

83-#761 - 11730

12-84

REPORT ON
GEOLOGICAL AND GEOCHEMICAL SURVEYS
ON THE
ELOISE CLAIM
Near Sayward, B.C.

Nanaimo Mining Division, Vancouver Island
NTS Map - Area 92 L/1
Lat. $50^{\circ} 14' N$, Long. $126^{\circ} 01' W$

Owned and Operated by
ACADIAN GOLD LTD.

Prepared by
W.G. Smitheringale, Ph.D., P. Eng.
W.G. SMITHERINGALE & ASSOCIATES LTD., GEOLOGICAL CONSULTANTS

Submitted

NOV 16 1984
GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,730

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SUMMARY

The Eloise claim, which contains 9 units, is located on northern Vancouver Island. Access is by logging road from Sayward.

Since 1966 the claim and surrounding area have undergone intermittent exploration for copper that has included soil geochemical surveys, airborne and ground magnetometer and induced polarization surveys, geological mapping, test pitting and some X-ray drilling. The property was acquired by Acadian Gold Ltd. in March, 1983.

Most of the claim is underlain by a gently northeastward dipping sequence of Karmutsen basalt flows. The northeast corner of the claim is underlain by Quatsino limestone and possibly by some cherty clastic sediments of the Parson Bay Formation.

Mineralization on the claim consists of chalcopyrite and bornite associated with pyrite, quartz and epidote in disseminations, amygdules and stringers in the Karmutsen basalts. The mineralization is discontinuous and its grade is erratic. Its distribution appears to be related to local shears and to flow tops and bottoms within intervals containing interflow limestone beds.

The known mineralization is not economic. Neither the 1983 geochemical survey nor previous geochemical surveys have indicated any significant anomalies over either Karmutsen, Quatsino or Parson Bay(?) rocks. It is recommended, therefore, that no further work be done on the Eloise claim.

INTRODUCTION

Location and Access (Figure 1)

The Eloise claim is located on northern Vancouver Island, 17 km south of Sayward, as follows:

Lat. $50^{\circ} 14'N$, Long. $126^{\circ} 01'W$

NTS Map-Area 92L/1

Nanaimo Mining Division

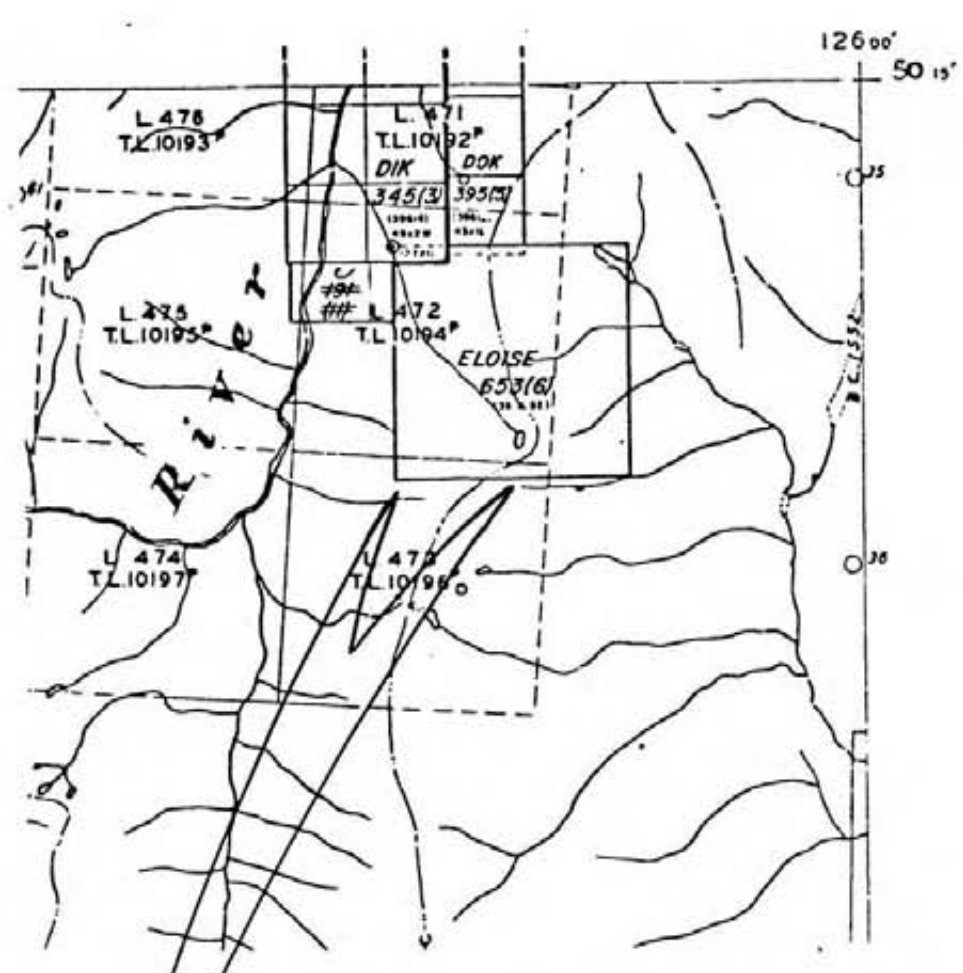
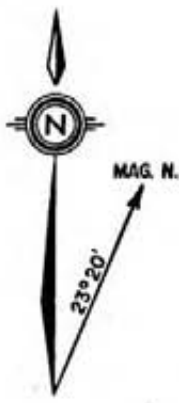


Figure 1

ACADIAN GOLD LTD.

ELOISE CLAIM LOCATION AND CLAIM MAP

Scale 1:50,000

Km 0 2 Km

W.G. SMITHERINGALE & ASSOCIATES LTD. NOV. 25 1983

Access is via the Island Highway to the Upper Adam logging road 15 km west of the Sayward turn-off, then south on the Upper Adam road for about 8 km, then eastward on road 108A to roads 108 and 109. From the end of road 108 game trails and an old survey trail lead to the western and central parts of the Eloise claim (Figure 3) and from the end of road 109 one can easily drop southwestward down to the nearby swamp and then onto game trails that lead to the eastern part of the claim.

The claim lies in gentle to rugged terrain characterized by moderate slopes, local cliffs and in many places a thick growth of blueberry and other bushes. The area has never been logged, and consequently the trees, which are mostly hemlock with some cedar and fir, are huge. Elevations range from about 500 m to 750 m. Lois Creek, which drains a small lake in the middle of the claim, runs through the northwest quadrant of the claim. First, Second and Third creeks have been named in order to facilitate the discussion of geology in this report.

Property Description

The Eloise claim contains 9 units, its record number is 653(6) and the expiry date is June 23, 1984. The owner and operator of the claim is Acadian Gold Ltd. of Vancouver, B.C.

The legal corner post is located on the west bank of Lois Creek at an elevation of 490 m.* The claim boundary runs 3 units south and 3 units east. The blazed boundary lines actually run 5° to 10° off true south and east and the north boundary is approximately 75 m short (Figure 3).

The history of the property has been summarized by Jones (1) as follows:

"The Eloise claim, covering a part of what was formerly called the Lois Creek property, was originally staked by P. Gottselig for the Adam River Syndicate in 1966. Rio Tinto Canadian Exploration briefly explored the property in 1966 and completed a geochemical soil survey on the ground. In 1967 Adam River Syndicate optioned the property to Emperor Mines Ltd. This company concentrated their efforts on the Adam River showings (now DIK claims - Figure 1) which consist of siliceous zones in limestone and

*Elevations shown on the accompanying maps (Figures 3, 4, 5 and 6) are about 70 ft. too high.

andesite locally well mineralized with pyrite, pyrrhotite, chalcopyrite, sphalerite and carrying significant values in gold. They dropped their option in 1968. The property was then optioned by Rip Van Mining Ltd. in 1969 and the following work was done: trenching and sampling; geochemical soil surveys; airborne magnetometer survey and induced polarization survey. In 1970, El Paso Mining and Milling Company succeeded Rip Van Mining Ltd. and took over management of exploration on the property. This included geochemical soil surveys, geological mapping and some X-ray drilling. The option was terminated in 1971.

The property was acquired by H.M. Jones, P. Eng., in 1980. In 1982 a ground magnetometer survey was conducted over that part of the property which contained all of the old mineralized pits."

In March, 1983, J.R. Billingsley purchased full title to the property and it was then immediately acquired by Acadian Gold Ltd.

The work described above focused attention on pyrite, chalcopyrite and bornite mineralization in volcanic rocks that has been exposed in pits along Lois Creek. This mineralization occurs as stringers, pods and disseminations and is localized by flow contacts. It is too restricted in distribution to be of economic significance and it is unlikely that this type of flow top associated mineralization is present in economic concentrations elsewhere on the property. Another type of mineralization that could be present on the property is Cu-Zn-(Au) mineralization (as described above by Jones) in the Quatsino or Parson Bay formations that cross the northeast quadrant of the claim. Unfortunately the soil geochemistry survey conducted in August, 1983, gave no indication of such mineralization. I conclude, therefore, that the Eloise claim has no mineral potential.

Summary of Work Done

Between June 26 and September 1, 1983, the following work was done.

Linecutting: 2.7 km cut, chained and pegged.

Geochemical survey: 404 soil samples analyzed for Cu and Zn.

Geological survey: 0.83 sq. km mapped at a scale of 1:2,500. This area includes most of the northern three units and part of the remaining two eastern units. The central, western and southern parts of the claim have been mapped previously.

TECHNICAL DATA AND INTERPRETATION

Regional Geology

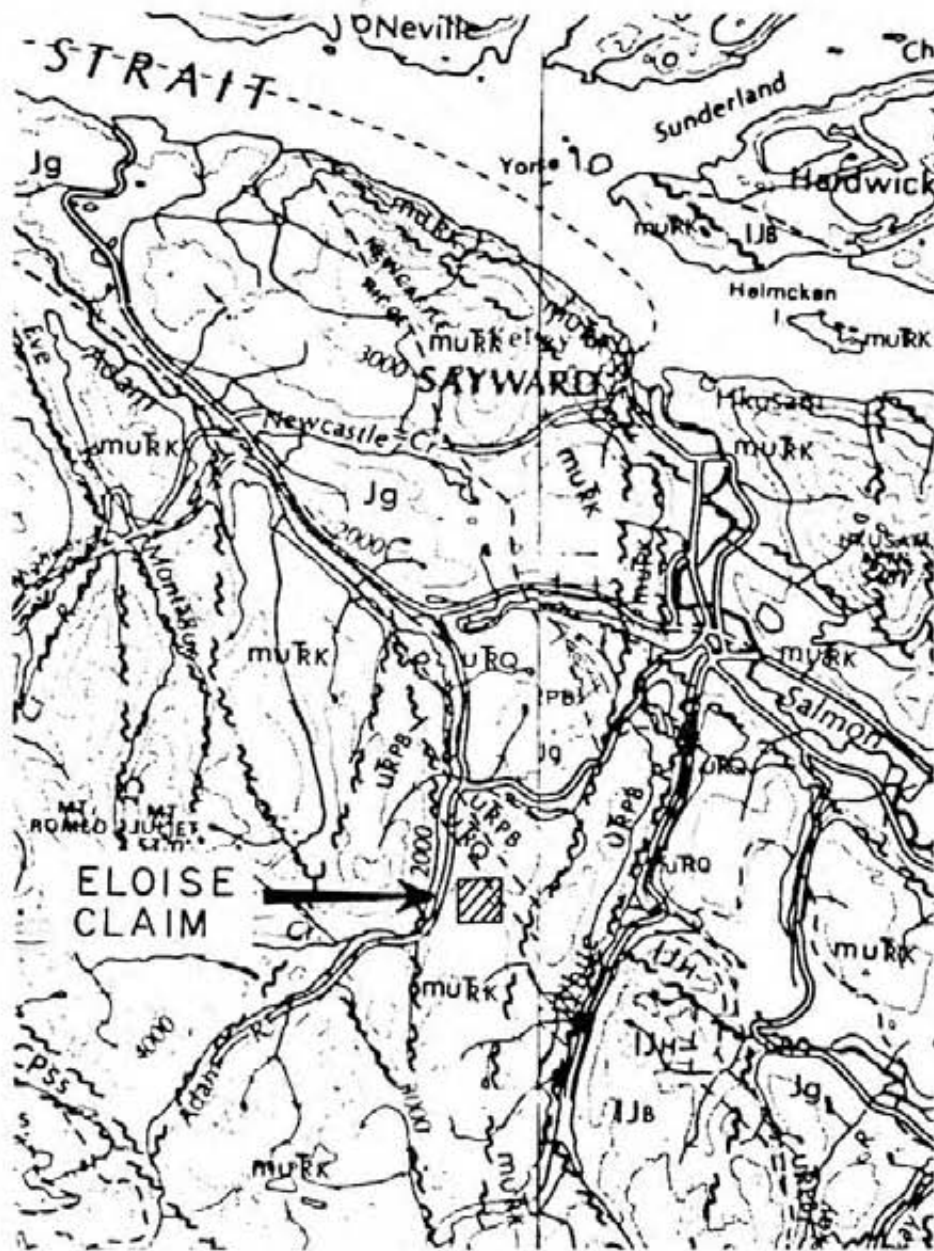
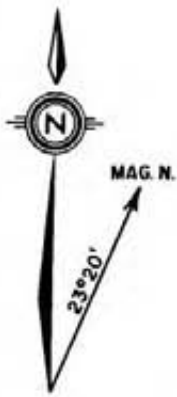
The Sayward region of Vancouver Island is underlain, in order of decreasing age, by the Karmutsen Formation (mid to late Triassic basaltic lava, pillow lava, breccia and tuff), the Quatsino Formation (late Triassic limestone), the Parson Bay Formation (late Triassic calcareous silstone, greywacke and silty limestone), the Harbledown Formation (early Jurassic argillite, greywacke and tuff), the Bonanza volcanics (early Jurassic basaltic to rhyolitic lava, tuff, breccia and minor argillite and greywacke) and Island Intrusions (late Jurassic granodiorite to quartz monzonite), which intrude the previously mentioned units (2). This terrain has been cut into a mosaic of sub-terrains by northwest to northeast trending faults (Figure 2).

Property Geology and Mineralization

The Eloise claim is underlain by the Karmutsen Formation, except for the northeast corner, where Quatsino limestone is in fault contact with the Karmutsen and is possibly overlain by the Parson Bay Formation.

The purpose of the geological survey conducted in 1983 was:

1. To determine the control of the mineralization exposed along Lois Creek and to determine if the geology of the property favours the occurrence of this type of mineralization in economic concentrations elsewhere on the property.
2. To locate the Karmutsen-Quatsino and Quatsino-Parson Bay contacts in the northwestern Quadrant of the property.



LEGEND

- Jg ISLAND INTRUSIONS
granite
- IJB BONANZA VOLCANICS
basalt to rhyolite, minor argillite
- uRPB Parson Bay
calcareous siltstone and related sediments
- uRo QUATSINO LIMESTONE
- muRK KAR MUTSEN VOLCANICS
basalt

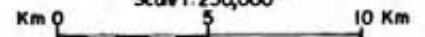
Figure 2

ACADIAN GOLD LTD.

**ELOISE CLAIM
REGIONAL GEOLOGY**

(after J.E. Muller, 1977)

Scale 1:250,000



Mineralization Along Lois Creek

The mineralization exposed in the pits along Lois Creek consists of pyrite, chalcopyrite and bornite associated with epidote, quartz, calcite and minor hematite occurring in small stringers, amygdules and disseminations. The host rock is propylitized, medium to dark green and greenish grey, amygdaloidal, massive and locally pillowed basalt. Mineralization was observed in fractures with attitudes of 035° to $050^{\circ}/v$, $020^{\circ}/60^{\circ}$ SE, about $110^{\circ}/30^{\circ}$ NE and in randomly oriented fractures. The $110^{\circ}/30^{\circ}$ NE fractures are parallel to flow contacts. In several places a 1 m thick bed of limestone lies between flows and comprises the local geological control for the course of Lois Creek. Bedding along the creek, as determined from the limestone bed and from flow contacts and pillow attitudes, is about $110^{\circ}/30^{\circ}$ NE. All evidence points to the mineralization being local in distribution and controlled by flow contacts and related features. The contact (or contacts) along which the limestone lenses occur may be a particularly important control. There is no evidence of the mineralization being associated with a strong, continuous structure such as a fault zone along Lois Creek.

Geology of area mapped in 1983

A. Karmutsen Formation

In the northern and eastern portions of the claim the Karmutsen Formation consists of basalt flows and minor flow breccia. These fine-grained rocks vary from medium to dark green, from pyroxene porphyritic through pyroxene and plagioclase porphyritic to plagioclase porphyritic and from massive to strongly amygdaloidal. The phenocrysts are mostly medium grained. In some flows plagioclase phenocrysts occur as multi-grain clots. Chlorite is the most common amygdule filling. Propylitization is generally well developed, although in places phenocrysts appear fresh. Pillow and flow breccia structures are present in places, but are not common. Flow thickness could seldom be determined. Several flows 5 m to 10 m thick were seen, and in general flows are more than several metres thick. Flow contacts that are marked by abrupt changes in the number of amygdules, and sometimes by changes in other textural features, can be found in most large outcrops by careful searching. Several joint sets are usually well developed, one of which is parallel to flow contacts. Bedding

determined from flow contacts ranges in strike from 080° to 120° and in dip from 25° to 35° northeastward.

On the accompanying geological map (Figure 4) basalts are differentiated on the basis of their phenocryst content.

In several places on Lois Creek and at one locality on Second Creek limestone or limey tuff beds a metre or so thick are present between flows. In the bluffs along the eastern boundary of the claim there are several exposures of light grey and felsite with small plagioclase and amphibole phenocrysts. They probably represent a northerly trending dyke.

In the writer's opinion, the Karmutsen flows in this area comprise a structurally simple northerly dipping sequence, probably cut by small northerly and easterly trending faults. Within the sequence there are two intervals in which interflow limestone beds and lenses are common. The locations of these intervals are indicated by the principal creeks, which by and large follow the intervals because they are less resistant to erosion than the adjacent flows. One interval is marked by Lois and Third Creeks and the other by First and Second Creeks. The attitudes of these stratigraphic intervals, estimated by projection from creek to creek, is $105^{\circ}/20^{\circ}$ NE for the Lois-Third Creek interval and $112^{\circ}/17^{\circ}$ NE for the First-Second Creeks interval. It is probable that these intervals would have been more susceptible to mineralization than the remainder of the basalt sequence. The numerous gulleys and cliff faces trending northerly and easterly probably represent faults, but no fault planes as such were observed.

B. Quatsino Formation and Andesitic Sill(?)

The northeastern part of the Eloise claim is underlain by a northwestward trending belt of Quatsino limestone characterized by small sinkholes. In the few exposures present the limestone is medium grey and generally massive, although several thin bedded and laminated horizons were observed. A fracture cleavage is present with an attitude of 115° to $150^{\circ}/80^{\circ}$ NE to vert. At one place this fracture cleavage is parallel to a fault contact between limestone and light grey felsite. Small folds with axes pitching 40° SE in the plane of the fracture cleavage were seen in one outcrop. In a quarry near the end of logging road 108 bedding in Quatsino limestone is $120^{\circ}/27^{\circ}$ NW.

The contact between the Quatsino and Karmutsen formations is assumed to be a fault.

No outcrop is present in the valley occupied by the lake in the northeast corner of the claim. However, thin bedded, cherty, limy, tuffaceous and argillaceous sediments belonging to the Parson Bay Formation outcrop on road 109 and project into this area. Northeast of the lake, near corner post 0S 3E, greyish green, massive, very fine grained, pyrrhotite rich (1% or 2%) andesite or basaltic andesite outcrops. This rock is dissimilar to the Karmutsen flows. It could be a down-faulted wedge of Bonanza volcanics, but most probably it is a sill within the Parson Bay Formation.

Geochemical Survey

Four hundred and four soil samples were collected on a grid with sample lines running 045° and spaced either 50 m or 100 m apart. Sample sites were spaced either 25 m or 50 m apart. In most places the B horizon was sampled, usually at a depth between 10 cm and 60 cm. In places where a thick layer of organic debris containing a dense network of roots prevented sampling the B horizon a sample was collected from the A_1 horizon (mixed humus and mineral matter). Near the lake shore northeast of the baseline, and in several creek beds, the soil profile is waterlogged. In such places the gley horizon directly beneath the humus was sampled. Samples were collected with a mattock and trowel and placed in wet-strength Kraft paper bags. They were submitted to Min-En Laboratories Ltd. of North Vancouver, B.C. They were oven dried and sieved, and the -80 mesh fraction was analyzed for Cu and Zn using a nitric-perchloric acid digestion and atomic absorption analysis. The results are reported in Appendix I and shown on Figures 5 and 6.

Statistical Treatment

The geochemical samples have been treated as two populations, one consisting of samples collected in the area underlain by the Karmutsen Formation and the other consisting of samples collected in the area underlain by the Quatsino Formation, according to the geological interpretation shown in Figure 4. Probability plots (Appendix I) and mean values show that the two sample populations are distinctly different in their Zn content but are only slightly different, if at all, in their Cu content. Statistical parameters for each population are given below and on Figures 5 and 6. Values are in ppm.

	<u>Karmutsen Terrane</u>		<u>Quatsino Terrane</u>	
	<u>Zn</u>	<u>Cu</u>	<u>Zn</u>	<u>Cu</u>
Mean	36.8	73.3	63.6	86.9
Standard deviation	15.5	38.3	33.6	37.7
Threshold (97.5 cumulative per cent value)	70	155	143	165

Anomalies shown on Figures 5 and 6 are based on threshold values defined as the 97.5 cumulative per cent value for each population, as shown above.

Discussion of Anomalies

The only anomalies involving more than one sample site are several small Zn anomalies along the east boundary of the claim. The anomalies on lines 5 + 50 SE, 6 + 50 SE, 7 + 00 SE and 10 + 00 SE are in areas mapped as Karmutsen Formation. Except for one sample on line 10 + 00 SE, the samples would not be anomalous if they were included in the Quatsino Zn population. Apart from a few isolated highs, these Zn anomalies are probably due to the presence of undetected fault slices of Quatsino limestone. The remaining spot anomalies of Zn or Cu in either terrane may be due to mineralization, but they are too isolated to warrant follow up work.

Interpretation

1. Mineralization along Lois Creek is discontinuous. It is controlled by relatively porous and permeable flow tops and bottoms and by minor faults in an interval within the Karmutsen flows that contains lenses and thin beds of limestone.
2. Apart from tentatively identifying two intervals that contain interflow limestone beds and that might be favourable loci for mineralization, the geological survey and prospecting failed to find any mineralization, alteration, major structures or other features within the area underlain by Karmutsen volcanics that might be considered to be encouraging or favourable for the presence of economic mineralization. The most favourable area for prospecting is the northeast corner of the claim, where the Karmutsen-Quatsino contact and possibly some Parson Bay Formation are present. The Parson Bay is mineralized north of the Eloise claim.
3. The geochemical survey failed to identify any anomalies worthy of follow-up, either over Karmutsen rocks or in the northeast corner of the claim.

ITEMIZED COST STATEMENT

Wages

P. Greening: 2.5 days (July 31, Aug. 1 & 2) @ \$115.00 per day	\$ 287.50
R. Ney: 18 days (Aug. 15 to Sept. 1) @ \$115.00 per day	2,070.00
K. Parr: 9 days (Aug. 17 to 21 and Aug. 27 to 30) @ \$115.00 per day	1,035.00
J. Fell: 8 days (Aug. 22 to 29) @ \$115.00 per day	<u>920.00</u>
TOTAL	\$ 4,312.50

Consulting Fees

W.G. Smitheringale & Associates Ltd.

Field work	17.0 days		
Research and expiditing	2.19 days		
Report preparation	<u>6.0 days</u>		
	25.19 days	@ \$350 per day	\$ 8,816.50

Food and Accommodation

At Salmon River Inn, Sayward, B.C.

<u>Date</u>	<u>No. of Men</u>	<u>Meals</u>	<u>Accommodation</u>
Aug. 15	3	\$ -	\$ 55.64
Aug. 16	4	107.82	79.18
17	5	85.65	102.72
18	5	111.76	102.72
19	3	98.47	70.62
20	3	61.19	70.62
21	3	73.61	70.62
22	3	63.23	70.62
23	3	58.56	70.62
24	3	55.42	70.62
25	3	57.52	70.62
26	3	59.82	70.62
27	3	70.93	55.64
28	3	60.61	55.64
29	2	52.33	47.08
30	2	50.59	47.08
31	1	5.50	-
		<u>\$1,074.01</u>	<u>\$1,110.66</u>

Sub Total, Salmon River Inn	\$ 2184.67
Meal tips, Salmon River Inn	77.00
Meals, traveling	31.90
TOTAL	\$ 2,293.57

Average food and accommodation \$44.11 per man day

Transportation

4 x 4 truck rental (Redhawk Rentals Ltd., Burnaby) Aug. 15 to Sept. 1 @ \$250.00 per week; 1,793 km @ \$0.12/km; insurance @ \$25.00 per week; tax 7% and fuel fill	\$ 1,027.37
Station Wagon Rental (W.G. Smitheringale & Associates Ltd.) 6 days @ \$25.00 per day; 1,050 km @ \$0.12 per km	250.00
Gas for vehicles	252.46
B.C. Ferry Charges	<u>143.00</u>
TOTAL	\$ 1,672.83

Analyses

404 soil samples, preparation and analysis for Cu & Zn @ 3.75 ea.	\$ 1,515.00
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Line Cutting (2.7 km)

By contract to Hi-Tec Resource Management Ltd., North Vancouver; 2 man crew, 4 days travel and cutting, plus equipment and travel charges	\$ 1,910.00
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Miscellaneous Expenses

Air photos, topo maps and reproduction of previous exploration maps	60.78
Field supplies (soil sample bags, hip chain thread, flagging, etc.)	276.64
Drafting for report	600.00
Secretarial	134.10
Map reproduction and Xeroxing	<u>217.36</u>
TOTAL	\$ 1,288.88

GRAND TOTAL	<u>\$21,809.28</u>
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Geochemical Survey

Aug. 19 to 30; 26 man days @ \$115/man day; 404 samples collected and analyzed for Cu and Zn.

Collection	\$ 2,990.00
Analysis	<u>1,515.00</u>
Total	\$ 4,505.00

Notes:

1. The brush was very thick, the slopes steep and at many sites several holes had to be dug before a suitable soil sample was obtained. The average of only 15 samples per man day is therefore quite reasonable.
2. These costs have been included above under Wages and Analyses.

Report

Writing, plotting data and expiditing: 6 days @ \$350 per day	\$ 2,100.00
Secretarial	134.10
Drafting	600.00
Reproduction and Xeroxing	206.45
Miscellaneous	<u>10.91</u>
Total	\$ 3,051.46

Note: The costs of the report have been included above under Consulting Fees and Miscellaneous Expenses.

Respectfully submitted,



W.G. SMITHERINGALE & ASSOCIATES LTD.
W.G. Smitheringale, Ph.D., P. Eng.

November 25, 1983

CERTIFICATION

I, William G. Smitheringale, certify that:

I am a practising Professional Geological Engineer, resident at 2008 Fullerton Avenue, North Vancouver, B.C.

I am a graduate of the University of British Columbia with a degree in Geological Engineering (B.Ap.Sc., 1955) and of the Massachusetts Institute of Technology with the degree of Doctor of Philosophy in Geology (Ph.D., 1962).

I have practised my profession continuously for twenty years as Geologist with the Geological Survey of Canada, as Assistant and Associate Professor, Department of Geology, Memorial University of Newfoundland and, since 1974, as a Consulting Geologist.

I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia (Registration No. 10,802).

This report is based on field work carried out by myself and by others under my supervision between June 26 and September 1, 1983, on published information and on data in private files and reports.

I hold no interest, nor do I expect to receive any interest, in the Eloise claim or in Acadian Gold Ltd.



W.G. SMITHERINGALE, Ph.D., P. Eng.

November 25, 1983

REFERENCES

- 1) Jones, Harold M., March 15, 1983: Report on the Eloise Claims, Adam River area, Sayward, B.C.; unpublished report prepared for J.R. Billingsley.
- 2) Muller, J.E., 1977: Geology of Vancouver Island (West Half); Geol. Surv. Canada Open File 463, geological map, scale 1:250,000.

APPENDIX I

Soil Geochemistry Data

MIN-EN Laboratories Ltd.

705 WEST 15th STREET,
NORTH VANCOUVER, B.C., CANADA V7M 1T2
TELEPHONE (604) 980-5814

ANALYTICAL REPORT

Project Eloise Date of report Sept. 14/83.

File No. 3-920 Date samples received Sept. 1/83.

Samples submitted by:

Company: W.G. Smitheringale

Report on: 404 soils Geochem samples

Assay samples

Copies sent to:

1. W.G. Smitheringale, Vancouver, B.C.

2.

3.

Samples: Sieved to mesh - 80 Ground to mesh

Prepared samples stored discarded

rejects stored discarded

Methods of analysis: nitric, perchloric digestion, A.A.

Remarks:

SPECIALISTS IN MINERAL ENVIRONMENTS

COMPAN

W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

FIL. No. 3-920

PROJECT No.: Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14

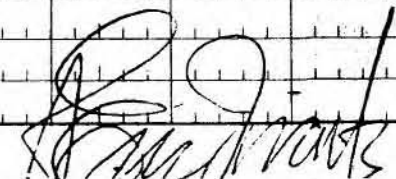
ATTENTION: W.G. Smitheringale

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Soil Horizon	Ag ppm	Depth (cm)	Hg ppb	As ppm	Mn ppm	Au ppb				
61	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
R 1		96		79		A ₁		39						(40 mesh)		
2		10		28		A ₁		40						(40 mesh)		
3		78		108		B		25								
4		98		198		B		30								
5		85		138		B		40								
6		99		176		B		30								
7		80		84		B		40								
8		63		114		B		35								
9		65		124		B		30								
10		87		210		B		45								
11		126		200		AAB		50								
12		45		84		B		40								
13		28		40		A ₁		35								
14		20		44		B		35								
15		46		53		B		35						(40 mesh)		
16		47		42		B		28								
17		77		50		B		38						(40 mesh)		
18		no sample														
19		48		26		A ₁		30								
20		73		76		B		30								
21		36		23		A ₁		42						(40 mesh)		
22		39		46		B		35								
23		39		50		B		45								
24		40		32		B		30								
R 25		18		34		A ₁		40						(40 mesh)		
L0+00B10+00		163		60		B		40								
L0+00-025S		98		58		B		35								
		050		62		B		30								
		075		77		B		40								
L0+00-100S		57		30		B		10								

CERTIFIED BY



COMPAN

W.G. Smitheringale

PROJECT No.:

Eloise

ATTENTION:

W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

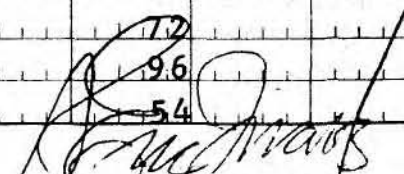
FILE No. 3-920

DATE: Sept. 14

1983

Sample Number	X _o ppm	X ₁ ppm	Pb ppm	Zn ppm	Ni ppm	Soil Horizon	Ag ppm	Depth (cm)	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm			
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L0+00150S				23		B		30						33		
L0+00250S				35		B		10						63		
300				34		B		10						47		
350				19		C		50		gley soil				6		
400				14		A ₁		30						5		
450				32		A ₁		40						35		
500				21		B		15						12		
550				23		B		25						38		
600				39		B		15						24		
650				14		C		60		gley soil				10		
L0+00700S				15		C		60		gley soil				11		
L0+50SEBL0+00				63		B		40						103		
L0+50SE 025S				78		B		20						85		
050				62		B		30						121		
075				45		B		20						72		
L0+50SE 100S				49		B		40						112		
L0+50SE 150S				45		B		10						102		
200				34		B		30						60		
L0+50SE250S				70		B		30						123		
L1+00SEBL0+00				54		B		40						66		
L1+00SE025S				69		B		10						122		
050				109		B		30						118		
075				52		B		25						87	(40 mesh)	
L1+00SE100S				64		B		25						100		
L1+00SE150S				45		B		20						73		
200				50		B		20						110		
250				49		B		15						118		
300				29		B		20						112		
350				36		B		20						96		
L1+00SE400S				30		B		30						54		

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COMPAN W.G. Smitheringale

PROJECT No: Eloise

ATTENTION: W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 3-920

DATE: Sept. 14

1983.

Sample Number	6	10	15	Pb ppm	Zn ppm	Ni ppm	30	35	Ag ppm	40	45	Hg ppb	50	As ppm	55	Mn ppm	60	Au ppb	65	Cu ppm	70	75	80
	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195
L1+00SE450S					40		<i>Soil</i>				2.0									123			
		5.00			1.9		<i>Horizon</i>				4.0									50		(40 mesh)	
		5.50			4.6						3.5									78			
		6.00			2.3						3.0									56			
L1+00SE650S					1.8						2.0									77			
L1+50SEBL0+00					3.5						2.5									105			
L1+50SE0.25S					6.2						2.0									155			
		0.50			4.0						4.0									87			
		0.75			5.4						4.0									70			
L1+50SE1.00S					7.5						3.0									99			
L1+50SE1.50S					2.5						4.0									56		(40 mesh)	
		2.00			2.4						3.0									27			
		2.50			2.5						4.0									42			
		3.00			5.3						3.5									98			
		3.50			2.5						3.0									24		(40 mesh)	
		4.00			3.8						2.0									42		(40 mesh)	
		4.50			3.3						1.5									99			
		5.00			3.3						1.5									106			
L1+50SE5.50S					3.9						2.5									67			
L2+00SEBL0+00					6.3						1.0									138			
L2+00SE0.25S					4.8						1.0									62			
		0.50			5.4						1.0									69			
		0.75			3.3						1.0									95			
		1.00			3.8						1.0									96			
		1.25			3.0						1.0									43			
L2+00SE1.50S					4.4						5									100			
L2+00SE2.00S					3.7						5									167			
		2.50			3.6						5									86			
		3.00			3.3						5									86			
L2+00SE3.50S					4.0						5									49			
											5									41			

[Handwritten Signature]

COMPAN

W.G. Smitheringale

PROJECT No.:

Eloise

ATTENTION:

W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No. 3-920

DATE: Sept. 14

1983.

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Sample Number	As ppm	Pb ppm	Pb ppm	Zn ppm	Ni ppm	Ag ppm	Ag ppm	Hg ppb	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm		
81	86	90	95	100	105	110	120	125	130	135	140	145	150	155	160
L2+00SE400S				24		B	•	5					11		
	4.50			18		A ₄	•	5					10	(40 mesh)	
	5.00			33		B	•	20					40	(40 mesh)	
L2+00SE550S				26		B	•	5					24	(40 mesh)	
L2+50SEBL0+00				41		B	•	20					79		
L2+50SE0.25S				59		B	•	10					88		
	0.50			34		B	•	20					42		
	0.75			54		B	•	10					85		
	1.00			60		B	•	10					89		
	1.25			49		B	•	20					57		
L2+50SE150S				38		B	•	25					89		
L3+00SEBL0+00				69		B	•	20					143		
L3+00SE0.25S				59		B	•	15					82		
	0.50			66		B	•	10					81		
	0.75			38		B	•	10					34		
	1.00			20		B	•	7					16		
	1.25			53		B	•	5					61		
L3+00SE150S				35		B	•	5					69		
L3+00SE2.00S				40		B	•	2					71		
	2.50			30		B	•	3					76		
	3.00			21		B	•	5					99		
	3.50			14		A ₄	•	10					61	(40 mesh)	
	4.00			28		B	•	3					42		
L3+00SE450S				22		A ₄	•	5					27	(40 mesh)	
L3+50SEBL0+00				51		B	•	20					78		
L3+50SE0.25S				77		B	•	10					193		
	0.50			44		B	•	20					54		
	0.75			63		B	•	25					84		
	1.00			49		B	•	30					48		
L3+50SE1.25S				41		B	•	20					56		

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W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 3-920

PROJECT No.

Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14

ATTENTION:

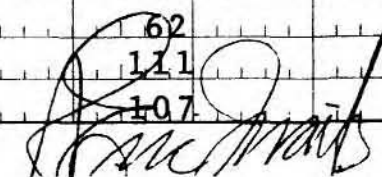
W.G. Smitheringale

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
	Co	Cu	Pb	Zn	Ni	Soil	Ag	Hg	As	Mn	Au	Cu					
	ppm	ppm	ppm	ppm	ppm	Depth	ppm	ppb	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	
	81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L3+50SE150S				60	B	3.0								150			
				34	B	3.0								71			
				48	B	3.0								37			
				40	B	4.0								64			
				44	B	3.0								101			
				56	B	3.0								172			
L3+50SE300S				34	B	3.0								84			
L4+00SEBLO+00				70	B	2.5								117			
L4+00SE025S				49	B	2.0								73			
				98	B	5								146			
				136	B	3.0								131			
				152	B	1.5								127			
				36	B	1.5								39			
				52	B	1.0								133			
				54	B	1.5								138			
				29	B	1.5								56			
				53	B	7								116			
L4+00SE250S				39	B	1.0								59			
L4+00SE300S				55	B	1.5								86			
L4+00SE350S				11	A ₁	1.0								6 (40 mesh)			
L4+50SEBLO+00				112	B	1.5								116			
L4+50SE025S				35	A ₁	2.2								20 (40 mesh)			
				80	B	2.0								170			
				90	B	3.0								116			
				70	B	4.5								78			
				74	B	4.0								80			
				35	C	7.0								37			
				46	B	10-14								62			
				60	B	2.5								111			
L4+50SE225S				84	B	2.5								107			

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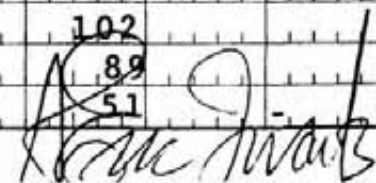
MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

Fl. No. 3-920

DATE: Sept. 14
1983.

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample Number	Mg ppm	K ppm	Pb ppm	Zn ppm	Ni ppm	Soil Horizon	Ag ppm	Depth (cm)	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm			
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L4+5.0S	E2.50S			50		B		5.5					160			
	2.75			23		B		3.0					37			
L4+5.0S	E3.00S			40		B		2.5-4.0					79			
L5+0.0S	EBL0+00			38		B		1.0					63			
L5+0.0S	E0.25S			97		B		2.0					205			
	0.50			36		B		1.0					76			
	0.75			66		A ₁		1.0					112	(40 mesh)		
	1.00			43		B		5					59			
	1.25			40		B		2.0					51			
	1.50			60		B		1.0					88			
	1.75			54		B		2.0					93			
	2.00			59		B		1.0					91			
	2.25			49		B		1.5					96			
	2.50			54		B		1.5					84			
	2.75			40		B		2.5					57			
L5+0.0S	E3.00S			32		B		4.0					64			
L5+0.0S	E3.50S			46		B		3.5					67			
L5+5.0S	E1.00S			86		B		3.0					78			
	1.25			40		B		1.5					75			
	1.50			66		B		2.5					60			
	1.75			86		B		2.5					76			
	2.00			80		B		3.5					66			
	2.25			83		B		4.5					72			
	2.50			60		B		1.5					123			
	2.75			40		B		5					79			
L5+5.0S	E3.00S			60		B		1.5					86			
L5+5.0S	E3.50S			36		B		1.5					63	(40 mesh)		
L6+0.0S	EBL0+00			59		B		1.0					102			
L6+0.0S	E0.25S			133		B		2.0					89			
L6+0.0S	E0.50S			32		B		1.0					51			



COMPANY: W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 3-920

PROJECT No: Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14

ATTENTION: W.G. Smitheringale

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	X ^o	X ^o	Pb	Zn	Ni	Soil	Ag	Depth	Hg	As	Mn	Au	Cu			
	ppm	ppm	ppm	ppm	ppm	Horizon	ppm	(cm)	ppb	ppm	ppm	ppb	ppm	ppm	ppm	ppm
81	86	90	100	105	110	115	120	125	130	135	140	145	150	155	160	
L6+0.0SE07.5S				60		B		2.0						114		
	100			74		B		2.0						70		
	125			72		B		3.0						96		
	150			40		B		1.0						61		
	175			58		B		1.0						62		
	200			44		B		2.0						70		
	225			20		B		5						32		
	250			68		B		2.5						74		
	275			62		B		1.0						68		
L6+0.0SE30.0S				37		B		2.0						40		
L6+0.0SE35.0S				42		B		1.0						94		
L6+5.0SE2.0S				117		C		5.0			gley soil			170		(40 mesh)
	225			120		B		3.5						104		
	250			30		B		2.5						60		
	275			82		B		4.5						90		(40 mesh)
	300			47		B		4.0						60		(40 mesh)
	325			40		B		2.0						44		
L6+5.0SE35.0S				30		B		2.0						40		
L7+0.0SE25.0S				103		C		2.5			gley soil			90		
	275			35		B		3.5						30		
	300			52		B		1.0						47		
	325			40		B		4.0						100		
	350			30		B		5						78		
	375			24		B		2.5						40		
	400			56		B		2.0						130		
	425			24		B		2.5						36		
L7+0.0SE45.0S				34		B		4.0						70		
L7+5.0SE30.0S				32		B		5						86		
	325			59		B		5						107		
L7+5.0SE35.0S				32		B		1.0						90		

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W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 3-920

PROJECT No.: Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14

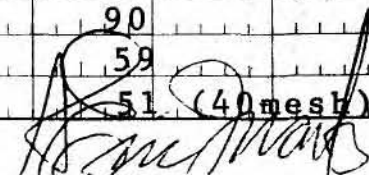
ATTENTION: W.G. Smitheringale

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	MX	MX	MX	Pb ppm	Zn ppm	Ni ppm	Soil	Ag ppm	Depth	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm		
	ppm	ppm	ppm				Horizon		(cm)							
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L7+50SE	E375S				41		B		1.0					128		
	400				34		B		3.0					76		
	425				68		B		3.0					120		
	450				40		B		2.0					100		
	475				24		B		2.5					70		
L7+50SE	E500S				38		B		2.0					68		
L8+00SE	E350S				40		B		3.0					72		
	375				34		B		3.0					50		
	400				40		B		3.0					92		
	425				56		B		3.0					94 (40 mesh)		
	450				55		B		3.5					70		
	475				44		B		4.0					75		
	500				34		B		3.0					60		
	525				46		B		3.5					70 (40 mesh)		
L8+00SE	E550S				34		B		3.0					59		
L8+50SE	E400S				46		B		2.0					110		
	425				50		B		2.5					128		
	450				36		B		1.5					84		
	475				32		B		3.0					88		
	500				26		B		3.0					55		
	525				49		B		2.5					94		
	550				44		B		3.0					78		
	575				67		B		11-10					144		
L8+50SE	E600S				22		B		2.0					60		
L9+00SE	E450S				39		B		4.0					72		
	475				54		B		2.5					80		
	500				76		B		2.5					107		
	525				37		B		5.0					90		
	550				25		B		4.5					59		
L9+00SE	E575S				26		B		1.5					51 (40 mesh)		

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PROJECT No: Eloise

ATTENTION: W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 3-920

DATE: Sept. 14
1983.

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample Number	<input checked="" type="checkbox"/> Ni	<input checked="" type="checkbox"/> Ni	Pb ppm	Zn ppm	Ni ppm	<u>Soil</u>	Ag ppm	<u>Depth</u>	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm			
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
						<u>Horizon</u>		<u>(cm)</u>								
L9+00SE	600S			5.6		B		1.0					80			
L9+50SE	500S			8.0		B		4.0					70			
	525			5.0		B		3.0					46			
	550			2.9		B		1.5					76			
	575			4.8		B		2.5					136			
	600			5.6		B		1.5					114			
	625			1.5		A		4.0					16			
L9+50SE	650S			3.6		B		3.0					72			
L10+00SE	550S			3.2		B		2.0					66			
	575			4.2		B		1.0					154			
	600			6.0		B		5					198			
	625			4.4		A+B		1.0					78			
	650			3.8		B		1.0					66			
	675			4.0		B		1.0					56			
L10+00SE	700S			4.4		B		5					80			
L10+50SE	600S			8.0		B		8					134			
	625			6.6		B		5					107			
	650			7.7		B		4.5					156			
	675			24.8		A		4.0					112	(40mesh)		
	700			3.7		B		4.0					76			
	725			4.6		B		2.5					57			
L10+50SE	750S			2.4		B		4.5					46			
L11+00SE	650S			1.4		A ₁		3.0					10			
	675			8.0		A+B		4.0					110			
	700			4.4		B		5.0					96	(40mesh)		
	725			2.4		B		2.0					78			
	750			2.6		B		1.0					84			
L11+00SE	775			3.2		B		5					70			
L11+50SE	700S			6.2		B		1.0					128			
L11+50SE	725S			2.8		B		3.5					86	(40mesh)		

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COMPAN

W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

16
File No. 3-920

PROJECT No: Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14

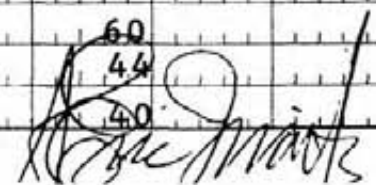
ATTENTION: W.G. Smitheringale

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample Number	As ppm	Pb ppm	Zn ppm	Ni ppm	Soil Horizon	Ag ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm					
81	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
	Depth (cm)															
L11+50SE750S			82		B		2.0						192			
	775		36		B		2.5						58			
	800		59		B		3.0						56			
	825		36		B		3.0						50			
L11+50SE850S			60		B		4.0						88			
L12+00SE750S			32		B		5.0						44			
	775		59		B		2.5						136			
	800		50		B		4.0						94			
	825		44		B		4.0						80			
L12+00SE850S			49		B		4.0						70			
L0+00-.025N			102		B		3.0						118			
	0.50		86		B		3.5						76			
	0.75		36		B		2.0						35			
L0+00-.100N			78		B		4.0						98			
L0+50SE0.25N			30		B		2.5						52			
	0.50		76		B		3.0						74			
L0+50SE0.75N			40		B		2.5						88			
L1+00SE0.25N			62		B		4.5						80			
	0.50		88		B		4.0						76			
	0.75		41		B		5.0						80			
L1+00SE1.00N			68		A		6.0						92			
L1+50SE0.25N			48		B		3.0						76			
	0.50		58		B		3.0						66			
	0.75		28		B		4.5						30			
L1+50SE1.00N			72		B		3.0						149			
L2+00SE0.25N			52		B		3.0						110			
	0.50		50		B		1.0						59			
L2+00SE0.75N			40		B		4.0						60			
L2+50SE0.25N			34		B		3.5						44			
L2+50SE0.50N			44		B		5.0						40			

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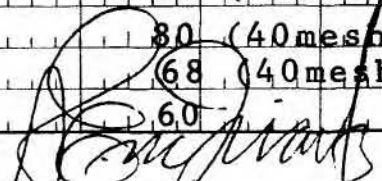
COMPAN W.G. SmitheringalePROJECT No.: EloiseATTENTION: W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814Fi. No. 3-920DATE: Sept. 141983.

Sample Number	6	10	15	Pb ppm	Zn ppm	Ni ppm	Soil Horizon	Ag ppm	Depth (cm)	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm	75	80	
	81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L2+50SE075N					100		B		30					76			
		100			240		C		50		gley soil			138	(40 mesh)		
L2+50SE125N					151		C		15		gley soil			140			
L3+00SE025N					37		B		35					76			
		050			58		B		40					110			
		075			50		B		25					138			
L3+00SE100N					51		B		60					65			
L3+00SE025N					32		B		20					29			
		050			42		B		25					64			
		075			43		B		40					60			
L3+50SE100N					24		B		35					28			
L4+00SE025N					68		B		20					100			
		050			67		B		10					89			
		075			57		B		10					99			
L4+00SE100N					48		A+B		5					66			
L4+50SE225S					100									129			
L5+00SE025N					70		B		15					80			
		050			32		B		15					69			
		075			72		B		20					137			
		100			46		B		25					61			
L5+00SE125N					17		A ₁		10					10	(40 mesh)		
L5+50SE205S					116									98			
L6+00SE025N					34		B		25					48			
		050			112		B		50					90			
		075			80		B		30					74			
L6+00SE100N					114		B		40					104			
L11+50SE+54m					74									57	(40 mesh)		
L1+00NW100S					54		B		20					80	(40 mesh)		
		150			38		A+B		35					68	(40 mesh)		
L1+00NW200S					79		B		30					60			



COMPAN W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

12
File No. 3-920

PROJECT No.: Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14
1983.

ATTENTION: W.G. Smitheringale

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

Sample Number	Pb ppm	Zn ppm	Ni ppm	Soil	Ag ppm	Depth (cm)	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm					
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L1+0.0NW25.0S		34		B		3.0					30					
	3.00	65		B		3.0					76					
	3.50	15		B		4.0					14					(40 mesh)
	4.00	35		B		4.0					68					
	4.50	23		B		3.0					42					(40 mesh)
	5.00	85		B		2.0					77					
	5.50	12		B+C		2.0					10					
L1+0.0NW60.0S		10		A ₁		4.0					90					(40 mesh)
L2+3.1NW25.0S		12		A ₁		2.0					10					(40 mesh)
L2+0.0NW30.0S		24		B		4.0					38					
	3.50	25		B		3.5					60					
	4.00	60		A ₁		3.5					64					
	4.50	56		B		2.0					160					
	5.00	36		B		2.5					60					
	5.50	33		B		3.0					78					
	6.00	32		B		2.0					84					
	6.50	48		B		4.0					112					(40 mesh)
L2+0.0NW70.0S		28		B		1.5					60					
L3+0.0NW30.0S		25		B		1.0					48					
	3.50	27		B		2.0					48					
	4.00	20		B		1.0					20					(40 mesh)
	4.50	33		B		1.5					80					
	5.00	37		B		2.0					58					
	5.50	25		B		2.0					38					
	6.00	42		B		3.0					82					
	6.50	26		B		2.0					34					
	7.00	35		B		2.0					64					
	7.50	34		B		2.5					44					
L3+0.0NW80.0S		34		B		1.0					84					
L4+0.0NW40.0S		23		B		4.0					40					

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[Handwritten Signature]

COMPAN

W.G. Smitheringale

PROJECT No.:

Eloise

ATTENTION: W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

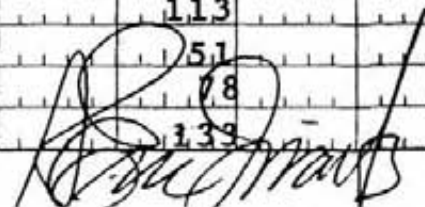
FILE No. 3-920

DATE: Sept. 14

1983.

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Sample Number	Pb ppm	Zn ppm	Ni ppm	Ag ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm						
B1	B6	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22
L4+00NW450S		14				A ₁		40					10		
500		29				B		40					93		
550		32				B		10					85		
600		35				B		10					83		
650		30				B		20					56		
700		27				B		10					58		
L4+00NW750S		31				B		30					70		
L5+00NW500S		30				B		25					81		
550		24				B+A		50					44		
600		23				B		30					44		
650		39				A+B		50					93 (40mesh)		
700		25				B		50					34 (40mesh)		
750		28				B		40					66		
L5+00NW800S		33				B		40					81		
L5+00NW850S		31				B		30					105		
L6+00NW600S		30				B		35					58		
650		31				B		30					64		
700		27				B		40					29		
750		24				A ₁		30					46		
L6+00NW800S		20				A ₁		30					59 (40mesh)		
L7+00NW700S		25				B		20					62		
L7+00NW750S		41				B		35					44		
L7+50NW800S		46				B		50					80		
L5+00NW101N		33				B		1					89		
102		23				B		30					60		
103		25				B		25					84		
104		31				B		30					113		
105		26				B		40					51		
106		24				B		45					78		
L5+00NW107N		26				B		40					133		

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W.G. Smitheringale

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 3-920 ¹⁴

PROJECT No.:

Eloise

MIN - EN Laboratories Ltd.

DATE: Sept. 14

ATTENTION:

W.G. Smitheringale

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	As ppm	Cd ppm	Pb ppm	Zn ppm	Ni ppm	Soil Horizon	Ag ppm	Depth (cm)	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm			
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
L5+50NW101N				31		B		10						75		
	102			57		B		35						118	(40 mesh)	
	103			28		B		65						33		
	104			40		B		40						50		
L5+50NW105N				30		A+B		30						84	(40 mesh)	
L6+00NW101N				42		B		30						78		
	102			31		B		30						42		
	103			27		B		30						66		
L6+00NW104N				36		B		30						49	(40 mesh)	
L6+50NW101N				32		B		10						113		
	102			23		B		30						78		
L6+50NW103N				28		A ₁		35						45		
L7+00NW101N				35		B		30						82		
L7+00NW102N				30		B		30						67		
L7+50NW101N				160		B		20						403		

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ELOISE CLAIM

ZN

FREQUENCY DISTRIBUTION

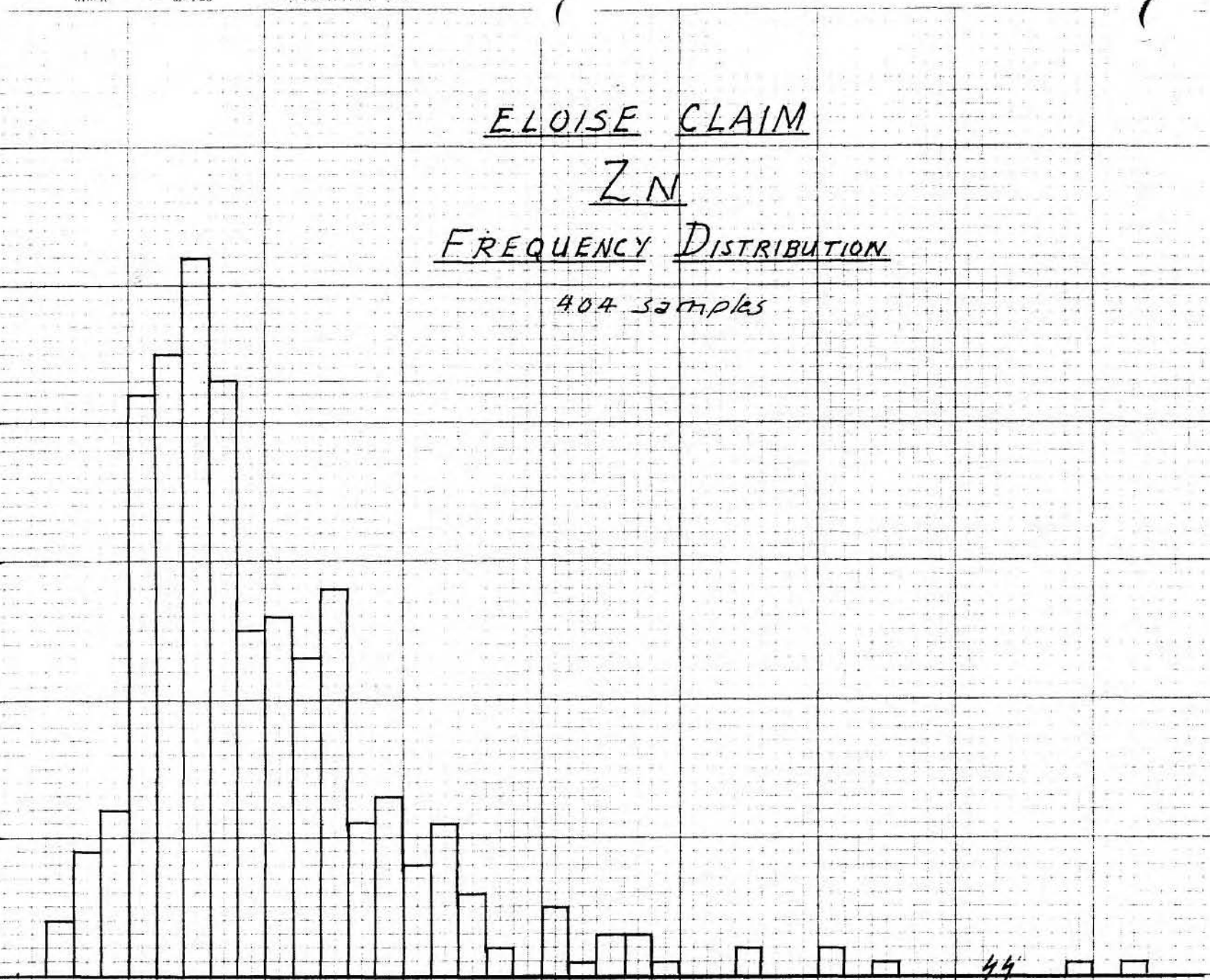
404 samples

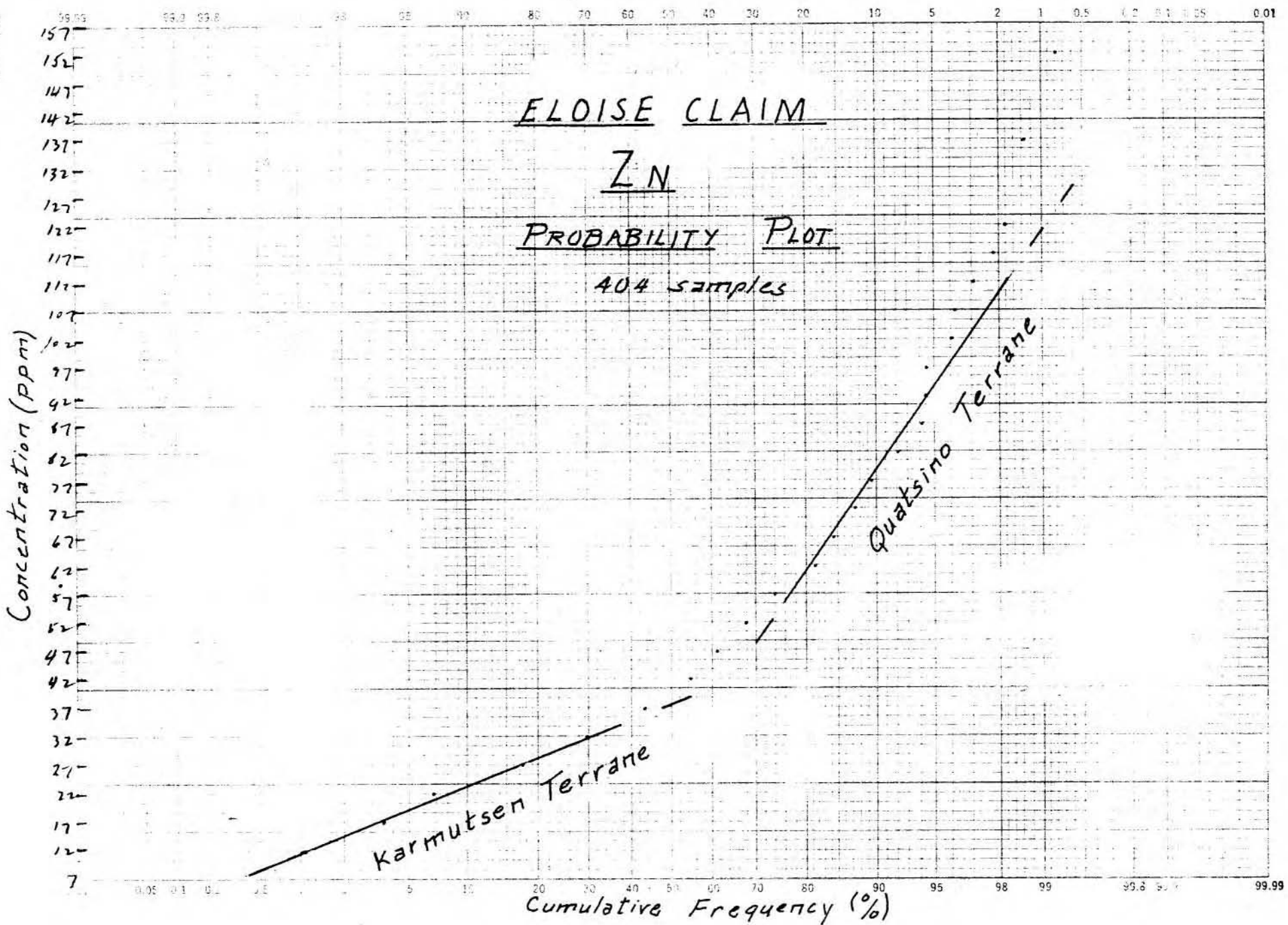
Frequency

60
50
40
30
20
10
0

3 7 12 17 22 27 32 37 42 47 52 57 62 67 72 77 82 87 92 97 102 107 112 117 122 127 132 137 142 147 152 157 162 44 237 242 247 252 257

ZN, ppm





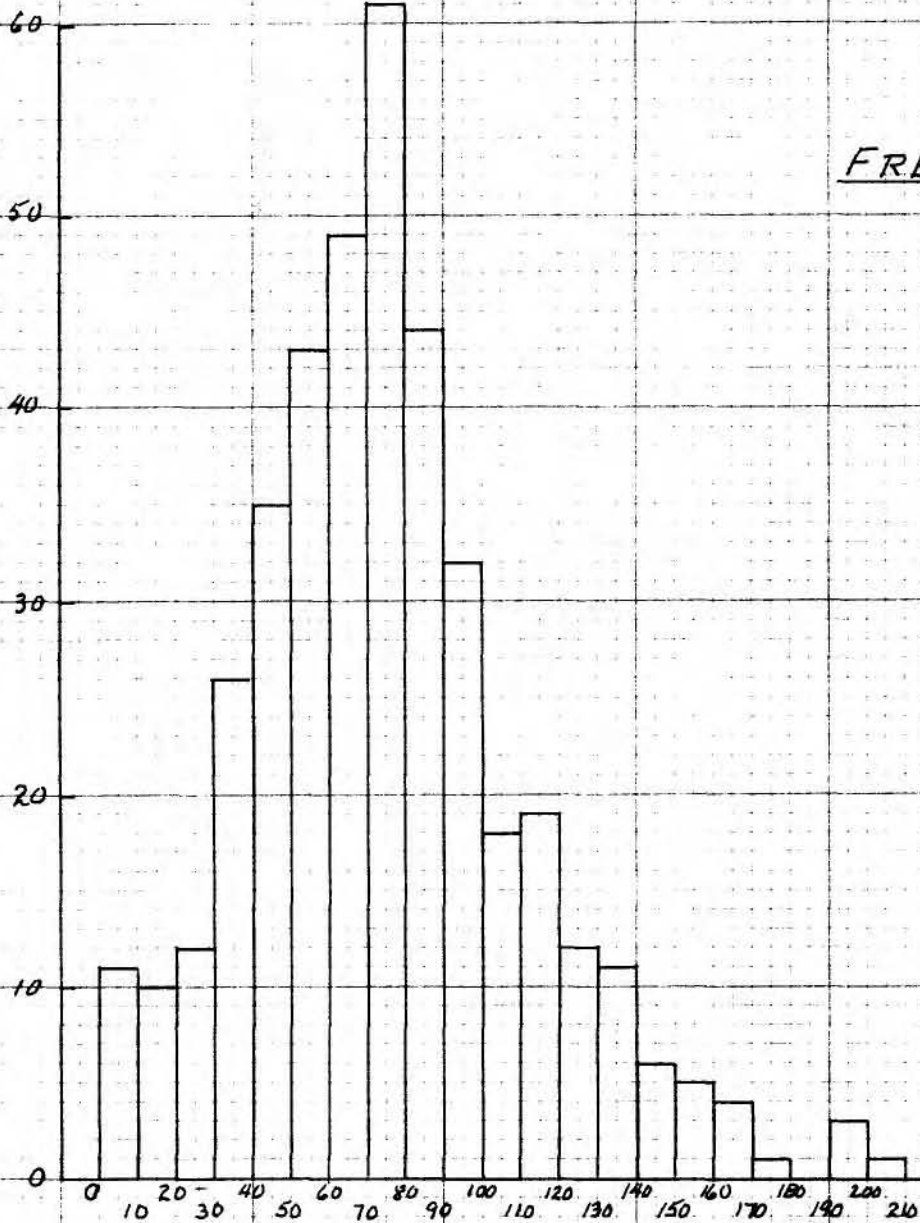
ELOISE CLAIM

CU

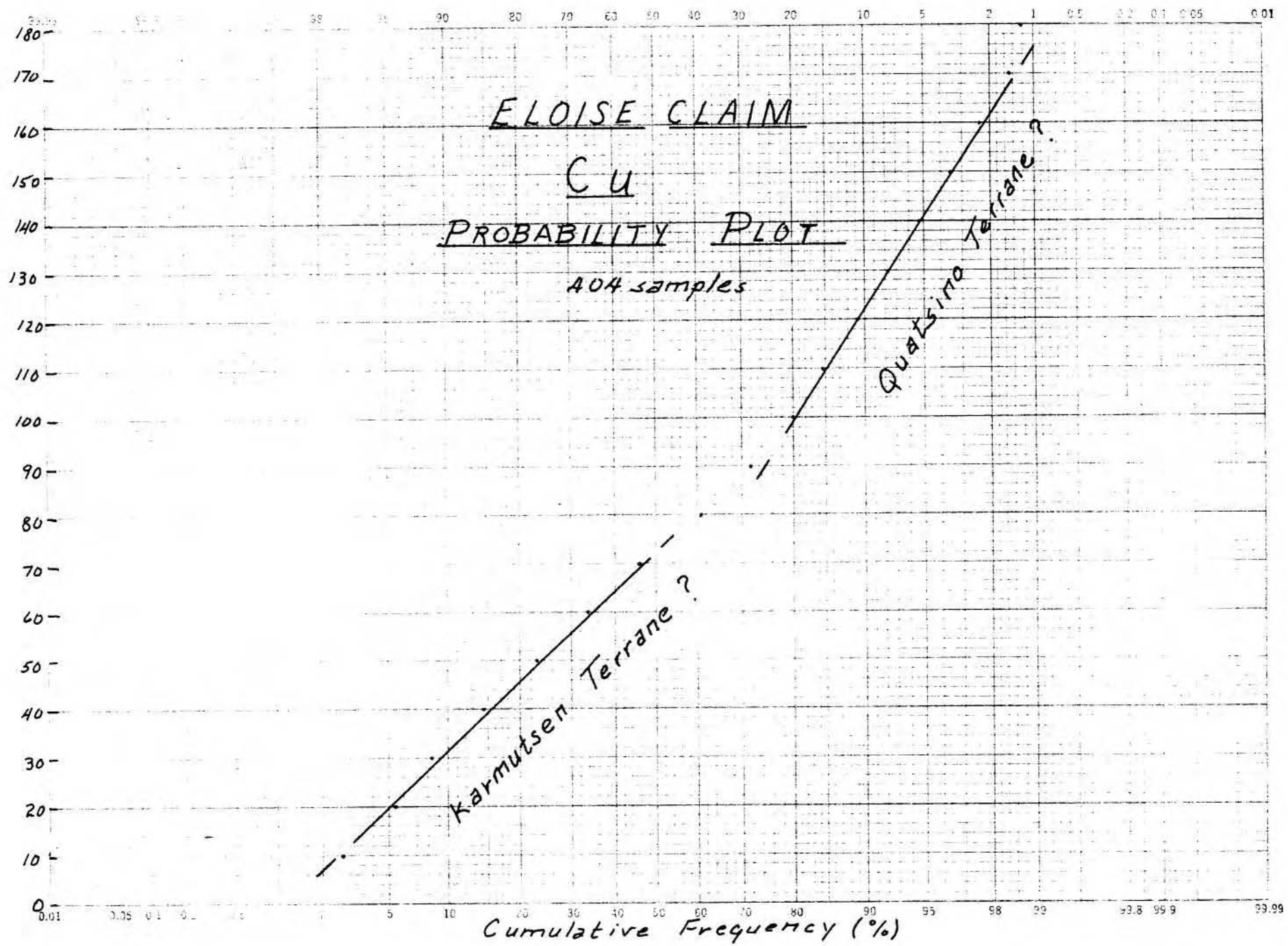
FREQUENCY DISTRIBUTION

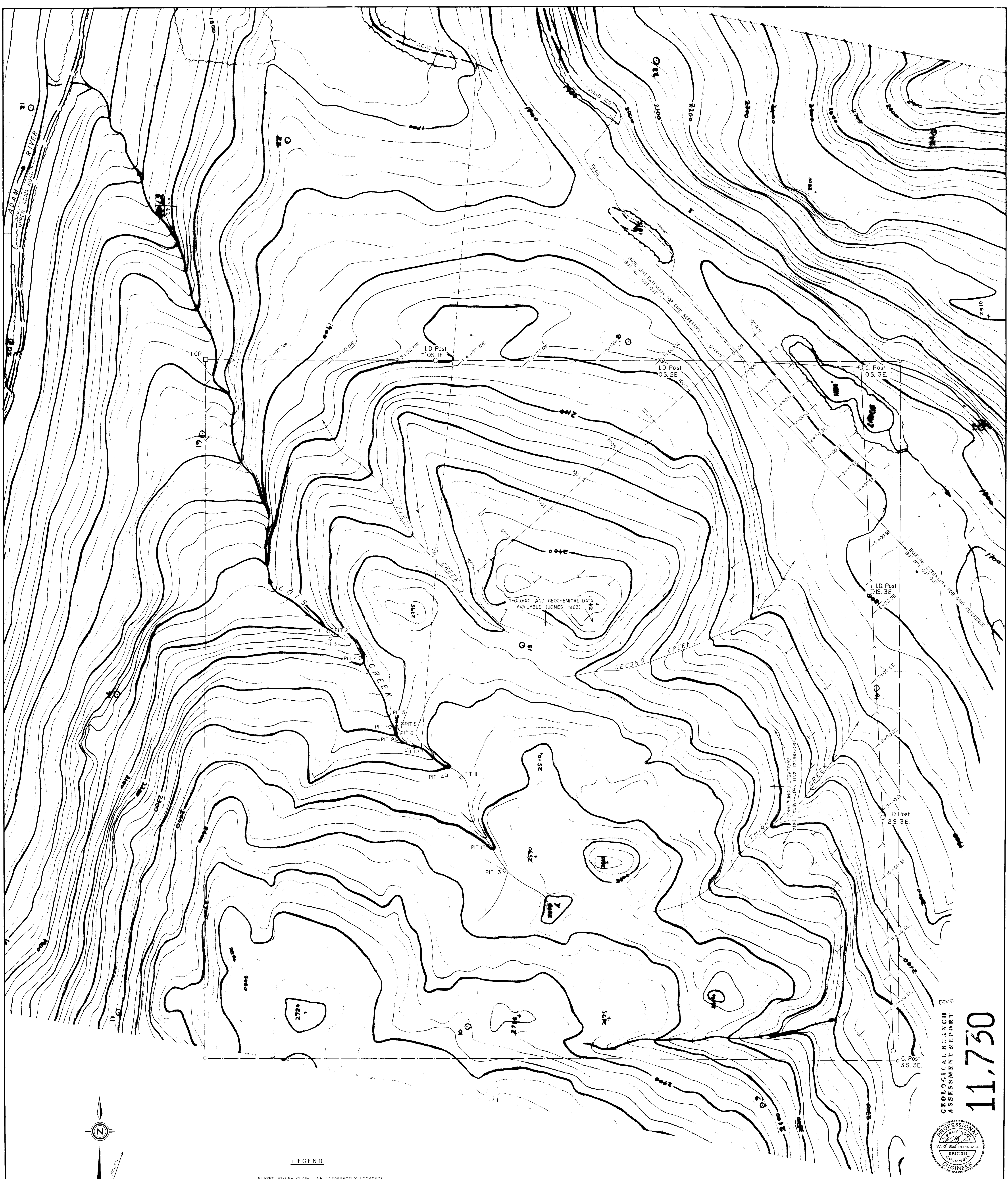
404 samples

Frequency



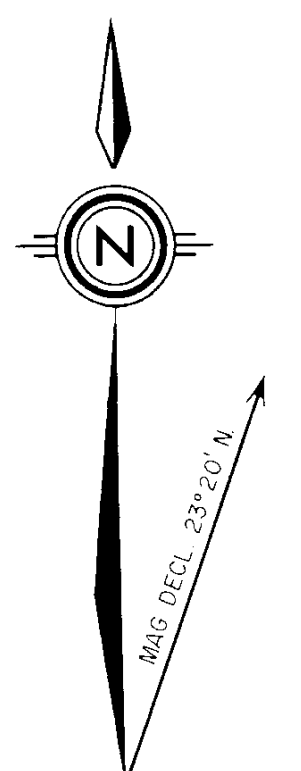
CU, ppm





LEGEND

- — PLACED ELOISE CLAIM LINE (INCORRECTLY LOCATED), CUT OUT AND USED FOR 1983 GRID
- — ELOISE CLAIM BOUNDARY CORRECTLY LOCATED RELATIVE TO L.C.P.
- — END OF GEOCHEMISTRY LINE



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 GEOLOGICAL BENCH ASSESSMENT REPORT
 PROFESSIONAL ENGINEER
 W. G. SMITHERINGALE
 BRITISH COLUMBIA

FIGURE 3

ACADIAN GOLD LTD.

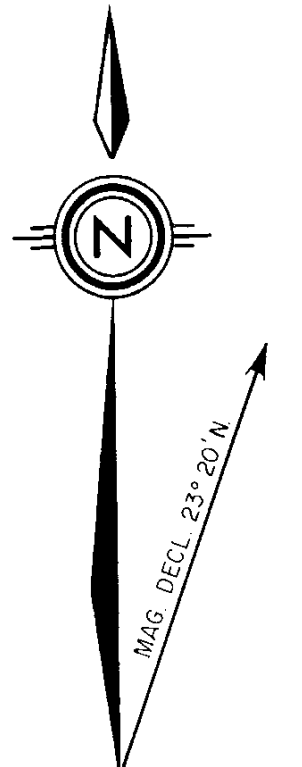
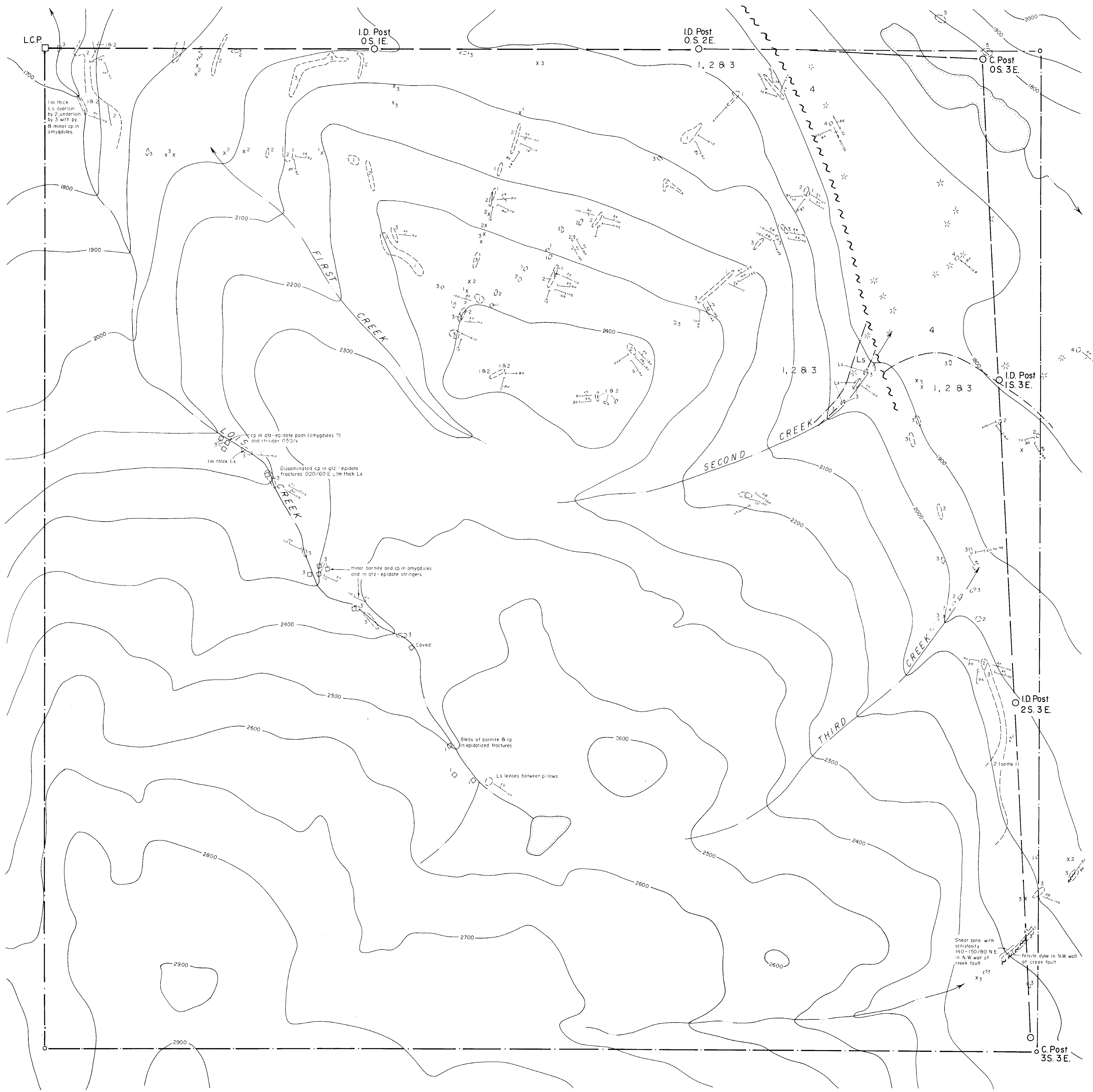
**ELOISE CLAIM
PROPERTY MAP**

SCALE 1:2500

0 50 100 150 200 m

CONTOUR INTERVAL 25 FEET.
 (From reconnaissance map by McElhenny Surveying & Engineering, Ltd. for Rio Van Mining, Ltd., July, 1969)

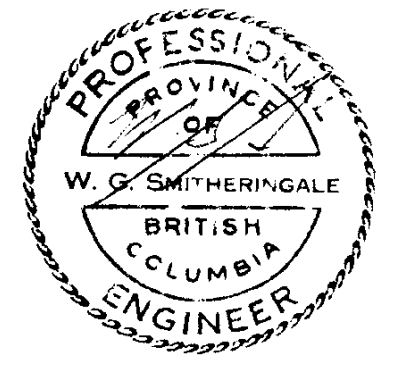
W. G. SMITHERINGALE & ASSOCIATES LTD. Nov 25, 1983



○ — BLAZED ELOSE CLAIM LINE (INCORRECTLY LOCATED);
CUT OUT AND USED FOR 1983 GRID.
— — — — — ELOSE CLAIM BOUNDARY CORRECTLY
LOCATED RELATIVE TO L.C.P.

LEGEND

- | | |
|---|---|
| <p>5 Andesite: massive, pyrrhotite rich (silt?)</p> <p>QUATSINO FORMATION</p> <p>4 Limestone: medium grey, massive and laminated</p> <p>KARMTSEN FORMATION</p> <p>3 Basalt: undifferentiated mostly very fine grained and nonporphyritic, some with small pyroxene and plagioclase phenocrysts, amygdaloidal or massive.</p> <p>2 Basalt: dominantly pyroxene porphyritic, may contain minor plagioclase phenocrysts, amygdaloidal or massive</p> <p>1 Basalt: dominantly plagioclase porphyritic, may contain minor pyroxene phenocrysts, amygdaloidal or massive.</p> <p>Ls Thin beds or lenses of limestone between basalt flows</p> | <p>○ Outcrop or outcrop area</p> <p>x Small outcrop</p> <p>□ Exploration pit, pre 1983</p> <p>☆ Sink hole</p> <p>— Bedding, probable bedding</p> <p>— Joint set, dipping, vertical</p> <p>— Fracture cleavage</p> <p>— Schistosity</p> <p>— Fold axis, plunge, direction of plunge</p> <p>— Fault, observed, assumed</p> <p>— Geological contact, observed, assumed</p> |
|---|---|



11.730
 GEOLOGICAL REPORT
 ASSESSMENT REPORT

FIGURE 4

ACADIAN GOLD LTD.

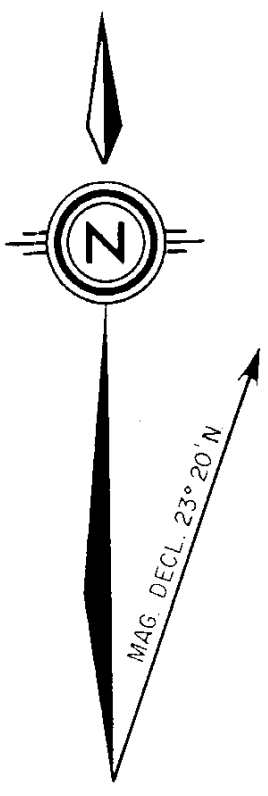
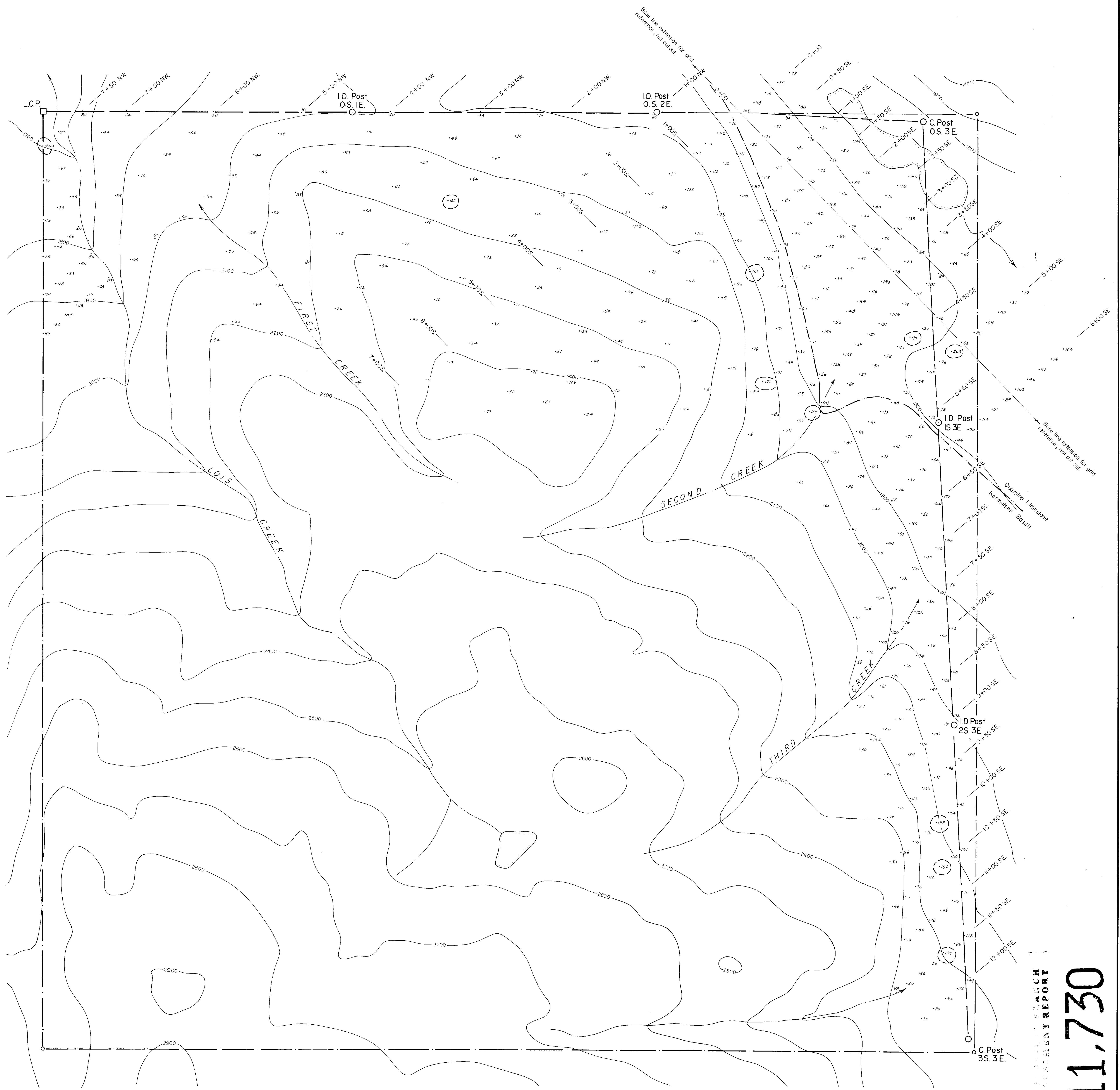
**ELOSE CLAIM
GEOLOGY**

SCALE 1:2500

0 50 100 150 200 m

W.G. SMITHERINGALE & ASSOCIATES LTD. Nov 25, 1983

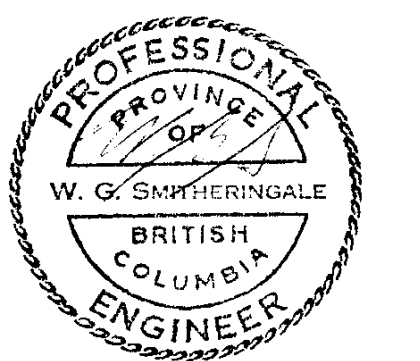
CONTOUR INTERVAL 25 FEET.
(From reconnaissance map by McElhenny Surveying & Engineering Ltd. for Rip Van Mining Ltd. July, 1969)



- LEGEND**
- — BLAZED ELOISE CLAIM LINE (INCORRECTLY LOCATED); CUT OUT AND USED FOR 1983 GRID
 - — — — — ELOISE CLAIM BOUNDARY CORRECTLY LOCATED RELATIVE TO L.C.P.
 - - - - - ASSUMED CONTACT BETWEEN QUATSINO AND K ARMUTSEN FORMATIONS
 - — GEOCHEMICAL ANOMALY

STATISTICAL INTERPRETATION

	mean (ppm)	standard deviation	threshold (97.5 cumulative %)	anomalous (ppm)
Quatsino Terrane	86.9	37.7	165	>165
Kormutsen Terrane	73.3	38.3	155	>155

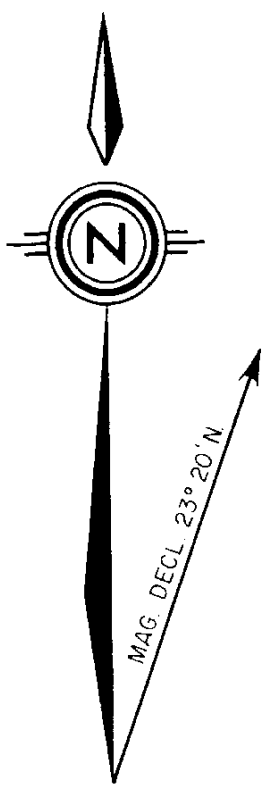
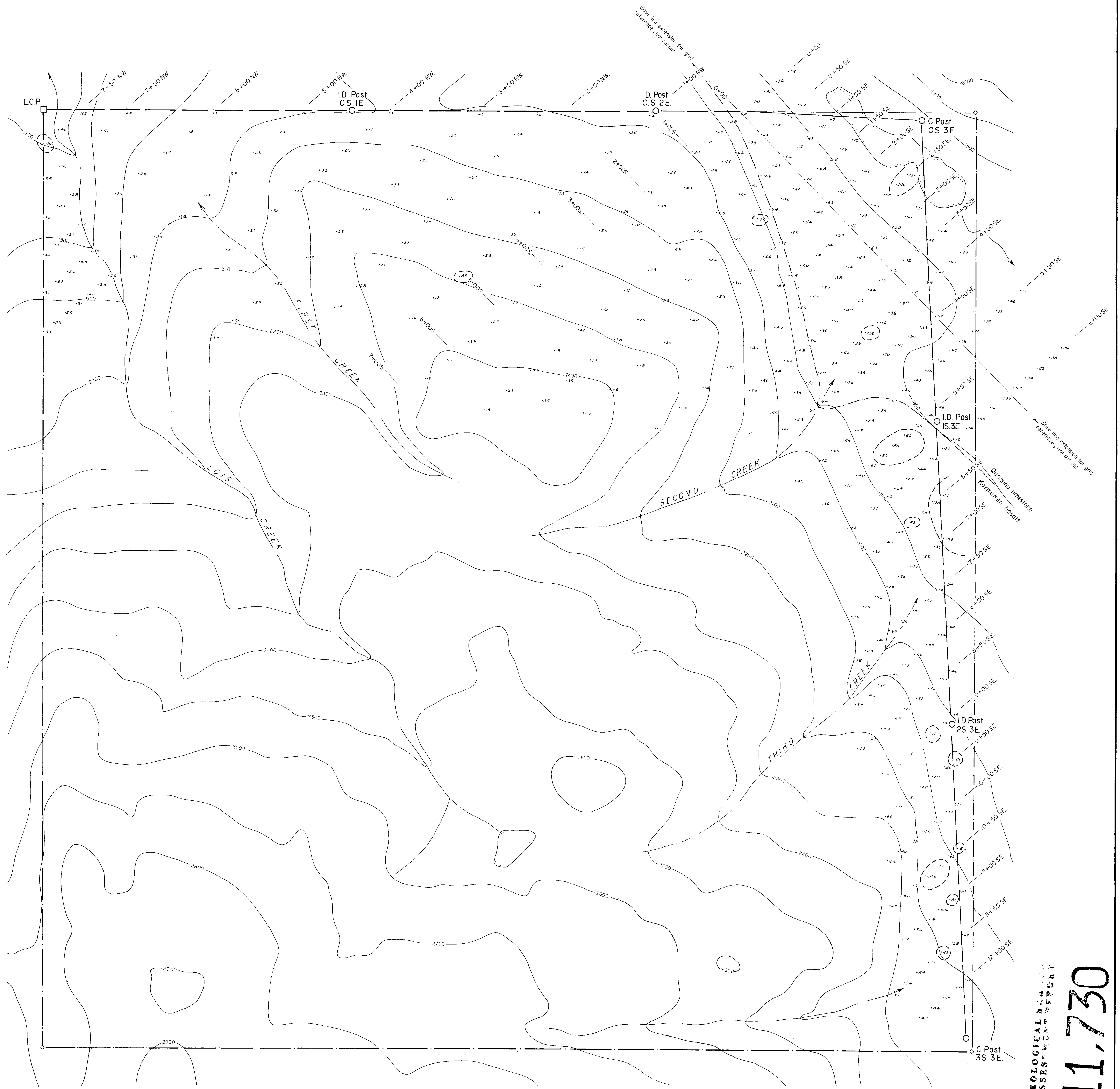


W. G. SMITHERINGALE
 CONSULTANT REPORT
 11,730

CONTOUR INTERVAL 25 FEET.
 (From reconnaissance map by McElhaney Surveying & Engineering Ltd. for Rip Van Mining Ltd. July, 1969)

ACADIAN GOLD LTD.
 ELOISE CLAIM
 SOIL GEOCHEMISTRY
 Cu, ppm
 SCALE 1:2500
 W. G. SMITHERINGALE & ASSOCIATES LTD. Nov 25, 1983

FIGURE 5



LEGEND

- — BLAZED ELOISE CLAIM LINE (INCORRECTLY LOCATED); CUT OUT AND USED FOR 1983 GRID.
- ELOISE CLAIM BOUNDARY CORRECTLY LOCATED RELATIVE TO L.C.P.
- - - ASSUMED CONTACT BETWEEN QUATSINO AND KARMUTSEN FORMATIONS
- — GEOCHEMICAL ANOMALY

STATISTICAL INTERPRETATION

	mean (ppm)	standard deviation	threshold (97.5 cumulative %)	anomalous (ppm)
Quatsino Terrane	63.6	33.6	143	>143
Karmutsen Terrane	36.8	15.5	70	>70

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 GEOLOGICAL ENGINEER
 W. G. SMITHERINGALE
 BRITISH COLUMBIA

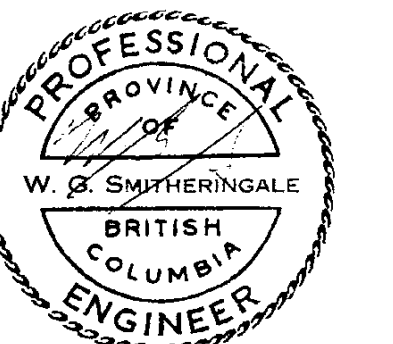


FIGURE 6

ACADIAN GOLD LTD.
ELOISE CLAIM
SOIL GEOCHEMISTRY
Zn, ppm
 SCALE 1:2500
 0 50 100 150 200 m
 W. G. SMITHERINGALE & ASSOCIATES LTD. Nov 25, 1983

CONTOUR INTERVAL 25 FEET.
 (From reconnaissance map by McElhenny Surveying & Engineering Ltd for Rip Van Mining Ltd July, 1969)