

LOG: 1122 RD.
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GEOLOGICAL REPORT

COVERING MAPPING OF A PORTION OF THE
AZZA CLAIM
WINNIFRED CREEK, MONASHEE MOUNTAINS
FOR
AMULET RESOURCES CORPORATION

VERNON MINING DIVISION
NTS 82E/15E

118° 34' W AND 49° 56' N

FILMED

OWNER: **L.A. BAYROCK**
1899 QUEENS AVE., WEST VANCOUVER, B.C.

OPERATOR: **AMULET RESOURCES CORPORATION**
430-475 WEST GEORGIA STREET
VANCOUVER, B.C.
V6B 4M9

AUTHOR: **EDWARD C. BURGAN, P.ENG. (ONT.)**
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WESTHILL, ONTARIO
M1C 2Y9

DATE: JANUARY 29, 1988

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

18-009

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CONCLUSIONS AND RECOMMENDATIONS

The mapped area of the AZZA claim is largely underlain by porphyritic, white to pink granite. Much lesser amounts of mafic dike rock, gabbro, felsite, pegmatite and quartz veins occur locally. The area is cut by numerous, highly altered fault/shear zones which are expressed as low relief, open-grassy topographic lineaments. These fault/shears host gold-bearing quartz veinlets, and exhibit intense hydrothermal alteration over considerable widths (up to 20 m).

In consideration of the large number of unexplored, low relief, topographic lineaments situated on the AZZA claim, and the direct association of hydrothermal alteration and gold-bearing mineralization to one such linear; it is the authors opinion that a continuing exploration program is warranted. Such a program should comprise the integration of geochemical, geophysical and geological data to better delineate targets for future trenching and diamond drilling. Locales of "lineament-intersections" may be of particular interest. Occurrences of white or glassy quartz should be carefully investigated.

INTRODUCTION

SCOPE-OF-REPORT

This report covers geological mapping of a portion of the AZZA Claim. The work was conducted on 3 full days and 2 half days in late October, utilizing a pre-existing, 100m-spaced, flagged-line system, and compass and pace. Field mapping was conducted at a scale of 1:2000 and was generally confined to close proximity to the flagged lines. Roughly 85 ha (210 acres) were examined in this manner.

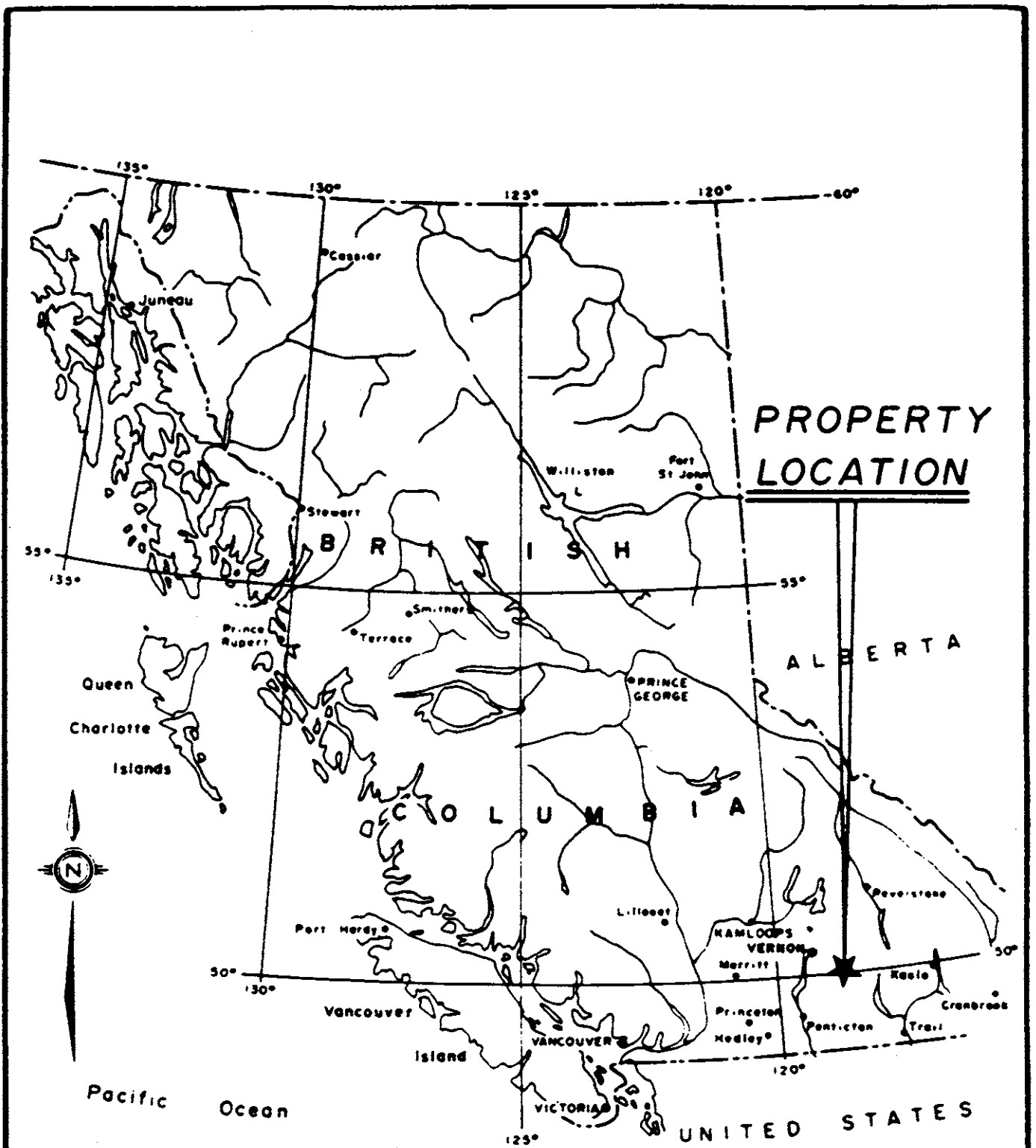
PROPERTY AND OWNERSHIP

The AZZA claim comprises 16 units (approximately 375 ha), and the Legal Corner Post is situated at the SE corner of the claim. The claim surrounds the ROB 1 claim and lies contiguous with and to the West of the AZZA 2 claim. Mr. L.A. Bayrock of W. Vancouver is the 100% owner of the claim which is under option to Amulet Resources Corporation.

<u>Name</u>	<u>Tag No.</u>	<u>Staked</u>	<u>Units</u>	<u>Record No.</u>	<u>M. Division</u>
AZZA	104103	85-07-23	16	1976	Vernon

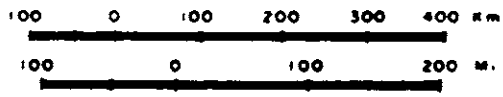
LOCATION AND ACCESS

The property is located roughly 60 km southeast of Vernon, B.C. in the Monashee Mountains. The NTS location is 82E/15E at approximately 118° 34' W. Long and 49° 56' N. Latitude.

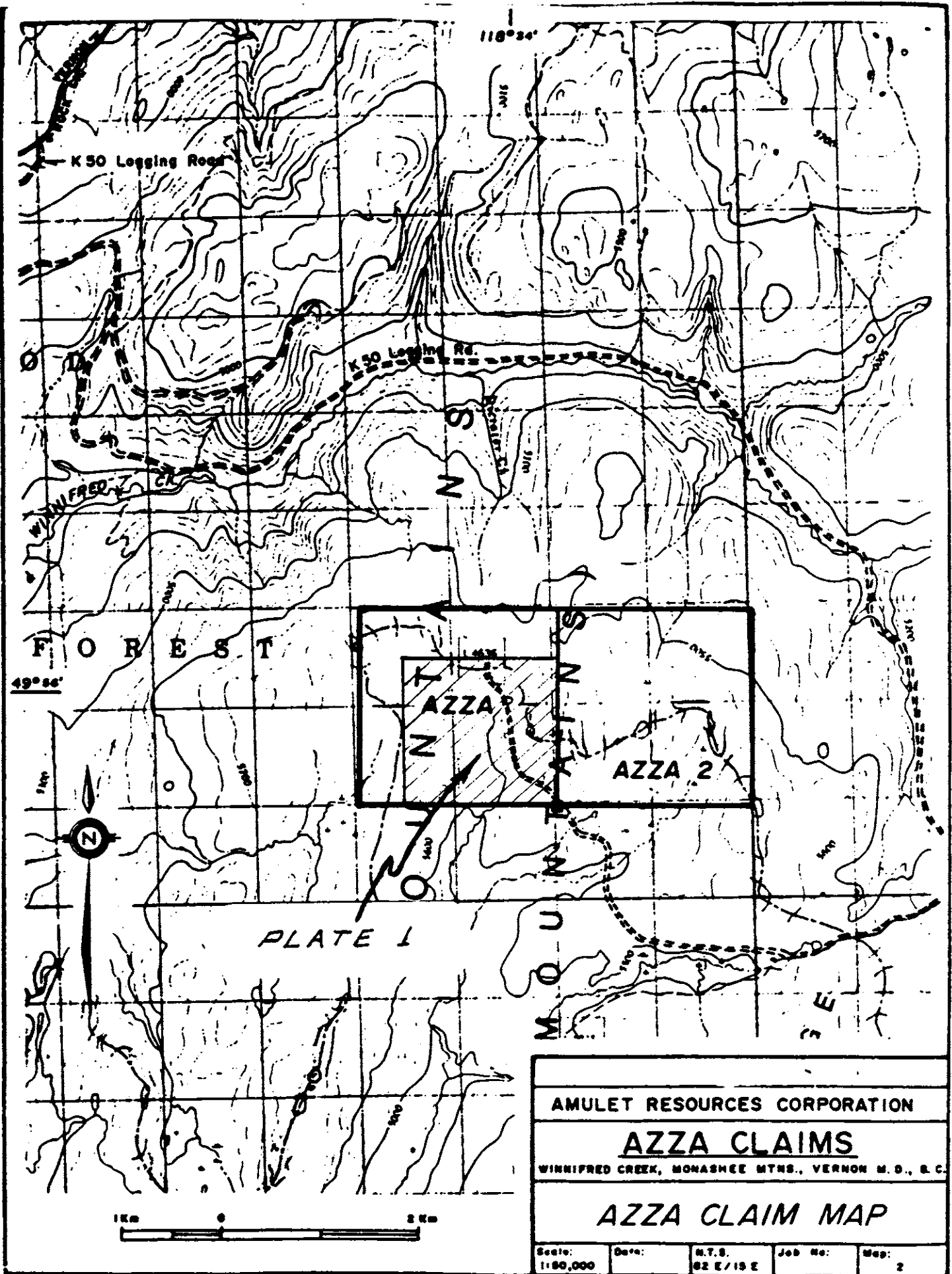


**PROPERTY
LOCATION**

Pacific Ocean



AMULET RESOURCES CORPORATION				
AZZA CLAIMS				
WINNIFRED CREEK, MONASHEE MTS., VERNON M. D., B. C.				
LOCATION MAP				
Scale:	Date:	N.T.S.	Job No:	Map:
1:10,000,000		82 E / 15 E		1



AMULET RESOURCES CORPORATION				
AZZA CLAIMS				
WINNIFRED CREEK, MONASHEE MTS., VERNON M.D., B.C.				
AZZA CLAIM MAP				
Scale:	Date:	M.T.S.	Job No:	Map:
1:50,000		82 E/19 E		2

The centre of the claim is about 3.5 km due south of the K50 logging road, measured along a N-S line 200 m west of the Dictator Creek/Winnifred Creek confluence. (see Maps 1 and 2).

Access to the property is gained by travelling 80 km east on highway #6 from Vernon to the Kettle River Road; thence south 10 km on the Kettle River Road to the K-50 road; thence easterly 5 km on the K-50 road keeping to the right on the Winnifred Creek road; thence roughly 24 km to the campsite (always bearing right at several intersections). As one travels easterly on the Winnifred Creek road, the road loops slowly to the south and then westerly, ending at a road junction at the old campsite. From that point one may turn south, cross the creek and proceed roughly 2 km westerly to the old Waterloo Mine trailer campsite. Or, one may proceed westerly and then northwesterly on the north side of the creek for about 3 km to the AZZA claim L.C.P. which is readily observed on the easterly edge of the road. This latter road segment requires a 4-wheel-drive vehicle.

PHYSIOGRAPHY

The AZZA claim lies on the westerly side of the Monashee Mountains, a part of the Interior Plateau System. The immediate claim area can be described as gently rolling with elevations ranging from roughly 1400 m to 1700 m. Overburden is generally shallow, and outcroppings are common in the mapped area. Light to moderate stands of spruce and fir are mixed with some open, grassy, park-like areas which are often

linear features trending commonly north-south. Summers are mostly dry, but moderate snow cover generally prevails from late fall through April.

GENERAL HISTORY

Exploration activity for Au (gold) and Ag (silver) dates to the 1920's and 30's. A number of old shafts, dumps and pits are still evident within the AZZA claim boundary. The Morning Mine (now ROB 1 claim?) was the major point of activity, where a shaft was sunk and drifting and x-cutting were undertaken. The 1933 B.C. D.M. Annual Report describes an 8' wide N-S shear zone containing a 3' wide quartz vein bearing galena, sphalerite and pyrite. Precious metal value range from 0.25 to 6.60 oz. per ton Au, and 0.75 to 42.2 oz. per ton Ag.

The Waterloo Mine is located about 2.5 km due south of the AZZA L.C.P., and comprises several adits and considerable drifting on several levels. Ag ores containing galena and sphalerite were mined on a small scale. The E-W trending quartz-carbonate vein carried values of several hundreds of ounces per ton Ag, locally.

Exploration on the AZZA claim over the past several years comprises bulldozer trenching, soil sampling and induced polarization-resistivity surveying. A sample taken of a 5 cm quartz veinlet at the East end of bulldozed trench #1, reportedly assayed 16.3 g/tonne Au (0.475 oz. per ton Au).

GEOLOGY

REGIONAL GEOLOGY

The regional geology was mapped by H.W. Little (1953-56) and is available on Survey Map 6-1957, Kettle River (East Half), at a scale of 1:253,440 (1" = 4 miles). The Winnifred Creek area is situated in the very upper portion of that map (see Map 3). The AZZA claim area is underlain by Cretaceous Nelson Intrusives which comprise dioritic, monzonitic and granitic rocks. Immediately south and southeast of the claim area lies a roof pendant of Permian age, the Anarchist Group, comprising greenstone, greywacke, limestone and paragneiss. The Waterloo Mine silver vein occurs in this pendant. Other rocks in the general area, are:

1. Valhalla Intrusives (younger cretaceous granites) to the east.
2. Proterozoic (?) paragneisses to the west and southwest.

GEOLOGY OF THE CLAIM

Overburden is relatively thin; hence, rock outcroppings occur frequently, particularly on the ridges and areas of higher relief. Porphyritic granites occur in predominance throughout the mapped area. Irregular mafic dikes from less than one metre to perhaps 10 metres thickness are locally commonplace. Of much more local

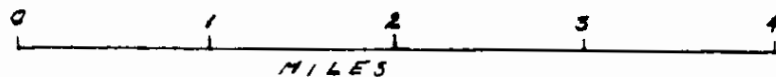
CANADA
DEPARTMENT
OF
MINES AND TECHNICAL SURVEYS

GEOLOGICAL SURVEY OF CANADA

SERIES



MAP-3 - GEOLOGY OF THE AREA AFTER LITTLE, 1957
SCALE 1 INCH TO 4 MILES



LEGEND

- CENOZOIC**
 - TERTIARY MIOCENE(?)**
 - 11 Basalt, olivine basalt
 - PALEOCENE OR EOCENE**
 - 10 **PHOENIX VOLCANIC GROUP**
Andesite, trachyte; minor basalt; locally, interbedded tuff, shale, and/or siltstone
 - 9 **KETTLE RIVER FORMATION:** rhyolite and dacite tuff; locally, conglomerate, sandstone, and shale; minor rhyolite flows and intrusive porphyritic rhyolite
 - PALEOCENE(?)**
 - 8 **CORYELL INTRUSIONS:** syenite; monzonite, shonkinite and granite
- MESOZOIC**
 - CRETACEOUS(?)**
 - LOWER CRETACEOUS(?)**
 - 7 **VALHALLA INTRUSIONS:** granite, porphyritic granite
 - 6 **NELSON INTRUSIONS:** granodiorite, porphyritic granite; diorite, monzonite, quartz monzonite
 - 5 Ultrabasic intrusions, serpentinite
 - JURASSIC**
 - 4 **ROSSLAND GROUP**
Andesite, latite; agglomerate and flow breccia; minor greywacke
 - PALAEZOIC**
 - PERMIAN(?)**
 - 3 **ANARCHIST GROUP**
Greenstone, greywacke, limestone; paragneiss
 - PENNSYLVANIAN AND/OR PERMIAN**
 - 2 **MOUNT ROBERTS FORMATION:** greywacke, greenstone, limestone; paragneiss
 - PROTEROZOIC (?)**
 - 1 **MONASHEE AND GRAND FORKS GROUPS**
Paragneiss; minor crystalline limestone and pegmatite

Drift-covered area 

Geological boundary (defined approximate) 

occurrence are gabbro, felsite, and pegmatite. Shear/fault zones are numerous and vary in strike, but most commonly trend within 20° of north-south.

Rock Descriptions

Rock names and mineral identifications are based solely upon megascopic examination in the field. No binocular- or petrographic-microscope studies were utilized.

Granite: Some variations in the granite does occur, but by far the most prevalent is a coarse grained, white to pink, porphyritic granite containing 3 to 10% biotite. Phenocrysts are orthoclase and occur up to 3 or 4 cm in diameters. Occasionally a non-porphyritic granite was noted. Locally, the granite is much enriched in biotite (20 to 70%) but most often the phenocrysts are still evident. This biotite-rich granite is attributed to assimilation of dike rocks or host rocks, or perhaps simple deuteric alteration.

Felsite: This rock was observed in irregular but sharp contact with granite in a small outcropping on line 6N at about 5W. Aphanitic, light grey, and hard, the felsite would appear to be perhaps rhyolitic in composition. Rocks of a similar nature are reportedly associated with the north-south shear zones of this general area.

Gabbro: Only one outcrop area of this rock has been observed to date. Roughly 40m by 10m, a number of exposures occur along a north-south ridge and just north of line 16N in the vicinity of 7 + 90W. The term gabbro was used for lack of a more specific classification. The rock is dark, competent, and contains 50 to 90% black, equidimensional uralite (hornblende after qugite) crystals up to 1.5 cm across. The groundmass is fine-grained felspar and quartz. Occasional irregular thin veinlets (up to 3 cm) of medium grained granite occur in this rock.

Mafic Dikes: These dikes most often cut the granite with sharp contacts, but occasionally are gradational. Chilled margins are not generally obvious. Some grain-size gradation was noted in one outcrop, but no contact was observable. The linear-types strike N30W to N15E with dips of 90° to 50° west. Some outcroppings show highly irregular forms with a complex mix of dikes and granite and/or pegmatite. Widths vary from 0.5m to perhaps in excess of 10m. The rock is dark, fined-grained (1-3mm), and contains 40-90% biotite, with plagioclase and some quartz. In one outcrop, hornblende appears to be the prime mafic mineral.

Quartz Veins: Two distinct types occur on the property. The most common and perhaps more wide spread, is a massive, white quartz with usually 2-5% fine disseminated pyrite. This quartz cuts the granite and strikes generally north-south; this trend is mainly based on exploration pits and

angular float occurrences. The second type of quartz vein is generally light grey, glassy but opaque, and may be more veinlet-like with local calcite. This type was noted in the bulldozer trenches just east of the road in the vicinity of lines 14N and 18N. The veins or veinlets were mainly observed as rubble fragments in highly kaolinized granite which was exposed by bulldozer trenching along a north-south shear and/or fault zone. Grab sample assays confirm at least one encouraging gold value.

Structure

Commonplace on the AZZA claim are numerous, linear, topographical "lows" which in most part trend from N30W to N30E. Three bulldozer trenches on one N-S linear, reveal strongly kaolinized granite with some quartz veining. This altered rock is typical of fault/shear zones, and it is assumed that the many other linear depressions are, in fact, expressions of faulting or strong shearing. Fault displacements, if any, are not evident at this time. Although observed in many outcroppings, jointing in the area is of a weak character; however, the most common joint-patterns are:

1. N10W to N30E with 90° to 40° E dips
2. S70W to N70W with 90° to 70° N dips

Alteration

The observed rocks of the claim area are in most part fresh and competent. Hydrothermal alteration of a moderate to strong intensity appears to be confined to numerous fault and/or shear zones which are expressed on surface as linear, generally grassy and open, topographic depressions. One such kaolinitic altered zone, lying just east of the road, is exposed in 3 bulldozer trenches. The kaolinized granite is soft, crumbly, most often calcareous, and usually retains some remanent textures.

Mineralization

The two types of quartz material have previously been described under Quartz Veins. The milky or white variety contains 5-10% pyrite usually as fine disseminations, but with occasional blebs or crystal aggregates to 1 cm. This quartz veining has not been shown to be associated with the stronger fault/shear zones, and assays indicate low to nil precious metal values. However, it is significant that the gold bearing "Morning" vein (Rob 1 claim) is reported to be a massive, white/milky quartz containing sphalerite and galena.

The opaque and glassy quartz was noted in two bulldozer trenches, and occurs as sparse thin to narrow veins in strongly kaolinized granite associated with a north-south fault/shear zone. Minor fine disseminated pyrite is evident, but no base metal minerals, or gold, were observed. However,

two separate grab samples from the east end of bulldozer trench # one are reported to assay:

1986 Bayrock Sample 0.475 oz/ton (5cm veinlet)

1987 Vacek-Burgan Sample 0.396 oz/ton (random rubble grab)

Portions of the kaolinized granite are strongly iron-oxide stained, indicating that perhaps some amount of iron sulphide deposition occurred along these fault/shears. A large grab sample of this material assayed nil gold.

Respectfully Submitted.



E.C. Burgan, P.Eng. (Ont.)

CERTIFICATION

I, EDWARD C. BURGAN, of the City of Scarborough, in the Province of Ontario, do hereby certify:

1. I am a graduate of the Colorado School of Mines, Golden, Colorado with a Degree of Geological Engineer (1954).
2. I have practiced my profession for 28 years, mainly in Canada.
3. I am a Member in good standing with the Association Of Professional Engineers Of The Province Of Ontario.
4. This Report is based on my personal mapping of outcroppings on a portion of the AZZA CLAIM.
5. I do not hold any interest in Amulet Resources Corporation nor any of the properties held by that Corporation.
6. I consent to the use of this report by Amulet Resources Corporation in any statement of material facts.



January 29, 1988

E.C. Burgan, P. Eng. (Ont.)

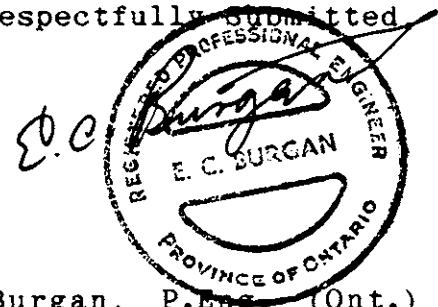
STATEMENT OF COSTS

This is to certify that I personally conducted geological mapping on portions of the AZZA CLAIM on the dates of 87-10-20,-21,-22,-27,and 87-11-02. The AZZA CLAIM is located in the Dictator/Winnifred Creeks area within the Vernon Mining Division.

(NTS 82E/15E).

Field Mapping	3 days @ \$500	=	\$1500.00	
	2 1/2-days @ \$250	=	500.00	\$2000.00
Subsistence, et al.				
	4 days @ \$100	=		400.00
Interpretive Report				<u>3000.00</u>
				5400.00
TOTAL				<u>\$5400.00</u>

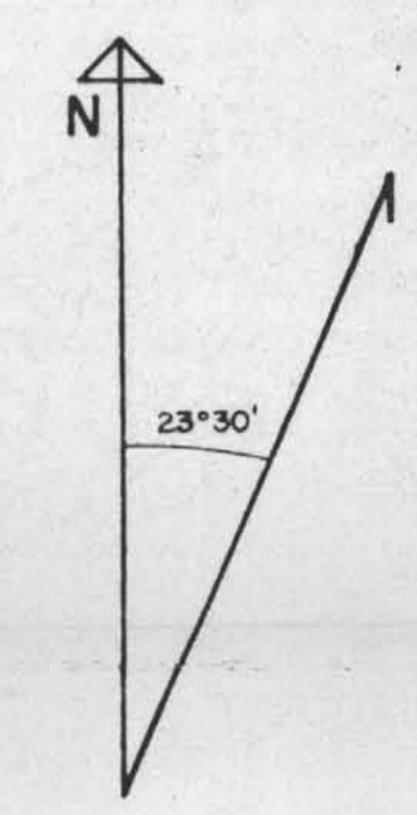
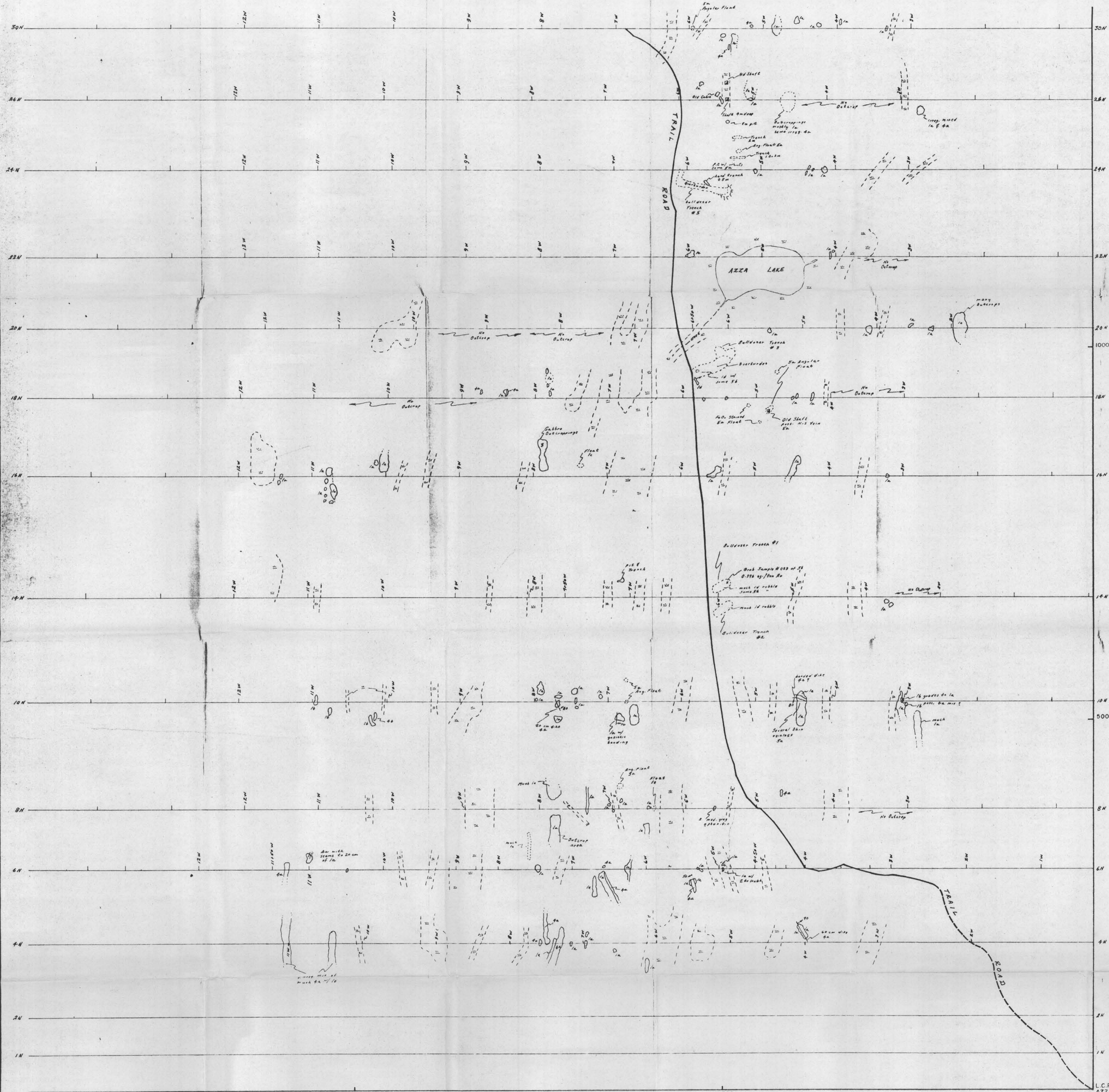
Respectfully Submitted



January 29, 1988

E.C. Burgan, P.Eng. (Ont.)

ROB L CLAIM (approx.)



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
18,009



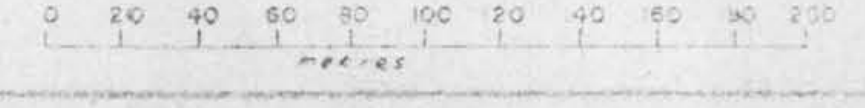
SYMBOLS

- Outcropping
- Strike/slip
- Open-grassy & low relief

Note: Azza L.C.A. located by
Linton & Davis & Company & Pace

GEOLOGICAL LEGEND

- 1** GRANITE
 - 13 PORPHYRITIC, WHITE TO PINK
 - 14 HIGH BIOTITE (CONTAMINATED)
 - 15 KAOLINIZED, WEAK TO MODERATE
 - 16 KAOLINIZED, STRONGLY
 - 17 PEGMATITIC
- 2** FELSITE
- 3** GABBRO
- 4** MAFIC DIKE
 - 41 FINE GRAINED BIOTITE RICH
 - 42 FINE GRAINED MONZONITE RICH
- 5** QUARTZ VEINS
 - 51 WHITE MASSIVE
 - 52 GLASSY DRUSE



REVISED
 AMMET RESOURCES CORPORATION
 AZZA MINING CLAIM
 GEOLOGICAL PLAN MAP
 SCALE: 1:2000
 BY: E.C. BURGAN, P.E.
 JANUARY, 1988
 PLATE 1
 BBE/ISE