



52F16NW0006 OM92-063 LAVAL

010

**SUMMARY REPORT**

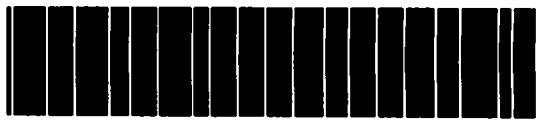
**GEOPHYSICAL SURVEY  
ON  
BEARTRACK LAKE PROPERTY**

**IN THE  
LAVAL TOWNSHIP  
DRYDEN AREA / NW-ONTARIO  
(CLAIM MAP: G-0823)**

**PREPARED AND SUBMITTED BY:**

**HORST W. PETAK, Ph.D., P.Eng.  
INDEPENDENT EXPLORATION SERVICES Ltd.  
104 BROWNING BLVD., WINNIPEG, MAN.**

**WINNIPEG, MAY 13th, 1992**



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**SUMMARY & CONCLUSIONS:**

From November 1991 to early April 1992 INDEPENDENT EXPLORATION SERVICES Ltd. of Winnipeg, Man. carried out geophysical surveys over the BEARTRACK LAKE PROPERTY in the Dryden area, NW-Ontario, on behalf of CHAMPION BEAR RESOURCES Ltd. of Calgary Alberta. The surveys consisted of LINE CUTTING, GROUND MAGNETIC SURVEY, and VLF-ELECTROMAGNETIC SURVEY covering all 26 claims of the property.

The magnetic survey outlined areas underlain by mafic volcanic rocks and associated subvolcanic mafic intrusive rocks. It also delineated areas containing deformational structures of the type which hosts the Graham Bousquet No.1 and 2 gold showings north and south of Beartrack Lake.

Follow-up work consisting of *geological mapping, prospecting and sampling*, and depending on results, some *selective IP survey* is recommended. Results from such work should provide future drill targets on the property.

**LOCATION & ACCESS:**

The Beartrack Lake property centers about 18 km ENE from the Dryden municipal airport (Fig.1) and is located in NTS area 52F/16SW, in the LAVAL TOWNSHIP of NW-ONTARIO. The southwest end of the property borders the "Lola Lake Provincial Nature Reserve Park".

Beartrack Lake is accessible by land via the GHOST LAKE ROAD (starting at the Dryden airport) and an old logging road branching off from it. The driving distance from the City of Dryden is 41 km.

**PROPERTY STATUS:**

The BEARTRACK LAKE PROPERTY is comprised of a total of 33 contiguous mining claims encompassing an area of 2,128 Hectare (5,258 acres). It is situated in LAVAL TOWNSHIP eastnortheast of Dryden, within the KENORA MINING DIVISION. The location of the claims is shown on attached MAP #1: CLAIM MAP, LAVAL TOWNSHIP, # G-0823. Appendix "A" of this report presents a listing of all the claims by their claim number.

The REGISTERED HOLDER of the mineral rights of these claims is:

CHAMPION BEAR RESOURCES LTD.  
3805 - 7A STREET S.W.  
CALGARY, ALBERTA  
T2T 2Y8  
PHONE: (403) 263 2190

-----  
CLT # 116945

The official ONTARIO REPRESENTATIVE of CHAMPION BEAR RESOURCES LTD. is:

BORDEN & ELLIOT  
BANK OF COMMERCE BUILDING  
250 UNIVERSITY AVE.  
TORONTO, ONTARIO  
M5H 3E9

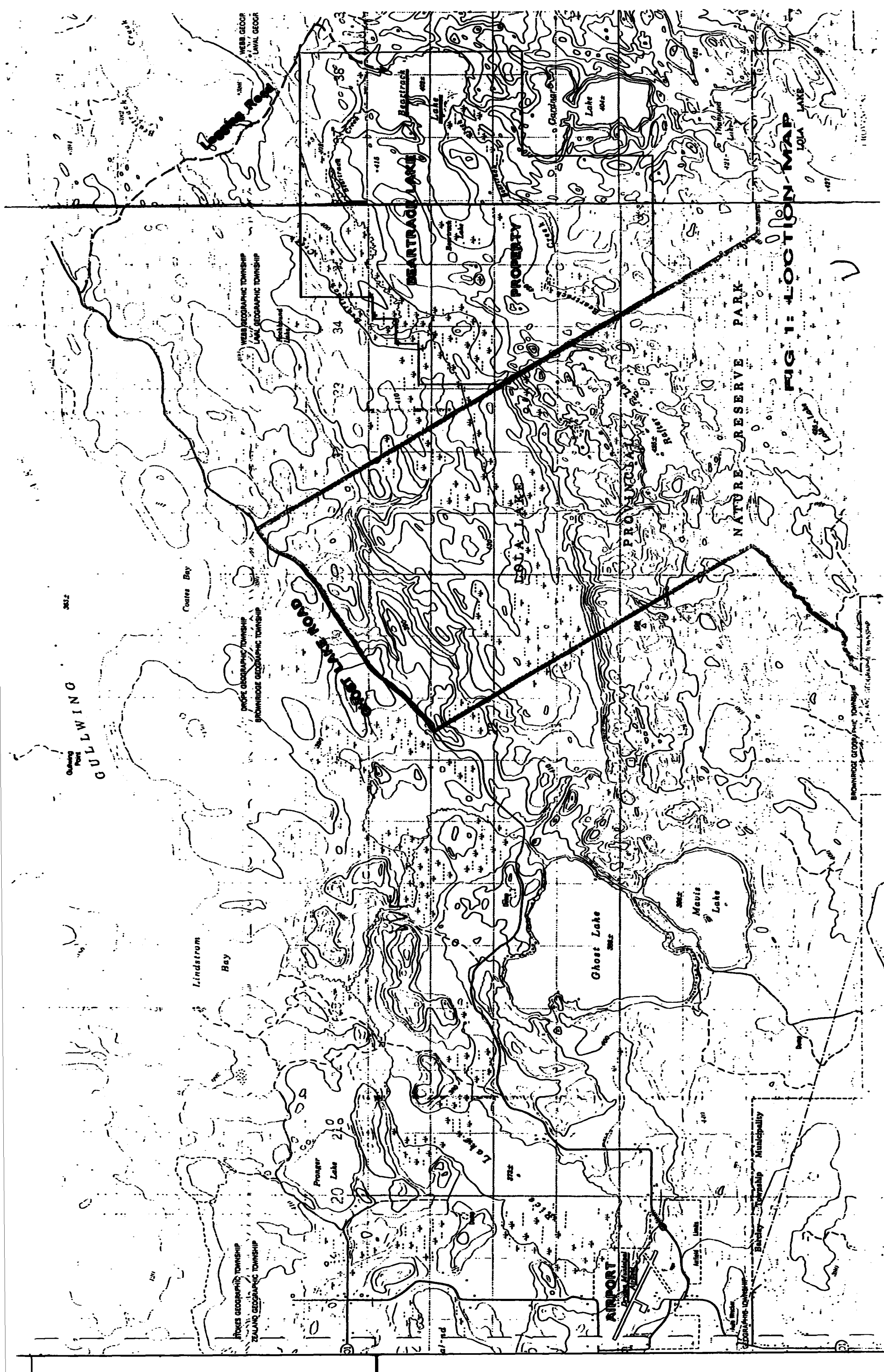


FIG. 1: LOCATION MAP

## EXPLORATION HISTORY

A detailed account of the exploration history of the area, including the property discussed in this report, is included in ONTARIO GEOLOGICAL SURVEY REPORT 272 (B.R.BERGER, 1990). "Intense exploration activity", involving a number of companies, is reported to have occurred during the period from 1946 to 1952. The search was for gold and resulted in the discovery of the Goldlund deposit and significant showings at Troutfly Lake and Beartrack Lake. The Beartrack Lake gold showings, referred to as the "GRAHAM BOUSQUET No.1 and No.2 SHOWINGS" (B.R.BERGER, 1990), after remaining dormant since 1952, were restaked in 1989 by the prospectors B. Fairservice, A. Glatz, and J. Riives. Significant gold assays from a diamond drill program back in 1950-51 and from surface samples taken during prospecting work carried out by above mentioned individuals, prompted CHAMPION BEAR RESOURCES LTD. from Calgary, Alberta, to option the property and carry out a full scale exploration program. Reported assay values for gold range up to better than 1.0 oz/t.

A number of different geological survey teams have over time carried out various mapping programs in the region including Laval Township. Detailed reference to earlier such programs and results from these can be found in the latest OGS REPORT 272, "Precambrian Geology Laval and Hartman Townships", by B.R.BERGER, 1990.

The Beartrack Lake property was also covered by an airborne geophysical survey flown by Geoterrex Limited under contract of the Ontario Geological Survey. The property area is contained in Map 80959 which was part of an airborne data release by the Ministry of Northern Development and Mines of Ontario in 1987.

**GENERAL GEOLOGY:**

All bedrock underlying Laval Township is Archean in age and is within the Wabigoon Subprovince of the Superior Province in the Canadian Shield. "Supracrustal lithologies" make up about "80%" of the rocks "and are composed of mafic, intermediate and felsic metavolcanics, related subvolcanic intrusions composed of gabbroic sheets and dikes, feldspar- and quartz-feldspar-phyric dikes, and clastic and chemical metasediments" (B.R.BERGER, 1990). The remaining 20% consist of felsic plutonic assemblages like granodiorite, quartz monzonite, granite, and tonalite which intruded the supracrustal metavolcanic and metasedimentary sequences. These plutons occur as distinct stocks like the Gardner Lake stock whose contact lies along the southeastern property boundary.

Referring to Chorlton (1987), B.R. BERGER, 1990, describes the tectonic history of the area as being characterized by three major distinct stages of deformation.

- 1.) A synvolcanic stage produced "gently dipping structures" (foliations, fold axes, lineations, and shear zones) in the volcanic sequences.
- 2.) A synplutonic stage developed "steeply plunging lineations and foliations" around the intrusive stocks.
- 3.) A syn- to postplutonic (?) stage created "upright folds in the supracrustal rocks, steepening and refolding of the earlier structures and creation of steeply dipping easterly to northeasterly trending shear zones".

B.R. BERGER, 1990, notes that "gold mineralization is localized in third stage deformational structures which are prospective exploration targets especially where they have fractured and flexed structurally competent bodies".

A Table summarizing the lithologic units mapped in the Laval and Hartman Townships in the Dryden area is included in Appendix "B" of this report.

## GEOPHYSICAL SURVEYS:

Starting in November 1991 until April 1992, *INDEPENDENT EXPLORATION SERVICES Ltd.* of Winnipeg, Manitoba, covered almost the entire property with geophysical surveys. All the work was performed on behalf of *CHAMPION BEAR RESOURCES Ltd.* of Calgary, Alberta. It consisted of 161 km of LINE CUTTING, 146 km of MAGNETIC SURVEY, and 146 km of VLF-EM SURVEY.

### LINE CUTTING:

A geophysical reference grid covering most of the property, consisted of 146 km of cross lines and 3 base- and tie lines of a combined total of 16 km. cross lines were cut at 100 meter intervals and picketed every 25 meters. Most of the cutting was done with axe. Power saws were only used for heavy timber.

### GROUND MAGNETIC SURVEY:

A ground magnetic survey was performed with an *EDA Omni-Plus* system along cross lines where field readings were taken at 12.5 meter station intervals. The instrument consisted of an integrated microprocessor-based magnetometer/vlf system with memory bank. The magnetometer module measured the total magnetic field strength. The system was used in combination with a base station. Interfacing of the base station unit and the field unit during the data dump procedure allowed electronic correction of the raw field data for the diurnal variation of the earth's magnetic field.

Data processing and plotting was done electronically by the author. The software package used for this purpose was Geosoft's Mapping system run on a PC system. Plotting was done on an HP drum plotter.

The data are presented as contour maps and as maps containing the diurnally corrected, posted total field magnetic intensities in nT (1 nT = 1 gamma). The contour maps were plotted in the scales of 1: 10,000 (Map #1) and 1: 5,000 (Map #2,3,4). The posted data were plotted on a map scale of 1: 5,000 only (Map #5,6,7).



The magnetic pattern of the surveyed area is characterized by two well pronounced and fairly extensive highs reflecting mafic volcanic rocks mixed with subvolcanic mafic intrusives of gabbroic composition. One of these zones trends about subparallel to tie line 1000 N through the entire length of the grid. The other one occurs mainly south of base line 0, with the highest amplitudes south of tie line 700 S between lines 1700 W and 2300 W. The areas grid-north and grid-south of these magnetic highs as well as a fairly wide area between, shows a very flat, low amplitude pattern of low intensity. This pattern may be the response of mainly sediments and perhaps felsic volcanic rock assemblages.

Another element in the magnetic pattern of the grid area is a series of very narrow magnetic lows. Many of these line up in a neat string fashion, suggesting fault and shear zones. The more pronounced ones were mapped out on Map #1. Their principal orientations seem to be easterly, northeasterly and northnortheasterly. Most of them could probably be classified as "third stage deformation" structures. The two gold showings on the property (Bousquet 1 and 2, north and south of Beartrack Lake) are closely associated with this type of structures. Follow-up mapping and prospecting is recommended with emphasis on these particular areas. Depending on results some selective IP coverage

#### VLF-EM SURVEY:

The VLF-EM survey was carried out with the same EDA Omni-Plus system that was used for the magnetic survey. The VLF module of the system measured and recorded the in-phase and quadrature component of the transmitter station NLK (Jim Creek, Wash.) on the frequency of 24.8 kHz. Readings were taken at 12.5 meter station intervals.

The VLF-EM data are presented as profile maps and maps containing the posted actual field readings of the in-phase and quadrature component. Both types of maps were plotted in a map scale of 1: 5,000 (Map #8,9,10,11,12,13). A data interpretation was compiled and plotted on the magnetic contour map in the scale of 1: 10,000 (Map #1).

The survey delineated 9 VLF-EM conductors. Their individual location on each line is indicated on Map #8, 9, and 10. Their axes delineating the strike are

outlined on Map #1. The conductive zones are marked with capital letters from A to I. The remaining survey picked up strong geophysical noise largely due to conductive overburden and rugged paleomorphology. VLF-EM data from these areas are therefore highly unreliable.

Conductive zones A to G are all located north of 1500N, in a magnetically low relief, low background area, believed to be underlain by mostly sedimentary rocks. They are therefore considered to be very low priority targets. Zone H and I are associated with the southern magnetic trend (south of BL-0) which is caused by mafic volcanics and associated mafic subvolcanic intrusives. Both zones show a reasonably strong conductivity response which could be caused by sulfides associated with shear zones. Since such a scenario provides good potential for gold mineralization, both zones H and I should be included in a follow-up program.

==== \*\*\*\* ====

**LIST OF REFERENCE:**

**BERGER, B.R., 1990: Precambrian Geology Laval and  
Hartman Townships  
Ontario Geological Survey Report 272  
  
Min.of Northern Development and  
Mines; Ontario**

APPENDIX "A"

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CHAMPION BEAR RESOURCES LTD  
BEARTRACK LAKE PROJECT  
LAVAL TWP G-0823

LIST OF CLAIMS

CLAIM NO:

- K1085111
- K1085112
- K1133313
- K1133443
- K1133507
- K1133508
- K1133509
- K1133510
- K1133511
- K1133512
- K1133513
- K1133514
- K1133515
- K1133516
- K1133517
- K1133519
- K1133520
- K1133521
- K1144900
- K1161172
- K1161173
- K1161174
- K1161175
- K1161176
- K1161177
- K1161178
- K1161179
- K1161180
- K1161181
- K1161182
- K1161183
- K1161184
- K1161185

**APPENDIX "B"**

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TABLE 1. TABLE OF LITHOLOGIC UNITS FOR THE LAVAL AND HARTMAN TOWNSHIPS AREA.

**PHANEROZOIC**

**CENOZOIC**

**QUATERNARY**

**RECENT**

Swamp, lake and stream deposits

*Unconformity*

**PRECAMBRIAN**

**ARCHEAN**

**LATE ARCHEAN**

**MAFIC INTRUSIONS**

*Lamprophyre dikes.*

**EARLY TO LATE ARCHEAN**

**FELSIC INTRUSIONS**

*Granodiorite, granite, tonalite, quartz monzonite, monzonite, quartz diorite, monzogabbro, pegmatite, aplite.*

**MAFIC INTRUSIONS**

*Gabbro, diorite, leucogabbro, plagioclase-phyric gabbro, quartz diorite, gabbroic dikes, altered gabbro.*

**CLASTIC AND CHEMICAL METASEDIMENTS**

*Wacke, siltstone, mafic wacke, pebbly wacke, argillaceous, phyllitic and biotite-muscovite-quartz schist, hornblende-garnet-biotite amphibolite, sulphide-magnetite and magnetite ironstone, chert, and metatextite.*

**FELSIC TO INTERMEDIATE METAVOLCANICS**

*Massive, spherulitic and autobrecciated flows, tuff and crystal tuff, lapilli tuff, breccia, feldspar, quartz and quartz-feldspar-phyric dikes, quartz-muscovite schist.*

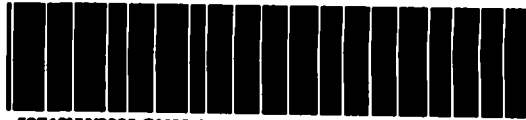
**HORNBLende-PHYRIC MAFIC TO INTERMEDIATE METAVOLCANICS**

*Massive and pillowed flows, tuff and crystal tuff, lapilli tuff and lapillistone, tuff breccia and breccia, pillow breccia, chlorite schist, basaltic dikes and sills.*

**MAFIC METAVOLCANICS**

*Massive, pillowed and variolitic flows, pillow breccia, tuff, lapilli tuff and lapillistone, breccia and tuff breccia, basaltic dikes and sills, amphibolite, talc-chlorite and talc-chlorite-carbonate schist, plagioclase-phyric flows.*

(after: B.R.BERGER,  
1990)



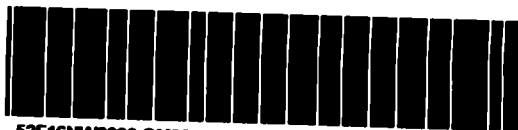
52F16NW0006 OM92-063 LAVAL

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**INDUCED POLARIZATION SURVEY**  
property of  
**CHAMPION BEAR RESOURCES LIMITED**  
**BEARTRACK LAKE Project**  
**Laval Township**  
**Province of Ontario**  
**February 1992**

**P. Lortie**

**R. Turcotte**



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DRAWING NO.

INDUCED POLARIZATION

4.2

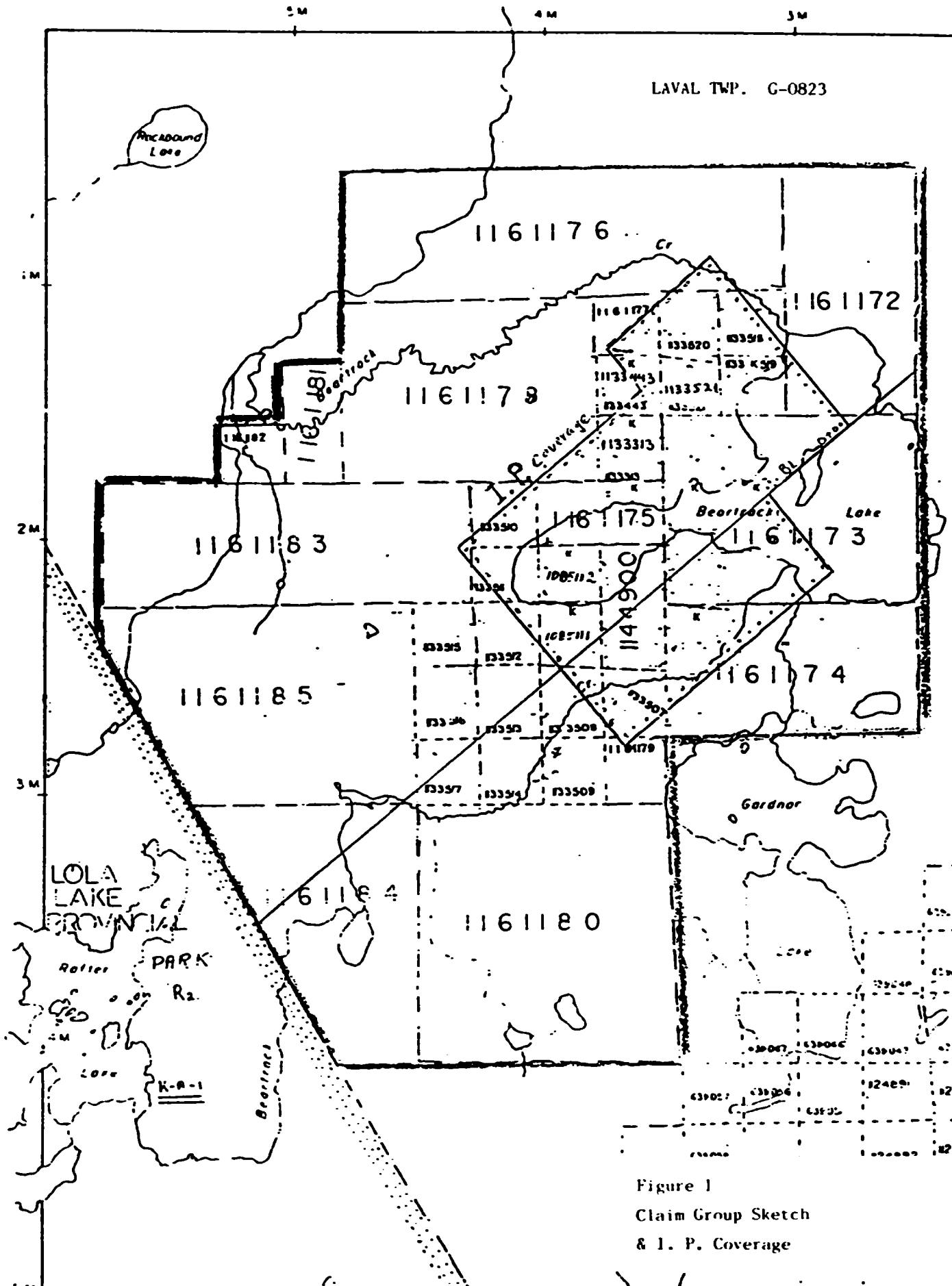
Resistivity Contours (filter)





**CHAMPION BEAR RESOURCES LIMITED**  
**BEARTRACK LAKE Project**  
**Figure #1: Index of claims**





CHAMPION BEAR RESOURCES LTD.

BEARTRACK LAKE PROJECT

LAVAL TWP. G-0823

LIST OF CLAIMS

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CLAIM NO:	I.P.	CLAIM NO:	I.P.
	COVERAGE		COVERAGE
K1085111	X	K1133520	X
K1085112	X	K1133521	X
K1133313	X	K1144900	X
K1133443	X	K1161172	
K1133507	X	K1161173	X
K1133508	X	K1161174	X
K1133509		K1161175	X
K1133510	X	K1161176	X
K1133511	X	K1161177	X
K1133512	X	K1161178	X
K1133513		K1161179	
K1133514		K1161180	
K1133515		K1161181	
K1133516		K1161182	
K1133517		K1161183	
K1133518	X	K1161184	
K1133519	X	K1161185	

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16 CLAIMS 11 - I.P.

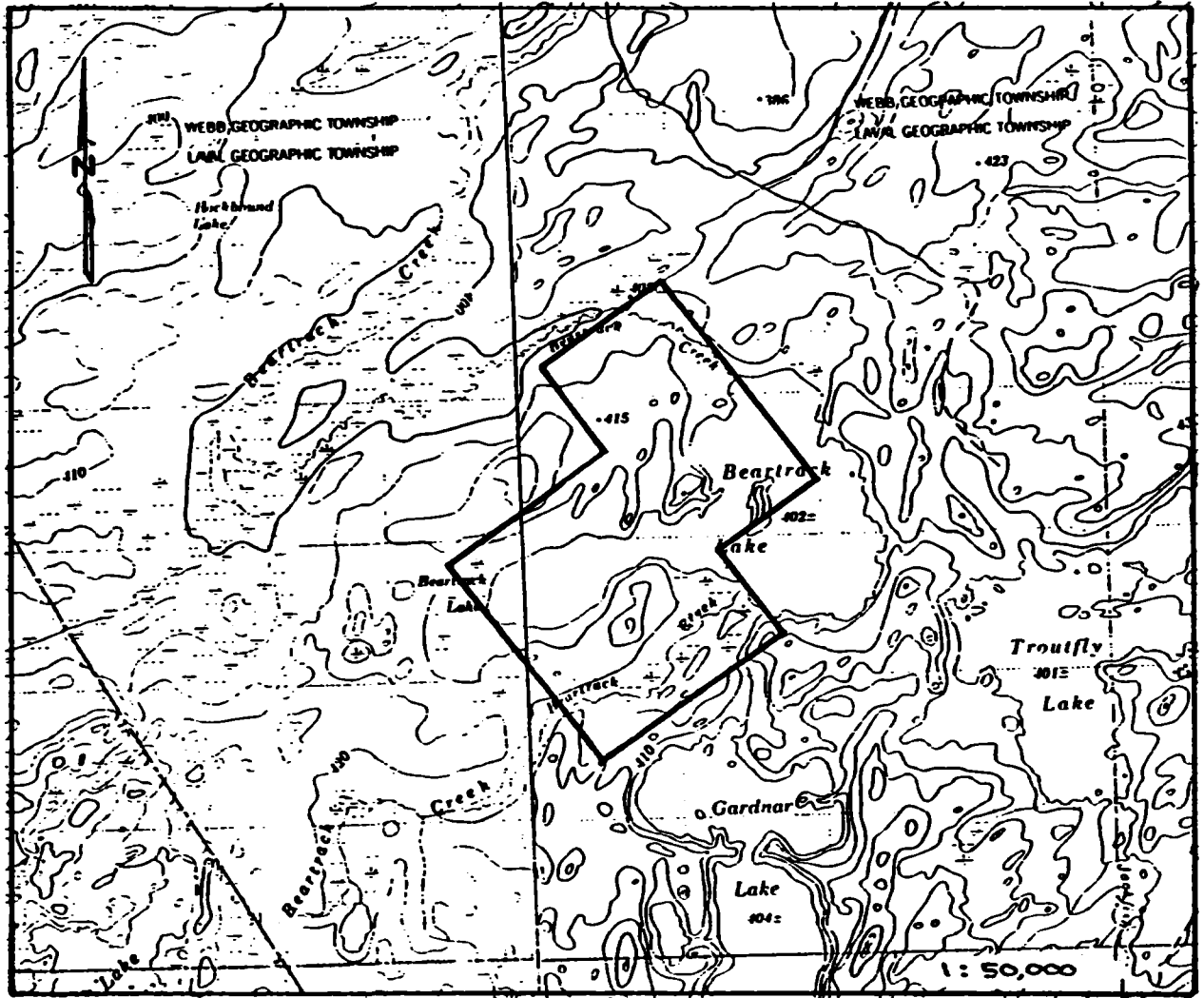
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16 CLAIMS 9 - I.P.

TOTAL NUMBER OF CLAIMS - 32

TOTAL NUMBER OF CLAIMS

WITH I.P. COVERAGE - 20



CHAMPION BEAR RESOURCES LIMITED  
BEARTRACK LAKE Project  
Figure #2: Area surveyed



### INTRODUCTION

In January 1992, an induced polarization survey was carried out on a property owned by CHAMPION BEAR RESOURCES LIMITED, BEARTRACK LAKE Project, Laval Township, Province of Ontario.

This survey was designed to locate structures favorable for gold or base metal deposition.

### PROPERTY, LOCATION AND ACCESS

The property is located approximately 30 kms North-East of the town of Dryden, in Laval Township, Province of Ontario.

The property is accessible by trails and lake which can be taken from the highway #72.

The property claims have been registered with the Ontario Department of Natural Resources and the number are presented on the figure #1 of this report and on plan map in pocket.

### GEOPHYSICAL SURVEYS

An induced polarization survey was carried out on part of the property from January 7th to 30th, 1992.

The induced polarization survey was conducted over a total of 43.0 kms using the PHOENIX IPT-1, MG-1 transmitter and the BRGM IP-6 receiver.



### SURVEY SPECIFICATIONS

The geophysical survey was carried out along a network of North West - South East picket line cut at 100 metres intervals. The lines were chained and stations marked at 25 metres intervals.

The I.P. survey has been done with a dipole-dipole array. The electrodes separation (X) was 25 metres with measurements of N = 1 to 6.

### RESULTS AND INTERPRETATION

The apparent resistivities measured in this induced polarization survey are dominated by variations of the overburden nature and/or thickness, as well as areas of near surface bedrock lithologies. In areas of thin and sandy overburden and outcropping lithologies, the values range from 1000 to over 30000 ohm-metres, whereas they reached as low as 100 ohm-metres in areas of clay-rich and/or deeper overburden.

A large section of the survey area is overlaid by bottom lake unconsolidated sediments which show apparent resistivities generally ranging between 30 and 70 ohm-metres, with some values as low as 10 ohm-metres.

The measured chargeabilities are generally defined by background values less than 1 mV/V. In areas of sub-outcropping lithologies, the background values are also very low and may vary according to the various rock units. On this property, it is very difficult to estimate and to ascertain the values of anomalous chargeabilities (cause by polarizable materials) from "lithologic" or inherent chargeabilities.



In areas covered with sandy overburden or bottom lake unconsolidated sediments, several chargeability values are negative (especially at larger dipole spacings) and/or noisy to extremely noisy. These values are related to very low primary voltage at the potential electrodes, with very low signal-to-noise ratios.

Thus, chargeability values in sandy areas must be interpreted cautiously. In areas covered by the lake (unconsolidated sediments), it appears that the survey was unsuccessful in detecting any polarization effects (as can be seen by the "blank" areas with anomalous zones on both sides of the lake). As several of the strong anomalous polarization zones are narrow, these observations are not surprising since deeper and/or more conductive overburden necessitate larger electrode separation. (However, with larger electrode separations, such as 50 metres, narrow sources may not be detected.)

Several anomalous chargeability responses were detected in this survey on both sides of the lake. These anomalies greatly vary in their characteristics, with values ranging from 1 to 30 mV/V, and some values reaching over 40 mV/V. Two distinct groups of anomalies are defined, one group of anomalies probably caused by the presence of sub-outcropping lithologies ("lithologic" anomalies), and the second probably caused by polarizable materials (such as disseminated sulphides).



The first group of anomalies are characterized by chargeability values ranging from 1 to 10 mV/V, are narrow and most often in areas of conductive overburden (for anomalies with very low values, 1 to 3 mV/V), or broad and in areas of sub-outcropping lithologies (for anomalies from 3 to 10 mV/V). These anomalous zones are always near surface.

The second group of anomalies is characterized by chargeability values generally ranging above 10 mV/V, are either narrow for most of them, or moderately broad (exceptionally up to 100 metres). These zones are labelled A to M on the interpretation map. Most of the anomalies are near surface, with the notable exception of I, and are trending NE-SW, in accordance with the local lithologies.

It is noteworthy that none of the detected polarization anomalies is conductive. This may point to the absence of graphitic sources and underline the imperative of testing all probable polarization anomalies.

Several of the anomalous zones are anastomosing along their trend, such as D/F/G and H/L; others may lie along the same lithotectonic feature, such as A/C/E/K? and D/F/L. Carefull correlation of these induced polarization results with other geophysical databases (such as magnetics) and geological information may help to sort out their lithotectonic setting.





It appears that the anomalous sources A, C, E and J may be caused by the disseminated sulphide mineralizations (with precious and/or base metals values) observed on the property. These mineralizations are associated with apparently concordant quartz veins that traversed the survey area. They certainly deserved priority for further exploration work (drilling).

It is suggested to drill test anomaly A on line 13+00W, anomaly C on line 8+50W, anomaly E on line 1+00E, and anomaly J on line 7+00E. With the exception of J, these zones are mostly narrow and of moderate amplitude (10 to 17 mV/V).

Some of the stronger anomalous zones (D, F, H, K, L and M) should also be tested in their best section, either where they are broader or stronger. Anomalies D, H and L would be good candidates: D on line 1+00W or 2+00W; H on line 1+00E or 2+00E; and L on line 6+00E.

Anomalies B, G and I should be estimated with other geoscientific information before testing.



CONCLUSION AND RECOMMENDATIONS

The induced polarization survey performed on the BEARTRACK LAKE Project permitted to detect several weak to very strong anomalous polarization responses. These sources are all non conductive. They are grouped under to types of sources, either caused by outcrop/overburden features, or by anomalous bedrock sources (labelled A to M).

It is recommended to drill test four of the anomalous bedrock sources which are probably caused by known disseminated sulphide mineralizations hosted in quartz veins and enriched in precious and/or base metal values. These zones are labelled A, C, E and J.

Other sources may also merit further testing by drilling, especially where they are broader and/or stronger (such as D, H and L). The other sources should be correlated with other geoscientific information for prioritization.

Respectfully submitted,  
VAL D'OR GEOPHYSIQUE LTEE

By:

  
Paul Lortie P. Eng  
Geophysicist

And by:

  
Robert Turcotte P. Eng.  
Geophysicist



CERTIFICATE

THIS IS TO CERTIFY THAT:

I reside at 681 Boule, Beloeil, province of Quebec, since 1990.

I am a graduate of Ecole Polytechnique, Universite de Montreal, where I have received a B.Sc.A. in Geological Engineering in 1979.

I have been engaged in exploration geophysics since 1977, have been practicing as a professional engineer since 1979, and have been a consulting geophysicist since 1989.

I am a member of the Ordre des Ingenieurs du Quebec since 1979.

I am a member of the Society of Exploration Geophysicists, the Prospectors & Developers Association of Canada, the Quebec Prospectors Association, the Association des Professionnels en Geologie et Geophysique du Quebec, the Societe de Geophysique du Quebec and the Canadian Institute of Mining & Metallurgy.

I do not hold nor do I expect to receive an interest of any kind in the properties held by CHAMPION BEAR RESOURCES LIMITED, on the BEARTRACK LAKE Project.

Signed in Beloeil, this February 18, 1992.

By:

A circular professional seal for a geophysicist. The outer ring contains the text "ORDRE DES INGENIEURS DU QUEBEC" at the top and "37301" at the bottom. The center features a cross symbol and the name "Paul Lortie".  
Paul Lortie, P.Eng.  
Consulting Geophysicist.



CERTIFICATE

THIS IS TO CERTIFY THAT:

I am a resident of Val d'Or, province of Quebec, since 1977.

I am a technologist graduated from "College du Nord-Ouest", Rouyn-Noranda, Quebec in 1977.

I have been actively engaged in geophysical exploration since 1977 and have acquired a wide range of experience in geophysical methods and techniques.

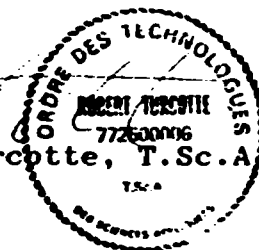
I am a member of "Corporation professionnelle des Technologues des Sciences Appliquees du Quebec" and also a member of the Quebec Prospectors Association and of the Canadian Institute of Mining and Metallurgy.

I do not hold nor do I expect to receive an interest of any kind in this property held by CHAMPION BEAR RESOURCES LIMITED.

Signed in Val d'Or, this February 18, 1992.

By:

Robert Turcotte, T.Sc.A.





52F16NW0006 OM82-063 LAVAL

**SUMMARY REPORT**  
**on the**  
**DIAMOND DRILL PROGRAM**  
**February, 1992**  
**CHAMPION BEAR RESOURCES LTD.**  
**BEARTRACK LAKE PROJECT**  
**Kenora Mining Division, Ontario**

by

**L.C. Chastko**  
**H.W. Petak**

**Consulting Geologists**  
**Independent Exploration Service Ltd.**

**June 30, 1992**

**LOCATION & ACCESS:**

The Beartrack Lake property centers about 18 km ENE from the Dryden municipal airport (Fig.1) and is located in NTS area 52F/16SW, in the LAVAL TOWNSHIP of NW-ONTARIO. The southwest end of the property borders the "Lola Lake Provincial Nature Reserve Park".

Beartrack Lake is accessible by land via the GHOST LAKE ROAD (starting at the Dryden airport) and an old logging road branching off from it. The driving distance from the ~~area~~ town of Dryden is 41 km.

town.

**PROPERTY STATUS:**

The BEARTRACK LAKE PROPERTY is comprised of a total of 33 contiguous mining claims encompassing an area of 2,123 Hectare (5,258 acres). It is situated in LAVAL TOWNSHIP eastnortheast of Dryden, within the KENORA MINING DIVISION. The location of the claims is shown on attached MAP #1: CLAIM MAP, LAVAL TOWNSHIP, # G-0823. Appendix "A" of this report presents a listing of all the claims by their claim number.

The REGISTERED HOLDER of the mineral rights of these claims is:

CHAMPION BEAR RESOURCES LTD.  
3805 - 7A STREET S.W.  
CALGARY, ALBERTA  
T2T 2Y8  
PHONE: (403) 263 2190

-----  
CLT = 116945

The official ONTARIO REPRESENTATIVE of CHAMPION BEAR RESOURCES LTD. is:

BORDEN & ELLIOT  
BANK OF COMMERCE BUILDING  
250 UNIVERSITY AVE.  
TORONTO, ONTARIO  
M5H 3E9

## EXPLORATION HISTORY

A detailed account of the exploration history of the area, including the property discussed in this report, is included in ONTARIO GEOLOGICAL SURVEY REPORT 272 (B.R.BERGER, 1990). "Intense exploration activity", involving a number of companies, is reported to have occurred during the period from 1946 to 1952. The search was for gold and resulted in the discovery of the Goldlund deposit and significant showings at Troutfly Lake and Beartrack Lake. The Beartrack Lake gold showings, referred to as the "GRAHAM BOUSQUET No.1 and No.2 SHOWINGS" (B.R.BERGER, 1990), after remaining dormant since 1952, were restaked in 1989 by the prospectors B. Fairservice, A. Glatz, and J. Riives. Significant gold assays from a diamond drill program back in 1950-51 and from surface samples taken during prospecting work carried out by above mentioned individuals, prompted CHAMPION BEAR RESOURCES LTD. from Calgary, Alberta, to option the property and carry out a full scale exploration program. Reported assay values for gold range up to better than 1.0 oz/t.

A number of different geological survey teams have over time carried out various mapping programs in the region including Laval Township. Detailed reference to earlier such programs and results from these can be found in the latest OGS REPORT 272, "Precambrian Geology Laval and Hartman Townships", by B.R.BERGER, 1990.

The Beartrack Lake property was also covered by an airborne geophysical survey flown by Geoterrex Limited under contract of the Ontario Geological Survey. The property area is contained in Map 80959 which was part of an airborne data release by the Ministry of Northern Development and Mines of Ontario in 1987.

## CONCLUSIONS

1). Eleven diamond drill holes for a total footage of 3,703 feet was carried out.

2). Drill holes 3, 4, 8, 9 & 10 were drilled to test an I.P. responses in the immediate vicinity of a high grade surface Au occurrence.

A number of mineralized shear zones were intersected, but these generally contained anomalous Au mineralization in the order of several hundred ppb Au.

Drill hole 9 intersects 8515 ppb Au over a core length of 1.0 feet.

None of the above zones appear to correlate with the surface occurrence.

A strong possibility is that the structure and geometry of the known occurrence is complex and may have been missed by these drill holes.

## RECOMMENDATIONS

- 1). The entire gridded area be mapped and prospected.
- 2). All known occurrences be stripped examined, mapped and sampled in detail.
- 3). Areas of anomalous I.P. response be prospected and sampled in detail.
- 4). The project be re-evaluated at the end of above program.
- 5). Top priority targets be tested by diamond drilling. The amount of drilling and location of holes to be determined after completion of above program.

## INTRODUCTION

During February of 1992, eleven drill holes totalling 3,705 feet were drilled.

The drill holes were put down and test:

a). a known zone of Au mineralization located at approximately L8+50 West; 0+25 North.

b). a number of I.P. anomalies located near the known zone of Au mineralization.



This drill program was aimed at testing only several select targets and to help establish a better appreciation and understanding of the mineralization in the area.

**GENERAL GEOLOGY:**

All bedrock underlying Laval Township is Archean in age and is within the Wabigoon Subprovince of the Superior Province in the Canadian Shield. "Supracrustal lithologies" make up about "80%" of the rocks "and are composed of mafic, intermediate and felsic metavolcanics, related subvolcanic intrusions composed of gabbroic sheets and dikes, feldspar- and quartz-feldspar-phyric dikes, and clastic and chemical metasediments" (B.R.BERGER, 1990). The remaining 20% consist of felsic plutonic assemblages like granodiorite, quartz monzonite, granite, and tonalite which intruded the supracrustal metavolcanic and metasedimentary sequences. These plutons occur as distinct stocks like the Gardner Lake stock whose contact lies along the southeastern property boundary.

Referring to Chorlton (1987), B.R. BERGER, 1990, describes the tectonic history of the area as being characterized by three major distinct stages of deformation.

- 1.) A synvolcanic stage produced "gently dipping structures" (foliations, fold axes, lineations, and shear zones) in the volcanic sequences.
- 2.) A synplutonic stage developed "steeply plunging lineations and foliations" around the intrusive stocks.
- 3.) A syn- to postplutonic (?) stage created "upright folds in the supracrustal rocks, steepening and refolding of the earlier structures and creation of steeply dipping easterly to northeasterly trending shear zones".

B.R. BERGER, 1990, notes that "gold mineralization is localized in third stage deformational structures which are prospective exploration targets especially where they have fractured and flexed structurally competent bodies".

A Table summarizing the lithologic units mapped in the Laval and Hartman Townships in the Dryden area is included in Appendix "B" of this report.

# Appendix A

=====

CHAMPION BEAR RESOURCES LTD  
BEARTRACK LAKE PROJECT  
LAVAL TWP G-0823

## LIST OF CLAIMS

### CLAIM NO:

K1085111  
K1085112  
K1133313  
K1133443  
K1133507  
K1133508  
K1133509  
K1133510  
K1133511  
K1133512  
K1133513  
K1133514  
K1133515  
K1133516  
K1133517  
K1133519  
K1133520  
K1133521  
K1144900  
K1161172  
K1161173  
K1161174  
K1161175  
K1161176  
K1161177  
K1161178  
K1161179  
K1161180  
K1161181  
K1161182  
K1161183  
K1161184  
K1161185

## Appendix B

**TABLE 1. TABLE OF LITHOLOGIC UNITS FOR THE LAVAL AND HARTMAN TOWNSHIP'S AREA.**

**PHANEROZOIC**

**CENOZOIC**

**QUATERNARY**

**RECENT**

Swamp, lake and stream deposits

*Unconformity*

**PRECAMBRIAN**

**ARCHEAN**

**LATE ARCHEAN**

**MAFIC INTRUSIONS**

Lamprophyre dikes.

**EARLY TO LATE ARCHEAN**

**FELSIC INTRUSIONS**

Granodiorite, granite, tonalite, quartz monzonite, monzonite, quartz diorite, monzogabbro, pegmatite, aplite.

**MAFIC INTRUSIONS**

Gabbro, diorite, leucogabbro, plagioclase-phyric gabbro, quartz diorite, gabbroic dikes, altered gabbro.

**CLASTIC AND CHEMICAL METASEDIMENTS**

Wacke, siltstone, mafic wacke, pebbly wacke, argillaceous, phyllitic and biotite-muscovite-quartz schist, hornblende-garnet-biotite amphibolite, sulphide-magnetite and magnetite ironstone, chert, and metatexite.

**FELSIC TO INTERMEDIATE METAVOLCANICS**

Massive, spherulitic and autobrecciated flows, tuff and crystal tuff, lapilli tuff, breccia, feldspar, quartz and quartz-feldspar-phyric dikes, quartz-muscovite schist.

**HORNBLende-PHYRIC MAFIC TO INTERMEDIATE METAVOLCANICS**

Massive and pillowed flows, tuff and crystal tuff, lapilli tuff and lapillistone, tuff breccia and breccia, pillow breccia, chlorite schist, basaltic dikes and sills.

**MAFIC METAVOLCANICS**

Massive, pillowed and variolitic flows, pillow breccia, tuff, lapilli tuff and lapillistone, breccia and tuff breccia, basaltic dikes and sills, amphibolite, talc-chlorite and talc-chlorite-carbonate schist, plagioclase-phyric flows.

(after: B.R. BERGER,

1990)



52F16NW0008 OM92-083 LAVAL

040

**CHAMPION BEAR RESOURCES LTD.**

**BEARTRACK LAKE PROJECT**

**DIAMOND DRILL LOGS**

**1991 - 1992**

SUMMARY OF DRILL DATA ON BORSURV FILES AT BearTrack Lake

Hole No.	Grid Name	Eastings METERS	Northings METERS	Elevation Units	Grid Dip Bearing	Depth Wedges FEET	Litho Units	No. of Assays	Averaged Zones Total	Assay Elements
8101	BearTrack	-1100.00	46.00	0.00	-45.00	180.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8102	BearTrack	-1100.00	215.00	0.00	-45.00	180.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8103	BearTrack	-800.00	125.00	0.00	-45.00	180.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8104	BearTrack	-800.00	86.00	0.00	-45.00	231.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8105	BearTrack	-375.00	75.00	0.00	-45.00	231.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8106	BearTrack	-475.00	135.00	0.00	-45.00	231.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8107	BearTrack	-200.00	125.00	0.00	-45.00	231.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8108	BearTrack	-675.00	56.00	0.00	-45.00	201.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8109	BearTrack	-735.00	64.00	0.00	-35.00	201.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8110	BearTrack	-650.00	55.00	0.00	-45.00	201.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))
8111	BearTrack	-1200.00	-825.00	0.00	-45.00	180.00	0	0	0	10(Sample, Au(ppb), Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Ni(ppm), Mn(ppm), Fe(Z), As(ppm))

Total Holes: 11 Total depth: 3765.00 Total assays: 136



CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BT01  
 Collar Eastings: -1100.00  
 Collar Northings: 40.00  
 Collar Elevation: 0.00  
 Grid: BearTrack

Collar Inclinations: -45.00  
 Grid Bearing: 0.00  
 Final Depth: 406.00 feet

Logged by: H. Petak  
 Date: Feb. 19-22, 1992  
 Down-hole Survey:

FROM	TO	WIDTH	Sample	As(ppm)	Pb(ppm)	Fe(ppm)	Mn(ppm)	As(ppm)	Fe(%)	As(ppm)
0	11	(CASTING)								
11	406	(AMBERITE)								
		Dark green to dark grayish green colour; mostly vfg chl, variable amounts of fides, very little qtz; Foliation is moderately to well developed with angles of 25 to 30 deg to ca. Carb veins occur quite freq through the sect.								
		28.4 - 50.5 incr amt carb vein, mostly parll to sub-parll to fol, minor crosscut	0.00	45.00	45.00	N.S.	N.S.	N.S.	N.S.	N.S.
		45.8 - 49.6 Finl disse py, mostly parll fol;	45.00	45.60	3.00	4101	15	24	71	776
		78 - 102 SHEAR ZONE with sporadic disse of lg py (< S1) incl 0.25' band of soil-mass py in one shear	45.60	100.50	50.90	N.S.	N.S.	N.S.	N.S.	N.S.
		121.5 - 126 strong shearing and fragmentation, no airt	100.50	101.50	1.00	4102	29	86	100	411
		135 & 140 shears, no airt	101.50	406.00	304.50	N.S.	N.S.	N.S.	N.S.	N.S.
		156 3" qtz vein, white, no airt								
		167 1.5' qtz vein, white, no airt								
		167.8 - 170 disse py (< S1) mostly along fol								
		182.5 0.25' qtz vein, white, no airt								
		195 - 196 shear, no airt								
		257 1' disse py (< S1); shear, no airt								
		306 shear, no airt								
		336 - 350.6 Fracture zone, no airt								

4106. (END OF HOLE)

HOLE No: BT01





CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BTO2

Page 2

FROM	TO	LITHOLOGICAL DESCRIPTION	WIDTH	Sample	Au(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)	Ni(ppm)	Mn(ppm)	Fe(T) As(ppm)	Fe(T) As(ppm)
454	458	< 21 (see discus p); inc] a massive and seal- massive band at 454.5 and 457 reapp)	4.00	4116	203	93	11	180	0.1	33	416	5.09	64
			486.00	486.00	281.00								

4 86. (END OF HOLE)

HOLE No: BTO2



**CHAMPION BEAR RESOURCES LTD.**  
DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
HOLE No.: BT03

Page 2

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Sample	Au(ppb)	Cu(ppb)	Pb(ppb)	Zn(ppb)	ASSAYS				
											Ag(ppb)	Mn(ppb)	Mo(ppb)	Fe(%)	As(ppm)
		Dark greenish-grey, weak to med fol; vlg disse py (< 3%) throat west of the section; portions of the sect are weak to med argentic due to some disse agt;	378.30	385.50	7.20	4122	391	198	17	662	0.4	127	830	6.77	84
			385.50	396.00	10.50	4123	7	104	8	134	TRACE	88	811	4.38	17
			396.00	406.00	10.00	4124	7	128	9	109	0.4	95	800	5.02	22
			406.00	416.00	10.00	4125	5	111	8	109	0.5	99	811	5.21	14
360		4" qtz vein with tour;	422.00	426.00	6.00	4126	5	67	10	121	0.2	86	831	4.49	13
362.5		shear with 4" of S - 10% py at upper contact;	426.00	431.00	5.00	4127	14	74	8	166	0.4	94	882	5.00	23
378.3	385.5	heavy disse and bands of med-massive py; incl 2" qtz vein at 378.7;	431.00	431.00	433.00	22.00	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.
385.5	396	3 - 32 fine disse py;	433.00	436.00	3.00	4128	TRACE	68	15	95	TRACE	68	625	5.09	13
406	416	fine disse py;	436.00	446.00	30.00	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.
422	426	fine disse py;													
426	431	fine disse py;													
433	436	5 - 10% disse py;													

4 86.

(END OF HOLE)

HOLE No: BT03

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE NO.: BT04  
 Collar Eastings: -800.00  
 Collar Northings: 80.00  
 Collar Elevations: 0.00

Collar Inclination: -45.00  
 Grid Bearing: 231.00  
 Final Depth: 426.00 feet

Logged by: H. Petak  
 Date:  
 Down-hole Surveys:

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Sample	As(%)	Co(%)	Py(%)	Ch(%)	Fe(%)	As(%)	Mo(%)	Bi(%)	As(%)	As(%)
0	5	(CASING)														
5	295	(DIRTITE) Dark grey to greenish-grey, lg to cp, in general weakly foliated with massive sections which are usually either very fine- or coarse-grained; mostly hb and fdep, some chl (after hb ?), very little or no qtz; finely disse py (< 15) throughout the section; freq carb veinings	0.00	21.50	21.50	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			21.50	25.00	3.50	4129	TRACE	TRACE	74	110	TRACE	74	385	3.00	N.S.	3
			25.00	31.30	6.30	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			31.30	32.20	0.90	4130	TRACE	TRACE	43	99	TRACE	111	746	3.75	TRACE	TRACE
			32.20	85.00	52.80	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			85.00	86.00	1.00	4131	23	23	100	4	245	0.2	95	970	7.97	20
			86.00	104.00	18.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			104.00	104.00	0.00	4132	144	144	1116	4	813	0.7	136	970	7.97	20
			104.00	162.00	57.20	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			162.00	164.00	2.00	4133	287	287	177	476	1608	3.3	168	623	7.74	170
			164.00	188.00	24.00	85.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			188.00	251.00	63.00	1134	12	12	77	9	135	0.2	137	798	4.73	10
			251.00	253.00	2.00	9.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			253.00	264.00	11.00	4125	5	5	28	TRACE	76	TRACE	106	840	3.72	TRACE
			264.00	265.60	1.60	24.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			265.60	291.00	25.40	4136	7	7	178	8	80	0.6	96	707	5.08	13
			291.00	375.00	84.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			375.00	381.00	6.00	4137	TRACE	TRACE	81	6	88	0.4	101	793	4.77	9
			381.00	384.00	3.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			384.00	386.00	2.00	4138	5	5	135	2	128	0.3	107	762	5.34	13
			386.00	426.00	40.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.

HOLE No: BT04

295 - 426 (ANDRESITE)  
 Dark green, fine grained, weakly to mod foliated, texture indicative of strong micro-brecc  
 295 - 296.3 FRACTURE ZONE, blocky

160 - 160.7 qtz vein with tura  
 183.8 - 185.5 mafic dyke  
 192.7 - 195 fracture zone filled with qtz and carbonate  
 216 shear, no axi  
 244 - 245 fracture zone, fractures filled with carbonate  
 some specs of py  
 1° qtz vein with tura, some disse py below  
 lower contact (< 32 py)  
 2° carbonate  
 258 - 265 qtz filled shear with some specs of py  
 266 1° carbonate  
 276.3 - 276.7 felsic dyke, apple green  
 285.8 - 290.4 felsic dyke, same as above, some fine disse py below lower contact

160 - 160.7 qtz vein with tura  
 183.8 - 185.5 mafic dyke  
 192.7 - 195 fracture zone filled with qtz and carbonate  
 216 shear, no axi  
 244 - 245 fracture zone, fractures filled with carbonate  
 some specs of py  
 1° qtz vein with tura, some disse py below  
 lower contact (< 32 py)  
 2° carbonate  
 258 - 265 qtz filled shear with some specs of py  
 266 1° carbonate  
 276.3 - 276.7 felsic dyke, apple green  
 285.8 - 290.4 felsic dyke, same as above, some fine disse py below lower contact

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
HOLE No.: BT04

Page 2

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FROM	TO	WIDTH	Sample	As(ppa)	Co(ppa)	Ph(ppa)	Zn(ppa)	Ag(ppa)	Ni(ppa)	Mn(ppa)	Fe(%)	As(ppa)
LITHOLOGICAL DESCRIPTION												
317.5	-	319	Injection of some felsic dyke material, same as above;									
324			qtz, carb, turaj									
325.7			2" qtz, carb, turaj									
326	-	330	1 - 32 fine disse pyi									
328.4			1.5" qtz and carb									
327.3	-	327.8	qtz, carb, turaj									
367	-	370	FRACTURE ZONE, blocky									
376			FRACTURE, blocky									
379	-	381	fine disse py above and below a 2" qtz vein at 380;									
384	-	386	fine disse pyi									
397	-	403	very blocky, some core lost;									
420			fracture, filled with carb and some very fine py									
426			(END OF HOLE)									

ANALYSIS

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BT05  
 Collar Eastings: -575.00  
 Collar Northings: 75.00  
 Collar Elevation: 0.00  
 Grid: BearTrack

Collar Inclination: -45.00  
 Grid Bearing: 231.00  
 Final Depth: 327.00 feet

Logged by: H. Petak  
 Date:  
 Down-hole Surveys:

FROM	TO	LITHOLOGICAL DESCRIPTION	WIDTH	Sample	As(ppm)	Fe(ppm)	Ni(ppm)	Mn(ppm)	Ag(ppm)	Co(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)	Fe(%)	As(ppm)
0	10	(CASING)													
10	327	(BIDRITE) Dark greenish grey, generally medium to coarse grained, consisting of hb, fldsp, some chl (after hb?), little or no qtz, poorly to mod foliated (30 to 45 deg to cal, in places massive)	43.20 44.70 44.70 84.30 84.30 327.00	43.20 1.50 40.20 1.40 240.70	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.	M.S. M.S. M.S. M.S. M.S.
16.6	17.2	FRACTURE ZONE, no sin													
21.0		FRACTURE, NO MIN													
43.2	44.7	( S1 dissep (fine and some coarse py)													
160.5	164	FRACTURE ZONE													
165	166	FRACTURE ZONE													
204	216.4	andesitic, (fine grained, weakly foliated, trc of dissep py (< 13)													
240.5	241.5	SHEAR													
255.4															
270	271	blecty													

3 27 (END OF HOLE)





CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BTO6

Page 2

FROM	TO	LITHOLOGICAL DESCRIPTION	WIDTH	Sample	As(ppm)	Co(ppm)	Mo(ppm)	Ni(ppm)	Ag(ppm)	As(ppm)	Fe(%)	As(ppm)
250	355	Fragmental (flow brecc ?), trc of fine pyi										
355		(END OF HOLE)										

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BT06  
 Collar Eastings: -475.00  
 Collar Northings: 135.00  
 Collar Elevations: 0.00  
 Grids: BearTrack

Collar Inclination: -45.00  
 Grid Bearing: 231.00  
 Final Depth: 355.00 feet

Logged by: H. Patak  
 Date:  
 Down-hole Survey:

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Sample	As(ppm)	Cr(ppm)	Pl(ppm)	Zn(ppm)	Ag(ppm)	Mn(ppm)	K(ppm)	Fe(%)	As(ppm)
0	0	(CASING)													
0	196	(DIORITE) Dark grey, med to coarse-grained, hb), ffdsp, some chl (after hb ?), little or no qtz, massive to med foliated (avg 45 deg to cal)	0.00	23.00	23.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		8 - 15.7 blocky	23.00	24.30	0.50	4141	23	338	13	172	1.0	149	820	5.06	25
		24.5 - 25 mafic dyke with 35 py at upper contacts	24.30	48.30	24.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		48.3 - 52.2 3 - 5% disse py	48.30	52.00	3.70	4142	16	134	35	103	0.6	95	612	5.73	10
		52.0 - 7.5 mafic dyke with trc of disse py (< 12%)	52.00	96.90	44.90	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		97.4 - 98 qtz with semi-massive py	96.90	98.20	1.30	4143	263	883	16	207	1.9	90	596	6.31	187
		107 - 110.5 mafic dyke	98.20	142.00	43.80	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		114.3 3" qtz vein	142.00	147.20	5.20	4144	374	330	32	1208	1.3	170	772	9.06	345
		120 2" qtz vein													
		141 - 147 fine-grained mafic rock (mafic dyke ?) with disse py fac; 2 massive bands about 1" wide at 143 (assoc with qtz) and at 145.6 resp.													
196	211	(ANDESITE) Dark greenish grey, fine-grained, massive to poorly foli													
211	238.5	(DIORITE) See as higher up in the section except mostly medium grained)													
238.5	268	(DIORITE) Light greenish-grey, fine-grained, massive; evidence of strong fracturing, fractured healed)													
268	355	(ANDESITE) with tuffaceous portions Dark greenish grey, fine-grained, massive to med foliated (15 - 20 deg to cal) hb), ffdsp, some chl (after hb ?), little or no qtz; occas trc of py; some carb and qtz veining (fracture fillings);	147.20	295.10	147.90	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		295.3 0.5" carb vein with 50% sphal (?);	295.10	295.30	0.20	4145	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		301.6 - 304.3 qtz vein, fract and sheared, no min;	295.30	355.00	59.70	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
		306.6 - 307.3 qtz vein, same as above;													
		321 5" qtz vein;													

CHAMPION BEAR RESOURCES LTD.  
DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
HOLE No.: BT06

Page 2

FROM	TO	WIDTH	Sample	Au(ppb)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)	NI(ppm)	Mn(ppm)	Fe(%)	As(ppm)
350	355		fragmental (flow brecc ?), trc of fine ppt									
355			(END OF HOLE)									

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: B707  
 Collar Eastings: 1200.00  
 Collar Northings: 125.00  
 Collar Elevation: 0.00  
 Grid: BearTrack

Logged by: H. Petak  
 Date:  
 Down-hole Survey:

Collar Inclination: -45.00  
 Grid Bearing: 231.00  
 Final Depth: 396.00 feet

ASSAYS

FROM TO WIDTH Sample Au(ppm) Cu(ppm) Pb(ppm) Zn(ppm) Ag(ppm) Ni(ppm) Mn(ppm) Fe(%) As(ppm)

FROM	TO	WIDTH	Sample Au(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)	Ni(ppm)	Mn(ppm)	Fe(%)	As(ppm)
0	12	(CASTING)									
12	82	(COLORITE)									
			Dark greenish-grey, fine- to medium-grained, well foliated at 40 - 45 deg to c; (fidep, hbl, some chl (after hbl?)) some epiditic and carbonate veining partic towards the lower part of the section)								
12	15										
17											
31	32										
			strongly weathered fracture; fracturing, very blocky								
92	108	(MUSCIELE) Flow Breccia ?									
			Fine-grained andesitic matrix with felsic (fidep) fragments up to several cm long, stretched with long axis parallel to plane of foliation; fragments subangular; top and bottom contact of section gradational;								
108	396	(MUSCIELE)									
			Greenish-grey, fine-grained, massive to weakly foliated at 45 deg to c; sporadic trc of py								
110	112										
			fine disse py, < 15;								
115.5											
			1" qtz vein, no min								
135	138										
			fine disse py, < 15;								
158											
			3" qtz vein, no min, some lura at lower contact;								
168	169										
			qtz filled shear with some py (up to 5%, avg 3%), by partially in tract, also chl and lura;								
178.8											
			3" qtz vein, disse py on both sides, up to 102 py at 180;								
187.6	188.5										
			5 - 102 fine disse py;								
196	197.4										
			12 fine disse py								
208											
			1" qtz vein;								
235	235.5										
			qtz vein, trc op py								
241											
			1" py up to 52;								
280	286.6										
			qtz vein;								

396. (END OF HOLE)

**CHAMPION BEAR RESOURCES LTD.**

**DIAMOND DRILL LOG**

PROPERTY: BearTrack Lake  
 HOLE No.: BTOB  
 Collar Eastings: -839.00  
 Collar Northings: 58.00  
 Collar Elevation: 0.00  
 Grid: BearTrack

Collar Inclination: -45.00  
 Grid Bearing: 150.00  
 Final Depth: 166.00 feet

Logged by: H. Petak  
 Date:  
 Down-hole Surveys:

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS																			
			Width	Sample	As(ppb)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)	Mn(ppm)	Mo(ppm)	Fe(%)	As(ppm)									
0	34	(CASING)																				
34	145.6	(DIORITE) Dark gray to dark greenish-gray, mostly coarse-grained with occasional fine-grained portions, mostly massive to poorly foliated (generally the coarse-gr part) with some short and foliated (usually fine-gr) sections, fol avg at 45 deg to cgl hbl, f16pp, occas chl (after hbl ?), little to no qtz; occas trc of py; some minor qtz and carb veinings	0.00	46.00	46.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	
46	53.6	SULFIDE ZONE: heavy disse to massive py; apart from a 3" qtz vein (with tur) at 46.7, the entire section shows some silicification.	46.00	53.60	7.60	4150	733	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
53.6	166.00	(AMPHIBOLITE) Dark greenish-gray, fine-grained, massive to poorly fol, hbl, chl, little f16pp and qtz, local trc of py	53.60	166.00	112.40	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
166.00		(END OF HOLE)																				

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BT09  
 Collar Eastings: -739.00  
 Collar Northings: 60.00  
 Collar Elevation: 0.00  
 Grid: BearTrack

Collar Inclination: -55.00  
 Grid Bearing: 231.00  
 Final Depth: 126.00 feet

Logged by: H. Petak  
 Date:  
 Down-hole Surveys:

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Sample Au(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)	Mn(ppm)	Mo(ppm)	Fe(%)	As(ppm)
0	4	(CASING)												
4	126	(BITUMITE) Dark greenish-grey to grey, coarsely coarse-gr, occas fine- to medium-grained, generally massive to poorly foliated, rarely well foliated at 35 - 45 deg to cat. (bl. f. disp, occas chl. (after bl. ?), very little or no chl.) occas trc of pyf	0.00	5.00	5.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			5.00	6.50	1.50	4151	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			6.50	23.00	16.50	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			23.00	23.50	0.50	4152	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			23.50	26.00	2.50	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			26.00	27.00	1.00	4153	8515	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
			27.00	126.00	99.00	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
5	6.5	< 31 disse pyf												
6	9	qtz veins												
12		3" disse py, 12'												
23	23.5	31 disse py along fol												
26	27	heavy disse to well-massive py in siliceous, well foliated rock; possible shear zone												
31	32	shear zone, chl, no sil												
48	53	silicification; shear at 51.5'												
78	85	chloritization with pegmat veins; 1" pegs with tere												
126		(END OF HOLE)												

CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
 HOLE No.: BT10  
 Collar Eastings: -850.00  
 Collar Northings: 55.00  
 Collar Elevation: 0.00  
 Grid: Beartrack

Logged by: H. Petak  
 Date:  
 Down-hole Surveys:

Collar Inclination: -45.00  
 Grid Bearing: 231.00  
 Final Depth: 125.00 feet

FROM TO WIDTH Sample Au(ppm) Cu(ppm) Pb(ppm) Zn(ppm) Ag(ppm) Ni(ppm) Mn(ppm) Fe(S) As(ppm)

0 25 (CASING)

25 104 (DIORITE)

Dark greenish-grey, medium- to coarse-grained, massive to poorly foliated (at 45 to 50 deg to chl), feldsp, chl (after hb1 ?), little or no qtz, occas fine disse agt; some occas thin qtz and carb veining;

35 - 37 mafic dyke;  
 85 - 86.5 mafic dyke;  
 102 shear, no min;

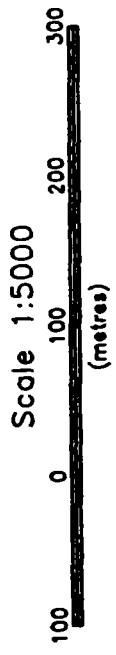
104 125 (AMPHIBITE)

Dark green to greyish green, usually fine-grained, poorly to med foliated; chl, hb1, minor feldsp; some very fine qtz and carb veining;

0.00 125.00 125.00 M.S. M.S. M.S. M.S. M.S. M.S. M.S. M.S. M.S. M.S.

125 (END OF HOLE)

K 1161174



K 1133507

BT11

250 m.

155 A

K 1161179

4J00

1133508





CHAMPION BEAR RESOURCES LTD.

DIAMOND DRILL LOG

PROPERTY: BearTrack Lake  
HOLE No.: BT11

Page 2

FROM	TO	LITHOLOGICAL DESCRIPTION	Fe	Pb	Zn	Cu	Au	Sample	Ag	Mn	Ni	As
-----												
ABSAYS												
FROM	TO	LITHOLOGICAL DESCRIPTION	Fe(ppm)	Pb(ppm)	Zn(ppm)	Cu(ppm)	Au(ppm)	Sample	Ag(ppm)	Mn(ppm)	Ni(ppm)	As(ppm)
306		2" qtz vein in shear zone with assoc py (S1 p7)										
316.5 - 324		STRONG FRACTURE ZONE, mostly sub-parallel to cat fract are often carbonate filled and py coated; also some act on fract planes										
324 - 327.7		porphyritic dyke pinkish, med- to coarse-grained with 2 - 4 mm fidep porphyroclasts; both contacts are very sharp.										
331.8 - 333.6		porphyritic dyke, same as above except finer grained										
343		0.5 ft fracture zone, no min										
363		fracture plane with heavy py coating										
372 - 386		porphyritic dyke, same as above										
406		(END OF HOLE)										

HOLE No: BT11



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4-Mar-92

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P.O. Box 7, Station A  
Winnipeg, MB  
R3K 1Z9

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Attn: Mr. Lou Chastko  
Project: Beartrack

PO #:

Received: 3-Mar-92 07:45

Job: 921019R

Status: Preliminary

### Core Samples

Sample	AU FA/AA3 ppb	AU FA/AA3 oz/T
4101	15	<0.001
4102	29	<0.001
4103	11	<0.001
4104	41	0.001
4105	177	0.005
4106	7	<0.001
4107	21	<0.001
4108	11	<0.001
4109	13	<0.001
4110	<5	<0.001
4111	69	0.002
4112	<8	<0.001
4113	<5	<0.001
4114	<5	<0.001
4115	213	0.006
4116	203	0.006
4117	46	0.001
4118	29	<0.001
4119	<5	<0.001
4120	124	0.004

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12-Mar-92

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R3K 1Z9

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Attn: Mr. Lou Chastko  
Project: Beartrack

PO #:

Received: 3-Mar-92 07:45

Job: 921019R

Status: Final

### Core Samples

Sample	Mo ICAP ppm	Cu ICAP ppm	Pb ICAP ppm	Zn ICAP ppm	Ag ICAP ppm	Ni ICAP ppm	Co ICAP ppm
4101	3	24	17	58	0.1	71	56
4102	1	86	9	46	<0.1	108	34
4103	1	9	14	63	<0.1	74	29
4104	2	19	14	152	0.6	78	31
4105	2	75	14	62	2.1	153	67
4106	2	19	8	69	<0.1	65	30
4107	2	117	21	137	0.5	76	50
4108	2	43	7	88	0.3	106	60
4109	2	38	8	249	0.1	76	42
4110	3	49	12	170	0.7	57	41
4111	3	57	10	216	<0.1	73	135
4112	3	37	11	23	<0.1	50	36
4113	3	30	14	37	<0.1	63	42
4114	2	17	16	91	<0.1	85	29
4115	2	111	34	193	<0.1	83	44
4116	3	95	11	188	0.1	33	42
4117	2	314	10	405	0.3	112	42
4118	3	63	11	165	0.1	80	38
4119	3	21	16	128	<0.1	33	40
4120	3	347	18	122	0.4	85	122

Sample	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4101	776	5.00	37	<2	4
4102	411	4.32	19	<2	<3
4103	512	3.23	13	<2	5
4104	867	3.16	20	<2	3

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12-Mar-92

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Attn: Mr. Lou Chastko  
Project: Beartrack

PO #:

Received: 3-Mar-92 07:45

Job: 921019R

Status: Final

### Core Samples

Sample	Mn ICAP PPM	Fe ICAP %	As ICAP PPM	Sb ICAP PPM	Bi ICAP PPM
4105	759	5.86	125	<2	<3
4106	708	3.50	20	5	<3
4107	620	7.41	32	4	<3
4108	625	5.12	39	<2	<3
4109	729	2.94	21	<2	<3
4110	753	6.98	18	4	<3
4111	805	6.17	114	6	<3
4112	573	1.68	8	<2	7
4113	321	2.29	16	3	<3
4114	936	3.51	3	<2	<3
4115	1260	6.52	166	<2	<3
4116	461	5.09	64	<2	<3
4117	633	6.13	75	2	<3
4118	795	5.44	29	<2	<3
4119	641	4.83	18	<2	<3
4120	1520	8.86	160	<2	<3

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12-Mar-92

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R3K 1Z9

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Attn: Mr. Lou Chastko  
Project: Beartrack

PO #:

Received: 3-Mar-92 07:45

Job: 921019R ..... Status: Final

Signed:

..... *Howard Lahti* .....  
Howard Lahti, Ph.D.  
Laboratory Manager

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25-Mar-92

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Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 5-Mar-92 09:27

Job: 921021R

Status: Final

## Core Samples

Sample	Au FA/AA3 ppb	Au FA/AA3 oz/T
4121	18	<0.001
4122	391	0.011
4123	7	<0.001
4124	7	<0.001
4125	5	<0.001
4126	5	<0.001
4127	14	<0.001
4128	<5	<0.001
4129	<5	<0.001
4130	<5	<0.001
4131	23	<0.001
4132	144	0.004
4133	287	0.008
4134	12	<0.001
4135	5	<0.001
4136	7	<0.001
4137	<5	<0.001
4138	5	<0.001



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25-Mar-92

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Winnipeg, MB  
R3K 1Z9

Page: 2  
Copy: 1 of 1  
Set: 2

Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 5-Mar-92 09:27

Job: 921021R

Status: Final

### Core Samples

Sample	Mo ICAP ppm	Cu ICAP ppm	Pb ICAP ppm	Zn ICAP ppm	Ag ICAP ppm	Ni ICAP ppm	Co ICAP ppm
4121	2	280	6	312	0.1	101	40
4122	1	198	17	662	0.4	127	59
4123	1	104	8	134	<0.1	88	40
4124	1	128	9	109	0.4	95	48
4125	1	111	8	109	0.5	99	48
4126	1	67	10	121	0.2	86	49
4127	1	74	8	166	0.4	94	52
4128	2	68	15	95	<0.1	68	41
4129	1	54	7	110	<0.1	74	31
4130	<1	43	<2	99	<0.1	111	30
4131	1	108	4	245	0.2	95	39
4132	2	1116	4	813	0.7	136	32
4133	3	177	476	1688	3.3	168	57
4134	<1	77	9	135	0.2	137	40
4135	1	38	<2	76	<0.1	106	31
4136	2	178	8	80	0.6	96	45
4137	1	81	6	88	0.4	101	44
4138	2	135	2	128	0.3	107	46

Sample	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4121	789	7.16	15	5	<3
4122	830	6.77	84	7	6
4123	811	4.38	17	7	<3
4124	800	5.02	22	4	<3
4125	811	5.21	14	8	<3
4126	831	4.49	15	7	3





# BARRINGER LABORATORIES

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Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 5-Mar-92 09:27

Job: 921021R

Status: Final

### Core Samples

Sample	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4127	882	5.00	23	2	<3
4128	625	5.09	13	5	<3
4129	585	3.00	3	7	<3
4130	746	3.75	<2	3	<3
4131	647	4.52	26	10	3
4132	970	7.97	20	11	<3
4133	623	7.74	170	18	11
4134	798	4.73	10	4	<3
4135	840	3.72	<2	3	<3
4136	707	5.08	13	12	<3
4137	793	4.77	9	9	<3
4138	762	5.34	13	7	<3



# BARRINGER LABORATORIES

BARRINGER / ACCURASSAY LABORATORIES  
THUNDER BAY DIVISION

5735 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
PHONE: (416) 890-8566  
FAX: (416) 890-8575

25-Mar-92

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P.O. Box 7, Station A  
Winnipeg, MB  
R3K 1Z9

Page: 4  
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Set : 2

Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 5-Mar-92 09:27

Job: 921021R

Status: Final

Signed:

  
.....  
Jeffrey Davis B.Sc.  
Supervisor Environmental Services



BARRINGER / ACCURASSAY LABORATORIES  
THUNDER BAY DIVISION

5735 McADAM ROAD  
MISSISSAUGA, ONTARIO  
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Page: 1  
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Attn: Mr. Lou Chastko  
Project: Bear Track

Received: 10-Mar-92 08:01

PO #:

Job: 921023R

Status: Final

Core Samples

Sample	Au FA/AA3 ppb	Au FA/AA3 oz/T
4139	12	<0.001
4140	12	<0.001
4141	23	<0.001
4142	16	<0.001
4143	265	0.008
4144	374	0.011
4146	16	<0.001
4147	25	<0.001
4148	14	<0.001
4149	9	<0.001



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Set: 2

Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 10-Mar-92 08:01

Job: 921023R

Status: Final

### Core Samples

Sample	Mo ICAP ppm	Cu ICAP ppm	Pb ICAP ppm	Zn ICAP ppm	Ag ICAP ppm	Ni ICAP ppm	Co ICAP ppm
4139	3	250	15	157	0.5	88	92
4140	2	212	10	287	0.7	100	47
4141	3	336	13	172	1.0	149	121
4142	2	134	55	103	0.6	95	49
4143	3	883	16	287	1.9	90	129
4144	2	330	32	1208	1.3	170	193
4146	3	129	4	110	<0.1	52	59
4147	5	60	<2	94	<0.1	43	39
4148	1	80	3	106	0.3	100	35
4149	5	99	<2	51	0.2	36	34

Sample	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4139	583	7.14	29	8	<3
4140	851	6.92	17	6	<3
4141	828	5.86	25	8	<3
4142	612	5.73	10	8	<3
4143	596	6.31	187	<2	9
4144	772	9.86	345	8	<3
4146	746	4.41	30	<2	<3
4147	1050	3.63	<2	<2	<3
4148	860	5.21	10	<2	<3
4149	694	2.94	4	<2	<3



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Set : 2

Attn: Mr. Lou Chastko  
Project: Bear Track

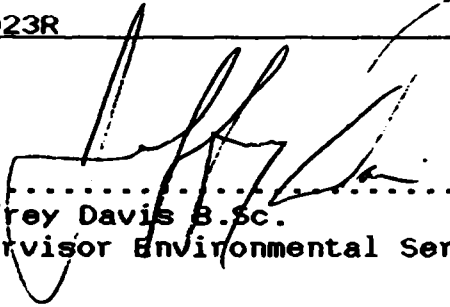
PO #:

Received: 10-Mar-92 08:01

Job: 921023R

Status: Final

Signed:

  
.....  
Jeffrey Davis B.Sc.  
Supervisor Environmental Services



# BARRINGER LABORATORIES

BARRINGER / ACCURASSAY LABORATORIES  
THUNDER BAY DIVISION

5735 McADAM ROAD  
MISSISSAUGA, ONTARIO  
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PHONE: (416) 890-8566  
FAX: (416) 890-8575

30-Mar-92

INDEPENDENT EXPLORATION SERVICES LIMITED  
P.O. Box 7, Station A  
Winnipeg, MB  
R3K 1Z9

Page: 1  
Copy: 1 of 1  
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Attn: Mr. Lou Chastko  
Project:

PO #:

Received: 23-Mar-92 10:06

Job: 924056T

Status: Final

### Core Samples

Sample	Au FA/AA3 ppb	Au FA/AA3 oz/T	Mo ICAP ppm	Cu ICAP ppm	Pb ICAP ppm	Zn ICAP ppm	Ag ICAP ppm
4154	<5	<0.001	<1	73	4	39	<0.1
4155	<5	<0.001	1	70	3	127	0.4
4156	<5	<0.001	<1	80	4	73	0.5
4157	<5	<0.001	<1	76	2	37	0.5
4158	<5	<0.001	1	85	3	112	0.4
4159	<5	<0.001	1	81	5	105	0.5
4160	6	<0.001	<1	64	2	56	0.6
4161	<5	<0.001	1	58	5	71	0.4
4162	<5	<0.001	<1	79	4	75	0.3
4163	<5	<0.001	1	76	2	85	0.4
4164	<5	<0.001	2	96	3	171	0.3
4165	<5	<0.001	1	83	7	87	0.2
4166	6	<0.001	1	75	10	76	0.3

Sample	Ni ICAP ppm	Co ICAP ppm	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4154	130	40	742	4.43	7	2	<3
4155	163	43	743	4.93	34	4	<3
4156	115	44	724	4.45	34	5	<3
4157	91	41	310	3.44	26	2	<3
4158	153	48	969	4.82	35	5	<3
4159	143	46	910	4.59	34	5	<3
4160	94	34	1000	4.21	39	8	<3
4161	112	33	1030	4.00	25	2	<3
4162	185	45	758	5.74	28	3	<3
4163	152	17	753	4.54	23	2	<3
4164	113	34	940	4.63	23	2	<3



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PHONE: (416) 890-8566  
FAX: (416) 890-8575

30-Mar-92

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Set: 1

Attn: Mr. Lou Chastko  
Project:

PO #:

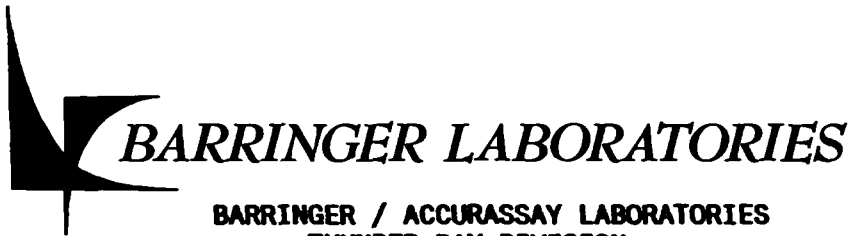
Received: 23-Mar-92 10:06

Job: 924056T

Status: Final

### Core Samples

Sample	Ni ICAP ppm	Co ICAP ppm	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4165	164	50	688	5.08	31	2	<3
4166	170	43	825	6.17	36	2	<3



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FAX: (416) 890-8575

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Attn: Mr. Lou Chastko  
Project:

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Received: 23-Mar-92 10:06

Job: 924056T

Status: Final

Signed:

  
.....  
Jeffrey Davis, B.Sc., C.Chem.  
Manager, Thunder Bay Division





# BARRINGER LABORATORIES

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THUNDER BAY DIVISION

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8-Apr-92

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Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 13-Mar-92

Job: 921025R

Status: Final

## Core Samples

<u>Sample</u>	<u>Au FA/AA3 ppb</u>	<u>Au FA/AA3 oz/T</u>
4150	733	0.021
4151	25	<0.001
4152	27	<0.001
4153	8515	0.248



# BARRINGER LABORATORIES

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8-Apr-92

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Attn: Mr. Lou Chastko  
Project: Bear Track

PO #:

Received: 13-Mar-92

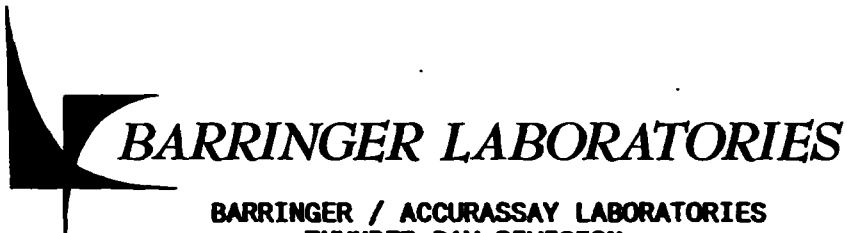
Job: 921025R

Status: Final

### Core Samples

Sample	Mo ICAP ppm	Cu ICAP ppm	Pb ICAP ppm	Zn ICAP ppm	Ag ICAP ppm	Ni ICAP ppm	Co ICAP ppm
4150	5	359	23	1227	1.8	116	108
4151	2	157	13	505	0.1	132	49
4152	3	140	<2	220	0.4	191	59
4153	3	116	258	2615	2.1	198	56

Sample	Mn ICAP ppm	Fe ICAP %	As ICAP ppm	Sb ICAP ppm	Bi ICAP ppm
4150	409	10.69	276	5	<3
4151	980	9.50	24	4	<3
4152	912	6.55	49	3	<3
4153	508	9.26	342	13	<3



5735 McADAM ROAD  
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CANADA L4Z 1N9  
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8-Apr-92

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Project: Bear Track

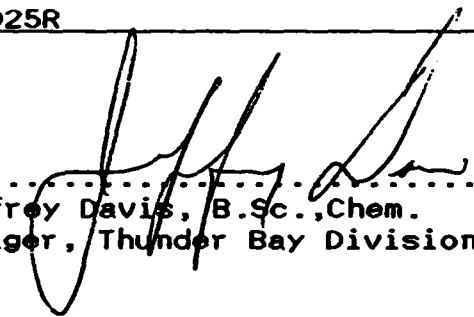
PO #:

Received: 13-Mar-92

Job: 921025R

Status: Final

Signed:

  
.....  
Jeffrey Davis, B.Sc., Chem.  
Manager, Thunder Bay Division

NOTES

400' surface rights reservation along the shores of all lakes and rivers

SAND and GRAVEL

- ① GRAVEL File 156744
- ② GRAVEL File 144048
- ③ MTC PIT NR112

AREAS WITHDRAWN FROM STAKING

SR - SURFACE RIGHTS M.R. - MINING RIGHTS

Section Date Disposition File

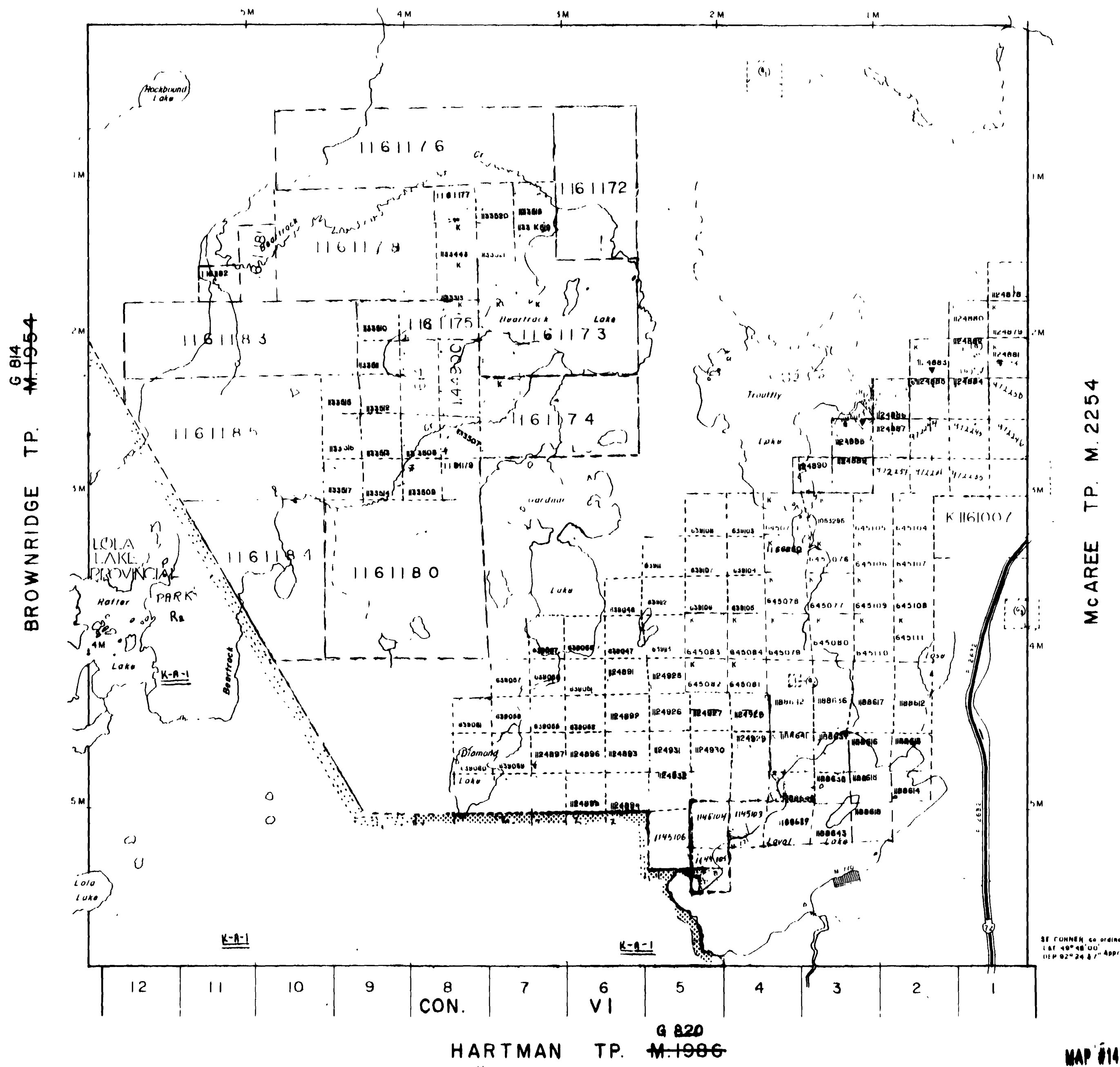
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32 00M W 37/83 S+MR A4623/8

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON

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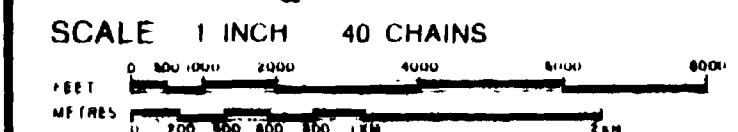
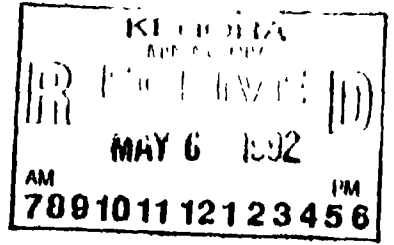


LEGEND

- HIGHWAY AND ROUTE NO.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
- TOWNSHIP 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
- ORIGINAL SHORELINE
- MARSH OR MUSKELG
- MINES

DISPOSITION OF CROWN LANDS

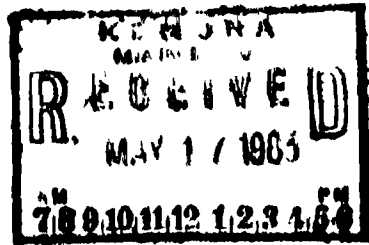
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- PATENT SURFACE & MINING RIGHTS
  - SURFACE RIGHTS ONLY
  - MINING RIGHTS ONLY
- LEASE SURFACE & MINING RIGHTS
  - SURFACE RIGHTS ONLY
  - MINING RIGHTS ONLY
- EVIDENCE OF OCCUPATION
- CROWN LAND SALE
- ORDER IN COUNCIL
- RESERVATION
- CANCELLED
- SAND & GRAVEL



ACRES	HECTARES
40	16

TOWNSHIP  
**LAVAL**  
DISTRICT  
KENORA  
MINING DIVISION  
KENORA

Ministry of Natural Resources  
Surveys and Mapping Branch  
Date Nov 74 Plan No  
Whitney Block Queen's Park Toronto

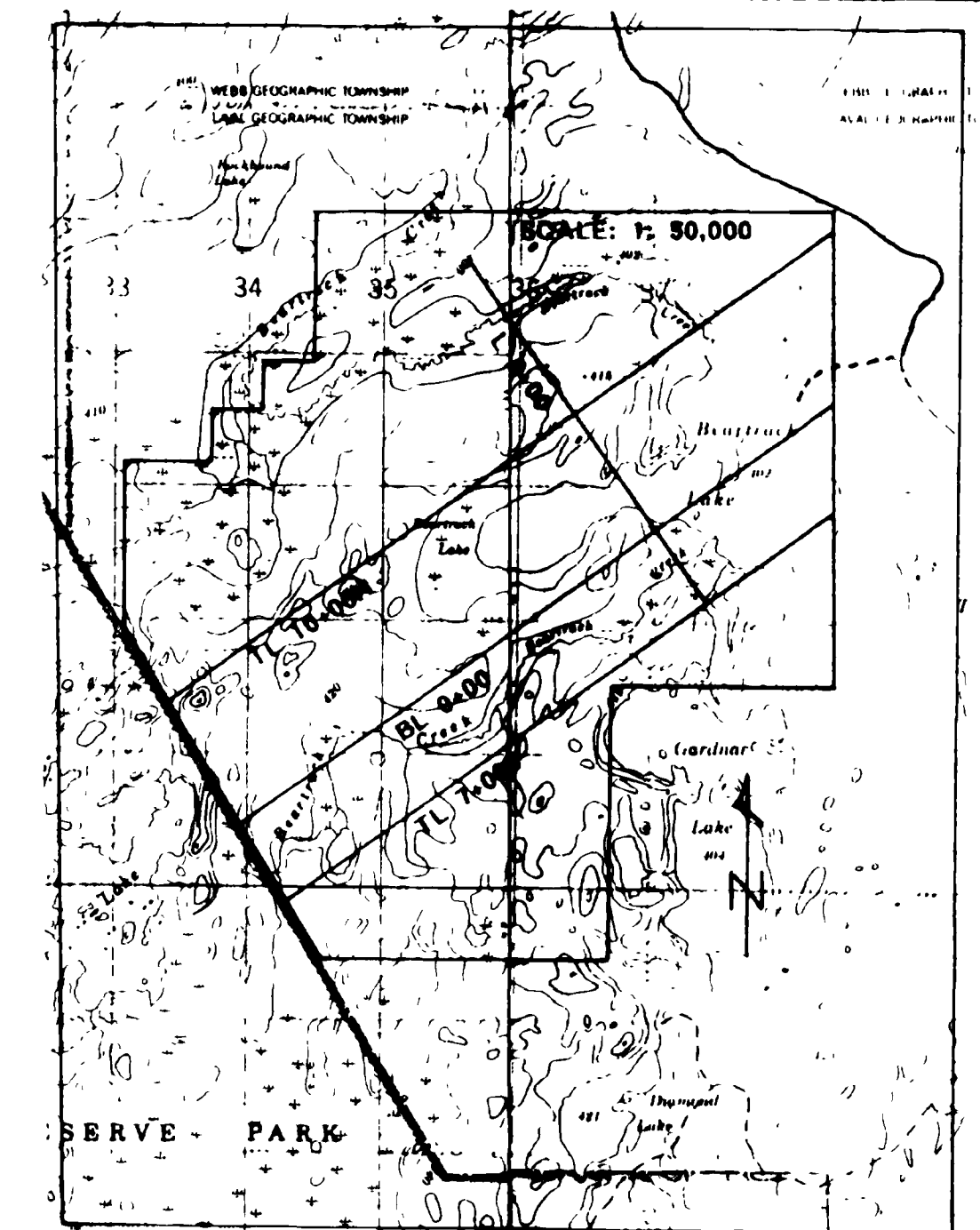
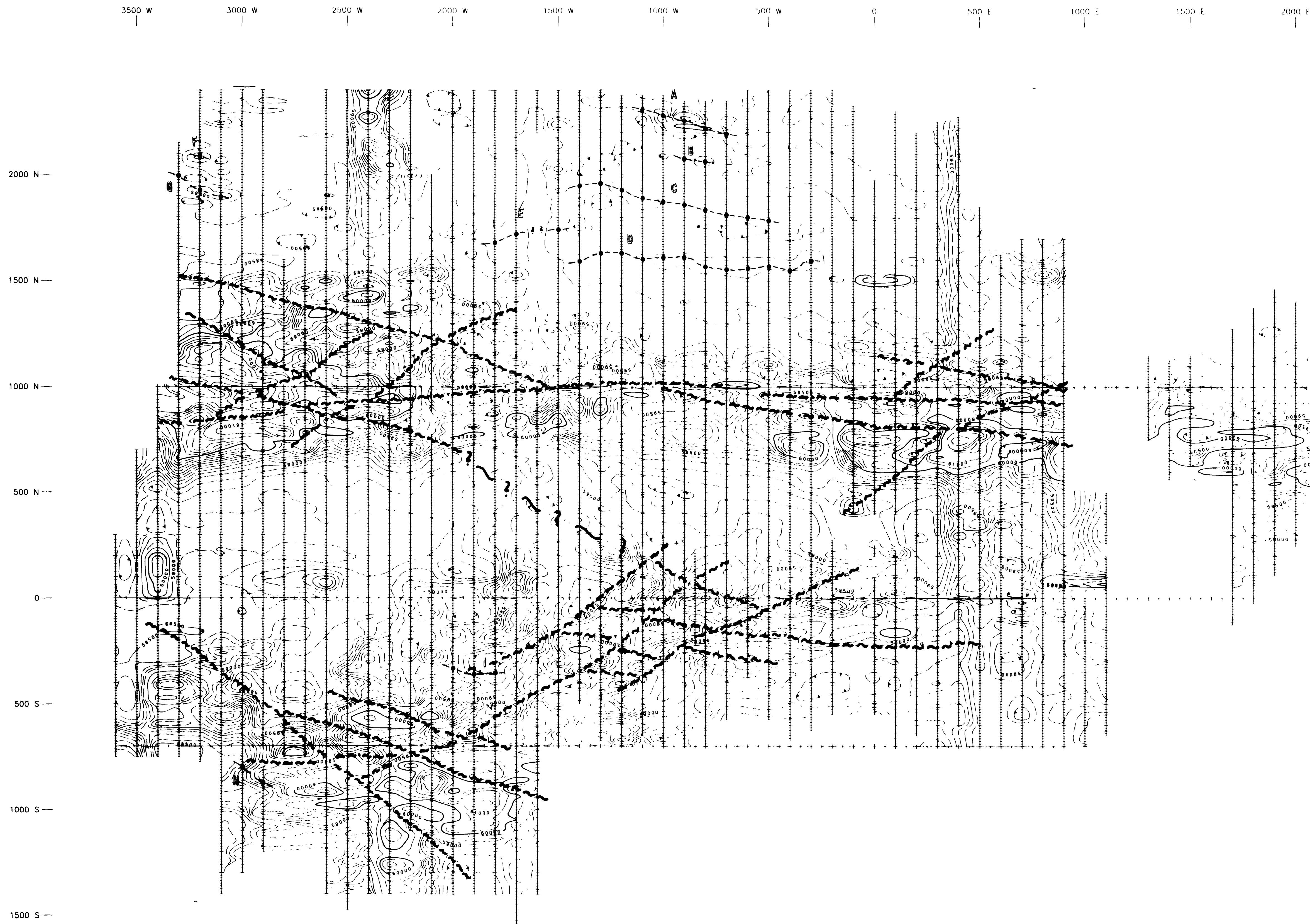


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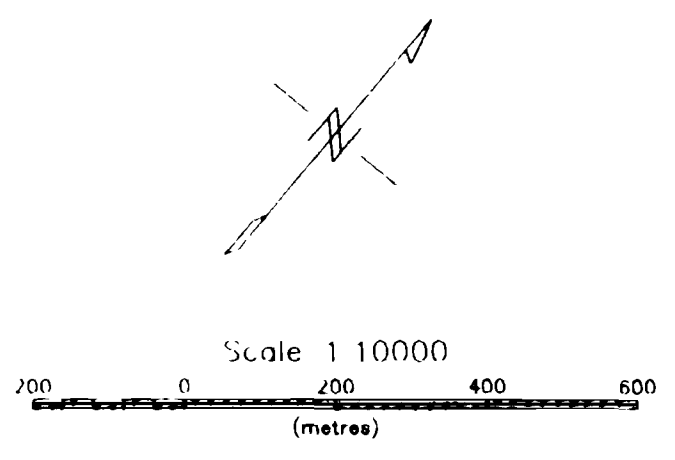
MAP #14

M. 3370  
G-0823



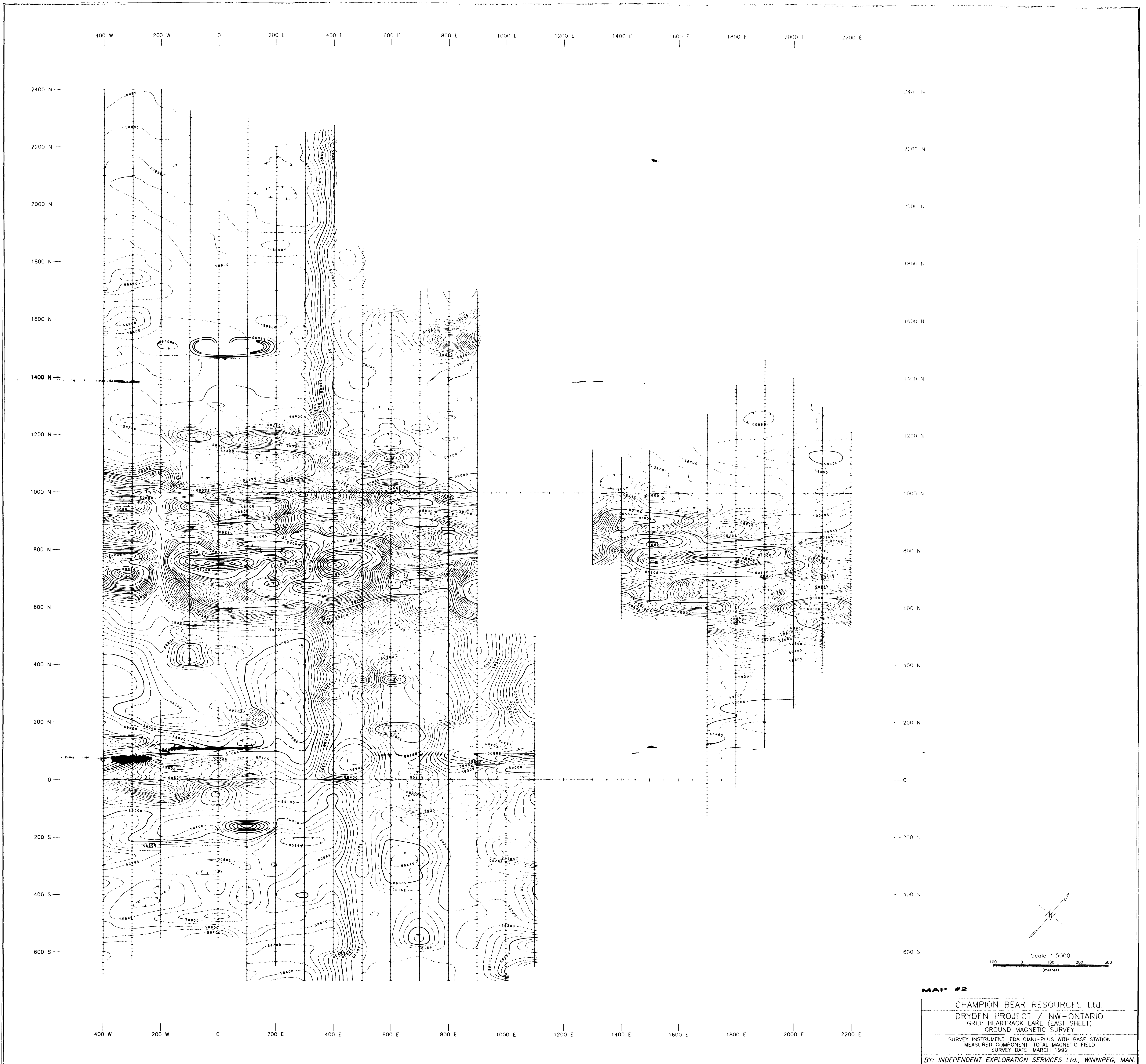


VLF-EM CONDUCTORS: A —●—  
 FAULT & SHEAR ZONES ~~~~~



**MAP #1**  
 CHAMPION BEAR RESOURCES Ltd.  
 DRYDEN PROJECT / NW-ONTARIO  
 GRID BEARTRACK LAKE  
 GROUND MAGNETIC SURVEY  
 SURVEY INSTRUMENT: EDA OMNI-PLUS WITH BASE STATION  
 MEASURED COMPONENT: TOTAL MAGNETIC FIELD  
 SURVEY DATE: MARCH 1992  
 BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.





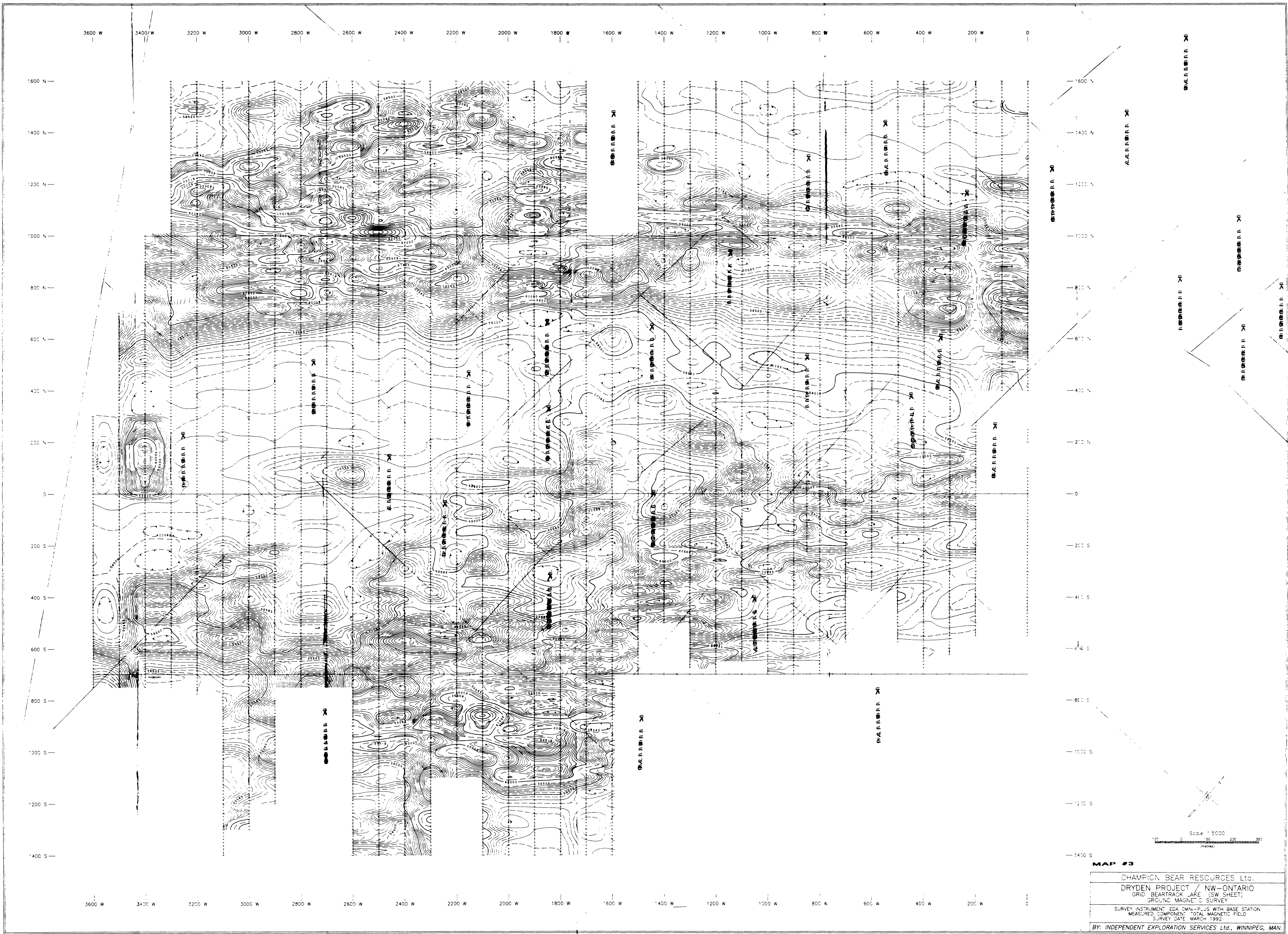
**MAP #2**

CHAMPION BEAR RESOURCES Ltd.  
 DRYDEN PROJECT / NW-ONTARIO  
 GRID: BEARTRACK LAKE (EAST SHEET)  
 GROUND MAGNETIC SURVEY

SURVEY INSTRUMENT: EDA OMNI-PLUS WITH BASE STATION  
 MEASURED COMPONENT: TOTAL MAGNETIC FIELD  
 SURVEY DATE: MARCH 1992

BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.



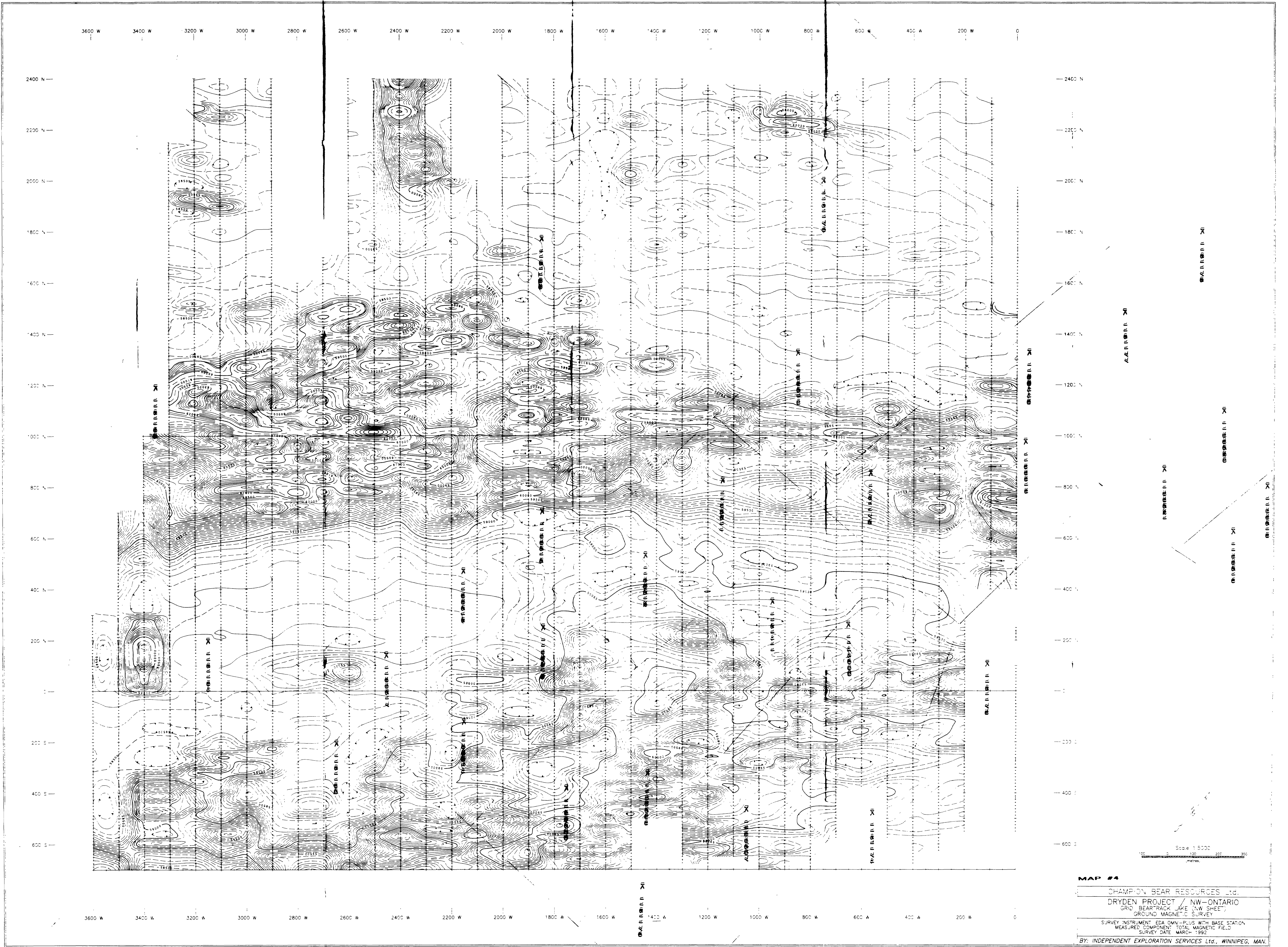


MAP #3

CHAMPION BEAR RESOURCES Ltd.  
 DRYDEN PROJECT / NW-ONTARIO  
 GRID BEARTRACK LAKE (SW SHEET)  
 GROUND MAGNETIC SURVEY

SURVEY INSTRUMENT: EDA OMNI-PUS WITH BASE STATION  
 MEASURED COMPONENT: TOTAL MAGNETIC FIELD  
 SURVEY DATE: MARCH 1992

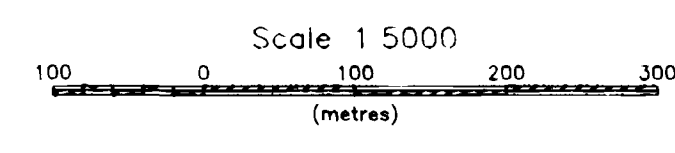
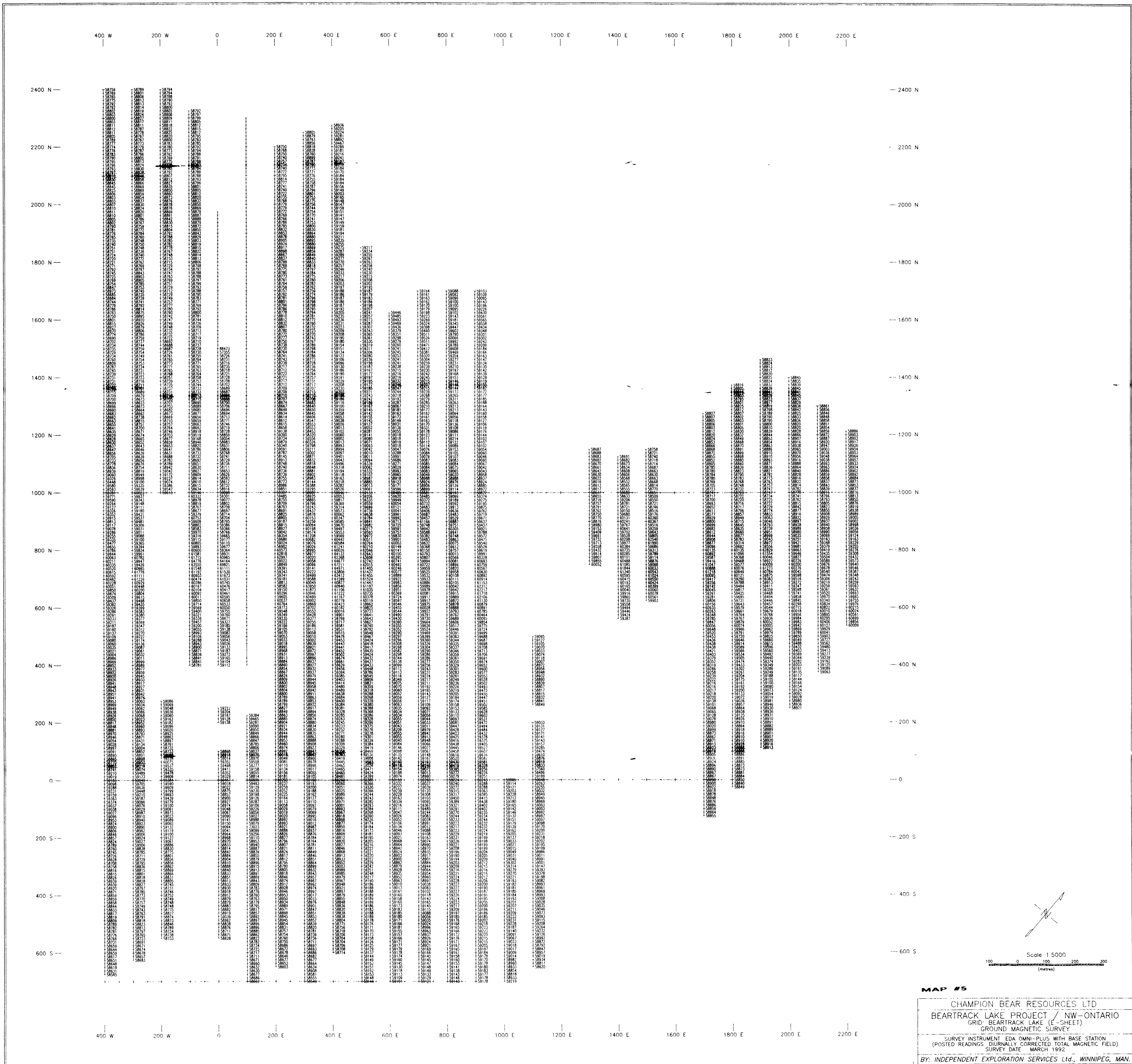
BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.



Scale 1:5000  
 0 100 200 300  
 metres

**MAP #4**  
 CHAMPION BEAR RESOURCES Ltd.  
 DRYDEN PROJECT / NW-ONTARIO  
 GRID BEAR-TRACK LAKE (N.W. SHEET)  
 GROUND MAGNETIC SURVEY  
 SURVEY INSTRUMENT: EDA OMNIPOLUS WITH BASE STATION  
 MEASURED COMPONENT: TOTAL MAGNETIC FIELD  
 SURVEY DATE: MARCH 1992  
 BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.



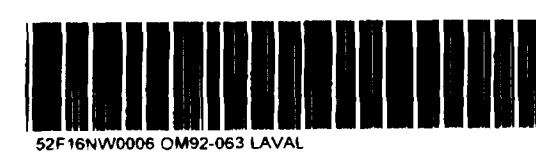
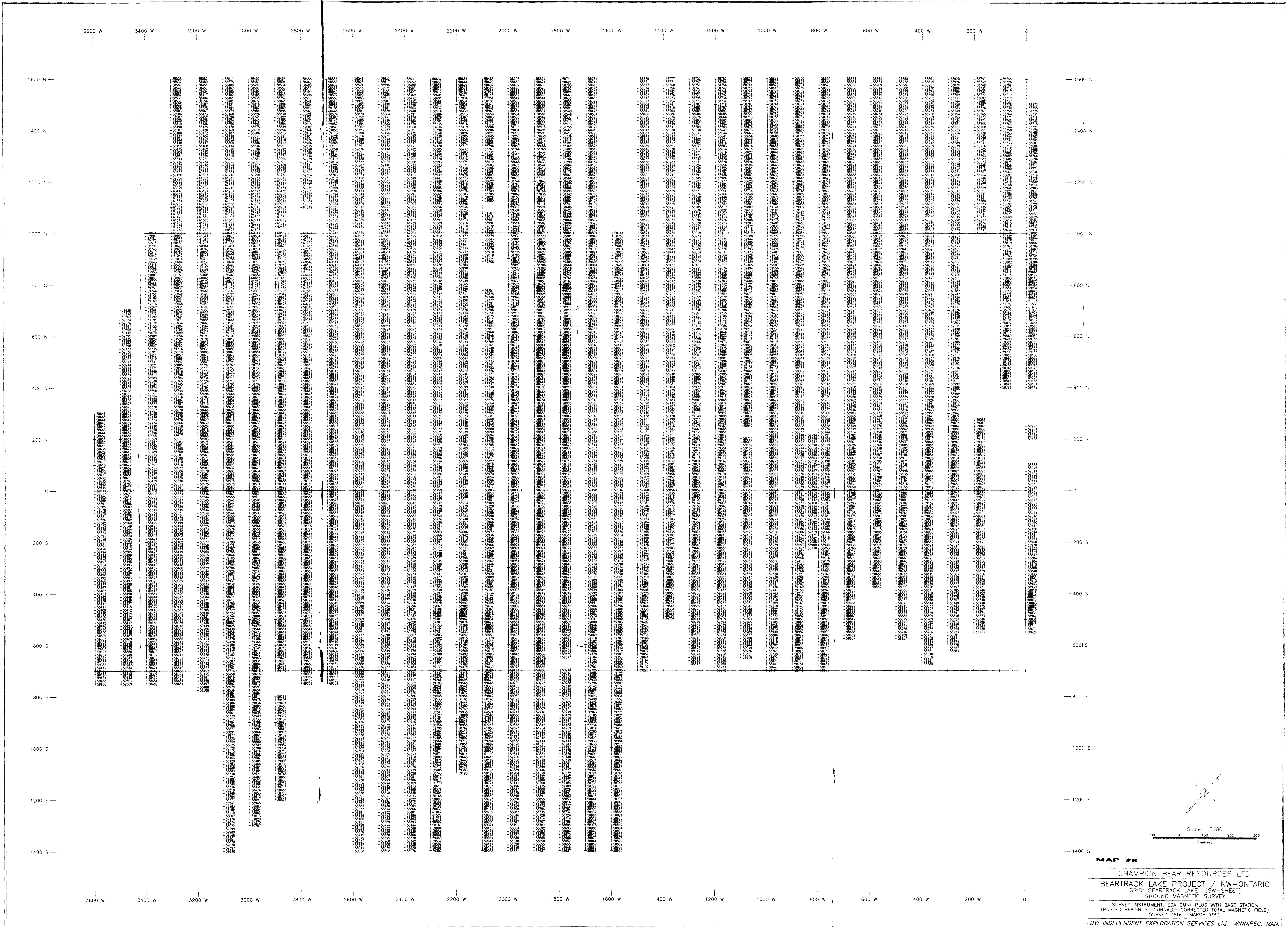


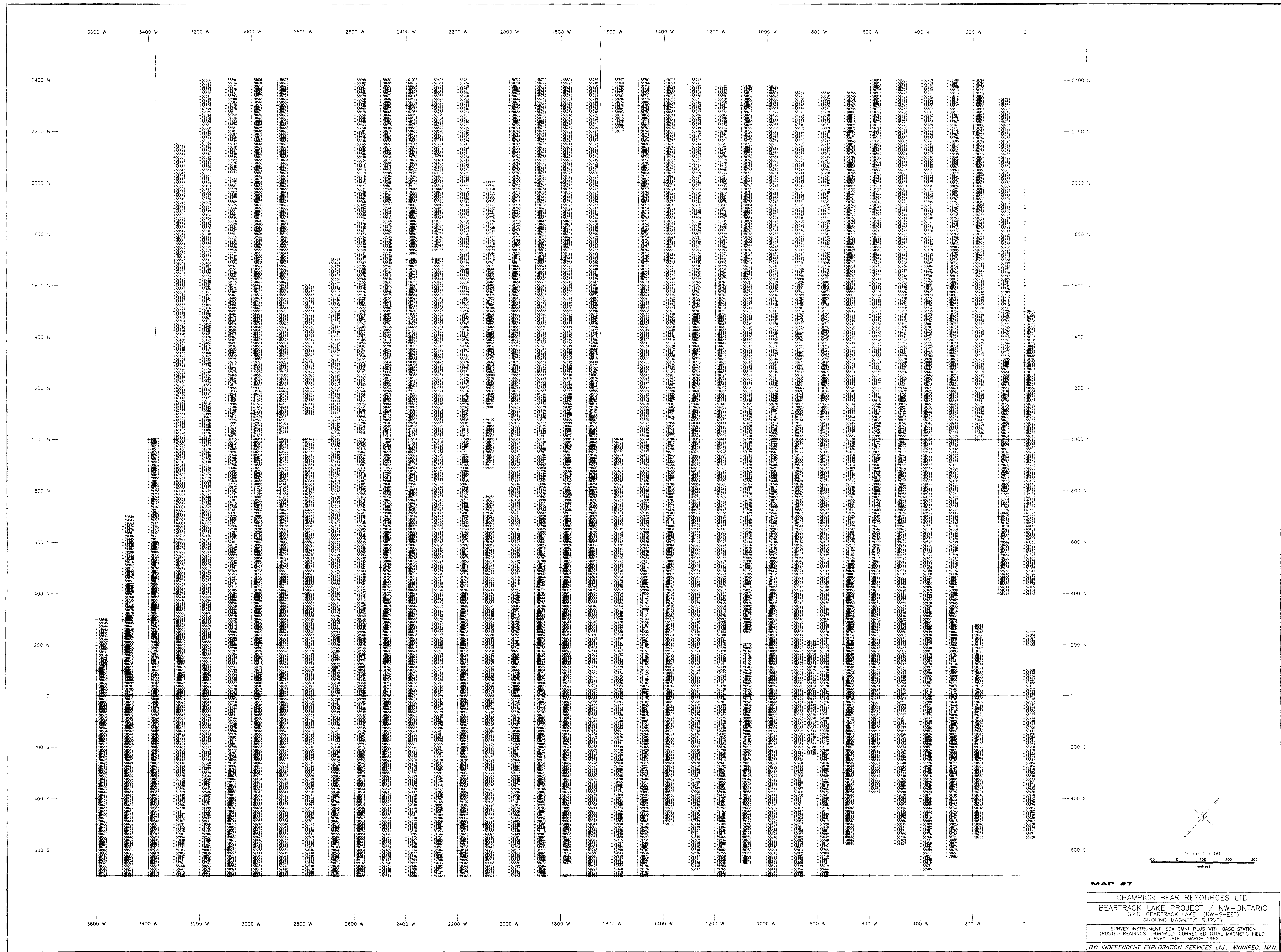
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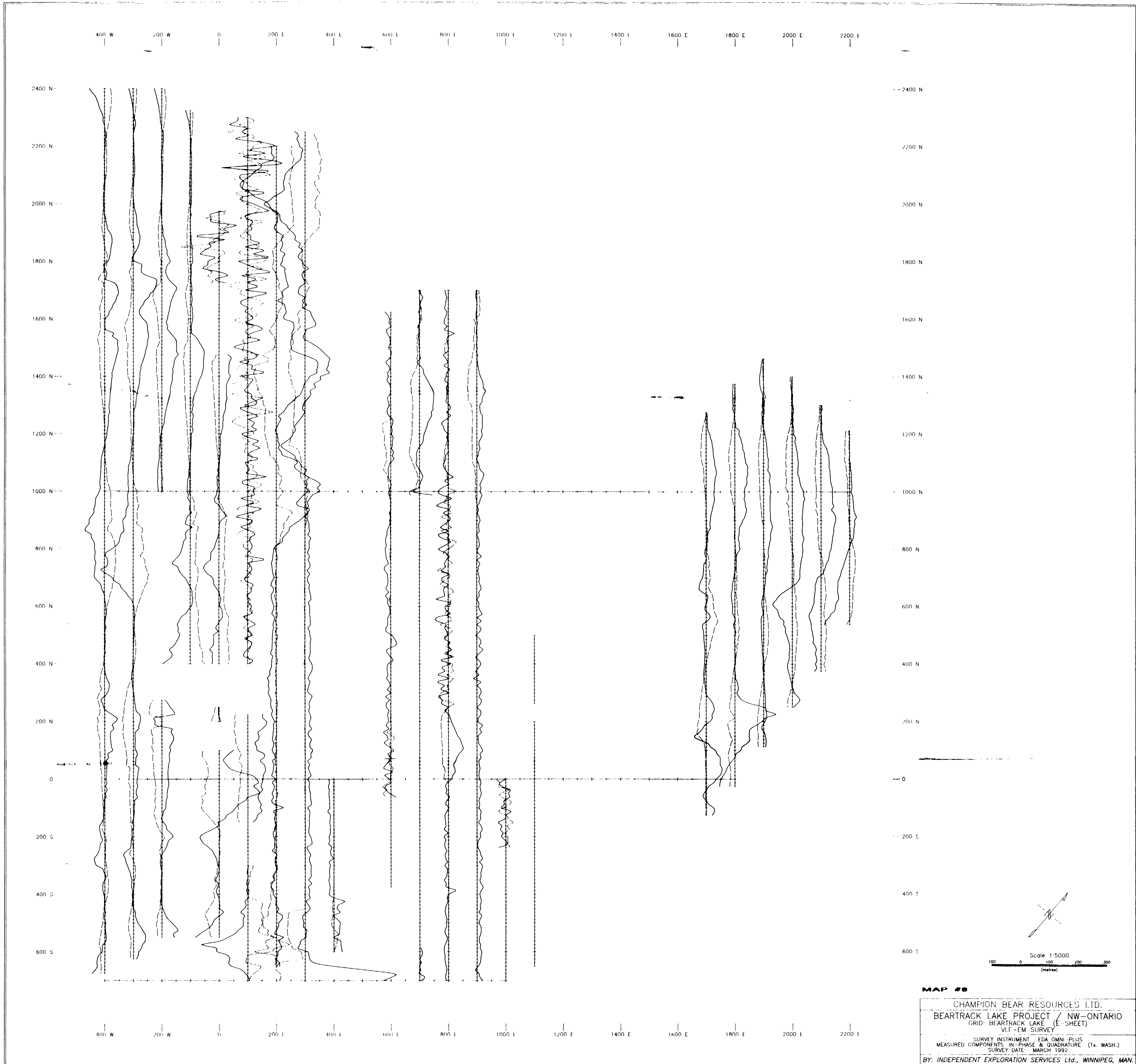
CHAMPION BEAR RESOURCES LTD  
 BEARTRACK LAKE PROJECT / NW-ONTARIO  
 GRID - BEARTRACK LAKE (E-SHEET)  
 GROUND MAGNETIC SURVEY

SURVEY INSTRUMENT: EDA OMNI-PLUS WITH BASE STATION  
 (POSTED READINGS - DIURNALLY CORRECTED TOTAL MAGNETIC FIELD)  
 SURVEY DATE: MARCH 1992

BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.







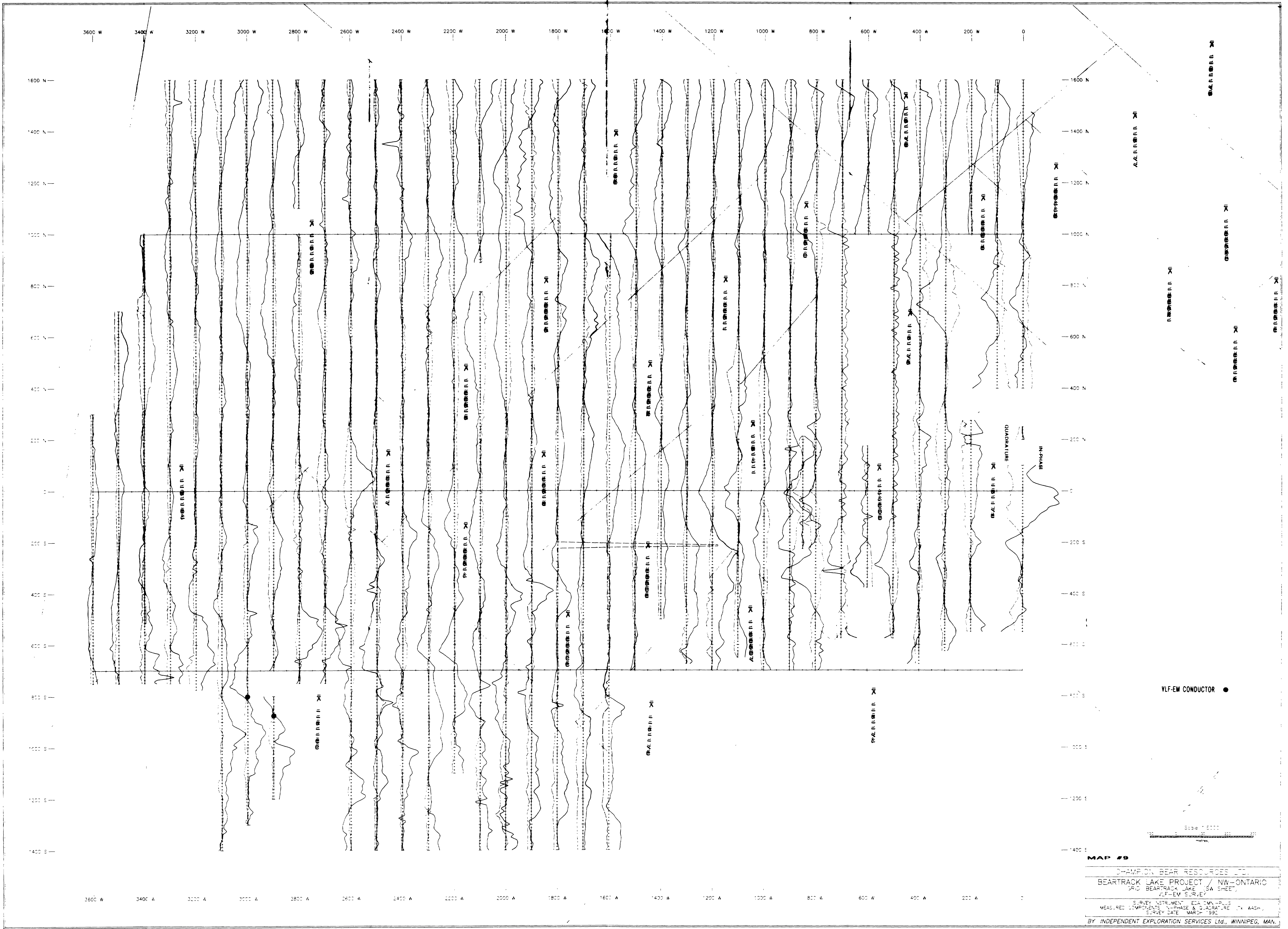
**MAP #8**

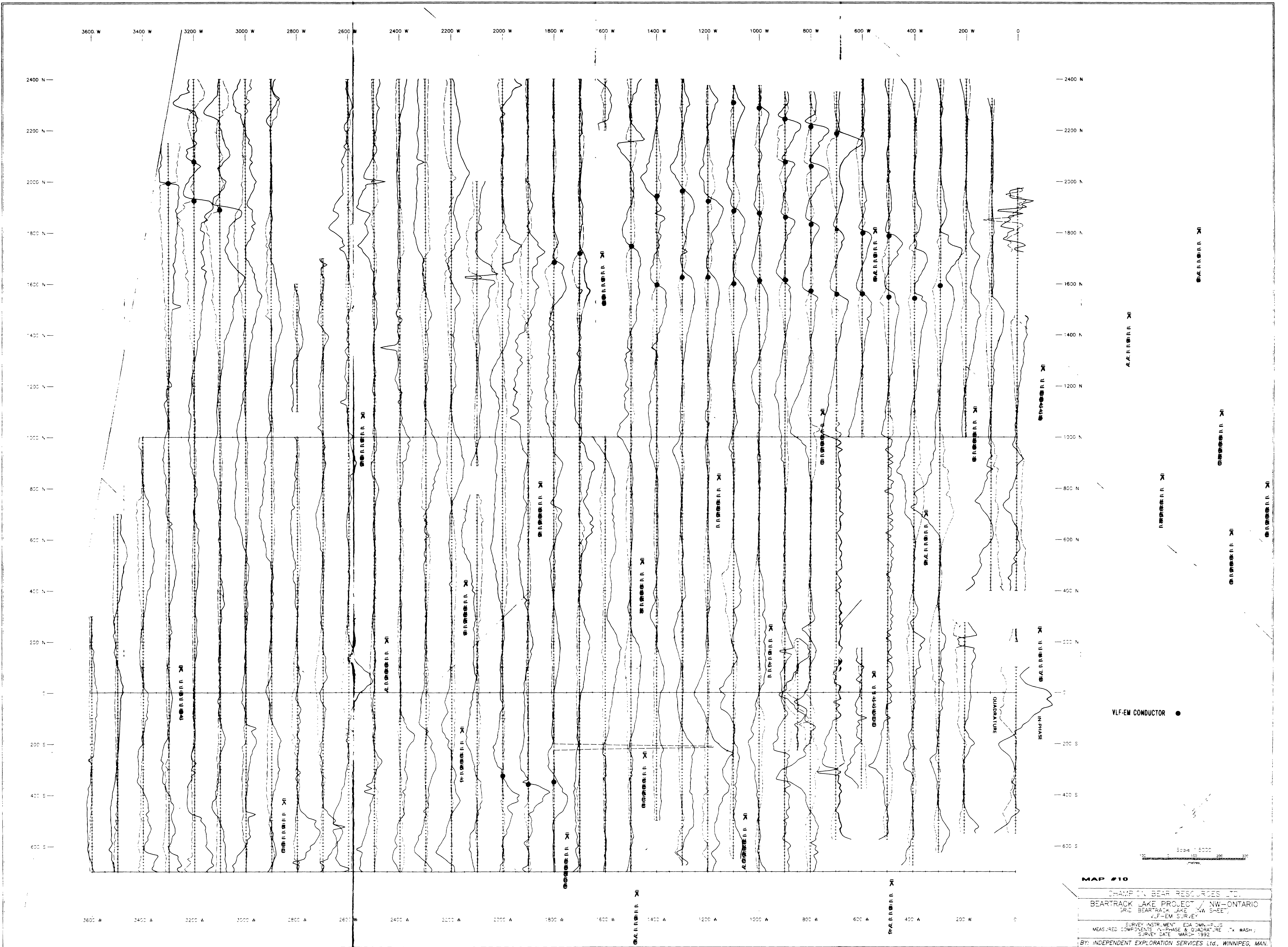
CHAMPION BEAR RESOURCES LTD.  
 BEARTRACK LAKE PROJECT / NW-ONTARIO  
 GRID: BEARTRACK LAKE (E-SHEET)  
 VLF-EM SURVEY

SURVEY INSTRUMENT: EDA OMNI-PLUS  
 MEASURED COMPONENTS: IN-PHASE & QUADRATURE (Tx. WASH.)  
 SURVEY DATE: MARCH 1992

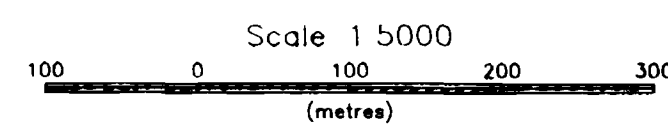
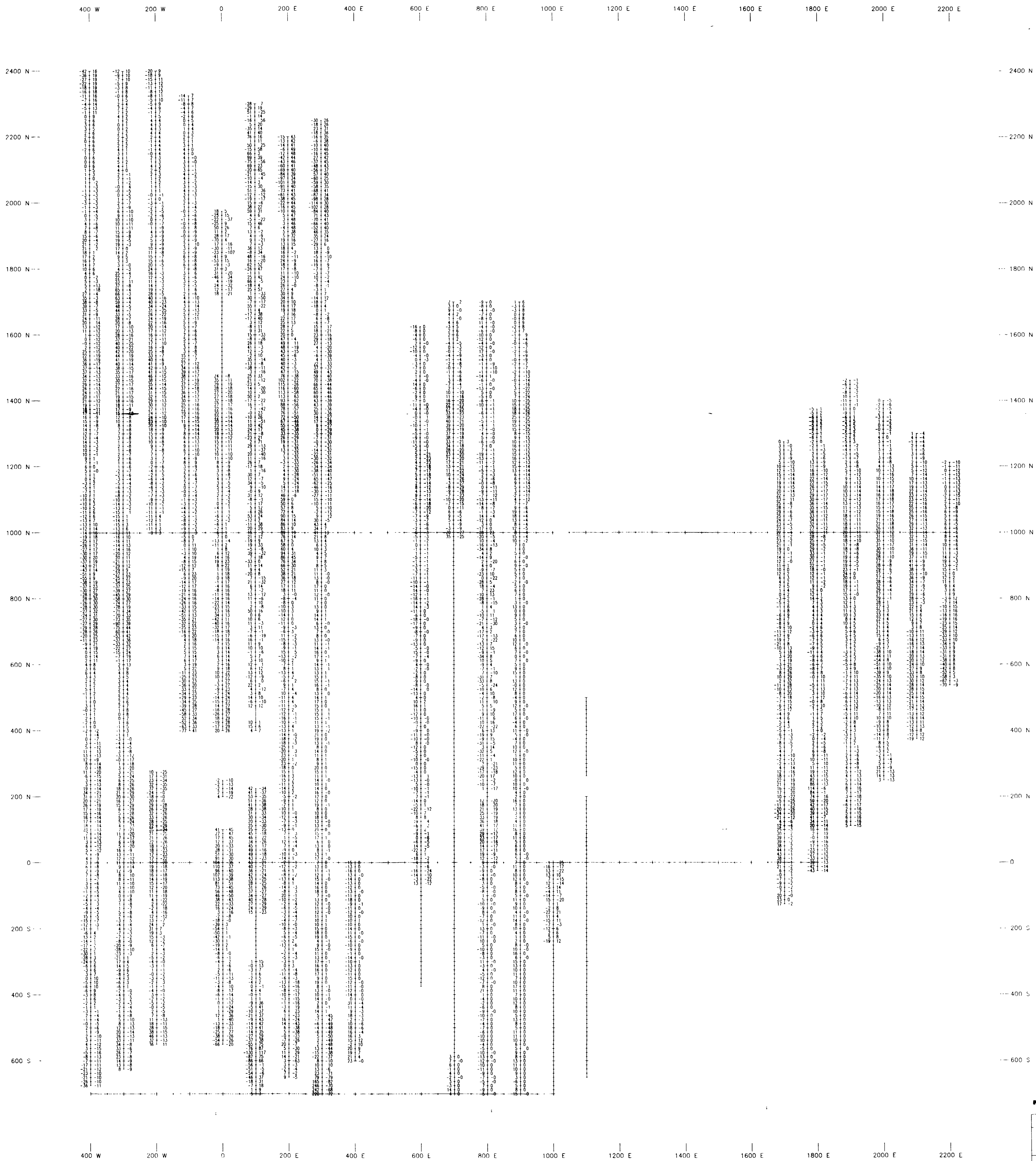
BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.







MAP #10  
 CHAMPION BEAR RESOURCES LTD.  
 BEARTRACK LAKE PROJECT / NW-ONTARIO  
 ORC BEARTRACK LAKE (NW SHEET)  
 VLF-EM SURVEY  
 SURVEY INSTRUMENT: EDA-DMA-PLUS  
 MEASURED COMPONENTS: IN-PHASE & QUADRATURE  
 SURVEY DATE: MARCH 1992  
 BY: INDEPENDENT EXPLORATION SERVICES LTD., WINNIPEG, MAN.



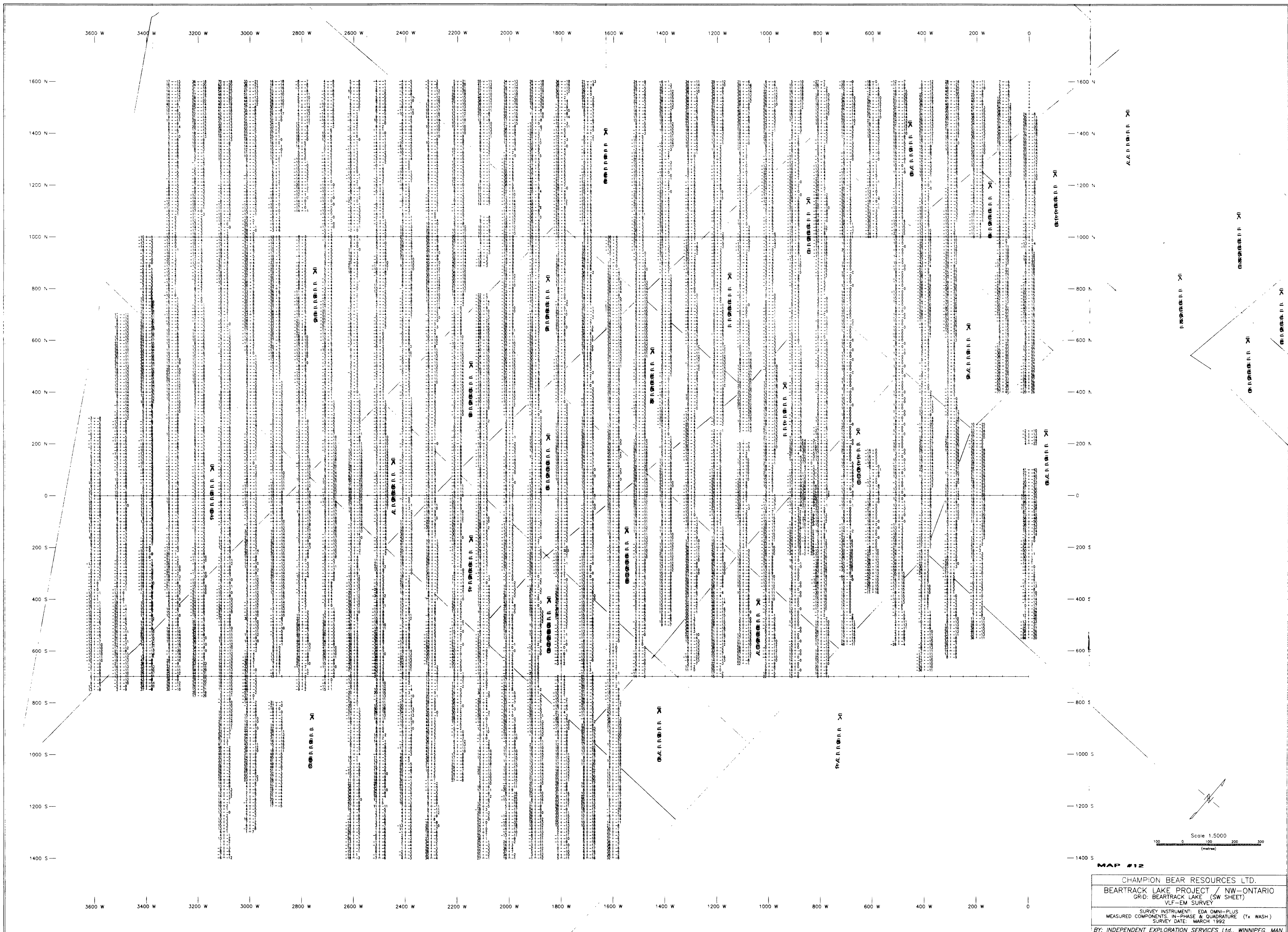
MAP #11

CHAMPION BEAR RESOURCES LTD.  
BEARTRACK LAKE PROJECT / NW-ONTARIO  
GRID: BEARTRACK LAKE (E-SHEET)  
VLF-EM SURVEY

SURVEY INSTRUMENT: EDA OMNI-PLUS  
MEASURED COMPONENTS IN-PHASE & QUADRATURE (Tx: WASH.)  
SURVEY DATE: MARCH 1992

BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.





Scale 1:5000  
 0 100 200 300  
 (metres)

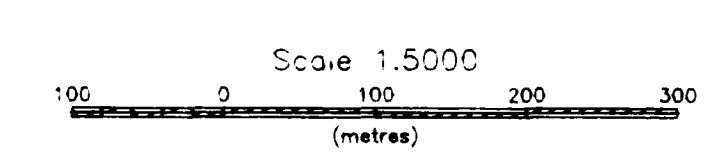
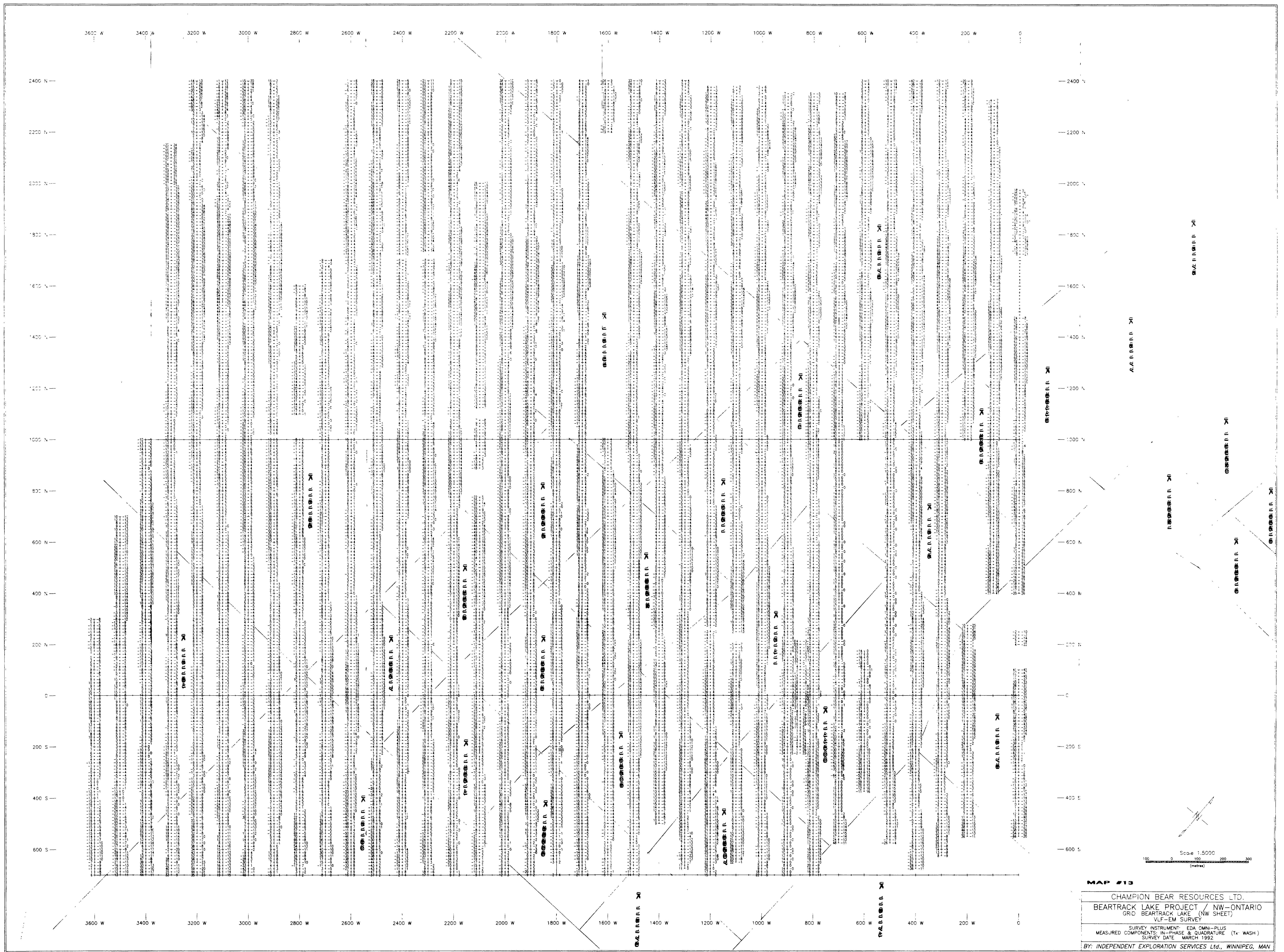
MAP #12

CHAMPION BEAR RESOURCES LTD.  
 BEARTRACK LAKE PROJECT / NW-ONTARIO  
 GRID: BEARTRACK LAKE (SW SHEET)  
 VLF-EM SURVEY

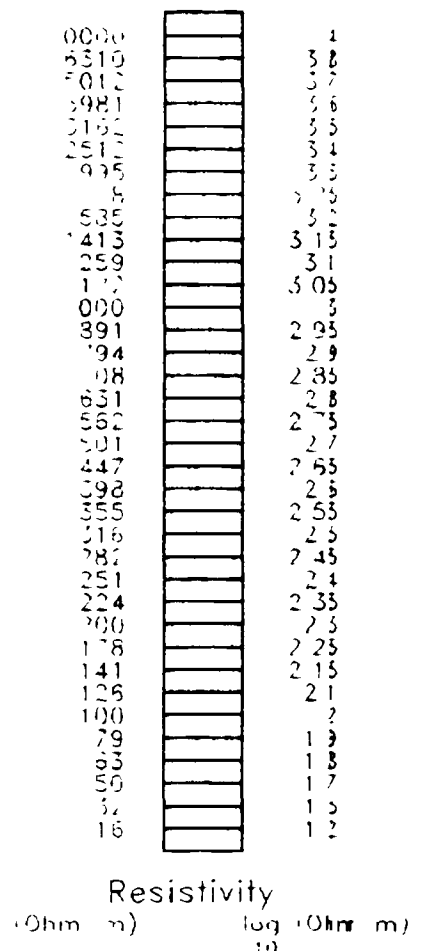
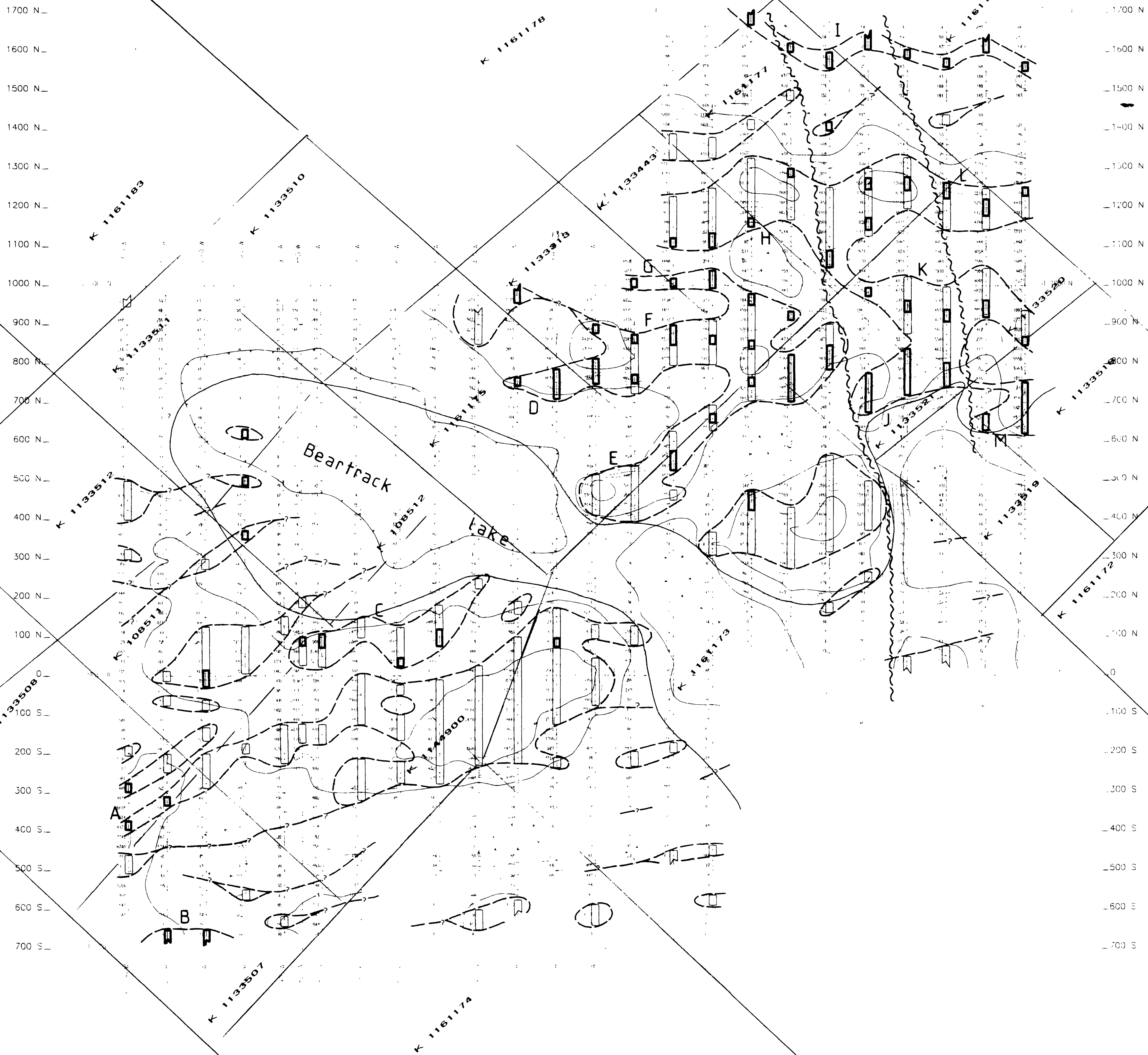
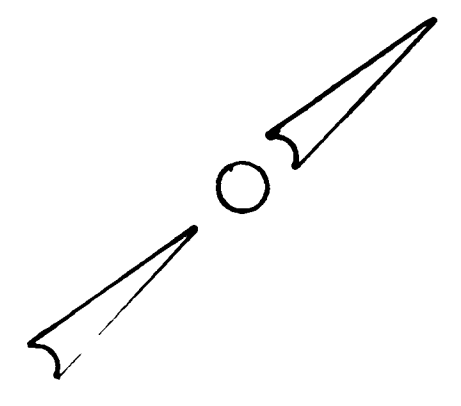
SURVEY INSTRUMENT: EDA OMNI-PLUS  
 MEASURED COMPONENTS: N-PHASE & QUADRATURE (Tx WASH)  
 SURVEY DATE: MARCH 1992

BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN.



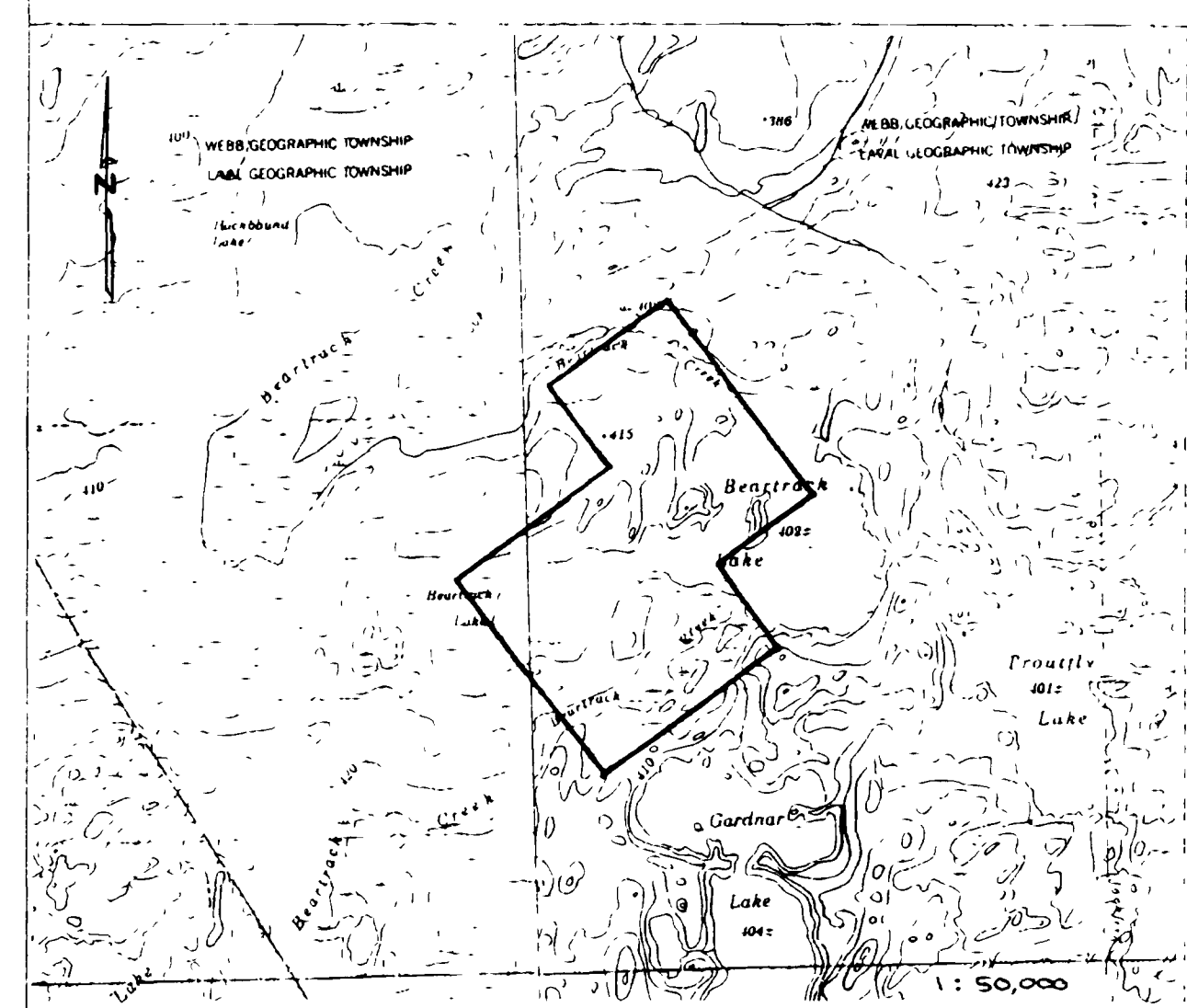


**MAP #13**  
 CHAMPION BEAR RESOURCES LTD.  
 BEARTRACK LAKE PROJECT / NW-ONTARIO  
 GRID BEARTRACK LAKE (NW SHEET)  
 VLF-EM SURVEY  
 SURVEY INSTRUMENT: EDA OMNI-PLUS  
 MEASURED COMPONENTS: IN-PHASE & QUADRATURE (Tx WASH)  
 SURVEY DATE: MARCH 1992  
 BY: INDEPENDENT EXPLORATION SERVICES Ltd., WINNIPEG, MAN



- LEGEND**
- INTERPRETATION**
- Unit of higher polarization associated with a relative decrease in the apparent resistivity. Well connected, conductive metallic minerals. Strongly defined in a strongly sheared structure.
  - Unit of higher polarization with little or no associated decrease of the apparent resistivity. Stringer or disseminated, poorly conductive metallic minerals. Massive magnetite. Massive minerals.
  - Weak or poorly defined polarizability anomaly with no apparent signature of resistivity. Thin, discontinuous veins of metallic minerals. Magnetite clay or micaceous minerals.
  - ▲ High resistivity feature. Bedrock ridge, flume, xenolith. High resistivity unit.
  - ▼ Low resistivity feature. Bedrock valley. Thicker permafrost. Low resistivity unit. Possible tectonic or structural causes.

- GENERAL**
- Interpreted shear zone
  - Interpreted fault
- CONTOUR INTERVAL (Ohm-metre)**
- Essential contours
- |     |    |     |      |    |
|-----|----|-----|------|----|
| 3.2 | 10 | 16  | 25   | 40 |
| 1.0 | 10 | 100 | 1000 |    |
- Electrode array: Dipole-dipole  
 1 = 25 m, n = 1, 2, 3, 4, 6, 6  
 Instruments: BPCM IP-6, Phoenix IP-7
- Filter calculation**
- |     |                         |       |       |
|-----|-------------------------|-------|-------|
| 35" | Map reading (Ohm-metre) |       |       |
| 380 | n = 1                   |       |       |
| 270 | 162                     | n = 2 |       |
| 152 | 338                     | 562   | n = 3 |



**CHAMPION BEAR RESOURCES LTD**  
**BEARTRACK LAKE PROJECT**

**INDUCED POLARIZATION SURVEY**  
 RESISTIVITY CONTOURS (FILTER)

VAL D'OR GEOPHYSIQUE LTEE

Interpreted by: P. Lortie, ing. Date: 2/1992

Scale: 1 : 5000 Drawing no. 92-785-4.2