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9/84

X-CALIBRE RESOURCES LTD.
TYAUGHTON LAKE ROAD
GENERAL DELIVERY
GOLD BRIDGE, B.C. V0K 1P0
(604) 238-2374

Preliminary Report on the
Gold Exploration Potential
of the
Anderson Lake Block
Lat. 50°35' Long. 122°30'
NTS 92-J-9&10
Lillooet Mining Division, B. C.

for

X-Calibre Resources Ltd.,
Gold Bridge, B. C.

by

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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,749

part 1
of 2

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1.0 Summary and Conclusions

Good geological evidence supports the theory that the Cadwallader Structural Complex, host to the Bralorne and Pioneer Gold Mines, extends onto the Anderson Lake Block held by X-Calibre Resources Ltd., Gold Bridge, B. C.

Known mineral occurrences on the property exhibit characteristics similar to gold mineralization from the Bralorne Camp, ie:

- 1) quartz veins with ribbon structure.
- 2) occurrence of mariposite within and bordering veins.
- 3) occurrence of ore grade material from prospects within the Cadwallader Structural Complex on the property.
- 4) occurrence of coarse placer gold in McGillivray Creek.
- 5) the presence of northwest structures on the property.

Gold assays up to 4.88 oz/ton which occur in northwest faults, as found at the Anderson Lake Mine, suggest an excellent exploration target for gold mineralization in shear structures. Occurrences of copper-silver-gold deposits related to the Bendor Batholith in the area are as likely to occur on the X-Calibre property where similar geological environments exist.

It is recommended that a three phase, \$370,000 exploration programme be initiated to bring the property to a stage of diamond drilling.

2.0 Introduction

This report encompasses a literature research on available information concerning geology and mineralization of the Anderson Lake Block of mineral claims, X-Cal 1 to 19 held by X-Calibre Resources Ltd., Gold Bridge, B. C.

2.0 Introduction (cont.)

The X-Calibre library of references was made readily available to the author in compiling this data.

3.0 Location and Access

The 19 claims are located west-northwest of Anderson Lake at Lat. $50^{\circ}35'$ Long. $122^{\circ}30'$ on NTS map areas 92-J-9 and 10. The town of D'Arcy, B. C. is located 5 miles to the south of the centre of the claim group. (Figure 1)

The property is accessible by logging road, 2 miles upstream from the mouth of McGillivray Creek to a point in the vicinity of the Anderson Lake Minesite. From there, a trail exists along McGillivray Creek to McGillivray Pass and further to the northwest. Whether this trail can be negotiated by trail bike should be the subject of further investigation.

4.0 Current Claim Status

A total of 19 claims forming the Anderson Lake Group are held in good standing by X-Calibre Resources Ltd., Gold Bridge, B. C.

| <u>Claim</u> | <u>Record No.</u> | <u>Anniversary Date</u> |
|--------------|-------------------|-------------------------|
| X-Cal #1 | 2329 | March 28, 1984 |
| X-Cal #2 | 2330 | March 28, 1984 |
| X-Cal #3B | 2331 | March 28, 1984 |
| X-Cal #4 | 2332 | March 28, 1984 |
| X-Cal #5 | 2333 | March 18, 1984 |
| X-Cal #6 | 2334 | March 28, 1984 |
| X-Cal #7 | 2335 | March 28, 1984 |
| X-Cal #8 | 2336 | March 28, 1984 |
| X-Cal #9 | 2337 | March 28, 1984 |
| X-Cal #10 | 2338 | March 28, 1984 |

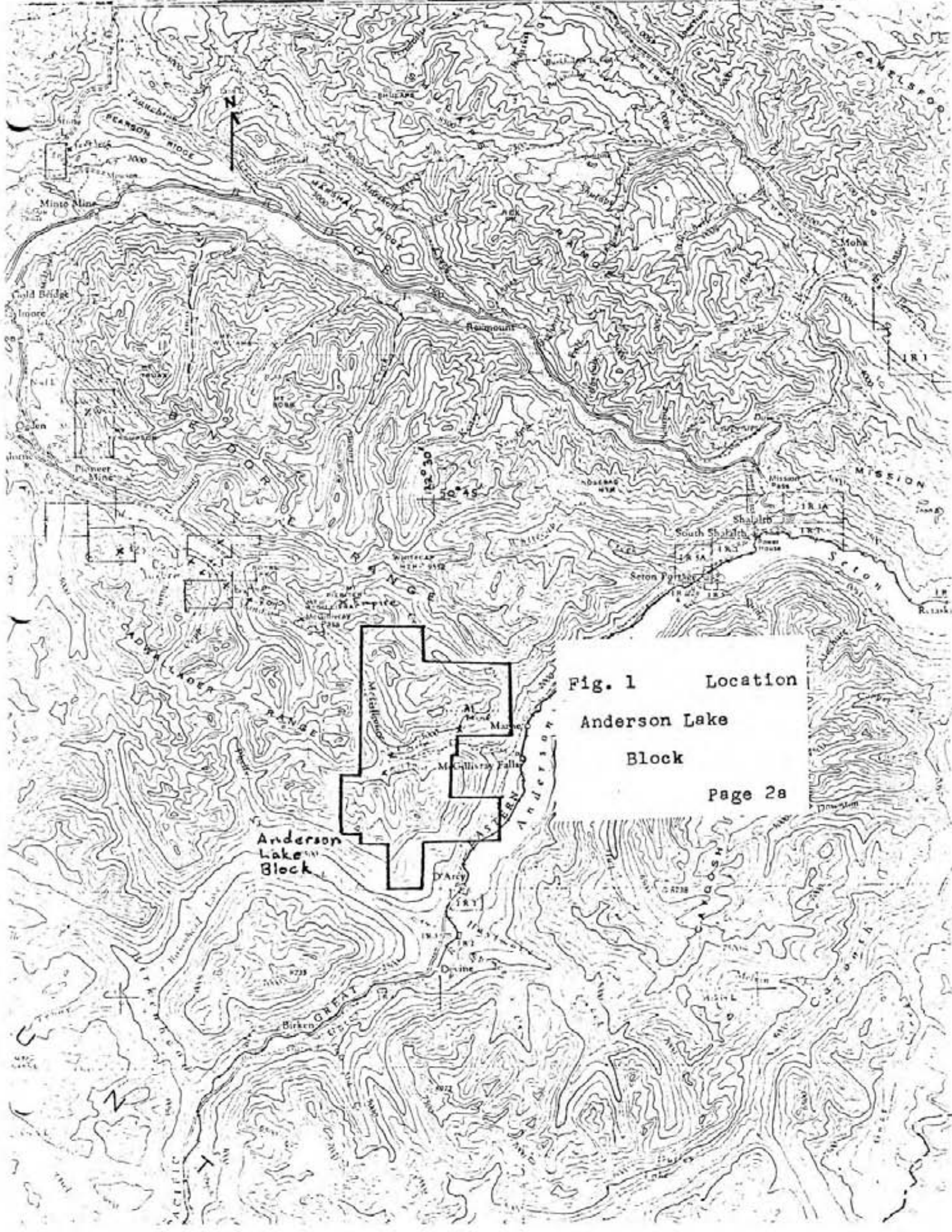


Fig. 1 Location
Anderson Lake
Block
Page 2a

Anderson
Lake
Block

4.0 Current Claim Status (Cont.)

| <u>Claim</u> | <u>Record No.</u> | <u>Anniversary Date</u> |
|--------------|-------------------|-------------------------|
| X-Cal #11 | 2339 | March 28, 1984 |
| X-Cal #12 | 2340 | March 28, 1984 |
| X-Cal #13 | 2341 | April 5, 1984 |
| X-Cal #14 | 2342 | March 28, 1984 |
| X-Cal #15 | 2343 | March 28, 1984 |
| X-Cal #16 | 2344 | April 5, 1984 |
| X-Cal #17 | 2345 | April 5, 1984 |
| X-Cal #18 | 2346 | April 5, 1984 |
| X-Cal #19 | 2347 | April 5, 1984 |

5.0 Physiography

The property is characterized by steep rugged mountains from 1000 ft. ASL to alpine peaks at 8000 ft. ASL. The tree line is approximately at the 6000 ft. level.

McGillivray Creek, draining the property to the east into Anderson Lake divides the property into two main mountainous masses.

Rock outcrops are ubiquitous at alpine elevations, but are more sporadic at the lower forested elevations, as can be determined from the examination of aerial photographs.

6.0 General Geology of the Bridge River Area

The geology and mineral deposit descriptions of the Bridge River Area are reported by McCann(1922), Cairnes (1937, 1943), Roddick and Hutchison (1973), Woodsworth (1977) and various government and assessment publications. (Figure 2)

The northeastern margin of the Coast Crystalline Belt trends north-westerly through the area. The northeastern flank of this belt of plutonic rocks is represented by granodiorite to quartz diorite of the Late

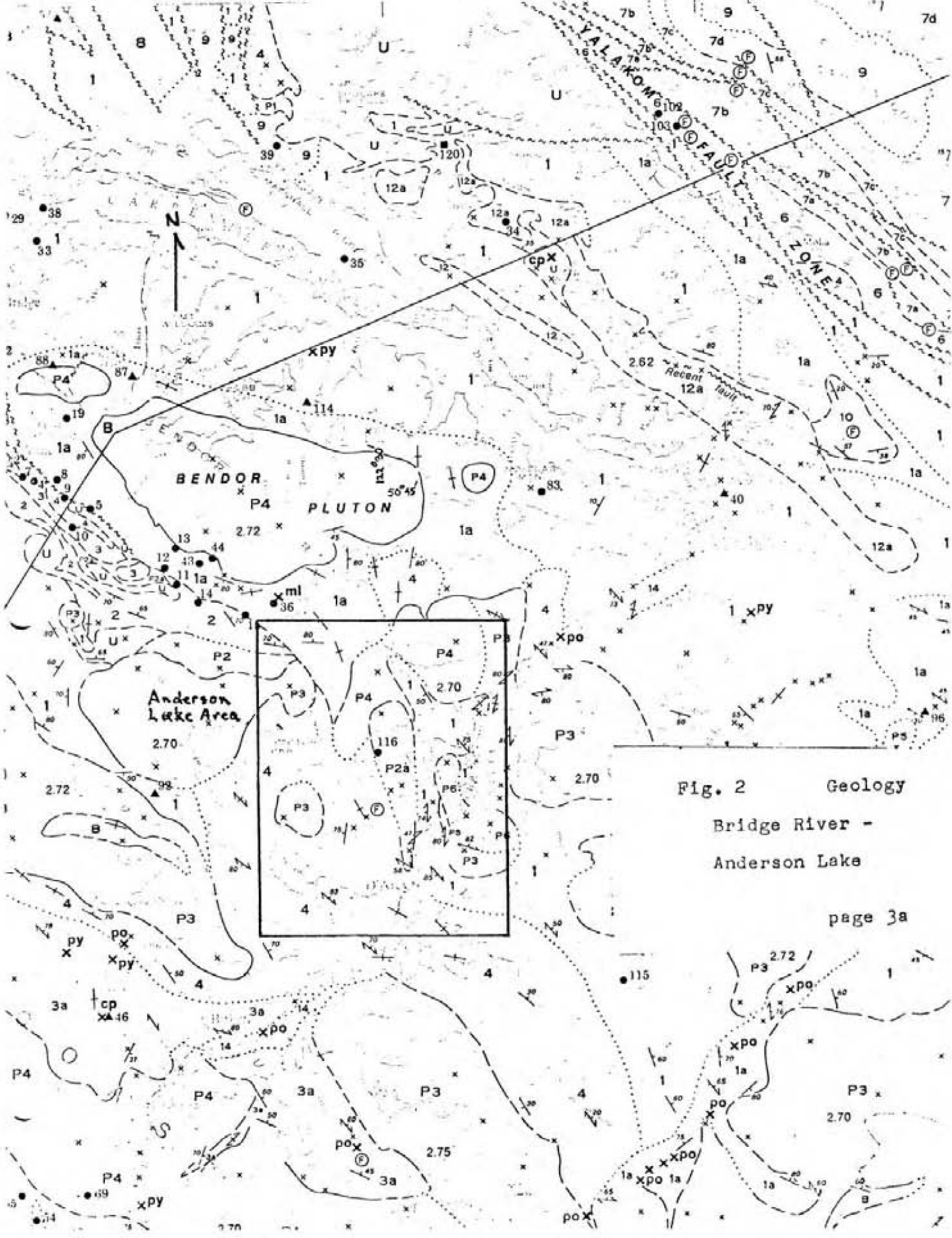


Fig. 2 Geology
 Bridge River -
 Anderson Lake

- GENOZOIC**
- QUATERNARY**
PLEISTOCENE AND RECENT
- 14 Unconsolidated alluvial and glacial deposits
- TERTIARY**
MIOCENE (?)
- 13 Basalt and rhyolite flows
- 12 Rhyolite and dacite breccia, tuff and flows;
 12a, Rexmount Porphyry (intrusive equivalent of 12?)
- 7 P4a Miarolitic granodiorite and syenodiorite
- LOWER TERTIARY**
- 11 Andesite flows and breccia; basalt and minor dacite
- 10 Shale, siltstone, sandstone, arkose and conglomerate
- MESOZOIC**
- CRETACEOUS**
UPPER CRETACEOUS
- P4 SCUZZY PLUTON (K-A 70 m.y.): granodiorite
- KINGSDALE GROUP**
- 9 Arkose, greywacke, shale and minor conglomerate
- LOWER CRETACEOUS**
TAYLOR CREEK GROUP
- 8 Chert-pebble conglomerate, black banded limy shale, green tuff, volcanic breccia, andesite and basalt
- JACKASS MOUNTAIN GROUP**
- 7 Undifferentiated; 7a, interbedded carbonaceous argillite and greywacke; minor conglomerate and coal; 7b, greywacke; pebble conglomerate, argillite and gritty sandstone; 7c, argillite; conglomerate and greywacke; 7d, massive greenish greywacke, argillite, gritty sandstone and pebble conglomerate
- JURASSIC AND CRETACEOUS**
UPPER JURASSIC AND LOWER CRETACEOUS
RELAY MOUNTAIN GROUP
- 6 Argillite; greywacke and pebble conglomerate
- JURASSIC**
LOWER JURASSIC
- 5 Argillite and shale; minor sandstone, limestone and pebble conglomerate
- TRIASSIC**
UPPER TRIASSIC
- U Ultrabasic rocks
- 4 HURLEY FORMATION: Thin-bedded limy argillite, phyllite, limestone, tuff, conglomerate, agglomerate, andesite, and minor chert
- 3 PIONEER FORMATION: Greenstone derived from andesitic flows and pyroclastic rocks; 3a, andesite breccia, tuff and flows, greenstone; minor rhyolite breccia and flows, slate, argillite, limestone and conglomerate
- 2 NOEL FORMATION: Thin-bedded argillite; chert, conglomerate and greenstone
- MIDDLE TRIASSIC AND (?) OLDER**
BRIDGE RIVER GROUP (FERGUSON GROUP)

2 NOEL FORMATION: Thin-bedded argillite; chert, conglomerate and greenstone

MIDDLE TRIASSIC AND (?) OLDER

BRIDGE RIVER GROUP (FERGUSON GROUP)

1 Chert, argillite, phyllite and greenstone; minor limestone, schist; 1a, metamorphosed rock of map-unit 1; mainly biotite schist

METAMORPHIC AND PLUTONIC ROCKS

(Mostly of unknown age)

B Metasedimentary rocks, mainly micaceous quartzite, biotite-hornblende schist, and minor schists bearing garnet, staurolite and possibly sillimanite

A Granitoid gneiss, migmatitic complexes, minor amphibolite and biotite schist

P6 Granite

P5 Quartz monzonite




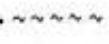

P4 Granodiorite; 4a, microplitic granodiorite and syenodiorite

P3 Quartz diorite

P2 Diorite; 2a, Bralorne Intrusions: Augite diorite, gabbro, minor soda granite and quartz diorite

P1 Gabbro

U Ultrabasic rocks: serpentine, peridotite, dunite

| | |
|---|---|
| Map-unit..... |  |
| Intrusive episode..... |  |
| Mean specific gravity of specimens from pluton | 2.85 |
| Outcrop examined (where not otherwise indicated by attitude or other symbol)..... | x |
| Geological boundary (defined, approximate, assumed) |  |
| Limit of geological mapping..... | |
| Bedding (horizontal, inclined, vertical, dip not known)..... |  |
| Foliation (horizontal, inclined vertical, dip not known) |  |
| Fault or shear zone |  |
| Thrust fault |  |
| Fossil locality | Ⓣ |
| Minor mineral occurrence observed (Chalcopyrite, cp; magnetite, ma; malachite, ml; pyrrhotite, po; pyrite, py)..... | x |
| Accuracy of location of mineral property (from Mineral Inventory Map, B. C. Dept. Mines and Petroleum Resources) | |
| Known within radius of 1000 feet)..... | ● |
| 1000 feet to 2 miles..... | ▲ |
| Not known within radius of 2 miles..... | ■ |

50°

Geology by J. A. Roddick and W. W. Hutchison, 1970 and from earlier reports

To accompany Paper 73-17 by J. A. Roddick and W. W. Hutchison

This preliminary edition may be subject to revision and correction

6.0 General Geology of the Bridge River Area (Cont.)

Cretaceous Bendor Batholith which intrudes the southwestern flank of a paralleling antiform. The antiform has a maximum width of 45 km and plunges gently northwest.

With the exception of some exposures of schist and gneiss, this antiformal structure consists of a package of complexly deformed Triassic volcanics and clastics, metamorphosed to lower greenschist facies.

The most widespread formation which is exposed in the core of the antiform is the Middle Triassic Bridge River or Fergusson Group of chert, argillite and greenstone. Conformably overlying these rocks is the Upper Triassic Cadwallader Group consisting of the basal Noel Formation clastics, the middle Pioneer Formation volcanics and the upper Hurley Formation calcareous sedimentary rocks.

In the Cadwallader Creek Valley, northwest to Eldorado Creek and southeast to Anderson Lake is a belt of plutonic rocks collectively mapped as the Bralorne Intrusions. These intrusives occur along a belt of folded and faulted Cadwallader Group rocks and serpentine of the President Intrusives, forming the Cadwallader Structural Complex. The Bralorne Intrusives are extraordinarily complex and variable in composition from gabbro, augite diorite, hornblende diorite, "greenstone diorite", quartz diorite and soda granite to albitite. The phases of soda granite are of particular economic significance as they are related to the gold deposits of the Bralorne-Pioneer Mining District. Here, gold mineralization averaging 0.52 ounces/ton in ribboned quartz veins have produced some four million ounces of gold throughout its production history since 1932.

7.0 Property Geology

7.1 Introduction

Bralorne intrusive, granite, quartz monzonite, granodiorite and quartz diorite of the Bendor Batholith intrude Middle Triassic Fergusson volcanics and clastics and Hurley Formation clastic rocks of Upper Triassic age. (Roddick & Hutchison, 1973) (Woodsworth, 1977).

Gold mineralization at the contact with Bralorne Intrusive has been reported in ribboned quartz vein structures carrying malpasite, both similar qualities to Bralorne-Pioneer mineralization. Assays of up to 8.6 feet of 0.78 ounces/ton gold have been reported at the Anderson Lake Mine.

7.2 Lithology

7.2.1 Fergusson Group

Roddick & Hutchison (1973) and Woodsworth (1977) have only served to differentiate between lower metamorphic and higher metamorphic phases of Fergusson Group rocks. They mapped more highly metamorphosed Fergusson Group in the northwest portion of the property between a quartz diorite intrusive to the southwest and granodiorite to the southeast.

McDougall (1933) describes the host rock of the quartz veins of National Gold Mines (Anderson Lake Mine) as schist, slate, chert, phyllite, limestone and quartzite, therefore, the Fergusson Group in the area consists mainly of clastic rocks.

7.2.2 Noel Formation & Pioneer Formation

Neither of these rock units have been mapped on the Anderson Lake Property.

7.2.3. Hurley Formation

Argillaceous and tuffaceous sediments of the Hurley Formation occur in the southwestern area of the property. These rocks are, in part, calcareous and have been metamorphosed to phyllite in places. (GSC Summ. Rpt., 1933)

7.2.4 Bralorne Intrusive

A north-south trending elongate body of Bralorne Intrusive has been mapped through the centre of the property measuring 10km in length and up to 2.5km in width separating Fergusson from Hurley sediments.

The significance of this intrusive body had not been realized until Roddick & Hutchison (1973) mapped it as Bralorne augite diorite. They describe the intrusive as "very heterogeneous and grades irregularly from greenstone, through dioritized greenstone to diorite some of which is coarse grained and some unusually leucocratic."

7.2.5 Bendor Intrusive

Various plugs of Bendor Intrusive occur on the property, intruding both Fergusson and Hurley sediments. A tongue of granodiorite from a major body to the northeast trends southwesterly across the property. A granite-quartz monzonite plug, variably miarolitic, occurs in the southeast corner of the property. Two quartz diorite plugs occur in the southwest corner and on the west border of the claim group.

7.3 Structure

A structural interpretation suggests that the body of Bralorne Diorite marks the continuation of the Cadwallader Structural Complex, but has been offset to the east by a left lateral fault trending at approximately $030^{\circ}AZ$ from a point located approximately at the forks of McGillivray Creek.

7.3 Structure (Cont.)

Airphoto lineaments and pre-faulting reconstruction of the geology verify the existence of such a fault.

7.4 Mineralization

7.4.1 Anderson Lake Mine

Information on this mine has been obtained from a number of Minister of Mines Annual Reports (B. C.)

1897 - Originally staked by the Brett Brothers of Lillooet, B. C.

1900 - 1903 - Anderson Lake Mining and Milling Co. acquired the claims.

Two drifts had been driven into a quartz vein of 6 to 8 ft. in width. A third tunnel was driven for 150 ft.

a) No 1 drift - elev. 3300 ft - 150 ft. length

b) No 2 drift - elev. 3450 ft - 500 ft. length

c) No 3 drift - 150 ft length

1929 - McGillivray Creek Gold Mines Ltd. acquired the property.

1932 - National Gold Mines Ltd. acquired the mine.

1933 - McDougall (1933) reports assays of 0.247 oz/ton Au over an average width of 5 feet from 112 samples on the No. 3 tunnel. His summary of workings differs somewhat from that of the 1910 report as follows:

No. 1 tunnel - upper - caved - 350 ft. in length

No. 2 tunnel - 125 ft. below No. 1

- 600 ft. in length - vein cut off by fault, fault mineralized Au - 4.88 oz/ton over 14 inches.

No. 3 tunnel - 150 ft. below No. 2

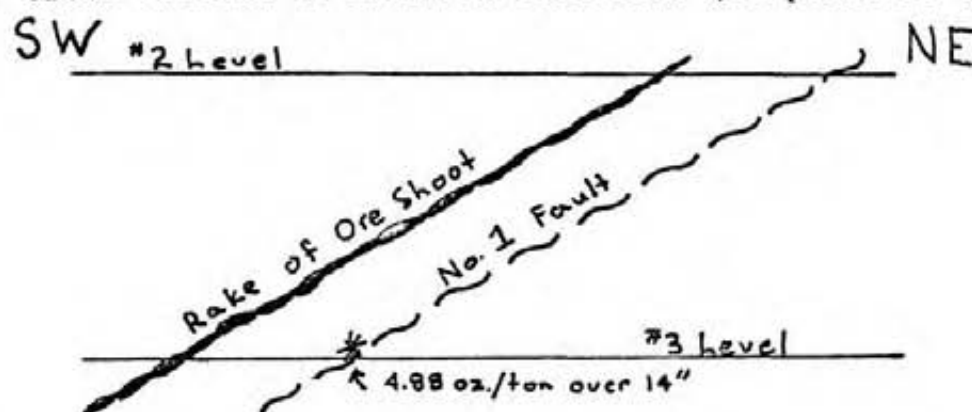
- 750 ft. in length, 600 ft driven in 1933

- vein cut off by fault at face and splits into east & west vein.

7.4.1 Anderson Lake Mine (Cont.)

1934 - The report by Author Unknown (1934) provides assay plans of the No. 2 and No. 3 levels. Assays of up to 8.6 ft. of 0.78 ounces/ton gold are reported. This assay and a number of others over 6.0 to 7.8 ft. at 0.22 to 0.67 oz/ton gold occur on both levels indicating an ore shoot raking at 30° to the southwest above the cutoff fault trending at $140^\circ/30^\circ$ SW. This is shown in Fig. 3

Fig. 3 Cross Section of Anderson Lake Mine (in plane of vein)



1947 - Golden Contact Mines Ltd. acquired the property. A total of 1095 feet of diamond drilling extended the western segment of the vein another 1000 feet, probably in a northerly direction. The Mac tunnel driven a total of 295 feet in length is 88 feet below the #3 tunnel. A weighted average of 0.21 oz/ton gold occurs across 6 feet over a 50 ft. length is reported.

1948 - The 49'er adit at elevation 3187 ft. ASL was driven 382 ft. and crosscut 395 feet, intersecting a 9 ft. wide ribboned quartz vein assaying 0.01 - 0.03 oz/ton Au.

- 373 feet of diamond drilling intersected a 12 ft. wide vein structure 350 ft. north of the number one adit.

7.4.1 Anderson Lake Mine (Cont.)

- 1949 - 504 ft. of drifting and 256 ft. of crosscutting on the 49'er level was undertaken.
- Erratic high and low gold assays were obtained, sulphide concentrations increased and the vein widened to 15 ft. average.
 - Another adit, 269 ft. below the 49'er was driven completing 60 ft. of crosscutting (Pep adit).
 - An engineer's report dated Dec 5, 1949 recommends further work on the Pep level. (Mandy, 1949).
- 1950 - Pep adit - 85 feet of drift and 1170 feet of crosscut completed.
- Sporadic free gold in quartz veins were intersected.
 - Spectacular free gold showing in the No. 1 fault.
- 1951 - Pep level - 500 ft. of drifting and crosscutting.
- qtz vein - average width 9 ft. minor sulphides.
- 1952 - 150 ft. of raising from two points on the Pep level
- 1st raise - 15 ft. into No. 1 fault - rich gold found.
 - 2nd raise - 135 ft. in faulted east vein segment.
- 1953 - 115 ft. drifting; 110 ft. crosscutting - Pep level
- 722 ft. diamond drilling of faulted extension of east vein.
 - drilling in fault proved unsuccessful.
- 1960 - Cassiar Copperfields Ltd. acquires option.
- cave in trapped men in 49'er level
 - portals of Pep and 49'er bulldozed to solid rock.
 - caving conditions in Pep caused problems.

| | | |
|---------------------------------|-------|--------------|
| 1961 - total of six adit levels | Adit | Elevation |
| | No. 1 | 3650 ft. ASL |
| - Pep & 49'er reopened | No. 2 | 3550 ft. ASL |
| | No. 3 | 3400 ft. ASL |
| | Mac | 3320 ft. ASL |
| | 49'er | 3187 ft. ASL |
| | Pep | 2918 ft. ASL |

7.4.1 Anderson Lake Mine (Cont.)

- 1961 - northwest faults offset vein
- development mainly on east vein north of No. 1 fault
 - raise driven from Pep to 49'er level
- 1962 - 847 tons of ore from Pep raise was milled recovering 7 ounces Au.
- operations ceased.
 - special sampling programme undertaken by Stu Holland, BCDM - concluded that random coarse free gold occurs in the vein which complicates representative sampling techniques. Assay values of not more than 0.22 oz/ton are probably more likely.

7.4.2 Gold Hill Prospect

This prospect is located south of McGillivray Creek above and below the south fork. A 110 ft. adit and 120 ft. crosscut to the west intersected a 30 ft. pyritic quartz vein trending at 170°AZ . (M.M.A.R. (B.C.) 1933; GSC Summ. Rpt. 1933). This vein is traced 100 feet below and 500 feet above where it splits into several veins. Assays up to 0.12 oz/ton are reported. A phyllitic argillite hosts the vein and is silicified on either side of the vein for up to 2.5 ft. These beds strike at $155^{\circ}/70^{\circ}\text{E}$.

A showing of quartz 4 ft. wide occurs 1000 feet to the east intruding a tongue of granite and is considered a better showing than the above wider vein (GSC Summ. Rpt., 1933).

These occurrences lie in close proximity to a quartz diorite 1 mile to the west and a hornblende diorite across the creek.

7.4.3 Diorite Prospect

This showing of a series of quartz veins intruding diorite occurs on the north side of McGillivray Creek at an elevation of 4500-4600 feet above the south fork. (M.M.A.R. (B.C.) 1933; GSC Summ. Rpt, 1933)

7.4.3 Diorite Prospect (Cont.)

A 15 ft. wide quartz-calcite vein striking N-S, dipping 77° W along the length of a diorite contact exhibits schistose walls and malachite. 100 feet west of this main showing a 2.5 ft. wide vein at $020^{\circ}/80^{\circ}$ W occurs at an elevation 80 ft. higher.

A vein occurring 1000 feet further west attains widths from 2 to 4 feet and strikes at $025^{\circ}/80^{\circ}$ NW.

All veins assay in gold, but none of these assays are reported.

7.4.4 Empire Prospect

Three claims staked in 1911 constitute the Empire group on the peak of Mt. McGillivray, approximately one mile northwest of the northernmost boundary of the Anderson Lake Block (MMAR, B.C. 1914; McCann, 1922)

A quartz vein containing tetrahedrite, azurite, malachite and galena trends at 135° AZ/ 60° S at the contact of cherty argillite of the Fergusson group and serpentine. Assays up to 0.5 oz/ton Au, 35.4 oz/ton Ag and 1.0% Cu have been reported. The vein varies from 7 to 32 feet in width and has been traced 1500 feet along strike to an elevation 700 feet lower down the mountain.

This showing occurs within one mile of the contact with the Bendor granodiorite.

Efforts should be made to trace the serpentine - chert contact onto the Anderson Lake Block and the northwestern area of the property prospected for similar occurrences near the granodiorite tongue which trends to the southwest on the property.

7.4.5 Blue Bell Prospect

The Blue Bell showings occur at an elevation of 4300 feet 5 miles southeast of Anderson Lake on a ridge to the northeast of Wade Creek. (GSC Summ. Rept., 1933)

Considerable underground work drifted on a pyritic dike-like intrusive lying in limestone, argillite and quartzite of the Fergusson Group. It is reported that lead, zinc and silver mineralization occurred in this dike, but no evidence of such mineralization was detected from the underground workings.

This occurrence lies in close proximity to a quartz diorite stock.

Miarolitic granite and quartz monzonite phases of the same intrusive occur in the southeast corner of the Anderson Lake Block.

7.4.6 Lucky Jane Prospect

The Lucky Jane occurs in the above mentioned miarolitic granite approximately half a mile above the shore of Anderson Lake. Fluorite and apatite occur in the vuggy granite and talc of fair quality occurs in a 2.7m wide shear. (Wilson, 1928).

7.4.7 D'Arcy Nephrite

Poor quality jade occurs in serpentine approximately one mile northwest of the town of D'Arcy just off the power line road. One hundred and fifty metres of serpentine is exposed trending at 135 AZ.

The occurrence of this deposit is important, not from an economic sense, but rather from a geologic sense. Serpentine has not been mapped previously on the Anderson Lake Block, yet this occurrence suggests that a serpentine belt which marks the trend of the Cadwallader Structural Complex, does indeed occur on the Anderson Lake property.

8.0 Recommendations

It is recommended that a three phase exploration programme be developed to bring the Anderson Lake Block to a stage of diamond drilling.

Phase I

An initial one week examination of the property is recommended to:

- 1) ascertain the logistics of the area.
- 2) map the geology at a reconnaissance level to verify the geology as reported, ie Bralorne intrusive, Bendor Intrusives, serpentine, clastics, structure.
- 3) take rock geochemical samples during the mapping.
- 4) locate and sample, with a minimum of hand trenching, the reported gold occurrences on the property.
- 5) map the geology of these gold occurrences.

Phase II

A two month exploration programme is recommended consisting of:

- 1) regional geological mapping at a scale of 1:10,000 on the whole property.
- 2) detailed mapping of known mineral occurrences and showings found during the course of the programme at 1:1000 scale
- 3) rock geochemical sampling during the course of regional mapping.
- 4) heavy mineral stream sampling.
- 5) regional prospecting of creeks and ridges.
- 6) detailed prospecting in areas of known mineralization.
- 7) blasting, trenching and sampling of mineral showings.
- 8) ground control surveying (linecutting).

Phase III

By Phase III the ground position should be reduced to areas of anomolous geology, geochemistry and/or mineralization. A three month programme of detailed mapping, geophysics (VLF - EM, Magnetics) geochemistry (rock, soil, biogeochemical), prospecting and trenching should be undertaken on picket grids established over anomolous ground to aid in the delineation of drill targets.

Table I shows the estimated costs to carry out this three phase exploration programme.

Table I - Estimated Costs

Phase I

| | |
|---|---------------------------|
| Labour - geologist 7 days @ \$175/day | \$ 1225 |
| - 2 assisstants 7 days @ \$100/day x 2 | 1400 |
| Food - 3 men @ \$10 man/day x 7 days | 210 |
| Camp Equipment - 7 days @ \$20/day | 140 |
| Transportation - trail bike - 7 days @ \$20/day x 2 bikes | 280 |
| - 4 wheel drive truck - 300km @ \$0.10km | 30 |
| Geological Supplies | 100 |
| Geochemical Analyses - 50 samples @ \$20/sample | 1000 |
| Report preparation | <u>450</u> |
| | Total \$ 4835 |
| | & 10% overhead <u>480</u> |
| | TOTAL \$ 5315 |

Table I - Estimated Costs (Cont.)Phase II

| | |
|--|---------------|
| Labour - Project Geologist 60 days @ \$200/day | \$ 12,000 |
| - stream sampler, linecutters 60 days @ \$100/day x 2 men | 12,000 |
| - Prospector 60 days @ \$150/day | 9,000 |
| - Cook/Expediter 60 days @ \$100/day | 6,000 |
| Food - 5 men @ \$15/day x 60 days | 4,500 |
| Camp accomodation - 3 tents @ \$1,000/tent | 3,000 |
| Camp supplies | 2,000 |
| Geological supplies | 3,000 |
| Transportation - 4x4 truck 2 mos. @ \$1800/mo. | 3,600 |
| - 2 trail bikes | 2,000 |
| - chopper 60 hrs. @ \$500/hr. | 30,000 |
| Geochemical Analyses - heavy mineral 50 @ \$100/sample | 5,000 |
| - rock geochemical 600samples @ \$25/samp. | 15,000 |
| - assays 200 @ \$25/assay | 5,000 |
| Report preparation - 1 mo. geologist plus drafting, typing, reproduction etc. | <u>5,000</u> |
| Total | \$ 117,100 |
| Plus 10% overhead | <u>11,710</u> |
| TOTAL | \$ 128,810 |

(w/o helicopter \$95,810)*

*N.B. \$30,000 helicopter costs could be transferred to rental of a bulldozer to provide access roads and trenching.

Table I - Estimated CostsPhase III

| | | |
|--|-----------------------------|---------------|
| Labour - Project Geologist | 90 days @ \$200/day | \$ 18,000 |
| - Linecutters | 90 days @ \$100/day x 2 men | 18,000 |
| - Geophysical operator | 90 days @ \$100/day | 9,000 |
| - Geochemical sampler | 90 days @ \$100/day | 9,000 |
| - Prospector/trencher | 90 days @ \$150/day | 13,500 |
| - Cook/expediter | 90 days @ \$100/day | 9,000 |
| Food - 7 men @ \$15/day x 90 days | | 9,450 |
| Camp Accomodation | | 2,000 |
| Camp supplies | | 2,000 |
| Geological supplies | | 5,000 |
| Geophysical equipment rental | | 6,000 |
| Transportation - 4x4 truck | 3 mos @ \$1800/mo. | 5,400 |
| - 2 trail bikes | | 2,000 |
| - chopper (60 hrs. @ \$500/hr.) or bulldozer | | 30,000 |
| Geochemical Analyses - rock | 300 samples @ \$25/sample | 7,500 |
| - biogeochemical & soil | 2000 samples @ \$25/sample | 50,000 |
| - assays | 300 samples @ \$25/sample | 7,500 |
| Report preparation - 2 mo. geologist plus drafting, typing, reproduction et. | | <u>12,000</u> |
| | Total | \$ 215,350 |
| | Plus 10% overhead | <u>21,535</u> |
| | TOTAL | \$ 236,885 |
| Total of three phase programme | | \$371,010 |

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Appendix I

Itemized Cost StatementANDERSON LAKE BLOCK

Itemized cost of preliminary report

| | |
|------------------------------------|--------------|
| Geologist: 2 days @ \$175.00 | \$ 350.00 |
| Project Manager: 2 days @ \$150.00 | 300.00 |
| Truck: 1 day @ \$40.00 | 40.00 |
| Typing, Secretarial, photocopies | <u>75.00</u> |
| | \$ 765.00 |

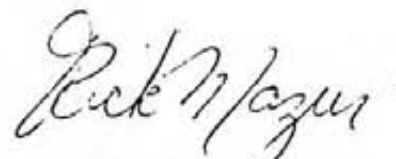
Appendix II

Certificate of Qualification

I, Richard J. Mazur, hereby certify that;

1. I am a registered professional geologist residing at 451 22 Ave. NE, Calgary, Alberta.
2. I am a graduate of the University of Toronto, having been granted a honours Bachelor of Science degree in geology in 1975.
3. I have primarily been employed in the mineral exploration industry since 1975.
4. I have been a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta continuously since 1980 to the present as a Professional Geologist.
5. I have no interest in the Anderson Lake Block or X-Calibre Resources Ltd. nor have I been promised any interest. The only remuneration I expect to receive is the amount of my professional fee for performing such work.
6. I agree to keep all information documented in this report confidential.
7. I hereby grant X-Calibre Resources Ltd. permission to use this report for its corporate purposes.

Dated this 17th day of July, 1983
Gold Bridge, B. C.


Richard J. Mazur

