REPORT ON ELECTROMAGNETIC AND MAGNETIC SURVEYS FOR HONCHO GOLD MINES INC. (II) ROUS LAKE AREA THUNDER BAY MINING DIVISION ONTARIO

RECEIVED
Dec 18 1983
MINING LANDS SECTION

December, 4, 1983 Deborah A. McCombe

TENOGA CONSULTANT INC.
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VLF SURVEY "FRASER METHOD" (Honcho II)
MAGNETOMETER SURVEY (Honcho II)
INTRODUCTION

Systematic VLF Survey "Fraser Method" and Magnetic Survey were performed over twelve unpatented mining claims held by Honcho Gold Mines Inc. in the Rous Lake Area, Ontario, in an attempt to delineate favourable targets in the search for precious metal deposits.

LOCATION AND ACCESS

The claim group covered by this report (Honcho II) is situated in the Hemlo Gold Area, approximately 350 km from Thunder Bay and 430 km from Sault Ste. Marie, Ontario, by road. Both the Canadian Pacific Railway and the Trans Canada Highway 17 are very close to the claim group.

The Honcho II property which is approximately three miles west-southwest of the settlement of Hemlo was staked to cover the possible southwestern extension of an isolated band of intermediate to felsic metavolcanics enclosed within the Heron Bay Pluton.

PROPERTY

Twelve contiguous, unpatented mining claims are held by Honcho Gold Mines Inc. in east central Lecours Township, Rous Lake Area, District of Thunder Bay, Ontario.

These include:

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<th>TB 581882</th>
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<tr>
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</table>
PREVIOUS WORK

In 1930, the first geological mapping of the Hemlo area was performed by J.E. Thompson. Although no previous exploration on the Honcho II property was noted in the Ontario Geological Survey Records, gold was discovered in 1945 in the Hemlo area approximately six miles east-northeast of the Honcho property. This ground is currently held by International Corona Resources Inc. Between 1947 and 1959, 10,000 feet of diamond drilling was carried out by Teck Exploration Company and Lake Superior Mining Corporation on a claim group immediately adjoining the original discovery. Approximately 89,000 tons of 0.27 ounces of Au/ton across 6.5 feet along a strike length of 900 feet were outlined (Ferguson et al, 1971, p286). The claims then lapsed until July, 1981, when encouraging gold values were intersected in diamond drilling by International Corona Resources.

GEOLOGY

Most of the Honcho property is underlain by the Heron Bay Pluton (Ontario Geological Survey Map 2452), an oval shaped, stock like intrusive whose long axis strikes northwesterly and consists mainly of medium grained, hornblende-biotite granodiorite. Immediately northeast of the claim group is a band of felsic metavolcanics approximately 3/4 mile long.

SURVEY PROCEDURE AND INSTRUMENTATION

The VLF-Electromagnetic Survey was carried out using an EM-16 unit manufactured by Geonics. The "Fraser Method", a data manipulation procedure which transforms noisy, non-contourable data into less noisy data was used to transform the data into an easily contoured presentation which simplified interpretation.

Lines were cut at 400 foot spacings and the data was collected at 100 foot intervals, with 50 foot readings being taken where anomalies occurred. The frequency observed was 17.8 kHz and survey was performed by E. Ingham of Val d'Or.
The Magnetic Survey was completed using a UNIMAG II unit manufactured by Geometrics. Readings were observed by E. Ingham at 100 foot stations in April, 1983.

INTERPRETATION

A broad weak VLF conductor centered below the baseline and running the width of the claim group has a slight magnetic correlation on the easterly claim boundary. Narrow bands of felsic to intermediate metavolcanics outcrop throughout this area, and a detailed mapping program may assist in the interpretation of this conductor.

Two fairly strong, narrow, northwesterly trending magnetic anomalies dominate this twelve claim group. The stronger anomaly occurs between L40+00E, 15+00S and trends northwesterly intersecting the BL 0+00 at L28+00E, and extending off the northern portion of the claim group between L12+00E and 16+00E, 22+00N. This anomaly is probably due to a diabase dike noted on O.G.S. map 2452.

The second magnetic anomaly intersects the southern portion of the claim group between L32+00E and L28+00E and extends northwesterly and off the claim group at L0+00, between L4+00N and L7+00N. This anomaly appears to be due to a northwesterly trending lineament as mapped by the Ontario Geological Survey.

CONCLUSIONS AND RECOMMENDATIONS

The Honcho Gold Mines Inc. (II) property consists of twelve contiguous claims located southwest of the village of Hemlo in the new Ontario gold belt. Map 2452 of the Ontario Geological Survey indicates that the group is underlain by the Heron Bay Pluton. Detailed mapping of the property may support the results of the VLF and Magnetic Surveys that indicate the possibility that part of the claims may be underlain by metavolcanics and/or metasediments.
It is recommended that a detailed geological mapping program with follow-up geochemical analysis be performed over the property to determine the reason for the VLF and magnetic anomalies. Follow-up diamond drilling would depend on the results of the mapping program.

Debrah A. M. James
BIBLIOGRAPHY

Bourne, Donald A.  
1983  
Report on Property of the Honcho Gold Mines Inc., Lecours Township, Thunder Bay Mining Division, Ontario

Muir, T.L.  
Geology of the Hemlo Area, District of Thunder Bay; Ontario Geological Report 217, Accompanied by Map 2452 (coloured) Scale 1" = ½ mile
Ministry of Natural Resources

Report of Work (Geophysical, Geological, Geochemical and Expenditures)

Ministry of Natural Resources
Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Ministry of Natural Resources
Ontario

File: 581876

Regional Director

Joseph Thunder Bay Parkin

Prospector's Licence No.

A45687 AAS899

Survey Company

CDI CO. VAL D'OR P.O.

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

Donald Bourne - McNELLEN RESOURCES 100 FRANT ST. W. TORONTO

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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<td>120</td>
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</tbody>
</table>

For Office Use Only

Total number of mining claims covered by this report of work: 12

For Office Use Only

Oct. 14/83

Certification Verifying Report on 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

Date Certified

Certified (Signature)

1982 (8/5)
Type of Survey(s): Magnetic, Electromagnetic
Township or Area: Rous Lake G-611
Claim Holder(s): Honcho Gold Mines Inc.
703-141 Adelaide St. W., Toronto, Ontario
Author of Report: Deborah A. McCombe
Address of Author: 2078 Tenoga Dr., Mississauga, Ont. L5H 3K2
Covering Dates of Survey: 3/05/83 to 2/12/83
Total Miles of Line Cut: 10 miles

### SPECIAL PROVISIONS

<table>
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<tr>
<th>Geophysical</th>
<th>DAYS per claim</th>
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<tr>
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<tr>
<td>Radiometric</td>
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<td>Other</td>
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### AIRBORNE CREDITS

- Magnetometer
- Electromagnetic
- Radiometric

DATE: Dec. 4, 1983

SIGNATURE: [Signature]

Res. Geol.: [Qualifications]

### MINING CLAIMS TRAVERSED

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### TOTAL CLAIMS

12

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**MINING LANDS SECTION**
GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 580
Station interval 100'
Profile scale EM – plotted Fraser Method – contoured 20 Fraser unit
Contour interval 100 ft. – Mag

Number of Readings Mag 592, EM 549

MAGNETIC

Instrument Unimag II, Geometrics
Accuracy – Scale constant 1 gamma
Diurnal correction method looping along adj. lines and correcting to base station
Base Station check-in interval (hours) 1 hr.
Base Station location and value BL, 20+00E

ELECTROMAGNETIC

Instrument EM-16, Geonics
Coil configuration Horizontal Loop
Coil separation 400 ft
Accuracy ±2.5% to ±1%
Method: □ Fixed transmitter □ Shoot back ☑ In line □ Parallel line
Frequency 17.8 kHz, Cutler Maine (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

Method □ Time Domain □ Frequency Domain
Parameters – On time Frequency
– Off time
– Delay time
– Integration time

RESISTIVITY

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 __________________

________________________________________________________________________________

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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General ____________________________
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July 11, 1984

Honcho Gold Mines Inc
Suite 910
335 Bay Street
Toronto, Ontario
M5H 2R3

Dear Sirs:

RE: Geophysical (Magnetometer & Electromagnetic) Survey submitted on Mining Claims TB 581876 et al in the Area of Rous Lake

Enclosed is a copy of our letter dated May 8, 1984 requesting additional information for the above-mentioned survey.

Unless you can provide the required data by July 23, 1984 the mining recorder will be directed to cancel the work credits recorded on October 14, 1983.

For further information, please contact Mr. Ray Plcette at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

S. Hurst:mc

cc: Mining Recorder
    Thunder Bay, Ontario

Encl.
May 8, 1984

Honcho Gold Mines Inc
Suite 910
335 Bay Street
Toronto, Ontario
M5H 2R3

Dear Sirs:

RE: Geophysical (Magnetometer, Electromagnetic) Survey
on Mining Claims TB 581876 et al in the Area of
Rous Lake

Returned herein are the plans (in duplicate) for the
above-described survey.

We apologize for having to write to you again, but when
the maps were returned to you before, we forgot to ask
for the claim numbers and claim lines be shown on each
map.

When returning this material please quote file 2.6149.

For further information, please contact Mr. F.W. Matthews
at (416)965-6918.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-6918

S. Hurst:mc

cc: Mining Recorder
    Thunder Bay, Ontario

Encl.
To: Geophysics

Comments

[Signature]

To: Geology - Expenditures

Comments

[Signature]

To: Geochemistry

Comments

[Signature]

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)
Mr. S.E. Kundt
Minister, Land Management Branch
Ministry of Natural Resources
Whitney Block
Room 6643
Queen's Park
Toronto, Ont.
M7A 1W3

March 26/84

Dear Madam:

Re: O.G.S. File 26149

Enclosed is the U.L.F. plan, in duplicate for Geophysical (Electromagnetic and Magnetometer) survey submitted on mining claims TB 58/876 et al in the Rous Lake Area. As requested, we have added the actual readings at each station.

These claims are now held by Honcho Gold Mines Inc. and any further questions regarding this assessment work should be forwarded to Honcho Gold Mines Inc. at the following address:

Ste. 910, 335 Bay St.
Toronto, Ontario
M5H 2R3.

Yours truly,
Debra A. McInerney
Geologist
March 5, 1984.

Joseph Perkin
980 Broadview Avenue
Apt. 706
Toronto, Ontario
M4K 3Y1

Dear Sir:

RE: Geophysical (Electromagnetic and Magnetometer) survey submitted on mining claims TB 581876 et al in the Area of Rous Lake.

Enclosed is the V.L.F. plan, in duplicate, for the above mentioned survey. The Fraser filter values are not sufficient for filling submission requirements. Please indicate the actual reading at each station and return the plans to this office.

For further information, please contact Mr. F. W. Matthews at (416) 965-1380.

Yours very truly,

J.R. Morton
Acting Director
Land Management Branch

Whitney Block
Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

D. Kinig:dg

Encls:

cc: Deborah McCombe
2078 Tenoga Drive
Mississauga, Ontario
L5H 3K2
Mineral Lands Comments

To: Geophysics  Mr. R. Barlow

Comments

\[ \text{new data needed} \]

☐ Approved  ☑ Wish to see again with corrections  Date: Jan 13/89  Signature: [Signature]

To: Geology - Expenditures

Comments

☐ Approved  ☐ Wish to see again with corrections  Date  Signature

To: Geochemistry

Comments

LD

☐ Approved  ☐ Wish to see again with corrections  Date  Signature

To: Mining Lands Section, Room 6462, Whitney Block.  (Tel: 5-1380)
Initial Check

Assessed

Approved Reports of Work
sent out

Notice of Intent filed

Approval after Notice of Intent
sent out

Duplicate sent to Resident
Geologist

Duplicate sent to A.F.R.O.
Mrs. Audrey Hayes  
Mining Recorder  
Ministry of Natural Resources  
P.O. Box 5000  
Thunder Bay, Ontario  
P7C 5G6

Dear Madam:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims TB 581876 et al in the Area of Rous Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch  
Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone:(416)965-1380

A. Barr

cc: Joseph Perkin  
980 Broadview Avenue  
Apt. 706  
Toronto, Ontario  
M4K 3Y1

cc: Deborah McCombe  
2076 Tenoga Drive  
Mississauga, Ontario  
L5H 3K2
December 8, 1983

Mrs. A. Hayes
Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Mrs. Hayes:

Please find enclosed reports (in duplicate) covering electromagnetic and magnetic surveys done on claims in Lecours Township for Honcho Gold Mines which we submit for assessment purposes.

Yours truly

D.A. McCombe
Geologist

DAM/1ak

MINING LANDS SECTION

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DECEMBER 12, 1983
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<tr>
<td>90</td>
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</tbody>
</table>
HONCHO GOLD MINES INC.

INDEX MAP

HONCHO GOLD MINES INC.
LECOURS TWP.
ONTARIO
PLAN SHOWING
PART II
MAGNETOMETER SURVEY

LEGEND

MAX. CALCULATION OVER 65,000 GAMMAS

100 - 500
500 - 1000
1000 - 1500
1500 - 2000
2000 - 2500
2500 - 3000
3000 - 3500
3500 - 4000
4000 - 4500
4500 - 5000
5000 - 5500
5500 - 6000
6000 - 6500
6500 - 7000
7000 - 7500
7500 - 8000
8000 - 8500
8500 - 9000
9000 - 9500
9500 - 10000

NOTE: FOR LOCATION & CORRELATION PLEASE REFER TO PART I OF SURVEY

2007, Lecours, June 2003

HONCHO GOLD MINES INC.
LECOURS TWP.
ONTARIO
PLAN SHOWING
PART II
MAGNETOMETER SURVEY

LEGEND

MAX. CALCULATION OVER 65,000 GAMMAS

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2007, Lecours, June 2003

HONCHO GOLD MINES INC.
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2007, Lecours, June 2003

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2007, Lecours, June 2003
NOTE: FOR LOCATION & COMPIRAIION PLEASE REFER TO PART I OF SURVEY

HONCHO GOLD MINES INC.

LECOURS TWP.
ONTARIO
PLAN SHOWING
PART II
V.L.F. SURVEY "FRASER METHOD"

EXECUTED BY: E. INGHAM
COMPILED & DRAWN BY: A. SAMOLOWSKI
APPROVED BY:

Val C Or, Quebec, April, 1983

NOTE: FOR LOCATION & COMPIRAIION PLEASE REFER TO PART I OF SURVEY