



42A06NW0239 63.1684 OGDEN

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The President and Directors,
Brabar Mines Ltd.,
Suite 1024,
85 Richmond Street West,
Toronto, 1, Ontario.

Gentlemen:

This report describes the results of a program of geophysical survey carried out on your 14-claim property located in Ogden Township, Porcupine Mining Division, Ontario. The survey was carried out immediately after the break-up time, and the results are depicted on the two plans accompanying this report.

PROPERTY, LOCATION AND ACCESS -

The claims covered by the geophysical survey, are listed as follows:

P-70754 to P-70762, inclusive (9 claims); and,

P-73492 to P-73496, inclusive (5 claims).

The location is in the southwestern portion of the township, and accessible by gravel road to within one-half mile from the west boundary of the property. A trail leads from this gravel road, near the Mattagami River, to the central part of the property.

TOPOGRAPHY, GEOLOGY AND AEROMAGNETIC DATA -

Topography as noted by the geophysical operators, is depicted on the plans accompanying this report. It is apparent that most of the property is covered by swampy low ground. There are hardly any outcrop areas, except at Line 16E., close to the base line. This is the area where an outcrop area of andesite is indicated on a geological map of the township, published by the Ontario Department of Mines. The geophysical operators observed a pit with quartz veins at 225 ft. south of the base line, along Line 16E.

The same geological map of the Ontario Department of Mines, traced by B. M. Lee in 1956, showed three holes cross-sectioned across part of the central section of the property. The geophysical operators located four holes at this central section of the property. Two of these holes corresponded in location to two of the three holes indicated on the above-said geological map. It follows that there should be five old holes drilled on the property. All but one of the five old holes were apparently cross-section drilling, without any regard to ground geophysical indications. The fifth hole, located at L. 6E., 60 ft. north, was apparently for assessment-work purposes.

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Two of the three holes shown on the said geological map of the township, cut sections of serpentine intruding andesite. The third hole, located near the old power line, cut a large formation of tuff.

Aeromagnetic data from Paper 299G., G.S.C., are also shown on the above-said geological map. The aeromagnetic map indicates that there is a high anomaly located in Claims P-78494, P-79760 and P-79761. Another aeromagnetic anomaly is located in Claim P-79754. These anomalies are apparently near the west end of a magnetic trend which runs along the Destor Porcupine fault from the South Porcupine Area to the area of your property.

The South Porcupine fault is located at 1/4 to 1/2 mile to the north of your property. At Logan Porcupine, about 2.5 miles to the east-northeast, the Destor Porcupine fault runs across an aeromagnetic anomaly in the order of 1400 gammas, as compared with the aeromagnetic anomaly of 1900 gammas located at the north-central part of your property. The aeromagnetic anomaly at Logan, is over gold-bearing porphyry, intruding andesite.

SURVEY DATA -

The geophysical survey was carried out along picket lines cut at 400-ft. intervals, to cover the property, and at 200-ft. intervals

to cover the central section where anomalous conditions were indicated.

The magnetometer survey was carried out, using a Sharpe A-2 Magnetometer. The electromagnetic survey was carried out, using a Ronke Mark IV unit with a 300-ft. cable. Readings were given at the receiver station which is leading on traverses.

SURVEY RESULTS AND INTERPRETATION -

The magnetometer survey outlined three magnetic zones which run east-westerly across the central part of the property. These anomalies have high readings in the order of 3,000 to 5,500 gammas, against background readings in the order of 800 to 900 gammas, over tuff. All but the strongest zone, located in Claim P-70761, were checked by old diamond-drill holes described above and found to be due to serpentine intruding andesite and tuff. The said strongest zone is apparently not well tested by the old drill holes.

Between the south and central zones, and to the east of the L. 14E., there is an area of magnetic low which cannot be accounted for by the occurrence of a regional structure and is inferred as an area for the occurrence of acidic intrusive or silicification favourable for the occurrence of gold mineralization.

The magnetometer survey also outlined a strong anomaly in Claim P-70754. This anomaly has a high reading of nearly 10,000 gammas, and lies along the same magnetic trend as the south zone located at the central section of the property, but appears to have been cut off by a northwesterly fault which runs across the west part of Claim P-70762, north part of P-70759 and the central part of P-70767.

There is no indication of the possible occurrence of the extension of the iron formation and porphyry dike known to exist to the west of Claim P-70756. Similarly, there is no indication of the possible occurrence of a band of iron formation and parallel porphyry dikes at the southeast part of the property in Claim P-73496.

The electromagnetic survey encountered several weak-to-marginal conducting points at various points, as indicated on the plans accompanying this report. None but the point located at L. 16E., 57 ft. north, is considered definite. The above-said conducting point has an in-phase change up to -4% and a ratio of 4. It is associated with a small isolated magnetic high of about twice background.

The electromagnetic survey also encountered several strong indications along the old power line in Claims P-70761 and

P-70702. Detailed work here, showed conclusively that these strong responses are located along the power line. The writer remembers that, during his visit to the area in 1969, he saw old cables lying on the ground and partly buried by sand, along this power line. He concludes that these electromagnetic indications are due to such displaced cables.

CONCLUSIONS AND RECOMMENDATIONS -

The geophysical survey has outlined several anomalous conditions on the property, and checked, in detail, the interesting central section of the property where most of the anomalous conditions are located. It is concluded that one of the strong magnetic zones and another interesting magnetic low area between two zones in Claims P-70701 and P-70702, have not been properly checked by drilling by previous owners. The strong electromagnetic indications are, however, inferred as due to cables lying on the ground or buried along the old power line.

The above-said magnetic zone and the interesting magnetic low area with dipole effects, can be used as targets for exploration diamond drilling. However, the writer recommends to apply for one year's assessment on these claims and await further development in

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the area, and to use all available data, in due time, for a further interpretation of the geophysical data and evaluation of the property, prior to possible diamond drilling.

Respectfully submitted,

CANA EXPLORATION CONSULTANTS LIMITED

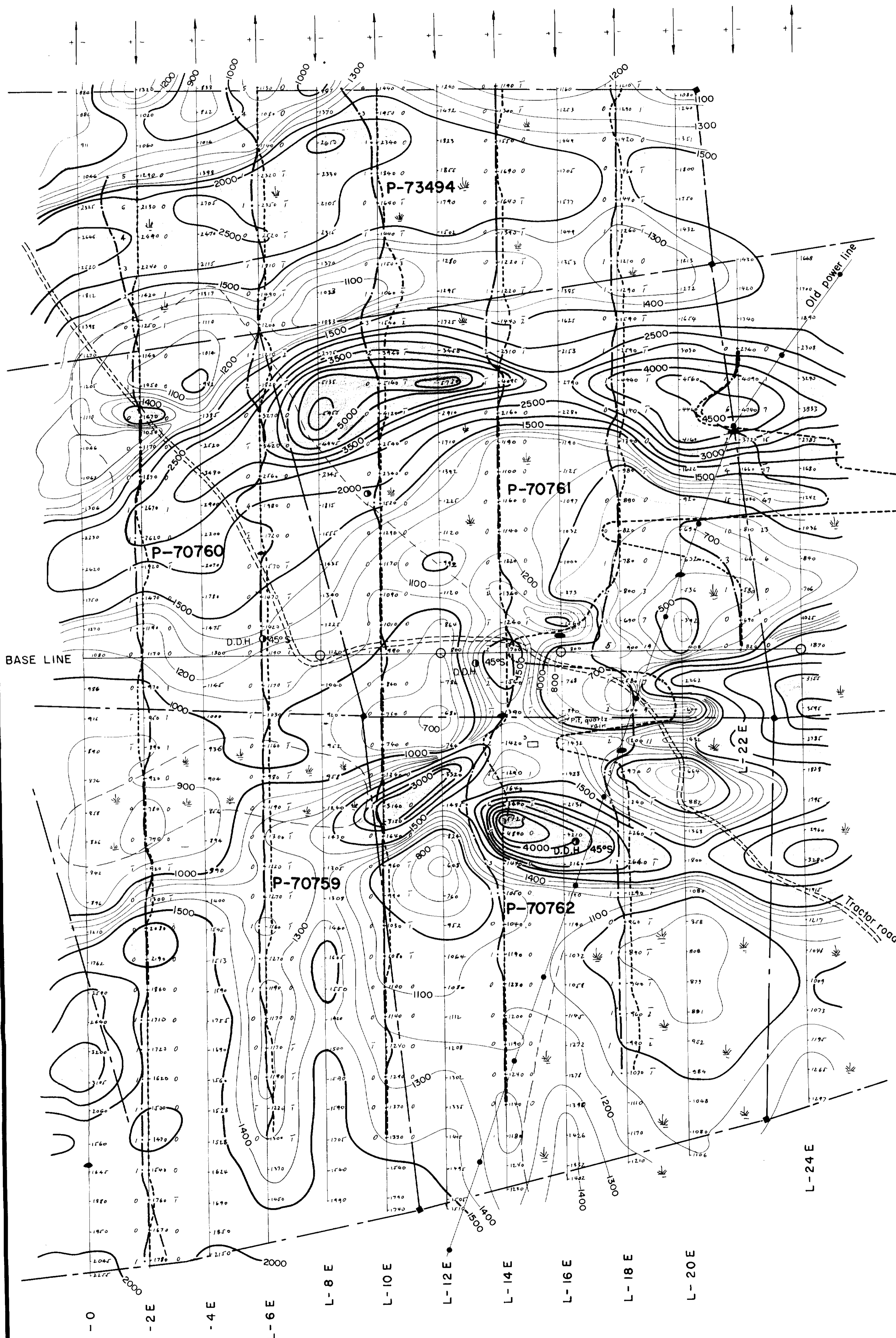


S. S. Szetu, Ph. D.,
Consulting Geologist.

SSS:rw
Encl.

Toronto, Ontario,

June 24th, 1965.



- Claim post and claim boundary
- Higher ground
- Swamp
- Magnetic control station
- Outcrop
- Picket line cut and chained
- Magnetic readings obtained and plotted to the East of the picket lines.
- Magnetic contours
- Below 700 gammas
- 700 - 1000 "
- 1000 - 1200 "
- 1200 - 1500 "
- 1500 - 2000 "
- 2000 - 3000 "
- 3000 - 5000 "
- Above 5000 "
- Electromagnetic readings obtained at the receiver station by using a Ronka Mark IV unit and 300 ft. cable
- In-phase readings plotted to the West, out-of-phase readings plotted to the East of picket lines
- Scale of profile: 1/10" = 1% of phase change
- Direction of traverse with receiver leading
- Electromagnetic conductor
- D.D.H.

ADDITIONAL DETAIL PLAN 2

BRABAR MINES LIMITED

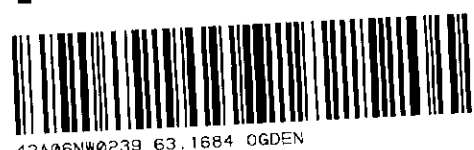
OGDEN TOWNSHIP
DISTRICT OF COCHRANE

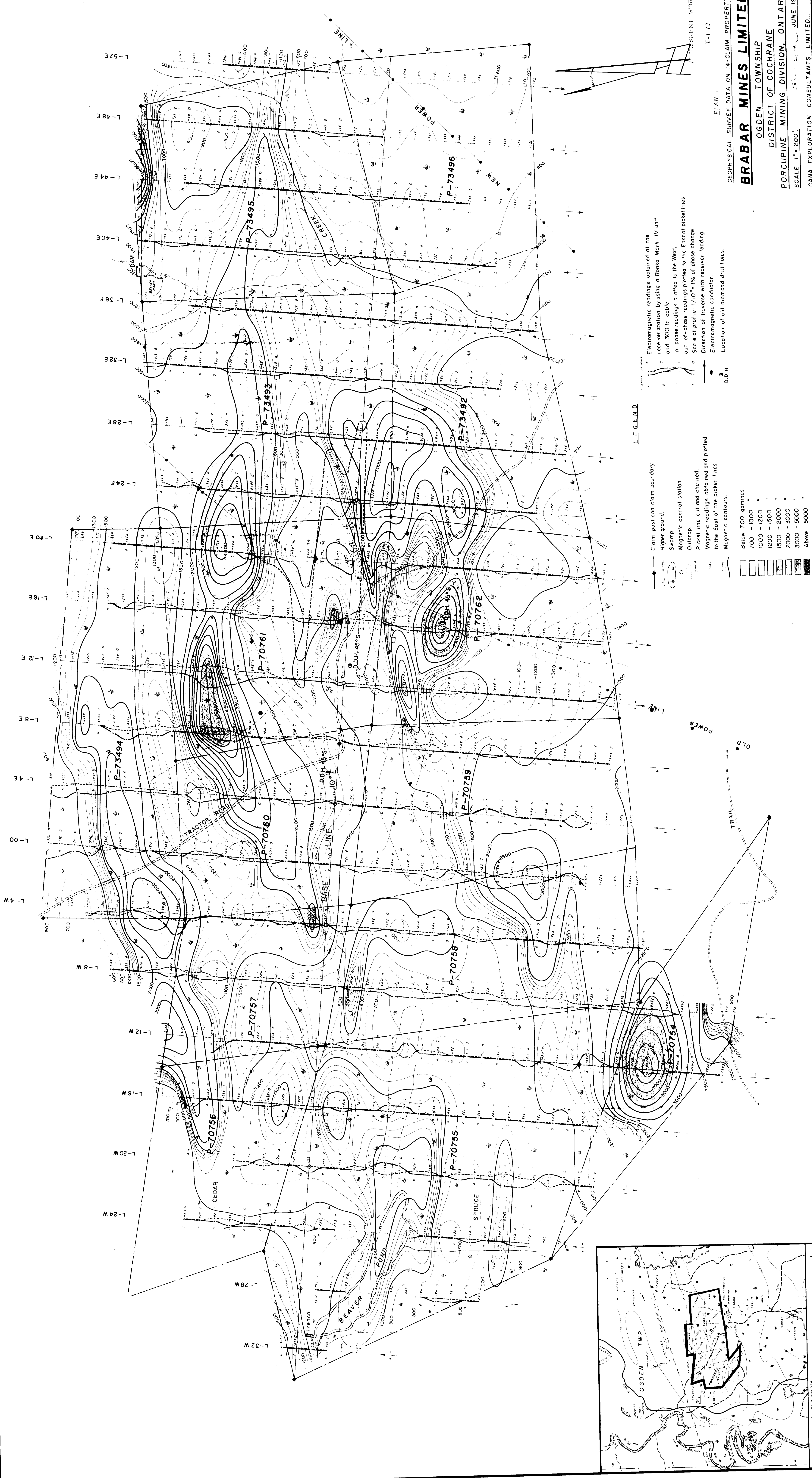
PORCUPINE MINING DIVISION, ONTARIO

SCALE: 1" = 200'

JUNE 1965

CANA EXPLORATION CONSULTANTS LIMITED





LEGEND

Electromagnetic readings obtained at the receiver station by using a Ronko Mark-IV unit and 500 ft. cable

In-phase readings plotted to the West, out-of-phase readings plotted to the East of picket lines

Scale of profile: 1/10" = 1% of phase change.

Direction of traverse with receiver leading.

Electromagnetic conductor.

Location of old diamond drill holes

D.D.H.

Claim post and claim boundary.

Higher ground

Swamp

Magnetic control station.

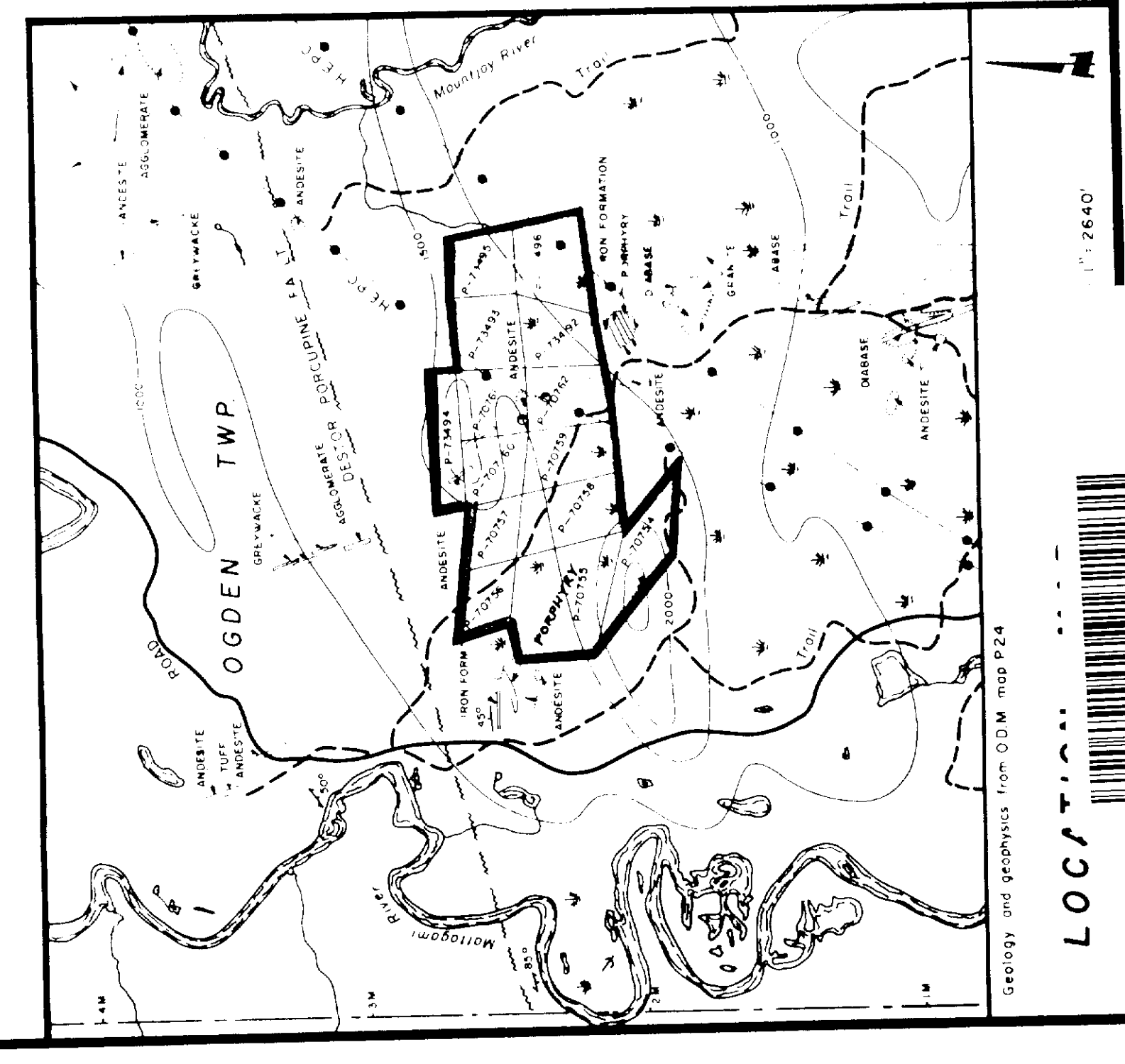
Outcrop

Picket line cut and chained.

Magnetic readings obtained and plotted to the East of the picket lines

Magnetic contours

Below 700 gammas
700 - 1000 "
1000 - 1200 "
1200 - 1500 "
1500 - 2000 "
2000 - 3000 "
3000 - 5000 "
Above 5000 "



GEOPHYSICAL SURVEY DATA ON 14-CLAIM PROPERTY
BRABAR MINES LIMITED
 OGDEN TOWNSHIP
 DISTRICT OF COCHRANE
 PORCUPINE MINING DIVISION, ONTARIO
 SCALE 1" = 200'
 JUNE 1965
 CANA EXPLORATION CONSULTANTS LIMITED