


I, LAWRENCE B. O'NEILL, Esq., hereby
certify this to be a true copy of the
Report on the Miller #1 Claim. DATED
this day of June, 1987.

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LAWRENCE B. O'NEILL

Report on the Miller #1 Claim

For


837 East Cordova St.
Vancouver, B. C.
V6A 3R2

Vernon Mining Division

N.T.S. 82L/4E

by

D. A. Leishman, B.Sc. & K. V. Campbell, Ph.D.

Consulting Geologists



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Summary

The Miller #1 mineral claim (20 metric units) held by Eureka Resources, Inc., lies in an area of the Vernon Mining Division that has recently undergone an increase in mineral exploration activity. This increase in exploration activity was initiated by the discovery of the gold bearing epithermal gold prospect on the nearby Brett claim in the fall of 1985 by Huntington Resources Inc.

The Miller #1 mineral claim is underlain by a pre-Tertiary sequence of metavolcanic and metasediments that are unconformably overlain by a Tertiary sequence consisting of a basal sedimentary unit that is in turn overlain by a succession of intermediate to basic volcanic rocks. A small syenitic stock has been mapped intruding the above sequence immediately north of the claim group. Northwesterly fault linears indicated on the Miller property trend in a similar direction to structures that host the epithermal precious metal occurrences found on the Brett claim.

A preliminary geochemical and geological survey of the Miller #1 claim group has provided favourable results. On the basis of these results and the similarities to the nearby Brett claim a two phase programme of exploration is proposed for the Miller #1 claim group. A budget of \$70,400 is included with this proposal.

Introduction

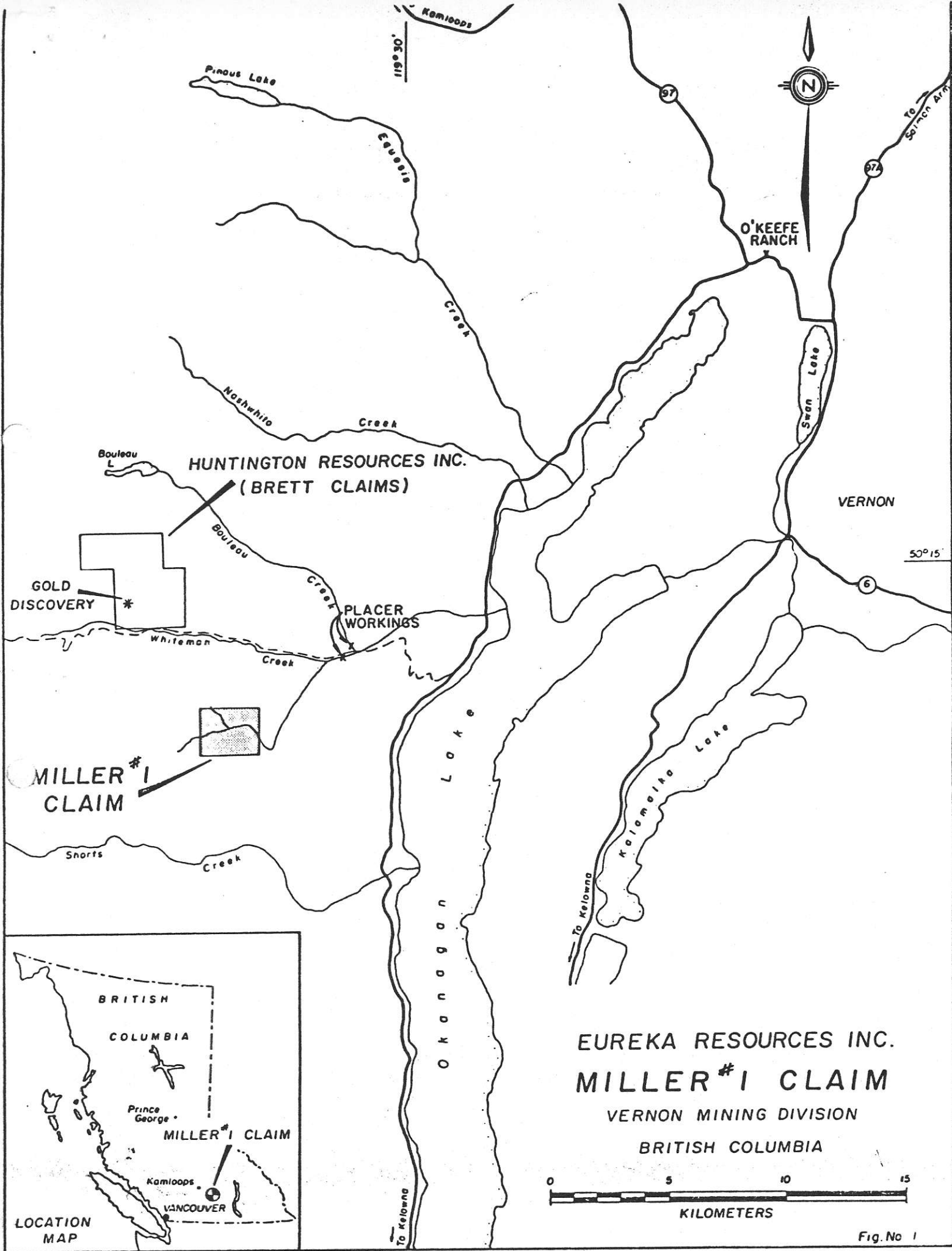
Upon the request of Mr. John R. Kerr, Vice-President of Eureka Resources, Inc., the writers were requested to review the data on the Miller #1 claim and to present a report with recommendations for a programme of mineral exploration. The Miller #1 mineral claim was acquired by Eureka Resources, Inc. through an option agreement with Mr. Brian Cross of Nelson, British Columbia during the spring of 1986.

This report is based upon one of the authors (Leishman's), intimate knowledge of the area in question which has included a property examination of the Huntington discovery. A review of all available literature related to the Miller #1 mineral claim and its immediate surroundings was also completed.

Location, Physiography and Access

The Miller #1 mineral claim is located in the Vernon Mining Division, approximately 25 kilometres southwest of the city of Vernon (Figure 1 & 2). Geographic co-ordinates of the centre of the claim are $50^{\circ}11'$ North Latitude and $119^{\circ}35.7'$ West Longitude on N.T.S. Map Sheet 82L/4E.

The property is reached from Vernon by travelling via Highway #97 north towards Kamloops and then at approximately 0.5 kilometres beyond the O'Keefe Ranch turning south onto the paved Westside Road. This road, which follows the west side of Okanagan Lake, is driven for approximately 20 kilometres where a good gravel logging road is then taken west along the Whiteman Creek valley. At kilometre 11, a branch road is taken to the south along South Whiteman Creek for approximately 7 kilometres. At this point the eastern boundary of the claim group is traversed. The Legal Corner Post for the Miller #1 claim is found to the southwest of the road. This access road and several other branch roads allow



EUREKA RESOURCES INC.
MILLER #1 CLAIM
 VERNON MINING DIVISION
 BRITISH COLUMBIA

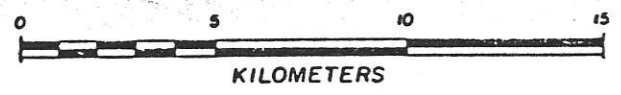


Fig. No 1



for easy access to the claim group. (see Figures 1 & 2)

The Miller #1 claim is situated on a broad plateau between the deeply incised valleys of Whiteman and Shorts Creeks. The northern third of the Miller claim is transected by the headwaters of South Whiteman Creek (Figure 1 & 2). Topographic elevations vary from 1300 metres a.s.l. at the eastern boundary in the South Whiteman Creek valley to 1550 metres a.s.l. along the southwest corner of the claim. Slopes are generally gentle to moderate.

The area covered by the Miller #1 claim is forested with moderate to thick stands of fir and pine. Clearcut logging has been carried out over approximately 50% of the claim area.

Property and Ownership

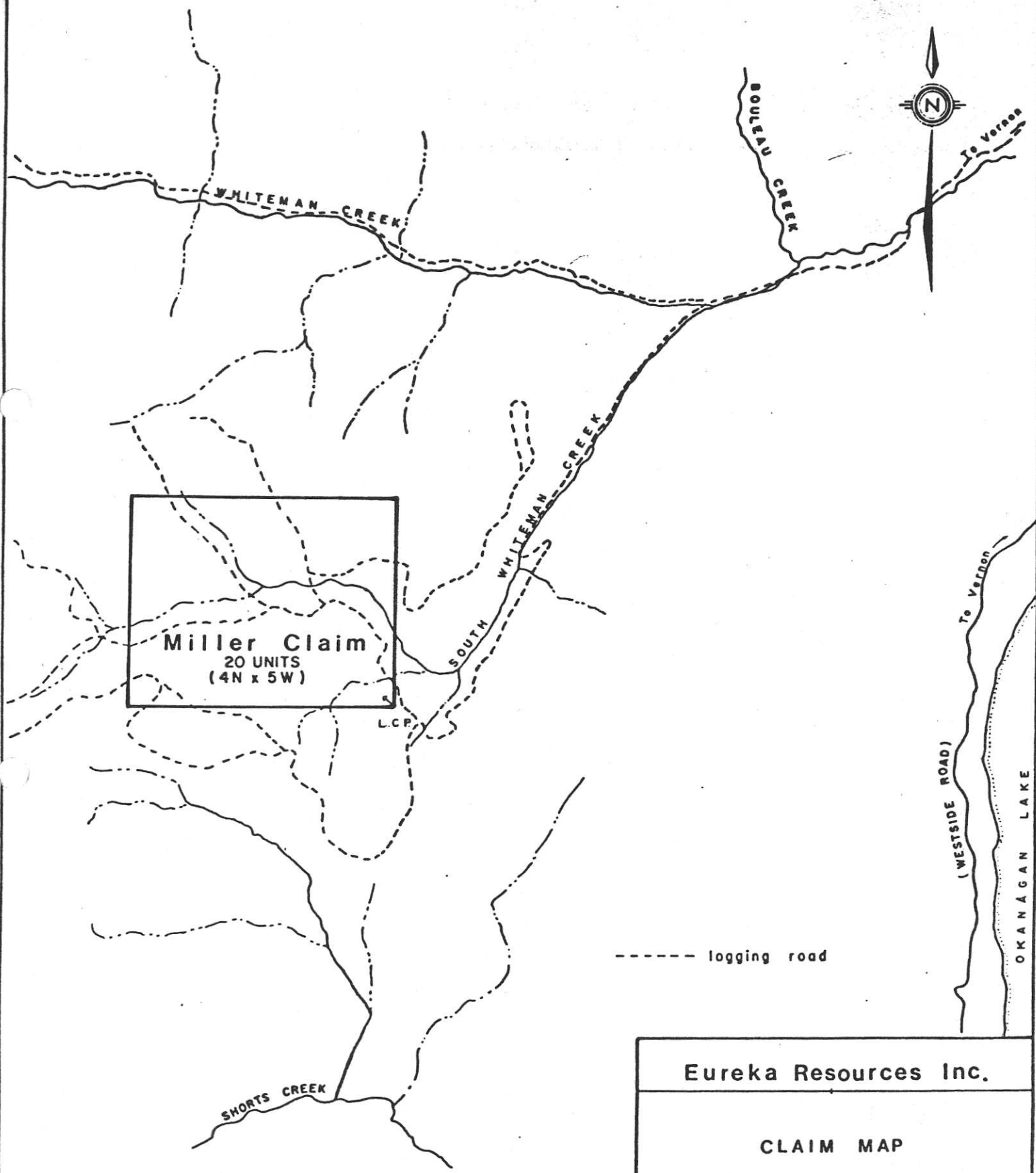
The Miller #1 property consists of one Modified Grid System claim totaling 20 units (approximately 500 hectares). The outline of the claim is shown on Figures 2 and 3. The following table summarizes all pertinent claim data.

Claim Name	Record Number	Units	Expiry Date
Miller #1	2049	20	November 15, 1987

The Miller #1 mineral claim is presently held by Eureka Resources, Inc., 837 East Cordova Street of Vancouver, B. C. under an option agreement with Mr. Brian Cross of Nelson, B. C.

History

There are records of small scale placer mining on both Whiteman and Bouleau Creeks intermittently from the turn of the century (Cairnes, 1932). However no lode source for these placer occurrences has been reported. More recently, the area in the general vicinity



Miller Claim
 20 UNITS
 (4N x 5W)

L.C.P.

Eureka Resources Inc.

CLAIM MAP
MILLER 1 CLAIM
 Vernon Mining Division
 NTS 82L 4E

Date: APRIL 1987 Scale: 1:50,000
 Drawn By: D.A. Leishman Fig. No. 2



of the Miller #1 claim has been explored for base metals, porphyry molybdenum and uranium with little success.

Approximately 3.5 kilometres southeast of the Miller #1 claim is a mineral occurrence described as the White Elephant deposit. Records dating back to 1921 indicate gold/silver mineralization is associated with quartz veining in granitic rocks. Ore from underground workings was processed in a small mill from which several shipments of concentrate were made during the 1920's and 30's.

A Mr. A. Brewer of Vernon, B. C. discovered gold and silver-bearing quartz veins within granitic rocks of the Okanagan Batholith in 1939. These occurrences are situated within the Brett claims (Huntington Resources Inc.) and are found approximately 8 kilometres northwest of the Miller #1 claim. Limited hand trenching has been carried out over the years, however the veins have proven to be of little economic interest.

During the 1960's and 1970's Cominco and Noranda were very active in the immediate area of the Miller #1 claim. However, their search was mainly directed towards porphyry copper and molybdenum targets. It is likely parts of the Miller #1 claim were included in these evaluations. Some of the intrusive rocks were found to be anomalous in molybdenum. A copper occurrence (Pat showing) was located by Noranda in 1967. The mineralization is said to consist of copper sulphides (bornite and chalcopyrite) in a brecciated zone within a syenite intrusive. Its approximate location is shown on Figure 3. Later, work by the above companies and Canadian Occidental Petroleum Ltd. was concentrated within the same areas and directed towards uranium. In 1983 Cominco conducted a limited geochemical evaluation of their Loch claims immediately to the north of the Miller #1 claim for precious metal deposits. Soil values obtained in arsenic and gold were generally low.

In 1983 a heavy mineral sampling of several tributaries of Whiteman Creek revealed highly anomalous gold values originating from the Brett property. Subsequent work by Huntington (1984-1986) resulted in the delineation of epithermal gold-silver mineralization

associated with a north to northwesterly trending shear/vein system. This mineralization was located approximately one kilometre southwest of the previously known mineralization on the Brett property.

With the exception of the 1986 programme carried out by Eureka Resources, Inc. the Miller #1 claim has no documented history of exploration towards the discovery of precious metal epithermal mineral deposits.

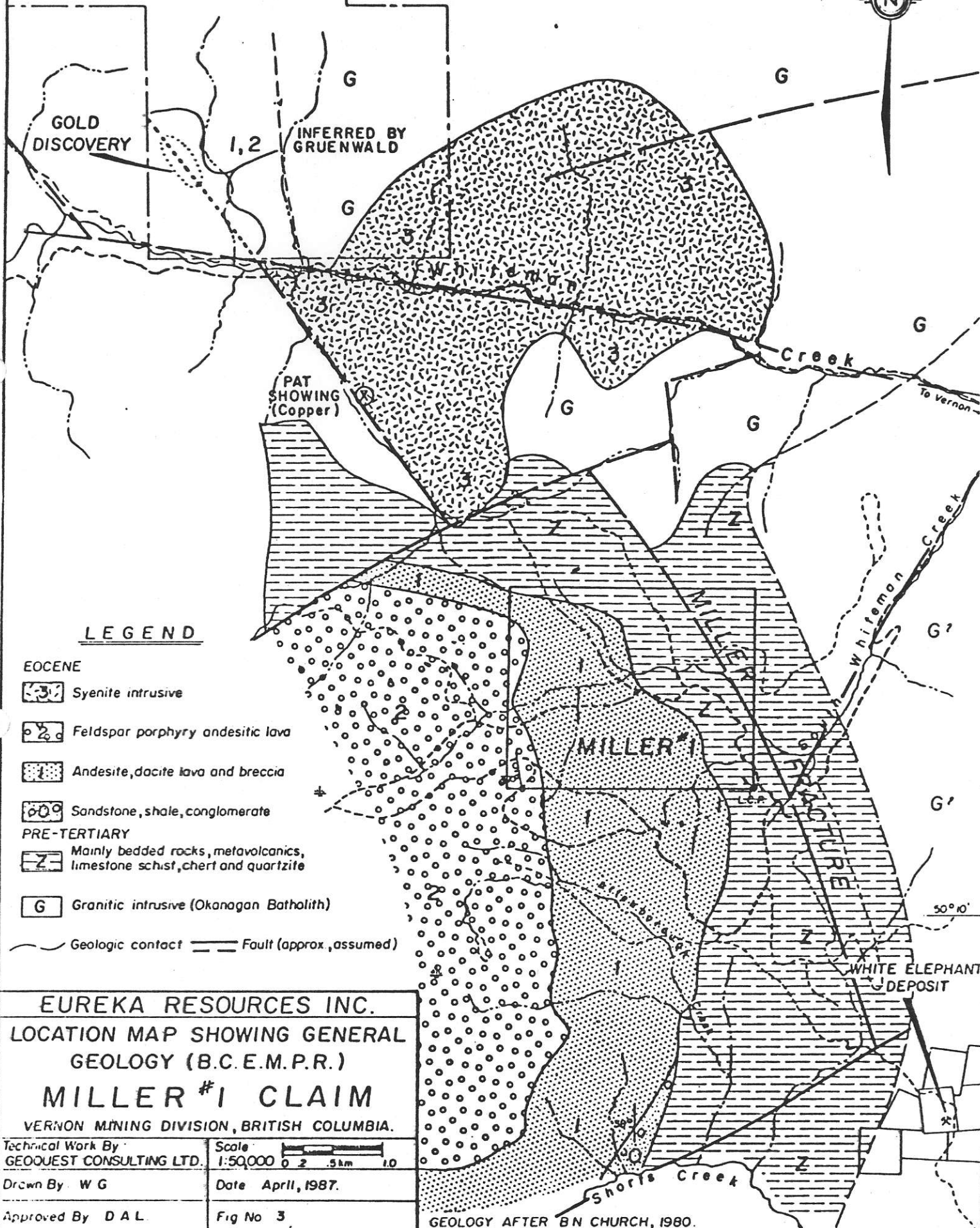
Regional Geology

Memoir 296 of the Geological Survey of Canada covers the area of the Vernon Map sheet. Mapping was completed in the late 40's and early 50's and reported on by Jones in 1959. This original mapping indicated the Miller #1 claim to be underlain by granitic rocks of Jurassic or Cretaceous age and to be part of the Okanagan Batholith. Unconformably overlying this unit were plateau type basalts of the Miocene Kamloops Group.

Recently, B. N. Church of the Ministry of Energy, Mines and Petroleum Resources has completed a map covering the area of the Miller #1 claim and shown a different picture. Figure 3 illustrates the work by Church. Here the northeast third of the Miller claim is shown to be underlain by pre-Tertiary bedded rocks that include metavolcanics, limestone schists, cherts and quartzites. These units are in turn overlain by Eocene andesitic and dacitic lavas, breccias and minor olivine basalt. These units cover most of the remainder of the property. The western boundary of the property is reportedly underlain by feldspar porphyritic andesitic lavas.

A north-northwest fracture has been mapped by Church in the eastern part of the Miller Claim. It is possible that the mineral occurrences on the Brett Claims and the White Elephant deposit lie on projections of this same fracture to the northwest and southeast respectively.

HUNTINGTON RESOURCES INC.
(BRETT CLAIMS)



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 (Okaganon Batholith)
- Geologic contact Fault (approx, assumed)

EUREKA RESOURCES INC.
LOCATION MAP SHOWING GENERAL
GEOLOGY (B.C.E.M.P.R.)
MILLER #1 CLAIM
 VERNON MINING DIVISION, BRITISH COLUMBIA.

Technical Work By GEOQUEST CONSULTING LTD.	Scale 1:50,000
Drawn By W G	Date April, 1987.
Approved By D A L	Fig No 3

GEOLOGY AFTER BN CHURCH, 1980.

To the northwest, Church's mapping show the fracture (herein called the Miller Fracture) to be offset 1 1/2 kilometers to the west by a north-northeasterly fault. It then carries on at least as far as Whiteman Creek, where it can be projected 1 1/2 km to the epithermal gold showing on the Brett claims. The case for the White Elephant deposit lying on the same fracture projected to the southeast, while not so convincing, is possible.

Property Geology

The only geological work done to date within the area of the Miller claim has been undertaken by Gruenwald for Eureka Resources, Inc. in the fall of 1986. The description below (slightly abbreviated) is taken from work by Gruenwald (1986). Refer to Figures 3 & 4.

" On a local scale the geology of the Miller property correlated roughly with that indicated by the B. C. Government mapping, however, distinct differences are present. Due to the relatively gentle nature of much of the property overburden cover is extensive though not thought to be thick. The majority of rock outcroppings are found in the northeastern sector of the property.

Located in the southeastern portion of the Miller property are outcrops of fine to coarsely fragmental metavolcanics. These rocks correlate with Unit Z mapped by Church (Figure 3). In the prominent canyon on the eastern border of the Miller claim are large outcrops of fine grained intermediate to basic volcanics. Rock samples consist of a fine grained, dense, basic volcanics with large (2-5 cm.) clasts of rounded crystalline limestone. These clasts are suggestive of a rock whose source is the underlying pre-Tertiary terrain. Another sample, also found in this canyon area consists of a very fine grained, pale

green, dense volcanic rock displaying an unusually high specific gravity. This rock may be a result of "skarnification" associated with underlying intrusive activity and or tectonic processes along the fracture zone inferred in this area (the Miller Fracture).

Pieces of feldspar porphyritic rock occur as float in the stream bed (South Whiteman Creek) and upstream of the above area. Similar or related rocks are seen in outcrop along a logging road less than 600 metres to the northwest. This rock type is closely associated with and may in fact be dyke material cutting massive, purplish vesicular basalts, andesite and tuffaceous (?) rocks. Similar volcanics are observed 0.4 kilometres westerly along this road as purplish agglomeritic to vesicular and/or amygdaloidal andesites. This latter rock type may correlate with Unit 1 mapped by Church.

Located in the extreme northeastern corner of the property is a roadside exposure of dark gray, fine grained, massive basalt (Unit 1) that was observed to overlie well bedded sediments. These sediments consist of impure (volcanically derived?) sandstone and siltstones that locally show evidence of soft sediment dragfolding and deformation. Attitudes indicate a north by northeasterly strike and gentle dip (20) to the NNW. This rock type is believed to be basal to the Unit 1 volcanics and mapped by Church further south near Shorts Creek as Unit 0 (Figure 3).

Limonitic felsic volcanics, which are most likely members of Unit 1, crop out along the main road approximately 350 metres easterly of Line 6 00S, 15 00E. Found as float in this vicinity was a piece of coarse polymictic pyroclastic rock similar to that seen on the Brett property and known in several cases to be mineralized there. Unfortunately, however, the source outcrops of the float were not found on the Miller #1 claim.

Outcrops in the west and southwestern portions of the property are generally scarce but those seen are intermediate to basic, fine grained volcanics, likely members of Unit 1. Those outcrops found near the western extremities of Line 6S, Line 8S and Line 10S also appear to be of this type and unit designation. "

Two fractures are interpreted to cross the property. The most notable is that along the north-northwesterly trending, deeply incised canyon of South Whiteman Creek near the eastern border of the property (the Miller Fracture). The second feature is a north-northwesterly lineament along a small tributary of South Whiteman Creek near the north-central boundary of the Miller # 1 claim (Figure 4).

Mineralization

There has been no mineralization found on the Miller #1 Claim. The only record of any precious metal occurrences in the immediate area are the White Elephant deposit located 3.5 kilometres to the southeast and the Brett property located 7 kilometres northwest of the centre of the Miller #1 claim. Placer gold has been found in the Whiteman/Bouleau Creek drainages, however, their lode sources have never been identified (Figure 1). A copper occurrence of bornite and chalcopyrite in a breccia zone in syenite, syenite porphyry, and trachyte porphyry was recorded on the Pat ? claims by work completed by Noranda Exploration Company Ltd. in 1967 (Figure 3).

The White Elephant deposit has been described as a large (15-20 metre wide) vein zone containing a central 5-7 metre wide ore shoot with values in gold, silver, bismuth, tellurium and tungsten. The host rocks are granitic and likely part of the Okanagan Batholith. (GSC Memoir 296, page 146)

The Brett property hosts two types of mineralization. The first and earliest recognized are "mesothermal type" quartz veins containing chalcopyrite and galena as well as gold and silver. These narrow (less than 0.5 metre) vein occurrences are hosted by granitic rocks of the Okanagan Batholith. Assays of up to 1.16 oz Au/ton and 5.21 oz Ag/ton have been reported by Huntington.

The second type of mineral occurrence are epithermal type shear/vein zones that carry

substantial amounts of precious metal mineralization. This mineralization is associated with north to northwesterly trending structures cutting a thick sequence of Tertiary age andesites, basalts and related rocks. Feldspar porphyry dyke swarms, thought to be related to the nearby Tertiary syenite stocks, are closely associated with and trend in the same direction as the mineralized structure. In addition to the shear/vein structure, mineralization has also invaded certain host rocks such as tuffaceous horizons.

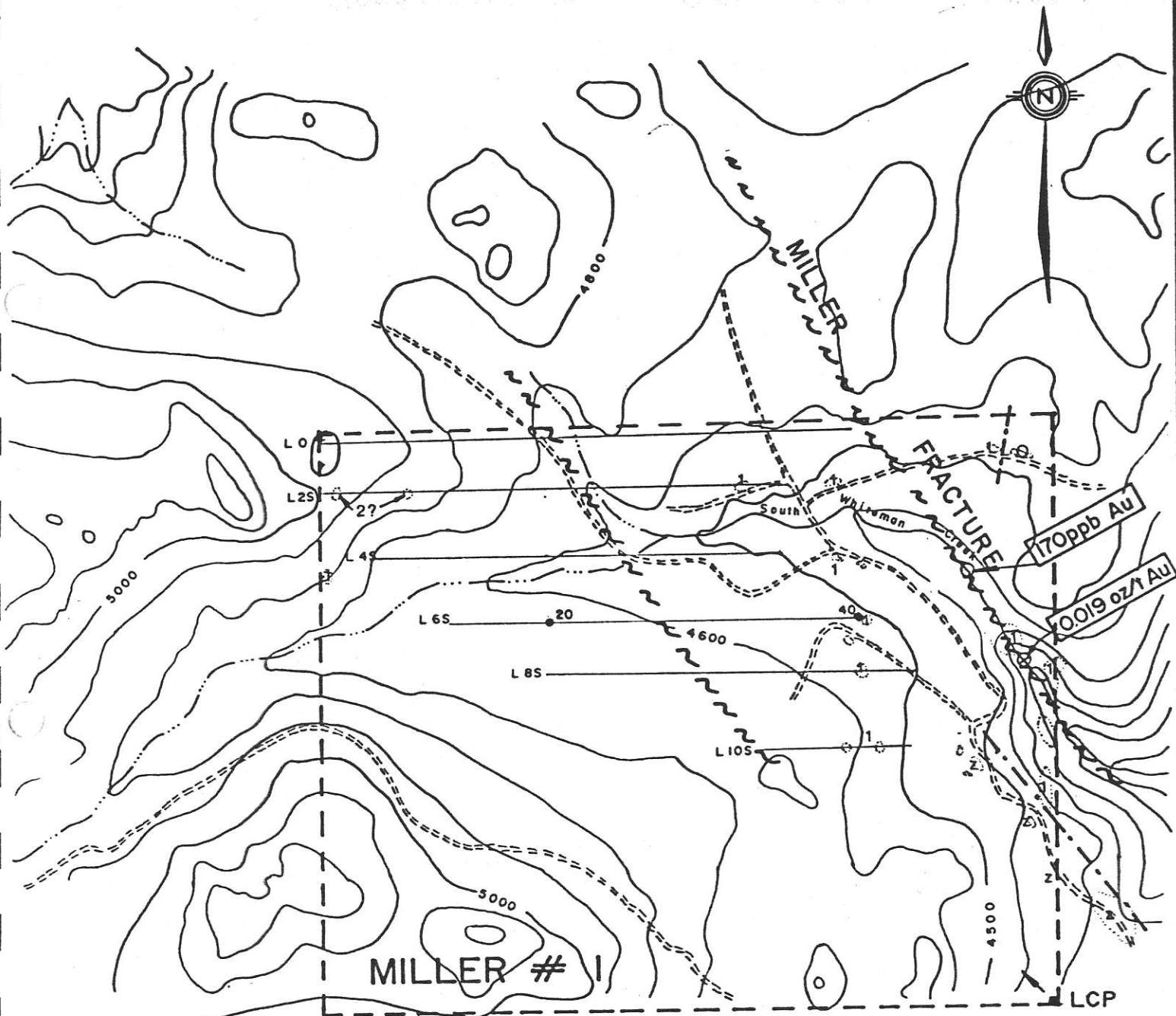
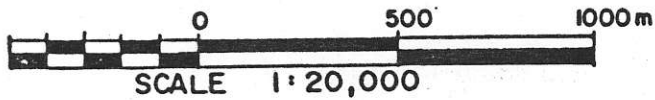
The local geology and favourable position of the Miller #1 claim with regard to fractures suggest potential for finding epithermal type mineralization within the area of the claim group.

Geochemistry

A limited programme of soil sampling was conducted over the northern third of the Miller #1 claim in July 1986 by Eureka Resources, Inc. A total of 145 soil samples were taken at 50 metre intervals over the grid lines illustrated on Figure 4. In addition 2 silt and 2 pan concentrate samples were taken. The soil, silt and pan samples were analysed by Kamloops Research and Assay Laboratory Ltd. by Atomic Absorption methods.

Soil sample results were generally low. Only two samples returned values greater than 5 ppb. These sites (both on Line 6 South) are illustrated on Figure 4. However as sample sites were spaced at 50 metre intervals epithermal vein mineralization, even as found on the Brett property of Huntington Resources, Inc., could be missed.

Silt and pan concentrate samples were taken together at 2 sites on the upper reaches of South Whiteman Creek (Figure 4). One pan concentrate sample returned a value of 0.019 oz/t gold near the eastern boundary of the claim while the silt sample taken approximately 300 metres upstream returned an anomalous value of 170 ppb Gold. The irregularity of the



TERTIARY (EOCENE)

- | | |
|--|--|
| <p>2 Feldspar porphyry andesitic lava</p> <p>1 Andesite, dacite lava breccia and basalt</p> <p>0 Sandstone, shale, conglomerate</p> | <p>● Anomalous soil, Gold in ppb</p> <p>○ Anomalous silt, Gold in ppb</p> <p>⊗ Anomalous pan, Gold in oz/t</p> |
|--|--|

PRE-TERTIARY

- | | |
|---|--|
| <p>Z Mainly bedded rocks including metavolcanics, limestone, schists, cherts, and quartzites</p> | <p>○ Outline of outcrop</p> <p>--- interpreted contact</p> |
|---|--|

To accompany a report by Leishman & Campbell Geology after Gruenwald

EUREKA RESOURCES INC.

**COMPILATION PLAN
MILLER CLAIM**

Vernon Mining Division

Drawn by D. A. Leishman	Scale 1:20,000
Date: April 1987	Figure 4

anomalous values from the two sample sites has been explained by Gruenwald in that one sample (pan concentrate) represents mechanically concentrated gold while the other (silt) represents a chemical anomaly. It does appear that the source of these anomalies is emanating from within the limits of the Miller #1 claim. It should be noted that both of these two anomalous values are associated with the northwesterly fracture (the Miller Fracture) as indicated by Church and Gruenwald.

The geochemical values obtained in the soil, silt and pan concentrate sampling of the Miller #1 claim indicate there is potential for locating precious metal epithermal vein deposits similar to that found on the nearby Brett property. However more detailed sample spacing is necessary.

Conclusions and Recommendations

The Miller #1 claim is relatively unexplored. However geological and geochemical data as illustrated in Figures 3 & 4 and described within this report indicate that the Miller #1 claim lies in an area favourable for the potential discovery of precious metal epithermal vein deposits.

The work completed to date on the Miller #1 claim has been of a very reconnaissance nature. However it has been demonstrated that anomalous values in soils, silt and pan concentrate samples exist within the area of the Miller #1 claim. The hypothesis of potential mineralization being related to northwest trending linears appears to be valid. However further work is necessary to adequately demonstrate this.

A two phase programme of exploration is suggested for the Miller #1 claim. This would include detailed soil sampling and geology over the entire claim area as well as a magnetometer and conductivity survey. A second phase of more detailed soil sampling, geophysics and trenching would then be completed over the areas of anomalous response. A budget proposal of \$70,400 is presented.

Douglas A. Leishman.

Douglas A. Leishman, B.Sc.

K. V. Campbell

K. V. Campbell, Ph.D.

April 30, 1987

Budget Proposal

Phase 1

Geological Mapping and Supervision	\$5,000.
Geochemical Soil Sampling	5,000.
Assays and Analyses	9,000.
Magnetometer and VLF-EM Surveys	13,000.
Data collation, drafting and report preparation	<u>3,500.</u>
Total	\$35,500.
10% contingency	<u>3,550.</u>

Total Costs Phase 1 **\$39,050.**

Phase 2

Detailed soil sampling and mapping	\$5,000.
Assays and analyses	8,000.
Detailed geophysical surveys	3,000.
Trenching	8,000.
Reporting, drafting, printing	<u>4,500.</u>
Total	\$28,500.
10 % contingency	<u>2,850.</u>

Total Costs Phase 2 **\$31,350.**

Total Costs Proposed Programme (Phase 1 & 2) **\$70,400.**

References


- Brynelson B. Geochemical Report on the Pat Claims, Whiteman Creek, Noranda Exploration Company Ltd., Assessment Report No. 1039, Fall 1967
- Church B. N. Geology of the Terrace Mountain Outlier, Revised Preliminary Map 37, B. C. Ministry of Energy, Mines and Petroleum Resources, 1980
- Cairnes Report on Pre-Cambrian Gold Mines, White Elephant Deposit, Annual Report of the Ministry of Mines 1932 , Page A143
- Gruenwald W. Geological and Geochemical Report on the Miller # 1 Claim, Vernon Mining Division, B. C., for Eureka Resources Inc., December 1986
- Gruenwald W. Summary Report on the Brett Property, Vernon Mining Division, B. C., for Huntington Resources Inc., January 1987
- Hill J. R. Geology and Geochemistry of Bald Claim Group, Assessment Report No. 7332, 1978
- Jones A. G. Vernon Map Area, B. C., G.S.C. Memoir 296, (Map 1059A) 1959
- MacDonald, Colin Geology and Geochemistry of the Whit Claim Group, Canadian Occidental Petroleum Co. Ltd., Assessment Report No. 5692, 1975
- MacDonald, Colin Geochemistry of the Whit 19 Claim Group, Canadian Occidental Petroleum Co. Ltd., Assessment Report No. 6052, August 1976
- MacDonald, Colin Geochemical Report on the Whit Claim, Canadian Occidental Petroleum Co. Ltd., Assessment Report No. 6572, 1976

- Mehner, D.T. Geochemical Report on the Loch Claims, Cominco Ltd., Assessment Report No. 11936, January 1984
- Osatenko, M. J. Geochemical and Geological Report on the Wit Property (Loch Claims), Cominco Ltd., Assessment Reports No. 7811, 8905, 1979
- Robertson, D. M. Geology and Geochemistry of Bald Claim Group, Canadian Occidental Petroleum Co. Ltd., Assessment Report No. 7973, Fall 1979
- Ministry of Energy, Mines and Petroleum Resources, Mineral Inventory File
N.T.S.82LSW

Statement of Qualifications

I, Kenneth Vincent Campbell, resident of Wells, Province of British Columbia, hereby certify as follows:

1. I am a Consulting Geologist with K.V. Campbell and Associates Ltd. in Wells, British Columbia, V0K 2R0
2. I graduated with a degree of Bachelor of Science, Honours Geology, from the University of British Columbia in 1966, a degree of Master of Science, Geology, from the University of Washington in 1969 and a degree of Doctor of Philosophy, Geology, from the University of Washington in 1971.
3. I have practiced my profession for 21 years. I am a Fellow of the Geological Association of Canada (F0078).
4. This report is based on my examination of the work and reports of D. A. Leishman and W. Gruenwald.
5. I hold no shares or interest in Eureka Resources, Inc. and nor do I expect to receive any.
6. Permission is hereby granted to Eureka Resources, Inc. to use this report for financing purposes, and to satisfy the requirements of the Securities Commission, and the Vancouver Stock Exchange.


K. V. Campbell, Ph.D.
Geologist

Vancouver, British Columbia

April 30, 1987