2823

GEOLOGICAL REPORT

ON

THE 920/10 ML IIIB GROUP

OF

ROYAL CANADIAN VENTURES LTD.

AT

BIG CREEK, B.C.

51° 122° NW

BY

N.B. Vollo, P.Eng.,

September 16th, 1970

TABLE OF CONTENTS

Map in Pocket

#1 Geological Plan, 1"=400'

SUMMARY

Geological mapping and prospecting was done over a geochemical anomaly on the ML 141 - 144 claims. The origin of the anomaly could not be determined and an Induced Polarization survey is recommended.

LOCATION AND ACCESS

The ML group is about 13 miles southeast of Big Creek in the Clinton Mining Division. Recent logging roads reach to within about eight miles of the area mapped but the most convenient access is by helicopter from Williams Lake.

TOPOGRAPHY & CLIMATE

The mapped area is approximately 5300' above sea level on an upland surface with low local relief. Rainfall and snowfall are low to moderate and forest cover is very open, mature lodgepole pine.

CLAIMS

The ML IIIB group consists of 38 claims as follows:

ML 141 - 147,	record numbers	17684-17691
ML 163 - 169,	" "	17706-17712
ML 174,	" "	17717
ML 177, 178 Frs.,	" "	21532-21533
ML 179 - 198,	" "	21534-21553

All are held be Royal Canadian Ventures Ltd.

HISTORY AND PREVIOUS WORK

Detailed soil geochemical, magnetic and VLF-EM surveys late in 1969 (Assessment Report, N.B. Vollo, Jan. 20th, 1970) confirmed a soil copper anomaly located by reconnaissance surveys earlier that year (Assessment Report, N.B. Vollo, Dec. 16th, 1969). The group was originally staked to cover a stream geochemical anomaly and to the writer's knowledge, the area has never previously been staked.

FIELD WORK

The writer spent three days, May 25th to 27th, mapping, assisted by M. Hjelt. Mapping was by pace and compass, using the previously chained grid for control. The very open forest growth allows outcrop to be seen from some distance and it is unlikely any was missed. Several small pits were attempted but the very bouldery nature of the overburden made this impractical.

GEOLOGY

The group is located within a stock of Jurassic age, forming a window in Tertiary plateau basalts. Reconnaissance mapping and geophysical work in 1969 indicated that the geochemical anomaly was located within a body of biotite granodiorite near the contact of the latter with hormblende granodiorite (Assessment Report, N.B. Vollo, Dec. 16th, 1969). The present mapping has not substantially changed this interpretation.

Hornblende granodiorite outcrops fairly abundantly immediately southwest of the geochemical anomaly. A fine grained and a coarse grained variety are present. The first appears to be older as it is frequently found as inclusions in the coarse type, together with fragments of fine grained diorite or andesite. Both varieties are composed mainly of plagioclase, quartz and hornblende.

No new outcrops were found within the postulated biotite granodiorite. Fairly extensive boulder fields in this area appear to be derived from the hormblende granodiorite to the southwest.

A quartz lense about one inch wide, carrying a little coarse chalcopyrite, is noted on the accompanying map. A boulder of fine grained hornblende granodiorite, found within the geochemical anomaly, contains disseminated chalcopyrite along fracture planes.

Epidote alteration is common in rocks exposed in the gullies in the viscinity of Line 128+00 S, but not elsewhere. Weak, patchy sericitization and potash feldspar alteration was also noted in this area.

CONCLUSIONS AND RECOMMENDATIONS

The geochemical anomaly may originate from the very minor quartz - chalcopyrite veins found in the hornblende granodiorite, but this is by no means certain. It is recommended that an Induced Polarization survey be done over the area thought to be underlain by biotite granodiorite. Drilling would be warranted if appreciable IP effects coincide with the geochemical high.

N. B. Vollo, P.Eng.
Sept. 16th, 1970

AFFIDAVIT ON EXPENDITURES

Personnel

N.B. Vollo, P.Eng., Geologist,
Field mapping, May 25-27, 3 days @ $75, -$225.00
Report, 1 day @ $75 ---------- 75.00

M. Hjelt, assistant, May 25th, 27th, 2 @ $45, - 90.00

Transportation

Okanagan Helicopters, 3½ hrs. @ $150 ---------525.00

Company vehicle, 360 miles @ 12¢ ---------- 43.20

Camp expense ---------- 53.47

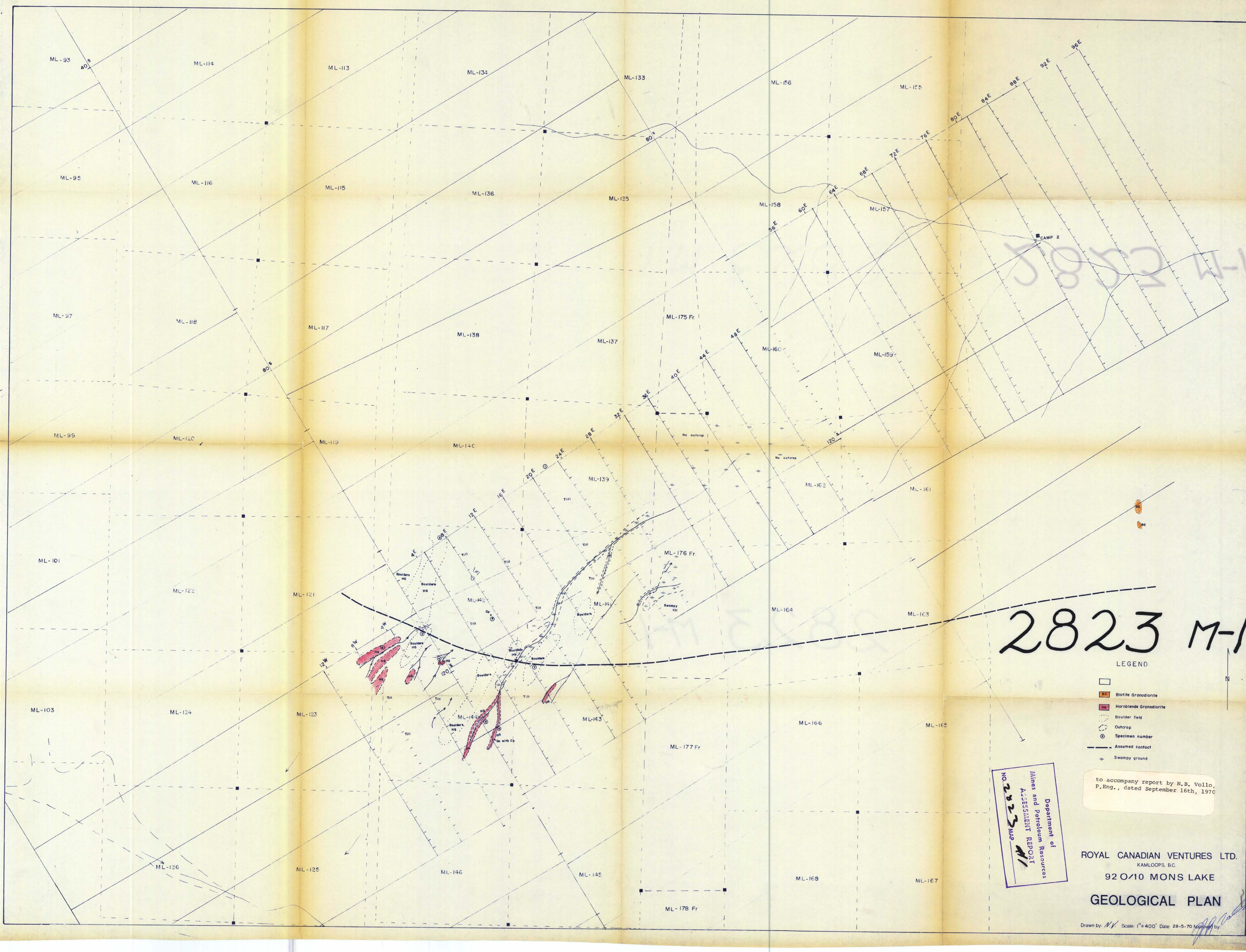
Prints, etc. ---------- 7.50

Total ---------- $1019.17

I, Nels B. Vollo, of the city of Kamloops, in the Province of British Columbia, make the above declaration, conciently believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me, at the city of Kamloops, in the Province of British Columbia, this 22 day of January, 1971, A.D.

A commissioner for ~~taking~~ affidavits for British Columbia


ML-93
ML-114
ML-113
ML-134
ML-133
ML-156
ML-155
ML-95
ML-116
ML-115
ML-136
ML-135
ML-158
ML-157
CAMP 2
ML-97
ML-118
ML-117
ML-138
ML-137
ML-175 Fr.
ML-160
ML-159
ML-99
ML-120
ML-119
ML-140
ML-139
ML-162
ML-161
ML-101
ML-122
ML-121
ML-142
ML-141
ML-176 Fr.
ML-164
ML-163
ML-103
ML-124
ML-123
ML-144
ML-143
ML-177 Fr
ML-166
ML-165
ML-126
ML-125
ML-146
ML-145
ML-178 Fr
ML-168
ML-167
No outcrop
Till
Boulders HG
Swampy till
2823 M-1
LEGEND
Biotite Granodiorite
Hornblende Granodiorite
Boulder field
Outcrop
Specimen number
Assumed contact
Swampy ground
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2823 MAP #1
to accompany report by N.B. Vollo, P.Eng., dated September 16th, 1970
ROYAL CANADIAN VENTURES LTD.
KAMLOOPS, B.C.
92 O/10 MONS LAKE
GEOLOGICAL PLAN
Drawn by: N.V. Scale: 1" = 400' Date: 28-5-70 Approved by: