REPORT ON THE AIRBORNE MAGNETIC AND VLF-ELECTROMAGNETIC SURVEYS ON THE PROPERTY OF CARL P. FORBES IN HINCKS TOWNSHIP LARDER LAKE MINING DIVISION, ONTARIO

by

H. FERDERBER GEOPHYSICS LTD.

May 22, 1990

R.A. Campbell, B.Sc.
Geologist

REPORT ON THE AIRBORNE MAGNETIC AND VLF-ELECTROMAGNETIC SURVEYS ON THE PROPERTY OF CARL FORBES IN HINCKS TOWNSHIP LARDER LAKE MINING DIVISION, ONTARIO

INTRODUCTION

On April 12 and 13, 1990, airborne magnetic and VLF-electromagnetic surveys were completed out on the property of Carl Forbes in the Hincks Township, Larder Lake 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, Quebec. A total of 166.1 miles of data was collected.

The magnetic survey provides data which helps outline the underlying geological structures and helps identify any potential economic concentrations which may contain variations in accessory magnetic minerals. The results of the VLF-electromagnetic survey 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 property of Carl Forbes is comprised of 141 claims in the southern part of Hincks Township, Larder Lake Mining Division, Ontario. The claims cover approximately 2256 hectares, are registered with the Office of the Mining Recorder at Kirkland Lake, and are listed in Appendix 1.

The property is located approximately 15 miles west-northwest of the town of Matachewan, 32 miles south-southeast of the city of Timmins and 42 miles west-southwest of Kirkland Lake. A secondary road south from Timmins, then east to Matachewan, bisects the property in a northeast direction. Numerous bush roads cross the northeastern and southwestern claims.

Most of the claim group is forest covered with approximately 10% of the property under water. Austen, Little Esker, Dokis and Little Whitefish Lakes and associated swamps are situated within the limits of the property. The Whitefish River and Esker Creek flow through the claim group.

Supplies, services and qualified manpower are available in the Matachewan, Timmins and Kirkland Lake areas.

GEOLOGY

The property is located near the southwestern 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 the Chibougamau mining camps.

The Ontario Division of Mines, Geological Compilation Series Map 2205, Timmins-Kirkland Lake and the Ontario Geological Survey, Mineral Deposits Circular 18, Gold Deposits of Ontario, Part 2, outline the geology and gold deposits in area of the claim group. Map 2205 shows that north trending Middle Precambrian sedimentary rocks underlie the eastern half of the claim group. The Coleman Member sediments (conglomerate, arkose, greywacke, quartzite and argillite) of the Gowganda Formation form a domed shaped band, narrowing near the northern boundary. Along the western and

eastern edges of the sediments, small bodies of south trending Early Precambrian felsic intrusive rocks are situated. The eastern intrusion ends near the northern boundary of the property while the western intrusion crosses the northern boundary southward into the northwestern claims. The remainder of the property is underlain by Early Precambrian metavolcanic rocks. Over 90% of the metavolcanics are mafic flows and pyroclastic rocks. Two units of felsic metavolcanic rocks (pyroclastics to the north and felsic flows to the south) are in contact with the mafic metavolcanics.

Small zones of iron formation lie in mafic metavolcanic east of Austen Lake and along the Little Whitefish River, south of the southeastern boundary. Numerous northwest striking Early Precambrian diabase dykes intrude the rocks of the northwestern claims. A similar trending Early Precambrian dyke ends just south of the southeastern corner of the property and a Late Precambrian diabase dyke trends northwest through the eastern part of Montrose Township, south of the property. Small intrusions of the felsic intrusive rocks (syenite, monzonite and feldspar porphyry) and metamorphosed mafic and ultramafic rocks intrude the metavolcanics just west of the claim group. A fault zone strikes northwest through the sediments on the claim group.

H.L. Lovell, in the Ontario Department of Mines, Geological Report 51, Geology of the Matachewan Area, indicates that in the Matachewan area gold trends to occur in, or in the vicinity of quartz veins occupying shears, fractures and faults in metavolcanic rocks, tightly folded sedimentary rocks, and silicic intrusives. Most of the gold, molybdenite and copper mineralization seems to be genetically related to intrusions of syenite porphyry.

In Hincks Township, the McCollum and McGill gold occurrences are located 2.5 miles northeast and 1.25 miles east-northeast of the property, respectively. Gold was found in quartz veins in basalts intruded by a lens shaped granitic body (McCollum) and by porphyry dykes (McCollum and McGill). Approximately 0.6 miles west of the property, in Zavitz Township, Au-Ag-Pb and Au-Cu

mineralization has been discovered. The Robinson Au-Ag-Pb occurrence lies in intermediate to felsic metavolcanics intruded by a small stocks of porphyritic syenite. Gold occurs in numerous quartz stringers which cut the stock. 0.5 miles north of this occurrence, Au-Cu mineralization of the Voyager Occurrence is in pyrite-pyrrhotite in a northwest trending bed of cherty rhyolite breccia, intruded by a quartz-feldspar dyke.

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 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 or 0.05 gamma to 10 readings per second at a 0.1 gamma absolute accuracy. 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 Annapolis, Maryland (NSS), frequency 21.4 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 the flight path on standard VHS type video tapes. Manual fiducials were indicated on the picture frames for 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 on lines oriented at 050^{o} and 230^{o} and spaced at 440 foot intervals. The flight altitude of 300 feet and air speed was 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 map are 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 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.

The geological interpretation of the magnetic data, plus conductor axes, is presented on Map GI-1.

SURVEY RESULTS AND INTERPRETATION

Magnetic Survey

The results of the airborne magnetic survey show that approximately 50% of the property is underlain by rocks of low magnetic susceptibility and relief as defined by the locations of broad lows over the eastern half of the claim group. Geology maps

indicate that these rocks are Late Precambrian, Coleman Member sediments (see Map GI-1). Over the rest of the property the magnetic contour pattern is represented by complex series of highs and lows with local relief of over 1300 gammas. The six strong highs of over 1000 gammas could outline the positions of iron formation or small conformable intrusions of metamorphosed mafic and ultramafic rocks, as shown on Map 2205 lying west of the property and trending southeastward towards the claim group.

The broad low lying over the north-central boundary has characteristics indicative of a stock of felsic intrusive rocks, either trodhjemites-granodiorites or syenites-monzonites-feldspar porphyries. Two other lows, striking southeastward across the northwestern boundaries could be caused by underlying felsic intrusive rocks but the widths and strikes of these lows indicate that these areas are probably underlain by units of felsic metavolcanics.

Series of linear highs, trending south, east of Austen Lake, and southeast, across the eastern part of the property, appear to be caused by underlying diabase dykes. The south trending dyke is thought to be Late Precambrian in age while the geology map indicates that the southeast trending dyke is older, Early Precambrian in age.

The remaining moderate strength highs delineated by the magnetic survey outline the positions of mafic metavolcanic rocks. The high striking southeast along the northeastern boundary, probably lies along the northern edge of a contact with the sediments to the south. The small lows associated with these highs indicate that the mafic metavolcanic rocks are intercalated with small units of felsic metavolcanic and sedimentary rocks.

Numerous breaks, distortions and magnetic lows form seven linear zones of alteration and deformation, defining the locations of 7 faults zones on the Forbes property. Faults F1, F2 and F3

strike northwestward and are thought to be older in age than the north-northeast to northeast trending fault zones, F4 to F7.

VLF-Electromagnetic Survey

The data collected by the VLF-electromagnetic survey shows that 13 conductive zones strike southeast to south across the claim group. Descriptions of these zones and their probable causes are presented in the following table.

Zone	Topography	Magnetics	Cause
A	Northern 3 conductors lie along a creek and a lake.	Northern three are along the south edge of a high. Southern conductor is cross-cutting a low.	Northern 3 conductors are caused by conductive overburden. Southern conductor could be a shear in IF or 7.
B	In Austen Lake	Crosses contour pattern.	Conductive overburden following a possible linear bedrock trend (shear) in metavolcanics with the southern end near a contact with IF or 7.
C	Lies in Austen Lake Esker and Little Lake and along a creek.	Northern and southern parts of long northern conductor cross contour pattern, parallel to F3. Central part in a low, cutting off F3. South conductor is in a low.	Caused by conductive overburden following a possible linear bedrock trend (shear) in 1 and 2, and the southern conductor lies along a contact between 1 and 11.
D	Northeast of Esker Lake.	In a low along fault F3.	Shear along a contact between 12, 1 and 11.

Zone	Topography	Magnetics	Cause
E	Southern and northern conductors are in lakes.	Along the boundary of a magnetic low and in a high, with the south end cut-off by F2.	Northern conductors represent shears in 10. Southern conductor could be caused by conductive overburden representing a shear along a contact between 10 and 11.
F	Northern 2 conductors are in along the edge of a lake and a creek.	Northern 2 conductors are in lows. Middle conductor is between 2 highs.	Northern 2 conductors are caused by conductive overburden or a change in topographical relief.
	The southern conductor crosses the shore of Dokis Lake.	Southern conductor crosses contour pattern at the intersection of F4.	Southern 2 conductors are shears in 1 and 12 near contacts between 1 and IF or 7 and 1 and 12, respectively.
G	Parts of conductor is in lakes.	Crosses contour pattern.	Shears in 1 and 12. The southern 3 conductors are cut and offset by F2 and F5.
H	Crosses Dokis Lake.	Across contour pattern along F1.	Northern end of F1 near a contact between 1 and 12.
I	South conductor is in lake.	Along the edge of a low with the southern end intersecting F6.	Shears in 12 with the southern conductor produced by overburden following a potential lineament through the lake.
J		In a magnetic high cut and slightly bent by F5 and F6.	Long shears in 16 (diabase) and 12.
K		Along the edge of a low, cut and folded by F7.	Shears in 12, south of a contact with 1.

Zone	Topography	Magnetics	Cause
L	Northern conductor lies along the edge of a lake.	Northern conductor cross contour pattern. Southern 2 conductors is in a low.	Northern conductor caused by a change in topographical relief. Shears in 12 south of a contact with 1.
M	Northern part of the northern conductor is in a lake.	In areas of low relief. Northern end intersects F1.	Shears in 12.

Legend

16 - Diabase Dykes (Late Precambrian)
12 - Coleman Member Sediments (Late Precambrian)
11 - Diabase Dykes (Early Precambrian)
10 - Felsic Intrusives (Early Precambrian)
7 - Metamorphosed Ultramafic and Mafic Rocks (Early Precambrian)
2 - Felsic Metavolcanics (Early Precambrian)
1 - Mafic Metavolcanics intercalated with Minor Felsic Metavolcanic and Metasedimentary Rocks (Early Precambrian)

CONCLUSIONS AND RECOMMENDATIONS

The maps produced by the data collected by the airborne magnetic and VLF-electromagnetic surveys were successful in helping delineate the geology underlying the Forbes' property in Hincks Twp. and in defining the positions of 13 conductive zones on the claim group. The eastern half of the property appears to be underlain by homogeneous sedimentary rocks of low magnetic susceptibility. These rocks are in contact near the northeastern boundary and through Dokis and Little Esker Lakes, with southeast striking mafic metavolcanics containing intercalations of minor sediments and felsic metavolcanics. The mafic metavolcanics, in

the west, contain six zones of iron formation or intrusions of metamorphosed mafic and ultramafic rocks. Two units of felsic metavolcanics trend southeast through the northwestern claims, in contact with the mafic metavolcanics. The south end of a stock of felsic intrusive rocks intrudes the sediments and mafic metavolcanics across the northern boundary, south of Hincks Lake. Two diabase dykes strike south and southeast the mafic metavolcanics and sediments.

Of the conductive zones representing potential shear zones, the conductors in felsic metavolcanics, iron formation and felsic intrusive rocks and those in mafic metavolcanics near contacts with the felsic metavolcanics sediments, iron formation and/or felsic intrusives are in good environments for Au or Cu mineralization (southern conductor of zone A, south end of B, zones C and E and the southern conductor of F). Further work should also be concentrated in the areas of the probable fault zones, especially at the intersections with the conductive zones.

The property should be prospected, mapped and sampled, followed by the completion of a program of ground geophysics (magnetic and horizontal loop-electromagnetic surveys). Mineralized zones and HLEM anomalies, representing potential mineralization, should then be tested by diamond drilling.

Respectfully submitted,
H. FERDERBER GEOPHYSICS LTD.

RAC

R.A. Campbell, B.Sc.
Geologist

Qual 2.6609

Appendix 1 - Claim List

L-1072334
L-1072335
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L-1072337
L-1072782
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L-1090322
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Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

2.13372 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 Hincks

Claim Holder(s) _____

_____

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 April 12 and 13, 1990 (linecutting to office)

Total Miles of Line ~~XXXX~~ Flown: 166.1

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

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

Magnetometer 33.2 Electromagnetic 33.2 Radiometric _____ (enter days per claim)

DATE: May 22, 1990 SIGNATURE: RAC
Author of Report or Agent

Res. Geol. _____ Qualifications 2.6609

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

L-1072334 et al
(prefix) (number)
(see attached Appendix)

If space insufficient, attach list

TOTAL CLAIMS 141

OFFICE USE ONLY

837 (85/12)

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 the RCA colour video camera and a ~~Panasonic colour video monitor.~~

Aircraft altitude 300 feet Line Spacing 440 feet

Miles flown over total area 166.1 Over claims only 117.1

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

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42A02SW0112 2.13372 HINCKS

900

Ministry of Northern Development and Mines
Ontario

DOCUMENT No. W9008.153

2.13372

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

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.

Type of Survey(s)	Mining Division	Township or Area
AIRBORNE MAGNETOMETER + VLF-EM	LARDER LAKE	HINCKS TOWNSHIP

Recorded Holder(s)	Prospector's Licence No.
PREMIER EXPLORATIONS INC.	T1762

Address	Telephone No.
70 McCAMUS AVE. KIRKLAND LAKE ONT. P2N 2J9	705-567-5145

Survey Company
M. FERBERBER GEOPHYSICS LTD.

Name and Address of Author (of Geo-Technical Report)	Date of Survey (from & to) Day / Mo / Yr	Day / Mo / Yr
R.A.CAMPBELL - 169 PERREAULT AVE. - VALDOR P.Q. J9P 2H1	12 04 90	13 04 90

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Other	
	Geological	
	Geochemical	
Airborne Credits **Note:** Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	33.2
	Magnetometer	33.2
	Other	

Total miles flown over claim(s). 117.1

Date	Recorded Holder or Agent (Signature)
JUNE 6/90	Carl P. Forbes

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Number	Mining Claim Prefix	Number	Mining Claim Prefix	Number
L	1072334	L	1096905	L	1096658
L	1072335	L	1096929	L	1096659
L	1072336	L	1096930	L	1096660
L	1072337	L	1096931	L	1096661
L	1072782	L	1096932	L	1096662
L	1072783	L	1096648	L	1096663
L	1096737	L	1096649	L	1096664
L	1096895	L	1096650	L	1096665
L	1096896	L	1096651	L	1096666
L	1096897	L	1096652	L	1096667
L	1096898	L	1096653	L	1096668
L	1096899	L	1096654	L	1096669
L	1096900	L	1096655	L	1096670
L	1096901	L	1096656	L	1096671
L	1096902	L	1096657	L	1096672
L	1096903				
L	1096904				

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
JUL 16 1990
RECEIVED

Total number of mining claims covered by this report of work. 47

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	Telephone No.	Date	Certified By (Signature)
CARL P. FORBES 70 McCAMUS AVE. KIRKLAND LAKE ONT. P2N 2J9	705-567-5145	JUNE 6 1990	Carl P. Forbes

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
3120.8	June 6/90	
	Date Approved as Recorded	Provincial Manager, Mining Lands
	13 July 90	

Received Stamp
RECEIVED
JUL 03 1990
MINING LANDS SECTION

m.2.

Ministry of Northern Development and Mines
Ontario

DOCUMENT No. W9008.154

2.13372

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

RECEIVED
JUL 03 1990
MINING LANDS SECTION

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.

Type of Survey(s)	Mining Division	Township or Area
AIRBORNE MAGNETOMETER & VLF-EM	LARDER LAKE	HINCKS TOWNSHIP

Recorded Holder(s)	Prospector's Licence No.
PREMIER EXPLORATIONS INC.	T1762
Address	**Telephone No.**
70 McCAMUS AVE. KIRKLAND LAKE ONT. P2N 2J9	705-567-5145
Survey Company	
H. FERDERER GEOPHYSICS LTD.	
Name and Address of Author (of Geo-Technical Report)	**Date of Survey (from & to)** Day / Mo. / Yr.
R.A. CAMPBELL - 169 PERREAULT AVE. - VAL D'OR P.Q. J9P 2H1	12 04 90 — 13 04 90

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey:	Geophysical	
Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey using the same grid.	- Other	
Enter 20 days (for each)	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	33.2
	Magnetometer	33.2
	Other	

Total miles flown over claim(s). 117.1

Date	Recorded Holder or Agent (Signature)
JUNE 6/90	Carl P. Forbes

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
L	1096673	L	1096702	L	1096717
L	1096933	L	1096703	L	1096718
L	1096934	L	1096704	L	1096719
L	1096935	L	1096705	L	1096720
L	1096936	L	1096706	L	1096721
L	1096937	L	1096707	L	1096722
L	1096938	L	1096708	L	1096723
L	1096939	L	1096709	L	1096724
L	1096940	L	1096710	L	1096725
L	1096941	L	1096711	L	1096726
L	1096942	L	1096712	L	1096727
L	1096943	L	1096713	L	1096728
L	1096944	L	1096714	L	1096729
L	1096698	L	1096715	L	1096730
L	1096699	L	1096716	L	1096731
L	1096700				
L	1096701				

Total number of mining claims covered by this report of work: 47

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			
CARL P. FORBES 70 McCAMUS AVE. KIRKLAND LAKE ONT. P2N 2J9			
	Telephone No.	Date	Certified By (Signature)
	705-567-5145	JUNE 6/90	Carl P. Forbes

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
3120.8	June 6/90	J. Beaulieu for
	Date Approved as Recorded	Provincial Manager, Mining Lands
	13 July 90 RFS	

M.L.

Ministry of Northern Development and Mines
Ontario

DOCUMENT NO. W9008.155

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.

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

2.13872

RECEIVED JUN 6 AM 8 19

REJECTED

Type of Survey(s)	Mining Division	Township or Area
AIRBORNE MAGNETOMETER & VLF-EM	LARDER LAKE	~~HINGES~~ TOWNSHIP

Recorded Holder(s)	Prospector's Licence No.
PREMIER EXPLORATIONS INC.	T1762

Address	Telephone No.
70 McCAMUS AVE. KIRKLAND LAKE ONT. P2N 2J9	705-567-5145

Survey Company

H. FERDERBER GEOPHYSICS LTD.

Name and Address of Author (of Geo-Technical Report)

R.A. CAMPBELL - 169 PERREAULT AVE. - VAL D'OR P.Q. J9P 2H1

Date of Survey (from & to): 12 Day 04 Mo 90 Yr — 13 Day 04 Mo 90 Yr

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
For each additional survey using the same grid: Enter 20 days (for each)	Geophysical - Other	
	Geological	
	Geochemical	

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

RECEIVED JUL 11 1990 MINING LANDS SECTION

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys	Electromagnetic	33.2
	Magnetometer	33.2
	Other	

Total miles flown over claim(s): 117.1

Date	Recorded Holder or Agent (Signature)
JUNE 6/90	Carl P. Forbes

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
L	1096732	L	1096750	L	1096767
L	1096733	L	1096751	L	1096768
L	1096734	L	1096752	L	1096769
L	1096735	L	1096753	L	1096770
L	1096736	L	1096754	L	1096771
L	1096738	L	1096755	L	1096772
L	1096739	L	1096756	L	1096773
L	1096740	L	1096759	L	1096774
L	1096741	L	1096760	L	1096775
L	1096742	L	1096761	L	1096776
L	1096743	L	1096762	L	1096777
L	1096744	L	1096763	L	1091199
L	1096745	L	1096764	L	1090322
L	1096746	L	1096765	L	1096757
L	1096747	L	1096766	L	1096758
L	1096748				
L	1096749				

Total number of mining claims covered by this report of work: 47

Certification Verifying Report of Work

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Name and Address of Person Certifying

CARL P. FORBES 70 McCAMUS AVE. KIRKLAND LAKE ONT. P2N 2J9

Telephone No.	Date	Certified By (Signature)
705-567-5145	JUNE 6/90	Carl P. Forbes

Received Stamp

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
31,208	June 6/90	
	Date Approved as Recorded	Provincial Manager, Mining Lands
	13 July 90	

RLS

1362 (89/06)

Cleaver Twp.

McNeil Twp.

Zavitz Twp.

Argyle Twp.

Montrose Twp.

Nighthawk R.

Hincks L.

McWilliams L.

Esker Cr.

Austen

Doks L.

Whitefish R.

Little Esker L.

2.13372

1M 2M 3M 4M 5M 6M

95M 94M 93M 92M 91M 90M

THE TOWNSHIP OF HINCKS

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1 INCH = 40 CHAINS

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY
ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES

NOTE

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
W 27/76	LE522	May 31, 1978	S.R.O.

DATE OF ISSUE
FEB 6 1980
LARDER LAKE MINING RECORDER'S OFFICE

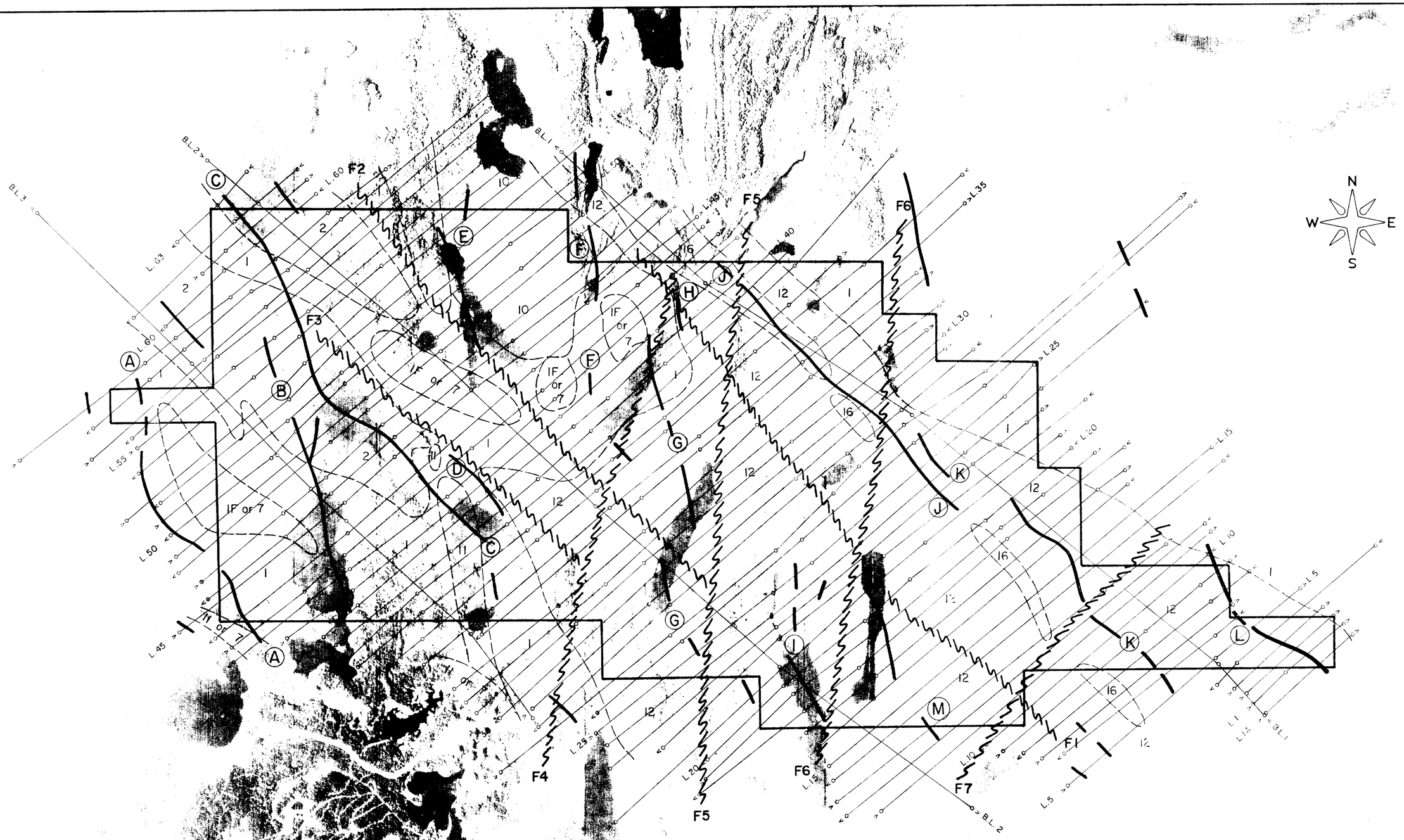
PLAN NO - M.223

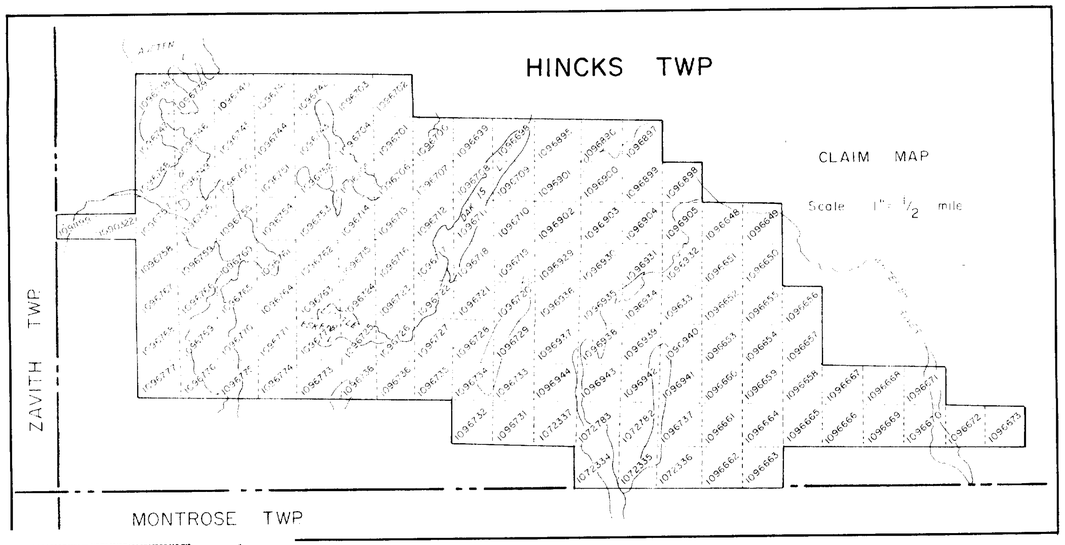
ONTARIO #11
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

42A02SW0112 2.13372 HINCKS

200

M.Z.





LEGEND

LATE PRECAMBRIAN

16 DIABASE DYKES

12 GOWGANDA FORMATION-COLEMAN MEMBER SEDIMENTS

EARLY PRECAMBRIAN

11 DIABASE DYKES

10 FELSIC INTRUSIVE ROCKS

7 METAMORPHOSED MAFIC & ULTRAMAFIC ROCKS

2 FELSIC METAVOLCANICS

1 MAFIC METAVOLCANICS ROCKS INTERCALATED WITH MINOR AMOUNTS OF FELSIC METAVOLCANIC & METASEDIMENTARY ROCKS

IF IRON FORMATION

SYMBOLS

GEOLOGICAL CONTACT (inferred from geophysics)

FAULT ZONES (inferred from geophysics)

CONDUCTOR AXES

TYPE OF WORK: GEOLOGICAL INTERPRETATION

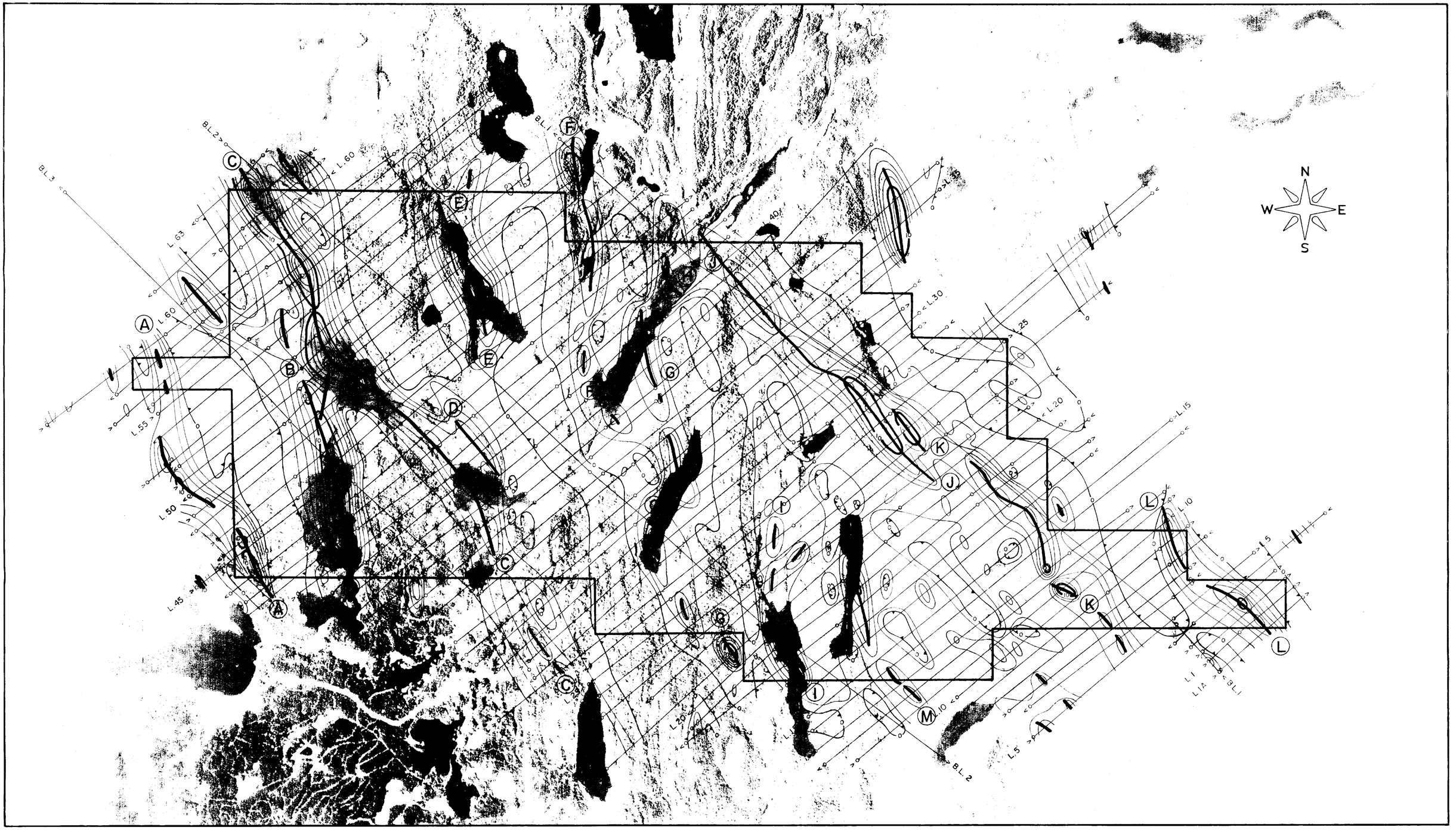
CLIENT: CARL FORBES

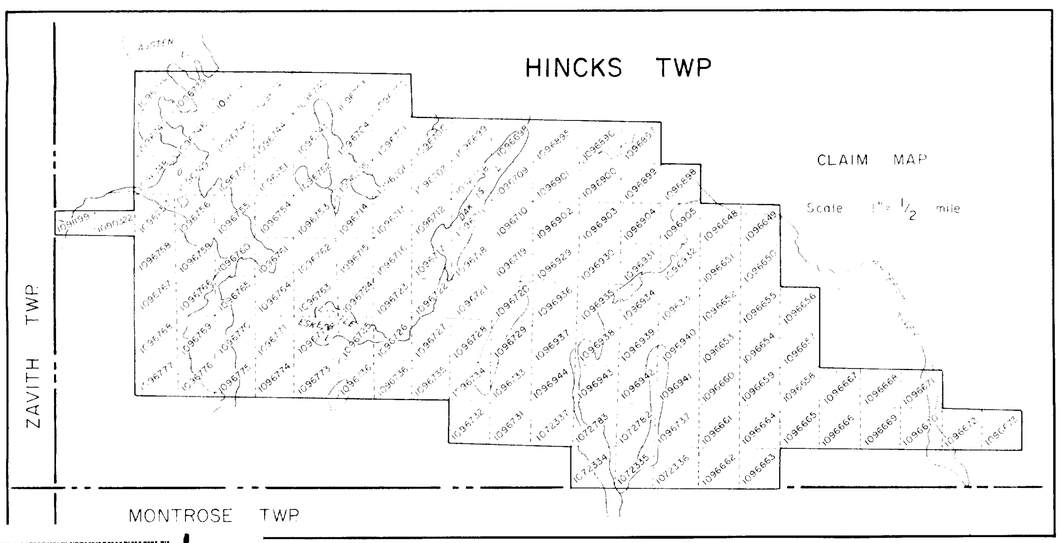
PROJECT: 2.13372

AREA: HINCKS TWP. (ONT.)

H. Ferderber Geophysics Ltd.

GI-1





LEGEND

TOTAL FIELD CONTOUR INTERVAL 2 %
CONDUCTOR AXIS
FIDUCIAL POINT
LINE DIRECTION
STATION USED: Annapolis, Maryland, USA. (NSS 21450)
LESS THAN ZERO
2%
10%

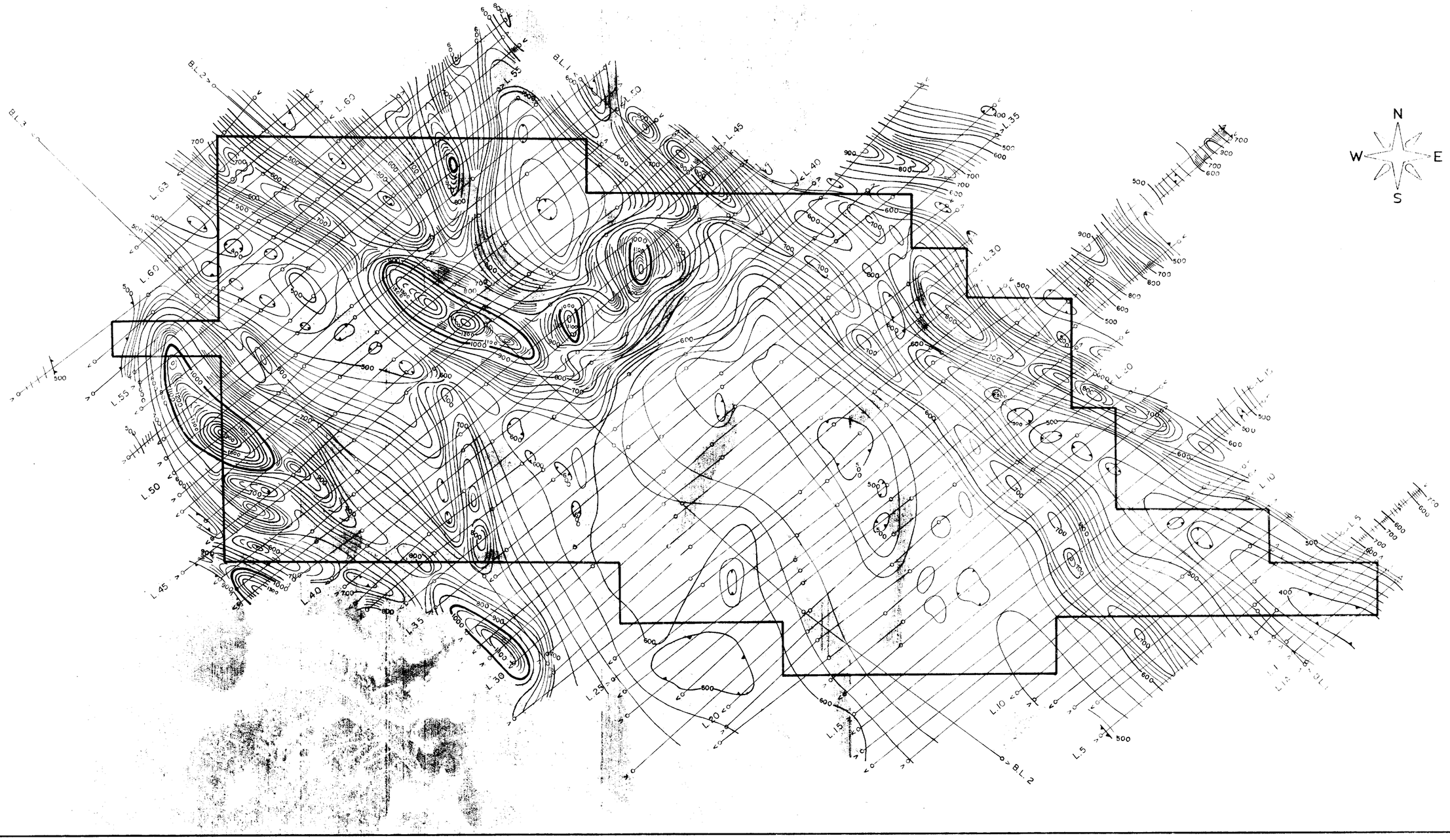
AIRBORNE V.L.F.-EM SURVEY

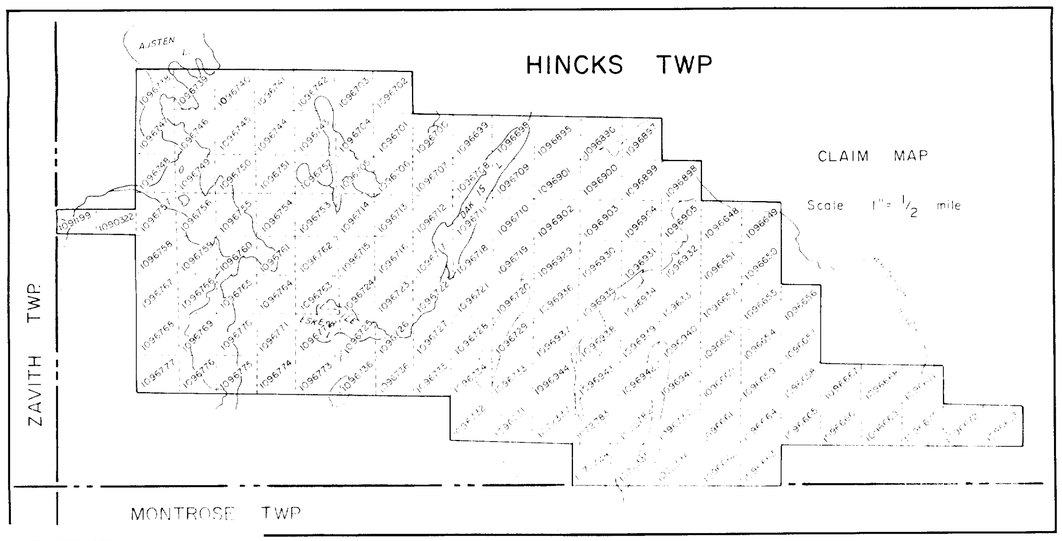
CARL FORBES

RAC 2.13372

H. Ferderber Geophysics Ltd.

EM-1





LEGEND

TOTAL FIELD CONTOUR INTERVAL 20 GAMMAS

FIDUCIAL POINT

LINE DIRECTION

BASE VALUE 58(0)0 GAMMAS

MAGNETIC LOW

1000 GAMMAS

100 GAMMAS

20 GAMMAS

AIRBORNE MAGNETIC SURVEY

2.13372

MG-1