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REPORT ON THE AIRBORNE MAGNETIC AND
VLF-ELECTROMAGNETIC SURVEYS ON THE
PROPERTIES OF MCKINNON PROSPECTING IN
GERMAN AND DUNDONALD TOWNSHIPS
PORCUPINE MINING DIVISION, ONTARIO

Respectfully submitted by,

H. FERDERBER GEOPHYSICS LTD.

RECEIVED

JAN 18 1991

MINING LANDS SECTION

Val d'Or (Québec)
January 10, 1991

R.A. Campbell, B.Sc.
Geology

REPORT ON THE AIRBORNE MAGNETIC AND
VLF-ELECTROMAGNETIC SURVEYS ON THE
PROPERTIES OF MCKINNON PROSPECTING IN
GERMAN AND DUNDONALD TOWNSHIPS
PORCUPINE MINING DIVISION, ONTARIO

INTRODUCTION

On November 18, 1990, airborne geophysical surveys were completed on two properties of McKinnon Prospecting in German and Dundonald Townships, Porcupine Mining Division, Ontario. Magnetic and VLF-electromagnetic data was collected by the airborne division of H. Ferderber Geophysics Ltd. The survey was flown from a base at Val d'Or, Québec. A total of 74.9 miles of data was collected.

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

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The two McKinnon Prospecting properties are comprised of 25 claims in lots 5 to 10, Concessions V and VI, German Twp. and 23 claims in lots 6, 7 and 8, Concessions I and II of Dundonald Twp. The northeastern most limit of the German property lies 0.4 miles southeast of the southeast corner of the Dundonald claim group. The claims are registered with the Office of the Mining Recorder in Timmins and are listed in Appendix 1.

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The properties are situated 28 to 30 miles east-northeast of the city of Timmins, 1 to 1.5 miles east of the village of Connaught and 11 to 13 miles southwest of the town of Iroquois Falls. Provincial Highway 67 passes through the German claim group and within 400 feet of the eastern boundary of the Dundonald property. Numerous secondary roads cut across the claims in German Township.

In Dundonald Township the property is located over Fredrickhouse Lake, with the eastern boundary lying along the eastern shore of the lake. Most of the claims in German Twp. are also water covered, by Barber's Bay of Fredrickhouse Lake. The remainder of the claims are generally forest covered. A south trending sand plain lies between the two sections of the German Group.

Supplies, services and qualified manpower re available in the Iroquois Falls - Timmins area.

GEOLOGY

The claim blocks are located near the western end of the Abitibi Volcanic Belt of the Superior Province of the Canadian Shield. The Abitibi Volcanic Belt extends for nearly 350 miles in a west-east direction from Timmins to Chibougamau. It is host to a variety of precious and base metal deposits including the Timmins, Kirkland Lake, Noranda, Val d'Or and Chibougamau mining camps.

The Abitibi Volcanic Belt is composed of a complex assemblage of interbedded volcanic and sedimentary rocks intruded by a variety of intrusives, from ultrabasic to granitic in composition. The rocks are Archean in age and have been metamorphosed to the greenschist facies. Numerous late Precambrian diabase dykes cut formations of the belt. The rocks generally strike east-west, have a vertical dip and are highly folded and faulted. Geological

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interpretation of the Abitibi Volcanic Belt is complicated by both the wide scattering of the outcrops and the complex structural relationships.

The Ontario Department of Mines, Map 2205, Timmins-Kirkland Lake Geological Compilation Series, indicates that the claims are underlain by metasedimentary and metavolcanic rocks intruded by sills of metamorphosed ultramafic rocks. In Dundonald Township, approximately 60 percent of the claims appear to be underlain by mafic flows and pyroclastic rocks. A west-southwest trending contact with felsic metavolcanic rocks lies near the northern boundary. A metamorphosed ultramafic intrusion strikes westward across the eastern shore of Fredrickhouse Lake. A synclinal axis is located in the metavolcanic rocks, crossing the northern most claims in Dundonald Twp., and a nickel showing lies on a small island in the centre of the claim group. A fault zone strikes south, 0.5 miles east of the property. The past producing Alexo Cu-Ni mine of Omega gold Mines Ltd. is situated in a band of metamorphosed ultramafic rocks, 7 miles of the Dundonald claim group. Numerous Ni and asbestos showing have been found in metamorphosed mafic to ultramafic rocks in the southeast corner of Dundonald Twp.

The claims in German Twp. are shown to be underlain by metasedimentary rocks. The west-northwest trending contact with the mafic metavolcanic rocks lies between the Dundonald and German claim groups. The geology map indicates that a southeast striking fault zone cuts across the extreme southwestern corner of the property in Barber's Bay. The Destor-Porcupine Fault Zone lies 4 miles south of the German claims.

INSTRUMENTATION AND SURVEY METHODS

The survey was completed using a 1972 Cessna 172, fixed wing aircraft, call letters CF-EWK, owned and operated by H. Ferderber Geophysics Ltd. The pilot and navigator/operator were M. Turcotte

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and D. Monastesse respectively of Val d'Or and Vassan. Geophysical sensors were mounted in modified wing tips. The geophysical, navigation and data acquisition systems are in the following pages.

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 sensitivity. For this survey four readings per second were collected. The analog output is on 3 channels, from 1 to 10,000 gammas full scale.

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 Seattle, Washington (NLK) frequency 24.8 kHz was employed in 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 to the flight path on standard VHF type video tapes. Manual fiducials were indicated on the picture frames for

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reference with digital printout. Flight path recovery was aided using a Panasonic Colour Video Monitor-S1300 and Video Cassette Recorder AG-2500.

Data Acquisition System

A Picodas Group Inc. PDAS 1100 data acquisition 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 acquisition system. At present this system stores the altimeter VLF-1 in-phase, VLF-1 quadrature, VLF-2 in-phase, VLF-2 quadrature, 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 north-south lines spaced at 440 foot intervals at an altitude of 300 feet, and 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

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

The aeromagnetic data was corrected for diurnal variations by using base lines as references. The data was then reduced to a base level of 58,000 gammas, contoured at 20 and 100 gamma intervals and presented on Map MG-1.

The VLF-EM data was transferred from the Totem 2AG memory to profiled form. Base values were determined for the VLF-EM profiled

-6-

data. These values were used to correct for variations in transmitter strength and the corrected values were plotted on Map EM-1. The positive values were contoured at intervals of 2%. The conductor axes were determined and labelled A, B, C, etc. No priority was attached to the labelling system.

SURVEY RESULTS AND INTERPRETATION

Magnetic Survey

The most prominent features outlined by the magnetic survey are series of west-southwest to west-northwest trending highs forming a large zone narrowing westward across the southern part of the Dundonald claim group. The magnetic values suggest that this area is underlain by metamorphosed ultramafic intrusive rocks. Smaller, weaker highs were delineated, north of the highs defining the position of the ultramafic intrusive. These highs are probably caused by small metamorphosed mafic intrusive bodies.

Series of narrow magnetic lows trend west-northwest and west-southwest across the northern half of the Dundonald property, defining the possible locations of units of felsic metavolcanic rocks. The remaining areas of the Dundonald claims are represented by west to west-northwest magnetic isogams. These areas are probably underlain by relatively homogeneous mafic metavolcanic rocks.

In German Township the magnetic values are low and exhibit low relief of less than 100 gammas. This magnetic data indicates that over 95 percent of the German claims are underlain by low susceptibility rocks, probably metasediments. The contact with the mafic metavolcanics trends west through the extreme northern limit of the property.

The shapes and positions of the contours in the northern part of the surveyed area suggest that synclinal axis trends west-

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southwest through mafic metavolcanic rocks, just north of the Dundonald claim group. Series of narrow lows and distortions in the magnetic contour pattern define the positions of two potential fault zones. Fault F1, striking north-northeast through the two claim groups, maybe a splay of off the Destor-Porcupine Fault. Fault F2 trends west-southwest from Fault F1, through the north-central part of the Dundonald Twp. claims.

VLF-Electromagnetic Survey

The map produced from the VLF-electromagnetic defines the locations of 5 conductive zones on the two McKinnon Prospecting properties. Descriptions of these zones are presented in the following table.

Zone	Topography	Magnetics	C a u s e
A	Near a small lake.	Parallel to contours.	Shear in metasediments.
B	East of lakeshore.	Between contours.	Shears in metasediments at intersection with fault F1.
C	Along the lakeshore.	Parallel to contours.	Lakeshore affect - conductive lake sediments.
D	Crosses the lakeshore.	Along the contour pattern.	Small shear along a mafic metavolcanics and a metasedimentary contact.
E	In Fredrickhouse.	Along the northern edge of a low.	Shear along a contact between mafic and felsic metavolcanic rocks, near fault F2.

CONCLUSIONS AND RECOMMENDATIONS

The maps produced by the data collected by the airborne magnetic and VLF-electromagnetic surveys were helpful in better

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defining the rock types and structures underlying the two properties of McKinnon Prospecting in German and Dundonald Townships. The Dundonald property appears to be underlain by mafic metavolcanic rocks intercalated with two narrow units of felsic metavolcanic rocks. A body of metamorphosed ultramafic rocks intrudes the metavolcanics in the southern part of the Dundonald group. A smaller metamorphosed mafic intrusive sill lies in mafic metavolcanic rocks near the units of felsic metavolcanics. The German Township claims appear to be underlain by metasedimentary rocks. The contact with the metavolcanics, to the north, trends roughly westward through the extreme northern edge of the German group. A fault, F1, strikes north-northeastward across both groups. A second fault, F2, trends west-southwest from F1, through the northcentral part of the Dundonald group. The intersection of these faults lies near the nickel showing on the island in Fredrickhouse Lake.

Of the five VLF-electromagnetic anomalies on the properties, Zones A, B, D and E define the positions of potential shear zones. Zones B and E, located near faults F1 and F2, are the best targets for sulphide mineralization which may contain precious or base metals.

Further work should be completed on the properties, especially in the areas of zones B and E and along the fault zones. The lakeshores should be mapped and any mineralization or alteration sampled. Magnetic and horizontal loop-electromagnetic surveys should then be completed over the properties in winter. Any anomalous areas could then be tested by diamond drilling.

Respectfully submitted by,

H. FERDERBER GEOPHYSICS LTD.



R.A. Campbell, B.Sc.
Geology

APPENDIX 1 - CLAIM LIST

German Twp.

P-1116028
P-1116029
P-1116030
P-1116031
P-1116032
P-1116033
P-1116034
P-1127914
P-1127915
P-1127916
P-1127917
P-1127918
P-1127919
P-1127920
P-1127921
P-1127922
P-1127923
P-1127926
P-1127927
P-1127928
P-1127929
P-1127930
P-1127931
P-1127932
P-1127933

Dundonald Twp.

P-1130843
P-1130844
P-1130845
P-1130846
P-1130847
P-1130848
P-1130849
P-1130850
P-1130853
P-1130854
P-1130855
P-1130856
P-1130857
P-1130858
P-1130859
P-1130863
P-1130864
P-1130865
P-1130866
P-1130867
P-1130868
P-1130869
P-1130870



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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-EM
Township or Area Dundonald Twp.
Claim Holder(s) M. Cool, D.L. McKinnon
D. Lacroix
Survey Company H. Ferderber Geophysics Ltd.
Author of Report R.A. Campbell
Address of Author 169 Perreault Ave., Val d'Or (Qc)
Covering Dates of Survey November 18, 1990
(linecutting to office)
Total Miles of Line ~~QNTX~~ Flown: 74.9

MINING CLAIMS TRAVERSED
List numerically

P-1130843 et al
(prefix) (number)
(see attached Appendix)

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 31.7 Electromagnetic 31.7 Radiometric
(enter days per claim)

DATE: Jan. 8, 1991 SIGNATURE: RA
Author of Report or Agent

Res. Geol. _____ Qualifications 2.6609

Previous Surveys

Table with 4 columns: File No., Type, Date, Claim Holder

TOTAL CLAIMS 23

If space insufficient, attach list

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) Magnetic and VLF-electromagnetic

Instrument(s) Gem GSM-11 magnetometer and Herz Totem 2A VLF-EM
(specify for each type of survey)

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

Aircraft used Cessna 172 Fixed-Wing

Sensor altitude 300 feet

Navigation and flight path recovery method Navigation was visual on airphoto mosaics.
Flight path recovery was obtained with a RCA colour video camera and a
Panasonic colour video monitor.

Aircraft altitude 300 feet Line Spacing 440 feet

Miles flown over total area 74.9 miles Over claims only 18.2

APPENDIX 1 - CLAIM LIST

Dundonald Twp.

P-1130843
P-1130844
P-1130845
P-1130846
P-1130847
P-1130848
P-1130849
P-1130850
P-1130853
P-1130854
P-1130855
P-1130856
P-1130857
P-1130858
P-1130859
P-1130863
P-1130864
P-1130865
P-1130866
P-1130867
P-1130868
P-1130869
P-1130870

13858

DOCUMENT No. W 9006-60558



900

Mining Act (Geophysical, Geological and Geochemical Surveys)

Mining Lands Section, Mineral Development and Land Use Branch

Type of Survey(s) MAGNETOMETER VLF-EM	Mining Division PORCUPINE	Township or Area GERMAN TOWNSHIP
Recorded Holder(s) DONALD L MCKINNON (M21873) RANDALL SALO (M21107)		Prospector's Licence No.
Address C/O BOX 1130 TIMMINS, ONTARIO P4N 7H6		Telephone No. 705-363-2295
Survey Company H. FERDERBER GEOPHYSICS LIMITED		
Name and Address of Author (of Geo-Technical Report) R.A. CAMPBELL 169 PERREAULT AVE. VAL D'OR QUEBEC		Date of Survey (from & to) Day: 18, Mo: 11, Yr: 90

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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)	- Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	30
	Magnetometer	30
	Other	
Total miles flown over claim(s).		22
Date	Recorded Holder or Agent (Signature)	
NOV 20/90	<i>Wendy Sims</i>	

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
P	1127914	P	1127933		
P	1127915	P	1116028		
P	1127916	P	1116029		
P	1127917	P	1116030		
P	1127918	P	1116031		
P	1127919	-P	1116032		
P	1127920	P	1116033		
P	1127921	P	1116034		
P	1127922				
P	1127923				
P	1127926				
P	1127927				
P	1127928				
P	1127929				
P	1127930				
P	1127931				
P	1127932				

ONTARIO GEOLOGICAL SURVEY GIS - ASSESSMENT FILES

APR 02 1991

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RECEIVED

NOV 30 1990

MINING LANDS SECTION

Total number of mining claims covered by this report of work. **25**

Certification Verifying Report of Work

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

Name and Address of Person Certifying
WENDY SIMS KORBA BOX 1130 TIMMINS, ONTARIO P4N 7H6

Telephone No. **705-363-2295** Date **Nov 20 1990** Certified By (Signature) *Wendy Sims*

Received Stamp

For Office Use Only

Total Days Cr. Recorded **1500**

Date Recorded **Nov 22/90**

Date Approved as Recorded **March 27/91**

Mining Recorder *Robert Bailey*

Provincial Manager, Mining Lands *Tom C. Goshinski*

RECORDED RECEIVED

NOV 22 1990 NOV 22 1990

142

DOCUMENT No.
W 9006-60587

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch:

Feb 08

Report of Work
Mining Act
(Geophysical, Geological and Geochemical Surveys)

Type of Survey(s) MAGNETOMETER VLF-EM	Mining Division PORCUPINE	Township or Area DUNDONALD
Recorded Holder(s) MARCEL COOL (M24221) DONALD L. MCKINNON (M21873) DANIEL LACROIX (M20603)	Prospector's Licence No. (M20603)	
Address C/O BOX 1130 TIMMINS, ONTARIO P4N 7H9		Telephone No. 705-363-2295
Survey Company H. FERDERBER GEOPHYSICS LIMITED		
Name and Address of Author (of Geo-Technical Report) R.A. CAMPBELL 169 PERREAU AV VAL DOR QUEBEC		Date of Survey (from & to) 18 11 90 18 11 90 Day Mo. Yr. Day Mo. Yr.

2.13858

Credits Requested per Each Claim in Columns at right

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)	- Other	
	Geological	
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic - Magnetometer - Other	
	Geological	
	Geochemical	

Airborne Credits	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	
Electromagnetic	30
Magnetometer	30
Other	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
P	1130843	P	1130865		
P	1130844	P	1130866		
P	1130845	P	1130867		
P	1130846	P	1130868		
P	1130847	P	1130869		
P	1130848	P	1130870		
P	1130849				
P	1130850				
P	1130853				
P	1130854				
P	1130855				
P	1130856				
P	1130857				
P	1130858				
P	1130859				
P	1130863				
P	1130864				

RECEIVED
JAN 17 1991
MINING LANDS SECTION
RECORDED
DEC 10 1990

Total number of mining claims covered by this report of work. **23**

Total miles flown over claim(s). **21**

Date **Nov 20 1990** Recorded Holder or Agent (Signature) *Wendy Sims Korba*

Certification Verifying Report of Work

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

Name and Address of Person Certifying
WENDY SIMS KORBA BOX 1130 TIMMINS, ONTARIO P4N 7H9

Telephone No. **705 363 2295** Date **Nov 20 1990** Certified By (Signature) *Wendy Sims Korba*

For Office Use Only

Total Days Cr. Recorded **1380**

Date Recorded **DEC 10 1990**

Mining Recorder *Robert Paulsen*

Date Approved as Recorded **March 27 1991**

Provincial Manager, Mining Lands *Ron C. Gashinski*

Received Stamp

RECEIVED
DEC 10 1990
10:30 am



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-EM
Township or Area German Twp.
Claim Holder(s) D.L. McKinnon, R. Salo
Survey Company H. Ferderber Geophysics Ltd.
Author of Report R.A. Campbell
Address of Author 169, Perreault Avenue, Val d'Or
Covering Dates of Survey November 18, 1990
Total Miles of Line Cut Flown 74.9

MINING CLAIMS TRAVERSED
List numerically
P-1116028 et al
(see attached Appendix)
TOTAL CLAIMS 25

SPECIAL PROVISIONS CREDITS REQUESTED
Geophysical DAYS per claim
-Electromagnetic
-Magnetometer
-Radiometric
-Other
Geological
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer 30.2 Electromagnetic 30.2 Radiometric
(enter days per claim)

DATE: Jan. 8, 1990 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. Qualifications

Previous Surveys
Table with columns: File No., Type, Date, Claim Holder

OFFICE USE ONLY

If space insufficient, attach list

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) Magnetic and VLF-electromagnetic

Instrument(s) Gem GSM-11 magnetometer and Herz Totem 2A VLF-EM

(specify for each type of survey)

Accuracy 0.04 gammas and 1%

(specify for each type of survey)

Aircraft used Cessna 172 Fixed-Wing

Sensor altitude 300 feet

Navigation and flight path recovery method Navigation was visual on airphoto mosaics. Flight path recovery was obtained with a RCA colour video camera and a Panasonic colour video monitor.

Aircraft altitude 300 feet Line Spacing 440 feet

Miles flown over total area 74.9 miles Over claims only 18.85

APPENDIX 1 - CLAIM LIST

German Twp.

P-1116028
P-1116029
P-1116030
P-1116031
P-1116032
P-1116033
P-1116034
P-1127914
P-1127915
P-1127916
P-1127917
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P-1127921
P-1127922
P-1127923
P-1127926
P-1127927
P-1127928
P-1127929
P-1127930
P-1127931
P-1127932
P-1127933

MAP SYMBOLOLOGY

Aerial Cableway	Pipeline
Boundary	Railroad
International	Single Track
Interprovincial	Double Track
District, Township	Abandoned
Indian Reserve	Unusable
Approach	Road
Lot, Concession	Highway, County
Approach	Tramway
Park Boundary	Access (road of doubtful maintenance or significant driveway)
Bridge	Trail, Beach Road (dashed lines)
Road, Railroad	Road
Building	Rapids
Chimney	Double line river with multiple rapids
Cliff, Pit, Pile	Reservoir
Contours	River, Stream, Canal
Contour Interval	Approximate
Approximate	Tractor of line
Control Points	Rock
Horizontal	Significant
Vertical	Fall
Culvert	Spot Elevation (from nearest)
Falls	Tower
Double line river	Transmission Line
Fence, Hedge, Wall	Pole
Feature Outline (Construction Features, etc.)	Pylon
Flooded Land	Tunnel
Lock	Utility Pole
Marsh or Swamp	Wharf, Dock, Pier
Mast	Wooded Area
Mine Head Frame	
Outcrop	

DUNDONALD TWP

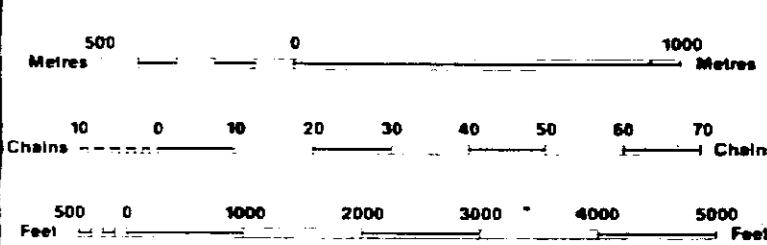
LEGEND

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 PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

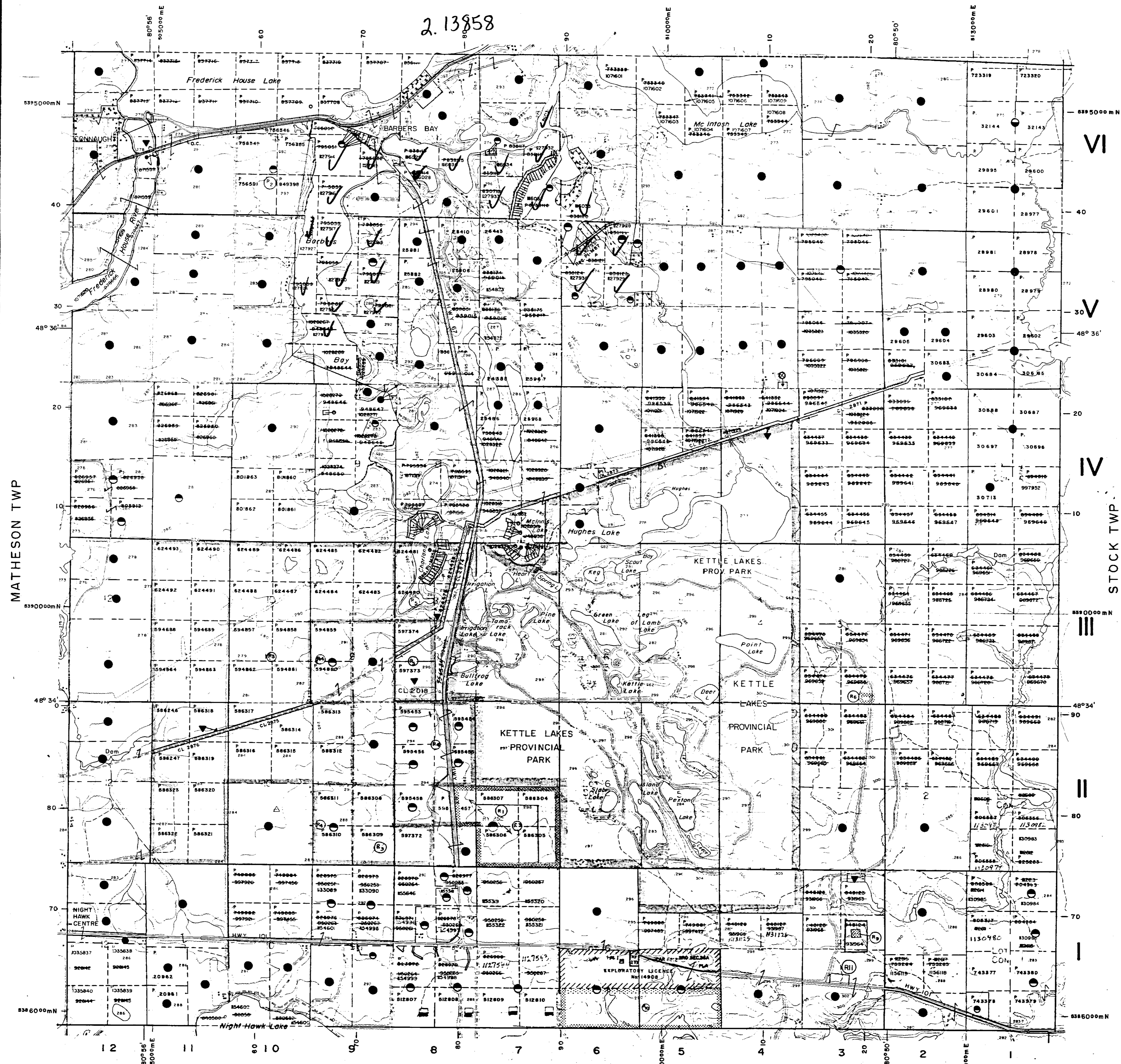


SCALE 1:20 000
GRID ZONE 17
NOTES

FLOODING RIGHTS ON NIGHTHAWK LAKE AND FREDRICK HOUSE RIVER TO ELEV. 903.5' RESERVED TO ONTARIO HYDRO.

FLOODING RIGHTS ON FREDRICK HOUSE LAKE TO ELEV. 903.0' TO ONTARIO HYDRO.

REGISTERED PLAN OF SUBDIVISION

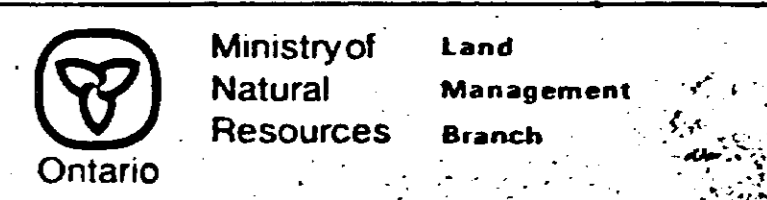


AREAS WITHDRAWN FROM DISPOSITION

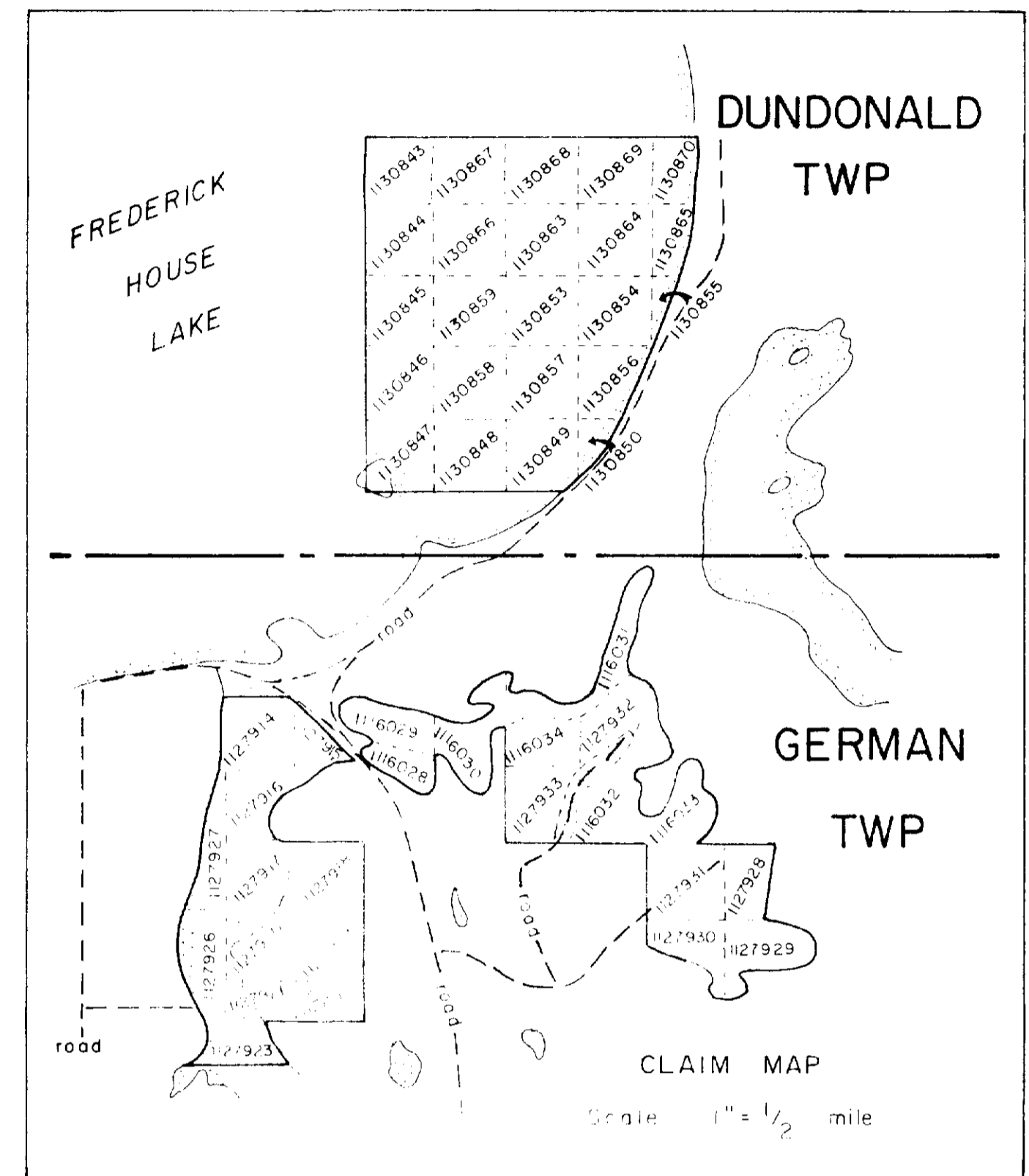
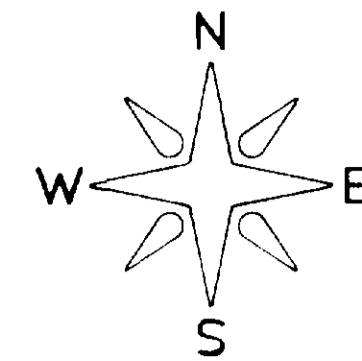
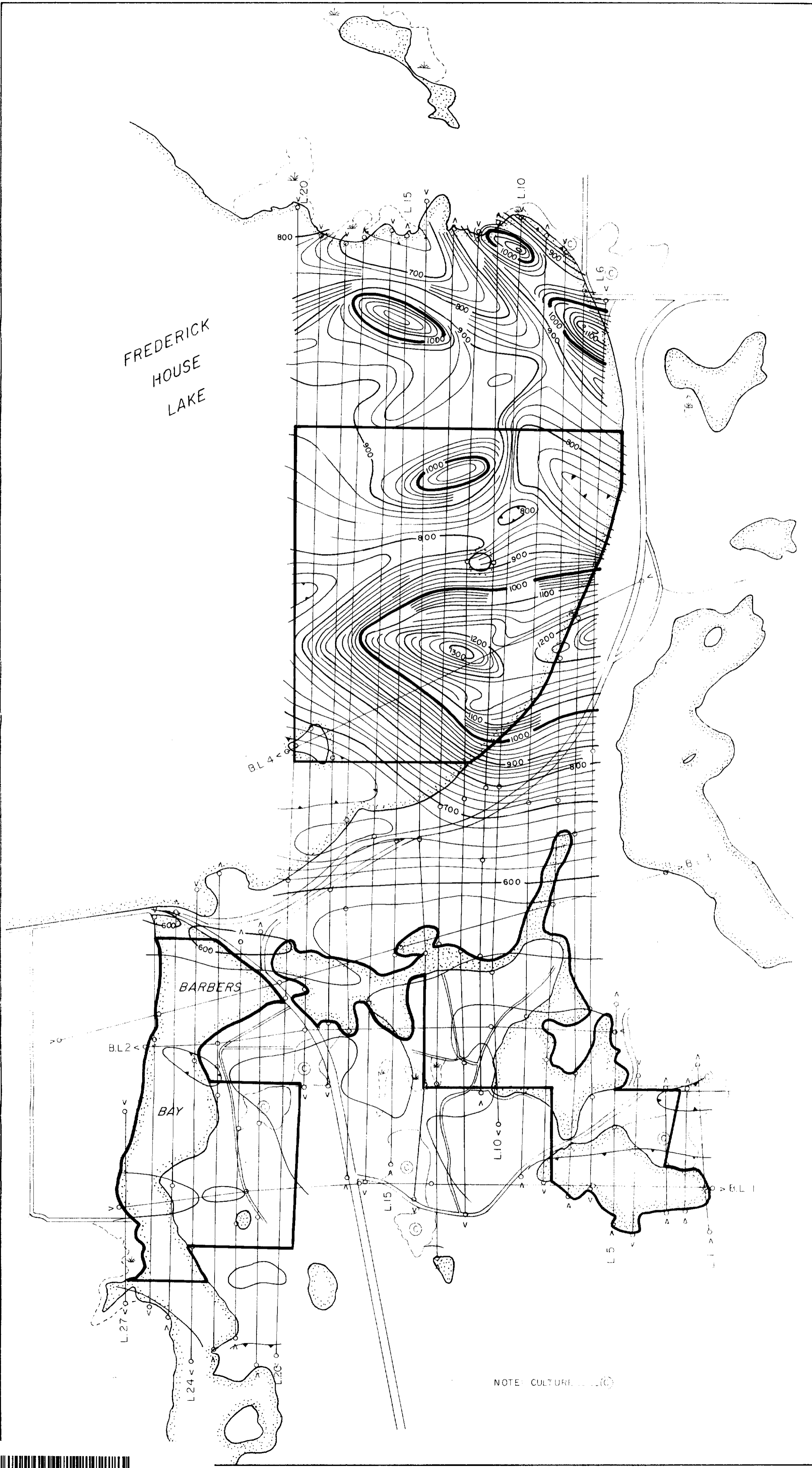
- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
RECEIVED				
MINING RIGHTS ONLY WITHDRAWN UNDER SECTION 36 OF THE MINING ACT R.S.O. 1980 ORDER NO. W-378		AUG 10 87		
W 76/77	22/9/77	S.R.O.		54339
SEWAGE DISPOSAL SITE - BONA FIDE APPLICATION UNDER P.L.A.				
MINING RIGHTS ONLY WITHDRAWN UNDER SECTION 36 OF THE MINING ACT R.S.O. 1980 ORDER NO. W-114				
MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 36 OF THE MINING ACT R.S.O. 1980 ORDER NO. W-9188 JAN. 29/88				
MINING RIGHTS ONLY WITHDRAWN UNDER SECTION 36 OF THE MINING ACT R.S.O. 1980 ORDER NO. W-0188 JAN. 29/88				
SPECIAL GRANT PENDING UNDER SECTION 19(2) OF THE MINING ACT				
MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 36 OF THE MINING ACT R.S.O. 1980 ORDER NO. W-0188 P. SEPT. 15/88				
SPECIAL GRANT PENDING UNDER SECTION 19(2) OF THE MINING ACT				
APPLICATION UNDER P.L.A. SEC. 3b. 6.3c.				

TOWNSHIP 61056
GERMAN
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE




ORIGINAL COMPILATION JULY 1984
REVISED July 13/87
Number
G-3992

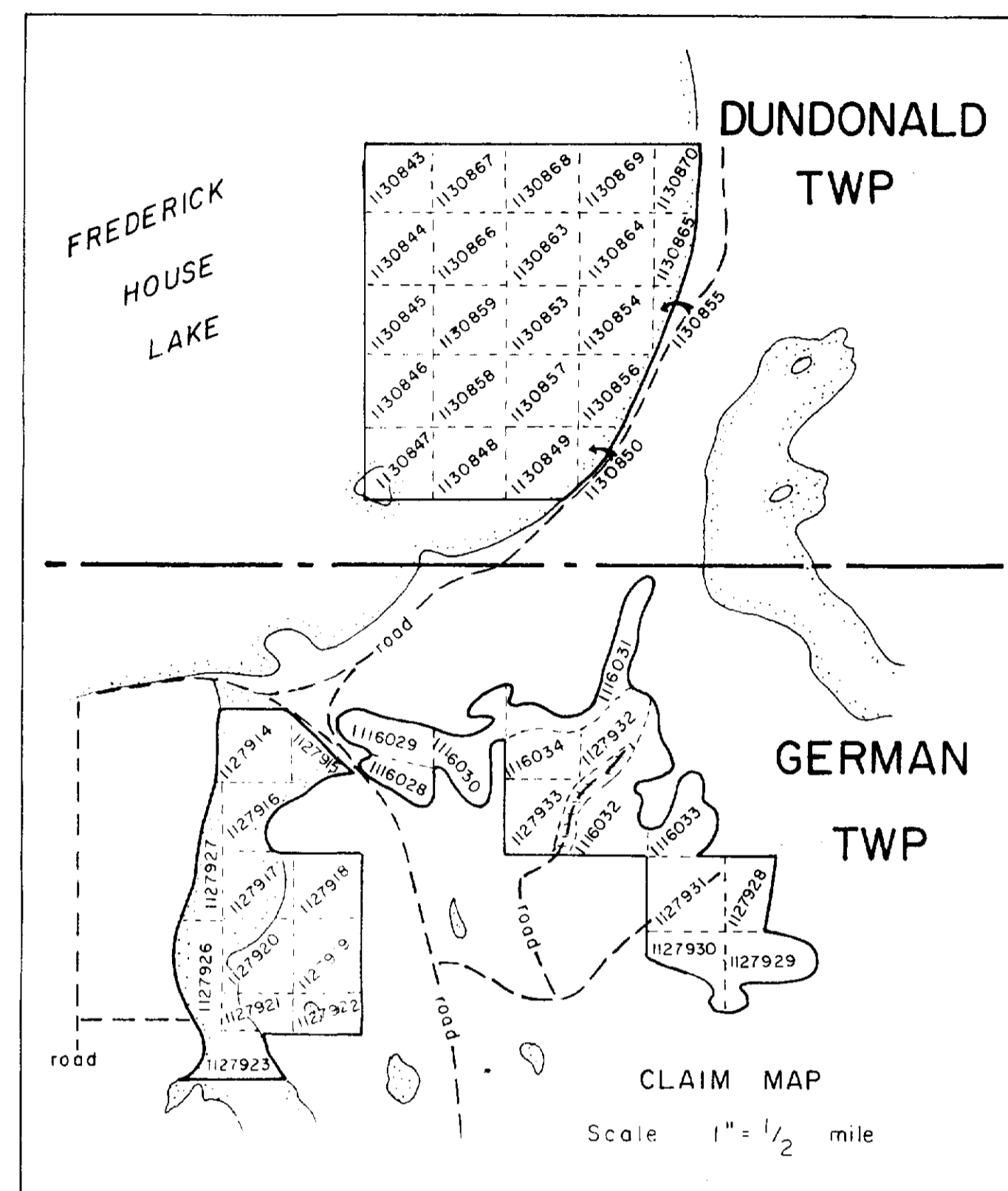
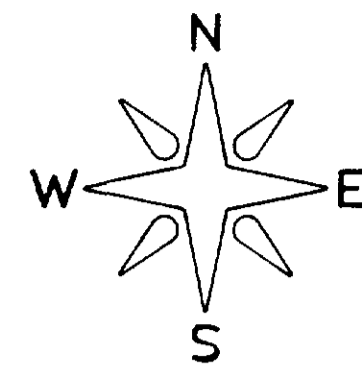
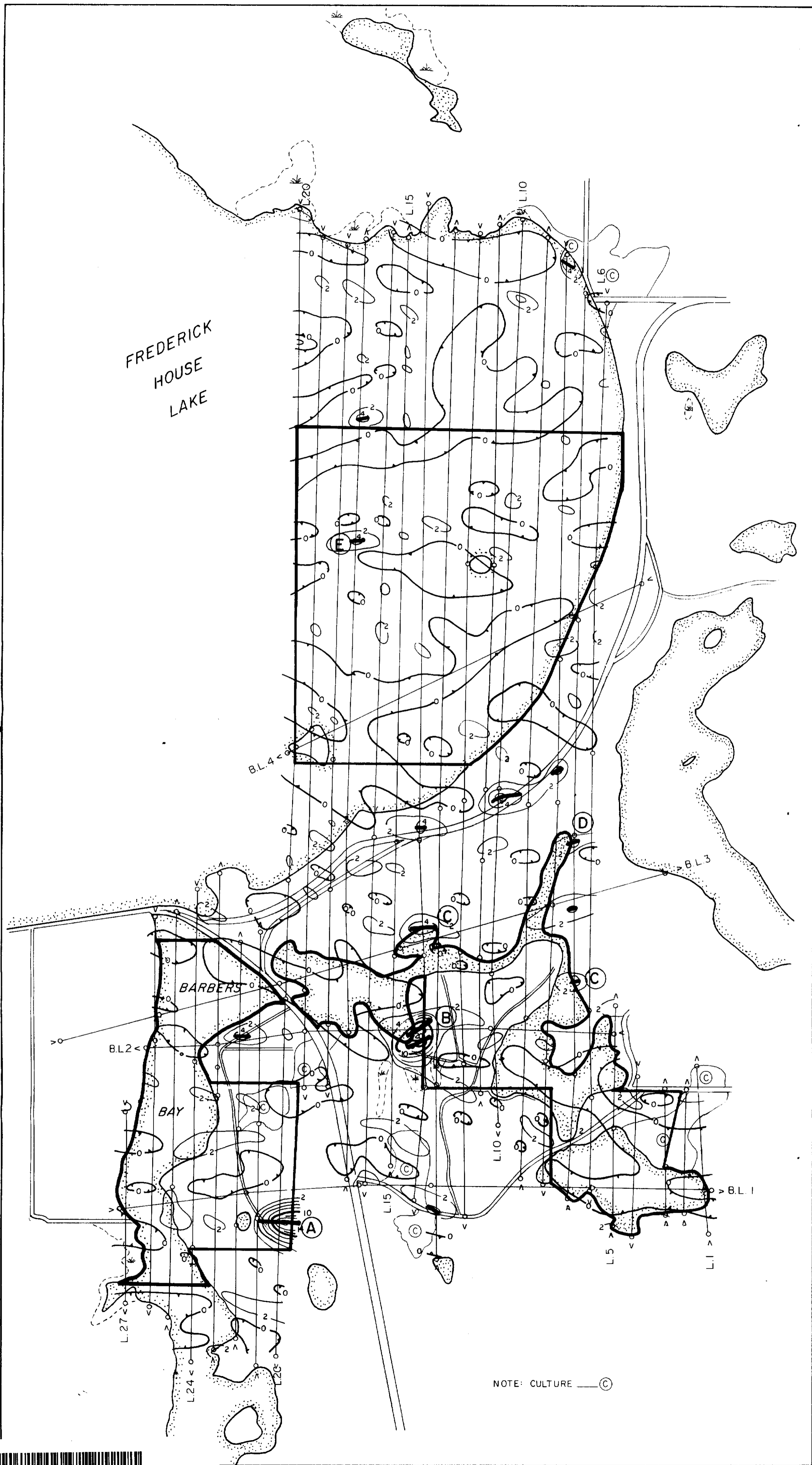


LEGEND

- TOTAL FIELD CONTOUR INTERVAL 20 GAMMAS
- FIDUCIAL POINT
- > LINE DIRECTION
- BASE VALUE 58,000 GAMMAS
- ⊖ MAGNETIC LOW
- 1000 GAMMAS
- 100 GAMMAS
- 20 GAMMAS

TYPE OF WORK		AIRBORNE MAGNETIC SURVEY		
CLIENT		McKINNON PROSPECTING		
PROJECT	2.13858	AREA	DUNDONALD & GERMAN TWPS, ONT.	
 RA H. Ferderber Geophysics Ltd.	SCALE	1" = 1/4 mile	DATE	NOV. 1990
	DRAWN BY	RM	MAP OR SHEET NO.	MG-1



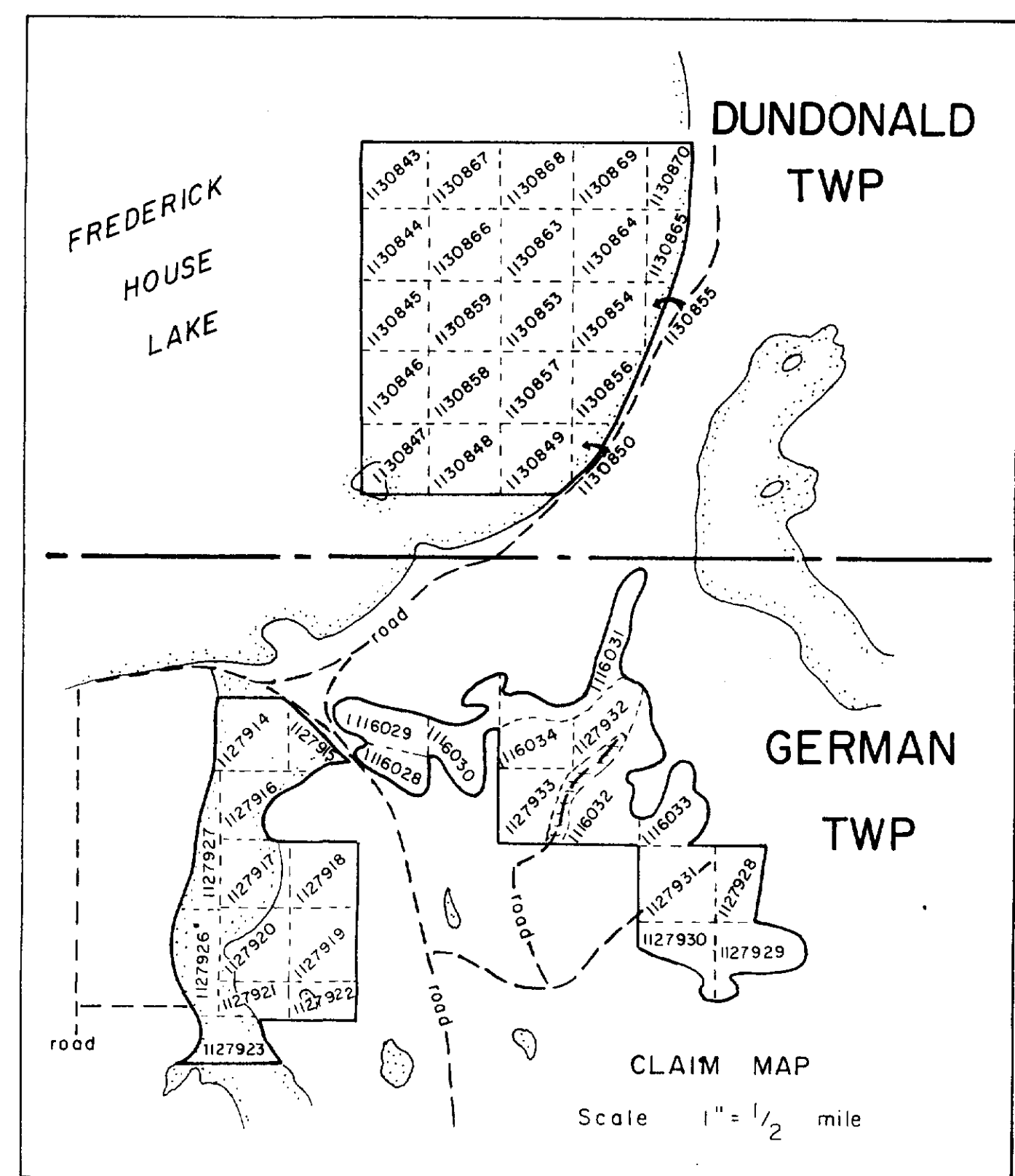
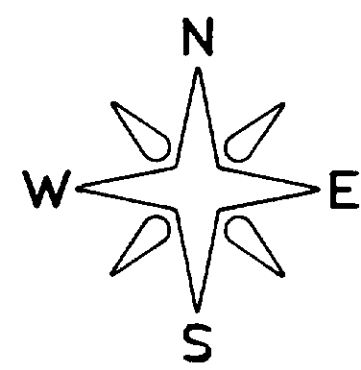
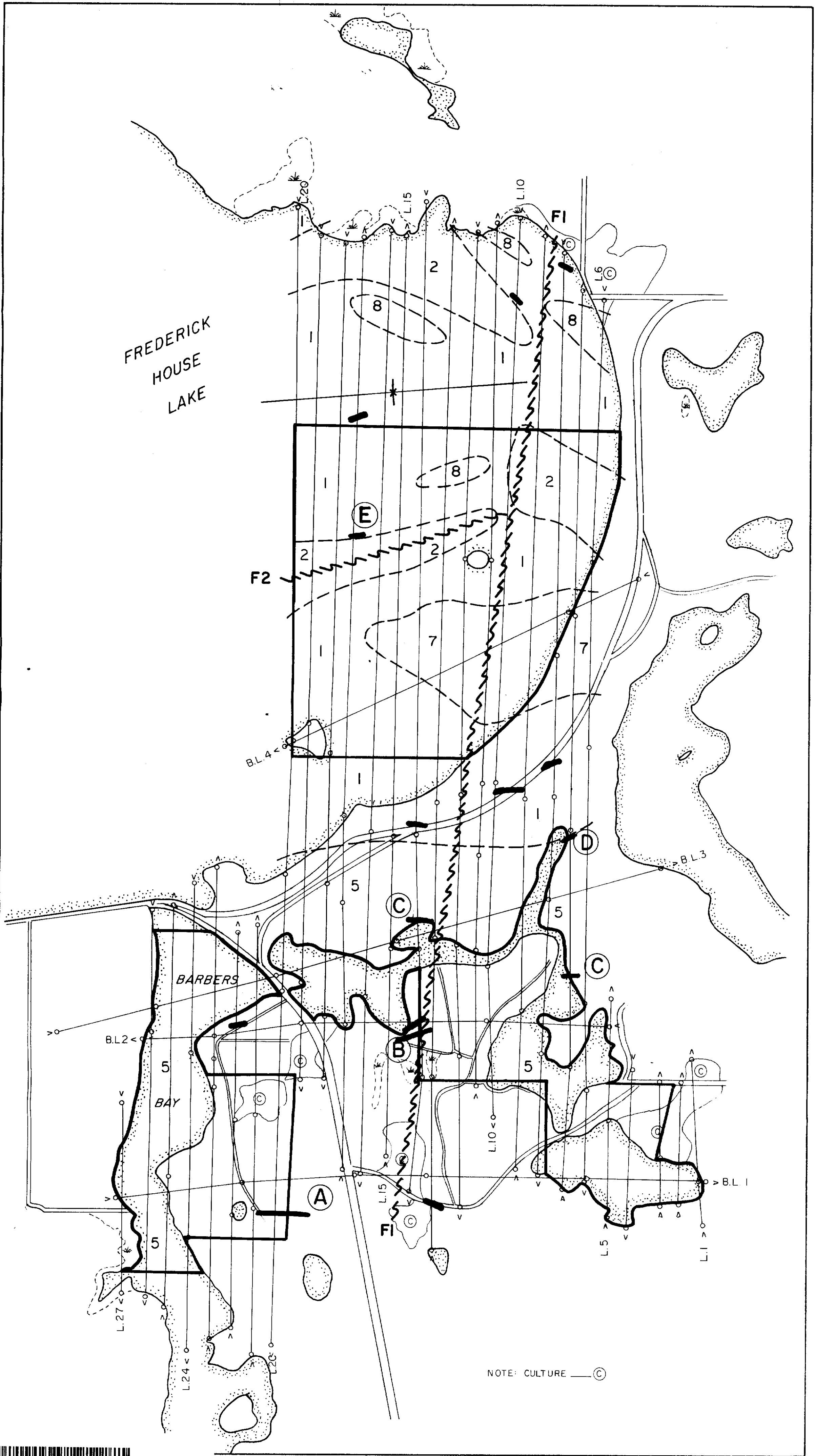


LEGEND

- TOTAL FIELD CONTOUR INTERVAL 2 %
- CONDUCTOR AXIS
- FIDUCIAL POINT
- > LINE DIRECTION
- STATION USED: Seattle, Washington, USA. (NLK 248kHz)
- ⊖ LESS THAN ZERO
- ~ 2%
- ~ 10%

TYPE OF WORK	AIRBORNE V.L.F.-EM SURVEY			
CLIENT	McKINNON PROSPECTING			
PROJECT	2.13858	AREA	DUNDONALD & GERMAN TWP'S, ONT.	
 H. Ferderber Geophysics Ltd.	SCALE	1" = 1/4 mile	DATE	NOV. 1990
	DRAWN BY	RA	MAP OR SHEET NO.	EM-1





LEGEND

- 8 METAMORPHOSED MAFIC ROCKS
- 7 METAMORPHOSED ULTRAMAFIC ROCKS
- 5 METASEDIMENTS
- 2 FELSIC METAVOLCANICS
- 1 MAFIC METAVOLCANICS

SYMBOLS

- CONTACT
- FAULT ZONE (from geophysics), WITH LABEL
- SYNCLINAL AXIS (from geophysics)
- CONDUCTIVE ZONE, WITH LABEL

TYPE OF WORK		GEOLOGICAL INTERPRETATION	
CLIENT		McKINNON PROSPECTING	
PROJECT	2.13858	AREA	DUNDONALD & GERMAN TWP'S, ONT.
DRAWN BY	H. Ferderber Geophysics Ltd.	SCALE	1" = 1/4 mile
		DATE	NOV. 1990
MAP OR SHEET NO.		G1-1	

