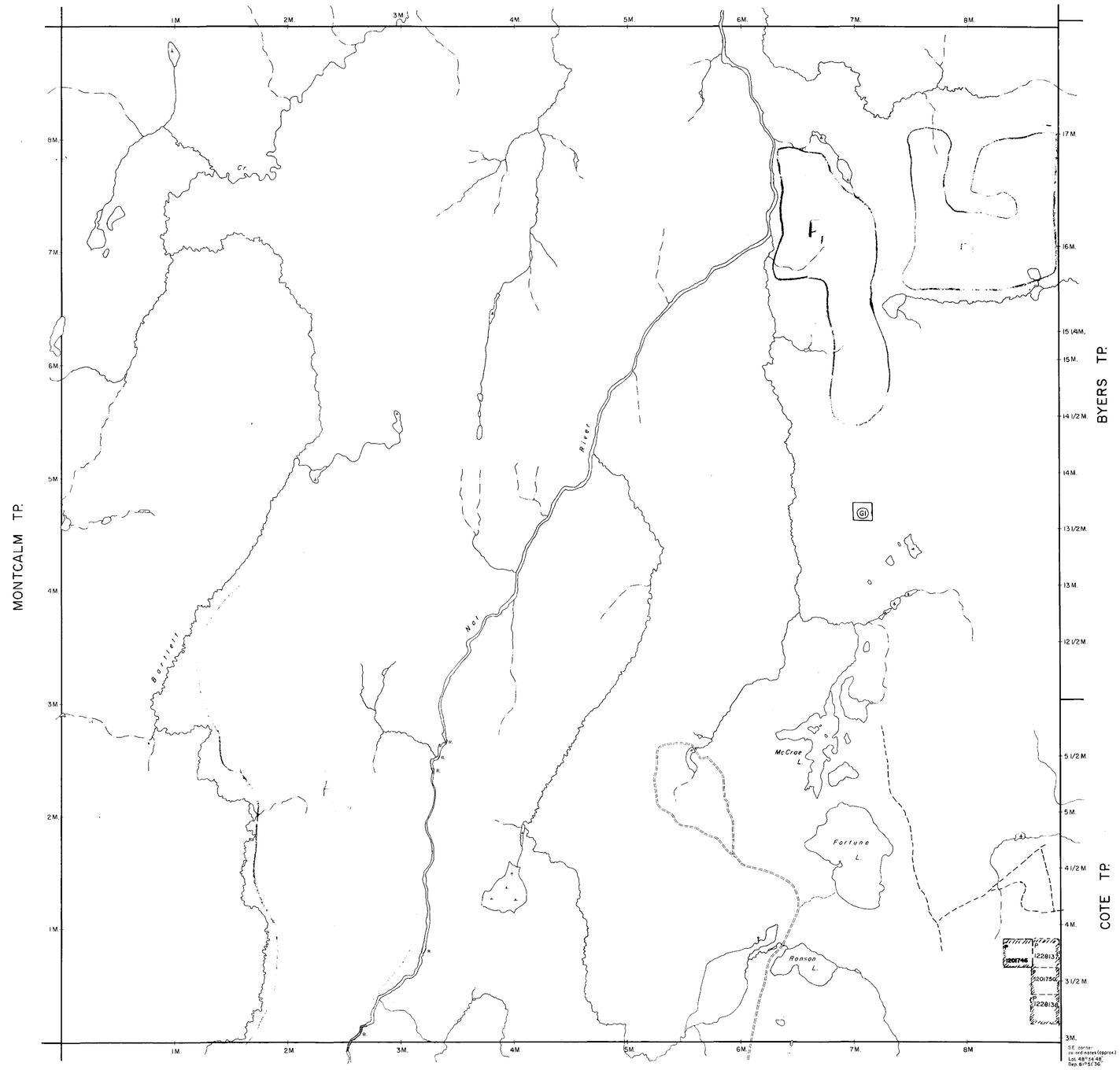
NOTES

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

F... FOREST ACTIVITY IN 1994/95

(GI) AGGREGATE PERMIT

1 THIS TWP. IS SUBJECT TO FOREST ACTIVITY IN 1995/96. FURTHER INFORMATION AVAILABLE ON FILE.



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, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

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
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

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	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	R
CANCELLED	X
SAND & GRAVEL	G

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000

METRES 0 200 400 600 800 1KM 2KM

TOWNSHIP

FORTUNE

M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS

MINING DIVISION
PORCUPINE

LAND TITLES / REGISTRY DIVISION
COCHRANE

DATE OF ISSUE
DEC 22 1997
PROVINCIAL RECORDING OFFICE - SUDBURY

Ontario Ministry of Natural Resources
Ministry of Northern Development and Mines

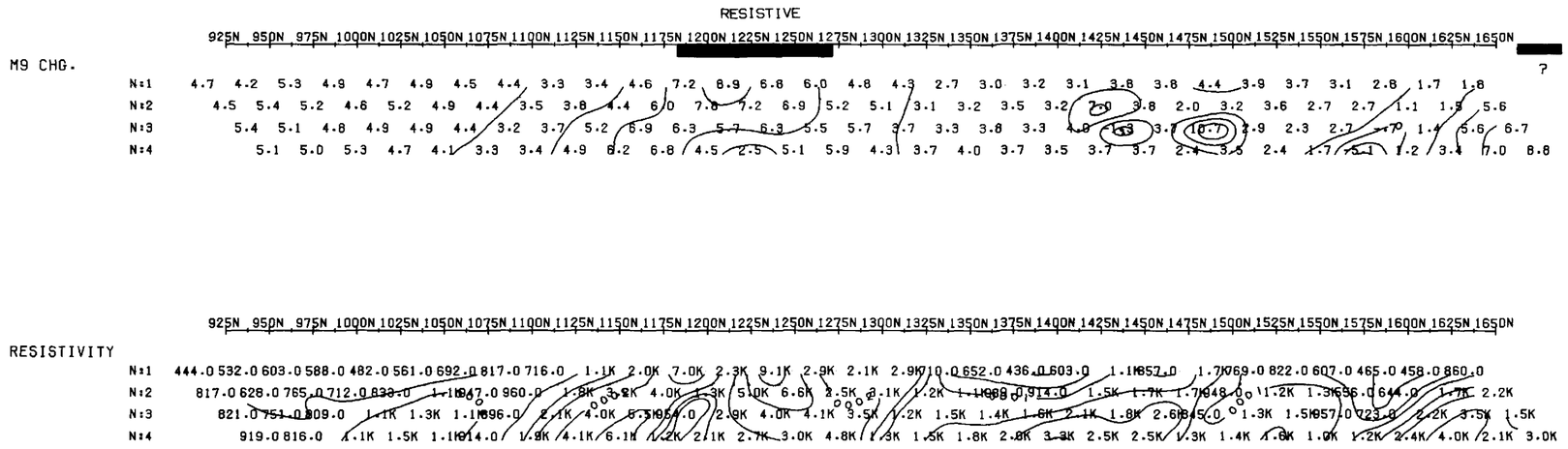
Date	Number
JAN. 1977	G-3943

ACTIVATED JULY 30, 1992 BY P.D.
CHECKED BY D.C.

42A12SW2001 2.18855 FORTUNE 210

K&E 1-73

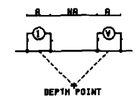
FIG 3: CLAIM LOCATION MAP FORTUNE TWP GOLD PROSPECT ALL - CLAIM BOUNDARY



LINE : 200 W

INDUCED POLARIZATION SURVEY

DIPOLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

RECEIVER: SCINTREX IPR-12 TIME DOMAIN
RX-TX TIMING: 2sec ON 2sec OFF
PLOTTED WINDOW SLICE: #9
TRANSMITTER: SCINTREX TSQ-3 3KVA

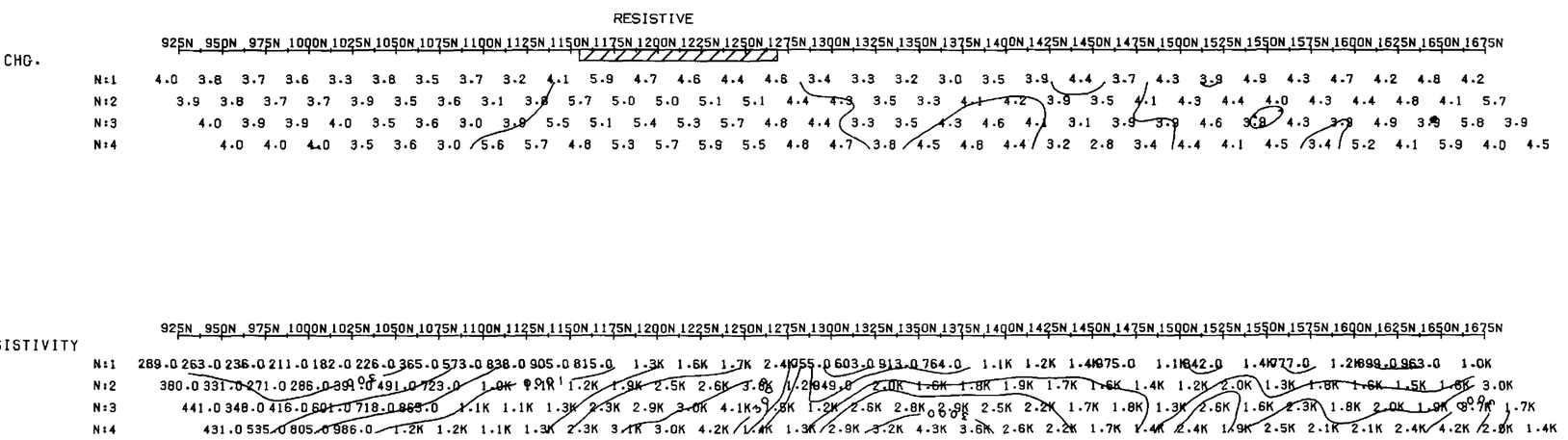
K. FILO / D. JONES

FORTUNE TWP. PROPERTY
1997 OPAP

DATE : JULY 1997 | REF :

SCALE = 1: 2500

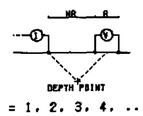
RAYAN EXPLORATION LTD



LINE : 100 W

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

RECEIVER: SCINTREX IPR-12 TIME DOMAIN
RX-TX TIMING: 2sec ON 2sec OFF
PLOTTED WINDOW SLICE: #9
TRANSMITTER: SCINTREX TSQ-3 3KVA

K. FILO / D. JONES

FORTUNE TWP. PROPERTY
1997 OPAP

DATE : JULY 1997 | REF :

SCALE = 1: 2500

RAYAN EXPLORATION LTD

K. FILO / D. JONES

FORTUNE TWP. PROPERTY

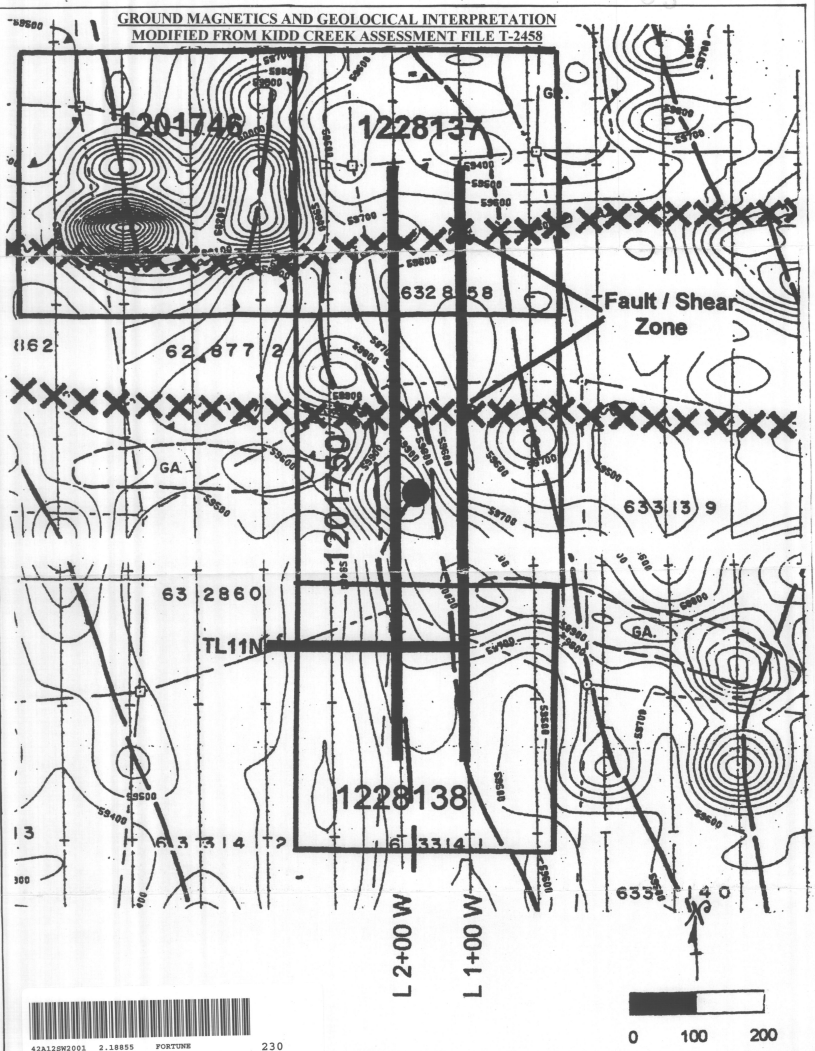
I.P. PSUEDOSECTIONS

PLATE 1 of 1 1:2500

42A12SW2001 2.18855 FORTUNE 220

P16's 849

GROUND MAGNETICS AND GEOLOCICAL INTERPRETATION
MODIFIED FROM KIDD CREEK ASSESSMENT FILE T-2458



42A12SW2001 2.18855 FORTUNE 230

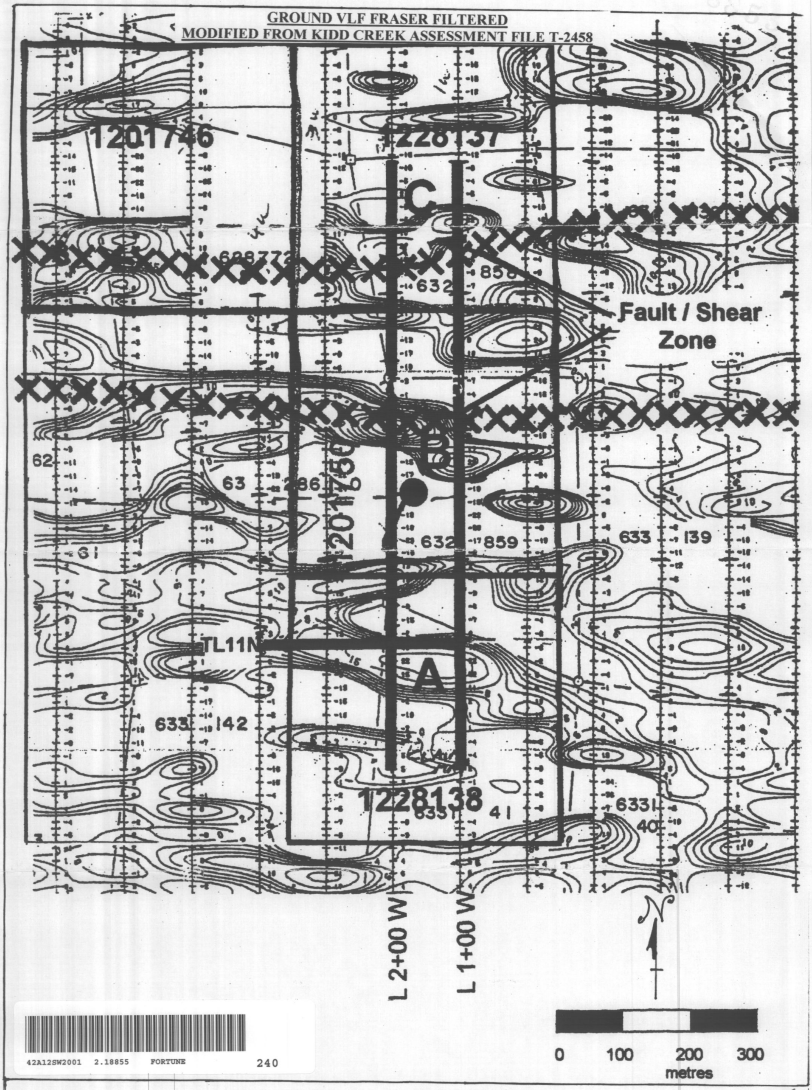
LEGEND

NEW GRID: Tie Line 11 North from 4W to 1W (start point= tie point from Kidd Creek @ 4W, 11N)
Grid lines cut at 2W and 1W from 900 North to 1800 North
Induced Polarization Survey Performed on new grid lines 2W and 1W (1.8 km.)

DIAMOND DRILL HOLE: Drilling by Filo and Jones from 1995 OPAP near Au showing

XXXX INTERPRETED FAULT SHEAR

FIG#6



42A12SW2001 2.18855 FORTUNE 240

LEGEND

As per Fig. # 6 except VLF Fraser Filtered Anomalies of Interest Designated A-C.

FIG. #7