

2.24056

GEOPHYSICAL SURVEY
BARRY HOLLINGER 4 GROUP
NEW EAST/WEST GRID
PACAUD TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

FOR

ALEXANDER H. PERRON

AUGUST 13, 2002

MISS WENDY K. WELLER
GEOTECH



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GROUND MAGNETOMETER SURVEY 1998 - MAP NO. BH/2002/mag.IN BACK POCKET

SUMMARY

i)

This report is a Geophysical Survey, as required by The Ministry of Northern Development and Mines, for assessment work purposes, following the recommendations set forth in the Mining Act Regulations 1991.

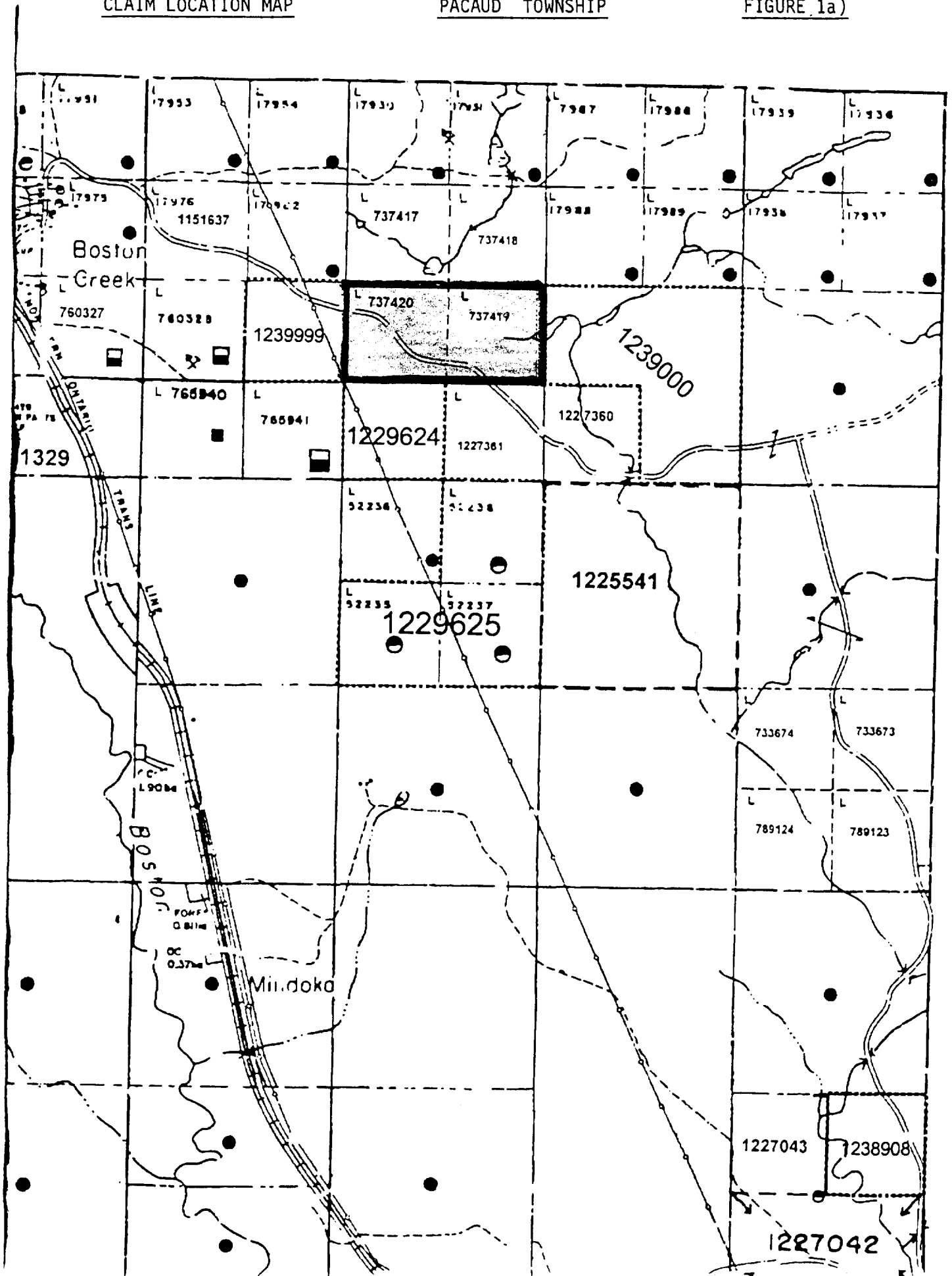
The report includes an introduction to the property, general geology, field results and conclusions, based on the field survey.

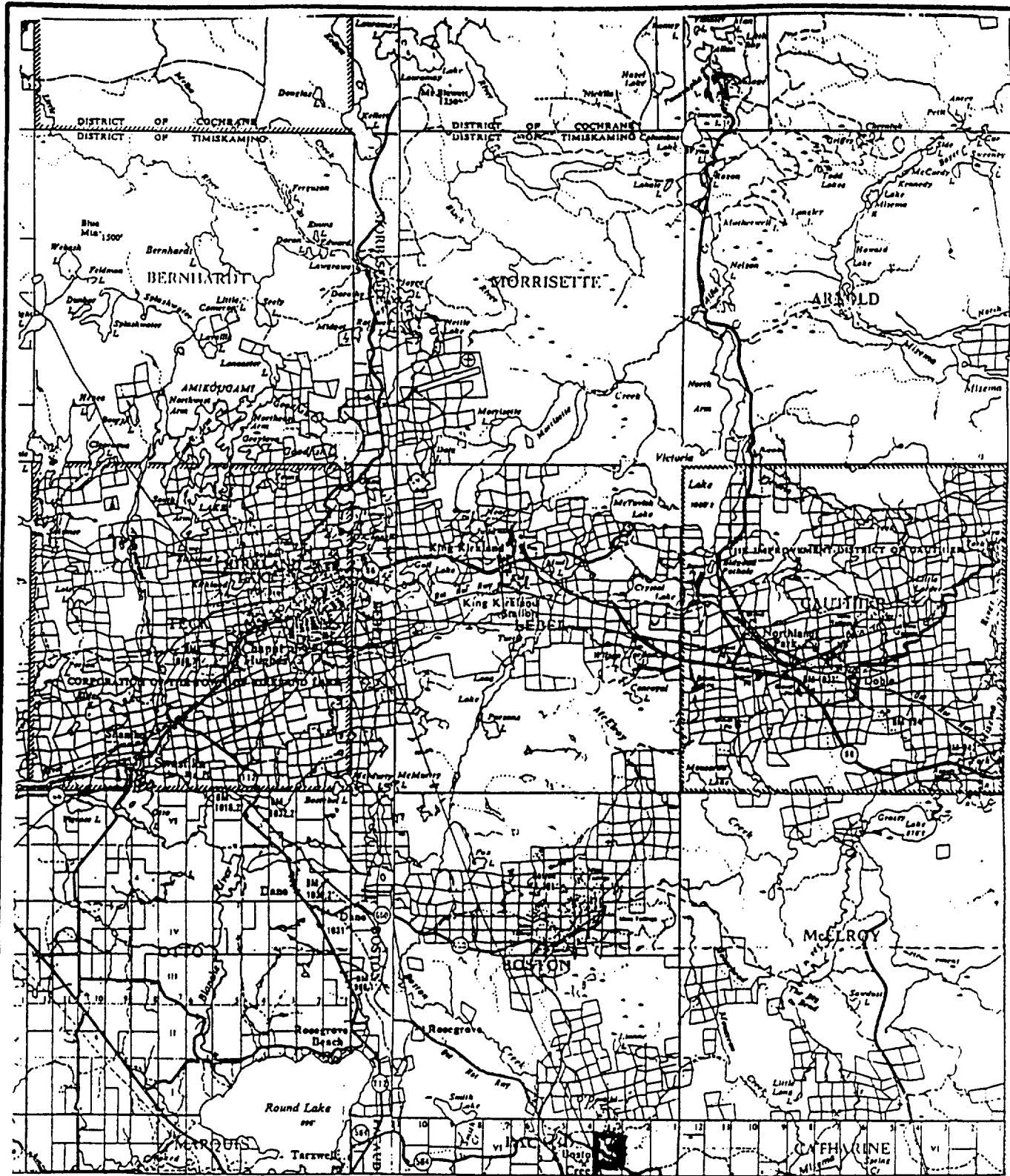
Technical data is provided in the Assessment Data Form found at the back of this report. Field data is compiled on the accompanying plan maps at the back of the report.

CLAIM LOCATION MAP

PACAUD TOWNSHIP

FIGURE 1a)





Location Map

Figure 1b

- August 1986 - Geological Survey
M. Greer
- April 1987 - Geophysical Survey
Barry Hollinger Joint Venture M. Greer
- August 1996 - Geophysical Survey
Barry Hollinger 4 Group Wendy K. Weller

The above reports can be viewed at the Regional Office.

TOPOGRAPHY

The terrain consists of low swampy areas surrounded by high steep hills, which has a large percentage of exposed outcrop.

A very large creek, pond system runs south/east through claim No. L-737419.

The vegetation in both claims ranges from alder, grass, balsam in the low lying areas to red jack pine and poplar, and silver and white birch on the outcrop showings.

GENERAL GEOLOGY

According to the O.D.M. Map No. 1957-4 the underlying bedrock consists of basic volcanic lava flows of the Keewatin age. These rock types are primarily gabbroic lava flows and andesite, basalt and pillow lava. The flows appear to be trending northwest-southeast and are facing east.

INSTRUMENTATION

Electromagnetic Survey:

The VLF-EM method uses as a source, one of the main submarine communications transmitters in the 15 to 25 kHz band found throughout the world. These submarine communication radio waves travel in a single mode parallel to the surface of the earth along the earth-air surface.

Without vertical conductors and travelling over flat ground, the magnetic field component of this radio or surface wave is horizontal and perpendicular to it's direction of travel.

VLF instruments are capable of picking up these structures that change the direction of the waves by measuring the tilt angle of the major axis of the polarization ellipse. This is illustrated by the tilt angle being zero on flat ground, but when a conductor is present the tilt angle will acquire a finite value. The direction of tilt indicates the direction of the conductor. Calculations of such parameters as depth, depth extent, dip and

width of the conductor is very minimal.

The VLF easily illustrates the location of the upper limit of dipping structures which can be seen or plotted as VLF profiles as areas of greatest change in tilt angle per unit of distance.

The instrument used for this EM survey was a Geonics VLF-EM16 Unit. The sensitivity of this unit is $\pm 1\%$ for the in-phase and $\pm 1\%$ for the quadrature. The operating frequency for the EM16 is from 15-25 kHz and the station selection is made by plug-in units.

For the purpose of this EM survey the station used was Cutler, Maine, which has a frequency of 24.0 kHz.

All the readings were taken facing north at 50 foot intervals and the topography was noted for future use in the interpretation of the EM results.

Magnetic Survey:

This system uses a backward motion of spinning protons of a hydrogen atom within a fluid of hydrogen and carbon. These spinning magnetic protons are caused to have two opposite poles by applying a magnetic field using a current within a coil of wire. When the current is stopped, the protons precess about the earth's magnetic field and in turn generate a small current in the wire. This frequency of precession is proportional to the earth's total magnetic field.

This instrument is read directly in gammas which is the absolute value of the earth's total field for that station.

2002 ELECTROMAGNETIC AND MAGNETOMETER SURVEYS

i) Magnetic Survey:

The field data is presented on a map at a horizontal scale of one inch to 200 feet, Map No. BH/2002/mag, found at the back of this report.

The magnetic data is illustrated as isomagnetic contours (contour interval 100 gammas) on a map of corrected magnetic values recorded at each station.

The magnetic trend is in a north to north/west direction. The magnetic relief ranges from 58,010 gammas to 60,606 gammas, (difference of 2,596).

In this small section of the 1998 grid two large magnetic highs are mirrored by two linear low magnetic bands. Also noted are two high magnetic circular anomalies.

The high magnetic structure is heavily altered and sheared zones of the Pacaud fault are in this survey.

ii) Electromagnetic Survey:

There are four conductors noted in this survey.

- C1 - Crosses PL4S 2125E to PL1000S 2300E.
This conductor crosses the east slope of a large overburdened outcrop that slopes to the major creek/pond system.
The quadrature is negative.
- C2 - Crosses PL600S 1750E to PL800S 1780E.
This conductor is top of the overburden outcrop.
The quadrature is negative.
- C3 - Crosses PL4S 900E to PL600S 950E.
The area ranges from flat to the west slope of a small overburdened outcrop.
The quadrature is positive.
- C4 - Crosses PL6S 400E to PL1000S 325E.
The area is flat open area east of the Hydroline. This contact is probably background noise from the Hydro line.

CONCLUSIONS AND RECOMMENDATIONS

Conductors 2 and 3 appear to have some association with the magnetic trend and structure. The VLF conductor axis is found to occur along the edge of a higher magnetic gradient.

The magnetic low indicates a change in the structure, possibly caused by a fault which also may be indicated by the EN response Q1.

All information is being compiled on the property at present to help determine future programs.

Respectfully submitted,



August 13, 2002

Miss Wendy K. Weller
Geotech

BIBLIOGRAPHY

Sixty-sixth Annual Report of the
Ontario Department of Mines

Volume LXVI, Part 5, 1957

Geology of Boston Township and part of
Pacaud Township by K.D. Lawton

April 10, 1987 - Geophysical Survey Report on the
M. Greer Barry Hollinger Joint Venture
Boston and Pacaud Townships.

August 1996 - Geophysical Survey
Barry Hollinger 4 Group
Pacaud Township

July 24, 1998 - Geophysical Survey (Barry Hollinger 4 Group)
Wendy K. Weller New East/West Grid, Pacaud Township,
Larder Lake Mining Division
District of Timiskaming, Ontario

Technical Data:

Line (mi/km): 3.44 KM

No. of samples/stations: 113

ELECTROMAGNETIC SURVEY:

Instrument: GEONICS EM-16

Coil configuration: VERTICAL AND HORIZONTAL

Method: FIXED TRANSMITTER

Vertical scale: 1 INCH = + 40%

Frequency: 24.0 kHz

Operational technique:

ALL READINGS TAKEN FACING NORTH/EAST

Line traversed:

Line/picket spacing: 200 FT/100 FT.

Operator: MISS WENDY K. WELLER

Accuracy: ± 1%

Coil separation: INFINITY

Parameters: IN PHASE/QUADRATURE

Horizontal scale: 1 INCH = 200 FT.

Station: CUTLER, MAINE

MAGNETIC SURVEY:

Instrument: MCPHAR GP-8 PROTON

Base station: BL 0+00

Base station time: 30 MINUTES

Contour interval: 50 - 100 GAMMAS

Contoured by: MISS WENDY K. WELLER

Operational technique: SENSOR POLE MOUNT

Operator: MISS WENDY K. WELLER

Accuracy: ± 1 GAMMA

Diurnal method: CLOSED LOOP BL TIE IN

Location/value: BL 0+00

Datum subtracted: 58,000 GAMMAS

Horizontal scale: 1 INCH = 200 FEET

INDUCED POLARIZATION SURVEY

Transmitter used:

Receiver used:

Method:

Frequency:

On time:

Range:

Off time:

Delay time:

Power source:

Output:

Electrode array:

Electrode spacing:

Readings taken:

Other data:

Operational technique:

Assessment Data Form

Type of Work:

Prospecting: _____ Geological: _____
 Physical: _____ LINE CUTTING AND CHAINING _____
 Geophysical: _____ MAGNETOMETER AND ELECTROMAGNETIC SURVEYS _____
 Geochemical: _____ Drilling: _____
 Assays/Analyses: _____ Other work: _____

Cost of Work: \$1,679.00

Dollars Applied: \$1,600.00

Recorded Holder:

Name: ALEXANDER H. PERRON _____
 Address: 103 GOVERNMENT ROAD EAST, _____
 KIRKLAND LAKE, ONTARIO P2N 1A9 _____

Survey Company:

Name: GWEN RESOURCES LTD., _____
 Address: 103 GOVERNMENT ROAD EAST, _____
 KIRKLAND LAKE, ONTARIO P2N 1A9 _____

Survey/Report Information:

Start of work: AUGUST 5, 2002 _____ End of work: AUGUST 9, 2002 _____
 Draughting time: AUGUST 12, 2002 _____ Report time: AUGUST 12, 2002 _____
 Completion of report: AUGUST 13, 2002 _____ Author: MISS WENDY K. WELLER _____
 Work performed on claim(s) _____ L-737419, L-737420 _____

Work applied to claim(s) L-737417, L-737418, L-737419, L-737420

Persons who performed work (supervisor first):

GWEN RESOURCES LTD. _____
 WENDY K. WELLER _____

C E R T I F I C A T E

I, Wendy K. Weller, of Kirkland Lake, Ontario, do hereby certify:

- 1) That I am a Geotech in Training and reside at:
71 Second Street, Apartment #2, Kirkland Lake, Ontario.
P2N 1R6.
- 2) That I graduated from the Haileybury School of Mines as a certified Diamond Driller in 1982. I have had a staking licence for the past 12 years.
- 3) That I was employed as a Diamond Driller for Heath & Sherwood for 1 year.
- 4) That I have been practising as a Geotech Trainee for a period of twelve (12) yrs. and I am qualified to write this report.
- 5) That I supervised and participated in this survey.

Aug 13/02
Date



Wendy K. Weller
Geotech

Date: 2002-SEP-03

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

ALEXANDER H. PERRON
103 GOVERNMENT RD. EAST.
KIRKLAND LAKE, ONTARIO
P2N 1A9 CANADA

Tel: (888) 415-9845
Fax: (877) 670-1555

Submission Number: 2.24056
Transaction Number(s): W0280.01313

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,



Roy Spooner
Acting Senior Manager, Mining Lands Section

Cc: Resident Geologist

Alexander H. Perron
(Claim Holder)

Wendy Kathleen Weller
(Agent)

Assessment File Library

Alexander H. Perron
(Assessment Office)

Date / Time of Issue Aug 20 2002 09:06h Eastern
 TOWNSHIP / AREA PACAUD PLAN G-3697
 ADMINISTRATIVE DISTRICTS / DIVISIONS
 Mining Division Larder Lake
 Land Titles/Registry Division TIMISKAMING
 Ministry of Natural Resources District KIRKLAND LAKE

TOPOGRAPHIC

- Administrative Boundaries
- Contours
- Concession Lot
- Fieldwork Stake
- Water Stream
- City, PE and PLS
- Canal
- Canal - Approval / Authority / Discretion
- Shed
- Utility Structure
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Hydro Line
- Communication Line
- Wooded Area
- Municipal / Provincial / Federal / Other

LAND TENURE

Freehold Interest

- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

1. MINING RIGHTS

- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

2. Nature of Occupation

- Lease Not Specified
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

3. Land Use Permit

- Order in Council
- Water Power Lease Agreement

LAND TENURE WITHDRAWALS

- Area Withdrawn From Disposition
- Mineral Rights Withdrawal
- Surface Rights Only Withdrawal
- Mining Rights Only Withdrawal
- Order in Council Withdrawal
- Surface And Mining Rights Withdrawal
- Surface Rights Only Withdrawal
- Mining Rights Only Withdrawal

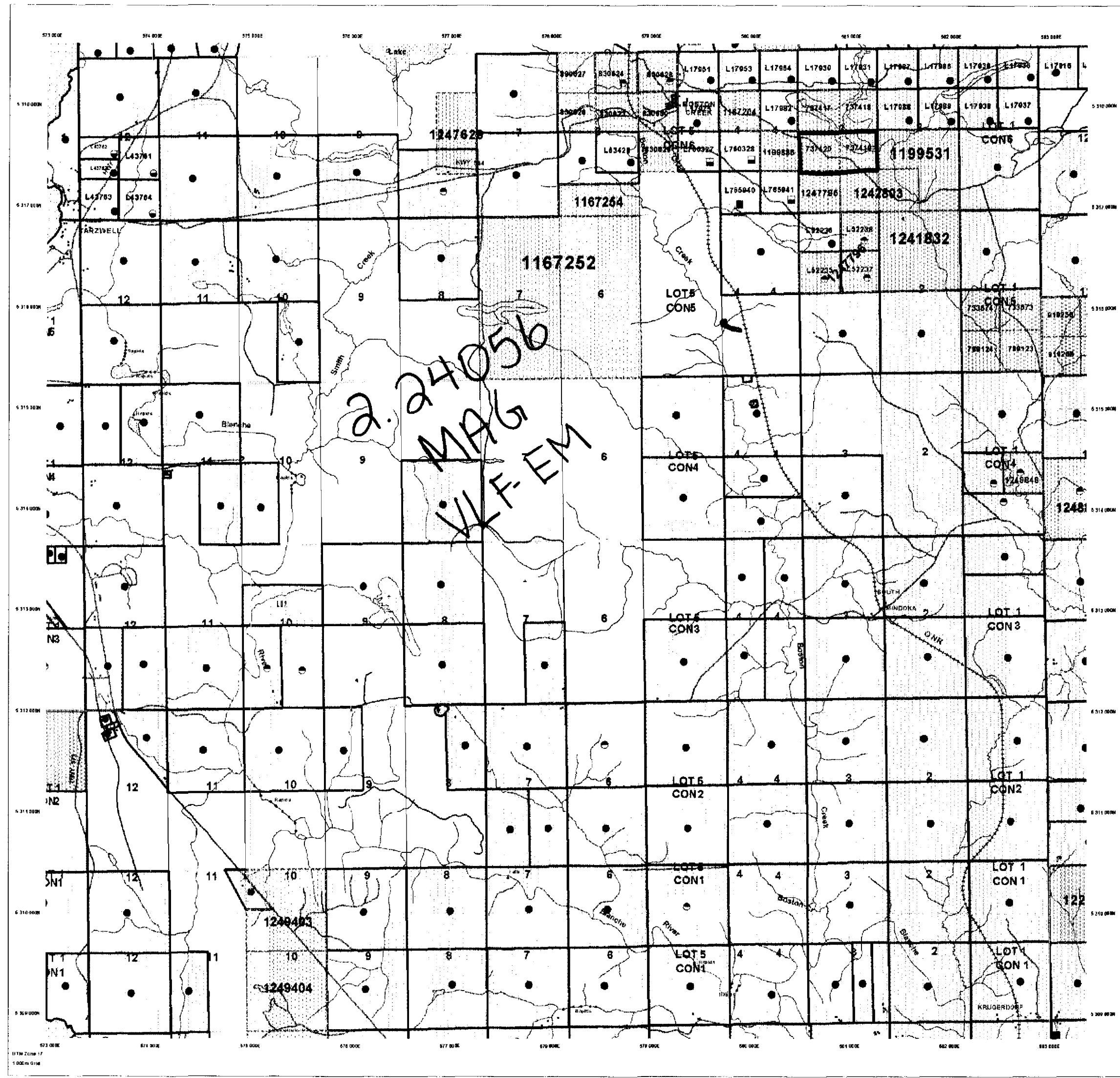
IMPORTANT NOTICES



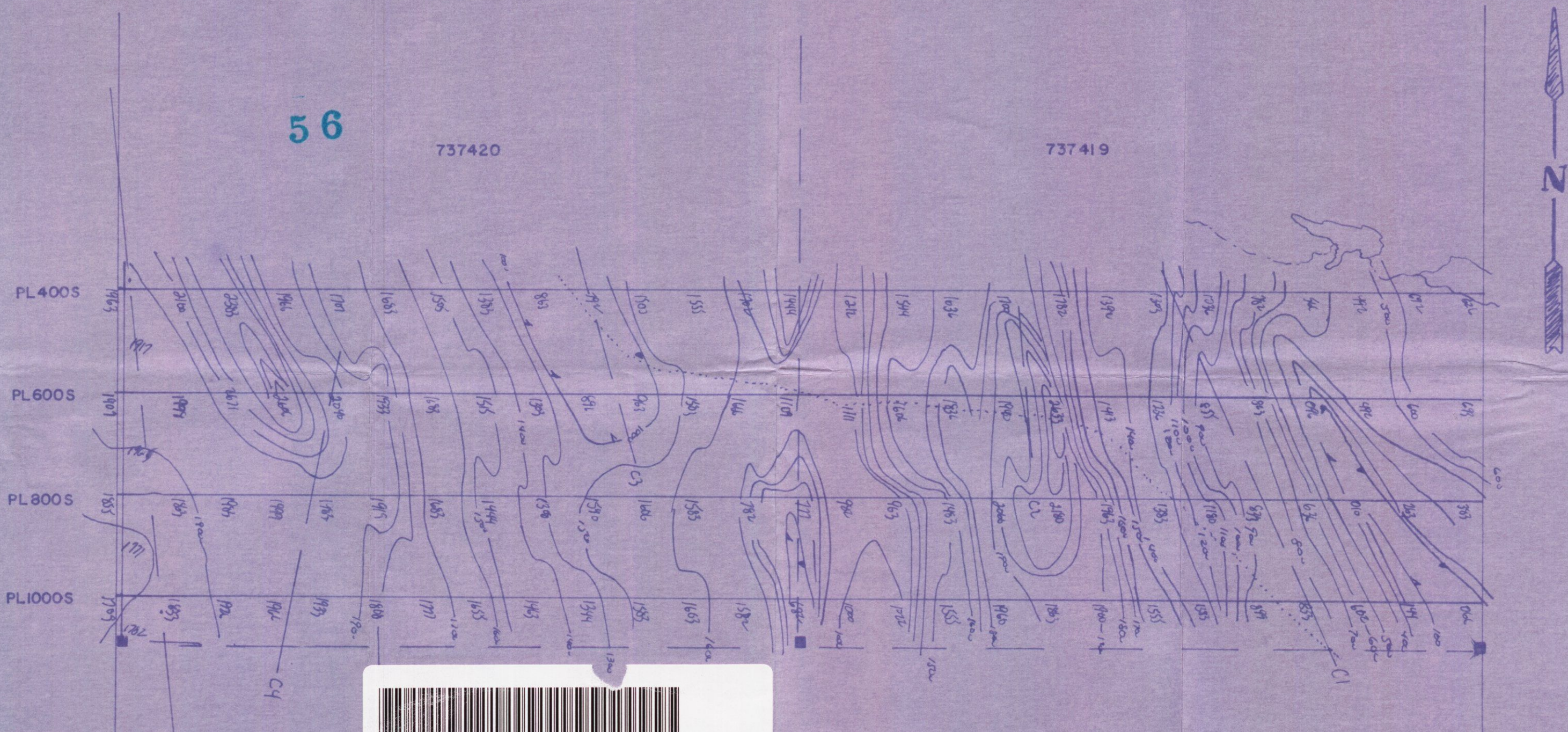
LAND TENURE WITHDRAWAL DESCRIPTIONS

Number	Date	Description
4131	Jan 1 2001	WITHDRAWN FROM STAKING SEC. 42 MIN. ACT (P.L. 1997) REF.
W4-0801	Jan 7 2001	Sec 75 WL 0801 20010207, M.C. 199150
W4400	Apr 7 1998	SEC 35/30 M/1476 7-178 S.F.O.

IMPORTANT NOTICES
 Areas under which nuclear regulations, land use or conditions exist that affect normal prospecting, mining and mineral development activities.



32045W2029 2.24056 PACAUD
 200



SYMBOLS

- Claim line - - - Claim post ■
- Highway // Access road
- Pond Creek
- Base station
- Isomagnetic contours **2.240**

INSTRUMENTATION

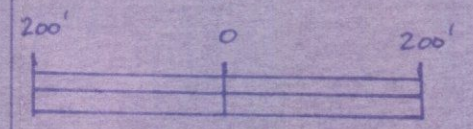
Instrument used McPhar GP8
 Datum subtracted 57000 g
 Contour interval 100 gammas

B H 4

**GROUND MAGNETOMETER SURVEY
 PACAUD TOWNSHIP**

Report by WKWeller

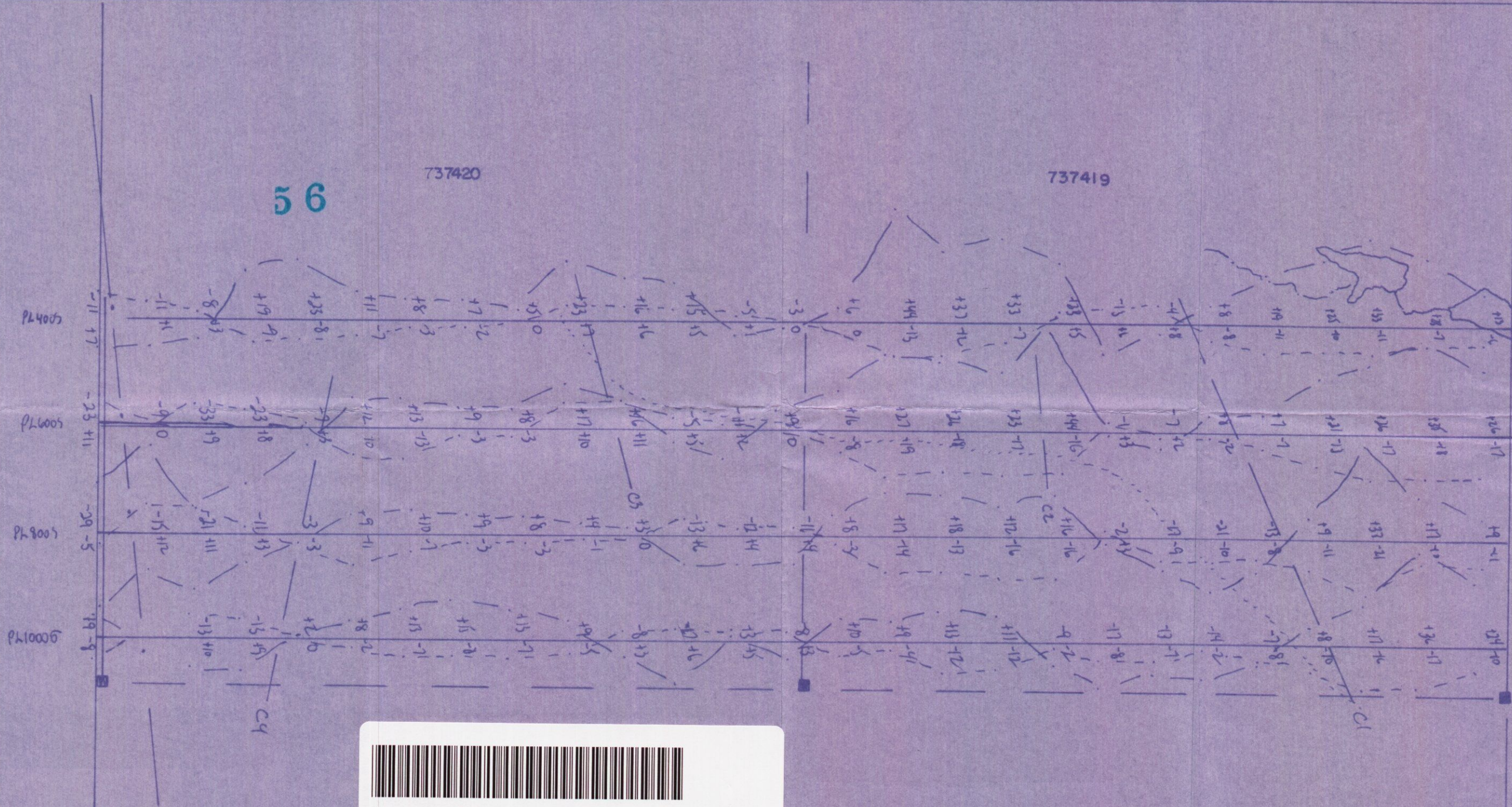
Map no. BA/2002/MAG
 Scale 1" = 200'



Handwritten signature



32D04SW2029 2.24056 PACAUD



SYMBOLS

Claim post ■ Claim line —

Pond Creek Highway

Inphase

Quadrature

Contact axis **2.240**

INSTRUMENTATION

Instrument used GEONICS EM 16

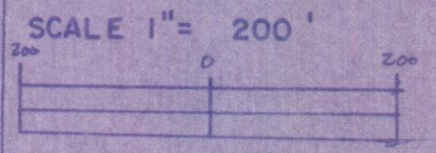
Station used

Vertical scale 40%

B H 4

GROUND VLF-EM SURVEY

PACAUD TWP.



Report by W KW

Map no. BA/2002/VLF

W. K. Webb