

REPORT
ON MCVICAR LAKE AREA
SUMMER OF 1986

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MINING LANDS SECTION

Submitted by:

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CONCLUSIONS AND RECOMMENDATIONS

Significant gold values, and/or favourable geology are found in five settings on this property. They are:

- 1) late felsic intrusion contact zones, i.e. channel sampling in the Shear Zone and Showing 8 areas;
- 2) mineralized felsic intrusions on the West Grid;
- 3) coincident shearing, iron formation and Max-Min anomalies on the north shore of Flat Lake, East Grid;
- 4) brecciated felsic volcanics in the Little Long Lake Goomi Lake area, East and North Grids;
- 5) massive sulphide mineralization on the South Grid, and Western Extensions.

Late Felsic Intrusion Contact Zones

SHEAR ZONE

The shear zone occurs at the contact of the felsic intrusion with a gabbro body. The felsic intrusion is granodiorite to quartz monzonite in composition and is believed to be related to the Shonia Lake intrusion, where it hosts a high grade quartz vein gold showing.

48 channel samples were taken from this area. The best assay results were .026 and .029 oz/T. The next two highest values, and the only others greater than 100 ppb, are 130 and 170 ppb Au. The two best grab samples from this area were .030 oz/T and 385 ppb. All these values are from sheared, mineralized, highly altered granodiorite/quartz monzonite or, in the case of the .030 and 170 ppb values, from a quartz vein hosted by the intrusion.

Although these results are less encouraging than was hoped, they are, for the most part, comparable to those being encountered during the current drilling on the 1985 grid. The shear zone is at least 40m

wide, where it disappears into McVicar Lake, and has been traced for at least 50m along strike. To the east it again disappears into McVicar Lake and to the west disappears under overburden. As such it is open to both the east and west.

SHOWING 8

The geology of Showing 8 is complex and somewhat unusual, but appears to be a contact zone between the felsic intrusion and felsic metavolcanics. Grab samples from this area assayed as high as .063 oz/T Au. The channel sampling results from this area were again less encouraging than was hoped, .052 oz/T being the only value that exceeded 70 ppb. The fact that this channel sample was from the same area that gave the high grab sample assay suggests a very localized gold occurrence. This may be the case, however, the area directly across the lake from this showing appears to have similar geology and one sample returned an assay value of 140 ppb.

Mineralized Felsic Intrusions, West Grid

More than half the samples taken from the felsic intrusions on the west half of the West Grid returned anomalous gold values, as did all of the quartz vein samples from these intrusions. This includes a maximum gold value of 355 ppb in the intrusions and a maximum of .039 oz/T and >1000 ppb (no fire assay available) in the quartz veins.

The Shonia Lake intrusion and the basement rocks on the West Grid are gold bearing intrusions and as such should be mapped in detail. In order to properly evaluate the potential of these intrusions it is recommended that the current grid spacing of 400m be reduced to 100m. During detailed mapping of the new lines special attention should be paid to mapping the extent of the intrusions, paying particular attention to any mineralized or altered zones, especially those with associated quartz veins. Contacts with metavolcanics or other intrusions are also priority targets. Ground geophysics over these lines, especially on McVicar Lake, may help delineate the extent of these intrusions and the degree of alteration of the contact zones.

Ironstone - Shear Zone Association

This association is found along the north shore of Flat Lake on the East Grid. Coincident with the ironstone - shear zone association is a Max-Min anomaly and a lineament, shown on the O.G.S. map of the area. There are also indications of cross-faulting perpendicular to the trend of the shear zone/lineament. While only one sample from this area gave an anomalous gold assay, 65 ppb Au, the setting is favourable.

The strength of the Max-Min anomaly in this area is unknown, therefore it is recommended that the survey be extended across the lake and south to the south tie line. The area of greatest interest in this area appears to be under the lake, and can be tested best by diamond drilling. Prior to any drilling however, the shoreline should be re-mapped in greater detail and extensively sampled, possibly using a fly-camp on Flat Lake. If the results of the mapping, sampling and the Max-Min survey prove sufficiently encouraging, limited diamond drilling should be considered.

Brecciated Felsic Volcanics

The brecciated zone is found associated with a lineament along the shores of Little Long Lake and Goomi Lake on the North and East Grids. Only one sample was taken from this unit, and it returned an assay of .012 oz/T Au. At least one other outcrop of this unit is known in this area.

It is recommended that the area surrounding these two lakes, and particularly their shorelines, be mapped in detail and extensively sampled, particularly any brecciated outcrops. The lineament associated with the brecciation is shown to continue along the south shore of McVicar Lake west of Goomi Lake. The outcrop along this shoreline is sheared and should also be mapped and sampled in more detail.

Massive Sulphide Mineralization

This is another contact feature, as the mineralization occurs at or near the mafic metavolcanic-gabbro contact. Base metal values of up to 3.04% copper and .93% nickel have been obtained from samples of this mineralization, however, the lack of continuity of the mineralization and the low precious metal values associated with it make this area a low priority target.

The most interesting feature of this mineralization was the possibility of PGE mineralization. As can be seen from Table 2, only two samples returned anomalous values, and these are sub-economic. The fact that they came from an area that returned only modest copper and nickel values relative to some of the areas sampled is unusual. Platinum is commonly associated with pentlandite, suggesting that higher nickel values should give higher platinum values. With this in mind it may be worthwhile to resample those areas that returned the highest nickel values, i.e. the three large trenches on L31-33E on the South Grid. These samples should be analyzed for platinum only. Resampling of the area that did give anomalous platinum values (Showing 6, 1985 Reconnaissance Mapping) is also recommended.

I. INTRODUCTION

This report describes the field work carried out by Iain Allen, Jeff Ackert, Victor Mitchell, David White and Shane Gillham on a gold property in the McVicar Lake area of the Gitche River Greenstone belt (see Figure 1) during the 1986 summer field season.

The 4 grids comprising the McVicar Lake property (project 1446) have different baseline orientations and line-spacings and are named for their location relative to the 1985 claim group (see Figure 2). The east, west, north and south grids are contiguous with each other and the 1985 claim group. The west grid is contiguous with the Long Lake property to the west and north. The area of the east, north and south grids was staked as a result of an airborne mag and VLF survey flown in December, 1985. Favourable results from the more detailed 1986 reconnaissance work led to the staking of the west grid.

The 1986 field work consisted of:

- detailed mapping and sampling of the east, north, and south grids;
- 2) a Max-Min survey over selected areas of these grids;
- 3) reconnaissance mapping and subsequent channel sampling west and south of the 1985 claim group;
- 4) linecutting and semi-detailed mapping (400m line spacing) of the west grid.

II. LOCATION, ACCESS, TOPOGRAPHY

The McVicar Lake property is located within the Lang Lake greenstone belt approximately 80 km W of Pickle Lake and 120 km NE of Sioux Lookout, Ontario (see Figure 1), in NTS: Blocks 52011 and 52012. The claims are shown on the McVicar Lake Area (G-2121) and Stoughton Lake Area (G-2228) claim maps.

Access is by float/ski plane or helicopter from either Pickle Lake or Sioux Lookout.

The east, north and south claim groups are approximately 20% outcrop, consisting mainly of low rounded mounds within large sand ridges that cover 40% of the property. The sand ridges are generally surrounded by muskeg with appreciable amounts of spruce bog and alder swamp. Relief is gentle, seldom exceeding 3-5m, although there are some 10-15m cliffs in the southeastern and northwestern parts of the property. Overburden in the muskeg and swamps appears to be quite deep, while the sand ridges represent shallow subcrop. They are covered mainly by Jack Pine, with subordinate Spruce, while the muskeg areas are covered mainly by Spruce with subordinate Jack Pine and Tamarack. Labrador Tea and moss are ubiquitous.

To the west the terrain is more rugged, much of the shoreline being 5-20m cliffs, however, as you move in from the shoreline there are many large areas of spruce bog, swamp or low sand mounds. Overburden is deep in the swamps, shallow in the sandy areas with 20-25% outcrop exposure. The forests are more mature to the west, with larger trees and less undergrowth. The overstory is predominantly conifer. Mainly White and Black Spruce and Jack Pine, with occasional stands of Poplar and/or Birch. Labrador Tea and moss are everywhere.

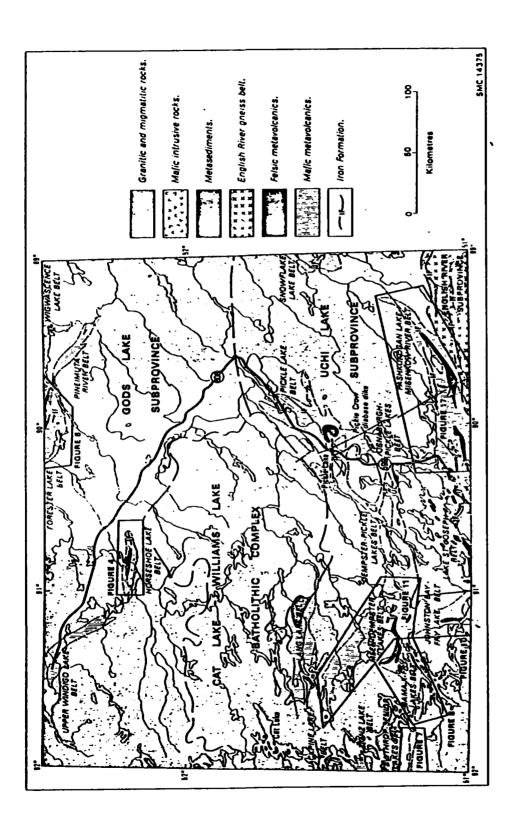
III. PREVIOUS WORK

The McVicar Lake area was mapped by Laird in 1929, (0.D.M. Map 39d) and by Fenwick in 1970, (0.G.S. Maps P.665 and P.581).

A. EAST, NORTH AND SOUTH GRIDS

Kenlew Mines Limited staked this area in 1959. Most of their work was concentrated in the area of the 1985 claim group (see 1985 report).

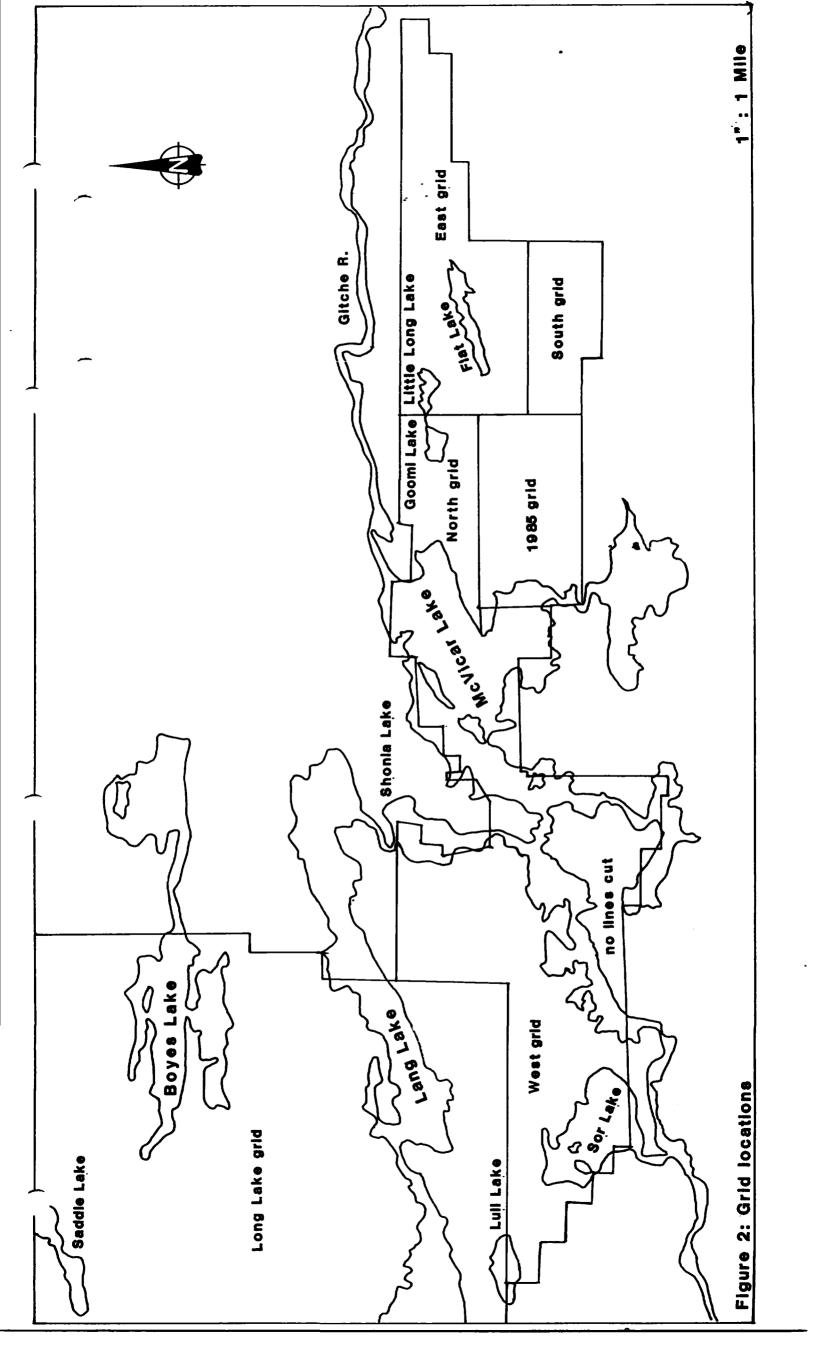
Kerr Addision optioned the Kenlew claim group in 1962. They were interested primarily in base metals, concentrating their efforts on the cp, po showings to the east, and ignored the gold potential of the area.



FIGURE

Location and regional geology

From Sage and Breake, 1982



The area was restaked in 1972 by New Jersey Zinc and in 1975 by UMEX. Both were interested only in base metals and subsequently allowed the claims to lapse.

The area remained open until it was staked by Utah in 1985 and 1986.

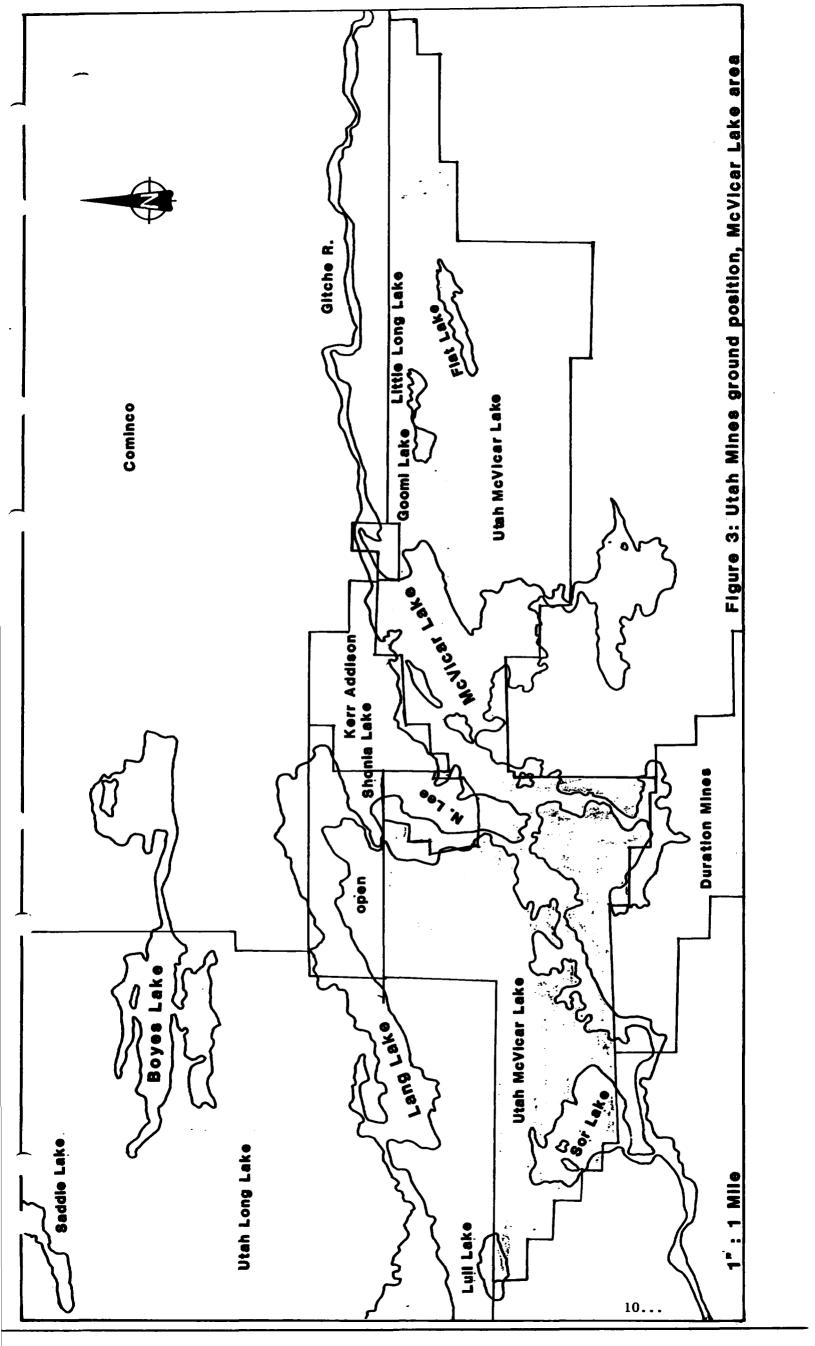
B. WEST GRID

Laird, 1931, reports initial work in this area in 1928. Claims were staked in the Shonia Lake area (the Smith-Watson and Goodfellow Groups) and just west of the southwest shore of McVicar Lake (the Dumond Group). Only the Smith-Watson Group appeared to have any gold potential, resulting in the only significant known gold showing in the belt.

Hanna Mining Company and Dresden Mines Limited were active in the area of the Dumond Group in 1972, but allowed their claims to lapse.

IV. RECENT WORK

Noranda and Kerr Addison were active in the area in 1984, conducting detailed mapping and lithogeochemical sampling programs on their claim groups during the summer, however, neither returned to do any follow-up work during 1985 or 1986. The Noranda claim group lapsed and was restaked by N. Lee of Sioux Lookout in 1986. The initial 37 claim group staked by Kerr Addison has been reduced to 27 claims and may soon lapse. Cominco staked a large claim group to the north and east of the Kerr Addison ground but as yet have done no work on the property. Duration Mines held an 8 claim group in the Semia Lake Area. This group has been expanded to the north and west and was mapped and sampled this summer. Figure 3, shows the current ground situation in the area.



V. SAMPLING

368 rock samples were taken during the course of the summer. No other medium was sampled. Included in this total are 64 channel samples, taken over widths of 0.5 to 1.5m. All of the samples were analyzed for Au and Ag, (343 for Cu and 338 for Zn). Most quartz vein samples were analyzed for Au and Ag only, however, four were analyzed for As as well. In areas of massive sulphide mineralization, various combinations of the following elements were added to the analysis: Ni (22 samples), Pt and Pd (11 samples), Co (8 samples) and Pb (6 samples).

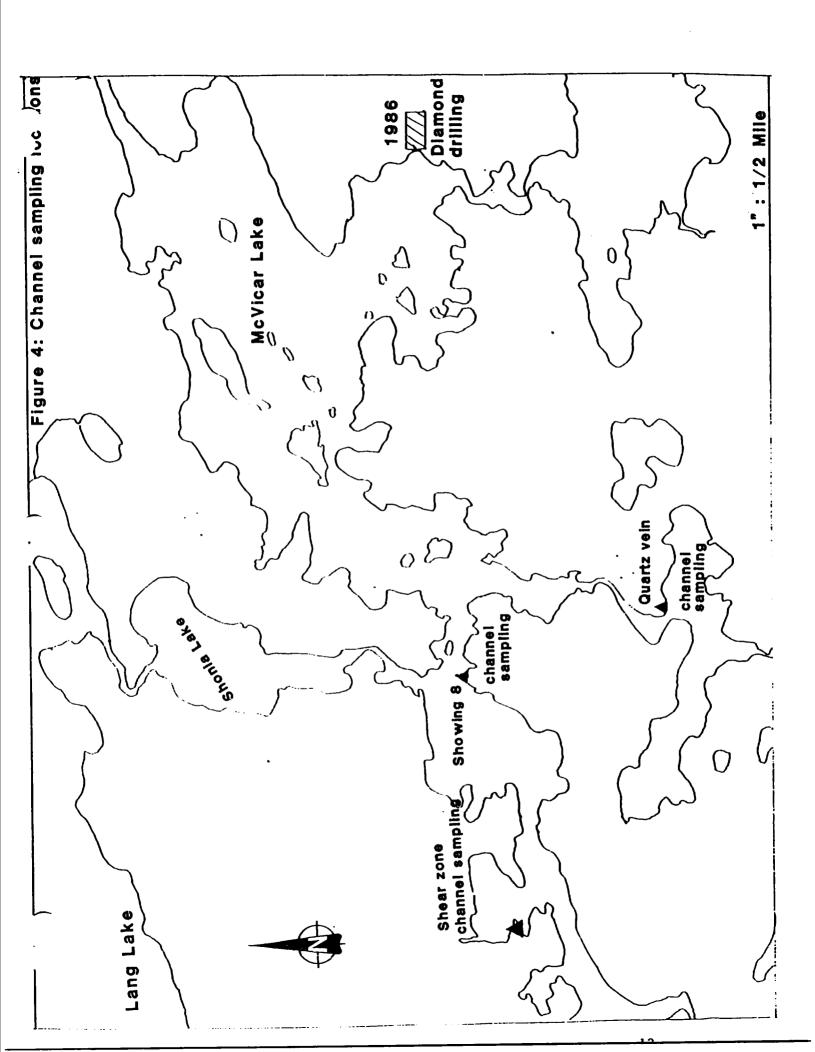
Sampling was restricted to areas that appeared altered, and/or mineralized, or were otherwise considered favourable for gold mineralization. The bulk of the channel samples were analyzed for the major elements and oxides, as well as the trace elements listed above. This was done in an attempt to:

- 1) better define the rock types in this area, and
- 2) to help identify the type and degree of alteration visible in the rocks.

Six samples other than the channel samples were also sent in for whole rock analysis. Again this was done to better identify the rock type or alteration type and intensity.

VI. CHANNEL SAMPLING

Three areas were channel sampled in 1986. The first was a large (.5m) quartz vein hosted by a quartz diorite-monzonite in the southwestern-most Bay of McVicar Lake. The next area channel sampled was the area of Showing 8 from the 1985 reconnaissance work. The final area of channel sampling was a shear zone along the NW shore of McVicar Lake. The locations of these 3 areas



relative to each other and to the existing grids is shown in Figure 4. Only the first area is described below. The other two areas are described in the Economic Geology section.

A. QUARTZ VEIN

Assessment reports by Chellew Mines Limited in 1950 indicate that the trenching they did in this area returned gold values. Grab samples were taken from this area during reconnaissance mapping in both 1985 and 1986 but no significant gold values were received. As the trench is now included in the McVicar Lake property, and is reported to be a gold showing, it was decided to channel sample it as a final test.

Prior to channel sampling the trench was cleaned out using a high-pressure Wajax pump and hand tools. The quartz vein strikes north-south and is exposed in the north part of the trench. It does not reappear in the south part of the trench, however, a number of narrow east-west striking shear zones are exposed. The quartz vein is barren milky quartz, with no visible mineralization or alteration. The shear zones are moderately carbonated and moderately to intensely sericitized. Trace to locally 1% pyrite is present in the shear zones. Seven channel samples, ranging from 0.5 to 1.5m were taken from this area, with disappointing results. Six returned 5 ppb Au, and one returned 10. This area is of no further interest.

VII. GENERAL GEOLOGY

The property lies within the Lang Lake metavolcanic-metasedimentary belt of the Uchi Lake Sub-province of the Canadian Shield (see Figure 1). The Lang Lake belt is an isolclinally folded syncline striking east-west and plunging to the east (Sage et al, 1982). All rocks are of Precambrian age.

A. SOUTH GRID

A gabbro/diorite intrusion is present in the SW corner of this grid. The intrusion is first seen about 2+00S on L25E. The contact between the intrusion and the metavolcanics to the north trends SE and runs off the grid at L41E. The rest of the grid is underlain by mafic metavolcanics, with a small lens of intermediate metavolcanics between lines 46 and 49E, from 6+00S to 7+00S. There is a second lens of intermediate metavolcanics along the baseline from L49 to L52E. Feldspar and quartz-feldspar porphyry dykes intrude both the metavolcanics and the intrusion.

B. EAST GRID

The east grid is underlain primarily by mafic meta-volcanics. The NW corner of this grid, from the south shore of Little Long Lake to the north boundary of the property, is underlain by intermediate metavolcanics. Within these intermediate rocks are two thin bands of felsic metavolcanics, both exposed along the shores of Little Long Lake. There are also 4 lenses of intermediate metavolcanic within the mafic metavolcanics. All these lenses strike parallel to the baseline. Magnetite and hematite ironstone are common on this grid. The best exposures are along the north shore of Flat Lake. There are scattered feldspar porphyritic dykes intruding the rocks on the west half of this grid.

C. NORTH GRID

The south half of this grid is underlain by mafic metavolcanics. To the north these are overlain by a band of intermediate metavolcanics, which are in turn overlain to the north by felsic metavolcanics. Felsic dykes intrude all lithologies.

D. WEST GRID

The western edge of this grid is underlain by granitic basement. To the southeast the granite is intruded by a gabbroic body, which is in turn intruded by small lenses of granodiorite or quartz monzonite related to the Shonia Lake intrusion. The north-central part of this grid is underlain by intermediate metavolcanics, which are overlain by a narrow band of felsic metavolcanics along L60E. East of this band of felsic metavolcanics are more intermediate metavolcanics, grading into mafic metavolcanics in the eastern part of the grid.

VIII. DETAILED GEOLOGY

A. Mafic and Intermediate Metavolcanics

The main criteria used to identify a rock as mafic or intermediate were colour index, hardness and mineralogy. Using these criteria it was difficult to state that one rock was definitely mafic while another was definitely intermediate. There seemed to be a gradation between the two rock types, both within and between outcrops, on this property, rather than distinct flow boundaries. As a result, these two rock types will be discussed together.

Mafic and intermediate metavolcanics are the predominant extrusive rock type on this property. They are comprised of massive and foliated lavas, tuff and lapilli-tuff, pillow breccia, pyroclastic breccia, ironstone-hosted breccia and rubbly breccia, pillow lava, amygdaloidal lava, coarse-grained flows (or mafic intrusive rocks) and amphibolite.

B. Massive and Foliated Lavas

The massive and foliated lavas are dark green on fresh surfaces and medium to dark green on weathered surfaces, are massive to weakly foliated, and are fine-grained to aphanitic. Jointing intensity in these outcrops ranges from very low to high. Which can give the outcrops a rubbly appearance. Short, discontinuous, 1-10 cm wide barren, milky quartz veins are occasionally present along the fractures. This feature is common to most of the mafic metavolcanic outcrops.

Weak carbonate alteration is present in most outcrops, mainly as coatings on joint surfaces. Iron oxide staining is also ubiquitous in these outcrops. It is usually seen as a 1-2 cm band on joint surfaces. Sulphide mineralization, principally finely disseminated pyrite, occasionally pyrrhotite, is rare in these rocks and where present seldom exceeds 17.

C. Tuff and Lapilli-Tuff

Outcrops of tuff and lapilli-tuff are rare and scattered. The tuff fragments range from .1 to lmm in size, and comprise from 10 to 30% of the rock. They are present in a very fine grained matrix that is generally chlorite-rich. Rarely the fragments are 2-4mm quartz eyes. The rock is generally dark green on fresh surfaces and medium grey-green on weathered surfaces. Alteration is confined to weak carbonation. either as coatings on joint surfaces or pervasively throughout the rock. Pyrite and/or pyrrhotite are occasionally present in trace to minor (<1%) amounts.

The lapilli-tuff outcrops are characterized by 40-50% fragments that are stretched 10-15:1 along the foliation. They average 10 cm % 1 cm in size and are generally more felsic than the matrix. There is no sulphide mineralization in these outcrops and alteration, mainly carbonation, is present in the fragments but not the matrix.

D. Breccias

The pillow breccias are found on the east and south grids. They are characterized by irregularly shaped fragments that have a chilled margin. The presence of a complete selvage on most of the fragments suggests that the pillows were brecciated before they had cooled completely. The fragments are up to 10 cm in size and are subrounded to subangular. Alteration is confined to weak to moderate carbonation, sulphide mineralization is absent.

The pyroclastic breccia outcrops are rare and scattered. The breccia fragments in these outcrops are generally angular, occasionally subrounded, range from lmm to .5m in size and constitute up to 70% of the rock. The matrix is very fine grained and chloritic. The rock is dark green on fresh surfaces, medium grey-green on weathered surfaces and is usually massive. Sulphide mineralization is absent from the outcrops examined. Alteration is confined to carbonate coatings on joint and fracture surfaces.

The ironstone-hosted breccia occurs in only one outcrop, 1093. The breccia appears to be a quartz-ankerite rich zone within an outcrop of magnetite ironstone. Fragments of well-banded ironstone are mixed with the quartzankerite material suggesting that the quartz-ankerite material is a cement for the ironstone fragments.

The rubbly breccia is so-called because it is composed of 90% subangular to subrounded fragments that are cemented together by calcite and look like cemented rubble. The fragments and the host rock are mafic metavolcanic. The calcite cement is light creamy white and has a sugary texture. The fragments are 1-10 cm in size. Aside from the calcite cement, there does not appear to be any alteration in this breccia, nor is there any sulphide mineralization. This breccia may be due to hydraulic fracturing, by a CaCO3-rich fluid, or it may be due to cementation of a talus slope (R. Thomas., pers. comm.).

E. Pillowed Lavas

In the pillowed flows the pillows are generally poorly exposed and appear stretched along the foliation in some instances. As a results few top determinations were possible. Those that were obtained were frequently contradictory and no concensus top direction was possible. The pillows ranged from .lm X .3m to .4m X 1.5m, with .5 to lcm salvages. They are dark green on fresh surfaces, medium green on weathered surfaces, and are extremely fine grained. In some instances the pillows are vesicular, with the 1-5mm oval vesicles concentrated toward the outside of the pillow. No sulphide mineralization was observed in the outcrops examined. Alteration is confined to carbonate coatings on joint and fracture surfaces.

F. Amygdaloidal Lava

The amydules range from .5mm to lcm in size, can be oval or irregular in shape and are usually calcite, occasionally quartz or feldspar. They comprise from 10 to 40% of the rock and weather out on exposed surfaces creating a pitted surface characteristic of these outcrops. In one outcrop the amygdules appeared aligned and stretched along the foliation. The rock is fine to medium grained, generally massive and contains trace to minor amounts of pyrite. Moderate to intense carbonation is common in these outcrops.

Amygdular lavas are common along the north shore of McVicar Lake between L72 and L76E. The amygdules comprise up to 40% of the rock and are very variable in composition. They can be calcite, iron carbonate, chlorite or glassy quartz. Occasionally the chloritic amygdules have calcite or iron carbonate cores, suggesting replacement.

G. Coarse-Grained Lavas

The outcrops of coarse grained lava are very similar to the massive flows differing only in grain size, which ranges from 1mm to 5-7mm. They often appear gabbroic but are believed to be simply a coarser phase of the flow. Outcrops of this unit are scattered throughout this belt, however, no pattern is evident in their occurrence or distribution.

H. Amphibolite

Outcrops of amphibolite are distinguished by the presence of abundant 0.5 to 3mm hornblende needles. The rock is dark green-blue on both fresh and weathered surfaces, is massive to weakly fractured and occurs in scattered outcrops in the northeastern part of the property. Alteration and mineralization are as described for the massive and foliated lavas.

I. Felsic Metavolcanics

This category includes massive and foliated lava, tuff and lapilli-tuff, tuff breccia, volcanic breccia and ironstone-hosted breccia.

These rocks are light green-grey on fresh surface, light buff coloured on weathered surfaces, and are aphanitic. They are very silica-rich, in some cases almost cherty, and are extremely hard. Visible sulphide mineralization is rare, where present it can be either pyrite or pyrrhotite, in amounts <1%. Alteration varies from weak carbonate coatings on joints to intense pervasive carbonation.

The tuff and lapilli tuff outcrops are distinguished by the presence of 1mm to 1cm fragments that comprise from 20 to 50% of the rock. While some outcrops are well bedded, most are massive. Some of the bedded outcrops may be very weak iron formation. The tuff breccia and volcanic breccia outcrops are distinguished by the presence of lcm to .5m angular fragments of tuffaceous material in an aphanitic matrix. In many of these outcrops the matrix appears mafic while the fragments are felsic. This mafic matrix is usually strongly foliated and seems to flow around the fragments. Mineralization is absent and alteration is primarily weak to moderate carbonation.

The ironstone-hosted breccias are heterolithic, containing fragments of volcanic mudstone (the material interbedded with the ironstone in non-brecciated outcrops), intermediate to felsic metavolcanic, and massive and finely laminated ironstone. The fragments are set in a matrix of scoriaceous-looking ironstone. They range in size from lmm to 15cm, are angular to subangular and comprise 10-30% of the rock. Proportionally, the metavolcanic fragments make up 60-70% of the fragments, the ironstone 15-20% and the remainder is volcanic mudstone. Weak to moderate carbonate alteration is present in some of the outcrops, and minor to 1% pyrite may also be present.

The genesis of these breccias is unsure. Some of the outcrops appear flow banded, with the fragments aligned along the direction of flow. This suggests some form of soft sediment deformation. Others appear to have been brecciated in-situ, possibly due to hydraulic fracturing by very iron-rich fluids in a reducing environment.

J. Chemical Sediments

The metavolcanics and the metasediments in this belt frequently host both magnetite and hematite ironstone. The magnetite ironstone occurs throughout he belt while the hematite ironstone is found mainly from the east shore of McVicar Lake to the east end of Flat Lake. The magnetite ironstone can be massive, banded or cherty, while the hematite ironstone is usually well banded.

K. Magnetite Ironstone (MIS)

The differences between the three types of magnetite ironstone are based on the presence/absence of banding and on the amount of chert present. The massive magnetite ironstone shows no banding or bedding, while the banded unit has 5mm to 10cm bands, frequently with mm scale laminae within the bands. Neither of these units contains more than 10% chert. The cherty unit contains up to 60% chert and is usually banded. In most cases the magnetite is finegrained, in the case of the cherty units it is aphanitic. Discrete crystals of magnetite are present in outcrops 1139. 1168 and 1174. They are 1-3mm in size and comprise 30-60% of the rock. In outcrops 1139 and 1168 the crystals are hosted by a cherty quartz vein, while in 1174 they are present in a band of fine grained magnetite. Outcrop 1168 is also the first outcrop in which the volcanic mudstone interbedded with the MIS is magnetic. The magnetite occurs in this unit as both discrete crystals and very fine grains.

The amount of magnetite present in the ironstone varies from a minimum of approximately 20% to a maximum of approximately 90%. Accordingly there are varying degrees of magnetism, from outcrops that do not visibly affect a compass held at chest height, to areas where a pencil magnet cannot easily be shaken off a sample from which it is suspended.

There is no obvious alteration in these outcrops. Moderate to intense iron staining is common, on both weathered surfaces and bedding and banding planes. Where they are not rusty, all surfaces are black. Minor (common) to 10% (rare) pyrite is present in these units in the eastern part of the McVicar Lake property as fine disseminations and as blebs concentrated along fractures and quartz/chert stringers. The magnetite and hematite ironstone can occur together, either interbedded or with MIS as rims around a core of HIS. The presence of both MIS and

HIS indicates a change from a reducing, (MIS) to an oxidizing (HIS) environment.

L. Hematite Ironstone

This unit is characterized by the colour of the jasper which can vary from a bright red to a dull burgundy colour. The rock is usually well laminated (lmm - lcm), is aphanitic and appears unaltered. It is only found in association with MIS, while MIS is frequently found without HIS. Pyrite mineralization is common in this unit, as fine disseminations and as blebs concentrated along fractures and quartz/chert stringers.

M. Sulphide Ironstone

There are three outcrops of sulphide ironstone in the McVicar Lake area. Two, one on the north shore and one on the SW shore, are 1-3m wide bands of massive sulphide mineralization, mainly pyrite with some pyrrhotite and rare chalcopyrite. Both were sampled extensively in 1985 and 1986, however, the best assay result from this sampling was .012 oz/T Au, with 2510 ppm Cu and 1.6 ppm Ag. All other samples were in the 5-10 ppb Au range.

The third outcrop of SIS is a 2-5cm band of pyrite rich rock interbedded with MIS in outcrop 1150 on the east grid. The sulphide rich band contains 50% massive pyrite, 20% disseminated pyrite and 5% disseminated pyrrhotite. The best assay from this outcrop was 10 ppb Au, with 640 ppm Cu and 600 ppm Zn.

Folding is common in all the ironstone outcrops. It ranges from gentle flexures in the banding to repeated, tight, "S" shaped drag folds which appear to be parasitic on the major regional fold. In many outcrops, particularly those around the shore of Flat Lake, small scale, highly

contorted folds are common. These are probably the result of soft sediment deformation rather than a reflection of a larger scale feature. 1-5cm beds of siltstone and mudstone are occasionally interbedded with the ironstone.

N. Mafic Intrusive Rocks

Gabbro and diorite are the two types of mafic intrusive rock on the property. During the mapping, gabbro and diorite were differentiated using a visual estimate of the amount of free quartz present. If there was more than 10% free quartz, the rock was called a diorite, less than 10% was a gabbro. within a single outcrop however, there is often a wide variation in the amount of free quartz present, making it difficult to name many of the outcrops.

The outcrops are predominantly massive and are usually equigranular, rarely porphyritic. Grain size varies from 3 to 15mm, visual composition can change radically within a few feet on a given outcrop and fresh surfaces range from dark green through a mottled green-white to almost white.

Carbonate alteration is usually present, but is generally weak and confined to joint surfaces. A few scattered outcrops appear to have been silicified, including the gossanous, mineralized zones, where intense silicification is the predominant form of alteration. These areas are discussed in more detail in the following section on areas of economic interest. Aside from these gossan zones, sulphide mineralization, mainly pyrrhotite with some pyrite, does not exceed 3%.

Zenoliths of mafic metavolcanic are common in this intrusion near the contact with the mafic flows to the north while felsic dykes and granitic zenoliths are common near the contact with the granitic basement near the south boundary of the property. The zenoliths are generally angular and range from a few centimetres to metres in size. Along the southern edge of the property the zenoliths of

both basement and mafic metavolcanic often exceed the amount of gabbro/diorite visible in the outcrop, and calling the outcrop a mafic intrusive is based more on field relations than on what is seen in the exposure being mapped.

Some outcrops, such as 1074, show flaser structures in the gabbro. Ribbons and stringers of mafic minerals and feldspar appear to have flowed around relatively undisturbed blocks of gabbro, creating an augen-like texture.

Accessory magnetite is quite variable in this mafic intrusion, however, it does seem to concentrate preferentially in the gabbros rather than the diorites. This became another criteria used in the determination of gabbro or diorite.

O. Felsic Intrusive Rocks

This rock type includes quartz monzonite, granodiorite and granite.

The granite outcrops are present mainly along the western portion of the property. They are strongly foliated, vary from fine (lmm) to coarse (lcm) grained and are composed mainly of K-feldspar and quartz. Other minerals present are plagioclase and scattered clots of mafic minerals, which can be weakly magnetic. Alteration is common, including low to moderate carbonation, moderate sericitization and occasional iron carbonate. Up to 5% pyrite is present in some of the outcrops, mainly as 1-2mm cubes. Gash quartz veins are common.

The outcrops of quartz monzonite and granodiorite grade into one another. Within a single outcrop the composition, texture and grain size can vary greatly. These rocks range from equigranular to porphyritic, massive to foliated, and from fine (lmm) to coarse (lcm) grained. In the foliated outcrops the foliation is defined by an alignment of mafic minerals, especially biotite, that flow around the quartz grains.

Alteration is common and includes varying degrees of silicification, carbonation, sericitization and, occasionally, iron carbonate. Pyrite is common in these outcrops, in amounts ranging from <1% to 10% locally. Quartz veining is common and many of the veins are mineralized, mainly at the contact with the wallrock.

P. Late Felsic Intrusive Rocks

This small intrusion is centred in the Shonia Lake area. It is quartz monzonite in composition, although in many areas the monzonite appears quartz porphyritic. The quartz phenocrysts are of the rock.

Moderate pervasive carbonation is common in this unit. It is usually associated with mineralization. Gossan, and up to 3% pyrite, are frequently seen. Weak to moderate sericite alteration is also a common feature of this unit, as is the presence of scattered, very fine grained to cherty areas within an outcrop.

This intrusion hosts the Shonia Lake gold showing, a series of large, rusty quartz veins. Areas of the intrusion with 5-25% pyrite also host gold mineralization. This is also the situation in two of the areas that were channel sampled. They will be discussed in more detail in a following section.

Felsic dykes are common on the property. In the central portion of the south grid there are a number of feldspar porphyry dykes. These are massive rocks with 20-30% .1-2mm subhedral to anhedral feldspar grains. They are weakly carbonated, usually have scattered quartz stringers, and may be mineralized along the stringer-wallrock contact.

There are two outcrops of a felsic dyke on the east grid and one on the south grid. In all three cases the dykes are hosted by mafic metavolcanics. The dykes are massive, fine grained and vary from .2 to .3m in width.

They appear unaltered and contain no sulphide mineralization.

IX. STRUCTURE AND METAMORPHISM

The major structure influencing the Lang Lake belt is an isoclinally folded syncline striking about N70E and plunging 40-60°E. In the McVicar Lake area the axis of the syncline is located between Boyes and Lang lakes (Sage and Breaks, 1982).

There is evidence of both brittle and ductile deformation in the rocks on this property. Ductile deformation is most evident in the less competent rocks such as the mafic metavolcanics and mafic intrusive rocks, which are frequently sheared and occasionally show gneissic or compositional banding. Evidence of brittle deformation i.e. brecciation, is most common in the more competent intermediate and felsic metavolcanics and ironstones.

A. SOUTH GRID

Most of the foliation measurements on this grid follow the general trend of the metavolcanic-intrusive contact. This is also the case with the shear zones on this grid. These shear zones range from 1 to 10m wide but are discontinuous, seldom exceeding 3m in strike length. Intensity of shearing is low. In the NE corner of this grid the shear and foliation measurements strike generally NE, a reflection of the regional syncline. Jointing in the metavolcanics is mainly NS, with steep easterly dips. In the mafic intrusive there is more variation, however, the presence of a strong NS set and a strong EW set suggests a conjugate set.

B. EAST GRID

Weak, discontinuous, relatively narrow (1-3m) shear zones are common on this grid. One exception to this is along the north shore of Flat Lake. The O.G.S. map of this area shows a lineament running northeast

through Flat Lake. The entire north shore appears strongly sheared, suggesting that the depression comprising the lake may be the result of shearing. Magnetite and hematite ironstone are exposed along the entire north shore of the lake, possibly acting as a competent member during deformation, so that the relatively incompetent mafic metavolcanics to the south, i.e. in Flat Lake, absorbed most of the strain. The shear zones strike generally NE, following the lineation, and dip steeply south.

A second NE striking lineation is shown on the O.G.S. map running through Goomi and Little Long Lakes. This lineation runs through more competent intermediate and felsic metavolcanics and is reflected in these rocks as breccia zones, exposed mainly along or near the shores of these lakes.

The foliations on this grid are parallel to subparallel to the shearing, however, the foliations dip steeply north, while the shearing dips steeply south. Bedding in the ironstones is also sub-parallel to the shearing, trending generally northeast. Jointing appears more random. One fairly common joint set strikes 310-340, possibly reflecting the major break seen in the airborne survey. Two microfaults, with a dextral offset of 3 to 25cm along a NW slip plane, were measured in the ironstone. These may also be a reflection of the break seen in the airborne survey.

C. NORTH GRID

The lineation that runs through Goomi and Little Long Lakes continues along the north shore of the point in the north grid. East-west shearing in most of the rocks along this point reflects the lineation. As was the case in the east grid, the shearing dips steeply south while the foliations dip steeply north. A

strong, predominant joint set is present in the rocks on the north grid. This joint is present in almost every outcrop, and strikes 320-340, again reflecting the structure seen in the airborne survey.

D. WEST GRID

The basement rocks in the western part of this grid are strongly foliated, and occasionally sheared, in an east-west to southeasterly direction. This is probably a reflection of the major ductile shear zone believed to separate the Lang Lake belt from the Meen-Dempster Lakes belt to the south. The shearing, foliations and bedding in the felsic metavolcanics along the northwest edge (L60E) of this grid all indicate a fold. In the north the strike is northeast, in the central area the strike is north-south, and in the south the strike is northwest. The dips generally support a synclinal structure.

There is a strong east-west shear zone in the north-eastern part of this grid. Strongly sheared amygdaloi-dal mafic flows are found on L72 and 76E giving the shear zone a minimum strike length of 400m. Based on the exposure available the shear zone is at least 100m wide.

Scattered glacial striae measurements were taken on all the grids. They strike in the 075 to 090 range, however, no definite indications of ice direction were seen.

The metamorphic grade in this belt varies from greenschist to lower amphibolite of regional metamorphism. Metamorphic grade may increase to the east and north as the ironstones to the east on the east grid are commonly associated with amphibolite.

X. AREAS OF ECONOMIC INTEREST

There are six areas of economic interest on this property. They are, in order of relative importance:

- 1) The channel samples shear zone and Showing 8
- 2) the mineralized felsic intrusive on the west grid
- 3) the ironstone-shear zone association along the north shore of Flat Lake on the east grid
- 4) the brecciated felsic metavolcanics on the north shore of Little Long Lake
- 5) the mineralized gabbro on the south grid
- 6) other scattered high gold values in the area.

Channel Sampling

SHEAR ZONE

Grab samples from 1986 reconnaissance mapping returned values of 785 ppb (.030 oz/T) and 385 ppb from the edge of this shear zone. These values, combined with an apparently complex but favourable geology led to the decision to stake this area and later to strip, detail map and channel sample it.

The stripping and detailed mapping revealed that the area is a contact zone between a gabbro to the south and a sheared felsic intrusion to the north. This intrusion is believed to be part of the Shonia Lake intrusion. The detailed geology of the area is shown on the 1:100 scale map accompanying this report and will be summarized below.

Outcrops A-E and J show the felsic intrusive while F-H show the gabbro. Only one outcrop shows the contact between the two intrusives, outcrop I. Here the contact appears gradational rather than the abrupt intrusive contact expected. This is probably due to the moderate to intense shearing and alteration in this outcrop.

The gabbro is mainly massive, and varies from fine to coarse grained. Scattered areas are weakly to moderately sheared.

Outcrop G is a complex outcrop, with narrow (.5-1.0m) felsic dykes and 1-2m bands of mafic metavolcanic within the gabbro. Outcrop H has a number of narrow shear zones, along with irregular, 1-5cm stringers of silicified mafic metavolcanic and scattered pods of quartz.

The felsic intrusive, of granodiorite to quartz monzonite composition, is at least weakly, often strongly, sheared in every outcrop. Pods and/or lenses of felsic metavolcanic are present in outcrops A, B and D. Quartz stringers, pods and lenses are found in outcrops A, B, E and J. Thin bands of very schistose mafic metavolcanic are present in outcrops B and J.

Only 17 of the 48 channel samples analyzed exceeded 10 ppb Au, only 6 exceeded 25 ppb and only four exceeded 100 ppb. The best assay values from the channel sampling were .029 oz/T and .026 oz/T, both from lm samples centred over a major fracture/-slip plane in outcrop E. The other samples ranged from <5 ppb to 170 ppb.

While the channel sampling results are disappointing, they do indicate that the intrusion is auriferous in this area, and deserves further work.

SHOWING 8

A grab sample taken from this are during reconnaissance mapping in 1985 gave an assay value of 640 ppb Au. Follow-up sampling in 1986 gave values of .063 and .038 oz/T Au. Based on these results, and the inclusion of this showing in the expanded McVicar Lake claim group, it was decided to channel sample this area.

Little was known about the geology of the immediate area prior to channel sampling as most of the area is covered by relatively thick overburden. Thorough stripping using the Wajax power pump and hand tools allowed detailed mapping of the area. The accompanying 1:50 scale map shows the geology of the area as well as the location and results of the channel sampling.

The quartz monzonite occurs in southeastward striking bands and pods that intrude a unit of felsic tuff. Along every contact

between these two units is a thin (2-3cm) to relatively thick (1m) band of strip of mafic volcanic. This band of mafic volcanic is also present within the intrusive in some areas. Just north of the main stripped area is a band of rhyolite/chert which is in contact with a sheared mafic volcanic.

It was initially thought that the mafic bands might be chilled margins between the intrusive and extrusive units. Whole rock analysis of most of the channel samples shows that the bands are mafic to intermediate in composition (57% SiO2), the volcanic is felsic (75% SiO2) and the intrusive is also felsic (68-72% SiO2). The differences in the chemistry of the mafic strips relative to the other units suggests that they are not chilled margins, but are discrete bands of mafic metavolcanic. The geology of this area may instead represent roof pendants or cupolas (R. Thomas, pers. comm.).

The quartz monzonite is the unit of most interest in this area. Four samples were taken from this unit. They returned gold values ranging from 15 ppb to .052 oz/T. The rock is weakly to moderately weathered, weakly magnetic, and contains scattered fine quartz stringers. Alteration consists of weak to moderate carbonation, with scattered stringers of ankeritic material. Pyrite is present in amounts ranging from <1% to 5%, with local concentrations of up to 30%. The highest gold values are from those samples with the greatest concentration of pyrite. The sample that returned the highest gold value was also the only sample that was not magnetic.

The unit of felsic tuff is finely bedded at 323/83. This unit is moderately weathered, locally weakly magnetic and has scattered rusty areas on the weathered surface. These generally coincide with mineralized zones. Carbonation is confined to fracture surfaces. Two samples were taken in this unit. Sample 1194, contained only trace amounts of pyrite and returned a gold value of 5 ppb Au. Sample 1195, contained 5% pyrite overall, with local concentrations of 10-12%. This sample returned an assay value of 70 ppb Au. The chert/rhyolite unit adjacent to the shear zone assayed 15 ppb Au. This unit is not bedded, is

almost aphanitic and is more brittle than the pyroclastic unit. It is weakly magnetic, weakly carbonated and contains minor pyrite, with local concentrations of up to 2%.

The mafic metavolcanic bands are weakly magnetic, are moderately to intensely carbonated, and are weakly mineralized. Minor pyrite is common, occasionally concentrated (1-2%) along quartz stringers. One channel sample, 1196, was taken in this unit. It returned a gold value of 5 ppb. The sheared mafic metavolcanic to the north also returned 5 ppb Au. This rock is moderately sheared, highly weathered and intensely carbonated.

Directly north of this showing, on the north shore of McVicar Lake, the geology is similar to that of the showing. A mineralized sample from this area returned 140 ppb Au. This suggests that Showing 8 may be more than an isolated occurrence and is worthy of more work.

A. Mineralized Felsic Intrusions, West Grid

Eight of the 11 samples taken from the granodioritic to quartz monzonitic intrusion (Shonia Lake affinity) returned anomalous gold values, ranging from 15 ppb to 130. All four of the samples taken from the mineralized granite (basement) returned anomalous values, ranging from 45 to 355 ppb Au. Four of the seven quartz vein samples from these intrusions also returned anomalous gold values, ranging from 15 ppb Au to .039 oz/T. One quartz vein sample that assayed >1000 ppb Au did not have a corresponding fire assay value.

The anomalous samples from the intrusions are characterized by at least 1% pyrite, possibly trace chalcopyrite, are usually sheared and are generally weakly to intensely altered, mainly sericite, and iron carbonate. They are usually rusty on weathered surfaces and host quartz stringers and veins, which are frequently auriferous. The auriferous quartz veins are milky to smoky quartz, are mineralized, containing 1 to 20% pyrite, and are usually hosted in

shear zones or areas of moderate to intense alteration of the host rock.

The grid lines in this area are 400m apart, making it difficult to draw firm conclusions about the geology or potential of this area, however, the preponderance of anomalous results indicates that this are should be looked at in some detail.

B. Ironstone-Shear Zone Association

The north shore of Flat Lake is strongly sheared and has abundant ironstone outcropping along the shore. The combination of a competent member that also provides a reducing environment, adjacent to a shear zone, with coincident Max-Min anomalies, provides a favourable environment for gold mineralization. Only one sample from this area returned an anomalous gold value, (3098-65 ppb), however the area of greatest interest may be under the lake. Drag folds and small offsets are common in the ironstone along the lakeshore, another feature favourable for gold mineralization.

C. Brecciated Felsic Metavolcanics

Two samples were taken from this unit on the northeast shore of Little Long Lake. One sample returned 595 ppb Au (.012 oz/T), the other returned 15 ppb. The rock is an extremely brecciated felsic metavolcanic with the breccia fragments cemented by a carbonate matrix. In some areas the rock contains more carbonate than fragments. Similar breccias are present in the mafic metavolcanics on the south grid, however, these were sampled and did not return anomalous gold values. Two other outcrops of the felsic breccia were mapped on the north grid, however, neither one was sampled. One of these outcrops is on the west shore of Goomi Lake, the other is just north of the baseline on LlW.

D. Gabbro-Hosted Massive Sulphides

These areas of mineralization occur sporadically on the south grid and on the 1985 grid. There is also an occurrence (Showing 6, 1985 reconnaissance mapping) on the west shore of McVicar Lake directly across from the 1985 grid. This mineralization is marked by intense gossan and weathering, and in most cases has been trenched and occasionally drilled.

The rock hosting the mineralization is a medium to coarse-grained gabbro, however, in areas of mineralization the rock has been intensely silicified and in most cases appears fine-grained. Mineralization ranges from 20 to 90% of the rock and consists mainly of massive pyrrhotite, with occasional chalcopyrite and rare pyrite. Nickel assays as high as 9300 ppm suggest that pentlandite is present with the pyrrhotite.

These areas have been sampled extensively, returning a variety of economic to sub-economic base metal assays including a maximum Cu assay of 30,400 ppm and a maximum Ni assay of 9300 ppm. Some anomalous gold assays were also obtained but non exceeded 200 ppb. In 1986 the samples from these areas were also analyzed for platinum and paladium. Sample 3004 assayed 760 ppb combined Pt + Pd and 3006 assayed 380 ppb combined Pt + Pd.

Airborne electromagnetic and ground Max-Min surveys have been completed over the area of this mineralization, which outcrops sporadically over a 4 to 5 km strike length. The results of these surveys indicate that this mineralization is a series of discontinuous pods, rather than a continuous zone that only outcrops sporadically. Despite the encouraging base metal results from these samples, the lack of high precious metal assays and the discontinuous nature of the mineralization suggest that these areas warrant no further work. In addition, the fact that many of the areas have been extensively trenched and drilled,

McVicar Lake Report

Without further development, at a time when base metal prices were at historic highs, rather than their current low levels, further mitigates against any further work in this

E. Other High Gold Values

The rest of the high gold assays from the summers work are isolated occurrences found during the reconnaissance mapping done during the first two weeks of the summer. They are described briefly below. All of these anomalous samples are from areas sampled during the 1985 reconnaissance work. Their results do not change the conclusions drawn from the 1985 work.

Sample 3001 assayed 745 ppb Au (.038 oz/T) from a quartz vein adjacent to the sulphide ironstone occurrence on the Kerr Addison property. The quartz vein contained 2% pyrite. This sample is the only one of seven from this area

that returned an anomalous gold assay.

Sample 1008 assayed >1000 ppb Au (.012 oz/T), from the

sumpre 1000 assayed 21000 pps Ad (1012 02/1); from enc sulphide ironstone occurrence in the southwest Bay of McVicar Lake. Again this was the only sample of 10 that returned a significant gold value.

Sample 1025 assayed 350 ppb Au. It was taken from samples taken from this showing in 1986 to check the 1985 values. It was the only sample that returned a significant

Respectfully submitted

Iain A. Allen, B.Sc. November, 14, 1986 so\AAI

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REPORT OF WORK CLAIMLIST - MARCH 28, 1988

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KRL	886095	860409	20	40	40	
KRL	886096	860409	20	40	40	1
KRL	886097	860409	20	40	40	1
KRL	886098	860409	20	40	40	1
KRL	886099	860409	20	40	40	1
KRL	886100	860409	20	40	40	1
KRL	886101	860409	20	40	40	1
KRL	890520	860409	20	40	40	1
KRL	890521	860409	20	40	40	1
KRI.	800522	860409	20	40	40	1

		REPORT C	OF WORK CLAIM	ALIST - MA	ARCH 28, 19	988
MDIV	CLAIM					HIS REPORT TALLY
KRL	890524	860409	20	40	40	1
KRL	890525	860409	20	40	40	1
KRL	890526	860409	20	40	40	1
KRL	890527	860409	20	40	40	1
KRL	890528	860409	20	40	40	· 1
KRL	890529	860409	20	40	40	1
KRL	890530	860409	20	40	40	1
KRL	890531	860409	20	40	. 40	1
KRL	890532	860409	20	40	40	1
KRL	890533	860409	20	40	40	1
KRL	890534	860409	20	40	40	1
KRL	890535	860409	20	40	40	1
KRL	890536	860409	20	40	40	1
KRL	890537	860409	20	40	40	1
KRL	890538	860409	20	40	40	1
KRL	890539	860409	20	40	40	1
KRL	890540	860409	20	40	40	1
KRL	890555	860409	20	40	40	ī
KRL	890556	860409	20	40	40	1
KRL	890557	860409	20	40	40	ī
KRL	890558	860409	20	40	40	<u> </u>
KRL	890559	860409	20	40	40	1
KRL	890560	860409	20	40	40	1
KRL	890561	860409	20	40	40	1
KRL	890562	860409	20	40	40	1
KRL	890563	860409	20	40	40	1
KRL	890564	860409	20	40	40	1
KRL	890565	860409	20	40	40	1
KRL	890566	860409	20	40	40	1
KRL	890567	860409	20	40	40	1
KRL	890568	860409	20	40	40	1
KRL	903101	860714	20	40	40	
KRL	903102	860714	20	40	40	17.110
KRL	903103	860714	20	40	40	3 AN 112 (9)
KRL	903104	860714	20	40	40	// ACTIBLIA AND
KRL	903105	860714	20	40	40	SYACITIVE
KRL	903109	860714	20	40	40	1 4 4088 × 1
KRL	903110	860714	20	40	40	3113000
KRL	903111	860714	20	40	40	MAR 3 1 1988 MAR 3 1 1988 PATRICIA MINING PATRICIA MINING
KRL	903112	860714	20	40	40	I I CATHIU CION
KRL	903113	860714	20	40	40	PAT DIVISION
KRL	903114	860714	20	40	40	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
KRL	903115	860714	20	40	40	13:11
KRL	903116	860714	20	40	40	
KRL	903117	860714	20	40	40	1
KRL	903118	860714	20	40	40	1
KRL	903118	860714	20	40		1
KRL		860714	20	40	40 40	1
KRL		860714				1
KRL			20	40	40	1
		860714	20	40	40	1
KRL KRL	-	860714	20	40	40	1
KRL KRL		860714 860714	20	40	40	1
KRL		860714	20 20	40	40	1
KRL		860714	20 20	40 40	40 40	1
KRI.		860714	20	40	40 40	1
			, W	u U	40	

• •									
		REPORT OF W	ORK CLAI	MLIST - M	ARCH 28.	1988			
MDIV	CLAIM	RECDATE WKP					REPORT	TALLY	
KRL	903130	860714	20	40	•	40		1	
KRL	903131	860714	20	40		40		1	
KRL	903132	860714	20	40		40		1	
KRL	903133	860714	20	40		40		1	
KRL	903134	860714	20	40		40		· 1	
KRL	903135	860714	20	40		40		_ 1	
KRL	903136	860714	20	40		40		1	
KRL	903137	860714	20	40	_	40		1	
KRL	903138	860714	20	40		40		1	
KRL	903139	860714	20	40	1	40		1	
KRL	903140	860714	20	40	4	40		1	
KRL	903141	860714	20	40		10		1	
KRL	903142	860714	20	40	4	40		1	
KRL	903143	860714	20	40	i	40		1	
KRL	903144	860714	20	40	4	40		1	
KRL	903145	860714	20	40		40		1	
KRL	903146	860714	20	40		10		1	
KRL	903147	860714	20	40		10		1	
KRL	903148	860714	20	40		10		1	
KRL	903149	860714	20	40	1	10		1	
KRL	903150	860714	20	40	ı	10		1	
KRL	903151	860714	20	40		10		1	
KRL	903152	860714	20	40	L	10		1	
KRL	903153	860714	20	40	t	10		1	
KRL	903154	860714	20	40	L	10		1	-
KRL	903155	860714	20	40 .		10		1	
KRL	903156	860714	20	40	ı	10		1	
KRL	903229	860714	20	40	L	10		1	
KRL	903230	860714	20	40	4	10		1	
KRL	903231	860714	20	40	L	10		1	
KRL	903255	860714	20	40	Ł	10		1	
KRL	903256	860714	20	40	4	0		1	
KRL	903258	860714	20	40	4	0		1	
KRL	903259	860714	20	40		0		1	
KRL	903260	860714	20	40		0		1	
KRL	903261	860714	20	40		0		1	
KRL	903262	860714	20	40		0		1	
KRL	903263	860714	20	40		0	. /	71.11	(E)
KRL	903264	860714	20	40		0	<i>[</i> -	1 05 El 19	r. Yol
KRL	903269	860714	20	40		0	/,`	10	1 1 N
KRL	910818	860617	20	40		0	/-	£:	四日
KRL	910819	860617	20	40		0	1-	T	79 > HO
KRL	910821	860617	20	40		0	٠٠	#72.9 .	and F
KRL	910822	860617	20	40		0	1	PATRICIA N	
KRL	910825	860617	20	40		0	1	PA Di	~ <i>!</i> //
KRL	910829	860617	20	40		0	,	1	
KRL	911382	860822	20	40		0	`	1	\'``\
	911385	860822	20	40		0		1	
	929206	860815	20	40		0		1	
	929207	860815	20	40		0		1	
	929208	860815	20	40		0		1	
	929209	860815	20	40		0		1	
KRL	929210	860815	30	40	4	0		1	
		TOTAL=			_	680		107	
		. U 1 A L Z			-	JUV		101	

TOTAL=

6680 6640 107



Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

June 10, 1988

Your File: W8803-118 Our File: 2.11010

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario

POV 2TO

Dear Sir:

RE: Notice of Intent dated May 26, 1988.

Geological Survey submitted on Mining Claims

KRL 886050 et al in the Areas of Stoughton

Lake and McVicar Lake.

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
JIIN 1 3 1988
RECEIVED

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

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

Yours sincerely,

W.R. Cowan, Manager Mining Lands Section

Mines & Minerals Division

Whitney Block, Room 6610 Queen's Park Toronto, Ontario M7A 1W3

Telephone: (416) 965-4888

AB AB:sc

cc: BHP-Utah Mines Limited Suite 900 25 Adelaide Street East Toronto, Ontario M5C 1Y2 cc: Mr. G.H. Ferguson Mining & Lands Commissioner Toronto, Ontario

cc: Resident Geologist Sioux Lookout, Ontario



Technical Assessment Work Credits

			•	2.11010
Dete May	26.	1988	Mining R Work No.	scorder's Report of

File

Date			Mining Recorder's Report of Work No.
May	26,	1988	Work No. W8803-118

Recorded Holder BHP-Utah Mines Limit	:ed
उर्द्रप्रक्राह्म Area Stoughton and McVica	ar Lake Areas
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Assessment days credit per claim Geophysical	
Electromagnetic days	KRL 886050 to 052 inclusive
	886055 to 056 inclusive
Magnetometer days	886058 to 071 inclusive
more cases dans	886075 to 086 inclusive 886088
Radiometric days	886094 to 101 inclusive
Induced polarizationdays	890520 to 540 inclusive
_ ,	890555 to 567 inclusive
Other days	903101 to 103 inclusive
77 /201 0 /// 201 0 /// 201	903109 to 115 inclusive
Section 77 (19) See "Mining Claims Assessed" column	903117 to 151 inclusive 903154 to 156 inclusive
Geologicaldeys	903154 to 156 inclusive 903255
	903258 to 259 inclusive
Geochemicaldays	903261 to 263 inclusive
	910818 to 819 inclusive
Man days 🗍 Airborne 🗍	929206 to 210 inclusive
Special provision (X) Ground (X)	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
Special credits under section 77 (16) for the following m	
	ys geological 10 days Geological
KRL 886053 KRL 903264 KRL 8	
_	8008/ 903209 003116 011385
	90568 910822 903153
_	03152 03230 to 231 incl. 903229
	M22EC 3100Z1
	910029
No credits have been allowed for the following mining d	
not sufficiently covered by the survey	insufficient technical data filed
i de la companya de	



Ministry of Land Natural Rescurces Branch

Management

Date JANUARY, 1964

G-2121

MEEN LAKE G-2122

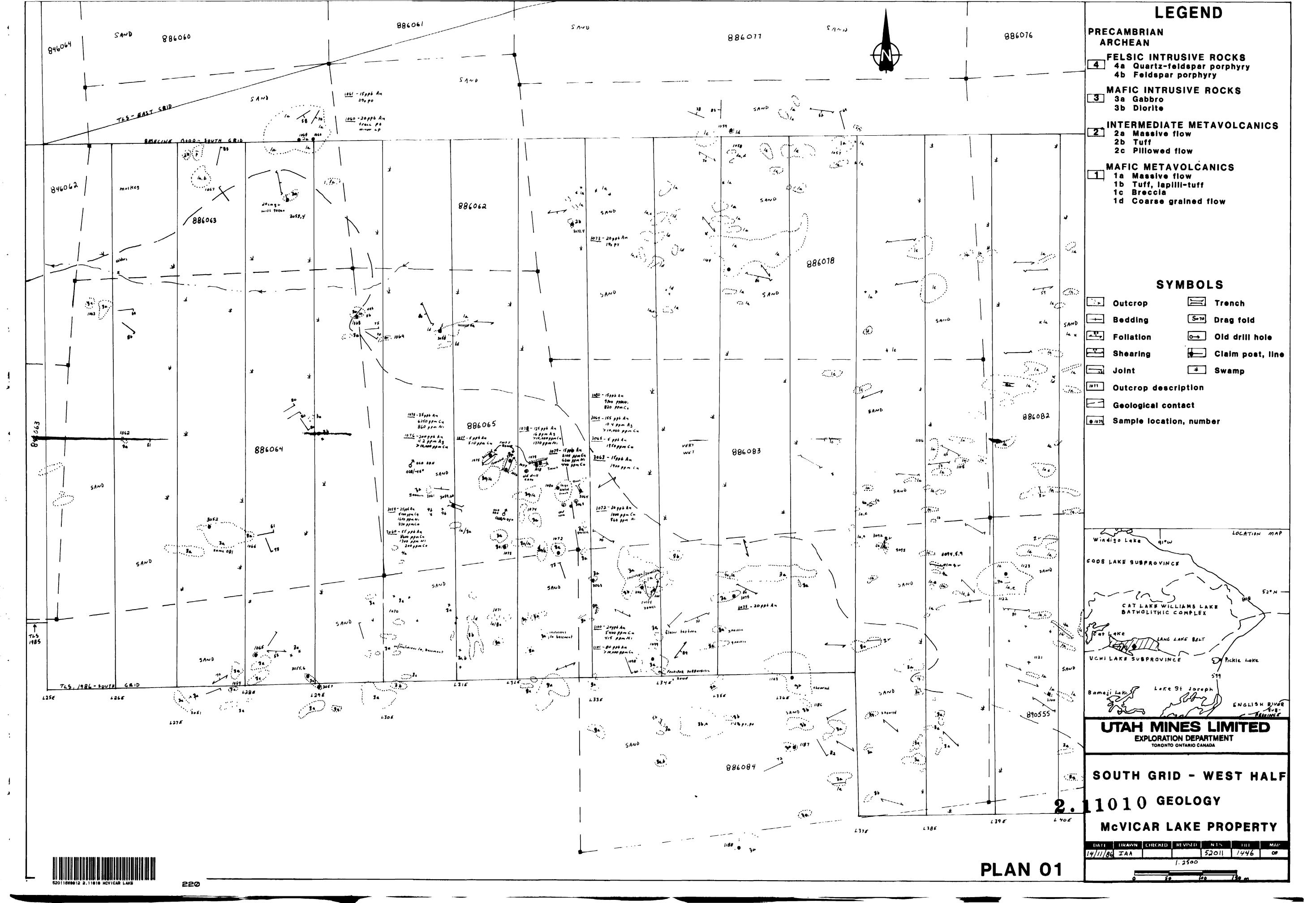
LEGENU HIGHWAY AND ROUTE No SURVEYED LINES TOWNSHIPS BASE LINES ETC LOTS MINING CLAIMS PARCELS LTC ----UNSURVEYED LINES PARCEL BOUNDARY MINING CLAIMS ETC RAILWAY AND RIGHT OF WAY NON PERENNIAL STREAM FLOODING OR FLOODING RIGHTS SUBDIVISION OR COMPOSITE PLAN ORIGINAL SHORELINE MARSH OR MUSKEG このには TRAVERSE MONUMENT DISPOSITION OF CROWN LANDS TYPE OF DOCUMENT PATENT SURFACE & MINING RIGHTS SURFACE RIGHTS ONLY LICENCE OF OCCUPATION ORDER IN COUNCIL CANCELLED SAND & GRAVEL . . NOTE MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY B 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT RSO 1970 CHAP 380 SEC 63 SUBSEC 1 AREAS WITHDRAWN FROM DISPOSITION M R O MINING RIGHTS ONLY SRO SURFACE RIGHTS ONLY MINING AND SURFACE RIGHTS PATTI. CINE HANNING DIVI DEUELARIN 7,8,9,10,11,12,1,2,8,4,5,6 SCALE 1 INCH = 40 CHAINS STOUGHTON M.N.R. ADMINISTRATIVE DISTRICT SIOUX LOOKOUT 2.11010

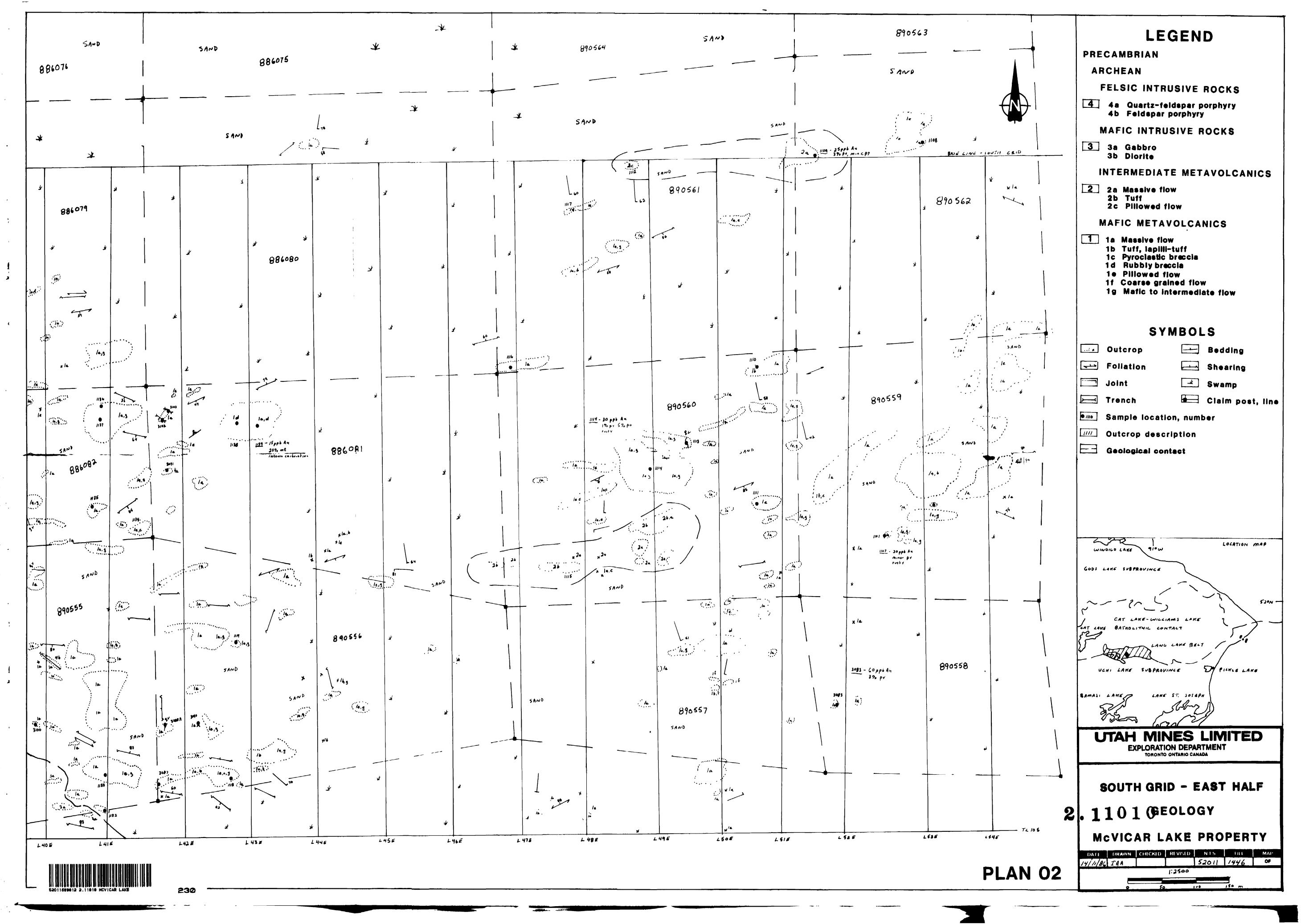
LAND TITLES / REGISTRY DIVISION KENORA (PATRICIA PORTION)

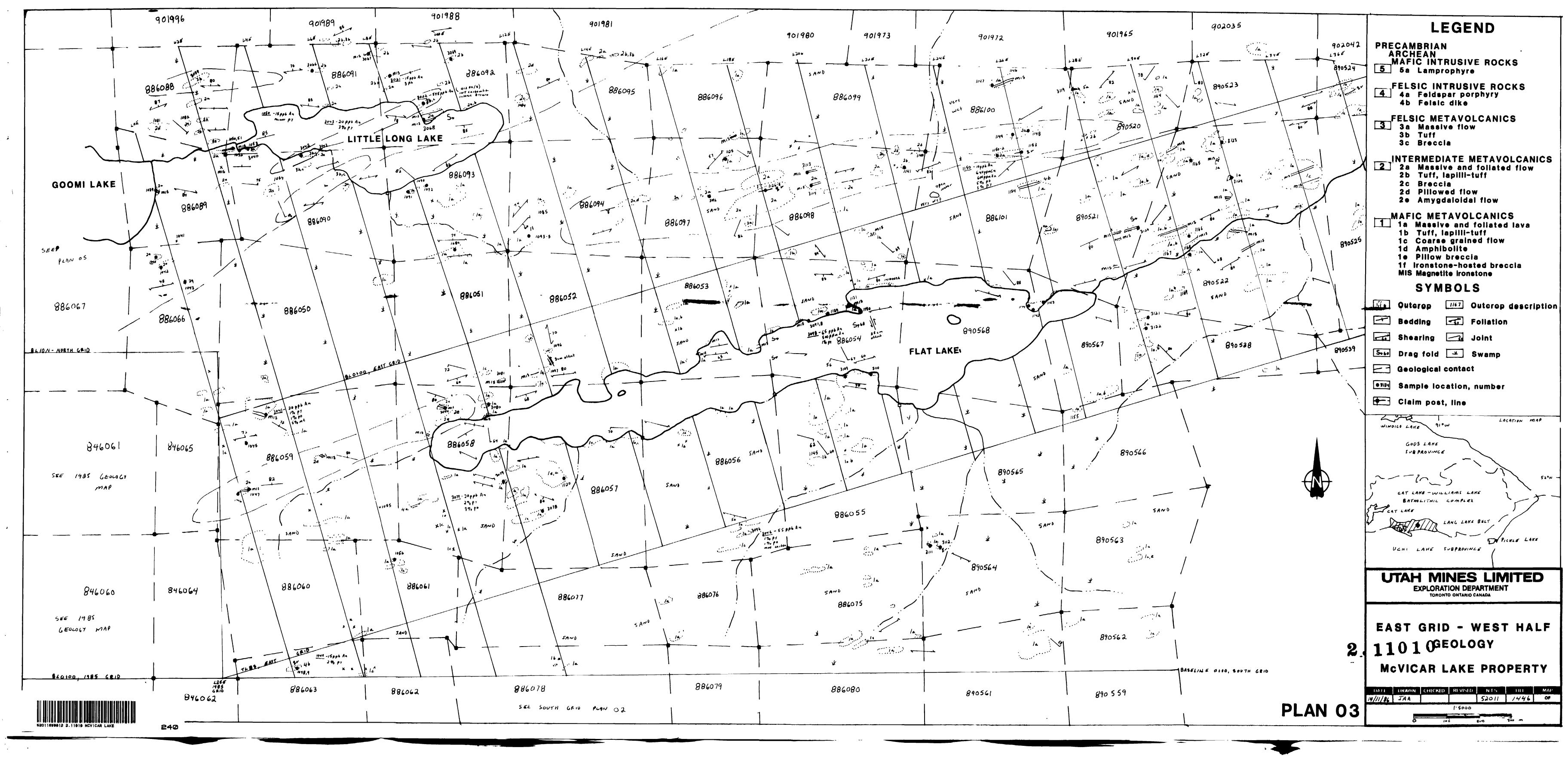
Ministry of Land

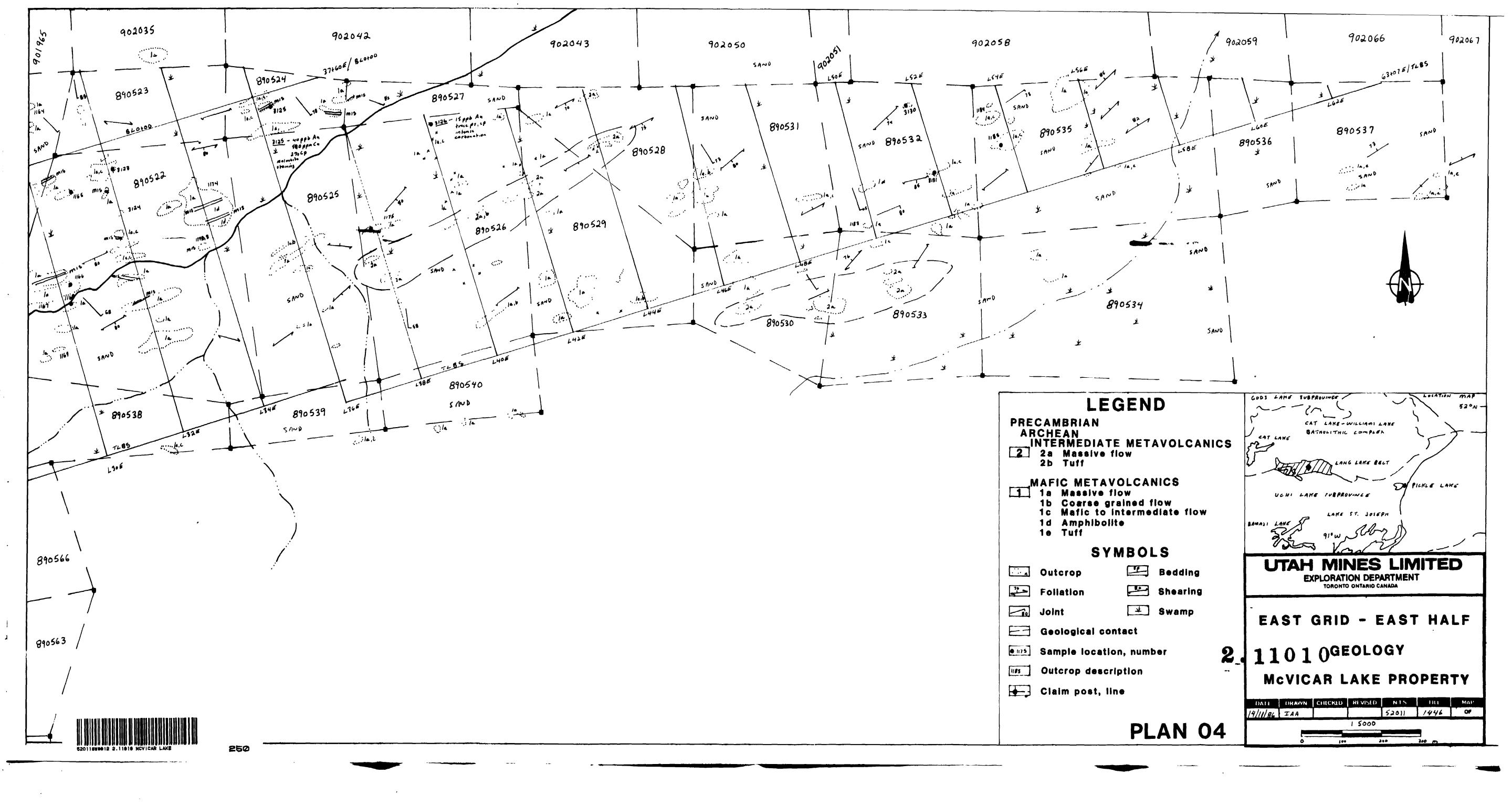
Resources Brench

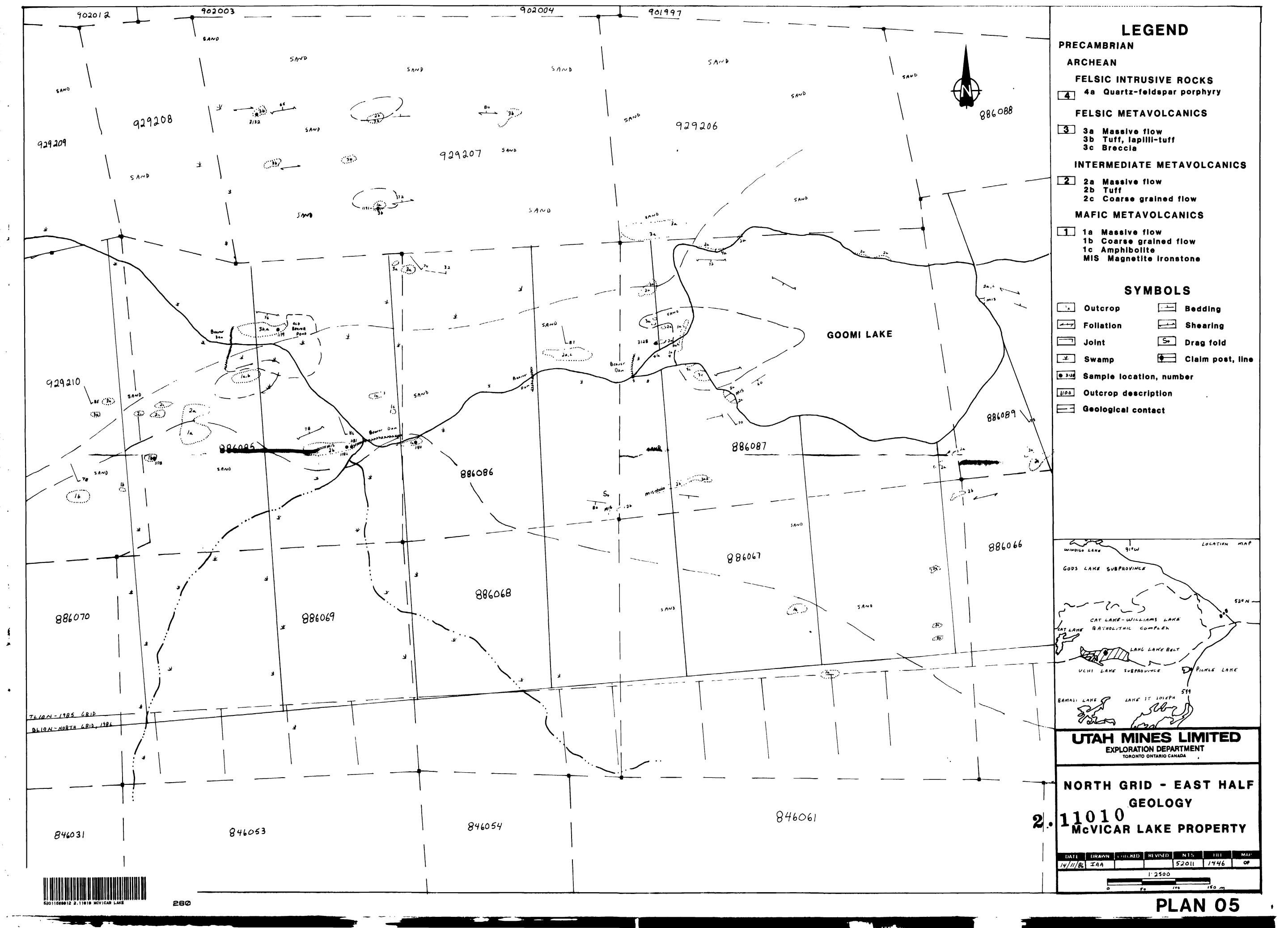
Date FEBRUARY, 1984

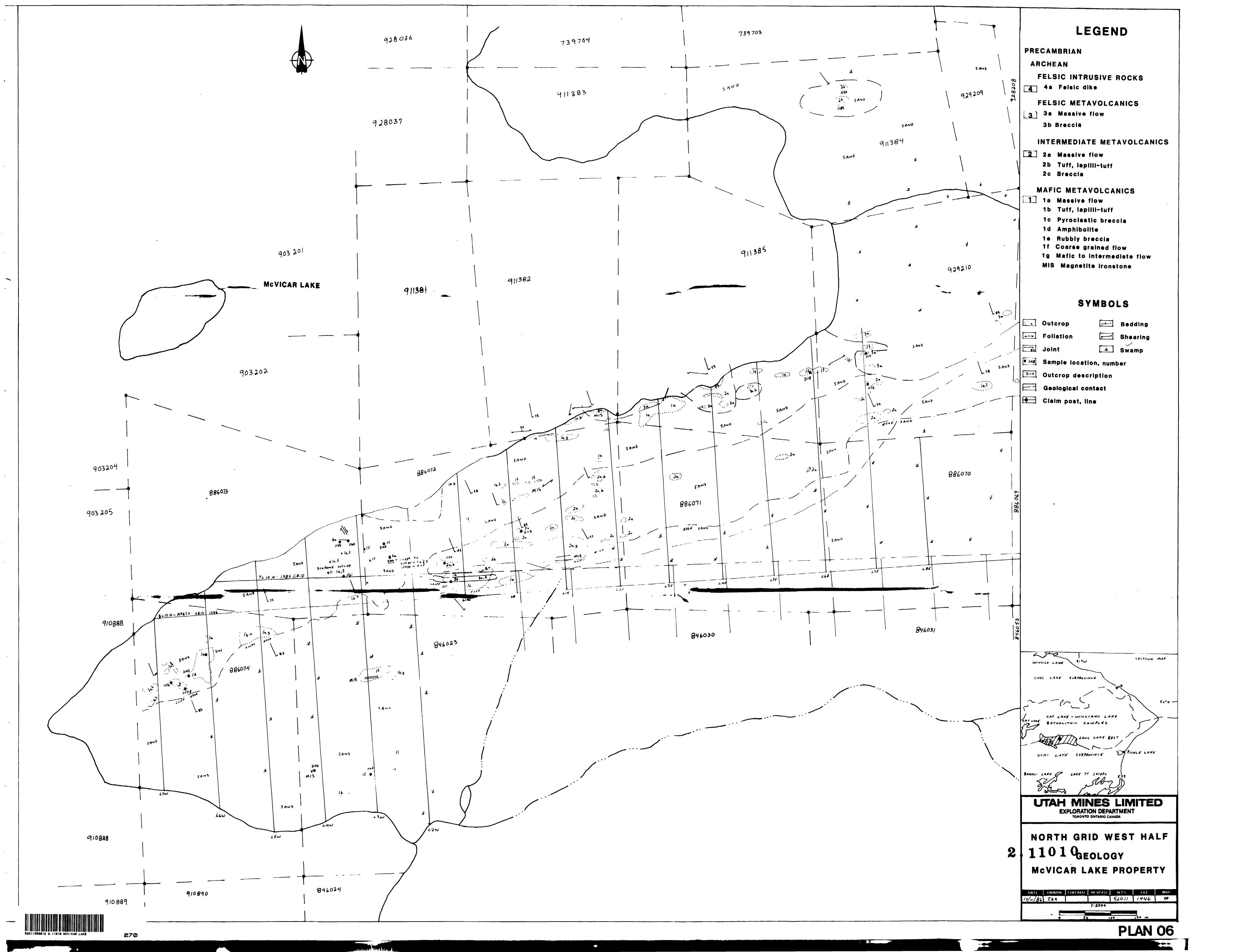




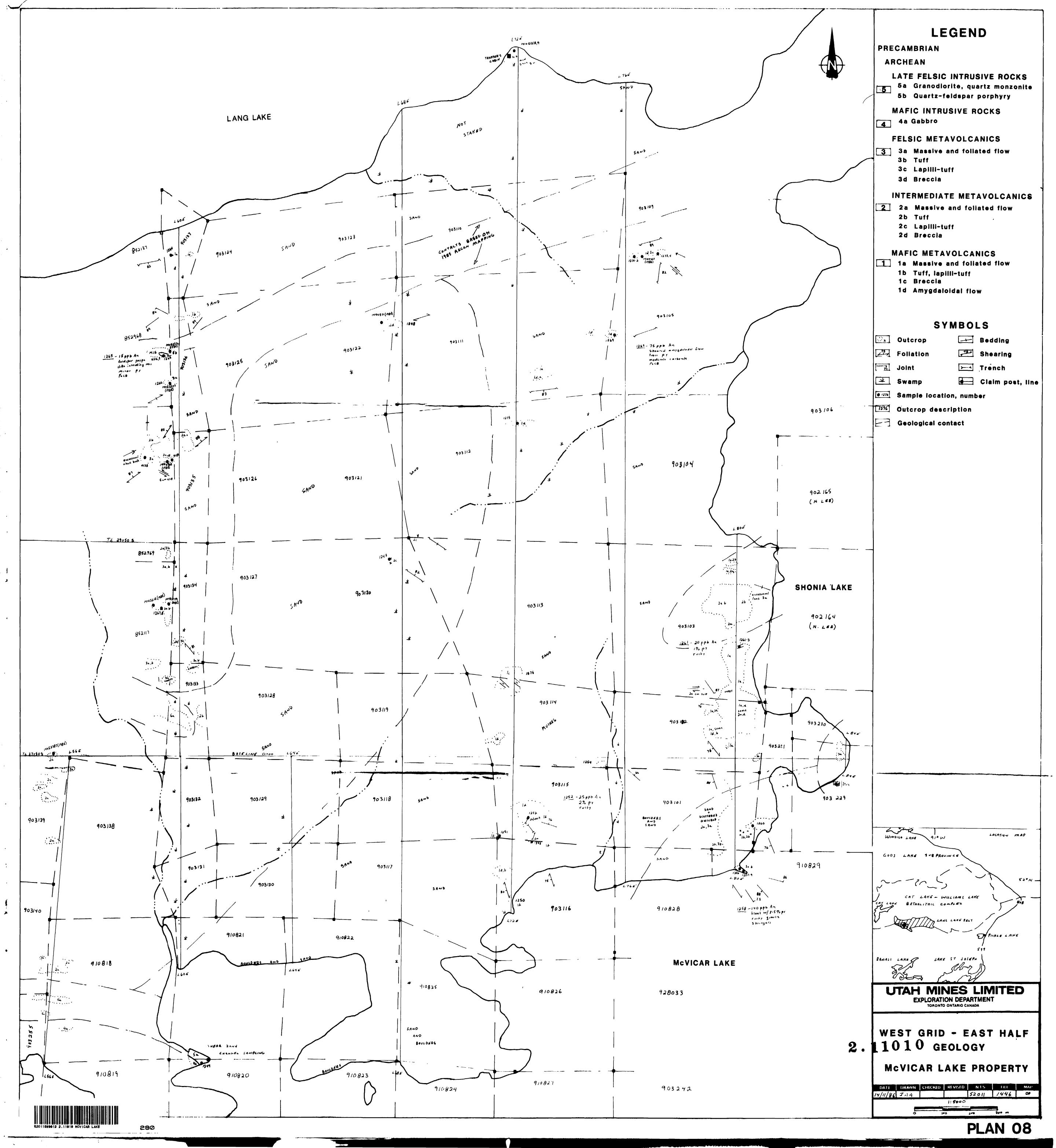


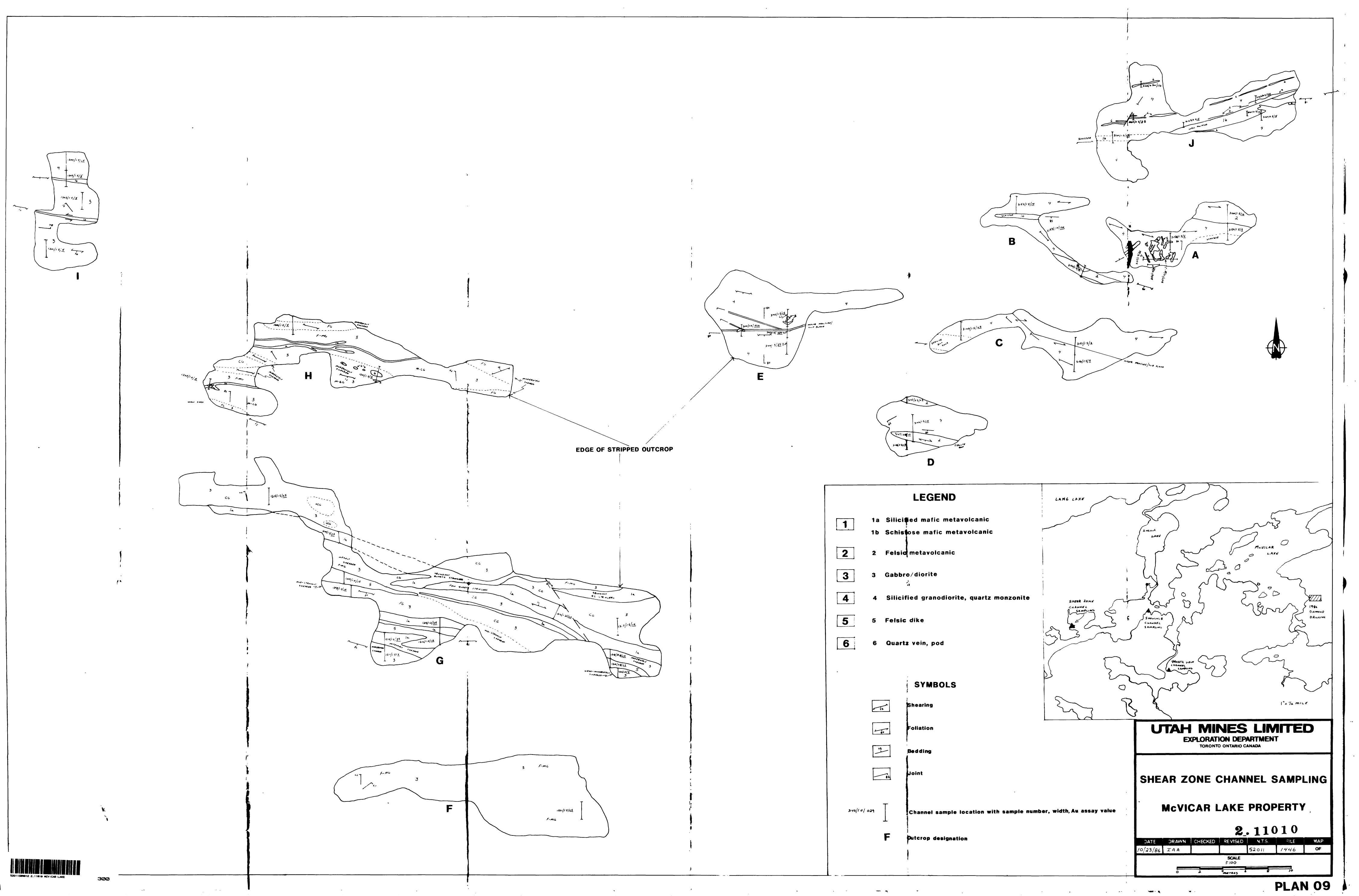


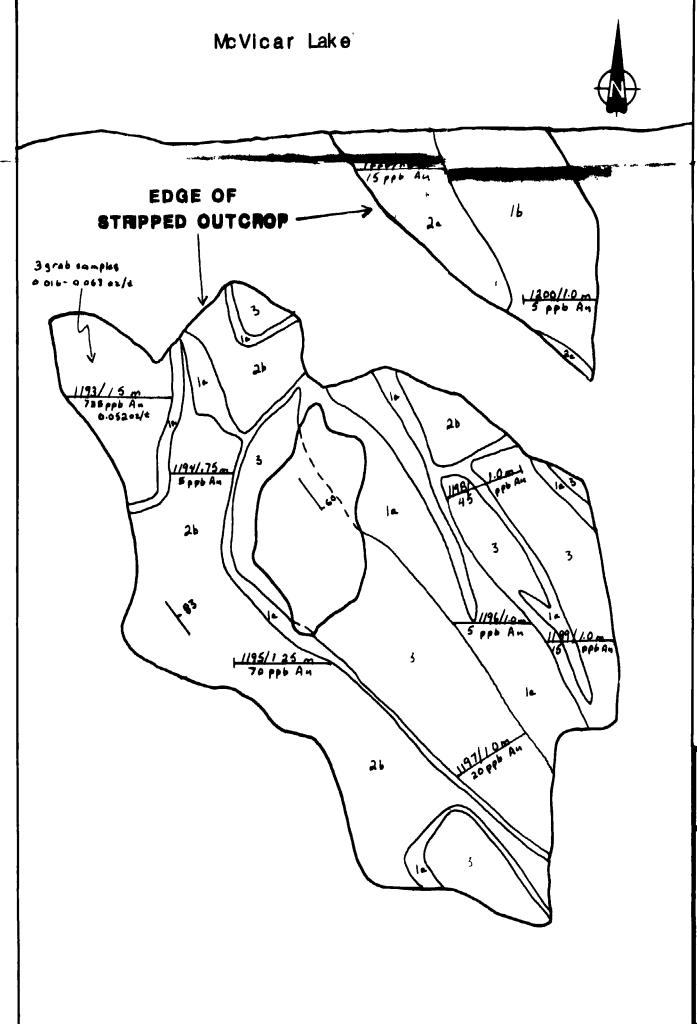












LEGEND

- Massive matic volcanic
- | | Sheared mafic volcanic
- 2. Felsic flow
- 21 Felsic tuff
- 3 Quartz porphyry

SYMBOLS

- Geologic contact (observed, inferred)
- Joint, inclined
- Bedding, inclined

70 pp An Gold value

UTAH MINES LIMITED

EXPLORATION DEPARTMENT TORONTO ONTARIO CANADA

CHANNEL SAMPLING Area of Showing 8'

2.1101,Q. Recon

DATE	DRAWN	CHICKID	REVISED	NIS	FILE	MAP
10/15/86	/ A A			52011	1446	OF
		-	50			
		1	*		3 m	

