



42C13SW8801 2.15002 WABIKOBA LAKE

010

RESULTS OF 1992 EXPLORATION WORK
MOMETER SURVEY AND PROSPECTING
IHNATKO - KUSINS PROPERTY
WABIKOBA LAKE AREA, NORTHWESTERN ONTARIO
N.T.S. 42 C 13 / SW

2.15002

Written by: Pierre Simoneau
2-309, Catherine st.
Thunder Bay, Ontario
P7E 1K7
Phone: (807) 623-7496

March 1993
Revised in August 1993

(807) 623-1692 (messages)

THE IHNATKO - KUSINS OCCURENCE

ABSTRACT

The property consists of 11 unpatented mining claims which include a base metal occurrence known as the Kusins Showing. For the sake of this report, the showing will be called The Ihnatko-Kusins zone, in honour of the man who reportedly actually discovered the showing.

The property is located 8 kilometres due north of the famous Hemlo gold mines sites on the Transcanada Highway 17. Access to the property is by a logging road running west of Highway 614 at a point about 8 km north of the Black River and running through the western portion of the property 24 km south of the railroad tracks.

The property lies in a package of volcano-sedimentary rocks similar to the Manitouwadge-Geco area which hosts several significant base metal deposits. Significant base metal mineralization obtained last year in a grab sample ran 10.7% zinc and 8.9% lead with 2.5 oz. silver per ton. This mineralization is located about 1200 metres east of the Pinegrove Lake logging road.

The volcanogenic mineralization located is at a contact between crystal tuffs and sediments. Here the tuffaceous rocks wedge out against the sedimentary rocks. Mineralization is hosted in sericite schists, siliceous sediments and fragmental rocks. The most significant base metal zone is 80 cm wide in the old trench and is coincident with a vlf anomaly that follows the contact between the sediments and the crystal tuffs. Layered pyrite-sericite mineralization halo "enclosed" the base metal zone. The Bullring Fault, identified by the vlf survey, is a potentially significant structure in relation to the mineralization. The diabase dykes were easily identified by the magnetic survey.

A Beep Mat survey was completed along cut lines at picked stations and between lines where response was indicated. The survey provides good assistance in locating potential base-metal and gold targets. One Beep Mat anomaly coincide with a magnetic stratigraphic layer used as a marker paralleling the Kusins zone. This mineralized marker was followed for over 200 metres. The sulphides at the Kusins showing are not conductive and do not respond to the BEEP MAT. More trenching, stripping, drilling and a detailed geological mapping should provide more accurate information.



42C135W8801 2.15002 WABIKOBA LAKE

010C

Table of content

Abstract.....2
Table of contents.....3
1. Introduction.....4
2. Location and Access.....5
3. Claims.....8
4. Regional geology.....10
5. Previous work.....12
6. Previous 1991 work program.....13
6.1 Linecutting.....13
6.2 Prospecting.....13
6.3 Geophysical surveys.....13
7. 1992 work program.....14
7.1 Linecutting.....14
7.2 Prospecting.....14
7.3 Geophysical surveys.....14
8. Property geology.....16
8.1 Volcano-sedimentary rocks.....16
8.1.1 Description of rock types.....16
8.2 Felsic intrusive rocks.....19
8.2.1 Description of rock types.....19
8.3 Mineralization.....19
9. Conclusion.....20
10. Recommendations.....21
Selected References.....22
Certificate of Qualifications.....23

APPENDICES

- Appendix 1. List of claim numbers and due dates
- Appendix 2. BEEP MAT Specifications

LIST OF FIGURES

Figure 1. General location map.....6
Figure 2. Detailed location map.....7
Figure 3. Claim map.....9
Figure 4. General geology map of Hemlo area.....11
Figure 5. Property Geology.....17

COMPLEMENTARY REPORT (at the end of the main report)

GEOPHYSICAL INTERPRETATION OF A MHOMETER SURVEY ON
DAVE SAUNDERS PROPERTY, IHNATKO - KUSINS SHOWING,
WABIKOBA LAKE AREA, NORTHWESTERN ONTARIO

LIST OF MAPS (in pocket)

Plan 1. Mhometric survey, profiles & postings	1 : 2,500
Plan 2. Mhometric survey, Delta Hz contours	1 : 2,500
Plan 3. Mhometric survey, D Hz colored contours	1 : 2,500
Plan 4. Prospection survey	1 : 5,000

1. INTRODUCTION

The following report gives the results of the exploration program carried out during fall 1992 over the Kusins Occurrence. For the sake of this report, the showing will be called the Ihnatko-Kusins Zone, in honour of the man who reportedly actually discovered the showing.

Prospecting and Beep Mat (Mhometer) surveys were carried out over the Ihnatko-Kusins property in september 1992. The author of this report supervised and performed the survey work.

The claims were staked to cover the showing and the area up to the logging road. Detailed prospecting of the old pits was successful in relocating the base metal mineralization which was overlooked by previous activity, companies who were mainly interested in gold.

2. LOCATION AND ACCESS

The property is located approximately 320 kilometres east of Thunder Bay (figure 1) and 8 km due north of the famous Hemlo gold mines sites on the Transcanada Highway 17. The property is located on a northerly extension of the same belt of rocks.

Access to the property is by a logging road which runs through the western portion of the property (figure 2). The road is the first main logging road, running west of Highway 614 at a point about 8 km north of the Black River. The property is located approximately 24 km south of the railroad tracks on the main logging road.

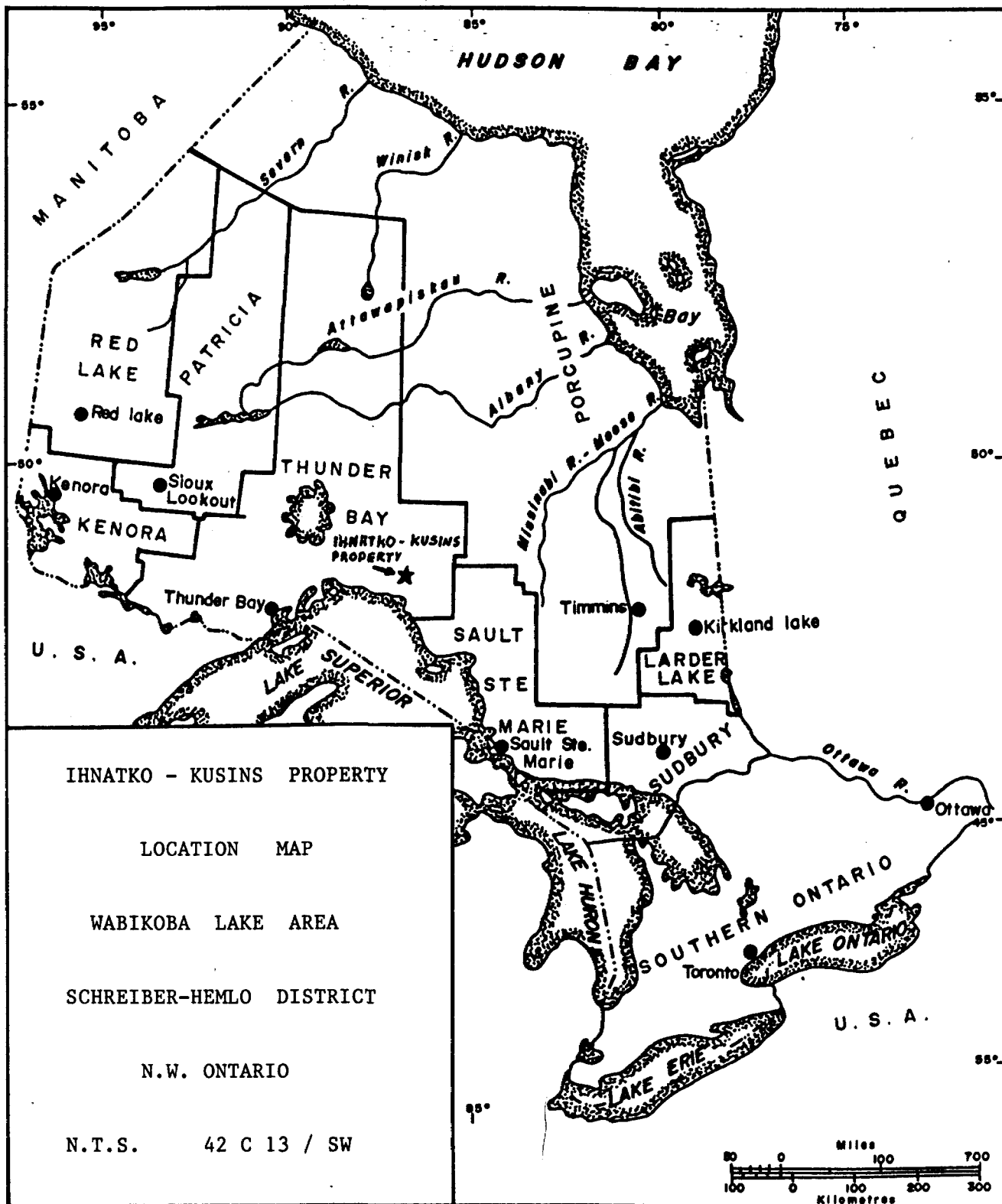


FIGURE 1.

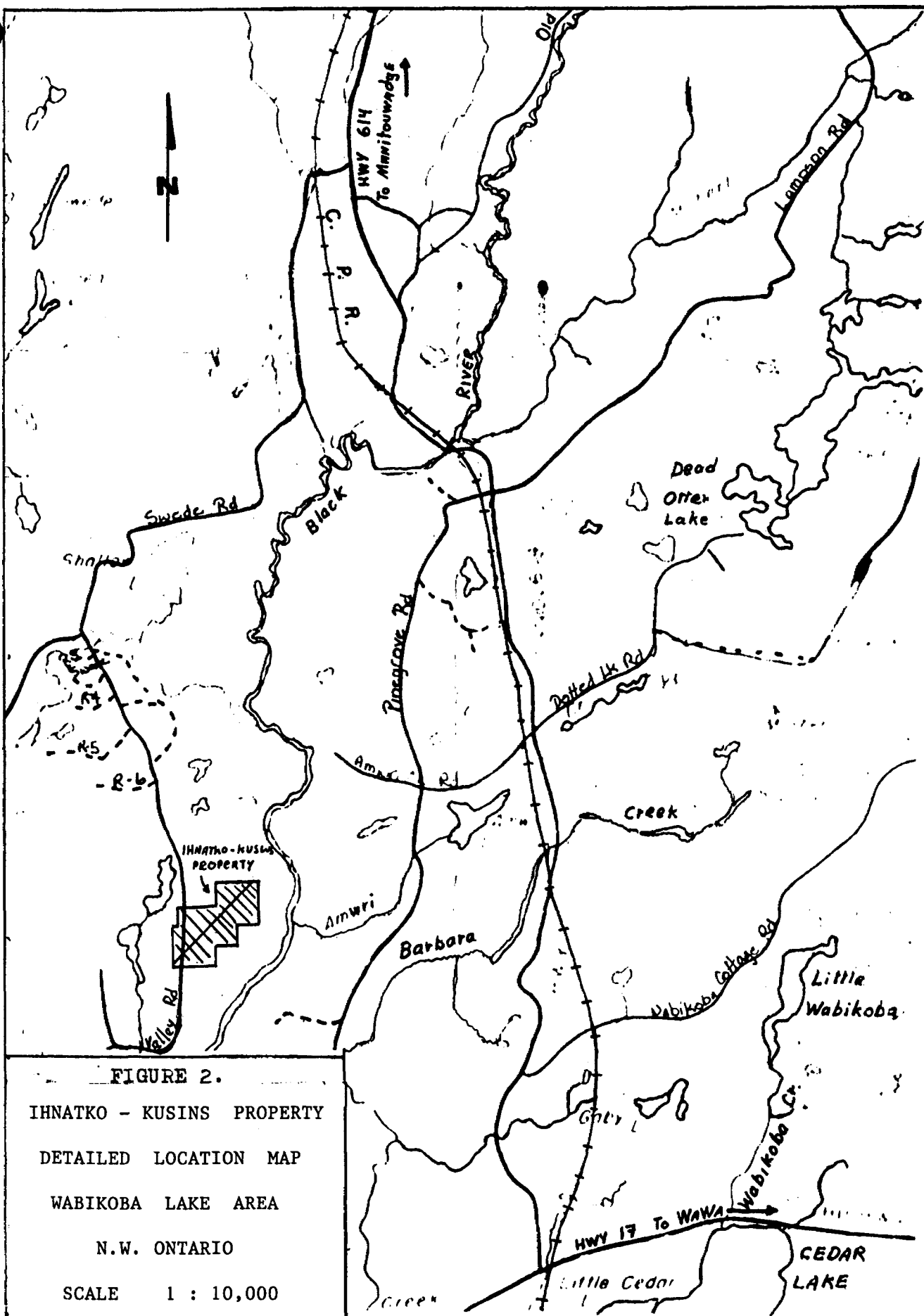


FIGURE 2.
 IHNATKO - KUSINS PROPERTY
 DETAILED LOCATION MAP
 WABIKOBA LAKE AREA
 N.W. ONTARIO
 SCALE 1 : 10,000

3. CLAIMS

The property consists of 11 unpatented mining claims which were all surveyed by a geophysical survey (figure 3).

The list of claims and due dates is in appendix 1.

The claim holder of the mining property covered by the survey is:

M. Dave Saunders
309, Catherine st.
Thunder Bay, Ontario
P7E 1K7

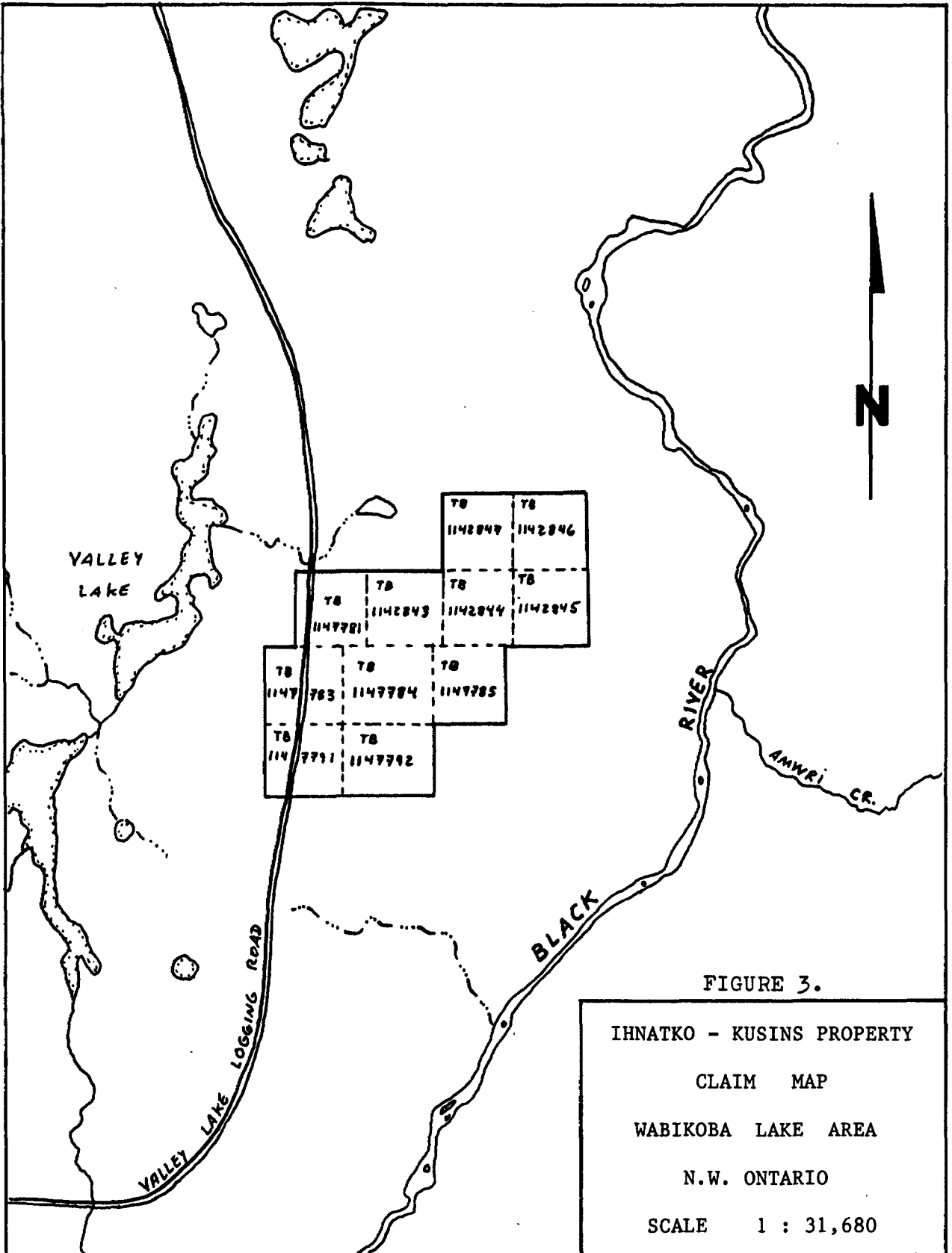


FIGURE 3.

IHNATKO - KUSINS PROPERTY
 CLAIM MAP
 WABIKOBA LAKE AREA
 N.W. ONTARIO
 SCALE 1 : 31,680

4. REGIONAL GEOLOGY

The Ihnatko-Kusins Property lies on the northern limb of the Hemlo Synform, an east-west trending synclorium developed within the Archean aged Heron Bay Greenstone Belt. The Syncline is flanked to the northwest by the Gowan Lake and to the south by the Bullring Lake granitic gneiss domes (figure 4).

The Bullring Lake Fault, a dextrous cross fault, is interpreted by Milne (1968) to extent through the eastern portion of the property. This fault (identified by a lineament on air photos) is a potentially significant structure in relation to the mineralization, specially with respect to mineralization at Manitouwadge - Geco.

Rocks within the syncline have locally attained an upper amphibolite grade of metamorphism. The core of the syncline has locally been intruded by several late Archean felsic complexes, including the Musher Lake Pluton. Several ages of post-Archean diabase dykes intrude the entire sequence.

The Hemlo Mining Camp is situated in the Wawa-Shebandowan subprovince, specifically occurs in a highly deformed zone flanked by intermediate to mafic volcanic rocks in the footwall and volcanoclastic rocks in the hanging wall. It has been suggested that the mineralization is at the contact of crystal tuffs and sediments, where the tuffaceous rocks wedge out against the sedimentary rocks. The mineralization is zoned both across dip and along strike.

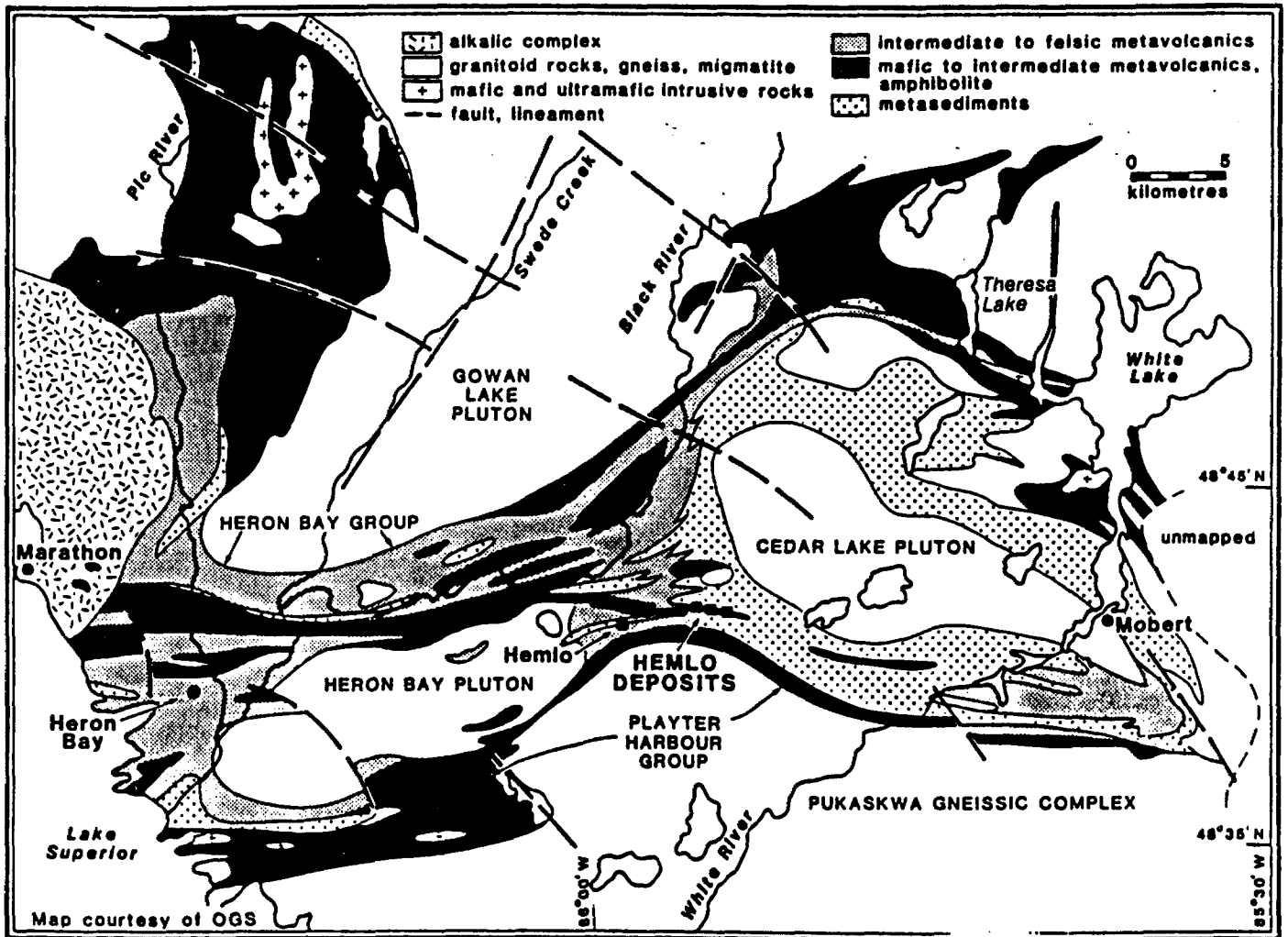


Figure 4. Geological map of the Hemlo area by T.L. Muir, 1983. (Modified after OGS Maps 2220, 2439, 2452, P.2701, P.2702, P.2738, P.2739).

5. PREVIOUS WORK

The property was reported to have been discovered by T. and W. Kusins (Milne, 1968) in 1963. Sources to M. Dave Saunders have suggested it was discovered by Ihnatko while timber cruising for the Ontario Paper Co. Ihnatko and Kusins became partners in the discovery claims.

The showing was examined by several companies in 1963 (Milne, 1968). The mineralization was trenced by Ihnatko and Kusins following this and optioned to Cominco in 1965. Grab samples were reported to run over 20 oz. silver per ton. (not published). Cominco conducted limited geophysical and geochemical work before reportedly drilling 5 X-ray drill holes.

Drill logs submitted by Cominco for assessment work were incomplete, and no assays were reported. Several sections in the drilling reported disseminated galena and sphalerite.

The property fell idle until it was staked during the Hemlo rush by Pryme Energy. In 1982, the ground covered by this property was optioned to Noranda. A large grid was established over the entire Prime Energy Option property and was mapped in 1983 and 1984. Some IP and conventional geophysics were conducted followed by limited drilling, which did not include the Ihnatko-Kusins zone.

The property was restaked by Dolphin Exploration and work was undertaken by Corona Corporation on behalf of Dolphin Exploration Ltd. in 1987. Soil sampling and geological mapping were performed in selected areas, including the present property.

6. PREVIOUS 1991 WORK PROGRAM

6.1 Linecutting

The old lines 200 m. spacing were recut and new lines were flagged to 100 m spacing, with the grid totalling 22.5 km.

6.2 Prospecting

The old trenches as described by Milne (1968) were relocated and prospected. Base metal mineralization was first located by Dave Saunders in the muck of Trench 2. This was traced to the NE face of the pit which shows a 0.80 m. thick mudstone unit with disseminated and semi-massive pyrite, sphalerite and galena mineralization. Sample 8626 ran 10.7% zinc and 8.9% lead with 2.5 oz. silver per ton in a grab sample. Sample 8624, a chip sample across 0.75m ran 0.84% Zn and 0.13% Pb with 1.8 oz/ton silver.

6.3 Geophysical surveys

The highest magnetic anomalies are oriented at about 300 and 010 degrees and correspond to the diabase dykes. Some other smaller anomalies follow the local geological trend and correspond to feldspar porphyry sills.

The electromagnetic VLF-EM16 anomalies are interpreted to be mainly topographic feature except for a small anomaly over the main showing. The general orientation of the VLF anomalies correspond to the local geological trend of the sedimentary bedding. The Bullring Lake fault cut across the area and the dexterous displacement is spectacularly shown by the VLF survey.

7. 1992 WORK PROGRAM

7.1 Linecutting

The baseline was recut and chained over 1.2 km due to a wind storm that pushed down many trees over.

7.2 Prospecting

Prospecting was carried out between September 8th to September 18th using a Beep Mat and no particular lines were followed. All claims were systematically covered, walking with the Beep Mat in any direction to find conductive outcrops or conductive boulders in overburden. It is impossible to draw any traverses on the map because most of the traverses especially over the overburden area were made in zigzag motion lines about 10m apart and there would be so much traverses drawn that the basic information would be unreadable.

West and north of the Bullring Lake Fault, the property is almost flat becoming a sandy plain. East of the fault, as you approach the Black River, high hills and deep valleys are the main topographic feature. No conductive outcrops or boulders were found in the property with the Beep Mat. That does not mean that there is no other mineralized zones than the Ihnatko-Kusins showing. In the present case, the Ihnatko-Kusins massive sulphide zone didn't react to the Beep Mat because the sulphides are not conductive. Other methods might have to be used to find mineralized areas. By example, a slight magnetic "lean iron formation" parallel to the Kusins mineralized layer was used as a marker to locate the mineralized zone over 200 metres from line 26E to 28E.

The reason for covering the property with the Beep Mat was to find other showings. Since the results were negative, no samples were taken in this survey.

The results of the prospecting work performed on the property are plotted on Plan 4 (back pocket). This map (at 1:5000) shows topography, showing location, vegetation and the main rock types.

7.3 Geophysical Surveys

A total of 22.5 km of lines including the base line was completed. The ground geophysical survey with the Beep Mat was carried out by the author of this report between september 20th to september 24th 1992.

A surface electromagnetic survey was conducted with a Beep Mat. The Beep Mat is a miniaturized electromagnetic survey instrument that is, in a way, the simplified version of the helicopter-borne unicoil. The BM-II-92 model consists of a unicoil inserted in a polyethylene shell and a separate readout module allows the measurements of the relative value of the conductivity or susceptibility (magnetic content) of the underlying surface in Hertz. Magnetite or conductive materials each have a different audio signal and their relative value is displayed. The Beep Mat efficiently and inexpensively detect conductive outcrops (pyrite, pyrrhotite, chalcopyrite, graphite, pentlandite and galena (which responds 1 time out of 2), magnetic outcrops or boulders hidden under up to 1.5 metres of overburden. More specification in appendix 2.

The geophysical interpretation of the mrometer survey is given in a complementary report from GEOSIG INC that is accompanying this main report.

The results of the mhometric survey are plotted on Plan 1 and the contours on Plan 2 with an extra coloured contour map 3. All the maps are at the metric scale of 1=2,500 in pocket.

The BEEP MAT can directly discover an ore shoot. In typical prospecting activities, the Beep Mat has helped localize layers of massive sulfides (pyrite, pyrrhotite) but the Kusins showing is a case where the sulphides are not conductive and therefore don't react with the Beep Mat. The mhometric maps do not show any conductive areas. On the colored map, the 2 red zones at the edges of the property are computer generated.

8. PROPERTY GEOLOGY

8.1 General Geology

Reconnaissance geological mapping was conducted in 1964 and 1965 (Milne, 1968) at 1:31680. The only other work recorded is in 1984 (Kemp, 1984) at 1:5000 and in 1988 (Hamilton, 1989) at 1:5000. The most recent work was conducted with helicopter support.

From compiling assessment work data, the property can be shown to be underlain by a package of volcanic and sedimentary rocks, with the northern portion underlain by a quartz-monzonite granite (Figure 5). In the vicinity of the Ihnatko-Kusins showing, the stratigraphy from the granite contact southward is as follows; a thin <50 m. section of foliated mafic volcanics is in sharp contact with a mudstone unit up to 100m thick followed by a felsic pyroclastic unit (30-40m thick which grades into laminated sediments and conglomerates. The Ihnatko-Kusins Zone occurs at the contact of the mudstones and the felsic tuffs.

The main rock type over most of the property is greywacke sediments and conglomerate. A possible agglomerate (conglomerate) was observed at the baseline near L24E, near the trace of the Bullring Fault. A slightly magnetic quartz-feldspar porphyry sill crosses the southern portion of the property.

The property is crosscut by diabase dykes and the Bullring Lake Fault.

8.1.1 Description of rock types (Refer to Figure 5 and to plan 4, backpocket)

- Unit 1 (Polymictic Conglomerate)
The conglomerate is bedded with bedding thickness ranging from 10cm to 2m. The rounded pebbles vary in density and size and are mostly stretched and flattened parallel to the foliation. The polymictic conglomerate is composed of various types of rocks including granitic, feldspar porphyry and clastic sediments fragments in a grey or green matrix that generally contains about 15% biotite and chlorite.
- Unit 2 (Greywacke)
This unit is often interfingered with the conglomerate unit. Dark grey to light grey color in fresh surface, it weathers light to medium brown. The greywacke is medium-grained and generally banded on a millimeter to 1 m thick. It is composed of 50-60% feldspar, 30-40% biotite and minor quartz. The greywacke represents a more mafic rich clastic sediment.

- Unit 3 (Mudstone)
This unit is mainly bedded on a centrimetric scale and the interbeds are often of a more mafic nature producing a ribboned effect. The mudstone ranges in texture from aphanitic to very fine-grained and light to medium grey in colour.
- Unit 4 (Acid tuff)
This unit is bedded on a decimetric scale, is light grey to white in colour and often exhibits a cherty character in some beds and quite sericitic in other beds. It normally weathers a rusty colour due to the presence of minor quantities of Pyrite. It is mainly a crystal tuff carrying up to 30% feldspar crystal and occasionally 5-10% quartz eyes less than 5 mm in size.
- Unit 5 (Mafic metavolcanic)
This unit is a massive foliated and amphibolitized dark green, fine to coarse grained "basalt". Locally, vague pillow rims were observed, however the metamorphic grade and shear fabric associated with nearby monzonitic intrusive make the unit's origins hard to interpret.
- Unit 8 (Proterozoic Diabase)
This unit is a mottled dark green to black diabase on fresh surface and distinctive dark grey-brown to medium brown on weathered surface. The crosscutting dykes are medium to coarse-grained, massive, equigranular with the characteristic diabasic texture. It contains up to 3% magnetite (BEEP MAT readings between -2200 to -3000) and traces of Pyrite.

8.2 Felsic intrusive rocks

The Ihnatko-Kusins Zone occurs approximately 150 metres south of the regional contact of the monzonitic Gowan Lake Pluton with the greenstone belt. The monzonite is typically a light coloured, medium grained, hornblende monzonite. A faint foliation parallel with the schistosity of the volcanics can be observed in places.

Recent prospecting on a cliff near the contact at L27E 3+75N shows a brecciated intrusive texture at the contact with the foliated mafic rocks. This may be a widespread feature and could be significant, to the origin of the base metal mineralization.

8.2.1 Description of rock types

Unit 6 (Monzonite)

This unit is generally fine- to medium-grained and exhibits an equigranular texture and a salt and pepper appearance being white and black speckled with pink to orange feldspars. It weathers reddish orange and light grey. The Monzonite is composed of 60% feldspar, 10-20% quartz, 10-20% biotite with 10% hornblende.

Unit 7 (Quartz-feldspar Porphyry)

This unit is restricted to the southern boundary of the property and was previously described as an arkose unit. The BEEP MAT registered magnetic readings around -300 while the sediments are almost neutral (-20). This porphyry in pink, equigranular medium-grained texture and composed of 30-50% feldspar, 30-50% quartz and 10%-20% biotite.

8.3 Mineralization

Sulphide mineralization was observed to occur at the contact of a sedimentary unit (mudstone) and a felsic crystal tuff unit. The main type of mineralized rock is a well layered pyrite sericite schist. The extent of this rock type was difficult to determine, but was present in all trenches, and up to 25m thick where it grades into felsic crystal tuffs.

In Trench 2, a 0.80 m. thick mudstone unit with disseminated and semi-massive sphalerite and galena was located. The best material ran 10.7% zinc and 8.9% lead with 2.5 oz silver per ton in a grab sample. A chip sample across 0.80 m. ran 0.84% Zn and 0.13% Pb with 1.8 oz/ton silver.

With the proximity of this mineralization to the Bullring Lake Fault, there may be excellent potential for a Manitouswadge-type of deposit.

9. CONCLUSIONS

A survey grid at 100 m. spacing has been established over the property. Road access to the property will reduce the cost of exploration which has hampered the development of the property in the past.

The base metal occurrence known as the Ihnatko-Kusins Showing has been relocated and sampled. The presence of significant base metal mineralization has been documented. A Vlf anomaly coincide with the volcanogenic mineralized zone. The Beep Mat doesn't react to the sulphides over the showing but a magnetic marker was used to follow the zone over 200 metres.

The host rocks and structural feature shares similarities with economic deposits in the area. Further ground work should establish the potential for an economic zone.

10. RECOMMENDATIONS

The property should be mapped in more detail at 1:2,500 scale. Further stripping, sampling and detailed mapping should be performed in the vicinity of the old trenches. Basal till sampling should be performed west of the Bullring Fault to locate possible continuation of the mineralized Ihnatko-Kusins zone.

The planning of more advanced work, including diamond drilling, would be based upon the ground survey results.

SELECTED REFERENCES

- Hamilton, W.S., 1989, Report on Geological and Geochemical (Soil) Surveys on the Black River Property. Company report for Dolphin Exploration Ltd. MNDM assessment file No. 2.12347, Thunder Bay.
- Kemp, R., 1984, Geological Assessment Report, Pryme North Joint Venture, Wabikoba Lake Area, Thunder Bay District. Company report for Noranda Exploration Company Ltd. MNDM assessment file No. 2.7108, Thunder Bay.
- Milne, V.G., 1968, Geology of the Black River Area. ODM GR 72, pp. 61-63, Map 2144.

CERTIFICATE OF QUALIFICATIONS

THIS IS TO CERTIFY THAT:

- I am a resident of Thunder Bay, province of Ontario, Canada (2-309 Catherine st, Thunder Bay, Ontario, P7E 1K7).
- I have been engaged in base and precious metal exploration as a geologist since 1987 and geophysicist since 1991.
- I am a graduate of University of Quebec at Chicoutimi, Chicoutimi, Quebec (M.Sc. Earth Sciences, 1987), and University of Montreal, Montreal, Quebec (B.Sc. Geology, 1982).
- I am a member of the Professional Association of Geologists and Geophysicists of Quebec (APGGQ).



Signed in Thunder Bay, August 12 1993



Pierre Simoneau
Geologist, M.Sc.

APPENDIX 1.

List of Claim Numbers and Due Dates

APPENDIX 1.

LIST OF CLAIMS AND DUE DATES

1.	TB	1142843.....	February 18, 1994
2.	TB	1142844.....	February 18, 1994
3.	TB	1142845.....	February 18, 1994
4.	TB	1142846.....	February 18, 1994
5.	TB	1142847.....	February 18, 1994
6.	TB	1147781.....	April 26, 1993
7.	TB	1147783.....	April 26, 1993
8.	TB	1147784.....	April 26, 1993
9.	TB	1147785.....	April 26, 1993
10.	TB	1147791.....	April 26, 1993
11.	TB	1147792.....	April 26, 1993

APPENDIX 2.

BEEP MAT Specifications



instrumentation
GDD inc.

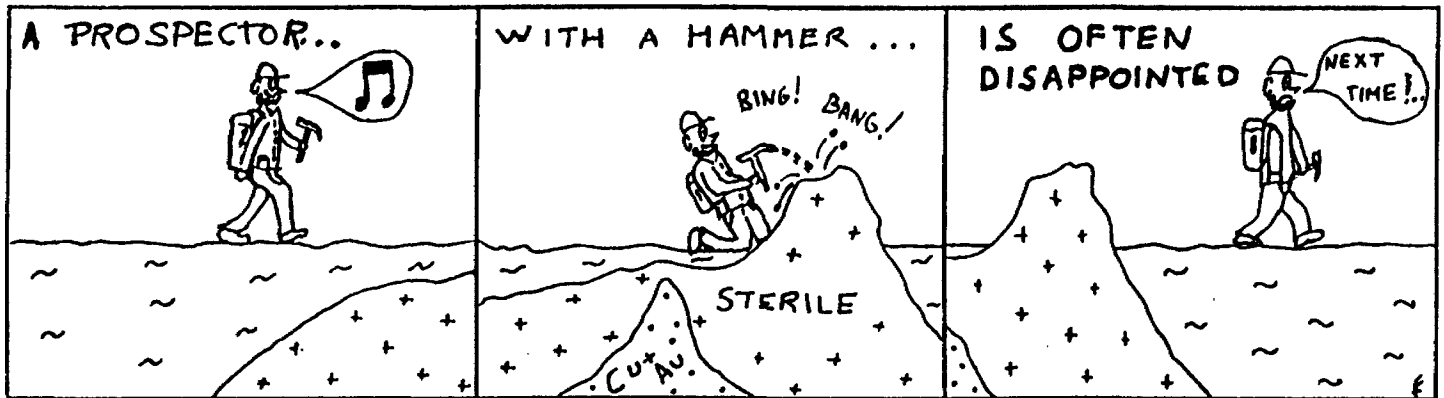
3700, boul. de la Chaudière
Ste-Foy, Qc. Canada G1X 4B7
Tél.: (418) 877-4249
Fax: (418) 877-4054



BEEP MAT BM-II

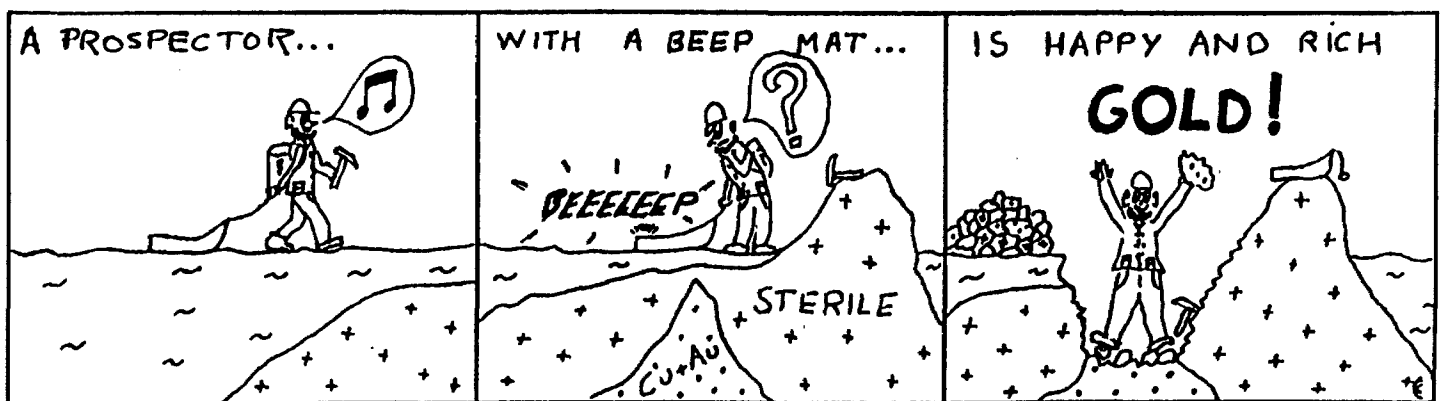
CAN YOU AFFORD TO MISS A MINE?

WHILE YOU HAD THE CLAIMS



AND LET OTHERS DETECT IT?

ONCE YOU DROPPED THE CLAIMS



"BEEP MAT IN EXPLORATION"
1993

INSTRUMENTATION GDD INC.
3700, boul. de la Chaudière
Sainte-Foy, Québec, Canada G1X 4B7
Tel.: 418-877-4249 Fax: 418-877-4054

Follow The Leaders . . . Use BEEP MATS and get funding for your projects

11 Case histories: Some of the successful majors companies, juniors and prospectors allowed us to print the following case histories, but most requested not to be identified as some properties are being staked. We hope to organize a seminar on BEEP MAT prospecting as soon as companies accept to share their experience.

1 FINDING THE SOURCE OF A KNOWN FLOAT TRAIN

Geologists outlined a train of ore boulders in an area of a small recent forest fire. Detailed geology, soil geochemistry and VLF and MAG geophysics up-ice of the boulder train failed to result in any new targets. The following spring, in a single day, a 4-man BEEP MAT crew found several dozen new ore boulders, both in the area of the forest fire and on both sides of it. At the end of the day, a large conductor was signaled on a small hill one kilometer northeast of the boulder train. The next morning, blasting till from the beep signal area uncovered several copper showings of the same material as the boulder train, a few tens of meters from previous trenches which only showed barren rocks.

2 FOLLOW UP OF A GROUND EM SURVEY

Detailed geological and surface prospecting of a number of airborne EM anomalies followed by MaxMin surveys had failed to bring any encouragement even if the geology was similar to that of a former nearby zinc producer. Then, a single BEEP MAT was brought in and given to a second-year engineering student used to hard work on his father's farm.

In a month, working alone, Carl found, dug out and sampled 40 pits through up to 5 feet of till down to conductive sulfide-bearing bedrock. Several copper-zinc showings were uncovered, 10 D.D.H. were put down, a new airborne survey was flown and the project is still running strong.

3 FOLLOWING THE LEADER

A follower acquired a few hundred claims next to the above company, used the same technique, and apparently found similar zinc showings.

4 EXPLORING AROUND AN OLD SHOWING

A prospector, with government help, started by running I.P. and VLF surveys around an old drilled-off nickel showing. The I.P. outlined the serpentinite but did not give new targets. Then, he brought in a BEEP MAT and after several days of work discovered, only 300 meters away, a new nickel showing many times richer.

5 TRENCHING A KNOWN ORE BODY

A prospector was requested to open up trenches with a bulldozer across a high-grade graphitic ore body, using MaxMin maps as a guide, to get samples for pilot mill testing. After digging several trenches down for 15 or 20 feet without reaching bedrock, he used his own BEEP MAT that he had brought to outline the areas where graphite sub-outcropped within 5 or 7 feet from the surface. Trenching was much more effective thereafter.

6 BEEP MAT HELPS WITH GROUND FOLLOW-UP

HLEM surveying, geological mapping and geochemical sampling were done on grids covering AEM anomalies. Cu Zn sulphides were found associated with one such conductor but overburden cover obscured the geological picture. A BEEP MAT survey helped trace, in detail, conductor location between lines and was also used to position some trenches. After a large area was stripped, the BEEP MAT was useful in mapping the distribution of conductive sulphides because the host rocks were deeply oxidized.

7 PROSPECTING AROUND AN OLD MINE

A company had not found a smell of new ore in years next to their high-grade copper-zinc producer. A BEEP MAT was brought in and discovered an ore float among 50 barren ones in two months of work. Two years later, a second float was found. A drill hole spotted under a long-neglected VLF conductor 1000 feet north of the float discovered a marginal but well defined ore shoot, the only new one discovered around the mine.

8 FINDING SHOWINGS ON A GEOLOGICAL TARGET

A junior company had acquired a huge property on a geological hunch but no airborne or other targets were known. A crew of seven experienced line cutters were given BEEP MATs and bonuses for each conductor discovered. Twelve small bedrock conductors were thus discovered and sampled in a two week period and four of these new showings gave good gold and copper assays. For that junior company, it was the only property that they ever optioned to a major for further exploration.

9 USING BEEP MATS TO SELECT PROPERTIES

For a joint venture, 12 properties totalling 700 claims were chosen because of good outcrops and easy access. With a \$100,000 budget, 300-man days of BEEP MAT were run and 58 virgin bedrock conductors (and 6 old ones) were trenched, then sampled. Two assays returned gold values that will be followed up this summer.

10 FOLLOW UP OF AN AIRBORNE SURVEY

In 1992, an old airborne survey was followed up with a single BEEP MAT for a week. Dozens of virgin conductors were trenched, blasted and sampled. Even if this was only a technical success, it illustrates how effective BEEP MATs can be to sample the numerous targets which result from airborne surveys.

11 A FLOAT BECOMES A FLOAT TRAIN

One large high grade float was found under a swamp by a crew doing a BEEP MAT survey. The float was hidden under only two feet of overburden. Four of the samples assayed averaged: 2.97% Zn, 2.7% Cu, 30g/t Ag and 8 g/t Au.

Several other boulders containing the same mineralization were discovered near the first discovery while using the BEEP MAT.

BEEP MATS FOR DIAMONDS?

Of course not! But BEEP MATs can rapidly detect many magnetic boulders. Therefore, some geologists are considering using them to check tills around pinhole magnetic anomalies to determine if they are caused by gabbros or by more exotic intrusives of a type that warrant a drill hole.



GDD BEEP MAT, model BM-II-93

THE FACTS

Up to 1993, some 2500 conductive occurrences have been localized by BEEP MAT surveys, then sampled, often by blasting. When showings and/or EM conductors occur in areas of shallow overburden and till, a BEEP MAT crew can discover and sample one conductive occurrence or more for every day of work. The ratio rapidly falls to one occurrence every 10 days in areas of shallow overburden but where no airborne conductors are known. On the average, two-thirds of the occurrences are bedrock and one third boulders. Numerous descriptions of field surveys are available.

THE BEEP MAT - A COST EFFECTIVE INSTRUMENT

To express the same idea differently, a BEEP MAT survey of a 100-claim group in an area of shallow overburden will discover from 10 to 100 hidden gossans, which can all be examined, sampled and assayed for the all-inclusive cost of one drill hole on a geophysical anomaly (\pm 50 000 \$). In every area where outcrops are present, the BEEP MAT thus represents an extremely cost-efficient approach to exploration, which allows to explore and cream off a property for less than the cost of a grid of lines.

Out of the 2,000 occurrences sampled up to now, some 40 (or 2%) revealed ore-grade assays of copper, gold, zinc, lead, etc. Concretely, one open pit mine is now in operation near a test pit first sampled with a BEEP MAT, and a small copper ore shoot was drilled off after the discovery of an ore float. Other showings and floats found during BEEP MAT surveys are actively prospected, such as a bedrock occurrence of 22% copper in Lemieux Township in Gaspé, or a 10% zinc-3% copper float in Chibougamau, or four gold showings near the Eastmain river. The high proportion of ore-grade occurrences among BEEP MAT conductors reflect mostly the high geological potential of the mining properties so far surveyed but also the nature's process of concentrating ore material such as gold or base metals in sulfide veins and veinlets.

HOW THE BEEP MAT CAN MAKE YOU SAVE TIME AND MONEY

The BEEP MAT can directly discover ore shoots, occasionally of a size to be directly minable as suggested by the positive reaction of BEEP MATS over the original subcrops of 10 of today's mines. However, a careful examination by qualified geologists of the conductive occurrences discovered by a BEEP MAT survey can:

- 1) Eliminate by actual sampling many graphitic horizons which can give misleading but large geophysical targets;
- 2) Focus exploration by discovering veinlets in previously unknown exhalitic horizons, worthy of detailed geoscientific investigation.
- 3) Discover new types of mineralization not predicted by the general geology of the area.
- 4) Discover floats from deeply buried ore bodies.

BEEP MAT surveys with the BM-II have been accepted for assessment works for many years just as any other geophysical survey.

=====

MAIN FEATURES

- . Rechargeable Gell Cell batteries (last 20 hours / rechargeable in 8 hours)
 - . Coil frequency: 2 MH
 - . Sensitivity: 10 Hertz
 - . Weight: 4,3 kg Size: 90 cm x 30 cm
 - . Digital display of the relative content of conductors or magnetite
 - . Different sound alarm for conductors and magnetite
 - . Waterproof
 - . Continuous ground coverage (10 readings/second): detects even the smallest sulfide veinlets
 - * One-year warranty on parts and labour (transportation fees not included)
- =====



BEEP MAT

NEW METHODOLOGY ENABLING THE SAMPLING OF UP TO 75% OF AIRBORNE ANOMALIES FOR LESS THAN THE COST OF LINE CUTTING

By overlaying airborne surveys with overburden maps (1:50,000) published by the Forestry Department of some provinces (Quebec, Ontario, etc.), it is now possible to:

- 1) Localize specific areas of thin overburden of less than one meter thick;
- 2) Transpose the localization of the conductors, their direction and strength (1-6 channels) over overburden maps;
- 3) Get to the area to be surveyed and, by using a GPS localization unit, walk towards the area where the anomaly has been localized;
- 4) Use a VLF such as the EM-16 to localize airborne anomalies and flag their direction;
- 5) Use a Beep Mat to cross over the flagged anomaly zigzagging from one side to the other, 25-m apart, until it "beeps" to the conductor;
- 6) Dig the area responding to the Beep Mat and sample for assays;
- 7) Go to the next conductor by using the GPS localization unit and repeat the above steps until assays give you interesting values. Then, depending on budgets, standard geophysics, diamond drilling, trenching or any other approach can be used over the showing to get the desired samples and assays.

If such a procedure is used, most of the time airborne anomalies will have been localized, dug and sampled for assaying. This methodology has proven to be very successful for companies such as Soquem, Noranda, Inco, Agnico-Eagle, Cominco, etc., especially when limited budgets do not allow the drilling of each anomaly. It enables these companies to verify a large portion of their anomalies with a small budget. By keeping the money tight, they were able to spend the residual for diamond drilling on showings with good assay values. In some instances, it also allowed them to get an additional budget to be spent on the same property in the weeks following the discovery with the Beep Mat.



Instrumentation
GDD Inc.

3700, boul. de la Chaudière
Ste-Foy, Qc. Canada G1X 4B7
Tél.: (418) 877-4249
Fax: (418) 877-4054

BEEP MAT

Model BM-II-93

PURCHASE / RENTAL PRICE LIST 1993

The BEEP MAT is a miniaturized electromagnetic survey instrument that is, in a way, the simplified version of the helicopter-borne uncoil. The BM-II-93 model consists of a uncoil inserted in a polyethylene shell and a separate readout module that allows the measurement of the relative value of the conductivity or susceptibility (magnetite content) of the underlying surface. Magnetite or conductive materials each have a different audio signal and their relative value is displayed. The BEEP MAT efficiently and inexpensively detects conductive outcrops (*pyrite, pyrrhotine, pyrrhotite, chalcopyrite (Cu), graphite, pentlandite (Ni), galena (Pb), etc.*), magnetic outcrops or boulders hidden under up to 1.5 meters of overburden.

	<u>PURCHASE PRICE</u>	<u>RENTAL PRICE</u>
	(Can. \$)	(Can. \$)
MODEL BM-II-93	7 900 \$*	70 \$ / day*
OPTION: Spare cable	400 \$*	included

* Shipping charges, customs fees, federal and/or provincial taxes are extra, if applicable.

-
- PURCHASE OPTION:** 80% of the rental fees of the last 4 months can be deducted from the purchase price of the rented instrument, if purchased.
- RENTAL PERIOD:** Starts on the day the instrument leaves our office in Sainte-Foy to the day of its return to our office.
- WARRANTY:** All instruments are guaranteed for one year. All repairs will be done free of charge at our office in Sainte-Foy (transportation fees excluded).
- SERVICE:** After the warranty has expired, a yearly maintenance contract, including parts and labour, is available for 790 \$ per year and includes any technical updating which could be made to the instrument sold.

Prices are subject to modification without notice.



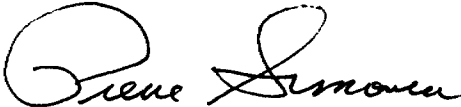
Edwin Gaucher, Ing., Ph.D.
Régis Desbiens, ing.
Simon Tshimbalanga, Ing.


Normand Moreau, géol.
Daniel Lapointe, géol., M.Sc.

EXPERTS-CONSEILS EN GÉOPHYSIQUE

**GEOPHYSICAL INTERPRETATION
OF A MHOMETER SURVEY
ON
DAVE SAUNDERS' PROPERTY,
IHNATKO - KUSINS SHOWING,
WABIKOBA LAKE AREA, NORTHWESTERN ONTARIO**

August 6, 1993


Pierre Simoneau, Geol., M.Sc.


Edwin Gaucher, Eng., Ph.D.

1. INTRODUCTION

This report describes in more details the Mhometer survey and is a complement to the report on the same property written by Pierre Simoneau in March 1993.

2. LOCATION AND ACCESS

The property is located approximately 320 km east of Thunder Bay (figure 1) and 8 km due north of the famous Hemlo gold mine sites on Transcanada Highway 17. The property is located on a northerly extension of the same rock belt.

Access to the property is by a logging road which runs through the western portion of the property (figure 2). The road is the first main logging road running west of Highway 613 at a point about 8 km north of the Black River. The property is located approximately 24 km south of the railroad tracks on the main logging road.

3. CLAIMS

The property consists of 11 unpatented mining claims which were all surveyed by a geophysical survey (figure 3). The list of claims and due dates is in appendix 1.

The claim holder of the mining property covered by the survey is:

Mr. Dave Saunders
309 Catherine Street
Thunder Bay, Ontario
P7E 1K76

4. FIELD WORK PROCEDURES AND INSTRUMENTS

The grid lines were run with a Beep Mat, model BM-II. This uncoil type electromagnetic instrument operates at about 2.1 megaHertz. It was designed and calibrated* to measure either the magnetite content of 1 m³ or the average apparent conductivity of 3 m³ of any material immediately underlying the instrument. However, if conductive and magnetic materials are simultaneously present, it cannot independently measure both parameters, just like the MaxMin or any in-phase out-of-phase

* Réf.: Crespy Jean-Marc, Etalonnage du BEEP MAT, Rapport de stage industriel I présenté à M. Michel Chouteau, professeur, Ecole Polytechnique de Montréal, Hiver 1991.

airborne survey. The Beep Mat is the commercial name of the Mhometer built by Instrumentation GDD Inc. of Ste-Foy, Quebec.

The survey was run between September 20 and 24, 1992. Readings were taken every 12.5 meters. Additional readings were taken between lines but they were not plotted nor used in contouring. The results are presented as readings and profiles (Plan #1) and as contours (Plan #2). Because of this scale, some profiles are incomplete but all readings are shown on the map.

The contour map was not drawn with quite the proper parameters and the high values are smeared out. The contours do not always reflect the high values. Additional trend lines would have helped to better define the dykes. Still, the general trends are apparent and we have drawn our interpretation on the black and white copy of the contour map.

5. DETAILED DESCRIPTION OF ANOMALIES

The Mhometer (Beep Mat) survey contour map clearly defines three dykes, one man-made feature and two magnetic trends that may help prospecting.

Dyke #1

This dyke extends from line 30+00E/0+25N to line 28+00E/5+50N. As the negative readings reach 1500 Hz over outcrops, the dyke should contain about 1 to 2% of magnetite and should correspond to a magnetic anomaly of 1000 to 2000 gammas.

Dyke #2

This dyke is not continuous on the Beep Mat survey and is probably hidden under deeper overburden under line 25+00E. It extends from line 24+00E/2+50S to line 27+00E/5+50N. Over outcrops, the intensity of the anomaly is similar to Dyke #1 at about 500 to 600 Hz. It should contain 1% of magnetite and correspond to a magnetic high of 1000 gammas. An apophyse of dyke #2 may extend from line 25+00E/2+50S up to line 26+00E/0+50N.

Dyke #3

This dyke can be followed from line 19+00E/3+00S to line 17+00E/1+00N. It is parallel to dyke #1.

5.1 Magnetite in road gravel

A long negative anomaly at about 100 Hz follows the road that limits the claim block to the west. This anomaly is likely to be due to the small magnetite content of the gravel.

5.2 Aread of high water table

A few weakly negative trends of about -75 to -100 Hz are likely to correspond to water saturated swamps. We can describe one on lines 14+00E to 16+00E/1+00S and another one extends between lines 19+00E to 25+00E/2+00N. Within the water-logged area, an isolated outcrop of diabase under line 20+00E/1+25N lowers locally readings to -2100 Hz. Several other water-sogged occurrences are highlighted in pink.

6. TARGETS WARRANTING INVESTIGATION

The examination of the map has defined two magnetic targets that warrant additional examination. No conductors were detected.

- 1) From line 21+00E/2+25S to line 23+00E/2+25S, an isolated magnetic low of 150 Hz is likely to correspond to a magnetite-rich layer in the underlying felsic tuff. It is very close to the surface and it should be trenched and sampled as base metal or gold mineralization is often associated with such weakly magnetic layers in tuffs, just like on the Kusins showing.
- 2) A similar magnetite-rich layer was detected immediately besides the Kusins showing on line 26+00E/2+00N and on line 27+00E/2+25N. This magnetic trend indicates that the overburden is very shallow and additional trenches should be dug on the favourable horizon by using that marker.

CONCLUSION

The Beep Mat survey has outlined the three diabase dykes. It also defined two narrow and weak magnetic anomalies in tuffs that should now be checked by trenches as they may help to localize exhalite-type sulfide-bearing horizons mineralized with either base or precious metals. The anomalies are so small that it would be hard to perceive them on a regular magnetic survey and yet the Beep Mat shows them clearly and allows an immediate follow up.

The results of the Beep Mat survey were easily correlated with the underlying geology. Such surveys are most useful when exploring for precious and base metals. They can contribute to mining discoveries in three manners:

- 1) better understanding of geology
- 2) direct detection of conductive showings hidden by shallow overburden (less than 1.5 meters)
- 3) detection of ore floats and tracing of sulfide boulder trains

Only the first application of the Beep Mat is evident on this property, but one never knows that there will be no conductors found till the survey is completed. On other properties, the Beep Mats were often successfully used to discover hidden bedrock conductors and/or high-grade sulfide floats.



42C13SW8801 2.15002 WABIKOBA LAKE

020

2.15002

RESULTS OF 1992 EXPLORATION WORK
GEOPHYSICAL SURVEY AND PROSPECTING
IHNATKO - KUSINS PROPERTY
WABIKOBA LAKE AREA, NORTHWESTERN ONTARIO
N.T.S. 42 C 13 / SW

Written by: Pierre Simoneau
2-309, Catherine st.
Thunder Bay, Ontario
P7E 1K7
Phone: (807) 623-7496
(807) 623-1692 (messages)

March 1993

THE IHNATKO - KUSINS OCCURENCE

ABSTRACT

The property consists of 11 unpatented mining claims which include a base metal occurrence known as the Kusins Showing. For the sake of this report, the showing will be called The Ihnatko-Kusins zone, in honour of the man who reportedly actually discovered the showing.

The property is located 8 kilometres due north of the famous Hemlo gold mines sites on the Transcanada Highway 17. Access to the property is by a logging road running west of Highway 614 at a point about 8 km north of the Black River and running through the western portion of the property 24 km south of the railroad tracks.

The property lies in a package of volcano-sedimentary rocks similar to the Manitouwadge-Geco area which hosts several significant base metal deposits. Significant base metal mineralization obtained last year in a grab sample ran 10.7% zinc and 8.9% lead with 2.5 oz. silver per ton. This mineralization is located about 1200 metres east of the logging road.

The volcanogenic mineralization is at the contact of crystal tuffs and sediments where the tuffaceous rocks wedge out against the sedimentary rocks. Ore hosts are sericite schists, siliceous sediments and fragmental rocks. The mineralized zone is 80 cm wide in the old trench and a vlf anomaly is following the contact between the sediments and the crystal tuffs where the mineralization was found. The Bullring Fault, identified by the vlf survey, is a potentially significant structure in relation to the mineralization. The diabase dykes were easily identified by the magnetic survey.

The Beep Mat survey was completed along cutted chained lines and across the claims. The survey provides good assistance in locating potential base-metal and gold targets. One Beep Mat anomaly coincide with a magnetic stratigraphic layer used as a marker following the Kusins zone. This mineralized marker was followed over 200 metres. The Kusins showing itself doesn't react with the Beep Mat because the sulphides are not conductive. More trenching, stripping, drilling and a geological mapping should provide more accurate information.

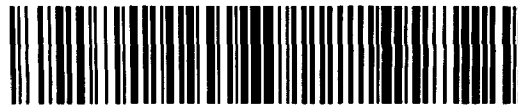


Table of contents

Abstract.....2
 Table of contents.....3
 1. Introduction.....4
 2. Location and Access.....5
 3. Claims.....8
 4. Regional geology.....10
 5. Previous work.....12
 6. 1991 work program.....13
 6.1 Linecutting.....13
 6.2 Prospecting.....13
 6.3 Geophysical surveys.....13
 7. 1992 work program.....14
 7.1 Linecutting.....14
 7.2 Prospecting.....14
 7.3 Geophysical surveys.....14
 8. Property geology.....15
 8.1 Volcano-sedimentary rocks.....15
 8.2 Intrusive rocks.....15
 8.3 Mineralization.....17
 9. Conclusion.....18
 10. Recommendations.....18
 Selected References.....19
 Certificate of Qualifications.....20

APPENDICES

- Appendix 1. List of claim numbers and due dates
- Appendix 2. BEEP MAT Specifications

LIST OF FIGURES

Figure 1. General location map.....6
 Figure 2. Detailed location map.....7
 Figure 3. Claim map.....9
 Figure 4. General geology map of Hemlo area.....11
 Figure 5. Property Geology.....16

LIST OF MAPS (in pocket)

Plan 1. Mhometric survey, profiles & postings 1 : 2,500
 Plan 2. Mhometric survey, Delta Hz contours 1 : 2,500
 Plan 3. Mhometric survey, D Hz colored contours 1 : 2,500

1. INTRODUCTION

The following report gives the results of the exploration program carried out during fall 1992 over the Kusins Occurrence. For the sake of this report, the showing will be called the Ihnatko-Kusins Zone, in honour of the man who reportedly actually discovered the showing.

Prospecting and Beep Mat surveys were carried out over the Ihnatko-Kusins property in september 1992. The author of this report supervised and performed the survey work.

The claims were staked to obtain the showing itself and the logging road. Detailed prospecting of the old pits was successful in relocating the base metal mineralization which was overlooked by previous operators, who were mainly interested in gold.

2. LOCATION AND ACCESS

The property is located approximately 320 kilometres east of Thunder Bay (figure 1) and 8 km due north of the famous Hemlo gold mines sites on the Transcanada Highway 17. The property is located on a northerly extension of the same belt of rocks.

Access to the property is by a logging road which runs through the western portion of the property (figure 2). The road is the first main logging road, running west of Highway 614 at a point about 8 km north of the Black River. The property is located approximately 24 km south of the railroad tracks on the main logging road.

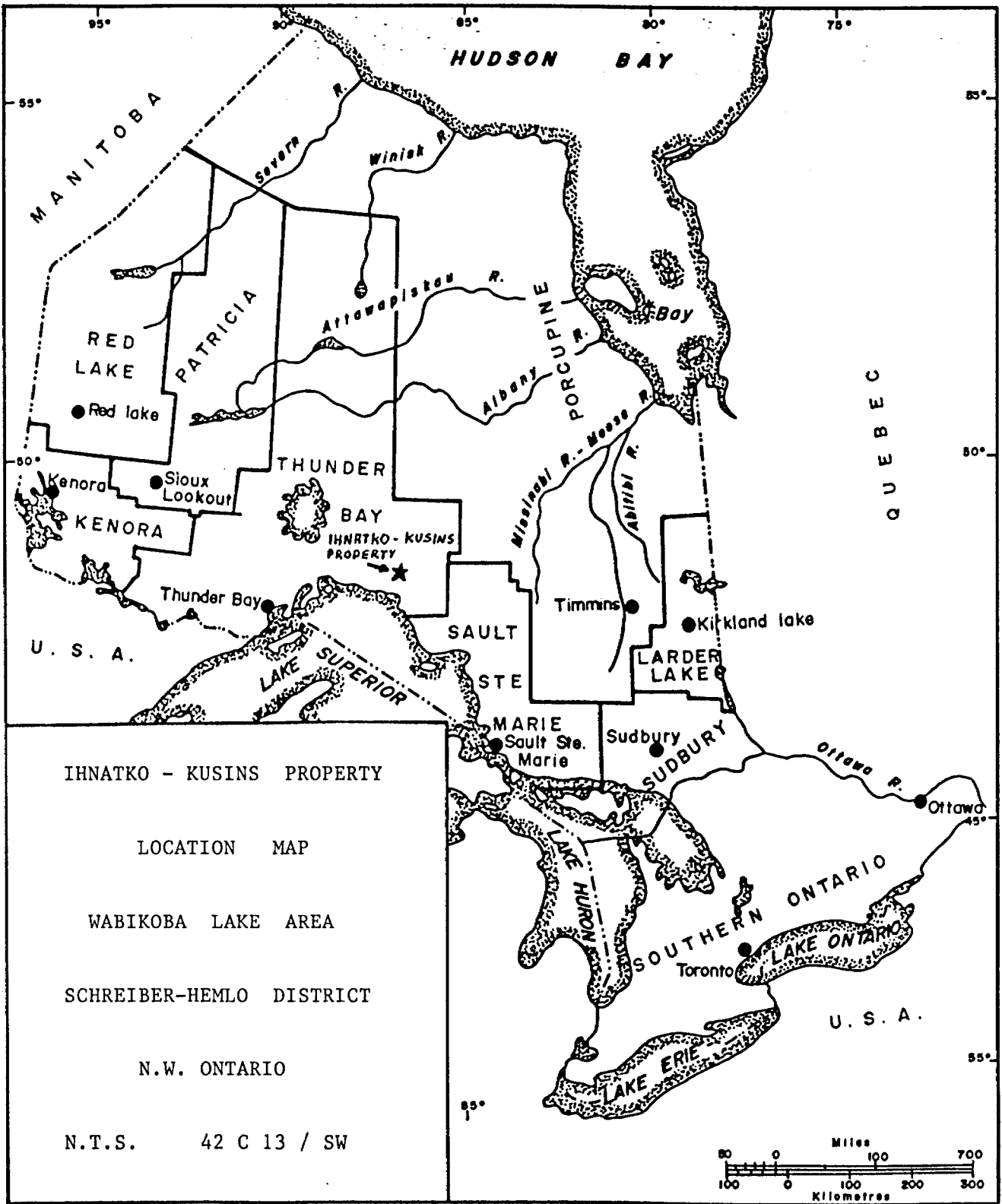
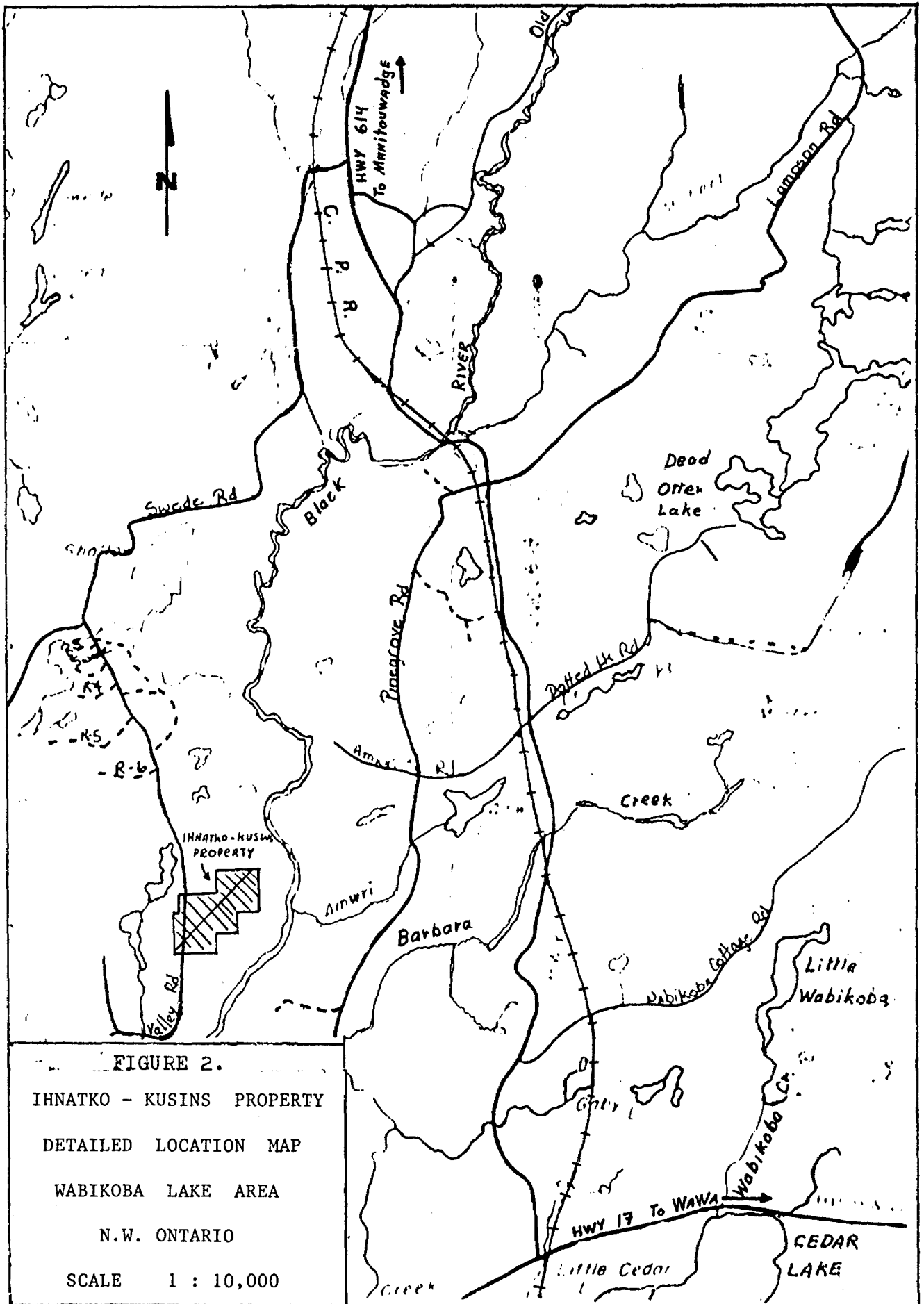


FIGURE 1.



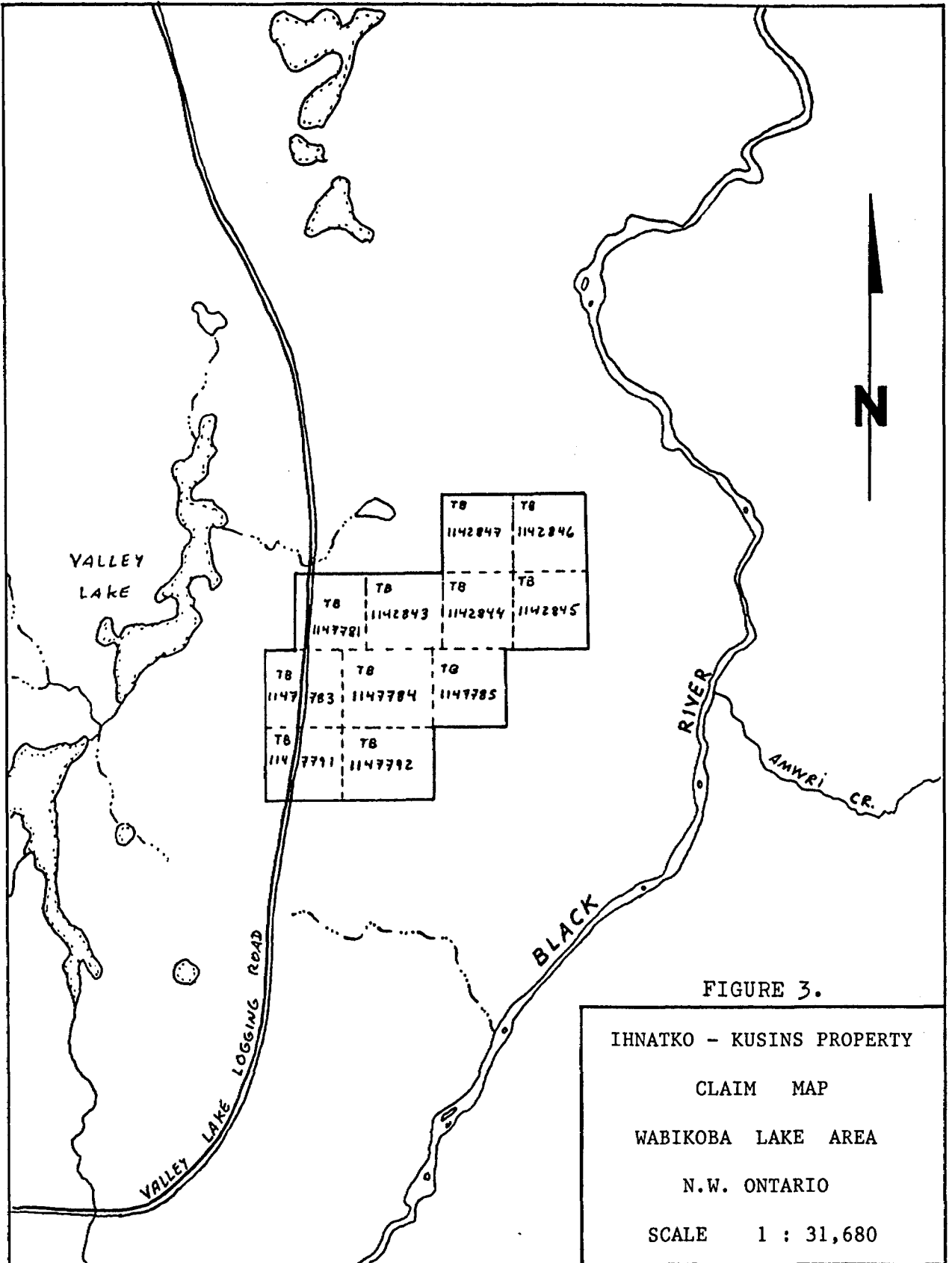
3. CLAIMS

The property consists of 11 unpatented mining claims which were all surveyed by a geophysical survey (figure 3).

The list of claims and due dates is in appendix 1.

The claim holder of the mining property covered by the survey is:

M. Dave Saunders
309, Catherine st.
Thunder Bay, Ontario
P7E 1K7



4. REGIONAL GEOLOGY

The Ihnatko-Kusins Property lies on the northern limb of the Hemlo Synform, an east-west trending synclinorium developed within the Archean aged Heron Bay Greenstone Belt. The Syncline is flanked to the northwest by the Gowan Lake and to the south by the Bullring Lake granitic gneiss domes (figure 4).

The Bullring Lake Fault, a dexter cross fault, is interpreted by Milne (1968) to extent through the eastern portion of the property. This fault (identified by a lineament on air photos) is a potentially significant structure in relation to the mineralization.

Rocks within the syncline have locally attained an upper amphibolite grade of metamorphism. The core of the syncline has locally been intruded by several late Archean felsic complexes, including the Musher Lake Pluton. Several ages of post-Archean diabase dykes intrude the entire sequence.

The Hemlo Mining Camp is situated in the Wawa-Shebandowan subprovince, specifically occurs in a highly deformed zone flanked by intermediate to mafic volcanic rocks in the footwall and volcanoclastic rocks in the hanging wall. It has been suggested that the mineralization is at the contact of crystal tuffs and sediments, where the tuffaceous rocks wedge out against the sedimentary rocks. The mineralization is zoned both across dip and along strike.

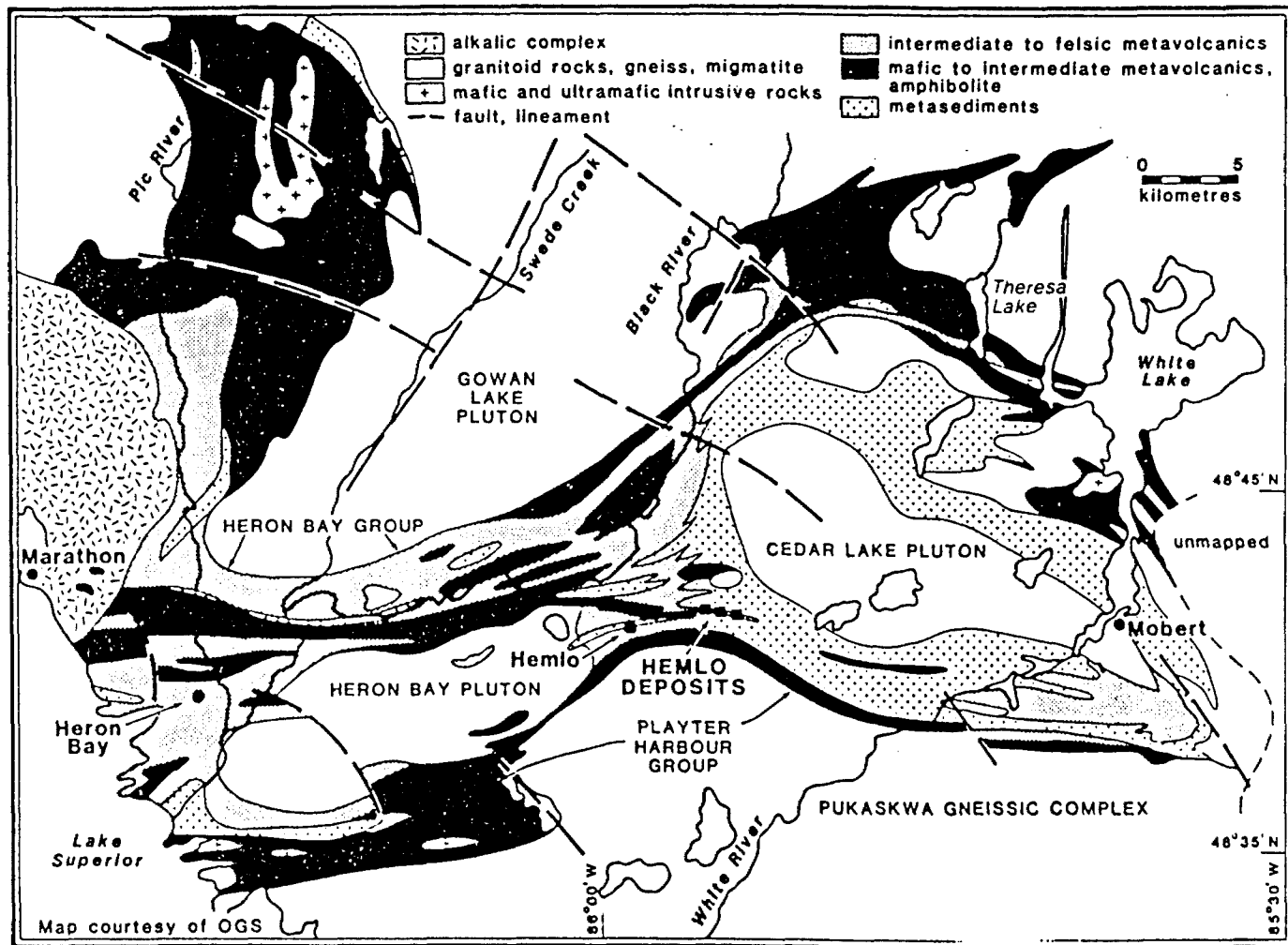


Figure 4. Geological map of the Hemlo area by T.L. Muir, 1983. (Modified after OGS Maps 2220, 2439, 2452, P.2701, P.2702, P.2738, P.2739).

5. PREVIOUS WORK

The property was reported to have been discovered by T. and W. Kusins (Milne, 1968) in 1963. Sources to M. Dave Saunders have suggested it was discovered by Ihnatko while timber cruising for the Ontario Paper Co. Ihnatko and Kusins became partners in the discovery claims.

The showing was examined by several companies in 1963 (Milne, 1968). The mineralization was trenched by Ihnatko and Kusins following this and optioned to Cominco in 1965. Grab samples were reported to run over 20 oz. silver per ton. (not published). Cominco conducted limited geophysical and geochemical work before reportedly drilling 5 X-ray drill holes.

Drill logs submitted by Cominco for assessment work were incomplete, and no assays were reported. Several sections in the drilling reported disseminated galena and sphalerite.

The property fell idle until it was staked during the Hemlo rush by Pryme Energy. In 1982, the ground covered by this property was optioned to Noranda. A large grid was established over the entire Prime Energy Option property and was mapped in 1983 and 1984. Some IP and conventional geophysics were conducted followed by limited drilling, which did not include the Ihnatko-Kusins zone.

The property was restaked by Dolphin Exploration and work was undertaken by Corona Corporation on behalf of Dolphin Exploration Ltd. in 1987. Soil sampling and geological mapping were performed in selected areas, including the present property.

6. 1991 WORK PROGRAM

6.1 Linecutting

The old lines 200 m. spacing were recut and new lines were flagged to 100 m spacing, with the grid totalling 22.5 km.

6.2 Prospecting

The old trenches as described by Milne (1968) were relocated and prospected. Base metal mineralization was first located by Dave Saunders in the muck of Trench 2. This was traced to the NE face of the pit which shows a 0.80 m. thick mudstone unit with disseminated and semi-massive pyrite, sphalerite and galena mineralization. Sample 8626 ran 10.7% zinc and 8.9% lead with 2.5 oz. silver per ton in a grab sample. Sample 8624, a chip sample across 0.75m ran 0.84% Zn and 0.13% Pb with 1.8 oz/ton silver.

6.3 Geophysical surveys

The major higher magnetic anomalies are oriented at about 300 and 010 degrees and correspond to the diabase dykes. Some other smaller anomalies follow the local geological trend and correspond to feldspar porphyry sills.

The electromagnetic VLF-EM16 anomalies are mainly topographic feature except for a small anomaly over the main showing. The general orientation of the VLF anomalies correspond to the local geological trend of the sedimentary bedding. The Bullring Lake fault cut across the area and the dexterous displacement is spectacularly shown by the VLF survey.

7. 1992 WORK PROGRAM

7.1 Linecutting

The baseline was recut and chained over 1.2 km due to a wind storm that pushed down many trees across the lines.

7.2 Prospecting

The prospection was carried out between september 8th to september 18th using a Beep Mat and no particular lines were followed. All claims were systematically covered, walking with the Beep Mat in any direction to find conductive outcrops or conductive boulders in overburden. It is impossible to draw any traverses on the map because most of the traverses especially over the overburden area were made in zigzag motion lines about 10m apart and there would be so much traverses drawn that the basic information would be unreadable.

West of the Bullring Lake fault, the property is almost flat becoming a sandy plain. East of the fault, high hills and deep valleys are the main topographic feature. No conductive outcrops or boulders were found in the property with the Beep Mat. That does not mean that there is no other mineralized zones than the Ihnatko-Kusins showing. In the present case, the Ihnatko-Kusins massive sulphide zone didn't react to the Beep Mat because the sulphides are not conductive. Other methods might have to be used to find mineralized areas. By example, a slight magnetic "lean iron formation" parallel to the Kusins mineralized layer was used as a marker to locate the mineralized zone over 200 metres from line 26E to 28E.

The reason for covering the property with the Beep Mat was to find other showings. Since the results were negative, no samples were taken in this survey.

The results of the prospecting work performed on the property are plotted on Plan 4. The map is at the metric scale of 1=5,000 in pocket.

7.3 Geophysical surveys

A total of 22.5 km of lines including the base line was completed. The ground geophysical survey with the Beep Mat was carried out by the author of this report between september 20th to september 24th 1992.

A surface electromagnetic survey was conducted with a Beep Mat. The Beep Mat is a miniaturized electromagnetic survey instrument that is, in a way, the simplified version of the helicopter-borne uncoil. The BM-II-92 model consists of a uncoil inserted in a polyethylene shell and a separate readout module allows the measurements of the relative value of the conductivity or susceptibility (magnetic content) of the underlying surface in Hertz. Magnetite or conductive materials each have a different audio signal and their relative value is displayed. The Beep Mat efficiently and inexpensively detect conductive outcrops (pyrite, pyrrhotite, chalcopyrite, graphite, pentlandite and galena (which responds 1 time out of 2), magnetic outcrops or boulders hidden under up to 1.5 metres of overburden. More specification in appendix 2.

The results of the mhometric survey are plotted on Plan 1 and the contours on Plan 2 with an extra coloured contour map 3. All the maps are at the metric scale of 1=2,500 in pocket.

The BEEP MAT can directly discover an ore shoot. In typical prospecting activities, the Beep Mat has helped localize layers of massive sulfides (pyrite, pyrrhotite) but the Kusins showing is a case where the sulphides are not conductive and therefore don't react with the Beep Mat. The mhometric maps do not show any conductive areas. On the colored map, the 2 red zones at the edges of the property are computer generated.

8. PROPERTY GEOLOGY

8.1 General Geology

Reconnaissance geological mapping was conducted in 1964 and 1965 (Milne, 1968) at 1:31680. The only other work recorded is in 1984 (Kemp, 1984) at 1:5000 and in 1988 (Hamilton, 1989) at 1:5000. The most recent work was conducted with helicopter support.

From compiling assessment work data, the property can be shown to be underlain by a package of volcanic and sedimentary rocks (figure 7). From the granite contact southward, a thin <150 m. section of foliated mafic volcanics is in sharp contact with mudstones which are in contact with a thin felsic pyroclastic unit which grades into laminated sediments and conglomerates. The Ihnatko-Kusins Zone occurs at the contact of the mudstones and the felsic tuffs.

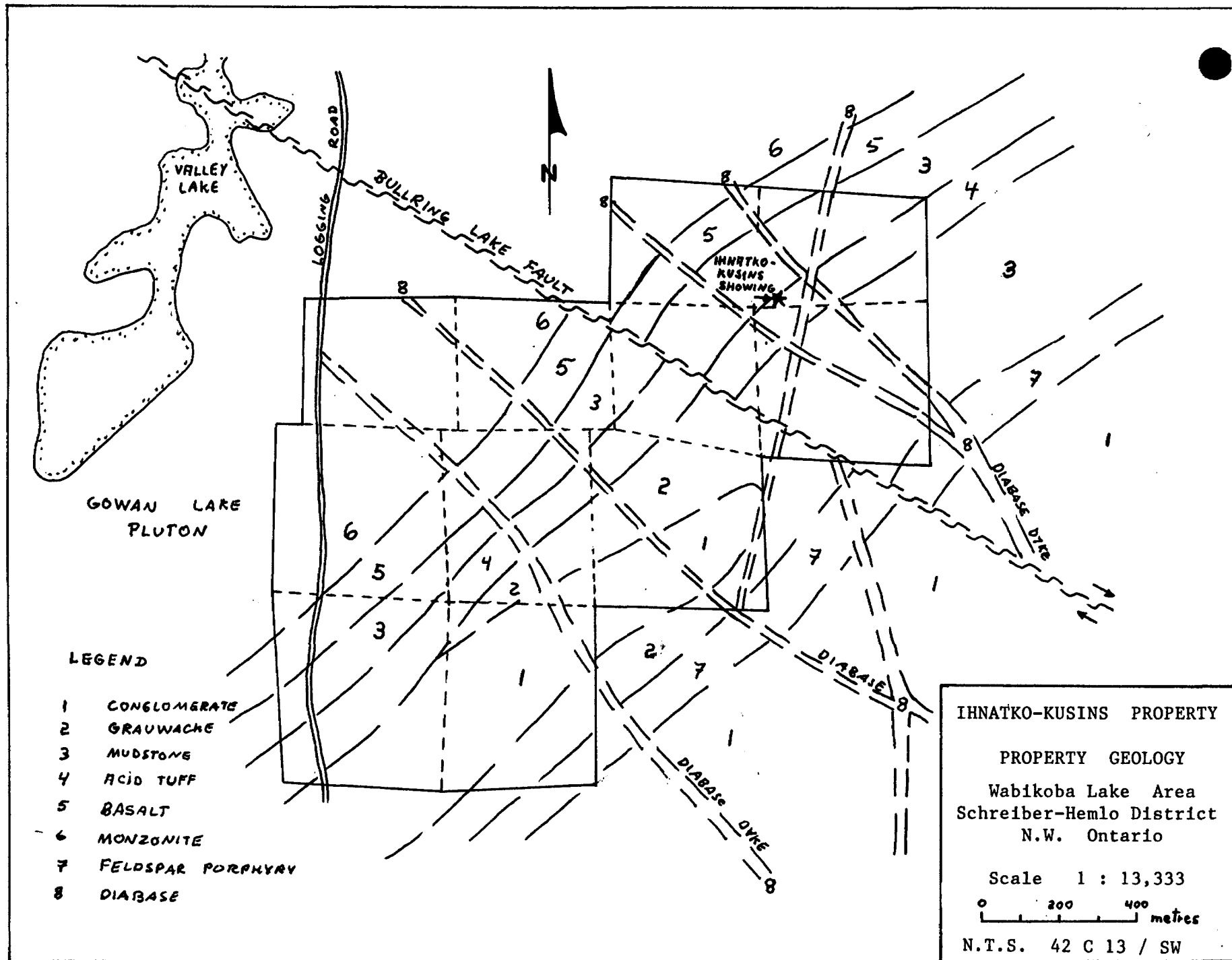
The three main rock types disclosed by other mapping were, however, observed: felsic tuffs south of the mineralized pits, grading into laminated sediments farther to the south, and foliated mafic volcanics between the mineralized zone and the Monzonite. A possible agglomerate (conglomerate) was observed at the baseline near L24E.

The property is crosscutted by diabase dykes and the Bullring Lake Fault.

8.2 Monzonitic rocks

The Ihnatko-Kusins Zone occurs approximately 150 metres south of the regional contact of the monzonitic Gowan Lake Pluton with the greenstone belt. The monzonite is typically a light coloured, medium grained, hornblende monzonite. A faint foliation parallel with the schistosity of the volcanics can be observed in places.

Recent prospecting on a cliff near the contact at L27E 3+75N shows a brecciated intrusive texture at the contact with the foliated mafic rocks. This may be a widespread feature and could be significant.



8.3 Mineralization

Sulphide mineralization was observed to occur at the contact of a sedimentary unit (mudstone) and a felsic crystal tuff unit. The main type of mineralized rock is a well layered pyrite sericite schist. The extent of this rock type was impossible to determine, but was present in all trenches.

In Trench 2, a 0.80 m. thick mudstone unit with disseminated and semi-massive sphalerite and galena was located. The best material ran 10.7% zinc and 8.9% lead with 2.5 oz silver per ton in a grab sample. A chip sample across 0.80 m. ran 0.84% Zn and 0.13% Pb with 1.8 oz/ton silver.

With the proximity of this mineralization to the Bullring Lake Fault, there may be excellent potential for a Manitouwadge-type of deposit.

9. CONCLUSIONS

A survey grid at 100 m. spacing has been established over the property. Road access to the property will reduce the cost of exploration which has hampered the development of the property in the past.

The base metal occurrence known as the Ihnatko-Kusins Showing has been relocated and sampled. The presence of significant base metal mineralization has been documented. A Vlf anomaly coincide with the volcanogenic mineralized zone. The Beep Mat doesn't react to the sulphides over the showing but a magnetic marker was used to follow the zone over 200 metres.

The host rocks and structural feature shares similarities with economic deposits in the area. Further ground work should establish the potential for an economic zone.

10. RECOMMENDATIONS

The property should be mapped at 1:2,500 scale. Further stripping, sampling and detailed mapping should be performed in the vicinity of the old trenches and basal till sampling should be performed west of the fault trying to find the continuation of the mineralized Ihnatko-Kusins zone.

The planning of more advanced work, including diamond drilling, would be based upon the ground survey results.

SELECTED REFERENCES

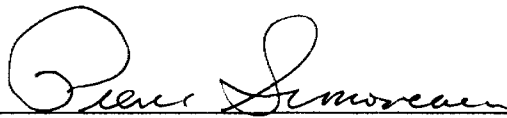
- Hamilton, W.S., 1989, Report on Geological and Geochemical (Soil) Surveys on the Black River Property. Company report for Dolphin Exploration Ltd. MNDM assessment file No. 2.12347, Thunder Bay.
- Kemp, R., 1984, Geological Assessment Report, Pryme North Joint Venture, Wabikoba Lake Area, Thunder Bay District. Company report for Noranda Exploration Company Ltd. MNDM assessment file No. 2.7108, Thunder Bay.
- Milne, V.G., 1968, Geology of the Black River Area. ODM GR 72, pp. 61-63, Map 2144.

CERTIFICATE OF QUALIFICATIONS

THIS IS TO CERTIFY THAT:

- I am a resident of Thunder Bay, province of Ontario, Canada (2-309 Catherine st, Thunder Bay, Ontario, P7E 1K7).
- I have been engaged in base and precious metal exploration as a geologist since 1987 and geophysicist since 1991.
- I am a graduate of University of Quebec at Chicoutimi, Chicoutimi, Quebec (M.Sc. Earth Sciences, 1987), and University of Montreal, Montreal, Quebec (B.Sc. Geology, 1982).
- I am a member of the Professional Association of Geologists and Geophysicists of Quebec (APGGQ).

Signed in Thunder Bay, March 30 1993



Pierre Simoneau
Geologist, M.Sc.



APPENDIX 1.

List of Claim Numbers and Due Dates

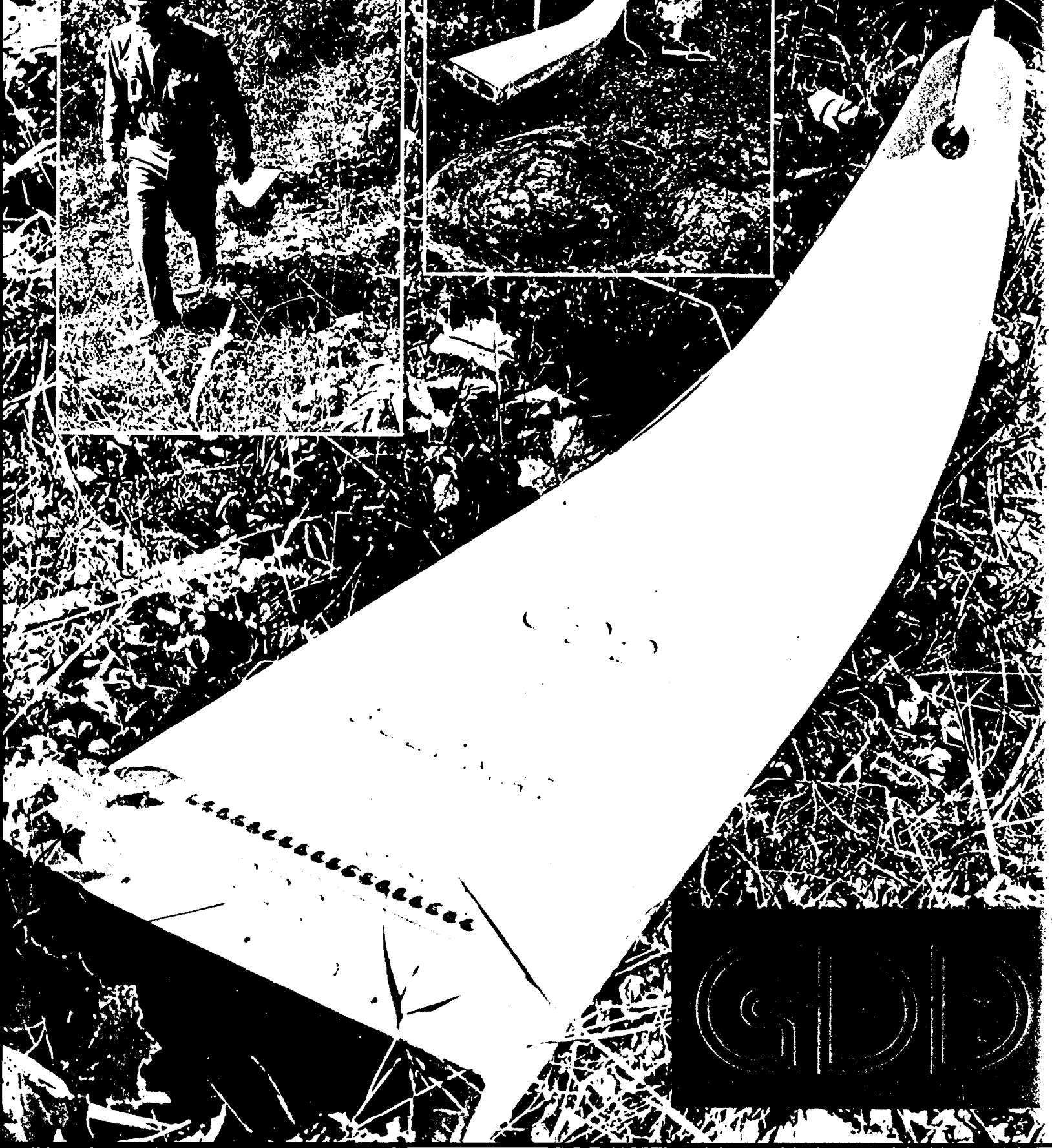
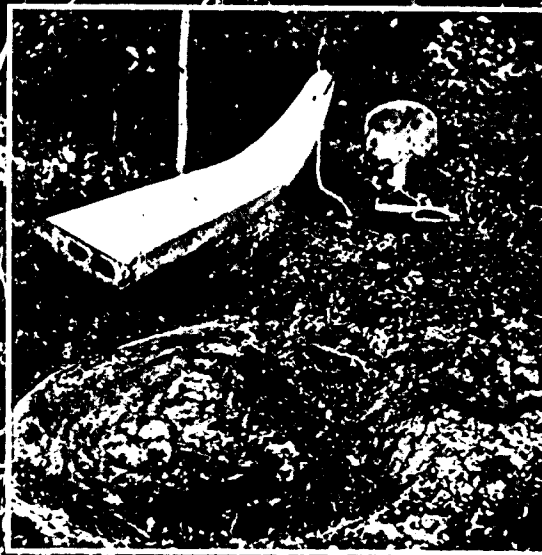
APPENDIX 1.

LIST OF CLAIMS AND DUE DATES

1.	TB	1142843.....	February 18, 1994
2.	TB	1142844.....	February 18, 1994
3.	TB	1142845.....	February 18, 1994
4.	TB	1142846.....	February 18, 1994
5.	TB	1142847.....	February 18, 1994
6.	TB	1147781.....	April 26, 1993
7.	TB	1147783.....	April 26, 1993
8.	TB	1147784.....	April 26, 1993
9.	TB	1147785.....	April 26, 1993
10.	TB	1147791.....	April 26, 1993
11.	TB	1147792.....	April 26, 1993

APPENDIX 2.

BEEP MAT Specifications





GDD BEEP MAT, model BM-II-92

THE FACTS

Up to 1991, some 2000 conductive occurrences have been localized by BEEP MAT surveys, then sampled, often by blasting. When showings and/or EM conductors occur in areas of shallow overburden and till, a BEEP MAT crew can discover and sample one conductive occurrence or more for every day of work. The ratio rapidly falls to one occurrence every 10 days in areas of shallow overburden but where no airborne conductors are known. On the average, two-thirds of the occurrences are bedrock and one third boulders. Numerous descriptions of field surveys are available.

THE BEEP MAT - A COST EFFECTIVE INSTRUMENT

To express the same idea differently, a BEEP MAT survey of a 100-claim group in an area of shallow overburden will discover from 10 to 100 hidden gossans, which can all be examined, sampled and assayed for the all-inclusive cost of one drill hole on a geophysical anomaly (\pm 50 000 \$). In every area where outcrops are present, the BEEP MAT thus represents an extremely cost-efficient approach to exploration, which allows to explore and cream off a property for less than the cost of a grid of lines.

Out of all the occurrences sampled until the end of 1991, some 30 (or 2%) revealed ore-grade assays of copper, gold, zinc, lead, etc. Concretely, one open pit mine is now in operation near a test pit first sampled with a BEEP MAT, and a small copper ore shoot was drilled off after the discovery of an ore float. Other showings and floats found during BEEP MAT surveys are actively prospected, such as a bedrock occurrence of 22% copper in Lemieux Township in Gaspé, or a 10% zinc-3% copper float in Chibougamau, or four gold showings near the Eastmain river. The high proportion of ore-grade occurrences among BEEP MAT conductors reflect mostly the high geological potential of the mining properties so far surveyed but also the nature's process of concentrating ore material such as gold or base metals in sulfide veins and veinlets.

HOW THE BEEP MAT CAN MAKE YOU SAVE TIME AND MONEY

The BEEP MAT can directly discover ore shoots, occasionally of a size to be directly minable as suggested by the positive reaction of BEEP MATS over the original subcrops of 10 of today's mines. However, a careful examination by qualified geologists of the conductive occurrences discovered by a BEEP MAT survey can:

- 1) Eliminate by actual sampling many graphitic horizons which can give misleading but large geophysical targets;
- 2) Focus exploration by discovering veinlets in previously unknown exhalitic horizons, worthy of detailed geoscientific investigation.
- 3) Discover new types of mineralization not predicted by the general geology of the area.
- 4) Discover floats from deeply buried ore bodies.

BEEP MAT surveys with the BM-II are accepted for assessment works just as any other geophysical survey.

=====

MAIN FEATURES

- . Rechargeable Gell Cell batteries (last 20 hours / rechargeable in 8 hours)
 - . Coil frequency: 2 MH
 - . Sensitivity: 10 Hertz
 - . Weight: 4,3 kg
 - . Size: 90 cm x 30 cm
 - . Digital display of the relative content of conductors or magnetite
 - . Different sound alarm for conductors and magnetite
 - . Waterproof
 - . Continuous ground coverage (10 readings/second): detects even the smallest sulfide veinlets
- =====



Ontario



42C13SW8801 2.15002 WABIKOBA LAKE

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Geoscience Approvals Section
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

Our File: 2.15002
Transaction #: W9340.00085

January 20, 1994

Mining Recorder
Thunder Bay Mining Division
Ministry of Northern
Development and Mines
435 James Street South
Suite B003
Thunder Bay, Ontario
P7E 6E3

Dear Sir:

Subject: Approval of Assessment Work submitted on Mining Claims
1142843 et al, Wabikoba lake Area.

The assessment work credits for Prospecting, Section 9, Mining Act Regulations, submitted on the above work report have been approved as of January 14, 1994. The approved amount of assessment work is the value originally claimed on the Report of work form.

Please indicate this approval on your records.

Yours sincerely

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

BK/lb

cc: Resident Geologist
Thunder Bay, Ontario

✓ Assessment Files Library
Toronto, Ontario



Report of Work Conducted After Recording Claim

Transaction Number

W9340-85

Mining Act

MINING LANDS

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.15002

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) DAVID SAUNDERS		Client No. 191663
Address 309 Catherine st. Thunder Bay Ont. P7E 1K7		Telephone No. 807 623-1692
Mining Division Thunder Bay - Hemlo	Township/Area Wabikoba Lake	M or G Plan No. G-620
Dates Work Performed From: Sept 6 1992		To: Sept 17th 1992

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	MHOMETRIC SURVEY (DEEP MAT)
Physical Work, Including Drilling	PROSPECTING WITH THE DEEP MAT
Rehabilitation	RECEIVED
Other Authorized Work	APR 26 1993
Assays	
Assignment from Reserve	MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ 5,233.00

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
PIERRE SIMONEAU	2-309 CATHERINE ST THUNDER BAY, ONT. P7E 1K7

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date MAR 30/93	Recorded Holder or Agent (Signature) <i>[Signature]</i>
--	--------------------------	--

Certification of Work Report

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

Name and Address of Person Certifying DAVID SAUNDERS 309 CATHERINE STREET, THUNDER BAY ONT. P7E 1K7		
Telephone No. 623-1692	Date MAR 30/93	Certified By (Signature) <i>[Signature]</i>

For Office Use Only

Total Value Cr. Recorded 5233	Date Recorded Apr 1/93	acting Mining Recorder <i>[Signature]</i>	Received Stamp APR 1 1993 PM 12:57 MINING DIVISION SUDBURY ONTARIO
	Deemed Approval Date June 30/93	Date Approved	
	Date Notice for Amendments Sent		



Statement of Costs
for Assessment Credit

État des coûts aux fins
du crédit d'évaluation

Transaction No./N° de transaction

W9340-86

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	2450	
	Field Supervision Supervision sur le terrain		2450. ⁰⁰
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type LINE CUTTING	300. ⁰⁰	
			300. ⁰⁰
Supplies Used Fournitures utilisées	Type FOR FIELD WORK	119.24	
	FOR CAMPING	204. ⁶⁶	
	EXPLOSIVES	36. ⁷⁵	
	PRINTING MAPS	101.55	462. ²⁰
Equipment Rental Location de matériel	Type CAMPING	250. ⁰⁰	
	GEOPHYSICAL		
	BEEP MAT	898. ⁸⁰	
			1148. ⁸⁰
Total Direct Costs Total des coûts directs			4361. ⁰⁰

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type VEHICLE	630. ⁰⁰	
	RECEIVED		
	APR 26 1993		
	MINING LANDS BRANCH		630. ⁰⁰
Food and Lodging Nourriture et hébergement	FOOD	233. ⁴⁰	233. ⁴⁰
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			863. ⁴⁰
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			863. ⁴⁰
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)		Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)	
			5233. ²⁰

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
	x 0,50 =

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Recorded Holder I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

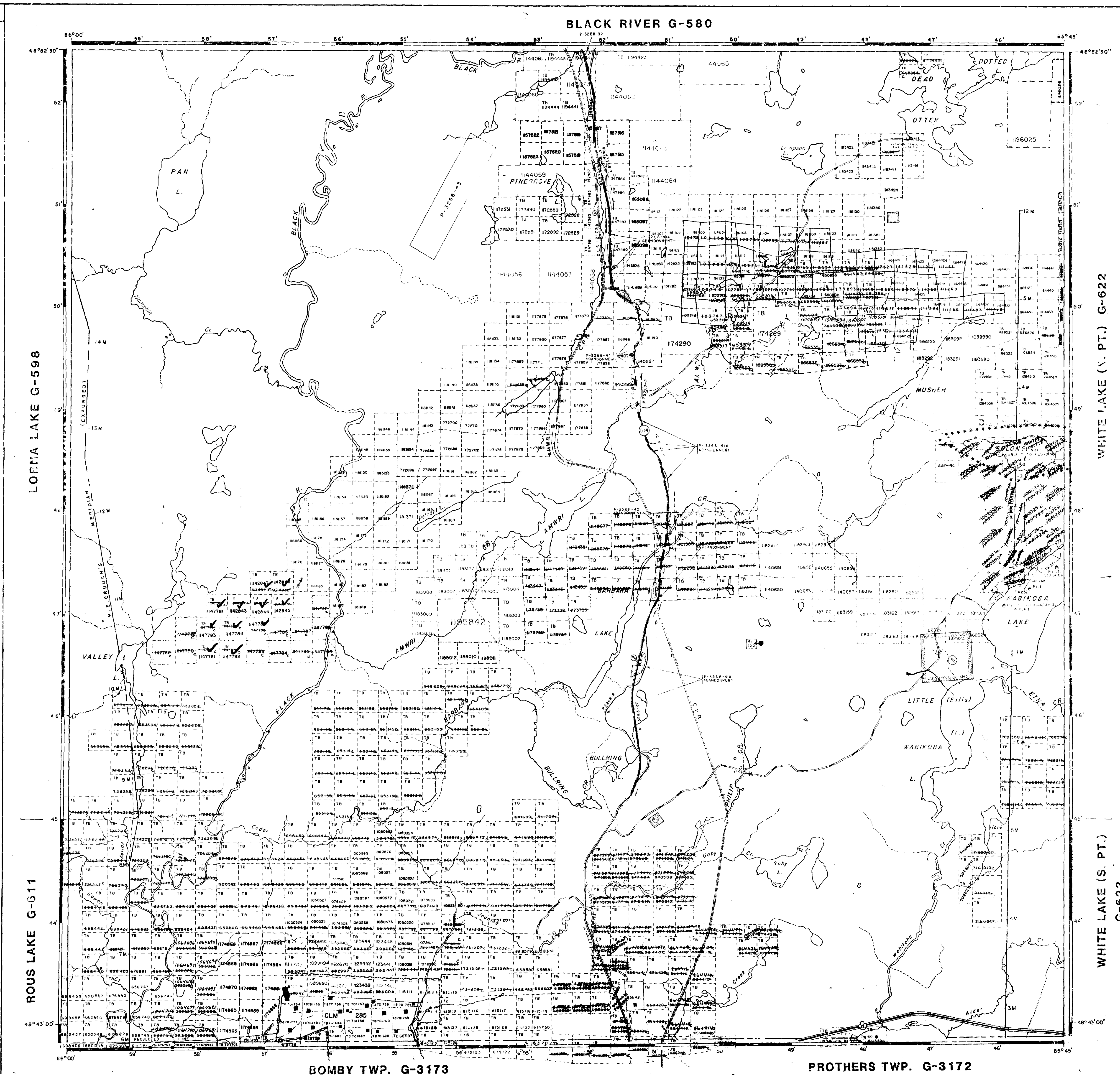
à faire cette attestation.

Signature 	Date MAR 30/93
---------------	-------------------

REFERENCES

AS WITHDRAWN FROM DISPOSITION
 M.R.O. - MINING RIGHTS ONLY
 P.R.O. - SURFACE RIGHTS ONLY
 M.F.S. - MINING AND SURFACE RIGHTS

Order No.	Date	Description	File
W22793	2/27/85	SM	
W22794	4/2/84	SR	
W10785	7/85	SR	
W11785	1/12/84	SM	

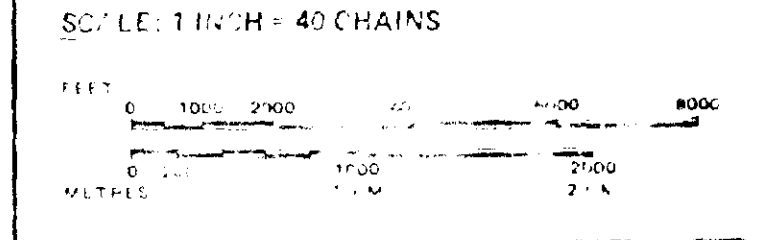


LEGEND

- HIGHWAY AND ROUTE
- OTHER ROADS
- TRAIL
- SUBDIVISION LINES
- TOWNSHIP BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARTS, ETC.
- UNSURVEYED LINES
- LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS, ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERMANENT STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OF CROWN LANDS
- TRAIL AT HOME
- CHALK OR SHORRELINE
- MAST OR MUSKELINE
- MINI
- TRAVEL 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
LICENSE OF OCCUPATION
GRANT IN COUNCIL
RESERVATION
CANCELLED
SAND & GRAVEL
AND USE PERMITS FOR COMMERCIAL TOURISM/RECREATION
NOTE: MINING RIGHTS IN RECEIVED PATENT, LEASE, GRANT IN COUNCIL, RESERVATION, SAND & GRAVEL AND USE PERMITS FOR COMMERCIAL TOURISM/RECREATION ARE SUBJECT TO THE MINING ACT, 1986.	



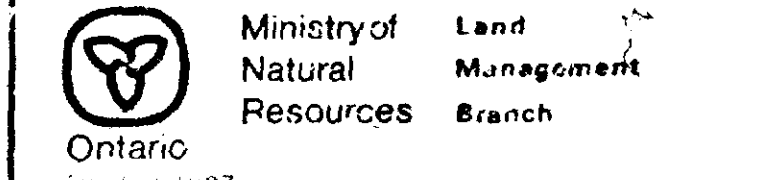
LAND SURROUNDED BY THE MARKING ARE SUBJECT TO SEC. 31 EASEMENT #24-10. See County 1-D-101.

LAND SURROUNDED BY THE MARKING ARE SUBJECT TO EASEMENT AND OTHER RIGHTS AS PER SEC. 31 EASEMENT # 35-14. See White Lake N. Part 10-101.

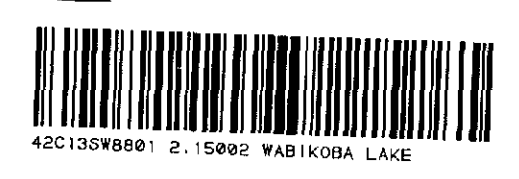
NOTE: The Above Easement is Subject to the Mining Act and Will Affect Mining Operations.

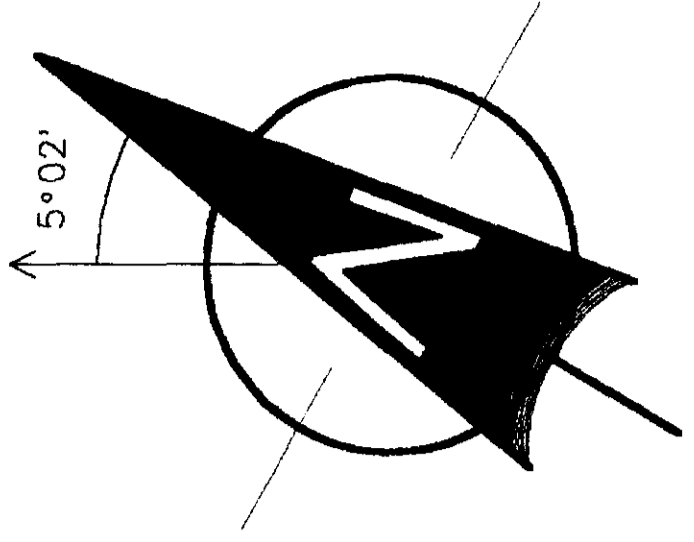
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

AREA
WABIKOBA LAKE
 M.N.R. ADMINISTRATIVE DISTRICT
 TERRACE BAY
 MINING DIVISION
 THUNDER BAY
 LAND TITLES / REGISTRY DIVISION
 THUNDER BAY



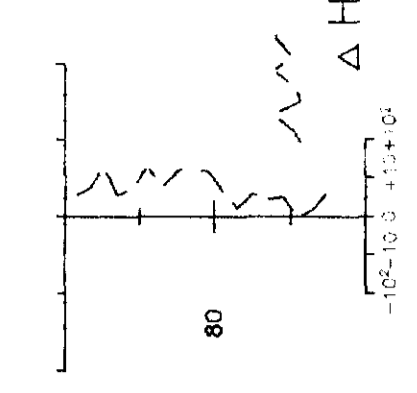
Date: AUGUST 1984
 Number: **G-620**





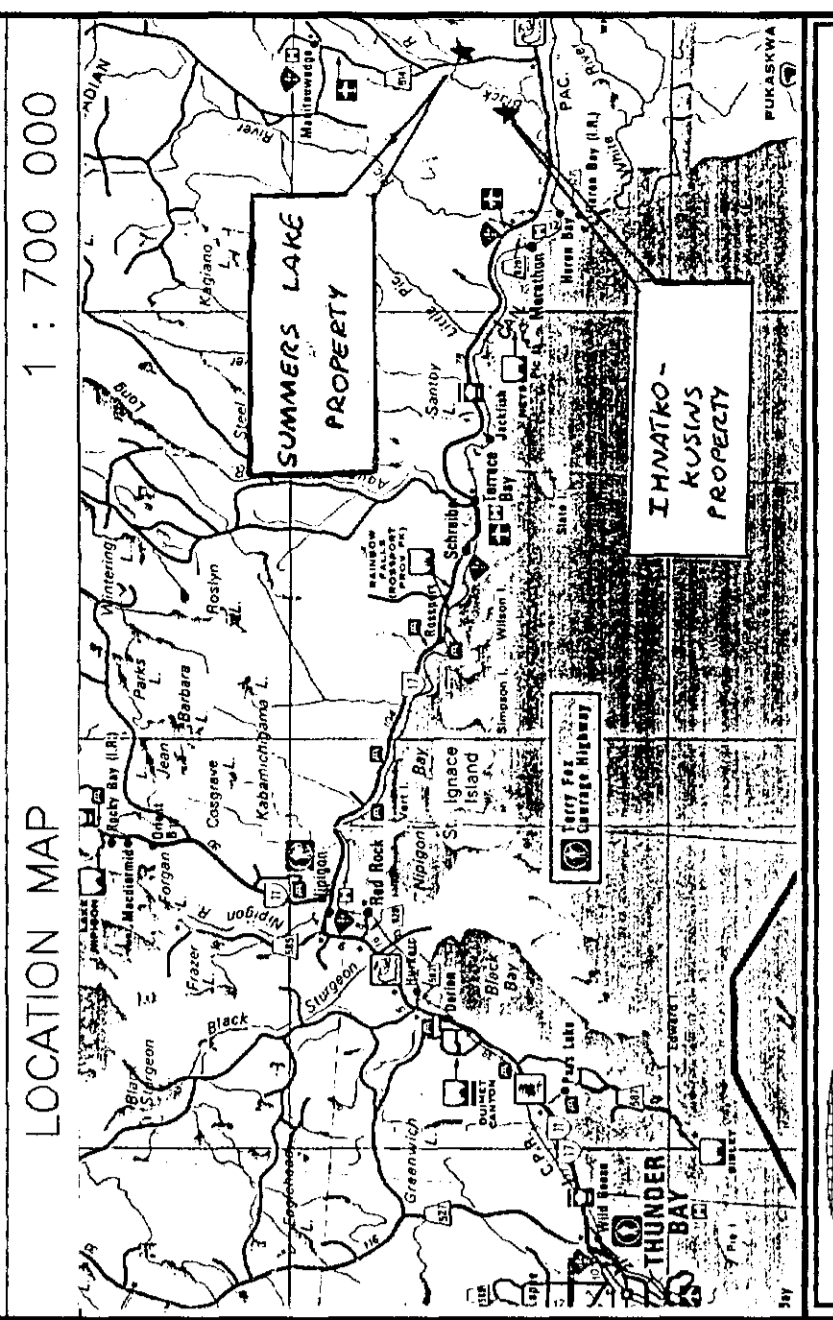
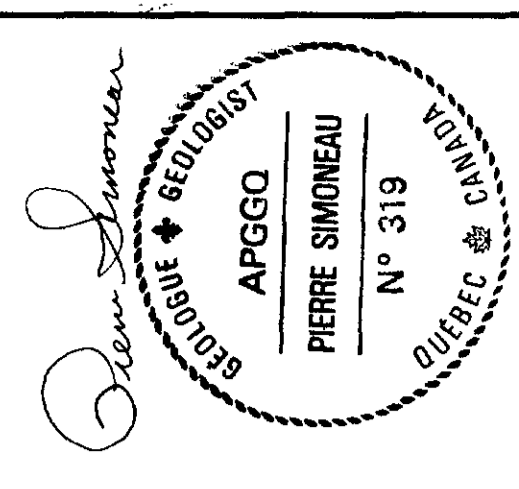
Approximate mean declination in 1982 for center of map
Annual change increase 1.5'

Geophysical Legend

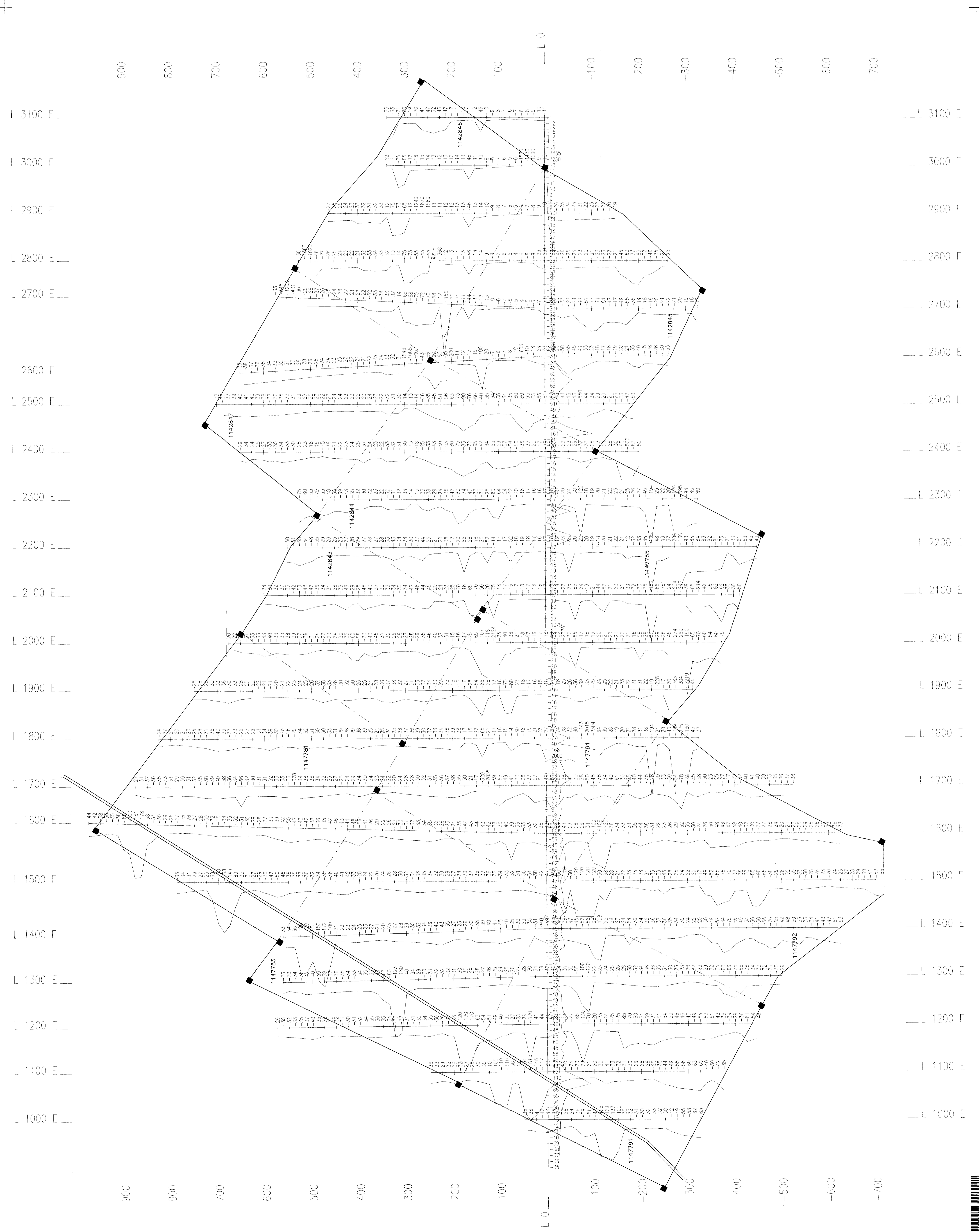


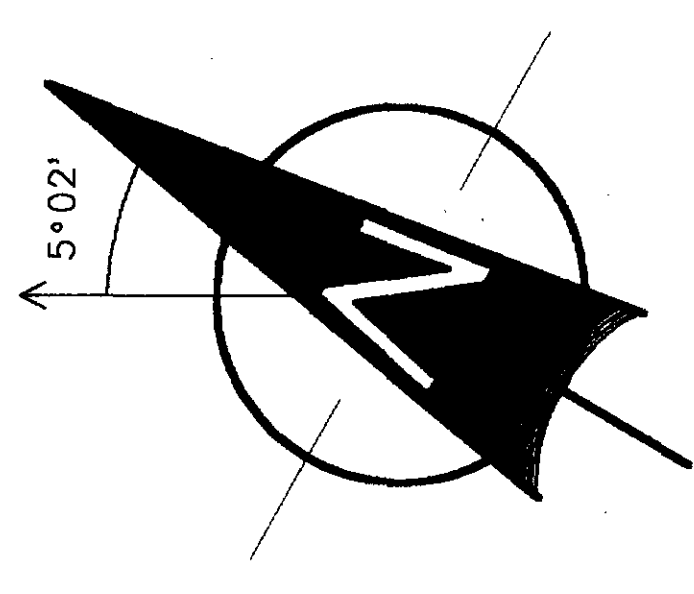
Legend

- Surface conductance in red colors
- Rigged survey lines
- Corn post
- Property limits
- Claim line
- Claim number



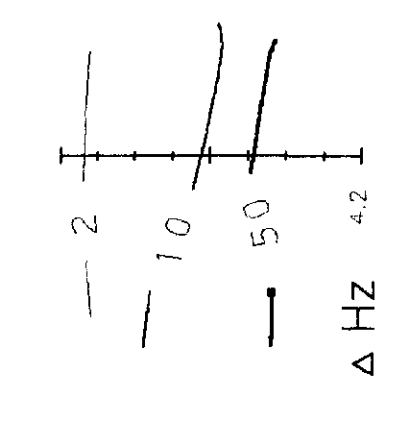
MHOOMETRIC SURVEY
BY: PIERRE SIMONEAU
PROJECT: LINDSEY'S PROPERTY
DRAWN BY: P. SIMONEAU
CHECKED BY: J. SIMONEAU
APPROVED BY: P. SIMONEAU
DATE: 02-23-82
SCALE: 1:2500
PART NO.



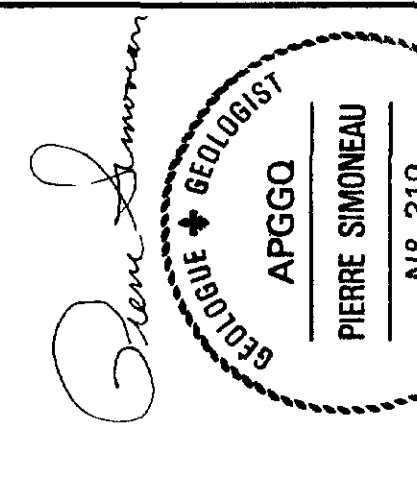


Approximate mean declination in 1982 for center of map
Annual change increase 1.5'

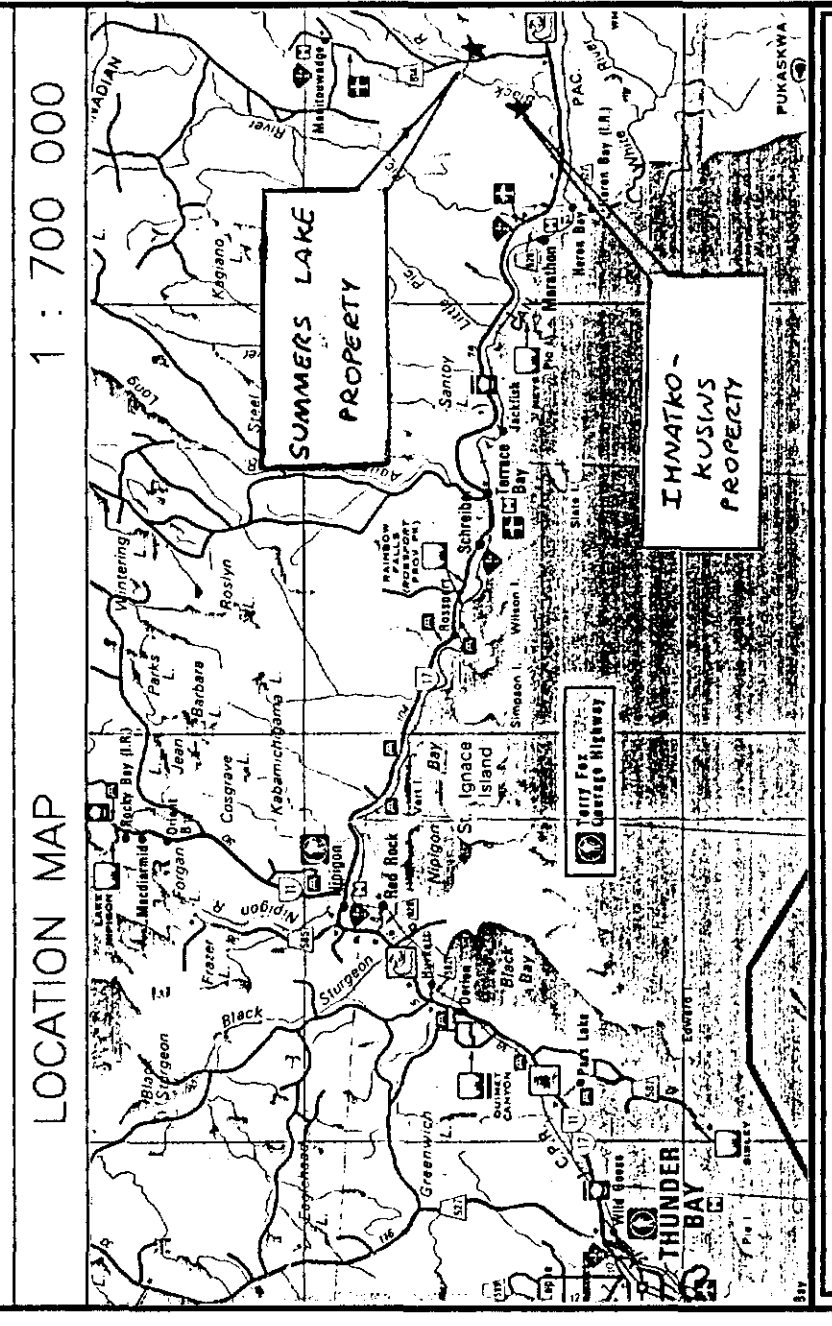
Legend
Δ Hz



Legend
Surface conductors in red colors
Flagged survey lines

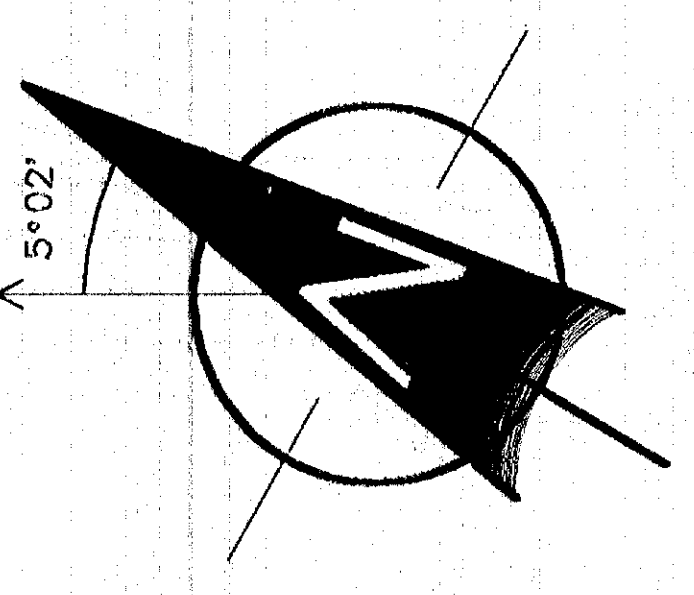


2.15002



MHOMETRIC SURVEY
CONTOURS
EXECUTED BY P. SIMONEAU 02-82
DRAWN BY P. SIMONEAU 01-83
AREA WABIKOBA LAKE
DISTRICT THUNDER BAY, N.W. DIST.
N. T. S. 42 C. 13 / SW
FOR JAVAD SAUNDERS
PLAN NO. 2
1:2500

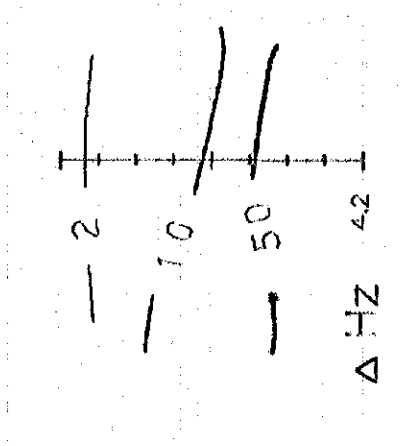




Approximate mean elevation in 1992 for center of map
Annual change towards 1.2'

Legend
Δ Hz

Geophysical Legend

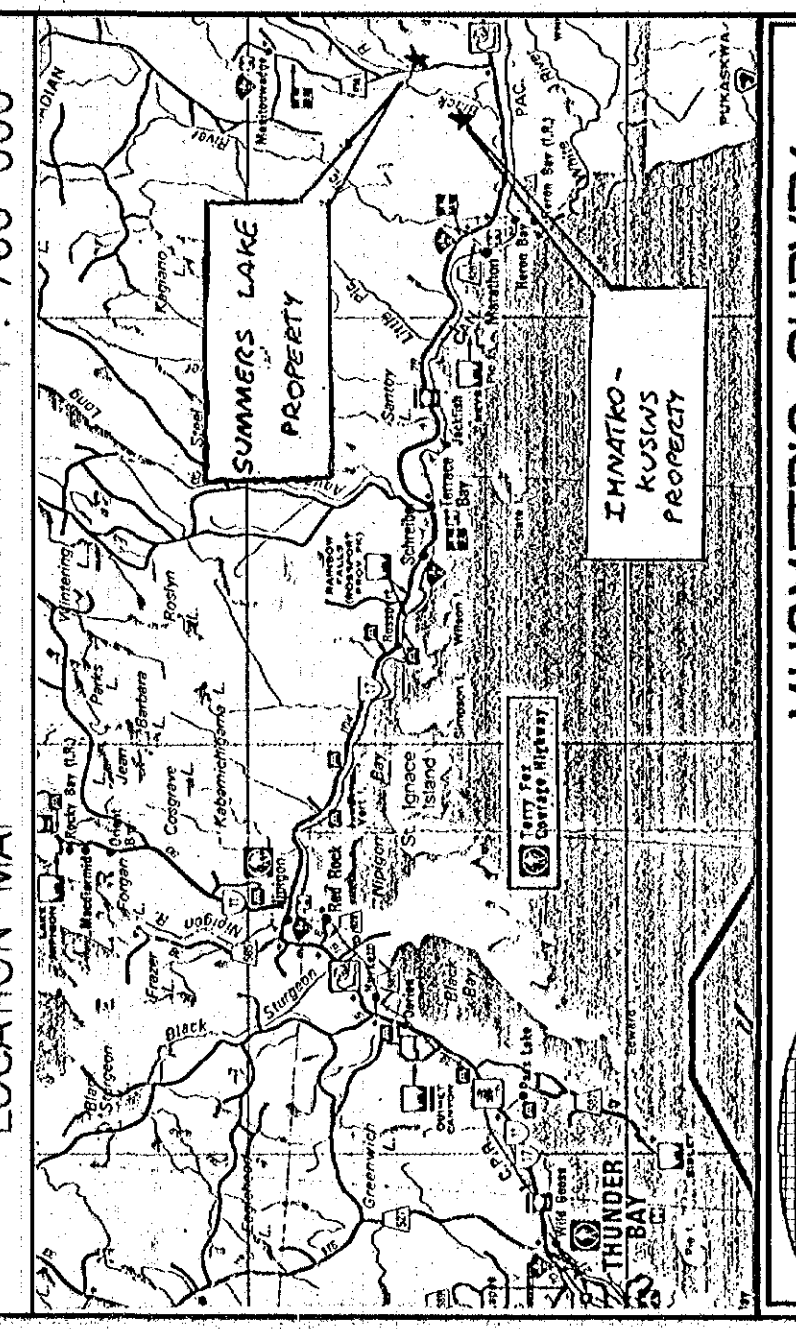


Legend
Surface contours in red colors
Flagged survey lines

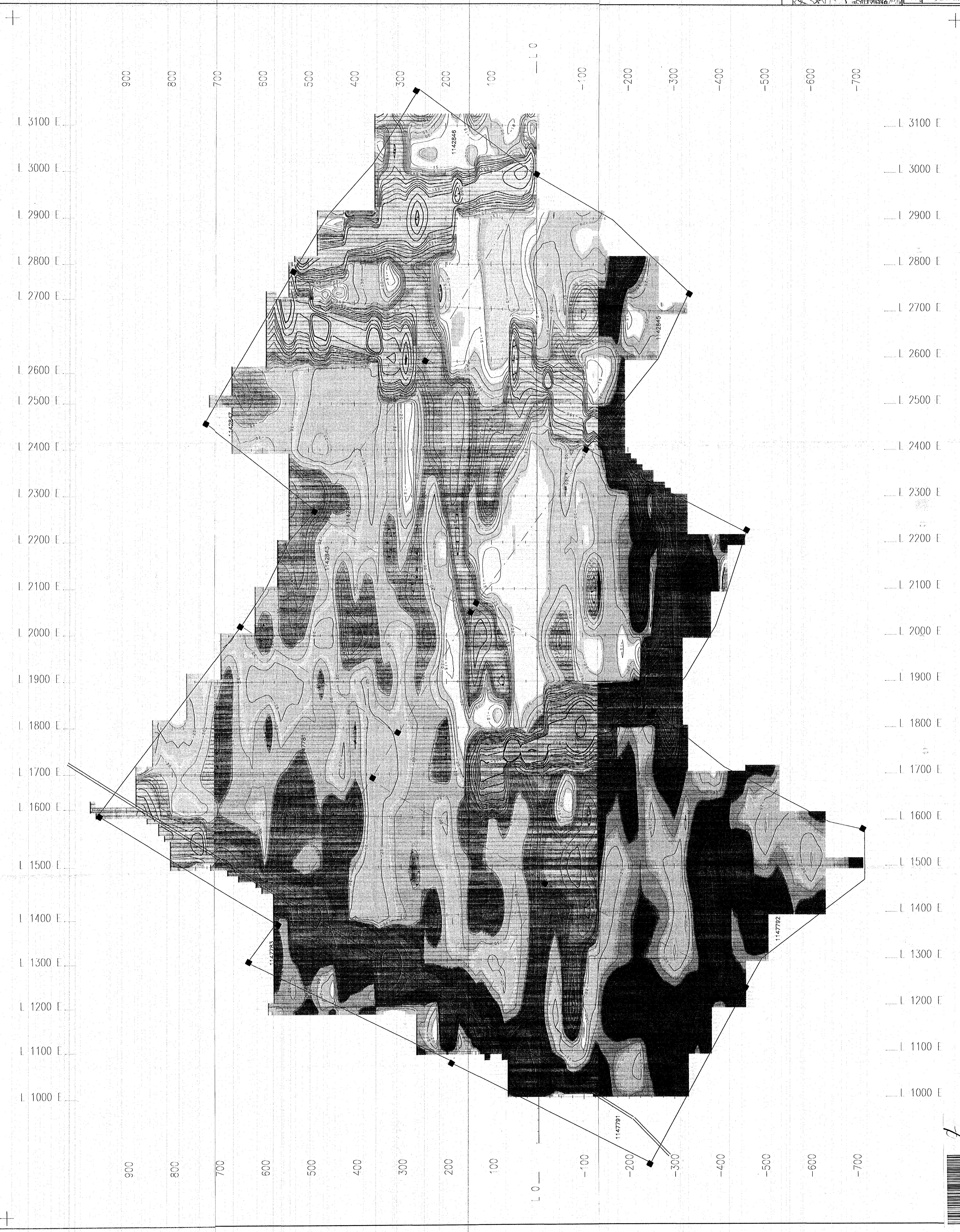
- Claim post
- Property limits
- Claim line
- Claim number

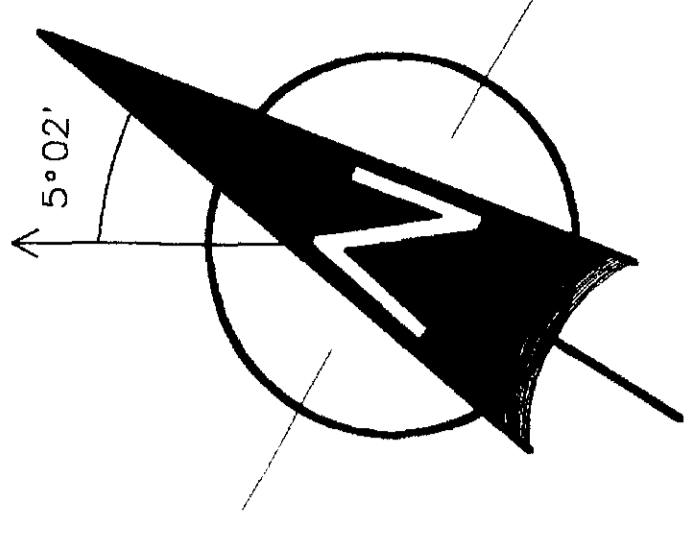
2. 15002

LOCATION MAP
1 : 700 000



MHOMETRIC SURVEY
 COLORED APS CONTOURS
 CREATED BY S. SIMONAL 08-02
 AREA WASHINGTON, WISCONSIN PROPERTY
 PROJECT SUMMERS LAKE
 DRAWN BY D. C. 13/02
 N. T. S. 42 C. 13/ SW
 SCALE 1 : 2500
 APPROVED BY S. SIMONAL 08-03
 FOR DAVID SANDERS
 PLAN NO. 3

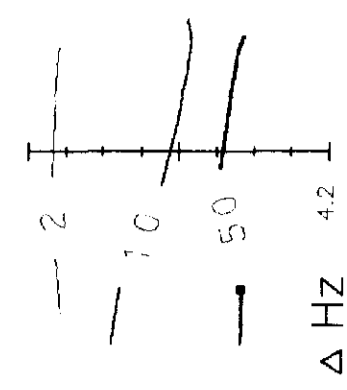




Approximate mean declination in 1992 for center of map
Annual change increases 1.5'

Legend
Δ Hz

Geophysical Legend



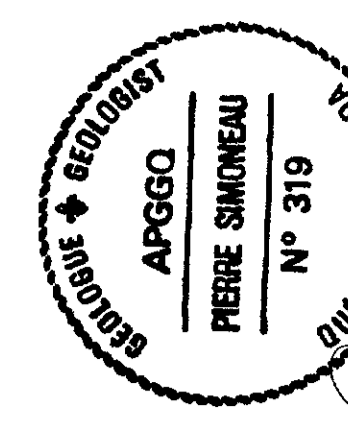
-- D1 Magnetic anomalies defined as dyes
-- A1 Magnetic targets that warrant examination

Legend

Surface conductance in red colors

Flagged survey lines

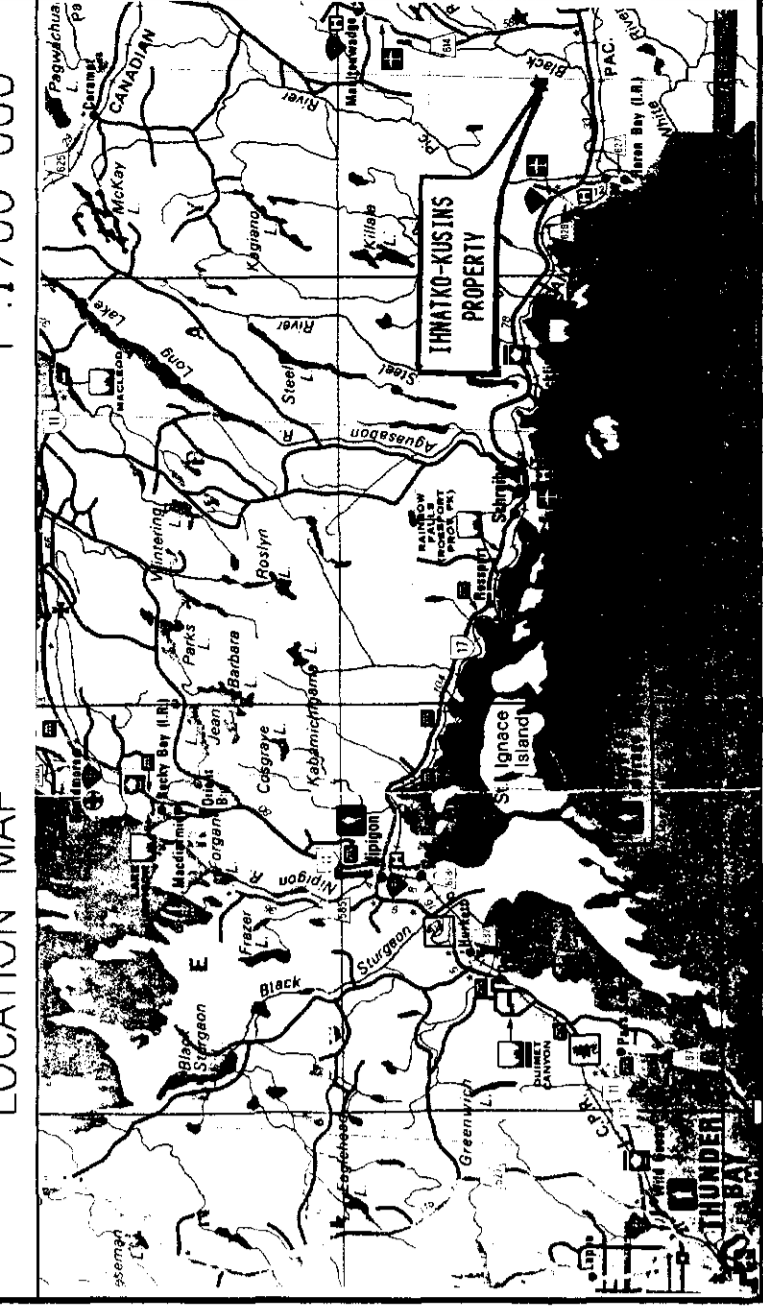
Claim post
Property limits
Claim line
TB 1142831 claim number



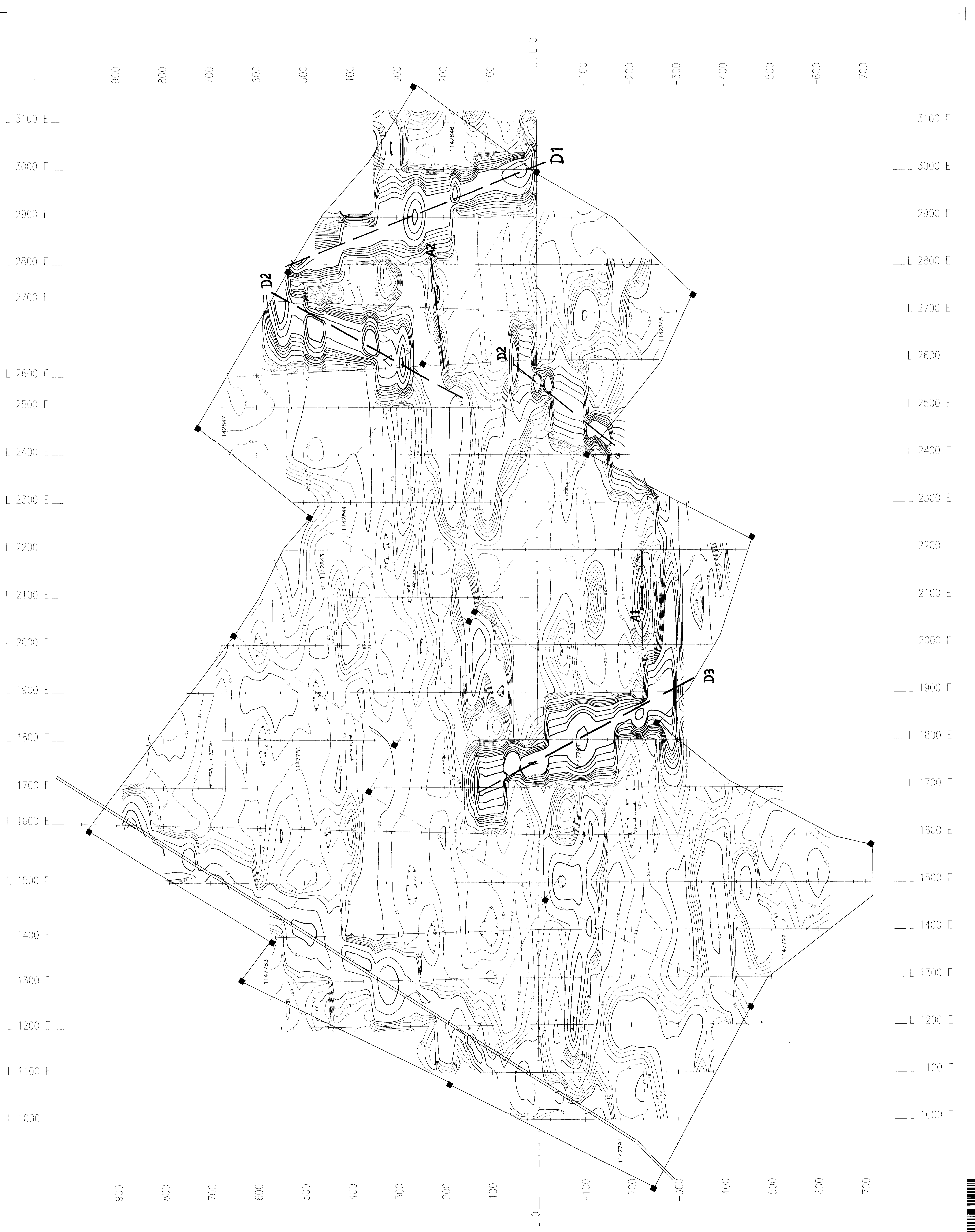
215002

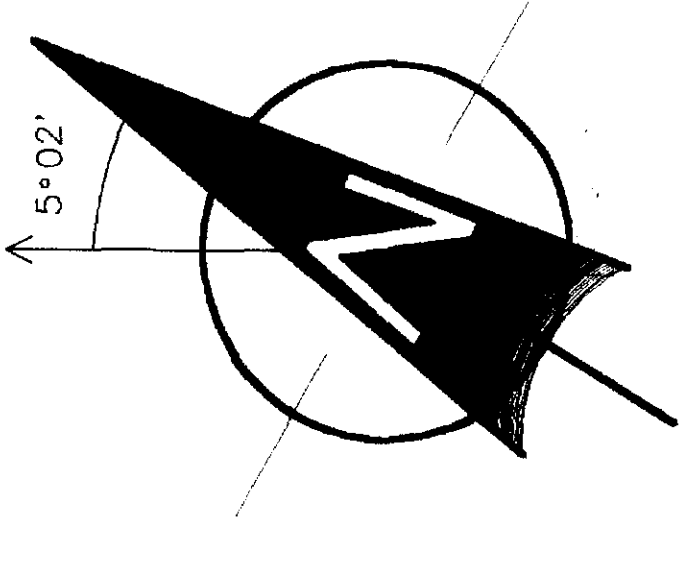
LOCATION MAP

1:1700 000



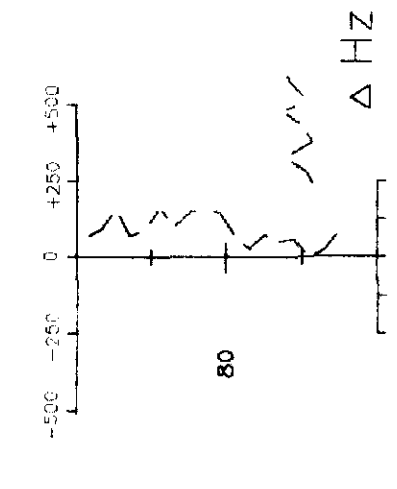
MHOMETRIC SURVEY
THE CONTOURS
EXECUTED BY P. SIMONEAU 09-92
DRAWN BY P. SIMONEAU 09-92
PROJECT JUNIATO-KUSINS EROBERTY
AREA WABIKOBA LAKE
N.T.S. 1:2500
APPROVED BY EGIL GAUBRE 08-93
FOR DAVID SAUNDERS
PLAN NO. 2





Approximate mean declination in 1992 for center of map
Annual change increases 1.5"

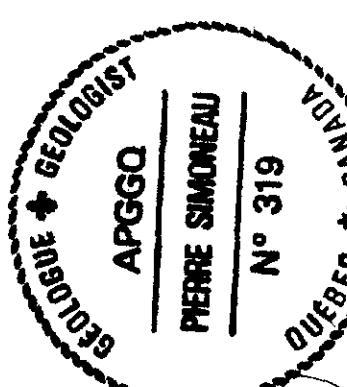
Geophysical Legend



- D1 Magnetic anomalies defined as dyes
- A1 Magnetic targets that warrant examination

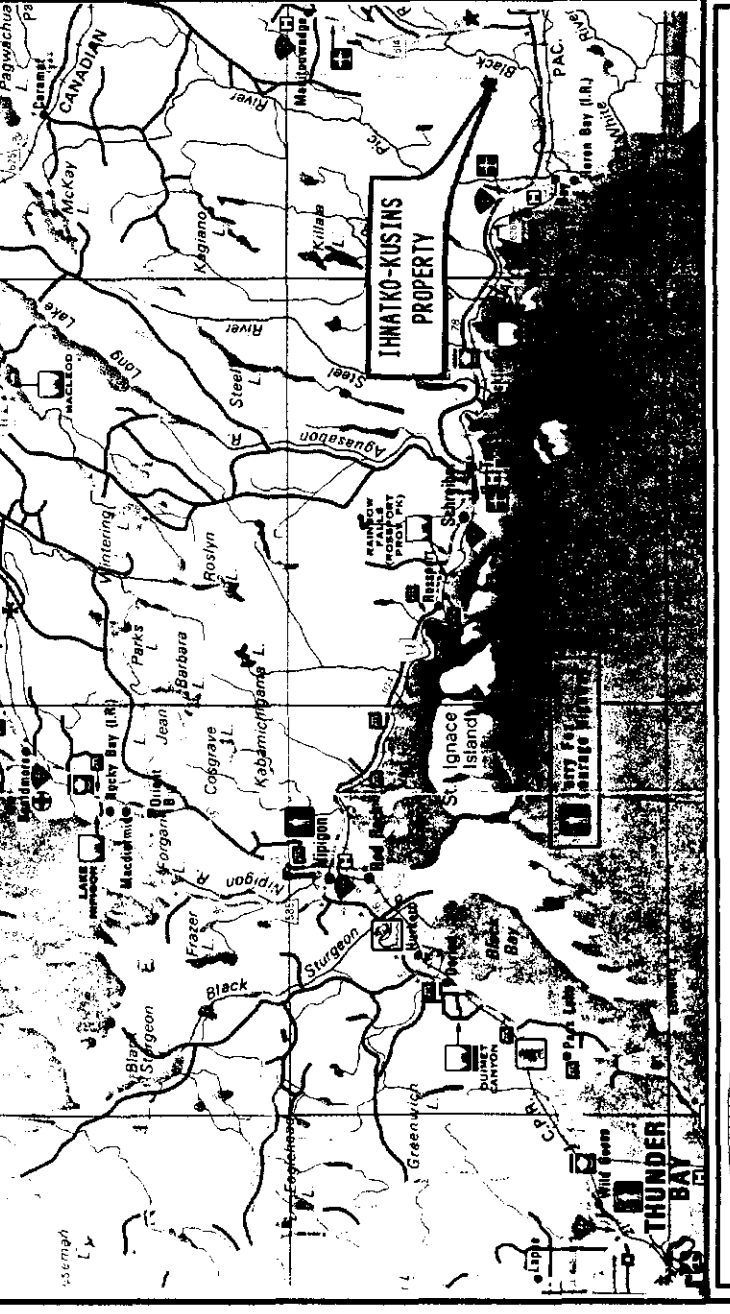
Legend

- Flagged survey lines
- Claim post
- Property limits
- Claim line
- Claim number

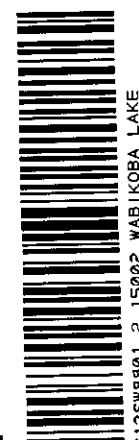
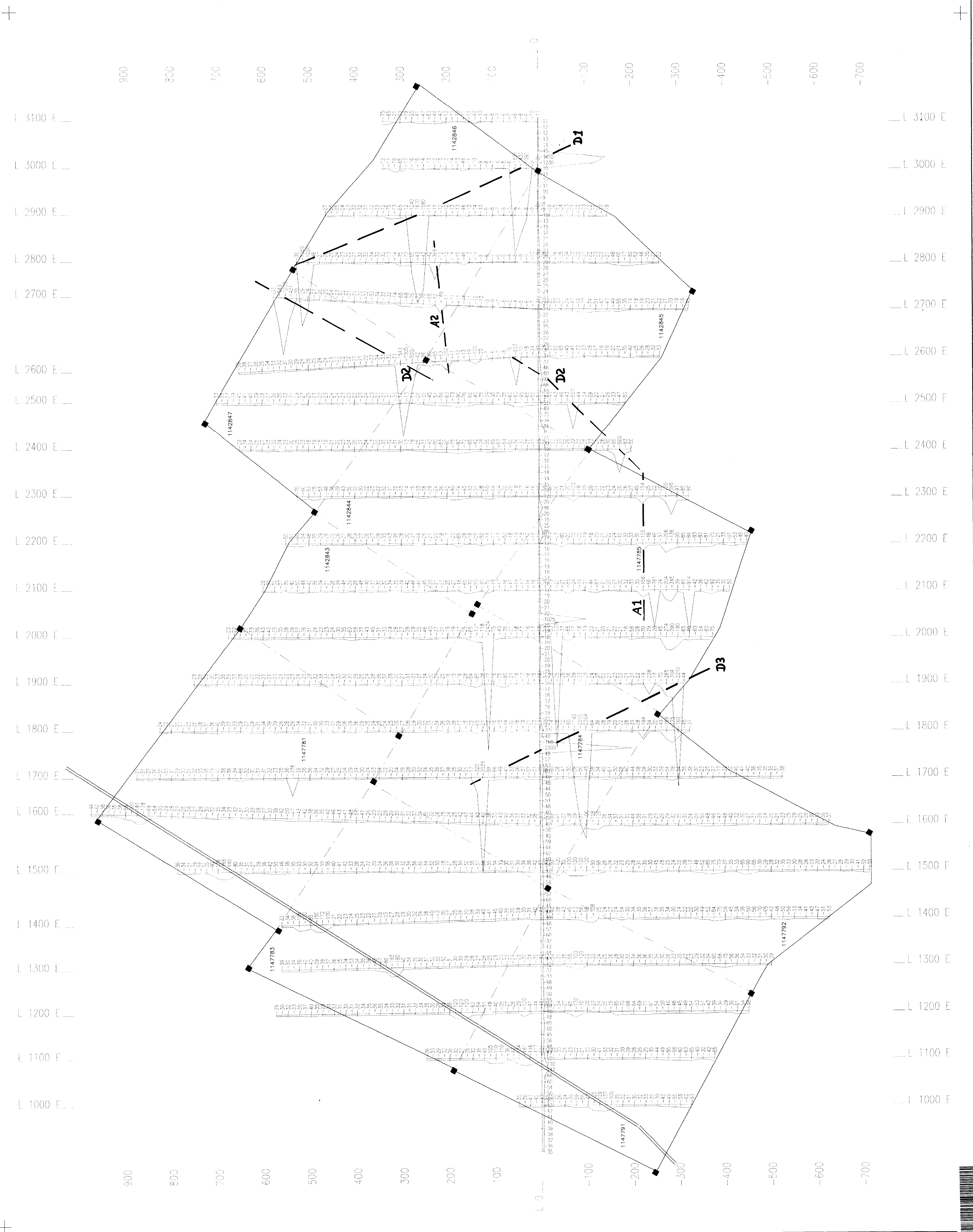


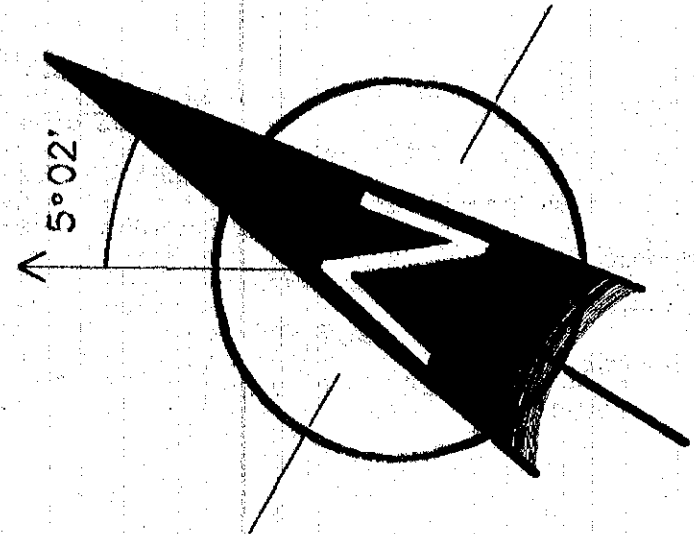
2.1500Z

LOCATION MAP 1:1700 000



MHOMETRIC SURVEY
 EXECUTED BY P. SIMONDEU 08-92
 DRAWN BY P. SIMONDEU 08-92
 AREA WABUKUBA LAKE
 DISTRICT THUNDER BAY, N.W. DIST.
 N. T. S. 42 E. 13 T. 38N
 FOR DAVID SAUNDERS
 PLAN NO. 1147783

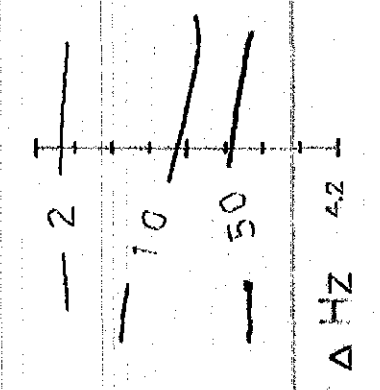




Approximate mean declination in 1992 for center of map
Annual change increases 1.5'

Legend
Δ Hz

Geophysical Legend

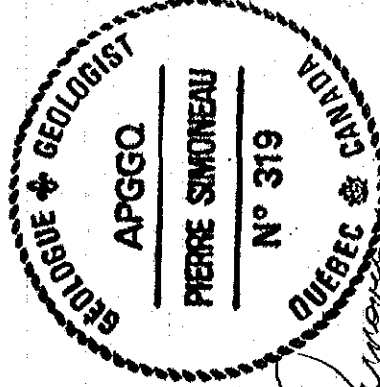


--- D1 Magnetic anomalies defined as dikes
--- A1 Magnetic targets that warrant examination

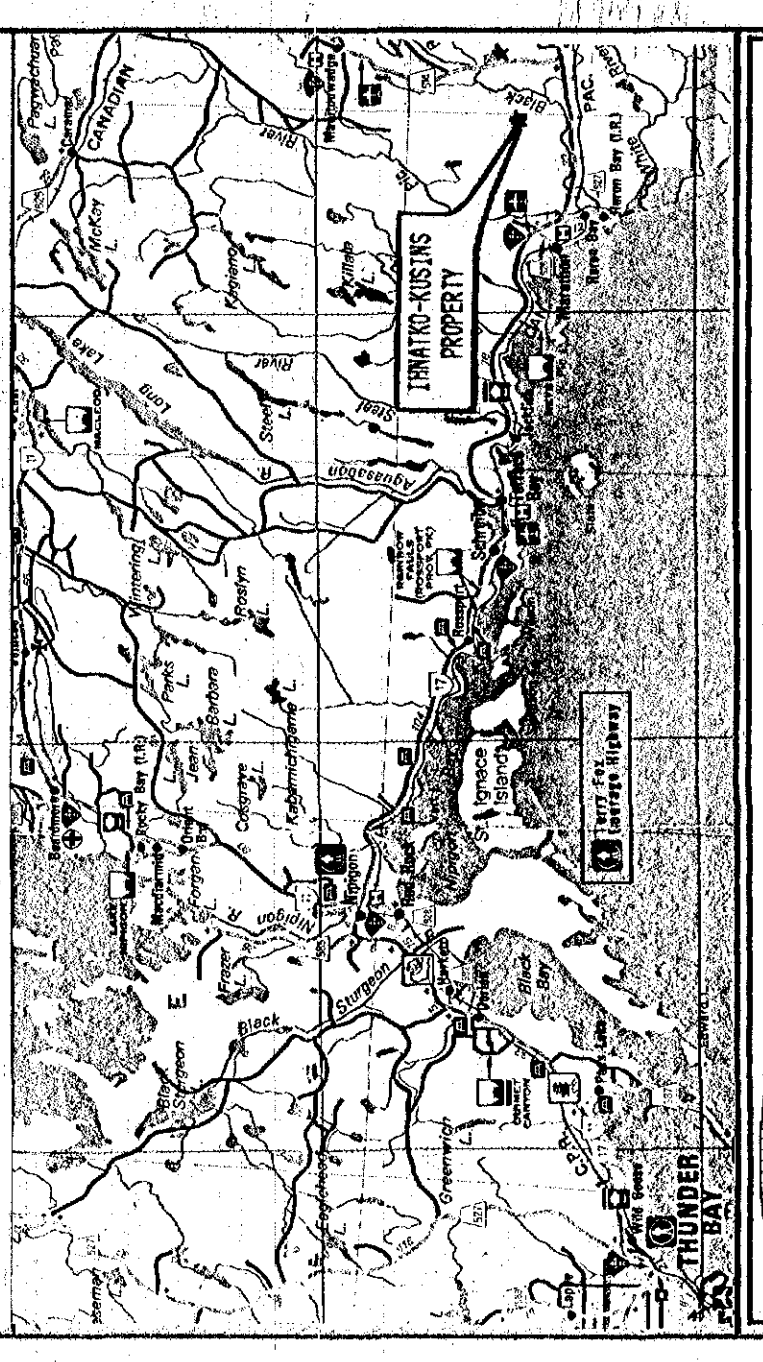
Legend

Surface conductors in red colors
Pegged survey lines
Colum post
Property limits
Colum line
Colum number
TB 1142831

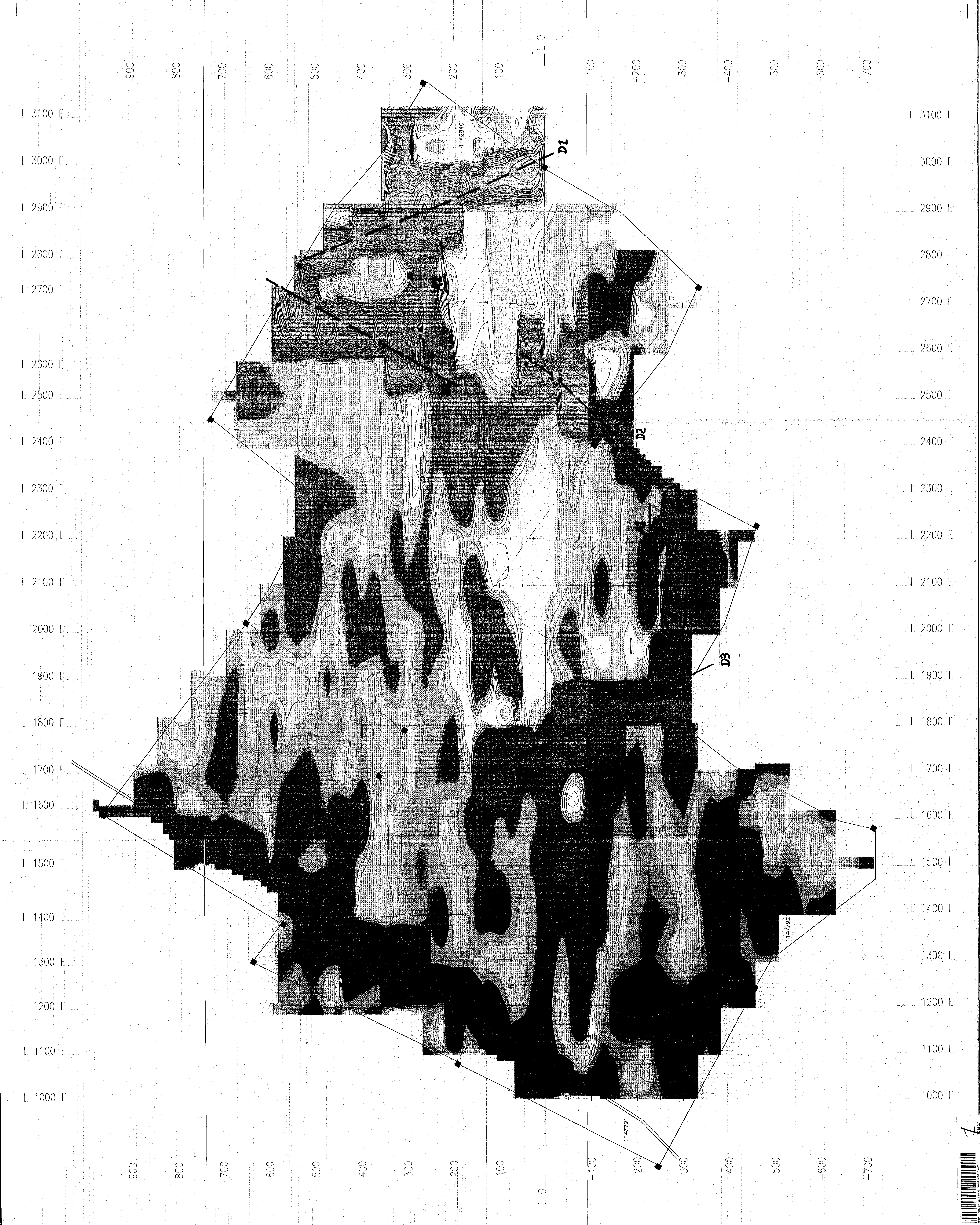
215002
Dunn

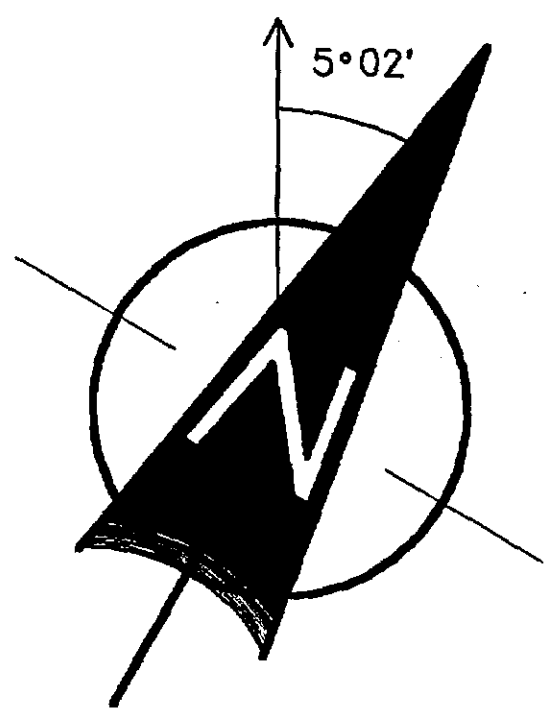
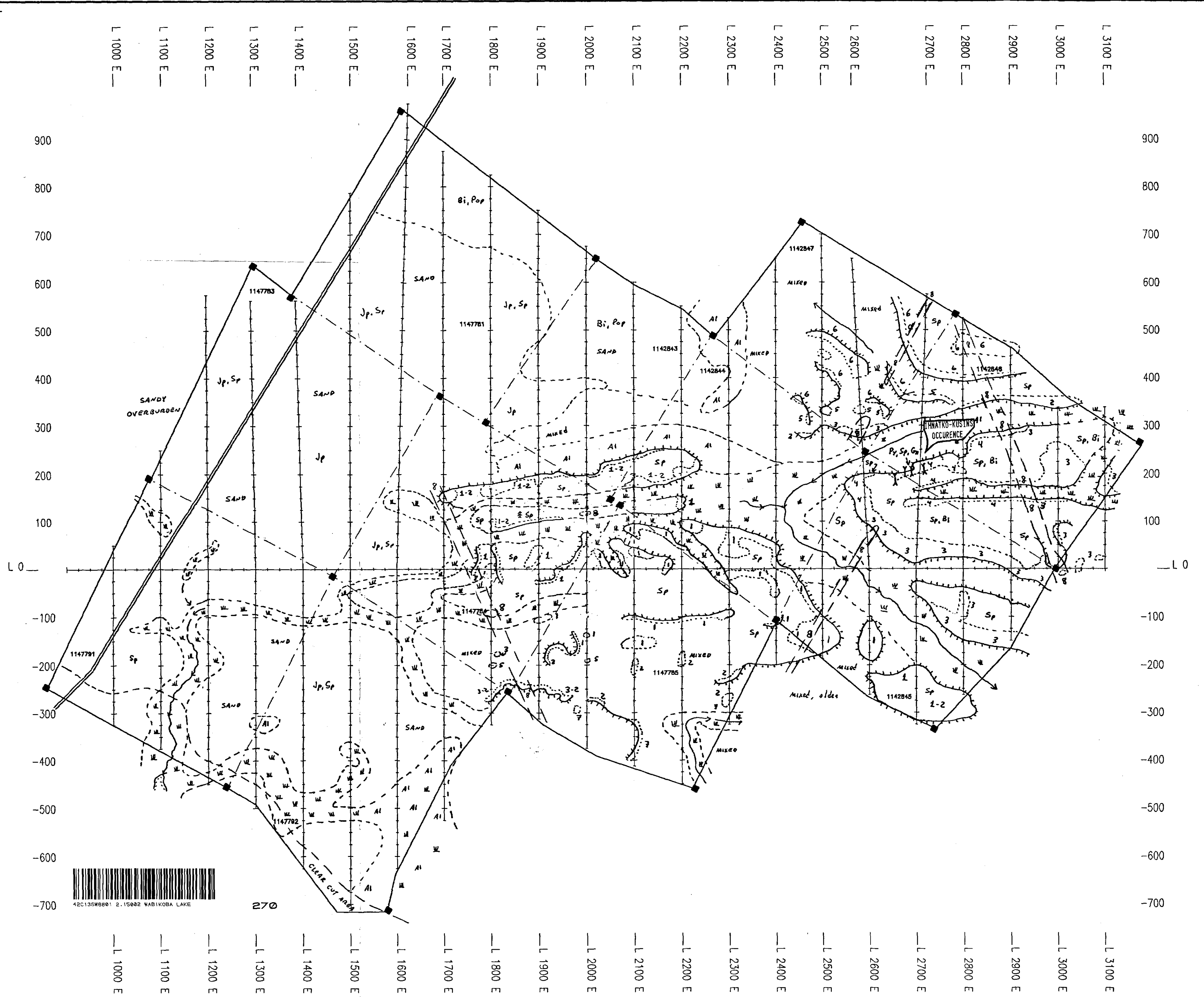


LOCATION MAP 1:1700 000



MHOMETRIC SURVEY	
CLOSED BAY CONTIGUOUS	
PROJECT: INDIANOCROSS PROPERTY	EXECUTED BY: E. SWINBU 08-92
AREA: INDIANOCROSS AVENUE	APPROVED BY: EMMY GAUCHER 08-92
DATE: 22.03.97	FOR: JAVO SAUNDERS
N. T. S.	SCALE: 1:2500
PLAN NO. 3	





Approximate mean declination in 1992 for center of map
Annual change increase 1.5'

Legend

- Rock types**
- 1 Conglomerate
 - 2 Grauwacke
 - 3 Mudstone
 - 4 Acid tuff
 - 5 Mafic metavolcanics
 - 6 Monzonite
 - 7 Felspar Porphyry
 - 8 Diabase

Outcrop areas

Cliff

Trench

Mineralization

Py Pyrite

Sp Sphalerite

Gn Galena

Swamp area

Creek

Forest cover

Jp Jackpine

Sp Blackspruce

Bi Birch

Pop Poplar

Al Alder

Mixed: All of the above

Logging road

Cut or flagged survey lines

Claim post

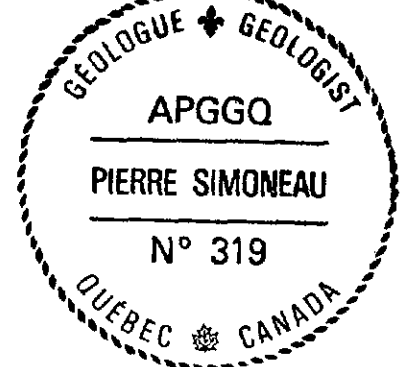
Property limits

Claim line

Claim number

2.15002

Pierre Simoneau



270

PROSPECTION SURVEY

PROJECT	IHNATKO-KUSINS PROPERTY	EXECUTED BY	P. SIMONEAU	DATE	09-92
AREA	WABIKOBA LAKE	LICENCE NO.	E-33322		
DISTRICT	THUNDER BAY, N.W. ONT.	DRAWN BY	P. SIMONEAU		04-93
N. T. S.	42 C 13 / SW	APPROVED BY	P. SIMONEAU		04-93
SCALE	1: 5000	FOR	DAVID SAUNDERS		
		PLAN NO	4		