Preliminary Geological and Geochemical Report on the Butte - X-Cal Claim

Lat. 50°43'N Long. 122°39'W

NTS 92-J-10E

Lillooet Mining Division, B. C.

for

X-Calibre Resources Ltd.,

Gold Bridge, B. C.

by

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Kingston, Ont.

March 7, 1984

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1.0 Summary and Conclusions

The Butte - X-Cal mineral claim lies immediately west of the Butte - I.X.L. gold mine where gold values of 0.13 ounces/ton in two quartz veins are reported. The mine site occurs along the northwest trending Cadwallader Shear Zone, which hosts the Bralorne-Pioneer Gold Deposits. Gold mineralization has been reported along the Cadwallader Shear Zone at the Red Hawk, Dan Tucker and Royal showings to the northwest and southeast of the Butte - X-Cal property.

Examination of the geology at the Butte - I.X.L. mine indicates an extension of the Noel - Pioneer Formation contact to the northwest onto the Butte - X-Cal claim. This contact appears to be controlling the emplacement of mineralized quartz veins in the area. Geochemical samples at the mine site returned concentrations of 120 ppb gold, 224 ppm lead and greater than 4000 ppm zinc.

A one kilometre trend of this prospective contact occurs at the northern extremity of the Butte - X-Cal property. A programme of geological mapping, prospecting and soil/biogeochemical sampling is recommended to outline potential gold mineralization on the property.

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2.0 Introduction

The geology in the immediate vicinity of the Butte - I.X.L. adit and shaft was examined on August 15, 1983. Although the mine site is located on crown grants not held by X-Calibre Resources, the mineralization was examined, to establish if a continuation was possible onto the Butte - X-Cal Claim. Five rock geochemical samples were collected, representing rock types in the area. They were analyzed for gold, silver, copper, lead and zinc content at Kamloops Research and Assay Labs, Kamloops, B. C.

3.0 Location and Access

The Butte Claims are located in the Bridge River Mining Camp at Lat. 50°43'N, Long. 122°39'W (Figure 1). The Butte adit and shaft are located on Aggie Creek, above the junction with Cadwallader Creek.

Access to the property is by four wheel drive vehicle or trail bike from the Pioneer mine site along a trail following Cadwallader Creek for 11 km south to Piebiter Creek. A hiking trail exists from this point to the site of the Butte workings, on the west side of Cadwallader Creek.

4.0 Current Claim Status

The following claims are held in good standing by X-Calibre Resources Ltd., Gold Bridge, B. C. (Figure 2; Table I).

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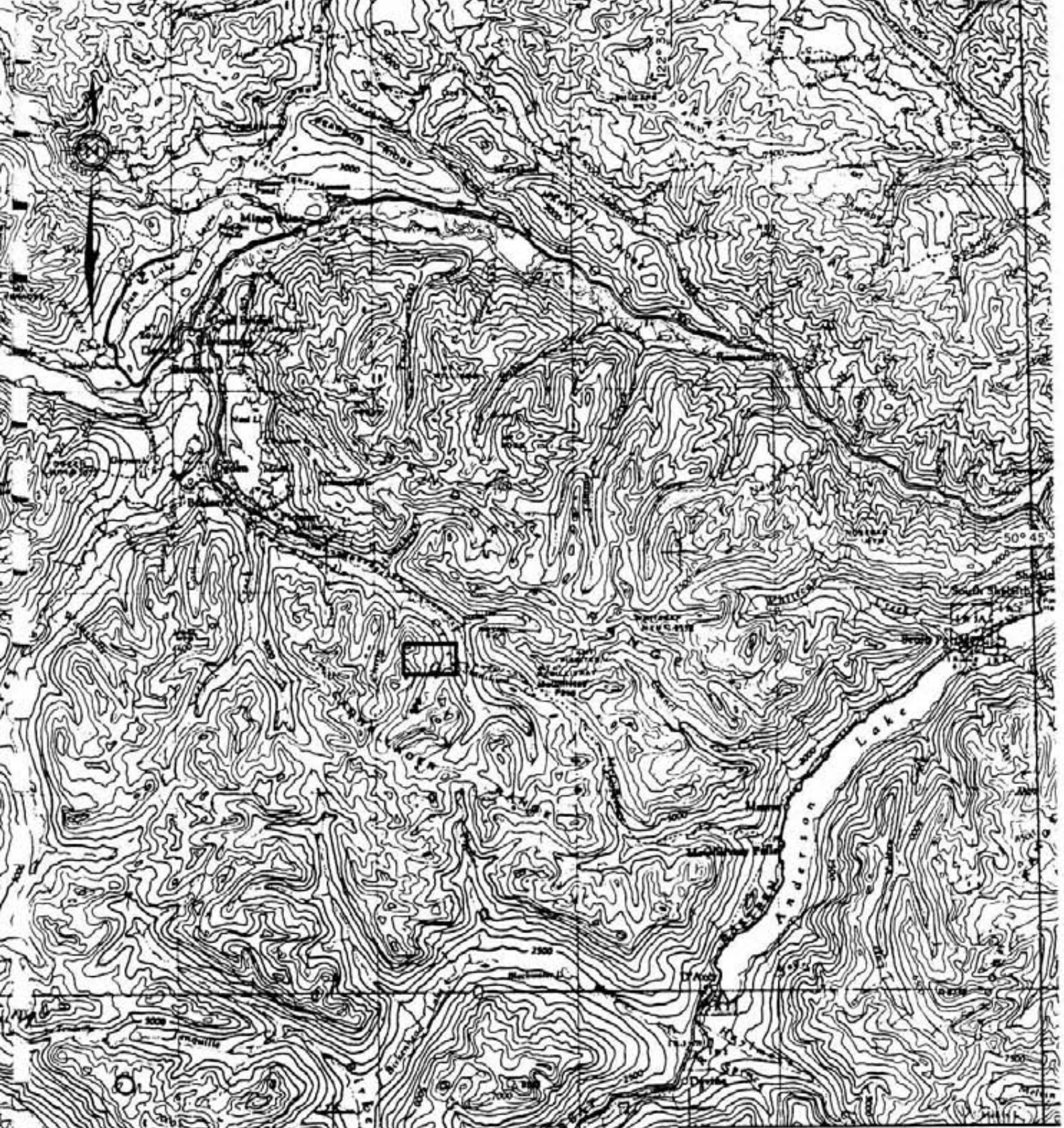

X - CALIBRE RESOURCES LTD.

BUTTE CLAIM

LOCATION

SCALE	NTS	FIGURE No.
1:250,000	92 - J - 15	1

Table I Claim Status

Claim	No. of Units	Record No.	Anniversary Date
Butte - X-Cal	20	2301	Feb. 21, 1984

5.0 Exploration History

The principal workings, consisting of an 803 foot long adit and a 165 foot shaft, were developed in 1933-34 by Butte - I.X.L. Gold Mines Ltd. of Vancouver, B. C. Numerous transfers of ownership occurred over the years, with the most recent work undertaken by Hillside Energy Corporation of Vancouver, B. C. Nevin, Sadlier-Brown, Goodbrand Ltd. (1980, 1982) conducted geological and geochemical surveys of the Jana - Butte - Royal - Standard Claim Group.

6.0 Physiography

The property is situated in tree covered, mountainous terrain with elevations ranging from 4400 - 6500 feet ASL. The mountainside is covered with a Pleistocene glacial drape of till and boulder clay. A recent dacitic ash fall occurs below the present soil horizon.

7.0 Regional Geology of the Bridge River Map 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 3).

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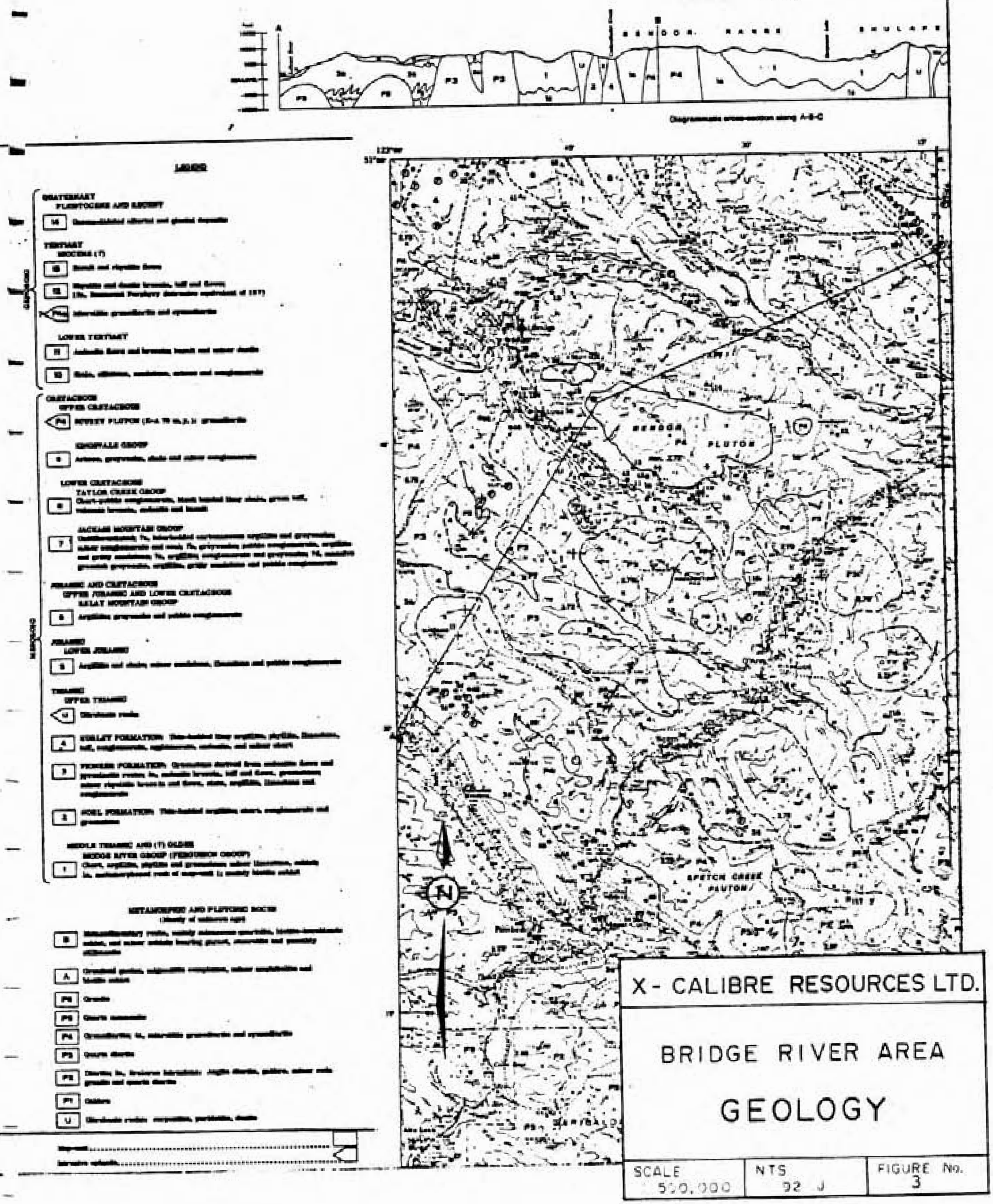
GEOLOGICAL SURVEY OF CANADA
BENDOR RANGE
Diagrammatic cross-section along A-B-C
LEGEND
BENDOR PLUTON
SPETCH CREEK PLUTON
X - CALIBRE RESOURCES LTD.
BRIDGE RIVER AREA
GEOLOGY
SCALE 500,000
NTS 92 J
FIGURE No. 3

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

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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. Four million ounces of gold has been produced from these two mines since 1932, in ribboned quartz veins averaging 0.52 oz/ton gold.

8.0 Property Geology

8.1 Introduction

The most comprehensive report on the geology of the Butte Claims was done by Cairnes (1937). Nevin, Sadlier-Brown, Goodbrand (1980) give a more detailed account of the geology immediately east of the ground held by X-Calibre Resources Ltd.

8.2 Lithology and Structure

The Butte property lies along the northwest trending Cadwallader Shear Zone, marked by a tightly folded and faulted sequence of Noel and Pioneer Formation sediments and volcanics which are in contact with sediments of the Fergusson Group. Peridotite intrusives occur at this contact; a distinctive marker unit of the Cadwallader Shear Zone. A body of serpentine occurs at the southern boundary of the property (Figure 2).

8.3 Butte Adit and Shaft Geology

The surface geology in the vicinity of the workings and rocks at the mine dump were examined by this author. The adit and shaft are developed at a contact between Noel Formation tuff and tuffaceous sediment and Pioneer Formation andesite. These

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rocks have been metamorphosed to greenschist facies.

Rock sample numbers 5203 and 5204 are considered representative of the Noel Formation in the area. Sample No. 5203, collected at the mine dump, is a grey, rust weathered tuffaceous sediment. It is fine-medium grained with a weak foliation trending at 135° AZ and slickenslided on fracture surfaces. Sampe No. 5204 is a black, fine grained argillite with less than 1% disseminated pyrite.

Sample No. 5205 is a dark grey, fine to medium grained greenstone of the Pioneer Formation with minor lapilli size fragments. This sample was collected further uphill at the shaft, approximately 250 metres southwest of the mine dump.

8.4 Mineralization

Brecciated quartz vein material at the mine dump contained minor amounts (less than 1%) of disseminated chalcopyrite and sphalerite (Sample No. 5202). Breccia clasts within the bull quartz consisted of altered greenstone. The sulphide mineralization tended to occur along the borders of these fragments.

No visible gold was observed in any of the vein material at the dump.

Cairnes (1937) reports that the purpose of the workings was to investigate two quartz vein structures trending at 125° AZ, one in tuffaceous sediments and another, further uphill to the southwest, in greenstone. Widths of up to 2 feet of quartz vein

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were observed underground. Bull quartz vein boulders were observed north of the shaft but appeared unmineralized (Sample No. 5206).

9.0 Rock Geochemistry

9.1 Results

Five grab samples were collected in the vicinity of the Butte mine workings and sent to Kamloops Research and Assay Labs, Kamloops, B. C. for rock geochemical analysis of gold, silver, copper, lead and zinc content. The results are shown in Appendix I and Figure 2. Appendix II illustrates the methods of geochemical analysis.

9.2 Interpretation

Quartz vein material from the mine dump shows anomalous concentrations of gold (120 ppb), lead (224 ppm) and zinc (greater than 4000 ppm). Although the gold content is not ore grade, it implies that potential may exist in the area where sulphide bearing quartz veins occur.

10.0 Recommendations

It is recommended that exploration to the northwest of the mine site, along the trend of the Cadwallader Shear Zone, be carried out on the Butte - X-Cal Claim to ascertain the possible continuation of the Butte mine quartz vein structures. The Noel - Pioneer contact seems to be an important lithological/structural control feature. Geological mapping, prospecting and soil/biogeochemical sampling

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at a scale of 1:5000 should be undertaken on a one square km grid established at the north end of the property with lines running north-south at 50 metre intervals. Trenching of the interesting showings should be carried out. Regional mapping and rock geochemical sampling of the whole claim group is recommended as a part of this programme.

Estimated exploration costs for a two week programme are shown in Table II below.

Table II Estimated Exploration Costs

Labour - Geologist 14 days X $200/day	$ 2,800
- Linecutter 14 days X $100/day	$ 1,400
- Geochemical Sampler 14 days X $100/day	$ 1,400
- Prospector/Trencher 14 days X $150/day	$ 2,100
Food - 56 man days X $20/man day	$ 1,120
Accomodation - 56 man days X $30/man day	$ 1,680
Transportation - 4X4 one month X $1,800/mo + gas	$ 2,000
Field Supplies	$ 5,000
Geochemical Analysis - Rock-40 X $25/sample	$ 1,000
- Biogeochem/Soil-400 X $20/sample	$ 8,000
- Assays-20 X $25/sample	$ 500
Report Preparation	$ 2,000
Office Expense	$ 1,400
Subtotal	$30,400
(Plus 15% contingency)	$ 4,560
Total	$34,960

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Cairnes, C. E., Geology and Mineral Deposits of Bridge River Mining Camp, British Columbia, GSC Memoir 213, (1937).

Cairnes, C. E., Geology and Mineral Deposits of Tyaughton Lake Map Area, B. C., GSC Paper 43-15, (1943).

McCann, W. S., Geology and Mineral Deposits of the Bridge River Map Area, B. C., GSC Memoir 130, (1922).

Nevin Sadlier-Brown Goodbrand Ltd., Geochemical and Geological Report on the Jana-Butte-Royal-Standard Claim Group, by John Ostler for Hillside Energy Corporation, BCMEMPR Assessment File #8878, Oct. 20-29, 1980.

Nevin Sadlier-Brown Goodbrand Ltd., A Report on a Geochemical Survey of the Jana-Butte-Royal-Standard Claim Group, by Melrose, D. L. and Fairbank, B. D., for Hillside Energy Corporation, BCMEMPR Assessment File #10211, Jan. 7, 1982.

Roddick, J. A. & Hutchison, W. W., Pemberton (East Half) Map Area, B. C. GSC Paper 73-17 (1973).

Woodsworth, G. J., Geology, Pemberton (92J) Map Area, GSC O. F. 482, (1977).

Appendix I

Geochemical

Results

KAMLOOPS
RESEARCH & ASSAY
LABORATORY LTD.

B.C. CERTIFIED ASSAYERS

912 LAVAL CRESCENT — KAMLOOPS, B.C.
V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

GEOCHEMICAL LAB REPORT

X-Calibre Resources Ltd.
General Delivery
Gold Bridge, B.C.
V0K 1P0

FILE NO.

DATE August 30, 1983

ANALYST

FILE NO. G-887

ERAL NO.	IDENTIFICATION	ppb Au	ppm Cu	ppm Mo	ppm Ag	ppm Co	ppm W	ppm As	ppm Sb	ppm Pb	ppm Zn
1	5188	200	10	9	.8	203	L4	G15		-	-
2	5190	10	49	2	.8	21	L4	G15		-	-
3	5191	10	50	3	.7	8	L4	2		-	-
4	5192	5	76	4	.7	12	L4	2		-	-
5	5193	L5	55	3	.7	7	L4	2		-	-
6	5194	110	-	7	4.2	35	L4	G15		-	-
7	5195	L5	12	6	1.4	14	L4	7		-	-
8	5196	L5	50	3	.7	10	L4	5		-	-
9	5197	L5	26	2	1.1	18	L4	2		-	-
10	5198	L5	58	5	1.5	60	4	G15		-	-
11	5199	L5	87	3	1.0	18	L4	5		-	-
12	5200	L5	65	2	.6	11	L4	L2		-	-
13	5201	L5	58	3	.7	15	L4	L2		-	-
14	5202	120	-	-	4.2	-	-	-		224	G4000
15	5203	L5	195	-	.9	-	-	-		18	960
16	Butte 5204	L5	56	-	.8	-	-	-		13	106
17	5205	L5	585	-	1.1	-	-	-		15	78
18	5206	L5	30	-	.3	-	-	-		7	15
19	5207	L5	59	2	.7	6	L4	5		-	-
20	5208	L5	61	2	.6	15	4	6		-	-
21	5209	L5	60	3	.6	13	L4	10		-	-
22	5210	L5	88	3	.7	11	L4	4		-	-

Appendix II

Methods

of

Geochemical

Analysis

Geochemical Analysis Procedure

Sample Preparation:

A. Silts and Sediments
Dry sample thoroughly and sieve through an 80 mesh stainless steel sieve. The oversize portion is discarded (unless we have been requested to save it) and the analyses are performed on the -80 mesh portion.

B. Vegetation
29.17 grams of material are weighed and placed in 20 gm assay crucibles which are then placed in a relatively cool assay furnace and the temperature is raised gradually. The samples are left in the furnace until the organics are completely burned off. The residue is then assayed.

Fire Assay Re-agents

1.	Litharge	:	C.P.
2.	Sodium Carbonate	:	C.P.
3.	Borax Glass	:	C.P.
4.	Potassium Nitrate	:	C.P.
5.	Flour	:	
6.	Herman Inquarts	:	C.P.
7.	SiO_2	:	C.P.

Atomic Absorption Re-agents

For Ag, Cu, Pb, Zn, Co, Cd, Ni, Mn, Fe, Cr, Mo

Nitric Acid	:	C.P. 70%
Hydrochloric Acid	:	C.P. 37%
Aluminum Chloride	:	C.P.+99%

Fire Assay-A.A. Method for Gold

Weigh 29.17 gms of sample. Fuse with re-agents as above in proportions necessary to obtain a good melt with clean pour and slag easily separated from lead button. (For silicates use flour; for sulphides use potassium nitrate .) Cupel lead bead and place in test tube. Dissolve bead in nitric acid then hydrochloric (3 times the amount of nitric). Bulk to 10 mls and read on atomic absorption spectrophotometer.

Appendix III

Itemized

Cost

Statement

Itemized Cost Statement

Butte - X-Cal

Geologist 3 days @ $200/day	$ 600
Project Manager 4 days @ $150/day	600
Labour 3 man days @ $120/day	360
Drafting & Reproduction	550
Geochemical Analysis 6 samples @ $20/sample	120
Truck Rental 4 days @ $40/day	80
Motorcycle 2 bikes x 2 days @ $20/day	80
Accomodation 4 man days @ $40/day	160
Secretarial, Office Overhead, Materials	170
	$2,720

Appendix IV

Statement

of

Qualification

Appendix IV

Statement of Qualification

I, Richard J. Mazur, hereby certify that;

1. I am a registered professional geologist residing at 586 Portsmouth Avenue, Kingston, Ontario.

2. I am a graduate of the University of Toronto, having been granted an 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 Butte- X-Cal Claim or X-Calibre Resources Ltd., nor have I been promised any interest. The only remuneration I expect for work leading to this report is the amount of my professional fee for performing such work.

6. I agree to keep all information documented in this report confidential.

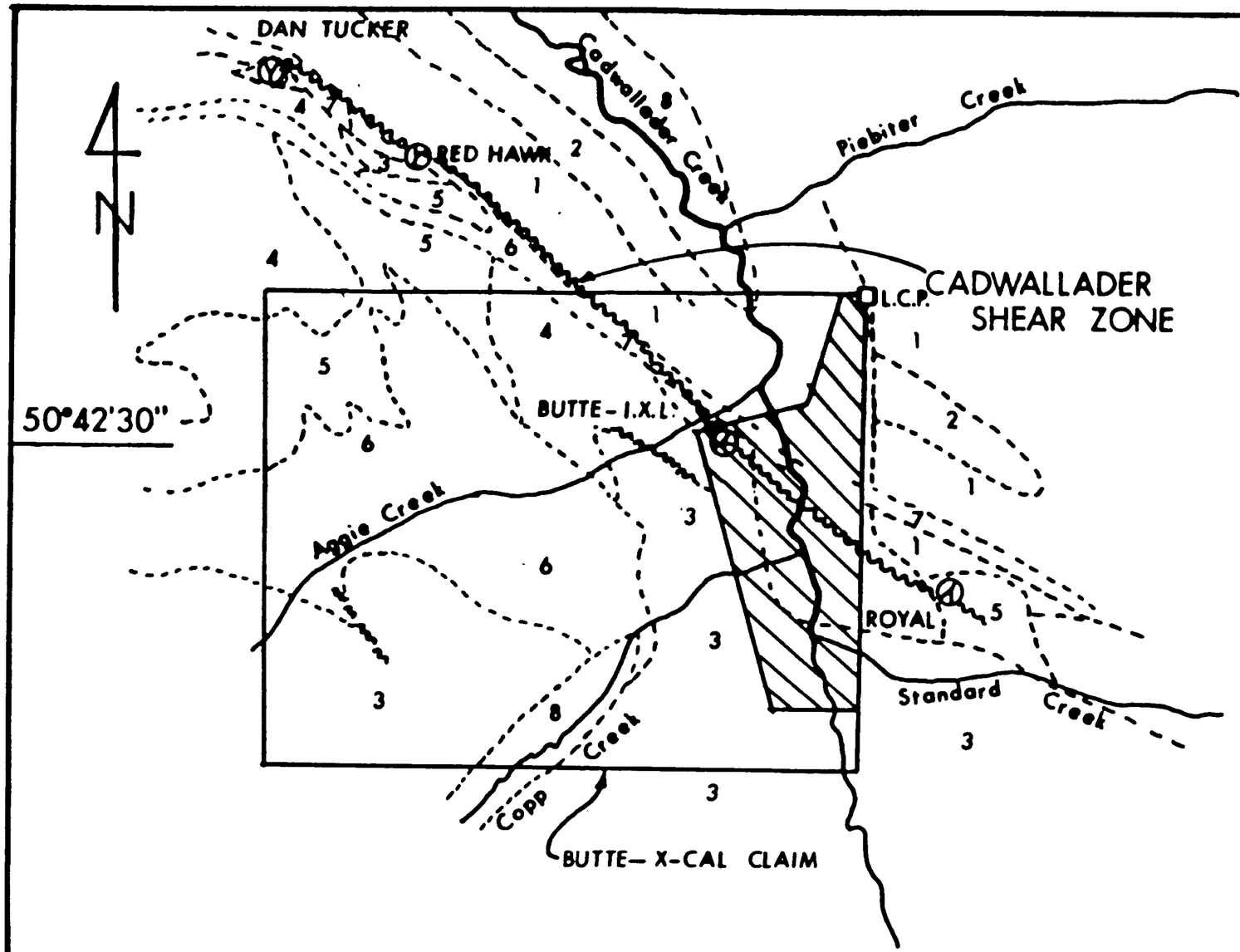
7. I hereby grant X-Calibre Resources Ltd. permission to use this report for its corporate purposes.

Dated this 12th day of March, 1984 at Kingston, Ontario.

Richard J. Mazur

P. Geol.

MAZUR RESOURCE CONSULTANTS



LEGEND

PLEISTOCENE

(8) Glacial drift

JURASSIC(?) INTRUSIVES

(7) Peridotite } PRESIDENT INTRUSIVES

(6) Serpentine }

(5) Bralorne Diorite

UPPER TRIASSIC CADWALLADER GROUP

(4) PIONEER FORMATION - andesitic volcanics

(3) NOEL FORMATION - argillite and tuffaceous sediments

MIDDLE TRIASSIC FERGUSSON GROUP

(2) Andesitic volcanics

(1) Chert and Argillite

(Geology after Cairnes, 1937)

Adit

Crown Granted Area

Geological Contact

Fault

Butte - I.X.L. Mine Site Rock Geochemical Results

sample no.	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
5202	120	4.2	-	224	>4000
5203	<5	.9	195	18	960
5204	<5	.8	56	13	106
5205	<5	1.1	585	15	78
5206	<5	.3	30	7	15

X-CALIBRE RESOURCES LTD.

BUTTE - X-CAL

Geology and

Geochemistry

SCALE	NTS	DATE	FIGURE
1:31,680	92-J-10	07-03-84	2

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