LAFOREST-HLAVA EXPLORATION SERVICES LTD.

(705) 268-2511

24 Pine Street South, P.O. Box 1163, TIMMINS, ONTARIO P4N 7H9

010

MAGNETOMETER

AND

VLF EM 16 SURVEYS

FOR

HONCHO GOLD MINES INC

BRISTOL TOWNSHIP

PORCUPINE MINING DIVISION

ONTARIO

Timmins, Ontario
March, 1988

Milan Hlava B.Sc., F.G.A.S.

Dual
2.357

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MAP 2B	VLF-EM 16 SURVEY E HALF	SCALE 1"=200'

(Maps in back pockets)

INTRODUCTION

The following report describes the results of a ground magnetometer survey and VLF-EM survey for Honcho Gold Mines Inc. on a claim group located in Bristol Township in the Porcupine Mining Division. The field work was completed on November 20, 1987. The report was completed on March 20, 1988.

PROPERTY LOCATION AND ACCESS (FIGURE 1)

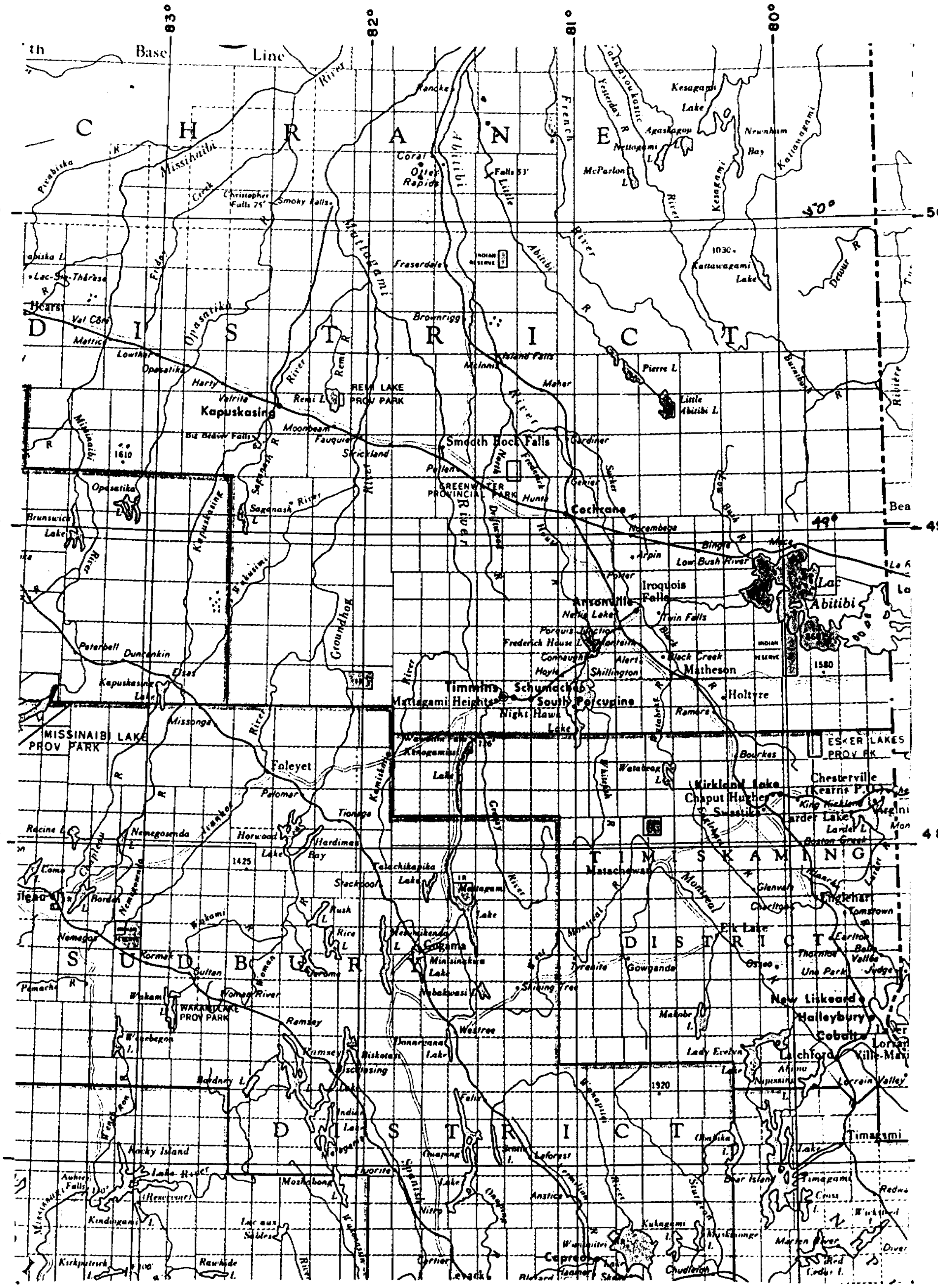
The Honcho Gold Mines Inc. property is located in the northern portion of Bristol Township, Porcupine Mining Division, Ontario at Latitude 48° 26' 00" and Longitude 81° 32' 30" or approximately 16 km (10 miles) west-southwest of the City of Timmins.

Access to the property is via Highway 101 west from Timmins for a distance of approximately 16 km (10miles) to the Malette Lumber Mill and north via a lumber road which runs along the entire northern boundary of the property.

PROPERTY DESCRIPTION (FIGURE 2)

The property consists of 22 contiguous, unpatented mining claims numbered as follows:

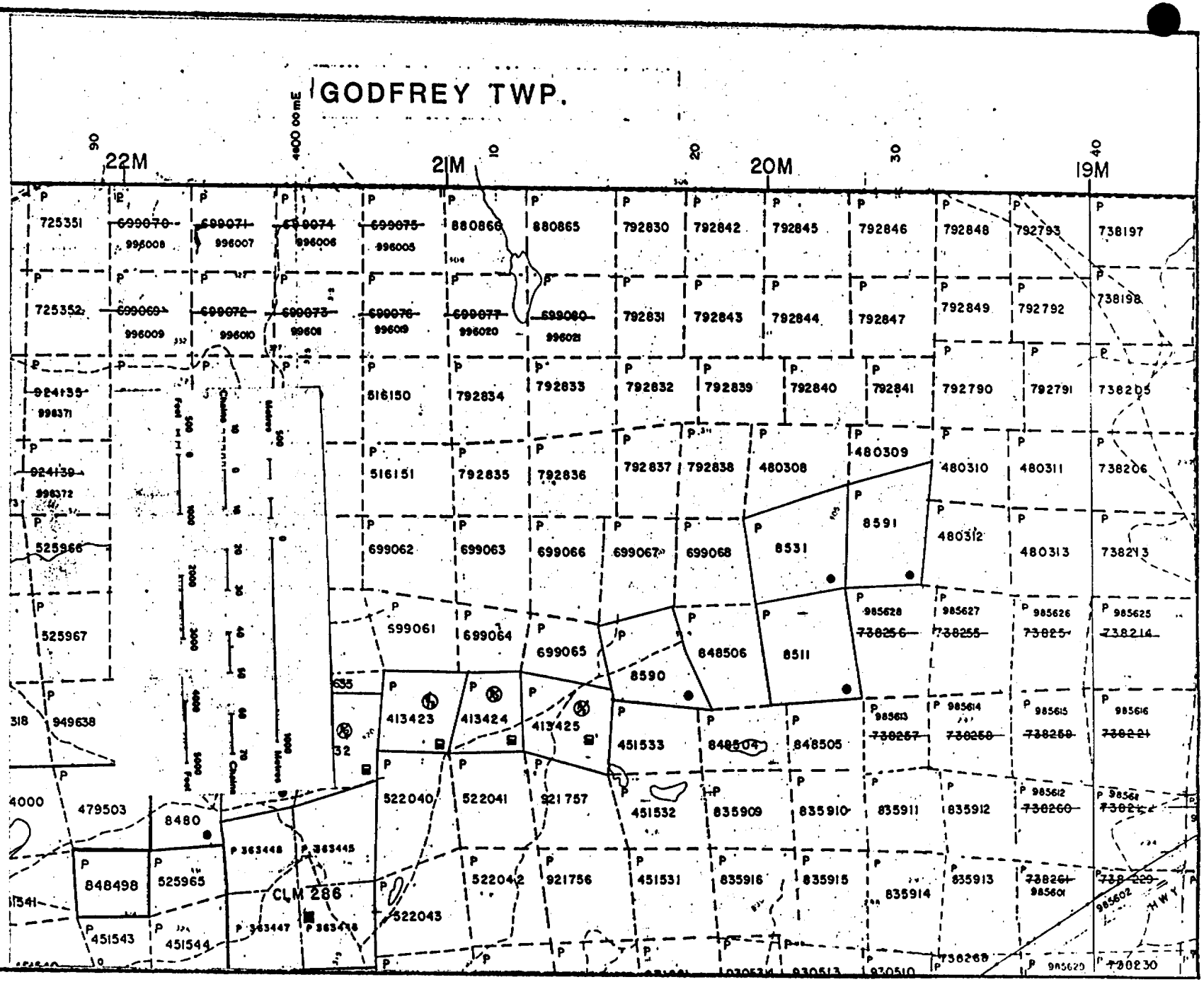
P792793	P792845	P996005	P996011
P792830	P792846	P996006	P996019
P792831	P792848	P996007	P996020
P792842	P792849	P996008	P996021
P792843	P880865	P996009	
P792844	P880866	P996010	



PROPERTY LOCATION

Scale 1"=32 miles

FIGURE 1



PORTION OF CLAIM MAP G3998
BRISTOL TOWNSHIP

FIGURE 2

PREVIOUS WORK

The geology of Bristol Township has been mapped and described by Ferguson in 1957. Pike and Middleton (1970) have described the regional geology and its relationship to sulphide mineralization in the area. Numerous gold showings occur in Bristol Township.

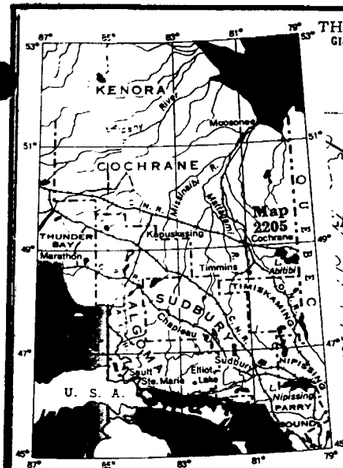
A review of the assessment work files in the Timmins resident geologist's office reveals that the following files are pertinent to the property: T-496; T-934; T-941; T-1099; T-1460; T-1752; T-2938; T-3075; T-3084.

All exploration work to date, within the present property boundary has been focused on a search for massive sulphide deposits.

REGIONAL GEOLOGY (FIGURE 3)

The regional geology shown on Figure 3 is a portion of the Ontario Department of Natural Resources Map 2205. The area is underlain by felsic metavolcanics, quartz-feldspar porphyry and diabase dikes.

The property is 5 km north of the projected western extention of the Porcupine Destor Fault and 4.5 kilometers west of the Mattagami River Fault (N-S).



Scale, 1 inch to 200 miles

N.T.S. reference 31M, 32D, 41P, 42A

LEGEND

CENOZOIC

PLEISTOCENE AND RECENT

Till, varved clay, sand, gravel, peat.

UNCONFORMITY

MESOZOIC

—19— *19 Kimberlite: dikes.*

INTRUSIVE CONTACT

PALEOZOIC

LOWER AND MIDDLE SILURIAN

18 *18 Thornloe Formation: limestone, dolomite, sandstone. Wabi Formation: limestone, shale.*

MIDDLE AND UPPER ORDOVICIAN

17 *17 Dawson Point Formation: shale. Farr Formation: limestone. Bucke Formation: limestone, shale. Guigues Formation: sandstone.*

UNCONFORMITY

PRECAMBRIAN

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

—16— *16 Diabase: dikes.*

INTRUSIVE CONTACT

MIDDLE PRECAMBRIAN

ALKALIC INTRUSIVE ROCKS

15 Syenite, nepheline syenite.

MAFIC INTRUSIVE ROCKS[e]

—14— *14 Diabase, granophyre: sheets and dikes.*

INTRUSIVE CONTACT

HURONIAN SUPERGROUP

COBALT GROUP

Lorrain Formation

13 Quartzite, arkose.

Gowganda Formation

12 Unsubdivided.
12a Firstbrook Member: argillite, greywacke, siltstone, arkose.
12b Coleman Member: conglomerate, arkose, greywacke, quartzite, argillite.

UNCONFORMITY

EARLY PRECAMBRIAN

MAFIC INTRUSIVE ROCKS[b]

11 Diabase: dikes.

INTRUSIVE CONTACT

FELSIC INTRUSIVE ROCKS[c]

10 *10a Quartz porphyry, quartz-feldspar porphyry, feldspar porphyry, granophyre, felsite*[d]
10b Trondhjemite, granodiorite, quartz monzonite: simple batholiths and stocks[d]
10c Trondhjemite, granodiorite, quartz monzonite, quartz diorite, aplite, pegmatite, migmatite: complex batholiths.

9 *9 Syenite, monzonite, feldspar porphyry*[d]

METAMORPHOSED MAFIC AND ULTRAMAFIC ROCKS[e]

8 *8 Gabbro, diorite, lamprophyre.*

7 *7 Peridotite, dunite, pyroxenite, serpentinite*[f]

INTRUSIVE CONTACT

METASEDIMENTS[g]

6 Conglomerate, greywacke, siltstone, slate, argillite[h]

5 *5 Greywacke, siltstone, slate, argillite and minor pebble conglomerate*[i]

METAVOLCANICS[g]

ALKALIC METAVOLCANICS[h]

4 *4 Trachyte, leucitic trachyte; flows, tuff, breccia.*

ULTRAMAFIC METAVOLCANICS[k]

3 *3 Serpentinized dunitic and peridotitic flows.*

FELSIC METAVOLCANICS[j]

2 *2 Unsubdivided.*
2a Pyroclastic rocks.
2b Flows.

INTERMEDIATE AND MAFIC METAVOLCANICS[j]

1 *1 Unsubdivided.*
1a Intermediate flows.
1b Intermediate pyroclastic rocks.
1c Mafic flows and pyroclastic rocks.

IF *IF Iron formation and ferruginous chert (occurs as a member of stratigraphic units 1, 2, 4, and 5).*

S *Sulphide mineralization.*

SYMBOLS

Geological boundary.

Synclinal axis.

Anticlinal axis.

Fault.

Lineament.

1550' *Altitude in feet above mean sea level.*

Railway with station or flagstop.

(11) *Provincial highway.*

Motor road.

Other road.

Producing mine.

Past producing mine.

Mineral occurrence.

Scale : 1" = 4 miles

Figure 3

PROPERTY GEOLOGY

Most of the property is covered by glacial overburden. Based on the geological information of the surrounding area and drill holes and limited outcrops in the western part of the property, it is assumed that the Archean volcanic rocks in the northern Bristol Township form the margin of the major volcanic eruptive complex centered on the Townships of Godfrey and Turnbull. The property is underlain by a succession of rhyolitic volcanic rocks including massive, cherty quartz-eye porphyry; pyroclastic breccias, crystal tuffs, lapilli tuffs, graphitic shales and sulphide-rich shales.

North of McDonnell Lake, the volcanics are intruded by feldspar porphyry and andesitic intrusive. Matachewan-type diabase dikes, striking north-northwest, cut all other rock types.

WORK COMPLETED

The grid was chained utilizing the Imperial System. Grid lines were established in a true north-south direction at 300' (91.44 m) intervals with pickets at 100' (30.48 m) intervals over the entire property. Base line 0 + 00 was started at claim post No. 4 of claim No. P996008.

A total of 27.88 line miles were cut.

GROUND MAGNETOMETER SURVEY

The ground magnetometer survey was completed utilizing a proton magnetometer (Geometrix Model G-816) capable of reading total field values to an accuracy of ± 1 gamma. The main base station was established at BL 30 + 00 E with a value of 58,767 gammas.

GROUND MAGNETOMETER SURVEY (Cont'd)

Secondary base stations were established at 100' (30.48 m) intervals along the base line to provide data for diurnal corrections. Diurnal variation was corrected by tieing in to the base stations at time intervals less than 45 minutes. Maximum misclosure was 25 gammas. A total of 2,944 readings were taken.

VLF-EM 16 ELECTROMAGNETIC SURVEY

The electromagnetic survey was completed over the entire grid utilizing a VLF-EM 16 unit manufactured by Geonics Ltd. The station used for the survey was NAA Cutler, Maine with a frequency of 24.0 kHz. The Azimuth to the station (NAA) was 140°. All the readings were taken with the operator facing north.

A total of 1,472 readings were taken.

SURVEY RESULTS - MAGNETOMETER

The results of the survey are presented on Maps 1A and 1B (in back pockets). The maximum magnetic relief within the property is 2,166 gammas.

The portion of the property between lines 0 + 00 and 33 + 00 E is characterized by the presence of anomalous magnetic features which do not reflect geological trends on adjacent properties or any known regional structural trends. Prominent magnetic highs in the northern and southern portions of the property are separated by magnetic low with the strike NE-SW (L18E 20+00S; L27 E 10+00S). This is interpreted to be due to a local fault. The magnetically high areas (> 1,000 gammas) are probably underlain

SURVEY RESULTS - MAGNETOMETER (Cont'd)

by intrusive (diorite, quartz-feldspar porphyry?). The portion of the property between 75+00E and 108+00E is characterized by N-S trending magnetic highs which are due to diabase dikes. The remainder of the surveyed area has a low magnetic relief (200 gammas).

SURVEY RESULTS VLF-EM

The survey results are presented on Maps 2A and 2B in back pockets. These maps present the contours of Fraser Filter Plot of in-phase data for the NNA station (Cutler Maine),and the interpreted locations of conductor axis from profiles as well as the locations of the I.P. anomalies detected by Riocanex in 1983.

The results of the surveys are highly encouraging. The present survey detected a total of 40 anomalous zones which are different in amplitude, strike length, width, depth, direction and magnetic association, while previous surveys in adjacent properties failed to define anomalous zones. The anomalies are labeled numerically from 1 to 15 on Map 2B in back pocket.

The following table is a summary and brief description of all anomalies detected by the present survey.

VLF - EM ANOMALY SUMMARY

ANOMALY NO.	STRIKE LENGTH	MAX.VALUE FRASER FILTER	MAGNETIC CORRELATION	COMMENTS
1	1,700'	72	40 - 400	
2	800'	69	F* 500	faulted extention of #1?
3	150'	13	---	
4	150'	13	---	
5	800'	9	30	interpreted from profile
6	150'	--	---	
7	900'	112	---	#1 priority
8	900'	47	F 130	
9	900'	93	10	#1 priority
10	1,000'	68	---	#1 priority
11	1,000'	42	F 1050	#1 priority
12	150'	--	---	
13	500'	94	F 150	
14	900'	64	F 230	
15	800'	43	D 900	
16	1,200'	24	---	
17	600'	19	---	
18	600'	22	---	
19	1,200'	20	---	
20	300'	22	---	
21	300'	17	---	
22	300'	22	---	OBD
23	300'	+22	---	OBD
24	600'	+11	---	OBD
25	300'	+24	---	faulted extention of 18
26	300'	+17		
27	1,400'	+34	---	
28	300'	+24	---	OBD?
29	600'	+13	---	
30	900'	+26	---	

VLF - EM ANOMALY SUMMARY

ANOMALY NO.	STRIKE LENGTH	MAX. VALUE FRASER FILTER	MAGNETIC CORRELATION	COMMENTS
31	300'	+17	---	
32	300'	+12	---	
33	600'	+19	---	
34	300'	+27	---	
35	300'	+14	+100	
36	300'	+13	+145	
37	900'	+16	---	
38	600'	+21	+ 60	
39	300'	+25	---	
40	300'	+12	---	

* F - Flanking

CONCLUSIONS

A total of 40 VLF EM 16 conductors of a different nature were located during the present survey.

Anomalies 6, 12, 22, 23, 24 and 28 are probably caused by overburden conductivity.

The remainder of anomalies appears to be valid bedrock conductors.

RECOMMENDATIONS

Because of the presence of two strong overburden gold anomalies, approximately 10,000 feet in down-ice direction from the surveyed area, all of the conductors detected by the present survey deserve further evaluation.

Approximately 5,000 feet of diamond drilling (15 drill holes X 300') will be required in order to test all the anomalous areas detected so far.

Respectfully submitted,

Milan Hlava

Milan Hlava B.Sc., F.G.A.S.

CERTIFICATE

CERTIFICATE

I, Milan Hlava of the City of Timmins, Province of Ontario, Canada and the Town of Surrey, Province of British Columbia, Canada do state:

1. That I am a practising consulting geologist with offices at 24 Pine Street South, P.O. Box 1163, Timmins, Ontario P4N 7H9 and 14746 90A Avenue, Surrey, B. C. V3R 1B2.

2. That I am a graduate of Komensky University, Bratislava, Czechoslovakia (1968) with a degree of Bachelor of Science in Exploration Geology.

3. That I have practised my profession as a Geologist continuously since 1968 and as a Consulting Geologist continuously since 1984.

4. That I am a Fellow of the Geological Association of Canada since 1972.

5. That I have no interest directly, indirectly nor anticipated in Honcho Gold Mines Inc. or the property reported in this report.

6. That I am familiar with the material contained in this report, having examined all the material myself in the field.

Milan Hlava

Milan Hlava B.Sc., F.G.A.S.
Consulting Geologist

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT No. W 8806.058

Instructions: – Please type or print.
– If number of mining claims traversed

May 4

2.10928 Min

42A05NE8465 2.10928 BRISTOL

900

Type of Survey(s)
Magnetometer, V.L.F. Em

Claim Holder(s)
R. E. Allerston

Prospector's Licence No.
M13613

Address
543 Pine Street North, Timmins, Ontario P4N 6L9

Survey Company
Laforest-Hlava Exploration Services Ltd

Date of Survey (from & to): Day 10 Mo. 11 Yr. 87 — Day 10 Mo. 12 Yr. 87

Total Miles of line Cut: 27.88

Name and Address of Author (of Geo-Technical report)
Milan Hlava, 24 Pine St S., P.O. Box 1163, Timmins, Ontario P4N 7H9

Credits Requested per Each Claim in Columns at right

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

RECEIVED
APR 8 1988
MINING LANDS SECTION

RECEIVED
PORCUPINE MINING DIVISION
APR / 5 1988

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.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	880865	
	880866	
	996005	
	996006	
	996007	
	996008	
	996009	
	996010	
	996011	
	996019	
	996020	
	996021	

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
MAY 26 1988
RECEIVED

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECORDED
MAR 15 1988

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

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
120	Mar. 15/88	
	Date Approved as Recorded: 18 May 88	Branch Director

Date: March 14, 1988

Recorded Holder or Agent (Signature): Milan Hlava

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
Milan Hlava, 24 Pine St S., Timmins, Ontario P4N 7H9

Date Certified: March 14/88

Certified by (Signature): Milan Hlava

1782 (85/12)

MAP SYMBOLOGY

Aerial Cableway
Boundary
International
Interprovincial
District, Township Indian Reserve
Approximate
Lot, Concession
Approximate
Para Boundary
Bridge
Road, Railroad
Building
Chimney
Cliff, Pit, Pile
Contours
Interpolated
Approximate
Depression
Control Points
Horizontal
Vertical
Culvert
Falls
Double line river
Fence, Hedge, Wall
Feature Outline (Construction features, etc.)
Flooded Land
Lock
Marsh or Swamp
Mast
Mine Head Frame
Outcrop

Pipeline (above ground)
Railroad
Single Track
Double Track
Abandoned
Portable
Road
Highway, County, Township
Access (road of doughtful or no existence or insignificant driveway)
Trail, Bush Road (Cartage, Misc.)
Rapids
Double line river with multiple rapids
Double line river with multiple rapids
Reservoir
River, Stream, Canal
Approximate Seasonal direction of Flow
Rock (significant)
Shoal
Spot Elevation (trees elevations) 300.0
Tower
Transmission Line
Poles
Pylons
Tunnel
Utility Poles
Wharf, Dock, Pier
Wooded Area

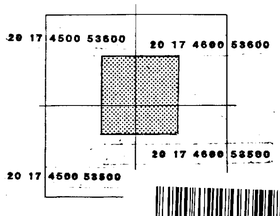
AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
			S.R.O.	164584
SEC. 36/80	W. 22/83	8/7/83	M+S	NRW 39/80

REOPENED - BY ORDER NRO 24/87
FEB, 19/87

KEY PLAN
For O.B.M. Map



42AMSME6485 2.10928 BRISTOL

200

GODFREY TWP.
THORNELOE TWP.
CARSCALLEN TWP.
OGDEN TWP.

23M 22M 21M 20M 19M
5M 4M 3M 2M 1M

4500000mE
4600000mE
536000mN
535700mN
81°34'
81°28'
48°26'
48°22'

CLM 324
CLM 286
Thundercloud Lake
McDonell Lake
Bristol Lake
Waterhen Lake
Red Sucker River
Cr.

LEGEND

HIGHWAY AND ROUTE No
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, 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 OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◓
" MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◨
" MINING RIGHTS ONLY	◧
LICENCE OF OCCUPATION	▼
ORDER-IN COUNCIL	OC
RESERVATION	ℛ
CANCELLED	⊗
SAND & GRAVEL	ℛ

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

500 Metres 0 1000 Metres
10 Chains 0 10 20 30 40 50 60 70 Chains
500 Feet 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
ZONE : 17

RECEIVED
MAY 3 1988

TOWNSHIP
BRISTOL
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario Ministry of Natural Resources — Land Management Branch

ORIGINAL COMPILATION JULY 1984
Feb 9/87 JB
Number G-3998

SURVEY LEGEND

Instrument: GEOMETRICS EM-16
Serial No.:
Datum: 58000
Contour Interval: 25 gammas

Contours:

1000.

Depression contours:

LAFOREST-HLAVA
EXPLORATION SERVICES LTD

MAGNETOMETER SURVEY

For:	HONCHO GOLD MINES INC.
Project:	BRISTOL TWP
Survey:	WEST SIDE MAP IA
Scale:	1" = 200'
File loc:	
Dwg no:	
Date:	17-FEB-88
Srvy'd by	
Apprv'd by	
Chk'd by	
Drw'n by	NORTHERN GEOTECH

2.10928

210

SURVEY LEGEND

Instrument: GEOMETRICS EM-16
Serial No.:
Datum: 58000
Contour Interval: 15 gammas

Contours:

Depression contours:

LAFOREST - HLAVA
EXPLORATION SERVICES LTD

MAGNETOMETER SURVEY

For	HONCHO GOLD MINES INC
Project:	BRISTOL TWP
Survey:	EAST SIDE MAP IB
Scale:	1" = 200'
File loc:	
Dwg no:	
Date:	18-FEB-88
Srvy'd by	
Apprv'd by	2.10928
Chk'd by	
Drw'n by	NORTHERN GEOTECH

2.10928

LAFOREST-HLAVA
EXPLORATION SERVICES LTD.

VLF
SURVEY

For:	HONCHO GOLDMINE LTD.
Project:	BRISTOL TWP.
Survey:	
Scale:	1" = 400'
File last	
Dwg no:	
Date:	18-APR-88
Surv'd by	
Appro'd by	
Chk'd by	
Drw'n by	NORTHERN GEOTECH

230

SURVEY LEGEND

Instrument: GEONICS EM-16
Serial No.:
Datum:
Contour Interval: 5%

Contours:

Depression contours:

LAFOREST - HLAVA
EXPLORATION SERVICES LTD

FRASER FILTERED
VLF SURVEY

For:	HONCHO GOLD MINES INC
Project:	BRISTOL TWP
Survey:	WEST SIDE MAP 2A
Scale:	1" = 200'
File loc:	
Dwg no:	
Date:	1c-FEB-88
Srvy'd by	
Apprv'd by	2.10928
Chk'd by	
Drw'n by	NORTHERN GEOTECH

240

SURVEY LEGEND

Instrument: GEONICS EM 16

Contours:

1000

Depression contours:

LAFOREST - HLAVA
EXPLORATION SERVICES LTD

FRASER FILTERED
VLF SURVEY

For:	HONCHO GOLD MINES INC
Project:	
Survey:	EAST SIDE MAP 2B
File loc:	
Dwg no:	
Date:	
Srvy'd by	
Apprv'd by	**2.10928**
Chk'd by	
Drw'n by	NORTHERN GEOTECH

250