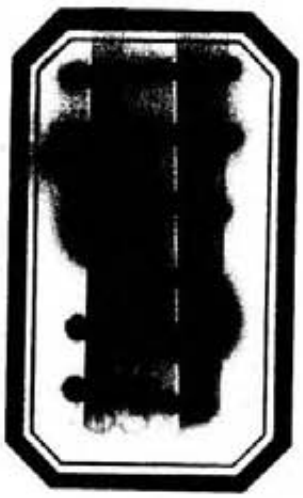
83-#438 - 11691
9/84

X-CALIBRE RESOURCES LTD.

Preliminary Geological and
Geochemical Investigation
of the
Dome, Trail, Last Chance
Crown Grants
Lat. 50°56′ Long. 122°57′
NTS Map Area 92-J-15W
Lillooet Mining Division, B. C.



11,691

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1.0 Summary and Conclusions

The Dome, Trail, Last Chance Crown Grants hold potential for disseminated gold mineralization in Hurley (?) sedimentary rocks which display a moderately high geochemical background in gold. These sediments are in contact with volcanics of the Hurley Formation.

The prospect for hydrothermal vein deposits of gold is excellent as Bralorne Diorite occurs on the property marking the northern extension of the Cadwallader Shear Zone. Phases of soda granite were observed within the diorite.

The area requires further prospecting and rock geochemical sampling to ascertain if the above deposits may exist on the property.

2.0 Introduction

Mazur Resource Consultants was commissioned by X-Calibre Resources Ltd., Gold Bridge, B. C. to make a preliminary field investigation of the Dome, Trail and Last Chance Crown Grants. Geological mapping and rock geochemical sampling were completed on July 8 and July 14, 1983.

3.0 Location and Access

The property is located at Lat. 50°56', Long. 122°57' at the junction of Gun Creek and Eldorado Creek. (Figure 1).

Access to the property is by trail bike along the Gun Creek Trail to the Jewel Creek Bridge approximately 12km west of its junction with the Tyaughton Lake Road. From the bridge, 2.5km northwest, a hiking trail along Gun Creek leads to the southern extremity of the property.

4.0 Current Claim Status

Twenty-four crown grants are held in good standing by X-Calibre Resources Ltd., Gold Bridge, B. C. (Table I).


X-CALIBRE RESOURCES LTD.
DOME, TRAIL, LASTCHANCE
CROWN GRANTS
LOCATION
SCALE
1:250,000
NTS
92-J-15
FIGURE No.
1

.0 Current Claim Status (Cont.)

Table I Claim Status

Crown Grant	Lot No.	Record No.	Anniversary Date
Dome Fr.	3258	2204	November 1, 1983
Dome #4	3255	2200	November 1, 1983
Dome #5	3256	2201	November 1, 1983
Dome #6	3257	2202	November 1, 1983
Last Chance Fr.	3248	2199	November 1, 1983
Last Chance #1	5931	2209	November 1, 1983
Last Chance #1 Fr.	3249	2210	November 1, 1983
Last Chance #2	3239	2203	November 1, 1983
Last Chance #3	3240	2193	November 1, 1983
Last Chance #4	3241	2194	November 1, 1983
Last Chance #5	3242	2195	November 1, 1983
Last Chance #6	3243	2196	November 1, 1983
Last Chance #7	3244	2197	November 1, 1983
Last Chance #8	3245	2198	November 1, 1983
Trail #1	5930	2208	November 1, 1983
Trail #2	5929	2207	November 1, 1983
Trail #4	5928	2206	November 1, 1983
Trail #6	5919	2205	November 1, 1983
Trail #5	5926	2168	September 20, 1983
Trail #3	5927	2167	September 20, 1983
Trail #1 Fr.	3246	2169	September 20, 1983
Trail Fr.	3247	2166	September 20, 1983
ast Chance #2 Fr.	3250	2221	December 10, 1983
Trail #2 Fr.	3251	2222	December 10, 1983

5.0 Exploration History

Very little information is available on the past exploration work done on these crown grants.

6.0 Physiography

The property lies in the valley of Gun Creek which is mainly covered with recent alluvial gravel deposits. Outcrops occur along the sidehill east of Gun Creek and on a knoll between Leckie Creek and Gun Creek.

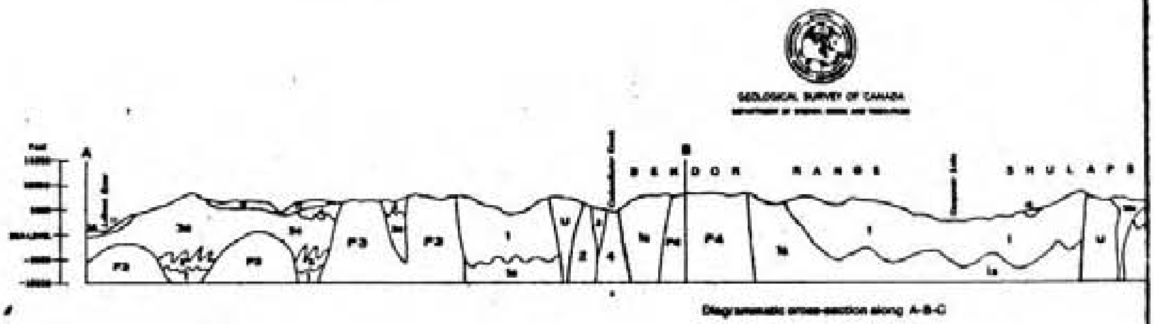
7.0 General Geology of the Bridge River Area

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 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 parallieling antiform. The antiform has a maximum width of 45km 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.



LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

14 Unconsolidated alluvial and glacial deposits

TERTIARY
MIOCENE (?)

13 [illegible]

12 [illegible]

P4a [illegible]

LOWER TERTIARY

11 [illegible]

10 [illegible]

MESOZOIC

CRETACEOUS
UPPER CRETACEOUS

P4 [illegible] PLUTON [illegible]

KINGSVALE GROUP

9 [illegible]

LOWER CRETACEOUS
TAYLOR CREEK GROUP

8 [illegible]

JACKASS MOUNTAIN GROUP

7 [illegible]

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
RELAY MOUNTAIN GROUP

6 [illegible]

JURASSIC
LOWER JURASSIC

5 [illegible]

TRIASSIC
UPPER TRIASSIC

U [illegible]

4 [illegible] FORMATION: [illegible]

3 [illegible] FORMATION: [illegible]

2 NOEL FORMATION: [illegible]

MIDDLE TRIASSIC AND (?) OLDER
BRIDGE RIVER GROUP [illegible]

1 [illegible]

METAMORPHIC AND PLUTONIC ROCKS

B [illegible]

A [illegible]

P6 [illegible]

P5 [illegible]

P4 [illegible]

P3 [illegible]

P2 [illegible]

P1 [illegible]

U [illegible]

X - CALIBRE RESOURCES LTD.

BRIDGE RIVER AREA

GEOLOGY

SCALE	NTS	FIGURE No.
1:500,000	92 J	2

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

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.

8.0 Property Geology

8.1 Lithology and Structure

8.1.1 Bralorne Diorite

Greenish grey, medium grained augite diorite occurs at the southeastern corner of the crown grants intruding volcanics and sediments of the Hurley (?) Formation. (Figure 3).

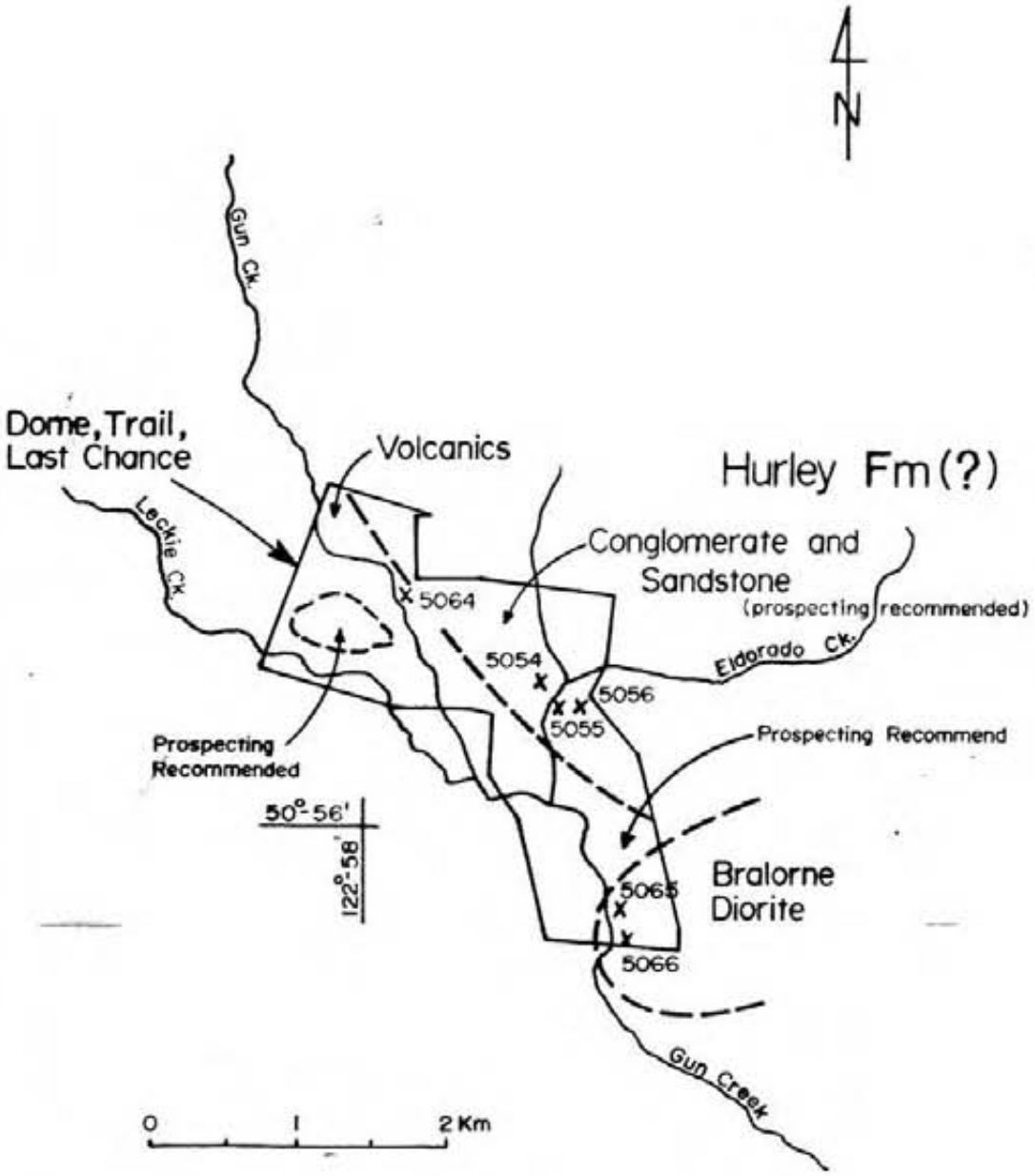
Quartz-epidote veining is common and heterogeneous phases grading to greenstone diorite and soda granite were observed.

Rusty weathered pyritic (up to 5%) diorite (Sample No. 5065) was sampled separately although disseminated pyrite is common throughout.

The existence of Bralorne Diorite suggests that the Cadwallader Shear Zone may trend onto the Dome, Trail, Last Chance property.

Rock Geochemistry

sample No.	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	W (ppm)	Cu (ppm)	Zn (ppm)
5054	10	1.5	< 2	< .2	1	57	62
5055	15	1.4	< 2	< .2	1	43	48
5056	15	1.3	< 2	< .2	1	39	45
5064	< 5	.9	< 2	.8	1	48	51
5065	5	.9	< 2	< .2	1	166	37
5066	5	.8	< 2	< .2	1	34	23



LEGEND

x Outcrop

Outcrop Area

Contact

Figure 3

X-CALIBRE RESOURCES LTD.

Dome, Trail, Last Chance
Crown Grants

Geology and Geochemistry

Scale	Geology by	NTS
1:50,000	R.J. MAZUR	92-J-15

8.1.2 Conglomerate and Sandstone - Hurley Formation (?)

Green weathering conglomerate with interbedded sandstone and minor siltstone occurs near the northeastern boundary of the property. Matrix and fragment contents vary in the conglomerates, but generally consist of 60% subangular to rounded cobbles in a 40% medium grained green matrix. Bedding strikes at 040°/25°NW with a strong jointing pattern developed at 070°/70°SE.

Roddick and Hutchison (1973) have reported fossil evidence which suggests that these sediments are from the Upper Triassic Hurley Formation, although other workers (Cairnes, 1943) have suggested a younger age, perhaps Jurassic or Cretaceous.

8.1.3 Volcanics - Hurley Formation (?)

A series of outcrops along Gun Creek near the northern extremity of the property are massive bedded, medium grained, green rocks of volcanic origin which can best be described as greenstone. Strong jointing at 110°/70°N was observed.

These volcanics form a northwest trending contact with Hurley sediments and are assumed to be volcanics of the same formation.

8.2 Mineralization

No mineralization of economic significance was observed during the brief visit to the property.

9.0 Property Geochemistry

9.1 Introduction

Six rock geochemical samples were collected and sent to Kamloops Research and Assay Lab, Kamloops, B. C. for analysis of Au, Ag, As, Sb, W, Cu and Zn content.

Appendix I shows the methods of geochemical analyses employed.

9.2 Results and Interpretation

Appendix II and Figure 3 show the results of the rock geochemical analysis on samples of Bralorne Diorite, Hurley sediments and volcanics.

By comparison with some 200 samples taken throughout the whole Bridge River area, two samples display anomalous conditions worthy to note. Sample 5064 in Hurley volcanics is weakly anomalous in antimony (0.8 ppm) which may be related to hydrothermal vein activity in the area.

Sample 5065 displays anomalous copper (166 ppm) in a strongly pyritic zone within Bralorne Diorite.

Gold ranges from 10-15 ppb in the sediments, less than 5 in the volcanics and 5 ppb in Bralorne Diorite.

The sedimentary formation may be a potential target for disseminated gold mineralization considering its high background level in gold.

10.0 Recommendations

It is recommended that further prospecting and rock geochemical sampling for Au, As, Sb, and W be undertaken in the following areas:

A. Within Hurley (?) sediments and at the contact with volcanics for potential disseminated gold mineralization.

B. At the contact and within Bralorne Diorite for gold bearing vein deposits.

C. Over the large area of outcrop west of Gun Creek and north of Leckie Creek which was not investigated during this brief visit to the property. This area is of interest considering the weak antimony anomaly in volcanics found across the creek.

References

Cairnes, C. E., Geology an 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 Mem. 130, (1922).

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

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

Appendix I

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.

Arsenic Geochem

1. Weigh 1.0 gram of sample in test tube.
2. Digest in 0.5 ml. HNO_3 for ½ hour and 1.5 ml. HCl for 1½ hour.
3. Pipette 2 ml. of sample into large test tubes.
4. Add - ~~15~~ 1 ml. H_2O

   2.5 ml. HCl

   1.0 ml. KI solution

   1 ml. $SnCl_2$ solution
5. Let stand 15 - 20 minutes.
6. Add ½ teaspoon zinc metal and quickly plug with cotton and rubber stopper.
7. Bubble into 3 ml pyridine solution for 30 minutes under fume hood.
8. Read at 540.

REAGENTS

KI - 15 grams in 100 ml. H_2O keep in dark bottle

$SnCl_2$ - 40 grams in 100 ml. HCl

Pyridine - 1 gram silver deithyldithio carbamate (SDDC) in 200 ml. pyridine.
make fresh

As stock solution (1000 ug/ml) - weigh 1.3 20 grams As_2O_3
- dissolve in H_2O with 4 grams NaOH
- dilute to 1 litre

Prepare a 1 ug/ml As standard solution. make fresh daily

Run with samples, standard of 0.5, 1.0, 2.0, 3.0, 5.0, ~~10.0, 15.0 ug.~~ 1.0 ml

~~1.0 ug As = 5 ppm As~~ in sample

weigh CP13 - 0.1 - 0.5 g → 100 ml

GEOCHEM

KRAL
Tungsten

1. Weigh .25 g sample into a test tube.
2. Add ~1.25 g Potassium Bisulfhate, mix and fuse.
3. Leach with 5 ml 10M HCl in bath (ligh volume).
4. Mix and cool - settle.
5. Pipette 2 ml sol'n and 2 ml $SnCl_2$ into test tube and mix.
6. Heat @ 80°C for 5 minutes in bath.
7. Add, while hot, 1 ml dithiol solution.
8. Continue heating until color forms - low volume ester phase - do not form a globule that sinks.
9. Remove from bath and cool.
10. Add 1 ml petroleum spirit and shake gently.
11. Compare with standards.

Standards

1. To 12 test tubes containing 2 ml $SnCl_2$ sol'n add respectively - 2.0, 1.8, 1.6, 1.4, 1.2, 1.0, 1.8, 1.7, 1.6, 1.5, 1.3, 1.0 ml 10M HCl.
2. Add tungsten in the following order - 0, .2, .4, .6, .8, 1.0, ml of 1µg/ml standard sol'n, and .2, .3, .4, .5, .7, 1.0 ml of 10 µg/ml standard sol'n.
3. Continue from step 6 above.

Reagents - 10M HCl = 835 ml conc → 100 ml
$SnCl_2$ sol'n = 10 g → 100 ml of 10M HCl
Dithiol = 1 g Zn Dithiol → 100 ml flask and 1 ml conc HCl - dilute to 100M with iso-amylacetate
Standard W = 1000 ppm, 100 ppm
10 ppm, 1 ppm

Standards

1 = 0 ppm
2 = .8 ppm
3 = 1.6 ppm
4 = 2.4 ppm
5 = 3.2 ppm
6 = 4 ppm
7 = 8 ppm
8 = 12 ppm
9 = 16 ppm
10 = 20 ppm
11 = 28 ppm
12 = 40 ppm

Appendix II

Rock

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,
Goldbridge, B.C.

DATE August 8, 1983

ANALYST

FILE NO. G 834

FILE NO.

KRAL NO.	IDENTIFICATION	ppb Au	ppm Sb	ppm As	ppm W	ppm Ag	ppm Cu	ppm zn		
1	5054	10	L.2	L2	1	1.5	57	62		
2	Last Chance 5055	15	L.2	L2	1	1.4	43	48		
3	5056	15	L.2	L2	1	1.3	39	45		
4	5057	15	.3	2	1	.9	24	29		
5	5058	15	L.2	L2	1	.7	40	67		
6	5059	15	L.2	L2	1	1.3	124	31		
7	Truck 5060	L5	L.2	L2	1	.7	26	67		
8	Paymaster 5061	10	L.2	2	1	1.0	20	62		
9	5062	45	L.2	L2	1	.8	24	74		
10	5063	15	3.8	3	1	.8	15	33		
11	5064	L5	.8	L2	1	.9	48	51		
12	Last Chance 5065	5	L.2	L2	1	.9	166	37		
13	5066	5	L.2	L2	1	.8	34	23		

Appendix III

Itemized

Cost

Statement

Statement of Exploration

Dome, Trail, Last Chance Crown Grants

Geologist 3 days @ $200/day	$ 600
Project Manager 3 days @ $150/day	450
Labour 2 days @ $100/day	200
Vehicle Rental 1 truck - 3 days @ $40/day	120
2 motorcycles - 2 days @ $20/day	80
Cost of production of report - including drafting & photocopies	200
Accomodation 6 days @ $40/day	240
Analysis 6 samples @ $20/sample	120
Office overhead, typing, material, freight, travel	250
	$2,260

* Note $140 cash in lieu paid to bring balance to $2400.00

Appendix IV

Certificate

of

Qualification

Appendix IV

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 Dome, Trail, Last Chance Crown Grants 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 26th day of August, 1983.
Gold Bridge, B. C.

Rick Mazur

Richard J. Mazur