



42C04NE0012 2.11088 PUKASKWA RIVER

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REPORT ON THE  
AIRBORNE GEOPHYSICAL SURVEY  
ON THE PROPERTY OF  
GABRIEL RESOURCES INC.  
PUKASKWA RIVER AREA, ONTARIO

RECEIVED

BY

APR 25 1988

MINING LANDS SECTION

H. FERDERBER GEOPHYSICS LTD.

April, 1988  
Val d'Or, Quebec

G.N. Henriksen, B.Sc.  
Geologist

**REPORT ON THE  
AIRBORNE GEOPHYSICAL SURVEY  
ON THE PROPERTY OF  
GABRIEL RESOURCES INC.  
PUKASKWA RIVER AREA, ONTARIO**

INTRODUCTION

On February 26, 1988 an airborne geophysical survey was carried out on the property of Gabriel Resources Inc. in the Pukaskwa River Area, Ontario. Magnetic and VLF-electromagnetic data was collected by the airborne division and was flown from a base at Wawa, Ontario. A total of 163.4 miles of data was collected.

The magnetic survey provides information which helps define underlying geological structures and identifies any potential economic concentrations from variations in accessory magnetic minerals. The VLF-electromagnetic survey outlines conductive zones which may represent shear zones and/or metallic sulphide deposits containing gold mineralization.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Gabriel Resources Inc. property is comprised of 111 claims in Pukaskwa River Area, Sault Ste. Marie Mining Division, Ontario. The claims cover approximately 1776 hectares in the southeastern part of the Area as a block of 110 claims and a single claim which lies one and a half miles east of the claim block. The claims are registered with the Ontario Mining Recorder's office at Sault Ste. Marie and are listed in Appendix I.

-2-

The property is located about 63 km (38 miles) west-northwest of the town of Wawa, 53 km (32 miles) south-southwest of the town of White River and 90 km (54 miles) southeast of the town of Marathon. Access is best obtained by helicopter based in one of the above mentioned towns. Map 2332, Pukaskwa River from the Ontario Division of Mines indicates outcrop density to be approximately 35% on the claim block and 95% on the single claim east of the claim block.

The property sports several small lakes and swamps which cover about 5% of the area the remainder being forested. The topographic relief is moderate to high. Drainage is to the southeast with creeks having dominate and subordinate trends southeast and northwest, respectively. The East Pukaskwa River lies about 3 miles southeast of the claim block, trends southwest and drains southward.

A northwest trending electric power transmission line lies about 13 km west of the property and a road extends from Highway 17 westward, about 33 km to the transmission line.

Supplies, services and qualified manpower are available in the Wawa-White River-Marathon area.

GEOLOGY

The property is situated in the western end of the Kabenung Lake Greenstone Belt of the Superior Province of the Canadian Shield. The Kabenung Greenstone Belt extends from Kabenung Lake in a west-southwest direction for a distance of about 50 km (30 miles).

The western end of the belt is comprised of Archean metavolcanic and metasedimentary rocks intruded by granitic to gabbro stocks and diabasic type dykes. Numerous gold showings have been discovered in the Mishibishu Lake Greenstone Belt which lie about three kilometers south of the property.

The Ontario Department of Mines Geological Compilation Map 2220 the Manitouwadge-Wawa sheet the Department of Mines Geoscience Report 153 and accompanying maps 2332 and 2333 and a report, Mineralization of the Mishibishu Lake Greenstone Belt, by K.B. Heather of the Ontario Geological Survey describe the geology of the area. These maps and reports indicate that the single claim west of the claim block is underlain by east-west trending metasediments: greywacke, sandstone and arkose.

-4-

An iron formation extends between the single claim and the claim block, pinching out in the southwest corner of the claim and the northeast part of the claim block. A synclinal fold axes lies along the southern boundary of the single claim and extends westward to the claim block subparalling the iron formation.

The claim block is indicated as being about 60% underlain by mafic to intermediate metavolcanic rocks, 10% by metasedimentary rocks, 15% by gabbro, and 25 % by granitic rocks. The metasedimentary rocks (greywacke, sandstone and arkose) traverse the claim block as a narrow unit extending from the northern part of the eastern boundary to the south central part of the western boundary. The extreme southeast corner of the claim block overlies part of a similar metasedimentary unit. Between the two sedimentary units lie metavolcanic rocks indicated as massive to foliated andesite to basalt and metagabbro to metadiorite (early mafic intrusive rocks).

The mafic metavolcanics and early mafic intrusive rocks have been intruded in the eastern part of the claim block by granitic rock and in the south central part of the claim block by late gabbroic rock. These lie along an anticlinal fold axes coinciding with the central part of the metavolcanic rocks. The anticlinal axes is reflected in the northern and southern symmetry of geology.

Massive to foliated andesite to basalt lie north of and adjacent to the metasedimentary rock in the north part of the claim block. An iron formation in the metavolcanic pinches out eastward a few hundred meters from the western boundary of the property. Batholithic granitic rocks adjacent to these metavolcanic rocks traverse the northwest corner of the claim block. Similar batholithic granitic rocks underlie the southwest corner of the claim block.

Two northeast trending diabase dykes lie just west of the northern part of the western boundary of the property.

The International Bibis Prospect is located about 200 meters east of the southeast corner of the claim block. Seven holes totalling 682.1 m (2,238 feet) were drilled. Six holes intersected a mineralized zone. The best result was 1.47% copper over 5.2 m (17 feet). The mineralized zone is 3 to 4.5 m (10 to 15 feet) wide, at least 120 m (400 feet) long, and strikes about N60W with a steep dip to the north. The mineralization consists of seams and disseminated grains of pyrite, chalcopyrite, and possibly bornite and sphalerite distributed irregularly in highly sheared silicified, and carbonatized mafic metavolcanics. Felsic metavolcanics lie a few feet to the north of the mineralized zone and may in part be a fault contact with the mafic metavolcanics. Dykes, sills and veins of granitic rocks have intruded the adjacent rocks.

-6-

Six grab samples were taken from the showing and were analysed by the Mineral Research Branch, Ontario Division of Mines. The results range from trace to 0.59 percent copper with one selected specimen yielding 5.58 percent copper and 0.66 ounces of silver per ton. Lead, zinc, and gold were detected in trace amounts only.

The Burrex pyrrhotite, chalcopyrite occurrence is situated about 1.25 km east of the southeast corner of the claim block. Overburden stripping and trenching of one of seven previously defined geophysical anomalies disclosed the presence of pyrite and graphite. Analyses of grab samples of the pyrite mineralization gave only minor amounts of precious metals and no copper. In the only other Burrex anomaly shown to be due to the presence of sulphide mineralization trenching exposed what is described in Burr's report as "heavy to massive pyrrhotite up to 23 feet in width". The best analysis of a grab sample is reported to be 0.18% copper and 0.03 ounce of silver.

In 1949 Amichi Gold Mines Limited discovered gold-bearing quartz veins about 300 m (1,000 feet) north of the north shore of Mishibishu Lake, approximately 12 km southeast of the property. Considerable trenching, stripping and assaying were carried in 1950. There is no report of diamond drilling. The

-7-

gold occurs in a pyrite and ankerite-quartz vein 25 to 91 cm (10 to 36 inches) wide and in 0.3 to 1.5 m (1 to 5 feet) wide shear zones on either side of the vein. The mineralized zone strikes about N50W for a distance of as much as 300 m (1,000 feet) in metamorphosed greywacke, slate, and arkose. A company report (Resident Geologist's Files, Ontario Ministry of Natural Resources, Sault Ste. Marie) gives the following assay results:

Pukaskawa River-University River Area

Width		Gold	Width		Gold
cm	inches	ounces/ton	cm	inches	ounces/ton
45	18	0.23	97	38	1.48
86	34	1.92	76	30	0.26
114	45	1.07	107	42	0.19
76	30	1.39	107	42	0.27

Average width 86 cm (34 inches)

Average grade 0.87 ounces per ton

The above assay results are reported to have been obtained from 75 m (240 feet) long section of the vein bounded by east-striking faults. Although extensions of the vein system were located, the only assays of commercial grade are those quoted above.



-8-

The Hollinger (Mishibishu Lake) gold occurrence, 1937, lies approximately 13 km southeast of the property. The gold occurs in 10 to 12 east-striking quartz veins and lenses 0.6 to 1.2 m (2 to 4 feet) wide and 18 to 24 m (60 to 80 feet) long, which lie within a zone of highly sheared mafic to intermediate metavolcanics and quartz porphyry about 90 m (300 feet) wide and 600 m (2,000 feet) long. This zone also strikes east, and dips steeply to the north. Disseminated pyrite is common within the shear zone and veins, and minor chalcopyrite, galena, and sphalerite are reported. Five selected samples were collected from old trenches on the deposit in 1968, and were assayed by the Mineral Research Branch, Ontario Division of Mines. Two samples were found to contain 0.82 and 0.40 ounce of gold per ton and trace silver. The remaining samples contained only trace amounts of precious metals.

The Erie Canadian gold occurrence, 1937, is situated about 1 km west of and adjacent to the Hollinger occurrence. The gold-bearing quartz veins and shear zone of Hollinger occurrence were found to continue for about 240 m (800 feet) eastward on to the Erie Canadian Mines Limited ground. Extensive stripping, trenching, and blasting were done on the extension by Erie Canadian Mines Limited, but the only significant assay obtained was 0.8 ounce of gold per ton over 1 m (3 feet) (Resident Geologist's Files, Ontario Ministry of Natural Resources, Sault Ste. Marie).

The Amichi Gold Mines Limited, gold discovery, Hollinger gold occurrence, and the Erie Canadian gold occurrence all lie in the Mishibishu Lake Greenstone belt about 2 kilometers south of the Kabenung Lake Greenstone belt.

The No Name Lake gold showing was discovered in 1984 on the Central Crude-Noranda property also in the Mishibishu lake Greenstone Belt approximately 10 km southeast of the property. Grab samples containing gold values of up to 0.744 oz/ton, were collected in quartz veins within a shear zone between mafic volcanic rocks and an intermediate volcanic flow and pyroclastic rocks. Recent sampling during the summer of 1987 identified a structure 200 to 700 meters wide and 4 km long, containing seven anomalous gold zones, ranging in widths from 0.5 m to 11 m. Grab and chip samples assayed from 0.01 oz/ton to 28 oz/ton. The gold was found in intermediate to felsic metavolcanic rocks located on the Central Crude Noranda Property.

The Mishibishu Lake Deformation Zone associated with several of the gold occurrences in the Mishibishu Greenstone Belt is comprised of several shear zones totaling up to 500 meters also is host to the Magacon (Muscocho Exploration Ltd.), the Granges-MacMillan (Granges Exploration Ltd.), the Scuzzy little lake (Dominion Explorers Ltd.) and the Discovery (Westfield

-10-

Minerals Ltd.) gold showings. They are situated near volcanic-sediment contacts along the deformation zone. The geology of the Gabriel Resources property in the Kabenung Lake Greenstone belt is similar to that of the Mishibishu Greenstone belt and has similar potential discovery of gold mineralization.

#### INSTRUMENTATION AND SURVEY METHODS

The survey was completed using a 1972 Cessna 172, fixed-wing aircraft, Registration CF-EWK, owned and operated by H. Ferderber Geophysics Ltd. The pilot and navigator/operator were Y. Saucier and D. Thai, respectively, of Val d'Or. Geophysical sensors were mounted in modified wing tips. The geophysical, navigation and data acquisition systems are described below.

#### Magnetometer

The magnetometer used was a GEM Systems GSM-11, high sensitivity airborne proton (Overhauser) magnetometer. The instrument continuously measures the Earth's magnetic field at a 0.01 gamma sensitivity for 1 reading per second to 10 readings per second at a 0.1 gamma absolute accuracy. For the survey 4 readings per second at an accuracy of 0.04 gammas were read. The analog output is on 3 channels, from 1 to 10,000 gammas full scale.

-11-

VLF-EM System

A Herz Totem 2A VLF-EM system was used to measure the changes in the total field and in the vertical quadrature field on two frequencies simultaneously, with an accuracy of 1%. The primary transmitting station of Cutler Maine, (NAA) frequency 24.0 KHz was employed for the survey.

Radar Altimeter

The ground clearance was measured with a King 10/10 A radar altimeter. The survey was flown at a mean clearance of 300 feet with the altimeter producing an accuracy of 5% (15 feet) at this altitude.

Tracking Camera and Video Centre

A RCA TC-200 colour video camera and Galaxy 200 video centre was used to record the flight path on standard VHS type video tapes. Manual fiducials were indicated on the picture frames for reference with the digital printout. Flight path recovery was aided using a Panasonic Colour Video Monitor-S1300 and Video Cassette Recorder AG-2500.

-12-

Data Aquisition System

A Picodas Group Inc. PDAS 1100 data aquisition system featuring seven analog inputs with two frequency inputs and external interfacing was used. A Termiflex Corp. ST/32 Keyboard control unit and Sharp Corp. LCD display unit are connected to the data aquisition system. At present this system stores the altimeter VLF-1 inphase, VLF-1 quadrature, VLF-2 inphase, VLF-2 quatrature, magnetic field (coarse), magnetic field (fine), and the fourth difference (noise), and fiducials on 3.5 inch floppy disk drive. The data is then printed out in digital and profile form.

The survey was conducted on north-south lines at an aircraft altitude of 300 feet. The lines were flown at spacings of 400 feet at a speed of approximately 90 miles per hour. Navigation was visual using airphoto mosaics, at a scale of one inch to 1320 feet, manual fiducials and the flight path recovery system as references.

DATA PRESENTATION

Flight lines, fiducial points and geophysical responses were reproduced from the airphoto mosaics on maps at a scale of one inch to 1320 feet (1:15,840). The outline of the claim block and claim map are shown on each map sheet.

-13-

The aeromagnetic data was corrected for diurnal variations by using a base line as reference. The data was then reduced to a base level of 59,000 gammas, contoured at 25, 100 and 1000 gamma intervals and presented on Map MG-1.

A base value was determined for the VLF-EM data and the change in the total field strength as a percentage of the base value was calculated. The values were plotted on map EM-1. The positive values were contoured at intervals of 2%. The conductor axes were determined and numbered 1, 2, 3, etc. No priority was attached to the numbering system.

#### SURVEY RESULTS AND INTERPRETATION

##### Magnetic Survey      Map MG-1

On the single claim, east of the main claim block the magnetic contour pattern trends east-west and the magnetic gradient decreases northward representing probable east-west trending rock unit. North of the claim the magnetic variation is relatively flat. A magnetic high anomaly lies adjacent to the claims southern boundary. The magnetic high anomaly probably represents iron formation in metasedimentary rock that appears to underlie the claim. The probable contact between the metasedimentary rock and the iron formation lies in the vicinity of the south boundary of the claim coinciding roughly with an east-west trending synclinal fold axes.

-14-

On the main claim block, west of the single claim, several distinct magnetic high and low anomalous zones were defined. A prominent magnetic high located in the northeast part of the claim block trends west-northwest pinching out in the north central part of the claim block. It has magnetic values in excess of 5000 gammas above background and probably represents iron formation in metasedimentary rocks.

A large magnetic high anomalous zone is situated in the south central part of the claim block. This zone is divided into a northern and southern zone by a saddle. The saddle and the shoulders of several magnetic highs define a west-northwest linear trend which may represent a fault zone. The large magnetic high anomalous zone has values in excess of 1400 gammas above background and its shape is sub-circular, suggesting intrusive mafic rocks.

A north-northwest trending linear anomalous zone traverses the southwestern part of the property. It is defined by magnetic low anomalies and an abrupt change in the magnetic contour pattern such that anomalies are truncated and trend north-northwest. The linear anomalous zone appears to represent a structural break.

-15-

The magnetic low anomalous zone in the northwest part of the property overlies rocks thought to be granite in composition. The magnetic low anomalous zone in the southeast corner of the claim block is underlain, to the north, by batholithic granitic rocks and, to the south, by metavolcanic rocks. The location of the contact between the granitic and metavolcanic is not well defined by the magnetic data. This indicates that the metavolcanic rocks are felsic.

The magnetic low anomalous zone situated in the southwest part of the property may represent batholithic granitic rocks or felsic metavolcanic rocks. The magnetic high anomalous zone in the southwest corner of the claim block appears to represent rocks similar to the probable intrusive mafic rocks underlying the central part of the claim block.

VLF-Electromagnetic Survey      Map EM-1

Conductive zone 1 is a short, northwest trending conductor situated in the southwest part of the property. It lies in an area having a relatively flat magnetic gradient and low magnetic values. Conductor 1 overlies the southeast edge of a small lake and the assumed position of a south-southwest trending synclinal fold axes. It may be the result of lake edge effect.



-16-

Conductive zone 2 is a north-northeast trending conductor located along the center part of the western boundary of the property. It traverses the eastern side of a saddle between two magnetic high anomalies and a southwest synclinal axis trending. It may represent a structural break.

Conductive zone 3, a discontinuous north-northeast trending conductor is located in the south central part of the claim block. It cross cuts the magnetic contour pattern. The northern end lies in a northwest trending magnetic low anomalous zone. Conductor 3 may represent a shear zone in probable mafic intrusive rocks.

Conductive zone 4 is a short, northwest trending conductor located in the southwest part of the property. It lies on the northwest shoulder of a magnetic high anomalous zone and overlies a swampy area. It may be caused by conductive overburden or a sheared geologic contact.

Conductive zone 5 trends north-northeast in the west central part of the claim block. It overlies the western shoulder of a magnetic high anomaly in an area where the magnetic contour pattern is distorted. The zone may represent a shear zone.

-17-

Conductive zone 6 is a short, north trending conductor located in the north part of the claim block. It overlies the northern flank of a west-northwest trending magnetic high anomalous zone in probable iron formation bearing metasedimentary rock. It may represent a structural break.

Conductive zone 7, a short, north-northeast trending conductor lies in the south central part of the claim block. It is situated in a magnetic high anomalous zone, interpreted as being mafic intrusive rock. A west-southwest synclinal fold axis lies immediately south of the conductor. Conductor 7 may represent a shear zone.

Conductive zone 8 is a short, north-northeast trending conductor situated along the southern part of the eastern boundary of the claim block. It overlies the eastern shoulder of magnetic high anomalous zone. Conductor 8 may represent a shear along a geologic contact.

Conductive zone 9 also located in the southeast part of the property trends northwest. It is situated in similar trending magnetic low anomaly and a creek. It is situated about a half kilometer west of a copper occurrence. Conductor 9 appears to be caused by conductive overburden.

-18-

Conductive zone 10 trends east-westward across the eastern boundary of the claim block. It lies in a magnetic low anomalous zone of a similar trending anticlinal axis and overlies the bottom of a hill north of a lake. Conductor 10 appears to be the result of topography.

#### CONCLUSION AND RECOMMENDATIONS

The airborne VLF-electromagnetic and magnetic surveys were successful in outlining possible shear zones and helping define the underlying geology of Gabriel Resources Inc. in the Pukaskwa River Area, Ontario. Rocks of high magnetic susceptibility that underlie the center and south part of the claim block are probably intrusive mafic rocks. A linear north-northwest trending zone defined by breaks in the magnetic contour pattern, and magnetic low anomalies on the southwest part of the property outlines the position of a possible structural break. Rocks of high magnetic susceptibility which underlie the northeast part of the claim block are probably metasedimentary rocks containing iron formation. Similar metasedimentary rocks appear to underlie the single claim east of the main claim block.

-19-

Rocks of low magnetic susceptibility underlie the southeast part of the claim block. This area is indicated as being underlain by batholithic granitic rocks and metavolcanic rocks. The possible metavolcanic rocks are probably felsic in composition. Rocks of low magnetic susceptibility underlying the southwest part of the property may be batholithic granitic rocks or felsic metavolcanics. Similar rocks appear to underlie the northwest part of the property.

Ten conductive zone were outlined on the property. Zones 2, 3, 5, 6, 7, and 8 appear to be bedrock conductors with zones 3, 5, 7 and 8 representing shear zones. Zone 8 may also be associated with a geologic contact and conductors 2 and 6 may represent structural breaks. Conductors 1, 4, 9 and 10 appear to be the caused by changes in topographical relief or conductive overburden.

The structural and lithologic complexity of the property as indicated by the magnetic data, suggests that the claims are located in a good geologic environment for gold and/or base metal mineralization. The property lies in the Kabenung Greenstone Belt, which is similar geologically to the Mishibishu Lake Greenstone Belt lying a few kilometers south, is host to numerous gold occurrences and is undergoing intense gold and base metal exploration.

-20-

Further work is warranted on the property especially in the areas of the possible bedrock conductors. An exploration of ground geophysics and geological mapping should be undertaken. A combined gradient/total field magnetic survey and horizontal loop-electromagnetic survey should be performed. Geophysical anomalies within good geological environment for gold mineralization should then be tested by diamond drilling.

Respectfully submitted,

H. FERDERBER GEOPHYSICS LTD.

*Gordon N.  
Henriksen*

G.N. Henriksen, B.Sc.  
Geologist

## APPENDIX I - CLAIM LIST

SSM 968440	SSM 970940	SSM 970969
968441	970941	970970
968442	970942	970971
968443	970943	970972
968444	970944	970973
968445	970945	970974
968446	970946	970975
968447	970947	970976
968448	970948	970977
968449	970949	970978
968450	970950	970979
968451	970951	970980
968452	970952	970981
968453	970953	970982
968454	970954	970983
968455	970955	970984
968456	970956	970985
968457	970957	970986
968458	970958	970987
968459	970959	970988
970931	970960	970989
970932	970961	970990
970933	970962	970991
970934	970963	970992
970935	970964	970993
970936	970965	991569
970937	970966	991570
970938	970967	991571
970939	970968	991572

SSM 991573  
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991576

SSM 991591  
991592  
991593  
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W8805-033 2.11088

900

Type of Survey(s) Airborne Magnetic and VLF-Electromagnetic Pukaskwa River

Claim Holder(s) See attached list Prospector's Licence No. See list

Address Durham Geological Services Inc. P4N 7G2  
P.O. Box 734, Timmins, Ontario

Survey Company H. Ferderber Geophysics Ltd. Date of Survey (from & to) 26 02 88 26 02 88 Total Miles of line Cut 150

Name and Address of Author (of Geo-Technical report) R.A. Campbell - G. Henriksen, 169 Perreault Ave., Val d'Or, Que. J9P 2H1

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Men Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
	968440				
	et. al.				
	see attached list				
<div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>MINING GEOLOGICAL SURVEY</b>  <b>ASSESSMENT FILES</b>  <b>OFFICE</b>    <b>JUN 8 1988</b>    <b>RECEIVED</b> </div>					
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;"> <b>RECEIVED</b>  <b>FEB 29 1988</b>  <small>A.M.</small> </div> <div style="border: 1px solid black; padding: 2px;"> <b>RECORDED</b>  <b>FEB 29 1988</b> </div> </div>					

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$  + 15 =  Total Days Credits

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date Feb 26, 1988 Recorded Holder or Agent (Signature) [Signature]

For Office Use Only

Total Days Cr. Recorded 8,880 Date Recorded Feb 29/88 Mining Records [Signature]

Date Approved or Recorded 8/06/07 Branch Director [Signature]

Certification Verifying Report of Work  
I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying Harry Ferderber 169 Perreault Ave. Val d'Or, Quebec J9P 2H1

Date Certified Feb 26, 1988 Certified by (Signature) [Signature]

Total number of mining claims covered by this report of work. 114  
125



**CLAIM LIST**

SSM	968440	SSM	970940	SSM	970969
	968441		970941		970970
	968442		970942		970971
	968443		970943		970972
	968444		970944		970973
	968445		970945		970974
	968446		970946		970975
	968447		970947		970976
	968448		970948		970977
	968449		970949		970978
	968450		970950		970979
	968451		970951		970980
	968452		970952		970981
	968453		970953		970982
	968454		970954		970983
	968455		970955		970984
	968456		970956		970985
	968457		970957		970986
	968458		970958		970987
	968459 ✓		970959		970988
	970931		970960		970989
	970932		970961		970990
	970933		970962		970991
	970934		970963		970992
	970935		970964		970993
	970936		970965		991569
	970937		970966		991570
	970938		970967		991571
	970939		970968		991572 ✓

**CLAIM LIST**

SSM	991573	SSM	991592
	991574		991593
	991575		991594
	991576 ✓		991595
	991577		991596
	991578		991597
	991579		991598
	991580		991599
	991581		991600
	991582		991601
	991583		991602
	991584		991603
	991585		991604
	991586		991605
	991587		991606
	991588		991607
	991589		991608
	991590		991609
	991591		991610 ✓

*no records of these claims spoke with Division Dept + he said to consult 991577. 991590 end of claim list Feb. 29/88*

CLAIM HOLDERS AND LICENCE NOS.

GARY CARNOVALE M 21895  
 JULES ANGLEHART D 19792  
 BARRY TESDIENS M 23742  
*D#581#NC*



Ontario

File \_\_\_\_\_

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Airborne Magnetic and VLF-Electromagnetic  
Township or Area Pukaskwa River Area  
Claim Holder(s) Gary Carnovale, Jules Anglehart  
Barry Desbiens  
Survey Company H. Ferderber Geophysics Ltd.  
Author of Report G.N. Henriksen  
Address of Author 169 Perreault, Val d'Or, Quebec  
Covering Dates of Survey February 26, 1988  
(linecutting to office)  
Total Miles of Line Cut flown 163.4

**MINING CLAIMS TRAVERSED**  
List numerically

SSM 968440 et. al.  
(prefix) (number)  
see attached list

**SPECIAL PROVISIONS  
CREDITS REQUESTED**

DAYS  
per claim

ENTER 40 days (includes  
line cutting) for first  
survey.  
ENTER 20 days for each  
additional survey using  
same grid.

- Geophysical
  - Electromagnetic \_\_\_\_\_
  - Magnetometer \_\_\_\_\_
  - Radiometric \_\_\_\_\_
  - Other \_\_\_\_\_
- Geological \_\_\_\_\_
- Geochemical \_\_\_\_\_

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)

Magnetometer 32 Electromagnetic 32 Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: April 20, 1988 SIGNATURE: [Signature]  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 2.10/56

**Previous Surveys**

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 111

OFFICE USE ONLY

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) VLF-EM and Magnetometer

Instrument(s) Herz Totem 2A and GEM GSM-11

Accuracy 1% and 0.04 (specify for each type of survey)  
gammas absolute

(specify for each type of survey)

Aircraft used Cessna 172, fixed wing aircraft (CF-EWK)

Sensor altitude 300 feet

Navigation and flight path recovery method Visual navigation on airphoto mosaic manual  
fiducial points and RCA TC-200 Colour Video Camera.

Aircraft altitude 300 feet Line Spacing 400 feet

Miles flown over total area 163.4 Over claims only 89.0 miles

**APPENDIX I - CLAIM LIST**

<b>SSM 968440</b>	<b>SSM 970940</b>	<b>SSM 970969</b>
968441	970941	970970
968442	970942	970971
968443	970943	970972
968444	970944	970973
968445	970945	970974
968446	970946	970975
968447	970947	970976
968448	970948	970977
968449	970949	970978
968450	970950	970979
968451	970951	970980
968452	970952	970981
968453	970953	970982
968454	970954	970983
968455	970955	970984
968456	970956	970985
968457	970957	970986
968458	970958	970987
968459	970959	970988
970931	970960	970989
970932	970961	970990
970933	970962	970991
970934	970963	970992
970935	970964	970993
970936	970965	991569
970937	970966	991570
970938	970967	991571
970939	970968	991572

SSM 991573  
991574  
991575  
991576

SSM 991591  
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991610

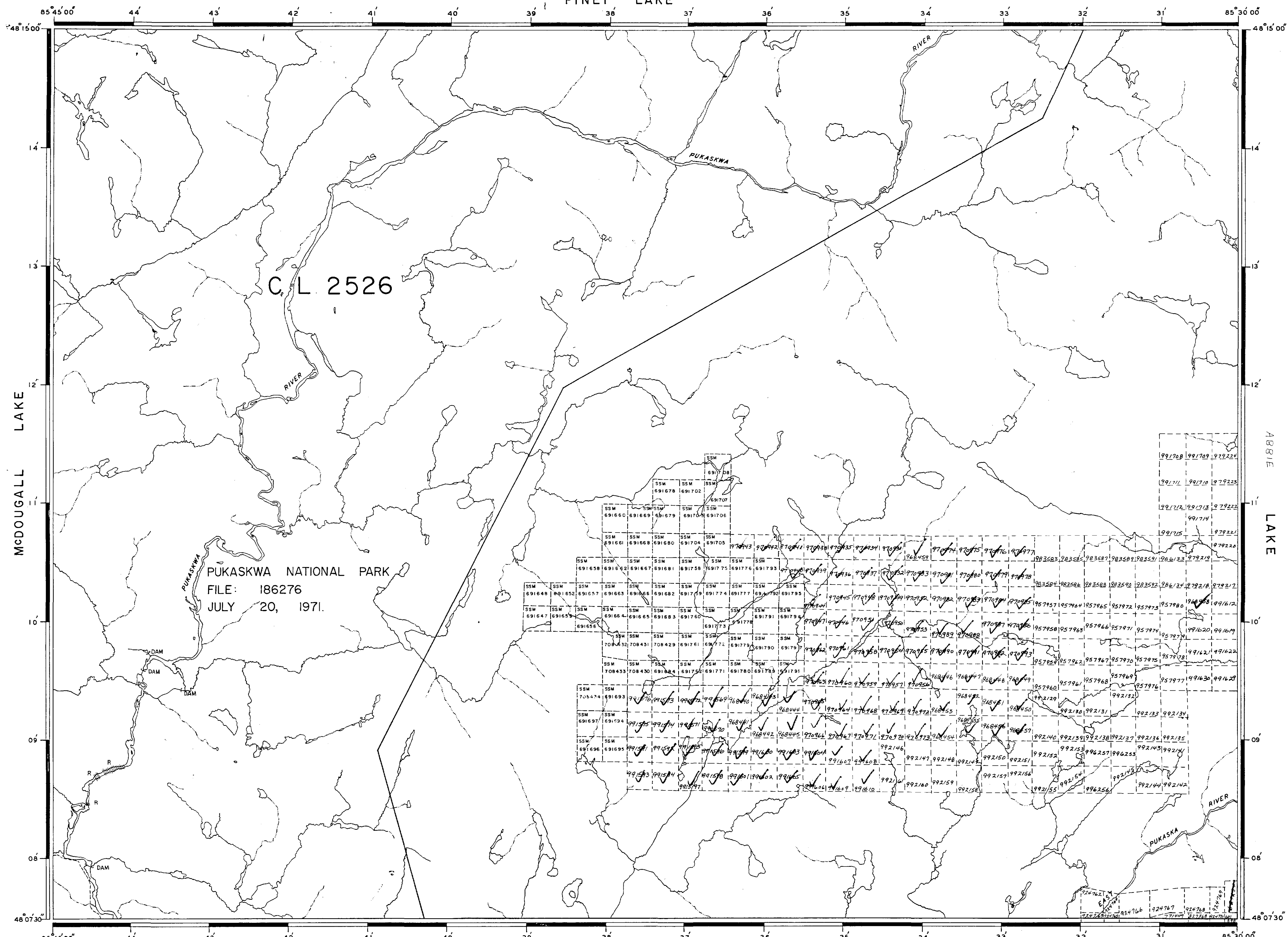
REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description Order No. Date Disposition File

PINEI LAKE



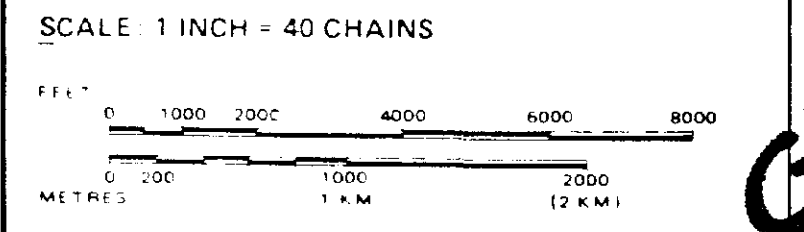
LEGEND

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

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	□
" MINING RIGHTS ONLY	◑
LICENCE OF OCCUPATION	○
ORDER IN COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊖
SAND & GRAVEL	⊕

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913 VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT R.S.O. 1970 CHAP. 380 SEC. 63 SUBSEC. 1.



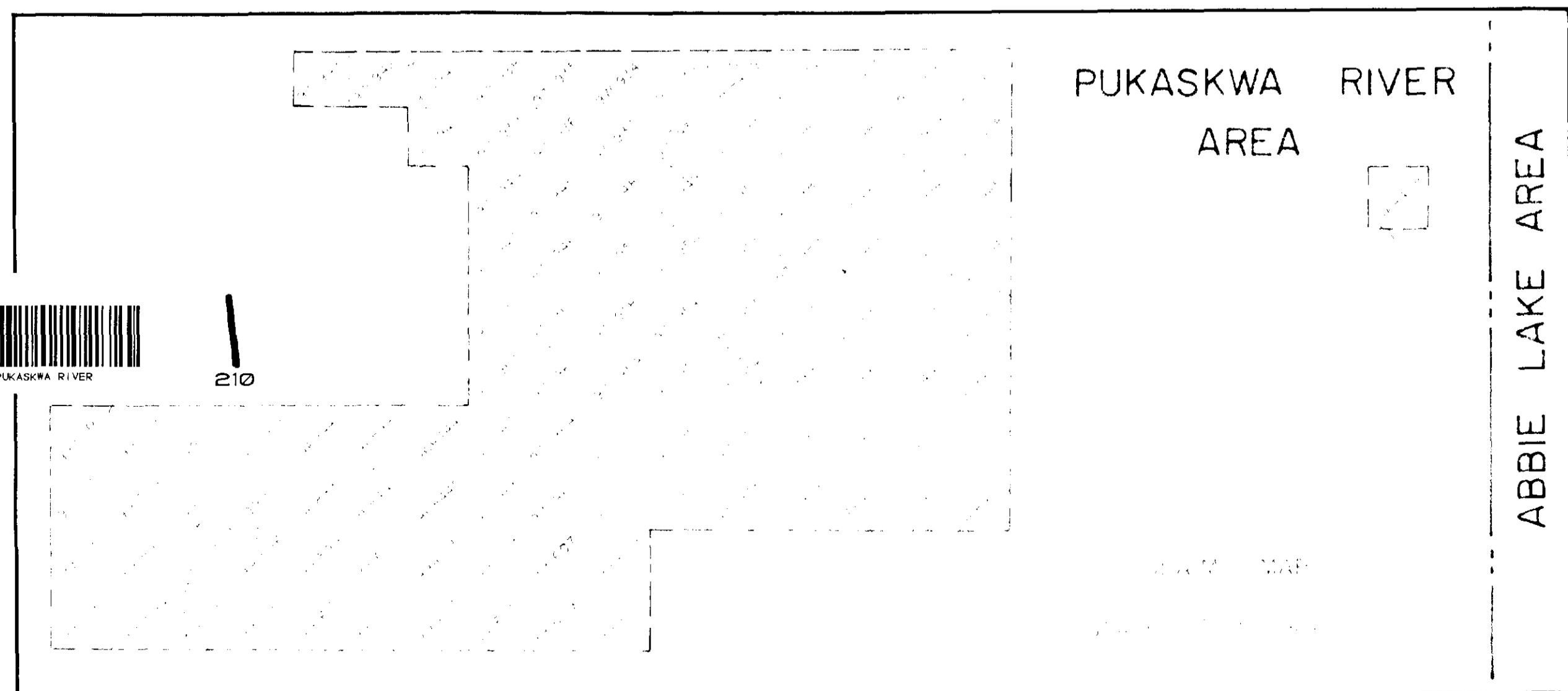
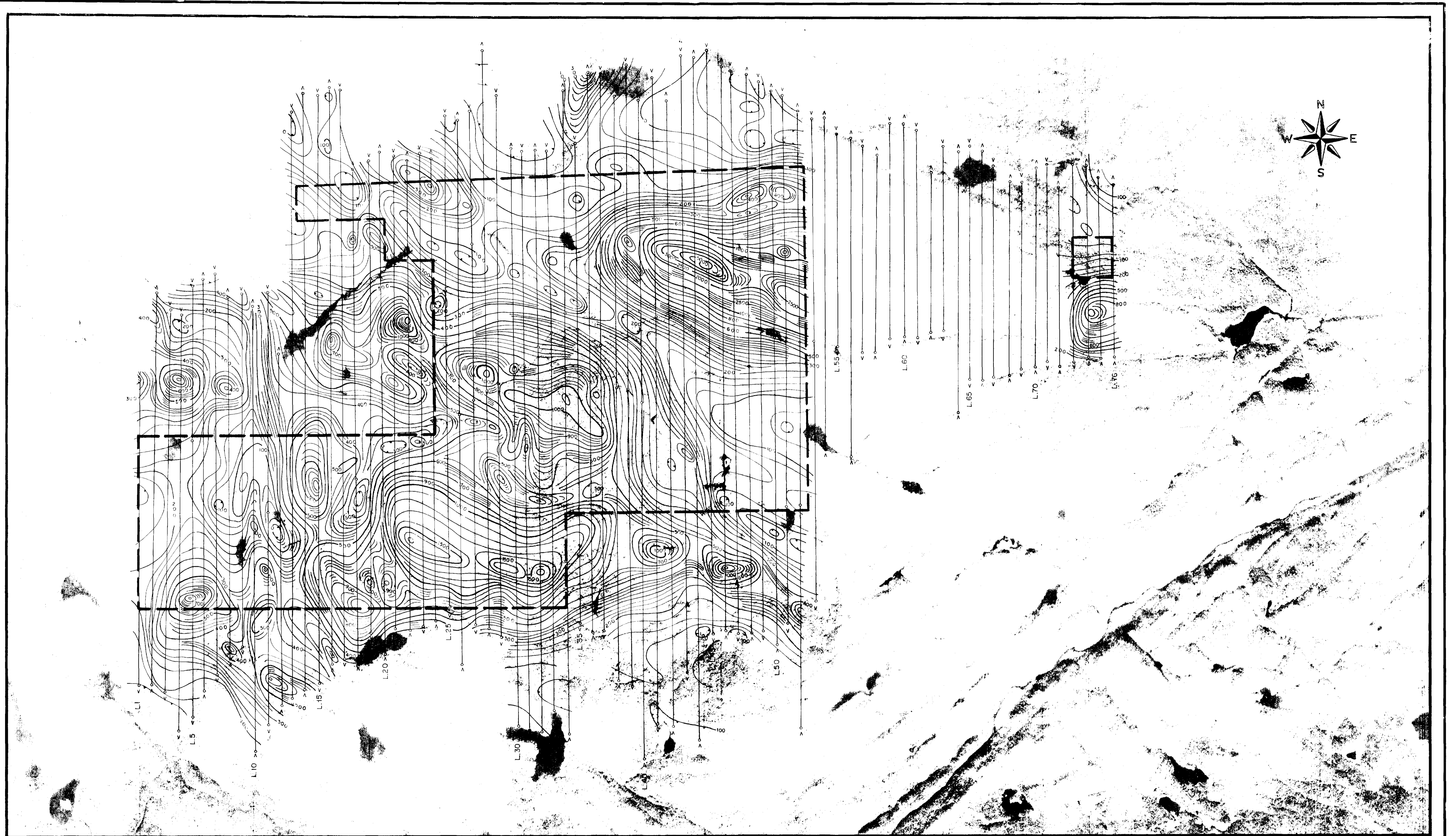
DATE OF ISSUE  
MAY 13, 1986  
SAULT STE. MARIE  
MINING RECORDERS' OFFICE

AREA  
**PUKASKWA RIVER**  
M.N.R. ADMINISTRATIVE DISTRICT  
WAWA  
MINING DIVISION  
SAULT STE. MARIE  
LAND TITLES / REGISTRY DIVISION  
ALGOMA

Ministry of Natural Resources Ontario  
Ministry of Northern Development and Mines


Date FEBRUARY, 1987  
Number G-3779



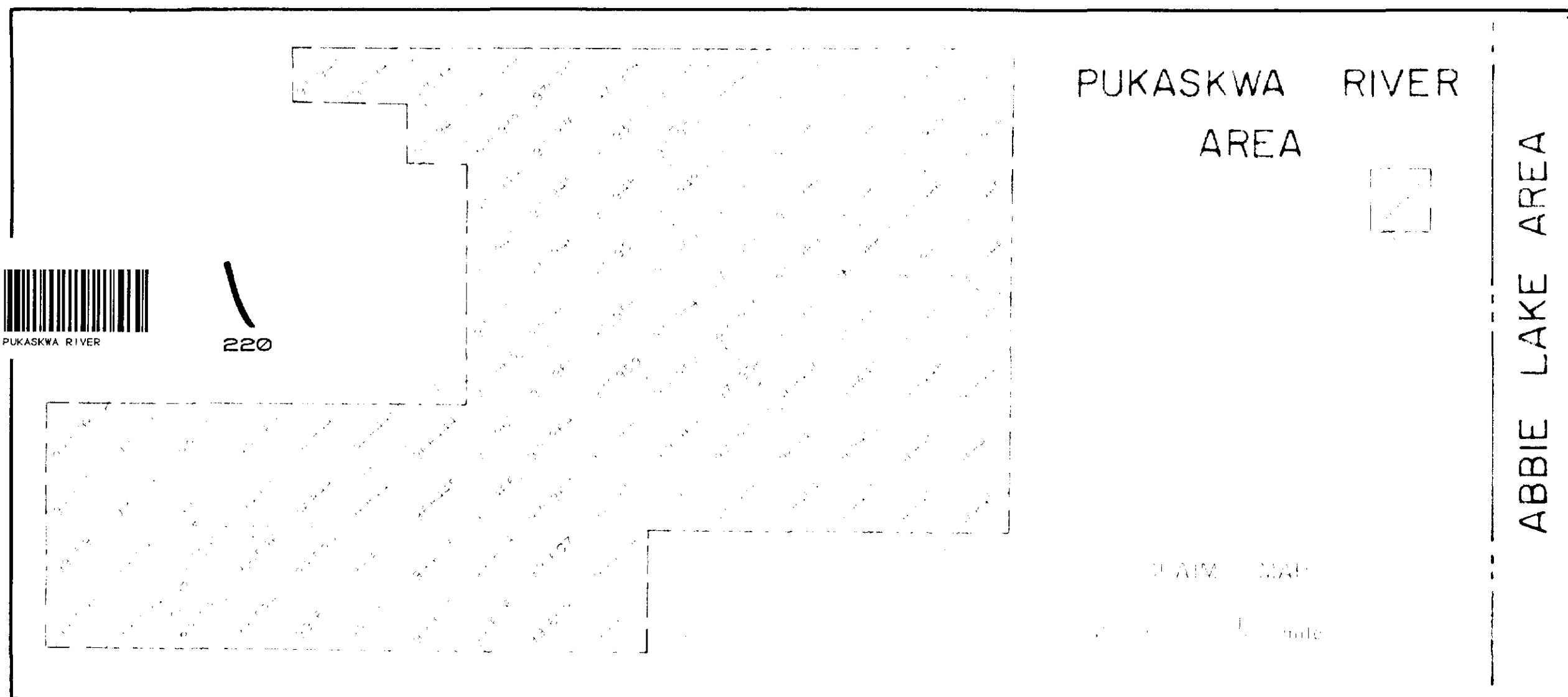
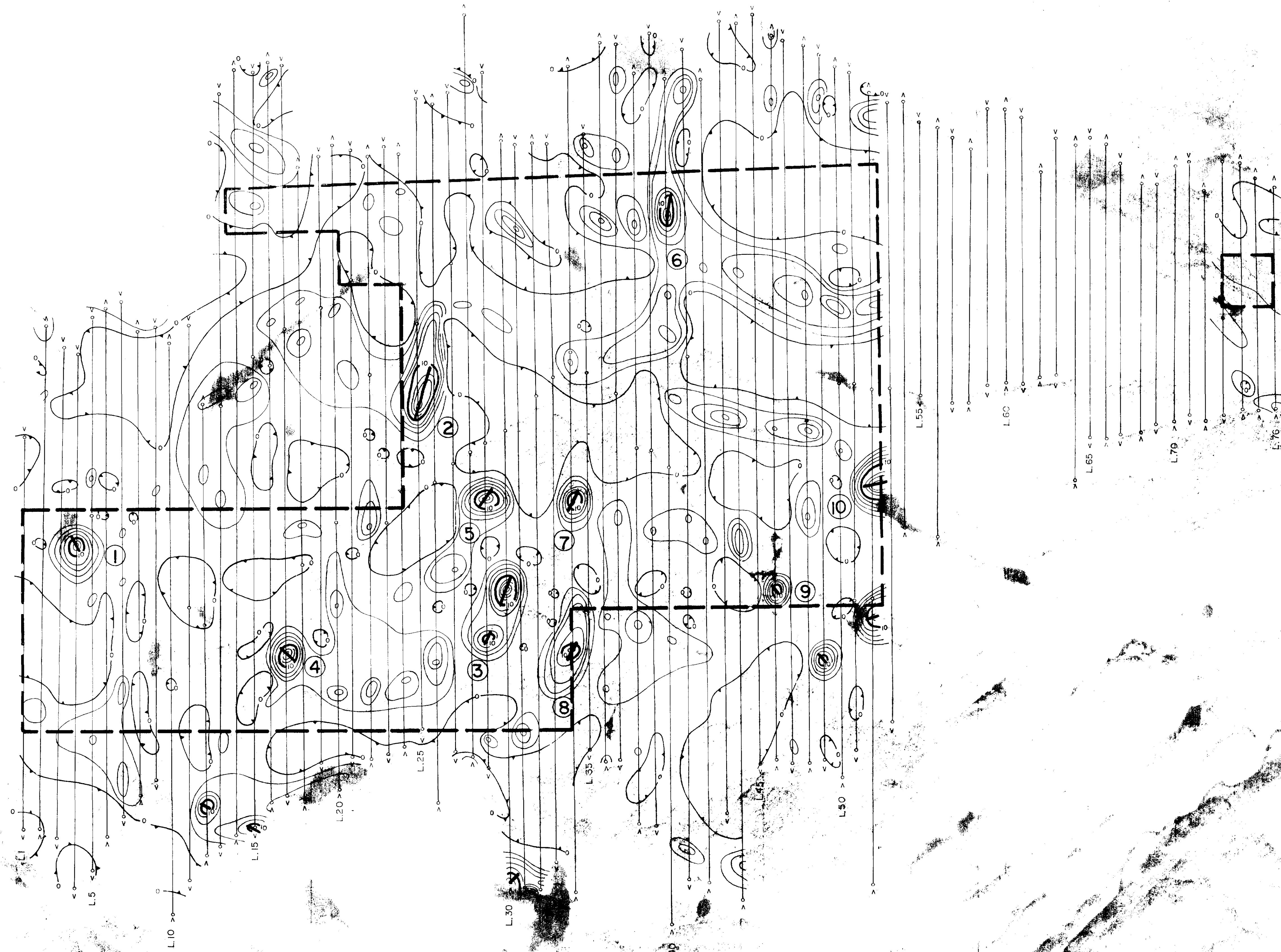


**LEGEND**

- TOTAL FIELD CONTOUR INTERVAL 25 GAMMAS
- FIDUCIAL POINT
- V LINE DIRECTION
- BASE VALUE 6000 GAMMAS
- ⊖ MAGNETIC LOW
- ⊖ 1000 GAMMAS
- ⊖ 500 GAMMAS
- ⊖ 100 GAMMAS
- ⊖ 25 GAMMAS

TYPE OF WORK		AIRBORNE MAGNETIC SURVEY	
CLIENT		GABRIEL RESOURCES LTD. 2.11088	
PROJECT	<i>Goodby M. Howard</i>	AREA	PUKASKWA RIVER AREA
SCALE	1" = 1/4 mile	DATE	APRIL 1998
DRAWN BY	<i>WJH</i>	MAP OR SHEET NO.	M9-1
 <b>H. Ferderber Geophysics Ltd.</b>			





**LEGEND**

- TOTAL FIELD CONTOUR INTERVAL 2 %
- CONDUCTOR AXIS
- FIDUCIAL POINT
- LINE DIRECTION
- STATION USED: CUTLER, MAINE, JCA (N.A.A. 240 kHz.)
- LESS THAN ZERO

TYPE OF WORK		AIRBORNE V.L.F.-EM SURVEY	
CLIENT		GABRIEL RESOURCES INC. 2.11088	
PROJECT	AREA	SCALE	DATE
<i>Gordon M. Hamer</i>	PUKASKWA RIVER AREA	1" = 1/4 mile	APRIL 1988
DRAWN BY		MAP OR SHEET NO.	
<i>207</i>		EM-1	

H. Furderber Geophysics Ltd.