



428015E0033 2.12978 HORWOOD

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GEOLOGICAL REPORT
on the
North Horwood Property
of
TARZAN GOLD INC.
by
John Burton, B.Sc.
October, 1989

2.12978



42B015E0033 2.12978 HORWOOD

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SUMMARY

Tarzan Gold Inc's property is situated in central Horwood Township in the North Swayze metavolcanic-metasedimentary "greenstone" belt and is located 80 km southwest of Timmins, Ontario.

A reconnaissance mapping survey was carried out from July 3 to July 15 of 1989. Major rock types found on the property were mapped as mafic and intermediate metavolcanic rocks, metagabbro and lesser outcroppings of felsic metavolcanic rock and diabase. Four areas of significant structural deformation and alteration were found to occur in the mafic metavolcanic rocks and are considered to be prospective for gold mineralization.

Seventeen samples were collected from the claim group for assay for gold, arsenic, and/or copper, lead, zinc and whole rock analysis. Two samples had anomalous gold values between 22 and 49 ppb and five had weakly anomalous copper values between 118 and 147 ppm and three had weakly anomalous-zinc values between 104 and 240 ppm. The gold, copper and zinc anomalies came from carbonatized and foliated intermediate to mafic volcanic rocks. A further discussion of the assay results follows under 'Discussions of Assay Results'.

Further exploration is recommended in four phases: detailed geological mapping and sampling, induced polarization and magnetometer surveys, trenching and sampling, and diamond drilling respectively. A budget of \$263,065 is proposed to complete this four phase exploration program on the property.

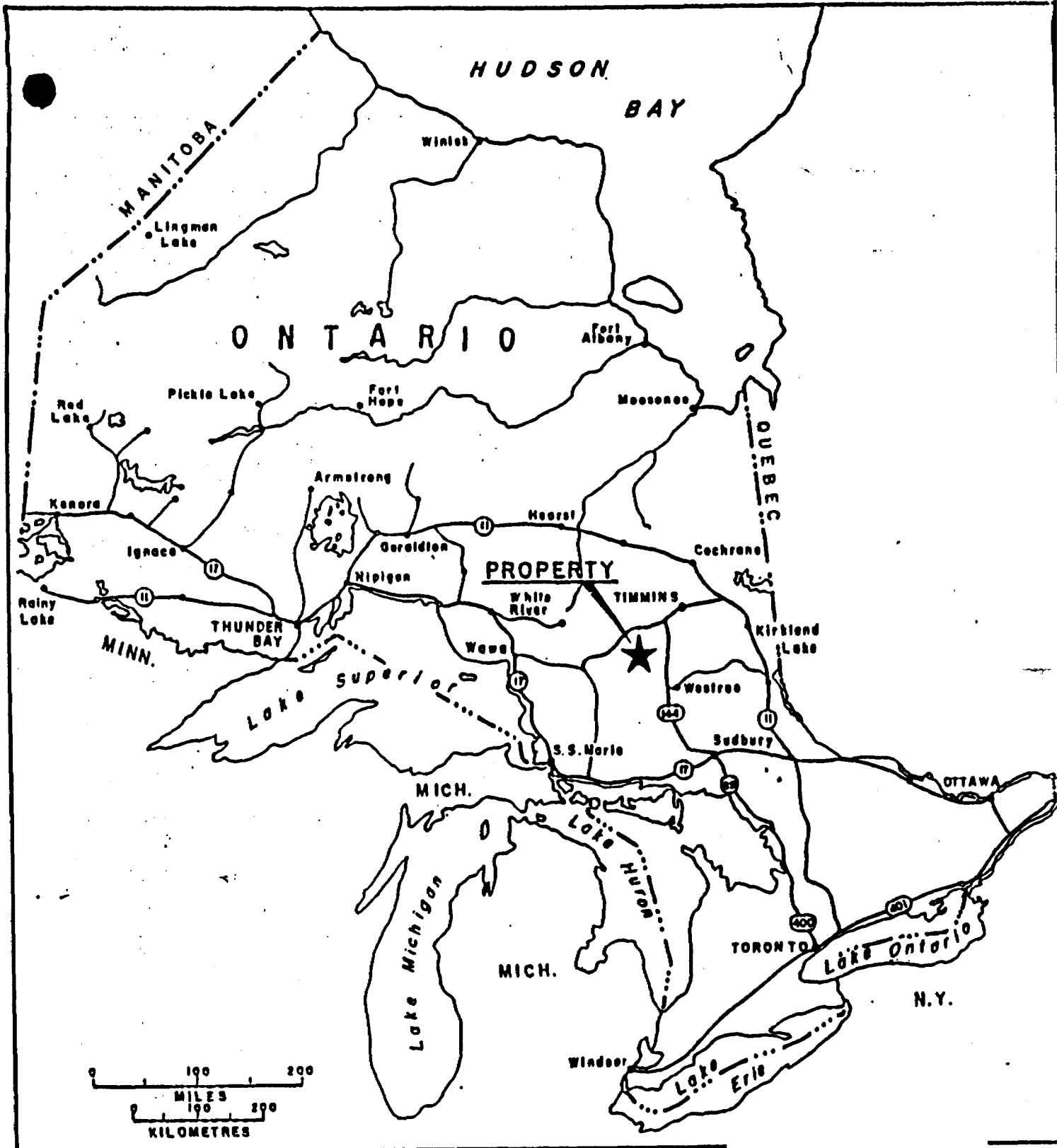
INTRODUCTION

At the request of Tarzan Gold Inc., a three person geological crew was contracted from Robert S. Middleton Exploration Services Inc. to conduct a reconnaissance program of geological mapping and sampling on a 99 unpatented, contiguous claim block belonging to Tarzan Gold Inc. which encompasses some 3,960 acres in central Horwood Township, Porcupine Mining Division, Ontario (Figure 1).

The prospecting and geological mapping carried out between July 3 and July 15, 1989 investigated the sources of various airborne geophysical expressions and identified basic rock types. Mapping was conducted by traversing along claim boundaries as well as trisecting each claim. Shoreline mapping by boat was also completed.

The geology of the Horwood Lake area was reported for the O.G.S. by F.W. Breaks in 1971 (O.G.S. Report 169 - 1972). Breaks geology map shows the Tarzan property to be predominantly underlain by mafic metavolcanic rocks and gabbroic bodies. A thin intermediate to felsic pyroclastic unit and several feldspar porphyries which strike northeast to southeast are shown to occur in the southwest region of the property and are overturned and face steeply north.

Several gold occurrences in the vicinity of the property, which include the J. Charlebois showing (formerly Groundhog Gold Mines) and the Dubermac Occurrence, appear to be associated with the Hardiman Bay Fault Zone and the Horwood Lake-Hoodoo Lake Fault Zone. The Tarzan property is bounded by these fault structures, Horwood Lake and Hoodoo Lake Fault Zone to the west and Hardiman Bay Fault Zone to the south and east.



John A. Burton

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	TARZAN GOLD INC.	
	Title	PROPERTY LOCATION MAP.	
	Date: Oct. 69	Scale: 1:10M.	N.T.S.
	Drawn:	Approved:	Fig. 1

The following is a list of claims upon which mapping was performed (see Figure 2):

1033540-1033595
1033597-1033600
1033623-1033628
1036191-1036223

The results of the reconnaissance geological program are presented in this report.

LOCATION, ACCESS, FACILITIES

The Tarzan Gold Inc. property is located in central Horwood Township, approximately 80 km southwest of Timmins, Ontario (Figure 1).

Access to the claim group is via road 616 south from Highway 101 to the northeast shore of Horwood Lake. Transportation by boat is then required to access the property. The claim group can also be reached via float plane and helicopter from Timmins or Folyet.

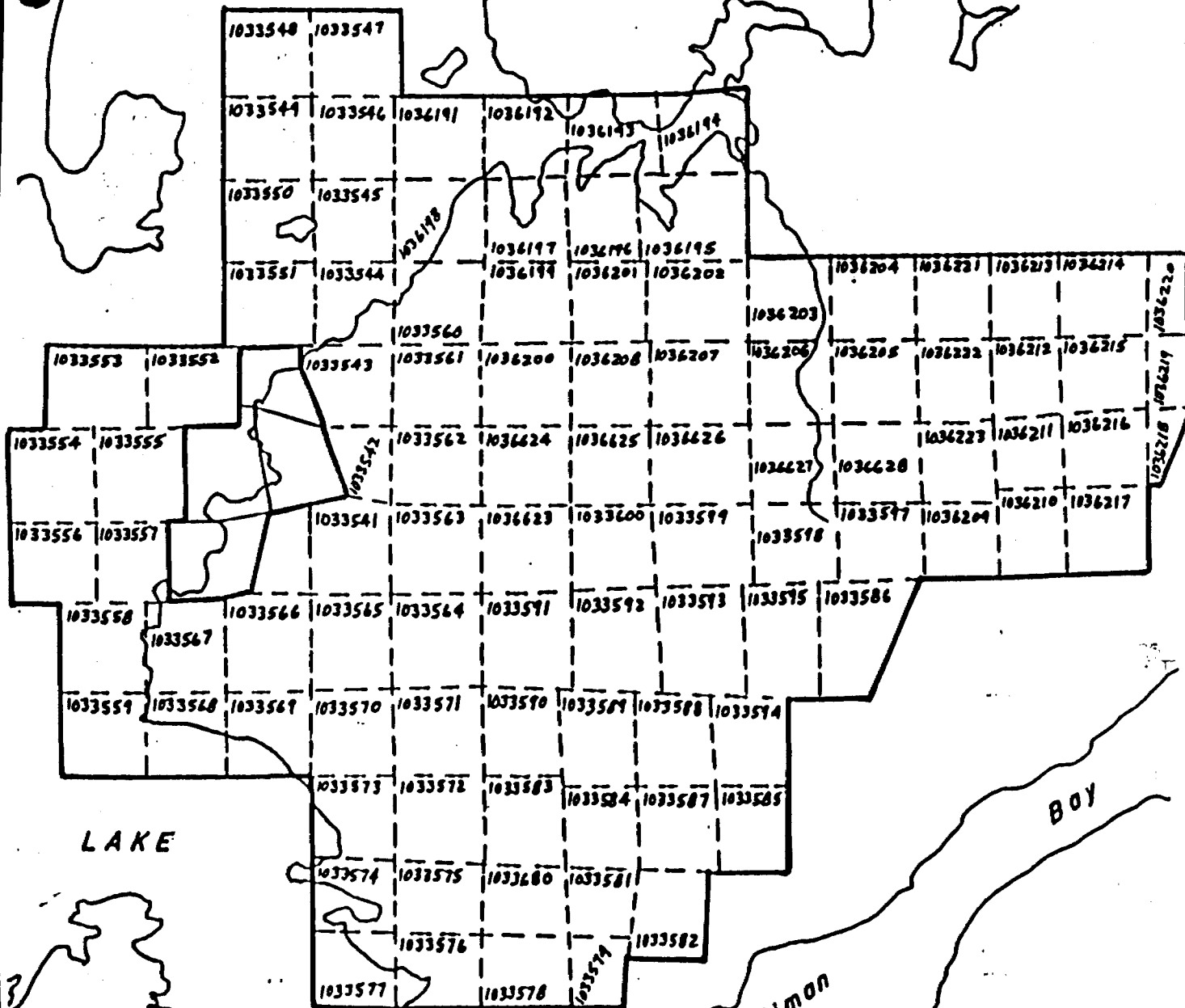
Accommodation was available at a fishing/hunting camp located centrally on the east shore of Horwood Lake.

TOPOGRAPHY AND VEGETATION

The topography of the property is characterized by various ridges and small hills that are separated by low swampy areas.

Vegetation consists predominantly of black spruce, birch and poplar. Cedar woods are common in low lying areas. Alder, balsam, fir and pine are also scattered throughout the property.

HORWOOD



LAKE

Boy

Hardiman



John A. Burton

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for
	TARZAN GOLD INC.:
	Title
	CLAIM MAP
	Fig. 2
Date: Oct. 19	Scale: 1" = 1/2 mi. N.T.S.
Drawn:	Approved: File: 11-208

Rock exposures constitute less than 15% of the total area, with the greatest concentration of outcrop occurring in the central and eastern parts of the property.

PREVIOUS WORK

The earliest reported work in the Horwood Lake area was in 1918, with a gold mineralization discovery by T. Jessop in a quartz vein within a northwest trending shear zone in chlorite schist. The Tarzan property surrounds the Jessop discovery which occurs on the eastern shore of Horwood Lake. Further exploration on the Jessop property by various, presently unknown, companies between 1927 and 1948 have delineated a quartz veined zone, 1,000 feet long by 3.4 feet wide averaging 0.31 oz Au/ton.

Gold mineralization was discovered in 1933 on the present day claim group of Orofino Mines Limited in southeastern Silk Township which lies immediately to the west of Horwood township. Visible gold was detected in an east striking system of quartz veins within a small stock of metagabbro.

Tionaga Gold Mines Limited

The Tionaga Mine is located 1.5 km south of the Tarzan claim group on the eastern shore of Horwood Lake. This small gold mine was initially explored by Hollinger Consolidated Gold Mines during 1935 and 1936. A forty-five degree shaft was sunk to 570 feet. Gold values of 0.02 to 0.85 oz Au/ton were obtained from lenses. In 1938 Tionaga Gold Mines Limited extended the shaft to 731 feet from which 6,653 tons of ore was processed producing 2,299 oz of gold and 404 oz of silver.

Northgate Exploration Limited

In the early 1980's Northgate performed VLF-EM and magnetic surveys in the vicinity of the Tionaga Mine. Several conductors were outlined and diamond drilled. Intersections of 0.379 oz Au/ton and 0.13 oz Ag/ton over five feet in a quartz vein associated with a quartz feldspar porphyry was the best result of the drilling.

The Dubermac Occurrence

The Dubermac Occurrence is located approximately one kilometre south of the Tarzan property. In 1946 surface sampling produced assays of 0.40 oz Au/ton over 3.5 feet in a silicified shear zone (OGS MDC/8).

Blueberry Island Occurrence

Three kilometers north of the Tarzan claim group, gold-copper showings were found near Blueberry Island in the 1930's. In 1948-1959 J.E. LeFever conducted trenching and diamond drilling on a now submerged island southeast of Blueberry Island.

Kerr Addison

In 1960, Kerr Addison diamond drilled 4,137 feet on the above mentioned island southeast of Blueberry Island. An intersected vein system gave assays of 0.43 to 3.46 oz Au/ton over widths of 4-20 inches. Kerr Addison later drilled the "Stack Vein" located on land one mile east of Blueberry Island. Three holes, for a total of 764 feet, were drilled into a quartz carbonate vein containing disseminated to massive pyrite, chalcopyrite and pyrrhotite. The host rocks were mafic metavolcanic rocks and diorite. Low gold and silver assay values led to the discontinuation of the property.

Ingamar Exploration Limited

In 1984, geological mapping and prospecting was conducted over a flagged grid established over the western portion of the Tarzan property. Several narrow quartz veins were discovered and sampled, however no assay values were reported (OGS Assessment File 2.7102).

Ultrex Petroleum Limited

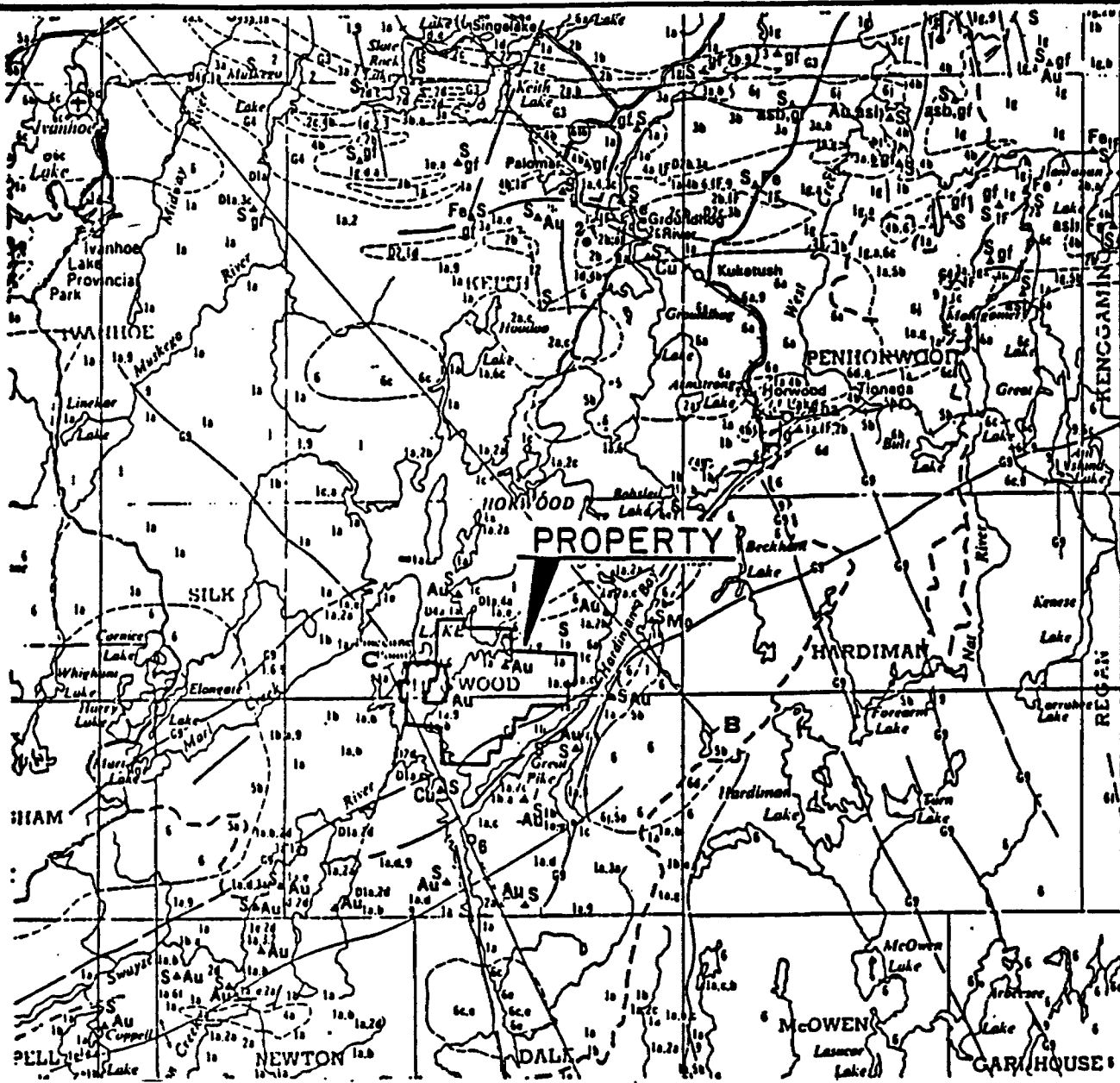
In August, 1985, P. Ferderber Geophysics was contracted to conduct geological and geophysical surveys (magnetometer, electromagnetic and induced polarization surveys) over a twelve claim group on the western portion of the Tarzan property. Several geophysical anomalies were delineated and interpreted as mineralized shear zones with possible quartz veining containing gold. Further exploration was recommended (OGS Assessment File 2.8511)

In November 1985, Ultrex Petroleum Limited diamond drilled five holes totalling 1,742 feet on the twelve claim group. No economic gold values were reported (OGS Assessment File 63.4739).

REGIONAL GEOLOGY

The geology of the Horwood Lake area was mapped by F.W. Breaks and reported in 1971, (O.G.S. Report 169). Horwood Township is situated on an east-west trending metavolcanic-metasedimentary belt known as the Swayze-Deloro greenstone belt which is the western extension of the Abitibi metasedimentary-metavolcanic belt of the Superior Province in the Canadian Shield (McCombe, 1988).

The area is predominantly underlain by Precambrian mafic metavolcanic rocks with some Proterozoic diabase dikes. The mafic metavolcanic rocks vary from massive flows to highly sheared schistose varieties. Feldspar and quartz feldspar porphyry intrusions are prolific in the map area (Figure 3).



FELSIC IGNEOUS AND METAMORPHIC ROCKS^c

Felsic Intrusive and Hybrid Rocks^c

- 6 Unsubdivided.^d
- 6a Massive to weakly foliated, biotite and hornblende trondhjemite, granodiorite, and minor quartz diorite.
- 6b Gneissic, biotite and hornblende trondhjemite, granodiorite, and minor quartz diorite.
- 6c Massive to weakly foliated, hornblende and biotite quartz-monzonite.
- 6d Gneissic biotite and hornblende quartz-monzonite.
- 6e Syenitic rocks.
- 6f Pegmatite, aplite.
- 6g Augen gneiss.
- 6h Hornblende granodiorite to diorite (in part hybrid rocks).
- 6j Porphyritic granitic rocks.

INTRUSIVE OR GRADATIONAL CONTACT

Migmatitic Rocks^c

- 5 Unsubdivided.^d
- 5a Migmatite with metavolcanic paleosome^e of quartz-feldspar-hornblende gneiss; veined with more than 25% granitic material (neosome^f).
- 5b Migmatite with metasedimentary paleosome^e of biotite-quartz-feldspar gneiss; veined with more than 25% granitic material (neosome^f).

INTRUSIVE CONTACT

MAFIC AND ULTRAMAFIC INTRUSIVE ROCKS

- 4 Unsubdivided.^d
- 4a Diorite and gabbro.
- 4b Ultramafic rocks and their serpentinized equivalents, minor gabbro.

INTRUSIVE CONTACT

METASEDIMENTS^g

- 3 Unsubdivided.^d
- 3a Greywacke, argose, quartzite.
- 3b Conglomerate.
- 3c Argillaceous, fine-grained metasediments.
- 3d Biotite-quartz-feldspar schists and gneiss.
- 3e Metamorphosed metasediments (10-25% granitic material).

IONS

**ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.**

for

TARZAN GOLD INC.

Title

REGIONAL GEOLOGY MAP.

Fig.

Date: Oct. 89	Scale: 1"=4miles N.T.S.:
Drawn:	Approved:
	File: M-325

Mafic to Intermediate Metavolcanics

- 1 Unsubdivided.^d
- 1a Basalt to andesite (flows and porphyritic flows, massive to foliated).
- 1b Basalt to andesite pillow lava.
- 1c Mafic pyroclastic rocks.
- 1d Layered amphibolite.
- 1e Diorite, gabbro (coarse-grained flows or intrusions).
- 1g Migmatized mafic metavolcanics (10-25% granitic material).

METAVOLCANICS^g

- 2 Unsubdivided.^d
- 2a Rhyolite to dacite flows and fragmental rocks.
- 2b Tuff, banded tuff, and lapilli-tuff.
- 2c Agglomerate, breccia.
- 2d Porphyritic flows, quartz-feldspar porphyry.

The local stratigraphy trends east-west with a steep north dip. Two major faults occur in southern Horwood Township, the Horwood Lake Fault along the southern arm of Horwood Lake and the Hardiman Bay Fault which trends to the northeast. The north trending Horwood Lake Fault may be continuous from the Hoodoo Lake Fault 14 km to the north through Horwood Lake and passes just west of the property.

A major anticlinal fold axis is interpreted to trend northeast from Newton Township west of Horwood Lake, continuing through the lake east of Marsh Island and ending in a bay south of Groundhog Lake (Breaks 1978). A second fold system, comprised of an antiform and synform, is suggested west of Great Pike Lake.

Gold mineralization in Horwood Township appears to be controlled by structure. Carbonatized and pyritized shear zones containing quartz veins are favourable environments for gold mineralization. Sulphide minerals commonly associated with gold mineralization are pyrite, chalcopyrite and pyrrhotite. Disseminated gold also occurs in some of the porphyry intrusive rocks (Breaks 1978).

PROPERTY GEOLOGY

Key geological features on the property which were determined from geological mapping or interpreted from airborne geophysical data are indicated, along with rock sample locations, on Maps 1 through 4 of this report.

In general, the geology of the property is comprised of an east-west trending sequence of Archean mafic metavolcanic rocks which have been intruded by several metagabbroic plugs and diabase dikes. A quartz dioritic intrusive body referred to as the Horwood Peninsula Pluton by Breaks (1978), crosses the northern boundary of the property.

ROCK TYPES

Mafic Metavolcanic Rocks

These metavolcanic rocks comprise over two thirds of the rocks in the map area and include massive, pillowed and foliated types with varieties that are intensely sheared and carbonatized. The massive rocks vary in color from greenish grey to black. The chlorite content is generally low in the massive varieties while the foliated rocks contain significantly more chlorite. All the mafic metavolcanic rocks are generally fine grained with the exception of sporadic areas of porphyritic plagioclase. The metamorphic grade throughout this metavolcanic sequence varies between upper greenschist and locally, lower amphibolite facies. Mineral assemblages which characterize these rocks are chlorite, actinolitic hornblende, epidote and plagioclase. Within these rocks primary structures and textures are absent or poorly recognizable.

Felsic to Intermediate Metavolcanics Rocks

These metavolcanic rocks comprise only a small constituent of the property. The rocks are characterized as fine grained, weakly to moderately foliated and are mapped as rhyolitic to dacitic in composition. They vary in color from blackish grey to pale greyish green. The presence of chlorite causes phyllitic sheen on the foliation surface of the rock.

Mineral assemblages which characterize these rocks are quartz, plagioclase, biotite and chlorite.

Early Mafic Intrusive Rocks

Massive to foliated metagabbros occur in the central portion of the property and correlate with a low to moderate magnetic response on the ODM GSC Map 2262G (Figure 4). These metagabbros are medium to coarse grained with hornblende comprising 50-60% of the rock. Typical mineral assemblages are hornblende

amphibole, plagioclase and quartz with chlorite, biotite, epidote, magnetite and sphene as accessory minerals (Breaks 1978). The metagabbro often displays relict textures of interlocking, subhedral plagioclase laths.

Late Felsic to Intermediate Intrusive Rocks

Horwood Peninsula Pluton

This leucocratic linear stock is found on the extreme north of the property. It consists largely of fine to medium grained, massive, equigranular, biotite-hornblende-quartz diorite with lesser portions of biotite-hornblende granodiorite (Breaks, 1978). Fresh surface colors vary from pinkish grey to dark grey with weathered surfaces displaying a speckled appearance. Mineralogically the rock consists of euhedral plagioclase laths, interstitial quartz, hornblende, biotite and accessory rutile that occurs in the biotite grains.

Late Mafic Intrusive Rocks

These are diabase dikes that vary from quartz diabase to porphyritic diabase. There are two sets of dikes in the property area, the first set trends north-northwest and the second more prominent set trends northeast. The first group of diabase dikes dip steeply to vertical and are rather narrow in width, usually less than 15 meters. Characteristically they are dark grey, medium grained, and have a distinguishing red brown weathered surface.

The second group of diabase dikes are more impressive and has widths up to 180 meters. The most prominent dike traverses through the southern portion of the property just north of Hardiman Bay. The rock consists of coarse grained equigranular plagioclase (65%), interstitial pyroxene (20%), olivine (5%) and magnetite (10%). Outcrops in general are weathered to a coarse rusty sandy grus. The diabase is strongly magnetic and correlates well with ODM GSC Maps 2262G and 2263G (Figure 4).

PLEISTOCENE GEOLOGY

Approximately 80% of the property is covered by a discontinuous undulating blanket of glacial overburden and lacustrine sediments. Overburden on hills and ridges is relatively thin and consists of A, B soil profiles and occasionally C soil horizons. Low areas contain thicker overburden consisting of lacustrine sediments and underlying glacial gravel and tills. Varved clay deposits extending up to 10m above the lake level are intermittently exposed along shoreline of southern Horwood Lake. Observed glacial striae indicates trends of ice movement towards N195 degrees E.

ALTERATION AND MINERALIZATION

Three zones of structurally deformed and altered rock were discovered by Burk and Abernethy in 1988 during a property examination. These three zones denoted A, B and C on the geology map were further investigated. A fourth zone of significantly altered and mineralized rock was discovered on a small island approximately 500 meters from the north shore of the property. This has been designated as Zone D.

ZONE A: Located in mafic metavolcanic rock along the south shore of a peninsula on the west central portion of the property (claims 1033568-569). The rock has been strongly sheared and deformed to a chlorite schist. Drag folding is present as well as local silicification in the form of thin quartz veins. Weak rusty brown carbonate alteration in the form of ankerite was observed throughout the zone. Acid tests, using dilute hydrochloric acid confirmed the presence of the ankerite. Trace amounts of pyrite were detected. Breaks (1978) shows a pyrite showing 500 meters

east and on strike from the shoreline exposure. The zone most likely represents a discrete east-south-east shear zone at or near the stratigraphic contact between the mafic volcanic rocks and the pyroclastic unit (Abernethy, Burk 1988).

ZONE B: A strongly foliated sericite pyrite schist occurs 400 meters north of Zone A on claim number 1033567, along the east shore of the western arm of Horwood Lake. The strike of this sheared metavolcanic is approximately parallel to the shear of Zone A which trends approximately east-west. The shear was not exposed inland but would be readily detected by geophysical means.

ZONE C: A 25 cm wide quartz vein is exposed 500 meters east of the patented Charlebois claims on claim number 1033541. The vein is orientated in a north-northeast direction and dips steeply to the east. The vein is hosted in a strongly foliated chlorite schist which contains trace pyrite. Drill core piled beside the exposure lends evidence that previous work on the vein has been done.

ZONE D: A weak to moderately foliated mafic metavolcanic unit is located on a small island 500 meters from the north shore of the property (claim number 1033550). The rock is medium grained, dark grey to black. Moderate to strong Fe carbonate alteration occurs with trace amounts of disseminated pyrite, galena and sphalerite.

The degree of deformation and hydrothermal alteration noted in Zones A and B are characteristic features of greenstone hosted gold deposits occurring in the Abitibi region of Ontario and Quebec and attest to the potential of these zones, as noted by Abernethy and Burk (1988).

GEOPHYSICAL INTERPRETATION

Geophysical interpretation of the geological data is derived from ODM GSC Maps 2262G and 2263G (Figure 4). Aeromagnetic signatures correlate well with the geology of the property.

Gabbroic plugs in the central part of the property are seen as a large weak magnetic expression.

A narrow northeast trending magnetic high crosses the southern portion of the claim group. This high represents a diabase dike as verified by the field mapping. This magnetic high contrasts sharply with the characteristic magnetic low of the metavolcanic and gabbroic rocks. A magnetic high on the northern boundary of the property may be related to the Horwood Peninsula Pluton.

DISCUSSION OF ASSAY RESULTS

During the reconnaissance mapping seventeen samples were collected for assay for gold, arsenic, and/or copper, lead, zinc and whole rock analysis. All samples are located on Maps 1-3.

Two samples, 0486 and 0494, had anomalous gold values of 22 and 49 ppb respectively. 0486 is located in the central north portion of the property. It is interesting to note that 0494 was taken directly east of alteration Zone B.

Five samples (0476, 0486, 0495, 0496, 0497) had anomalous copper values of 133, 118, 133, 147 and 134 ppm respectively. The sample 0476 was taken

approximately 1000m east of Zone B on claim number 1033565. As stated above sample 0486 also has anomalous Au and is situated on claim number 1036194 in the central north area of the property. Samples 0495-97 are clustered together in the southern part of the claim group on claim numbers 1033575 and 1033580. There is a chalcopyrite and pyrrhotite showing (OGS Report 196, Breaks 1972) approximately 800m south of these anomalous copper values (Map 3).

Anomalous Zn values from samples 0500, 31404 and 31405 were reported from Zone D, the small island 500m west of the north shore of the property.

It is recommended that all areas where anomalous gold, copper and zinc values occurred be extensively mapped and sampled. For sample descriptions see Appendix A.

CONCLUSIONS AND RECOMMENDATIONS

The reconnaissance mapping program performed on the Tarzan Gold Inc. claim group has identified five distinct rock types. The majority of the property is underlain by mafic volcanic rocks in the form of massive, pillowed and foliated flows. Other identified rock types are felsic to intermediate metavolcanic, gabbro, diabase and quartz diorite.

It has been determined from the geological mapping that the mafic metavolcanic rocks contain the most abundant hydrothermal alteration and mineralization and therefore present the most potential source of economic gold mineralization.

The Tarzan claim group has a similar geological environment to Orofino's Swayze Gold Mine six kilometers to the southwest in Silk Township (McCombe, 1988). The Swayze Gold Mine is situated in the same sequence of mafic to intermediate volcanics and gold mineralization within an east-west striking quartz vein system

located in an elongated metagabbro stock similar to the extrusions on the Tarzan property (McCombe, 1988).

Four mineralized zones have been delineated in the mafic volcanic rock and are recommended for future geological and geophysical exploration.

Local mineralization in the mafic metavolcanic rocks, due to the intrusion of diabase, was found on the property but in this author's opinion, holds little promise of economic potential.

A four phase exploration program is recommended for the Tarzan Gold Inc. property. Phase 1 would involve line cutting for ground control and a geological mapping program. A magnetometer survey to assist in mapping structure and lithologies, and an induced polarization survey to delineate possible disseminated sulphide mineralization and/or zones of shearing and faulting would complete Phase II. Positive results from Phases I and II would validate a Phase III program of trenching, stripping, sampling and assaying. A four thousand foot diamond drilling program is proposed in Phase IV.

The following is a proposed budget for the four phase exploration program.

BUDGET

Phase I

<i>Linecutting</i>	
113.4 km @ \$230./km	\$ 24,500.00
<i>Geological mapping (2 geologists)</i>	
25 days @ \$550./day	13,750.00
<i>Assaying</i>	4,000.00
<i>Travel, accommodation</i>	5,000.00
<i>Reports</i>	2,500.00

Phase II

<i>Magnetometer Survey</i>	
113.4 km @ \$100./km	11,340.00
<i>IP Survey</i>	
30 days @ \$1,450./day	43,500.00
<i>Accommodations</i>	6,000.00

Phase III

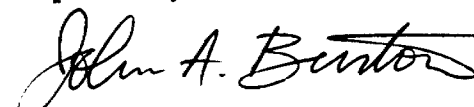
<i>Trenching - Backhoe -dozer</i>	
15 days @ \$1,200./day	18,000.00
<i>1 Geologist</i>	
15 days @ \$235./day	4,125.00
<i>Rock saw & sampling</i>	3,000.00
<i>Assaying</i>	6,000.00
<i>Accommodations</i>	600.00

Phase IV

<i>Diamond drilling</i>	
4,000 feet @ \$25./foot	100,000.00
<i>Supervision</i>	
1 geologist - 30 days @ \$275./day	8,250.00
<i>Assaying</i>	4,000.00
<i>Reports</i>	2,500.00
<i>Accommodations</i>	<u>6,000.00</u>

Total Phases I, II, III & IV \$263,065.00

Respectfully submitted


John Burton, B.Sc.

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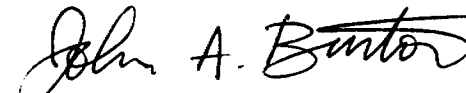
*Report on Horwood Township Property of Barege
Investment Corp. Porcupine Mining Division, Ontario.*

CERTIFICATION

I, John A. Burton, B.Sc., of 38 Fourth Avenue, in the town of Schumacher, Province of Ontario, certify as follows concerning my report on the Horwood Township, Ontario property of Tarzan Gold Inc. and dated October 23, 1989.

1. I am a graduate of Mount Allison University, Sackville, New Brunswick, with a B.Sc. degree specializing in geology obtained in 1987.
2. I have been practising my profession in Canada for the past 2.5 years.
3. I have no direct or indirect interest in the properties, leases or securities of Tarzan Gold Inc., nor do I expect to receive any.
4. The attached report is a product of:
 - a) Data listed in the references;
 - b) Previous work files at the Offices of the Ontario Ministry of Natural Resources;
 - c) A personal visit to the property to conduct geological mapping.

Dated this October 23, 1989
TIMMINS, Ontario


John A. Burton, B.Sc.

A P P E N D I X A

ROCK SAMPLE DESCRIPTIONS

SAMPLE #	ANOMALOUS ELEMENT	DESCRIPTION
0474		<i>Milky white quartz with weak rusty Fe staining</i>
0475		<i>Dark green, massive mafic metavolcanic with trace medium grained, euhedral pyrite</i>
0476	133 ppm Cu	<i>Dark green, mafic metavolcanic with local calcite alteration and trace fine grained disseminated pyrite</i>
0477		<i>Fractured white quartz vein with mafic volcanic host, 1% fine grained disseminated pyrite</i>
0482		<i>Intermediate to mafic metavolcanic, moderate pervasive silicification, weak pervasive Fe carbonate, trace galena(?)</i>
0483		<i>Strongly sheared mafic volcanic rock with local calcite stringers</i>
0484		<i>Strongly sheared mafic volcanic, weak silicification, local calcite stringers</i>
0485		<i>Fine ash tuff, quartz fracture filled veinlets, moderate tourmaline alteration, calcite stringers, trace fine grained pyrite</i>
0486	22 ppb Au 118 ppm Cu	<i>Massive mafic metavolcanic with 1% fine grained disseminated pyrite</i>
0493		<i>Mafic volcanic rock, fine grained, in contact with quartz-feldspar porphyry</i>
0494	49 ppb Au	<i>Medium grained quartz-feldspar porphyry with trace pyrite (at contact with mafic volcanic rocks)</i>
0495	133 ppm Cu	<i>Intermediate metavolcanic, weak pervasive Fe carbonate and calcite alterations, 1% fine grained disseminated pyrite</i>
0496	147 ppm Cu	<i>Intermediate to mafic metavolcanic, weak pervasive Fe carbonate alteration, trace pyrite</i>

SAMPLE #	ANOMALOUS ELEMENT	DESCRIPTION
0497	134 ppm Cu	<i>Tuff?, finegrained, finely banded, <1% fine disseminated pyrite</i>
0500	240 ppm Zn	<i>Medium grained, black, massive mafic volcanic, weak Fe carbonate alteration, fine grained disseminated pyrite, sphalerite and galena?</i>
31404	104 ppm Zn	<i>Medium grained, black mafic volcanic with weak Fe carbonate alteration, fine disseminate pyrite, sphalerite</i>
31405	168 ppm Zn	<i>Medium grained, black massive mafic volcanic with weak pervasive Fe carbonate alteration, trace pyrite and sphalerite</i>

A P P E N D I X B

ASSAY RESULTS

SAMPLE #	Au ppb	As ppm	Cu ppm	Zn ppm	Pb ppm
0474	2	<3	14		
0475	<1	<3	91		
0476	<1	<3	133		
0477	1	<3	35		
0482	<1	<3	50		
0483	1	<3	89		
0484	<1	<3	45		
0486	22	<3	118		
0493	<1	<3	94		
0494	49	<3	79		
0495	3	<3	133		
0496	2	<3	147		
0497	<1	<3	134		
31404	6	<3	-	104	<2
0500	7	<3	-	240	6
31405	2	<2	89.8	168	<2

WHOLE ROCK ANALYSIS OF 31405

Au ppb	2	SiO ₂ %	44.8
Li ppm	19	Al ₂ O ₃ %	13.4
Be ppm	<5	CaO%	9.64
B ppm	<10	MgO%	6.44
S ppm	823	Na ₂ O%	2.01
SC ppm	60.2	K ₂ O%	0.22
V ppm	370	Fe ₂ O ₃ %	20.2
Cr ppm	120	MnO%	0.26
Co ppm	79	TiO ₂ %	1.84
Ni ppm	77	P ₂ O ₅ %	0.13
Cu ppm	89.8	LOI%	1.23
Zn ppm	168	Total %	100.2
Ge ppm	<10		
As ppm	<2	Rb ppm	20
Se ppm	<3	Sr ppm	164
Mo ppm	<1	Y ppm	18
Ag ppm	<0.5	Zr ppm	13
Cd ppm	<1	Nb ppm	40
In ppm	<1	Ba ppm	92
Sn ppm	<10		
Sb ppm	<0.2		
Cs ppm	2		
La ppm	2.0		
Ce ppm	8		
Nd ppm	6		
Sm ppm	2.0		
Eu ppm	1.1		
Tb ppm	0.5		
Yb ppm	2.5		
Lu ppm	0.4		
Hf ppm	1		
Ta ppm	<1		
W ppm	<3		
Pb ppm	<2		
Bi ppm	<3		
Th ppm	<1		
V ppm	<0.5		



42B015E0033 2.12978 HORWOOD

900

Mining Act Report of Work

(Geophysical, Geological and Geochemical S

Type of Survey(s) Mining Division Township or Area

Recorded Holder(s) **GEOLOGICAL MAPPING** **PORCUPINE** **HORWOOD TWP**

Address **TARZAN GOLD INC** **2.12978** Prospector's Licence No. **T 5122**

Survey Company **R.S. MIDDLETON EXPLORATION SERVICES INC.** Telephone No. **(705) 264-4246**

Name and Address of Author (of Geo-Technical Report) **J. BURTON (ADDRESS ABOVE)** Date of Survey (from & to)

Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim	Mining Claims Traversed (List in numerical sequence)					
			Prefix	Number	Prefix	Number	Prefix	Number
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic		P 1033540	✓ P 1033566	✓ P 1033592	✓ P 1036206		
	- Magnetometer		P 1033541	✓ P 1033567	✓ P 1033593	✓ P 1036207		
	- Other		P 1033542	✓ P 1033568	✓ P 1033594	✓ P 1036208		
For each additional survey: using the same grid: Enter 20 days (for each)	- Geological	20	P 1033543	✓ P 1033569	✓ P 1033595	✓ P 1036209		
	- Geochemical		P 1033544	✓ P 1033570	✓ P 1033596	✓ P 1036210		
			P 1033545	✓ P 1033571	✓ P 1033597	✓ P 1036211		
			P 1033546	✓ P 1033572	✓ P 1033598	✓ P 1036212		
			P 1033547	✓ P 1033573	✓ P 1033599	✓ P 1036213		
			P 1033548	✓ P 1033574	✓ P 1033600	✓ P 1036214		
			P 1033549	✓ P 1033575	✓ P 1036191	✓ P 1036215		
			P 1033550	✓ P 1033576	✓ P 1036192	✓ P 1036216		
			P 1033551	✓ P 1033577	✓ P 1036193	✓ P 1036217		
			P 1033552	✓ P 1033578	✓ P 1036194	✓ P 1036218		
			P 1033553	✓ P 1033579	✓ P 1036195	✓ P 1036219		
			P 1033554	✓ P 1033580	✓ P 1036196	✓ P 1036220		
			P 1033555	✓ P 1033581	✓ P 1036197	✓ P 1036221		
			P 1033556	✓ P 1033582	✓ P 1036198	✓ P 1036222		
			P 1033557	✓ P 1033583	✓ P 1036199	✓ P 1036223		
			P 1033558	✓ P 1033584	✓ P 1036200	✓ P 1036224		
			P 1033559	✓ P 1033585	✓ P 1036201	✓ P 1036225		
			P 1033560	✓ P 1033586	✓ P 1036202	✓ P 1036226		
			P 1033561	✓ P 1033587	✓ P 1036203	✓ P 1036227		
			P 1033562	✓ P 1033588	✓ P 1036204	✓ P 1036228		
			P 1033563	✓ P 1033589	✓ P 1036205	✓ P 1036229		
			P 1033564	✓ P 1033590	✓ P 1036206	✓ P 1036230		
			P 1033565	✓ P 1033591	✓ P 1036207	✓ P 1036231		

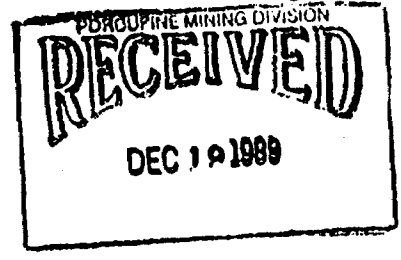
Total number of mining claims covered by this report of work. **99**

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

Name and Address of Person Certifying **JOHN BURTON (Address Above)**

Telephone No. **(705) 264-4246** Date **Dec 15/89** Certified By (Signature) **J.A. Burton**

Received Stamp



For Office Use Only

Total Days Recorded Date Recorded Mining Recorder

Date Approved as Recorded Provincial Manager, Mining Lands



Recorded Holder
Tarzan Gold Inc.

Township or Area
Herwood Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<p>Geophysical</p> <p>Electromagnetic _____ days</p> <p>Magnetometer _____ days</p> <p>Radiometric _____ days</p> <p>Induced polarization _____ days</p> <p>Other _____ days</p> <p>Section 77 (19) See "Mining Claims Assessed" column</p> <p>Geological <u>20</u> days</p> <p>Geochemical _____ days</p> <p>Man days <input type="checkbox"/> Airborne <input type="checkbox"/></p> <p>Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims.</p> <p><input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.</p>	<p>P 1033540 to 1033543 incl. P 1033560 to 1033567 incl. P 1033570 to 573 incl. P 1033575-76 P 1033578 to 1033595 incl. P 1033597 to 1033600 incl. P 1036195 to 1036197 incl. P 1036199 to 1036223 incl. P 1036623 to 1036628 incl.</p>

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

15 days Geological - ~~P~~1033569, ~~P~~1033574
 10 days Geological - ~~P~~1033544, ~~P~~1033568, P1036193-94, P-1036198
 5 days Geological - ~~P~~1033545, ~~P~~1033550, ~~P~~1033557 to 1033559 incl.
~~P~~1033577 ~~P~~1036191 - .92

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

~~P~~1033546 to 1033549 incl.
~~P~~1033551 to 1033556 incl.

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



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
880 Bay Street, 3rd Floor
Toronto, Ontario
M5S 1Z8

Telephone: (416) 965-4888

April 23, 1990

Your File: W8906-596
Our File: 2.12978

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

Re: Notice of Intent dated March 8, 1990 for Geological Survey
submitted on Mining Claims: P 1033540 et al in Horwood
Township.

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.

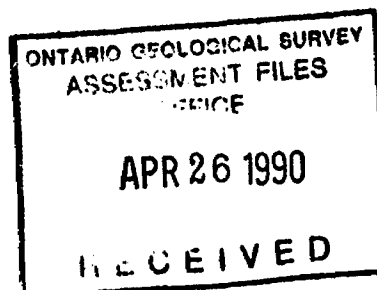
Yours sincerely,

W.R. Cowan
Provincial Manager, Mining Lands
Mines & Minerals Division

W.S:pt
Enclosure

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

Tarzan Gold Inc.
Timmins, Ontario



Resident Geologist
Timmins, Ontario

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY

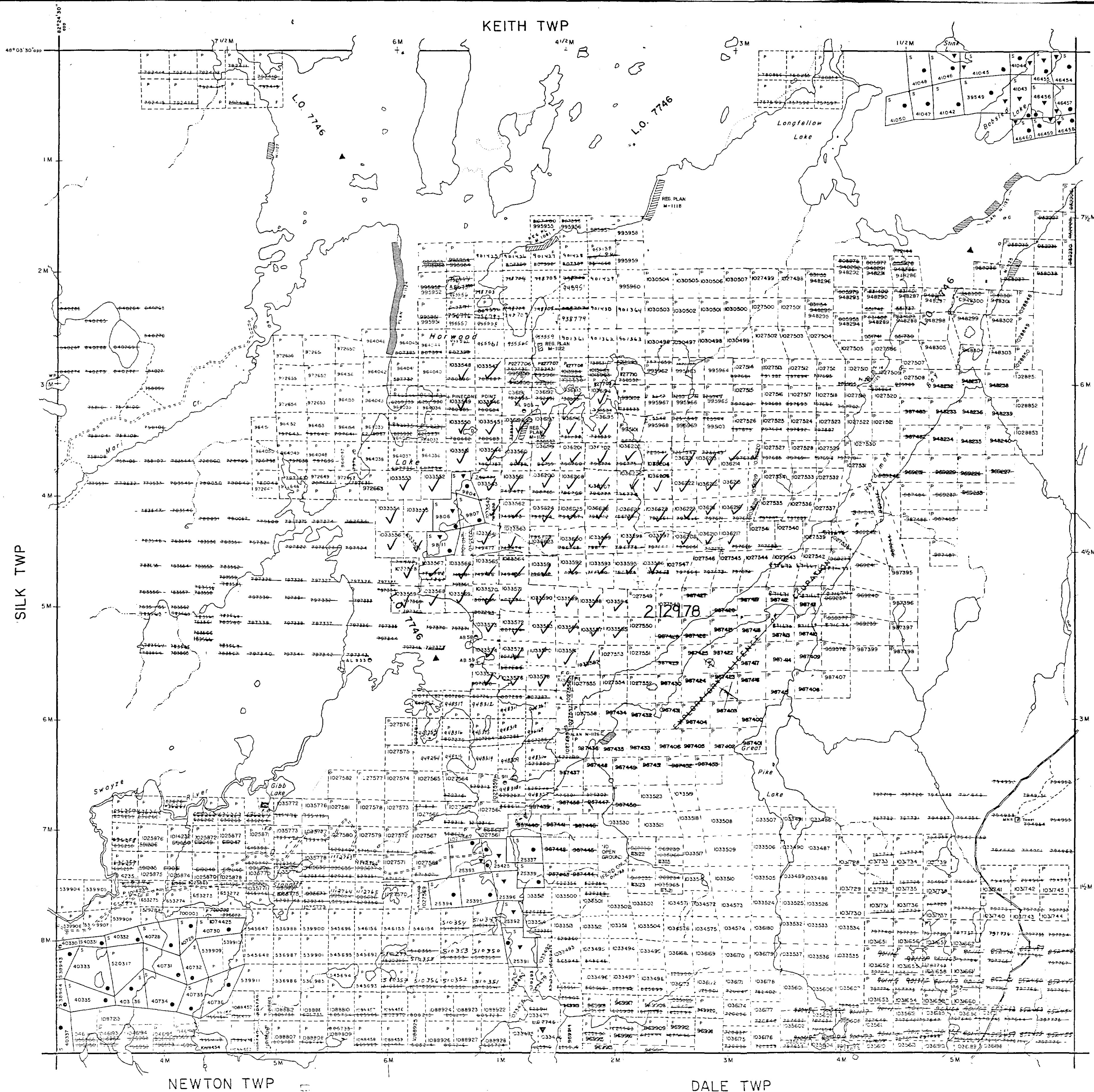
S.R.O. - SURFACE RIGHTS ONLY

M. + S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(M) SEC. 36/80	W 2/82	11/2/82	W-2/82 N.R.O. 3/82	
(R2) BLD/14901	NRD 22/85	JUNE 7/85	Me - SR 02/04/85	
			JULY 17/85 7:00 A.M.	

FLOODING

FLOODING RIGHTS ON HORWOOD LAKE B HARDIMAN SAY TO CONTOUR ELEV. 1117 FEET ARE RESERVED TO THE SPRUCE FALLS POWER AND PAPER CO. LTD. File: 75166 L.G. 7746



LEGEND

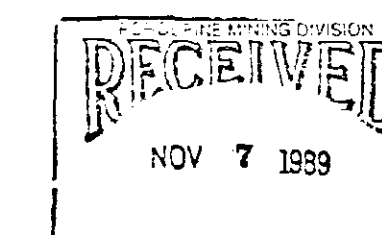
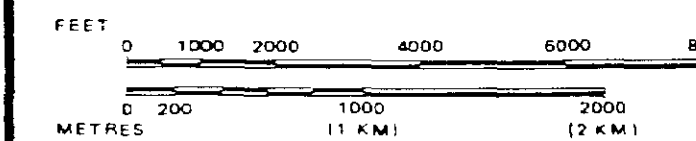
HIGHWAY AND ROUTE No.	
OTHER ROADS	
TRAILS	
SURVEYED LINES: TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES:	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE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

DISPOSITION OF CROWN LANDS

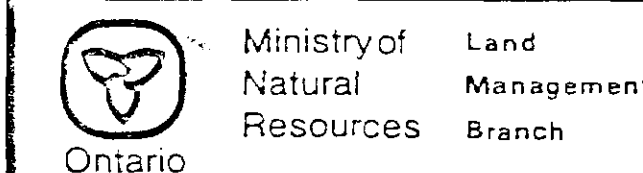
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

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

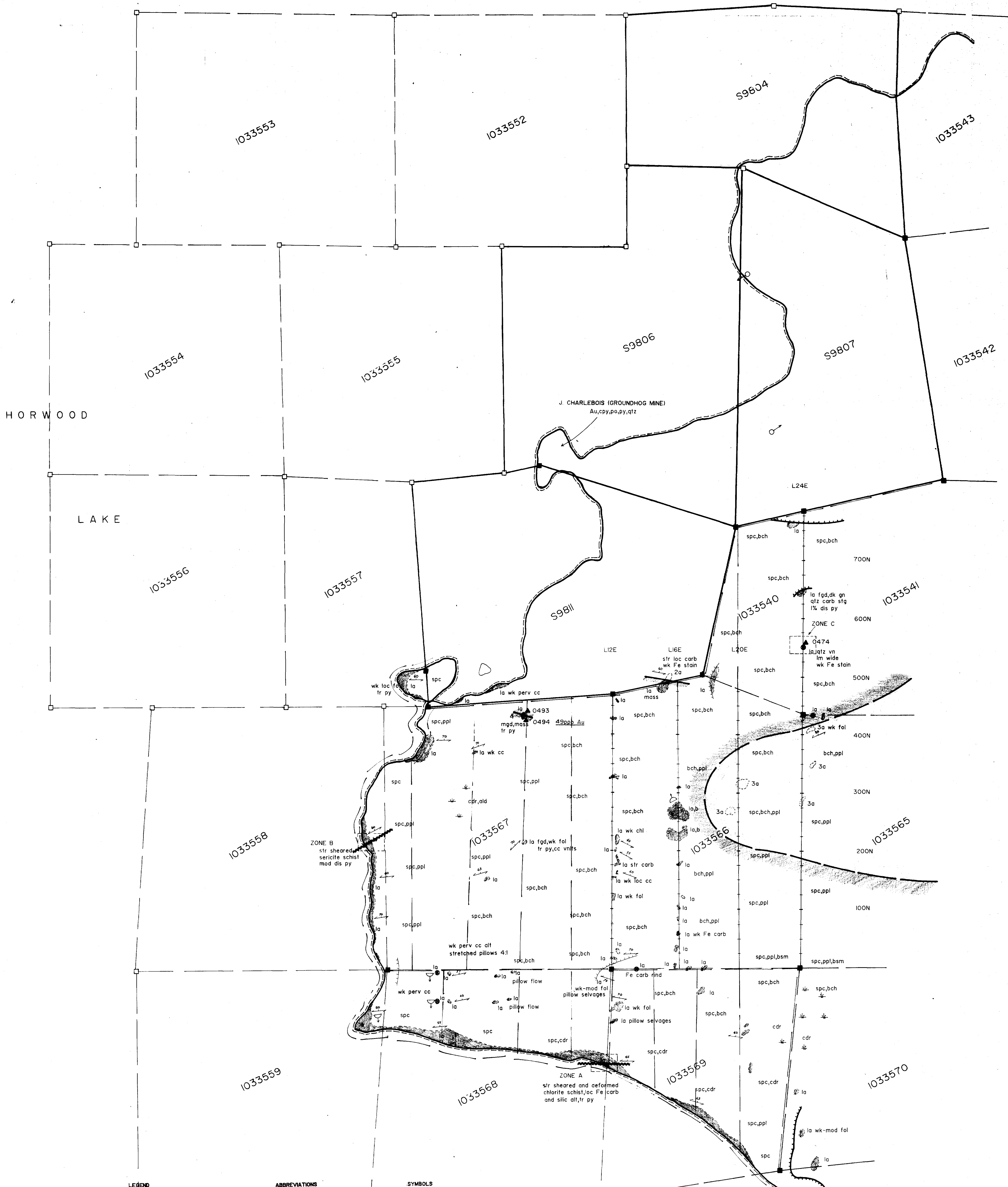
SCALE: 1 INCH = 40 CHAINS



TOWNSHIP
HORWOOD
M.N.R. ADMINISTRATIVE DISTRICT
CHAPLEAU
MINING DIVISION
PORCUPINE
LAND TITLES & REGISTRY DIVISION
SUDBURY



Date: MARCH 1985
Number: **G-3228**

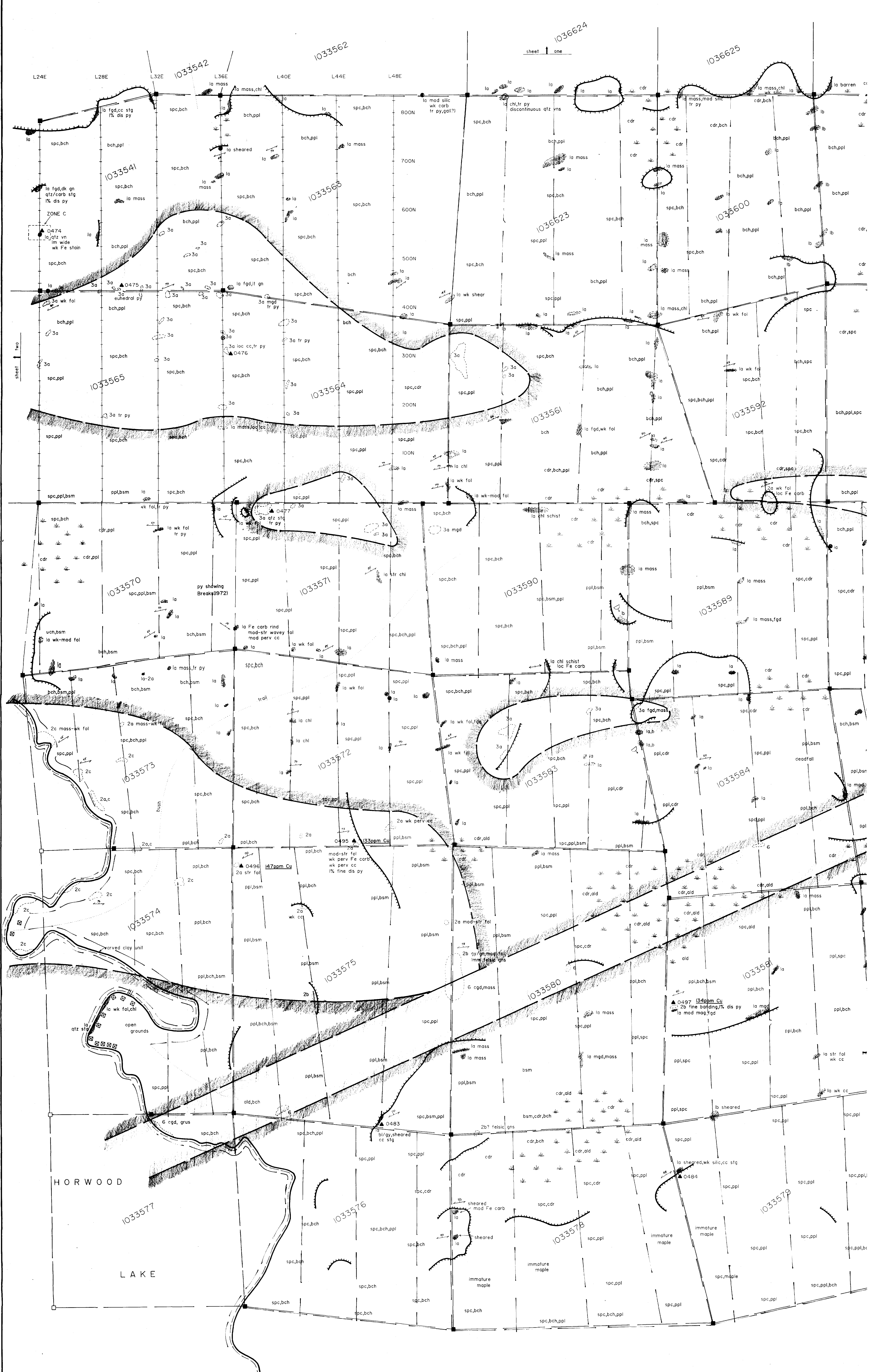


LEGEND	ABBREVIATIONS	SYMBOLS
<p>6 LATE MAFIC INTRUSIVE ROCKS 6 diabase</p> <p>5 LATE FELSIC INTRUSIVE ROCKS 5 Horwood Peninsula Pluton</p> <p>4 EARLY FELSIC INTRUSIVE ROCKS 4 quartz feldspar porphyry</p> <p>3 EARLY MAFIC INTRUSIVE ROCKS 3a gabbro 3b diorite</p> <p>2 FELSIC-INTERMEDIATE VOLCANIC ROCKS 2a massive flow or undifferentiated 2b luff, crystal luff 2c loppel luff</p> <p>1 MAFIC VOLCANIC ROCKS 1a massive flow or undifferentiated 1b pillow flow</p>	<p>alt alteration loc local per pervasive str strong mod moderate wk weak vn vein vnt veinlet fol foliation dis disseminated f fine m medium c coarse gd graded tr trace mass massive sul sulfides tex texture mag magnetic qtz quartz slic silicified carb carbonate cc calcite chl chlorite py pyrite cpy chalcopyrite fravase lais (boat + land)</p>	<p>Trees cdr cedar spr spruce pop poplar bsm balsam one pine bch birch ald alder mxt mixed forest bl blue gy grey bk black gn green</p> <p>foliation with dip cleavage with dip lineation with plunge drag fold bedding with dip pillow tops direction shearing outcrop, float scarp trench shaft stream gravel road trail claim post, assumed sample location, number diamond drill hole geological contact geological contact (assumed) swamp</p>

2. 12978

John A. Bat

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
for	TARZAN GOLD INC.		
Title	GEOLOGY MAP 2 WEST SHEET		
Date: Oct. 1989	Scale: 1:2500	N.T.S.: 410/16	
Drawn: Job	Approved:	File: M-325	



LEGEND

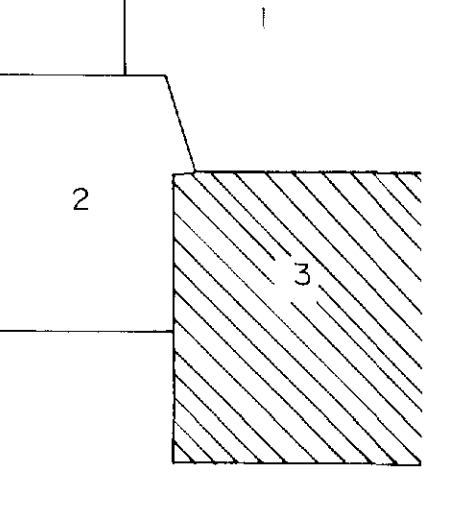
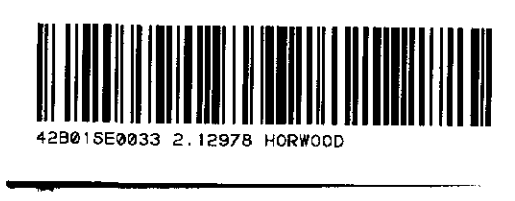
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6 diabase
- 5 LATE FELSIC INTRUSIVE ROCKS
5 Horwood Peninsula Pluton
- 4 EARLY FELSIC INTRUSIVE ROCKS
4 quartz feldspar porphyry
- 3 EARLY MAFIC INTRUSIVE ROCKS
3a gabbro
3b diorite
- 2 FELSIC-INTERMEDIATE VOLCANIC ROCKS
2a massive flow or undifferentiated
2b tuff, crystal tuff
2c lapilli tuff
- 1 MAFIC VOLCANIC ROCKS
1a massive flow or undifferentiated
1b allowed flow
1c pyroclastic

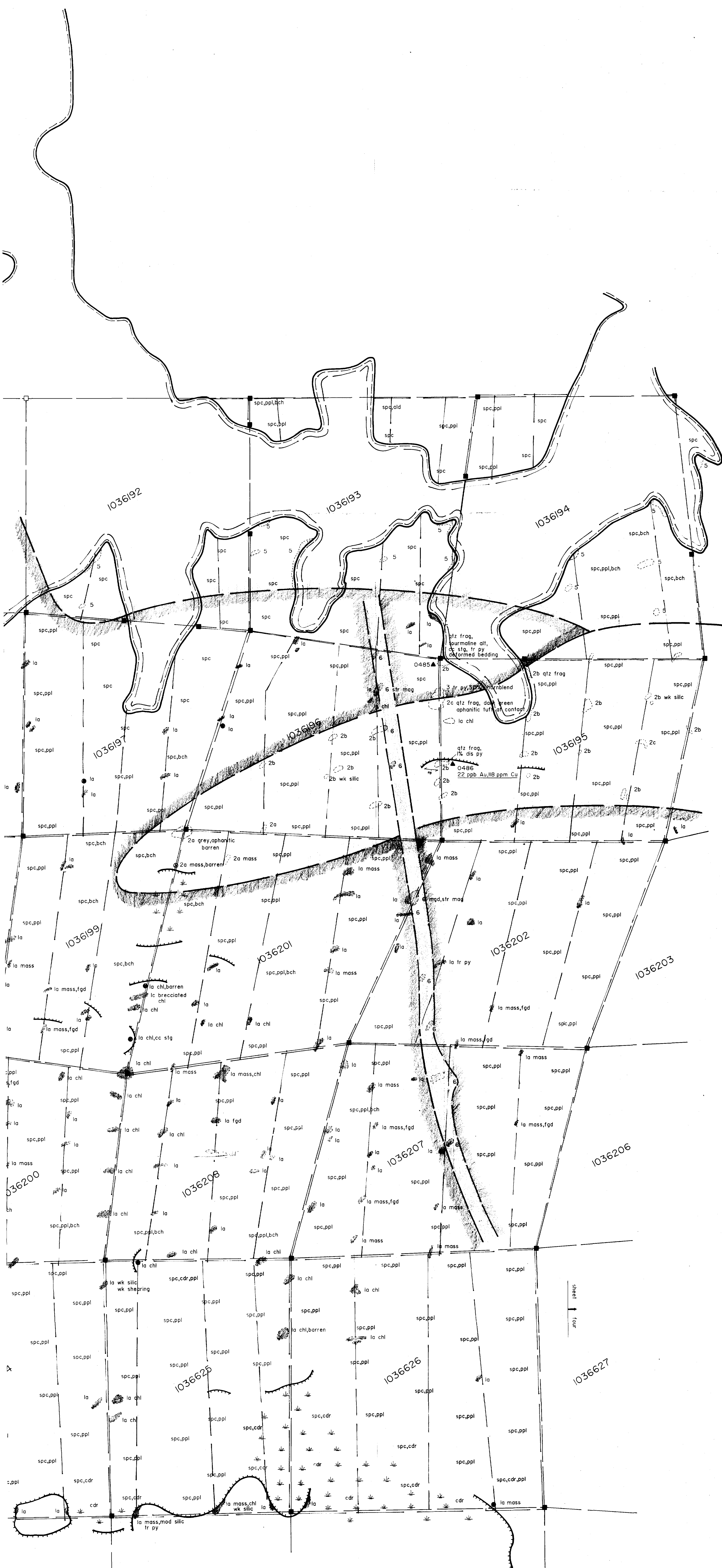
ABBREVIATIONS

- alt alteration
- loc local
- per pervasive
- str strong
- mod moderate
- wk weak
- vn vein
- vnlt veinlet
- fol foliation
- dis disseminated
- f fine
- m medium
- c coarse
- gd grained
- tr trace
- mass massive
- sil sulfide
- tex texture
- mag magnetic
- qtz quartz
- silic silicified
- carb carbonate
- cc calcite
- chl chlorite
- py pyrite
- cry chloropyrite
- Fravase (linc)
- (bank + land)

SYMBOLS

- *foliation with dip
- cleavage with dip
- lineation with plunge
- drag fold
- bedding with dip
- pillow tops direction
- shearing
- outcrop, float
- scarp
- trench
- shaft
- stream
- gravel road
- claim post, assumed
- sample location, number
- diamond drill hole
- geological contact
- assumed
- swamp



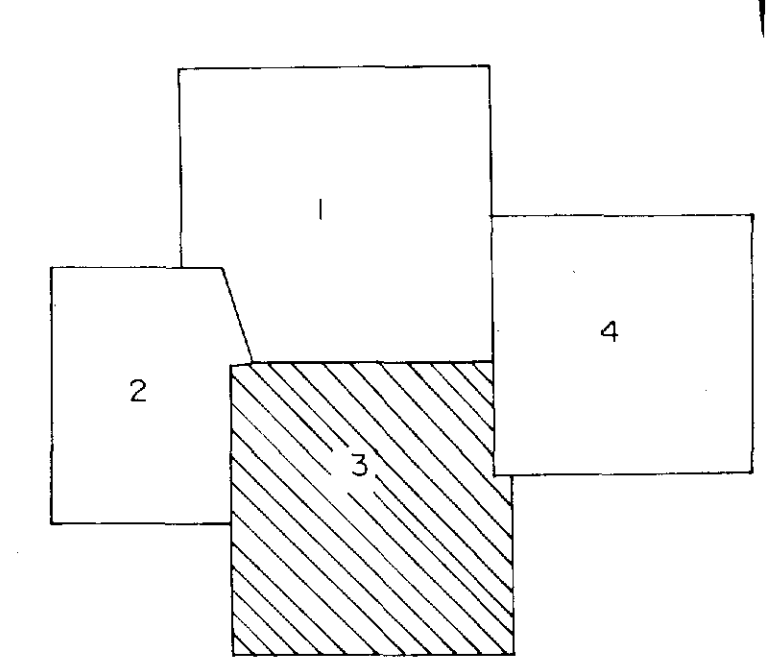
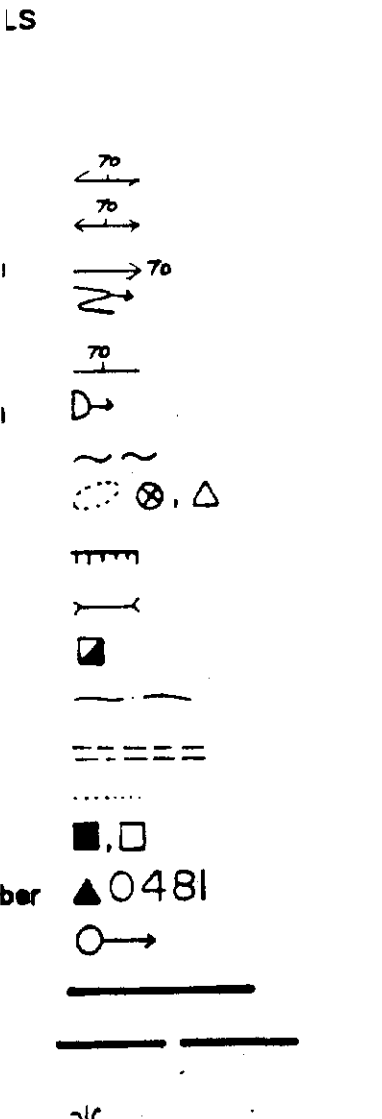


- ABBREVIATIONS**
- l alteration
 - l local
 - l pervasive
 - l strong
 - l moderate
 - l weak
 - l vein
 - l veinlet
 - l foliation
 - l disseminated
 - l fine
 - l medium
 - l coarse
 - l grained
 - l trace
 - l massive
 - l suffices
 - l texture
 - l magnetic
 - l quartz
 - l silicified
 - l carbonate
 - l calcite
 - l chlorite
 - l pyrite
 - l chalcopyrite
 - l reverse (mics bed + land)
- SYMBOLS**
- Tress
 - cdr cadar
 - spc spruce
 - ppl paplar
 - bsm balsum
 - one pine
 - bch birch
 - ald alder
 - mxl mixed forest
 - bl blue
 - gy grey
 - bk black
 - gn green
- foliation with dip
 - cleavage with dip
 - lineation with plunge
 - drag fold
 - bedding with dip
 - pillow tops direction
 - shearing
 - outcrop, float
 - scarp
 - trench
 - shaft
 - stream
 - gravel road
 - trail
 - claim post, assumed
 - sample location, number
 - diamond drill hole
 - geological contact
 - geological contact (assumed)
 - swamp

2.12978

John A. Barton

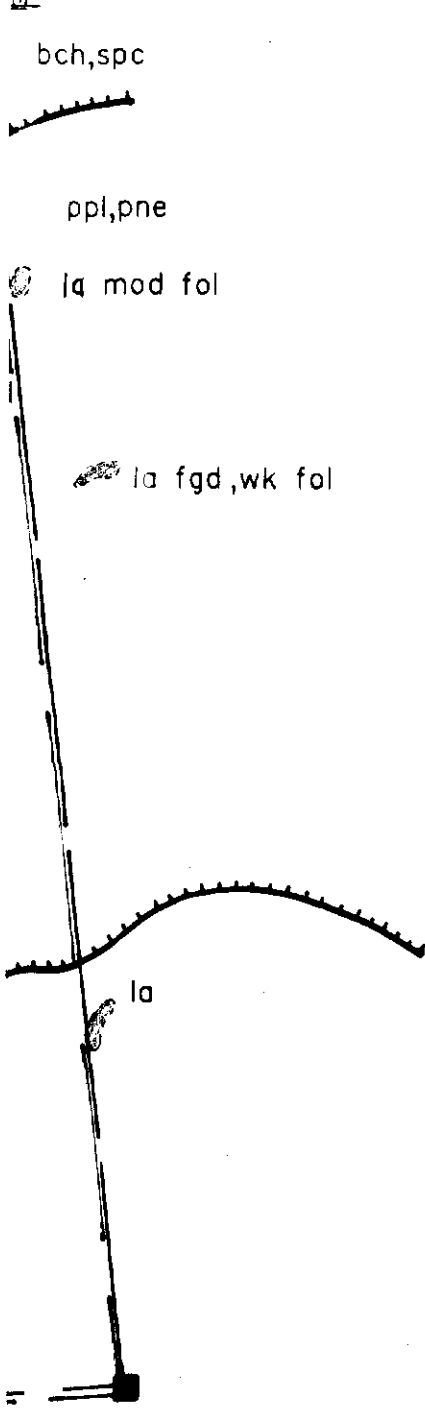
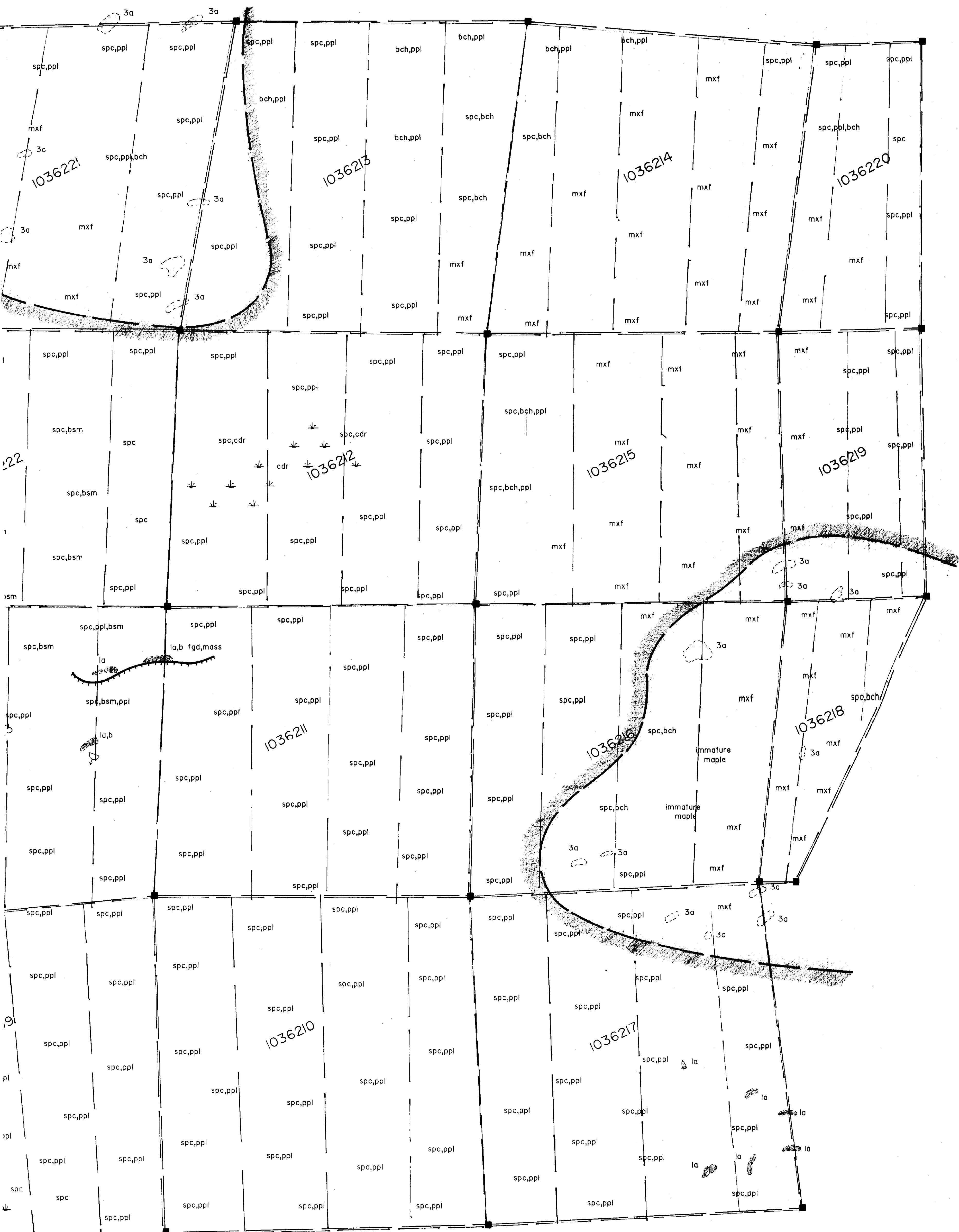
REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for TARZAN GOLD INC.		
	Title GEOLOGY MAP I NORTH SHEET		
Date: OCT./89	Scale: 1:2500	N.T.S.: 410/16	
Drawn: Job	Approved:	File: M-325	



2. 12978

John A. Burton

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	TARZAN GOLD INC.	
	Title	GEOLOGY MAP 3 SOUTH SHEET	
Date: Oct. 1989	Scale: 1:2500	N.T.S.: 410/16	
Drawn: Job	Approved:	File: M-325	



LEGEND

- 6 LATE MAFIC INTRUSIVE ROCKS
6 diabase
- 5 LATE FELSIC INTRUSIVE ROCKS
5 Horwood Peninsula Pluton
- 4 EARLY FELSIC INTRUSIVE ROCKS
4 quartz feldspar porphyry
- 3 EARLY MAFIC INTRUSIVE ROCKS
3a gabbro
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2a massive flow or undifferentiated
2b tuff, crystal tuff
2c lapilli tuff
- 1 MAFIC VOLCANIC ROCKS
1a massive flow or undifferentiated
1b pillowed flow
1c pyroclastic flow

ABBREVIATIONS

- alt alteration
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- str strong
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- vn vein
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- fol foliation
- dis disseminated
- f fine
- m medium
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- gd grained
- tr trace
- mass massive
- sul sulfides
- tex texture
- mag magnetic
- qtz quartz
- slc silicified
- carb carbonate
- cc calcite
- chl chlorite
- py pyrite
- cpy chalcopyrite

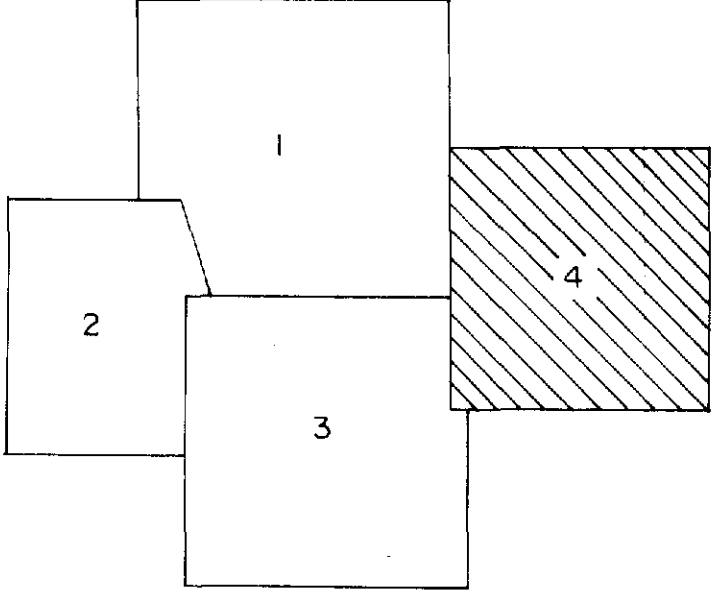
SYMBOLS

- foliation with dip
- cleavage with dip
- lineation with plunge
- drag fold
- bedding with dip
- pillow tops direction
- shearing
- outcrop, float
- scarp
- trench
- shaft
- stream
- gravel road
- trail
- claim post, assumed
- sample location, number
- diamond drill hole
- geological contact
- geological contact (assumed)
- swamp
- Traverse lines (boat + land)



2. 12978

John A. Butler



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	TARZAN GOLD INC.	
	title	GEOLOGY MAP 4 EAST SHEET	
	Date: Oct. 1989	Scale: 1:2500	N.T.S.: 410/16
	Drawn: Job	Approved:	File: M-325