



42A02SW0007 OP92-503 ARGYLE

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**REPORT ON THE
1992 GROUND EXPLORATION PROGRAM
BY R. CAMPBELL AND P. HAWLEY
ON THE TRINITY EXPLORATIONS PROPERTY
ARGYLE, MCNEIL AND ROBERTSON TWPS.,
LARDER LAKE MINING DIVISION, ONTARIO.**

Val d'Or, Quebec
September 17, 1992

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INTRODUCTION

Between May 26 and August 15, 1992, R. Campbell and P. Hawley completed a ground exploration program on the Trinity Explorations Property in Argyle, McNeil and Robertson Twps., Larder Lake Mining Division, Ontario. A grid was established, total field magnetic, vertical magnetic gradient and two channel VLF-electromagnetic geophysical surveys were completed and a program of prospecting, geological mapping and sampling conducted on the claim group.

Previous work on the property uncovered Kell's Pt-Pd-Cu-Ni Showing, the Water Hole Au-Ag Showing, the New Kelore Mines East Au Showing and several gold showings on claims in Argyle Twp. The 1992 ground exploration program was designed to delineate the old showings, and potential new mineralized area and deformation zones by prospecting, mapping and sampling, and to use magnetic and VLF-electromagnetic methods to define the probable geology and mineralization in areas of overburden cover.

The funding for the exploration program was provided by OPAP to R. Campbell and P. Hawley.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Trinity property is located in Argyle (M303), McNeil (M300) and Robertson (M310) Townships on the Matachewan area of Larder Lake Mining Division, northeastern Ontario. The property is comprised of 18 claims, covering approximately 720 acres on NTS map 42A/2 at a latitude of 48 degrees 06' and a longitude of 80 degrees 49'. Twelve claims are situated in the northeast corner of Argyle Twp., 3 in the southeast corner of McNeil Twp., and the remaining 3 in the southwestern edge of Robertson Twp. The claims are registered with the Office of the Mining Recorder at Kirkland Lake and are listed in Appendix 1.

The property is situated 12 miles north-northwest of the village of Matachewan and 35 miles west of the town of Kirkland Lake. Provincial Highway 566, north and west, from Matachewan lies 6 miles south of the project area. A secondary dirt road, north from the Highway, passes by Argyle Lake and ends at the Argyle River. Approximately 0.6 miles south of the river a bush road trends northeast, west and north towards the claim group. This road is driveable for 0.5 miles and the remaining 3 miles has to be walked, reaching the western boundary near 1400 south. The road continues eastward for approximately 0.5 miles until Kell's old cabin near line 24E. The road then becomes a trail bisecting the property near the northern end of Argyle Twp. The eastern boundary of the claim group can also be reached by taking the eastern end of the above-mentioned trail from the north end of Matachewan Lake, 2 miles to the southeast.

Over 80 percent of the property is forest covered, mainly by black spruce and cedar. Two small lakes, Muhquoh Lake and an unnamed lake to the southwest, and numerous ponds lie on the claim block, connected by tributaries of the Whitefish River system. Topographical relief on the property is low with much of the westernmost claims underlain by a large cedar swamp. Most of the property is covered by a thin layer of overburden, so outcrop exposure is relatively poor.

Supplies, services and qualified manpower are available in the Kirkland Lake-Matachewan area.

GEOLOGY AND MINERALIZATION

The claim block is located near the southwestern end of the Abitibi Volcanic Belt of the Superior Province of the Canadian Shield. The Abitibi Volcanic Belt extends for nearly 350 miles in a west-east direction from Timmins to Chibougamau. It is host to a variety of precious and base metal deposits including the Timmins, Kirkland Lake, Noranda, Val d'Or and Chibougamau mining camps.

The Abitibi Volcanic Belt is composed of a complex assemblage of interbedded volcanic and sedimentary rocks intruded by a variety of intrusives, from ultrabasic to granitic in composition. The rocks are Archean in age and have been metamorphosed to the greenschist facies. Numerous late Precambrian diabase dykes cut formations of the belt. The rocks generally strike east-west, have a vertical dip and are highly folded and faulted. Geological interpretation of the Abitibi Volcanic Belt is complicated by both the wide scattering of outcrops and the complex structural relationships.

The Ontario Division of Mines, Map 2205, the Timmins-Kirkland Lake Geological Compilation Series, at a scale of 1 inch equal to 4 miles, outlines the geology underlying the property. The Ontario Geological Survey, Mineral Deposits Circular 18, Gold Deposits of Ontario - Part w, 1979, describes the old gold deposits, prospects and occurrences on and in the vicinity of the claim group and a search of assessment files helped define the mineralization and geology on the claim group.

The geology map indicates that over 90% of the property is underlain by rocks thought to belong to the Blake River Group. These are calc-alkaline basalt, andesite, dacite and rhyolite flows and pyroclastic rocks, intercalated with minor Mg-rich tholeiitic basalts. The western end of a felsic intrusive body (trondhjemite, granodiorite and quartz monzonite) underlies the northeasternmost claim.

The results of an airborne survey flown over the claims in 1991 suggest that the western two-thirds of the property is underlain by intermediate to mafic metavolcanics containing a felsic metavolcanic unit or syenite sill. These metavolcanic rocks appear to be in contact with the western end of the felsic intrusive body. A small intrusive of metamorphosed mafic rocks was also outlined. Three potential north-northwest trending fault zones and 8 conductive zones cut the above-mentioned rocks.

The Montreal River, Whiskeyjack Creek and Mistinikon Lake Faults strike southeast, and south respectively 1.5 to 1.9 miles

east of the property, intersecting in the Matachewan River. Another southeast trending fault zones ends 1.7 miles west of the claim group.

The Matachewan area was first prospected in 1906. Exploration activity increased in the 1930's. Between 1934 and 1964 the Matachewan Consolidated Mines Ltd., Young-Davidson Mines Ltd. and Ryan Lake Mine produced Au-Ag (Matachewan Consolidated Mines Ltd. and Young-Davidson) and Au-Ag Cu (Ryan Lake) in Powell Twp., 11 miles south of the property. The Au-Ag mines produced 956,117 ounces of gold and 165,598 ounces of silver while the total production from the Ryan Lake Mines was 1,352 and 36,141 ounces of gold and silver, respectively and 4,995,745 pounds of copper.

The 1990 Queenston Mining - Strike Minerals base metal discovery in Robertson Twp., approximately 4 miles northeast of the claim group sparked a staking rush in the Matachewan area. The preliminary five hole drill program intersected four zones of banded, disseminated to semi-massive sulphide mineralization, including a 14.3 foot section grading 5.17% zinc and 0.93% copper.

Previous work on the property uncovered Kell's Pt-Pd-Cu-Ni showing, the Water-Hole Au-Ag Showing, New Kelore Mines East Au Showing, and several gold showings over claims in Argyle Twp. Assays of up to 12.6% Cu, 6.0% Ni, 1.56 oz/ton Pt and 5.52 oz/ton Pd were reported in a sulphide lens within altered dunite at the Kell's showing in the northwestern part of the property. The Water-Hole gold-silver showing, 1200 feet southeast of Kell's showing, is situated within a weak shear containing pyrite, chalcopyrite, sphalerite and galena. A grab sample assayed 0.14 oz/ton Au and 3.82 oz/ton Ag while a hold (DDH#1, New Kelore Mines Ltd., 1974) intersected 0.11 oz/ton and 0.21 oz/ton Au over 3.0 and 3.2 feet, respectively. In the eastern claims in Argyle Twp. gold showings have been discovered in surface mapping. In present claim 1137581, just south of Muhquoh Lake, a grab sample of 3 to 5% pyrite along a syenite-andesite contact assayed 2.74 oz/ton (New Kelore Mines East Showing)

East of the property in Baden Township, the Thesaurus Gold Prospect, Baden Syndicate Au-Cu occurrence and the Richore Au occurrence have been found in metavolcanics and granitic-syenitic rocks, near the western end of the granitic intrusive. These showings appear to be in geological environment similar to the New Kelore Mines East Showing, 2 to 3 miles to the west and northwest.

Five potential types of mineral deposition exist on the property:

- 1) Au-Ag, chalcopyrite, sphalerite and/or galena in sheared metavolcanics.
- 2) Sulphides in mafic to ultramafic intrusions containing Pt, Pd, Ni, Cu.
- 3) Au in syenite and mafic to intermediate metavolcanic rocks at the western end of the felsic intrusive body striking west through Baden and Robertson Townships.
- 4) Au in disseminated sulphide mineralization and/or shear zones within felsic metavolcanic rocks.
- 5) Cu-Zn bearing semi-massive type sulphide mineralization in felsic metavolcanic rocks.

WORK PERFORMED AND METHODS USED

Grid Establishment

In May and June, 1992, a 14.34 mile grid was established on the property by St. Pierre Exploration Enr. Because of the regional trend of the 1991 airborne survey, north-south cross lines were cut at 400 foot intervals along a baseline striking east at the northern boundary of Argyle Twp. All lines were chained and picketed at 100 foot intervals.

Magnetometer Survey

12.75 miles of total field magnetic and vertical magnetic surveys were completed on the cross lines between August 3 and 8, 1992. These surveys were performed to delineate contacts between the intermediate to mafic metavolcanics, dunite (gabbro), felsic

metavolcanics and felsic intrusive rocks thought to underlie the property and to outline the locations of any potential fault zones cross-cutting the above-mentioned rocks. Approximately 750 magnetic stations were established.

The magnetic surveys were conducted using two GEM GSM-8 proton precession magnetometers, with a vertical separation of 5 feet. Readings were taken simultaneously at 50 and 100 foot intervals along the cross lines. The GSM-8 magnetometer measures the total field intensity of the earth's total field in gammas. It has a sensitivity and repeatability of one gamma or better.

The vertical gradient was calculated using the formula $(S2 - S1) / 1.5$ S1 is the reading produced by the top sensor, (in gammas) S2 is that of the bottom, and 5.0 feet is the distance between the sensors. This formula reduces the data to gammas per foot. These values were plotted on the vertical gradient map MG-1 at a scale of 1 inch equals 200 feet (1:2400). The data was then contoured at intervals of 2 and 10 gammas per foot.

For the total field measurements, the lower sensor (S2) was read. Base stations for determining the magnetic diurnal variations were established at various locations along the road and base line. The total field readings, corrected for diurnal variations were plotted on the total field map MAG-1. The total field values were contoured at 25, 50 and 100 gamma intervals.

The data obtained from a vertical gradient survey has certain advantages over the data from a total field survey. A gradient survey has greater sensitivity to near surface sources. The resolution of a vertical gradient survey is approximately 30% greater than that of a total field. Composite total field anomalies can be resolved into their individual components. This leads to accurate mapping of lithologic contacts. A contact is defined a zero contour. Also, from the gradient data and magnetic susceptibility, magnetic moment, depth and source geometry may be calculated. The effect of magnetic storms and diurnal variations, that are important in total field data reduction, are automatically removed during a vertical gradient survey.

VLF-Electromagnetic Surveys

The 12.83 miles of VLF-electromagnetic surveys, representing approximately 680 stations at 100 ft. intervals was performed on the cross lines. A Geonics EM-16 was used in the very low frequency-electromagnetic surveys. This type of geophysical surveying uses powerful radio transmitters set-up in different parts of the world for military communications. Relative to frequencies generally used in geophysical exploration, this frequency is considered high. These powerful waves induce electrical currents in conductive bodies thousand of miles away. The induced currents then produce secondary magnetic fields which are detected at surface through deviations of the normal VLF field. This secondary field from the conductor is added to the primary field vector, so that the resultant field is tilted up on one side of the field vector, and down on the other side. The VLF receiver measures the field tilt with the in-phase and quadrature components of the vertical magnetic field as a percentage of the horizontal primary field (i.e. the tangent of the tilt angle and ellipticity). The Geonics EM-16 unit has a repeatability and sensitivity of 1%.

Because of the results of the 1991 airborne survey, delineating two sets of conductive zones, two channels were read at each station. The primary transmitting station at Cutler, Maine (NAA), frequency 24.0 kHz. and secondary station at Annapolis, Maryland (NSS), frequency 21.4 kHz were used.

Interpretation of the results is quite simple. The conductor is located at the inflection point marked by the crossover from positive tilt to negative tilt. The main advantage of the VLF method is that it responds well to poor conductor and has proved a reliable tool in mapping faults-shear zones, conductive mineralization and rock contacts. The major disadvantage is that because of the high frequency of the transmitted wave a multitude of anomalies from unwanted sources such as swamp edges, creeks and topographic highs may be delineated. So some amount of care must be taken in interpreting the results in certain areas displaying these topographical features.

The data collected by the VLF-EM surveys were plotted on Maps VLF-1 (Cutler) and VLF-2 (Annapolis) at scales of 1 inch equals 200 feet. These values were then profiled at a scale of 1 inch equals 40%. The axes of the conductors were defined and labelled A-1, B-1 etc. for Cutler and A-2, B-2 etc. for Annapolis.

Prospecting Program

The prospecting program was conducted between May 26-28 and June 17-20, 1992, see Appendix 4 (Daily Log). The purpose of the prospecting program was to locate the old showings and working thought to be on the property, define the position and extent of any outcrop exposure and to map topographical features such as roads, trails, lakes, ponds creeks, hills, valleys, tree types, etc., with respect to the cut grid and claim posts. Samples were collected for comparisons at various locations.

Generally the prospecting traverses were run close to the grid lines so the control was good. In areas of outcrop exposure and near old workings the traverses were run along strike. The results of the prospecting are plotted on map PRO-1 at a scale of one inch equal to 200 feet. The outcrops, workings, topographical features and traverses are plotted on this map. Trenches and old showings with outcrop were labelled T-1, T-2, T-3 etc for later reference for the geological program.

Geological Mapping and Sampling Program

This program was completed between August 9 and 15, 1992 by the authors. The program consisted of examining outcrops, trenches, old workings, and mineralized areas found by the prospecting program. Any trenches and old workings found were plotted on map Geo-1 (scale: 1 inch equals 200 feet). Trenches containing outcrop exposures were labelled using the pre-existing standard of T-1, T-2 T-3 etc.

The outcrop exposure and old working into bedrock were mapped with particular interest shown in the rock types, structure, strike and dip, and mineralization. Where mineralization warranted sampling, either grab or channel samples were taken. Channel

samples taken were confined to uniform rock types, structures or mineralized areas., The channel sample interval was marked by flagging tape at the beginning and at the end of the interval. Also for all samples taken, flagging tape with the sample number was left at the place of sampling. Each author collected 20 samples which were assayed for Au, Ag, Cu, Ni, Zn, Pt and Pd. Sample descriptions, intervals and assay results are presented in Appendices 2 and 3.

The results of the mapping and sampling are shown on Map GEO-1. Due to the high density of old working from line 12 east to line 28 east, 2+00 south to 14+00 south, map GEO-2 has been prepared outlining the detailed geology, sample numbers, mineralization and assays of interest, at a scale of one inch equals fifty feet (1"=50'). In four select areas where the geology was complex and mineralization abundant, mapping was done at the scale of one inch equals five feet, (Figures G-B, G-C and G-D) or one inch equals 10 feet (Figure G-A). On Map GEO-2 these areas are shaded with a note, see Figures, G-A, G-B, G-C and G-D.

SURVEY RESULTS

Magnetic Surveys

The data collected by the ground total field and vertical gradient magnetic surveys has produced sets of east-southeast and east-northeast trending isogams over the Trinity property. The results of the total field survey are remarkably similar to those of the 1991 airborne magnetic survey.

The most prominent magnetic features are the series of east striking total field highs and positive vertical gradient values in the eastern part of the property. These features form a set of broken highs with a general trend of east-northeast. They are probably caused by bands of magnetite rich mafic to intermediate metavolcanic rocks and more mafic phases of the syenite. The narrow highs, to the north and south of this wide band of highs, trending east across the eastern boundary define the locations of narrow units of mafic to intermediate metavolcanic rocks. Old

trenches and pits were found along the broad east-northeast trending band in the vicinity of lines 56E to 60E and the base line at 74E. The East Kelore Mines - East Au Showing (2.74 oz/ton) is thought to be located near the trenches found between lines 56 E to 60 E. The band of east-northeast highs is not continuous suggesting that these metavolcanic rocks are deformed and offset by series of east-southeast striking fault zones.

Except for narrow lows lying directly north of the highs, in the areas north and south of the east-northeast band, the magnetic values are low and exhibit low relief. The contour shapes and magnetic values are indicative of low magnetic susceptibility felsic intrusive rocks. The above-mentioned trenches and pits (New Kelore Au Showing) lie near the contact between the volcanics and felsic intrusive rocks.

In the western half of the property much of the area is represented by magnetic values between 58175 and 58250 gammas. These areas are thought to be underlain by intermediate metavolcanic rocks of the Blake River Group. These metavolcanics contain relative low constant amounts of magnetite.

The strong highs - positive gradient values on line 0-4E, line 12E, and line 28E are probably caused by mafic to ultramafic intrusive rocks, gabbro, peridotite and/or dunite. The Kell's Pt-Pd-Cu-Ni showing lies near the northern edge of the high on line 12E in a negative gradient zone while the Waterhole (?) gold-silver showing is thought to be located at the northern edge of a total field gradient high near line 24E. The high positive gradient value on line 28 E at 5S maybe a continuation of the zone on line 12E.

Broad magnetic lows and narrower lows, not associated with highs to the south, in the western part of the property outline the positions of small intrusions of felsic intrusive rocks within Blake River intermediate metavolcanics.

VLF-Electromagnetic Surveys

The axes of 10 east-southeast to east-northeast conductive zones were delineated by the data collected using the primary transmitting station at Cutler, Maine and 8 generally cross-cutting conductive zones were outlined using the transmitting station at Annapolis, Maryland. Descriptions and possible causes of each zone are presented in the following pages.

Cutler, Maine (24.0 kHz)

<u>Zone</u>	<u>Topography</u>	<u>Magnetics</u>	<u>Cause</u>
A-1	Swamp	In a weak total field and gradient highs.	Conductive overburden.
B-1	Western Conductor and eastern 2 conductors are in swamp	Generally associated with weak highs.	The eastern 2 conductors, western conductor and the west end of the 2nd conductor from the west appear to be caused by conductive overburden or a change in topographical relief. The remaining conductors could represent shears in metavolcanic rocks.
C-1	Western conductor is in a swamp	In a weak low.	The western conductor could be caused by conductive overburden and the eastern conductor may define a small shear in metavolcanics.
D-1	In a swamp.	In a weak low.	Conductive overburden.
E-1	In a swamp.	Crossing weak highs and lows.	Conductive overburden. The zone lies along strike, 400 feet southwest of the Zn showings in trench T-25.
F-1	The west end is in a swamp.	In weak magnetic highs.	Shear zone in andesite. The east end is situated over a trench.

<u>Zone</u>	<u>Topography</u>	<u>Magnetics</u>	<u>Cause</u>
G-1	In a swamp.	In weak lows and highs.	Conductive overburden.
H-1	In a swamp, near a creek.	In weak highs.	Conductive overburden.
I-1		In highs.	Shear zones in metavolcanic rocks or mafic syenite or along metavolcanic-syenite contacts. The eastern conductor is located near a trench.
J-1	The western part of the west conductor is in a swamp.	In highs.	Shears in metavolcanics or mafic syenite. The east end is located near trenches containing low gold and shear zone.
K-1	In a swamp.	In weak highs.	Conductive overburden.

Annapolis, Maryland (21.8 kHz)

<u>Zone</u>	<u>Topography</u>	<u>Magnetics</u>	<u>Cause</u>
A-2	In a swamp.	Crosses weak highs and lows.	Conductive overburden.
B-2	The western part is in a swamp.	Crosses weak highs and lows.	Intersects K-1 in the north and intersects with C-2 and cuts off C-1 in the south. Represents a cross-cutting shear in metavolcanic rocks.
C-2	The north end is in a swamp.	Crosses weak highs and lows.	The southeast part of the conductor defines the location of a cross-cutting shear in metavolcanics and felsic intrusive rocks. The zone cuts off conductors B-1, K-1, C-1 and intersects B-1.

<u>Zone</u>	<u>Topography</u>	<u>Magnetics</u>	<u>Cause</u>
D-2	In swamps near a creek.	Crosses magnetic highs and lows.	Conductive overburden. Cuts zones G-1, H-1 and J-1.
E-2	North end is in a lake.	In a total field low and crosses gradient highs and lows.	Shear zone in metavolcanics and syenite, along a possible fault zone. Cuts off I-1 and coincides with J-1.
F-2	The south end is in a swamp.	Crosses highs and lows.	The north end may be caused by a cross-cutting shear in metavolcanic rocks. It cuts off the western extension of F-1 and intersects with E-1, southwest of trenches.
G-2	The eastern conductor lies along the edge of a swamp.	Generally in weak highs.	The east conductor is probably caused by conductive overburden or a change in topographical relief. The western conductor may be caused by a shear in metavolcanic rocks along Zone B-1.
H-2	The east end lies in a swamp, near a creek.	In a weak low between 2 highs.	Shear in metavolcanics, just south of B-1.

Prospecting Program

The results of the prospecting program, as plotted on map PRO-1, show that outcrop exposure on the property is relatively poor. Most areas are overburden covered with lakes and swamps overlying at least one third of the claim group. Except for the swamps, lakes and small areas of outcrop exposure the overburden layer appears to be thin, less than 5 feet, comprised of mainly A and B fine grained soil horizons. As expected topographical relief over the property is low with small hills located at areas of outcrop and subcrop. The most predominant tree type is small black spruce

with the swamp covered areas also containing cedar, tamarack and alders. It appears that the east-central part of the property has been logged (?) because much of this area contains second growth.

The prospecting program delineated 4 main areas of outcrop exposure: claim 1137581; Claim 1137579 and claims 1137572 (east part), 1137575 and 1137576, and claims 1137569 and 1137572 (west). The locations of approximately 175 old trenches and pits were found, of these 75 contained rock exposures and approximately 100 were filled with overburden. Most of the exposures in the trenches were small with a great percentage of these trenches being filled with rubble and overburden. Two old drill hole locations were delineated, but since the casings were pulled no dips or azimuths were noted. All the above-mentioned workings and drill hole locations were tied in to the present grid co-ordinates on map PRO-1.

Geological Mapping and Sampling

Mapping of the outcrops and trenches/pits containing bedrock exposures indicate that the property is underlain by metavolcanics intruded by felsic intrusive and metamorphosed mafic to ultramafic rocks. The most abundant rock type is metavolcanic rocks of the Blake River Equivalent Group, comprised of mainly intermediate flows and pyroclastic rocks, intercalated with minor felsic and mafic flows. Andesite flows and andesitic type tuffs are the most prominent rocks found. The andesite flows are light grey-green in colour, mainly massive and are usually carbonate rich. They are interbedded with fine ash and crystal ash tuffs. Fragments of feldspar generally less than 1/4 inch in length are aligned in a light green groundmass and these tuffs are probably similar to the andesite porphyry found in Baden Twp. Near the beaver pond by the road an outcrop of light grey-green siliceous dacite was found. Seven hundred feet northwest of the dacite a pale quartz rich exposure of rhyolite was uncovered in trench T-40.

The metavolcanics have been intruded by mafic to ultramafic metamorphosed rocks in at least two locations, lines 25E-12S and

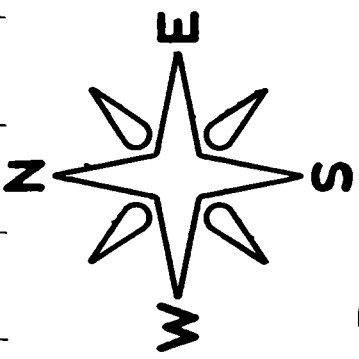
lines 11E to 15E between 2S and 7S. The rocks of the eastern body (trenches T-1 and T-1A) are green-grey, fine grained gabbros, sheared and altered (sericite, carbonate, chlorite). The gabbro contains fragments of quartz rich sericite schist which is locally brecciated. The northwestern mafic to ultramafic intrusive has been traced in trenches and outcrop for over 500 feet in a southwest-northeast direction and is mainly comprised of dark green gabbro with aphanitic groundmass. It is magnetic and is altered to a dark green, soft, serpentized and chloritized dunite. The dunite weathers to a black colour. The fine-grained basalt found near L12E at 7S may be very fine grained gabbro at the margins of this intrusive.

Outcrops and exposures of felsic intrusive rocks were mapped in the eastern and central parts of the property. The felsic intrusive rocks are mainly fine to medium grained, pink to white, massive syenite. A more mafic, grey-green, medium-grained syenite was found grading into the lighter syenite in the pit just west of line 56E at 10S. A contact with the andesites to the east trends 140 degrees through this pit.

Generally in the east the metavolcanic rocks and shear zones strike east-northeast, parallel to the similar trending magnetic high. In the western part of the property the rocks have been highly altered and structurally deformed. Numerous shears and fractures trend 0 to 15 degrees and 90 to 120 degrees and lineation directions vary from 10 to 175 degrees. Contacts between the andesite and tuff and between the gabbro-sericite schist, near L24#, strike 115 and 120 degrees, respectively.

Three significant showings, of Au-Ag-Cu-Zn, Pt-Pd-Cu-Ni, and Zn, were uncovered in trenches T-1, T-52 and T-25, respectively. Five minor gold showings (T-23, T-1A, T-6, T-19 and a trench near L56) were also found. Descriptions of these showings are presented in the following pages.

TRENCH-1,8



LEGEND

- 4a GABBRO
- 2a ANDESITE
- 2e SERICITE SCHIST
- QUARTZ VEIN (Q.V.)
- QUARTZ VEINLET (Q.VLET)
- Py PYRITE
- Cpy CHALCOPYRITE
- Sph SPHALERITE
- Ag NATIVE SILVER
- Mai MALACHITE
- OUTCROP IN TRENCH
- OVERBURDEN IN TRENCH
- ~~~ JOINTING
- ~> SHEARING
- ↖ STRIKE AND DIP
- 2/1' SAMPLE NO./ WIDTH
- LEDGE

SAMPLE No.	FT.	Au O.R.T.	Ag O.R.T.	Cu %	Zn %
2177	1.5	.412	6.42	.46	3.84
2178	1.5	.003	—	.105	.081
2179	3.0	.004	.09	.295	2.96
2180	4.0	.230	.51	.227	1.36

SCALE: 1" = 10'



Peter Hawley
 GEOLGIE GÉOLOGIST
 APGGQ
 PETER J. HAWLEY
 N° 843
 QUÉBEC CANADA

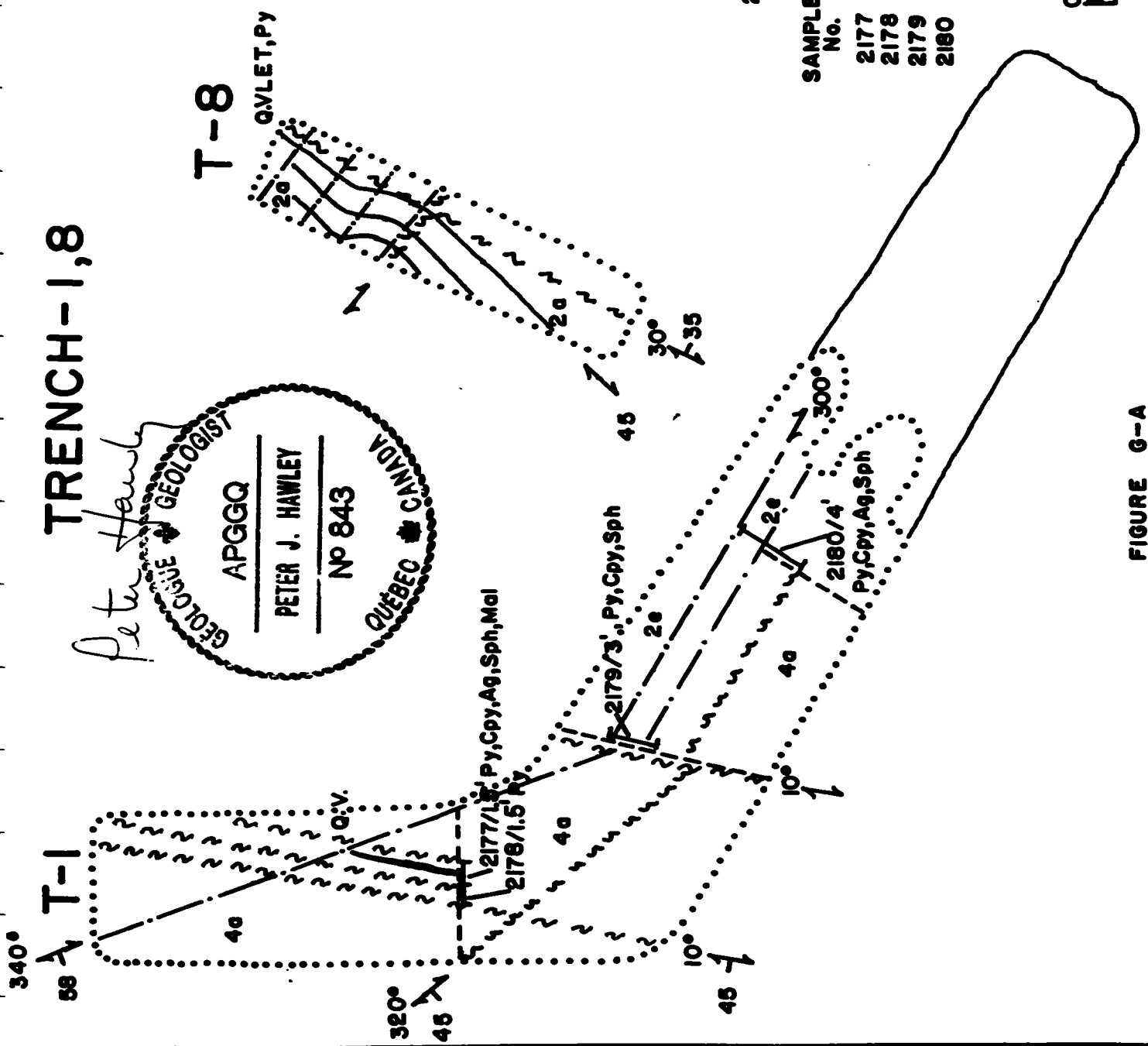


FIGURE G-A

The Au-Ag-Cu-Zn showing uncovered at trench T-1 is thought to be the old Waterhole Showing. It is shown on map Geo-2 and Figure G-A. In trench T-1 two parallel, 010 degrees trending, shear zones cut a 300 to 320 degree striking shear in gabbroic host rock. The northern part of western-most 010 degree shear is 3 feet wide, containing a 2-3 inch white quartz vein and pyrite, chalcopyrite, galena, malachite and sphalerite in thin stringers of up to 1 inch wide. A 1.5 foot chip-channel sample (2177) of the eastern part of this shear assayed 0.412 and 6.52 oz/ton Au and Ag, respectively, 0.46% Cu and 3.84% Zn. Sample 2178, across the footwall of the shear in slightly sericitized and carbonatized gabbro containing pyrite, chalcopyrite and minor sphalerite, assayed 0.03 OPT Au, 0.105% Cu and 0.081% Zn over 1.5 feet. These two samples contain less than 0.002 OPT Pt and Pd.

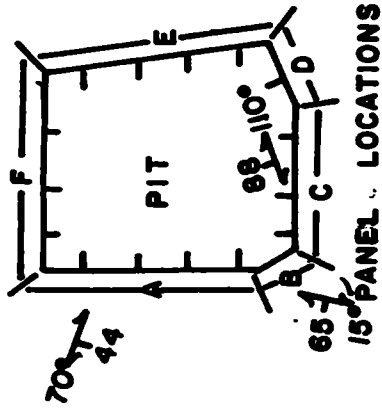
A parallel 010 degree trending shear, 10 feet to the east lies in a gabbroic and sericite schist. A chip-channel sample (2179) of 3 feet of pyrite, chalcopyrite and sphalerite assayed 0.004 OPT Au, 0.09 OPT Ag, 0.295% Cu and 2.96% Zn.

Another one foot wide shear along a gabbro-sericite schist contact trends 300 degrees and is offset to 320 degrees at the intersection with the eastern 010 degree shear. The mineralization is the same as in the 010 degrees shear. The shear and 3.0 feet of the hanging wall sericite schist was sampled. The four foot chip-channel sample (2180) contained 0.230 OPT Au, 0.51 OPT Ag, 0.227% Cu and 1.36% Zn.

Pt-Pd-Cu-Ni (Trench 52)

The Kell's Pt-Pd-Cu-Ni showing was found in a 5 foot by 6 foot pit (T-52), 6 feet deep (Figure G-C). A massive sulphide lense strikes 070 degrees and dips 44 degrees south in gabbroic host rock, 12 feet north of altered serpentine rich dunite in trench T-51. Weak brittle shears strike 15 degrees and dip 65 to 75 degrees east. The joining pattern of the host gabbroic rock unit strikes 250 degrees azimuth, and dips near vertical at 88 degrees north.

TRUE PLAN VIEW



SAMPLE No.	FT.	Au	Ag	Pt	Pd	Cu	Ni	Zn
		QRT.	QRT.	QRT.	QRT.	%	%	%
886	1.3	.087	.72	.087	.185	5.44	5.32	.007
887	3.7	.003	—	.004	.029	.590	.299	.015
888	3.3	.012	.39	.109	.344	2.14	3.74	.005
889	2.2	.007	—	.009	.045	.670	.450	.005
890	5.0	.004	—	.007	.033	.620	.400	.007
891	4.5	.003	—	.004	.019	.295	.275	.005

TRENCH - 52



TRUE PANEL PROFILES

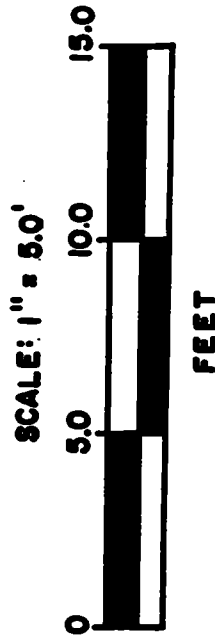
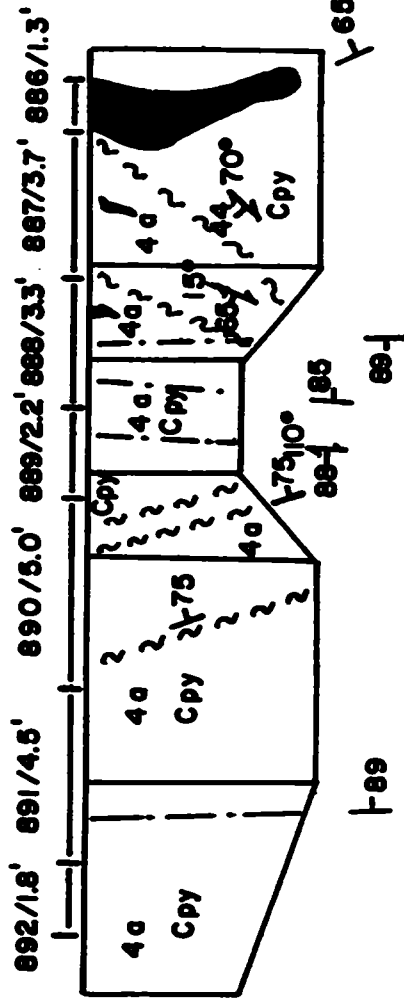
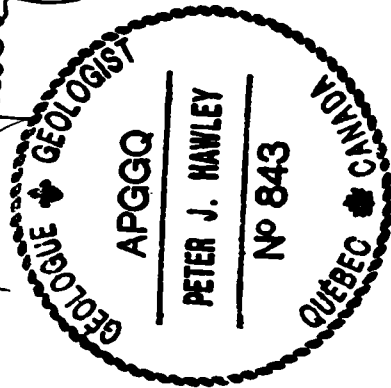


FIGURE G-C

LEGEND

- 4g GABBRO
- MASSIVE SULPHIDES
- Cpy CHALCOPYRITE
- - - JOINTING
- ~ ~ ~ SHEAR
- D PANEL
- 12/1' SAMPLE NO./ WIDTH
- ⊙ PIT

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The main sulphide lense is 1.3 feet in width with a possible northwest plunge. Sulphide content (up to 70%) includes pyrite, chalcopyrite, pyrrhotite, galena and magnetite. The lense is not present on the other side of the pit and appears to have no related shear structure.

The foot wall zone is about 4.0 feet in width and contains 2-5% fine disseminated chalcopyrite within unaltered coarse gabbro with occasional blebs of 1-2 inch massive sulphide, similar to the above described lense. Weak brittle shears are present over this area. The mineralization appears uniform and does not appear to be structurally controlled.

Samples of the facing walls have consistent disseminated chalcopyrite content with low Pd, Cu, Ni values. A total of 6 channel samples were taken and are listed below.

Sample NO.	Width Ft.	Au OPT	Ag OPT	Pt OPT	Pd OPT	Cu %	Ni %	Zn %
886	1.3	.087	.72	.087	.185	5.44	5.32	.007
887	3.7	.003	N.D.	.004	.029	.590	.299	.015
888	3.3	.012	.39	.109	.344	2.14	3.74	.005
889	2.2	.007	N.D.	.009	.045	.670	.450	.005
890	5.0	.004	N.D.	.007	.033	.620	.400	.007
891	4.5	.003	N.D.	.004	.019	.295	.275	.005

Zn (Trench T-25)

High Zn and low Au and Cu values were obtained in the 4 samples assayed for zinc and Au in trench T-25. Two small shear zones trending 0 and 110 degrees cut altered andesite. The 0 degree shear dips vertically and contains up to 30% fine-grained pyrite, 1-2% chalcopyrite and up to 5% sphalerite. A 4 inch chip-channel sample (2192) assayed 2.56% Zn, 0.064 OPT Au and 0.038% Cu. A grab sample (2187) of the rubble containing up to 60% sulphides, probably from the above-mentioned shear, also contains Zn of 3.08% and low gold, silver and copper. Two samples were collected on the 110 degree striking chlorite rich shear. Grab sample 2190 of up to 50% fine-grained pyrite and 5% sphalerite reported 1.44% Zn and low

(0.024 oz/ton) Au. The fourth high Zn value of 1.22% was obtained in a grab sample at the southwest end of this trench exhibiting mineralization similar to the above.

Low Au

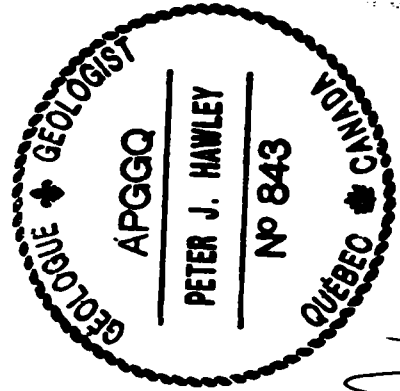
Trench 1A is located along strike from the 010 degree striking shears in T-1, forty feet to the north. It is comprised of a large water and rubble filled pit, 30 feet by 30 feet. It appears the 010 degree shear was the target of the excavation in this pit. Examination of the rubble around the pit indicates that massive pyrite (up to 70%) is contained within brecciated sericite schist, brecciated and massive white quartz and as nodules of schist within a gabbroic host rock. Grab samples collected had a 1 inch weathered rind due to the high pyrite content. Low Au values of 0.006 to 0.063 OPT in samples 881 to 883 were obtained. The low assay results may be due to the leaching of the auriferous sulphide content of the rocks on surface and the inability to sample the possible shear thought to underlie the western end of the pit. Fresh rock samples may exhibit a higher gold content.

Trench 6 (see Figure G-B) contains andesitic rocks altered due to shearing. Channel sample 878 over 1.0 feet in unaltered andesite assayed 0.003 OPT Au. The main 3 foot wide shear strikes 100 degrees Azimuth and dips 68 degrees south in strongly carbonatized sericite schist with 15-20% fine disseminated pyrite. Chip-channel sample 879 over 3.0 feet assayed 0.008 OPT Au. The foot wall of the shear zone is weakly sheared and carbonatized in an andesitic rock with up to 20% fine disseminated pyrite. In this area the shearing is parallel to the jointing plane. Channel sample 880 over 3.0 of the foot wall assayed 0.014 OPT Au. The shearing may be tension related due to the proximity of the mafic and felsic intrusions.

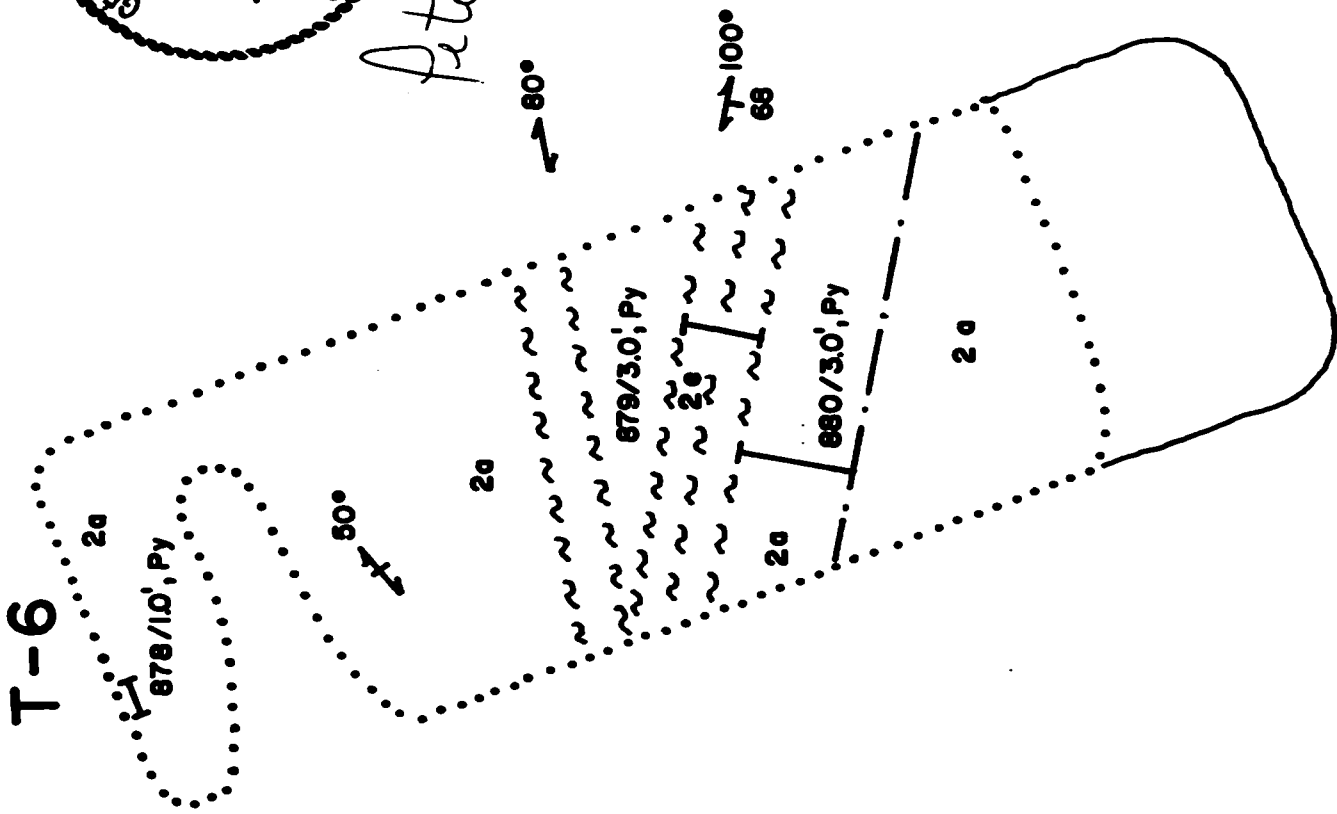
Approximately 20-30 feet northeast of trench T-6, trench T-19 contains a strong carbonatized 4 inch shear within an andesitic host rock. The shear trends 10 degrees azimuth and displays 5-25% fine disseminated pyrite. Channel sample 2183 over 0.33 feet

TRENCH - 6

T-6



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LEGEND

- 4a
 - 2a
 - 2c
 - Py
 - Cpy
 - Sph
 - Ag
 - Mel
 - ...
 - O
 - ...
 - ...
 - 2/1'
 - ...
- GABBRO
 - ANDESITE SCHIST
 - SERICITE VEIN (Q.V.)
 - QUARTZ VEINLET (Q.VLET)
 - PYRITE
 - CHALCOPYRITE
 - SPHALERITE
 - NATIVE SILVER
 - MALACHITE
 - OUTCROP IN TRENCH
 - OVERBURDEN IN TRENCH
 - JOINTING
 - SHEARING
 - STRIKE AND DIP
 - SAMPLE NO./ WIDTH
 - LEDGE

SAMPLE FT. No.	Au	Ag	QRT.	O.R.T.
878	1.0	.003	---	---
879	3.0	.008	---	---
880	3.0	.014	---	---

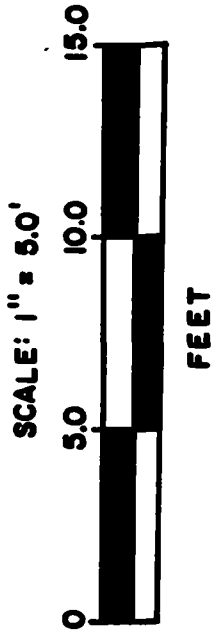
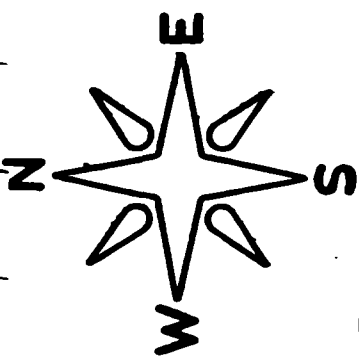
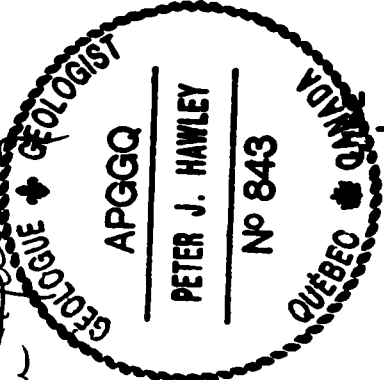


FIGURE G-B

SAMPLE No.	FT.	AU O.R.T.	AG O.R.T.
893	4.0	.002	—
894	2.0	.006	—
895	3.0	.003	—
896	1.5	.003	—

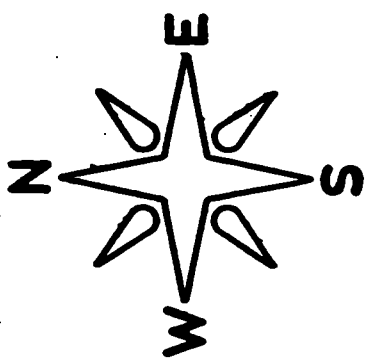
TRENCH -23

Peter Hawley

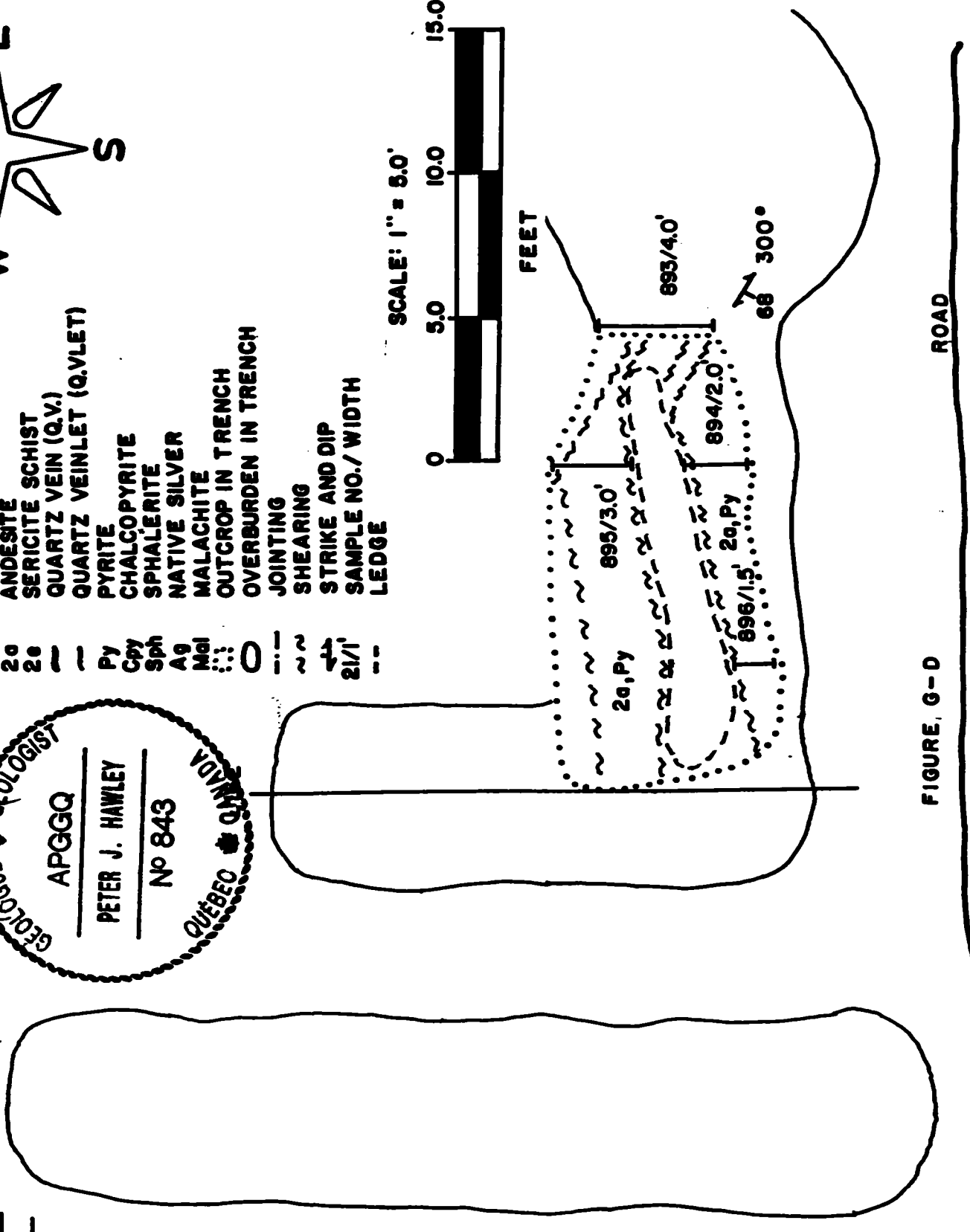


LEGEND

- 40 GABBRO
- 20 ANDESITE SCHIST
- 20 SERICITE VEIN (Q.V.)
- QUARTZ VEINLET (Q.VLET)
- Py PYRITE
- Gpy CHALCOPYRITE
- Sph SPHALERITE
- Ag NATIVE SILVER
- Mol MALACHITE
- OUTCROP IN TRENCH
- OVERBURDEN IN TRENCH
- JOINTING
- ~ ~ ~ SHEARING
- ↗ STRIKE AND DIP
- 2 1/1' SAMPLE NO./ WIDTH
- LEDGE



FEET



FIGURE, G-D

assayed 0.063 OPT Au. This auriferous structure has the same trend as the primary shear present in the Waterhole showing.

A trench found near the reported New Kelore Mines East Au showing (near line 56E, 10S) contains a 2 inch quartz stringer hosted with a mafic syenite. Both the 310 degrees striking quartz stringer and syenite contain 2% fine disseminated pyrite and trace chalcopyrite. Channel sample 2169 over 0.5 foot assayed 0.043 OPT Au. A contact with andesite 15 feet to the east, strikes 320 degrees. The trench is approximately 35 feet long and mostly rubble filled.

Trench T-23 (Figure G-D) is located on line 16E at 8+50S near the main trail. This trench contains andesite within a strong carbonatized shear with 2-15% fine disseminated pyrite in 0.25 and 0.50 inch veinlets. This shear is 4-5 feet in width and branches into two shears westwards. The shear displays a general attitude of 300 degrees and dips 68 degrees southwest. Although the shear and mineralization was encouraging, low auriferous values were recorded.

CONCLUSIONS AND RECOMMENDATIONS

The objectives of the 1992 ground exploration program on the Trinity Explorations Property were met. The prospecting, mapping and sampling program succeeded in defining the locations of 175 old workings, of which three significant showings were sampled and in mapping the outcrops on the claim group. The data collected by the geophysical surveys helped define the geology and locate areas of deformation and potential mineralized zones in areas of overburden cover.

Most of the property is underlain by homogeneous low magnetite content intermediate flows and pyroclastic rocks (andesite, fine ash tuffs and crystal tuffs). Numerous outcrop exposures of syenite show that small felsic intrusive bodies cut the metavolcanic rocks in the central part of the property. A zone of magnetic highs trending east-northeast across the eastern claims could define the location of more mafic metavolcanic rocks or mafic

syenite along the western edge of a syenite intrusive body which is thought to underlie the eastern part of the property. Mafic to ultramafic areas of intrusive outcrops of gabbro or dunite were mapped in two areas and have coincident magnetic anomalies. A third magnetic anomaly crossing the western boundary may define the location of a third mafic to ultramafic intrusive, covered by overburden. The metavolcanic rocks are altered to sericite schists and breccia in deformation zones in the vicinity of the eastern most gabbro body.

The rocks underlying the property have been undergone deformation with shearing and fracturing at two predominant directions, 0 to 15 degrees and 70 to 120 degrees. Sets of possible shears, defined by the VLF-electromagnetic surveys strike parallel to, and cross-cut the local geology. Series of east-southeast trending potential fault zones cut across the metavolcanic and granitic rocks along the eastern boundary of the felsic intrusive body.

Four of the five potential types of mineralization discussed in the Geology and Mineralization section have been found during the mapping and sampling program, only Cu-Zn bearing semi-massive sulphide mineralization in felsic metavolcanics wasn't found. A fifth type of mineralization Au-Ag with minor Cu+Zn mineralization in gabbro was discovered. The 5 types of mineralization outlined during the 1992 program are described below.

- 1) Au-Ag, sphalerite and/or chalcopyrite in 0-10 degrees and 100 to 120 degrees striking shear zones.

<u>Shear</u>	<u>Trench</u>	<u>Sample</u>	<u>Width (Ft)</u>	<u>Zn %</u>	<u>Au OPT</u>	<u>Ag OPT</u>	<u>Cu %</u>
0	T-25	2192	0.33'	2.56	0.064	--	0.038
010	T-19	2183	0.33'	--	0.063	N.D.	--
100	T-16	880	3.00'	--	0.014	N.D.	--
120	T-23	894	2.00'	--	0.006	N.D.	--

2. Sulphides in mafic to ultramafic intrusions containing Pt-Pd-Ni-Cu Kell's showing - Trench T-52

<u>Sample</u>	<u>Interval</u>	<u>Pt OPT</u>	<u>Pd OPT</u>	<u>Cu %</u>	<u>Ni %</u>
888	3.3	0.101	0.344	2.14	3.74
886	1.3	0.087	0.184	5.94	5.34

3). Au in syenite and metavolcanic rocks at the western end of the felsic intrusive body striking west through Baden and Robertson Twps.

<u>Sample</u>	<u>Width</u>	<u>Au OPT</u>				
2169	0.5	0.043	130 degrees	striking	quartz	stringer.

4). Au in disseminated sulphide mineralization and/or shear zones within felsic metavolcanic rocks.

<u>Trench</u>	<u>Sample</u>	<u>AU OPT</u>				
T-40	2188	Trace	5-7%	pyrite	in	rhyolite.

5) Au, Ag, Cu and Zn in altered and sheared gabbro near the edge on the intrusive body.

<u>Shear</u>	<u>Trench</u>	<u>Sample</u>	<u>Width</u>	<u>Au OPT</u>	<u>Ag OPT</u>	<u>Cu %</u>	<u>Zn %</u>
010	T-1	2177	1.5	0.412	6.42	0.46	3.84
120	T-1	2180	4.0	0.230	0.51	0.227	1.36
010 (?)	T-1A	882	Grab	0.063	0.06	--	--

The deposition of the precious and base metals in the metavolcanics and altered gabbros appears to be structurally controlled by the emplacement of the intrusive bodies and the sets of 90 to 120 degrees and 0 to 15 degrees striking shear zones. The 90 to 120 degree shears are probably older than the wider, more altered and regional 0 to 15 degree striking shears. Mineralization has been found in both sets of shears. VLF-electromagnetic conductive zones I-1, J-1, B-2, E-2 the central parts of B-1, the north end of F-2 and the western conductor of G-2, define the locations of possible shears striking 80 to 120 degrees.

The mafic-ultramafic complex of gabbro and altered dunite hosts the high grade Kell's Pt-Pd-Ni-Cu showing in lenses of pods of pyrite, chalcopyrite, pyrrhotite, galena and magnetite and the lower platinum group - base metal values in the country rock. Since anomalous values were obtained in all samples, the whole complex may host Pt-Pd-Ni-Cu mineralization. The magnetic high trending west across the western boundary may be caused by a similar complex.

Future exploration should be concentrated in areas of shearing within the metavolcanics, the syenite, and the gabbro intrusives and along their contacts, and throughout the mafic to ultramafic intrusive complexes. The exploration should be comprised of a 2 phase program of stripping and diamond drilling.

Stripping should be concentrated in the area of trenches 1 and 1A, testing the continuity of mineralization between the two trenches; in the vicinity of trench 52 to better define the Pt-Pd-Zn-Cu mineralization in the mafic to ultramafic complex; and over the trenches near line 56E along a metavolcanic-syenite contact.

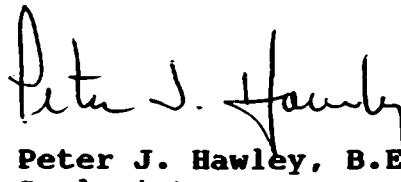
Areas of mineralization outlined by stripping; the magnetic high on line 0; conductor E-2 along a potential fault zone cutting a possible syenite-metavolcanic contact; and the east end of conductor F (on line 16E) over a magnetic high should then be tested by a program of diamond drilling.

Respectfully submitted,



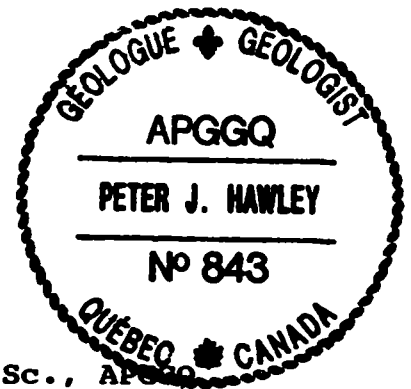
Val d'Or, Quebec
September 24, 1992

R.A. Campbell, B.Sc.,
Geologist.



Val d'Or, Quebec
September 24, 1992

Peter J. Hawley, B.Eng., B.Sc., A.P.G.G.Q.
Geologist.



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APPENDIX 1 - CLAIM LIST

**L1137568
L1137569
L1137570
L1137571
L1137572
L1137573
L1137574
L1137575
L1137576
L1137577
L1137578
L1137579
L1137580
L1137581
L1137582
L1137583
L1137584
L1137585**

APPENDIX 2 - SAMPLE DESCRIPTIONS

<u>Sample #</u>	<u>Description</u>	<u>Widths</u> <u>(ft.)</u>	<u>As</u> <u>OPT</u>	<u>Ag</u> <u>OPT</u>	<u>Cu</u> <u>§</u>	<u>Ni</u> <u>§</u>	<u>Pt</u> <u>OPT</u>	<u>Pd</u> <u>OPT</u>	<u>Zn</u> <u>§</u>
# 2169	Syenite, light grey to pink containing trace to 2% fine grained pyrite and trace amounts of chalcopyrite. Sample also includes a 2 inch wide quartz stringer with trace to 2% pyrite and trace chalcopyrite	0.5'	0.043						
# 2170	Andesite, fine-grained, massive, light grey-green in colour, containing a small 4 inch shear with trace to 1% very fine grained pyrite.	Grab	trace						
# 2176	Andesite, light grey-green, fine grained, very sheared with secondary foliation, strong sericite, carbonate alteration, weak chlorite alteration, non-magnetic, soft, trace-2% very fine disseminated pyrite.	1.5'	Trace						
# 2177	Gabbro(?) - light green-grey, fine grained, very sheared with well developed secondary alteration, strong sericite and carbonate alteration, traces black mica and chlorite flecks, moderate chlorite, weakly magnetic, contains 2-3 inch veinlet bull white quartz veinlet, chalcopyrite, pyrite, galeana, pyrrhotite mineralization. Strong malachite and lesser amounts of azurite staining.	1.5'	.412	6.42	.46	.011	<.002	<.002	3.84
# 2178	Gabbro(?), light olive green to pink purple, coarse texture, weakly sheared, strong carbonate within matrix, some chlorite and titanium within carbonate alteration, 1-3% mm cubic pyrite in places. Wall rock next to the above-mentioned shear, non-magnetic.	1.5'	.003	N.D.	.105	.005	<.002	<.002	.001

<u>Sample #</u>	<u>Description</u>	<u>Width</u> <u>(Ft.)</u>	<u>As</u> <u>OPT</u>	<u>Ag</u> <u>OPT</u>	<u>Cu</u> <u>%</u>	<u>Ni</u> <u>%</u>	<u>Pt</u> <u>OPT</u>	<u>Pd</u> <u>OPT</u>	<u>Zn</u> <u>%</u>
# 2179	Gabbro(?), light green-grey, moderate-strongly sheared, weak carbonate, weak-til magnetics, moderate chlorite alteration, moderately soft, semi-massive, 1-2 inch lenses of chalcopyrite, galena and sphalerite with lesser amounts of lmm cubic pyrite, moderate malachite staining.	3.0'	.004	.09	.295	.011	<.002	<.002	2.96
# 2180	Gabbro(?), and sericite schist light olive green, strongly altered moderate shearing, strong sericite alteration, non-magnetic, no carbonate, weak chlorite 5-15% fine lmm cubic pyrite along shears, includes 1.0 ft. shear zone containing semi-massive chalcopyrite, galena, sphalerite and lesser pyrite, and some malachite staining	4.0'	.230	.51	.227	.002	<.002	<.002	1.36
# 2181	Gabbro(?). light olive green, highly altered, massive in appearance, high quartz content, no carbonate alteration, some sericite and chlorite alteration within matrix, 20% fine lmm cubic pyrite within matrix, possibility of fine disseminate gold with pyrite surrounding as a halo.	Grab	.029	N.D.					
# 2182	Syenite, light pink, purple, massive, fine grained with quartz-carbonate matrix, colour maybe derived from hematite and/or titanium within carbonate due to close proximity to an ultra-mafic mass, 1/4" smoky grey quartz veinlet along jointing, 1-3% fine pyrite within rock and quartz veinlet.	Grab	.004	N.D.					
# 2183	Andesite, fine-grained, light grey-green in colour. Carbonate rich, 1/4" shear surrounded by a 4 inch mineralized zone containing 5-25% fine-grained pyrite.	0.33'	.063	N.D.					

<u>Sample #</u>	<u>Description</u>	<u>Widths (ft.)</u>	<u>As OPT</u>	<u>Ag OPT</u>	<u>Cu %</u>	<u>Ni %</u>	<u>Pt OPT</u>	<u>Pd OPT</u>	<u>Zn %</u>
# 2184	Andesite, fine-grained, black in colour, baked. Sample from rubble near trench with 2-5% pyrite	Grab	Trace						
# 2185	Andesite, massive, fine-grained, green in colour. With a 1" shear containing 50% pyrite, iron stained about 2 ft. long.	Grab	.016	N.D.					
# 2186	Andesite, as above, containing 2 ft. wide shear with 1-2% pyrite.	2.0'	trace						
# 2187	Andesite, green, fine-grained, chlorite rich. Rubble at north end of a trench containing 60% pyrite, trace chalcopyrite and sphalerite.	Grab	.044	.146	.024				3.08
# 2188	Felsic volcanic (rhyolite), bottom of trench T-40, 5-7% finely disseminated pyrite	Grab	Trace						
# 2189	Gabbro, 2 ft. wide shear, strong serpentinized and chlorite alteration, minor quartz and carbonate veining, trace pyrite	2.0'	.002						
# 2190	Andesite, as above, highly sheared and very chloritized with up to 50% fine-grained pyrite, up to 5% sphalerite.	Grab	.024						1.44
# 2191	Andesite, gossened, iron-stained, highly friable.	Grab	Trace						
# 2192	Andesite, like 2190, highly fractured. Up to 30% fine-grained pyrite, 1-2% chalcopyrite and up to 5% sphalerite	0.33'	.064		.038				2.56
# 2193	Andesite, like 2190. Rubble from a trench with up to 25% pyrite, trace chalcopyrite and 2-3% sphalerite.	Grab	.009		.036				1.22
# 877	Syenite, light pink, purple, massive, fine-grained with quartz-carbonate matrix, 1-3 mm fine pyrite within rock unit (see #2182).	1.0'	.003	N.D.					

<u>Sample #</u>	<u>Description</u>	<u>Widths (Ft.)</u>	<u>As OPT</u>	<u>Ag OPT</u>	<u>Cu %</u>	<u>Ni %</u>	<u>Pt OPT</u>	<u>Rd OPT</u>	<u>Zn %</u>
# 878	Andesite, light grey-green, sheared and brecciated and reheated by a quartz silica matrix. Strong carbonate within matrix. Trace-2% fine disseminated pyrite within matrix and 1/4" carbonate veinlet.	1.0'	.003						
# 879	Sericite schist, olive green, green-grey, extremely sheared with very strong chlorite, sericite altered along secondary foliation, strong carbonate, 10-15% fine disseminated pyrite.	3.0'	.008	N.D.					
# 880	Andesite, light grey-green, strongly sheared with strong carbonate alteration within matrix 15-20% fine disseminated pyrite within matrix.	3.0'	0.014	N.D.					
# 881	Sericite breccia, light olive green, nodular appearance, strong carbonate alteration, massive fine pyrite up to 50%.	Grab	.056	.06					
# 882	Sericite schist, light olive green, extremely sheared with 40% carbonate within matrix, carbonate matrix contains 20% fine disseminated pyrite, pyrite also occurs as 1-3 mm fine pyrite veinlets.	Grab	.063	.06					
# 883	Quartz-sericite schist, light olive green, white sheared and brecciated	Grab	.006	N.D.					
# 884	Andesite, light grey, fine-grained aphanitic, weak carbonate, massive, 2-4% fine disseminated pyrite along fracture planes	1.0'	Trace						
# 885	Dacite, light olive green-grey, sericite-chlorite alteration, extremely sheared and brecciated reheated by grey cherty silica, slight carbonate alteration, 5-8% fine disseminated pyrite within breccia matrix	1.5'	Trace						

Sample #	Description	Width (Ft.)	As OPT	Ag OPT	Cu %	Ni %	Pt OPT	Pd OPT	Zn %
# 886	Massive sulphide, breccia, massive pyrite, galena, chalcopyrite, very magnetic.	1.3'	.007	.72	5.44	5.32	.007	.105	.007
# 887	Gabbro, dark green, aphanitic ground mass, magnetic, fine disseminated pyrite, and chalcopyrite.	3.7'	.003	N.D.	.590	.299	.004	.029	.015
# 888	Gabbro, dark green, aphanitic, ground mass, very magnetic, 1/4" bull white quartz veinlet, 2"x1" nodule of massive chalcopyrite, 1-2% fine disseminated pyrite, chalcopyrite within matrix.	3.3'	.012	.39	2.14	3.74	.109	.344	.005
# 889	Gabbro, as above, 1-3% fine disseminated chalcopyrite, pyrite within ground mass	2.2'	.007	N.D.	.670	.450	.009	.045	.005
# 890	Gabbro, as above, 2-5% fine disseminated chalcopyrite, pyrite within ground mass.	5.0'	.004	N.D.	.620	.400	.007	.033	.007
# 891	Gabbro, as above.	4.5'	.003	N.D.	.295	.275	.004	.019	.005
# 892	Gabbro, dark green, aphanitic ground mass, very magnetic, trace chalcopyrite, pyrite.	1.8'	Trace		.025				.006
# 893	Andesite, light green, grey, strongly sheared with carbonate within matrix and as 1/4" veinlets, 10-15% fine disseminated pyrite within carbonate matrix and in veinlets.	4.0'	.002	N.D.					
# 894	Andesite, as above.	2.0'	.006	N.D.					
# 895	Andesite, as above.	3.0'	.003	N.D.					
# 896	Andesite, as above.	1.5'	.003	N.D.					

* N.D. = less than .06 OPT Ag.

APPENDIX 3 - ASSAY CERTIFICATES



LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

PETER HAWLEY

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

Argyle TWP.

N° 60026

ECHANTILLONS
SAMPLES Rock

VAL D'OR (QUÉBEC) August 21 19 92

REÇU DE
RECEIVED FROM

ANALYSES
ASSAYS 20Au, 16Ag, 6Pt, 6Pd, 7Cu,
7Zn, 6Ni

Sample	Au oz/ton	Ag ppm	Cu %	Zn %	Ni %	Pt oz/ton	Pd oz/ton
877	0.003	N.D.	-	-	-	-	-
878	0.003	-	-	-	-	-	-
879	0.008	N.D.	-	-	-	-	-
880	0.014	N.D.	-	-	-	-	-
881	0.056	2	-	-	-	-	-
882	0.063	2	-	-	-	-	-
883	0.006	N.D.	-	-	-	-	-
884	Trace	-	-	-	-	-	-
885	Trace	-	-	-	-	-	-
886	0.087	24	5.44	0.007	5.32	0.087	0.185
887	0.003	N.D.	0.590	0.015	0.299	0.004	0.029
888	0.012	13	2.14	0.005	3.74	0.109	0.344
889	0.007	N.D.	0.670	0.005	0.450	0.009	0.045
890	0.004	N.D.	0.620	0.007	0.400	0.007	0.033
891	0.003	N.D.	0.295	0.005	0.275	0.004	0.019
892	Trace	-	0.025	0.006	-	-	-
893	0.002	N.D.	-	-	-	-	-
894	0.006	N.D.	-	-	-	-	-
895	0.003	N.D.	-	-	-	-	-
896	0.003	N.D.	-	-	-	-	-

For Ag N.D. means less than 2 ppm.

[Handwritten Signature]
ANALYSTE ASSAYER



LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

ROBERT CAMPBELL

Argyle TWP.

ÉCHANTILLONS Rock
SAMPLESREÇU DE
RECEIVED FROMCERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 60027

August 21

19 92

VAL D'OR (QUÉBEC)

ANALYSES 20Au, 9Ag, 4Pt, 4Pd, 7Cu,
ASSAYS 8Zn, 4Ni

Sample	Au oz/ton	Ag ppm	Cu %	Zn %	Ni %	Pt oz/ton	Pd oz/ton
2169	0.043	-	-	-	-	-	-
2170	Trace	-	-	-	-	-	-
2176	Trace	-	-	-	-	-	-
2177	0.412	214	0.460	3.84	0.011	<0.002	<0.002
2178	0.003	N.D.	0.105	0.081	0.005	<0.002	<0.002
2179	0.004	3	0.295	2.96	0.011	<0.002	<0.002
2180	0.230	17	0.227	1.36	0.002	<0.002	<0.002
2181	0.029	N.D.	-	-	-	-	-
2182	0.004	N.D.	-	-	-	-	-
2183	0.063	N.D.	-	-	-	-	-
2184	Trace	-	-	-	-	-	-
2185	0.016	N.D.	-	-	-	-	-
2186	Trace	-	-	-	-	-	-
2187	0.044	5	0.024	3.08	-	-	-
2188	Trace	-	-	-	-	-	-
2189	0.002	-	-	-	-	-	-
2190	0.024	-	-	1.44	-	-	-
2191	Trace	-	-	-	-	-	-
2192	0.064	-	0.038	2.56	-	-	-
2193	0.009	-	0.036	1.22	-	-	-

For Ag N.D. means less than 2 ppm.

Robert Campbell
ANALYSTE / ASSAYER

APPENDIX 4 - DAILY LOG OF WORK ACTIVITIES

<u>DAY</u>	<u>DATE</u>	<u>WORK PERFORMED</u>	<u>PROJECT AREA</u>
1	May 26, 1992	Prospecting	East part of claim 1137572 East part of claim 1137573 West part of claim 1137574 West part of claim 1137575
2	May 27, 1992	Prospecting	Southeast part of claim 1137572 Northeast part of claim 1137573
3	May 28, 1992	Prospecting	East part of claim 1137569 West part of claim 1137572
4	June 17, 1992	Prospecting	Claims 1137577, 1137582, 1137583, 1137584, 1137585.
5	June 18, 1992	Prospecting	Claims 1137578, 1137579, 1137580, 1137581.
6	June 19, 1992	Prospecting	Claims 1137570, 1137571, 1137574, 1137575, 1137576.
7	June 20, 1992	Prospecting	Claims 1137568, 1137569, 1137572, 1137573.
8	July 4, 1992	VLF-EH Survey	Claims 1137583, 1137584, 1137585 and the east part of 1137582, 1137581, 1137582.
9	July 5, 1992	VLF-EH Survey	West part of 1137580, 1137581 and 1137582, east part of 1137577, 1137578, 1137579
10	July 6, 1992	VLF-EH Survey	West part of 1137577, 1137578, 1137579, east part of 1137575 and 1137576.
11	Aug. 1, 1992	VLF-EH Survey	West half of 1137574, 1137575 and 1137576, claims 1137571, 1137572, 1137573.
12	Aug. 2, 1992	VLF-EH Survey	Claims 1137568, 1137569, 1137570.
13	Aug. 3, 1992	Total Field and Gradient Magnetic Surveys	Claims 1137583, 1137584, 1137585.
14	Aug. 4, 1992	Total Field and Gradient Magnetic Surveys	Claims 1137580, 1137581, 1137582.
15	Aug. 5, 1992	Total Field and Gradient Magnetic Surveys	Claims 1137577, 1137578, 1137579.
16	Aug. 6, 1992	Total Field and Gradient Magnetic Surveys	Claims 1137574, 1137575, 1137576.
17	Aug. 7, 1992	Total Field and Gradient Magnetic Surveys	Claims 1137571, 1137572, 1137573.
18	Aug. 8, 1992	Total Field and Gradient Magnetic Surveys	Claims 1137568, 1137569, 1137570.
19	Aug. 9, 1992	Geological Mapping	Claims 1137584, 1137585.

20	Aug. 10, 1992	Geological Mapping	Claim 1137581 and east part of 1137579.
21	Aug. 11, 1992	Geological Mapping	West part of 1137579 and claim 1137574.
22	Aug. 12, 1992	Geological Mapping	Claims 1137575, 1137576.
23	Aug. 13, 1992	Geological Mapping	East part of 1137572 and claim 1137573.
24	Aug. 14, 1992	Geological Mapping	Claim 1137571 and west part of 1137572.
25	Aug. 15, 1992	Geological Mapping	Claim 1137569.
	Aug. 24-28, 1992	Report Preparation	

ROBERTSON

DATE OF ISSUE
MAR 28 1992
LARDER LAKE MINING RECORDER'S OFFICE

DISTRICT OF
TIMISKAMING
LARDER LAKE MINING DIVISION

SCALE 1-INCH = 40 CHAINS

IFGND

- (P) PATENTED LAND
- (C) CROWN LAND SALE
- (L) LEASES
- (LO) LOCATED LAND
- (L.O.) LICENSE OF OCCUPATION
- (M.R.O.) MINING RIGHTS ONLY
- (S.R.O.) SURFACE RIGHTS ONLY
- (R) ROADS
- (I.R.) IMPROVED ROADS
- (K.H.) KING'S HIGHWAY
- (R.L.) RAILWAYS
- (P.L.) POWER LINES
- (M.M.) MARSH OR MUSKIEG
- (J.M.) JUMP
- (L.A.M.) LARDER LAKE
- (R.T.S.) REMOTE TOURIST SETUP

NOTES

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

TOWNSHIP SUBJECT TO FORESTRY OPERATIONS

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

PLAN NO. M.310

(ONTARIO)

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

CLEAVER TWP M.269

SHEBA TWP M.385

MCNEIL Twp
Scale 1 inch = 1/2 mile

Robertson Twp
Scale 1 inch = 1/2 mile

ARGYLE TWP
Scale 1 inch = 1/2 mile

ARGYLE

DATE OF ISSUE

MAR 28 1992

LARDER LAKE MINING RECORDER'S OFFICE

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- (P) PATENTED LAND
- (C) CROWN LAND SALE
- (L) LEASES
- (LO) LOCATED LAND
- (L.O.) LICENSE OF OCCUPATION
- (M.R.O.) MINING RIGHTS ONLY
- (S.R.O.) SURFACE RIGHTS ONLY
- (R) ROADS
- (I.R.) IMPROVED ROADS
- (K.H.) KING'S HIGHWAYS
- (R.L.) RAILWAYS
- (P.L.) POWER LINES
- (M.M.) MARSH OR MUSKIEG
- (J.M.) JUMP
- (L.A.M.) LARDER LAKE
- (R.T.S.) REMOTE TOURIST SETUP

NOTES

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

- (P) Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. 5/88.
- (L) Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. 5/88.
- (M) Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. 5/88.
- (R) AND PART (R) REOPENED FOR STAKING UNDER ORDER O-90-87 NR.
- O-LES-80 NR OPENS PART OF M/8186, NOV 11/80

TOWNSHIP SUBJECT TO FORESTRY OPERATIONS

PLAN NO. - M-203 # 5

MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

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

ARGYLE TWP

HINKS TWP

Baden Twp

Bannockburn Twp.



N-503

ROBERTSON

DATE OF ISSUE
Mar 23 1992
 DISTRICT OF
TIMISKAMING
 LARDER LAKE
 MINING DIVISION

SCALE 1-INCH = 40 CHAINS

LFGND

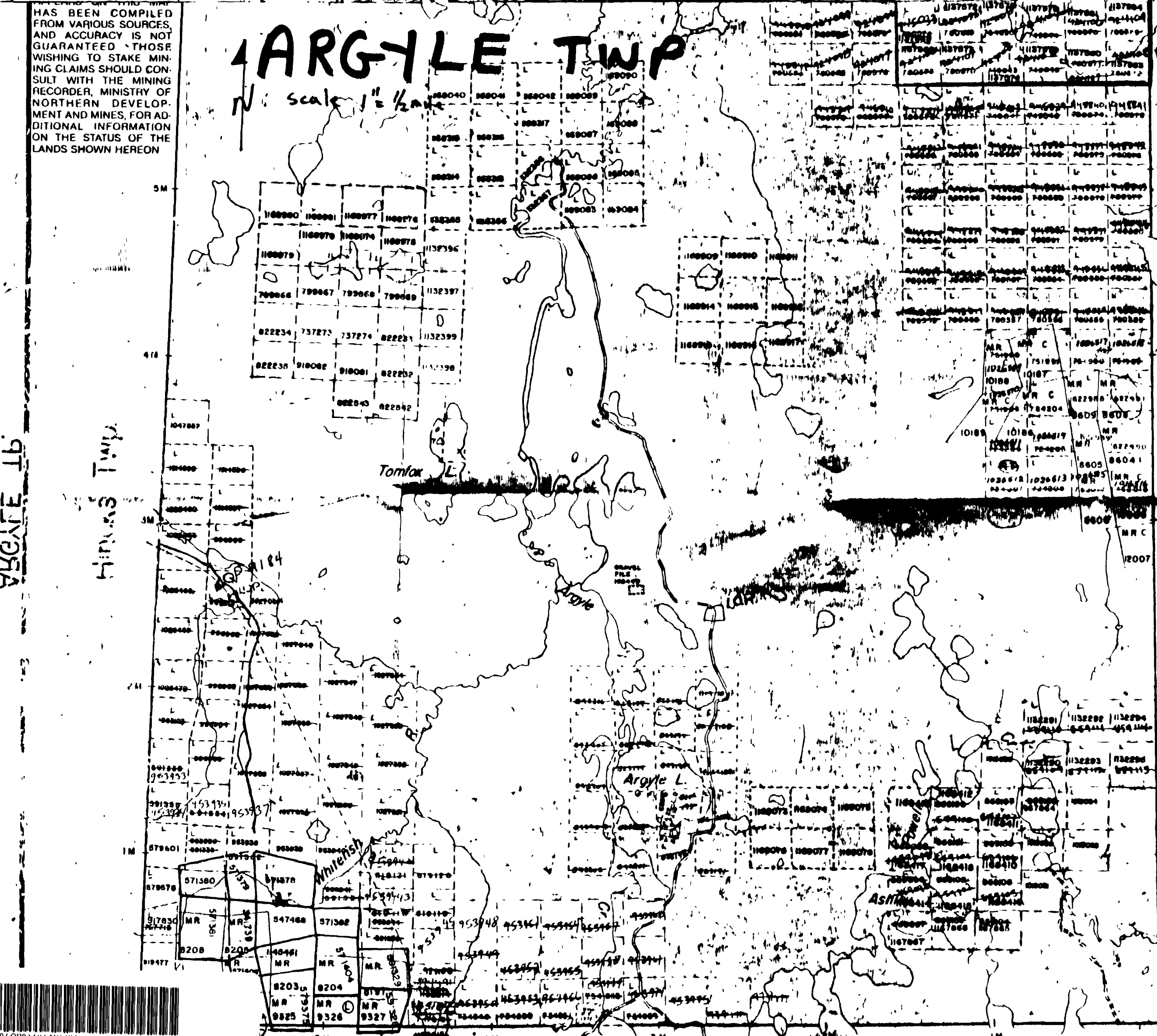
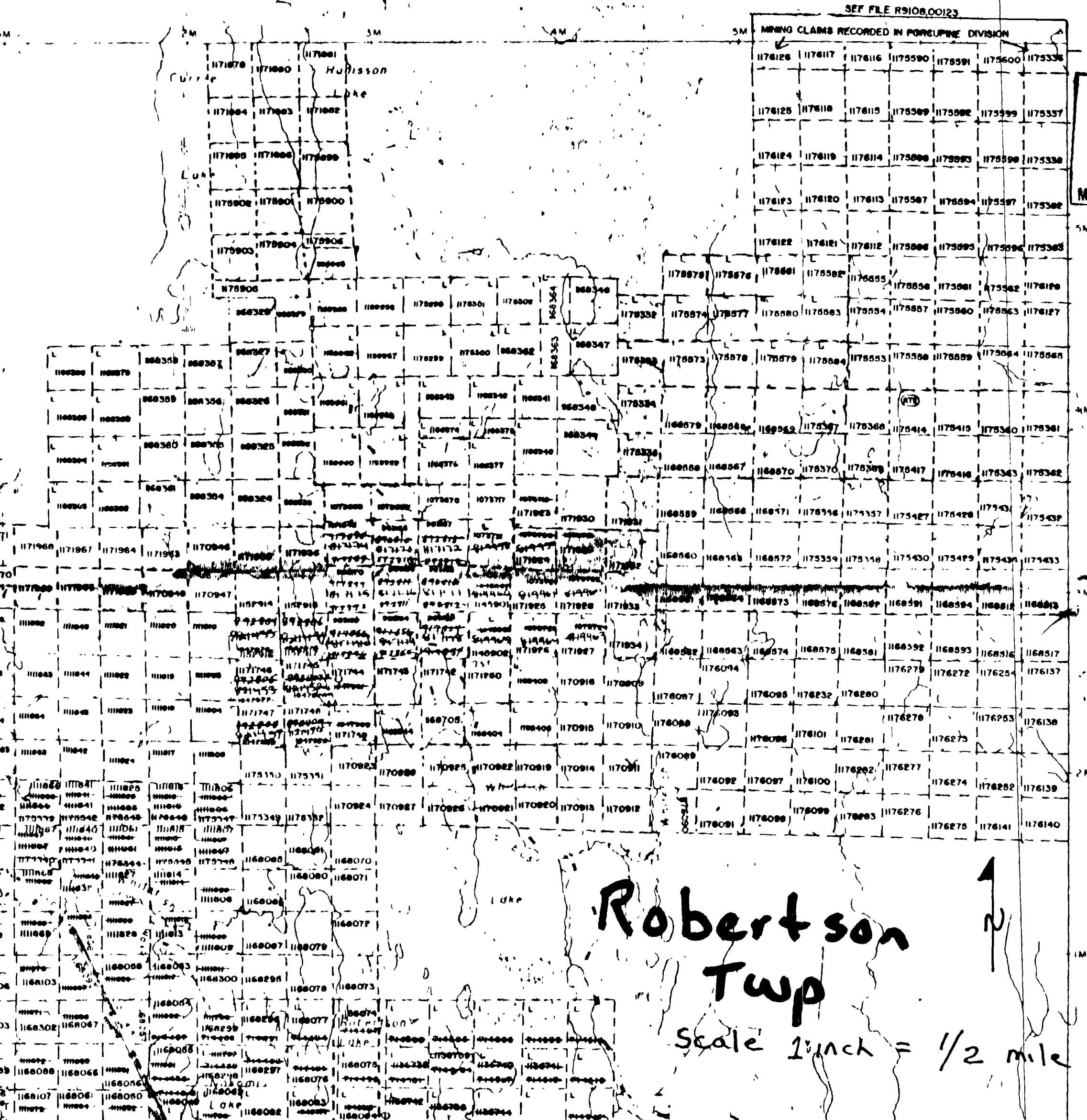
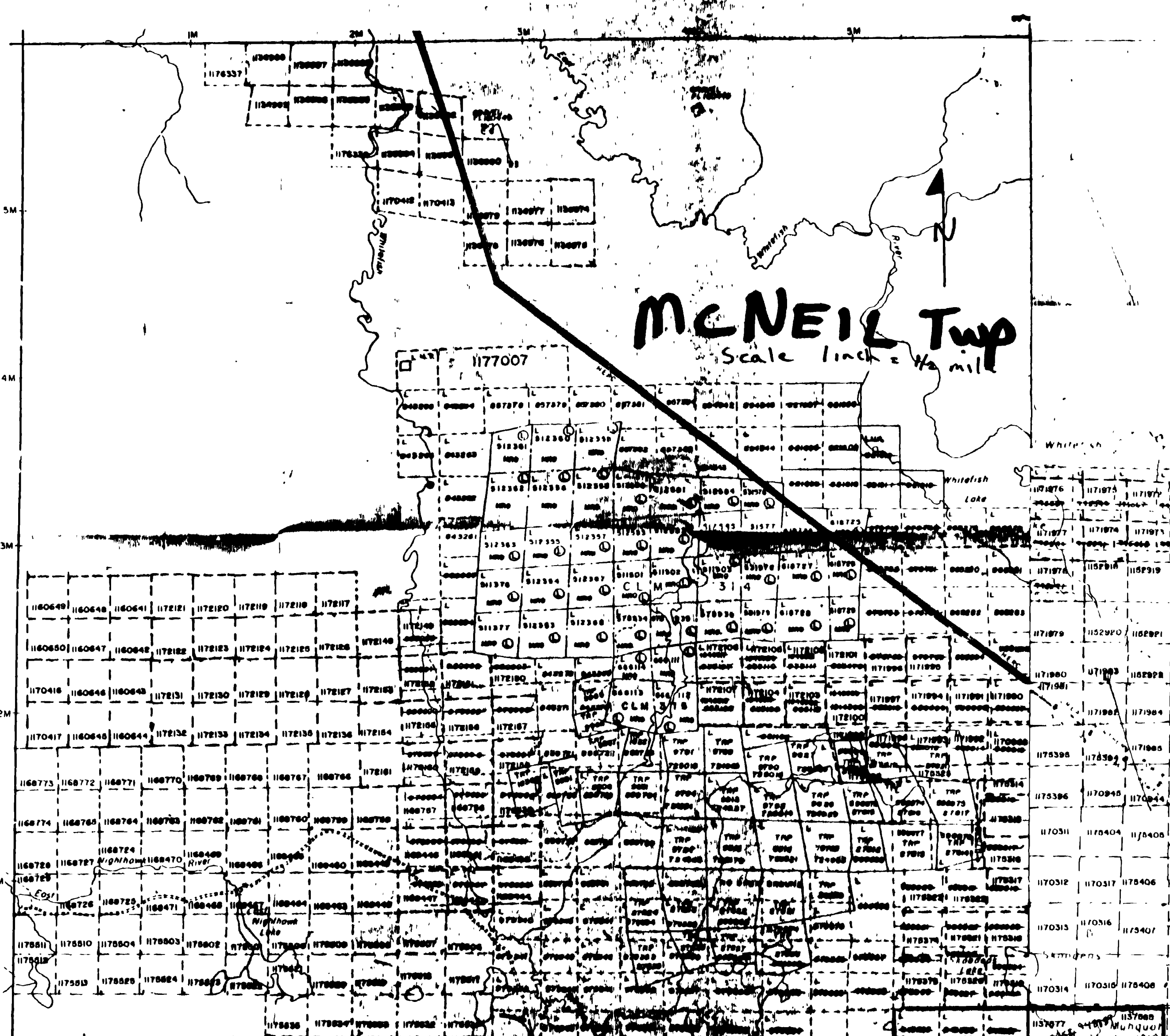
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CROWN LAND SALE LEASE	CL
LOCATED LAND	LOC
LICENSE OF OCCUPATION	LO
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAY	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
LANDS	
CANCELLED	
REMOTE TOURIST SETUP	(RIS)

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

TOWNSHIP SUBJECT TO FORESTRY OPERATIONS

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

PLAN NO **M.310**
 ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEYS AND MAPPING BRANCH



DATE OF ISSUE
Mar 23 1992
 DISTRICT OF
TIMISKAMING
 LARDER LAKE
 MINING DIVISION

SCALE 1-INCH = 40 CHAINS

PROPERTY LEGEND

- PATENTED LAND
- CROWN LAND SALE LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- LANDS
- CANCELLED

NOTES

- 400' surface rights reservation along the shores of all lakes and rivers.
- Surface and Mining Rights Withdrawn from Staking section 36/80 order No. 5200-0-12/80C OPENS W-8/80C
- Surface and Mining Rights Withdrawn from Staking section 36/80 order No. 5200-0-12/80C OPENS W-8/80C
- Surface and Mining Rights Withdrawn from Staking section 36/80C order No. 5200-0-12/80C OPENS W-8/80C
- AND PART (R) REOPENED FOR STAKING UNDER ORDER O 90-87 NR. O-123-80 NR OPENS PART OF THE RES. NOV 21/80

TOWNSHIP SUBJECT TO FORESTRY OPERATIONS

PLAN NO - M-203 # 5

CLEAVER TWP M.269

SHEBA TWP M.385

ARGYLE TWP

HUMPHREYS TWP

Baden Twp.



Problem Page

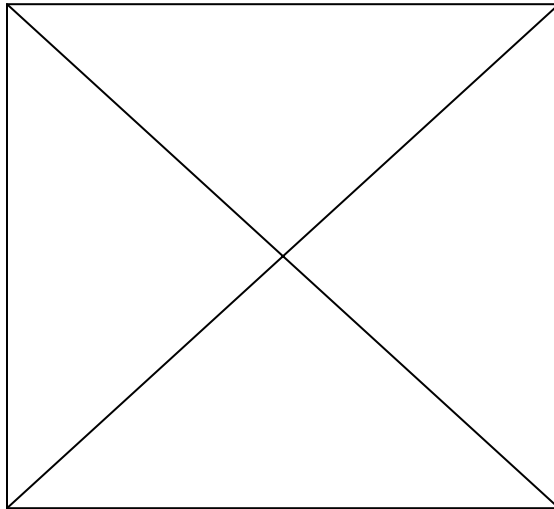
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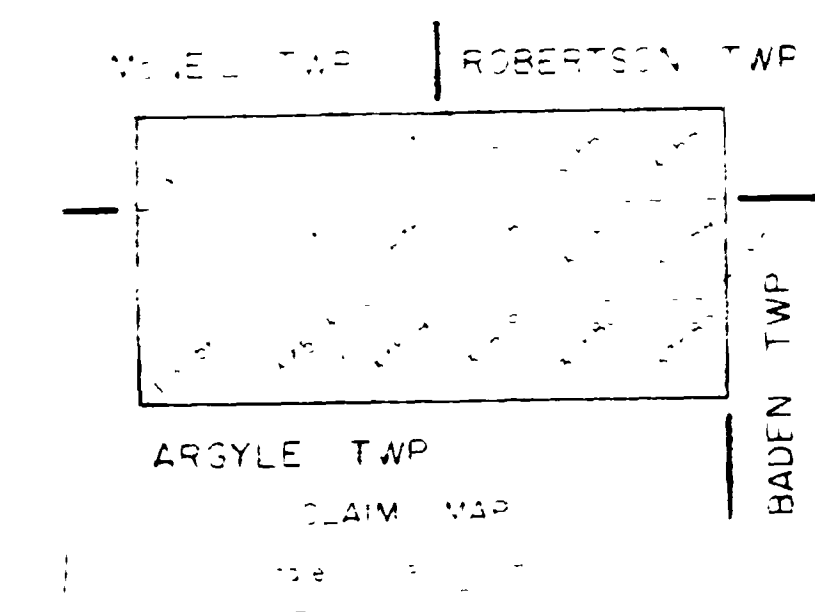
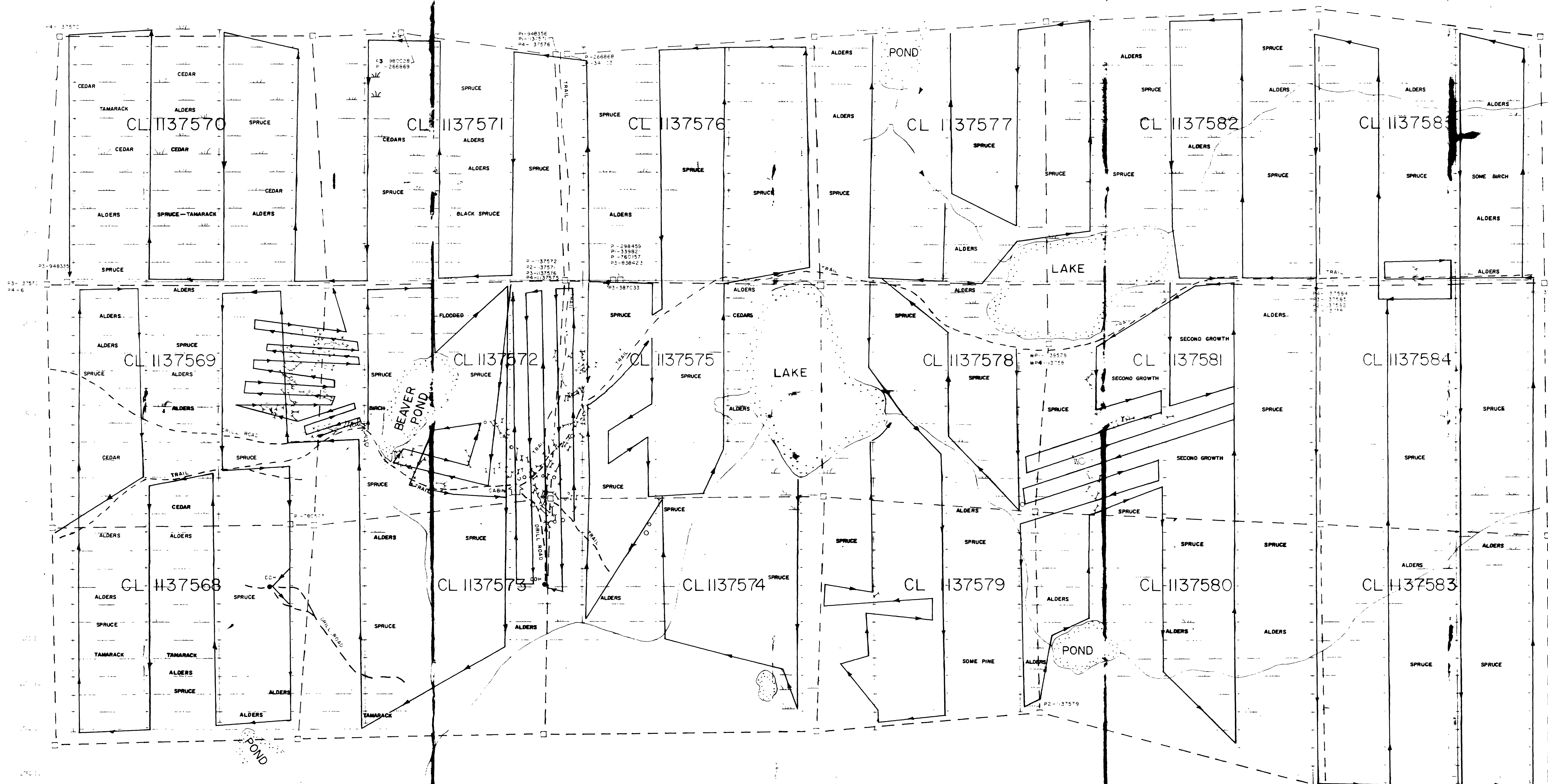
We apologize for the inconvenience.

Problème de conversion de page

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Nous regrettons tout inconvénient occasionné par ce problème.

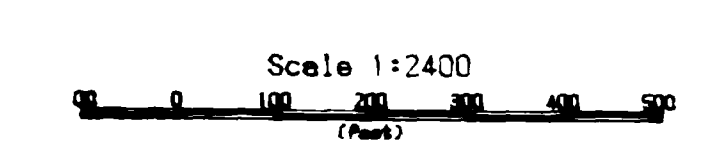




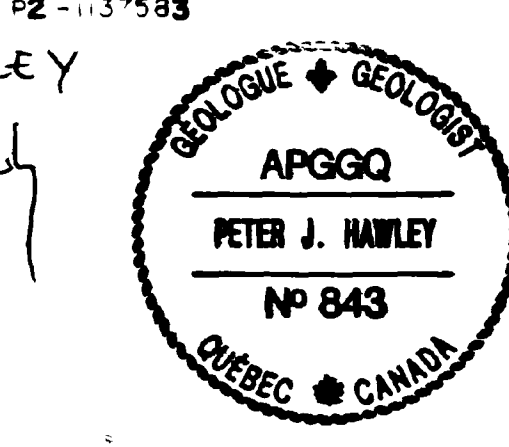
LEGEND

- TRAVERSES WITH DIRECTION
- ▲ OUTCROP
- TRENCH
- PIT
- CLAIM POST
- CLAIM LINE
- ≡ SWAMP

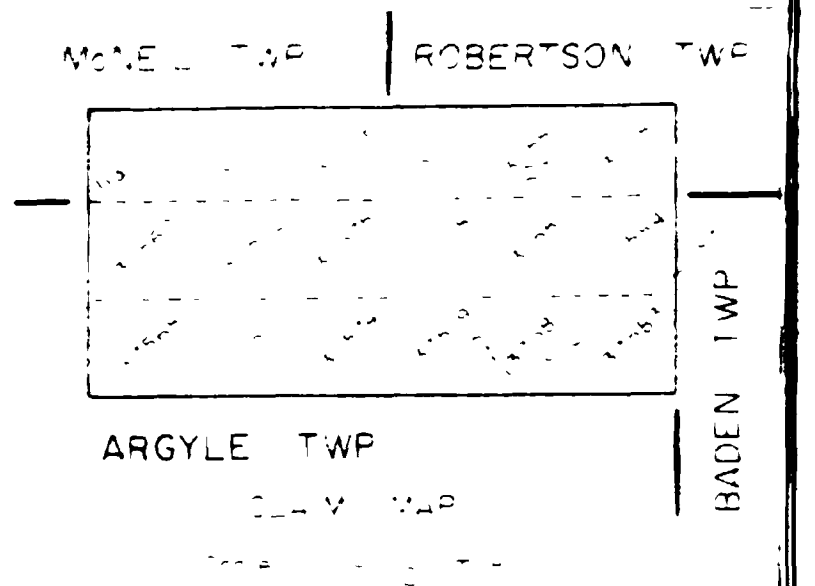
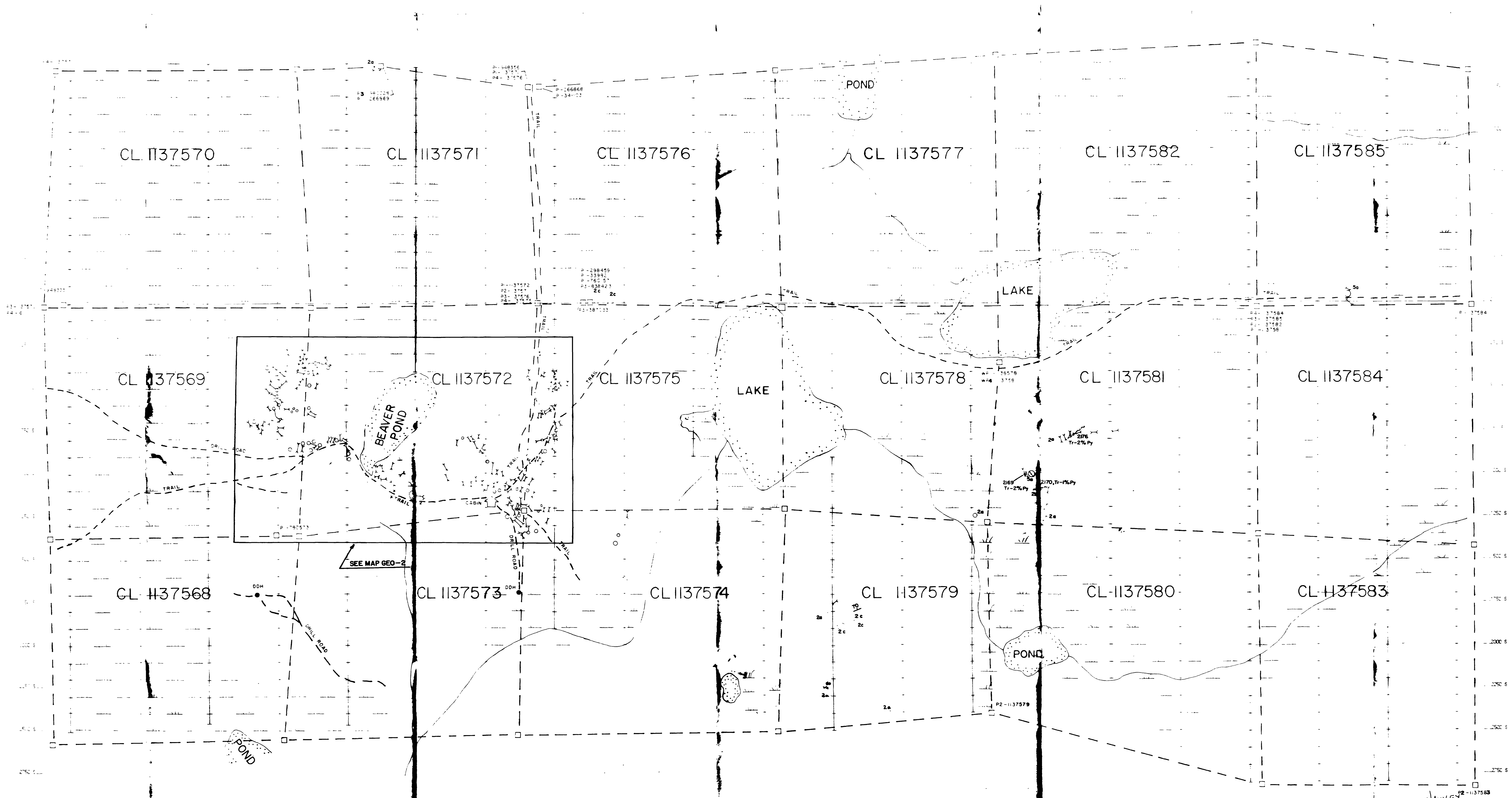
TRAVERSE DATES
MAY 26-28,92
JUNE 17-20,92



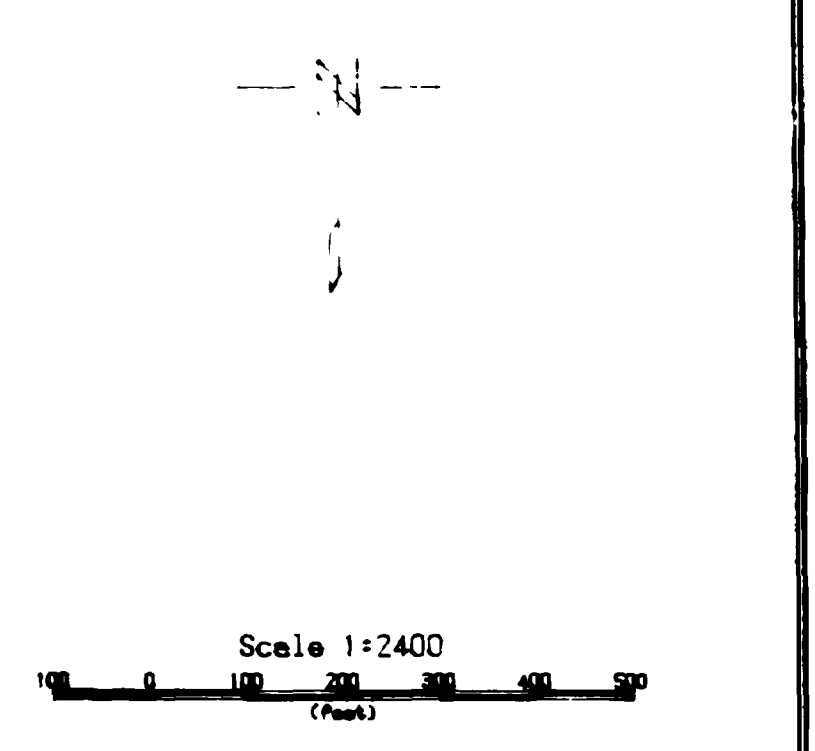
PETER HAWLEY
Peter Hawley
RA Campbell
RH



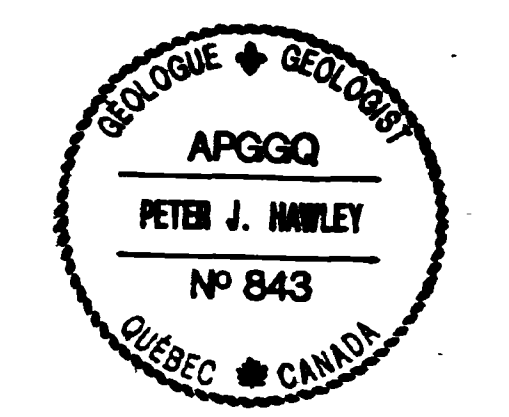
CAMPBELL / HAWLEY
PROSPECTING
PRO - 1
TRINITY EXPLORATIONS
ARGYLE - ROBERTSON - MOYE TWS.
ON. 4810
CANADA



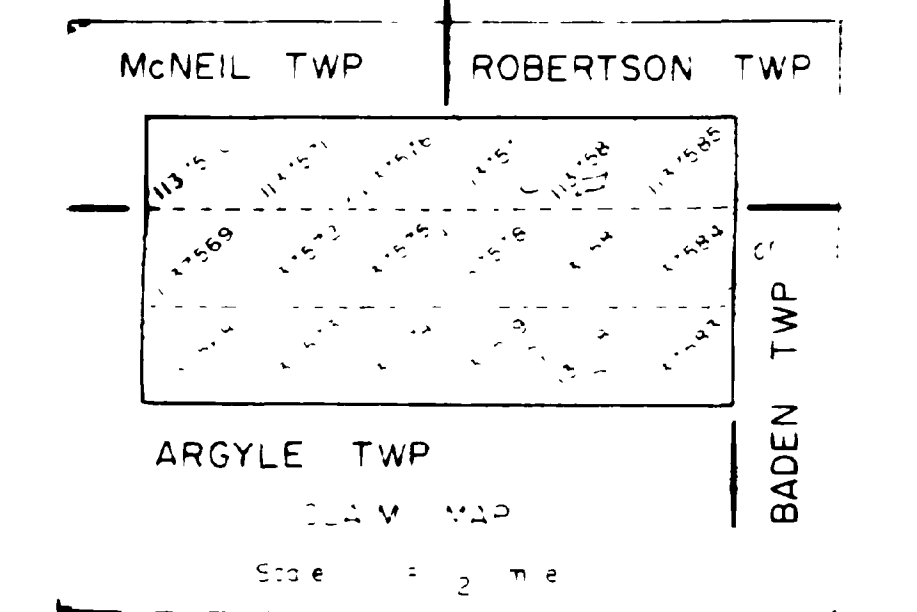
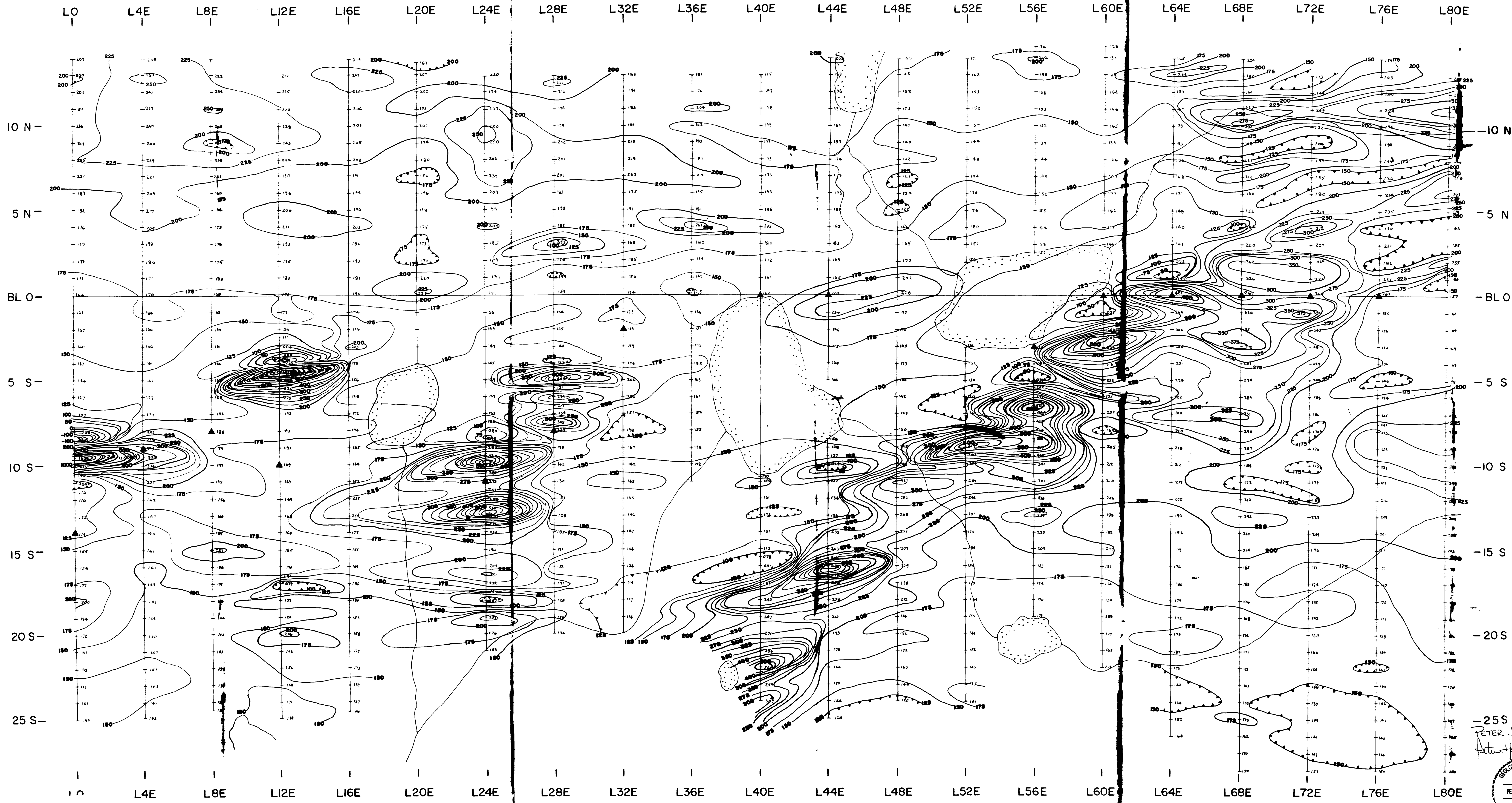
LEGEND
SEE DETAIL GEOLOGY MAP
GEO-2



PETER HAWLEY
Peter Hawley
R.A. Campbell
R.H.



CAMPBELL / HAWLEY
GEOLOGICAL SURVEY
GEO-1
TRINITY OPERATIONS
ARGYLE-ROBERTSON-HAILE TWP.
ONTARIO
CANADA

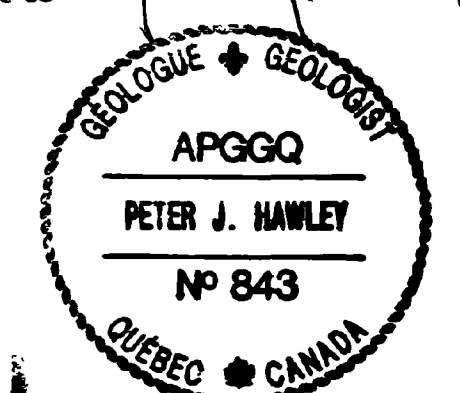


LEGEND

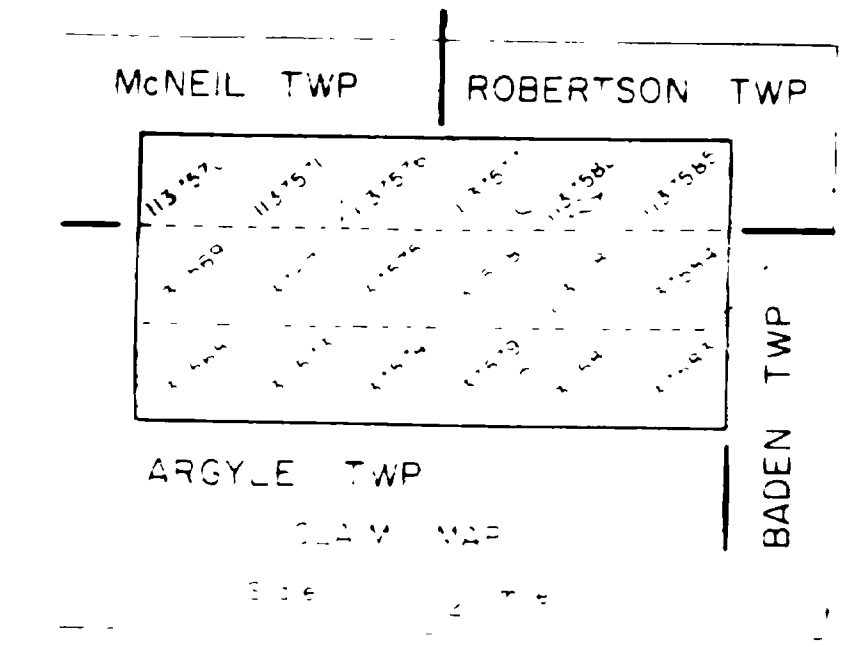
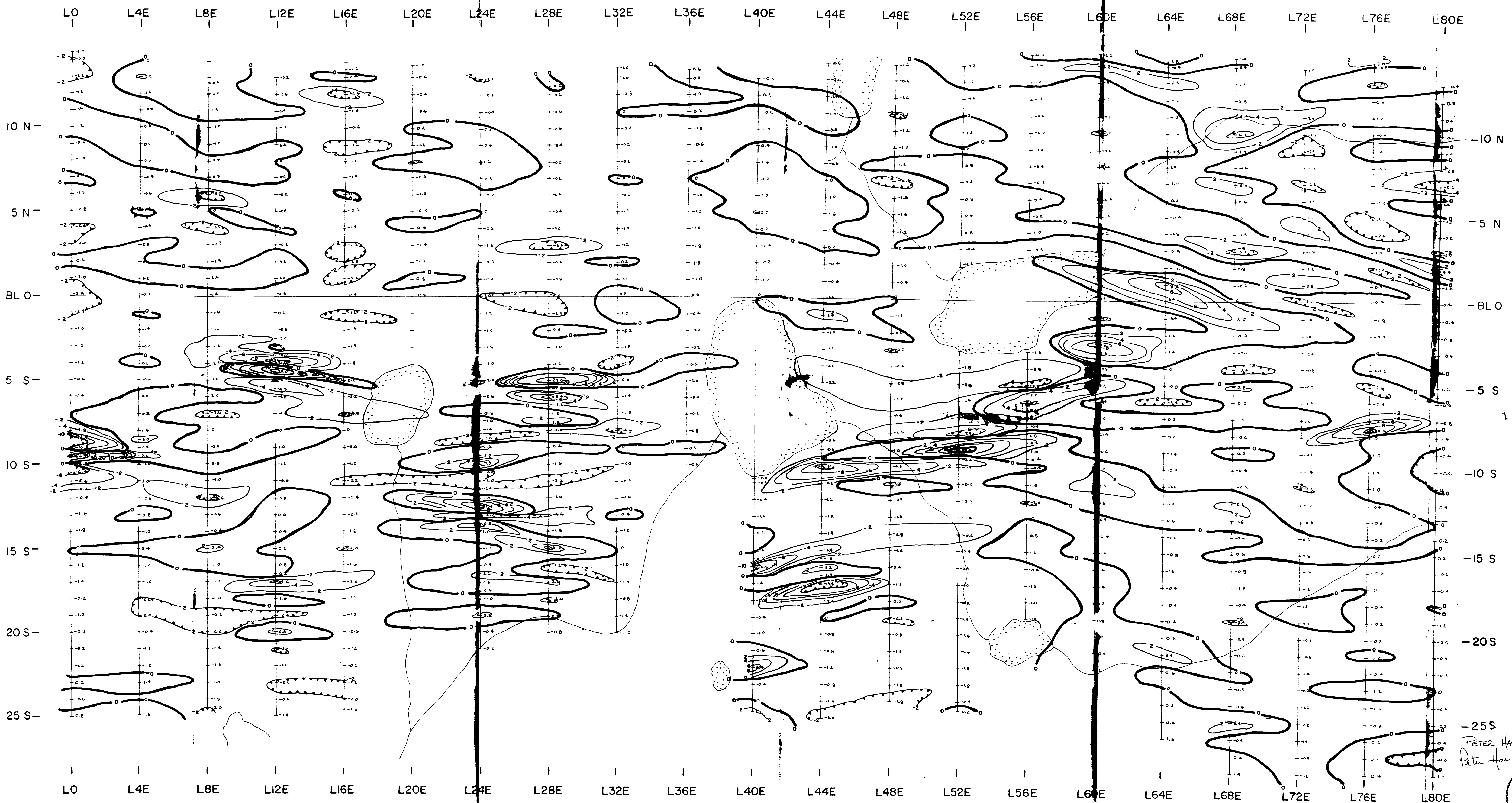
- MEASUREMENT STATIONS ALONG PICKET LINES
- READINGS OF EARTH'S TOTAL MAGNETIC FIELD
- RECORDED READINGS ARE 50,000 PLUS PLOTTED VALUES
- FORCE OF THE EARTH'S MAGNETIC FIELD (IN GAMMAS)
- MAGNETIC CONTOURS
- BASE STATION
- ELECTRICAL CONDUCTOR
- INSTRUMENT USED : GEM SYSTEMS G5M-8

Scale 1:2400
1 INCH = 200 FEET

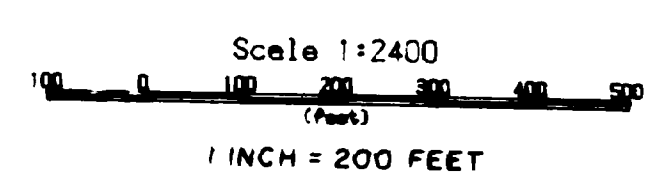
-25 S
 PETER J. HAWLEY
 Peter Hawley
 R. Campbell
 PH



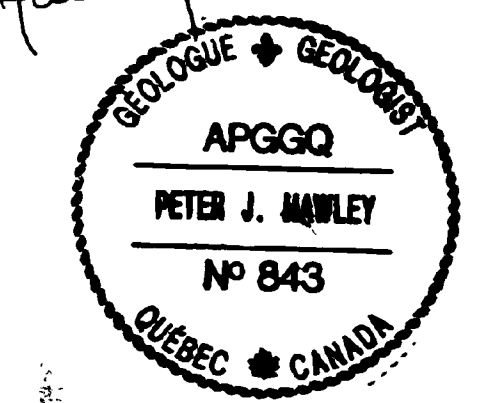
CAMPBELL / HAWLEY
 TOTAL FIELD MAGNETOMETER
 MAG-1
 TRINITY EXPLORATIONS
 ARGYLE - ROBERTSON - MCNEIL TWP.
 ONTARIO
 CANADA



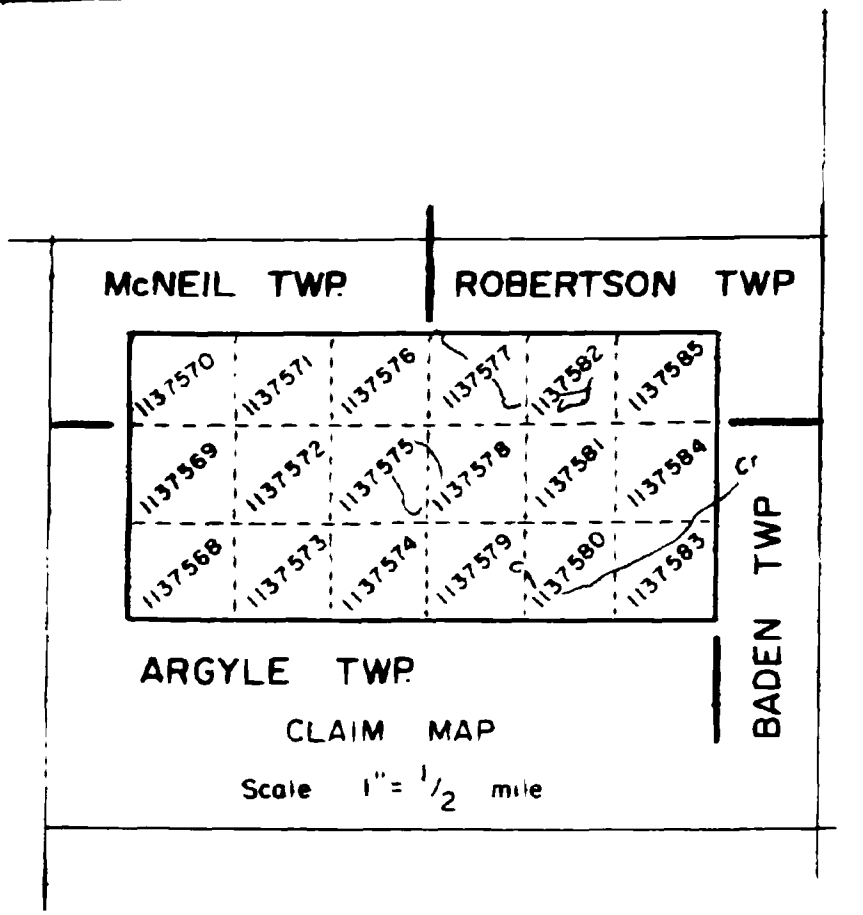
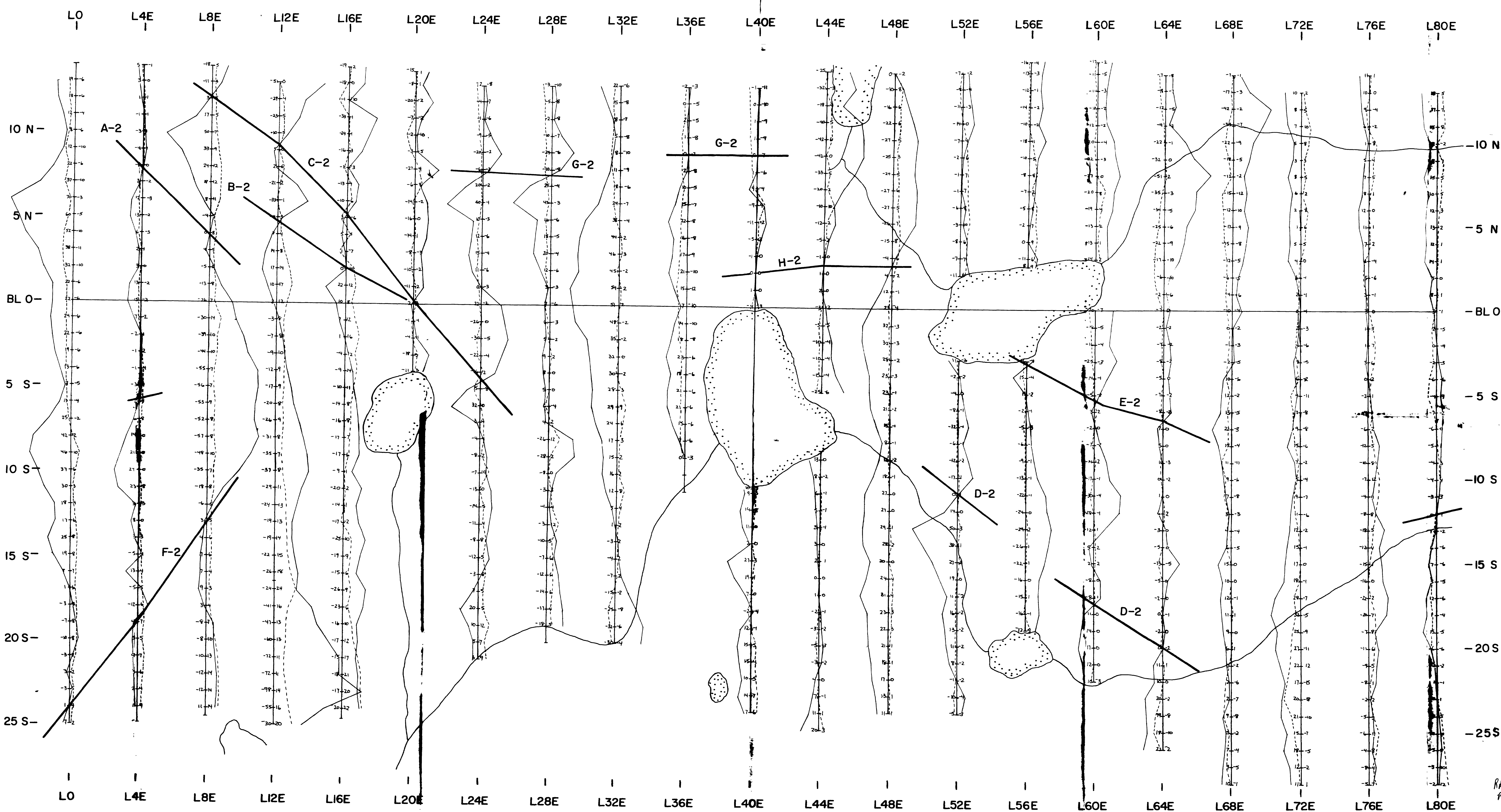
LEGEND
 LOW ALL READINGS IN GAMMA / FOOT
 INSTRUMENT USED: GEM SYSTEM
 GSM 8 MAGNETOMETER



PETER HAWLEY R.A. Geophys.
 Peter Hawley



CAMPBELL / HAWLEY
VERTICAL MAGNETIC GRADIENT SURVEY
 MG-2
 TRINITY EXPLORATIONS
 ARGYLE - ROBERTSON - McNEIL TWP.
 ONTARIO
 CANADA



- LEGEND**
- 3-6 MEASUREMENT STATIONS ALONG PICKET LINES
 - IN PHASE
 - - - QUADRATURE
 - PROFILE SCALE: 1"=40' ELECTRICAL CONDUCTOR
 - INSTRUMENT USED: GEONICS EM - 16
 - STATION USED: ANNAPOLIS, MD, USA, (21.4 kHz)
 - CLAIM POST
 - ⊥ SWAMP

Scale 1:2400
1 INCH = 200 FEET

PETER HAWLEY
Geologic & Geophysical
APGGQ
PETER J. HAWLEY
843
QUEBEC CANADA

RA Campbell
RH

CAMPBELL & HAWLEY
MFL-EM SURVEY
MFL-2

5+00S

10+00S

L12E

L16E

L24E

L28E

137569

137568

137572

137573

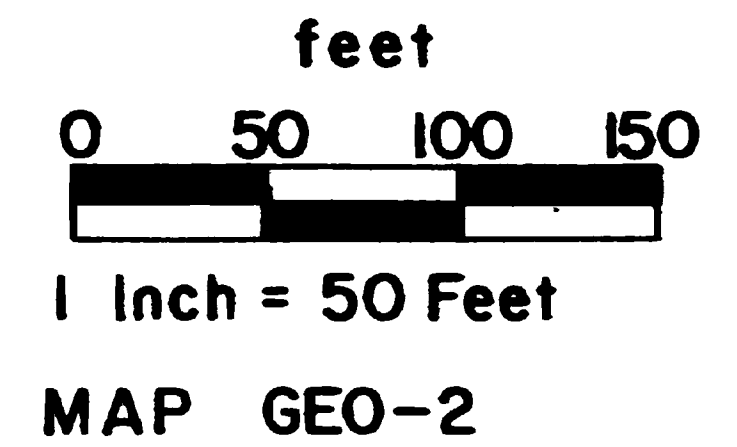
137575

137574



LEGEND

- 5 Felsic Intrusive Rocks
 - 5a Syenite
- 4 Metamorphosed Mafic-Ultra Mafic Int Rocks
 - 4a Gabbro
 - 4b Dunite
 - 4c Peridotite
- 3 Felsic Metavolcanics
 - 3a Rhyolite flow
 - 3b Tuff
 - 3c Breccia
- 2 Intermediate Metavolcanics
 - 2a Andesite Flow
 - 2b Dacite Flow
 - 2c Fine Ash Tuff
 - 2d Crystal Ash Tuff
 - 2e Sericite Schist
 - 2f Breccia
- 1 Mafic Metavolcanics
 - 1a Basalt Flows
 - 1b Tuff
- 10+00S CLAIM LINE
- Strike + Dip
- Contact
- Outcrop
- Trench
- Trench No.
- Pit
- Sample No.
- Sample Location
- Detailed Geology
- Jointing
- Shear
- Claim Post
- Road
- Trail
- Cabin
- Pyrite
- Chalcopyrite
- Sphalerite



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