A REPORT OF GEOLOGICAL WORK ON THE MAYFLOWER AREA CLAIM GROUP, THUNDER BAY MINING DIVISION, ONTARIO

BY

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Prepared on behalf of Argor Explorations Limited, Calgary, Alberta

20th December

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1. INTRODUCTION

Purpose

This report describes the results of a work program consisting of a geological investigation and geochemical rock sampling on claims owned by Argor Explorations Limited within the Area of Factor Lake.

Problem

Published information was insufficient to discern whether small shear zones and sulphide associated gold mineralization was present and possibly related to the nearby Mayflower Mine.

Scope

The 1984 summer work program was designed to deliniate favourable areas for subsequent follow-up work. This summer program consisted of two phases, of which this report deals with the geological work undertaken. A second phase consisted of an airborne geophysical survey flown over the claims and is described in a separate report.

As background material a description of the claim-group location and access, property ownership and claims held, physiography and previous exploration activity are presented. Also the approach taken and geochemical sampling are discussed.

Furthermore a discusion of results, combining geophysical information, is presented along with a geological map of the claim-group. Conclusions and recommendations for subsequent follow-up work are also presented.

2. LOCATION & ACCESS

The approximate geographic centre of the claim-group is latitude 44°44'30", longtitude 92°7'50". Topographic map Pipe Lake NTS No. 52C/9 (1:50,000) covers this area. The property is located 25 road miles west of Atikokan via Highway 11 and is one-quarter mile north of the highway. A short dirt road, intersecting the highway approximately 1½ mile west of the Flander's Station Road, provides easy access. Figure 1 contains a location map.

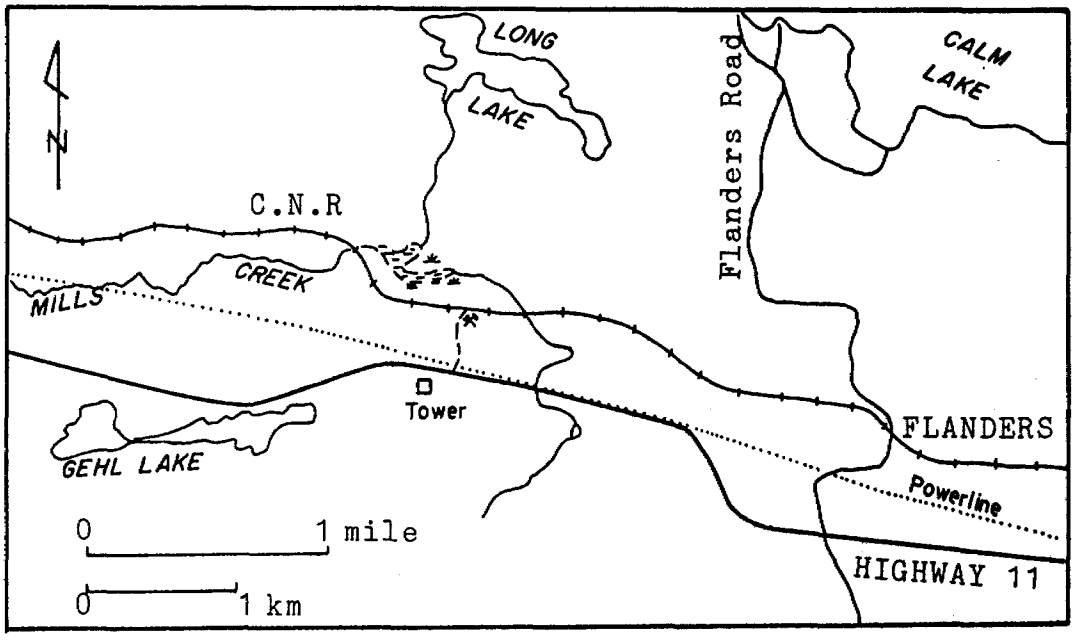

Figure 1: Location map of the Mayflower Area claim - group.

3. PROPERTY OWNERSHIP

A total of 5 claims (762081, 762082, 762083, 762084, 762085) comprise the Mayflower Area claim-group. These claims are within the Area of Factor Lake (claim map no. G527), part of the Thunder Bay Mining Division. Date of recording is May 31, 1983. All claims are owned by Argor Explorations Limited of Calgary, Alberta. Figure 2 is a map showing the location of claims held.

4. PHYSIOGRAPHY

The claim-group occupies two highlands, north and south of the Canadian National railway tracks, about 150 feet above the Mills Creek and swamp located at the centre of the claim-group. Outcrop exposure is very good throughout most of the highland ridges except for a lowland area, overburden covered, immediatly south of the railway tracks. Mixed forest is predominant.

5. SURVEY DATE

Geological investigation and sampling took place from August 7-8, 11, 15-16, 1984. The airborne geophysical survey was flown on August 12, 1984.

6. PREVIOUS EXPLORATION ACTIVITY

Dating back to the turn of the century the region and claim-group has been explored for gold and base metals. Fumerton (1981) has reported that periodic exploration (including drilling and trenching) has been carried out at the Mayflower Mine and surrounding area since its initial discovery in 1900. The Mayflower Mine is adjacent to the eastern side of Argor's claims. Ontario Geological Survey (O.G.S) report (Wilkinson 1982) lists the development of the Mayflower Mine as follows:

- circa 1900: Shaft sunk to a depth of 32m with crosscuts at 14m and 30m.
- 1928: Shaft was dewatered and additional crosscuting was done. Surface showings were stripped and trenched.
- 1945, 1946: Diamond drilling by Andowam Mines and Freeport Exploration Company.
- 1979: K. McTavish trenched the surface showings and resampled.

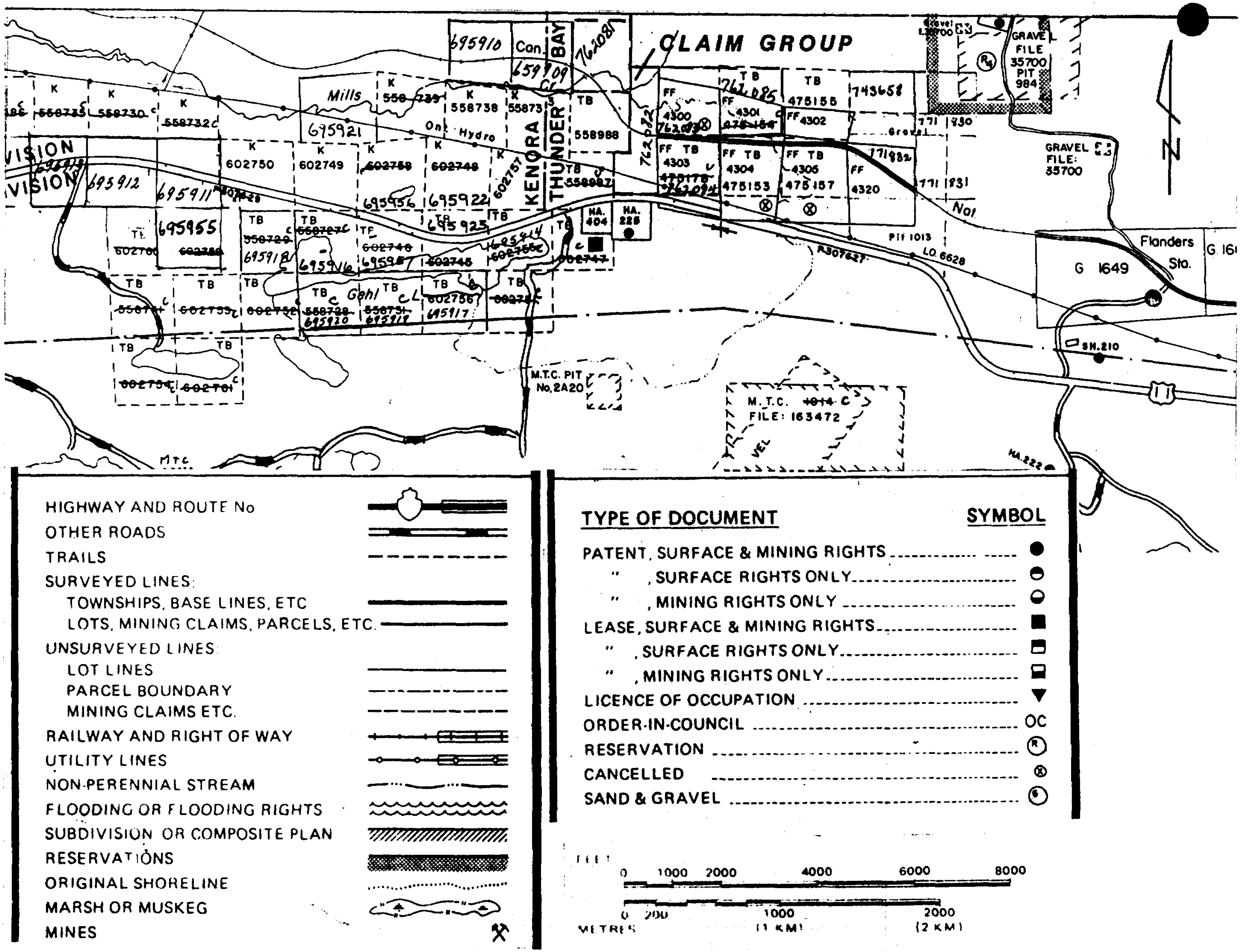

Figure 2: Claim location map - Mayflower Area Claim-Group

During 1980 the O.G.S completed an airborne geophysical survey (EM INPUT and magnetics) over the area as part of a regional program.

7. REGIONAL & LOCAL GEOLOGY (compiled from Fumerton 1981, Wilkinson 1982)

Extending from Mine Centre to Atikokan, early Precambrian rocks of the Superior Structural Province underly the region. The Mayflower Area claim-group occurs at the locus of the Quetico Fault (originally called the Seine River - Rainy Lake Fault) and fault splays off the Little Turtle Lake Fault. The Quetico Fault, a narrow continous shear zone, marks the boundary between the Wabigoon Sub-Province, on the north side, and the Quetico Subprovince on the south side of the fault. Figure 3 illustrates the regional geology. Movement along the fault is predominantly right-lateral horizontal displacement.

The Wabigoon Subprovince is composed of narrow metavolcanic belts and granitic batholiths. Mafic to intermediate flows, tuffs, and chlorite schist comprise the dominant metavolcanics in the claim area. Serpentinized and carbonatized shear zones are locally prevalent. A narrow east-west trending felsic metavolcanic tuff band occurs in the northwest corner of the property. Associated with it is a thin unit of ironstone. A narrow and sheared northeast trending band of wacke metasediment traverses the southern part of the claim-group. Inaddition a small tonalite stock intrudes the metavolcanics and marks the site of the Mayflower Mine.

The Quetico Subprovince is a dominantly metasedimentary belt comprised of wackes, argillites and carbonaceous sediments.

Ajoining the claim-group is the Mayflower Mine which is hosted in metavolcanic rocks adjacent to a small tonalite stock. Gold mineralization occurs in silicified and carbonatized zones within felsic volcanic rocks, and in quartz and carbonate veins within the tonalite. A small shear cuts through the deposit and trends approximately 75°, dipping 85°N.

8. METHODS OF INVESTIGATION

Mapping

The claim-group was extensively traversed, by pace and compass, to locate any shear zones and sulphide associated gold mineralization

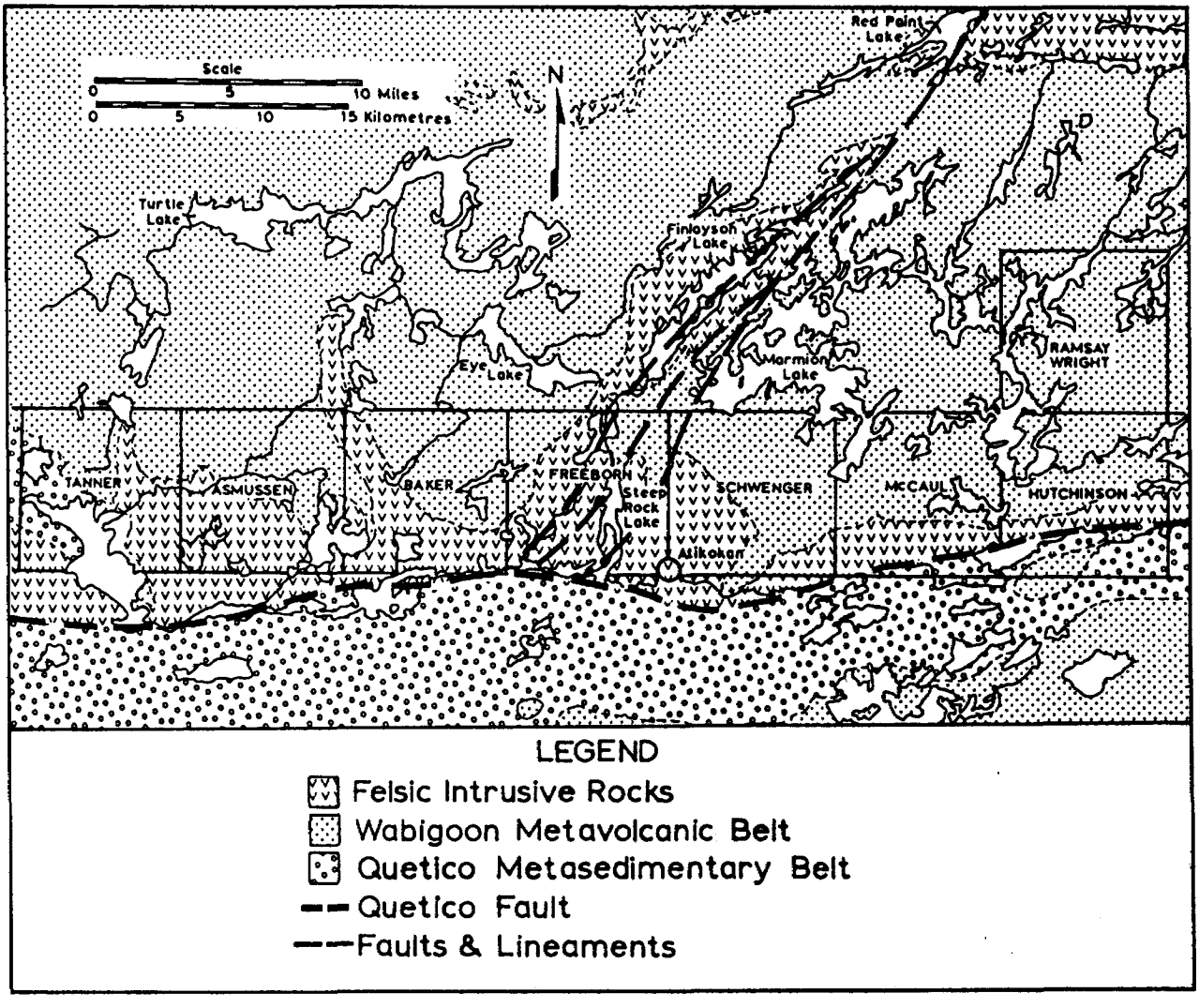

Figure 3—Regional geology of the Atikokan area, adapted after Hawley (1930), Moore (1940), Woolverton (1960), Pye and Fenwick (1965), Shklanka (1972), and Fenwick (1976a). (from Wilkinson 1982)

not shown on Fumerton's Preliminary 1"-½mile map. A 1"-800' scale geological map was prepared from compiled information, data from traversing and geophysical results.

Geochemical Rock Sampling

Rock samples were collected for geochemical detection of gold and also for multi-spectographic analysis on selected samples. Samples were collected by hammer and chisel from rock outcrops showing quartz veining, sulphides, felsic lithologies, alteration and shearing. About two pounds of material were collected from a sampling face usually no more than 5 feet in length. A grab sample was taken from one old trench. In all a total of 24 samples were collected.

Geochemical analysis was by neutron activation and done by X-Ray Assay Laboratories of Toronto. Lower detection limit is 1 part per billion. Submitted samples were crushed to ¼ inch of which several hundred grams were split for final pulverization. Spectographic analysis was done by a combination of neutron activation and D.C plasma.

Presentation of Data

The 1"-800' scale geological map is produced as figure 4. Geochemical sample locations are shown in figure 5.

9. DISCUSSION OF RESULTS

Nearly all of the rock geochemical samples returned nil to negligible gold values except for those associated with shear zones where minor amounts of sulphides are present. These values were only a few ppb higher in gold.

Several shear zones were deliniated by the geophysical survey and coincided with observable features in outcrop. A bedrock conductor, steeply dipping, trending east-west occurs on the south side of the railway tracks within mafic metavolcanics. Sample location 2265 is closely aligned with this zone and is marked by a two foot wide shearing at the contact between a massive flow and overlying feldspar porphyritic flow. Only a minor amount of sulphides and quartz-carbonate veinning is present. The shear attitude is 282°, dipping 55° possibly to the north. Interestingly

this conductive zone trends towards the Mayflower Mine shaft. However it also roughly coincides the north edge of the outcrop ridge.

Another long east-west trending shear zone lies along the northern margin of claims 762084 and 762085, and coincides with a VLF-EM conductor. The rock is a schistose metavolcanic, possibly tuffaceous, with abundant carbonate alteration and occasional discontinous quartz veinlets. A visible band width at location 2262 is seven feet. Slightly south is an inferred fault by Fumerton (1981) that coincides with another VLF-EM conductor axis. On the western edge of claim 762082 is a northeast trending bedrock conductor axis coincident with a seven foot wide talcose-serpentinized fault/shear? in a metavolcanic flow.

The large magnetic anomaly in claim 762081 is attributable to the magnetic ironstone formation within the felsic metavolcanics and was not found to be continous any further east than previously mapped. An old trench, at sample site 2255, occurs at the contact between metavolcanics and a felsic aphanetic to phanertic rock, possibly a quartz-porphyry flow. Some carbonate alteration exists but gold values were negligible.

Interculated with the metavolcanic flows are narrow bands of pyroclastic metavolcanics with lapilli-tuff sized fragments. At location 2258 this interunit is at least 6 feet wide and trending east-west. Felsic fragments average 1½ inch by ½-¼ inch wide but at location 2248 eight inch long fragments were visible.

10. CONCLUSIONS & RECOMMENDATIONS

It is most likely that the southern conductor/shear zone is one of a numerous number of shear or fault splays off the Quetico Fault and may possibly have some relationship to mineralization at the Mayflower Mine. The northeast trending conductor/shear zone transecting claim 762082 is also likely related to the Quetico Fault. The two near parallel east-west shears/fault north of the railway would be splays off the Little Turtle Lake Fault. Several modifications as to outcrop location, noting of a few new outcrops, shear zones and inter units were made but do not appreciably alter the previous geological map by Fumerton (1981).

It is recommended that the company:

1) Further investigate the east-west trending conductive/shear zone, south of the railway track, by additional geochemical sampling and stripping of overburden where necessary.

2) Considers doing additional geochemical rock sampling along the shear zone north of the railway track.

Such a program could be quickly conducted in a couple of weeks and would provide additional information about the nature and potential of these two shear zones, particularly if the southern shear has any genetic relationship to gold mineralization at the Mayflower Mine.

Peter A. Fernberg
Geologist B.Sc

20th December 1984

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1982: Gold Deposits of the Atikokan Area; Ontario Geological Survey Mineral Deposits Circular 24, 54p.

Young, W.L.
1960: Geology of the Bennett - Tanner Area; Ontario Department of Mines, Volume 69, Part 4, 17p. Accompanied by Map 1960b, scale 1:31 680 or 1 inch to ½ mile.

CERTIFICATION

I, Peter A. Fernberg, of R.R. No. 2, Ingleside, Ontario, do hereby certify that:

1) I am an exploration geologist living at R.R. No. 2, Ingleside, Ontario.

2) I graduated from Carleton University in Ottawa, Ontario in 1979 with a B.Sc (Honours) degree in Geology.

3) I have been permanently employed and employed on a contract basis in my profession since graduation in 1979.

4) I have no interest either directly or indirectly nor do I anticipate receiving such interest in the properties or securities of Argor Explorations Limited.

5) The attached geological report and its enclosed maps are the product of a survey carried out by myself.

6) The survey was carried out during the period of August to ———, 1984.

Ingleside, Ontario
Date: Dec 20/84

Peter Fernberg
Geologist, B.Sc

Peter A. Fernberg

Dual Interest file

REPORT ON
COMBINED HELICOPTER-BORNE MAGNETIC AND ELECTROMAGNETIC SURVEY
BENNETT LAKE, ONTARIO

for

MORRISON PETROLEUMS LIMITED

by

AERODAT LIMITED

OCTOBER, 1984

ADDENDUM

The survey referred to as "TEST AREA" within the geophysical report and maps denotes the Mayflower Area Claim-Group (claims 762081-762085 inclusive), Area of Factor Lake, Thunder Bay Mining District.

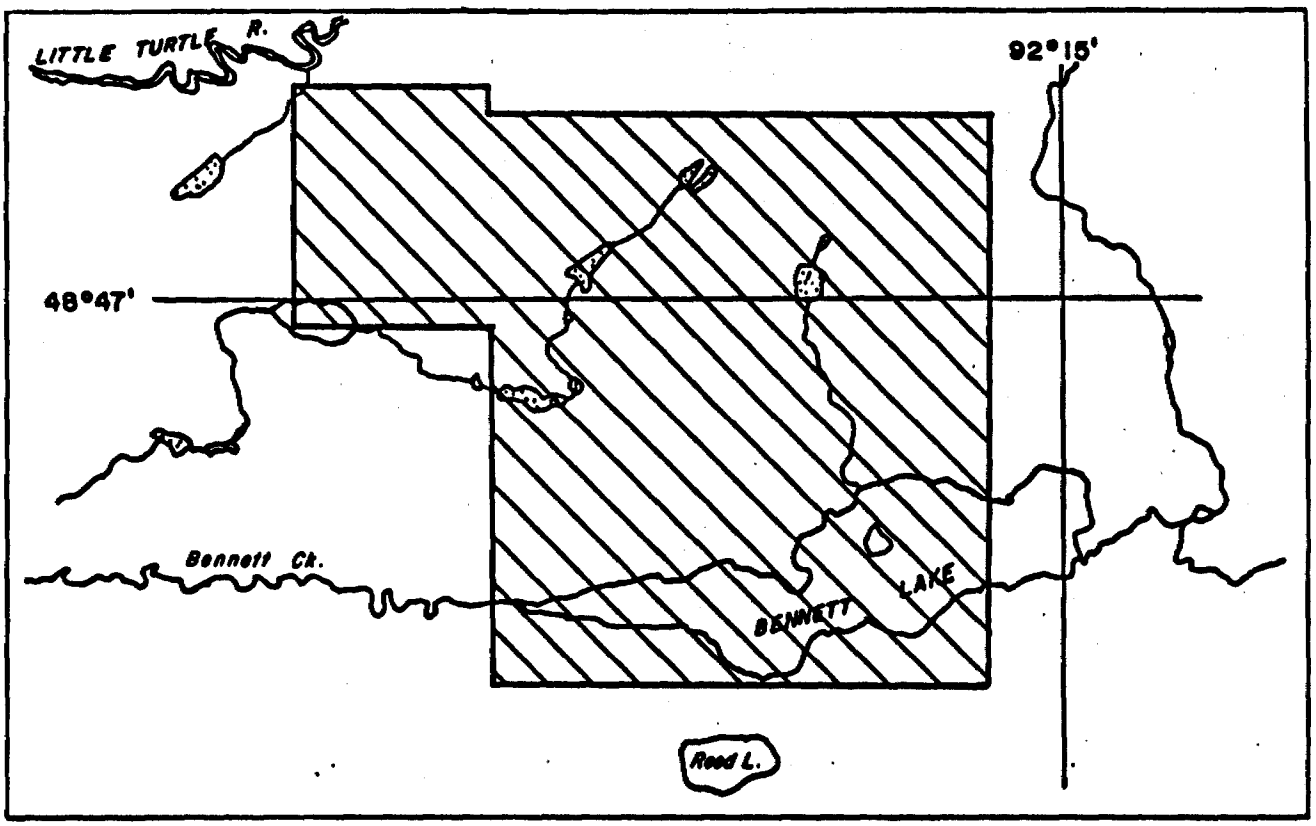
1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Morrison Petroleums Limited by Aerodat Limited. Equipment operated included a 3-frequency electromagnetic system, a magnetometer and a VLF-EM system.

The survey was located in the Bennett Lake area, Ontario. Flown on August 12, 1984, it consisted of 155 line kilometres (96.3 line miles), of which 76 kilometres (47 miles) were the specified property claims and 10 kilometres (6.2 miles) were in the small Mayflower test area.

2. SURVEY AREA LOCATION

The survey area is indicated on the index map below. The flight lines were flown in the North/South direction at a nominal spacing of 100 metres.



3. AIRCRAFT AND EQUIPMENT

3.1 Aircraft

The aircraft used for the survey was an Aerospatiale A-Star 350D helicopter owned and operated by Maple Leaf Helicopters. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The helicopter was flown at a nominal altitude of 60 meters.

3.2 Equipment

3.2.1 Electromagnetic System

The electromagnetic system was an Aerodat/ Geonics 3 frequency system. Two vertical coaxial coil pairs were operated at 932 Hz and 4510 Hz, and a horizontal coplanar coil pair at 4137 Hz. The transmitter-receiver separation was 6.9 meters. In-phase and quadrature signals were measured simultaneously for the 3 frequencies with a time constant of 0.1 seconds. The electromagnetic bird was towed 30 meters below the helicopter.

3.2.2 VLF-EM System

The VLF-EM System was a Herz 1A. This instrument measures the total field and vertical quadrature component of the selected frequency. The sensor was towed in a bird 15 meters below the helicopter, and the station used was NAA (17.8 kHz), Cutler, Maine.

3.2.3 Magnetometer

The proton precession magnetometer used was a Geometrics G-803. The sensitivity of the instrument was 1.0 gamma at a 0.5 second sample rate. The sensor was towed in a bird 15 meters below the helicopter.

3.2.4 Magnetic Base Station

An IFG proton precession type magnetometer was operated at the base of operations to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system.

3.2.5 Radar Altimeter

A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

3.2.6 Tracking Camera

A Geocam tracking camera was used to record flight path on 35 mm film. The camera was operated in strip mode and the fiducial numbers for cross-reference to the analog and digital data were imprinted on the margin of the film.

3.2.7 Analog Recorder

An RMS dot-matrix recorder was used to display the data during the survey. In addition to manual and time fiducials, the following data was recorded:

Channel	Input	Scale
00	altimeter (500 ft at top of chart)	10 ft./mm
04	high frequency quadrature	2 ppm/mm
03	high frequency in-phase	2 ppm/mm
06	mid frequency quadrature	4 ppm/mm

Channel	Input	Scale
05	mid-frequency in-phase	4 ppm/mm
02	low frequency quadrature	2 ppm/mm
01	low frequency in-phase	2 ppm/mm
14	magnetometer	5 gamma/mm
15	magnetometer	50 gamma/mm
07	VLF total field	2.5%/mm
08	VLF quadrature	2.5%/mm

3.2.8 Digital Recorder

A Perle DAC/NAV data system recorded the survey data on cassette magnetic tape. Information recorded was as follows:

Equipment	Interval
EM	0.1 second
VLF-EM	0.7 second
magnetometer	0.5 second
altimeter	0.1 second
fiducial (time)	1.0 second
fiducial (manual)	0.2 second

3.2.9 Radar Positioning System

A Motorola Mini-Ranger (MRS III) radar navigation system was utilized for both navigation and track recovery. Transponders located at fixed known locations were interrogated several times per second and the ranges from these points to the helicopter measured to several meters accuracy. A navigational computer triangulates the position of the helicopter and provides the pilot with navigational information. The range/range data was recorded on magnetic tape for subsequent flight path determination.

3.3 Personnel

Personnel directly involved with the survey operation included:

Pilot: Dan Chinn

Equipment Operator/Technician: Mike Blondin

4. DATA PRESENTATION

4.1 Base Map and Flight Path

Photo map bases at 1:10,000 scale were prepared by enlargement of aerial photographs of the area.

The flight path was derived from the Mini-Ranger radar positioning system. The distance from the helicopter to two established reference locations was measured several times per second, and the position of the helicopter mathematically calculated by triangulation.

4.2 Electromagnetic Profile Maps

The electromagnetic data was recorded digitally at a high sample rate of 10/second with a small time constant of 0.1 second.

Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with a geological phenomenon. To avoid this possibility, a two stage digital filtering process first searches out and rejects the major sferic events.

The signal to noise ratio was further enhanced by the application of a low pass digital filter. It has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This low effective time constant permits maximum profile shape resolution.

Following the filtering processes, a base level correction was made. The correction applied is a linear function of time that ensures that the corrected amplitude of the various in-phase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data were then presented in profile map form.

The in-phase and quadrature responses of the coaxial 4510 Hz and the coplanar 4137 Hz configuration were plotted with flight path and presented as a two color overlay. The in-phase and quadrature responses of the coaxial 932 Hz configuration were plotted with electromagnetic anomaly information.

4.3 Magnetic Contour Maps

The aeromagnetic data was corrected for diurnal variations by subtraction of the digitally recorded base station magnetic profile. No correction for regional variation was applied.

The corrected profile data was interpolated onto a regular grid at a 2.5 mm interval using a cubic spline technique. The grid provided the basis for threading the presented contours at a 10 gamma interval.

The aeromagnetic data was presented with electromagnetic anomaly information.

4.4 VLF-EM Contour Maps

The VLF-EM signal from NAA, Cutler, Maine, was compiled in map form. The mean response level of the total field signal was removed and the data was gridded and contoured at an interval of 2%.

The VLF-EM data was presented with electromagnetic anomaly information.

5. INTERPRETATION

The electromagnetic profile maps were analysed to identify those responses typical of bedrock conductors. As discussed in Appendix I, the profile shape can indicate the general geometry of the conductive source. Anomalies that exhibited the characteristics of a horizontal conducting layer were attributed to conductive overburden. Those with characteristics of a thin, steeply dipping sheet were interpreted to be of bedrock origin. Where the response shape was insufficiently diagnostic to rule out the possibility of a conductive overburden source the conductor axis was indicated as a possible bedrock conductor.

The process of conductor identification emphasized profile shape rather than the estimated conductance. This parameter, however, was calculated by application of the high frequency coaxial in-phase and quadrature response to the phasor diagram for the vertical half-plane model. Carried out by computer, the results are tabulated in Appendix II and presented on the interpretation map in symbolized form.

The estimated conductance is a measure of the conductive properties of the source. A low conductance of say, under 4 mhos is more indicative of electrolytic conduction in faults and shears, possible minor disseminated mineralization or overburden.

The several unlabelled surficial appearing EM zones and possible bedrocks of 1, 2 and 7 fall into this category. In an environment of relatively high bedrock conductivity, however, most of the bedrock conductors identified have high conductances worthy of significant graphite or massive sulphide mineralization. The only obvious exceptions are the two less defined conductors of 4 and 5 in the SE corner. Their apparent conductivity-thickness, however, have been superficially downgraded to some degree by the surrounding lake overburden.

The highest conductance values of the area and, at 40 to 80 mhos, some of the highest seen in any area occur along the 3 strongly defined conductor bands of the NE corner, as represented by zones 11 and 12. Along with the neighbouring weaker, deeper and, at the fringe of the survey coverage, less defined conductor of 14 they form the most conspicious area of conductive mineralization in the area. Their length, banding, varying conductance and location along a very strong magnetic gradient suggest well-formed graphitic formations, likely in a schist geology that is favourably near parallel mapped metavolcanics/metasediments contact and synclinal axis.

The large and strong magnetic feature covers the NW third of the area. It is of such high gradient and amplitude (several thousand gammas) that it over stepped the capabi-

lity of the magnetometer, producing spurious noise readings at its peak. As a result, the contours at this position are blanked out. It should, as does the coinciding line of strong negative inphase EM responses, represent the location of two long parellel iron formations mapped on known geology (Ontario Department of Mines Geology Map 2115).

It may be of significance that zone 11 not only follows their WSW - ENE strikes in the east but, like the iron formations, also appears to fold around south to east at the west end. This suggests a stratigraphic, if not geologic relation, between the formations. The curved zoning of 11 is based on similar EM responses at zone portion 11a, joint to the main zone by two lines (360 and 370) of unconformingly wide responses at the fold apex. This bend in structuring is supported by corresponding magnetics and VLF trends, and perhaps related to an adjacent synclinal axis mapped through the area.

Though of lower apparent conductances, albeit still impressive at 18 to 35 mhos, zones 10 and 6 are of higher appeal than the above formations because of shorter, more isolated strikes and direct magnetic associations. Such characteristics are more conducive to anomalous mineralization such as massive sulphides, given their attractive conductivity. Both zones have double peak EM responses, indicating either a more flat-lying source or double bands. The latter is more probable for zone 6, which appears to have two arms

diverging eastwards. Located beside zone 11, zone 10 might be its offset continuation rather than 11a if there is no folding in the area. Its less dipping anomaly shapes and distinctive circular magnetic association , however, point to a more anomalous source.

Isolated to the south of the multiple formation conductors (11, 12, 14) is zone 13, another short zone with direct magnetic association but more moderately high conductance of about 5 mhos. The modelled depths hint at an extension of the zone at depth west of line 580. If this is the case, then the south-curving continuation of the corresponding magnetic high suggests that zone 13 is a subsequent horizon of mineralization following the same stratigraphic structuring as the 11 and 12 formations.

Two other short bedrock zones, 8 and 9, exist in the centre of the area. Zone 9 is actually a line of more defined and conductive anomalies within a wide area between zone 6 and 11 of more questionable bedrock responses such as zones 7 and 9a. It might be an arm of 11a as their eastern ends converge or, as the magnetic trends hint at, it might extend westward to the less conductive zone of 8.

The three remaining interpreted bedrocks are of lower apparent conductances and definition. Their more questionable status is in part due to their southern location around Bennett Lake, which forms the main surficial conductivity

of the survey area. Zones 2, 4 and 5 are granted the bedrock classification because of their more resolved definition, in particular on the more bedrock revealing inphase and low frequency channels, amongst the wide overburden blanket. In contrast, the lower rated neighbouring zones of 1, 4a and 3 are possible exaggerated edge effects because of the lack of low frequency inphase responses or EM peak resolution.

Zone 3 shows enough bedrock signs (especially at lines 510 and 590) to be considered as a continuation of zone 2, but its insistence of alignment along the lake's edge leaves it suspect. The eastern arm of 2, meanwhile, is located off the lake but might be a separate conductor, with subzone 2a as a weak continuation.

Zone 4, 4a and 1 show promise as areas of fault mineralization. They are located along a strong magnetic gradient that most likely represents the major east-west fault which strikes through the southern margin of the area.

The only other zoned EM responses occur on the NW arm of the area. They show no low frequency inphase response and little peak definition on the quadrature, however. Located on a lake and stream, they, like most of the other supplementary VLF and high frequency EM trends also noted, likely reflect weak surficial conductivity. Exceptions occur in the four NW VLF axis which appear to reflect the conductivity of the

iron formations and possible weak extensions of conductors 8 and 12. The magnetic contours can also be analyzed in more detail to provide supplementary geological and structural information in the interpretation procedure. The survey area can be basically divided into three areas magnetically. The NW, as mentioned, is completely covered by the overwhelming high of the iron formations. The southern part is dominated by the magnetic low around the sediments of Bennett Lake, truncated in the south by the fault gradient. As in the EM, the most interesting region is found in the complex magnetic patterns down the centre of the area. Beside supporting the zones of 6, 8, 10, 11 and 13, many other small, mal-aligned and broken contour patterns exist here to suggest, as expected from the jumbled EM responses and given detailed geological mapping, a tectonically complex (folded, fractured and faulted) geology.

The structural complexity and multiple conductor banding result in EM responses that might not always be well represented by the Vertical Half Plane used in modelling. Interpretation of conductor dip direction is also made difficult by the multiple anomaly peaks. Nevertheless, in most cases or where it is obvious, the bedrock conductors appear to be southerly to vertical dipping, and of varying but significant conductances and depths (20 metres plus except for the near surface centre portions of zones 11 and 12).

A few lines of data were also collected in the small Mayflower test area, along the major fault, east of the main area. The EM response here is dominated by three lines (highway, powerline and railroad) of cultural responses and a wide higher conductance anomaly on the western most line (1090). Similarily, the only magnetic highs occur in the west. They are two large east-west striking bodies. The stronger northern one corresponds to a mapped iron formation and the resulting line of negative inphase anomalies. The other high is perhaps related to the conductor,

The orientation of the conductor is uncertain as its one line wide response might strike north-south. Closer inspection, in particular on the more sensative high frequency EM, however, reveals a line of weak responses directly east as well as a stronger partial anomaly at the south end of line 1080. Unless the former is the result of a combined side-effect of the adjacent railroad and surficial responses then the conductivity of line 1090 might well continue eastwards as shown by the two conductor axis noted on the map. It is noted that the longer southern zone is on strike to a mapped gold occurrence located just east of the test area and perhaps initially meant to be surveyed.

6. RECOMMENDATIONS

The Bennett Lake area is located in a favourable geological setting where known gold mineralizations occur. The survey proved the area to be electromagnetically and magnetically active, complex, and of high interest worthy of its geological potential.

Many probable conductor axis were interpreted from the EM and VLF responses. Of these, 14 were deemed to be of interest as bedrock zones and numbered for discussion. Eleven of the zones, most of which are of significant to very high conductances, can be confidently classified as certain bedrock conductors. As an aid to further geophysical/geological classification and follow-up considerations, the 14 selected zones are listed and grouped below in order of priority on the basis of their accompanying geophysical merits.

10,6,13 - Bedrock conductors with more isolated short strike lengths, direct magnetic associations and high conductances - characteristics often associated with massive sulphide mineralization.

11,12,14 - Together, they form four parellel bands of long formational-type conductors, likely of high density graphitic and perhaps iron min-

eralization, as suggested by their extremely high 30 to 80 mho conductances.

8,9 - Respectively, weaker and less resolved bedrock conductor bands that might be connected amongst the multiple conductive responses at the survey area's centre.

2,5,4 - Bedrock conductors of less significant conductances and medium to long strike lengths that are obscured and likely covered by the surrounding Bennett Lake surficials.

7,3,1 - Possible bedrock conductors of questionable status due to poor resolution from surrounding wide responses and, for zone 1, to the lack of any measureable conductance.

It should be noted that the above grading is based mainly on the geophysical criteria which most favour the existence of good anomalous bedrock conductors. While this has a useful basis in massive sulphide exploration, it will have less bearing on gold prospecting. Because of its low concentration, gold normally does not directly produce a high conductance anomaly. Weaker electrolytic conductive trends of accessory mineralization (such as the subzones), faults (4, 5 and 1), contacts and shears can also be potential gold-bearing structures.

Nevertheless, follow-up should take into consideration that two of the highest rated zones, 6 and 3, plus one of the two test area bedrocks (T1) are located in the vicinity of known gold occurrences. Close analysis of these zones should help in rating the potential of other similar conductors. Follow-up is also definitely recommended for the highly conductive and structurally complex central part of the main area, specifically on zones 10 and 11a. Investigation of the extremely conductive centre portion of zone 12 might also be useful in discovering the source of this anomalous mineralization. As well, due to cultural interference and the incomplete coverage, the region around the two interpreted bedrock zones of the test area should be further investigated to confirm their existence and outlines. The remaining conductors can be better assessed by those who can combine more detailed geological information with the geophysical data provided by the survey.

Respectfully submitted,

AERODAT LIMITED

Richard Yee

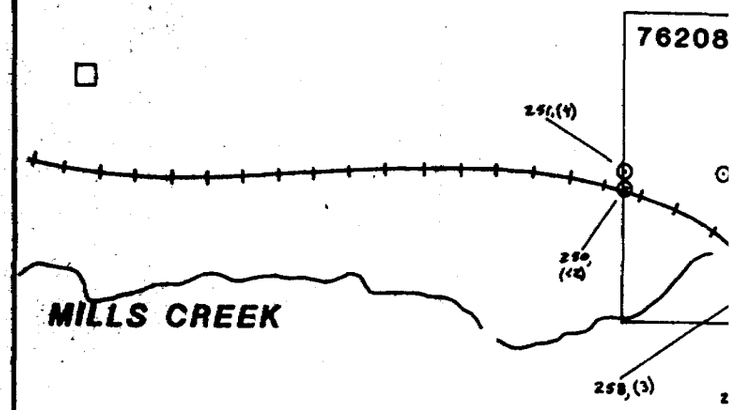
October 18, 1984

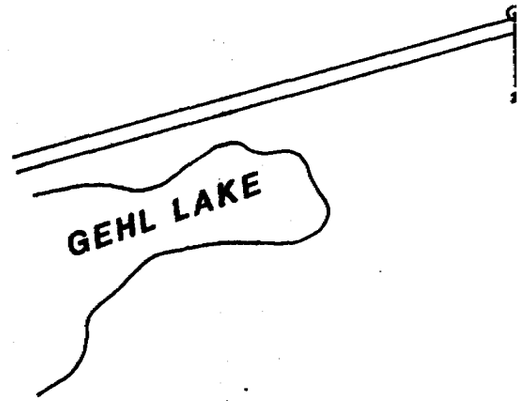
Richard D.C. Yee, P. Eng.

Dual
2.6687

LEGEND

Sample Location	⊙
Sample Number	265
Geochemical Gold Value (ppb)	(9)
Claim Number	762061
Claim Boundary	└──
Access Road	====
Shaft	□

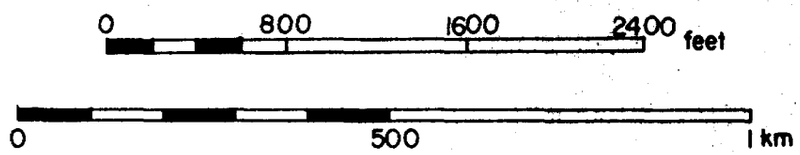




ARGOR EXPLORATIONS LTD

GEOCHEMICAL SAMPLE MAP

MAYFLOWER AREA CLAIM-GROUP



SCALE 1 inch-800 ft

DATE: **December, 1984** DRAWN BY: **P.Fernberg**

SURVEYED BY: **P. Fernberg**

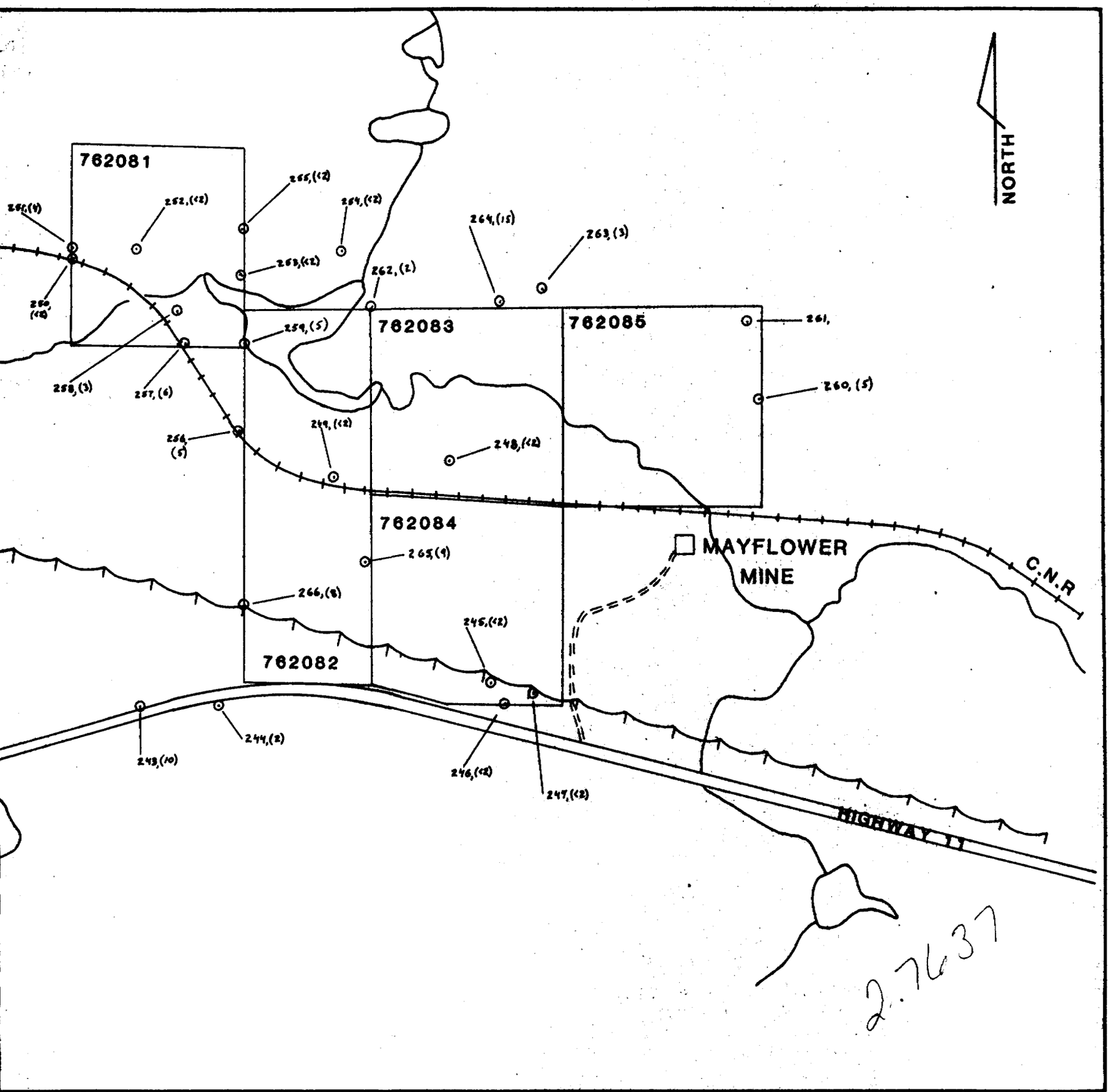


Figure 5: Geochemical Sample Locations

LEGEND

METAVOLCANIC

Mafic and Intermediate Metavolcanics

- 1 unsubdivided
- 1a unsubdivided flows
- 1e tuff
- 1f lapilli-tuff
- 1g tuff-breecia
- 1h debris flow
- 1j chlorite schist
- 1q carbonatized
- 1t silicified
- py minor pyrite

Felsic Metavolcanics

- 2d tuff

METASEDIMENTS

Low-medium grade Arigillaceous and Arenaceous Clastic Metasediments

- 3a wackes, mudstones
- 4c wacke
- 4f chlorite/talc schist
- 5 clast supported conglomerate
- 7 magnetite ironstone

INTRUSIVE

Felsic Intrusive

- 10a unsubdivided
- 10c feldspar porphyritic tonalite
- 10d medium-grained biotite tonalite

NOTE: 1) pre-fix c denotes geology from Fumerton (1981)

2) geological legend corresponds to Fumerton's map (1981)

Bedding 80°

Foliation 160

Fault: assumed

Shear zone

Outcrop, x

No visible outcrop no v. o/c

Claim boundary

Shaft

traverse line March 28/85

ARGOR EXPLORATIONS LTD

GEOLOGICAL MAP

MAYFLOWER AREA CLAIM-GROUP

0 800 1600 2400 feet

0 500 1 km

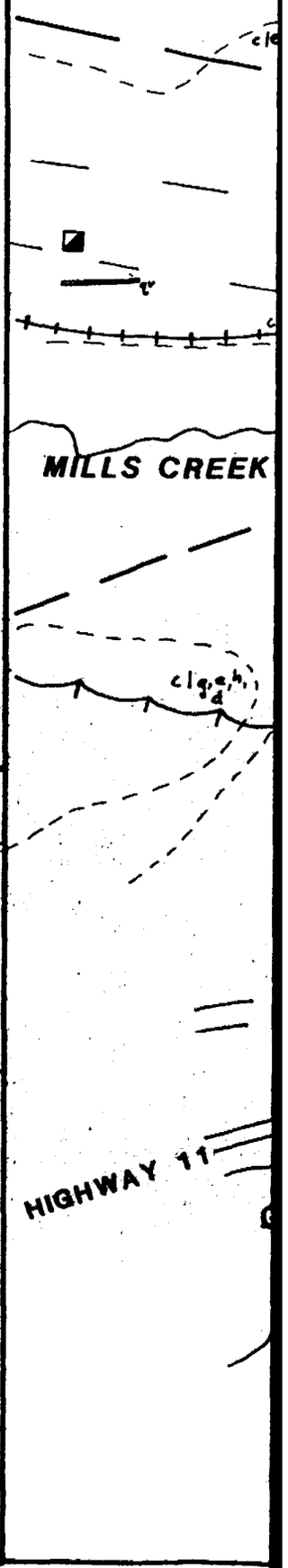
SCALE 1 inch-800 ft

DATE: **December, 1984**

DRAWN BY: **P. Fernberg**

SURVEYED BY: **P. Fernberg**

Peter A. Fernberg



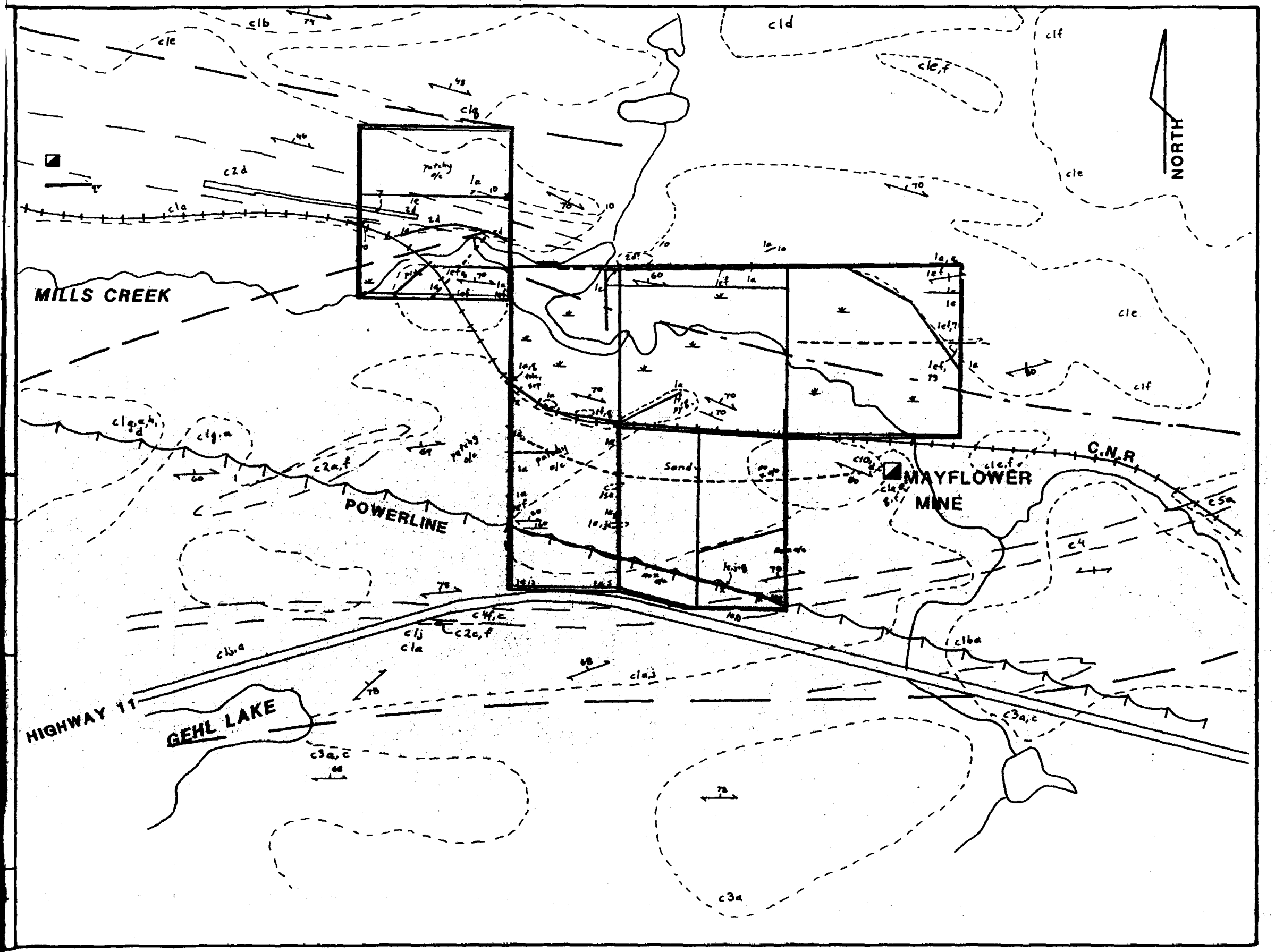
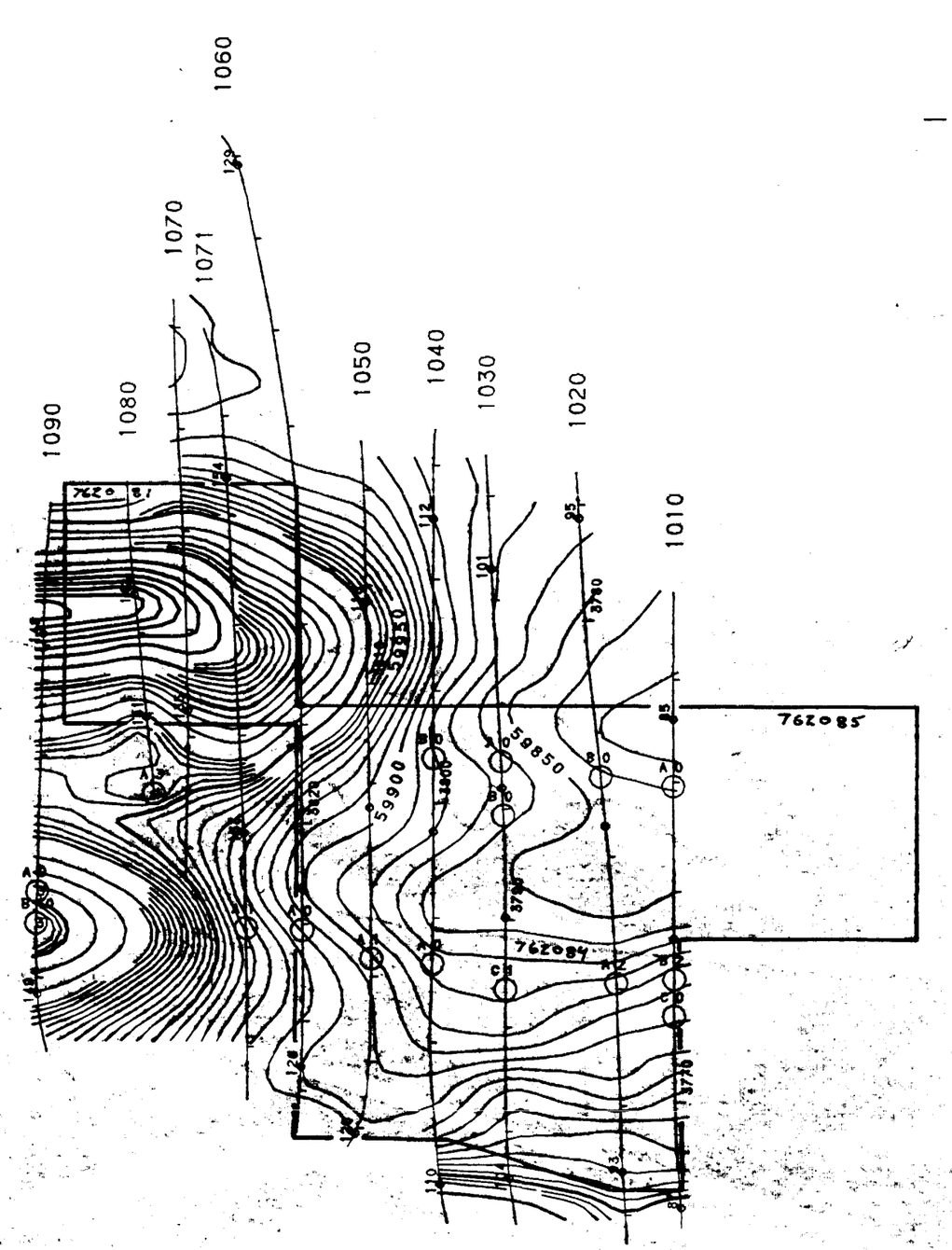


Figure 4: Geological map



LEGEND

250 gammas.....

50 gammas.....

10 gammas.....

MORRISON PETROLEUMS LTD.

TOTAL FIELD MAGNETIC MAP

TEST AREA

ONTARIO

SCALE 1/10,000

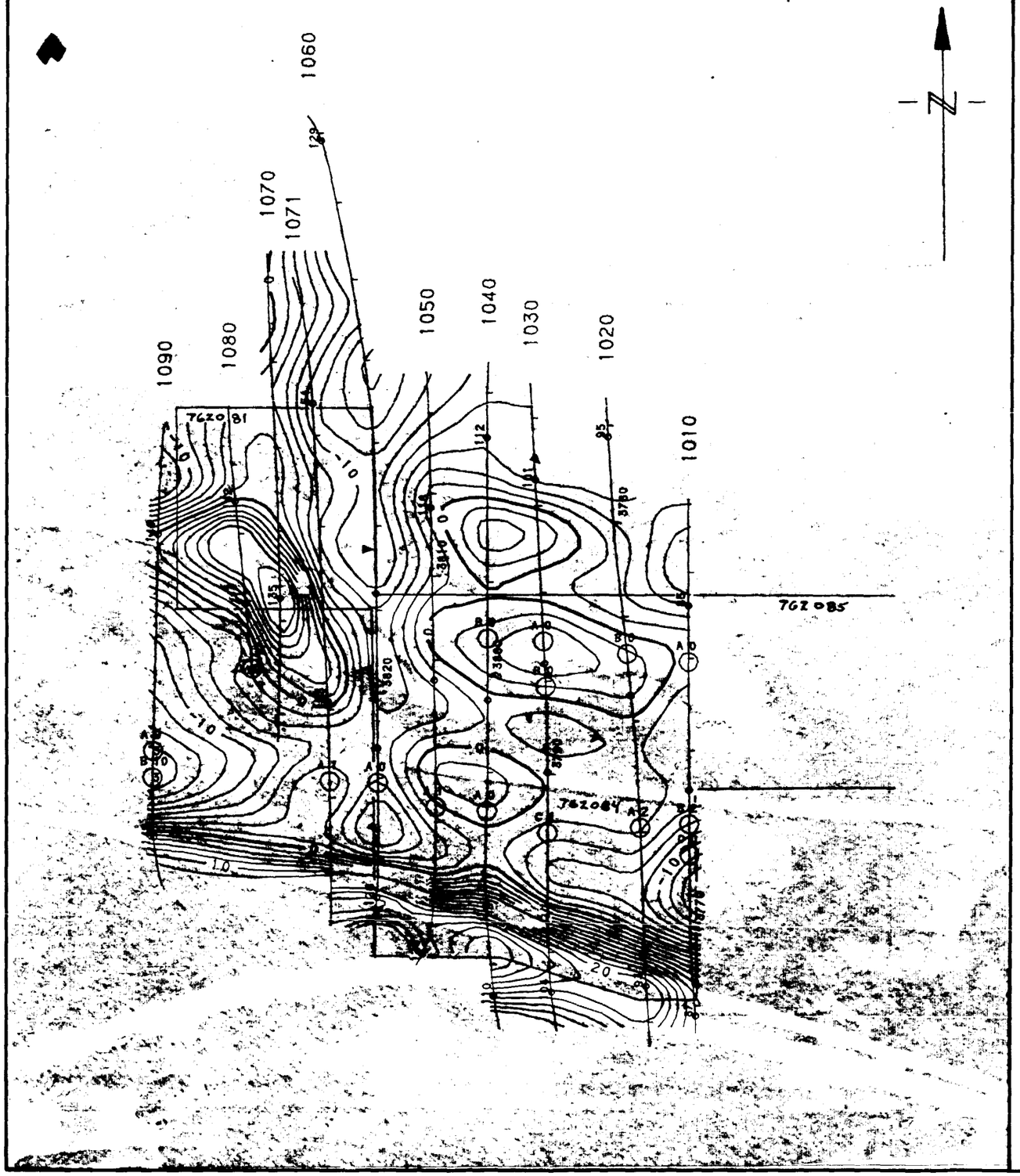
0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE:	August 1984
N.T.S. No:	52C/16
MAP No:	3

J8438



50% .....

10% .....

2% .....

MORRISON PETROLEUMS LTD.

VLF-EM TOTAL FIELD CONTOURS

NAA CUTLER MAINE, -24.0 kHz

TEST AREA

ONTARIO

SCALE 1/10,000

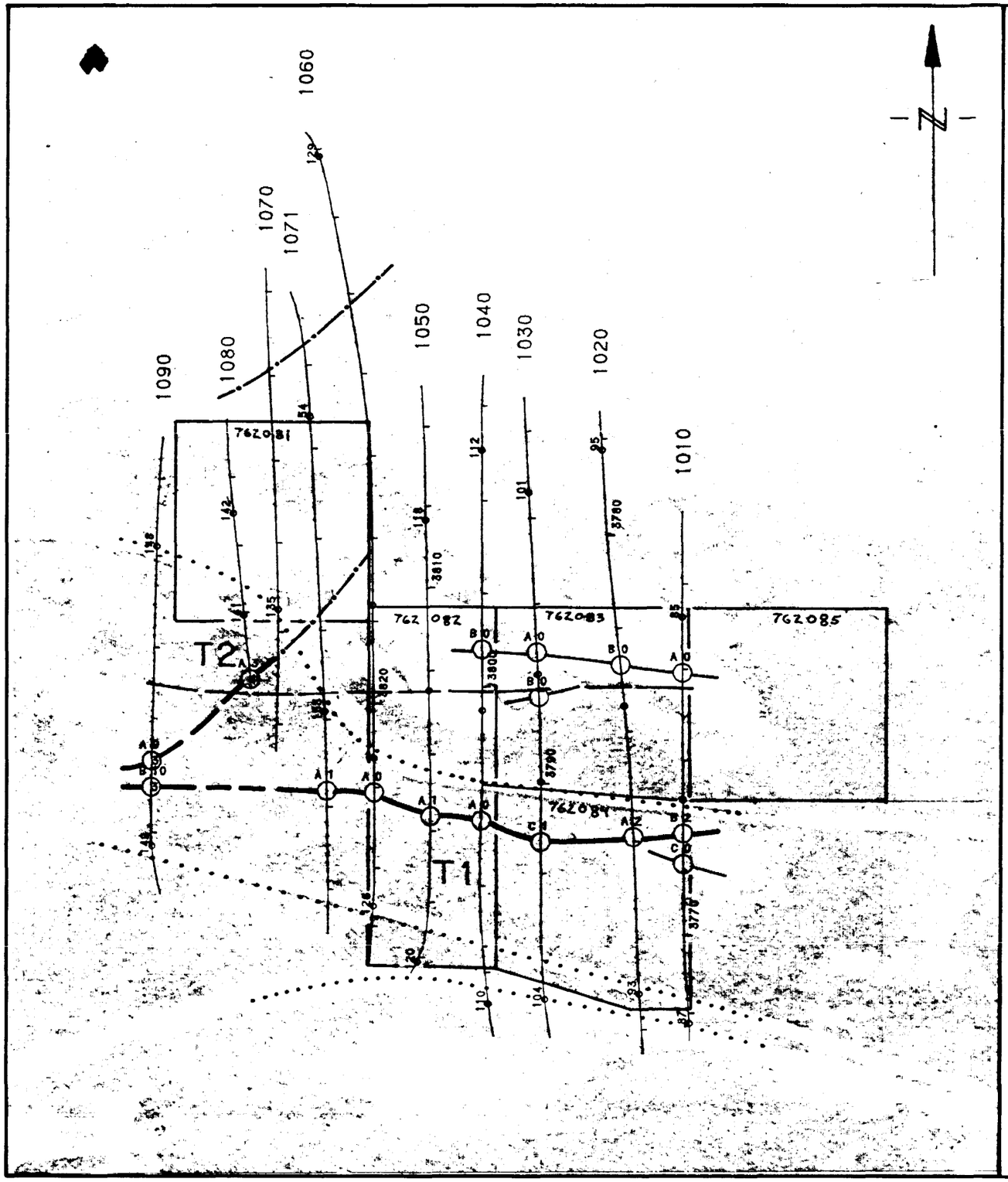
0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE:	August 1984
N.T.S. No:	52C/16
MAP No:	4

J8438



INTERPRETATION

- INTERPRETED BEDROCK CONDUCTOR AXIS
- POSSIBLE BEDROCK CONDUCTOR AXIS
- VLF OR HIGH FREQUENCY EM CONDUCTOR AXIS
- INFERRED FAULT AXIS
- CULTURAL CONDUCTOR

Horizontal control ..... based on photo laydown

Average bird height ..... 30 metres

Line spacing ..... 100 metres

EM RESPONSE

Conductivity thickness in mhos

⑦	60 - 120
⑥	30 - 60
⑤	15 - 30
④	8 - 15
③	4 - 8
②	2 - 4
①	1 - 2
○	0 - 1

MORRISON PETROLEUMS LTD.

AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP

TEST AREA

ONTARIO

SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

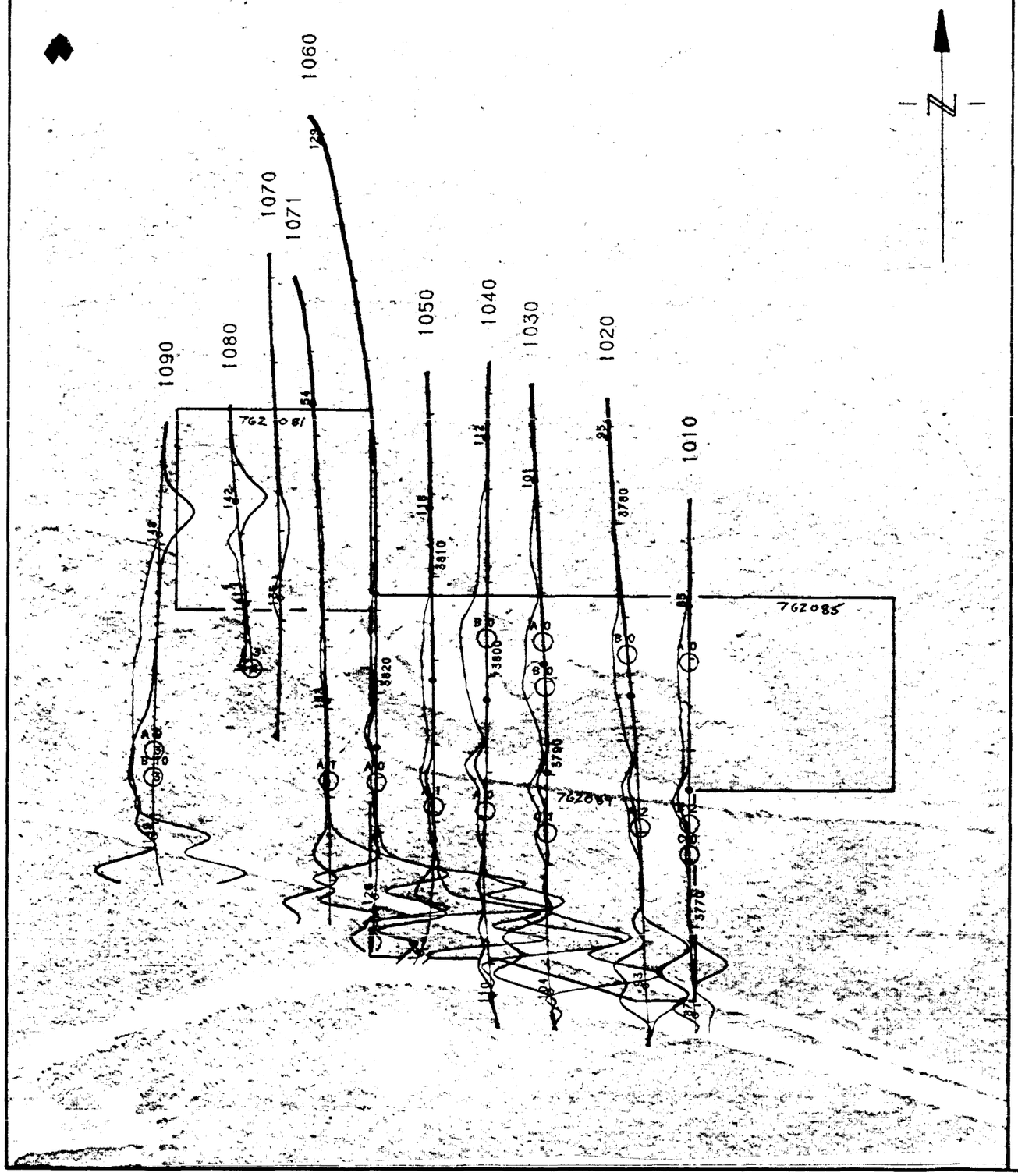
AERODAT LIMITED

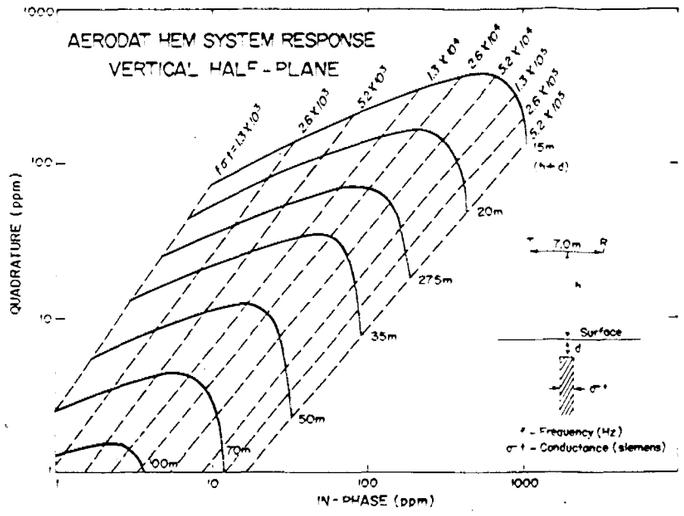
DATE: August 1984

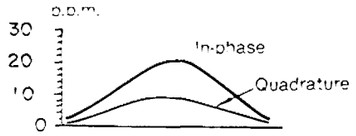
N.T.S. No: 52C/16

MAP No: 1

J8438







COAXIAL - 932 Hz

MORRISON PETROLEUMS LTD.

AIRBORNE ELECTROMAGNETIC SURVEY PROFILES

TEST AREA
ONTARIO

SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE:	August 1984
N.T.S. No:	52C/16
MAP No:	2

J8238

Ontario

Ministry of Na

GEOPHYSICAL – GEOLO
TECHNICAL DA

52C09NE0015 2.7637 FACTOR LAKE

900

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) HELICOPTER ELECTROMAGNETICS/MAGNETIC/VLF-EM

Township or Area AREA OF FACTOR LAKE

Claim Holder(s) ARGOR EXPLORATIONS LIMITED

Survey Company AERODAT LIMITED

Author of Report RICHARD D.C.YEE

Address of Author C/O AERODAT LIMITED

Covering Dates of Survey AUGUST 12, 1984
(linecutting to office)

Total Miles of Line Cut N/A

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

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

Magnetometer 40 Electromagnetic (enter days per claim) N/A Radiometric 40
VLF-EM

DATE: JANUARY 7/85 SIGNATURE: Peter A. Fenn
Author of Report or Agent

2.7637

Res. Geol. _____ Qualifications 2 (6) 87.

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

762081
762082
762083
762084

If space insufficient, attach list

TOTAL CLAIMS 4

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) HELICOPTER ELECTROMAGNETIC/MAGNETIC/VLF-EM

Instrument(s) AERODAT GEONICS 3 FREQUENCY/GEOMETRICS G-803/HERZ TOTEM 1A

(specify for each type of survey)

Accuracy 1ppm / 1. gamma / 1%

(specify for each type of survey)

Aircraft used AEROSPATIAL A-STAR 350D

Sensor altitude 30 metres / 45 metres / 45 metres

Navigation and flight path recovery method MOTOROLA MINI-RANGER (RADAR POSITIONING)

_____

Aircraft altitude 60 metres mean terrain clearance Line Spacing 100 metres

Miles flown over total area 155 km (96.3 miles) Over claims only 10 km (6.2 miles)

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken_____

Total Number of Samples_____

Type of Sample_____
(Nature of Material)

Average Sample Weight_____

Method of Collection_____

Soil Horizon Sampled_____

Horizon Development_____

Sample Depth_____

Terrain_____

Drainage Development_____

Estimated Range of Overburden Thickness_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis_____

General_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others_____

Field Analysis (_____tests)

Extraction Method_____

Analytical Method_____

Reagents Used_____

Field Laboratory Analysis

No. (_____tests)

Extraction Method_____

Analytical Method_____

Reagents Used_____

Commercial Laboratory (_____tests)

Name of Laboratory_____

Extraction Method_____

Analytical Method_____

Reagents Used_____

General_____

Land Management Jan. 13th

Ministry of Natural Resources
Ontario

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

#605 File
762081 2.7637

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
GEOLOGICAL + GEOPHYSICAL (Airborne)	Area of Factor Lake G527

Claim Holder(s)	Prospector's Licence No.
~~ARDOR EXPLORATIONS LIMITED~~ Peter Fernberg	~~A38144~~ H11461

Address: 1003 - 605 5TH AVE CALGARY, Alberta T2P 3H5

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
AERODAT LIMITED 3883 Nashua Dr Mississauga, Ontario	8 8 84 (Day Mo. Yr.) 16 8 84	—

Name and Address of Author (of Geo-Technical report)
Peter Fernberg, RR#2, Ingleside, Ont. K0C 1M0; GEOLOGICAL / GEOPHYSICAL; R. Yee Aerodat Ltd.

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions: For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Man Days: Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological Mar: ~~44~~ 40	
	Geochemical	
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic (VLF)	40
	Magnetometer	40
	Radiometric	/

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
T.B.	762081	4.2
	762082	4.2
	762083	4.2
	762084	4.2
	762085	4.2

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

Total number of mining claims covered by this report of work: 5

Expenditures (excludes power stripping)

Type of Work Performed: GEOCHEMICAL ASSAY on Rock Samples

Performed on Claim(s): 762 081 → 762085

Calculation of Expenditure Days Credits

Total Expenditures			=	Total Days Credits
$ 322.00	+	15	=	21.4

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
42	Nov. 14/84	

Date	Recorded Holder or Agent (Signature)
Nov 9/84	Peter A Fernberg

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: PETER FERNBERG — RR#2, Ingleside, Ontario, K0C 1M0

Date Certified	Certified by (Signature)
Nov 9/84	Peter A Fernberg

1362 (81/9)

Peter Fernberg
R.R. 2, Ingleside
Ontario, K0C 1M0

January 7, 1985

Lands Administration Branch
Whitney Block Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Sirs;

I am enclosing both a geological and a geophysical survey report carried out on Argor Explorations Limited's Mayflower Area Claim-Group, claims No. 762081-762085 inclusive. These reports are submitted on behalf of Argor Explorations as partial fulfilment of assessment work on these claims.

The above claims are held by Argor Explorations Limited, Suite 2700,801 - 6th Avenue S.W., Calgary, Alberta, T2P 3W2

Please note that the airborne survey was contracted out by Morrison Petroleums Limited, Suite 2700, 801 - 6th Avenue S.W., Calgary, Alberta on behalf of Argor Explorations.

Yours sincerely,

Peter A. Fernberg
Geologist B.Sc

XRAL

X-RAY ASSAY LABORATORIES
LIMITED

1885 LESLIE STREET • DON MILLS ONTARIO M3B 3J4 • (416) 445-5755

CE TO
COPY TO

MORRISON PETROLEUMS LTD
ATTN: A. W. STOLLERY
801 - 6TH AVENUE SOUTH WEST, SUITE 2700
CALGARY, ALBERTA
T2P 3W2

TTED TO:
ARGOR EXPLORATIONS LTD
ATTN: A. W. STOLLERY
P. O. BOX 99
UNIONVILLE, ONTARIO
L3R 2L8

CUSTOMER NO. 1012

INVOICE NO.	INVOICE DATE	WORK ORDER NO.	DATE SUBMITTED
22183	05-SEP-84	17837	17-AUG-84

TERMS

TERMS NET 30 DAYS
1.5% PER MONTH INTEREST ON ACCOUNT OVER 30 DAYS

P.O. NO.	CLIENT PROJECT NO.		TYPE OF SAMPLES SUBMITTED
			ROCK

PKGS	SHIPPED VIA	WAY BILL NO	SHIPPED FROM
BOX	SMALL FRY	13876	

ANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
13	AU, PPB	2, 10, 7, 0, 0, 0	7.00	91.00
2	30 ELEMENT ANALYSIS	90, 13, 0, 0, 0, 0	22.00	44.00
13	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	99, 1, 0, 0, 0, 0	2.75	35.75

Mayflower Area
→ # 2243 → 2255

MORRISON PETROLEUM LTD.
CALC VERIFIED
DESCRIPTIONS
APPROVAL
ACCTG DR 3730 XRAY
CODE
CR 6210 XRAY
ACCTG MONTH SEPT '84 CHEQUE #
DATE PD Sept 25/84 BY
BATCH REF # 20189

Independence Mine Proj

PAID

SUB-TOTAL $ 170.75

MISC. CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES	
	14.70				$ 14.70
	OTHER			SURCHARGE - RUSH SERVICE	

TOTAL IN CANADIAN FUNDS $ 185.45

IGINAL INVOICE

XRAL

X-RAY ASSAY LABORATORIES
LIMITED

1885 LESLIE STREET • DON MILLS ONTARIO M3B 3J4 • (416) 445-5755

COPY TO

NCE TO

MORRISON PETROLEUMS LTD
ATTN: A.W. STOLLERY
801 - 6TH AVENUE SOUTH WEST, SUITE 2700
CALGARY, ALBERTA
T2P 3W2

ITTED TO:

ARGOR EXPLORATIONS LTD
ATTN: A.W. STOLLERY
P.O. BOX 99
UNIONVILLE, ONTARIO
L3R 2L8

CUSTOMER NO. 1012

INVOICE NO.	INVOICE DATE	WORK ORDER NO	DATE SUBMITTED
22308	14-SEP-84	17923	24-AUG-84

TERMS

TERMS NET 30 DAYS
1.5% PER MONTH INTEREST ON ACCOUNT OVER 30 DAYS

S P.O. NO.	CLIENT PROJECT NO.		TYPE OF SAMPLES SUBMITTED
			ROCK

PKGS	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM
BOX	SMALL FRY	14803	

ANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
11	AU, PPB	2, 10, 7, 0, 0, 0	7.00	77.00
2	30 ELEMENT ANALYSIS	90, 13, 0, 0, 0, 0	22.00	44.00
11	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	99, 1, 0, 0, 0, 0	2.75	30.25

May/Burnt Area
↳ # 2256 → 2266

MORRISON PETROLEUM LTD

CALC VERIFIED

DESCRIPTIONS

APPROVAL

Independence Mine

3730 XRAY

6210 XRAY

Aug '84

0.04 1/84

P0194

PAID

SUB-TOTAL $ 151.25

SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES
5.00			

ISC. RGES

OTHER

SURCHARGE - RUSH SERVICE $ 5.00

TOTAL IN CANADIAN FUNDS $ 156.25

GINAL INVOICE

Peter Fernberg
RR. 2, Ingleside
Ontario
KOC 1MO

March 28, 1985

Mr. Dennis Kinvig
Ministry of Natural Resources
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7W 1W3

Dear Mr. Dennis Kinvig;

RE: File 2.7637 - Mining Claims TB 762081 to 85 inclusive in the Area of Factor Lake.

Enclosed are the geological plans showing the traverse lines. These plans are to be included with my letter of March 27, 1985.

Yours sincerely,

Peter A. Fernberg

Peter Fernberg

February 21, 1985 File: 2.7637

Argor Exploration Limited
Suite 1003
605 5th Avenue
Calgary, Alberta
T2P 3H5

Dear Sirs:

RE: Geophysical (Electromagnetic & Magnetometer) and Geological Survey and Data for Assaying on Mining Claims TB 762881 to 85 inclusive in the Area of Factor Lake

---

This will acknowledge receipt of the report and maps on January 7, 1985.

Enclosed is the Geological plan, in duplicate. Please indicate the traverse lines and return the plans to this office.

One requirement for submitting geological surveys, is that the scale of the plans should not be more than 500 feet and not less than 100 feet to one inch. These geological plans will be accepted this time. However, this acceptance is not to be considered a precedent.

In addition, the submitted man-days breakdown states that 32 technical days were required to carry out the geological mapping. However, the report states on page three that the geological survey took place over a five day period. Credit can only be given for the actual claims traversed and not for any work performed outside the claim group.

...2

Please clarify as to the names of the employees and the datesdthat each man worked on these five claims on the various phases of the geological survey.

For further information, please contact Dennis Kinvig at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

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

D. Kinvig:mc

cc: Peter Fernberg
R.R.#2
Ingleside, Ontario
K0C 1M0

cc: Mining Recorder
Thunder Bay, Ontario
File: 605

Encl.

2.7637

Peter Fernberg
R.R. 2
Ingleside, Ontario
K0C 1M0

March 27, 1985

Mr. Dennis Kinvig
Ministry of Natural Resources
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7W 1W3

Dear Mr. Dennis Kinvig;

RE: File 2.7637 - Mining Claims TB 762081 to 85 inclusive in the Area of Factor Lake

In reply to your request for the following information:

1) Geological Traverse Lines - Claims were traversed along the claim lines inaddition to several north-south crosslines. Other areas of the claims were traversed by going to specific outcrops as plotted on the goverment preliminary geology maps and air photographs. The enclosed geological plan indicates traverse lines used.

2) Man Days Breakdown - Over a 5 day period, 32 hours (4 days at eight hours per day) were spent traversing claims TB 762081 to 85 inclusive. My understanding of the assessment requirements is that 7 days can be applied for every eight hour day of geological surveying. Therefore the requested man days of assessment would be;

4 eight-hour days (technical days) x 7 = 28 technical days credit

28 tech. days credit - 5 = 5.6 days/claim

The submitted assessment work breakdown mistakenly said 32 technical days were spent on the claims. It should have been 4 technical days. Also the man days per mining claim requested is 5.6 days/claim not 44.8 claims as erroneously requested in the submitted Report of Work.

I am uncertain as to how this error missed my detection but thank you for bringing this discrepancy to my attention.

...2

3) Personnel Employed - Peter Fernberg
August 7,8,11,15,16 1984

If you require additional information please do not hesitate to contact me.

Yours sincerely,

Peter Fernberg

Ministry of Natural Resources
Ontario

Geotechnical Report Approval

File 2.7637

Mining Lands Comments Clarence:

- They spent 32 days mapping this property. Is this acceptable or do you feel it's excessive?
- Also, the map scale is 1" = 800'. Is it adequate?

Dennis Kinvig

☐ To: Geophysics

Comments

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

☑ To: Geology - Expenditures MR. C. KUSTRA

Comments

Excessive credit request — too much for geology. There is no indication of traverse lines & map scale is too small; no indication of nature of overburden; ~~Report does~~ very sketchy description of property geology in report. Reduce geology credit. Claiming a total of 124.2 days/claim!
Report & map approved but at reduced credit.

☑ Approved ☐ Wish to see again with corrections | Date Feb. 5/85 | Signature C Kustra

☐ To: Geochemistry

Comments

RECEIVED
FEB 06 1985
MINING LANDS SECTION

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

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

1593 (81/10)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey	Technical Days		7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	÷	No. of Claims	=	Days per Claim
	32	X	7	=	224	+	—	=	224	÷	5	=	44.8
		X	7	=		+		=		÷		=	
		X	7	=		+		=		÷		=	
		X	7	=		+		=		÷		=	

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File: 2.7637

Date: 1985 04 17

Mining Recorder's Report of Work No.: 605

Recorded Holder: PETER FERNBERG

Township or Area: FACTOR LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days ☐ Airborne ☐ Special provision ☐ Ground ☐ ☐ Credits have been reduced because of partial coverage of claims. ☐ Credits have been reduced because of corrections to work dates and figures of applicant.	$322.00 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIMS TB 762081 to 85 inclusive. 21.4 ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19) — 60:

Ontario Ministry of Natural Resources

Technical Assessment Work Credits

File 2.7637

Date 1985 04 17

Mining Recorder's Report of Work No. 605

Recorded Holder: PETER FERNBERG

Township or Area: FACTOR LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	TB 762081 to 84 inclusive
Electromagnetic 40 days	
Magnetometer 40 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☒	
Special provision ☐ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ Insufficient technical data filed

TB 762085

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60:

928 (83/6)

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File: 2.7637

Date: 1985 04 17

Mining Recorder's Report of Work No.: 605

Recorded Holder: PETER FERNBERG

Township or Area: FACTOR LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 5.6 days	TB 762081 to 85 inclusive
Geochemical _____ days	
Man days ☒ Airborne ☐	
Special provision ☐ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60:

928 (83/6)

Ministry of Natural Resources
Ontario

May 2/85

1985 04 17

Your File: 605
Our File: 2.7637

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

Dear Madam:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

D. Kinvig:mc

Encls.

cc: Peter Fernberg
R.R.#2
Ingleside, Ontario
K0C 1M0

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Ministry of Natural Resources

Ontario

Notice of Intent

for Technical Reports

1985 04 17

2.7637/605

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

Mining Lands Section

File No 2.7637

Control Sheet

TYPE OF SURVEY

✓ GEOPHYSICAL

✓ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

- Map Scale 1" = 800' for Geology.
- 32 man-days for Geology - excessive?

L.D.

Legal

Denis K.

Signature of Assessor

Apr. 2/85

Date

1985 05 08

Your File:605
Our File:2.7637

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

Dear Madam:

RE: Notice of Intent dated April 17, 1985
Geophysical (Electromagnetic & Magnetometer)
GeologicalSurvey and Data for Assaying on
Mining Claims TB 762081, et al, in the Factor
Lake Area

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

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

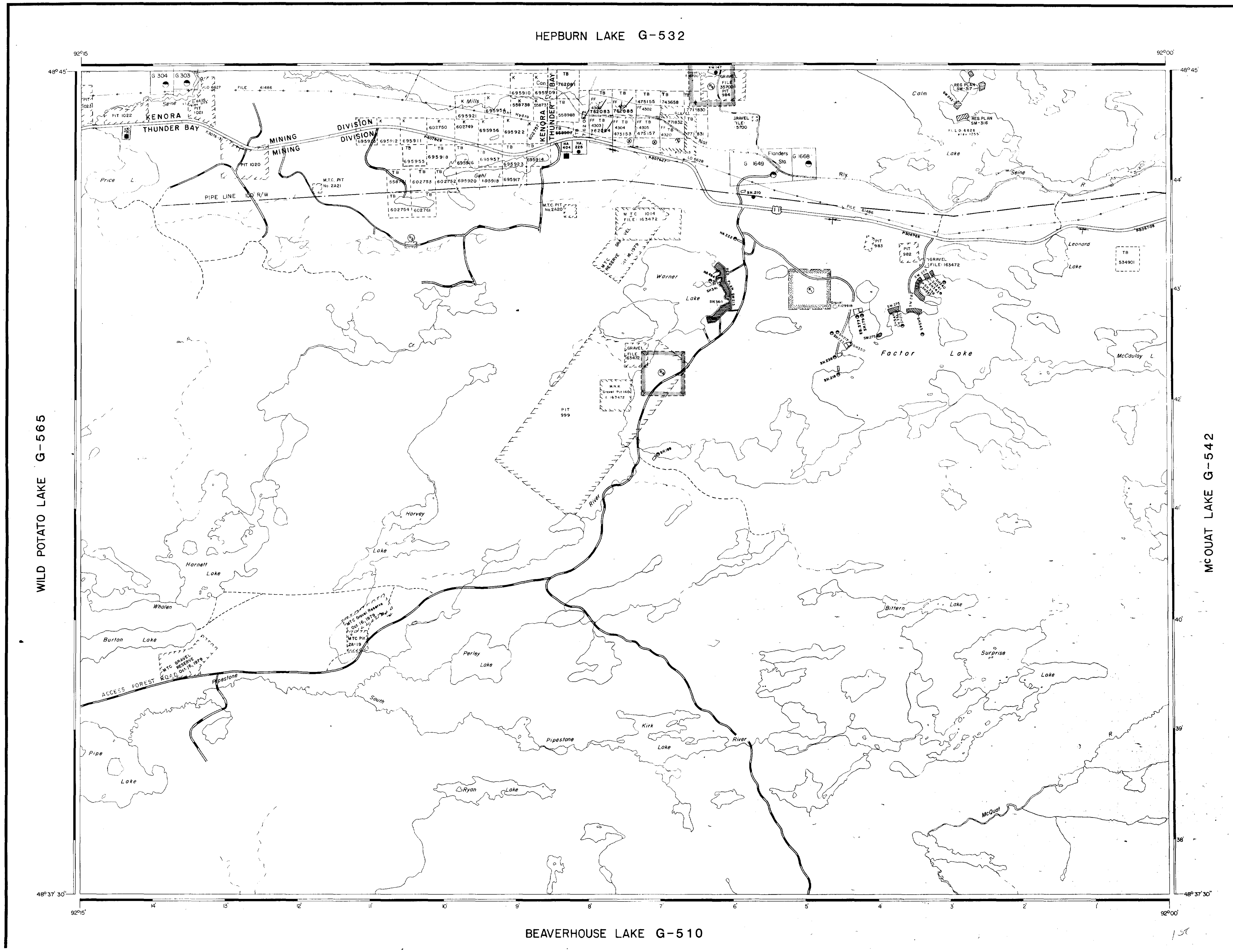
D. Kinvig:mc

cc: Peter Fernberg
R.R.#2
Ingleside, Ontario
K0C 1M0

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Encl.

cc: Resident Geologist
Thunder Bay, Ontario



NOTES

AREAS WITHDRAWN FROM DISPOSITION

S.R. – SURFACE RIGHTS M.R. – MINING RIGHTS

Description	Order No.	Date	Disposition	File
SEC. 35/80	W 64/81	30/11/81	S.R.	
W 21/80NCR	163472	30/6/80	S.R.O.	

SAND and GRAVEL

M.T.C. PIT No. 2A - 27

LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

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

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

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

AREA

FACTOR LAKE

M.N.R. ADMINISTRATIVE DISTRICT
ATIKOKAN & FORT FRANCES
MINING DIVISION
THUNDER BAY & KENORA
LAND TITLES / REGISTRY DIVISION
RAINY RIVER

Ministry of Natural Resources Ontario — Land Management Branch

Date NOVEMBER 1981 — Number **G-527**

52C09NE0015 2.7637 FACTOR LAKE

200