A LOGISTICAL AND INTERPRETIVE REPORT

ON

SPECTRAL IP, RESISTIVITY,

VLF-EM AND MAGNETOMETER

SURVEYS

CONDUCTED ON

THE LABBE / BOUDREAULT OPTION

PROJECT 54

OSSIAN TWP., LARDER LAKE AREA, ONTARIO

FOR

SILVER CENTURY EXPLORATIONS LTD.

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JVX LTD.

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OSSIAN TWP., LARDER LAKE AREA, ONTARIO

For:
Silver Century Explorations Ltd.
c/o Hubacheck Consultants Ltd.
Suite 1401, 141 Adelaide Street West
Toronto, Ontario
M5H 3L5
Tel.: (416) 364-2895
Fax: (416) 364-5384
Attention: Peter Hubacheck / David Christie

By:
JVX Ltd.
60 West Wilmot St, Unit #22
Richmond Hill, Ontario
L4B 1M6
Contact: Blaine Webster
Tel.: (905) 731-0972
Fax: (905) 731-9312

JVX Ref: 9639-East-*revised*
December, 1996

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1 INTRODUCTION

1.1 GENERAL

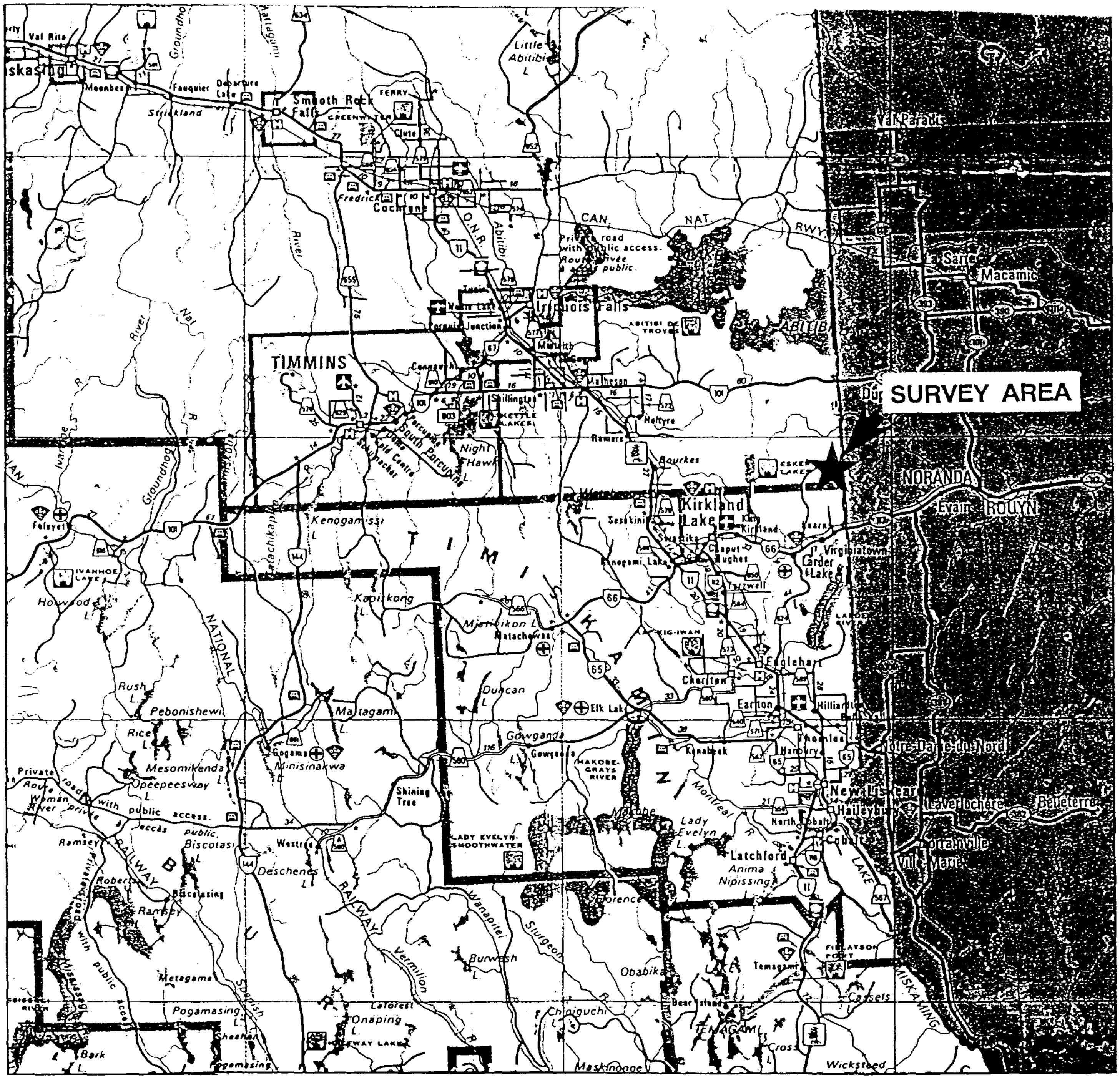
JVX Ltd. conducted time-domain spectral Induced polarization/resistivity (IP/res.), Magnetometer and VLF-EM surveys from June 8 to August 24, 1996, on behalf of **Silver Century Explorations Ltd.** The survey was located on the Labbe/Boudreault Option (Project 54), Ossian Twp., Larder Lake Area, Ontario (N.T.S. 32D/4, D/5).

In 1996, IP/Resistivity coverage was 14,528 meters, Magnetometer coverage was 7422 meters, and VLF-EM coverage was 25,131 meters. This 1996 geophysical work has been merged and compiled along with the 1995 JVX work and the 1992 Service Exploration work, at the request of Silver Century Explorations Ltd. The 1992 and 1995 geophysical work has already been filed for assesment credit.

Claim numbers: 1203474, 1203476, 1203479, 1180276 and 1180277.

1.2 PURPOSE

The purpose of this survey was to locate areas of base metal or gold mineralization.



LOCATION MAP
SILVER CENTURY EXPLORATIONS LTD.
PROJECT 54
LABBÉ - BOUDREAULT PROPERTY

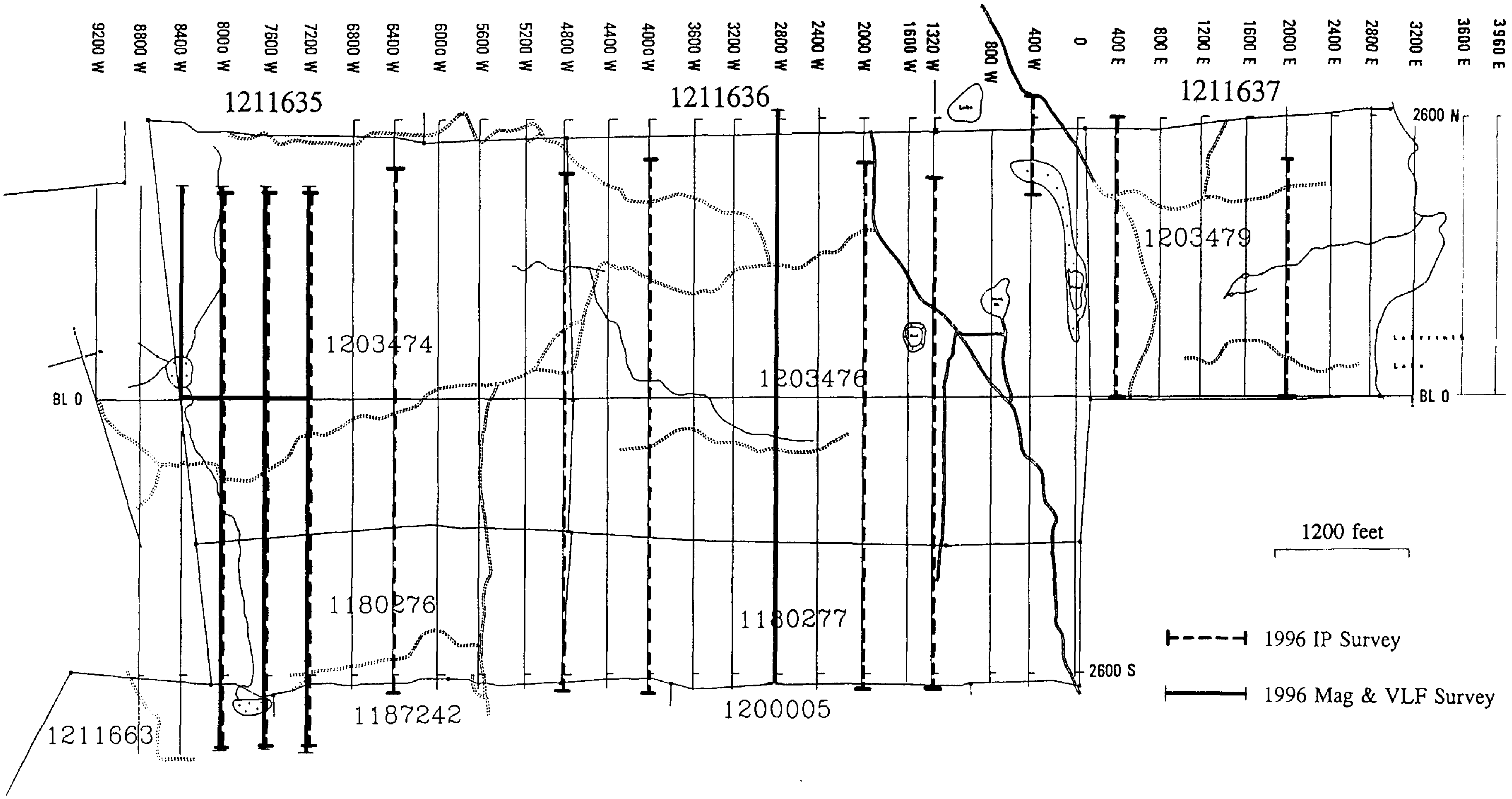
Ossian Twp, Larder Lake area, Ontario
NTS 32 D/4 & 32 D/5

GROUND GEOPHYSICAL SURVEY

Scale: 1 : 1,600,000

Surveyed by **JVX Ltd.**
Summer 1996

Figure 1



GRID / CLAIM MAP
SILVER CENTURY EXPLORATIONS LTD.
PROJECT 54
LABBÉ - BOUDREAULT PROPERTY

Ossian Twp, Larder Lake area, Ontario
NTS 32 D/4 & 32 D/5

GROUND GEOPHYSICAL SURVEY

Surveyed by **JVX Ltd.**
Summer 1996

Figure 2

2 DATA ACQUISITION

2.1 SURVEY SPECIFICATIONS

IP/Resistivity (1996)	
Transmitter	Scintrex IPC-7/2.5 kW
Receiver	Scintrex IPR-11
Array Type	Pole-Dipole
Transmit Cycle Time	2 sec
Receive Cycle Time	2 sec
Number of Potential Electrode Pairs	6
Electrode Spacing (*a spacing*)	100 feet or 164 feet
Number of Lines Surveyed	11
Survey Coverage	14,528 meters

Table 1: Specifications for the IP/Resistivity Survey (1996)

TOTAL MAGNETIC SURVEY (1996)	
	IGS-2/MP-4
Sensor type	Proton Precession
Number of Lines Surveyed	5 & Base Line
Survey Coverage	7,422 meters

Table 2: Specifications for the Magnetic Surveys (1996)

VLF - EM SURVEY (1996)	
Transmitter	NAA (Cutler Maine, 24.0 kHz)
Receiver	Transmitter
Number of Lines Surveyed	21 & Base Line
Survey Coverage	***25.131 meters***

Table 3: Specifications for the VLF-EM Surveys (1996)

2.2 GRID SPECIFICATIONS

The survey grid is located on the Labbe-Boudreault Property, Ossian Twp., Larder Lake Area, Ontario (see Figure 1).

2.3 PRODUCTION SUMMARY

Total 1996 IP coverage was 14,528 meters. Total 1996 magnetometer coverage was 7,422 meters and total VLF-EM coverage was 25,131 meters. The following tables list the 1995 and 1996 survey coverage in detail:

Line	From Station		To Station		Distance (m)	No. of Readings	'a' spacing
1200E	0	N	600	N	600	21	25 m
3200W	325	S	800	N	1125	39	25 m
400W	750	S	775	N	1525	55	25 m
5600W	800	S	650	N	1450	52	25 m
Total					**4700**	**167**	

Table 4: Summary for IP/Resistivity Survey (1995)

Line	From Station	To Station	Distance (m)	No. of Readings	a' spacing
8000 W	2000N	3300S	1615	52	100 ft.
7600 W	2000N	3200S	1585	51	100 ft.
7200 W	2000N	3200S	1585	51	100 ft.
6400 W	2100N	2700S	1463	47	100 ft.
4800 W	2100N	2700S	1463	47	100 ft.
4000 W	2200N	2800S	1524	49	100 ft.
2000 W	2200N	3100S	1615	52	100 ft.
1320 W	2120N	2964S	1550	24	164 ft.
400 W	3300N	1900N	427	11	100 ft.
400 E	3280N	0	1000	17	164 ft
2000 E	2200N	100S	701	20	100 ft.
Total			*14,528*	*421*	

Table 5: Summary for IP/Resistivity Survey (1996)

Line	From Station	To Station	Distance (m)	No. of Readings
6800 W	2600N	2600S	1234	105
6400 W	2600N	2600S	1234	105
6000 W	2600N	2600S	1234	105
5600 W	2600N	2600S	1234	105
5200 W	2600N	2600S	1234	105
4800W	2600N	2600S	1234	105
4400W	2600N	2600 S	1234	105
4000 W	2600N	2500S	1219	102
3600 W	2600N	2600S	1234	105
3200 W	2600N	2600S	1234	105
Total			**12,325**	**1047**

Table 6: Summary for Magnetometer Survey(1995)

Line	*From Station*	*To Station*	*Distance (m)*	*No. of Readings*
BL	8400 W	7200 W	366	23
8400 W	2000 N	0 N	610	41
8000 W	2000 N	3250 S	1600	106
7600 W	2000 N	3250 S	1600	104
7200 W	2000 N	3250 S	1600	106
2800 W	2700 N	2700 S	1646	218
Total:			*7,422*	*598*

Table 7: Summary for Magnetometer Survey (1996)

Line	From Station	To Station	Distance (m)	No. of Readings
L 3960E	2600N	0	792.5	27
L 3600E	2650N	0	807.7	28
L 3200E	2650N	0	807.7	28
L 2800E	2650N	0	807.7	28
L 2400E	2650N	0	807.7	28
L 2000E	2650N	0	807.7	28
L 1600E	2600N	0	792.5	27
L 1200E	2650N	0	807.7	28
L 800E	2650N	0	807.7	28
L 400E	2650N	0	807.7	28
L 0	2650N	2650S	1615.5	55
L 400W	2650N	2650S	1615.5	55
L 800W	2650N	2650S	1615.5	55
L 1320W	2650N	2650S	1615.5	55
L 1600W	2650N	2650S	1615.5	55
L 2000W	2650N	2650S	1615.5	55
L 2400W	2650N	2650S	1615.5	55
L 7200W	2000N	3250S	1600.2	106
L 7600W	2000N	3250S	1600.2	105
L 8000W	2000N	3250S	1600.2	106
L 8400W	2000N	0	609.6	41
BL 0	7200W	8400W	365.8	27
Total			*25,131.1*	*1048*

Table 8*:* Summary for the VLF-EM Survey (1996)

2.4 PERSONNEL

Michelle Nield (Geophysical Technician)
Ms. Nield operated the Scintrex IPC-7 2.5 kW transmitter. She was responsible for data quality and day-to-day operation and direction of the survey.

Mike Fecteau (Geophysical Technician)
Mr. Fecteau operated the Scintrex IPR-11 receiver. He was responsible for data quality and the day-to-day operation of the survey.

Roger Poirier (Geophysicist)
Mr. Poirier operated the Scintrex Envimag & IGS-2 Magnetometers. He was responsible for the quality of the Magnetometer and VLF-EM survey data.

Three or four field assistants were also engaged by JVX as required.

Andrew Wang (Geophysicist):
Mr. Wang processed the data, prepared the plots, and is responsible for the data storage.

Dagmar Piska (Draftperson) and Vaso Lymberis (Draftsperson):
Ms. Piska and Ms. Lymberis carried out manual drafting, and assembled and bound the report.

Joe Mihelcic (Geophysicist):
Mr. Mihelcic interpreted the data and wrote this report.

Blaine Webster (President, JVX Ltd.):
Mr. Webster provided overall supervision of the survey.

2.5 FIELD INSTRUMENTATION

JVX supplied the geophysical instruments described below. Additional information about the geophysical methods can be found in Appendix A.

2.5.1 I.P. Transmitter

A **Scintrex IPC-7/2.5 kW Time Domain Transmitter** powered by an eight horsepower motor generator was used. The transmitter generates square wave current output with a period of 4, 8, or 16 seconds. A digital multi-meter in series with the transmitter was used to measure the magnitude of the current output.

2.5.2 I.P. Receiver

A **Scintrex IPR-12 Time Domain Receiver** was used. This unit samples the voltage decay curve as measured by the potential electrodes at ten points in time. Readings are repeated until they converge to within a tolerance level, and the data are stored in solid-state memory.

2.5.3 Magnetometer

The Envimag magnetometer was used as the base station. The IGS-2/Mag-4 system was used to measure the total field over the grid.

2.5.4 VLF-EM

The Scintrex Envimag/VLF and IGS-2/MP-4 system was used to measure the vertical in-phase, out-of-phase, and horizontal field component.

3 DATA PROCESSING

After being transferred to a field computer at the end of each survey day, the data were examined, corrected, and organized by the instrument operator. The results were plotted on the following printers:

- STAR NX-80 colour dot-matrix printer
- EPSON FX-80 dot-matrix printer

These plots were used to monitor progress and data quality, and to make an initial interpretation. Thus survey parameters and design were altered when necessary.

The data were sent by courier to the head office of JVX in Richmond Hill, Ontario. They were processed and results were plotted on the following printers as was necessary:

- HEWLETT PACKARD DESIGNJET 750C colour plotter
- NICOLET ZETA 36 inch pen plotter
- TEKTRONIX COLORQUICK ink jet printer
- FUJITSU DL2400 colour dot-matrix printer
- TEXAS INSTRUMENTS MicroLaser Pro 600 Laser printer

The processing procedure follows:

3.1 IP AND RESISTIVITY

Steps 1 and 2 were performed both in the field and in the head office. Steps 3 and 4 were performed at the head office.

1) The **GEOPAK IPSECT Package** was used to generate colour pseudosections of chargeability and resistivity data.

2) The in-house **JVX SOFT II Package** was used to perform spectral analysis of the time-domain data. This step was crucial to maximizing the information that can be obtained from IP data. This software analyses the shape of the IP decay curve,
giving information about:
(a) the grain size (indicated by the parameter τ),
(b) the uniformity of the grain size (indicated by c), and
(c) the magnitude of the chargeable source (indicated by *M-IP*).
(Please see Appendix A for more information about spectral analysis.)

3) The pseudosections from 2 above were aligned in **AUTOCAD**, then plotted.

4) Contoured plan maps of both chargeability and resistivity data from one dipole were produced using **JVX** in-house software and the **GEOPAK Line Processing Package**. Additional drafting on these maps was done through **AUTOCAD**.

The pseudosection results of this conversion are presented in Appendix B

3.2 MAGNETICS and VLF-EM

A contour map and profile map of the magnetic and VLF-EM data were generated in the head office using the GEOPAK and GEOSOFT line processing software.

4 INTERPRETATION METHODOLOGY

JVX uses its many years of experience in geophysical interpretation to extract the most accurate information from the data. The procedures involved are simplified for the sake of clarity.

4.1 IP AND RESISTIVITY

The IP and resistivity data are interpreted using the following procedure:

1) Chargeability anomalies are picked on the pseudosections and classified using the following scheme *as a guide* (Mx sample window = 310 ms to 1050ms)

━━━	*Very Strong* (> 30 mV/V) and well defined
———	*Strong* (20 to 30 mV/V) and well defined
— —	*Moderate* (10 to 20 mV/V) and well defined
– – –	*Weak* (5 to 10 mV/V) and well defined
· · · · · ·	*Very Weak* (3 to 5 mV/V) and poorly defined
x x x x	*Extremely Weak* (<3 mV/V) and very poorly defined

The peak of the anomaly provides a qualitative indication of the depth to the top of the anomalous source and the location of the centre of the body. Where possible, the location and dipole number of the peak are written beside the anomaly bar.

2) The spectral characteristics of the anomalies are examined. The peak value of *M-IP* is noted, and τ is classified according to the following scheme:

L	*Long* (> 10.0 sec)
M	*Medium* (1.0 to 10.0 sec)
S	*Short* (< 1.0 sec)

3) Resistivity anomalies are picked on the pseudosections and classified using the following scheme *as a guide*:

no symbol	**VH(*n*)**	*Very High* (> 25 000 Ωm) — highly silicified
no symbol	**H(*n*)**	*High* (> 10 000 Ωm) — probably silicified
no symbol	**WH(*n*)**	*Weak High* (< 10 000 Ωm) — relative increase compared to surrounding material
— —	**SL(*n*)**	*Strong Low* — strong decrease in resistivity
– – –	**ML(*n*)**	*Medium Low* — medium decrease in resistivity
· · · · · ·	**WL(*n*)**	*Weak Low* — slight resistivity decrease relative to surrounding material

where *n* is the dipole number at which the anomaly peak is located.

4) The anomalies from steps 1 to 3 are marked on the compilation map.

5) Resistivity anomalies on the compilation map are joined into conductive and resistive zones.

6) Zones of high chargeability are interpreted based on spectral, resistivity, and geometric information.

7) The anomalies are rated according to JVX' past experience. The following are some of the characteristics that may be indicative of economic mineralization:

- A moderate to high chargeability anomaly flanked by a narrow finger-shaped resistivity high.
- High *M-IP* values (> 300 mV/V), which are not associated with a resistivity low, indicating a large quantity of metallic sulphides.
- Low τ values (short time constant) which indicate that the chargeable source is disseminated and fine-grained. Gold mineralization is generally associated with fine-grained sulphides. However, in environments where the sulphides have been remobilized, gold mineralization may be associated with coarse-grained sulphides (long time constant).

- In particular, very high *M-IP* values (> 900 mV/V) with short τ are typically the most favourable spectral IP targets.

4.2 MAGNETICS

The total field magnetic data are studied for lateral changes of the strength of the magnetic field. Representative contours are chosen to best express both anomalous bodies and lithological contacts.

4.3 VLF

The VLF survey data conducted using transmitter station NAA, Cutler Maine, which operates at a frequency of 24.0 kHz. The conductive axes are determined by locating true cross-over responses. A Fraser Filter operation was carried out in order to located cross-over trends. The data from this were contoured/coloured and plotted in plan format to aid with the VLF interpretation.

5 DISCUSSION

The interpretation of the geophysical data was compiled onto a single map, and is summarized in the sections following. This Compilation Map and all data plots are included in Appendix B.

The survey area has been divided into two broad areas of IP and resistivity anomalies: ***Area A*** west of L3200W and ***Area B*** east of L4000W. Magnetics data are relatively flat throughout the grid area. Compared to a reference background level of 57 580 nT, the broadest zone with the highest magnetic readings are located between ***Area A*** and ***Area B*** at ***Mag-3.*** Readings within ***Mag-3*** are only 100 nT above background which indicates a geological structure and not necessarily the presence of magnetic sulphides. A brief discussion of the geophysical anomalies within the two main areas follows:

-Area A (east of L3200W)-

Area A is defined by east-west trending chargeability, resistivity and VLF anomalies. However, magnetic features and trends extend through and beyond this area. All of the interpreted VLF anomalies within the grid are located in ***Area A***. A northeast-southwest trending IP anomaly, ***IP-1,*** appears to define the area's northwest limit.

IP-1, IP-2, Mag-4 and VLF-1:

The chargeability zones consist of relatively weak anomalies. ***IP-1*** spectral MIP & tau are at 250 mV/V & long in the northeast, 155 mV/V & medium in the centre, and 40 mV/V & short in the southwest. The spectral parameters indicate coarser-grained sulphides in the northeast compared to the southwest part of the zone. ***IP-2*** MIP and tau are less than 250 mV/V and short respectively, typical for minor fine-grained sulphides.

Although ***IP-1*** and ***IP-2*** trend northeast-southwest and east-west respectively, the magnetic data in this area are generally east-west and north-south . The non-coincident nature of the IP and magnetic trends supports the idea that the magnetic data are indicative of geologic variations and the IP zones cross-cut them, probably along faults or lineaments. ***Mag-4*** is a 'high' (only 70 nT above background) magnetic area located between ***IP-1*** and ***IP-2***. It appears that sulphides detected by the IP survey are more likely to occur at the edge of the more mafic unit causing ***Mag-4.*** As will be seen, this pattern (where the IP zones do not cross-cut the main magnetic high zones) occurs throughout the surveyed grid.

VLF-1 is a VLF conductor shown on the Compilation Map immediately north of ***IP-2.*** It is well defined and appears to be dipping steeply towards the north. ***IP-2*** may be the near surface expression of ***VLF-1.*** An apparent resistivity low anomaly located at *IP-2* on L400E/stn.1400N could result from this conductive body.

IP-3, RL-1, Mag-1, VLF-2 and VLF-3:

IP-3 is an east-west trending chargeability anomaly located immediately south of *IP-2*. It is dominated by a moderately strong IP anomaly on L400E with long time constant tau, indicative of coarse-grained or linked sulphides. An apparent resistivity low axis, ***RL-1***, is located immediately north of ***IP-3. VLF-3*** is a poorly defined VLF conductor axis anomaly located immediately south of ***IP-3*** and probably dipping steeply towards the south. This EM anomaly could be related to the chargeability source causing ***IP-3*** and a weak resistivity low anomaly defined on L400W.

IP-3, RL-1 and ***VLF-3*** are located in a magnetic low area between magnetic high zones ***Mag-4*** (discussed earlier) and ***Mag-1*** located outside ***Area A*** towards the south. ***Mag-1*** appears to be associated with apparent resistivity high zone ***RH-3*** defined on L400W. Apparent resistivity high values also occur on L400W north of ***IP-3.*** The break in magnetic and apparent resistivity high trends at *IP-3* supports the interpretation that *IP-3, **RL-1*** and *VLF-3* are located along a structural feature such as an alteration, fault or shear zone that contains sulphides.

A moderately strong single line anomaly is located on L400W at the baseline. It is located immediately south of an apparent resistivity low anomaly and immediately northwest of a magnetic high zone, ***Mag-1***. Spectral MIP and tau are at 426 mV/V and short respectively. This anomaly is likely due to fine-grained sulphides at the edge of a geologic formation or contact defined by the magnetics.

VLF-4, VLF-5 and Mag-5:

These anomalies are located in the eastern part of the grid. ***VLF-4*** is a poorly defined conductor axis located immediately south of ***Mag-5.*** Its source is likely near vertical and may be associated with a structural contact. Chargeability zone ***IP-2*** appears to terminate at this contact, but only because there were no additional IP lines surveyed towards the east of L2000E. A river from Labyrinth Lake is sub-parallel to ***VLF-4*** and may coincide with a topographic lineament associated with the feature. Whether ***VLF-4*** is related to erosional materials such as clay or is related to sulphides is uncertain due to limited IP coverage over this anomaly.

VLF-5 is a two-line near surface anomaly that appears to be associated with a magnetic low sub-zone within ***Mag-5.*** It too was not covered with IP and may or may not be related to sulphides.

-Area B (west of L4000W)-

This area is defined by irregular shape/trend chargeability, resistivity and magnetic anomalies west of L4000W.

IP-4, IP-5, RH-1, RH-2, Mag-6 and RL-2:

IP-4 and ***IP-5*** are weak chargeability zones. They are related to apparent resistivity high zones ***RH-1*** and ***RH-2*** respectively. Spectral MIP and tau for ***IP-4*** are less than 150 mV/V and short respectively. For ***IP-5*** these parameters are 342 mV/V and short respectively at L7200W/stn.500N. Both chargeability zones are located at the edge of relative magnetic high zones. As discussed earlier, magnetic trends appear unrelated to chargeability trends. However, zone ***IP-4*** is located south-east of ***Mag-6*** and zone ***IP-5*** is located south of ***Mag-2*** (discussed later). These zones are likely the result of fine-grained sulphides associated with a silicified host rock with a relatively low magnetic susceptibility (more felsic).

RL-2 is a resistivity low axis which trends west-north-west whereas the main magnetic trends in this area appear to be unrelated, with ***Mag-6*** trending east-north-east. Although ***RL-2*** does not coincide with a chargeability zone, it does cross (or is crossed by) ***IP-4*** at L6400W. ***RL-2*** is likely related to an alteration or shear zone cross-cutting the geologic structures inferred from the magnetics.

IP-6 and Mag-2:

IP-6 is a very weak chargeability zone located in the northern part of ***Area B***. Although relative magnetic high zone, ***Mag-2***, extends through the zone, ***IP-6*** does not appear to be related to any other significant geophysical anomalies. This zone is likely related to minor amounts of fine-grained sulphides.

Mag-2 is highly variable over the northwest part of the grid but appears to be generally east-north-east trending (as is ***Mag-6*** which is located further south). It is not possible to interpret specific geologic features within these areas of magnetic variability, although that does not preclude their existance (e.g., faults, contacts etc.).

6 RECOMMENDATIONS

Several Target Areas for further exploration have been identified and prioritized on the Compilation Map.

HIGH PRIORITY

T-H1 (L400W/baseline):

This is a near surface (n=2) target with a high spectral MIP and short tau chargeability anomaly. Its proximity to an apparent resistivity low and high zone to the north and south respectively, and to a magnetic high zone to the southeast, makes this a high priority exploration target for gold.

T-H2 (L400E/1400N):

T-H2 coincides with a near surface chargeability anomaly (n=1) and apparent resistivity low anomaly (n=2) within chargeability zone ***IP-2***. It is also located at the south edge of ***Mag-4*** and between VLF conductors ***VLF-1*** and ***VLF-2.*** Although chargeability anomalies vary in strengh over the zone, ***T-H2*** should be expanded along ***IP-2,*** particularly at L2000E/stn.1050N and at L1320W/stn.1000N, if results are favourable.

T-H3 (L7200W/500N):

This chareability target has an MIP of 342 mV/V and short time constant tau. It coincides with a magnetic high 'finger zone' that extends southwards from ***Mag-2*** and this is indicative of a structural variation (e.g., movement of geologic units by a fault or fold). An apparent resistivity high zone also coincides with this target area. ***T-H3*** is a target area for fine-grained gold-bearing sulphides associated with silicification. There is also the potential for the concentration of gold within a structural feature such as a fault or fold.

MEDIUM PRIORITY

T-M1 (L6400W/stn.1000S):

This target area consists of a weak chargeability anomaly associated with a high apparent resistivity zone (***RH-1***) to the immediate south, and a low apparent resistivity axis (***RL-2***) to the immediate north. A moderate MIP value of 143 mV/V and short time constant contribute to make this a medium priority exploration target for gold.

LOW PRIORITY

T-L1 (L400E/stn.600N), T-L2 (L400W/stn.2800N):

These targets consist of chargeability anomalies with long time constant tau. This is indicative of coarse-grained sulphides. If the gold was remobilized, these targets may be associated with economic gold.

All geophysical anomalies and targets should be compared with available geologic and geochemical data. Follow-up work along zones is recommended if results are favourable. If there are any questions with regard to the conducting of the survey or the interpretation of the data, please call the undersigned at JVX Ltd.

Respectfully submitted,

JVX Ltd.

Joe Mihelcic, P.Eng., M.B.A.
Geophysicist

Blaine Webster, B.Sc.
President

APPENDIX A

Background
to the
Geophysical Methods

INDUCED POLARIZATION AND RESISTIVITY

1 THE IP EFFECT

The induced polarization (IP) phenomenon is primarily caused by:

1) electrical polarization at the boundary between the rock or soil and the pore fluids, and

2) electrical polarization at the boundary between metallic minerals (particularly sulphides) within pores and the pore fluids.

This polarization occurs when a current is applied across these boundaries. Its magnitude can be measured in two ways:

1) in the frequency domain (also known as phase IP), in which the applied current is sinusoidal, or

2) in the time domain, in which the applied current is a modified square wave.

JVX conducts IP surveys in the time domain because spectral analysis, a powerful interpretive tool, can only be performed in the time domain.

Generally, the current is transmitted as a modified square wave with a period of eight seconds (two seconds positive, two seconds off, two seconds negative, two seconds off). The voltage measured in the ground will have the form shown in figure IP-1. The IP effect is manifested as a roughly exponential voltage decay after the current is turned off, similar to the relaxation effect of a discharging capacitor. The IP receiver samples this voltage decay curve at a number of points.

The **SCINTREX IPR-11** receiver repeats and averages the following measurements until they converge:

V_p The primary voltage (the steady-state amplitude of the voltage while the current is being transmitted).

SP	The self-potential (the steady state voltage when no current is being transmitted).
m0 to m9	The chargeabilities (measures of the IP effect at different times along the decay voltage curve $V_s(t)$).

Each chargeability value (m0 to m9) is the ratio of the average secondary voltage over a time window to the primary voltage. Mathematically, this is given by:

$$m = \frac{1000}{V_p(t_2-t_1)} \int_{t_1}^{t_2} V_s(t)\, dt$$

where

m = chargeability (in mV/V)
$V_s(t)$ = secondary voltage (i.e. the voltage decay)
V_p = primary voltage
t_1 = beginning of time window
t_2 = end of time window

The IPR-11 uses the ten time windows, also known as time slices, listed in table IP-1 and shown in figure IP-2. Unless otherwise stated, the term chargeability refers to the eighth time window (m7).

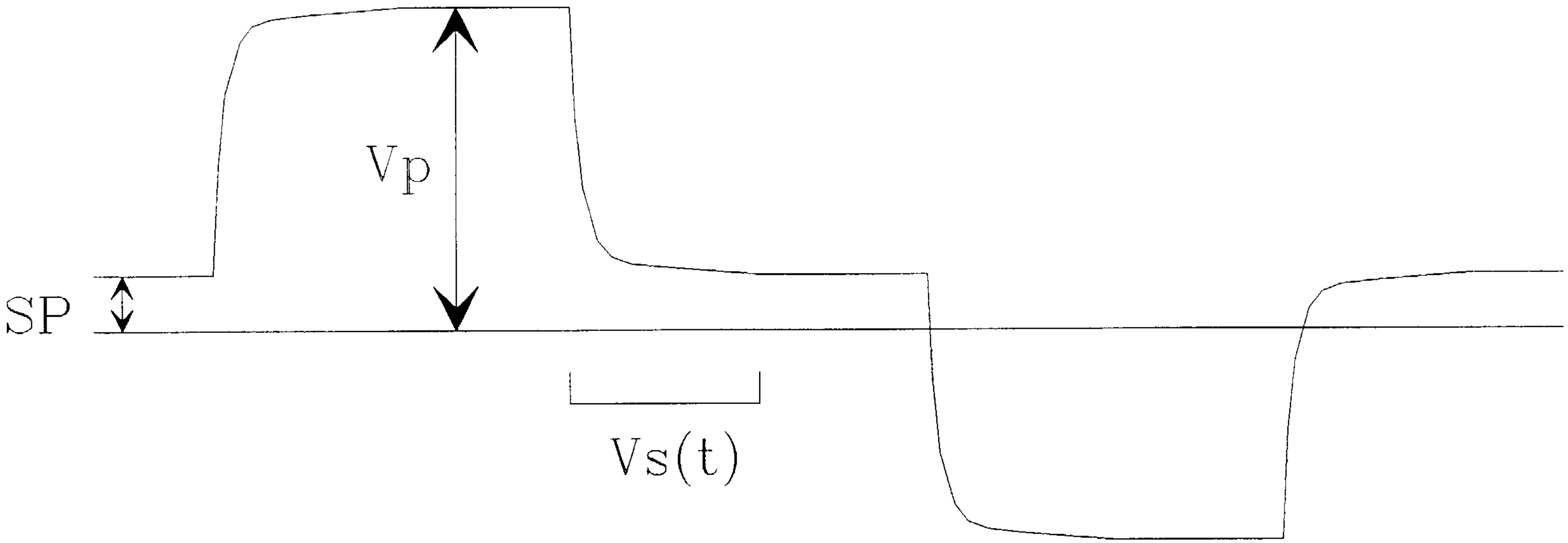
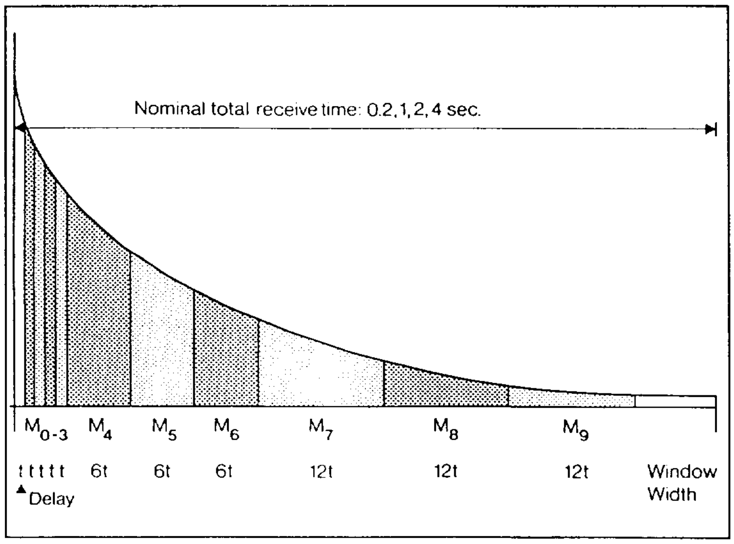


Figure IP-1 : The I.P. Waveform

SLICE	DURATION (msec)	FROM (msec)	TO (msec)	MIDPOINT (msec)
m0	30	30	60	45
m1	30	60	90	75
m2	30	90	120	105
m3	30	120	150	135
m4	180	150	330	240
m5	180	330	510	420
m6	180	510	690	600
m7	360	690	1050	870
m8	360	1050	1410	1230
m9	360	1410	1770	1590

Table IP-1 : Time slices recorded by the IPR-11 receiver



IPR-11 Transient Windows

Figure IP-2 : IP effect decay curve with IPR-11 time slices

2 SPECTRAL ANALYSIS

With the ability to sample the decay curve at a number of points, the shape of the decay curve can be analysed. This gives important information about the characteristics of the source.

Spectral analysis utilises the Cole-Cole model of the IP effect (Pelton et al., 1978). This model uses the following four parameters (described in Johnson, 1984) to calculate a theoretical IP decay curve:

ρ_a **Resistivity** (Ωm)
This quantity is described in detail later in this appendix.

M-IP **Chargeability Amplitude** (mV/V)
This quantity is related to the volume percent of the chargeable source, although there is no simple quantitative relationship.

τ **Time Constant** (seconds)
The time constant is related to the grain size of the source. A short time constant (0.01 to 0.3 s) indicates a fine-grained source. A long time constant (30 to 100 s) indicates a coarse-grained, interconnected, or massive source.

c **Exponent** (dimensionless)
A high value (e.g. 0.5) indicates that the grain size is uniform. A low value (e.g. 0.1) indicates that there is a mixture of grain sizes.

Conventional chargeability is a combination of these spectral parameters. A change in any one parameter will produce a change in the apparent chargeability. *In the absence of spectral analysis, such changes are always ascribed to a change in the volume percent of the chargeable source, even though the cause may be a shift from fine-grained to coarse-grained material.*

JVX has developed a software package called **SOFT II** which determines the spectral parameters by comparing the measured decay curve with a library of model curves. The quality of the fit is given as a root-mean-square difference (expressed as a percentage). A low value (e.g. 1 %) indicates high quality data of medium to high amplitude. A high value (e.g. greater than 10 %) indicates poor quality or low amplitude data. If the fit is greater than 5 %, the spectral parameters are considered to be of poor quality, and therefore are usually discarded.

3 ARRAY CONFIGURATION

As mentioned above, a current must be flowing through the ground in order for the IP effect to occur. This current is applied using two electrodes, which are called C1 and C2, and the voltage decay is measured using two potential electrodes, P1 and P2. The distance separating P1 and P2 is known as the *a-spacing*, or *a*, and generally remains constant during the survey.

The three most common electrode array configurations are:

1) **Gradient**
C1 and C2 are located at an "infinite" distance (i.e. very far) from the grid, with one on each side. The potential electrodes move throughout the grid.

2) **Dipole-Dipole**
C1 and C2 are separated by a distance of *a*, and move along with the potential electrodes.

3) **Pole-Dipole**
C2 is located at "infinity". C1 moves along with the potential electrodes throughout the grid.

The gradient array allows for fast reconnaissance surveys. However, no depth information is obtained (described below), and the resolution is much lower because all of the ground between C1 and C2 is energised. Furthermore, the current will be channelled through conductive zones, which could result in inaccurate chargeability and resistivity values. Thus, great care must be used when using a gradient array.

In JVX' experience, the pole-dipole array is superior to the dipole-dipole array. Since C2 is located at an infinite distance, a greater volume of ground is energised. This results in better depth penetration (i.e. higher quality data), and is particularly important in the presence of thick and/or conductive overburden. However, the pole-dipole array does not have the disadvantages of the gradient array. Since C1 is located near the potential electrodes, depth information is obtained (see below), and resolution is high.

4 A-SPACING AND NUMBER OF DIPOLES

The resolution of the data depends on *a*, the electrode spacing. The smaller *a* is, the greater the resolution. However, the depth of penetration is also smaller. A larger *a* results in greater depth, but less resolution. Thus, both factors must be considered when selecting the electrode spacing.

The standard pole-dipole array is shown in figure IP-2. Seven potential electrodes are used to measure the voltage simultaneously across six electrode pairs (P1-P2, P2-P3, P3-

P4, etc.). Each pair is labelled using an integer, *n*, where *na* is the distance between the first potential electrode and the nearest current electrode.

The depth of investigation is greater when the potential electrode pair is farther from the current electrode (i.e. larger *n*). However, a greater separation distance also results in greater signal attenuation, limiting the number of dipoles which could be used effectively.

5 RESISTIVITY

The DC apparent resistivity (ρ_a) is a measure of the bulk electrical resistivity of the subsurface. Electricity flows primarily through the groundwater within fractures and pore spaces. Therefore, fault zones can be detected as low resistivity zones. However, sulphide minerals, some oxides, and graphite are also good conductors and so produce low resistivity zones. The current flow is electronic in these minerals rather than electrolytic as it is in groundwater. Sometimes, the geometry of the low resistivity zone can distinguish between a fault zone and a mineral source. In other cases, additional geological information is needed. Silicates, the most common rock forming minerals, are very poor conductors of electricity, producing high resistivity zones.

The resistivity is measured simultaneously with the IP data. For a homogeneous and isotropic subsurface, it is given by the following formula:

$$\rho_a = \frac{k\,V_p}{I}$$

where

ρ_a = apparent resistivity (Ωm)
V_p = primary voltage (measured while current is on) (mV)
k = k-factor (m)

The *k-factor* is an array-dependant component. For a pole-dipole array, it is given by:

$$k = 2\pi n(n+1)a$$

where

n = dipole multiple (dimensionless)
a = electrode separation (m)

Although the assumption of a homogeneous and isotropic earth is unrealistic, the calculated value of ρ_a can be used qualitatively to map changes in rock type (even to identify the rock type in some cases), and to map low resistivity fault zones.

References

Johnson, I.M. Spectral I.P. Parameters as Determined through Time Domain Measurements, pp. 1993-2003 *Geophysics* **49**, 1984

Johnson, I.M., B. Webster, R. Mathews, and S. McMullan Time Domain Spectral IP Results from Three Gold Deposits in Northern Saskatchewan, *The Canadian Mining and Metallurgical Bulletin*, Feb. 1989

Pelton, W.H., S.H. Ward, P.G. Hallof, W.P. Sill, P.H.Nelson Mineral Discrimination and Removal of Inductive Coupling with Multifrequency IP, pp. 588-609, *Geophysics* **43**, 1978

MAGNETIC METHOD

The magnetic field measured at any point on or above the earth's surface is a combination of:

1) the earth's magnetic field,

2) the induced magnetization of near-surface material, and

3) the remanent magnetization of near-surface material.

The total measured field is equal to the vector sum of the magnetic field arising from all three factors.

1 THE EARTH'S MAGNETIC FIELD

The earth's magnetic field is similar in form to that of a bar magnet. The flux lines of the geomagnetic field are vertical at the north and south magnetic poles where the strength is approximately 60 000 nT (or gammas). In the equatorial region, the field is horizontal and its strength is approximately 30 000 nT. This field can be considered to be constant in space and time for exploration surveys.

2 INDUCED MAGNETIZATION

An external magnetic field (for example, the earth's) induces the magnetization of a ferrous body. This magnetized body then produces an additional magnetic field, known as the *induced field*, which is given by the following formula:

$$\mathbf{I} = k\,\mathbf{H}$$

where:

$\mathbf{I}$ = the induced magnetic field (nT) — a vector
k = the volume magnetic susceptibility of the material
$\mathbf{H}$ = the external magnetic field (nT) — a vector

Thus, the strength of the induced magnetic field is a function of the susceptibility of the body. In turn, the susceptibility is a reflection of the content of ferrous minerals, most importantly magnetite. Note that the induced field is parallel to the external field.

3 REMANENT MAGNETIZATION

The remanent magnetization of rocks depends both on their composition and their previous history. Whereas the induced magnetization is nearly always parallel to the direction of the geomagnetic field, the natural remanent magnetization may bear no relation to the present direction and intensity of the earth's field. The remanent magnetization is related to the direction of the earth's field at the time the rocks were last magnetized. Generally, one can assume that there is no significant remanent magnetization when interpreting magnetic data.

4 DIURNAL CORRECTION

Although the earth's magnetic field is essentially constant, time-varying magnetic fields may result from atmospheric phenomena. Fields due to magnetic storms may vary by hundreds of nanoteslas in a few minutes. Therefore, it is necessary to monitor the background magnetic field constantly using a stationary base station magnetometer. The field measurements can then be corrected for the background magnetic variation. This process is known as diurnal correction.

5 INTERPRETATION

Magnetic data are used to map regions of different magnetic susceptibilities (i.e. ferrous content). The magnetic method cannot detect gold directly, but it can map structures which can aid in locating areas of silicification and carbonization. When used in conjunction with geological and other geophysical data, magnetic data can help select targets which are favourable for economic mineralisation.

VLF METHOD

1 TRANSMITTED SIGNAL

The Very Low Frequency (VLF) Electromagnetic Method measures variations in high-powered electromagnetic signals in the 5 to 25 kHz range which are broadcast for air and marine navigation.

Above a uniform earth, the vertically polarized primary (transmitted) signal has three components:

1) the horizontal component of the electric field parallel to the direction of propagation,

2) the vertical component of the electric field, and

3) the horizontal component of the magnetic field perpendicular to the direction of propagation.

This primary signal varies slightly with time, usually due to changes in the atmospheric conditions. However, more dramatic changes can sometimes be observed.

2 VLF MEASUREMENTS

The primary transmitted signal induces eddy currents in conductive bodies. These conductive bodies in turn generate secondary electromagnetic fields. The **Scintrex IGS-2/VLF-4** system measures three components of the resulting fields:

1) the horizontal field component,

2) the in-phase vertical component (as a percentage of the horizontal field), and

3) the out-of-phase vertical component (also as a percentage off the horizontal field).

The horizontal field component is not a reliable interpretive tool unless a second stationary VLF sensor (a "base station") is used to monitor fluctuations in the primary signal. These fluctuations are usually due to changes in atmospheric conditions, and can be dramatic in some cases. However, the in-phase and out-of-phase components can be used to locate conductive bodies reliably.

3 INTERPRETATION

In the absence of a conductive body, the vertical component is zero (both in-phase and out-of-phase). Near a conductor, the vertical component is non-zero. Generally, the polarity of both components changes as the sensor passes over a conductive body, i.e. from positive to negative, or negative to positive. Furthermore, the in-phase and out-of-phase components are of opposite polarity. For example, the in-phase will be positive to the east of a body, and negative to the west. The out-of-phase will be negative to the east, and positive to the west. Thus, the conductive body is located below the point where the two components *cross over.*

If a base station is used, a diurnal correction can be made, allowing a more detailed interpretation of the data. Alternately, a low-pass filter can be applied to determine the slow varying diurnal component of the primary field. This component can then be removed from the data. However, this method is far less reliable than the use of a base station.

APPENDIX B

Plates

Ontario

Ministry of
Northern Development
and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W9680.00633
Assessment Files Research Imaging

Personal information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this ... to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Roa

Instructions: - F
- F ... use form 0240.

32D05SE0101 2.16991 OSSIAN

900

2.16991

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

Name Silver Century Expl. Ltd. // Sudbury Contact Mines Ltd	Client Number 301001 // 198617
Address #2302-401 Bay St.,	Telephone Number 416-947-1212
Toronto, Ontario, M5H 2Y4	Fax Number 416-367-4681
Name Pascal J. Labbe // Bernard R. Boudreault	Client Number 154921 / 110673
Address Box 433	Telephone Number
Larder Lake, Ontario, P0K 1L0	Fax Number 705-643-2321

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

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

Work Type Magnetic/VLF Survey IP/Resistivity Survey Linecutting	**Office Use** Commodity Total $ Value of Work Claimed 26,302.00
Dates Work Performed From 08 (Day) 06 (Month) 96 (Year) To 24 (Day) 08 (Month) 96 (Year)	NTS Reference
Global Positioning System Data (if available) / Township/Area: Ossian Tp.	Mining Division: Larder Lake
M or G-Plan Number: M-378	Resident Geologist District: Kirkland Lake

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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 JVX Ltd, 60 West Wilmot St., Unit #22	Telephone Number 905-731-0972
Address Richmond Hill, Ontario, L4B 1M6	Fax Number 905-731-9312
Name W.A. Hubacheck Cons. Ltd. #1401-141 Adelaide St. W.	Telephone Number 416-364-2895
Address Toronto, Ontario M5H 3L5	Fax Number 416-364-5384
Name	Telephone Number
Address	Fax Number

4. Certification by Recorded Holder or Agent

I, DAVID W. CHRISTIE (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

[illegible] March 23/97

Date Dec 30/96

. **Work to be recorded and distributed.** Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this 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 work 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	1211636 ✓	16 units	41	0	0	41
✓ 2	1211637 ✓	16	137	0	0	137
✓ 3	1203474 ✓	9	10928	3600	0	7328
✓ 4	1203476 ✓	12	6058	4800	0	1258
✓ 5	1203477 ✓	6	2207	2400	0	0
✓ 6	1180276 ✓	3	3958	1200	0	2758
✓ 7	1180277 ✓	4	1928	1600	0	328
✓ 8	1211663 ✓	6	669	0	193	476
✓ 9	1187242 ✓	12	376	0	0	376
10						
11			9 claims			
12			84 Units			
13						
14						
15						
		Column Totals	26302	13600	193	12702

2.16991

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I, DAVID W. CHRISTIE (Print Full Name), do hereby certify that the above work credits are eligible under 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 Dec 30/96

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 to 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

[illegible]
MINING DIVISION
DEC 23 1996
11:00 A.M

Deemed Approved Date March 21/97

Date Notification Sent

Date Approved

Total Value of Credit Approved

Approved for Recording by Mining Recorder (Signature)

0241 (02/96)

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)

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

2.16991

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	Total Cost
Line cutting	BL 0.37 km Crosslines - 11.46 km	400.00 275.00	148.00 3151.50
Magnetic/VLF Survey	7.422 km	166.26	1234.00
IP/Resistivity Survey	14.528 km	1275.00	18523.20
Project Geologist	0.5 days	323.16	161.58
Associated Costs (e.g. supplies, mobilization and demobilization).			
Field Expenses			23.13
Consultant's Management Fee			606.04
Administration Costs			1454.48
Transportation Costs Mob/Demob			1000.00
Food and Lodging Costs			
		Total Value of Assessment Work	26,301.93

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Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If 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.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, DAVID W. CHRISTIE (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on Agent - Project Geologist I am authorized

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

March 11, 1997

Roy Spooner
Mining Recorder
4 Government Road East
Kirkland Lake, ON
P2N 1A2

Dear Sir or Madam:

Submission Number: 2.16991

		Status
Subject: Transaction Number(s):	W9680.00633	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.

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

NOTE: This correspondence may affect the status of your mining lands. Please contact the Mining Recorder to determine the available options and the status of your claims.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at beneteau_s@torv05.ndm.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

ORIGINAL SIGNED BY
Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

Correspondence ID: 10587
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.16991

Date Correspondence Sent: March 11, 1997 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9680.00633	1211636	OSSIAN	Deemed Approval	February 21, 1997

Section:

14 Geophysical IP
14 Geophysical MAG
14 Geophysical VLF

Correspondence to:

Mining Recorder
Kirkland Lake, ON

Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

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

David W. Christie
TORONTO, ONTARIO, CANADA

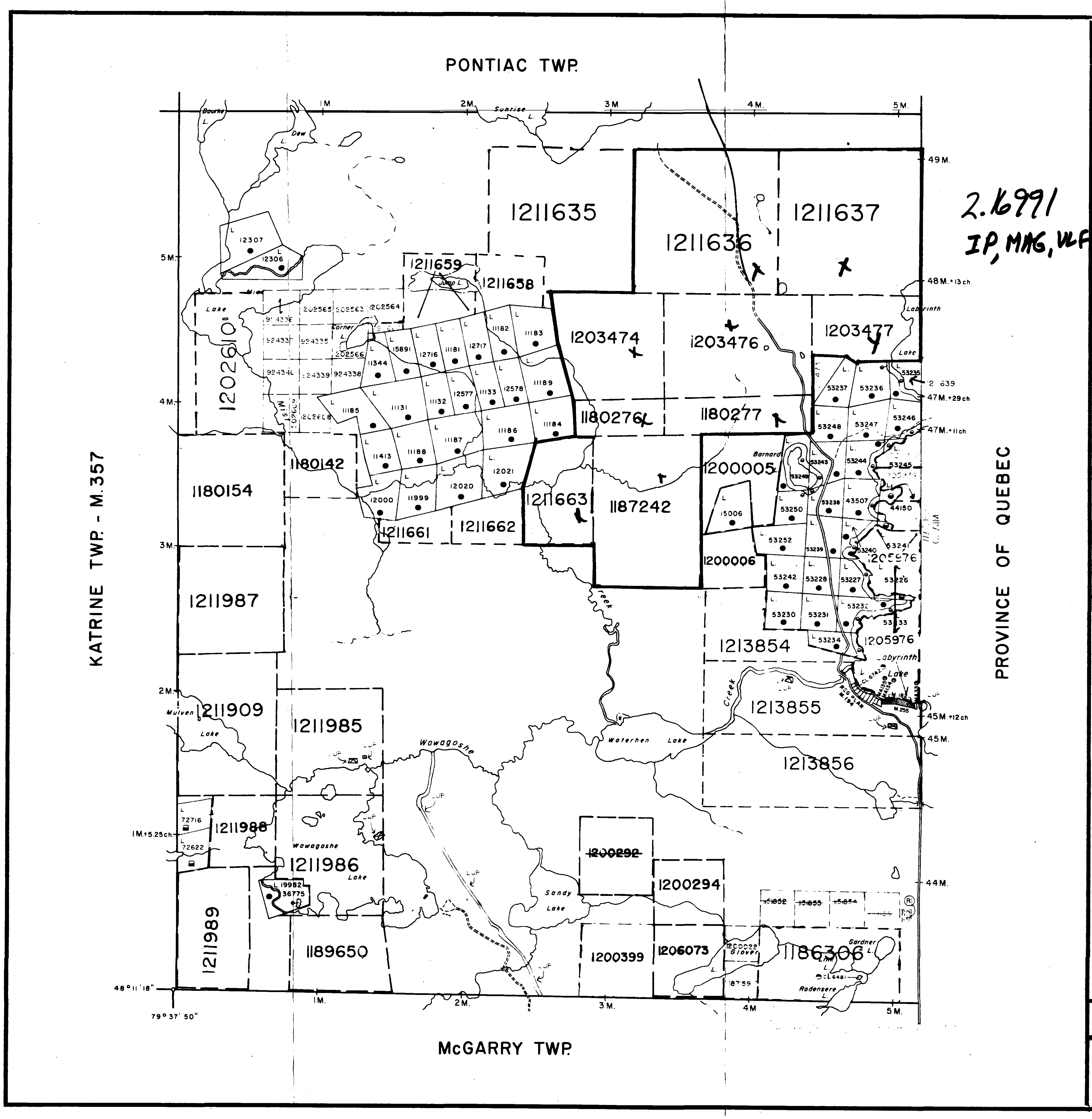
SILVER CENTURY EXPLORATIONS LTD.
TORONTO, ONTARIO

SUDBURY CONTACT MINES LIMITED
TORONTO, Ontario

PASCAL JOSEPH LABBE
LARDER LAKE, Ontario

BERNARD REMOND BOUDREAULT
LARDER LAKE, Ontario

Correspondence ID: 10587



2.16991
IP, MAG, VLF

THE TOWNSHIP

2.16991

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DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

DISPOSITION OF CROWN LANDS

PATENT,	SURFACE AND MINING RIGHTS	●
" ,	SURFACE RIGHTS ONLY	⊖
" ,	MINING RIGHTS ONLY	◒
LEASE,	SURFACE AND MINING RIGHTS	■
" ,	SURFACE RIGHTS ONLY	⊟
" ,	MINING RIGHTS ONLY	⬓
LICENCE	OF OCCUPATION	▼

ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	⚒
CANCELLED	C.

NOTES

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

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No. File	Date	Disposition

S.R.– SURFACE RIGHTS
M.R.– MINING RIGHTS

PLAN NO. M.378

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

TRIM LINE

Plate 4

m7 CHARGEABILITY (n=2)

PROJECT 54, LABBE-BOUDREAULT PROPERTY
Ossian Township, NTS 32D/4,32D/5
SILVER CENTURY EXPLORATIONS LTD.

Contours: 1, 5 mV/V
Rx: Scintrex IPR11, Tx: Scintrex IPC-7

JVX Ltd. ref.#9639

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Plate

TOTAL FIELD MAGNETICS

PROJECT 54, LABBE-BOUDREAULT PROPERTY
OSSIAN TWP., NTS 32D/4,32D/5
SILVER CENTURY EXPLORATIONS LTD.

Contours 10 nT, 50 nT
Rx: Scintrex IGS-2/MP4 @ ENVIMAG

JVX Ltd. ref. 9639-west

32D05SE0101 2.16991 OSSIAN

220

32D05SE0101 2.16991 OSSIAN

230

2.16991

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Plate 2

TOTAL FIELD MAGNETICS

PROJECT 54, LABBE-BOUDREAULT PROPERTY
OSSIAN TWP., NTS 32D/4,32D/5
SILVER CENTURY EXPLORATIONS LTD.

Contours 10 nT, 50 nT
Rx: Scintrex IGS-2/MP4 @ ENVIMAG

JVX Ltd. ref. 9639-west

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2.16991

240

Plate 3

VLF-EM - Cutler, Maine

PROJECT 54, LABBE-BOUDREAULT PROPERTY
Ossian Township, NTS 32D/4,32D/5
SILVER CENTURY EXPLORATIONS LTD.

VLF Source: 24 kHz Cutler NAA
Plote Scale: 40‾ per cm
Positive Eastward

JVX Ltd. ref.#9639

2.16991

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250

Plate 5

APPARENT RESISTIVITY (n=2)

PROJECT 54, LABBE–BOUDREAULT PROPERTY
Ossian Township, NTS 32D/4,32D/5
SILVER CENTURY EXPLORATIONS LTD.

Logarithmic Contours (ohm–m)
Rx: Scintrex IPR11, Tx: Scintrex IPC–7

JVX Ltd. ref.#9639

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MINING LANDS BRANCH

2.16991

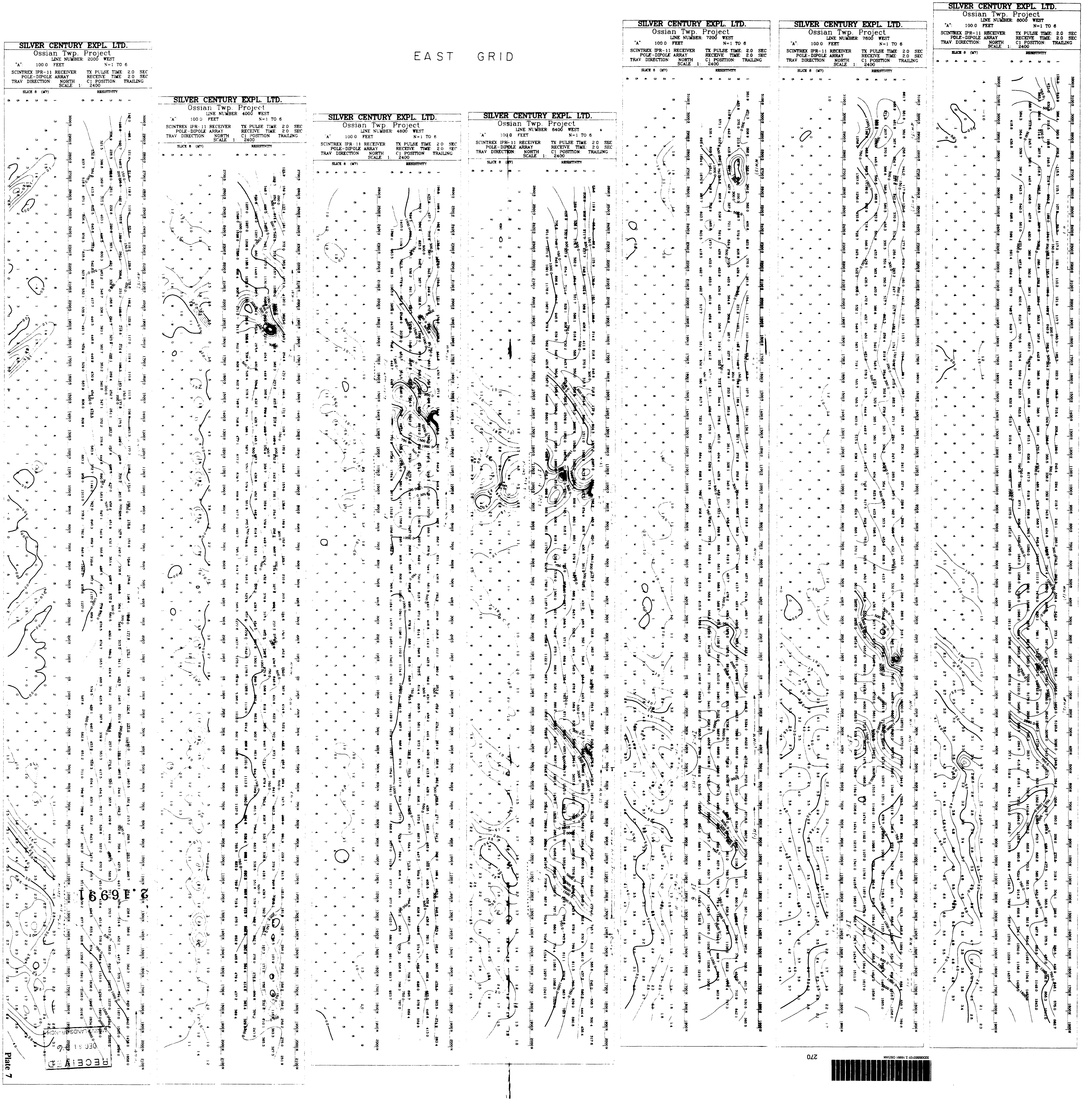
Plate 6

COMPILATION MAP

PROJECT 54, LABBE-BOUDREAULT PROPERTY
Ossian Township, NTS 32D/4,32D/5
SILVER CENTURY EXPLORATIONS LTD.

JVX Ltd. ref.#9670

EAST GRID



SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 2000 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 4000 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 4800 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 6400 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 7200 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 7600 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

SILVER CENTURY EXPL. LTD.
Ossian Twp. Project
LINE NUMBER: 8000 WEST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 2400
SLICE 8 (M7) RESISTIVITY

Plate 7

SILVER CENTURY EXPL. LTD.

Ossian Twp. Proj.(East Grid)
LINE NUMBER 2000 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400

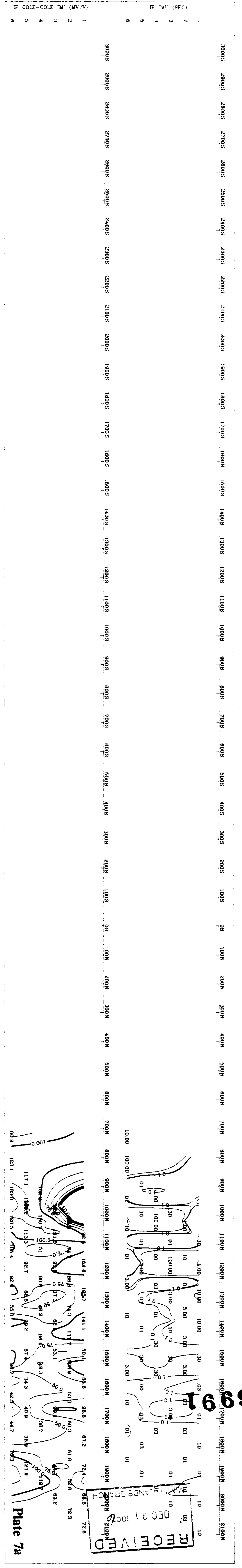


Plate 7a

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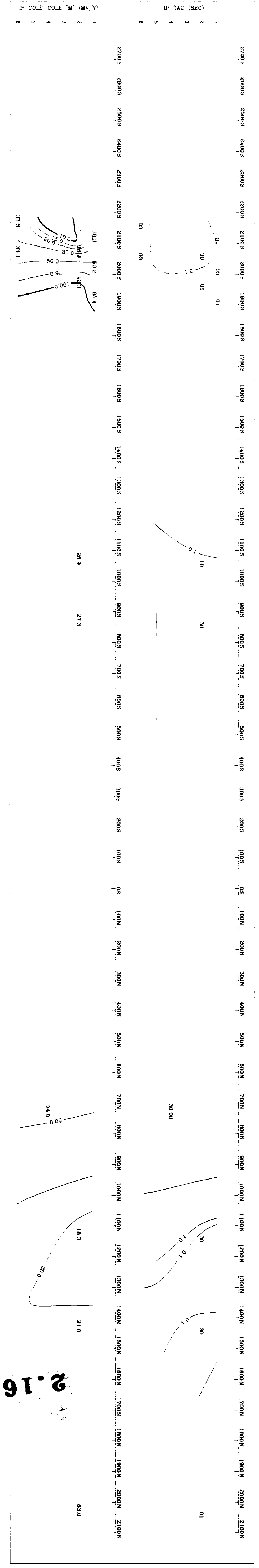
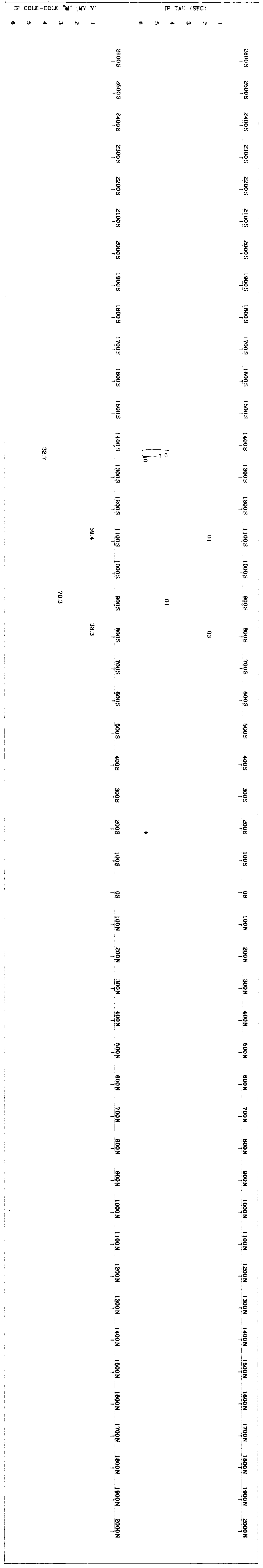
SILVER CENTURY EXPL. LTD.

Ossian Twp. Proj.(East Grid)
LINE NUMBER 4000 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400



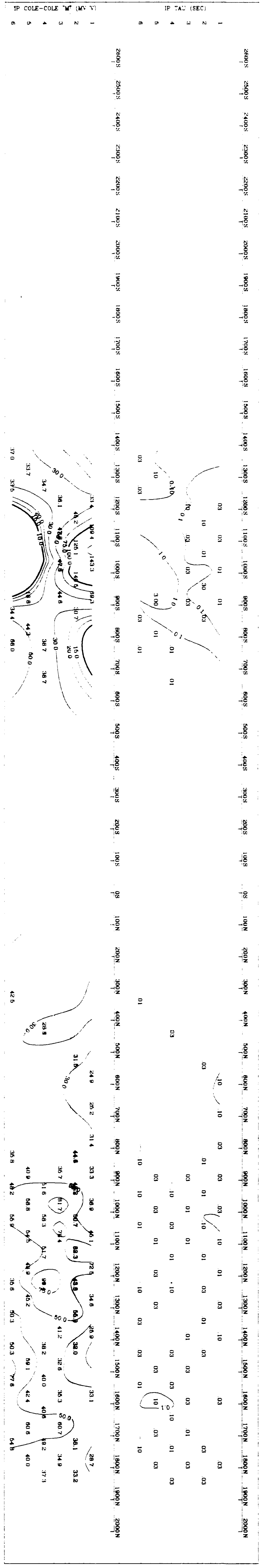
SILVER CENTURY EXPL. LTD.

Ossian Twp. Proj.(East Grid)
LINE NUMBER 4800 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400



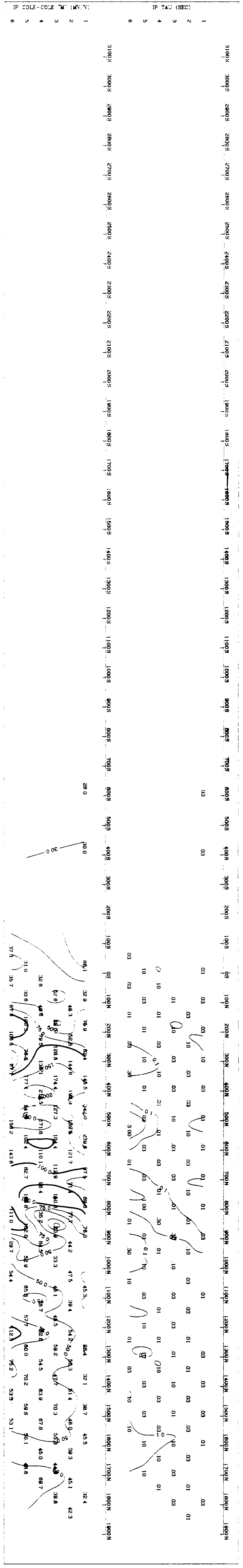
SILVER CENTURY EXPL. LTD.

Ossian Twp. Proj.(East Grid)
LINE NUMBER 6400 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400



SILVER CENTURY EXPL. LTD.

Ossian Twp. Proj.(East Grid)
LINE NUMBER 7200 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400

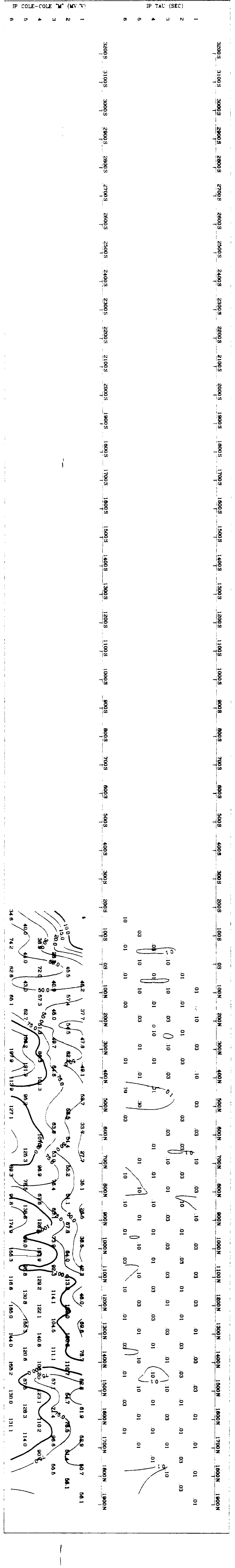


SILVER CENTURY EXPL. LTD.

Ossian Twp. Proj.(East Grid)
LINE NUMBER 7600 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400

SILVER CENTURY EXPL. LTD.

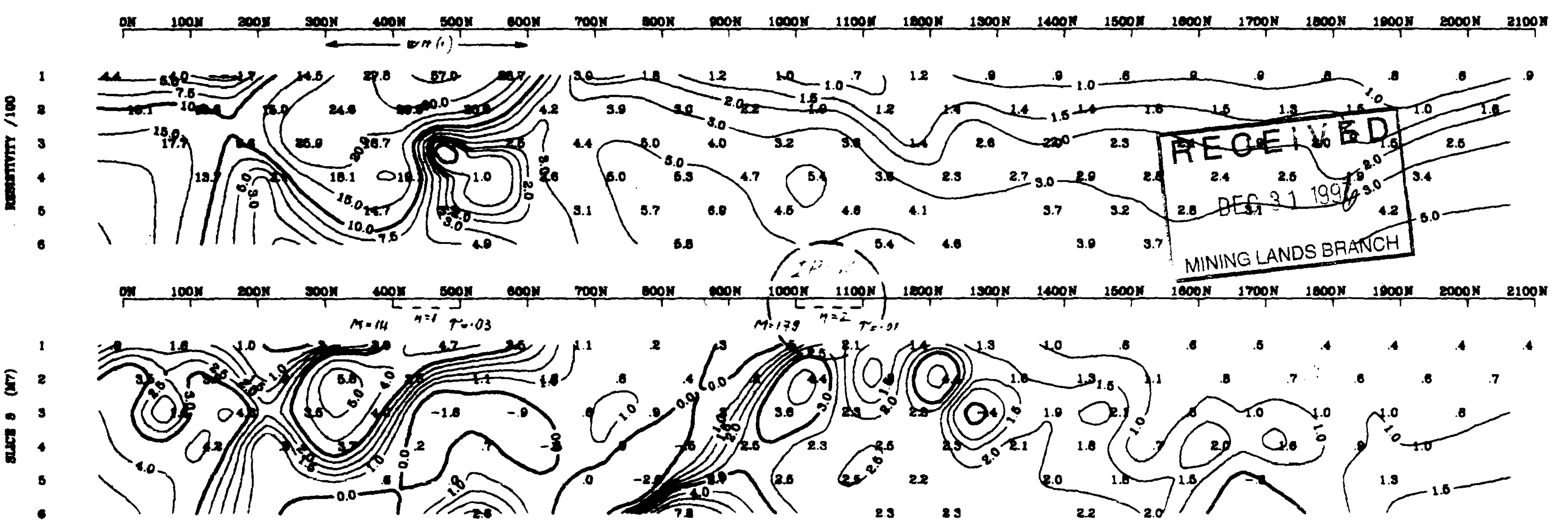
Ossian Twp. Proj.(East Grid)
LINE NUMBER 8000 WEST
"A" 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION TRAILING
SCALE 1: 2400



SILVER CENTURY EXPLORATIONS

Ossian Twp/Larder Lk.(Imp.Grid

LINE NUMBER: 2000 EAST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER
POLE-DIPOLE ARRAY
TRAV. DIRECTION: NORTH
SCALE 1: 2400
TX PULSE TIME: 2.0 SEC
RECEIVE TIME: 2.0 SEC
C1 POSITION: TRAILING



RECEIVED
DEC 31 1997
MINING LANDS BRANCH

SILVER CENTURY EXPLORATIONS

Ossian Twp/Larder Lk.(Imp.Grid

LINE NUMBER: 2000 EAST
"A": 100.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER
POLE-DIPOLE ARRAY
TRAV. DIRECTION: NORTH
SCALE 1: 2400
TX PULSE TIME: 2.0 SEC
RECEIVE TIME: 2.0 SEC
C1 POSITION: TRAILING

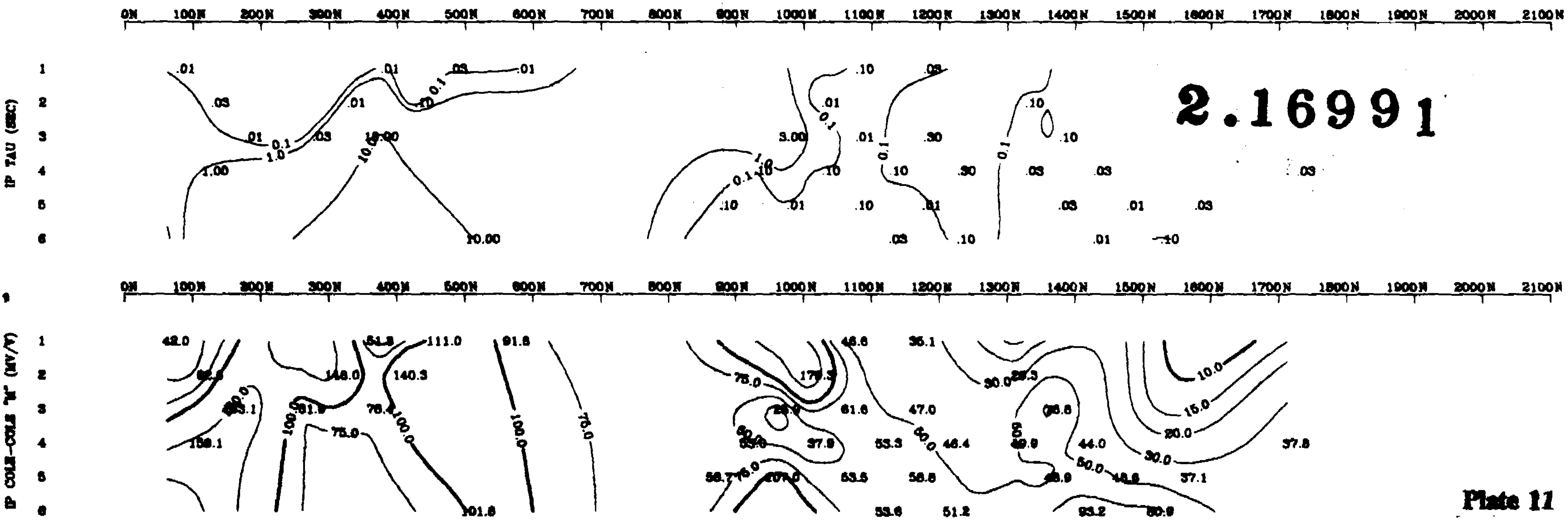


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Plate 11

290

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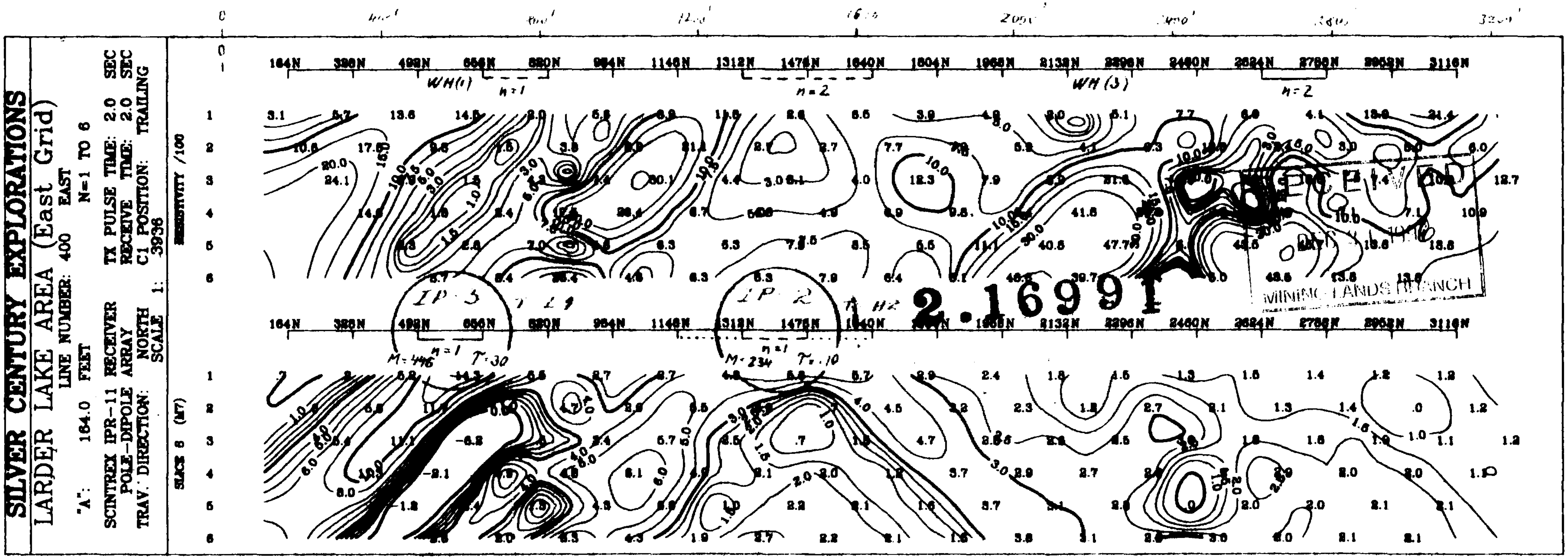

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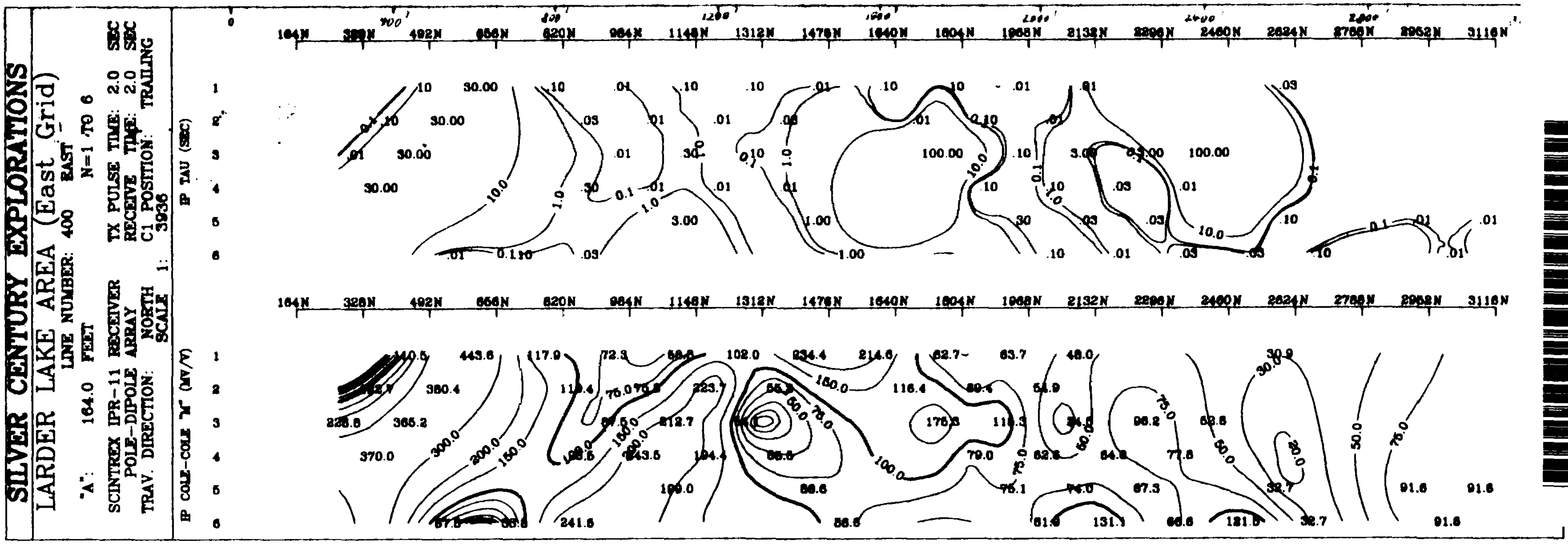
MINING LANDS BRANCH



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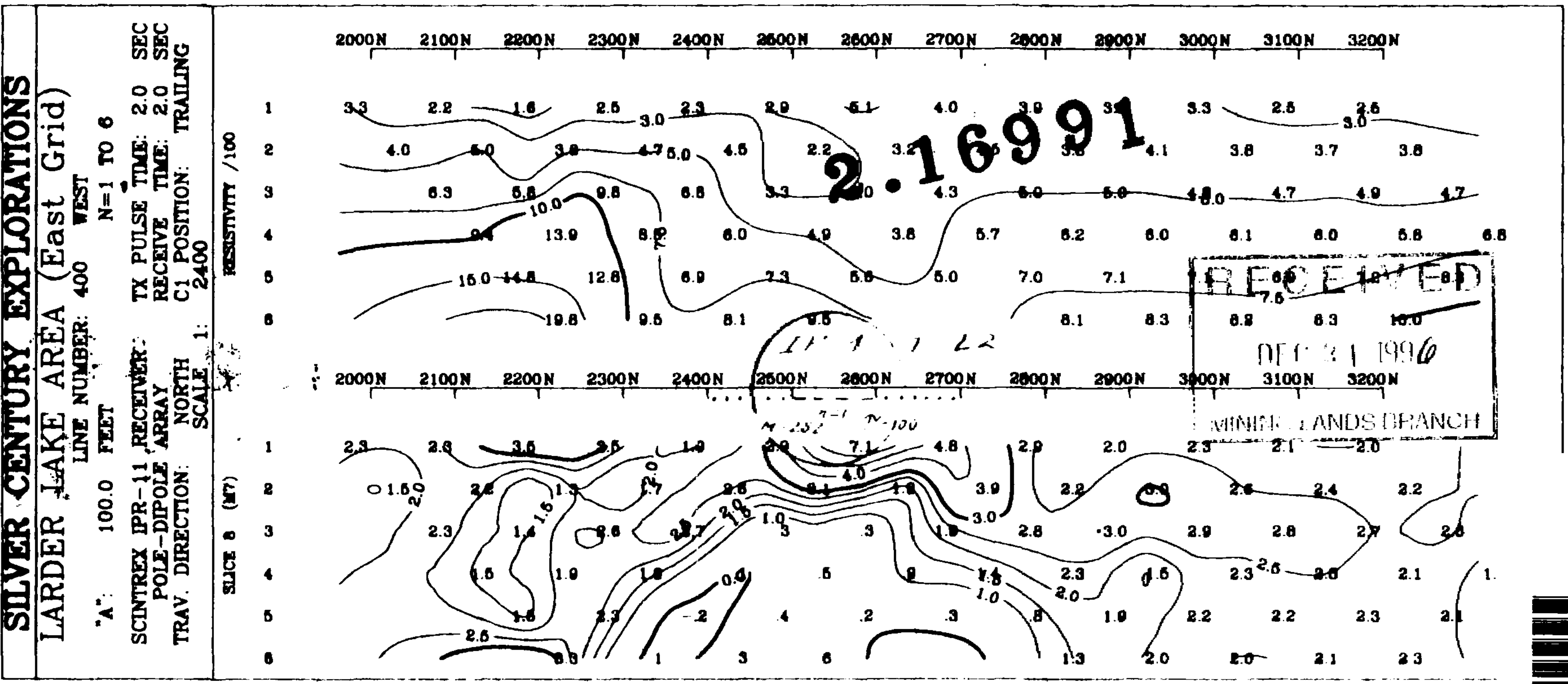
32D05SE0101 2.16991 OSSIAN

Plate 10



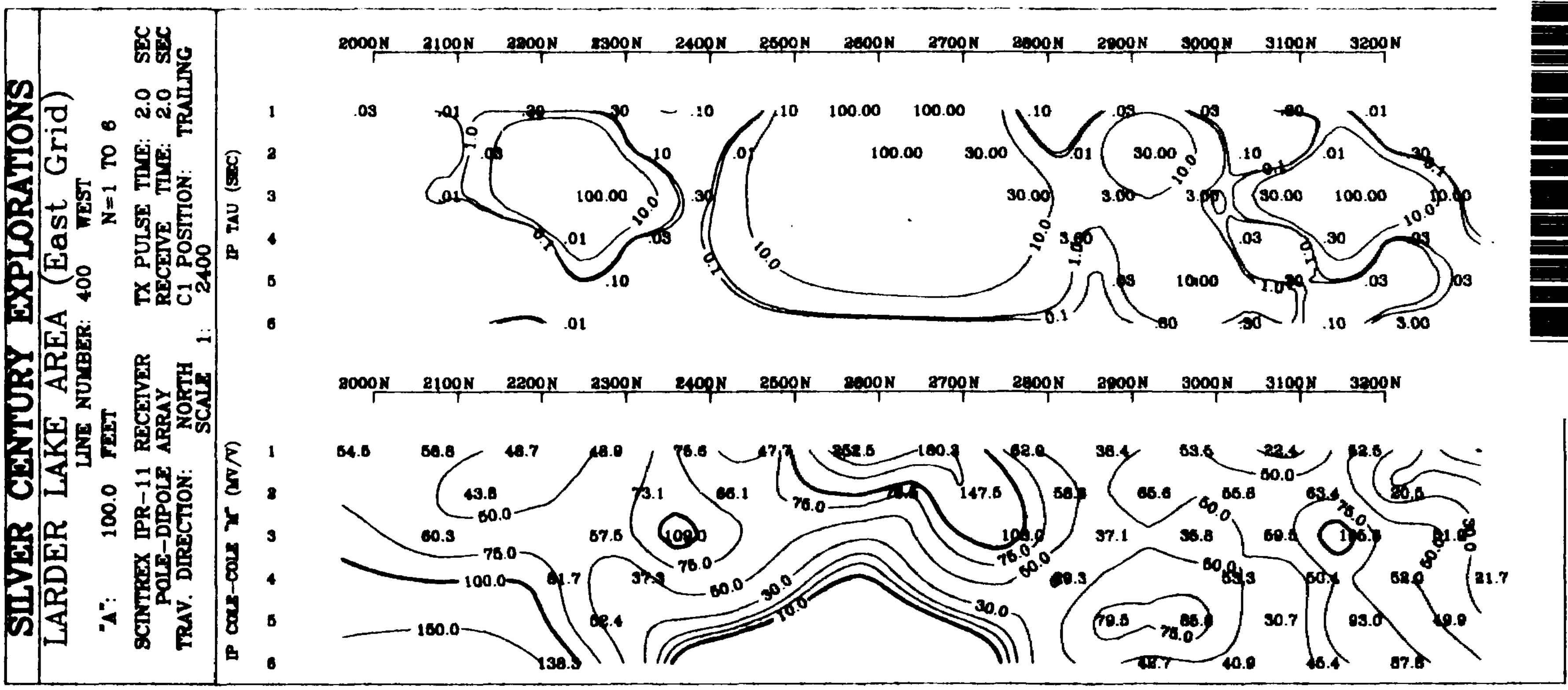


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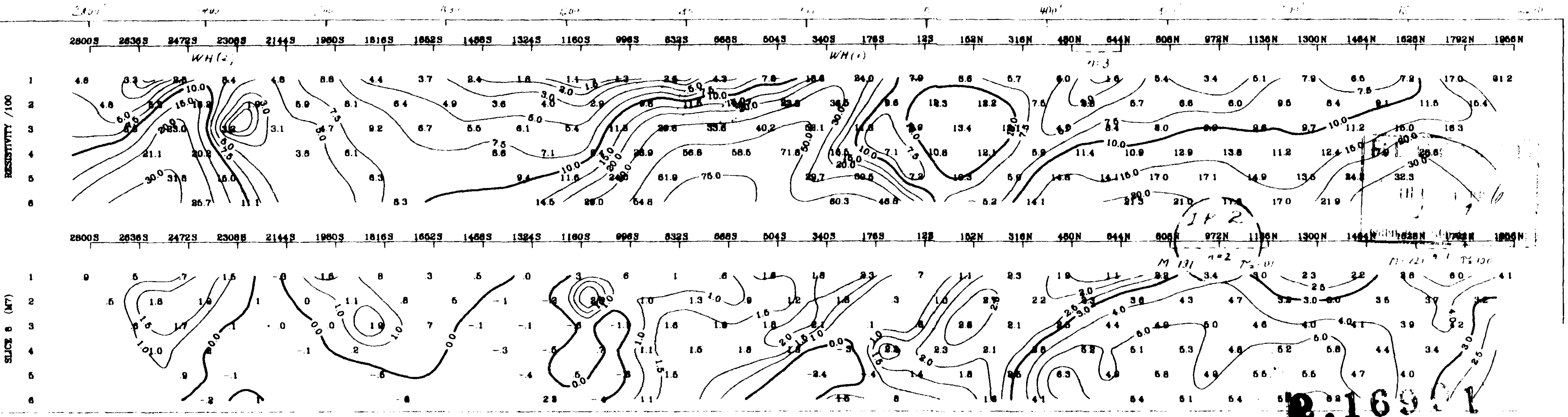
Plate 9

SILVER CENTURY EXPLORATIONS

LARDER LAKE AREA (East Grid)

LINE NUMBER: 1320 WEST
"A": 164.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 3936



SILVER CENTURY EXPLORATIONS

LARDER LAKE AREA (East Grid)

LINE NUMBER: 1320 WEST
"A": 164.0 FEET N=1 TO 6
SCINTREX IPR-11 RECEIVER TX PULSE TIME: 2.0 SEC
POLE-DIPOLE ARRAY RECEIVE TIME: 2.0 SEC
TRAV. DIRECTION: NORTH C1 POSITION: TRAILING
SCALE 1: 3936

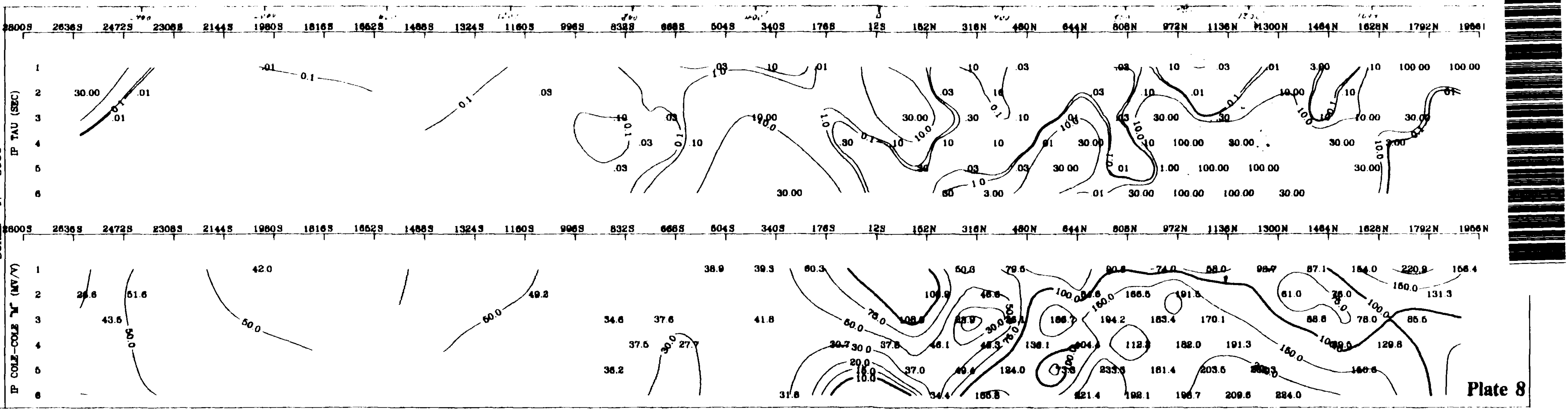


Plate 8

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