REPORT ON

AIRBORNE GEOPHYSICAL SURVEYS, KENOGAMING TOWNSHIP PROPERTY ONTARIO

for

REBA RESOURCES LTD.

Toronto, Ontario
January, 1984

W.E. Brereton, P.Eng.
MPH Consulting Limited

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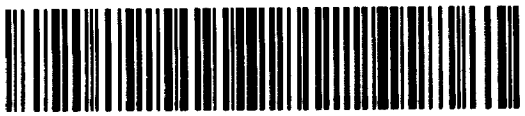

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SUMMARY

An airborne geophysical survey flown by Dighem Ltd. consisting of EM, magnetics and VLF has recently been carried out on the Reba Resources Ltd. gold property in Kenogaming Township, northeastern Ontario.

The Reba property encompasses a geological setting similar to that on the adjoining Carl Creek-Bearcat property which contains the old Dunvegan gold-zinc and Jonsmith gold prospects.

A program of ground geophysical surveying and geological investigations at a cost of $50,000 is proposed to test airborne geophysical targets and further evaluate the gold potential of the claims.

1.0 INTRODUCTION

This report describes the results of recently completed airborne geophysical surveys on the Reba Resources Ltd. Kenogaming Township gold prospect, Swayze gold area, Ontario.

Airborne surveying was carried out by Dighem Ltd. of Toronto on behalf of Reba and consisted of airborne electromagnetics, magnetics and VLF-electromagnetics.

Flight line spacing was 200m with a north-south flight direction.

The AS-350 turbine helicopter flew at an average airspeed of 110 km/hr with an EM bird height of approximately 30m. Ancillary equipment consisted of a Sonotec PMH 5010 magnetometer with its bird at an average height of 45m, a Sperry radio altimeter, a Geocam sequence camera, an RMS GR-33 digital graphics recorder, a Sonotec SDS 1200 digital data acquisition system, a DigiData 1640 9-track 800-bpi magnetic tape recorder and a Totem 2A VLF. The analog equipment recorded four channels of EM data at approximately 900 Hz, two channels of EM data at approximately 2700 Hz, two ambient EM noise channels (for the coaxial and coplanar receivers), two channels of VLF data and a channel of radio altitude. The digital equipment recorded the EM data with a sensitivity of 0.2 ppm and the magnetic field to one nT (i.e., one gamma).

Appendix I provides details on the data channels, their respective sensitivities, and the flight path recovery procedure. Noise levels of less than 2 ppm are generally maintained for wind speeds up to 35 km/hr. Higher winds may cause the system to be grounded because excessive bird swinging produced difficulties in flying the helicopter. The swinging results from the 5 m^2 of area

which is presented by the bird to broadside gusts. The DIGHEM system nevertheless can be flown under wind conditions that seriously degrade other AEM systems.

Appendix 2 presents Technical Data Statements in respect of assessment credits on claims covered by the surveying.

2.0 PROPERTY

The property consists of 18 unpatented mining claims in the Porcupine Mining Division of Ontario.

The claims are numbered as follows:

Claim Numbers	Recording Date
P700048-053 inclusive	April 5, 1983
P700055-060 inclusive	April 5, 1983
P700298-301 inclusive	April 5, 1983
P700303	April 5, 1983
P699774	April 5, 1983

The property encompases 720 acres more or less.

3.0 LOCATION, ACCESS AND INFRASTRUCTURE

The property is centred approximately 75 km southwest of the town of Timmins in northeastern Ontario (Figure 1).

Access is relatively good. Highway 101 West passes 13 km to the north of the claim group.

New, good quality gravel roads lead from Highway 101 to the south through the general Kenogaming - Penhorwood area. Numerous subsidiary logging roads extend off these main access roads. One of these leads directly through the Reba property as indicated on the accompanying airborne survey map.

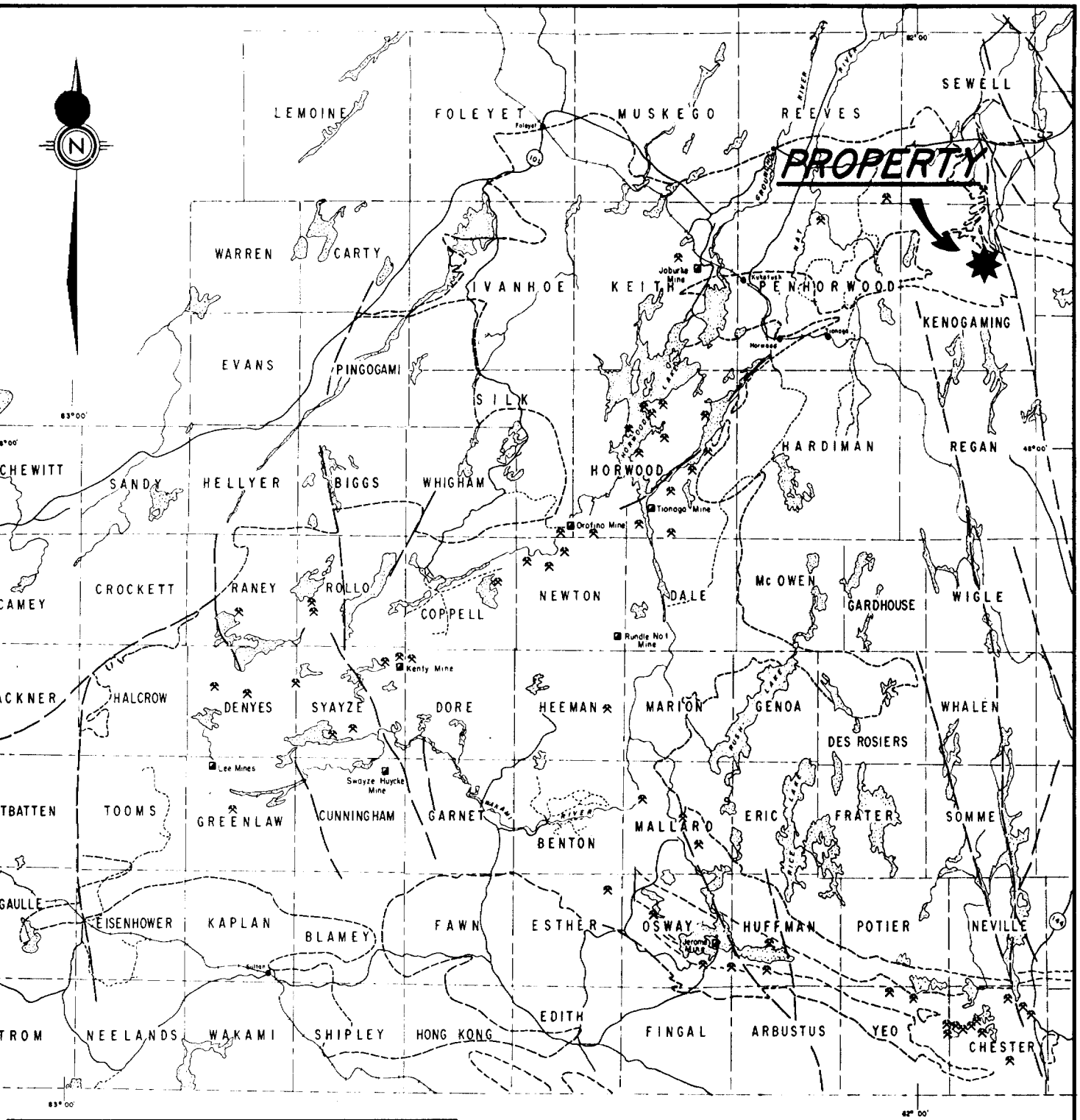
The general area is under active development by a local lumber company (Mallette Lumber) which should ensure continued year round access.

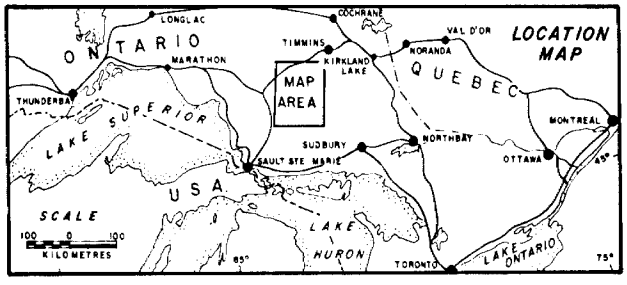
The main line of the Canadian National Railway passes to the southwest of the property.

The main centre of service and supply in the region is Timmins with a population of 45,000. All manner of mining equipment, contract services, exploration services, etc. are available here along with a skilled and stable mining work force. The smaller, nearby hamlet of Foleyet offers some food, accommodation and supply services.

Of interest, Orofino Resources Ltd. plan to construct a mill on their Silk township gold property which might be available to handle ore from other deposits in the immediate area. This is a very attractive consideration for further gold exploration in the north Swayze area. The presence of a nearby custom mill could

greatly increase the economic viability of a smaller, otherwise non-economic deposit. The closest custom mills at present are those of Pamour Porcupine Mines Ltd. at Schumacher and Pamour, approximately 85 miles by truck to the east.





SCALE

5 0 5 10 15 20

KILOMETRES

LEGEND

- *Swayze metasedimentary - metavolcanic belt*
- *Felsic intrusive rocks*
- *Gold prospect or showing*
- *Shaft on gold deposit*

REBA RESOURCES LTD.

SWAYZE GREENSTONE BELT

GEOLOGY AND GOLD OCCURRENCES

Project No: C-653	By: W.E. Brereton
Scale:	Drawn: GCS Limited
Drawing No: Figure 1	Date: Jan. 1984

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4.0 GEOLOGY AND MINERAL DEPOSITS - NORTH SWAYZE GOLD AREA

4.1 General

The property is located in the northeastern extremity of the Swayze Gold Belt. The Swayze Gold Belt is located southwest of and in rocks grossly equivalent to the Timmins-Porcupine Gold Camp. The Porcupine Camp is located in the west portion of the Abitibi Greenstone Belt of the Canadian Shield. It is the largest gold-producing camp in Canada and one of the largest in the world. During the past seventy years, more than 56.3 million troy ounces of gold have been produced from 18 properties in the area.

The Swayze area contains four past-producing gold mines (Joburke, Tionaga, Halcrow-Swayze and Jerome). Other substantial gold prospects under active exploration/ development in addition to Orofino include the Rundle Mine (Sulpetro-Hollinger) in Newton Township, the Kenty Mine in Swayze Township (Cumo Resources-Heron Resources) and the Jerome Mine in Osway Township (Osway Resources).

4.2 History of Exploration and Development

Initial interest in the general region was stimulated by the discovery of two major iron formation bands along the Groundhog River and Woman River in the early 1900's. Following a general waning of interest in iron deposits, gold became the principal metal sought.

Earliest gold discoveries date back to 1909 as prospectors worked westward from the Porcupine Camp which had been discovered that same year.

The first significant gold discovery in the area and subsequent staking rush was made in 1918 on the east shore of Horwood Lake. This became the property of Groundhog Gold Mines Limited in 1934.

Visible gold was discovered on what is now the property of Orofino Resources Limited in the early 1930's. This precipitated another small rush into the region.

Numerous other properties were being actively explored and developed in the Horwood Lake area at this time. The only production during this period was in 1938-39 from the Smith-Thorne (Tionaga) Mine.

Gold was then discovered in 1946 on the Joburke property in Keith Township immediately to the north of Orofino triggering another staking rush in the northern portion of the Swayze metasedimentary-metavolcanic belt.

4.3 Geology

The Swayze area has been the subject of numerous geological studies since the turn of the century. The most pertinent studies in the present area are those by Laird (1935), Harding (1937), Breaks (1978) and Milne (1972).

The Swayze area represents the western extremity of the Abitibi metasedimentary-metavolcanic ("greenstone") belt of Archean age which extends for several hundred miles east - northeast to the Grenville Front east of Chibougamau.

Swayze greenstone rocks are truncated to the west against the "Kapuskasing High" structural-metamorphic zone.

Of interest, the Abitibi is probably the most prolific metal producer of any greenstone belt in the world.

The present area of interest, the Kenogaming-Penhorwood area, encompasses the northeasternmost extremity of the Swayze greenstone sub-belt.

The present property is contained within a discrete, lenticular pile of felsic metavolcanic rocks, approximately 13 km long in an east-west direction by 6.5 km wide in the central portion of Kenogaming Township and east-central portion of Penhorwood Township (Ontario Department of Mines Map 2231). The main felsic pile is bounded to the east by the Tanton Lake Fault although a narrow wedge of felsic rocks does extend to the east into adjoining Pharand Township. Rock types include mainly felsic volcaniclastic rocks (tuffs, tuff-breccias) and some flows. The volcanics are extensively intruded by mafic to ultramafic rocks. A major oxide facies iron formation extends along the entire north boundary of the felsic pile and forms the contact with adjoining mafic metavolcanics. Granitic batholith complexes occur to the east and south.

Extensive areas of mafic-ultramafic intrusives crop out directly to the west of the survey area. One of these hosts the Reeves talc/asbestos Mine.

4.4 Mineral Deposits

Economic interest in the immediate area has focussed on gold, silver, asbestos, talc, copper-nickel, iron, copper- zinc and barite deposits. There has been economic production of the first four of the above mineral commodities. Gold and silver have been won primarily from structurally-controlled,

quartz vein-type deposits, e.g. Joburke mine, Keith Township, which produced 66,500 ounces of gold from 1973-1979. Asbestos and, lately, talc are produced at the Reeves Mine of Canadian Johns-Manville in Reeves Township to the northwest of the present property. The Orofino Mine, 40 km southwest of the property is currently being actively explored with a view to a productive decision in early 1984. Drill indicated reserves are currently quoted in the range of 1,000,000 tons of 0.17 oz Au/ton.

5.0 REBA PROPERTY - GEOLOGY AND EXPLORATION HISTORY

5.1 Geology

The property is underlain virtually entirely by felsic volcaniclastic rocks with a preponderance of felsic tuff and tuff-breccia (Figure 2).

A small ultramafic body is indicated to be present east of Logie Lake.

A sill-like amphibolite intrusive transects the southwest portion of the group.

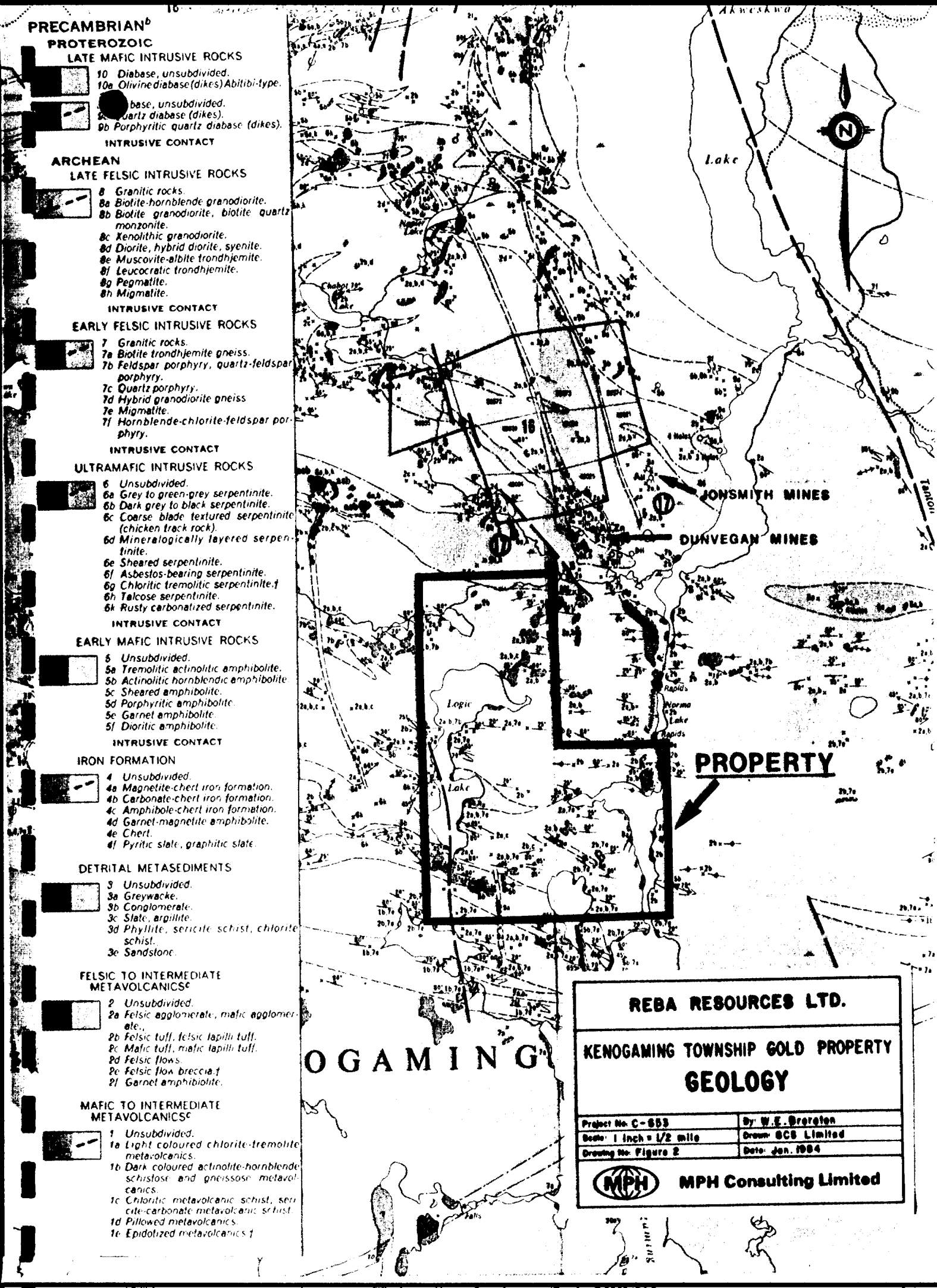
Of interest in an exploration context is the indicated presence of a 6 ft. wide quartz vein on the east shore of the small lake on claim 700059.

5.2 Exploration History

There is no record of any detailed exploration on the present property in assessment files.

Other work in the immediate area however is of interest in terms of the Reba claims. The most significant in this regard is probably on the property adjoining to the north and east, namely the Carl Creek-Bearcat Explorations ground which encompasses the old Dunvegan gold-zinc and Jonsmith gold prospects.

Gold was first discovered in the area now encompassed by the Carl Creek property in 1947 by a prospector working for Hoodoo Lake Mines. Subsequent prospecting, trenching and sampling were concentrated on five of their claims where gold discoveries had been made. The following quotes are excerpts


PRECAMBRIAN[b]
PROTEROZOIC
LATE MAFIC INTRUSIVE ROCKS
10 Diabase, unsubdivided.
10a Olivine diabase (dikes) Abitibi-type.
9 Diabase, unsubdivided.
9a Quartz diabase (dikes).
9b Porphyritic quartz diabase (dikes).
INTRUSIVE CONTACT
ARCHEAN
LATE FELSIC INTRUSIVE ROCKS
8 Granitic rocks.
8a Biotite-hornblende granodiorite.
8b Biotite granodiorite, biotite quartz monzonite.
8c Xenolithic granodiorite.
8d Diorite, hybrid diorite, syenite.
8e Muscovite-albite trondhjemite.
8f Leucocratic trondhjemite.
8g Pegmatite.
8h Migmatite.
INTRUSIVE CONTACT
EARLY FELSIC INTRUSIVE ROCKS
7 Granitic rocks.
7a Biotite trondhjemite gneiss.
7b Feldspar porphyry, quartz-feldspar porphyry.
7c Quartz porphyry.
7d Hybrid granodiorite gneiss
7e Migmatite.
7f Hornblende-chlorite-feldspar porphyry.
INTRUSIVE CONTACT
ULTRAMAFIC INTRUSIVE ROCKS
6 Unsubdivided.
6a Grey to green-grey serpentinite.
6b Dark grey to black serpentinite.
6c Coarse blade textured serpentinite (chicken track rock).
6d Mineralogically layered serpentinite.
6e Sheared serpentinite.
6f Asbestos-bearing serpentinite.
6g Chloritic tremolitic serpentinite.†
6h Talcose serpentinite.
6k Rusty carbonatized serpentinite.
INTRUSIVE CONTACT
EARLY MAFIC INTRUSIVE ROCKS
5 Unsubdivided.
5a Tremolitic actinolitic amphibolite.
5b Actinolitic hornblendic amphibolite
5c Sheared amphibolite.
5d Porphyritic amphibolite.
5e Garnet amphibolite.
5f Dioritic amphibolite.
INTRUSIVE CONTACT
IRON FORMATION
4 Unsubdivided.
4a Magnetite-chert iron formation.
4b Carbonate-chert iron formation.
4c Amphibole-chert iron formation.
4d Garnet-magnetite amphibolite.
4e Chert.
4f Pyritic slate, graphitic slate.
DETRITAL METASEDIMENTS
3 Unsubdivided.
3a Greywacke.
3b Conglomerate.
3c Slate, argillite.
3d Phyllite, sericite schist, chlorite schist.
3e Sandstone.
FELSIC TO INTERMEDIATE METAVOLCANICS[c]
2 Unsubdivided.
2a Felsic agglomerate, mafic agglomerate.,
2b Felsic tuff, felsic lapilli tuff.
2c Mafic tuff, mafic lapilli tuff.
2d Felsic flows.
2e Felsic flow breccia.†
2f Garnet amphibiolite.
MAFIC TO INTERMEDIATE METAVOLCANICS[c]
1 Unsubdivided.
1a Light coloured chlorite-tremolite metavolcanics.
1b Dark coloured actinolite-hornblende schistose and gneissose metavolcanics.
1c Chloritic metavolcanic schist, sericite-carbonate metavolcanic schist.
1d Pillowed metavolcanics.
1e Epidotized metavolcanics.†
Lake
JONSMITH MINES
DUNVEGAN MINES
Logic
Lake
PROPERTY
OGAMING
REBA RESOURCES LTD.
KENOGAMING TOWNSHIP GOLD PROPERTY
GEOLOGY
Project No. C-883
By: W.E. Brereton
Scale: 1 inch = 1/2 mile
Drawn: BCS Limited
Drawing No. Figure 2
Date: Jan. 1984
MPH Consulting Limited

taken from a report dated February 3, 1948 by G.W. Moore, Mining Engineer (Assessment Work File T-527):

"As a result of this work many small gold bearing shear zones were found but so far there is only one that shows values that have economic interest.

The main belt of tuff and agglomerate in which the gold bearing zones occur strikes roughly at N55W and dips steeply to the northeast. The fragments in the agglomerates are elongated along the strike of foliation. This tuff and agglomerate is highly silicified throughout. The strike of the gold bearing shear zones seems to conform with the general strike length of the tuff.

The tuff and agglomerate are usually slightly mineralized with fine pyrite which becomes quite heavy in parts, especially in the narrow gold bearing shear zones and in trenches No. 7 to 12 in the area west of the main gold discovery. Considerable heavy pyrite also occurs in scattered bunches east of Akweskwa Lake.

A large quartz vein about 150 feet wide was examined. This occurs about 600 feet south of the gold bearing belt of tuff and agglomerate and is close to the west shore of Akweskwa Lake. Although this vein is barren looking and a grab sample taken from it ran only .01 ozs in gold, the vein is considered to be of interest from a structural standpoint. So far it has been difficult to trace the vein along its strike because of low swampy ground to the west and Akweskwa Lake to the east. The strike of the vein is apparently parallel to the general strike of the rocks.

The gold discoveries made to date have been confined to narrow well pyritized shear zones in the tuff and agglomerate. Gold is readily panned from those shear zones, usually after burning pieces of the rock. In the case of the main gold discovery which is located on claim No. S-49029, heavy tails of gold have been panned from surface rust while high assays have also been obtained from channel samples in different places along the strike. The shear is about two feet wide and the rock section has been traced so far for

about seventeen feet in length. Late this fall Elieff dug up some rich specimens of free gold out of this shear that further increased interest in it and in the property. Further trenching showed the presence of still more free gold. This seems to occur in concentrations along narrow seams in the shear zone. The high gold samples also carry considerable silver, about 25% as much as of gold.

The trenching done on the east side of Akweskwa Lake has uncovered still more narrow gold bearing shear zones with the gold content being generally a little higher than further west. That is with the exception of the main rich shear zone.

Geological conditions seem generally favourable to the deposition of the gold ore with the area on the east side of Akweskwa Lake showing the most signs on rock disturbance. Drag folds are more common here than further west."

In 1950 the name of Hoodoo Lake Mines was changed to Dunvegan Mines. During the summer of 1951, the Canadian Johns-Manville Company sent a party of prospectors into the area to investigate a belt of serpentine rocks (magnetic highs) that extend in an east-west direction through Kenogaming Township. The possibility of finding asbestos led to renewed staking by Dunvegan, Canadian Johns-Manville, and others.

In 1951, old trenches were deepened and new trenches excavated; all were sampled for zinc, gold and silver. Up to 0.24 oz Au/ton over 4 ft. and 12.33% Zn over 2 ft. were recorded by this work (OMNR file T-527, Timmins).

In 1953, Norduna Mines (Falconbridge Nickel) optioned 135 claims from Dunvegan Mines and undertook an exploratory search for nickel deposits associated with the extensive belt of altered ultramafics. After completing approximately 5,000 ft. of diamond drilling, Norduna patented nine claims covering the main nickel

occurrences in disseminated pentlandite and allowed the remainder to lapse.

In 1957, Dunvegan re-staked some of the lapsed claims, and undertook additional exploration on two separate serpentinite zones. They drilled six holes in the area located a few hundred feet south of the original Hoodoo Lake Mines gold-zinc showing and four holes located east of Akweskwa Lake. No commercial mineralization was encountered in the drill holes. Dunvegan subsequently became inactive in the area and their claims lapsed.

In 1960, Jonsmith Mines Ltd. staked 12 claims covering the original Hoodoo Lake Mines' gold-zinc showing, and undertook exploration in this general area. They drilled three short holes (packsack drill) to test a gold occurrence located 1,800 ft. northeast of the above main gold-zinc showing. Each hole was just over 100 ft. long and the total length drilled was 306 feet such that the total strike length of the tuffaceous zone tested was approximately 100 feet only. The principal rock intersected in the holes was sericitized tuff cut by thin veins of lightly pyritized quartz. Gold mineralization was reportedly associated with the heavier pyrite mineralization; the highest gold values were obtained where chalcopyrite and galena were present in addition to the pyrite. The best intersections were in drillhole No. 1 where a 5-foot intersection assayed 0.92 oz. gold per ton was reported, followed by another 5-foot section that assayed 0.16 oz. gold per ton. That is, the 10-foot section from 65-75 ft. averaged 0.54 oz. gold per ton. It appears as if the remainder of the hole from 75-102 ft. was not assayed even though the drill log states that it intersected the same favourable sericitized tuff host rock with scattered pyrite and some quartz vein material.

Two other sections intersected near the beginning of the hole also contained gold values, a 5-foot section assayed 0.06 oz. Au/ton, and a 5.6-foot section assayed 0.04 oz. Au/ton. Two holes drilled on either side of Hole No. 1 intersected only minor gold values with the best intersection being three feet that averaged 0.07 oz. Au/ton. Because of their locations however, there is considerable doubt whether or not these latter two short drillholes actually intersected the possible srike extensions of the 10-foot gold-bearing zone intersected in Hole No. 1.

In 1966, Falconbridge Nickel Mines optioned part of the Jonsmith claim group including the area encompassing the original Hoodoo Lake Mines' gold-zinc showing. Falconbridge drilled eight holes to test this zone along an 800-foot strike length. Thin sphalerite stringers were cut in hole No's 3, 7 and 8 and disseminated pyrite sections in all holes. In DDH #7, one 3.7-ft. section assayed 1.21% Zn, 0.51 oz. Ag and 0.03 oz. Au per ton; and another 5.2 ft. section assayed 1.03% Zn, 0.55 oz. Ag and 0.01 oz. Au per ton. The best gold assay was a 3.3 ft. section near the bottom of hole 4 which returned 0.08 oz. Au per ton.

Falconbridge also completed ground magnetic, horizontal loop electromagnetic, and self-potential surveys over six of the Jonsmith claims as well as their own adjacent claims. No worth while electromagnetic anomalies were detected. The magnetometer survey clearly outlines the ultramafic intrusive bodies as areas of magnetic highs. Falconbridge subsequently drilled a number of holes at scattered points throughout the claim group to test magnetic highs associated with ultramafic intrusives. Disseminated sulphide zones with associated nickel values were found at a number of locations; however, no economic deposits were found.

The felsic volcaniclastics that host the Dunvegan and Jonsmith mineralization do not strike onto the Reba claims, the latter property being located the west and south. The Reba property encompasses a very similar geological setting however and it is reasonable to expect that there is potential for similar mineralization on the present claims.

6.0 AIRBORNE GEOPHYSICAL SURVEYS

6.1 General

Airborne surveying consisted of Dighem electromagnetics (EM), VLF-electromagnetics (VLF-EM) and magnetics.

Airborne survey data are presented in Figures 3, 4 and 5. The author has drawn freely on material provided by Dighem re conductor responses, etc. in the following discussion.

6.2 VLF-EM

VLF-EM anomalies are not EM anomalies in the conventional sense. EM anomalies primarily reflect eddy currents flowing in conductors which have been energized inductively by the primary field. In contrast, VLF-EM anomalies primarily reflect current gathering, which is a non-inductive phenomenon. The primary field sets up currents which flow weakly in rock and overburden, and these tend to collect in low resistivity zones. Such zones may be due to graphite and/or sulphides, shears, river valleys and even unconformities.

The Hertz Industries Ltd. Totem VLF-electromagnetometer as used in the present survey measures the total field and vertical quadrature VLF components. Both these components are digitally recorded in the aircraft with a sensitivity of 0.1 percent. The total field yields peaks over VLF current concentrations whereas the quadrature component tends to yield crossovers. Both appear as traces on the profile records. The total field data also are filtered digitally and displayed on a contour map, to facilitate the recognition of trends in the rock strata and the interpretation of geologic structure.

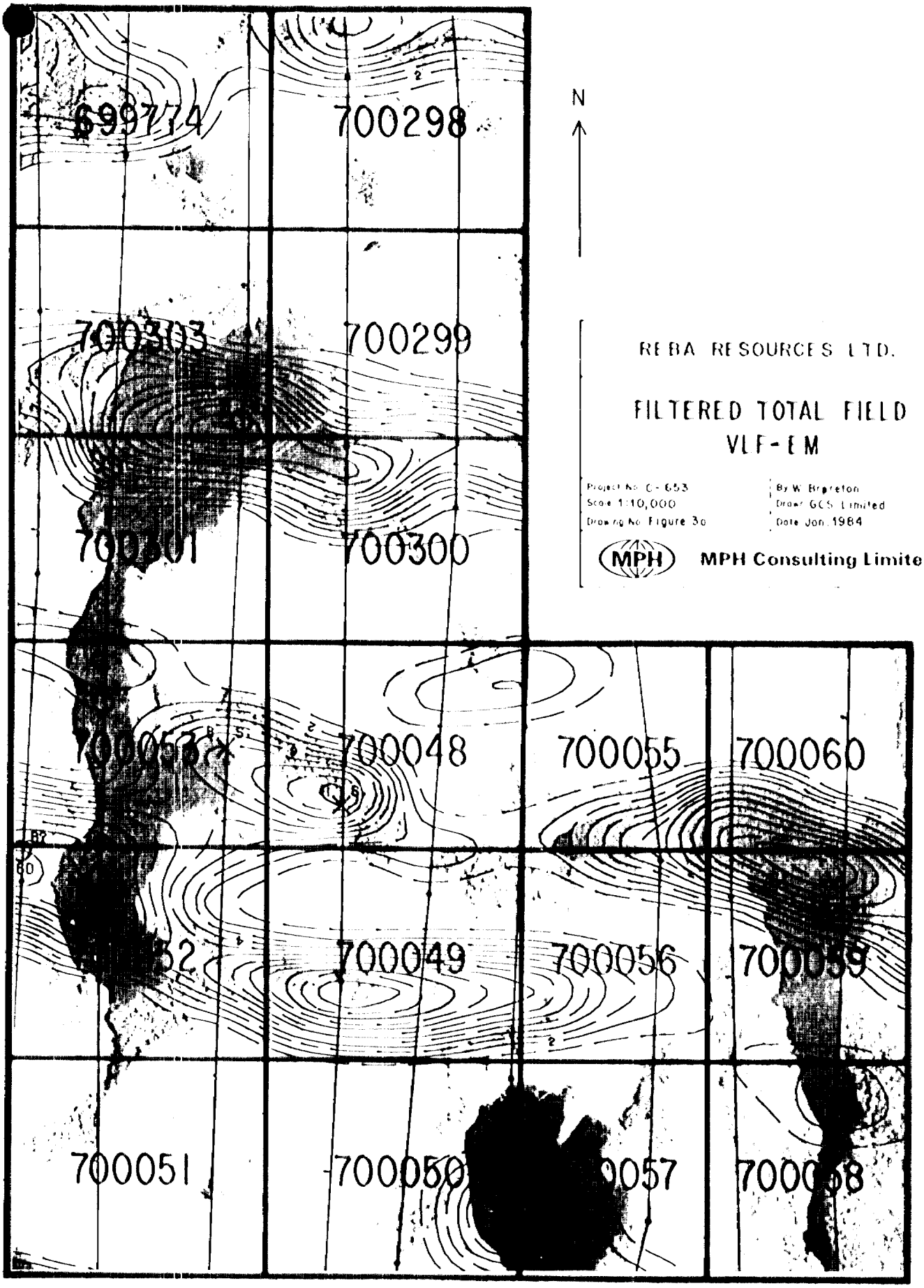
The response of the VLF total field filter operator in the frequency domain is basically similar to that which can be used to produce enhanced magnetic maps. The VLF-EM filter removes long wavelengths such as those which reflect regional and wave transmission variations. The filter sharpens short wavelength responses such as those which reflect local geological variations. The filtered total field VLF-EM contour map is produced with a contour interval of one percent.

Filtered VLF results for the property are presented in Figure 3a with a corresponding legend as Figure 3b.

As indicated, several VLF anomalous trends transect the claim group in an east-west direction. The northernmost anomaly, i.e., that along the north property boundary, coincides in part with a linear swampy depression and is interpreted to represent a shear zone. It may be significant that the 100 to 150 ft. wide quartz vein zone previously described on the adjoining Carl Creek-Bearcat ground occurs just off the south edge of this same shear structure and may be related to it. This impressive zone of quartz veining is located 700 m due east of the northeast cover of the Reba property.

A second VLF anomalous trend is centred under the north end of Logie Lake. This also is probably a zone of shearing with some enhancement by lake bottom sediment conductivity.

The ultramafic intrusions towards the south end of Logie Lake are coincident with VLF anomalous zones. This is fairly common and often reflects extensive shearing and alteration (talc, carbonate) which gives rise to a very weak conductivity. It is of interest that one of these VLF



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REBA RESOURCES LTD.

FILTERED TOTAL FIELD
VLF-EM

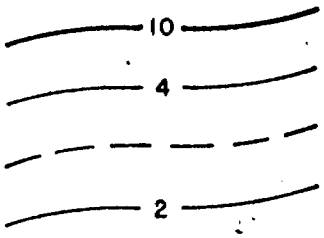
Project No. C-653
Scale 1:10,000
Drawing No. Figure 3a

By W. Brereton
Drawn GCS Limited
Date Jan. 1984

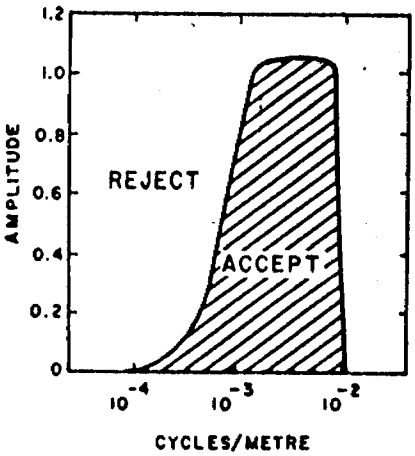
MPH Consulting Limited

LEGEND

Contours in percent.



The numbers face in the direction of increasing value.



Frequency response of VLF – EM filter

Flight Line

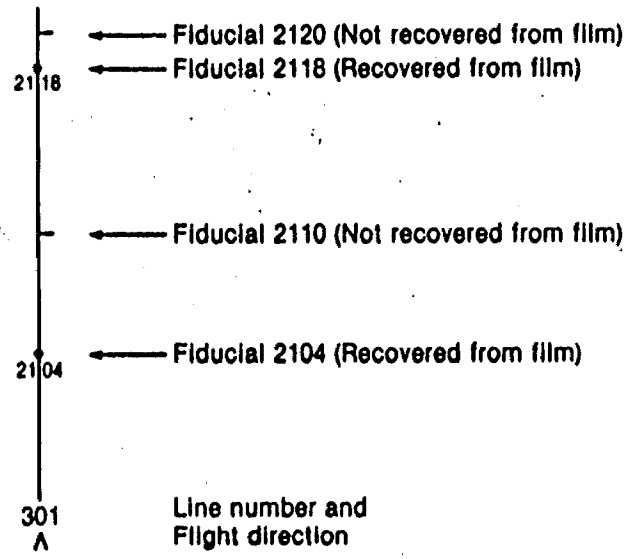


FIGURE 3b

anomalous zones passes immediately to the north of the quartz vein on claim 700059, a setting analogous to that on the adjoining Carl Creek ground.

6.3 Electromagnetics

DIGHEM electromagnetic responses fall into two general classes, discrete and broad. The discrete class consists of sharp, well-defined anomalies from discrete conductors such as sulphide lenses and steeply dipping sheets of graphite and sulphides. The broad class consists of wide anomalies from conductors having a large horizontal surface such as flatly dipping graphite or sulphide sheets, saline water-saturated sedimentary formations, conductive overburden and rock, and geothermal zones.

The EM anomalies appearing on the electromagnetic map are analyzed by computer to give the conductance (i.e., conductivity-thickness product) in mhos of a vertical sheet model. This is done regardless of the interpreted geometric shape of the conductor. This is indicated by Dighem to not be an unreasonable procedure because the computed conductance increases as the electrial quality of the conductor increases, regardless of its true shape. DIGHEM anomalies are divided into six grades of conductance, as follows. The conductance in mhos is the reciprocal of resistance in ohms.

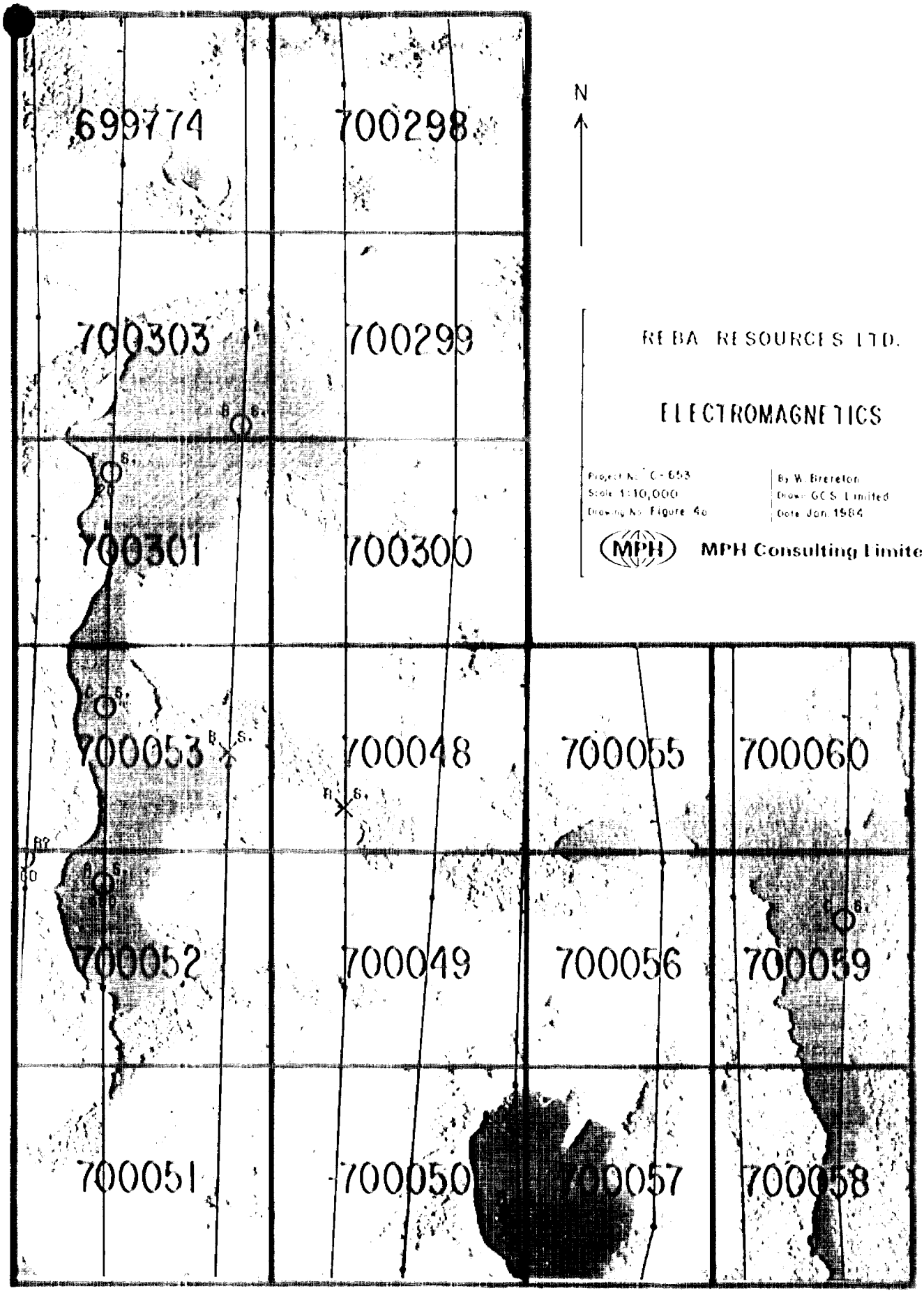
Anomaly Grade	Mho Range
6	greater than 99
5	50 - 99
4	20 - 49
3	10 - 19
2	5 - 9
1	less than 5

The conductance value is a geological parameter because it is a characteristic of the conductor alone; it generally is independent of frequency, and of flying height or depth of burial apart from the averaging over a greater portion of the conductor as height increases. Small anomalies from deeply buried strong conductors are not confused with small anomalies from shallow weak conductors because the former will have larger conductance values.

Conductive overburden generally produces broad EM responses which are not plotted on the EM maps. However, patchy conductive overburden in otherwise resistive areas can yield discrete anomalies with a conductance grade of 1, or even of 2 for conducting clays which have resistivities as low as 50 ohm-m. In areas where ground resistivities can be below 10 ohm-m, anomalies caused by weathering variations and similar causes can have any conductance grade. The anomaly shapes from the multiple coils often allow such conductors to be recognized, and these are indicated by the letters S, H, G and sometimes E on the map (see EM legend - Figure 4b).

For bedrock conductors, the higher anomaly grades indicate increasingly higher conductances. Graphite and sulphides can span all grades but, in any particular survey area, field work may show that the different grades indicate different types of conductors.

Strong conductors (i.e., grades 5 and 6) are characteristic of massive sulphides or graphite. Moderate conductors (grades 3 and 4) typically reflect sulphides of a less massive character or graphite, while weak bedrock conductors (grades 1 and 2) can signify poorly connected graphite or heavily disseminated sulphides. Grade 1 conductors may not



REBA RESOURCES LTD.

ELECTROMAGNETICS

Project No. C-653
Scale 1:10,000
Drawing No. Figure 4a

By W. Brereton
Drawn GCS Limited
Date Jan. 1984

MPH Consulting Limited

ANOMALY GRADE	EM GRADE SYMBOL	CONDUCTANCE RANGE (MHOS)
6	●	· 99
5	✹	50 -- 99
4	●	20 -- 49
3	◉	10 -- 19
2	○	5 -- 9
1	○	5
	×	Indeterminate

DIGHEM anomalies are divided into six grades of conductivity-thickness product. This product in mhos is a measure of conductance.

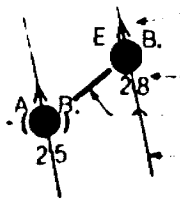
anomaly name · C● H· interpretive symbol

Depth is greater than
· 15 m
: 30 m
⋮ 45 m
⋮ 60 m

Inphase and Quadrature of Coaxial Coil is greater than
. 5 ppm
.. 10 ppm
... 15 ppm
.... 20 ppm

Interpretive symbol	Conductor ("model")
B.	Bedrock conductor
S.	Conductive cover ("horizontal thin sheet")
H.	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E.	Edge of broad conductor ("edge of half space")
L.	Culture, e.g. power line, building, fence

arcs indicate the conductor has a thickness · 10 m



dip direction

magnetic correlation in nT (gammas)

conductor axis

flight line

Flight Line

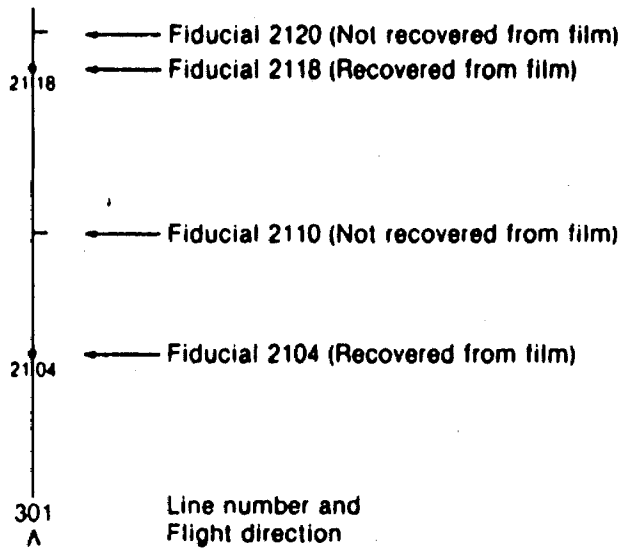


FIGURE 4b

respond to ground EM equipment using frequencies less than 2000 Hz.

Faults, fractures and shear zones may produce anomalies which typically have low conductances (e.g., grades 1 and 2). Conductive rock formations can yield anomalies of any conductance grade. The conductive materials in such rock formations can be salt water, weathered products such as clays, original depositional clays and carbonaceous material.

There are no good grade EM anomalies on the Reba property, suggesting that within the detection capability of the airborne geophysical surveying, there are no massive sulphide/graphite zones on the claims.

There are several very weak airborne anomalies that coincide directly in virtually all cases with VLF zones (Figure 4a). These are all indicated to be "S" or surficial type responses in almost all cases and are interpreted to be reflective of the very weak shear/conductive overburden conductivity being detected at the VLF frequencies.

A single, very weak "B?", i.e. questionable bedrock, anomaly is located on the west property boundary on claim 700053.

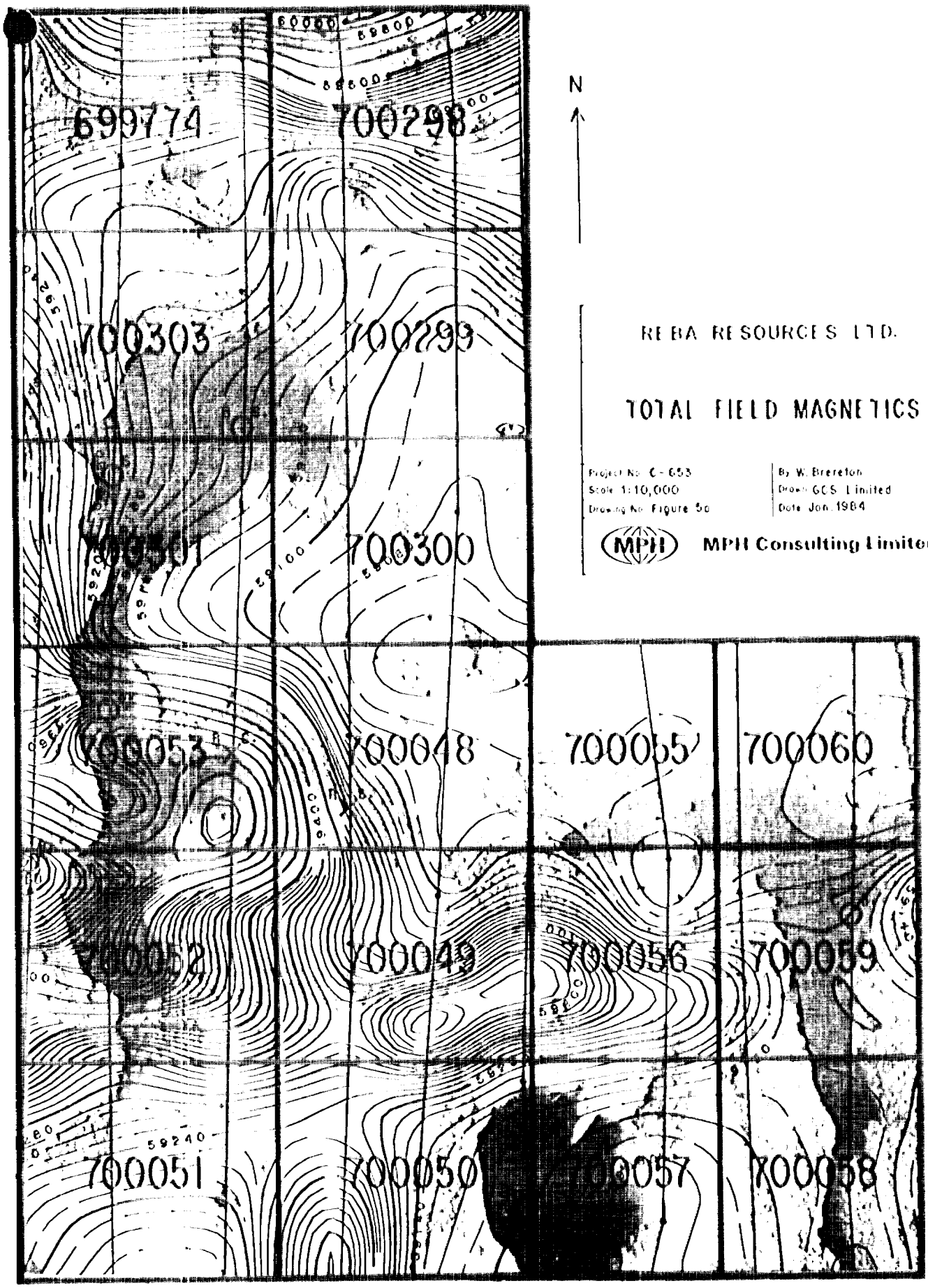
6.4 Magnetics

The magnetometer data are digitally recorded in the aircraft to an accuracy of one nT (i.e., one gamma). The digital tape is processed by computer to yield a total field magnetic contour map.

Figures 5a and 5b present magnetic results and legend respectively for the Reba property.

The zone of intense magnetic activity across the south portion of the claims is interpreted to reflect the known ultramafic intrusives in this area. Higher values towards the north end of the property again reflect a known ultramafic intrusive located north of the property.

North-south faults cut and offset the south magnetic anomaly in at least 2 places (along Kamiscotia River and 500m east of Logie Lake).



REBA RESOURCES LTD.

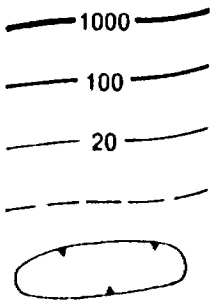
TOTAL FIELD MAGNETICS

Project No. C-653
Scale 1:10,000
Drawing No. Figure 5a

By W. Brereton
Drawn GCS Limited
Date Jan. 1984

MPH Consulting Limited

ISOMAGNETIC LINES
(total field)



1 000 nT

100 nT

20 nT

10 nT

magnetic depression

Magnetic Inclination within the survey area: 76°

Flight Line

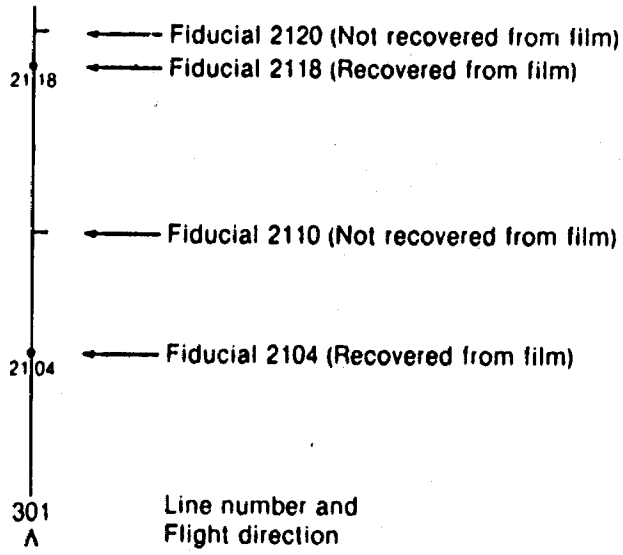


FIGURE 5b

7.0 CONCLUSIONS AND RECOMMENDATIONS

Airborne geophysical surveys (Dighem EM, VLF-EM, magnetics) recently completed on the Kenogaming Township gold prospect of Reba Resources Ltd. indicate that a number of east-west shear zones transect the property area. At least one of these is associated with and probably reflective of ultramafic rocks.

Geologically, the property area is indicated to be underlain primarily by felsic volcaniclastic rocks.

Overall setting in terms of lithologies, shearing, quartz veining, etc. is very similar to that on the adjoining Carl Creek-Bearcat property, which contains the old Dunvegan gold-zinc and Jonsmith gold prospects.

The Reba property is therefore concluded to have potential to host similar types of mineralization and an exploration program is hereby proposed to further evaluate this potential. The initial program is to consist of linecutting, VLF and IP surveying and is estimated at $50,000.00 as follows:

Linecutting: 400 ft. lines, 20 mi @ $325	$ 6,500.00
VLF-EM surveying: 20 mi @ $300	5,400.00
IP survey allowance	20,000.00
Prospecting, geological evaluation, Assaying, analytical	10,000.00
Reporting, supervision, drafting, land management	4,000.00
Contingency	4,000.00
TOTAL	$50,000.00

Linecutting should consist of north-south lines at 400 ft. intervals with 100 ft. stations off an east-west baseline which extends from the No. 1 post of claim 700060 to the No. 4 post of claim 700053.

The IP work should be carried out to further evaluate priority VLF targets. Positioning of IP lines will be decided upon receipt of the VLF data. IP is recommended in this case as the disseminated to pod-like pyrite mineralization associated with the gold and zinc values on the adjoining property would appear to present a classic IP target.

Work should commence as soon as possible to take advantage of winter ice conditions.

Respectfully submitted,

W.E. Brereton, P.Eng.

REFERENCES

Breaks, F.W.; 1978
Geology of the Horwood Lake Area, Ont. Geol. Surv. Report 169.

Harding, W.D.; 1937
Geology of the Horwood Lake Area, Ont. Dept. Mines An. Report, Vol. XLVI, P II, 1937.

Laird, H.C.; 1935
Horwood Lake Area, Ont. Dept. Mines An. Report, Vol. XLIV, P VII, 1935.

Milne, J.G.; 1972
Geology of the Kukatush - Sewell Lake Area, Ont. Div. Mines Geol. Report 97.

CERTIFICATE OF QUALIFICATIONS

I, William E. Brereton, of Toronto, Ontario, do hereby certify that:

1. I am a consulting geologist with an office at 120 Adelaide Street West, Suite 2406, Toronto, Ontario, M5H 1T1, Canada.

2. I obtained an Honours B.Sc. degree in Geology and Physics from Queen's University in 1971 and an M.Sc.(A) in Mineral Exploration from McGill University in 1977.

3. I have practised my profession continuously since graduation and have been in private independent practice since 1977.

4. I am a member of the Association of Professional Engineers of the province of Ontario.

5. I have no interest in Reba Resources Ltd. or the Kenogaming property, nor do I expect to receive or acquire any such interest.

William E. Brereton, P.Eng.,
Toronto, Ontario, Canada,
January, 1984.

APPENDIX 1

THE FLIGHT RECORD AND PATH RECOVERY

Both analog and digital flight records were produced. The analog profiles were recorded on chart paper in the aircraft during the survey. The digital profiles were generated later by computer and plotted on electrostatic chart paper at a scale of 1:10,000. The digital profiles are listed in Table A-1.

In Table A-1, the log resistivity scale of 0.03 decade/mm means that the resistivity changes by an order of magnitude in 33 mm. The resistivities at 0, 33, 67, 100 and 133 mm up from the bottom of the digital flight record are respectively 1, 10, 100, 1,000 and 10,000 ohm-m.

The fiducial marks on the flight records represent points on the ground which were recovered from camera film. Continuous photographic coverage allowed accurate photo-path recovery locations for the fiducials, which were then plotted on the geophysical maps to provide the track of the aircraft.

The fiducial locations on both the flight records and flight path maps were examined by a computer for unusual helicopter speed changes. Such speed changes may denote

an error in flight path recovery. The resulting flight path locations therefore reflect a more stringent checking than is provided by standard flight path recovery techniques.

Table A-1. The Digital Profiles

Channel Name (Freq)	Observed parameters	Scale units/mm
MAG	magnetics	10 nT
ALT	bird height	3 m
CXI (900 Hz)	vertical coaxial coil-pair inphase	1 ppm
CXQ (900 Hz)	vertical coaxial coil-pair quadrature	1 ppm
CXS (900 Hz)	ambient noise monitor (coaxial receiver)	1 ppm
CPI (900 Hz)	horizontal coplanar coil-pair inphase	1 ppm
CPQ (900 Hz)	horizontal coplanar coil-pair quadrature	1 ppm
CPS (900 Hz)	ambient noise monitor (coplanar receiver)	1 ppm
CPI (7200 Hz)	horizontal coplanar coil-pair inphase	1 ppm
CPQ (7200 Hz)	horizontal coplanar coil-pair quadrature	1 ppm
CPS (7200 Hz)	ambient noise monitor (coplanar receiver)	1 ppm
VLFT	VLF-EM total field	1 %
VLFQ	VLF-EM vertical quadrature	1 %
	Computed Parameters	
DIFI (900 Hz)	difference function inphase from CXI and CPI	1 ppm
DIFQ (900 Hz)	difference function quadrature from CXQ and CPQ	1 ppm
REC1	first anomaly recognition function	1 ppm
REC2	second anomaly recognition function	1 ppm
REC3	third anomaly recognition function	1 ppm
REC4	fourth anomaly recognition function	1 ppm
CDT	conductance	1 grade
RES (900 Hz)	log resistivity	.03 decade
RES (7200 Hz)	log resistivity	.03 decade
DP (900 Hz)	apparent depth	3 m
DP (7200 Hz)	apparent depth	3 m
FEO% (900 Hz)	apparent weight percent magnetite	0.25%

Sonotek Limited
2410-5 Dunwin Drive, Mississauga
Ontario — Canada — L5L 1J9
telephone: (416) 828-6810
telex: 065 - 24733

Specification for the Proton Precession Magnetometer:

Sensitivity	±0.1 gamma for sample times of 1 second or longer
	±1 gamma for sample times of less than 1 second
Range	20,000 to 100,000 gammas
Sampling Rate	Programmable in 0.1 sec steps from 0.3 to 2.0 sec (same as scan rate of data system)
Tuning	Automatic
Reference Frequency	Accuracy ±1 ppm at 25°C
	Stability 5 ppm/year
Auxiliary Output	Analog signal monitoring output (BNC)
Indicator	Polarize current LED monitor
Power	28±4 VDC. For typical sensor: 7 A max current, 50% duty cycle, 100 W average power
Physical Data:	
Signal Package	Width 241 mm (9.5 in), half-rack width
	Height 133 mm (5.25 in)
	Depth 254 mm (10 in)
	Weight 5 kg (11 lb)
Toroid Sensor	Diameter 150 mm (5.9 in)
	Height 170 mm (6.7 in)
	Weight 5.5 kg (12 lb)
Airfoil plus Toroid Sensor	Diameter 170 mm (6.75 in)
	Length 660 mm (26 in)
	Weight 9 kg (20 lb)

Totem 2A

VLF Electromagnetic airborne survey instrument

Multi channel

Specifications

Introduction.
The Totem-2A measures basically the same parameters and shares the same package configuration as the well established Totem-1A.

This new generation instrument, however, measures multiple parameters on two channels simultaneously, with less noise and greater accuracy. These advancements have been achieved while maintaining the simple installation and operating procedures of the 1A model.

The Totem-2A employs state of art digital and linear integrated circuits to implement the functions of crystal controlled phase locked loop frequency synthesizers, dual frequency heterodyne conversion and proprietary time domain sampling vector computation techniques.

Features.
The principal parameters measured are the change in total field and the vertical quadrature field. Parameters also available are the total field gradient (from sensors in two locations) and the horizontal quadrature field. The quadrature polarity is defined by the direction of flight relative to the field. The total and quadrature magnitudes are insensitive to sensor orientation in pitch, roll and yaw.

One obvious advantage of dual frequency operation is that primary sources can be selected to ensure good coupling with conductors of any orientation. Potential uses of the gradient mode are enhanced interline contouring and deliniation of multiple conductors with horizontal and vertical gradient respectively.

Specifications subject to change.

Primary source:	Magnetic field component radiated from VLF radio transmitters (one or two simultaneously).
Parameters measured:	Total field, vertical quadrature, horizontal quadrature, gradient.
Frequency range:	15kHz to 25.0kHz front panel selectable for each channel in 100Hz steps.
Sensitivity range:	130uV/m to 100mV/m at 20kHz, 3dB down at 14kHz and 24kHz.
VLF signal bandpass:	-3dB at ± 80Hz, < 4% variation at ± 50Hz.
Adjacent channel rejection:	300 to 800Hz = 20 to 32dB, 800 to 1500Hz = 32 to 40dB, > 1500Hz > 40dB (for < 2% noise envelope).
Out of band rejection:	10kHz to 2.5kHz = $5x10^{-4}$A/m to $5x10^{-1}$A/m < 2.5kHz rising at 12dB/octave 30kHz to 60kHz = $5x10^{-4}$A/m to $8x10^{-3}$A/m > 60kHz rising at 6dB/octave (for no overload condition).
Output span:	± 100% = ± 1.0V
Output filter:	Time constant 1sec for 0 to 50% or 10% to 90%, noise bandwidth 0.3Hz (second order LP).
Internal noise:	1.3uV/m rms (ambient noise will exceed this).
Sferics filter:	Reduces noise contribution of impulse interference.
Electric field rejection:	< 0.5% error for 20m tow cable.
Controls:	Power switch, frequency selector switches (line & ortho) level controls (line & ortho), meter switch (total/quad) sferics filter switch.
Displays:	Meters (line & ortho), sferics light, overload light
Inputs:	Power, 23 to 32 Vdc fused 0.5Amp. Signal, Sensor upper, Sensor lower.
Outputs:	Total, quad, gradient, multiplexed (line & ortho) Audio monitor, stereo line & ortho
Dimensions & weight:	Console 19" rack mounted, 4.5cm high x 34cm deep, 3.8kg. Sensor and pre-amplifier assembly 15cm dia. and 46cm long, 1.5kg.

Herz Industries Ltd.
197 Fenn Avenue
Willowdale/Ontario
M2P 1Y1
Tel: (416) 221-8908

HERZ Manufacturers of geophysical instruments

APPENDIX 2

Ministry of Natural Resources
Ontario

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

8406.317

42A04NW0134 2.6343 KENOGAMING

900

Type of Survey(s): Airborne VLF-EM, Magnetics, EM	Township: Kenogaming Twp.
Claim Holder(s): Robert J. Shepard	Prospector's Licence No.: M-21444
Address: 620 - 885 Dunsmuir St., Vancouver, B.C. V6C 1N5	
Survey Company: Dighem Ltd./MPH Consulting Ltd.	Date of Survey (from & to): Day 10 Mo. 83 — Day 01 Mo. 84
Total Miles of line Cut: -	
Name and Address of Author (of Geo-Technical report): W.E. Brereton, 2406 - 120 Adelaide St. West, Toronto, Ont. M5H 1T1	

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	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days: Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	40
	Magnetometer	20
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	699774				
	700048				
	700049				
	700050				
	700051				
	700052				
	700053				
	700055				
	700056				
	700057				
	700058				
	700059				
	700060				
	700298				
	700299				
	700300				
	700301				
	700303				

RECEIVED
AUG 13 1984
MINING LANDS SECTION

RECORDED
AUG - 8 1984
Receipt No. 40

PORCUPINE MINING DIVISION
RECEIVED
AUG - 8 1984
A.M. 7 8 9 10 11 12 P.M. 1 2 3 4 5 6

Total number of mining claims covered by this report of work: 18

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.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1080	August 8, 1984	Stanley
	Date Approved as Recorded	Branch Mining Recorder
	See revised Statement	

Date: Aug. 1/84 — Recorded Holder or Agent (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: W.E. Brereton, 2406 - 120 Adelaide St. West, Toronto, Ont. M5H 1T1

Date Certified: Aug. 1/84 — Certified by (Signature)

1362 (81/8)

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.6343

Date 1984 07 19

Mining Recorder's Report of Work No.

Recorded Holder: R. SHEPPARD

Township or Area: KENAGAMING TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	P 700048 to 53 inclusive 700055 to 60 inclusive 700298 to 301 inclusive 700303 699774
Electromagnetic 40 days	
Magnetometer 20 days	
Radiometric ____ days	
Induced polarization ____ days	
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

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; Geological — 40; Geochemical — 40; Section 77(19)—60:

2.6343

1984 07 19

Our File: 2.6343

Mr. Bruce W. Hanley
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Airborne Geophysical (Electromagnetic and Magnetometer) Survey submitted on Mining Claims P 699774 et al in the Township of Kenogaming

---

The Airborne Geophysical (Electromagnetic and Magnetometer) Survey assessment work credits as shown on the attached statement have been approved as of the above date.

No Report of Work was filed for the above-mentioned survey. Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

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

D. Kinvig:mc

cc: R. Sheppard
21 - 2246 Falkstone Way
West Vancouver, B.C.
V7S 2X7

cc: W.E. Brereton
Suite 2406
120 Adelaide Street West
Toronto, Ontario
M5H 1T1

Attach.

984 02 09

Our File: 2.6343

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for an Airborne Geophysical (Electromagnetic & Magnetometer) Survey submitted on Mining Claims P 700048 et al in the Township of Kenogaming.

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

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

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

A. Barr:sc

cc: R. Sheppard
21 - 2246 Folkestone
Vancouver, B.C.
V7S 2X7

cc: W.E. Brereton
2406 - 120 Adelaide St. W.,
Toronto, Ontario
M5H 1T1

Ministry of Natural Resources
Ontario

Geotechnical Report Approval

File 2.6343

Mining Lands Comments

☐ To: Geophysics

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geology - Expenditures

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geochemistry

Comments

L.D.

☐ Approved ☐ Wish to see again with corrections | Date | Signature

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

Assessor: P.K. - July 12/84

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.

Ontario

Ministry of Natural Resources

File _____

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) Airborne VLF, EM, MAG

Township or Area Kenogaming Twp.

Claim Holder(s) R. Sheppard

21 - 2246 Folkestone Way, W. Vancouver

Survey Company MPH Consulting/Dighem Ltd. V7S 2X7

Author of Report W.E. Brereton, P.Eng.

Address of Author 2406-120 Adelaide St. W., Toronto

Covering Dates of Survey Oct./83 - Jan./84
(linecutting to office)

Total Miles of Line Cut -

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 _____

--Magnetometer _____

--Radiometric _____

--Other _____

Geological _____

Geochemical _____

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

Magnetometer 20 Electromagnetic 40 Radiometric _____
(enter days per claim)

DATE: Jan. 31/84 SIGNATURE: W.E. Brereton
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	700048
P	700049
P	700050
P	700051
P	700052
P	700053
P	700055
P	700056
P	700057
P	700058
P	700059
P	700060
P	700298
P	700299
P	700300
P	700301
P	700303
P	699774

TOTAL CLAIMS 18

If space insufficient, attach list

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) VLF, Magnetics, EM

Instrument(s) Totem 2A VLF, Sonotek PMH 5010 Mag, Dighem III EM system

(specify for each type of survey)

Accuracy EM - 0.2 ppm, Magnetics - 1 gamma

(specify for each type of survey)

Aircraft used AS-350 Helicopter

Sensor altitude 30 m

Navigation and flight path recovery method Visual Navigation

_____

Aircraft altitude 45 m Line Spacing 200 m

Miles flown over total area 1000 km (600 miles) Over claims only 9 miles

Sewell Twp. M.1102

Penhorwood Twp. M.1055

Pharand Twp. M.306

Crothers Twp. M.742

Regan Twp. M.1075

Akweskwo Lake

Crawford L.

Wye L.

Kenese L.

Kaneki L.

Kenogoming Lake

THE TOWNSHIP OF

KENOGAMING

DISTRICT OF SUDBURY

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	● or (P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	
PATENTED S.R.O.	

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

Planned Extension

DATE OF ISSUE
JUL 23 1984
Ministry of Natural Resources
TORONTO

PLAN NO. M.967

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

42A04NW0134 2.8343 KENOGAMING