

83-#404-#11221

GEOCHEMICAL REPORT ON THE  
ELAINE CLAIMS  
FOR  
CRYSTAL MOUNTAIN RESOURCES LTD.  
ALBERNI MINING DIVISION  
NTS 92E/15E, 16W

(LAT. 49 degrees 47' North, LONG. 126 degrees 30' West)

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,221**

Vancouver, B.C.

September 9, 1983

George Cavey, Consulting Geologist

OreQuest Consultants Ltd.

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## 1.0 INTRODUCTION

### 1.1 LOCATION and ACCESS (Figure 1)

The Elaine claims are located 132 kilometers west of Campbell River in an area of rugged mountainous topography centered at 49 degrees 47' North latitude and 126 degrees 30' West longitude located on NTS Map sheet 92E/15E, Vancouver Island.

The northern portion of the claims are accessible by travelling along a 4.0 kilometer logging road which exits off Highway #28 near Head Bay on Tlupana Inlet. (Figure 1)

### 1.2 CLAIM STATUS

The Elaine claim is one claim block consisting of 9 contiguous units staked early July 1982.

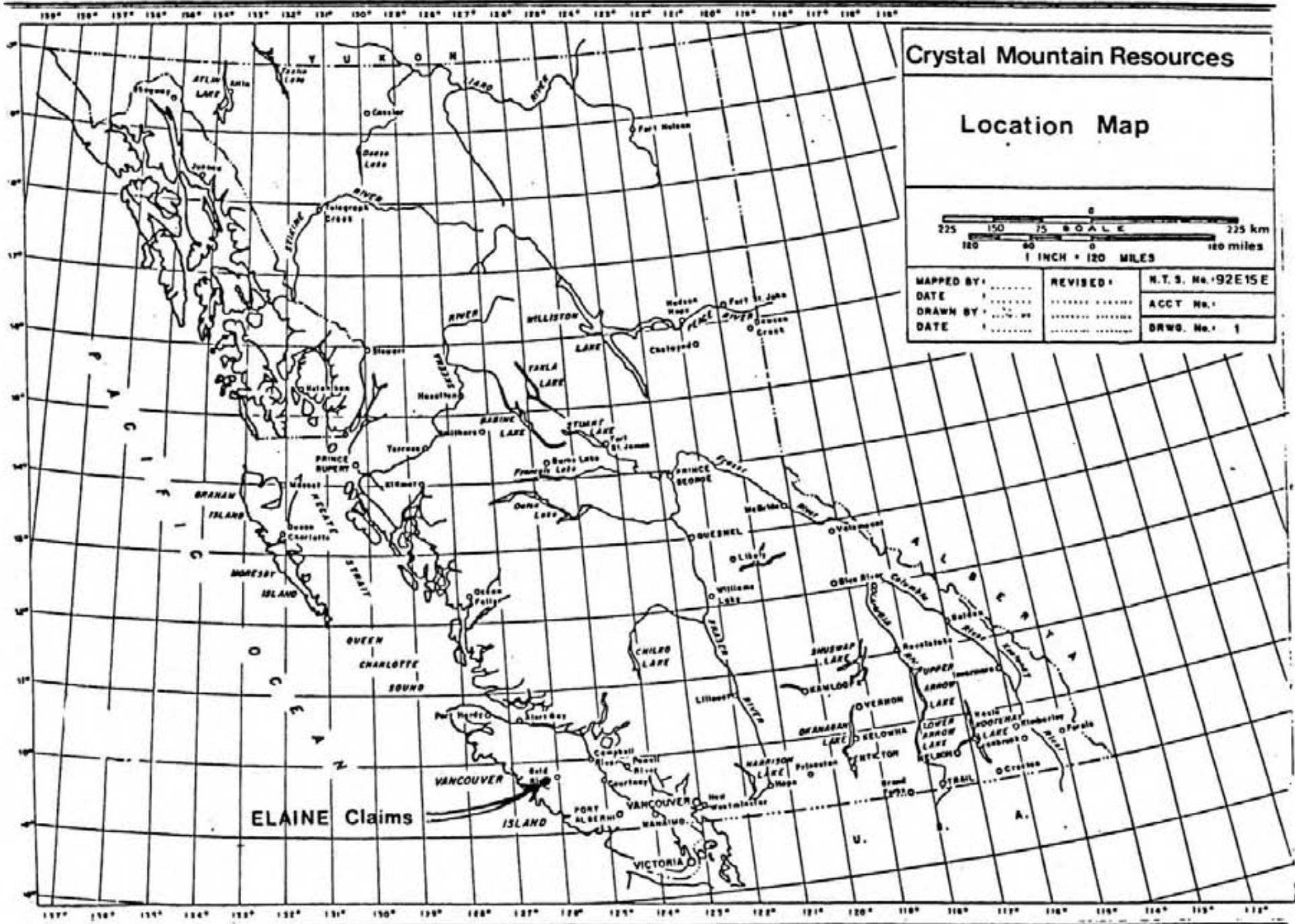
The claim block is held in good standing (100% by Crystal Mountain Resources Ltd.) and has a 1987 expiry date pending approval of assessment work.

The claims are as follows:

	Record No.	Staked	Expiry
Elaine	1452	July 9, 1982	July 9, 1987

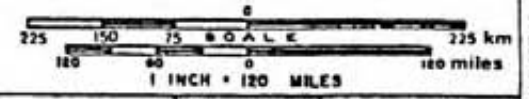
### 1.3 HISTORY

Earliest recorded activity was in 1934 when a small company drove an adit 36.6 metres (120 feet) to test a gold-quartz vein discovered on surface. No



# Crystal Mountain Resources

## Location Map



MAPPED BY:	REVISED:	N.T.S. No. 92E15E
DATE:		ACCT. No.:
DRAWN BY:		DRWG. No. 1
DATE:		

ELAINE Claims

results are recorded.

A magnetite deposit reported to be approaching commercial size has also been mentioned to occur on the property.

## 2.0 EXPLORATION RESULTS

### 2.1 GEOLOGY (Figure 2)

Outcrop exposure is sparse largely due to heavy underbush and organic growth.

It is believed that the oldest rocks on the claim group are lower Jurassic andesitic to dacitic lavas, tuffs, breccias and sedimentary rocks belonging to the Bonanza Group.

Intrusive to this package of rocks are small stocks of quartz diorite possibly related to the Island Intrusive complex of Jurassic age.

Gold-quartz veins have been observed in the amgduloidal lavas, but no further information is available. Deposits of magnetite have also been recorded. No mineralization was observed during the 1982 reconnaissance study.

### 2.2 GEOCHEMISTRY (Figure 3)

A total of 60 soil, silt and rock samples were collected over the property along foot traverses following contours, roads and streams.







Every effort was made to collect the "B" horizon (30-60 cm depth).

All samples were analyzed for gold by VanGeochem Labs at their laboratory in Vancouver, employing the AA method. (Appendix A)

Preliminary geochemical results indicate that the property definitely warrants follow-up work.

Six out of 60 samples taken registered anomalous gold values (greater than 20 ppb). One sample in particular (central part of claims) assayed 130 ppb gold in soil.

### 3.0 CONCLUSIONS and RECOMMENDATIONS

According to past records of the area gold has been found within quartz-veins host by andesite of the Bonanza Group.

During the 1982 reconnaissance program no mineralization was observed due to insufficient rock exposure however, several areas of anomalous gold were detected.

It is recommended therefore that more work should be conducted over the property.

Work should include: linecutting (100 metre spaced lines), soil geochemistry (50 metre stations), geological mapping, prospecting and trenching.

Further work would be contingent on the results.

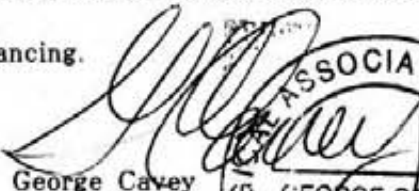
4.0 ITEMIZED COST STATEMENT (October 5, 1982-October 10, 1982 - 6 days)

Wages:	
Geologist - 6 days @ \$400	\$2,400.00
Sampler - 6 days @ \$100	600.00
Food and Accommodation	535.70
Equipment	434.79
Travel (Ferry, Gas)	98.00
Truck Rental - 6 days @ \$75	450.00
Soil Geochem Analysis	417.45
Report Writing and Preparation - 2 days @ \$400	800.00
Materials	93.88
 TOTAL	 <u>\$5,829.82</u>

## QUALIFICATIONS

I, George Cavey, of 3926 Valley Drive, Vancouver, British Columbia hereby certify:

1. I am a graduate of the University of British Columbia (1976) and hold a BSc. degree in geology.
2. I am presently employed as a consulting geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my profession by various mining companies for the past nine years.
4. I am a Fellow of the Geological Association of Canada.
5. The information contained in this report was obtained during the completion of the Phase I work program conducted by OreQuest Consultants in July of 1983.
6. Neither OreQuest Consultants Ltd. nor myself have direct or indirect interest in the property described nor in the securities of Crystal Mountain Resources Ltd.
7. This report may be used by Crystal Mountain Resources Ltd. for all corporate purposes and including any public financing.

  
George Cavey

Consulting Geologist



DATED at Vancouver, British Columbia, this 9th day of September, 1983.

BIBLIOGRAPHY

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CARSON, D.T.

1972: Geological Survey of Canada, Open File 463.

MEULLER, J.E.

1977: Geological Survey of Canada , Open File 463.

British Columbia Department of Mines and Petroleum Resources Mineral Inventory File - NTS 92E #28

**APPENDIX A**



986-5211

VANGEOCHEM LAB LTD. 1521 PEMBERTON AVE., NORTH VANCOUVER, B.C., CANADA 604-269-0000

V7P 2S3

June 16, 1983

To: Omineca Consultants Attention: Mr. George Cavy  
#403 - 595 Howe St.  
Vancouver, B C V6C 2T5

From: Vangeochem Lab Ltd.  
1521 Pemberton Avunue  
North Vancouver, B.C. V7P 2S3

Subject: Analytical procedure used to determine hot acid soluble  
Mo, Cu, Pb Zn, Ag in geochemical silt, soil and rock samples.

### 1. Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft paper bags and rock samples in 4" x 6" Kraft paper bags.
- (b) The wet samples were dried in a ventilated oven.
- (c) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieves. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (d) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

### 2. Methods of Digestion

- (a) 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.
- (b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

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(C) The digested samples were diluted with demineralized water to a fixed volume and shaken. Aluminium chloride solutions were also added.

3. Method of Analysis

Mo, Cu, Pb, Zn, Ag analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective hollow cathode lamps. The digested samples were aspirated directly into an air and acetylene flame, but Mo digestion were aspirated into an acetylene and nitrous flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit and displayed in a strip chart recorder.

4. The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and the laboratory staff.

  
Eddie Tang  
VANGEOCHEM LAB LTD.

ET:jl