



52J02NE0016 52J02NE0048 BECKINGTON LAKE

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UMEX Inc

1984 GEOLOGICAL REPORT

BECKINGTON LAKE AREA - M. 1740

BECK 1 & 2 CLAIMS

RECEIVED

FEB 11 1985

MINING LANDS SECTION

by: Brian Wing

November 1984.

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TABLE 1 - List of Beck Claims.

Drawings 1 to 5, in pocket.

## SUMMARY

A geological evaluation program aided by litho geochemistry sampling over the Beck 1 and 2 claim groups near Savant Lake, Ontario was done in 1984. This consisted of mapping previously unmapped claims and re-establishing the existing geology. Preliminary results were positive from the area of DDH #7 and #9 and lines were selected to run a geophysical IP survey over 4.6 km.

By combining all present data, it appears as though the anomalous horizon intersected in DDH #9 at depth, can be traced by geophysics to the north and the south. Drill holes on L500S and L1250S have been spotted to intersect this zone. The subparallel zone to the east is a fine grained pyritic sericitic schist on surface. To the south of "The Pond", a stronger IP conductor may coincide with this zone. DDH #8 may not have been deep enough to hit this zone, so at present, it is untested. A hole has been planned for L1250S to test the zone.

## 1. INTRODUCTION

UMEX Inc of 1935 Leslie Street, Don Mills, Ontario controls 158 claims on the Beck Project in Northwestern Ontario, approximately 230 km north-northwest of Thunder Bay (Fig. 1). The claim groups are located on the Beckington Lake map sheet M.1740 and are known as Beck 1 and Beck 2. From August 1 to October 1, 1984, the claims were geologically mapped and evaluated by the author using a previously cut grid for control. A systematic litho geochemistry survey was carried out by Gary Pringle, during this time. From October 26 through November 5, 1984, a geophysical Induced Polarization survey was done over 4.6 km of the grid. The cumulation of the results from these surveys helped to locate drill targets which are being tested now. All surveys were under the direction of Mr. F. Felder of UMEX Inc.

### 1.1 Location

The Beck 1 and 2 claim groups are located in NTS quadrangle 52J, approximately 12 km southeast of the town of Savant Lake. All of the claims are contiguous and comprise a block trending N20°W extending from the Northeast Arm of Sturgeon Lake in the south to the Canadian National Railways' main east-west line in the north (Fig. 2).

Access to the claims is provided by Great Lakes Forest Products #700 road, from Hwy 599, which transects the property. GLFP camp #700 is located on claim Pa 486111 and a road to the CNR loading spur provides additional access to the northern Beck 1 and the Beck 2 claim groups. An older road subparallel to Moose Creek from Sturgeon Lake to the CNR provides a suitable foot path to parts of the property.

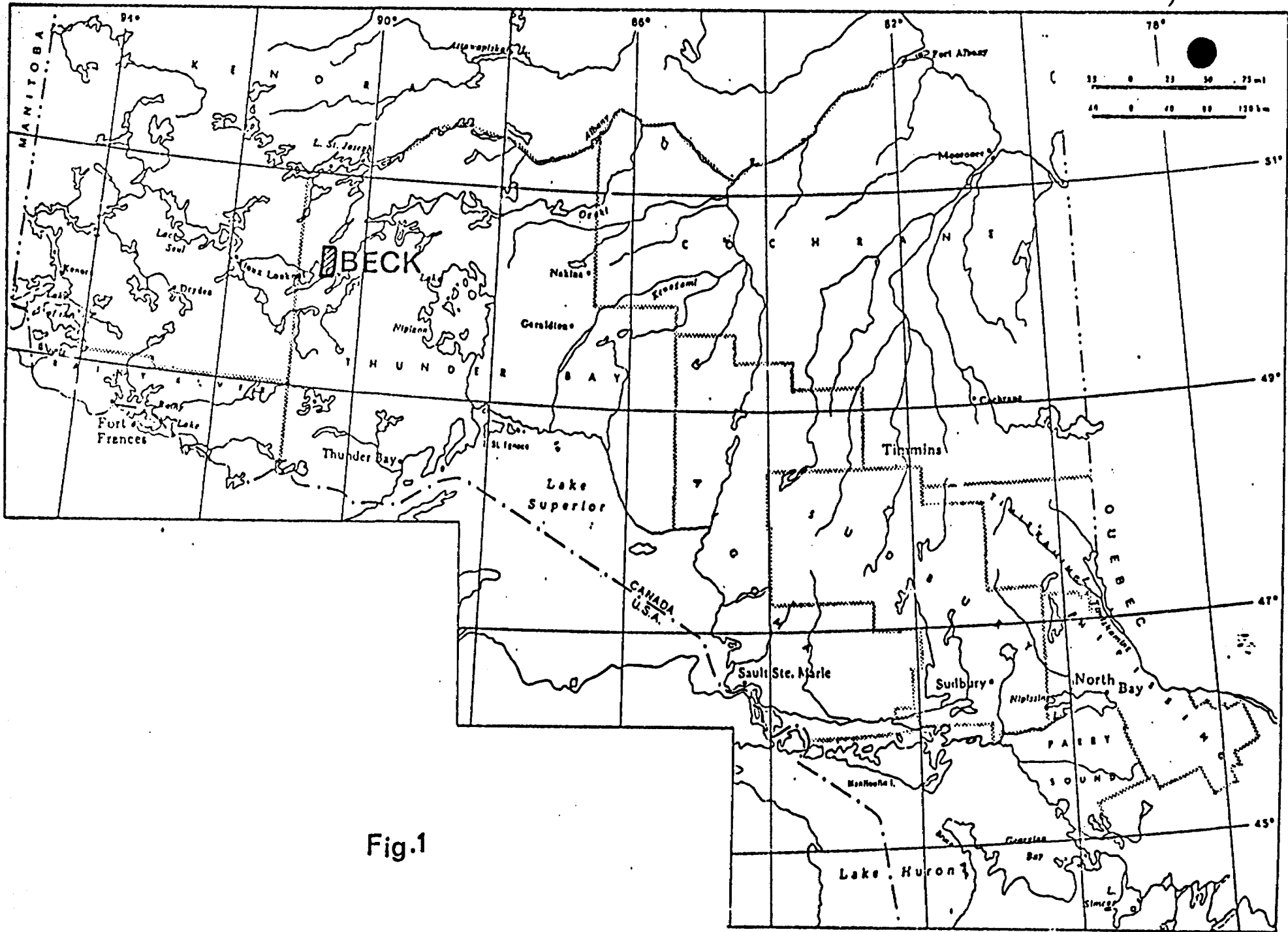


Fig.1

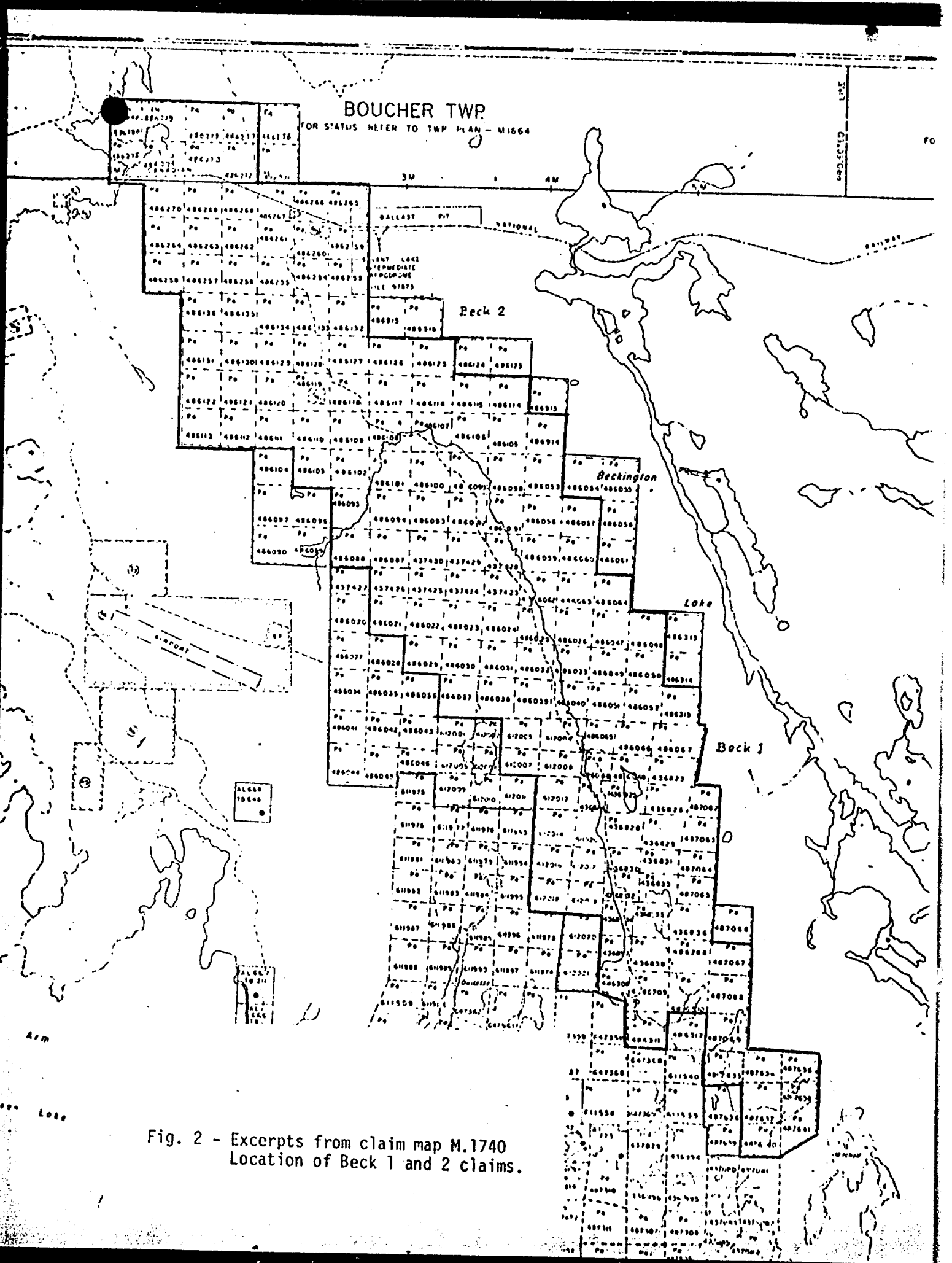


Fig. 2 - Excerpts from claim map M.1740  
Location of Beck 1 and 2 claims.

## 1.2 Relief

Relief over the property is low, with outcrop exposures accounting for most topographic highs. Topographically low areas are often lakes or swampy areas between lakes. The claims are mostly covered with spruce and little underbrush. Intervening marshy areas are associated with muskeg, cedar and alders. On sandy hills, vegetation is less dense, and mostly jack-pine. To the north, birch and poplar trees are common.

## 1.3 List of claims

All of the claims belong to UMEX Inc, licence T-133, and are listed in Table 1.

## 1.4 History

In 1971, Canadian Nickel Company Ltd. drilled one x-ray diameter core hole on present claim Pa 486127 to 162'. The hole was predominantly greenstone volcanic with sparse sulfides. Also in 1971, the MacDonald Mining Syndicate did 31.93 miles of ground geophysics using a Scintrex MF-2 Magnetometer and a Ronka EM-16 Electromagnetic unit. On and to the south of the property, nearer Sturgeon Lake, Selco completed 28 miles of ground magnetometer survey using the ABEM MZ4 torsion type magnetometer in 1971.

In 1976, Noranda explored some of the Beck property. After completing 12.5 miles of ground geophysics, delineating two anomalous conductors, two holes were drilled on present claims Pa 486116 and 486105 to depths of 304' and 300' respectively. The sections that were tested for precious metals contained traces of Au and Ag. According to the Noranda logs, the rocks are predominantly mafic greenstone volcanics.

UMEX in a joint venture with Samin Canada Ltd., acquired the property in 1980. Geological and lithogeochemical surveys were done on the cut grid over most of the property. The grid was geophysically surveyed throughout, with magnetics and VLF-EM, and, locally with horizontal loop Max-Min EM. As a result of these surveys, a total of 9 DDH have been drilled for a total of 1,287 meters. Hole #9 had anomalous gold sample corresponding to heavily pyritized intervals of the strongly altered "andesite tuff" (410 ppb Au/12.0 feet), and underlying mafic tuff (240 ppb Au/3.00 feet).

## 2. GEOLOGY

### 2.1 Regional Geology

The most recent, and very comprehensive study of the area was that of Trowell (1983), from which the following is largely derived. He identified a series of major volcanic-stratigraphic units making up the Sturgeon Lake-Savant Lake greenstone belt (Fig. 3). In the area of the Beck Project, he identified three major assemblages in an eastward facing

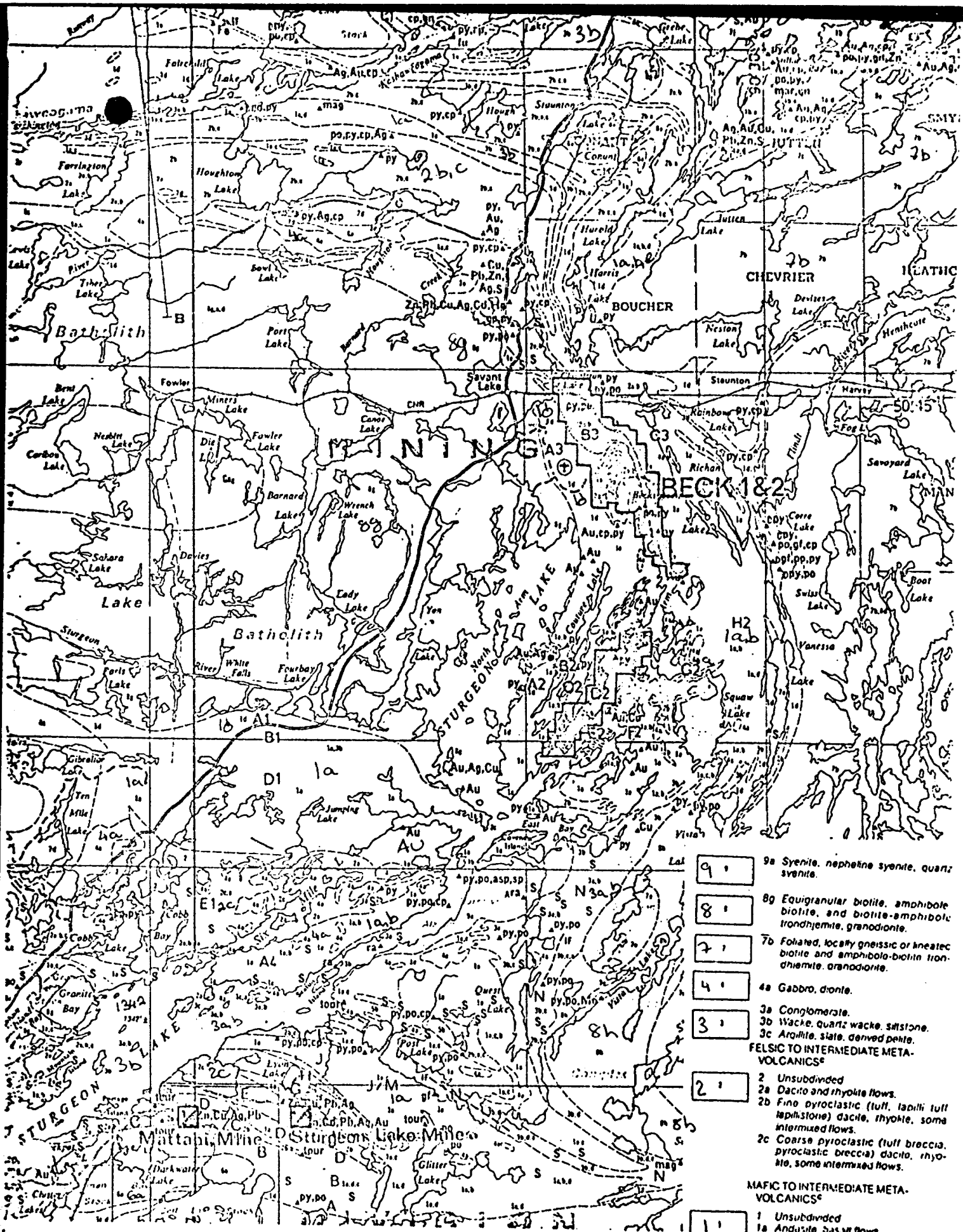
TABLE 1

LIST OF BECK CLAIMS

Pa 391427	1 claim	Pa 486272-486275	4 claims
436823-436826	4 "	486277-486280	4 "
436828-436838	11 "	486288	1 "
437423-437426	4 "	486308-486311	4 "
437428-437430	3 "	486315	1 "
486021-486026	6 "	486914	1 "
486029-486033	5 "	487062-487065	4 "
486037-486040	4 "	487067-487069	3 "
486047-486053	7 "	487633-487635	3 "
486056-486057	2 "	487637-487638	2 "
486059-486060	2 "	487640-487641	2 "
486062-486069	8 "	611926	1 "
486087-486088	2 "	612003-612004	2 "
486091-486095	5 "	612007-612008	2 "
486098-486103	6 "	612012	1 "
486105-486122	18 "	612014	1 "
486125-486136	12 "	612016-612019	4 "
486253-486270	18 "		

Total of UMEX Inc claims in the Beckington Lake area:

158 claims



- |   |  |
|---|--|
| 9   | 9a Syenite, nepheline syenite, quartz syenite.   |
| 8   | 8g Equigranular biotite, amphibole biotite, and biotite-amphibole trondhjemite, granodiorite.  |
| 7   | 7b Foliated, locally gneissic or lineated biotite and amphibole-biotin trondhjemite, granodiorite.   |
| 4   | 4a Gabbro, diorite.  |
| 3   | 3a Conglomerate.<br>3b Wacke, quartz wacke, siltstone.<br>3c Argillite, slate, derived pelite.   |
| <b>FELSIC TO INTERMEDIATE META-VOLCANICS*</b> |  |
| 2   | 2 Unsubdivided<br>2a Dacite and rhyolite flows.<br>2b Fine pyroclastic (tuff, lapilli tuff lapillstone) dacite, rhyolite, some intermixed flows.<br>2c Coarse pyroclastic (tuff breccia, pyroclastic breccia) dacite, rhyolite, some intermixed flows. |
| <b>MAFIC TO INTERMEDIATE META-VOLCANICS*</b>  |  |
| 1   | 1 Unsubdivided<br>1a Andesite, basalt flows.<br>1b Pillowed flows.<br>1c Pyroclastic rocks.<br>1d Foliated to gneissic, amphibolized flows.  |

A2 Etc Subdivisions After Trowell

Fig 3



homocline, of mafic volcanics, felsic volcanics and mafic volcanics, underlain to the east by an extensive area of gneissic, foliated trondhjemite. In the area of Beck 1 and 2, these units were called the "Northeast Arm Assemblage", with the lower two units forming the "Beckington Lake West" cycle and the upper units forming the lower part of the "Beckington Lake East" cycle.

The lower mafic unit (Formation A3) consists of massive pillowed, porphyritic and amygdular flows with minor interflow fragmentals. It is correlative with the North Arm cycle, Northeast Arm Assemblage: Morgan Island Section (Formations A2, C2) and may be equivalent to the mafic volcanic sequence (Formation A) at the base of the Sturgeon Lake Assemblage further to the south.

The central felsic unit on the Beck 1 and 2 claims (Formation B3) consists of intermediate to felsic flows (?), hypabyssal intrusives and coarse fragmentals. Distinctive porphyritic units are characterized by up to 3 cm blue quartz eyes.

The upper unit (Formation C3) is a sequence of mafic, massive flows with minor porphyritic, pillowed and amygdaloidal flows, and is equivalent to similar units in the Squaw Lake cycle (Formation F2), and possibly to the mafic unit (Formation D) overlying the Mattabi Mine.

An alternative stratigraphic correlation equates the lower mafic unit (A3) with "Formation D", the felsic unit (B3) with "Formation E" of the "Claw Lake cycle", which are similar intermediate to felsic fragmentals, and the upper mafic unit (C3) with "Formation F" of the "Lyon Lake cycle", all of which are closely related to the Sturgeon Lake Mines and Lyon Lake orebodies.

Petrochemically, the lower mafic unit (A3) is a tholeiitic basalt, with interlayered high-magnesia and high-iron tholeiites. The middle felsic unit of Beck 1 and 2 is composed of calc-alkalic rhyolites, dacites and andesites, but without any obvious simple differentiation trend, suggesting distal vent-sources, and possibly more than one source.

Throughout the volcanic sequence there are numerous stratabound hypabyssal intrusives both mafic gabbro-diorite, and anorthositic gabbro-diorite as well as felsic quartz and quartz-feldspar porphyries. The mafic intrusions are dominantly tholeiitic, whilst intermediate to felsic intrusions are calc-alkali, and are therefore likely comagmatic to the volcanic units, and hence synvolcanic.

The intrusive western margin of the volcanic sequence is a "western granitic complex", comprised of well foliated granodiorite and trondhjemite. Though the present contact is probably fault controlled the granite complex is probably intrusive into the sequence, as there are large enclaves of metavolcanics enclosed within it. Two massive trondhjemite-granodiorite plutons intrude both the granitic complex and the volcanic sequence at its base, namely the North Arm and St. Anthony plutons, and both are associated with gold mineralization at their contacts with the basal, mafic volcanics which they intrude.

The eastern margin of the volcanic sequence is a concordant, gneissic, well foliated biotite and hornblende-biotite granodiorite and trondhjemite with local microcline porphyritic granitics. It may originally have been of sedimentary origin, and overlain the volcanic sequence.

The structure in the area is very simple, of near vertical dipping volcanic units, sometimes locally overturned, but generally forming a steep, east-facing, upright homocline. Generally dips are from 75 to 85° to the east. A number of faults have been mapped. The large sand covered area between the Beck 1 and Beck 2 outcrop areas may represent the trace of a major structural zone, as indicated by local strike changes in the geophysical data and correlations of similar stratigraphy in the two outcrop areas. (The fold shown on published geological maps with local NE strikes, at the north of the Beck 1 grid, does not in fact exist. There is rather a stronger NE foliation in this area.)

Metamorphism is generally of the greenschist facies on the southern part of the Beck 1 grid. At about the location of the GLFP #700 road however there is a sharp facies transition to amphibolite grade metamorphism with, in the hydrothermally altered areas, the substitution of staurolite for chloritoid, in a relatively narrow band where staurolite-chloritoid-garnet-andalusite assemblages were observed. Further north in the Beck 2 area, staurolite is quite common, chloritoid absent, and kyanite and sillimanite are sporadically associated with andalusite. North of the property, in the Sabin area, sillimanite and kyanite tend to be slightly more common, indicating yet further increases metamorphic grade northwards.

## 2.2 Property Geology

The rocks underlying the Beck 1 and 2 claim groups are rhyolite tuffs, dacite tuffs and massive rhyolite with some interbedded mafic and intermediate volcanic flows and tuffs. A silicate iron formation is generally continuous trending at 340° ± 5° through the property and is well exposed on claims Pa 486032, 486040, 612004.

The felsic volcanic tuffs located on claims Pa 487636, 487637, etc... on the south of the property near the Northeast Arm of Sturgeon Lake are rhyolitic to rhyodacitic in composition with fine grained felsic fragments up to lapilli size although commonly smaller. Angular to subangular blue quartz phenocrysts ("quartz eyes") ranging from 1 mm to 3 cm in diameter are common in this rock. The density of the quartz phenocrysts increases toward interpreted flow tops.

Rocks of mafic to intermediate chemical composition are drab grey in color, fine grained and homogeneous on the southerly claims with especially good exposure on claims Pa 486834, 487067. Biotite is common in these rocks and along with feldspar constitutes a major percentage of the rock. In general, the mafic units are subordinate in exposure to the felsics here but this relationship reverses itself to the east until only mafic volcanic flows are present.

The rocks nearer the GLFP #700 road are in general alternating horizons of fine grained felsic tuffs and fragmentals and strongly foliated mafic to intermediate medium grained tuffs and flows. The felsic rocks are rhyodacitic to dacitic in composition with fragments ranging from less than 1 cm to several cms in size. These fragments are usually felsic but locally are mafic. Although the size and chemical composition of these fragments differs through the map area localized outcrop generally homogeneous clast.

The mafic rocks do not show a tuffaceous nature at some localities and these may be flows. They generally interfinger with the dominating felsic rock and quite often are sheared. The dominant mineral composition is chlorite and plagioclase with or without amphiboles. Sulfides often are found disseminated throughout the groundmass, generally pyrite. A zone between the felsic and mafic horizons often sericitic-schist type

The iron formation is a silicate facies on claims Pa 486032, etc... containing garnets, staurolites and biotite. This whole continuous zone is anomalous in precious metals. Structure in this area is slightly more complex than the rest of the property, though this may be due to increased outcrop exposure. A regional foliation in the rocks is still  $340^{\circ}$  but more cross lineaments and small scale fractures at  $360^{\circ}$  and  $040^{\circ}$  may be indicative of larger structures. Mineralization in the area may be concentrated by this complexity of the structures.

To the north of the property, in the vicinity of CNR, the Chivelston Lake granitic stock intrudes the western claims Pa 486275 and 486280. Eastward from the stock, the felsic rocks have a sillimanite, staurolite, quartz, plagioclase, mica assemblage indicating a higher grade of metamorphism than farther south on the Beck property. To the east of this zone, mafic flows and tuffs dominate.

### 2.3 Detailed Geological Description

The southern section of the Beck claims in the vicinity of the Northeast Arm of Sturgeon Lake (Dwg. 5) consisting of claims Pa 486288, 487636, 387637, 487638, 487633, 487634, 487635, 486311, 487069, 487068, 486310, 486309, 436837, 436838, 486288, 487067, 487066, 436836, 436835, 436834, 436832, 436833, 487065, 487064, 436831, 436830, 487063, is underlain by interbanded mafic and felsic volcanic rocks. The foliation in the area is very close to  $340^{\circ}$  and dips steeply to the east.

The mafic rock units are often tuffaceous, basaltic to andesitic in composition. They are massive to foliated, medium to coarse grained, with feldspar, chlorite,  $\pm$  hornblende,  $\pm$  small subrounded quartz phenocrysts. The quartz phenocrysts are  $<2\%$  of the rock. The metamorphic grade is greenschist. To a lesser extent, a coarser lapilli tuff is present with both mafic and felsic fragments.

The felsic to intermediate rocks of the area consist of varying tuffs containing either basic fragments, acidic fragments or both in a fine grained felsic groundmass. The fragments are usually elongated in the direction of foliation, approximately  $340^{\circ}$ . The groundmass is rhyolitic to rhyodacitic in composition, massive to weakly foliated. Porphyritic quartz phenocrysts up to 2 mm in diameter can be very common, 5%, but are usually from 2-5% of the rock. Lapilli size felsic fragments are present in some localities. Generally, the rocks with larger lapilli size fragments have a groundmass slightly more dacitic in composition than the fine grained tuff variety. Quartz eyes are common here as well and may be slightly larger.

Drawing 4, covering the geology of claims Pa 486037, 486038, 486032, 486033, 486039, 486040, 486051, 612003, 612007, 612004, 486065, 486066, 486067, 486068, 612008, 486069, 436823, 436825 is located in the central section of Beck 1, with GLFP #700 road transecting the northerly claims. The rocks consist predominantly of felsic to mafic volcanic rocks. The felsics are fine grained tuffaceous rocks, rhyolitic to dacitic in composition with quartz phenocrysts virtually always present and often 5% of the whole rock. Many locations have shattered quartz phenocrysts and often a bluish hue is present. The fragments are usually acidic but may be basic in zones that appear to be transition zones from mafic to felsic rocks. The average diameter of the fragments is 1-2 mm. The outcrop is massive to weakly foliated to very strongly foliated.

The mafic rocks in the area are often tuffaceous, massive to strongly foliated. The groundmass is coarser grained to the west on claim Pa 486037 and becomes fine grain size eastward toward Pa 486067. The rocks are massive to the west, foliated throughout most of the claims. Segregations of chlorite as clots or stringers are present in some of the rocks. In general, the metamorphic grade could be considered upper greenschist south of GLFP #700 road and amphibolitic north of the road. Also east of the section, and off the Beck claims, randomly oriented dentritic actinolite clusters are present. Acidic fragments are often present in these mafic volcanics and are elongated in the direction of foliation.

The other mafic rock in the area is a massive homogeneous green flow rock that is fine to medium grained and basaltic to andesitic in composition. Dark quartz phenocrysts may be present in the mafic rocks but are usually minor and of very fine grain size.

The center of the area just west of DDH #8 has a sericitic schist horizon between a felsic and mafic unit. This rock is fine grained up to 90% sericite and contain disseminated sulfide. Continuity of the zone in a north and south direction can be inferred from the VLF-EM and Max-Min surveys.

The "silicate iron formation" that is north of the GLFP #700 road on claim Pa 486032 has greater than 20% total iron. The minerals present are garnets, staurolite, biotite and amphiboles. Chlorite may also be present, this chlorite is believed to be retrograde.

The area covering claims Pa 612014, 612012, 612016, 612017, 612018, 612019, 611926 (Dwg. 3) consists of fine to medium grained mafic volcanics, which are tuffaceous in the west with some homogeneous massive flow. To the east, there is a gradual transition to felsic tuffaceous rocks. There is an increase in quartz phenocrysts as one goes from west to east. The eastern claims are covered by rocks of dacitic composition that can give a pinkish green hue on fresh surface.

The Beck 2 claims to the north (Dwg. 2) contain claims Pa 486113, 486122, 486129, 486130, 486131, 486132, 486133, 486134, 486135, 486136, 486258, 486257, 486256, 486255, 486254, 486253, 486259, 486260, 486261, 486262, 486263, 486264, 486265, 486266, 486267, 486268, 486270, 486271, 486272, 486273, 486274, 486275, 486277, 486278, 486279, 486280. In the Chivelston Lake area, the Chivelston Lake Intrusive has intruded the rocks. This rock is granodioritic in composition, fine grained and foliated in spots.

The claims Pa 486113 and 486122 are underlain by massive medium grained homogeneous mafic flows or fine grained intrusives. These are basaltic in composition. At one exposure, just east of claim Pa 486113, a felsic volcanic rock is in fault contact with the mafic rocks to the east.

The claims to the east Pa 486253 etc... contain rocks of fine grained mafic flows and are more or less homogeneous throughout the eastern claims. Pillows may be present in these rocks north of the CNR.

### 3. GEOPHYSICS

#### 3.1 UMEX Inc

During 1982, UMEX Inc conducted ground geophysics over the Beck property. The ground geophysical surveys comprised of a fairly systematic coverage of the property by VLF-EM and magnetometer survey. Conductive zones were defined in greater detail by Max-Min EM in those areas where the geological and lithochemical surveys indicated areas of potential interest.

#### 3.2 1984 IP Survey

During October-November 1984, an induced polarization survey was carried out over five lines on the Beck Project. All the lines transected the Creek zone, and the two southernmost lines were extended further east as well as to cover another anomaly south of a small lake.

The anomalous responses along the Creek zone are not very strong, but improve with depth. There is also an appearance of widening at depth. A second anomaly, most likely related to a mafic intrusive on the east side of the creek, is becoming more distinct to the south. The significance of this anomaly is unknown at this time.

The Lake Anomaly is very much stronger than the one in the Creek zone. It resolves into two targets on Line 12+50S, as if being located along two stratigraphic planes. The shallower one was intersected in the drilling. Line 15+00S was not carried far enough to the east to resolve the two anomalies.

4. RECOMMENDATIONS AND CONCLUSIONS

The work done in 1984: geological, geochemical and geophysical, further defined the previously known anomalous zone near Moose Creek, the zone that DDH #9 intersected. Geology in the area is felsic tuffs and pyroclastics and mafic volcanics. This zone can be traced by geophysics from L125S to L1500S.

The sericitic schist horizon to the west of DDH #8 comes to surface west of "The Pond" on L750. This horizon is along strike with a strong IP conductor on L1250S at 500-600E. This area has not been fully sampled. Additional litho-geochemical sampling of the area is warranted.

At present, a 740 m diamond drill program is being carried out to test these zones and results should assist in evaluating the property potential.

*Douglas Unger*

BW/tn

*for* Brian Wing

REFERENCES

Trowell, N.F. 1983. Geology of the Sturgeon Lake area, District of Thunder Bay & Kenora. Ontario Geological Survey, Report 221.

CERTIFICATE

I, David C. Unger, certify that:

1. I am a consulting geologist, residing at 514 Christie Street, Toronto, Ontario, M6G 3C3.
2. I am a graduate of the University of Toronto, Toronto, Ontario, with a four year Bachelor of Science, 1979.
3. I have practiced geology in the field since 1979.
4. This report entitled "1984 Geological Report, Beckington Lake Area M.1740, Beck 1 and 2 claims" is based on work performed on the property in the period of August 1 to October 1, 1984.
5. I, David Unger, have no personal interest in the property mentioned in this report.

*David Unger*

*Just  
this file*





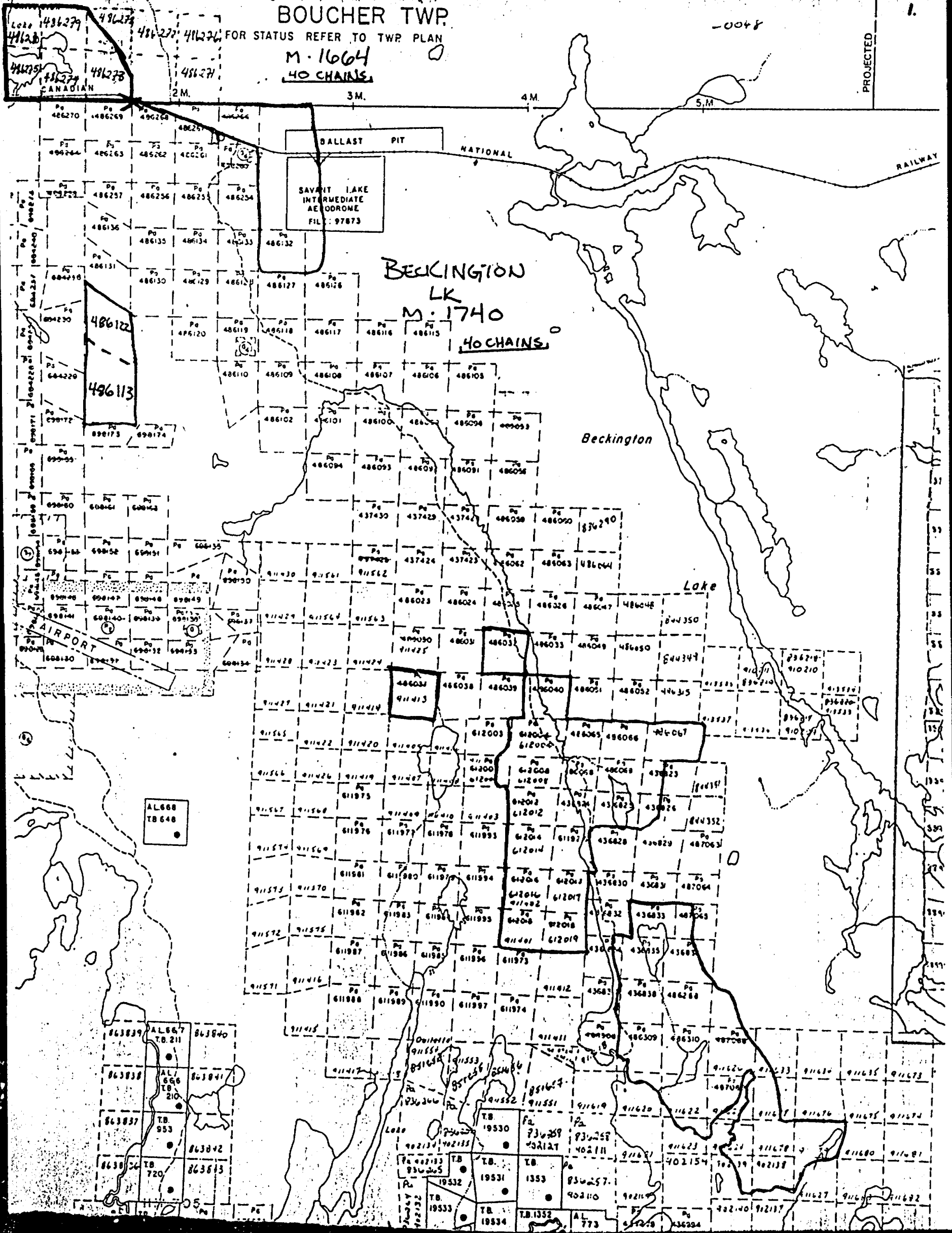
# BOUCHER TWP.

FOR STATUS REFER TO TWP PLAN

**M-1664**  
**40 CHAINS**

-0048

PROJECTED



W.M. Mining Land

of, Geophysical, and/or Earth Sciences (if any) and Expenditures

#84-16

27799  
27799

Mining Act

June 11  
2.

Type of Survey: **Geological**

Name of Holder: **UMEX Inc**

Address: **1935 Leslie Street, Don Mills, Ontario, M3B 2M3**

Survey Company: **UMEX Inc**

Date of Survey (from to): **01 08 84 01 10 84**

Total Miles of Line Cut: \_\_\_\_\_

Name and Address of Author (of Geo-Technical report): **Brian Wing, c/o UMEX Inc**

Location: **Beckington Lake - M.1740**

Proprietor's Licence No.: **T-133**

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	X
	Geochemical	

Special Provisions	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
Geological		
	Geochemical	

Special Provisions	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
Pa	486288	20	Pa	486037	20
	486309	20		486067	20
	486310	20		612014	20
	486311	20		612016	20
	436835	20		612017	20
	436836	20		612018	20
	487067	20		612019	20
	487068	20			
	487633	20		486113	20
	487634	20		486122	20
	487635	20		486132	20
	487637	20		486253	20
	487638	20		486259	20
				486265	20

Expenditures (excludes power stripping)

Type of Work Performed: \_\_\_\_\_

Performed on Claim(s): \_\_\_\_\_

Calculation of Expenditure Days Credits

Total Expenditures \$ \_\_\_\_\_ + 15 = Total Days Credits \_\_\_\_\_

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

Total number of mining claims covered by this report of work: **26**

For Office Use Only

Total Days Credits Reported: **520**

Date Reported: **Dec 19, 1984**

Signature: **[Signature]**

Date Approved as Accurate: **Dec 19, 1984**

Signature: **[Signature]**

Date: **December 12, 1984**

Received by Holder or Agent (Signature): **[Signature]**

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

Name and Postal Address of Person Certifying: **Mr. Brian Wing, c/o UMEX Inc, 1935 Leslie St., Don Mills, Ont. M3B 2M3**

Date Certified: **Dec 12/84**

Certified by: **[Signature]**

20048



Ministry of  
Natural  
Resources

**Technical Assessment  
Work Credits**

- 0048 2

File  
2.7799

Date  
1985 02 21

Mining Recorder's Report of  
Work No. 84-16

Recorded Holder  
UMEX INC

Township or Area  
BECKINGTON LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column	P 486288 486309-10 436836 487067-68 487634-35 486037-67 612014-16-17-18-19 486113-22-32 486253-59-65
Geological _____ 20 _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	
Special credits under section 77 (16) for the following mining claims	

15 DAYS	10 DAYS	5 DAYS
PA 436835 487633-37	PA 487638	PA 486311

No credits have been allowed for the following mining claims

not sufficiently covered by the survey       Insufficient technical data filed

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



February 11, 1985

G.5054

Mr. F.W. Matthews  
Ontario Ministry of Natural Resources  
Mining Lands Branch  
Whitney Block, Queen's Park  
Toronto, Ontario  
M7A 1Z1

Dear Sir,

Re: Submission of Geological Survey in Patricia Mining Division -  
Beckington Lake Area - M.1740, claims Pa 486288, etc...

We are hereby submitting Geological Survey on 26 claims in the Beckington Lake Area, claim map M.1740.

As Brian Wing is not available, we have taken the liberty of asking Mr. David Unger to sign Mr. Wing's geological report. A certificate of Mr. Unger's qualifications is attached.

The following documents, in duplicate, are also enclosed:

- Report of Work;
- 1984 Geological Report - Beckington Lake Area - M.1740, Beck 1 and 2 claims;
- Related maps.

We respectfully request that the submitted work be recorded as assessment work on these claims.

Yours truly,

**RECEIVED**

FEB 11 1985

**MINING LANDS SECTION**

*J. Nangreaves*  
Mrs. T. Nangreaves

/tn  
encl.



Ministry of  
Natural  
Resources

*Much 8/85*

. 1985 02 21

Your File: 84-16  
Our File: 2.7799

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

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

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

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

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

*H.J.* S. Hurst:mc

Encls.

cc: Umex Inc  
1935 Leslie Street  
Don Mills, Ontario  
M3B 2M3  
Attention: Brian Wing

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

-0048 7.



Ministry of  
Natural  
Resources

Notice of Intent  
for Technical Reports

1985 02 21  
2.7799/84-16

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

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

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

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



Ministry of  
Natural  
Resources

52 J/2 NE (74)<sup>2.</sup>  
-004f

1985 03 15

Your File: 84-16  
Our File: 2.7799

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

RE: Notice of Intent dated February 21, 1985  
Geological Survey on Mining Claims P 486288,  
et. al., in the Beckington Lake Area

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

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

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

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

Rj S. Hurst:mc

cc: Umex Inc  
1935 Leslie Street  
Don Mills, Ontario  
M3B 2M3  
Attention: Brian Wing  
cc: Mr. G.H. Ferguson  
Mining & Lands Commissioner  
Toronto, Ontario

cc: Resident Geologist  
Timmins, Ontario

Encl.

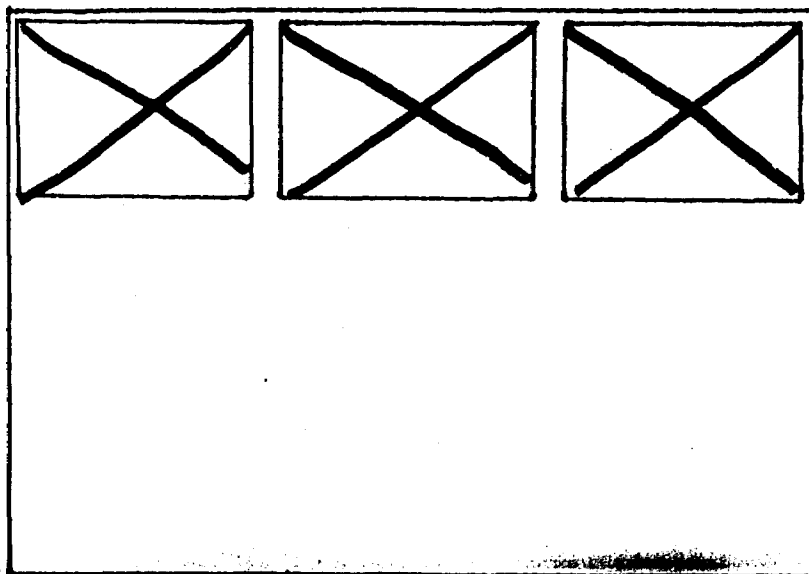


● SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

525/02NE-0048 #1-3

LOCATED IN THE MAP  
CHANNEL IN THE  
FOLLOWING SEQUENCE

(X)



FOR ADDITIONAL  
INFORMATION

SEE MAPS:

525/02NE-0048 # 4-5

---

Evans Lake Area - M.1774

AREA OF

# BECKINGTON LAKE

DISTRICT OF THUNDER BAY

PATRICIA MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

### DISPOSITION OF CROWN LANDS

- PATENT, SURFACE AND MINING RIGHTS
- " SURFACE RIGHTS ONLY
- " MINING RIGHTS ONLY
- LEASE, SURFACE AND MINING RIGHTS
- " SURFACE RIGHTS ONLY
- " MINING RIGHTS ONLY
- LICENCE OF OCCUPATION
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED

### NOTES

400' Surface Rights Reservation along the Shores of all lakes and rivers.

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition	
1	Reserved for Public Use		S.R.	
2	143788	18/10/71	S.R.	
3	W 36/74	143788	27/6/74	S.R.
4	W 28/76	185555	8/6/76	S.R.

One mile wide CNR reserve -- Surface Rights withdrawn under Sec 43 of The Mining Act File 168405

### SAND and GRAVEL

- MTC Gravel Pit No 636
- Pit No 637
- Gravel File 185333
- 143788
- MTC Gravel Pit No 635
- Pit No 1646
- Pit No 1430, File 143788
- Gravel File 160704
- MTC Gravel Pit No 1C-14 File 143788
- Q.P. QUARRY PERMIT

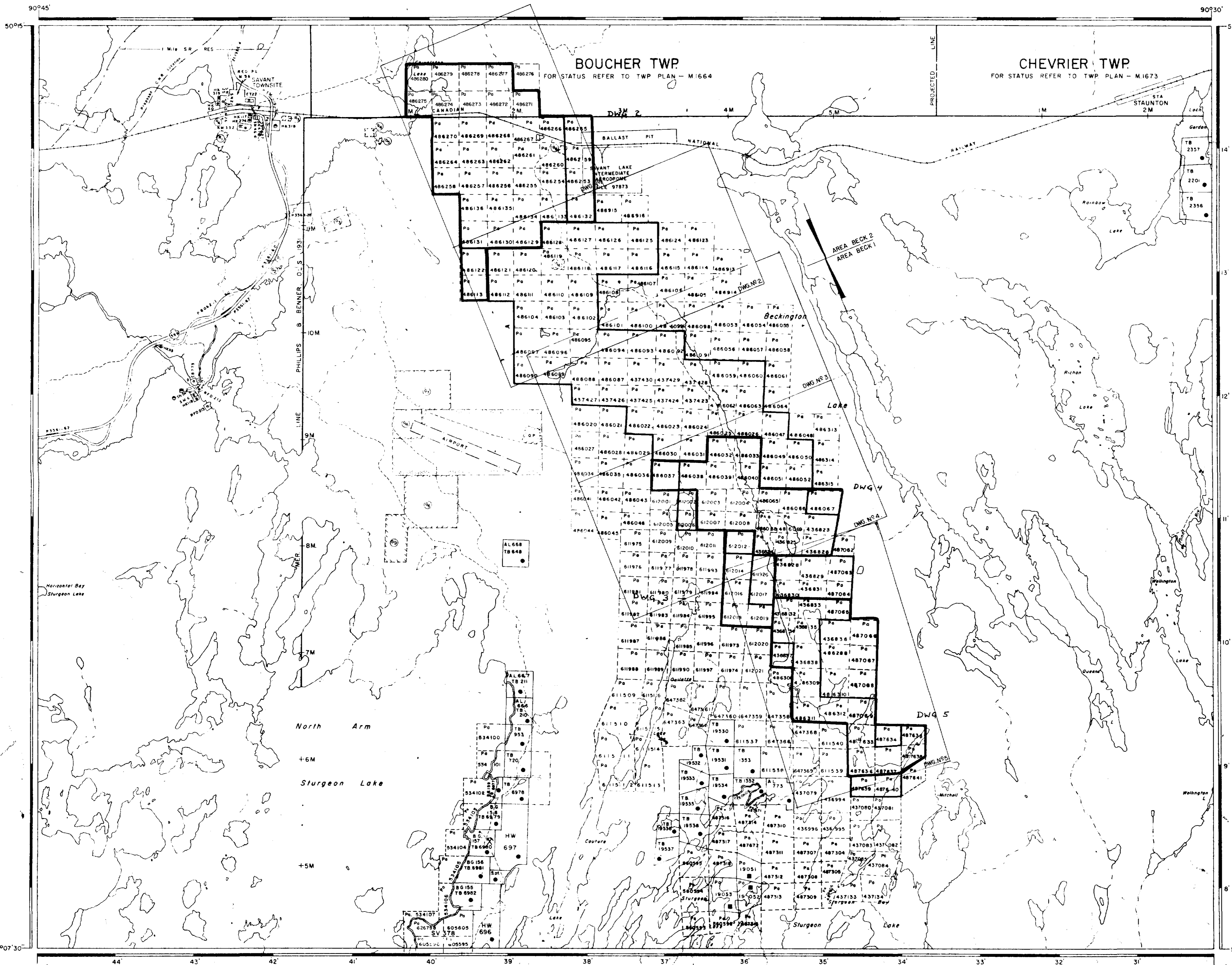
*Brian Wang*

**DWG 1**  
**AREA BECK 1 & 2**  
**GEOLOGY**  
**LOCATION MAP**  
**UMEX INC.**

NATIONAL TOPOGRAPHIC SERIES 52J2

PLAN NO. **M.1740**

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



Barnard Lake Area M.1744

Fog Lake & Manion Twp. M.3191

Squaw Lake Area - M.1904

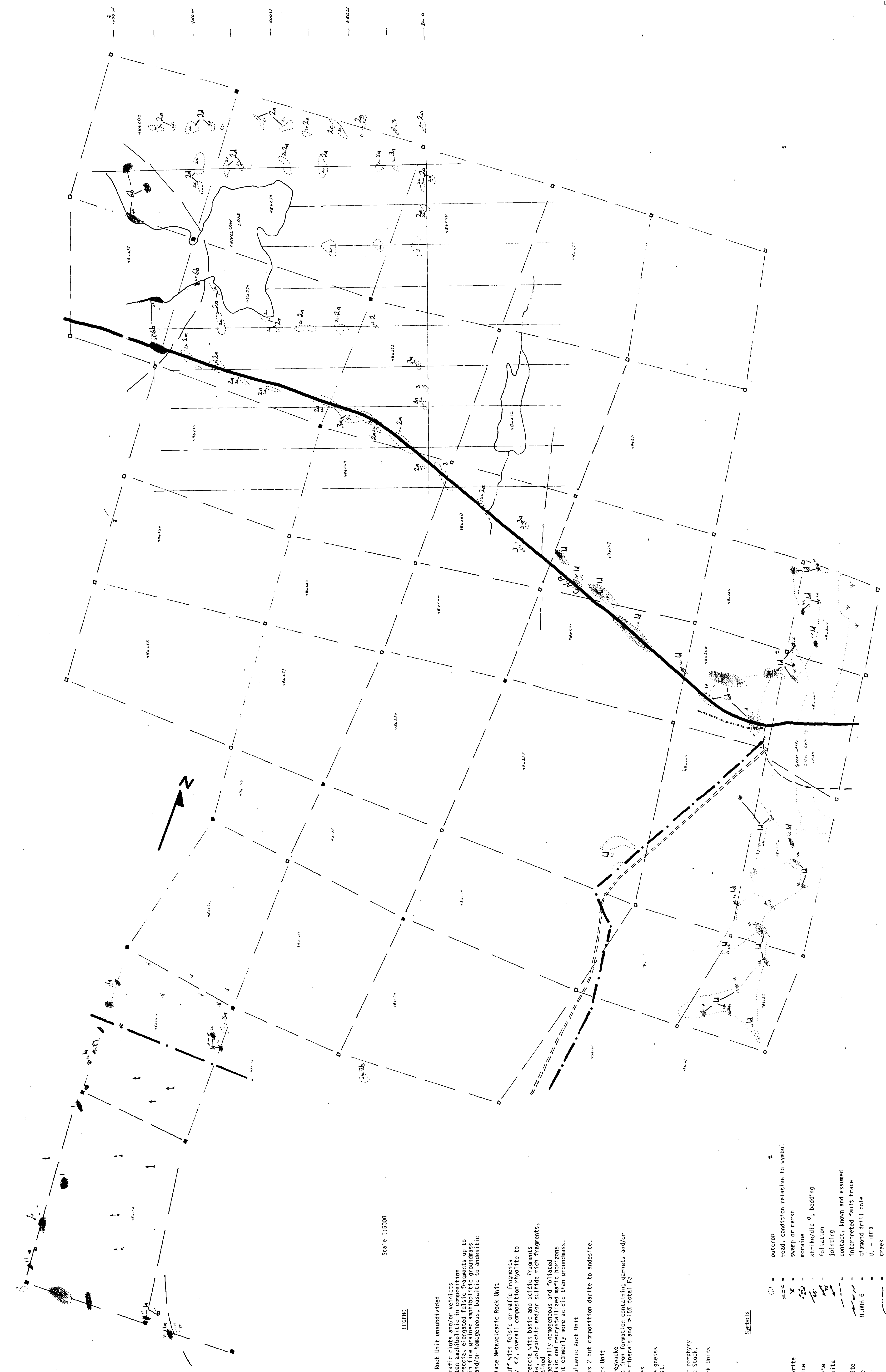
52J/02NE-0048, #1



**BECK 2  
GEOLOGY**

Scale: 1:5000  
 UMEX CORPORATION LTD.  
 DRAWN BY: *Alan Long*  
 DATE: \_\_\_\_\_  
 SURVEYED BY: \_\_\_\_\_

525/02 NE - 0078, #2



Scale 1:5000

**LEGEND**

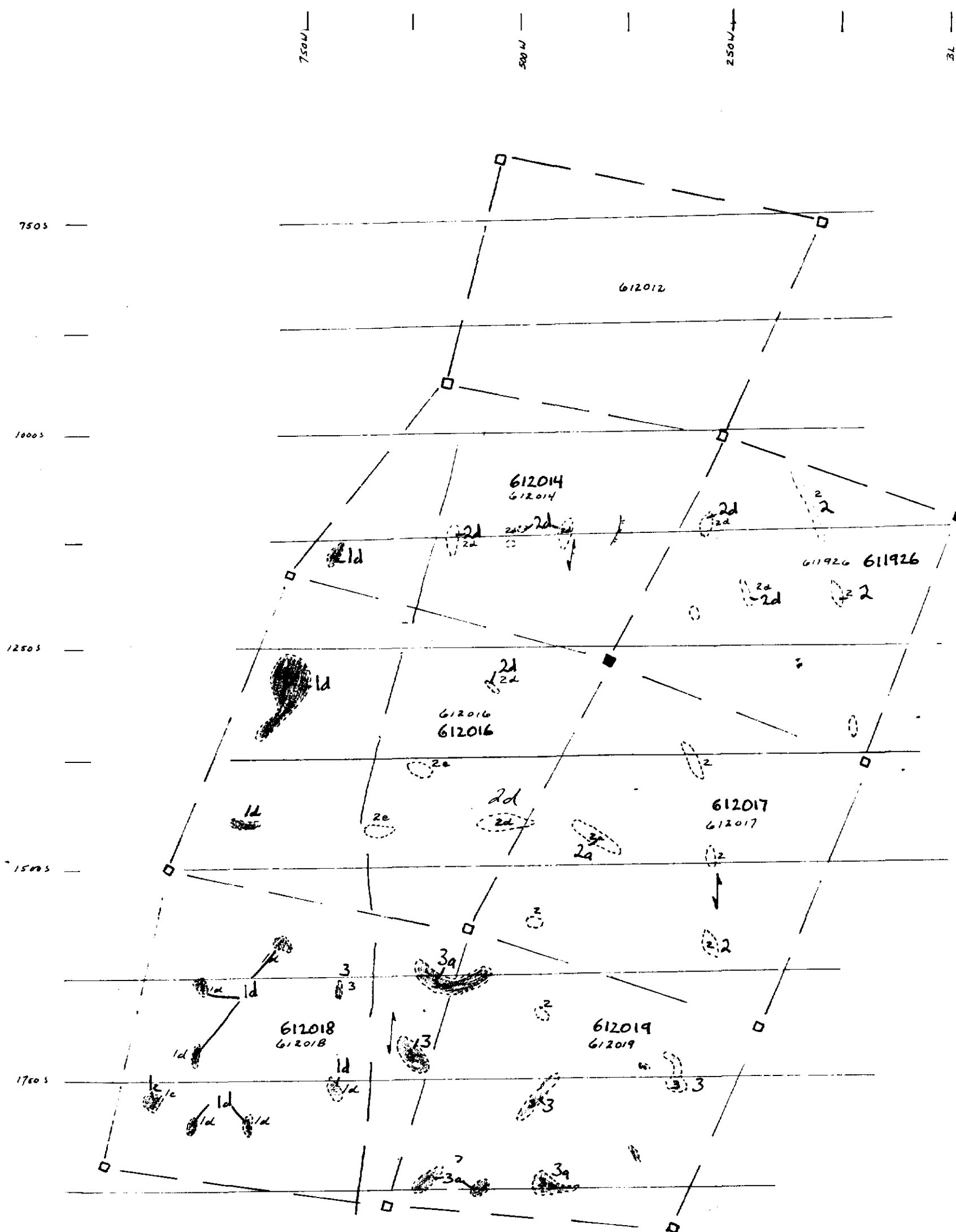
1. Basic Metavolcanic Rock Unit unsubdivided
  - a) Separations, mafic clasts and/or veins
  - b) Suffered from embolization
  - c) Lapilli/tuff breccia, elongated felsic fragments up to 2 cm by 4 cm in fine grained amphibolitic groundmass
  - d) Fine grained mafic and/or homogeneous, basaltic to andesitic (b) followed
2. Felsic to Intermediate Metavolcanic Rock Unit
  - a) fine grained tuff with felsic or mafic fragments < 5 mm usually < 2, overall composition rhyolite to andesite
  - b) lapilli/tuff breccia with basic and acidic fragments
  - c) volcanic breccia, polytextured and/or sulfide rich fragments, matrix of fine grained mafic and/or homogeneous and foliated
  - d) interbedded felsic and recrystallized mafic horizons
  - e) breccia fragment commonly more acidic than groundmass.
3. Intermediate Metavolcanic Rock Unit
 

Same subdivisions as 2 but composition dacite to andesite.
4. Metasupplementary Rock Unit
  - a) quartz, biotite gneiss
  - b) sericitic schist.
5. Schists and Gneisses
  - a) quartz, biotite gneiss
  - b) sericitic schist.
6. Felsic Intrusive
  - a) quartz feldspar porphyry
  - b) Chiveston Lake Stock.
7. Basic Intrusive Rock Units
  - a) diabase dyke.

**Symbols**

py	pyrite	○	outcrop	relative to symbol
cpy	chalcopyrite	□	road, condition	
sph	sphalerite	△	swamp or marsh	
gal	galena	◇	moraine	
and	andalusite	▧	strike/dip °, bedding	
stl	stibnite	▨	foliation	
mt	montmorillonite	▩	jointing	
scr	sericite	▫	contact, known and assumed	
ser	sericite	▬	interpreted fault trace	
gos	"gossan"	▭	diamond drill hole	
ky	kyanite	▮	U. - UMEX	
amp	amphibole	▯	claim post, assumed	
chl	chlorite	▰	traverse	
po	pyrrhotite	▱	spruce swamp	
mag	magnetite	▴		





27799

UMEX INC.

BECK I  
GEOLOGY

DWG 3 Brian King

Scale 1:5000

LEGEND

1. Basic Metavolcanic Rock Unit unsubdivided
  - a) Segregations, mafic clots and/or veinlets
  - b) tuffaceous, often amphibolitic in composition
  - c) lapilli/tuff breccia, elongated felsic fragments up to 12 cm by 4 cm in fine grained amphibolitic groundmass
  - d) flow, massive and/or homogeneous, basaltic to andesitic (p) pillowed.
2. Felsic to Intermediate Metavolcanic Rock Unit
  - a) fine grained tuff with felsic or mafic fragments < 5 mm usually < 2, overall composition rhyolite to dacitic
  - b) lapilli/tuff breccia with basic and acidic fragments
  - c) volcanic breccia, polymictic and/or sulfide rich fragments, matrix fine grained
  - d) massive flow, generally homogeneous and foliated
  - e) interbedded felsic and recrystallized mafic horizons
  - f) breccia fragment commonly more acidic than groundmass.
3. Intermediate Metavolcanic Rock Unit
 

Same subdivisions as 2 but composition dacite to andesite.
4. Metasedimentary Rock Unit
  - a) argillaceous greywacke
  - b) silicate facies iron formation containing garnets and/or aluminosilicate minerals and >15% total Fe.
5. Schists and Gneisses
  - a) quartz, biotite gneiss
  - b) sericitic schist.
6. Felsic Intrusive
  - a) quartz feldspar porphyry
  - b) Chivelston Lake Stock.
7. Basic Intrusive Rock Units
  - a) diabase dyke.

Symbols

Mineral			
py	=	pyrite	○ = outcrop
cpy	=	chalcopyrite	== = road, condition relative to symbol
sph	=	sphalerite	⋈ = swamp or marsh
gal	=	galena	⊖ = moraine
and	=	andalusite	⊖ = strike/dip °; bedding
sill	=	sillimanite	⊖ = foliation
gnt	=	garnet	⊖ = jointing
str	=	staurolite	⊖ = contact, known and assumed
ser	=	sericite	⊖ = interpreted fault trace
gos	=	"gossan"	U.DDH 6 = diamond drill hole
ky	=	kyanite	U. = UMEX
amp	=	amphibole	⊖ = creek
chl	=	chlorite	■, □ = claim post, assumed
po	=	pyrrhotite	⋯ = traverse
mag	=	magnetite	⊖ = spruce swamp

Brian King  
Sept 1984

52J/02NE-0048, #3





Scale 1:5000

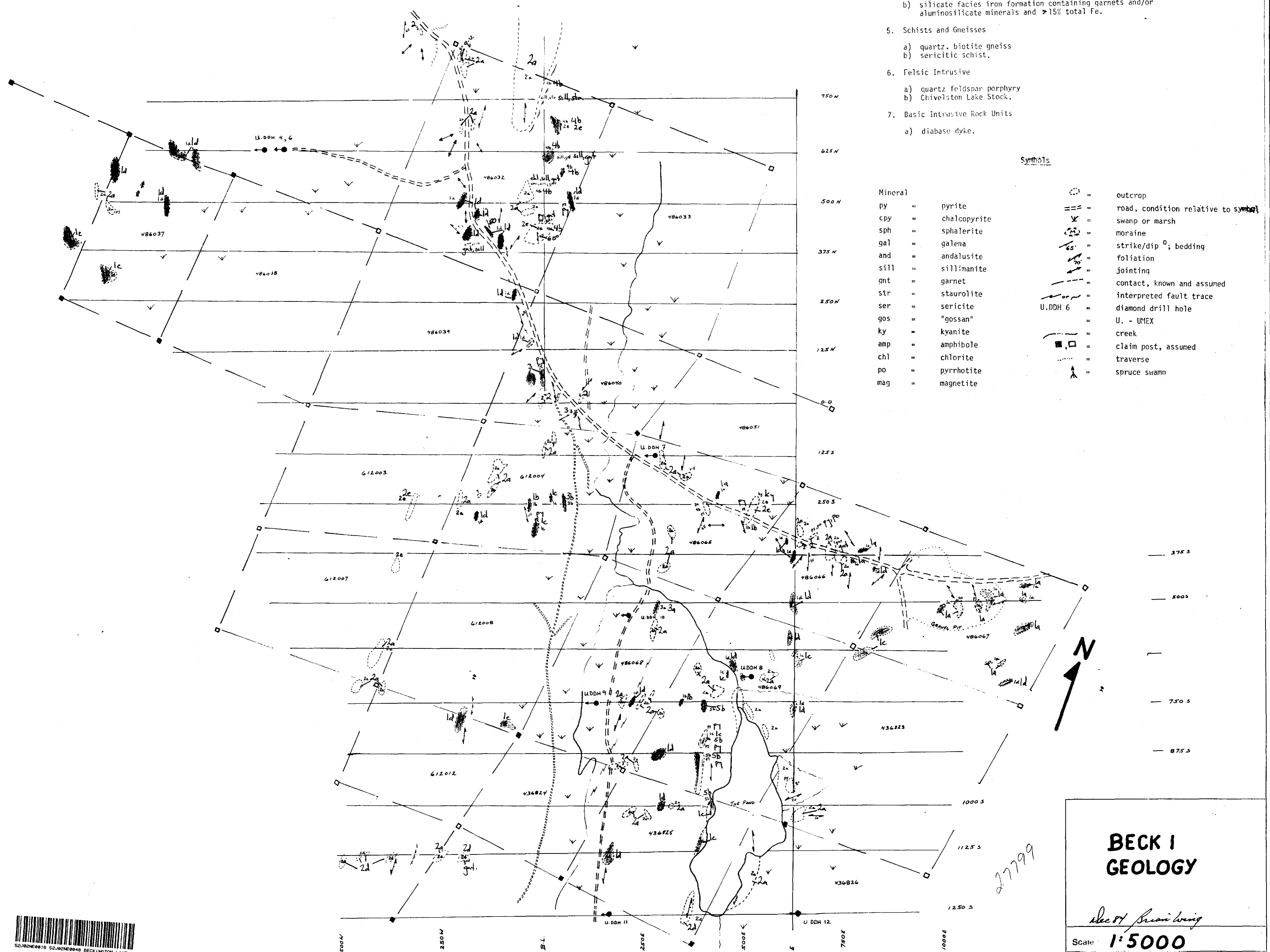
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Symbols

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py	=	pyrite	○	=	outcrop
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gal	=	galena	⊠	=	moraine
and	=	andalusite	65°	=	strike/dip °; bedding
sill	=	sillimanite	⊠	=	foliation
gnt	=	garnet	⊠	=	jointing
str	=	staurolite	— —	=	contact, known and assumed
ser	=	sericite	— —	=	interpreted fault trace
gos	=	"gossan"	U.DDH 6	=	diamond drill hole
ky	=	kyanite	U.	=	UMEX
amp	=	amphibole	— —	=	creek
chl	=	chlorite	□	=	claim post, assumed
po	=	pyrrhotite	⋯	=	traverse
mag	=	magnetite	▲	=	spruce swamp



**BECK I  
GEOLOGY**

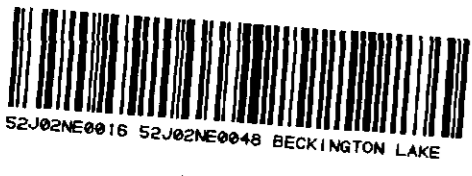
*See of Brian King*

Scale: **1:5000**

UMEX CORPORATION LTD.

DATE: 2000-10-10  
DRAWN BY: Brian King  
SURVEYED BY: Brian King

DWG. No. **4**



52J/02NE-0048, #4

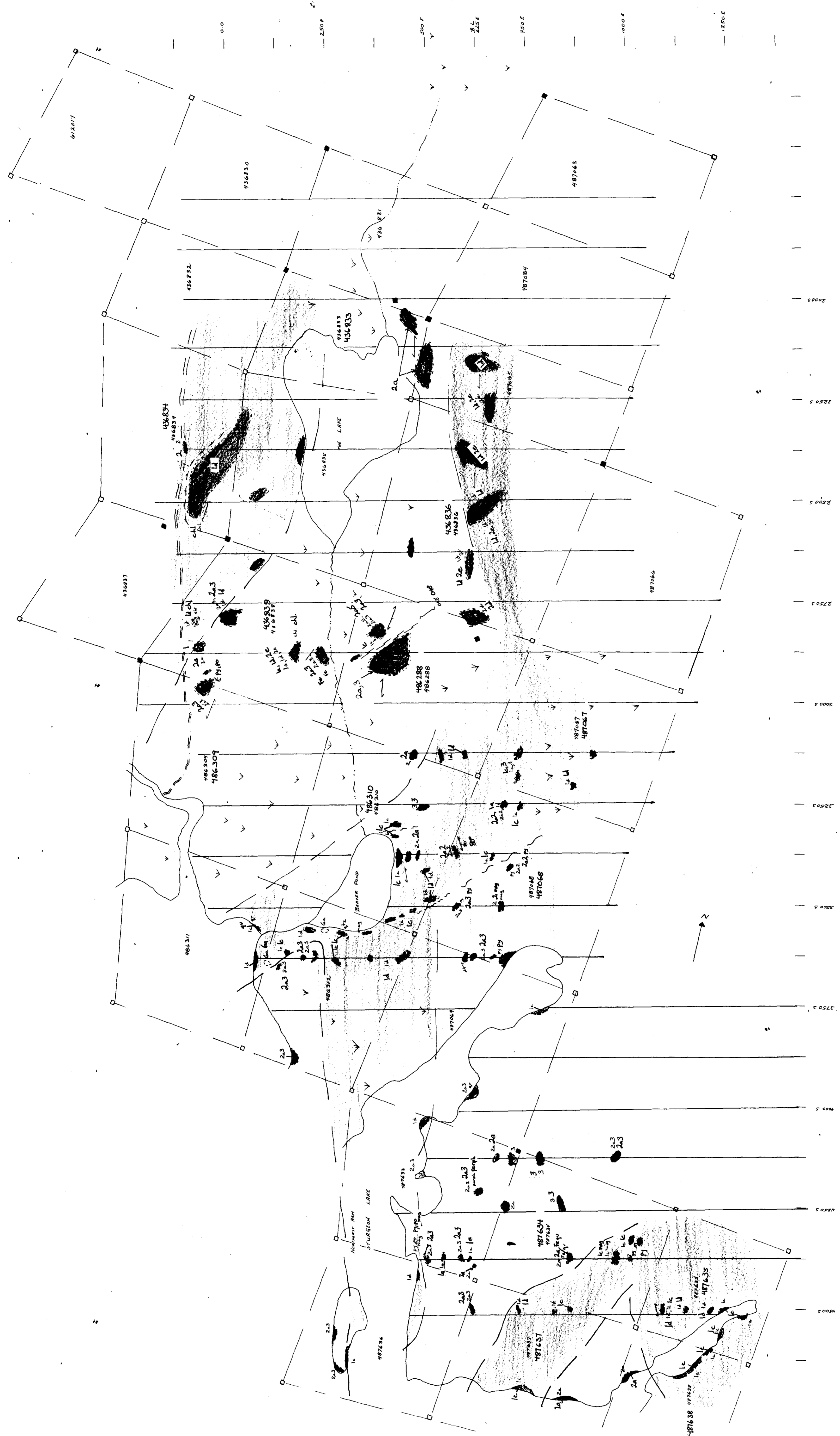
Scale 1:5000

LEGEND

1. Basic Metavolcanic Rock Unit unsubdivided
  - a) Segregations, mafic clots and/or veinlets
  - b) surfaceous, often amphibolitic in composition
  - c) pillowed breccia, elongated felsic fragments up to 12 cm
  - d) flow, massive and/or homogeneous, basaltic to andesitic
  - e) flow, massive and/or homogeneous, basaltic to andesitic
  - f) pillowed.
2. Felsic to Intermediate Metavolcanic Rock Unit
  - a) fine grained tuff with felsic or mafic fragments < 5 mm usually < 2, overall composition rhyolite to dacite
  - b) tuff breccia with basic and acidic fragments
  - c) volcanic breccia polytictic and/or sulfide rich fragments, matrix fine grained
  - d) massive flow, generally homogeneous and foliated
  - e) interbedded felsic and recrystallized mafic horizons
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3. Intermediate Metavolcanic Rock Unit
 

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- Mineral
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  - gnt = garnet
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  - ser = sericite
  - gos = "gossan"
  - ky = kyanite
  - amp = amphibole
  - chl = chlorite
  - po = pyrrhotite
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- Symbols
- = outcrop
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  - ⊕ = moraine
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  - ⊥ = foliation
  - ⊥ = jointing
  - = contact, known and assumed
  - = interpreted fault trace
  - ◇ = diamond drill hole
  - U, DDH 6 = U. - UNEX
  - = creek
  - = claim post, assumed
  - = traverse
  - = spruce swamp



BECK 1 GEOLOGY

2.7799

Dwg. 5

525/02 NE-0048, #5

UNEX CORPORATION LTD.  
April 1984  
Surveyed by: Susan Wong

