

**2.17373**

**VLF-EM SURVEY**

**OKA 4 PROPERTY**

*Powell Township  
Sedex Mining Corp.*

May 1997



41P15NE0029 2.17373 POWELL

010

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VLF-EM profiles with posting



41P15NE0029 2.17373 POWELL

010C

*Oka 4 Property (Otisse north)*

**1.0 INTRODUCTION:**

In May of 1997, a program of linecutting and geophysical surveys was carried out on the Oka 4 Property held by Sedex Mining Corp., 21 Goodfish Rd., P.O. Box 1146, Kirkland Lake, Ontario P2N 3M7. The work was executed and reported on by David Laronde of Meegwich Consultants Inc., P.O. Box 482, Temagami, Ontario POH 2H0.

A total of 8.475 km of grid line establishment was done from a 1000 metre long baseline running at an azimuth of 060 degrees for control. The entire grid was surveyed with VLF.

**2.0 PROPERTY:**

The 48 hectare property in Powell Twp. consists of 4 contiguous claims numbered as follows:

1206571    1206572    1206573    1206574

**3.0 LOCATION AND ACCESS:**

The property is situated 400 meters east of Little Hawley Lake, 4.0 km north-northwest of the town of Matachewan, Ontario, which is 50 km west of Kirkland Lake.

The property can be accessed by walking from a secondary road originating from Hwy 566 (near Ryan Lake) about 5 km northwest of Matachewan.

#### *Oka 4 Property (Otisse north)*

This road heads northeast coming to within 250 meters of the northwest corner of the claim group.

#### **4.0 VLF-EM SURVEY:**

A total of 7.475 km (340 readings) was surveyed with a station spacing of 25 meters on lines spaced at 100 meters. NAA Cutler, Maine was used as the transmitting station at 24.0 kHz.

**4.1 Instrumentation:** A Geonics VLF EM-16 receiver was used for the survey. This instrument measures, to an accuracy of +/- 1%, the in-phase and quad-phase components of the vertical magnetic field as a percentage of the horizontal primary field.

**4.2 Survey Results:** The results are presented on profile plans at 1:2500 scale.

The survey outlined 4 conductors with northeast trends that are briefly described as follows:

**Conductor A:** A moderately strong conductor that tapers out on both ends. Strongest response on L 600 E. High priority.

**Conductor B:** Weak, continuing off grid, easterly trend. High priority.

**Conductor C:** Short, weak response. Area was trenched before. Medium priority.

**Conductor D:** One line anomaly, very weak. Low priority.

*Oka 4 Property (Otisse north)*

**5.0 GEOLOGY :**

The property is underlain by Archean mafic to intermediate volcanic rocks. A northeast trending fault cuts the claim group in half. The gold mines 3 km to the south also have a northeast trending lineament near the shaft area. A syenite intrusive comes down to the north perimeter of the property. Carbonate and asbestos are mapped on the property near the fault.

The western extension or Matachewan Branch of the Larder-Cadillac Break passes within 2.5 km from the south boundary of the property.

The surrounding greenstone geology off the claim (3.0 km south) contains the prolific Young-Davidson Mines which produced 585,690 ounces of gold from 1934 -1957 and the Matachewan Consolidated Mine which produced 370,427 ounces of gold from 1934-1954.

**6.0 CONCLUSIONS AND RECOMMENDATIONS:**

In conclusion, the pattern of conductors outlined may all be part of a northeast trending fault and/or associated shear zone. Conductor C has been trenched in the past.

There is a possibility of sulphide mineralization associated with the faulting/shearing zone. Carbonate is present near Conductor C.


**Recommended Follow-up Work:**

Phase One: Magnetometer survey and mapping. Outline geology and structure.

*Oka 4 Property (Otisse north)*

Phase Two: Two lines of I.P. are recommended as follow-up work on these conductors. L 700 and 800 E (all of line) would test all four anomalies for disseminated mineralization.

Respectfully submitted,



David Laronde *Qual. # 2.834B*  
Geology Engineering Technologist

*Oka 4 Property (Otisse north)*

**References**

1964 Ontario Department of Mines - Geology of Powell and Cairo Townships - Map 2110

1967 H.L. Lovell - Geology of Matachewan Area - GR 51

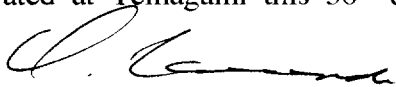
*Oka 4 Property (Otisse north)*

**CERTIFICATE OF AUTHOR**

I, David Laronde of the town of Temagami, Ontario hereby certify:

1. That I am a consulting technologist and have been engaged in my profession for the past 18 years.
2. That I am a graduate of Cambrian College in Sudbury with a diploma in Geology Engineering Technology 1979.
3. That my knowledge of the property described herein was acquired by field work and documentation.

Dated at Temagami this 30<sup>th</sup> day of May 1997.



David Laronde



# CLAIM MAP

OKA PROJECT

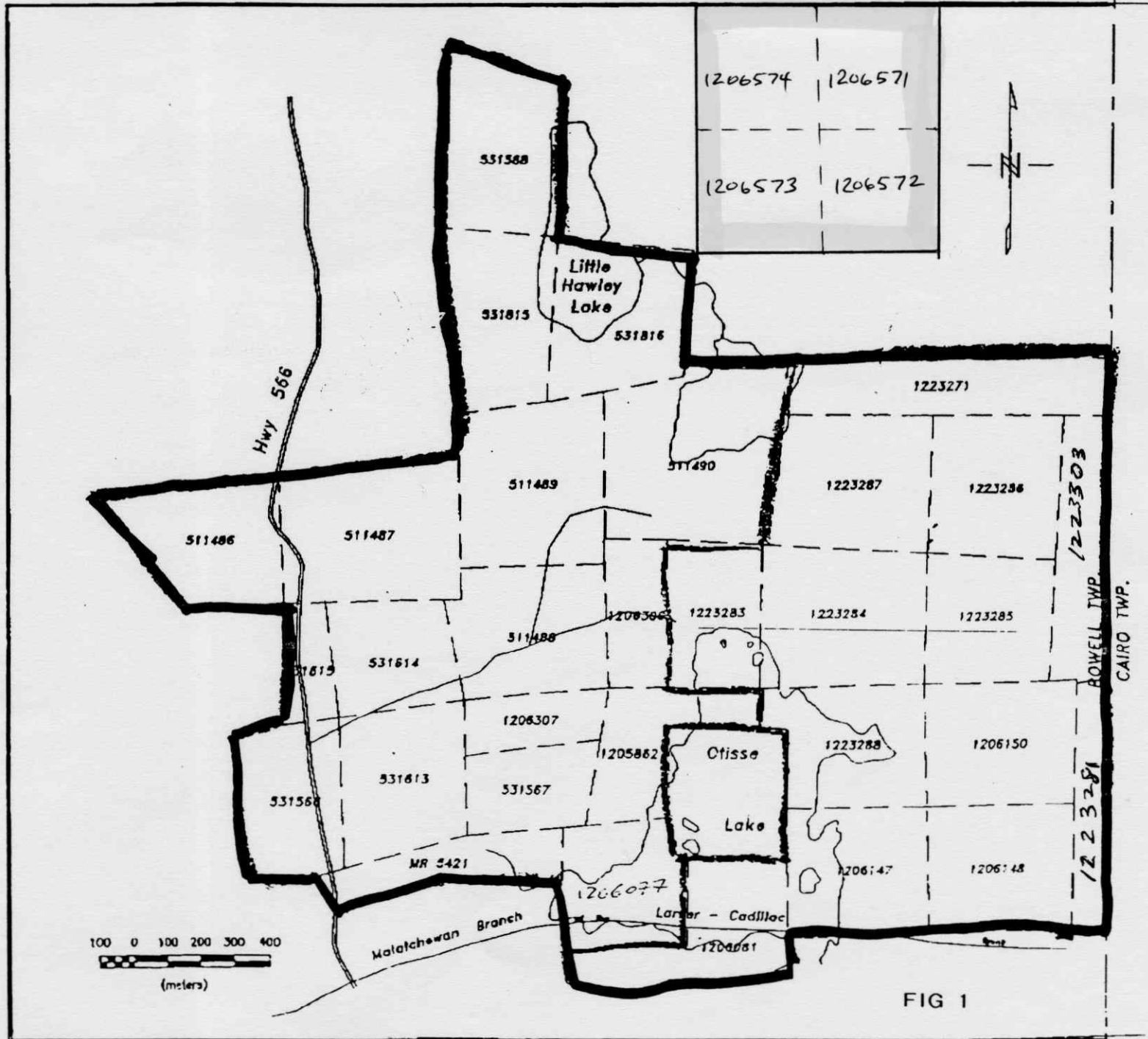


FIG 1

1:100,000

# LOCATION MAP

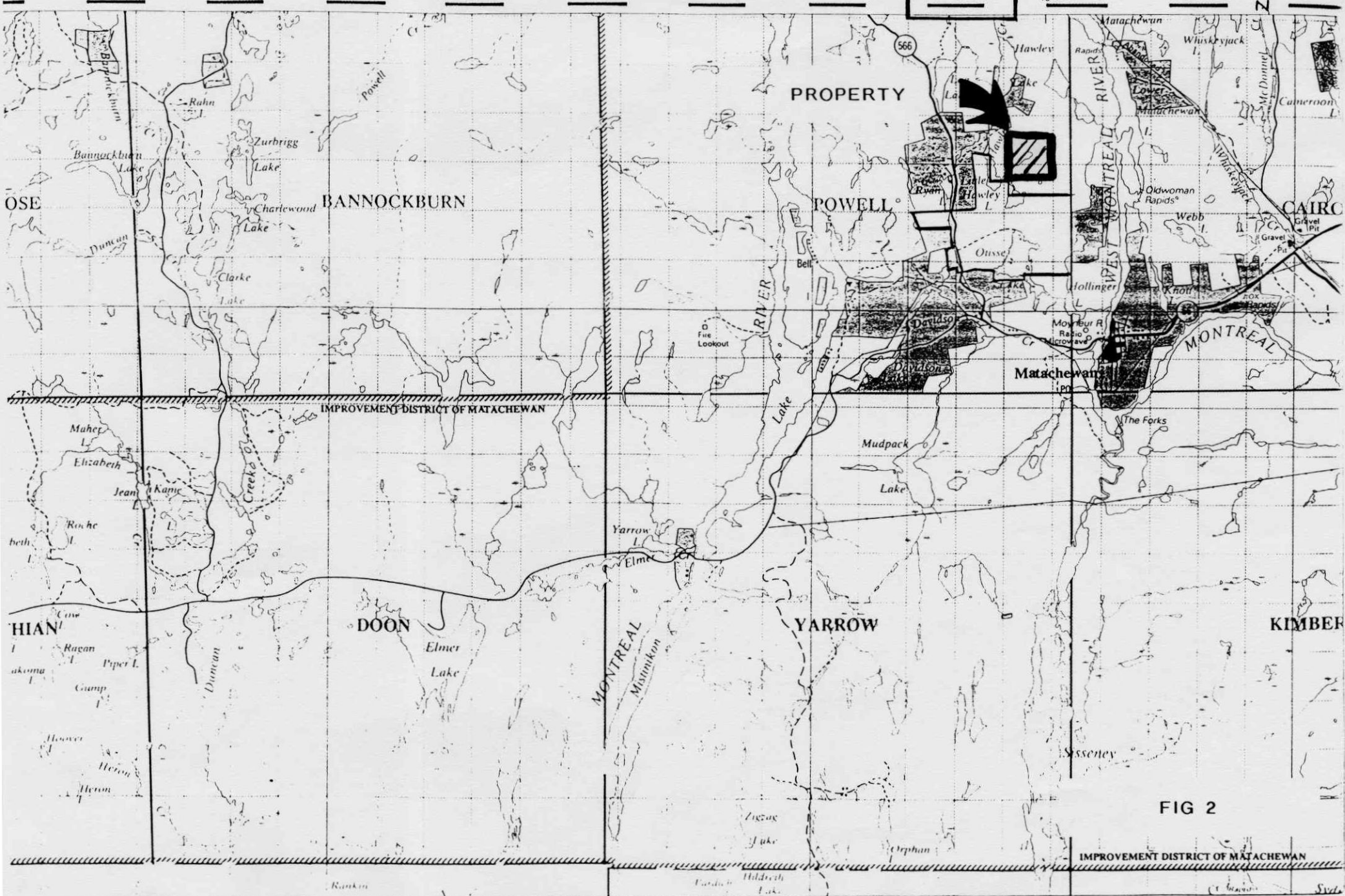
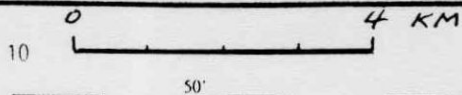


FIG 2

IMPROVEMENT DISTRICT OF MATACHEWAN



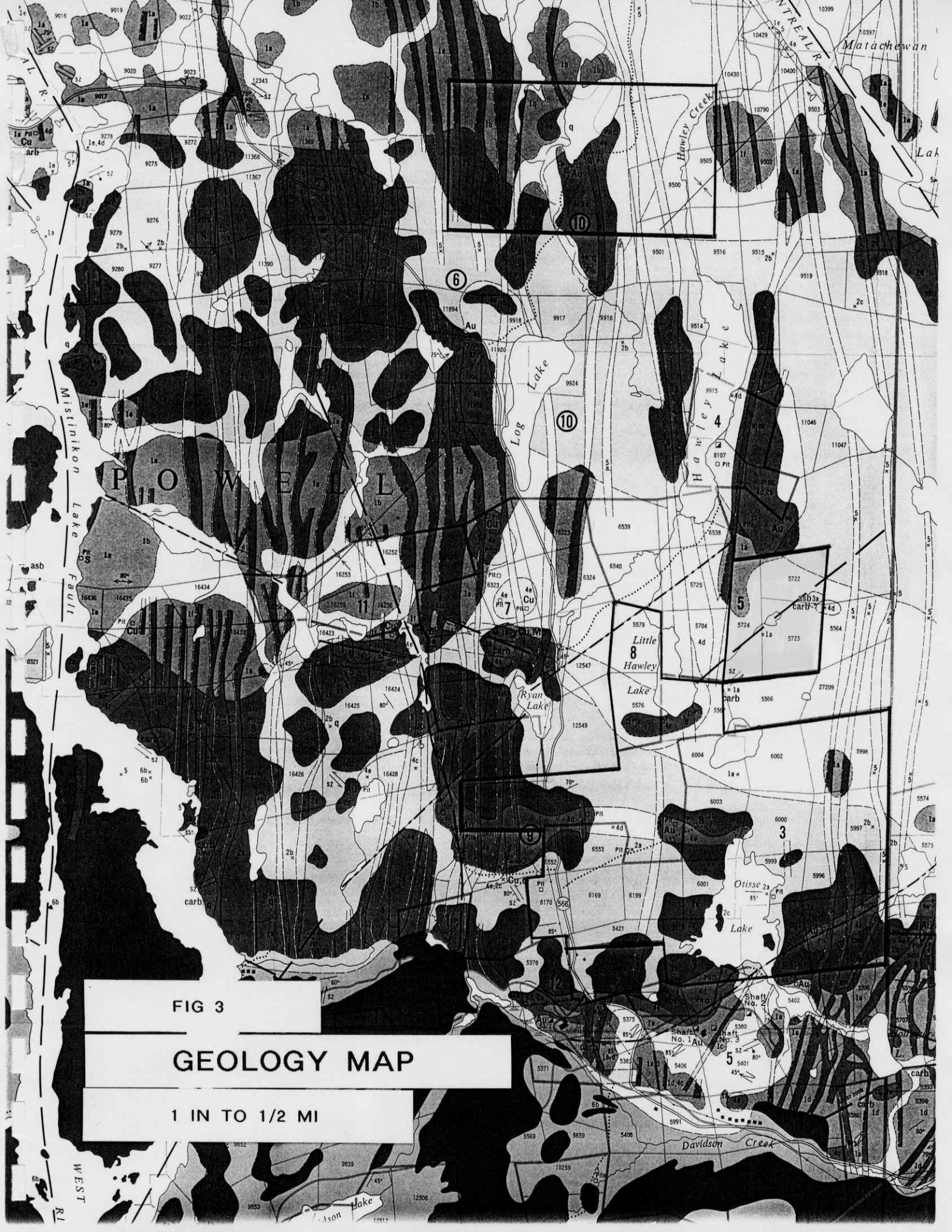
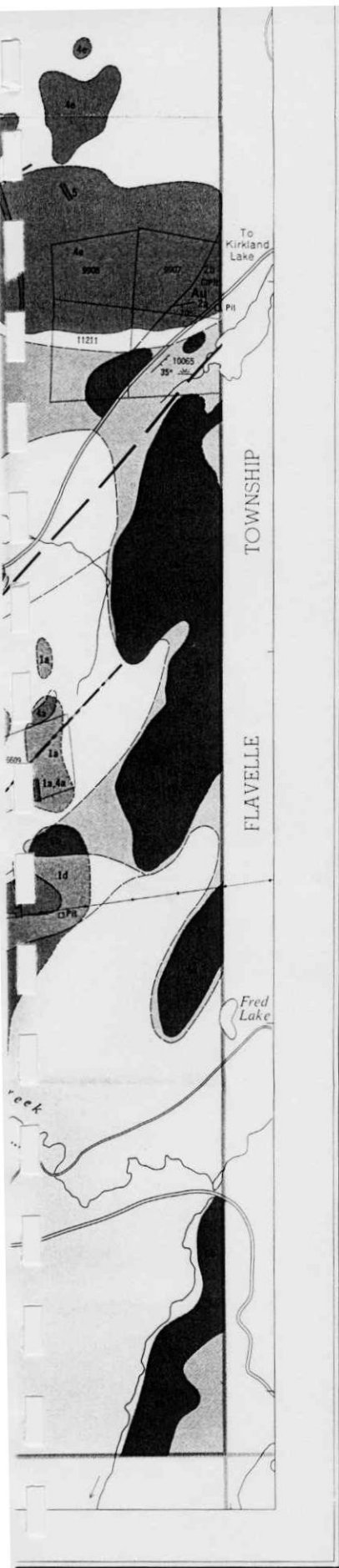


FIG 3

GEOLOGY MAP

1 IN TO 1/2 MI



## LEGEND

### CENOZOIC\*

#### RECENT

*Swamp and stream deposits.*

#### PLEISTOCENE

*Sand, gravel, clay.*

#### UNCONFORMITY

### PRECAMBRIAN\*\*

#### PROTEROZOIC

##### MAFIC INTRUSIVE ROCKS (Nipissing)





 7 *Diabase.*

#### INTRUSIVE CONTACT

#### HURONIAN

##### COBALT GROUP


*Gowganda Formation*

 6a *Argillaceous and arkosic quartzite.*  
 6b *Conglomerate.*  
 6c *Argillite.*  
 6d *Arkose.*

#### UNCONFORMITY







#### ARCHEAN

##### MAFIC INTRUSIVE ROCKS (Matachewan)

 5 *Diabase, undifferentiated.*



#### INTRUSIVE CONTACT

##### SILICIC INTRUSIVE ROCKS (Algonian)

 4a *Granite.*  
 4b *Granodiorite and granitic gneiss.*  
 4c *Syenite.*  
 4d *Mafic syenite and lamprophyre*  
 4e *Syenite porphyry and coarse-grained syenite.*  
 4f *Quartz diorite and diorite.*




#### INTRUSIVE CONTACT

##### ULTRAMAFIC AND MAFIC INTRUSIVE ROCKS (Haileyburian)

 3a *Serpentinite.*  
 3b *Diorite.*









#### INTRUSIVE CONTACT

##### SEDIMENTARY ROCKS (Timiskaming)

 2a *Conglomerate.*  
 2b *Greywacke, interbedded argillite and quartzite.*  
 2c *Arkose.*

#### UNCONFORMITY

##### VOLCANIC ROCKS (Keewatin)

 1a *Basalt and andesite.*  
 1b *Bleached, silicified, sericitized volcanic rocks.*  
 1c *Andesite porphyry.*  
 1d *Tuff (banded, and massive types).*  
 1e *Agglomerate.*  
 1f *Rhyolite and dacite.*  
 1g *Carbonatized and amygdaloidal rocks.*  
 1h *Amphibolite.*

asb *Asbestos.*  
 Au *Gold.*  
 ba *Barite.*  
 carb *Carbonate.*  
 Cu *Copper.*  
 mag *Magnetite.*  
 Mo *Molybdenum.*  
 Ni *Nickel.*  
 n *Quartz*

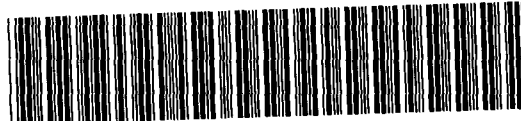
EM16 SPECIFICATIONS

MEASURED QUANTITY	Inphase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity).
SENSITIVITY	Inphase: $\pm 150\%$ Quad-phase: $\pm 40\%$
RESOLUTION	$\pm 1\%$
OUTPUT	Nulling by audio tone. Inphase indication from mechanical inclinometer and quadphase from a graduated dial.
OPERATING FREQUENCY	15-25 kHz (15-30 kHz optional) VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	ON/OFF switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.
POWER SUPPLY	6 disposable 'AA' cells.
DIMENSIONS	53 x 21.5 x 28 cm
WEIGHT	Instrument: 1.8 kg Shipping: 8.35 kg

CAUTION:

EM16 inclinometer may be damaged by exposure to temperatures below  $-30^{\circ}\text{C}$ . Warranty does not cover inclinometers damaged by such exposure.

Personal Information  
Mining Act, the  
Questions about  
933 Ramsey Lake



900

and 66(3) of the Mining Act. Under section 8 of the  
ent work and correspond with the mining land holder.  
of Northern Development and Mines, 6th Floor.

Instructions:

Please type or print in ink.

2.17373

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

Name <u>Tom Obradovich / 2973090 Canada Inc</u>	Client Number <u>177382 / 300337</u>
Address <u>P.O. Box 1146</u>	Telephone Number <u>(705) 567-6883</u>
<u>KIRKLAND LAKE Ontario P2N3M7</u>	Fax Number <u>(705) 567-6873</u>
Name	Client Number
Address	Telephone Number
	Fax Number

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 <u>VLF-EM</u>	Office Use
	Commodity
	Total \$ Value of Work Claimed
Dates Work Performed From <u>28</u> <u>04</u> <u>97</u> To <u>27</u> <u>05</u> <u>97</u>	NTS Reference
Global Positioning System Data (if available)	Mining Division
Township/Area <u>Powell</u>	Resident Geologist District
M or G-Plan Number	

- 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 to assigning work;  
- include two copies of your technical report.

RECEIVED  
JUN 06 1997  
MINING LANDS BRANCH

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

Name <u>Megawick Inc D. Laronde</u>	Telephone Number <u>(705) 569-2904</u>
Address <u>P.O. Box 482, Temagami, Ont P0H 2H0</u>	Fax Number <u>(705) 569-2817</u>
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

RECEIVED  
JUN 3 1997  
MINING DIVISION  
LAKE

4. Certification by Recorded Holder or Agent

I, Larry J. Stoliker, 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 <u>Larry J. Stoliker</u>	Date <u>June 3/97</u>
Agent's Address <u>P.O. Box 1146, KIRKLAND LAKE, ONT P2N3M7</u>	Telephone Number <u>705-567-6883</u>
	Fax Number <u>567-6873</u>

Deemed Sept. 1 / 97

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.

Star

Personal section the r

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 L-1206571	1	\$1777.00	\$1777		
2 L-1206572	1	1777.00	1777		
3 L-1206573	1	1777.00	1777		
4 L-1206574	1	1777.00	1777		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals		\$7108	\$7108		

RECEIVED  
JUN 06 1997  
MINING LANDS BRANCH

Larry J. Stoliker (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: Larry J. Stoll Date: June 03/97

3. 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  
90 8 11 8 11 26

Deemed Approved Date <u>June 1/97</u>	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature) <u>[Signature]</u>	

T04: Otisse North

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 8/96. 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 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.

2.17373

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
Line cutting - crew chief:	156.5 hrs	\$15 per hr	\$ 2347.50
2 students:	13 days	\$100 a day	2600.00
VLF	22.5 hrs	\$15 per hr.	337.50
<b>Associated Costs (e.g. supplies, mobilization and demobilization).</b>			
	Truck Rental 17 days	\$50 a day	<del>850.00</del>
	Digitize data, base map, Report writing, materials and Map Production		633.45
	Field and Report Preparation 1/2 day	\$200	100.00
<b>Transportation Costs</b>			
	Truck Rental 17 days	\$50 per day	850.00
	(2210km) Gas		240.00
<b>Food and Lodging Costs</b>			
<div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>RECEIVED</b>                      JUN 06 1997.                      MINING LANDS BRANCH                 </div>			
Total Mining Lands Assessment Work			\$ 7108.45

**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                      x 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:**

Larry J. Steliker (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 the accompanying Declaration of Work form as Agent I am authorized (recorded holder, agent, or state company position with signing authority) to make this certification.

Signature <u>Larry J. Steliker</u>	Date <u>June 3/97</u>
---------------------------------------	--------------------------



October 14, 1997

THOMAS JOHN ELI OBRADOVICH  
P.O. BOX 1146  
KIRKLAND LAKE, Ontario  
P2N-3M7

Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9846  
Fax: (705) 670-5863

Dear Sir or Madam:

**Submission Number: 2.17373**

**Status**

**Subject: Transaction Number(s):** W9780.00593 Approval After Notice

---

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.

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at [gates\\_b@torv05.ndm.gov.on.ca](mailto:gates_b@torv05.ndm.gov.on.ca) or by telephone at (705) 670-5856.

Yours sincerely,



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

# Work Report Assessment Results

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**Submission Number:** 2.17373

**Date Correspondence Sent:** October 14, 1997

**Assessor:** Bruce Gates

---

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9780.00593	1206571	POWELL	Approval After Notice	October 10, 1997

**Section:**

14 Geophysical VLF

The 45 days outlined in the Notice dated August 26, 1997 have passed.

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

**Correspondence to:**

Resident Geologist  
Kirkland Lake, ON

Assessment Files Library  
Sudbury, ON

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

Larry J. Stoliker  
KIRKLAND LAKE, ONTARIO, CANADA

THOMAS JOHN ELI OBRADOVICH  
KIRKLAND LAKE, Ontario

2973090 CANADA INC.  
KIRKLAND LAKE, ON

---

# Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: October 14, 1997

Submission Number: 2.17373

---

Transaction Number: W9780.00593

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1206571	1,141.00
1206572	1,141.00
1206573	1,141.00
1206574	1,140.00
	<hr/>
Total: \$	4,563.00

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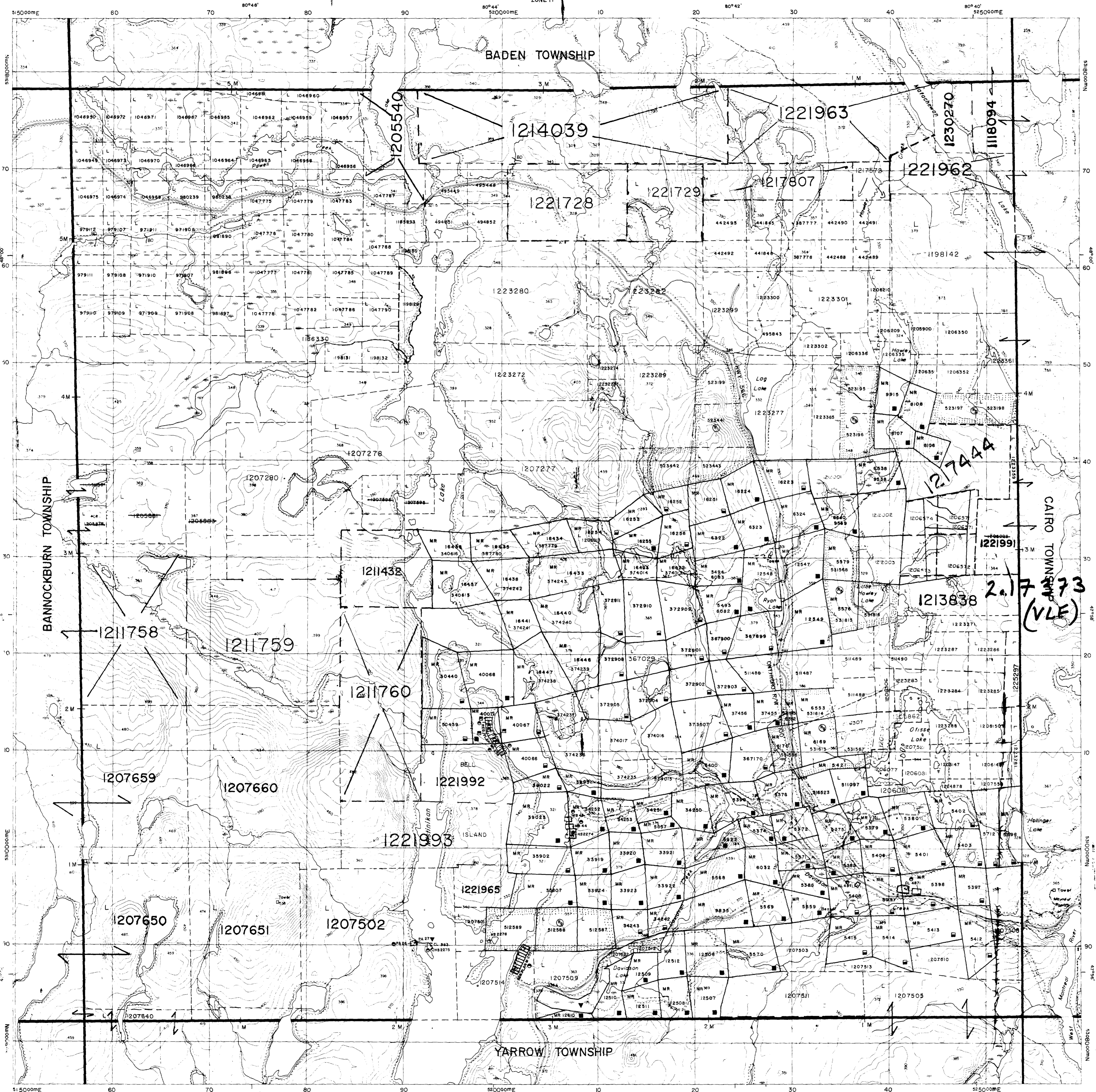
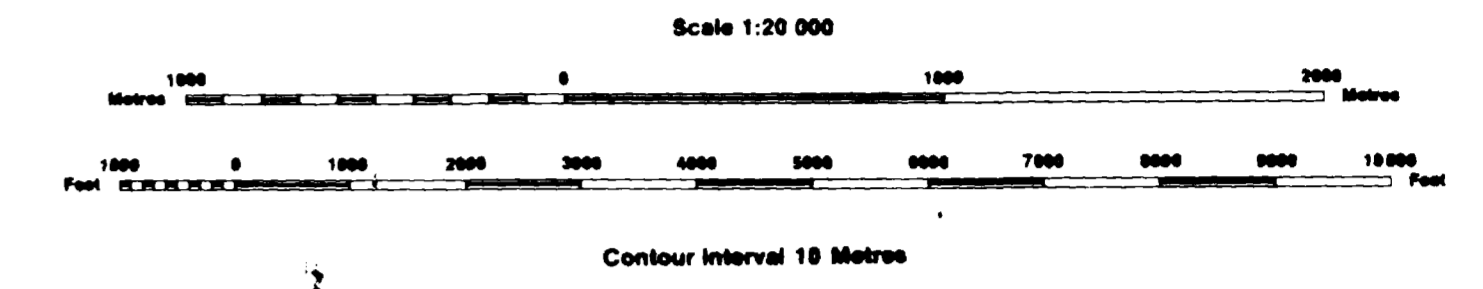
**INDEX TO LAND DISPOSITION**

PLAN  
G-3218  
TOWNSHIP

M.N.R. ADMINISTRATIVE DISTRICT  
KIRKLAND LAKE  
MINING DIVISION  
LARDER LAKE  
LAND TITLES/REGISTRY DIVISION  
TIMISKAMING

**POWELL**

**2.17373**



**AREAS WITHDRAWN FROM DISPOSITION**

MR - Mining Rights Only  
SRO - Surface Rights Only  
M+S - Mining and Surface Rights

**SYMBOLS**

- Boundary
- Township, Meridian, Baseline
- Road allowance; surveyed
- shoreline
- Lot/Concession; surveyed
- unsurveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way; road
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

**NOTES**

L.O. 7601 COVERS FLOODING RIGHTS IN THIS TOWNSHIP TO CONTOUR 870 TO ONTARIO HYDRO. FILE 12290 VOL. 2.

**DISPOSITION OF CROWN LANDS**

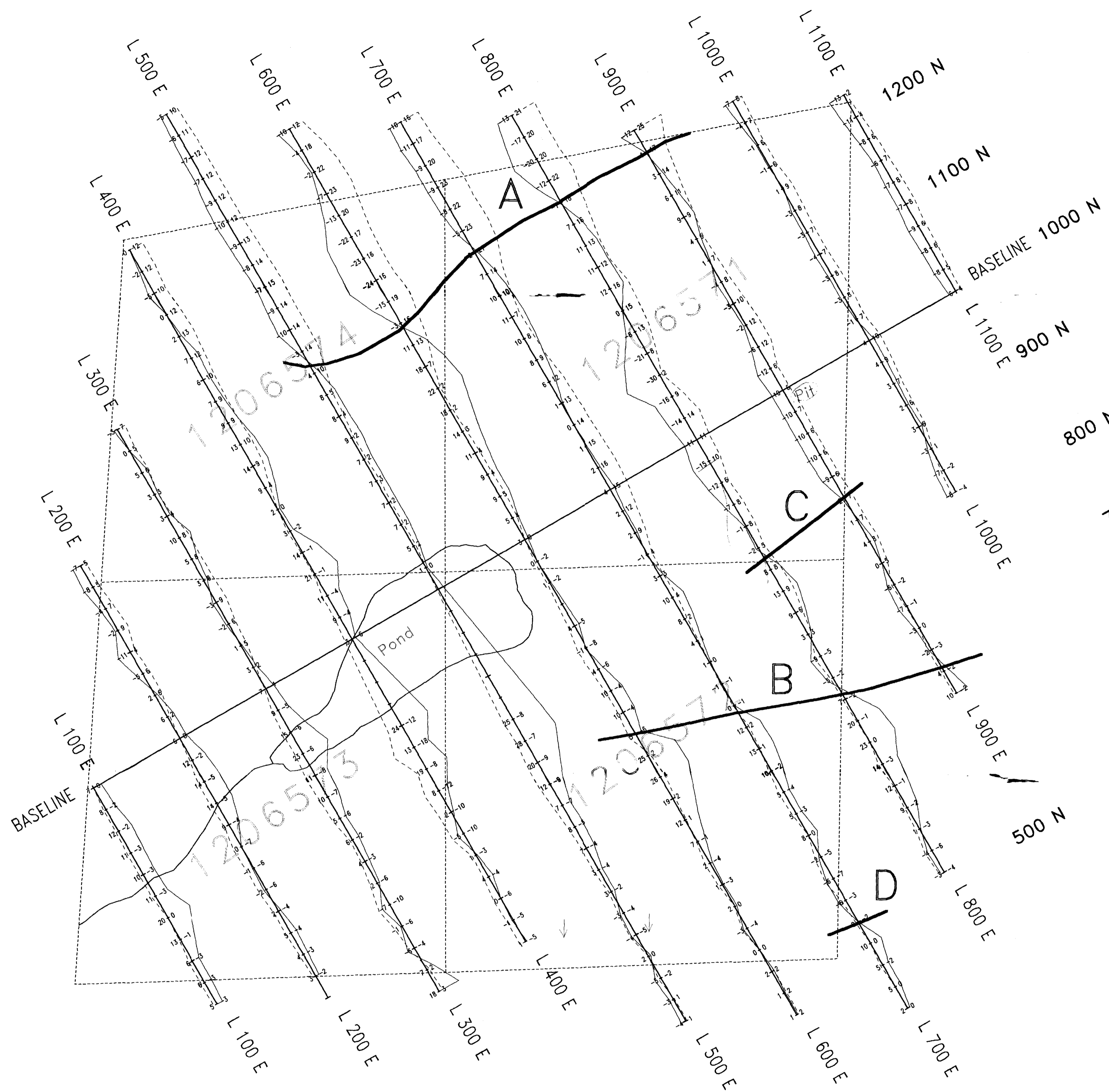
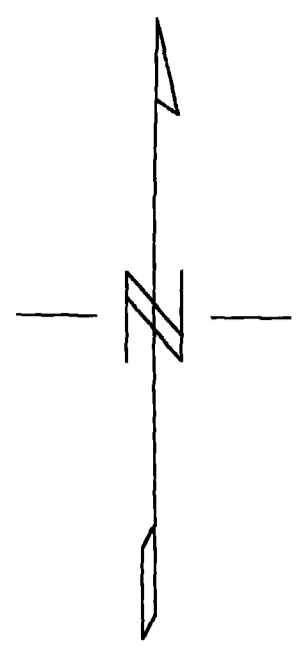
- Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only
- Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only
- Licence of Occupation
- Order-in-Council
- Cancelled
- Reservation
- Sand & Gravel

CIRCULATED DEC 14, 1995 KP  
ARCHIVED MAY 27/97

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.





1206574

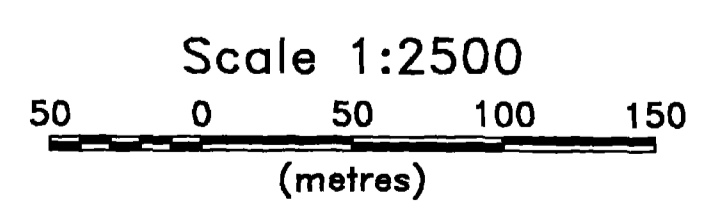
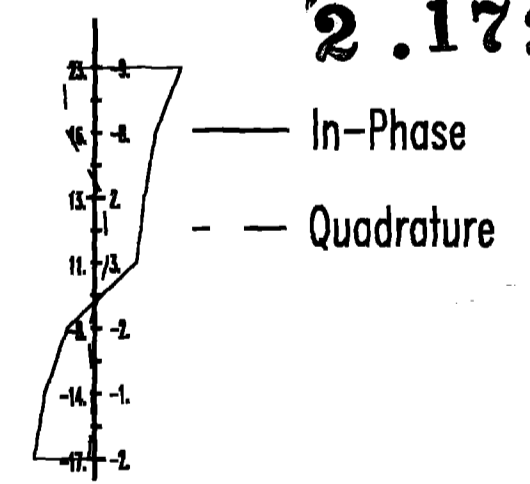
1206571

1206573

1206577

Profile Scale: 1 cm = 20%

2.17373



Instrument: Geonics EM-16 VLF Receiver



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MEEGWICH INC.

May 1997

Sedex Mining Corp. Oka Four Project	
Powell Township	
Ground Geophysical Surveys VLF - EM Survey Profiles of the In-Phase and Quadrature	
Data processing and interpretation by: Meegwich Consultants Inc.	NTS 41 P/15 Scale 1:2500