## GEOCHEMICAL REPORT

## CAC CLAIM GROUP

Cariboo M.D.

$$
\begin{array}{cc}
\text { NTS } 93 \mathrm{~A} / 13 \mathrm{~A} \\
& 93 \mathrm{~A} / 14 \mathrm{~W}
\end{array}
$$

Lat $52^{\circ} 48^{\prime}$, Long $121^{\circ} 31^{\prime}$
for

Cascadia Mines and Resources Ltd
by
M.K. Lorimer, B.A.Sc., P.Eng. 14 July, 1989

$$
18,895
$$

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## GENERAL

The following report is submitted in support of an application made by Cascadia Mines and Resources Ltd. on 17 April, 1989, for one year's work credit on the CAC 1-5 Mineral Claims.

The report is based on information that the writer believes to be reliable. The writer has not visited the subject property, nor was he involved in the collection or handling of the soil samples on which the report is based.

## INTRODUCTION

## Location:

The CAC Claims Group is located west of the confluence of Rabbit and Keithley Creeks in the Cariboo District. Fig. 1.

The area is most conveniently reached by travelling northerly from Likely over gravel and logging roads for a distance of about 32 kilometres.

The geographic location is $52^{\circ} 48^{\prime} \mathrm{N}, 121^{\circ} 31^{\prime} \mathrm{W}$, the National Topographic System map area is $93 \mathrm{~A} / 13 \mathrm{E}$ and $93 \mathrm{~A} / 14 \mathrm{~W}$, and the Mining Division is Cariboo. Elevations range from about 1100 metres to over 1300 metres.

The area is wooded but much of it has been logged. Rock outcrops are scarce. Glacial till is common.

## Property:

The CAC Claims Group consists of five claims totalling 100 units as follows:

| CLAIMS | RECORD NO's | EXPIRY DATE | OWNER |  |
| :---: | :---: | :---: | :---: | :---: |
| CAC 1 | 4968 | 12 Jul 89 | Cascadia Mines | \& Recources |
| CAC 2 | 4969 | 12 Jul 89 |  | " |
| CAC 3 | 7540 | 16 Apr 90 |  |  |
| CAC 4 | 7541 | 16 Apr 90 |  | + |
| CAC 5 | 7542 | 16 Apr 90 |  |  |

The boundaries are as shown on Fig. 2.

## History:

The property is located in an area that was an important producer of placer gold for several decades after 1860. It has continued to be a minor and intermittent producer to the present time.

Less attention was paid to bedrock showings although auriferous quartz veins had been known to exist almost as early as the placer deposits.

Cascadia Mines and Resources Ltd. staked the CAC 1 and 2 claims in 1985 and the CAC 3, 4 and 5 in 1986. Recent work has consisted of prospecting, establishing a grid system and soil sampling.

## Geology:

The Geological Survey of Canada has mapped the area as being underlain by phyllite, schist, quartzite, silicate rocks and minor limestones.

The schist often occurs with limestone in deformed folds. Magnetite is a minor constituent of these assemblies, and calcite veinlets also occur.

At least one dioritic intrusion has been observed.

There are several sets of jointing striking in westerly to northwesterly directions.

A thrust fold along the course of Rabbit Creek has been mapped.

## 1988-9 Programme:

In June and July, 1988, a grid system was established on the CAC 1 claim, and soil samples were hung, dried over the winter, and shipped for assaying in February, 1989.

For the grid, a baseline 800 metres long was run on a bearing of 315 degrees. At 50 -metre intervals along this line, cross-lines were run in either direction and marked at 25 -metre intervals.

Soil samples were taken from the oxidized zone, usually about 20-25 centimetres below the surface, at each 25 -metre interval.

The work was supervised by D.E. Pauls of Quesnel.
A cost summary is given as Appendix A.
Although 518 samples were taken, only 388 were assayed.
About 30 samples were lost in transit and a further lot of 100 samples was contaminated in storage and not tested.

164 samples were assayed by Bondor-Clegg and Company Ltd. They used fire assay procedures for gold, platinum and palladium. For silver the method was nitric-hydochloric acid hot extraction and atomic absorption.

Quanta Trace Laboratories Inc. analyzed the remaining 224 samples. They used fire assay and the 1 CAP method.

## RESULTS

Copies of the Certificates of Assay are attached as Appendix B, and the values are plotted on Figs. 3, 4, 5 and 6 for gold, silver, platinum and palladium respectively.

Because of the missing samples the grid pattern is incomplete. However, enough values were obtained to indicate a comparatively flat background with several readings above the norm.

In the case of the gold and platinum plots, there is co-incidence of above-average values in the area to the west of the base-line at its southern end.

Another instance of coincidence occurs on line $7+00$ north, east of the base-line, where both platinum and palladium show aboveaverage values for over 300 metres.

These coincidences suggest a northerly lineation of the mineralized zones.

## CONCLUSIONS

Two anomalous areas, one west of the south end of the baseline, and the other along the eastern half of line $7+00$ north have been revealed.

The areas should be further examined to determine the extent and values of the sources of the anomalies. This examination should include geochemical sampling to fill in the existing gaps in information, and detailed geological mapping of promissing areas.
M.K. Lorimer, P.Eng.

14 July 1989

## CFRTIFICATE OF QUALIFICATIONS

I, MALCOLM KEITH LORIMER, of the City of Vancouver, B.C., Mining Engineer, hereb. certify:

1. THAT I am a practising Mining Engineer and reside at 3082 West 27 th Avenue, Vancouver, B.C.
2. THAT I am a graduate of the University of British Columbia and hald a Bachelor of Applied Science degree in Mining Engineering granted in 1950.
3. THAT I have been practising my profession for over twenty-nine years.
4. THAT I am a member of the Association of Professional Engineers of the Province of British Columbia.
5. THAT the following is a true record of my employment and experience:

1950-52 General engineering, Consolidated Mining and Smelting Company of Canada Limited, Kimberley, B.C.

1952-56 Chief Engineer, Pioneer Gold Mines of B.C. Ltd., Ploneer Mines, B.C.

1956-57 Chief Engineer, Buchans Mining Co, Ltd., Buchans, Nfld.

1957-59 Chief Engineer and Mine Superintendent, Cowichan Copper Company Ltd., Lake Cowichan, B.C.

1959-65 General exploration work for various companies, mostily in southern British Columbia.

1965-75 Associate, H.L. Hill and Associates Ltd., later L.J. Manning and Associates Ltd., Consulting Mining and Ceological Engineers, Vancourer, B.C.

1975-Present Independent Mining Consultant.
6. THAT I have no direct or indirect intereat in the properties or securities of CASCADIA MINES \& RESOURCES LTD.
nor do I expect to acquire any.
DATED at Vancouver, British Columbia, this 14 th. day of July , 1989.
M.K. Lordmer, B.A. Sc., P.Eng.

## Geochemical Survey:

15 Kilometres of soil collection @ 25 metre spacings, 15 kilometres @ $\$ 300.00$ \$ $4,500.00$

Assaying:

```
Soil preparation $ 1,171.00
Assaying 388 samples for Au,AG,Pt, & Pd. _ 12,875.00
TOTAL: $ 18,546.00
```



Bondar-Clegg \& Company Lid.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
'494) 985-0681 Telex 04-352667

Appendix ${ }^{-1}$ Geochemical
Lab Report
'

CASCADIA MINES
7708 - 736 GRANUILLE ST,
UANCOUUER, B.C.
U62 163 Geochemical V7P 2R5
${ }^{-}$4) 985-0681 Telex 04-352667

REFERENCE INFO:

SUBHITIED BY: D. DENHIS
DATE PRINTED: 1-JUN-89


IEMARKS:IT: = Incufficiont sample

REFORT COPIES TO: CASCADIA MHES
Invoice to: CASCADIA mines



Geochemical

| REPORT：U89－02441．0 |  |  |  |  | PROJECT：NONE GIVEN |  | PAGE 2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SMAPLE ELEHENT | Pt | Pd | AU | Ag | SAMPLE ELEMENT | Pt | Pd | AU | Ag |
| NUTBER UNITS | PPB | P98 | FP8 | PPM | NUMBER UNITS | P98 | PY8 | PP8 | PPn |
| S1 PL $2+5 \mathrm{TN} 1+50 \mathrm{~F}$ | $<15$ | $<2$ | ＜ 5 | 0.4 | 51 BL 2＋10 ${ }^{\text {S }} 3+75 \mathrm{E}$ | ＜15 | ＜2 | ＜ 5 | 0.3 |
| $51 \mathrm{BL} 2+50 \mathrm{~N} 1+75 \mathrm{E}$ | $<15$ | $<2$ | ＜ 5 | 0.2 | S1 8L $2+$ TInN $4+$ OfE | ＜15 | 2 | $<5$ | 1.0 |
| S1 BL $2+50 \mathrm{~N} 2+11 \mathrm{~F}$ | $<15$ | $<2$ | $<5$ | 0.1 | S1 Bt $2+\operatorname{THN} 4+25 E$ | ＜15 | 2 | ＜5 | 0.7 |
| S1．BL $2+50 \mathrm{~N} 2+25 \mathrm{E}$ | 15 | $<2$ | ＜ | 0.7 | S1 8L $2+$ OnN $4+50 \mathrm{E}$ | ＜15 | 4 | 6 | 0.2 |
| S1：8L $2+50$ N $2+35 E$ | 15 | ＜2 | ＜ 5 | ＜01．1 | S1 B1 2＋f0n $4+75 \mathrm{E}$ | ＜15 | 4 | $<5$ | 0.5 |
| SI AL $2+50 \mathrm{~N} 3+\mathrm{THE}$ | 15 | ＜2 | （5 | 0.2 | SL BL 2＋anN 5＊TIE | ＜15 | 8 | 5 | 0.3 |
| S1＇ $8 \mathrm{~L} 2+50 \mathrm{~N} 3+25 E$ | 15 | ＜2 | $<5$ | 0.2 | S1 BL O＋58N $0+50 \mathrm{~F}$ | ＜15 | 2 | $<5$ | 0.2 |
| S1 BL 2＋50N 3＋5nE | ＜15 | ＜2 | $<5$ | ＜0． 1 | $51 \mathrm{BL} 0+5 \mathrm{NN} 0+75 \mathrm{E}$ | ＜15 | 4 | $<5$ | 0.2 |
|  | $<15$ | 2 | ＜ | 0.3 | S1 Di a 0 50N $1+$ UUE | ＜15 | 4 | $<5$ | 0.2 |
| S1 8L 2＋50N 4＋10NE | ＜15 | 4 | $<5$ | 0.4 | S1 8L 0＋58N 1＋25E | 30 | 4 | $<5$ | 0.1 |
| S1 RL $2+50 \mathrm{~N} 4+258$ | $<15$ | 6 | ＜ 5 | 0.4 | S1 BL IOS50N $1+50 \mathrm{~F}$ | ＜15 | 4 | ＜ 5 | 0.2 |
| S1 BL $2+50 \mathrm{Na} 4+50 \mathrm{E}$ | $<15$ | ＜2 | $<5$ | 0.2 | $518 \mathrm{EL} 0+50 \mathrm{~N} \mathrm{1+75E}$ | 20 | ＜2 | $<5$ | 0.3 |
| （i）8l． $2+50 \mathrm{~N} 4+75 \mathrm{E}$ | ＜15 | ＜2 | ＜ 5 | 0.6 | 31 BL $0+58 \mathrm{~N} 2+00 \mathrm{~F}$ | ＜15 | ＜2 | $<5$ | 0.2 |
| S1 8L－ $2+50 \mathrm{~N} 5+00 \mathrm{E}$ | ＜15 | ＜2 | ＜ 5 | （0） 1 | S1 BL I $+5 \mathrm{DN} 2+25 \mathrm{E}$ | 30 | 18 | 8 | 0.4 |
| $51 \mathrm{BL} 2+1 \mathrm{ON} 8+1 \mathrm{OLW}$ | ＜15 | 8 | ＜ 5 | 0.6 | S1 8L 1 $+50 \mathrm{~N} 2+50 \mathrm{E}$ | ＜15 | 8 | ＜ 5 | 0.4 |
| 518 LC 2.00 N 7.35 L | ＜15 | $<2$ | $<5$ | 0.6 | S1 8L $0+50 \mathrm{~N} 2+35 \mathrm{E}$ | ＜15 | ＜2 | $<5$ | 0.1 |
| S1 8L 2＋00N 7＋517N | ＜15 | 6 | $<5$ | ＜0．1 | S1 81［ $1+50 \mathrm{~N} 3+00 \mathrm{~F}$ | ＜15 | 2 | ＜ 5 | 0.1 |
| Si BL． $2+00 \mathrm{~N}$ 7＋25以 | ＜15 | 4 | ＜ | 0.4 | S1 8t 0 $+50 \mathrm{NN} 3+25 \mathrm{E}$ | $<15$ | 8 | 8 | 0.4 |
|  | ＜15 | 4 | $<5$ | 1.6 | S1 BL $0+5 \mathrm{OHd} 3+50 \mathrm{E}$ | ＜15 | 10 | $<5$ | 0.3 |
| S1 8L 2＋70N 6＋754 | ＜15 | 8 | $<5$ | 0.9 | S1 BL $0+50 \mathrm{~N} 3+75 \mathrm{E}$ | ＜15 | $<2$ | $<5$ | ＜0．1 |
| $318 \mathrm{BL} 2+00 \mathrm{~N} 6+50 \mathrm{~L}$ | ＜15 | 4 | ＜ 5 | 1.8 | S1． BL D $+50 \mathrm{~N} 4+60 \mathrm{E}$ | ＜15 | 4 | 5 | 0.3 |
| S1 BL $2+90 \mathrm{~N} 6+1010$ | $<15$ | ＜2 | $<5$ | ＜0．1 | S1 8L 0 $+50 \mathrm{~N} 4+25 \mathrm{E}$ | ＜15 | 4 | $<5$ | 1.2 |
| $51 \mathrm{RL} 2+00 \mathrm{~N} 5+750$ | ＜15 | $<2$ | $<5$ | 0.1 | 51 BL $0+50 \mathrm{~N} 4+50 \mathrm{E}$ | $<15$ | 2 | ＜ 5 | 0.5 |
| S1 日l $2+00 \mathrm{~N} 5+50 \mathrm{H}$ | 30 | 4 | $<5$ | 0.5 | 51 BL 0＋50N $4+75 \mathrm{~F}$ | $<15$ | 4 | ＜ 5 | 0.2 |
| S18L 2＊00N 5．254 | 20 | 4 | ＜ 5 | 0.3 | S1 BL $3+50 \mathrm{~N} 5+00 \mathrm{E}$ | $<15$ | 4 | 29 | 0.3 |
| S1 Bl． $2+00 \mathrm{~N}$ O 0 ORE | 15 | 11 | $<5$ | 0.7 | S1 8t $1+30$ | $<15$ | 2 | $<5$ | 0.2 |
| Si［3L． $2+00 \mathrm{Na}$ I +25 F | 20 | $<2$ | ＜ 5 | 0.1 | S1 Bt： $0+000$ i +50 F | ＜15 | ＜2 | $<5$ | 0.2 |
| S 1 BL $2+00 \mathrm{~N}$ ก +50 E | 217 | 4 | ＜ 5 | 1.0 | S1 BL［0 $+0010+75 E$ | $<15$ | 10 | 14 | 0.2 |
| $518 \mathrm{BL} 2+00 \mathrm{~N}$［1＋7．5E | 15 | 2 | ＜ 5 | 0.4 | S1 BL A＋ 1 I $1+$ DEE | $<15$ | 8 | 5 | 0.1 |
| S1 8L $2+00 \mathrm{~N}$ ： 2 月0E | 15 | $<2$ | ＜ 5 | 0.1 |  | $<15$ | 10 | 8 | 0.1 |
| S1 BL $2+\mathrm{OON} 1+2.5 \mathrm{E}$ | 20 | $<2$ | ＜ 5 | 0.2 | S1 Bi $0+101+50 E$ | $<15$ | 6 | 7 | 0.1 |
| St BL $2+$ OBN $1+50 \mathrm{E}$ | 20 | $<2$ | 45 | 0.4 | 51 BL －+ ［ $1+75 \mathrm{E}$ | 25 | 10 | 1.3 | 0.2 |
| S1 8t 2＋DEN 1＋75E | $<15$ | 10 | ＜ 5 | 2.4 | S1 BL $11+002+100 \mathrm{~F}$ | 15 | 25 | 10 | 0.6 |
| S1 BL 2 2 OUN $2+0$ OE | 30 | $<2$ | ＜ 5 | 0.6 | S1 8L Ot0 $12+25 \mathrm{E}$ | $<15$ | 19 | ＜ 5 | 0.1 |
| 51 BL $2+0 \mathrm{CN} 2+25 E$ | $<15$ | $<2$ | $<5$ | 0.3 | $51310+012+50 E$ | $<15$ | $<2$ | ＜ 5 | 0.2 |
| S1 BL 2＋GON 2＋50E | 15 | 2 | ＜ 5 | 0.3 | 51 BL ］$+\mathrm{BC} 2+75 \mathrm{C}$ | ＜15 | 4 | ＜＇ | 0.4 |
| S1 EL $2+00 \mathrm{~N} 2+75 \mathrm{E}$ | 20 | 4 | $<5$ | 0.4 | $61 \mathrm{BL} \mathrm{[1+DO} \mathrm{3+05]}$ | $<15$ | 2 | $<5$ | 0.2 |
| S1 BL $2+00 \mathrm{~N} 3+\mathrm{OME}$ | $<15$ | $<2$ | $<5$ | 0.2 | S1 BL $0+0$（ $3+258$ | ＜15 | $<2$ | ＜ 5 | 0.2 |
| S1 BL 2＋010N 3＋25E | ＜15 | 4 | ＜ 5 | 0.4 | S1 BL $0+003+50 \mathrm{E}$ | $<15$ | $<2$ | $<5$ | 0.3 |
| Si BL $2+00 \mathrm{~N} 3+50 \mathrm{E}$ | 20 | 2 | ＜ 5 | 0.2 | S1 81 0＋00 3＋75E | ＜15 | ＜2 | ＜ 5 | 0.3 |

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Geochemical


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File: 11547
Date: 14-Jun-89
Pase: 1 of 3

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Froject: Cariboo
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Attertirert ms. D. Dermias





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CAD CLAIM GROUP






3
0
$\vdots$
$\vdots$
3
$\vdots$
$i$
3
0
$\vdots$
$i$
3
$\stackrel{3}{n}$
3
8
+
+


Fig. 6
ac claim group PALLABLMM
$\qquad$ 100 metres
3
$\vdots$
$\vdots$

$\vdots$ | 3 |
| :--- |
| 0 |
|  |





Fig. 7
CAC CLAIM GROUP $\underset{(\mathrm{Prm})}{\text { Copper }}$

3
0
$\vdots$
$\vdots$




Fig. 8

