

MINNOVA

MEMORANDUM

DATE: November 21, 1991
A TO: ✓ I. D. Pirie
COPIES A COPIES TO: file (NTS 82L/4E)
DE FROM: J. D. Kapusta
SUJET SUBJECT: Miller Lite Claims, submittal by Rick Henderson

Location:

The Miller Lite claims are located 25 km southwest of Vernon, between Whiteman and Shorts Creek on NTS map sheet 82L/4E.

Target:

Epithermal, shear hosted quartz veins; similar to Huntington Resources' Brett Property.

Recommendation:

The mineralization found to date on the Miller Lite claims does not warrant Minnova becoming involved with this property.

Geology

The eastern part of the claims is underlain by a phase of the Okanagan Batholith (early Jurassic). The Eocene Kamloops group overlies the Okanagan Batholith (angular unconformity) and is composed of both volcanic and sedimentary stratigraphy. The volcanic component is made up of fragmental dacite, crystal and lithic tuffs, andesite and interbedded andesite flows and breccias. It is the volcanoclastic and andesitic rocks that host gold mineralization on the Brett property. The Whiteman Creek syenite (Eocene) occurs approximately 8000 m northeast of the claim group. This intrusive is believed to be the source of the syenite dikes

and mineralizing fluids that have travelled along fractures on the Brett claims. Regionally, major fracture sets trend east-southeast (Whiteman Creek Fault), northwest (Miller Fracture) and northeast. Mineralization is controlled by the northwest fracture set. It is thought that the Miller Fracture may be the continuation of the main shear zone on the Brett property, offset by a northwest fault. Another northwesterly trending fracture occurs on the Miller Lite claims and is referred to as Lineament B. Both the Miller Fracture and Lineament B are near vertical to steep westerly dipping. Drilling on the Miller Lite claims has intersected a feldspar porphyry dike in the Miller Fracture, believed to be similar to those in the Main Shear Zone on the Brett Property.

Mineralization

On the Brett Property mineralization is hosted in Steep dipping, northwesterly trending shear sets. Syenite dikes (from the Whiteman Creek Syenite) have intruded along the shear structures. The gold rich mineralizing fluids, related to the Whiteman Creek Syenite have also been injected along the northwesterly trending shears. The most receptive units on the Brett property are the volcanoclastic rocks where the shear zone reaches 10 meters in true thickness. The gold occurs as clusters of coarse particles in quartz veins and as finely disseminated colloidal gold associated with the intensely silicified rocks.

To date only weakly anomalous gold and silver values (24 ppb Au was the highest gold value and 2.8 ppm Ag was the best silver number) have been returned from drill core.

Drilling

Only two holes, totalling 477.30 m have been drilled on the Miller Lite claims. These were drilled in 1989 by Eureka Resources, and confirmed the presence of two northwest trending shear structures (the Miller Fracture and the B Lineament). No significant mineralization was intersected. No alteration

spatially related to fractures or other features has been recognized on the property.

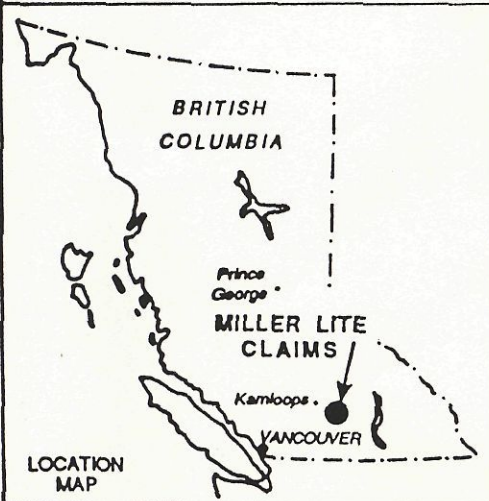
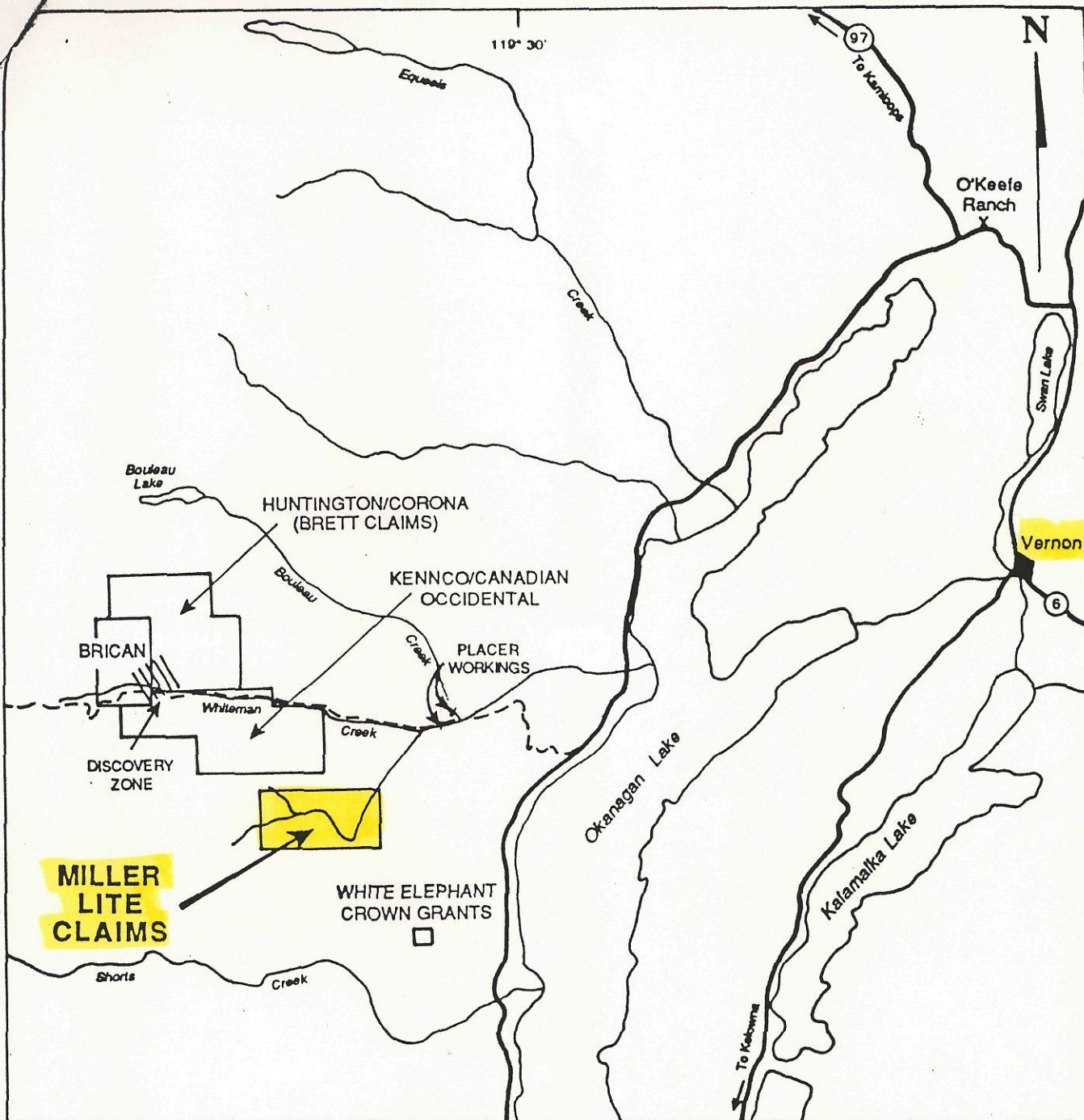
Soil Geochemistry

A soil survey carried out during 1988 was moderately successful in delineating both the Miller fracture and Lineament B. Northwesterly trending gold, arsenic, antimony, zinc and silver geochemical anomalies are associated with each. Maximum values returned were 385 ppb Au, 8.3 ppm Ag, 1613 ppm Cu, 79 ppm As, 15 ppm Sb Zn.

Conclusion

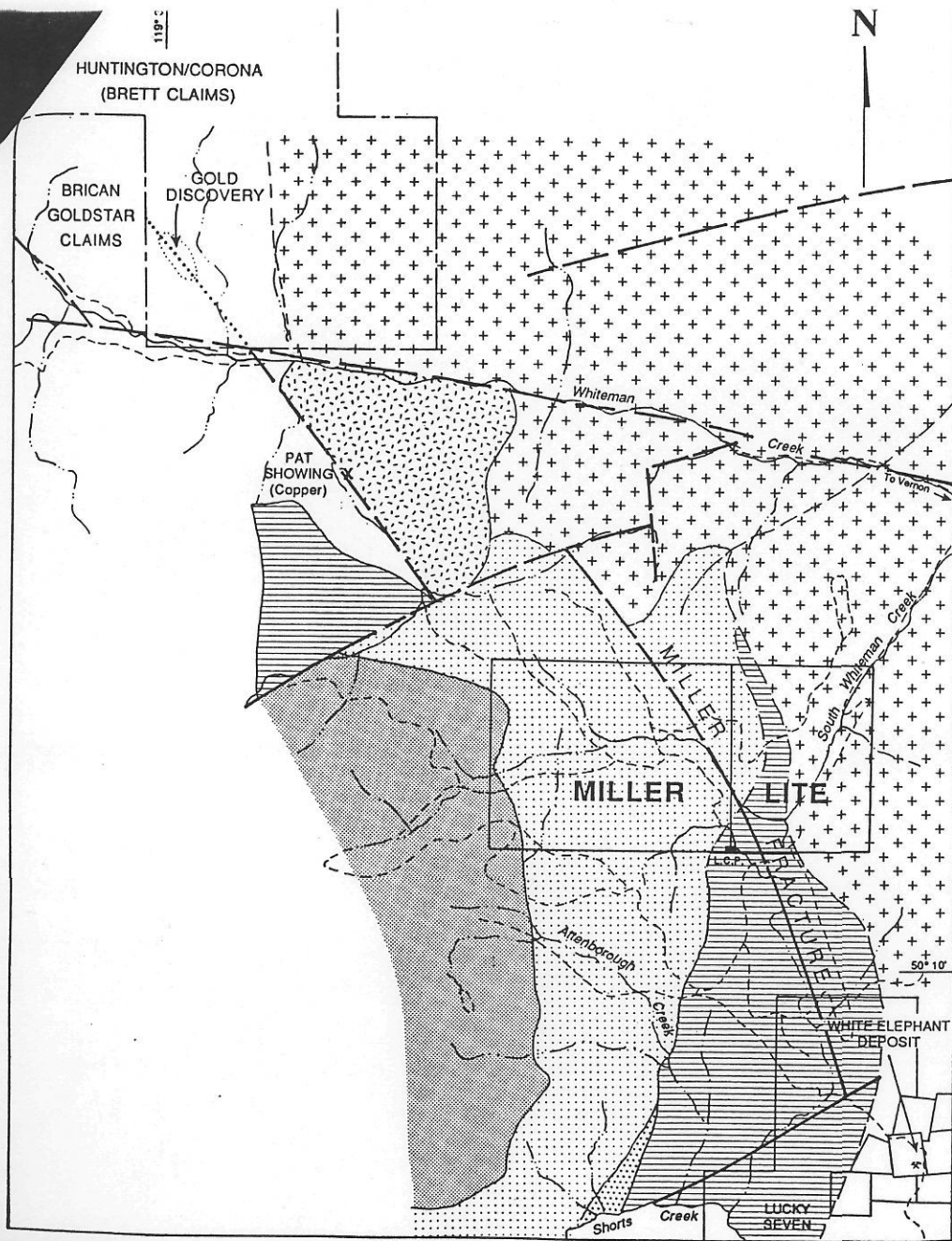
What appear to be northwesterly trending shear structures are present on the property (Miller fracture, Lineament B) and have been intersected by drilling. Unfortunately so significant Au values were reported from the drilling, and no visible alteration is associated with the structures. The soil sampling indicates that epithermal mineralization may be present along the structure. I would have to guess that the drill holes were collared on the better soil anomalies, and these did not intersect any significant mineralization.

No further work is recommended.







Scale 1:200,000
 0 2 4 6 8 10 km

EUREKA RESOURCES, INC.			
MILLER LITE PROPERTY			
Vernon Mining Division			
LOCATION MAP			
PROJECT 89-137	DRAWN KVC	DATE June 1989	FIGURE 1
Revised		N.T.S. 82L	
K.V. CAMPBELL & ASSOCIATES LTD.			







LEGEND

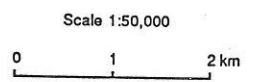
EOCENE

-  Syenite intrusive
-  Feldspar porphyry andesitic lava
-  Andesite, dacite lava and breccia
-  Sandstone, shale, conglomerate

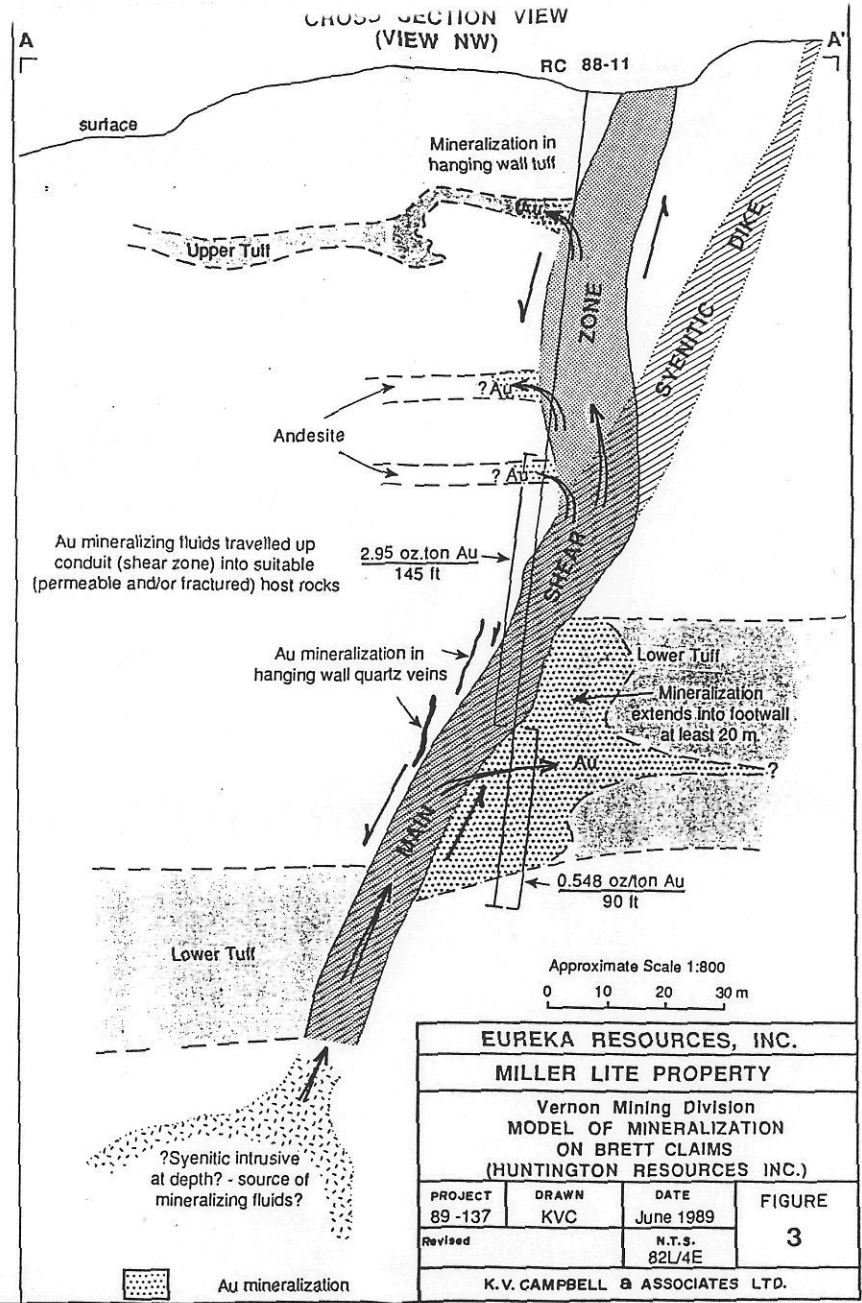
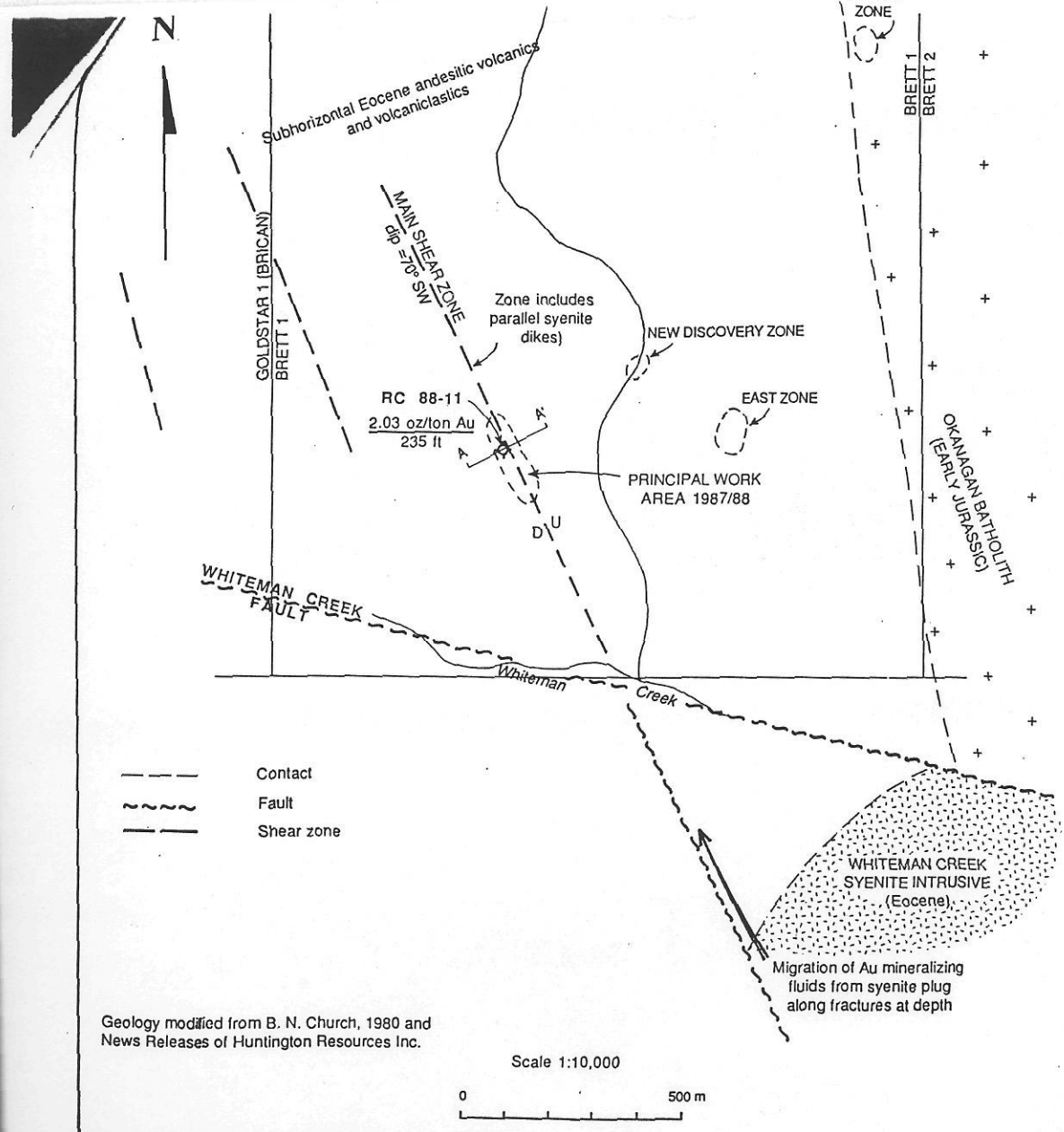
PRE-TERTIARY

-  Mainly bedded rocks, metavolcanics, limestone schist, chert and quartzite
-  Granitic intrusive (Okanagan batholith)
-  Geologic contact
-  Fault (approximate, assumed)

(Geology modified from B. N. Church, 1980)



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MILLER LITE PROPERTY			
Vernon Mining Division			
REGIONAL GEOLOGY			
PROJECT 89-137	DRAWN KVC	DATE June 1989	FIGURE 2
Revised		N.T.S. 82L/4	
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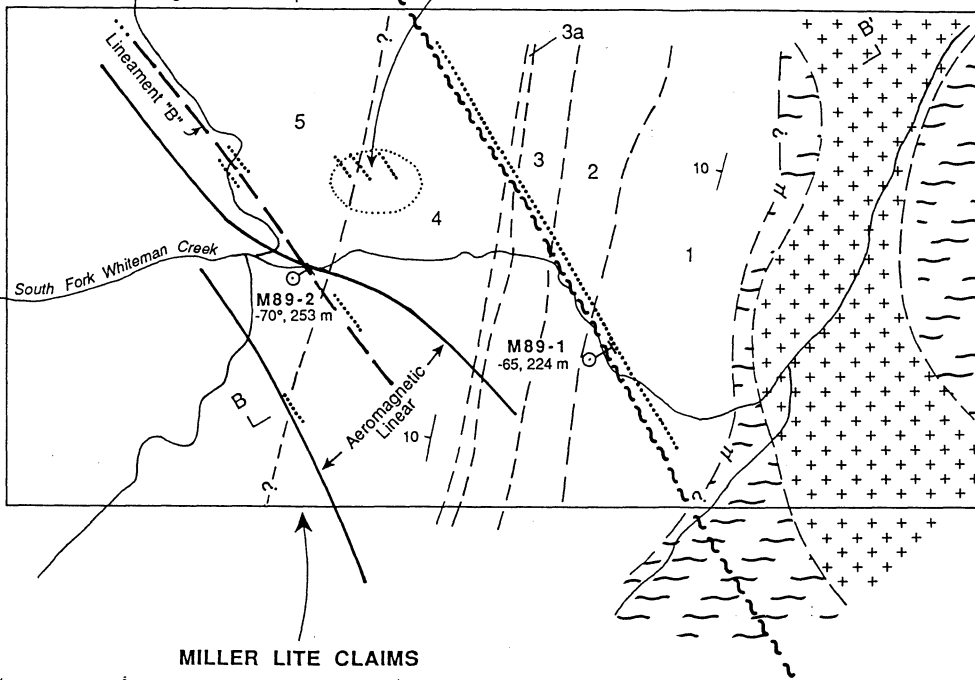


WHITEMAN CK
SYENITE INTRUSIVE

MILLER FRACTURE

Migration of
Au mineralizing fluids
from syenite plug
along fractures at depth

Possible Syenite Intrusion
at depth (Au source?)



TERTIARY
EOCENE

- 5
- 4
- 3
- 2
- 1

- Andesite
- Interbedded andesite flows and breccia
- Crystal tuff
3a - polymictic tuff
- Mudstone, argillite
- Fragmental dacite

PRE-TERTIARY

- + +
-

- Okanagan Batholith; granitic
- Metasedimentary and metavolcanic rocks

Shear zone

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IP conductors

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Aeromagnetic Linear

○

Diamond drill hole

/15

Drill inferred bedding

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Fault

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Geological contact, inferred

—μ—

Inferred unconformity

Geology modified from B. N. Church (1980)  
and P. A. Leishman (1988)

**EUREKA RESOURCES, INC.**

**MILLER LITE PROPERTY**

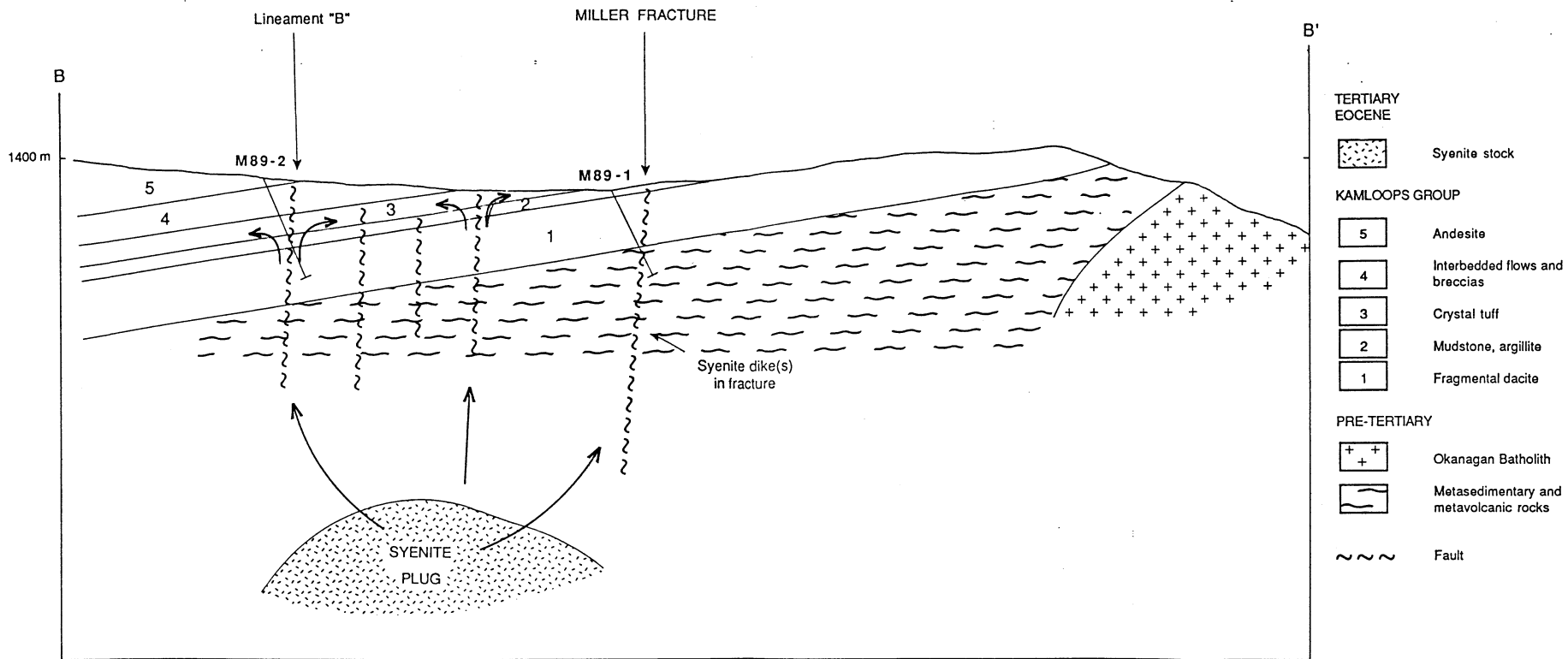
Vernon Mining Division, B.C.

**SIMPLIFIED GEOLOGY**

| PROJECT                         | DRAWN | DATE             | FIGURE |
|---------------------------------|-------|------------------|--------|
| 89-137                          | KVC   | June 1989        | 4      |
| Revised                         |       | N.T.S.<br>82L/4E |        |
| K.V. CAMPBELL & ASSOCIATES LTD. |       |                  |        |

Scale 1:20,000





VIEW NORTHWEST

Scale 1:10,000

Note: (1) Section perpendicular to fractures, not Tertiary lithology.

(2) Location of drill holes is approximate and not true projection.

Cartoon shows Au mineralizing fluids moving up conduits (fractures) into suitable host rocks, namely the crystal tuff unit (3)

EUREKA RESOURCES, INC.

MILLER LITE PROPERTY

Vernon Mining Division, B.C.

MODEL OF MINERALIZATION  
ON MILLER LITE CLAIMS

| PROJECT | DRAWN | DATE             | FIGURE |
|---------|-------|------------------|--------|
| 89-137  | KVC   | June 1989        | 5      |
| Revised |       | N.T.S.<br>82L/4E |        |

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