ASSESSMENT REPORT

CAC CLAIM GROUP

CARIBOO MINING DIVISION

93A/13 and 14

Lat 52 48'30"

8187

FILMED

Long 121 30'

OWNER: Cascadia Mines and Resources Ltd.

OPERATOR: Cascadia Mines and Resources Ltd.

CONSULTANT: W.G.T. Consultants Ltd.

AUTHOR: Marthe Archambault

SUBMITTED: August 21st, 1986

amended Copy

GEOLOGICAL BRANCH ASSESSMENT REPORT

15,274

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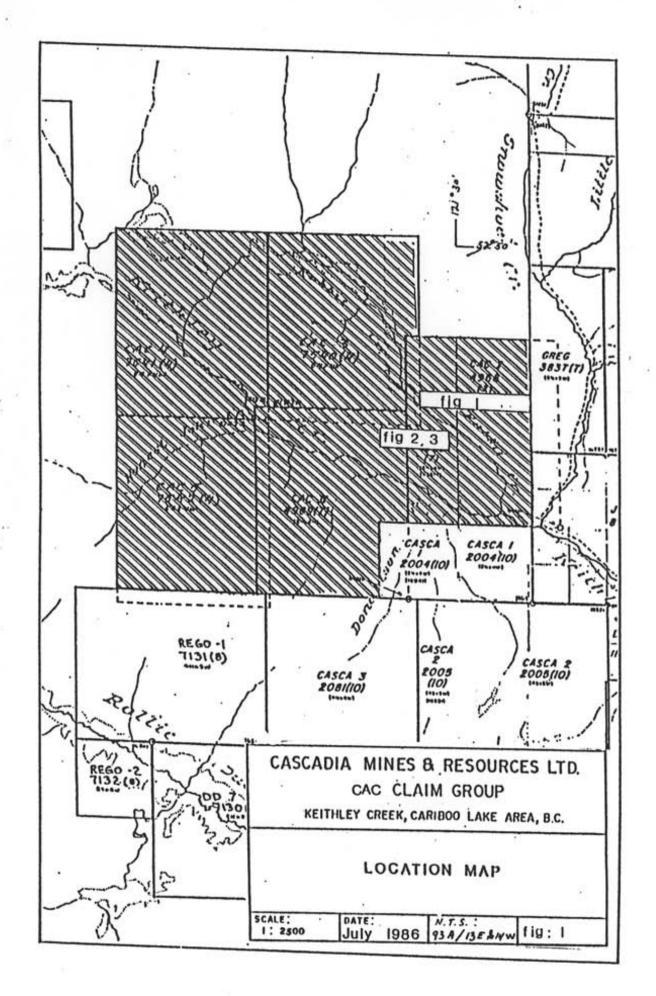
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#### 3.0 INTRODUCTION

#### 3.1 Location and Access

The CAC claim group is located approximately 8 km NW of the town of Keithley Creek, at the junction of Keithley Creek and Rabbit Creek (Fig. 1). It is accessible by a gravel logging road from the south end of Cariboo Lake. The claims lie at an elevation varying between 1,100 m and 1,300 m. The area is forested although most of the surface of CAC I and CAC 3 has been logged. The area is covered by overburden and various thicknesses of glacial till and outcrops are sparce.

#### 3.2 History: Lode Deposits

Much of the past lode deposit history of the area consisted of staking "Quartz Claims". These claims were 100 feet square and were normally placed on top of and encompassing a showing.

On October 25th, 1862, Hayward and Jeffrey two prospectors in the area, announced their discovery of the Douglas Vein. This led to a rush of quartz - claim staking on Little Snowshoe Creek in the Spring of 1863.

In August 1864 Hayward and ten others known as the Rising Sun Company recorded eleven claims on Yank's Peak. These claims were the most prominent of the lode deposits in the area of Keithley and Snowshoe Creeks. This mountain was the site of numerous discoveries of auriferous quartz veins. On Yank's Peak 1 a discovery was made of four approximately parallel veins of oxidized quartz about 1.5 feet in width and 25 feet apart. Two open cuts 250 feet apart intesected what appeared to be the same vein on which two samples were taken. One sample showed only a

trace of gold and silver while the other assayed 3.60 oz/ton gold and .4 oz/ton silver. The sample width in both cases being 1.5 feet (Report of the Minister of Mines 16 Geol 5 p. A161).

Intermittent activity in the area has been noted from the late 1860's until the 1970's. Cascadia initiated exploration during 1979. The CAC I and CAC II claims were first staked in July 1985, and the CAC 3, CAC 4 and CAC 5 in April 1986.

#### 3.3 Objectives

Gold mineralization in the Cariboo occurs in two different types: 1- as auriferous pyrite in quartz and 2- as "replacement ore" in limestone.

Some limestone outcrops were discovered during some regional prospecting. Because the limestone is known to be a possible host rock, trenching was initiated to get a better exposure.

#### 4.0 GRID ESTABLISHMENT

Flagged grid lines were established in three grids and amount to 9.8 km. A total of 3.5 km are located on the north side of Rabbit Creek, in three 1.1 km lines oriented in an EW direction. Line 0+00 has its starting point at the CAC 3 - 4 E - 1N post (Fig. 2) and ends at the CAC I eastern N-S claim line. The other 2 lines L 1+00N and L 1+00S are respectively 100 m north and 100 m south of line 0+00.

The second grid includes 4.1 km of lines with a .8 km long baseline oriented at 120 and 5 cross lines. Station 0+00 is the CACII/4N claim post. (Fig. 3).

The remaining 2.2 km located on the south side of Rabbit Creek with the baseline extending east for 950 m from the CAC II post 4 N (Fig. 4).

#### 5.0 GEOCHEMICAL SURVEY

A sample of the B soil horizon was taken every 25 m on the northern grid and on the 120 grid. All of the 2 grids is layed out in a logged out area. The B horizon is close to surface because most of the A horizon was burned during the slash burning conducted by the logging company. Most of the soil samples were taken at a depth of 20 to 25 cm. The soil is generally medium brown and fine grained. There are 121 samples from the northern grid and 137 samples from the 120 grid. A list of these samples and their location is presented in table 1 and 2. The samples are stored in Vancouver by W.G.T. Consultants Ltd., and have not been analysed.

### 6.0 PHYSICAL WORK

A D-9 cat with ripper was brought in to the Rabbit Creek area. Rocks have been exposed in 10 different trenches, lettered A to M. The dimension of each trench is listed in table 2 and their location and shape are illustrated in Fig. 4.

#### 7.0 GEOLOGY

### 7.1 General Geology

According to the G.S.C. open file 858 the two claims are underlain by rocks of the Ramos Creek succession described as being various phyllite, schist, quartzite, calcareous quartzite, calc-silicate rocks and minor limestones. The lower contact with Devonian and Mississippian rocks, equivalent to the Black Stuart Group, is gradational. A thrust fault, generally following the course of Rabbit Creek has been mapped. The thickness of the succession is poorly known but probably exceeds 250 m.

#### 7.2 Detailed Geology

Rocks exposed by the 15 trenches can be divided into four major The northern most units consists of a dark green chlorite units. schist with approximately 1% of fine grained (.25) diameter), dissiminated magnetite. It also contains some white quartz pockets along the schistosity plane. This schist occurs in fault contact with an isoclinaly folded, recrystallized, medium grey limestone. It is coarse grained: 5mm in diameter, and cross-cut by numerous narrow (1 mm wide) rusty calcite veinlets of various orientation. Very fine grained dissiminated pyrite is present in some areas.

This pure limestone occurs in fault contact with a limy schistose. This rock displays alternating bands of limestones and schist. It is extremely folded and deformed.

The first three rock types are cross cut by a dioritic intrusion. The diorite is more massive than the other units and doesn't show as much deformation as the schist and limestone although it is well jointed.

The major orientation of faulting and jointing is 120 /vertical to sub-vertical. A second set of jointing occurs at 220, also sub-vertical and other jointing patterns trend at 317/45, 274/75 and 349/76.

An age of Mississippian to Permian is assigned to the limestone and schists, and Mississippian or younger to the diabase and diorites (G.S.C., Open file 858). Therefore, other than the diorite being the youngest unit, the age and relation of these units remain unknown.

A grab sample of each rock type was collected in each trench. The location of these samples is illustrated on figure 4. The samples were assayed by Min-En Laboratories Ltd. The assay results (Table 4) failed to show any anomalous values.

# 8.0 <u>ITEMIZED COST STATEMENT</u>

# LABOUR

	Time	Rate	<u>Total</u>
1 Geologist 2 Helpers	10 days 10 days	\$150./day 65./day	\$ 1,500.00 1,300.00
1 Cat Operator	10 days	130./day	1,300.00
Camp Facilities for four men	10 days	30 <b>.</b> /day	1,200.00
EQUIPMENT			7
D-9 Cat with Ripper Mobilization and Demo Fuel	50 hours	\$125./hr.	\$ 6,250.00 500.00 2,276.00
Grid Establishment			
9.8 km of grid line a	at \$250./km	n	\$ 2,450.00
Report Preparation			\$ 3,000.00
TOTAL			\$19,716.00

### AUTHOR'S QUALIFICATIONS

- I, MARTHE ARCHAMBAULT, residing at 302 880 West 71st Avenue, Vancouver, B.C. do hereby certify that:
- 1. I am a geologist having been practising my profession for seven years.
- 2. I am a graduate of the University of Montreal, Montreal, P.Q., 1980, and of the University of British Columbia, Vancouver, B.C., having received a Masters degree in Economic Geology in 1985.
- 3. I have no interest direct or indirect in the property or securities of Cascadia Mines and Resources Ltd., nor do I expect to receive any such interest.
- 4. I am the author of this report which is based on personal knowledge of the area gained during an exploration program supervised by W.G. Timmins and conducted by myself and a field crew on July 2nd to 12th, 1986.

DATED at Vancouver, B.C., this 31st day of July, 1986.

Marthe Archambault

W.G. TIMMINS EXPLORATION AND

Marke archambault

DEVELOPMENT LTD.

TABLE 1: Soil Sample Location

## NORTH GRID, CAC I

Station	<u>1.1+00N</u>	<u>L0+00</u>	<u>L1+00S</u>
0+00	NS	NS	NS
25E	NS	NS	NS
50	121	NS	202
75	120	122	201
1+00	119	123	200
25	117	124	199
50	116	125	198
7.5	115	126	197
2+00	114	127	196
25	113	128	195
50	112	129	193
7 5	111	130	192
3+00	110	131	191
25	109	132	190
50	108	133	189
75	107	134	188
4+00	NS	135	186
25	106	136	185
50	105	137	184
75	104	138	183
5+00	103	139	187
25	102	140	182
50	101	141	181
75	100	142	180
L+00E	99	143	179
25	98	144	178
50	97	145	177
75	96	146	176
7+00	95	147	175
25	94	148	174
50	93	NS	NS

	Station	1+00N	0+00	1+005	
	7.5	92	NS	173	
	8+00	91	149	NS	
	25	90	150	172	
	50	89	151	171	
	75	88	152	170	
	9+00	87	153	169	
	25	86	154	168	
	50	85	155	167	
	75	84	156	166	
	10+00	83	157	165	
	25	82	158	164	
•	50	81	NS	163	
	75	80	159	162	
	11+00	79	160	161	

TABLE 2: Soil Sample Location

## 120 GRID, CAC II

Station	<u>6+00W</u>	<u>4+00W</u>	2+00W	0+00	2+00E
2+00 S			263		
75	262	228	264	320	
50	261	227	265	319	
25	NS	226	266	318	
1+00	269	225	267	317	
75	259	224	268	316	
50	258	223	269	315	
25 S	257	222	270	314	
0+00	256	221	NS	313	NS
25 N	255	220	271	312	320
50	254	219	272	311	321
75	253	218	273	310	322
1+00	252	217	274	308	323
25	251	216	275	307	324
50	250	NS	276	306	325
7.5	249	215	277	305	326
2+00	248	214	278	304	327
25	247	213	279	303	328
50	246	212	280	302	329
7.5	245	NS	281	301	330
3+00	244	211	282	300	331
25	243	210	283	299	332
50	242	209	284	298	333
7.5	241	208	285	297	334
4+00	240	NS	286	296	335
25	239	207	287	295	336
50	238	206	288	294	NS
75N	237	205	289	293	337
5+00 N	236	204	290	292	338

Station	6+00W	<u>4+00W</u>	<u>2+00W</u>	0+00	2+00E
25	235	203	291		339
50	234				340
75	233				
6+00	232				
25	231				
50	230				

# TABLE 3 - TRENCH DIMENSION

Trench	Dimension in Metre
Λ	10 x 36
В	6 x 14
С	20 x 34
D	6 x 18
Е	9 x 21
F	5 x 9
G	6 x 25
Н	9 x 13
I	5 x 18 and 7 x 35
J	15 x 16
К	5 x 5
L	3 x 3
М	6 x 7

## TABLE 4 ROCK SAMPLE LIST

SAMPLE NO.	AMPLE NO. ROCK TYPE	
R – 1	qtz. in serecite schist	Grab
2	qtz. in sericite schist	Grab
3	altered limstone	Grab
4	fresh limestone	Chip over 5m
5	rusty sericite schist	Grab
6	altered limestone	Grab
7	fresh limestone	Chip over 5m
8	qtz. in chl. schist	Grab over 2m
9	chl. schist	Chip over 10m
10	qtz. in altered schist	Chip over 4m
11	altered schist	Grab
1 2	altered schist	Grab
1 3	quartz	Grab
1.4	fault gouge	Grab
1 5	limy schist	Chip over 2m
16	qtz. in shear zone	Grab
17	fault gouge	Grab
18	limy schist	Grab
19	quartz	Grab over 5m
20	quartz & fault gouge	Grab
21	limy schist	Grab
22	quartz	Grab
23	altered limy schist	Grab
24	rusty limestone	
	and limy schist	Grab
2 5	limestone with diss. pyrite	Grab
26	fault gouge	Grab
27	quartz in fault zone	Grab
28	limestone with diss pyrite	Grab
29	quartz in diorite	Grab
30	diorite	Grab
31	quartz in diorite	Grab

#### MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5914 OR (604)988-4524

TELEX: 04-352828

### Certificate of ASSAY

Company: W.G.T. COMSULTANTS LTD.

Project:

Attention: W.G. TIMMINS

File:6-561/P1
Date:AUGUST 6/86

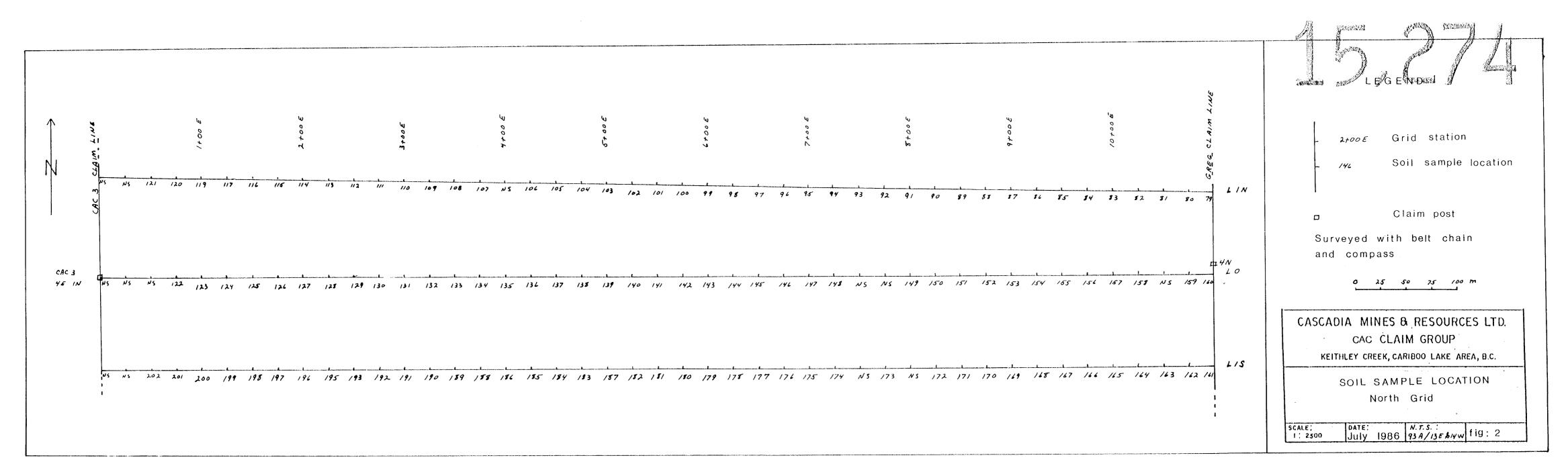
Type:ROCK ASSAY

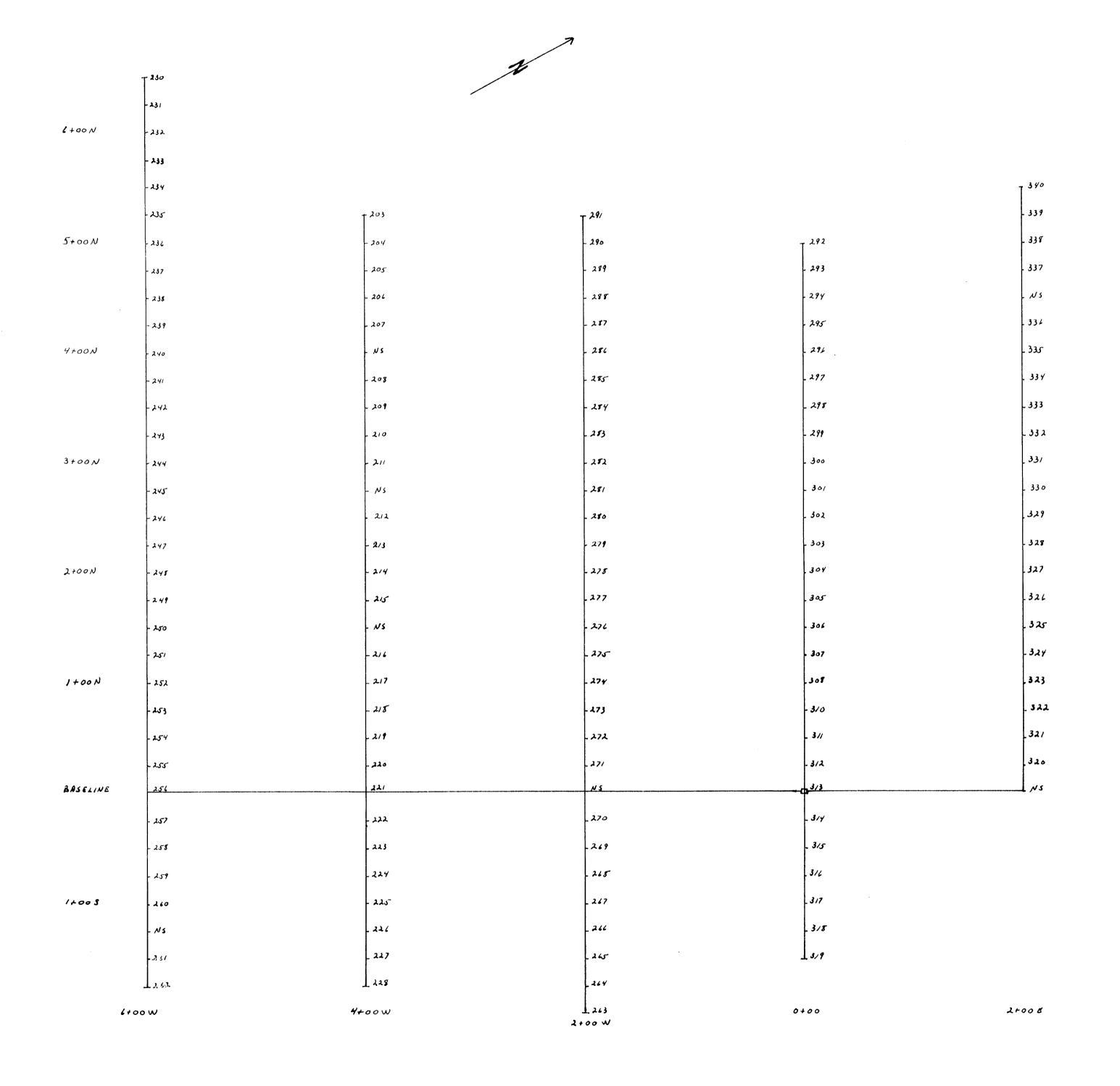
<u>We hereby certify</u> the following results for samples submitted.

***************************************							
Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON			
R-1 R-2 R-3 R-4 R-5	0.2 0.2 0.2 1.9 0.2	0.01 0.01 0.01 0.06 0.01	.02 .06 .01 .01	0.001 0.002 0.001 0.001 0.001			
R-6 R-7 R-8 R-9 R-10	0.1 2.2 0.1 0.3 0.2	0.01 0.06 0.01 0.01 0.01	.03 .02 .01 .01	0.001 0.001 0.001 0.001 0.001			
R-11 R-12 -13 R-14 R-15	0.2 0.1 0.1 1.7 2.0	0.01 0.01 0.01 0.05 0.06	.02 .01 .01 .01	0.001 0.001 0.001 0.001 0.001			
R-16 R-17 R-18 R-19 R-20	0.1 0.2 0.2 0.1 0.2	0.01 0.01 0.01 0.01 0.01	.01 .02 .01 .03	0.001 0.001 0.001 0.001 0.001			
R-21 R-22 R-23 R-24 R-25	1.1 0.2 2.3 0.5 0.2	0.03 0.01 0.07 0.01 0.01	.03 .04 .01 .15	0.001 0.001 0.001 0.004 0.001			
R-26 R-27 R-28 R-29 R-30	0.1 0.2 1.3 0.1 0.2	0.01 0.01 0.04 0.01 0.01	.03 .01 .03 .01	0.001 0.001 0.001 0.001 0.001			
R-31	0.1	0.01	.01	0.001	<u> </u>	1	

Certified by\_

MIN-EN LABORATORIES LTD.





GEOLOGICAL BRANCH ASSESSMENT REPORT

15,274

LEGEND

. 2700 E Grid station

144 Soil sample location

Claim post

Surveyed with belt chaln and compass

0 25 50 25 100 1

CASCADIA MINES & RESOURCES LTD.

CAC CLAIM GROUP

KEITHLEY CREEK, CARIBOO LAKE AREA, B.C.

SOIL SAMPLE LOCATION
120° Grid

SCALE: DATE: N.T.S.: July 1986 93 A/13 E & 14 w fig: 3

