Report on the Geology and Geochemistry

of the

Pilot Reverted Crown Grants
Lat. 50°53'N Long. 122°54'W
NTS 92-J-15W

Lillooet Mining Division, B. C.

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

for

by

Richard J. Mazur, P. Geol.

Mazur Resource Consultants

Calgary, Alta.

August 21, 1983

GEOLOGICAL BRANCH ASSESSMENT REPORT

11,402

# Table of Contents

		age
1.0	ummary and Conclusions	1
2.0	ntroduction	2
3.0	ocation and Access	2
4.0	urrent Claim Status	2
5.0	xploration History	4
6.0	hysiography	4
7.0	eneral Geology of the Bridge River Area	4
8.0	roperty Geology	6
	.l Introduction	6
	.2 Lithology,	6
	8.2.1 Chert and Cherty Argillite - Fergusson Group (Unit 1)	) 6
	8.2.2 Silicified Tuff - Noel Formation (Unit 2)	6
24	8.2.3 Sheared Quartz Diorite (Unit 3)	7
	8.2.4 Quartz Diorite (Unit Qd)	7
	8.2.5 Brelorne Intrusive. (Unit.B)	7
	.3 Structure	8
	.4 Mineralization	8
9.0	roperty Geochemistry	9
	.l Introduction	9
	.2 Methods of Geochemical Analysis	10
	.3 Results	10
	.4 Interpretation	11
10.0	ecommendations	12
	eferences	13

# Table of contents

1 4
List of Figures
Figure 1 Location 2
Figure 2 Geology - Bridge River Area 4
Figure 3 043 Trench
List of Tables
Table I Claim Status
Table II Geochemical Anomalies
Table III Estimated Exploration Costs
List of Maps
Map I Geology(in pocket)
Map II Geochemistry-Au, Ag, As, Sb, W, Cu, Co,(in pocket)
List of Appendices
Appendix I Methods of Geochemical Analysis(in back of report)
Appendix II Geochemical and Assay Results(in back of report)
Appendix III Histograms - Au, Ag, As, Sb, W, Cu, Co
(in back of report)
Appendix IV Itemized Cost Statement(in back of report)
Appendix V Certificate of Qualification(in back of report)

#### \_\_.0 Summary and Conclusions

The Pilot Reverted Crown Grants hold excellent exploration potential for gold - silver bearing vein deposits in a major shear structure within a quartz diorite intrusive.

Mineralization on the property has been discovered grading 0.324 oz/ton gold and 1.66.oz/ton silver over a true width of 0.9 m. An anomalous zone of rock geochemical content of gold, silver, arsenic, antimony and tungsten occurs over a 275 metre by 200 metre area centred on this showing within a major structure in quartz diorite.

This shear structure is host to gold bearing vein deposits of the Pilot Mine immediately to the south and trends northwest through the Pilot Extension Claims held by X-Calibre Resources Ltd. to the Gem and Jewel gold deposits which occur along the same structural trend.

Detailed exploration should be conducted over the gold - silver discovery on the Crown Grants and along the northwest trending shear onto the Pilot Extension Claims, as 680 ppb gold has been obtained in a heavy mineral stream sample from Walker Creek.

#### 0.0 Introduction

A programme of geological mapping, rock geochemical sampling and trenching was undertaken on the Pilot Reverted Crown Grants from June 25 - June 28, 1983 for X-Calibre Resources Ltd., Gold Bridge, B. C.

A ground control survey by hip chain and compass for a total of 5.1 line kilometres was completed on east-west lines at 200 metre intervals with stations flagged at 100 metre intervals. No cutting of the bush was carried out for this survey.

Geological mapping at a scale of 1:2500 was completed over a 0.8 sq. km area on the southernmost crown grants, by traversing the lines and creeks.

Rock geochemical samples were collected from outcrops during the course of geological mapping. A total of nineteen samples were shipped to Nuclear Activation Services Ltd., Hamilton, Ontario on July 5/83 for analysis of ..., As, Sb, Wo, Ag, Co and Cu content.

A total of 4 cubic metres of overburden was removed from a trench to expose a potentially mineralized quartz vein.

#### 3.0 Location and Access

The Pilot Reverted Crown Grants are located in the Bridge River Mining Camp at latitude 50°53'N, longitude 122°54'W in NTS Map Area 92-J-15W.

(Figure 1). The property lies one kilometre northwest of Gun Lake between Walker and Sumner Creeks. It is accessible by the Gun Lake Road which goes southwest around Mt. Zola and then north along the northwest shore of Gun Lake approximately 10.5km from Gold Bridge, B. C.

#### 4.0 Current Claim Status

The following 12, reverted crown grants are held in good standing by "-Calibre Resources Ltd., Gold Bridge, B. C. (Table I).



14.0 Current Claim Status (Cont.)
Table I Claim Status

Claim	Lot No.	Record No.	Anniv. date
Gold Pass #1	6999	2080	July 23, 1983
Ypres Fr.	5689	2081	July 23, 1983
GLG #3	5688	2082	July 23, 1983
Gold Pass #2	7000	2083	July 23, 1983
GLG #1	1322	2084	July 23, 1983
GLG #2	`1323	2085	July 23,1983
#LG #4	1324	2086	July 23, 1983
GLG #5	1325	2087	July 23, 1983
GLG #7	1326	2088	July 23, 1983
GLG #8	1327	2089	July 23, 1983
GLG #9	1328	2090	July 23, 1983
GLG Fr.	1340	2230	Nov. 17, 1983

#### 5.0 Exploration History

The aforementioned crown grants were previously most recently held by a Mr. John Tanconi, who reported no work and allowed them to lapse.

Exploration in the area began in 1917 when the Ypres group of 18 claims were staked by Messrs. O. Fergusson and C. Walker. In 1931, the property was aquired by Gun Lake Gold Mines Ltd., transferred to Cariboo-Bridge River Gold Properties in 1933 and then aquired by Pilot Gold Mines Ltd., Vancouver, B. C. in 1934. This company developed the extensive underground workings known as the Pilot Mine. The present owner of the Pilot Mine is not known to this author.

Underground workings are mainly on one adit level 15 metres above

Gun Lake and are still accessible on the northwest side of Gun Lake Road

200 metres northeast from Walker Creek. Approximately 1500 metres of drift

and crosscut with one shallow winze have been developed. A second adit,

3 metres above Gun Lake, developed 60 metres of adit and crosscut but has

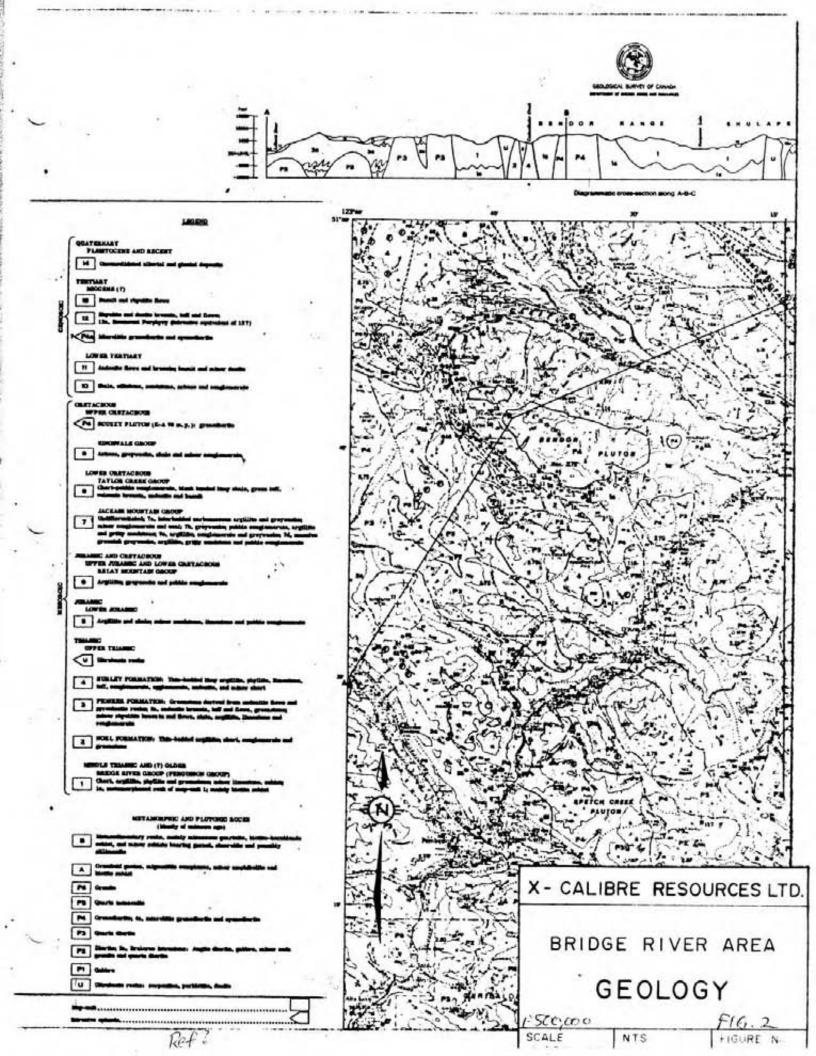
since caved in and is not accessible.

Assays of up to 0.30 oz/ton gold have been reported (Cairnes, 1937).
6.0 Physiography

The property is situated on a steep sidehill with elevations ranging from 3100 ft ASL in the south to 4500 ft. ASL in the north. The area is forest-covered with steep ravines down to creek level. Elsewhere on the property overburden cover of a recent dacitic ash fall and Pleistocene gravel and boulder till mask any outcrops.

## 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 shows the general geology of the Bridge River Area.



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

The northeastern margin of the Coast Crystalline Belt trends northwesterly throughout the area. The northeastern flank of this belt of plutonic rock 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 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 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 diorie, "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/con in ribboned quartz veins have produced some four million ounces of gold throughout its production since 1932.

#### 8.0 Property Geology

#### 8.1 Introduction

The Pilot crown grants consist of a major body of Late Cretaceous Bendor quartz diorite intruding Upper Triassic Noel Formation silicified tuff to the east and Middle Triassic Fergusson Group cherts and cherty argillite to the west. The quartz diorite is intensely sheared in a northerly direction along the axis of the property. A small plug of Bralorne Intrusives intrudes the quartz diorite.

Exposures are restricted to the southern half of the property within and along Walker Creek and the creek to the south of it. (Map I)

#### 8.2 Lithology

#### 8.2.1 Chert and Cherty Argillite -- Fergusson Group (Unit 1)

A wedge of cherty rocks exposed along the creek in the vicinity of the junction of Walker Creek and the creek flowing into it at L 9+00S STN 0+50W is tentatively assigned to the Fergusson Group. Cairnes (1937) reports that Fergusson rocks occur 200 metres west of the Pilot adit as shown in the underground workings, which would be on strike with those found on the X-Calibre property.

The chert and cherty argillite weather rust to dark brown and are medium to dark grey on the fresh surface. They are aphanitic, very hard and slightly calcareous. Where sheared, the rock is dark grey to black with carbonaceous films and chloritic on slickenslided surfaces.

## 8.2.2 Silicified Tuff-Noel Formation (Unit 2)

The tuff of the Noel Formation is massive bedded forming an escarpment of approximately 30m in height at L 2+00W STN 5+00S. It weathers brown to black and is medium grey on the fresh surface. The matrix is apparitic and minute angular volcaniclastic fragments are barely visible (less than 1mm). Minor quartz and calcite microveins occur.

#### 8.2.3 Sheared Quartz Diorite (Unit 3)

A major shear zone with widths of up to 75 metres make this rock type a distinct mappable unit. It is characterized by a bright orange weathering and intensely fractured and comminuted with a dominant fracture orientation of 140°-160°Az, dipping 55°-85° east. Limonitic and potassic alteration are common.

#### 8.2.4 Quartz Diorite (Unit Qd)

Fresh unaltered quartz diorite weathers brown and exhibits the characteristic medium grained, salt & pepper texture on fresh surfaces. It's composition is 55% plagioclase, 45% pyroxene and 5% quartz. Quartz content varies, as the large outcrops along L 8+00S STN 3+00 to 5+00W contain very little quartz and may truly be classified as a diorite.

#### 8.2.5 Bralorne Intrusive (Unit B)

The outcrop at L 6+00S STN 2+00W exhibits quite a variable composition from sodic granite with less than 10% mafics and up to 40% quartz to granodiorite and quartz diorite. The small outcrop along the creek 40 metres to the southeast is a fine to medium grained pink quartz-ofeldspathic rock. A quartz-epidote veinlet swarm trending at 165°Az/85° East occurs in quartz diorite just across the creek from the quartzofelds-pathic outcrop.

Although the massive quartz diorite intrusive occuring on the Pilot property has been assigned to the Bendor Intrusive by previous workers (Cairnes, 1937, Roddick & Hutchison, 1973), these exposures indicate a possible association with Bralorne Intrusive, perhaps as a small plug within Bendor quartz diorite.

#### 8.3 Structure

A major shear zone in quartz diorite trends at 140 - 150 Az dipping 55 - 85 east. This shearing appears to take an abrupt swing to 095 at its northernmost exposure at L 4+00S STN 3+00W. Quartz and quartz ankerite veins within the shear follow the same orientation.

The Noel Formation tuffs occur right at the boundary of the sheared quarts diorite and are in fault contact with it. The bottom 3 metres of Noel tuffs are intensely sheared forming a blocky fracture pattern. The major shear direction is 160°Az/50° east, generally the same strike as shearing in the quartz diorite but a shallower angle. Quartz-pyrite veins in the Noel Formation trend at 010° - 040°Az dipping 30° - 50° west but are offset by the above shear direction as observed at L 7+00S STN 0+50W.

The massive cliff forming tuff beds of the Noel Formation strike and dip at 095 Az/15 N.

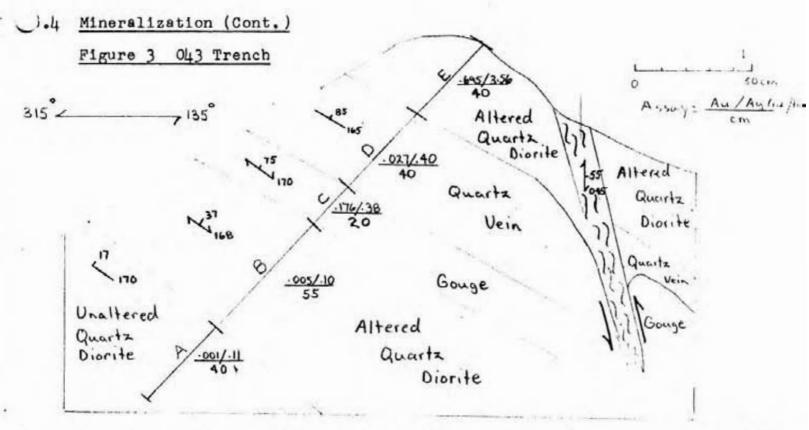
The wedge of Fergusson Group cherts may be emplaced by faulting or as a large xenolithic block.

The Bralorne intrusive type rocks form a small plug intruding Bendor quartz diorite.

Jointing patterns in massive quartz diorite contain two sets trending 055°- 070°Az and 125 - 155°Az.

## 8.4 Mineralization

Arsenopyrite in a 30cm blue cryptocrystalline quartz vein with ankerite envelopes occurs at L 7+00S STN 0+50W. This showing was trenched for 4 metres along its length and is open on both ends. (See Fig. 3). It occurs within sheared quartz diorite which exhibits minor malachite mineralization. The vein conforms to the major shear direction at 165°Az/15°E and gouge up to 20cm thick occur on the footwall. A minor offset of the vein occurs by a fracture trending at 045°Az/55°SE.



Assays from the trench range from 0.001 to 0.695 oz/ton gold. A weighted average of 0.324 oz/ton gold and 1.66 oz/ton silver occur over a true width of 0.91 m. (Appendix II).

The highest assay in the trench came from altered quartz diorite in the hanging wall.

Quartz veins persist for up to 150 metres north of this occurrence where anomalous gold in a quartz vein contains 390 ppb Au.

## 9.0 Property Geochemistry

#### 9.1 Introduction

Rock chip samples were collected from most outcrops visited during the course of geological mapping. Approximately one kilogram of sample material was collected at each outcrop or over an outcrop area at equal interals over the rock mass and across the stratigraphy where bedding or foliation was recognizable. Where vein material was sampled, channel samples or

#### 9.1 Introduction (Cont.)

chip samples at equal intervals across the vein were taken at several points along its length. A total of 19 samples were collected on the Pilot property.

Two samples of heavy mineral concentrates from the stream were collected from Walker Creek below and above the junction with the creek flowing into it from the west. This latter sample was not panned.

One stream silt sample was collected from a small creek flowing into Walker Creek from the east.

#### 9.2 Methods of Geochemical Analysis

The rock geochemical samples were shipped to Nuclear Activation Services Ltd., Hamilton, Ontario for analysis of Au, As, Sb, W by neutron activation analysis. Ag, Co, and Cu were analyzed by a direct current plasma emission spectrophotometric technique. All samples were ground to - 200 mesh in a : Ni-Cr swing mill.

Appendix I gives a detailed description of the neutron activation analytical technique.

The samples of heavy mineral concentrate were sent to Chemex Labs Ltd., Vancouver, B. C. and immersed in a solution of tetrabromethane to separate sediment greater than 2.96 specific gravity. This fraction is ring ground to - 100 mesh and analyzed for Au, As, Sb, W, Ag, Co, and Cu by atomic absorption (Au-fire assay and AA). The silt sample was similarly analyzed without the first step of heavy mineral separation.

#### 9.3 Results

Map II illustrates the sample results at their locations at a scale of 1:2500. Appendix II tabulates the analytical results received from the lab.

Appendix III contains histograms of rock geochemical results for Au,
As, Sb, W, Ag, Co and Cu.

#### 9.3 Results (Cont.)

Anomalous values are determined by examination of the distribution of results in the histogram. All the elements form log normal distributions. The point where the fitted curve begins to tail out is chosen as the threshold value. All values greater than the threshold value are considered anomalous. (Table II).

Table II Geochemical Anomalies

	MODELLE CONTROL CONTRO		Threshold value				
Element	Back Mean	ground Value (x)	Cumulative % of Population	Geochem	ical Value	_	
Au	13	ppb	73.7	20	ppb		
Ag	0.8	ppm	79.0	1.4	ppm		
As	19	ppm	68.5	30	ppm		
Sb	2.1	ppm	73.7	, 5	ppm		
W	2.4	ppm	84.3	4	ppm		
Co	17	ppm	Not anomalous				
7u	48	ppm	84.2	80	ppm		

#### 9.4 Interpretation

A zone of anomalous gold, silver, arsenic and antimony occurs for a length of 275 metres within sheared quartz diorite. The trench assaying 0.695 oz/ton gold occurs in the middle of this zone. A quartz vein 150 metres north of the trench contains 390 ppb gold.

Anomalous gold, silver, arsenic and tungsten occur in the Noel Formation adjacent to the geochemical anomaly in the shear zone.

The potential for gold mineralization in quartz veins and shear structures similar to the tenor of mineralization in the trench is excellent in the area of this geochemical anomaly

The potential for mineralization further northwest along the shear structure within and beyond the Pilot Crown Grants onto the Pilot Extension

Claim are excellent considering the heavy mineral stream sample anomaly of 680 ppb on Walker Creek.

#### 10.0 Recommendations

It is recommended that a programme of geological mapping, prospecting, trenching, soil, rock, and/or biogeochemical sampling and geophysical surveying be conducted in detail (scale 1:1000) over the area of the geochemical anomaly.

A picket grid should be established utilizing the existing flagged grid by running east-west lines for 500 metres across the shear zone at 50 metre intervals for a total of 21 line km. Stations should be established every 50 metres. Tight control is necessary for the exploration of podiform vein structures which may exist along the major shear structure in quartz diorite.

Table III details the estimated cost of a 1.5 month programme leading to the delineation of drill targets.

#### Table III Estimated Exploration Costs

DANGER GROUND	Control of the contro	100	11% - 30102199	
Labour:	Geologist 30 days x \$200/day	\$	6,000	
	Linecutters 2 men x 14 days x \$100/day		2,800	
_	Geochemical Sampler 30 days x \$100/day		3,000	
	Geophysical Operator 30 days x \$100/day		3,000	
	Prospector/Trencher 30 days x \$150/day		4,500	
Food:	134 man days x \$15/day		2,010	
Accomod	ation: 134 man days x \$20/man day		2,680	
Transpor	rtation: 4x4 1 mo. x \$1800/mo. + gas		2,000	
Field St	upplies (geological, linecutting, blasting)		5,000	
Geophys	ical Equipment Rental (Magnetoneter, ULF-EM)	1	2,000	
Geochem	ical Analyses: 100 assays x \$17.50/assay	1	1,750	
	300 geochem analyses x \$20/analys	Ls	6,000	
Report 1	Preparation		2,500	
Office I	Expense		4,400	
	Sub-total		47,640	
	(Plus 10% conting	gency)	4,760	
1	Total	\$	52,400	
	MA	ZUR RESC	OURCE CONSULTAN	NTS

#### References

- Cairnes, C. E., Geology and Mineral Deposits of Bridge River Mining Camp, British Columbia, G. S. C. Memoir 213, (1937)
- Cairnes, C. E., Geology and Mineral Deposits of Tyaughton Lake Map Area,
  B. C., G. S. C. Paper 43-15, (1943)
- McCann, W. S., Geology and Mineral Deposits of the Bridge River Map Area,
  B. C., G. S. C. Mem. 130 (1922)

Minister of Mines Annual Reports (B. C.)

- (1932) p 218, (1933) p 268, (1934) p F32, (1935) p F56, G42, (1936) p F63
- Roddick, J. A. & Hutchison, W. W., Pemberton (East Half) Map Area, B. C. G. S. C. Pap. 73-17 (1973)
- Woodsworth, G. J., Geblogy, Pemberton (92J) Map Area, G. S. C. O. F. 482, (1977)

Appendix I

Methods

of

Geochemical

Analysis

#### Instrumental Neutron Activation Analysis

This INAA technique is applicable to any biogeochemical type material such as plants, pine needles, the humic forest cover or in fact any biological material. Samples of approximately 20-50 grams of material are collected, screened (-30 mesh), dried and macerated. Eight grams of this material is briquetted in a press at 30,00 PSI to form a 40 mm briquette about 6 mm thick (figure 1). Briquettes are then batch irradiated under thermal or epithermal neutron fluxes depending on the elements besides gold that are to be determined. The samples are allowed to decay from four days to one week where, they are counted singly using a combination of hyperpure germanium detector linked to a multichannel analyzer-computer system (figure 2). Detection limits may vary with the type of material being analyzed but will usually be in the 0.1 to 1 ng/g range. Briquettes are quite simply made and have been prepared in the field by one exploration company.

The advantages of the technique are many, including being multielement where many common gold pathfinder elements (As, Sb, W and Cr) may be analyzed simultaneously. The technique avoids dry or wet asking of the sample and therefore possible asking losses or contamination of the sample. The method is very cost effective and rapid, and finally the sensitivity for gold is still unrivalled by any of the previously mentioned analytical techniques.

As every method has its drawbacks, this technique is no exception.

Some materials may have large quantities of certain elements which can cause an effective increase in the detection limits. An example of this is the bromine content of some pine needles. In general though this has not proved to be a problem for 99.9% of the samples submitted for analysis don't have any interferring elements. In performing humic biogeochemical surveys the amount

Appendix II

Geochemical

and

Assay

Results

SAMPLE		CO PPM	HI PPM	CU PPM	ZN PPM	מירק פא	
5001					130	140	
5002					110	=	
5003			1200	12.0	31.0	62	
5004					56.0	2	
5005	2	100			64.0	2	1
5005			2.5		71.0	2	
5007					37.0	7	
			V-5455	102000	54.0	3	
5003			72		2810	6.7	
5010			IL		56.0	<b>~1</b>	
5011	4				99.0	2	
5017					33.0	2	
5013				7.7	50.0	2	
5014						1	
2215			122		240	12	
5015			12. Variati	100	78.0	13	
5017				20000	53.0		
5011							
5010						2 7	
5020							
5021			-			5.5	
5022	•					13	
5023			7.7	7.7		1	
5024						43	
5025						4	
5026							
5027						-	
5 2 2 3						?	
5323						3	
5030							
5031	14		**			1	
5032						1	
F033		8.7.7				14	
5034		1.55				-	
5035		3		45.0		9	
F 736		15		37.0		0	
5037		14		62.0		1 ^	
. 5039		31		120		2.4	
5037		22		72.0		100	
5040		13		36.0		7	
5041		13		46.0	1	1300	
5042		7		39.0	*	41	
5043		6		180		3300	
5044		15		37.0		29	
5045		14		39.0		2"	
5945		27		50.0		149	
5047		16		47.0		12	
5040		34		73.0		62	
5049	**	24	"	41.0		?	
5050		21		48.0			
5251		13		48.0		5.5	
5052		13		140			
5053		16		53.0		2	



# KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

B.C. LICENSED ASSAYERS GEOCHEMICAL ANALYSTS METALLURGISTS

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C. V2C 5P5 PHONE: (604) 372-2784 — TELEX: 048-8320

#### CERTIFICATE OF ASSAY

General Delivery			-	Certificate No. <u>K-5756</u> Date <u>August 18, 1983</u>
	reby certify that the	e following are the results of assay:	s made by us upon the herein de	escribed samples
Kral Ne	Marked	Au		
1	043A	ounces/ton		
2 3 4 5	043B 043C 043D	.005 .176 .027		
.5	043E	.7		
-				
			77	

NOTE: Rejects retained three weeks Fulps retained three months unless otherwise arranged

Houlf THE

Registered Assayer, Province of British Columbia



# KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

B.C. LICENSED ASSAYERS GEOCHEMICAL ANALYSTS METALLURGISTS

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C. V2C 5P5 PHONE: (604) 372-2784 — TELEX: 048-8320

#### **CERTIFICATE OF ASSAY**

Samples   State   St	G		VOK 1P0	of accave man	le by us upon the hear	rain described	DateA	No. <u>K-5794</u>	
1 043A .11 .01 .01 2 043B .10 .04 .01 3 043C .38 .27 .02				10	Printer College Trees	em described		samples	
2 043B .10 .04 .01 3 043C .38 .27 .02			ounces/ton	percent	percent				
	3	043B 043C 043D	.10 .38 .40	.04 .27 .30	.01 .02 .02				of Sec.

NOTE: Rejects retained three weeks. Pulps retained three months unless otherwise arranged.

Registered Assayer, Province of British Columbia



# CHEMEX LABS LTD.

212 BROOKSBANK AVE. NORTH VANCOUVER, B.C. CANADA V7J 2C1

TELEPHONE: (604) 984-0221

REGISTERED ASSAYERS

TELEX: 043-52597

CERTIFICATE OF ANALYSIS

TO : X-CALIBRE RESOURCES LIMITED
TYAUGHTON LAKE ROAD

GENERAL DELIVERY GOLD BRICGE, B.C.

ANALYTICAL CHEMISTS

VOK 1PC

CERT. #

: A8312392-CC1-A

INVOICE # : 18312392 DATE : 22-JLL-83

P.C. # : NCNE

						Ten	Д,
Sample	Prep	Cu	Ag	Co	AU-AA	h	Sb
description	code	ppm	ppm	ppm	ppb	ррп	рсп
P-001	213	29	0.1	16	680	25	3.8
P-003	213	36	0.1	17	20	1	32.0



certified by Houtisuchler



# CHEMEX LABS LTD.

212 BROOKSBANK AVE. NORTH VANCOUVER, B.C. CANADA

TELEPHONE: (604) 984-0221

· ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

TELEX:

043-52597

CERTIFICATE OF ANALYSIS

TO : X-CALIBRE RESOURCES LIMITED

TYAUGHTON LAKE ROAD

GENERAL CELIVERY GOLD BRIDGE. B.C.

VOK 1PO

CERT. #

: A8212393-CC1-A

INVCICE # : 18312393

DATE

: 12-JLL-83

P.C. #

: NCNE

Sample	Prec	Cu	Ag	Co	AU-AA	W	Sc
description	code	ppm	ppm	ррп	ppb	ppm	pon
P-002	201	67	0.1	15	<10	1	1.0

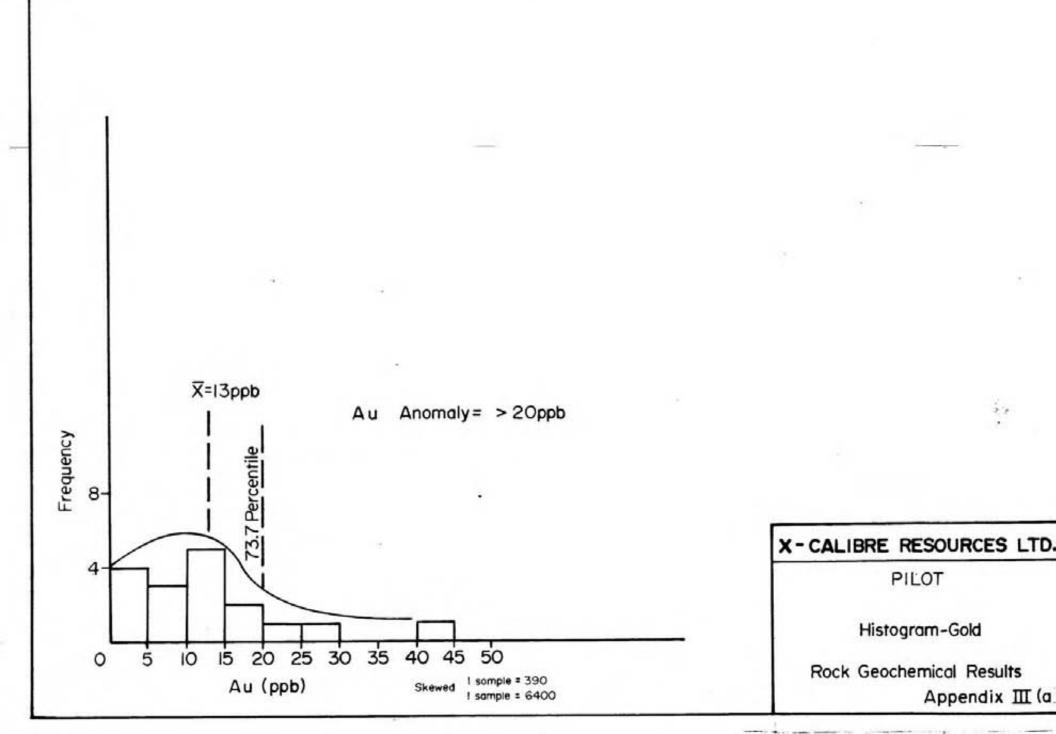


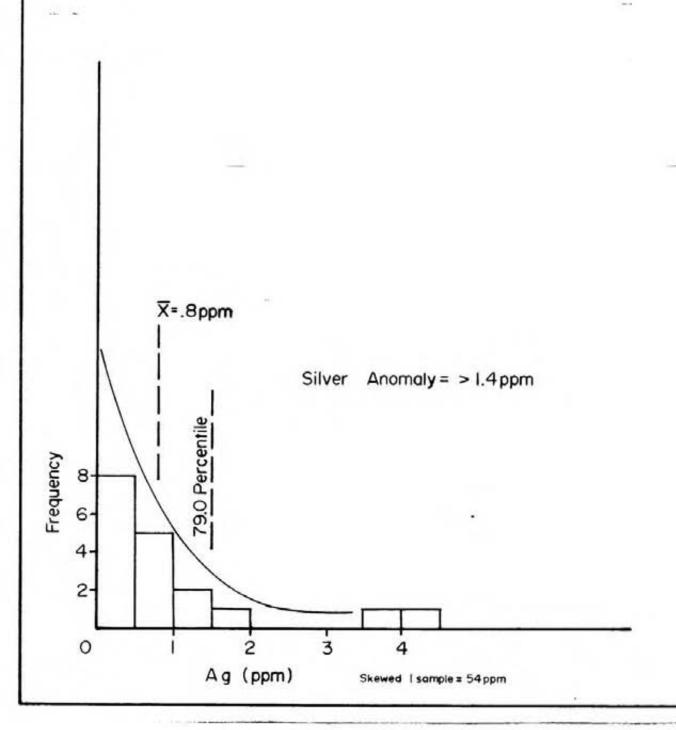
Certified by Hart Bichler

Appendix III

Histograms

Au, Ag, As, Sb, W, Cu, Co





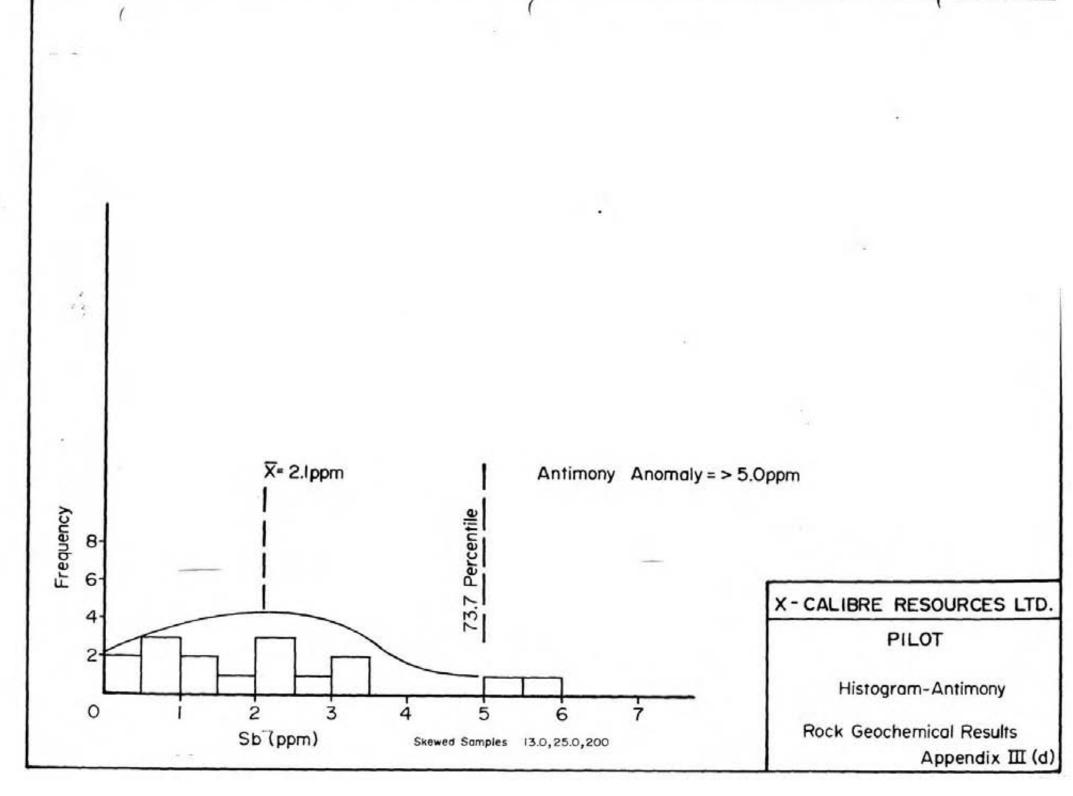
X-CALIBRE RESOURCES LTD.

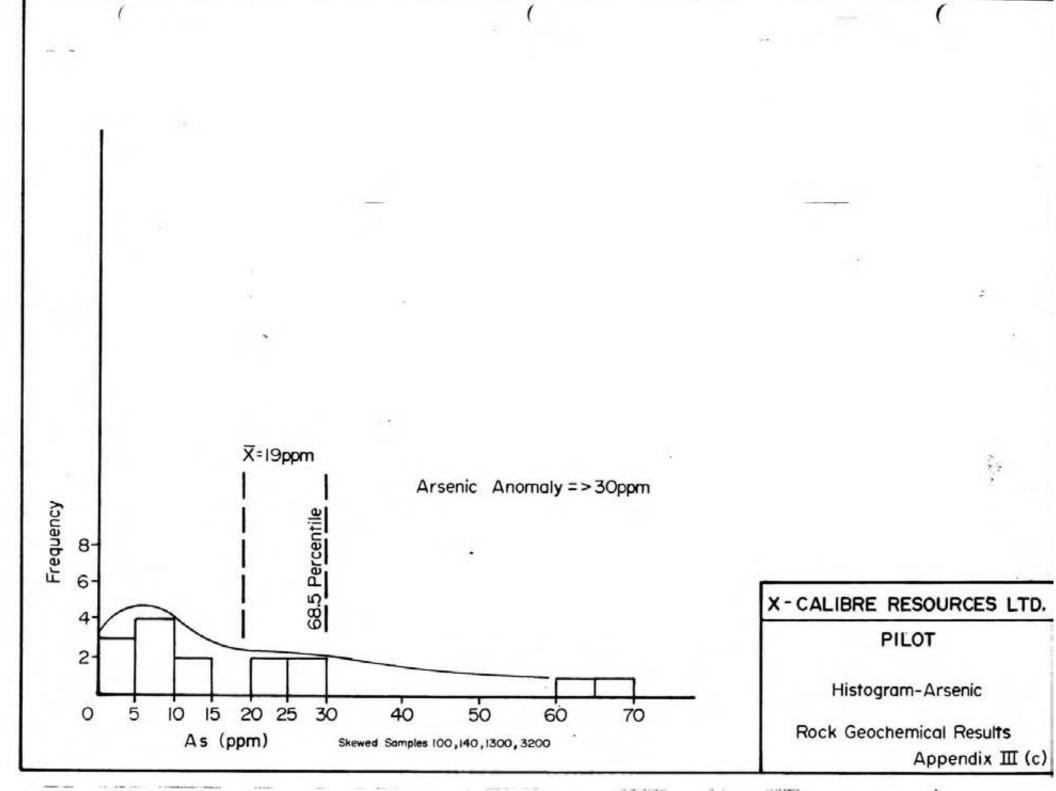
PILOT

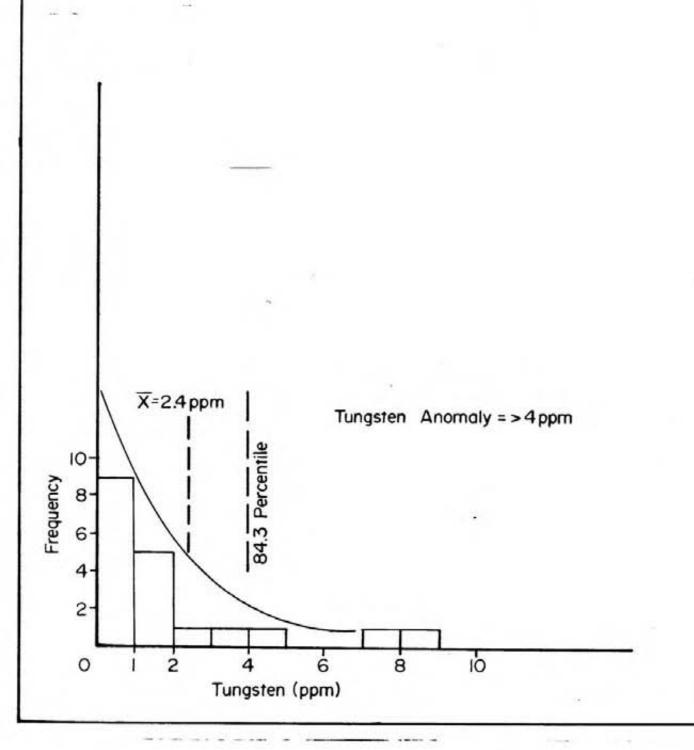
Histogram-Silver

Rock Geochemical Results

Appendix Ⅲ (b)







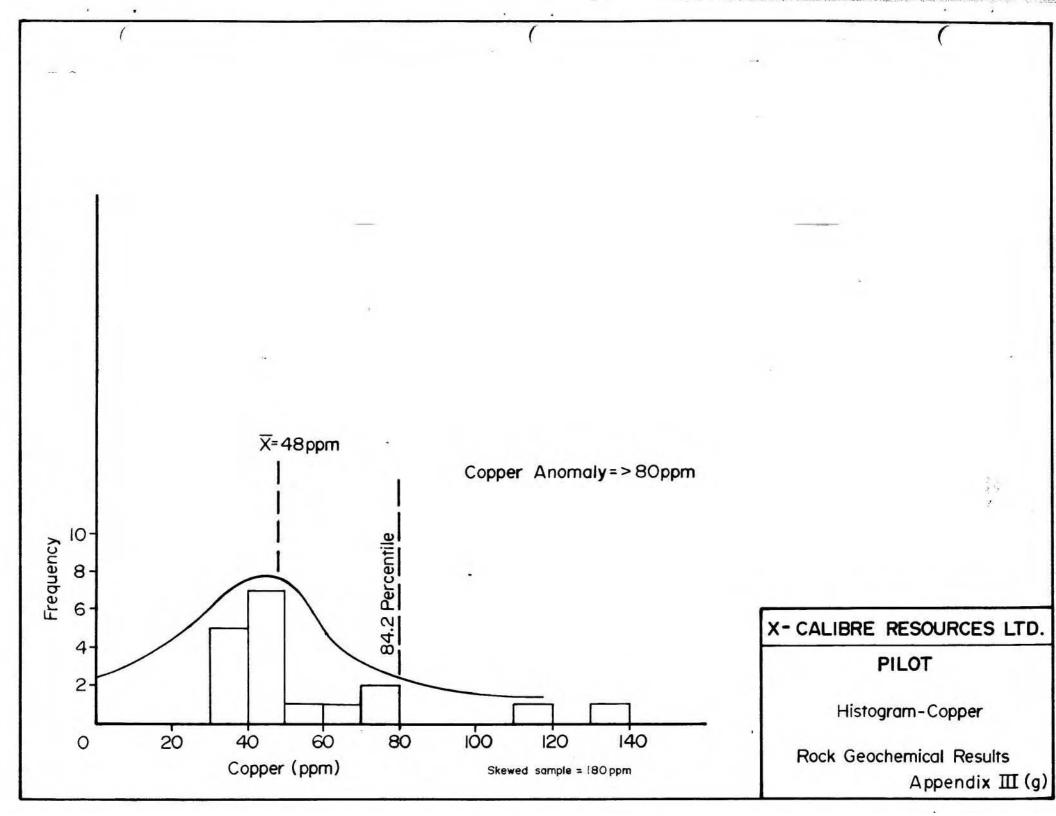
# X-CALIBRE RESOURCES LTD.

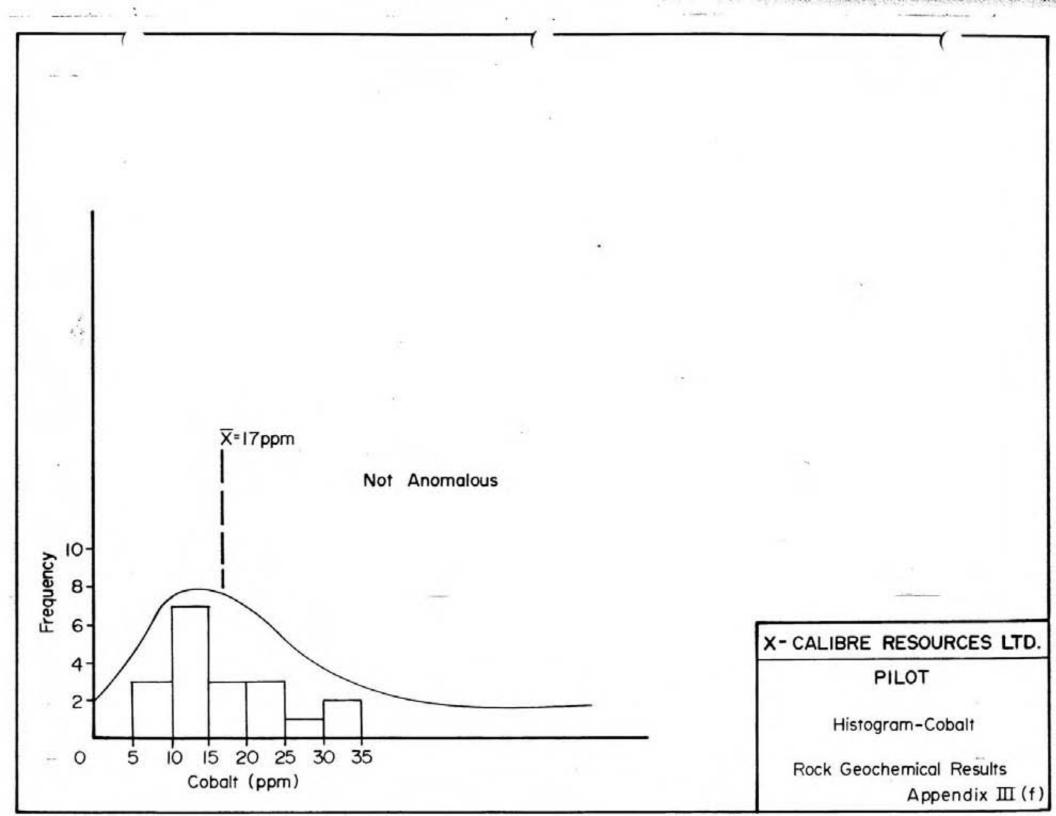
# PILOT

Histogram-Tungsten

Rock Geochemical Results

Appendix III (e)





Appendix IV

Itemized

Cost

Statement

# Statement of Exploration Costs Pilot Reverted Crown Grants

Geologist 8 days @ \$175/day	\$ 1,400.00
Project Manager 8 days @ \$150/day	1,200.00
Labour 4 days @ \$100/day	400.00
Accomodation 16 man days @ \$35/day	280.00
Truck Rental 8 days @ \$40/day	320.00
Travel & Air Freight	150.00
Analysis and Assays	500.00
Materials	20.00
Typing & Secretarial	100.00
Reproduction, Xerox & Binding	80.00
Drafting ·	500.00
Office overhead	100.00
	\$ 5,050.00

Appendix V

Certificate

of

Qualification

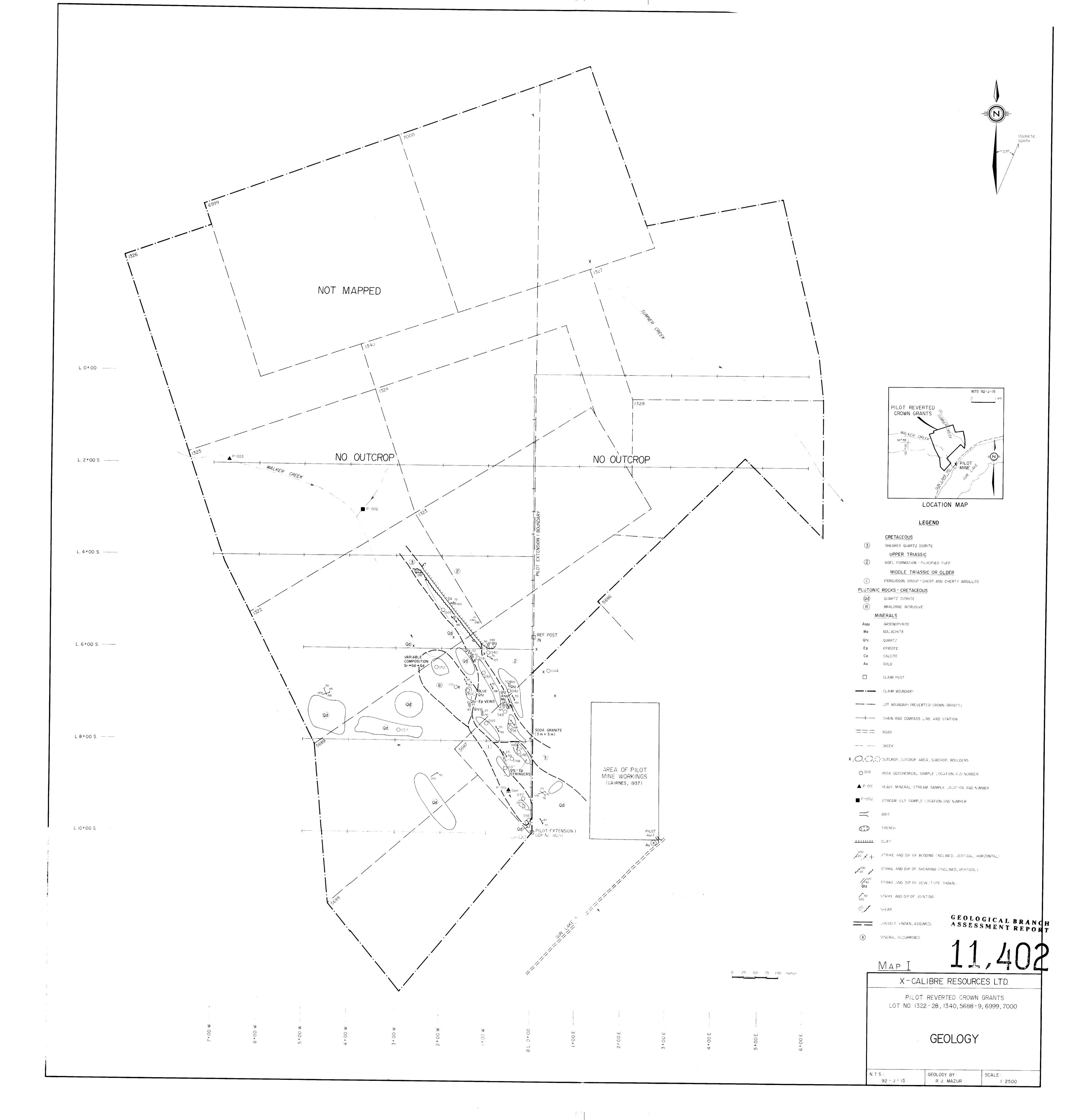
#### Appendix V

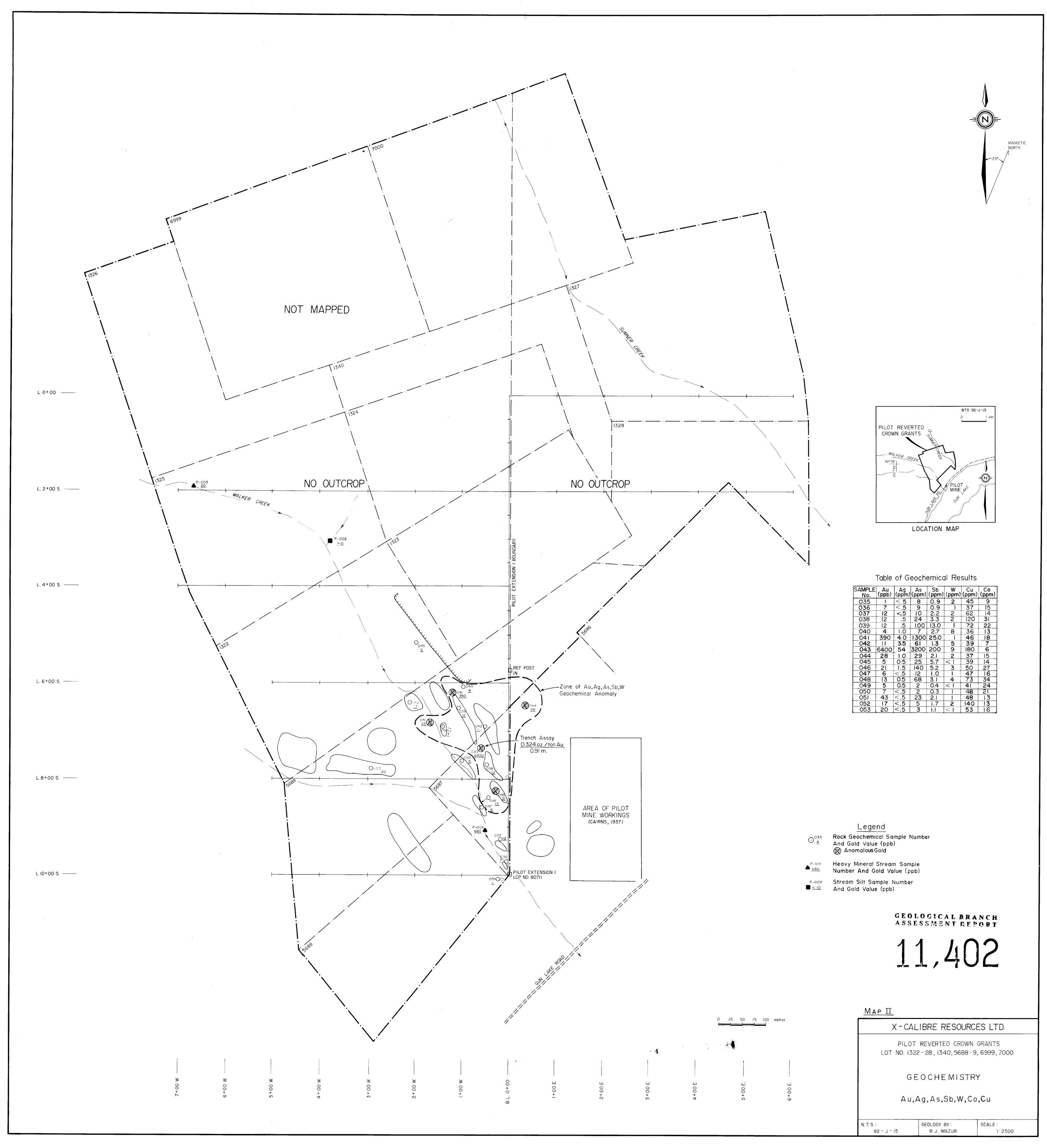
#### Certificate of Qualification

- 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 an honours Bachelor of Science degree in geology in 1975.
- 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 Pilot Claim Group 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 21st day of August, 1983 at Gold Bridge, B. C.

Richard J. Mazur





.