



52C16SW0005 2.7646 BENNETT

010

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

for
MORRISON PETROLEUMS LIMITED
by
AERODAT LIMITED
OCTOBER, 1984

RECEIVED

JAN 11 1985

MINING LANDS SECTION

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.

TABLE OF CONTENT



52C16SW0005 2.7646 BENNETT

010C

	<u>Page No.</u>
1. INTRODUCTION	1 - 1
2. SURVEY AREA LOCATION	2 - 1
3. AIRCRAFT AND EQUIPMENT	3 - 1
3.1 Aircraft	3 - 1
3.2 Equipment	3 - 1
3.2.1 Electromagnetic System	3 - 1
3.2.2 VLF-EM System	3 - 2
3.2.3 Magnetometer	3 - 2
3.2.4 Magnetic Base Station	3 - 2
3.2.5 Radar Altimeter	3 - 3
3.2.6 Tracking Camera	3 - 3
3.2.7 Analog Recorder	3 - 3
3.2.8 Digital Recorder	3 - 4
3.2.9 Radar Positioning System	3 - 5
3.3 Personnel	3 - 5
4. DATA PRESENTATION	4 - 1
4.1 Base Map and Flight Path Recovery	4 - 1
4.2 Electromagnetic Profile Maps	4 - 1
4.3 Total Field Magnetic Contours	4 - 3
4.4. VLF-EM Contours	4 - 3
5. INTERPRETATION	5 - 1
6. RECOMMENDATIONS	6 - 1

APPENDIX I - General Interpretive Considerations

APPENDIX II - Anomaly List

LIST OF MAPS

(Scale: 1:10,000)

- MAP 1 - Electromagnetic Interpretation Map
- MAP 2 - Electromagnetic Profile and Anomaly Map
(932 Hz Coaxial Configuration)
- MAP 3 - Total Field Magnetic Contours
- MAP 4 - VLF-EM Total Field Contours

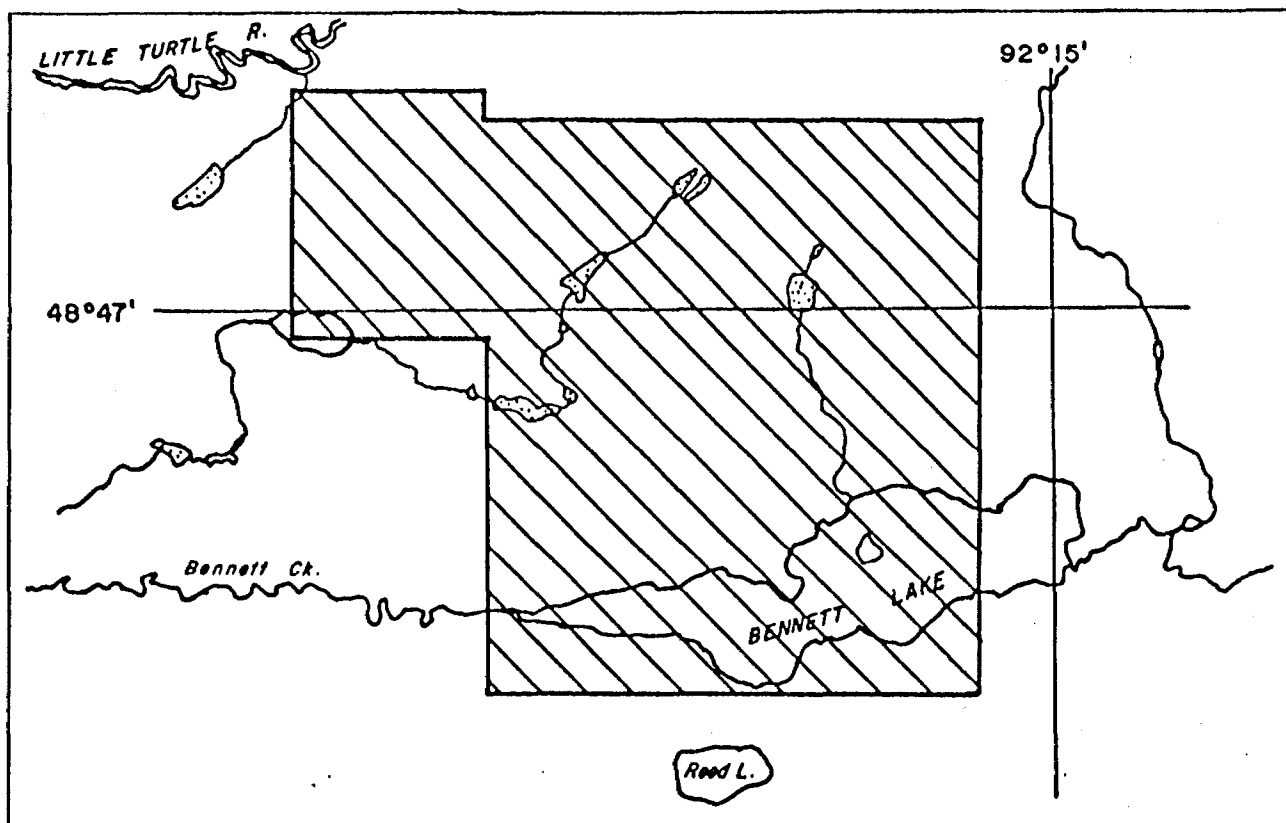
1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Morrison Petroleum 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:

<u>Channel</u>	<u>Input</u>	<u>Scale</u>
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

<u>Channel</u>	<u>Input</u>	<u>Scale</u>
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:

<u>Equipment</u>	<u>Interval</u>
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

<u>Channel</u>	<u>Input</u>	<u>Scale</u>
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:

<u>Equipment</u>	<u>Interval</u>
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 spheric 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 spheric 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 conspicuous 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 parallel 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). Similarly, 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 sensitive 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 axes 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 parallel 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,

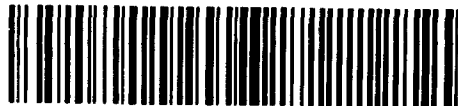
AERODAT LIMITED

Richard Yee

October 18, 1984

Richard D.C. Yee, P. Eng.





52C16SW0005 2.7646 BENNETT

020

A REPORT OF GEOLOGICAL WORK
ON THE BENNETT LAKE CLAIM
GROUP, KENORA MINING
DIVISION, ONTARIO

by

PETER A. FERNBERG

Prepared on behalf of Argor
Explorations Limited, Calgary,
Alberta

20th December, 1984

Peter A. Fernberg
Geologist, B.Sc

RECEIVED

JAN 11 1985

MINING LANDS SECTION

1. INTRODUCTION

Purpose

This report describes the results of a geological work program consisting of a preliminary geological survey and reconnaissance geochemical sampling on claims owned by Argor Explorations Limited within the Area of Bennett Lake and Bennett Township.

Problem

Recent detailed mapping (1 inch = $\frac{1}{4}$ mile) by the Ontario Geological Survey (O.G.S) only covers a small portion of the Bennett Lake claim-group and was not detailed enough to discern sought after geological conditions similar to those reported at the nearby Independence Mine.

Scope

The 1984 summer program was designed to assess the potential of gold occurrences within the claim area and if possible delineate favourable areas for subsequent follow-up work. This summer program consisted of two phases, of which this report describes the results of 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 to mapping and type of geochemical sampling are discussed.

Furthermore a discussion of results incorporating previous geological work are 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 $48^{\circ}47'$, longitude $92^{\circ}17'$. In addition the claim-group is situated in both Bennett Township and the Area of Bennett Lake, Kenora Mining Division. Topographic map Manion Lake, NTS No. 52C/16 (1:50,000) covers this area. The property is about 34 road miles west of Atikokan via Highway 11 and then 3 miles north of the Highway. Figure 1 contains a location map.

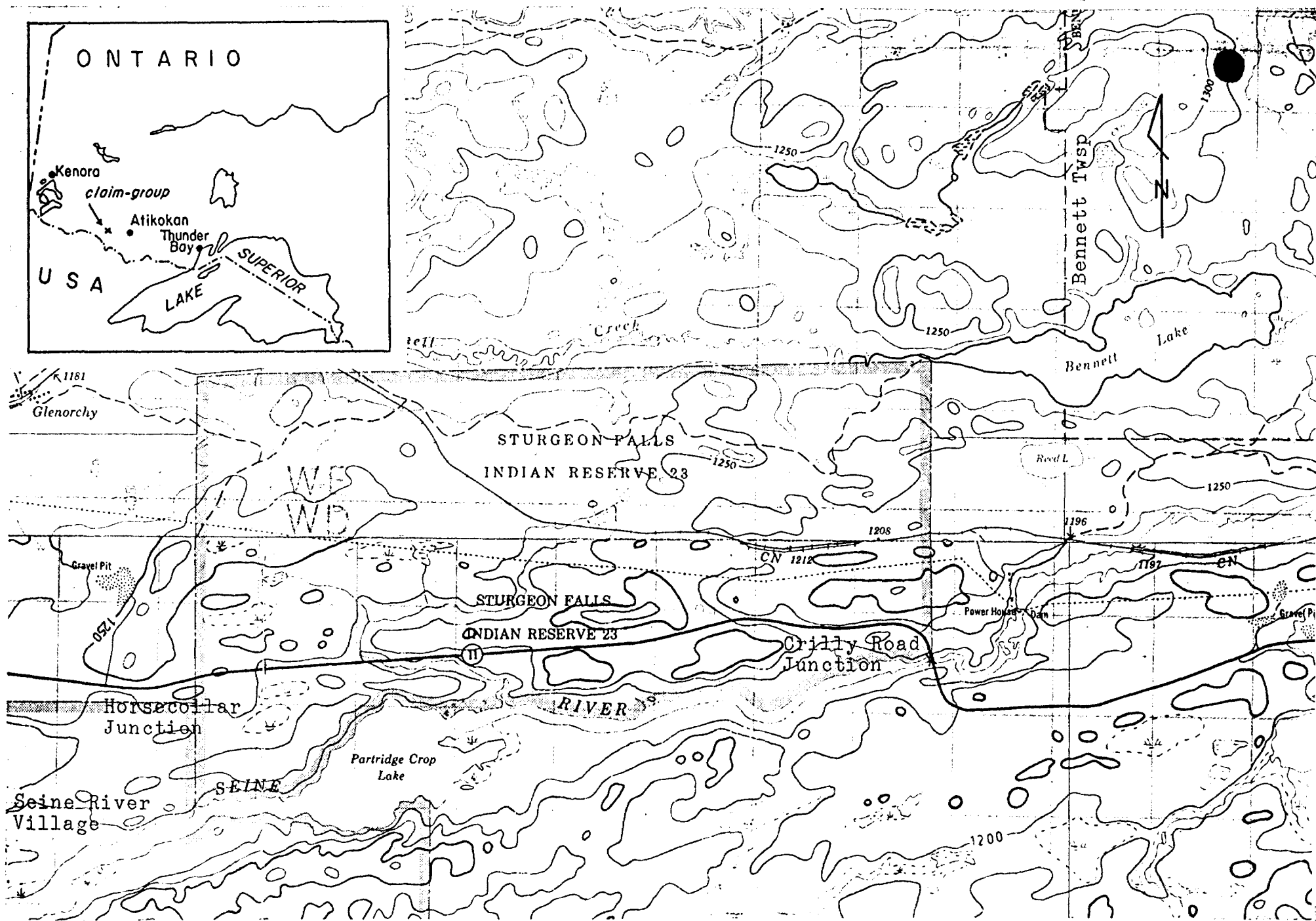


Figure 1: Location map of the Bennett Lake claim-group

Scale 1:50,000

Access is by two gravel roads intersecting Highway 11. The Crilly Road turnoff, 34 miles west of Atikokan, can be used to reach a ½ mile long winter road which goes down to the south shore of Bennett Lake. Easier access is via the Cedar Lake road, 39 miles west of Atikokan, and which is located a ½ mile east of the Horse-collar Junction. The Cedar Lake road traverses Sturgeon Falls Indian Reserve No. 23 for a distance of 8 miles and goes directly to the south shore of Bennett Lake. Prior permission is required from the Seine River Indian Band, at Seine River Village, to use this road. From the south shore a boat is required to cross the lake, a distance of 100 feet to 1½ mile depending on which part of the property is desired to be reached. Two north-south cut lines, coincident with the claim lines, allow for easy walking to the interior of the property.

3. PROPERTY OWNERSHIP

A total of 45 claims (see Table I for a complete listing along with recording dates) comprise the Bennett Lake claim-group. Thirty-six claims are within the Area of Bennett Lake (claim map No. 2392) and nine claims are within the adjoining Bennett Township (claim map No. 1920). All claims are owned by Argor Explorations Limited of Calgary, Alberta. Peter Fernberg of Ingleside, Ontario staked the above claims at the request of Argor Explorations. Figure 2 is a map showing the location of claims held.

4. PHYSIOGRAPHY

The south shore of Bennett Lake is gradually sloping towards the lake and away from a long ridge of bedrock on the south margin of the property. A consequence of this is that there is virtually no outcrop along this slope since it's covered by sandy overburden with mixed forest and cedar groves. On the north shore the ground consists of a 50 - 100 foot high ridge parallel to the lake. Relatively good rock exposure occurs near and at the shoreline but towards the lee side it becomes covered by overburden, cedar swamp, forest wind-fall and regrowth. The central portion of the property is a lowland basin interspersed with small ridges. Outcrop exposure is poor as the area is covered by overburden, marshy land and dense mainly deciduous forest. On the northern part of the claim-group the area

Table I: Claims comprising the Bennett Lake claim-group

Claim No.	Location	Date of Recording
762058	Bennett Township	May 16, 1983
762059	" "	"
762061	Area of Bennett Lake	"
762062	"	"
762063	"	"
762064	"	"
762065	"	"
762066	"	"
763067	"	"
762068	"	"
762069	"	"
762070	"	"
762072	Bennett Township	"
762073	"	"
762074	Area of Bennett Lake	"
762075	"	"
762076	"	"
762077	"	"
762078	"	"
762079	"	"
762080	"	"
762086	Bennett Township	May 30, 1983
762087	" "	"
762811	" "	"
762812	Area of Bennett Lake	"
762813	"	"
762814	"	"
762815	"	"
762816	"	"
762817	"	"
762818	"	"
762819	"	"
762820	"	"
762821	"	"
762822	"	"
762823	"	"
762824	"	"
762825	"	"
762826	"	"
762827	"	"
762828	"	"
762829	"	"
778423	Bennett Township	August 24, 1984
778424	" "	"
778426	Area of Bennett Lake	"

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
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- PROPERTY BOUNDARY
- ACCESS ROUTE

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 | ▼ |
| CROWN LAND SALE | CS. |
| ORDER-IN-COUNCIL | OC |
| RESERVATION | ⊙ |
| CANCELLED | ⊗ |
| SAND & GRAVEL | ⊕ |

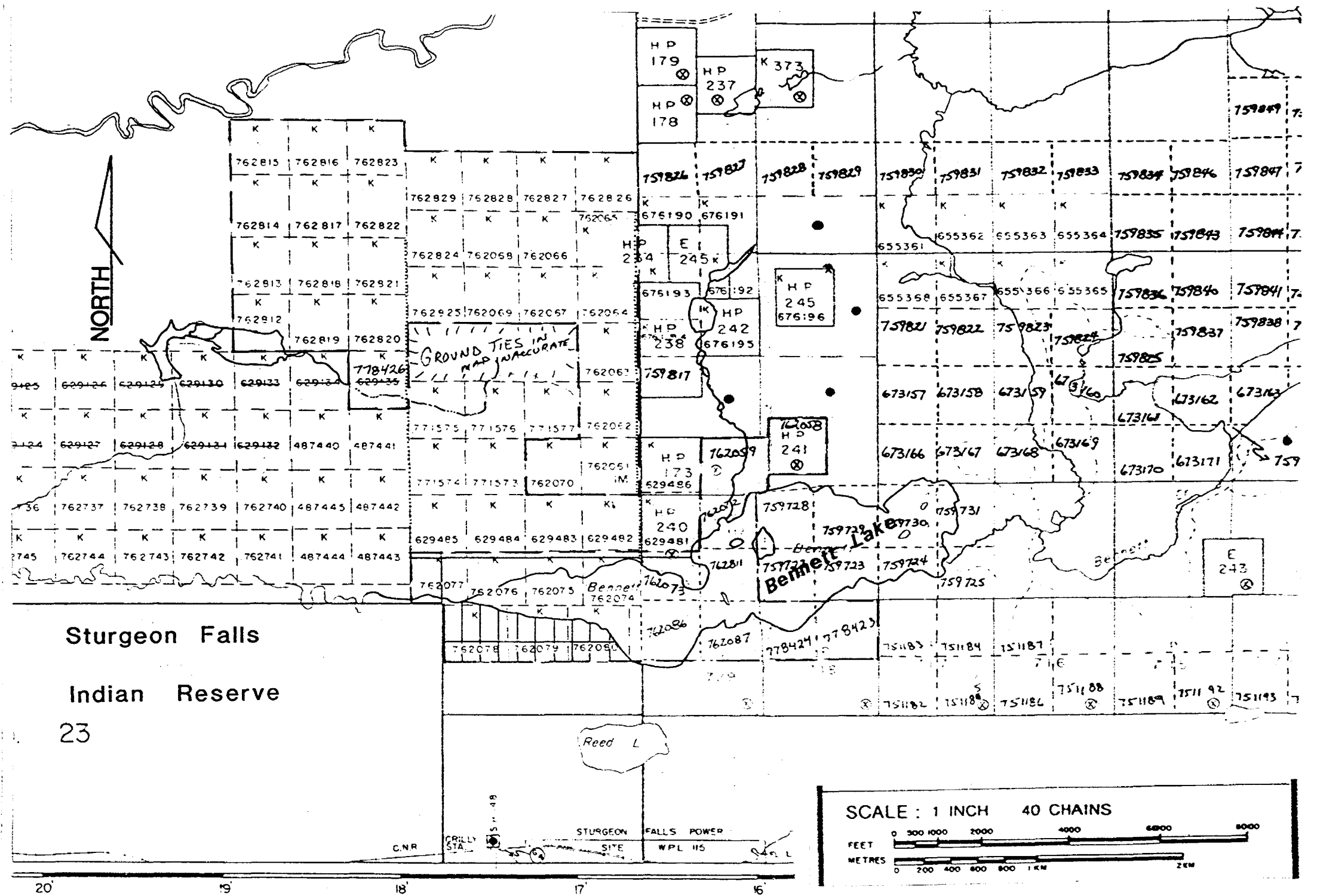


Figure 2: Claim and grid location - Bennett Lake Claim Group

1936: Located by Red Cedar Lake Gold Mines Ltd the occurrence was extensively trenched and then drilled. No records about drilling have been located. A trench across a shear zone averaged 0.15 oz/ton gold across an 85 ft section.

-Continued work was done by:

1940: Sylvanite Gold Mines Limited

1958: Jacobus Mining Corporation

1960: Turbenn Minerals Ltd conducted a magnetic survey in the vicinity

1971: E. Corrigan

1973: E. Rivers

1973: Yeoman Mines Ltd chip-sampled the property and later optioned it to International Chemalloy Corp. Ltd.

1975: Assessment work by Yeoman Mines on behalf of International Chemalloy consisted of a ground VLF-EM and a fluxgate magnetometer survey. Four Em anomalies coincident with magnetic anomalies were located.

-1980: R.J. MacLean et al claim staked the area east of the occurrence.

-1980: An airborne EM (Mark VI INPUT) and magnetic geophysical survey was done by the O.G.S as part of a regional geophysics program.

8. REGIONAL & LOCAL GEOLOGY (compiled from Fumerton 1981, Poulsen 1983)

Extending from Mine Centre to Atikokan, early Precambrian rocks of the Superior Structural Province underly the region. The Bennett Lake claim-group lies immediately north of a boundary zone between the Wabigoon and Quetico Subprovinces of the Superior Province. This boundary, extending westwards into Minnesota, is defined by a system of steeply-dipping dextral wrench faults, the largest of which are the Little Turtle Lake Fault and Quetico (originally called the Seine River - Rainy Lake Fault). Figure 3 illustrates the regional setting.

Within the claim group the Little Turtle Lake Fault forms the southern margin to the property. Further eastwards this fault splays into a series of lesser faults.

North of the Little Turtle Lake Fault the Wabigoon Subprovince is composed of metavolcanics and metasediments which have been intruded by a number of plutonic bodies. The metavolcanics are predominately intermediate to mafic flows, occasionally pillowed. Fragmental metavolcanics are typically intermediate in composition and include tuff breccias, lapilli-tuffs, and lithic and crystal tuffs. Felsic

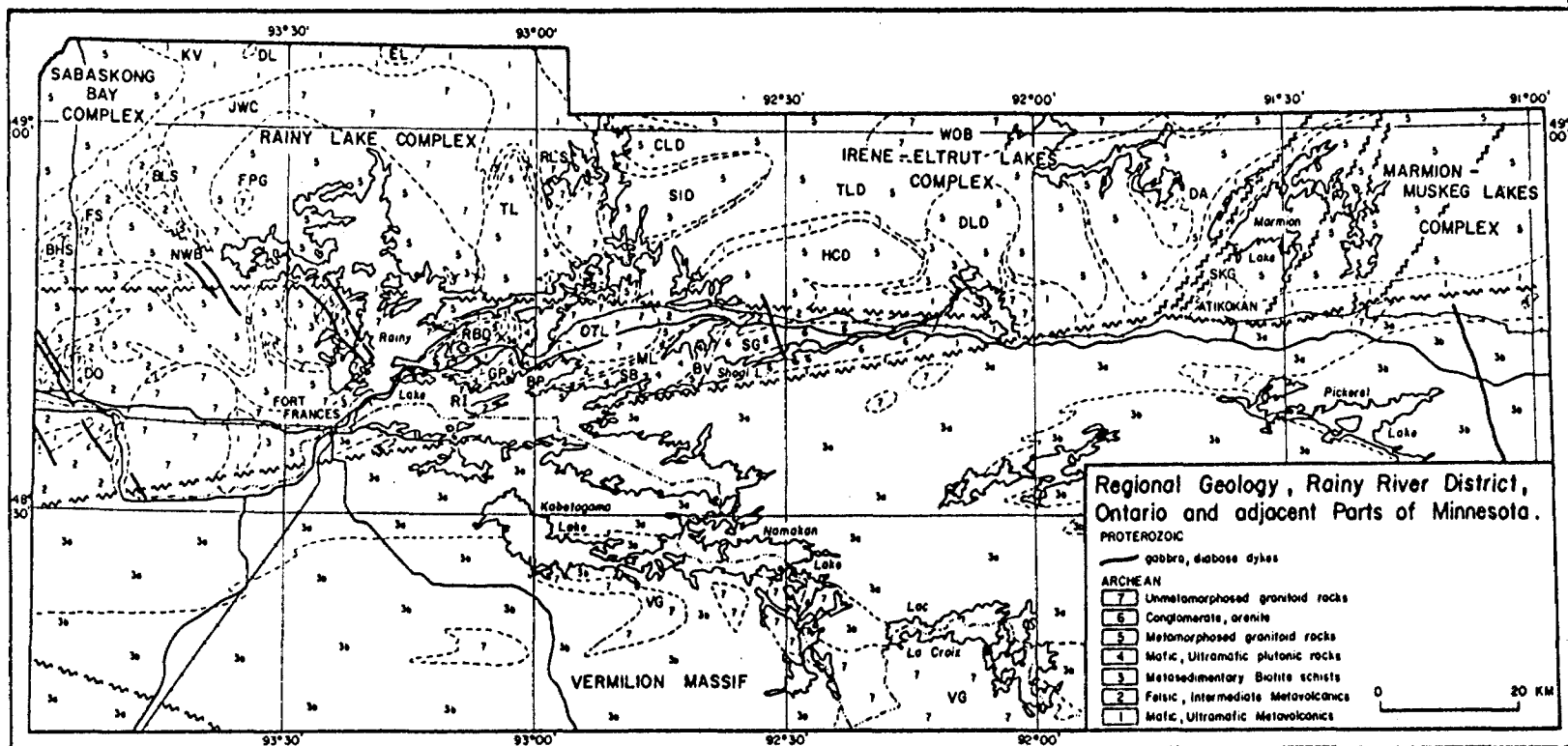


Figure 3: Regional Geology (RBD: Rice Bay Dome, BP: Bean Pass pluton, GP: Grassy Portage intrusion, RI: Rest Island granite, OTL: Otter Tail Lake pluton, ML: Mud Lake pluton, SB: Seine Bay intrusion, BV: Bad Vermilion tonalite, SG: Seine Group, VG: Vermilion Granite). (from Poulson 1983)

● tavalcanics are predominately pyroclastics. Two small bodies of felsic metavolcanics (tuff to lapilli-tuff) occur within the patented claims just east of the claim-group. One of these bodies hosts the Independence Mine.

A large amount of medium-grade metasediments outcrop north of Bennett and McPherson Lakes and stratigraphically overlie the metavolcanics. Most of these metasediments are probably arenites but some pebble conglomerate bands have been recognized. Known occurrences of banded magnetic ironstone occur as thin units within the metasediments (biotite schists in the Bennett Lake area) interlaminated with arenaceous and argillaceous rocks.

Six different types of plutonic rocks have intruded the supracrustal rocks of the Wabigoon subprovince within the region. To the northeast of the claim-group is the Hillyer Creek Dome, a granodiorite intrusion probably predating tectonism. Common to the metasediments are tonolite dikes and stocks. They principally occur as concordant dikes within these metasediments, suggesting that they were probably structurally controlled during the last major period of folding.

The Quetico Subprovince consists of wacke and mudstone beds suggestive that they comprise a turbidite sequence.

North of the Little Turtle Lake Fault the region contains fold patterns that are both complex and fragmented. Five fold axial planes have been recognized and were probably produced by two or more periods of deformation. The dominant structure is a large tightly folded syncline whose axis trends approximately east-west as it crosses the claim group and passes close to the Independence mine and Red Cedar occurrence. A later more regional folding produced two antiforms with axial planes trending southeast which is best expressed 5 miles northeast of the claim group.

Poulsen has noted that the fault and shear network of the Wabigoon Subprovince consists of two distinct elements: east-trending dextral faults and conjugate faults striking 030° reflecting a late tectonic shortening of the subprovince about a northwesterly trending axis. Gold mineralization appears to be localized in subsidiary structures related to the fault zones. Ductile shear zones in plutonic and massive metavolcanics and also dilatant zones parallel to regional cleavage would be priority targets for gold mineralization.

METHODS OF INVESTIGATION

Mapping

A 1 inch -to-800ft scale geological map was made of the portion of the claim-group which had not been previously mapped in detail by the O.G.S. The portion of the claim-group which was previously mapped by Fumerton (1981) was checked and modified where necessary. The property was mapped by traversing along claimlines and inbetween claimlines by means of pace and compass. As many outcrops as possible were examined in each claim by traversing and examining pre-selected outcrops discerned from air photographs. Two north-south claimlines which were recut, brushed out and hip-chained were used to provide traverse control. Claimlines were also hip-chained to provide further control on outcrop location. The grid at the southern end of the property was traversed and mapped. Rock samples were collected and several were later selected for thin-sectioning to provide additional information.

Geochemical Rock Sampling

During the course of mapping rock samples were collected for the geochemical detection of gold and also for multi-spectrographic analysis on selected samples. Samples were collected from outcrops showing quartz veining, sulphides, felsic lithologies or shearing. Grab samples were also taken from various trenches, pits and shallow exploration shafts. Each sample was collected by hammer and chisel and were about 2 pounds in weight and no more than five feet of sample width was taken.

Geochemical analysis was by neutron activation and done by X-Ray Assay Laboratory of Toronto. Lower detection limit is 1 part per billion. Submitted samples were crushed to $\frac{1}{4}$ inch of which several hundred grams were split for final pulverization. Spectrographic analysis was done by a combination of neutron activation and D.C plasma. A total of 150 samples were collected from the claim group.

Presentation of Data

The 1 inch - 800ft scale geological map is produced as figure 4. In conjunction a same scale base map showing claim boundaries and the location of various old workings is also included as figure 5 to avoid map clutter. A larger scale map of the visible trenches at the Red Cedar Occurrence is contained in figure 6. Geochemical sample locations are shown on figure 5.

The 1"-800' scale base map was produced by optically enlarging a Lands and Forest 1"- $\frac{1}{4}$ mile map. Geological information from Fumerton's map was also enlarged and traced onto figure 4. Note that the claim boundaries as depicted in figure 5 can only be considered as approximations and would require proper surveying to establish their correct positions.

10. DISCUSSION OF RESULTS

The geology of the Bennet Lake claim group is essentially a continuation of lithologies and structure as previously mapped by Fumerton (1981), however there are some refinements that are discussed below.

The central and northern part of the claim-group is underlain predominately by a biotite schist - medium-grade metasediments of the Wabigoon Subprovince. This rock appears to be a quartz arenite with about 15-20% biotite, 60% quartz, 20% feldspar and minor late stage chlorite and white mica. Note that contacts drawn between the metasediments and metavolcanics have been inferred from mapped outcrops and geophysical data.

Common to the metasediments are concordant, syntectonic, fine grained felsic intrusives as dikes and stocks. Fumerton's map has referred to these as biotite tonalites and the same naming is retained. These intrusions are usually a couple of feet to 50 feet wide, massive with little to no foliation, and often tapering at its ends. As outcrops they form preeminent humps above the biotite schists. Unmineralized quartz veining may occasionally be present. Several larger stock like felsic intrusive bodies occur on the western side of the property and at one place form a 100 foot bluff face south of the '818' Glory hole.

Within the metasediments a few outcrops of felsic extrusive metavolcanics have been located, particularly on claim 762821. There are some problems distinguishing this lithology from the similar appearing fine grained felsic intrusives since metamorphism and structural complexity have obliterated the small scale primary textures. At several spots it would appear that the two lithologies merge into each other.

Two areas stand out as being felsic extrusives. The first at sample location 2292 and 2293 contains folded and elongated fragments in a light green sericitic matrix with numerous carbonate veinlets. Only about 15-20% feldspar crystals/grains are visible with 25% polygonized quartz crystals/grains resting in a white mica rich matrix and indiscript recrystallized quartz-feldspar groundmass. On the outcrop the rock is well foliated with interbands of differential composition, either being more siliceous or sericitic. Adjacent, to the north, is a dike or sill of a coarse grained mica-aceous rich quartz-feldspar porphyry. Interestingly a small sliver of magnetic schist separated the porphyry from the felsic pyroclastic. Outcrop 2195 would appear to be a felsic tuff unit. Geochemical surface rock samples returned negligible values.

Another outcrop of felsic metavolcanic occurs at sample location 2175 which is massive in appearance, possibly a flow, but petrographically similar to No. 2192. One hundred feet north, at sample location 2177, the outcrop contains felsic fragments, one foot or less in length, suggesting a pyroclastic horizon.

Some other fine grained leucocratic lithologies which appear to be felsic metavolcanic extrusives were noted but closer investigation may reveal it to be either a metamorphosed tonalite intrusive or a metasediment comprised of reworked felsic tuffs. The latter case may be more common. At location 2216 a thin unit mapped as a leucocratic arenite is overlain by a very similar leucocratic rock scouring and infilling the bottom unit.

Pebble conglomerate bands occur as distinct units within the metasediments in the western and mid-northern parts of the claim-group and range in width from a couple of feet up to 300 feet. Comprised of well elongated, rounded, sucrosic quartz clasts, within a fine grained biotite bearing and white mica leucocratic matrix, these pebble clasts range from 5 inches long by 1½ inch wide or less. Clast sizing in a band tends to be homogenous with one size being predominant. At claim 762818 two narrow pebble conglomerate units are separated by a leucocratic quartz arenite that contains a minor amount of small (1 inch or less) pebbles and in which the matrix contains a lesser amount of biotite.

In the northwestern and northern area of the property thin magnetic ironstone units are present within the metasediments. These

nits consist of two main bands and a minor third one. The northern most band consists of two somewhat parallel beds varying in width from 5 to 20 feet and even less. As described by Young (1960) the ironstone consists of thin, lenticular bands of magnetite separated by wider bands of siliceous sediments and argillic material. In contrast to Young's map, the ironstone was not located as bands on the southern limb of the syncline. A few broken pods of ironstone were found by the '818' Glory Hole within a biotite schist and at the southeastern corner of claim 762822 as a small lense of unknown orientation.

A particularly distinctive rock lithology has been noted occurring on claims 762058, 762059 and partially along the north shore of Bennett Lake. It would appear to be a reworked volcanoclastic, now present as a quartz wacke. Fumerton's map indicates a similar rock just to the north of claim 762058. This unit exhibits severe deformation and destruction of primary textures. It's composed of 25-30% feldspar, several percent white mica, minor green biotite and chlorite, and an excessive quartz rich groundmass. Also a minor amount of interstitial carbonate is present. Feldspars and quartz especially are polygonized and granulated. In addition this unit shows a variable degree of magnetism, being strongly magnetic along the lakeshore and at sample location 2153 but not elsewhere. Minor amounts of pyrite, silica flooding and occasional quartz and carbonate veinlets are present and tend to correspond to some interesting geochemical gold values.

The Red Cedar Occurrence contains several small (2 inch - 1½ foot wide) quartz veins aligned with minor shear zones trending east-west. Host rocks are a jumbled mess of intercalated biotite gneiss/schist, amphibolite gneiss, minor quartz wacke and ironstones (according to Fumerton these are composed of hematite, iron silicates and quartz). Sulphide staining is ubiquitous and pyrite, sometimes as 1 inch diameter clumps, is common. Geochemical analysis confirmed that gold concentration varies from trace to 900 ppb with a preferential concentration of gold in shear zones. Other major workings investigated where:

- 1) A 40 foot deep exploratory shaft on claim 762820 sunk on a 7 foot wide quartz vein, nearly vertical, within a wall rock of pebble conglomerate and biotite schist. The hanging wall is silica

flooded and contains sulphides as laminations. A minor amount of pyrite and arsenopyrite are present in the quartz vein. Geochemical gold values of the vein and selective grabs of the dump material returned essentially trace values.

- 2) The '818' Glory Hole on claim 762818, unknown depth, is situated at the contact between biotite schists on the north and a felsic intrusive on the south. Several intensely sulphide stained quartz pods occur inbetween the contact. Geochemical values of selected dump material samples was nil.

Overburden is a sandy soil in the area north of Bennett Lake and is thought to be only several feet thick. South of the lake the depth of the sandy overburden is unknown but appears to shallow going southwards.

Geophysical data inconjunction with field observations indicates the following:

- Conductor 2 coincides with intense carbonatized shearing and localized quartz veining along the north shore of Bennett Lake. Pyrite content was up to 2% along this trend. This conductive zone continues eastwards to the No. 3 conductive zone and likely represents a fault splay off the Little Turtle Lake Fault.
- Conductor 1 follows the approximate alignment of the Little Turtle Lake Fault and mimics the small bluff which marks the outcrop margin south of the lake. The rock is intensely sheared, almost mylonitic and with isolated minor concentrations of pyrite.
- Conductor 4 and 5 response resolution is partially obscured by sandy overburden in this area and are though to be structurally associated with the Little Turtle Lake Fault.
- Listed as a possible conductor axis, zone 2A may represent a formational or volcanic flow contact. Within this vicinty the rock becomes more hornfelsic to the north.
- Conductor 6 is an isolated short strike length zone with a direct magnetic association and high conductance. On the property this area coincides with the contact between metasediments and meta-volcanics and is possibly associated with a graphitic layer that was found to the east at sample location 2216.
- Conductor 7 corresponds to a westerly trending dike of quartz feldspar porphyry with a minor amount of quartz veins, trace pyrite and likely represents a shear zone. The three short possible

- bedrock conductors north of zone 7 may well be reflections of the syntectonic felsic dikes along structurally weak zones .
- Conductor zone 10 is associated with a high magnetic structure and has a moderate conductance value. The metavolcanic is a medium grained gabbroic rock bounded by biotite schists. A very thin band of quartz wacke, similar to that on claim 762058, was located along this conductor trend along with a 10 feet or greater width quartz feldspar porphyry.
- The northeast trending VLF conductors in the northwest and northern margin of the claim-group reflect the conductivity of the ironstone.
- A northwesterly trending high frequency/VLF axis coincides partially with the silicified and deformed volcanoclastic (quartz wacke) on claim 762058.
- Several northerly trending faults are postulated to occur in the southern half of the claim-group based on geophysical results coincident with topographic valleys.

11. CONCLUSIONS & RECOMMENDATIONS

Lithology as previously mapped by Fumerton (1981) extends into the claim area, with metasediments being the main rock type in the central and northern part of the claim-group. Metavolcanics are present along the southern margin of the claims and along the northern shore of Bennett Lake. The predominant metasediment is a biotite schist, originally a quartz arenite. Pebble conglomerate and leucocratic quartz rich band are commonly intercalated within the biotite schist which is also intruded by biotite dikes and stocks. Several localities of what appears to be felsic extrusives were located and are suggestive in some cases of being reworked. Some difficulty was experienced in distinguishing between felsic extrusives and intrusives due to lack of primary textures. A narrow unit of volcanoclastic, possibly originally a tuff unit, was discovered along the north shore of Bennett Lake and also within a couple of other claims. This unit has several interesting geochemical gold values associated with siliceous and pyrite bearing areas. Whereas the rest of the geochemical samples returned nil to negligible values.

Of all the old workings investigated within the property the Red Cedar Occurrence is the largest. Examination of this occurrence

Confirmed previous assessments of low gold values associated with quartz veins in small shear zones. A previously unknown exploratory shaft was found to be situated in a localized quartz pipe within silicified pebble conglomeratic rock.

An assessment of geophysical survey data with ground observations noted that a conductive zone on the north shore of Bennett Lake is likely a shear splay off the Little Turtle Lake Fault. Several small conductive zones on the southeast end of the property may be structural zones also related to the east trending Little Turtle Lake Fault. In the centrally located claims the conductive zones coincide with a metasediment - metavolcanic contact and/or graphite lens and areas of felsic intrusive dikes. The northwest region of the claim-group is underlain by narrow bands of magnetic ironstone within the biotite schists. However field mapping did not reveal these ironstone bands to occur along the southern limb of the main syncline. Geophysical information confirms the presence of the large synclinal structure.

Several northerly striking faults, on the eastern half of the property, are postulated.

The presence of a jumbled geophysical response and observable geology within the area north and south of the Red Cedar Occurrence are suggestive of a tectonically complex geology which requires further study and evaluation.

It is recommended that the company:

- 1) Proceed with cutting a north-south grid, 100 metre interval, on claims 762058, 762059, 762062, along the north shore of Bennett Lake, claims 762061-762065 and 762066-762067 so as to provide survey control for subsequent geological investigation.
- 2) Conduct further geological mapping at a scale of 1 inch to 200 feet and rock sampling to provide additional deliniation and information of the volcanoclastic unit (quartz wacke).
- 3) Conduct geological mapping at a scale of 1 inch to 200 feet to evaluate conductive zone No. 10.
- 4) Consider dewatering the 40 foot deep exploratory shaft and investigate the gold mineralization potential.

Consider doing a soil geochemical survey within the area just north of conductor zone No. 6 to delineate any subcrop mineralization beneath this overburden covered area.

- 6) Consider using a bulldozer to expose any subsequent anomolous zones discovered by additional mapping and/or sampling.

The above work is recommended before any drilling is considered.

Peter A. Fernberg
Peter A. Fernberg
Geologist B.Sc

December 20, 1984

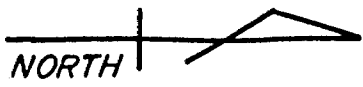
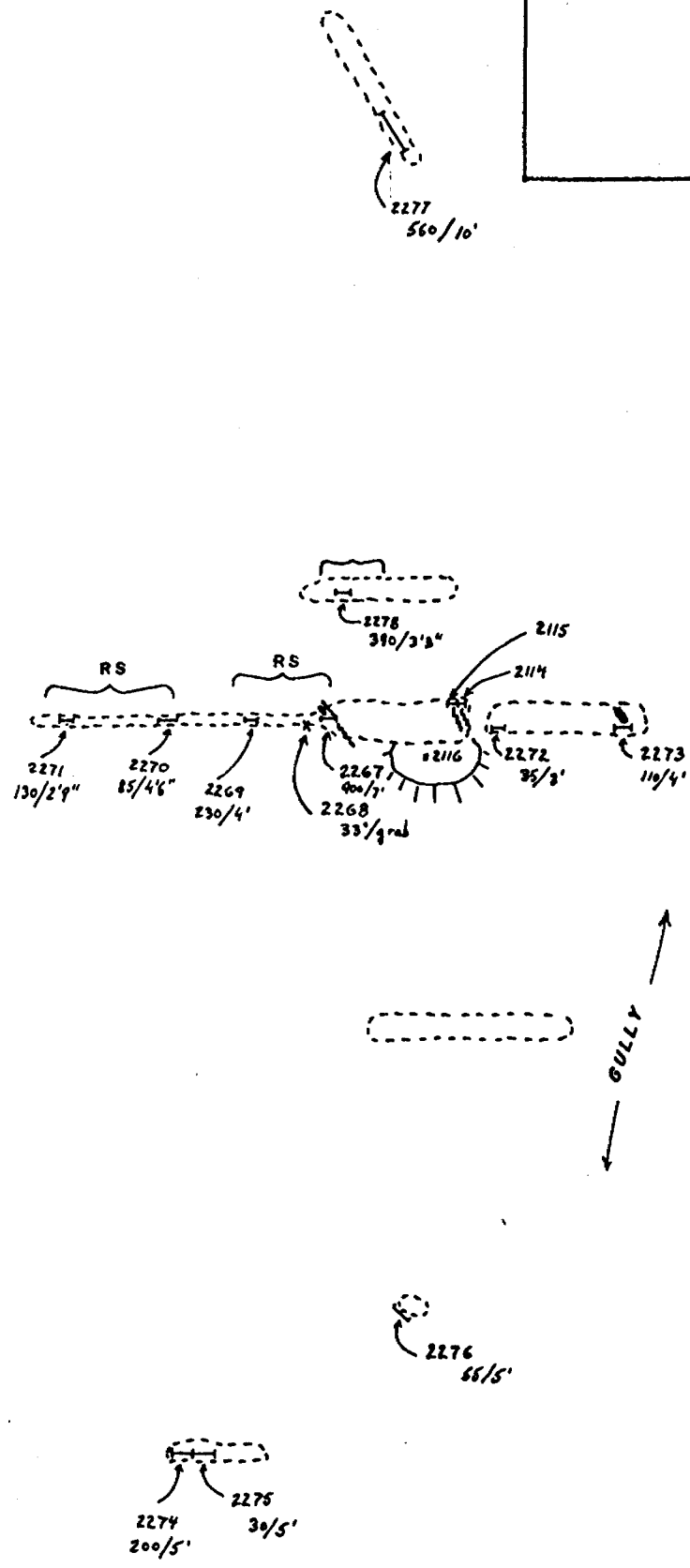
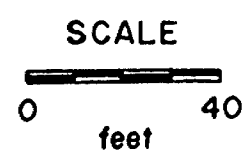


Figure 5:
Red Cedar Occurrence
trench and sample location



- trench
- shear
- quartz vein
- RS** rusty zone
- dump
- X, |** sample location
- sample number
- 2214**
- 950/2** interval in ft.
- gold ppb



Peter A. ...

SELECTED REFERENCES

Fumerton, S.L.

1981: Precambrian Geology of the Calm Lake Area, Rainy River District
Ontario Geological Survey Preliminary Map P. 2405, (Revised)
Geological Series, Scale 1:15 840 or 1 inch to $\frac{1}{4}$ mile.
Geology 1980.

Poulsen, K.H.

1983: Mineral Deposits of the Fort Frances - Mine Centre Area;
Ontario Geological Survey Guidebook.

Poulsen, K.H.

1983: Structural Setting of Vein Type Gold Mineralization in Mine
Centre - Fort Frances Area: Implications for the Wabigoon
Subprovince in The Geology of Gold in Ontario; Ontario
Geological Survey Miscellaneous Paper 110., pg. 174-180.

Wilkinson, S.J.

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 $\frac{1}{2}$ 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 June to August, 1984.

Ingleside, Ontario

Date: January 11, 1985

Peter Fernberg
Geologist, B.Sc

Peter A. Fernberg

XRAL

X-RAY ASSAY LABORATORIES LIMITED

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

COPY TO

INVOICE TO
 Morrison Petroleums Ltd
 Attn: A.W. Stollery
 605 Fifth Avenue S.W., Ste.1003
 Calgary, Alberta
 T2P 3H5

Customer No. 1012

SUBMITTED TO
 Argor Explorations Ltd
 Attn: A.W. Stollery
 P.O. Box 99
 Unionville, Ontario
 L3R 2L8

INVOICE NO.	INVOICE DATE	WORK ORDER NO.	DATE SUBMITTED
21702	24-Jul-84	17226	27 jun 84

TERMS

Terms Net 30 days, 1.5% interest on account over 30 days

CLIENTS P.O. NO.	CLIENT PROJECT NO.	TYPE OF SAMPLES SUBMITTED
		Rock

NO. OF PKGS	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM
2 Boxes	Small Fry	11598	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
14	Au, PPB	10,7	7.00	98.00 ¹
6	Multi Element, Exploration Pkg.	20,14,7	34.00	204.00 ¹
3	Ag	10	7.50	22.50 ¹
14	Rock, Crushing & Milling	1	2.75	38.50 ¹
			Sub-total	\$ 363.00 ¹

APPROVED: *[Signature]*
 APPROVAL: *[Signature]*
 3730 XRAY
 6210 XRAY
 JULY 84
 Sept 19/84
 10, 84

Independent mine

[Signature]

3 month 2120 → 2116

PAID
PAT

363.00
 - 294.75
 68.25

MISC CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES	
	7.50				
	OTHER			SURCHARGE - RUSH SERVICE	\$ 7.50

RECEIVED AUG 13 1984

ORIGINAL INVOICE	TOTAL IN CANADIAN FUNDS	\$ 370.50
------------------	--------------------------------	-----------

XRAL

X-RAY ASSAY LABORATORIES LIMITED

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

COPY TO

VOICE TO

MORRISON PETROLEUMS LTD
ATTN: A. W. STOLLERY
801 - 6TH AVENUE SOUTH WEST, SUITE 2700
CALGARY, ALBERTA
T2P 3K2

SUBMITTED 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
21959	15-AUG-84	17642	1-AUG-84

TERMS

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

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

NO. OF PKGS	SHIPPED VIA	WAY BILL NO	SHIPPED FROM
1 BOX	SMALL FRY	13482	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT									
1 9	AU, PPB	2,10, 7, 0, 0, 0	7.00	63.00									
2 9	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	99, 1, 0, 0, 0, 0	2.75	24.75									
<p>↳ <i>Beaver Lake</i></p> <table border="1"> <tr> <td>2203</td> <td>209</td> <td>21</td> </tr> <tr> <td>204</td> <td>208</td> <td>212</td> </tr> <tr> <td>205</td> <td>209</td> <td>213</td> </tr> </table>				2203	209	21	204	208	212	205	209	213	
2203	209	21											
204	208	212											
205	209	213											
<p>MORRISON PETROLEUM LTD</p> <p>APPROVAL: <i>AWB</i> / <i>Independent Mine</i></p> <p>CALC VERIFIED: <i>[Signature]</i></p> <p>APPROX DR: <i>5730 XRAY</i></p> <p>CR: <i>WALD XRAY</i></p> <p>APPROX NORTH: <i>Aug 84</i></p> <p>ENTERED: <i>Sept 19/84</i> BY: <i>[Signature]</i></p> <p>BATCH REF #: <i>10185</i></p> <p>DESCRIPTIONS: _____</p>													
SUB-TOTAL				\$ 87.75									

**PAID
POF**

MISC. CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES	AMOUNT
OTHER	5.00			SURCHARGE - RUSH SERVICE	\$ 5.00

TOTAL IN CANADIAN FUNDS

92.75

XRAL

X-RAY ASSAY LABORATORIES LIMITED

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

INVOICE TO:

MORRISON PETROLEUMS LTD
ATTN: A.W. STOLLERY
801 - 6TH AVENUE SOUTH WEST, SUITE 2700
CALGARY, ALBERTA
T2P 3M2

SUBMITTED 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
22311	14-SEP-84	17943	27-AUG-84

TERMS

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

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

NO. OF PKGS	SHIPPED VIA	WAY BILL NO	SHIPPED FROM
2 BOXES	SMALL FRY	14970	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT \$
1. 19	AU	12, 10, 20, 0, 0, 0	7.00	133.00 ✓
2. 1	30 ELEMENT ANALYSIS	90, 13, 0, 0, 0, 0	22.00	22.00 ✓
3. 19	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	99, 1, 0, 0, 0, 0	2.75	52.25 ✓

MORRISON PETROLEUMS LTD
CALG VERIFIED 26 DESCRIPTIONS
APPROVED 1781
3730 XRAY
6210 XRAY
Aug 84
08/11/84
0194

Independence Mine

Actually only 17 samples analyzed
2267 → 2297
6913 → 6915
6913-6918 → Hyd Property
6 samples x 7.00 Au = 42.00
1 30E analysis x 22 = 66.00
6 PAP → 16.50
80.50

PAID PDF

207.25
80.50
126.75
RECEIVED SEP 28 1984

MISC. CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES	OTHER	SURCHARGE - RUSH SERVICE
	5.00					
						5.00

TOTAL CANADIAN FUNDS \$ 212.25

ORIGINAL INVOICE

XRAL

X-RAY ASSAY LABORATORIES LIMITED

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

COPY TO

INVOICE TO

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

SUBMITTED 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
21865	08-AUG-84	17348	9-JUL-84

TERMS

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

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

NO. OF PKGS	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM
3 BOXES	SMALL FRY	12159	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
1. 40	AU	{ 12, 10, 20, 0, 0, 0	7.00	280.00
2. 2	MULTI ELEMENT, EXPLORATION PACKAGE	{ 15, 20, 14, 7, 0, 0	34.00	68.00
3. 40	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	{ 99, 1, 0, 0, 0, 0	2.75	110.00
		→ Record label # 2177 → 2166		

MORRISON PETROLEUM LTD.

CALC VERIFIED JS

DESCRIPTIONS

APPROVAL JS

Imperial

Independence Mine

Mine Proj

3730 XRAY

6210 XRAY

AUG 84 CHECK #

SEP 16/84 BY JS

60173

PAID

RECEIVED AUG 21 1984

SUB-TOTAL \$ 455.00

MISC CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES
	7.50			
	OTHER			SURCHARGE - RUSH SERVICE
				7.50

TOTAL CANADIAN FUNDS

\$ 462.50

ORIGINAL INVOICE

XRAL

X-RAY ASSAY LABORATORIES LIMITED

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

COPY TO

INVOICE TO

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

SUBMITTED 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
21899	10-AUG-84	17420	

TERMS

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

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

NO OF PKGS	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM
3 BOXES	SMALL FRY	12488	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
1. 27	AU	12,10,20, 0, 0, 0	7.00	189.00
2. 6	MULTI ELEMENT. EXPLORATION PACKAGE	15,20,14, 7, 0, 0	34.00	204.00
3. 1	BY	15,20, 0, 0, 0, 0	10.00	10.00
4. 6	AU, 30 GMS	50,10, 7, 0, 0, 0	11.00	66.00
5. 6	AG	50,10, 0, 0, 0, 0	11.00	66.00
6. 33	ROCK, CRUSHING & MILLING (ROTHME STEEL MILL)	99, 1, 0, 0, 0, 0	2.75	90.75
7.	PULVERIZING 2 LBS. OVERSIZE SAMPLE	1000, 1, 0, 0, 0, 0	1.00	1.00

29 samples (Netted later)
↳ # 2187 → 2195

*Independence
Imperial Mine Proj Mine*

8501.75
133.00
8368.75

4 samples (8910, 911, 912)
↳ Hyatt's

4 Ag → 44.00
4 Au 30 gm → 44.00
1 Spec → 34.00

PAID

4 Trp → 11.00
123.00

RECEIVED AUG 24 1984

MORRISON PETROLEUM LTD

CALC VERIFIED *[Signature]*

APPROVAL *[Signature]*

DESCRIPTIONS

3730 XRAY

OR 6310 XRAY

AUG 84

Sept 4/84

10123

[Signature]

SHIPPING CHARGES	CUSTOMER BROKERAGE	TELEX	MINIMUM CHARGES
7.50			
MISC. CHARGES	OTHER	BURCHARGE - RUSH SERVICE	

TOTAL CANADIAN FUNDS



X-RAY ASSAY LABORATORIES LIMITED

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

INVOICE TO:

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

SUBMITTED 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
21917	13-AUG-84	17512	23-JUL-84

TERMS

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

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

NO. OF PAGES	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM
2 (30)	EMAL FRY	12789	

QUANTITY	DESCRIPTION METHOD	XRAY CODE	UNIT COST	AMOUNT
1. 7	AU	12.10.20. 0. 0. 0	7.00	49.00 *
2. 7	ROCK CRUSHING & MILLING (CHROME STEEL MILL)	99. 1. 0. 0. 0. 0	2.75	19.25 1
SAMPLES 2196 ↓ 2202				

Independence Mine

Imprial Mine Proj

MORRISON PETROLEUM LTD.

CALC VERIFIED *ll*

DESCRIPTIONS

APPROVAL *ll*

ARGOR LA 3730 XRAY

LAID XRAY

DATE RECEIVED Aug '84

Sept 16/84

Per 173

PAP FILE

RECEIVED AUG 21 1984

SUB-TOTAL

\$ 68.25

MISC CHARGES	SHIPPING CHARGES	CUSTOMER ORDER NO.	TELEX	MINIMUM CHARGES
	5.00			
OTHER				SURCHARGE - RUSH SERVICE
				\$ 5.00

TOTAL IN CANADIAN FUNDS

ORIGINAL INVOICE



XRAL

X-RAY ASSAY LABORATORIES

LIMITED

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

COPY TO

INVOICE 1:

Morrison Petroleum Ltd
Attn: A.W. Stollery
801-6th Ave. S.W., Ste. 2700
Calgary, Alberta
T2P 3W2

SUBMITTED 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
21748	27-Jul-84	17238	27-Jun-84

TERMS

Net 30 days
1.5% per month int. on acct. over 30 day

CLIENTS PO NO	CLIENT PROJECT NO	TYPE OF SAMPLES SUBMITTED
		Rock

NO OF PKGS	SHIPPED VIA	WAY BILL NO	SHIPPED FROM
	Small Fry (Part of 17226)	11598	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
19	Au, PPB	10,7	7.00	133.00
7	Multi Element, Exploration Pkg.	20,14,7	34.00	238.00
2	Ag	10	7.50	15.00
19	Rock, Crushing & Milling	1	2.75	52.25

*Bennet Lake
↳ # 2101 → 2119*

[Handwritten Signature]

*Independence
mine*

RECEIVED AUG - 3 1984

MORRISON PETROLEUM LTD.
 SALES ORDER *JS* DESCRIPTIONS
 APPROVAL *PLS*
 ACCTS NO *3730 XRAY* IMPERIAL MINE
 CODE *OR 6210 XRAY* PROJECT
 POST MONTH *JULY '84*
 DATE REC'D *AUG 29 1984* BY *[Signature]*
 INVOICE REF # *20167*

PAID P/A

\$ 438.25

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

ORIGINAL INVOICE

TOTAL CANADIAN FUNDS \$ 438.25

XRAL

X-RAY ASSAY LABORATORIES *Jill* LIMITED

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

COPY 10

VOICE TO:

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

ADMITTED 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
22220	07-SEP-84	17744	10-AUG-84

TERMS

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

INSTRUMENT P.D. NO.	CLIENT PROJECT NO.	TYPE OF SAMPLES SUBMITTED
		ROCK

NO. OF PKGS	SHIPPED VIA	WAY BILL NO	SHIPPED FROM
2 BOXES	SMALL FRY	13769	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
1. 3	AG. MIXED ACID DIGESTION	1, 7, 0, 0, 0, 0	2.30	6.90
2. 29	AU, PPB	2, 10, 7, 0, 0, 0	7.00	203.00
3. 4	MULTI ELEMENT, EXPLORATION PACKAGE	15, 20, 14, 7, 0, 0	34.00	136.00
4. 3	30 ELEMENT ANALYSIS	90, 13, 0, 0, 0, 0	22.00	66.00
5. 29	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	99, 1, 0, 0, 0, 0	2.75	79.75

*benet tube
↳ # 2214 → 2242*

MORRISON PETROLEUMS LTD

CALC VERIFIED *JL* DESCRIPTIONS

APPROVAL *AS*

ACCTS DR 3730 XRAY

CR 6210 XRAY

DATE SEP 84 CHEQUE #

DATED Sept 25/84 BY *JL*

BATCH REF # 20189

Independence Mine Project

RECEIVED SEP 18 1984

PAY PAY

SUB-TOTAL \$ 491.65

MISC CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES	
	7.50				
OTHER				SURCHARGE - RUSH SERVICE	\$ 7.50

TOTAL IN CANADIAN FUNDS \$ 499.15

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 _____ 1 ppm 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 _____ 76 km (47 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 _____



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

Fwm 2.7646

- 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.

Jan 12/84 #268-84

Mining Act

Type of Survey(s) GEOLOGICAL & GEOPHYSICAL (Airborne) Township or Area Bennett Township M-1920

Claim Holder(s) (ARGOR EXPLORATIONS LIMITED) PETER FERNBERG Prospector's Licence No. A38144 H.11461

Address 1003-605 5TH AVE CALGARY, Alberta T2P 3H5) RR#2, INGLESIDE, ONT. K0C 1M0

Survey Company AERODAT LIMITED 3883 Nashua Dr Mississauga, Ontario Date of Survey (from & to) 2 6 84 Total Miles of line Cut 1/4 mile

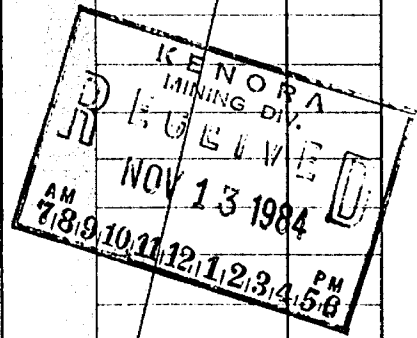
Name and Address of Author (of Geo-Technical report) GEOLOGICAL; Peter Fernberg, RR#2, Ingleside, Ontario K0C 1M0 / GEOPHYSICAL; Richard Kee Aerodat Ltd

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
For each additional survey: using the same grid: Enter 20 days (for each)	- Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	7.8
	Geochemical	
Airborne Credits	(VLF) Electromagnetic	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Magnetometer	40
	Radiometric	40

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
K	762058	2.8			
	762059	2.8			
	762072	2.8			
	762073	2.8			
	762086	2.8			
	762087	2.8			
	762811	2.8			



Expenditures (excludes power stripping)

Type of Work Performed Geochemical Assay on rock samples

Performed on Claim(s) 762058 → 762811

Calculation of Expenditure Days Credits

Total Expenditures \$ 298.75 ÷ Total Days Credits 15 = 19.9

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.

762058

Total number of mining claims covered by this report of work. 7

Date Nov 9/84 Recorded Holder or Agent (Signature) Peter P. Pady

For Office Use Only

Total Days Cr. Recorded 650.9 Date Recorded Nov 13/84 Mining Recorder ME Lemay/acting

Date Approved as Recorded See Revised Statement Branch Director

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 Nov 9/84 Certified by (Signature) Peter P. Pady

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 <i>GEOLOGICAL</i>												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
10				70		1		71		9		7.8

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim



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

2.7646
FWM

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.

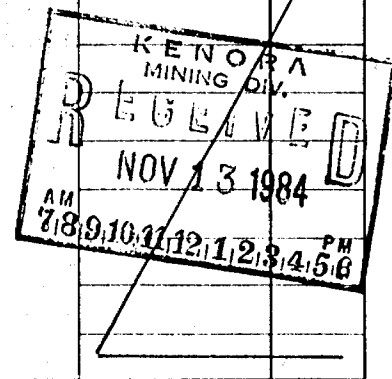
Jan 12th
#267-84

Mining Act

Type of Survey(s) GEOLOGICAL & GEOPHYSICAL (Air borne)	Township or Area Area of Bennett Lake G.2667
Claim Holder(s) (ARGON EXPLORATIONS LIMITED) PETER FERNBERG.	Prospector's Licence No. A38144 H.11461
Address (1003-605 5TH AVE Calgary, Alberta T2P 3H3) RR#2, INGLESIDE, ONT KOC1M0	
Survey Company HERODAT LIMITED 3883 Nashua Dr Mississauga, Ontario	Date of Survey (from & to) 2 6 84 24 8 84 Day Mo. Yr. Day Mo. Yr.
Name and Address of Author (of Geo-Technical report) GEOLOGICAL; Peter Fernberg, RR#2, Ingleside, Ontario KOC1M0	Total Miles of line Cut 1.73 GEOPHYSICAL; Richard Yee Herodat Ltd

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	16.4
	Geochemical	
Airborne Credits	(VLF) Electromagnetic	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Magnetometer	40
	Radiometric	40

Mining Claims Traversed (List in numerical sequence)		
Prefix	Mining Claim Number	Expend. Days Cr.
K	762 061	3.6
	762 062	3.6
	762 063	3.6
	762 064	3.6
	762 065	3.6
	762 066	3.6
	762 067	3.6
	762 068	3.6
	762 069	3.6
	762 070	3.6
	762 074	3.6
	762 075	3.6
	762 076	3.6
	762 077	3.6
	762 078	3.6
	762 079	3.6
	762 080	3.6
	762 812	3.6
	762 813	3.6
	762 814	3.6
	762 815	3.6
	762 816	3.6
	762 817	3.6



Expenditures (excludes power stripping)

Type of Work Performed
GEOCHEMICAL ASSAY ON ROCK SAMPLES

Performed on Claim(s)
762 061 → 762 070, 762 074 → 762 080
762 812 → 762 819

Calculation of Expenditure Days Credits

Total Expenditures	Total Days Credits
\$ 1941.90	15 = 129.46

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.

762061 Total number of mining claims covered by this report of work. **35**

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

For Office Use Only

Total Days Cr. Recorded **3506** Date Recorded **Nov 13/84** Mining Recorder **McLemay Acting**

Date Approved as Recorded **see Reused Statement** Branch Director

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, KOC 1M0

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

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 <i>GEOLOGICAL</i>												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
80				560		17		577		35		16.4

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input style="width: 50px; height: 20px;" type="text"/>				<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input style="width: 50px; height: 20px;" type="text"/>				<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input style="width: 50px; height: 20px;" type="text"/>				<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>

Recorded Holder	ARGOR EXPLORATIONS (PETER FERNBERG)
Township or Area	BENNETT 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 <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	\$1941.90 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS: K 762061-62-64-65-67-68-69-70 762074-75-76-78-79 762812-13-14-18-19-20-21-24-25-26-67-29 129.46 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.

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

**Technical Assessment
Work Credits**

File
2.7646

Date
1985 02 13

Mining Recorder's Report of
Work No. 268-84

Recorded Holder	ARGOR EXPLORATIONS LIMITED (PETER FERNBERG)
Township or Area	BENNETT TOWNSHIP

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 <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	\$298.75 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS: K 762058-59-72-73-86-87 762811 19.9 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.

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:

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 <i>GEOLOGICAL</i>												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
80				560		17		577		35		16.4

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input type="text"/>				<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input type="text"/>				<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input type="text"/>				<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>

**Technical Assessment
Work Credits**

File 2.7646

Date 1985 02 13 Mining Recorder's Report of Work No. 268-84

Recorded Holder ARGOR EXPLORATIONS LTD (PETER FERNBERG)

Township or Area BENNETT TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ 40 days Magnetometer _____ 40 days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ 7.8 days Geochemical _____ days Man days <input checked="" type="checkbox"/> Airborne <input checked="" type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	K 762058-59-72-73-86-87 762811

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:

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 <i>GEOLOGICAL</i>												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
10		7		70		1		71		9		7.8

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
		7										

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
		7										

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
		7										

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

January 12, 1984

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 Bennett Lake Claim-Group, claim nos. 762058 - 763059, 762061 - 762070, 762072 - 762080, 762086 - 762087, 762812 - 762829, 778423 - 778424, and 778426. 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. Also note that airborne geophysical credits requested are 40 days per claim per each geophysical instrument - magnetometer (total intensity) and VLF - EM.

*Send correspondence to
Argor explor.*

Yours sincerely,

Peter A. Fernberg

Peter A. Fernberg
Geologist B.Sc.

MINING CLAIMS TRAVERSED CONTINUED

K762074
K762075
K762076
K762077
K762078
K762079
K762080
K762812
K762813
K762814
K762815
K762816
K762817
K762818
K762819
K762820
K762821
K762822
K762823
K762824
K762825
K762826
K762827
K762828
K762829
K778426

Area of Bennett Lake

Total Claims: Area of Bennett Lake - 36 claims
Bennett Township - 9 claims

1985 02 13

Your File: 267-84,268-84
Our File: 2.7646

Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

RE: Geophysical (Electromagnetic & Magnetometer)
and Geological Survey and Data for Assaying
on Mining Claims K 762058, et al, in Bennett
Township and Bennett Lake Area

The Geophysical (Electromagnetic & Magnetometer)
and Geological Survey and assaying expenditures
as shown on the attached statement 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

S. Hurst:mc

cc: Argor Explorations Limited
1003-605 5th Avenue
Calgary, Alberta
T2P 3H5

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

cc: Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

cc: Resident Geologist
Kenora, Ontario

Encl.

	GC	GL		GC	GL		2-7646
762061	✓	✓	762817		✓		
62	✓	✓	18	✓	✓		
63		✓	19	✓	✓		
64	✓	✓	20	✓	✓		
65	✓	✓	21	✓	✓		
66		✓	22		✓		
67	✓	✓	23		✓		
68	✓	✓	24	✓	✓		
69	✓	✓	25	✓	✓		5
70	✓	✓	26	✓	✓		
74	✓	✓	27	✓	✓		
75	✓	✓	28		✓		
76	✓	✓	29	✓	✓		
77		✓	762058	✓	✓		
78	✓	✓	59	✓	✓		
79	✓	✓	72	✓	✓		
80		✓	73	✓	✓		
762812	✓	✓	86		✓		
13	✓	✓	87		✓		
14	✓	✓	762811		✓		
15		✓					
16		✓					

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

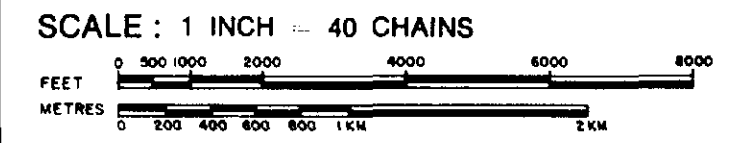
LEGEND

- 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
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

NATURAL RESOURCES
 JAN 25 1955
 TITLES SECTION

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 | |
| CROWN LAND SALE | |
| ORDER-IN-COUNCIL | |
| RESERVATION | |
| CANCELLED | |
| SAND & GRAVEL | |



ACRES	HECTARES
40	16

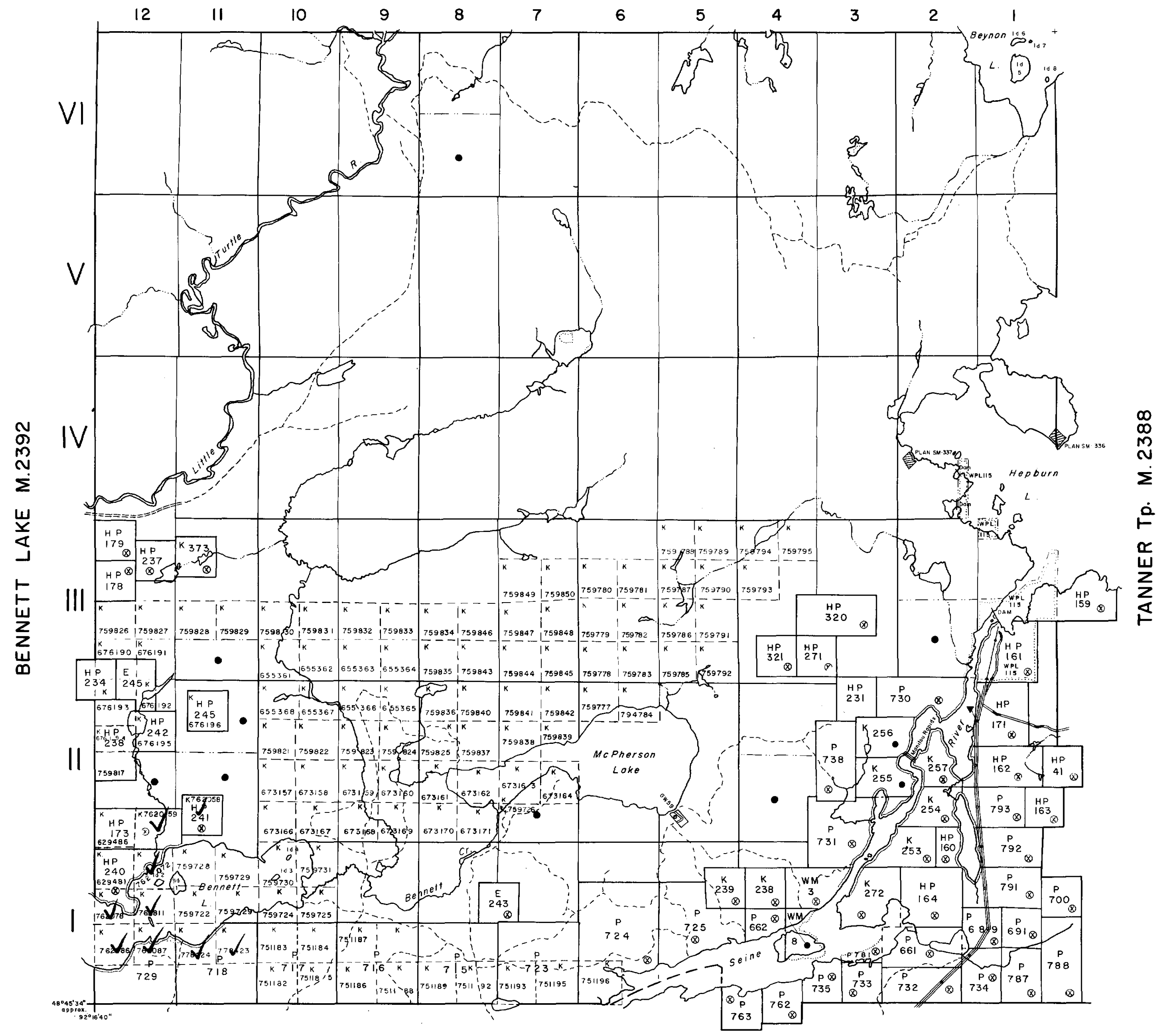
TOWNSHIP
BENNETT
 DISTRICT
 RAINY RIVER
 MINING DIVISION
 KENORA

Ministry of Natural Resources
 Ontario Surveys and Mapping Branch

Date 6-76 Plan No.
M.1920

M.2392

HEPBURN LAKE M.2388



BENNETT LAKE M.2392

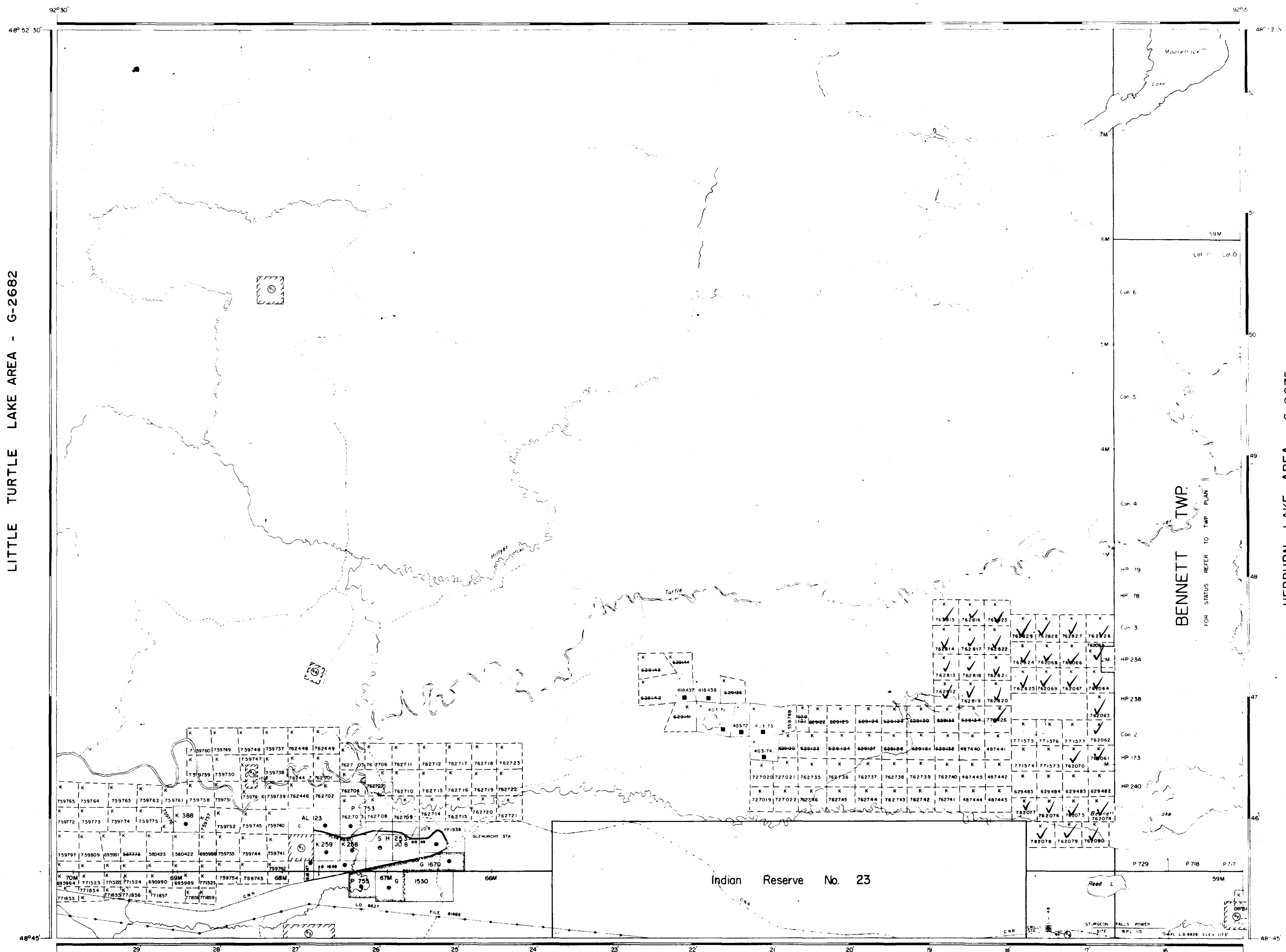
TANNER TP. M.2388

M.2392

M.2388



MANION LAKE AREA - G-2686



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 OF COMPOSITE PLAN	
RESERVATION	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

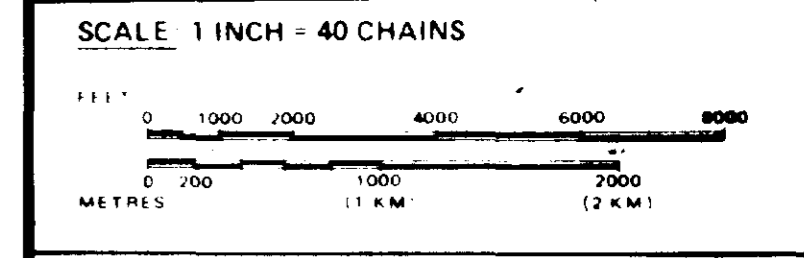
TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT R.S.O. 1910 CHAP. 380 SEC. 63 SUBSEC. 1

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

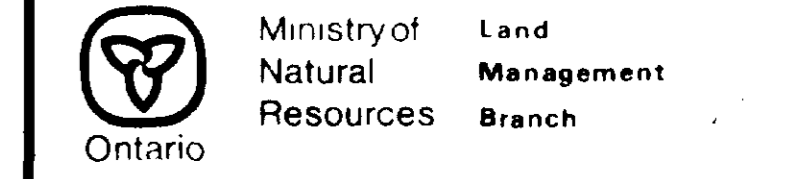
Description	Order No.	Date	Disposition	File
M.R.O. MINING RIGHTS ONLY				
S.R.O. SURFACE RIGHTS ONLY				
M. + NATURAL RESOURCES RIGHTS				
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> JAN 25 1995 TITLES SECTION </div>				
SAND AND GRAVEL				
	GRAVEL FILE 162718			
	M.T.C. PIT 1089 GRAVEL FILE 162718			
	M.T.C. PIT 1058			
	GRAVEL FILE 16799 vol 7			
	M.N.R. Gravel Reserve No 228, File 162718			
	M.T.C. PIT NR 1B-14			



AREA

BENNETT LAKE

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



Date: **FEBRUARY, 1984** Number: **G-2667**



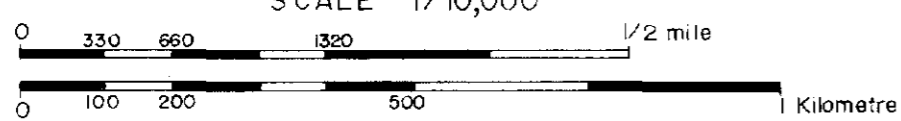


MORRISON PETROLEUMS LTD.

TOTAL FIELD MAGNETIC MAP

BENNETT LAKE AREA
ONTARIO

SCALE 1/10,000



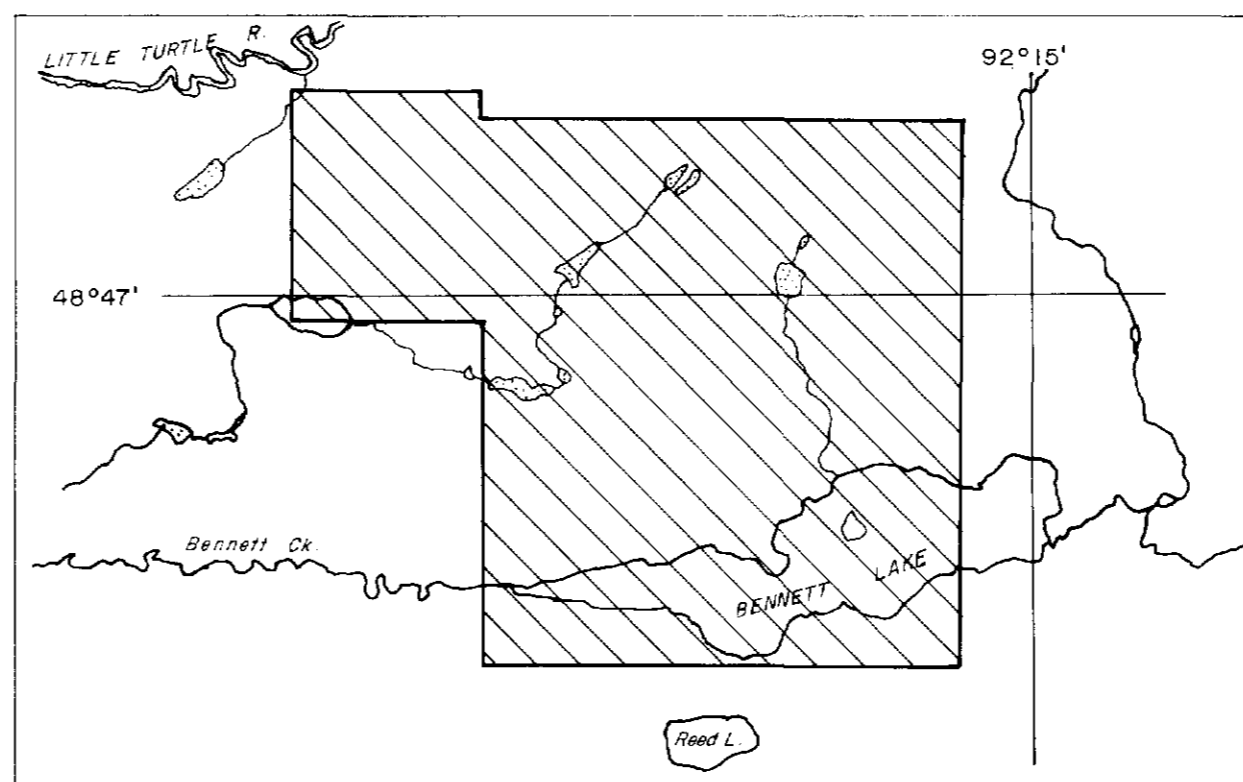
▼ AERODAT LIMITED

DATE: August 1984

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

MAP No: 3

J8438



LEGEND
 250 gammas
 50 gammas
 10 gammas
 contour interval 10 gammas



52C165W0005 2.7646 BENNETT

John P. Young



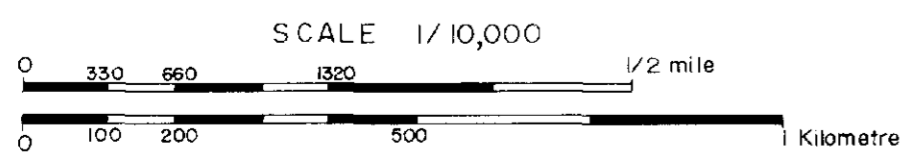
MORRISON PETROLEUMS LTD.

VLF-EM TOTAL FIELD CONTOURS

NAA CUTLER, MAINE - 24.0 KHz

BENNETT LAKE AREA

ONTARIO



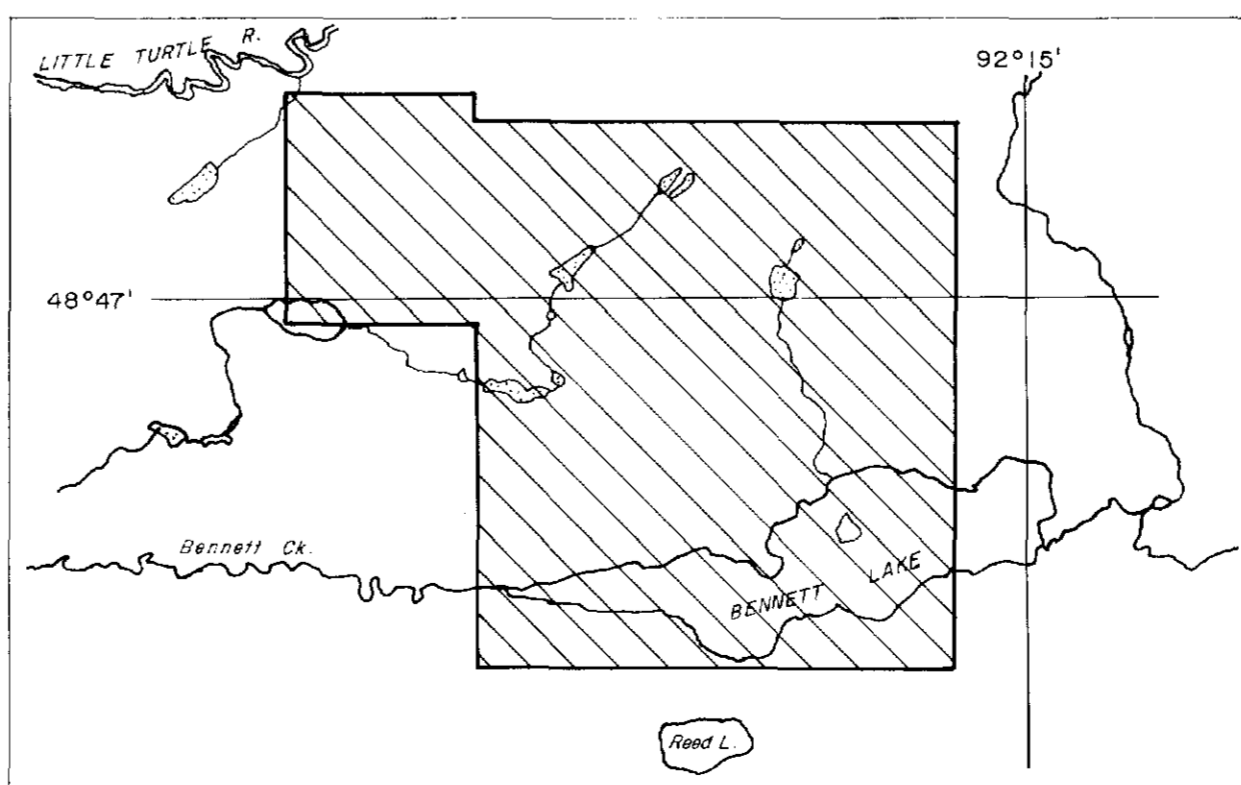
AERODAT LIMITED

DATE: August 1984

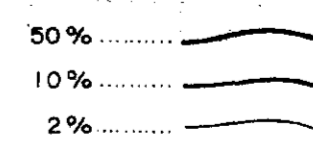
N.T.S. No: 52C/16

MAP No: 4

J8438



LEGEND



INTERPRETATION

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



52C16S0005 2.7646 BENNETT

230

File 52C/16

LEGEND

INTRUSIVES

- Meta Syntectonic Felsic Plutonic Rock
- 10 unsubdivided
- 10a fine grained biotite tonalite
- 10b quartz porphyritic tonalite (quartz phenocrysts)
- 10d medium grained biotite tonalite
- 10g muscovite bearing
- 10r sericitic
- 10t silicified
- 12b hornblende tonalite
- 12c hornblende/biotite quartz diorite

NOTE: 1) pre-fix c denotes geology from Fumerton (1981)
 2) geological legend corresponds to Fumerton's map (1981) except for unit 3
 3) some of these may be mafic intrusive rock
 4) claim boundaries are approximate

METAVOLCANICS

- Mafic and Intermediate Metavolcanic
- 1 unsubdivided
- 1a unsubdivided flow
- 1b pillowed flow
- 1c porphyritic flow (feldspar phenocrysts)
- 1d coarse- and medium-grained flow³
- 1e tuff
- 1f lapilli-tuff
- 1g tuff breccia
- 1j chlorite schist
- 1k amphibolite
- 1m hornblende/biotite granoblastic to massive to gneissic
- 1q carbonatized
- 1r sericitic
- 1t silicified
- 1v felsic fragments
- gh graphite
- qv quartz vein
- sy sulphides

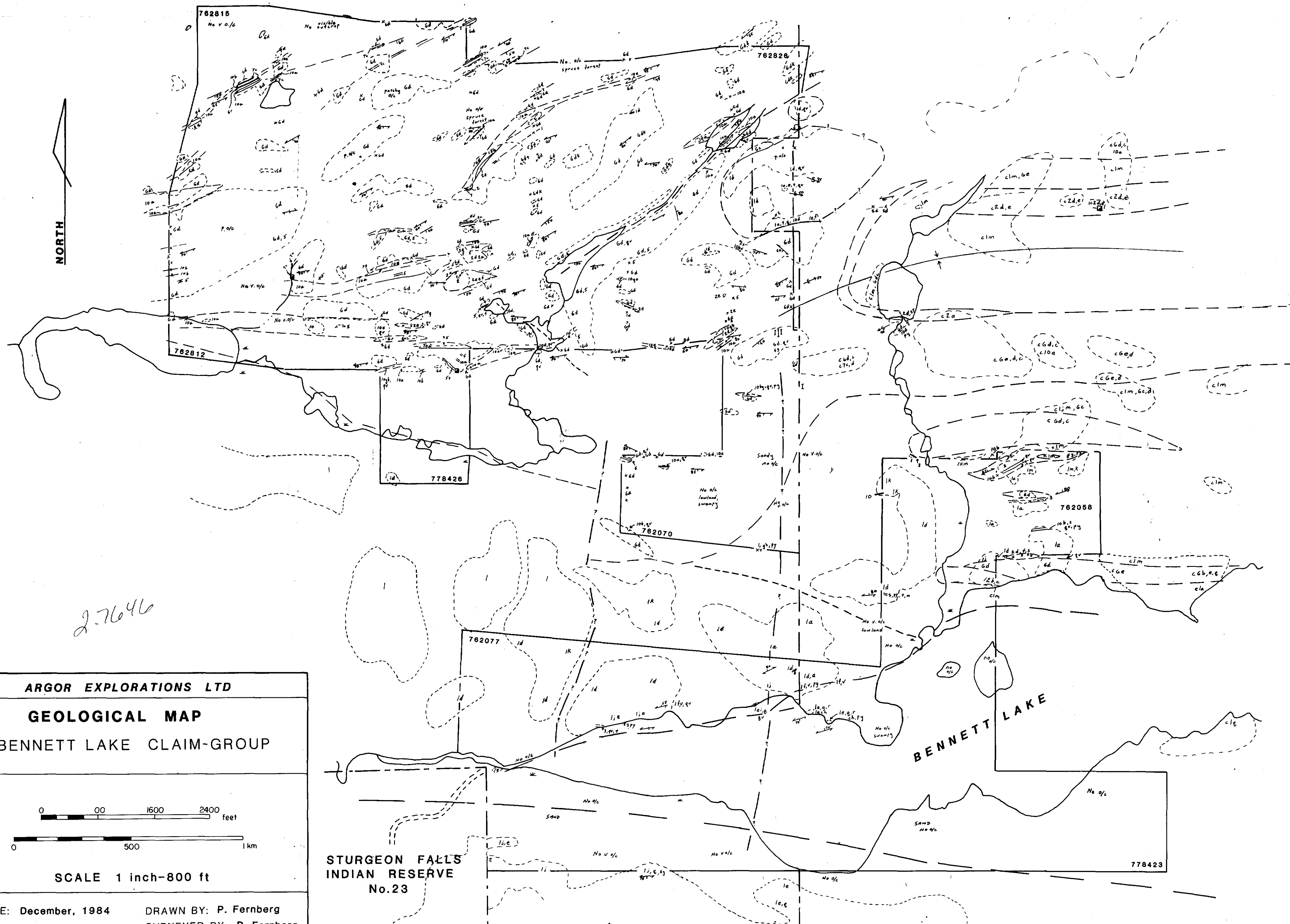
- Felsic Metavolcanic
- 2 unsubdivided
- 2a unsubdivided flow
- 2c porphyritic flow (feldspar phenocrysts)
- 2d tuff
- 2e lapilli-tuff
- 2f sericitic

METASEDIMENTS

- Unit 3
- 3 quartz wacke (possible volcanoclastic)
- 3m magnetic
- 3q quartz veining
- 3t silicified
- py minor pyrite
- Low-Medium Grade Metasediments
- conglomerate bed, intercalated within #6 metasediments
- 5t silicified
- 6 unsubdivided
- 6b arenite
- 6c wacke
- 6d biotite schist
- 6g muscovite bearing
- 6j chloritic
- 6k garnetiferous
- 6t staurolite bearing
- 6r leucocratic arenite

- Chemical metasediments
- 7c magnetite ironstone

- Bedding
- Foliation
- S-shaped, Z-shaped fold axis
- Syncline
- Fault: assumed, inferred
- Structural break inferred from geophysics
- Outcrop
- No visible outcrop
- Shaft trench
- access road
- Claim boundary



ARGOR EXPLORATIONS LTD
GEOLOGICAL MAP
BENNETT LAKE CLAIM-GROUP

0 00 1600 2400 feet
 0 500 1 km

SCALE 1 inch=800 ft

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

Figure 4: Geological map



