GEOPHYSICAL REPORT

on the

Hoblitzell Township Property

for

BEAVERHEAD RESOURCES LTD.

RECEIVED

AUG - 1 1986

MINING LANDS SECTION

by

Greg Hodges
Geophysicist

Robert S. Middleton Exploration Services Inc.
P.O. Box 1637 Timmins, Ontario P4N 7W8

July 25, 1986

Page

LIST OF FIGURES

IN BACK POCKET

INTRODUCTION

A program of Linecutting, Magnetometer Survey, and Horizontal Loop Electromagnetic surveying was carried out on the Hoblitzell Township property for Beaverhead Resources Ltd. The work was done by R. S. Middleton Exploration Services Inc., between March 31 to May 23, 1986.

An early break-up necessitated applying for an extension on some of the claims and the work was completed in May, 1986.

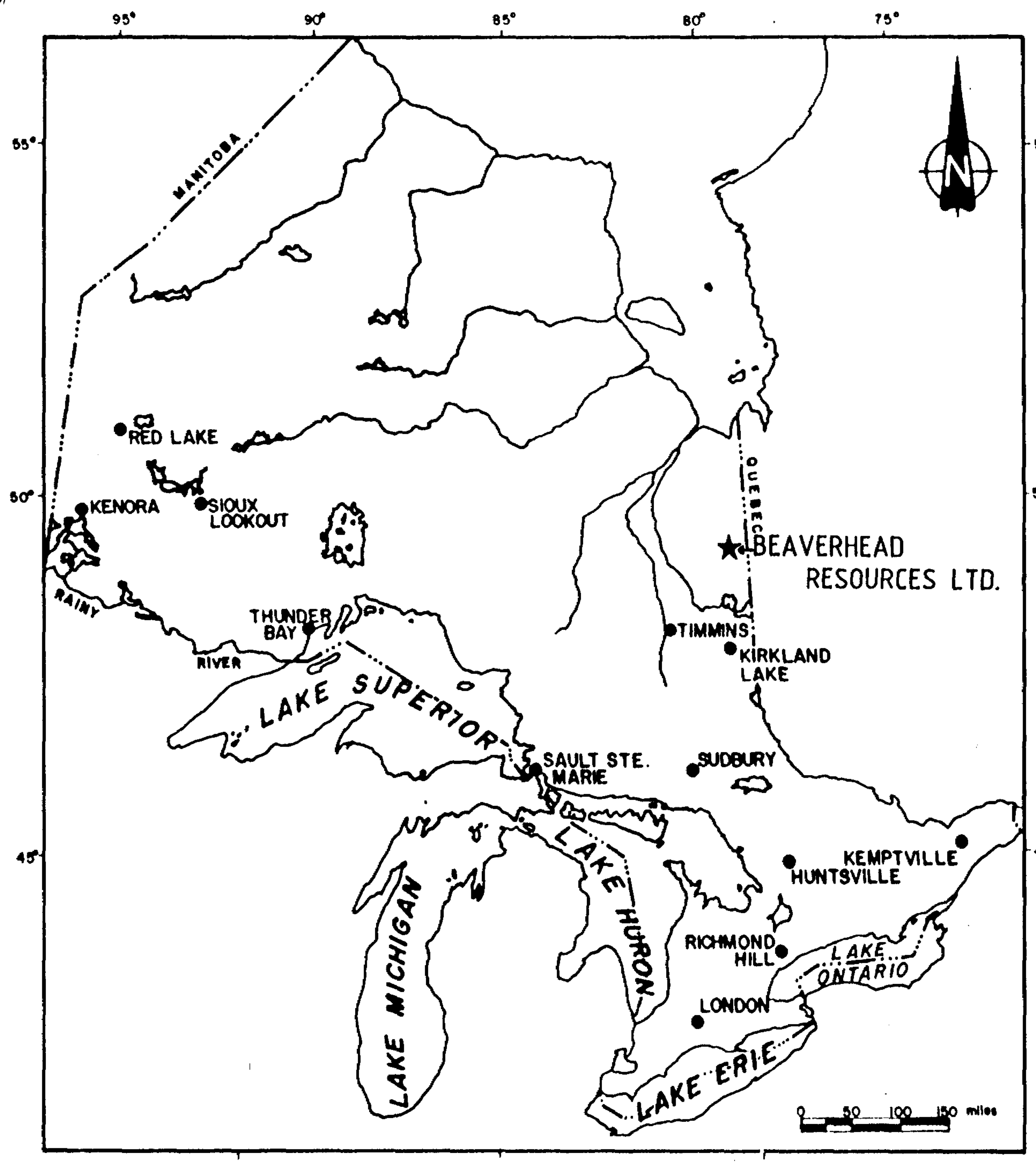
The purpose of the survey was to delineate known conductive and magnetic horizons which were suspected of underlying the claim group.

Location, Access and Facilities

The property is located in the southwest part of Hoblitzell Township, approximately 50 air miles northeast of Cochrane, Ontario (see Figure 1). Access to the property is via helicopter from Cochrane. There is a lake on the property but it is not suitable for fixed wing. In addition, the all weather Tomlinson road ends 5 miles east of the property.

Claim Status

The property consists of 24 unpatented mining claims in the Larder Lake Mining Division of Ontario (see Figure 2). The numbers are as follows:



PROVINCE OF ONTARIO

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.	
	for BEAVERHEAD RESOURCES LTD.	
	Title PROPERTY LOCATION MAP	Fig 1
Date JULY 86	Scale: 1" = 160mi	N.T.S.:
Drawn: P.G.	Approved:	File:

Claim Number	No.	Recording Date
848104-848121	18	April 19, 1985
848409-848414	6	June 19, 1985
	24	

Claims 848104-848121 are under extension until July 21, 1986. All the claims are held by Maurex Resources Ltd. in trust for Beaverhead Resources Inc.

Personnel

The following personnel were involved with the project between March 31 to May 23, 1986:

R. J. Meikle	Timmins, Ontario
Steve Anderson	Crystal Falls, Ontario
Lanny Anderson	Crystal Falls, Ontario
Fern Duquette	Crystal Falls, Ontario
Francois Bonhomme	Toronto, Ontario

Previous Work

In 1976, ground electromagnetic horizontal loop surveys were carried out by Hudson Bay Mining and Smelting on the present claims and several conductors were outlined that trend approximately 85°. These conductors have not been tested by drilling except for one on the northeast side of West Porphyry Lake. This hole was not assayed for gold. There is no other previous work on record for the property.

In 1982 - 1985 Newmont Exploration carried out an extensive overburden drilling, geophysical and diamond drill program 10 miles east of the property and have recently announced an important drill intersection of 4 gm/7.5m (N. Miner, April 18, 1985a) and 0.116 oz Au/25 feet with an 8 foot section assaying 0.27 oz Au, Northern Miner 1985b. This hole is on the same iron formation trend that extends west through the Hoblitzell, Blakelock and Tweed Township area (see Figure 3). Extensive staking has taken place west of the Newmont property by Esso Resources, which is tied on to the east side of the Beaverhead property (see claim map in back pocket). A block of 132 claims to the west of the Newmont Mikwam claim block in Hoblitzell Township have been optioned from Golden Shield by Newmont, Northern Miner 1985c. The Golden Shield claim group extends west to within a mile of the Beaverhead property and is surrounded by Esso claims on the south and west sides of the property.

GEOLOGY

The property is scheduled for geological mapping in the summer, 1986. The following is a description of the regional and property geology taken from a report on the property by Mr. Paul Bowen, P.Eng., dated December 1985.

Regional Geology

A series of iron formations hosted in sediments and felsic-mafic volcanics extend from the Casa Berardi area of Quebec into the Burntbush greenstone belt area in Ontario. The geology is illustrated on Ontario Department of Mines Map 2161.

These iron formations are closely related to the gold mineralization as shown by the new Casa Berardi discovery by Inco, (see Northern Miner 1984a, b and d) but upon detailed examination gold occurs within several rock types including oxide and sulphide iron formation, argillites, greywackes, conglomerate and felsic tuffs. Carbonate and silica alteration - veining with pyritization is directly associated with the gold values within the various rock types at the Inco discovery. Bedded stratabound pyrite zones within the oxide iron formation also contain important gold values. Recent assays released by Inco give gold grades and widths in widely spaced holes of 0.13/6.7 ft., 0.26/24.9 ft., 0.73/15.7 ft., 0.23/81.5 ft. (Northern Miner 1984b).

The aeromagnetic data as shown on the aeromagnetic map in the back pocket can be utilized to trace the iron formation markers, and zones where the magnetic gradient becomes less indicate areas of change from oxide (high magnetic gradient) to sulphide and or carbonate facies. In Noseworthy township a gold showing is reported to occur near the Burntbush River (Cyril Knight showing) which is situated along the same magnetic horizon that links the iron formation markers in Quebec with the area containing the property.

Approximately 3 miles east of the Cyril Knight discovery, a new discovery made in March, 1985 has been announced by Newmont

Exploration of Canada. This zone occurs, associated with sulphide-oxide-carbonate iron formation, on the south side of Noseworthy Lake and assays 0.116/25 ft. with a section grading 0.27 oz Au/8ft. (Northern Miner, June 20, 1985b). This discovery was the result of overburden drilling giving high gold values (up to 1.5 oz in heavy media concentrates in till samples) coupled with EM magnetic and I.P. surveys. The geophysical work pin pointed the diamond drill targets "up ice" from the overburden holes.

Overburden cover and general lack of outcrop in the region has prevented conventional gold prospecting and the principle exploration effort in the past 25 years has been base metal exploration using electromagnetic methods for outlining conductors. Gold analysis was not routinely done during these base metal programs, and as a result the gold potential for the area was not assessed nor was the geological setting appreciated until recent gold discoveries were made elsewhere along the belt.

Property Geology

The geology underlying the property consists of felsic, intermediate and mafic volcanic tuffs and flows which are intruded by local high level porphyry bodies. The south side of the property is underlain by a sedimentary unit containing an alteration zone with blue quartz eyes. Drilling in 1976 by Hudson Bay Exploration Development Company was directed at one conductor on the property with the purpose of base metal exploration. This type of setting is similar to that of the Agnico Eagle mine in Quebec, portions of the Inco Casa Berardi discovery and Hemlo in Ontario. Siliceous, blue quartz eye and sericite alteration occurs in the host rocks (seen by the writer on the north side of West Porphyry Lake) which act as guides to tracing out sulphide horizons that may contain concentrations of precious or base metals. In other words the areas with greatest alteration would likely occur near and adjacent to areas with metal concentrations.

Analysis of disseminated pyrite in a porphyritic unit in Noranda hole HK 75-2 which is situated 1/4 mile west of the Mikwam River (claim L 848 389), 3 miles west of the property, assayed 0.03 oz Au/3 feet showing that gold is present and is anomalous in this sulphide and porphyry (possibly porphyritic rhyolite) environment (logs on file at MNR, Kirkland Lake). Therefore further exploration for stratabound sulphide and porphyry gold deposits within this area is warranted.

Consideration should also be given to delineation of what is now being described as the "Casa Berardi Break". This break may prove to be of a similar order of magnitude as the Destor-Porcupine, Kirkland Lake-Larder Lake or Cadillic-Malartic Breaks. Heretofore syngenetic exhalative gold deposits similar to Agnico-Eagle have been the targets of gold exploration programs. This is largely because the depth of overburden and lack of outcrop prevented extended geological assessment of the area in order to develop exploration targets and most companies were desirous of finding large tonnage lower grade deposits that were amenable to bulk mining methods. It was much simpler to fly large areas with airborne geophysical surveys (primarily magnetic and electromagnetic), define conductors, use ground follow-up methods; vertical and horizontal loop electromagnetic, induced polarization/resistivity surveys and overburden drilling/heavy media separation analysis to discriminate and refine targets and finally diamond drill those targets. Considering what has been found from diamond drilling on several properties and from examining old diamond drill core, a model for the distribution for the gold mineralization based more along structural lines should perhaps be considered.

If one analyzes observations from the Inco-Golden Knight diamond drilling four types of mineralized rocks occur:

1) Gold in graphitic fault zones that have been brecciated and silicified and have numerous quartz veins.

2) Gold in the sulphide-rock portions of interbedded magnetic iron formation chert horizons, more specifically the "lean" iron formations or dirty iron formations with varying amounts of chloride within them.

3) Gold in chert of "lean" iron formations recrystallized chert and low sulphide content.

4) Gold in quartz veins:
   a) Gold in narrow high grade quartz veins 5-15 feet wide with sphalerite and visible gold, 10% pyrite

and arsenopyrite with the best grades with the coarse grained arsenopyrite.

b) Gold in 10 to 100 foot wide quartz veins or generally within 70 metres of these veins. The bulk of the tonnage developed to date comes from these zones. Highly carbonatized rocks occur to both sides of these structures.

SURVEY PROCEDURES

MAX-MIN II

Theory

The Max-Min II is a frequency domain, horizontal loop electromagnetic (HLEM) system, based on measuring the response of conductors to a transmitted, time varying electromagnetic field.

The transmitted, or primary EM field is a sinusoidally varying field at any of five different frequencies. This field induces an electromotive force, (emf), or voltage, in any conductor through which the field passes. This is defined by:

$$\oint E.dl = \frac{-\partial \phi}{\partial t} \quad \text{(the Faraday Induction Principle)}$$

where E is the electric field strength in volts/metre (and so $\oint E.dl$ is the emf around a closed loop) and ϕ is the magnetic flux through the conductor loop. This emf causes a "secondary" current to flow in the conductor in turn generating a secondary electromagnetic field.

This changing secondary field induces an emf in the receiver coil (by the Faraday law) at the same frequency, but which differs from the primary field in magnitude and phase. The difference in phase (the phase angle) is a function of the conductance of the conductor(s), both the target and the overburden and host rock. The magnitude of the secondary is also dependant on the conductance, and also on the dimensions, depth, and geometry of the target, as well as on the interference from overburden and the host rock.

These two parameters (phase angle and magnitude) are measured by measuring the strength of the secondary field in two components: the real field or that part "in-phase" with the primary field; and the imaginary field, or that part in "quadrature" or 90° out of phase from the primary field.

The magnitude and phase angle of the response is also a function of the frequency of the primary field. A higher frequency field generates a stronger response to weaker conductors, but a lower frequency tends to pass through weak conductors and penetrate to a greater depth. The lower frequency also tends to energise the full thickness of a conductor, and gives a better measure of its true conductivity-thickness product (conductance).

For these reasons two or more frequencies are usually used; the lower for penetration and accurate measure of good conductors, and the higher frequency for strong response to weak conductors.

Distinction between conductive targets, overburden, and host rock responses are made by studying the shape of the secondary field, and the difference in the frequency responses.

The transmitted primary field also creates an emf in the receiver coil, which is much stronger than the secondary, and which must be corrected for by the receiver. This is done by electronically creating an emf in the receiver, whose magnitude is determined by the distance from receiver to transmitter as set on the receiver, and whose phase is derived from the receiver via an interconnecting wire.

Field Method

The Max-Min II survey was carried out in the "maximum coupled" mode (horizontal co-planar). The transmitter and receiver are carried in-line down the survey line separated by a constant distance (in this case 150 m) with the receiver leading. Two transmitter frequencies were used: 444 Hz and 1777 Hz. The transmitter and receiver are connected by a cable, for phase reference and operator communication.

MAGNETICS

Theory

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally ocurring magnetic field caused by changes in the magnetization of the rocks in the earth.

These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals.

Magnetic anomalies in the earth's field are caused by changes in two types of magnetization: induced and remanent (permanent). Induced magnetization is caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals.

Remanent magnetism is independant of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc.) in the rock. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same direction as the present earth's field, due to changes in the orientation of the rock or the field.

The most common method of measuring the total magnetic field in ground exploration is with a proton precession magnetometer. This device measures the effect of the magnetic field on the magnetic dipole of hydrogen protons. This dipole is caused by the "spin" of the proton, and in a magnetometer these dipoles in a sample of hydrogen-rich fluid are oriented parallel to a magnetic field applied by an electric coil surrounding the sample. After this magnetic field is removed, the dipoles begin to precess (wobble) around their orientation under the influence of the ambient earth's magnetic field. The frequency of this precession is proportional to the earth's magnetic field intensity.

Field Method

The magnetics data were collected with a proton precession magnetometer, which measures the absolute value of the total magnetic field of the earth to an accuracy of $\pm$ 1 n Tesla. The magnetometer is carried down the survey line by a single operator, with the sensor mounted on a short pole to remove it from the surface geologic noise. Readings are normally taken at 25 m intervals, and at 12.5 m intervals where the operator observes a high gradient (anomaly).

The readings are corrected for changes in the earth's total field (diurnal drift) by repeating readings at base stations and "tie points" several times each day.

INTERPRETATION

The major feature visible on the grid is a strong magnetic response running northeast from 14W, 8+75 across the grid. This anomaly (Anomaly A) is continuous to line 1W at 2+75S. A weaker branch continues from 2W, 4+25S to 2E, 3+50S.

An apparent continuation of the same zone occurs at line 5E from 100m baseline to 100m south to 100m north. Another strong anomaly occurs at 2+00N on L4E to 3+50N on L9E.

North of Anomaly A there are numerous minor magnetic anomalies, reasonably strong, but mostly of limited extent.

South of Anomaly A the magnetics are exceptionally quiet, and the change is very abrupt. The dashed line on the magnetics map sheet (in the back pocket) indicates this contact between the iron formation and the nonmagnetized unit to the south.

A portion of the contact coincides with an electromagnetic anomaly on lines 2W, 1W, 0 and 1E, as shown on the Max Min (1777 Hz) map sheet as Anomaly B. This anomaly is very weakly conductive, and may only be a bedrock trough. Futher detailed work would be necessary to resolve this.

The largest electromagnetic anomaly, C, trends northeast from L16W, 7+00S to 8W, 4+00S. At the eastern end the conductor is quite strong, with a conductivity thickness as high as 21 Siemens. It ends very abruptly on line 8W, at the point of highest conductivity thickness. There is no evidence of a fault or other offsetting feature at this point.

There is another EM anomaly (Anomaly D) trending northwest from 2+25S on L9W to about 0+50S on 16W. The conductivity thickness of this anomaly is less than that of Anomaly C, approximately 5 - 6 Siemens.

Another weak EM anomaly, E, is from 1+75S on 6E off of the north edge at 9E.

There are a few isolated moderate conductors on some of the western lines at the extreme north edge. They are too close to the claim boundary to be detailed except by extending the survey north of the property.

CONCLUSIONS AND RECOMMENDATIONS

The major feature on the grid is north-east trending iron formation detected by the magnetics, flanked by several EM conductors. The appearance of the anomalies is that of a west plunging, synclinal fold.

EM anomalies C and D may be from the same zone, folded back.

There is a definite lithologic contact suggesting that south of a line under Anomaly B is less magnetic rock, probably metasediments.

It is recommended that Phase II of the exploration program recommended by R. P. Bowen be started, and the geological mapping of the grid, part of Phase I, be completed.

There is outcrop indicated on the southeast shore of West Porphyry Lake (Ontario Geological Survey map 2410, Twopeak Lake), and pilots report rock outcrops in the lake (a boat may be useful for mapping).

Induced polarization/resistivity surveying has proven useful in the past in the delineation of sub-overburden lithology, and is recommended for this grid. A series of lines at approximately 200 m intervals would be best, with concentration on the major EM and magnetic anomalies.

The geologic survey should start as soon as possible, to be completed before the first snow falls. Closely following the I.P. and geologic surveys, a program of overburden drilling should be started, planned to drill "down ice" of the major anomalies.

From the data collected, the overburden depths vary considerably, from 12 to 40 m. An overburden program of 12 holes would require a total of at least 300 m of drilling. More drilling may be recommended from the geologic mapping.

Diamond drilling would best wait for the results of the geologic mapping and overburden drilling, but the most likely targets for drilling now defined would be the strong iron formation (Anomaly A) and EM Anomaly C. The drill hole for Anomaly A could also investigate the lithologic contact, and if it proves interesting another hole drilled at Anomaly B.

A recommended budget would be:

BUDGET

COMPLETION OF PHASE I		
Geological Mapping		
- 35 km @ $320/km	$ 11,200.00	
TOTAL PHASE I		$ 11,200.00
PHASE II		
Induced Polarisation Survey		
- 10 days @ $1,300/day	$ 13,000.00	
Travel & Subsistence	2,000.00	
Preliminary Overburden Drilling		
- 1,000 feet @ $20/ft	20,000.00	
Drill Mobilization	6,000.00	
Assaying	2,000.00	
Drill Supervision	3,000.00	
Sample processing, plotting and report	4,000.00	
TOTAL PHASE II		50,000.00
PHASE III (Contingent on results of Phases I and II)		
Diamond drilling		
- 2,000 feet @ $30/ft	$ 60,000.00	
Assaying, reports, core splitting	6,000.00	
Supervision, subsistence and transportation	4,000.00	
TOTAL PHASE III		70,000.00
TOTAL PHASES I, II AND III		$131,200.00

Respectfully submitted,

Greg Hodges

D. Greg Hodges
Geophysicist

CERTIFICATION

I, D. Greg Hodges, of 136 Cedar Street South, in the city of Timmins, Province of Ontario, certify as follows concerning my report on the Heaverhead Resources Ltd. property in Hoblitzell Township, Province of Ontario and dated July 25th, 1986:

1. I am a member in good standing of the Society of Exploration Geophysicists

2. I am a graduate of Queen's University at Kingston, Ontario, with a B.Sc. (Hons.) Geological Sciences with Physics, obtained in 1980.

3. I have been practising in Canada, and occassionally in the United States, Europe, and Australia for the past six years.

4. I have no direct interest in the properties, leases, or securities of Beaverhead Resources Ltd., nor do I expect to receive any.

5. The attached report is a product of:

   a) Examination of data included in the report which was collected on the property concerned.

Dated this July 25th, 1986
Timmins, Ontario

Greg Hodges

D. Greg Hodges, Geophysicist

42H09SE0010 2.9296 HOBLITZELL

900

Mining Lands Section

File No 29296

Control Sheet

TYPE OF SURVEY ✓ GEOPHYSICAL

_____ GEOLOGICAL

_____ GEOCHEMICAL

_____ EXPENDITURE

MINING LANDS COMMENTS:

P. Aust

Signature of Assessor

Aug 6/86

Date

Gpd Ld.

September 5, 1986

Your File: 230/86
Our File: 2.9296

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

RE: Notice of Intent dated August 8, 1986
Geophysical (Magnetometer & Electromagnetic)
Surveys on Mining Claims L 848105, et al,
in Hoblitzell Township

Please disregard the above-noted Notice of Intent. Additional information has been submitted by the claim holder and the report has been approved as recorded. Enclosed is a copy of Report of Work No. 230/86.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc

cc: Beaverhead Resources Ltd
P.O. Box 9535
1600 Bow Valley Square II
Calgary, Alberta
T2P 2V7

R.J. Meikle
P.O. Box 1637
Timmins, Ontario
P4N 7W8

G. Hodges
P.O. Box 1637
Timmins, Ontario
P4N 7W8

bcc: Mr. G.H. Ferguson
Mining & Lands Comm.
Toronto, Ontario

Encl.

Ontario Natural Resources

(Geophysical, Geological, Geochemical and Expenditures)

230/86

29296

Mining Act

Note: – If more space on this form, attach a list
Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Aug 5

LM

Type of Survey: Linecutting EM MAGNETOMETER	Township or Area: HEBLITZELL
Claim Holder(s): Boarhead Resources Ltd from D.V. Jones	Prospector's Licence No.: T 3621
Address: PO Box 9535 1600 Bow Valley Square II Calgary Alta. T2P 2V7	
Survey Company: R S MIDDLETON EXPLORATION SERVICES INC.	Date of Survey (from & to): 31 03 86 – 23 05 86 (Day Mo. Yr. – Day Mo. Yr.)
	Total Miles of line Cut: 29.8 Km
Name and Address of Author (of Geo-Technical report): G. HODGES PO BOX 1637 TIMMINS ONT P4N 7W8	

Credits Requested per Each Claim in Columns at right

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

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

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

LARDER LAKE MINING DIV. RECEIVED JUN 16 1986 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM 11:20am

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions

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

Date	Recorded Holder or Agent (Signature)
June 13/86	[signature]

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.
L		
	848104	60
	848105	60
	848106	60
	848107	60
	848108	60
	848109	60
	848110	60
	848111	60
	848112	60
	848113	60
	848114	60
	848115	60
	848116	60
	848117	60
	848118	60
	848119	60
	848120	60
	848121	60
	848409	60
	848410	60
	848411	60
	848412	60
	848413	60
	848414	60

RECEIVED JUL 10 1986 MINING LANDS SECTION

PORCUPINE MINING DIVISION RECEIVED JUN 13 1986

Total number of mining claims covered by this report of work. 24

For Office Use Only		
Total Days Cr. Recorded: 1440	Date Recorded: JUN 16 1986	Mining Recorder: Acting [signature]
	Date Approved as Recorded: 86.9.5	Branch Director: [signature]

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: R.J. MEIKLE PO BOX 1637 TIMMINS ONT P4N 7W8

Date Certified	Certified by (Signature)
June 13/86	[signature]

1362 (81/9)

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
LEPHONE (705) 264-4246
(705) 264-4247
P.O. BOX 1637
TIMMINS, ONTARIO
P4N 7W8

August 25, 1986

RECEIVED
AUG 27 1986
MINING LANDS SECTION

Mr. W.L. Good, Chief Mining Recorder
Ministry of Natural Resources
Room 6521, Whitney Block
Queen's Park
TORONTO, Ontario
M7A 1W3

Dear Sir:

Re: Your File #2.9296

Please find enclosed, ammended pages to be inserted in the Beaverhead Report, as well as ammended copies of the maps.

As discussed with Ms. Susan Hurst we omitted a row of 7 claims numbered 848106-07-12-13-18-19, 848409. The work was done on these claims at the same time as the others, however, they were mistaken for another company.

I trust everything is in order. If there are any questions please call.

Yours truly,

R J Meikle

R.J. Meikle.

RJM/lm
Encl.

Ontario

more maps
mining
Aug 25/86

Ministry of
Northern Development
and Mines

August 8, 1986

Your File: 230/86
Our File: 2.9296

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at (416) 965-4888.

Yours sincerely,

for J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

SH/mc
Encl.

cc: Beaverhead Resources Ltd
P.O. Box 9535
1600 Bow Valley Square II
Calgary, Alberta
T2P 2V7

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

G. Hodges
P.O. Box 1637
Timmins, Ontario
P4N 7W8

R.J. Meikle
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Ontario

Ministry of
Northern Development
and Mines

Notice of Intent
for Technical Reports

August 8, 1986

2.9296/230/86

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on the record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted directly to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File
2.9296

Date	Mining Recorder's Report of Work No.
August 8, 1986	230/86

Recorded Holder
BEAVERHEAD RESOURCES LTD

Township or Area
HOBLITZELL TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	L 848104-05
Electromagnetic 40 days	848108 to 111 inclusive
Magnetometer 20 days	848114 to 117 inclusive
Radiometric ____ days	848120-21
Induced polarization ____ days	848410 to 414 inclusive
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☒ insufficient technical data filed

L 848106-07-12-13-18-19
848409

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

M-110

File

Ontario

Ministry of Natural Resources

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

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

Type of Survey(s) Electromagnetic Magnetic
Township or Area Hoblitzell Township
Claim Holder(s) Maurex Resources Ltd.

Survey Company Robert S. Middleton Exploration Services Inc.
Author of Report D. Greg Hodges
Address of Author 136 Cedar St. So., Timmins P4N 7W8
Covering Dates of Survey March 31 to May 23, 1986 (linecutting to office)
Total Miles of Line Cut 29.8 km

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	40
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

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

Magnetometer ______ Electromagnetic ______ Radiometric ______
(enter days per claim)

DATE: July 31/86 SIGNATURE: Greg Hodges
Author of Report or Agent

Res. Geol. ______ Qualifications 2.5919

Previous Surveys

File No.	Type	Date	Claim Holder

RECEIVED
AUG - 1 1986
MINING LANDS SECTION

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
848104	848412
848105	848413
848106	848414
848107	
848108	
848109	
848110	
848111	
848112	
848113	
848114	
848115	
848116	
848117	
848118	
848119	
848120	
848121	
848409	
848410	
848411	

If space insufficient, attach list

TOTAL CLAIMS 24

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 1,200 Number of Readings Mag-1, EM-2
Station interval 25 m Line spacing 100 m
Profile scale 1:2,500
Contour interval

MAGNETIC

Instrument EDA OMNI IV Tie-Line
Accuracy – Scale constant ± .1 nT
Diurnal correction method Tie Lines
Base Station check-in interval (hours) 2
Base Station location and value On Grid 59180.0 nT

ELECTROMAGNETIC

Instrument Apex Parametrics Max Min II
Coil configuration Horizontal Co-Planar
Coil separation 150 m
Accuracy ± 1/4%
Method: ☐ Fixed transmitter ☐ Shoot back ☒ In line ☐ Parallel line
Frequency 444 Hz 1777 Hz
(specify V.L.F. station)
Parameters measured In Phase, Quadrature

GRAVITY

Instrument
Scale constant
Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method ☐ Time Domain ☐ Frequency Domain
Parameters – On time Frequency
– Off time Range
– Delay time
– Integration time
Power
Electrode array
Electrode spacing
Type of electrode

SELF POTENTIAL

Instrument ______________________ Range ______________

Survey Method ______________________

____

Corrections made ______________________

____

RADIOMETRIC

Instrument ______________________

Values measured ______________________

Energy windows (levels) ______________________

Height of instrument ______________________ Background Count ______________

Size of detector ______________________

Overburden ______________________

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey ______________________

Instrument ______________________

Accuracy ______________________

Parameters measured ______________________

____

Additional information (for understanding results) ______________________

____

____

AIRBORNE SURVEYS

Type of survey(s) ______________________

Instrument(s) ______________________

(specify for each type of survey)

Accuracy ______________________

(specify for each type of survey)

Aircraft used ______________________

Sensor altitude ______________________

Navigation and flight path recovery method ______________________

____

Aircraft altitude ______________________ Line Spacing ______________

Miles flown over total area ______________________ Over claims only ______________

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken ______________________________

____

____

Total Number of Samples ______________

Type of Sample ______________
(Nature of Material)

Average Sample Weight ______________

Method of Collection ______________

____

Soil Horizon Sampled ______________

Horizon Development ______________

Sample Depth ______________

Terrain ______________

____

Drainage Development ______________

Estimated Range of Overburden Thickness ______________

____

____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis ______________

____

____

____

General ______________

____

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____

____

ANALYTICAL METHODS

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

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

Others ______________

Field Analysis (______________ tests)

Extraction Method ______________

Analytical Method ______________

Reagents Used ______________

Field Laboratory Analysis

No. (______________ tests)

Extraction Method ______________

Analytical Method ______________

Reagents Used ______________

Commercial Laboratory (______________ tests)

Name of Laboratory ______________

Extraction Method ______________

Analytical Method ______________

Reagents Used ______________

General ______________

____

____

____

____

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____

2.9296

	M	EM		M	EM
848164	✓	✓	848118	✓	✓
5	✓	✓	19	✓	✓
6	✓	✓	20	✓	✓
7	✓	✓	21	✓	✓
8	✓	✓	848409	✓	✓
9	✓	✓	10	✓	✓
10	✓	✓	11	✓	✓
11	✓	✓	12	✓	✓
12	✓	✓	13	✓	✓
13	✓	✓	14	✓	✓
14	✓	✓			
15	✓	✓			
16	✓	✓			
17	✓	✓			

HOBLITZELL

M502

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

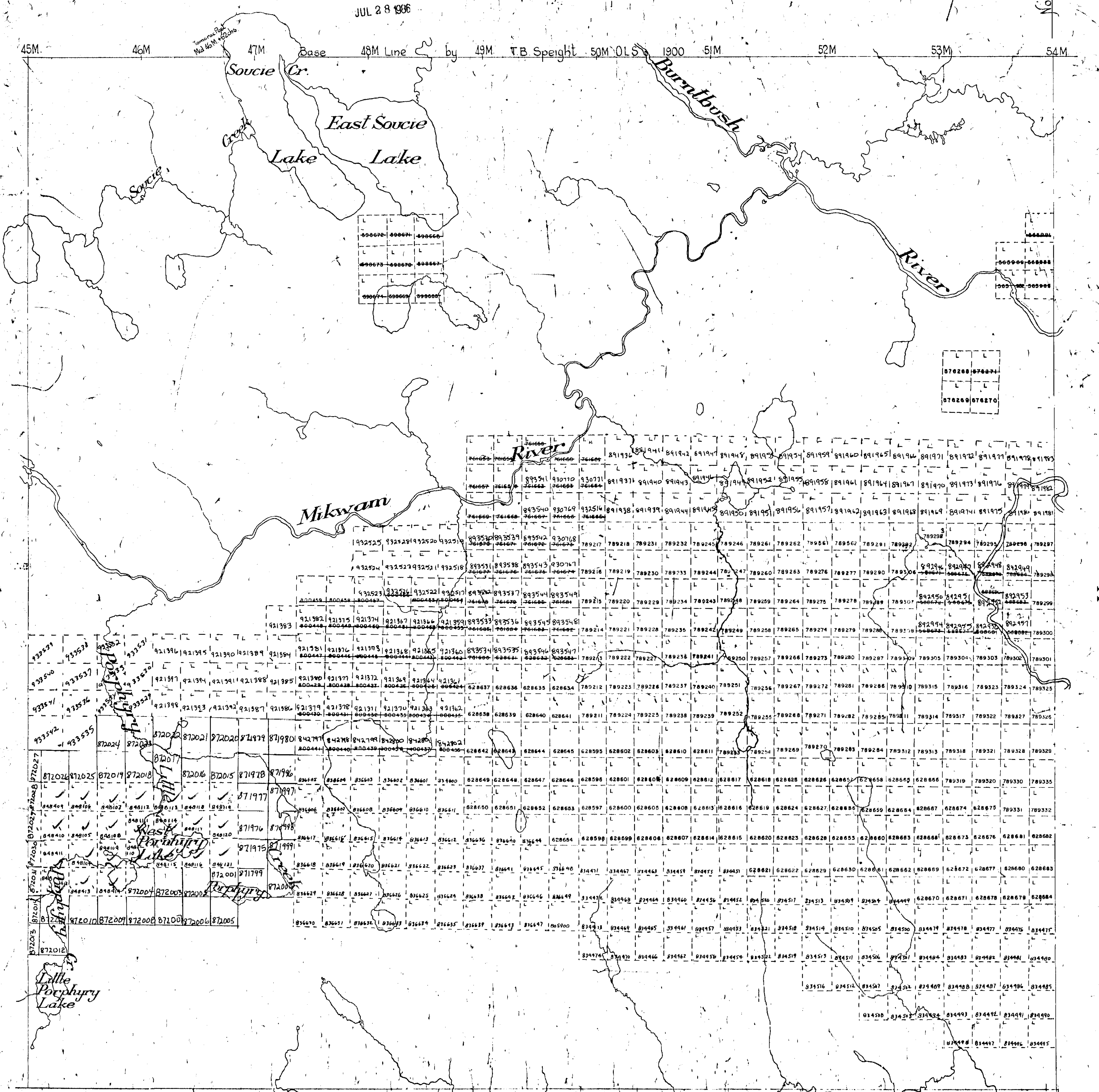
LARDER LAKE MINING DIVISION

DISTRICT OF COCHRANE

Scale - 40 Chains - 1 Inch

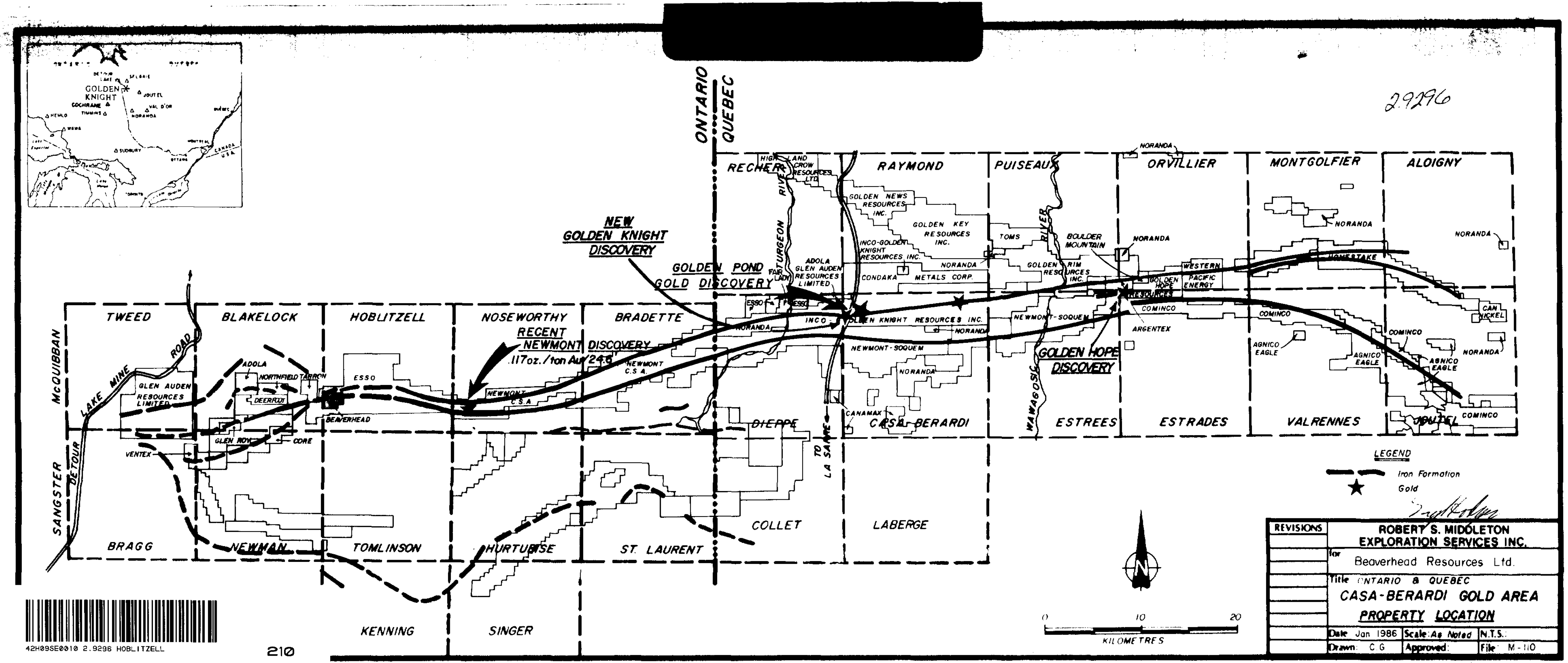
NOTE
400' Surface Rights Reservation around all Lakes and Rivers.

JUL 28 1986



LEGEND
CANCELLED
PATENTED LAND
CROWN LAND SALE
LEASE
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY

42H09SE0010 2.9296 HOBLITZELL 200



42H09SE0010 2.9296 HOBLITZELL

210

42H09SE0010 2.9296 HOBLITZELL

220

LEGEND

Lithologic Contact from Magnetics

☐ CLAIM POST (Assumed)
■ CLAIM POST (Located)

LEGEND

INSTRUMENT: EDA OMNI IV
Proton Precession
PARAMETERS MEASURED: Total Magnetic Field
Diurnals Corrected by Base Station Looping
ACCURACY: +/- 10 nano - teslas
CONTOUR INTERVAL: 100 nano-teslas

22296

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for BEAVERHEAD RESOURCES LTD.		
	Title HOBLITZELL TWP CONTOURED MAGNETOMETER SURVEY Background: 58,000		
	Date: JULY 86	Scale: 1:5000	N.T.S.:
	Drawn: P.G. / C.G.	Approved:	File: M-110

230

Key

Symbol	Group	Description
	1	Very Good Conductor
	2	Good Conductor
	3	Fair Conductor
	4	Weak Conductor
	5	Very Weak Conductor

☐ CLAIM POST (Assumed)
■ CLAIM POST (Located)

Anomaly Axis

+10% 0 -10%

LEGEND

INSTRUMENT: MAX-MIN II
MODE: Maximum Coupled
COIL SEPERATION: 150 M
FREQUENCIES: 444 Hz
PARAMETERS MEASURED: In phase, Out of phase
VERTICAL SCALE: 1cm = 10%

REVISIONS

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

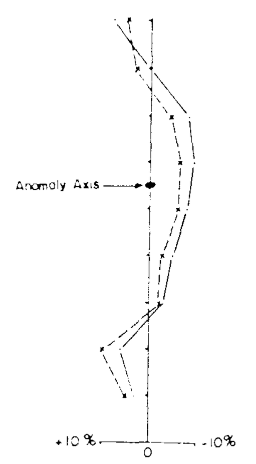
for BEAVERHEAD RESOURCES LTD.

Title HOBLITZELL TWP.

MAX-MIN II
444 Hz

Date: JULY 86	Scale: 1:5000	N.T.S.:
Drawn: P.G.	Approved:	File: M-110

240



Key

Symbol	Grade	Description
	1	Very Good Conductor
	2	Good Conductor
	3	Fair Conductor
	4	Weak Conductor
	5	Very Weak Conductor

☐ CLAIM POST (Assumed)
■ CLAIM POST (Located)

LEGEND

INSTRUMENT : MAX-MIN II
MODE : Maximum Coupled
COIL SEPERATION : 150 M
FREQUENCIES : 1777 Hz
PARAMETERS MEASURED : In phase , Out of phase
VERTICAL SCALE : 1cm = 10%

29296

REVISIONS

ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.

for BEAVERHEAD RESOURCES LTD.

Title HOBLITZELL TWP.

MAX-MIN II
1777 Hz

Date: JULY 86	Scale: 1:5000	N.T.S.:
Drawn: P.G.	Approved:	File: M-110

250