

GEOCHEMICAL REPORT ON
the 92H/16TC GROUP
of Royal Canadian Ventures Ltd.
at: Peachland, B.C. 49°120° NE
N.B. Vollo, P. Eng. 92H/9E, 16E

February 10th, 1972.

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GEOCHEMICAL REPORT

ON THE

92 H/16 TC GROUP

of

ROYAL CANADIAN VENTURES LTD.

at

PEACHLAND, B.C.

49° 120° N.E.

by

N.B. Vollo, P. Eng.

February 10th, 1972.

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 3643	MAP.....

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MAPS IN POCKET

#1 Geochemical Plan, Cu ZN, 1"=1000'
#2 " " , Mn Mo, 1"=1000'

SUMMARY

Approximately 1100 soil samples were analysed for Cu, Zn, Mn, and Mo over an area of approximately 160 claims. A large zinc anomaly was outlined along the Spring Creek valley and should be examined in more detail.

LOCATION & ACCESS

The group is located 17 miles due west of Peachland and is skirted by good secondary roads from Peachland, Summerland or Princeton. A C.P.R. branch line from Penticton to Princeton is within 2 miles of the south boundary.

TOPOGRAPHY & CLIMATE

The group is situated on a plateau surface approximately 5,000 feet above sea level, cut by the valleys of Trout and Spring Creeks, approximately 1,000 feet deep. It is within the Interior dry belt, with moderate to low rainfall and snowfall. A fairly open growth of lodgepole pine is present, with a little fir and spruce on the north slopes.

CLAIMS

The group consists of 160 claims, all in the Similkameen mining division as follows: -

TC 1 - 40	Record Nos. 33627 - 33666
TC 41 - 112	Record Nos. 33414 - 33485
TC 113 - 148	Record Nos. 33499 - 33530
TC 149 - 160	Record Nos. 33667 - 33678

All are held by Royal Canadian Ventures Ltd.

HISTORY & PREVIOUS WORK

Part of the Group was staked previously during the Brenda rush but the writer has no record of work done. The area was mapped by H.A. Rice, from 1939 to 1944, for the geological survey of Canada and a map and report published as Memoir 243.

FIELD WORK

Five men were employed from May 18th to June 4th. Approximately 1100 soil samples were taken over about 70 miles of grid.

GEOLOGY

The group is underlain entirely by acid intrusive rocks. A body of quartz feldspar porphyry of Upper Cretaceous or Tertiary age, intruded into granodiorites of pre Cretaceous age (Rice, 1960), occupies most of the central part of the property.

The quartz feldspar porphyry is characterized by phenocrysts of quartz and/or feldspar in a fine grained felsic matrix, with very sparse mafic minerals. Some phases have coarse quartz phenocrysts only while ⁱⁿ others feldspar phenocrysts are more prominent. Slight to moderate alteration is common, often giving the feldspars a greenish cast.

The surrounding older intrusive varies from extremely coarse porphyritic pink granite to medium grained grey granodiorite, and always contains significant proportions of biotite and hornblende.

A minor showing of chalcopyrite and malachite was noted at 56 + 00 south, 28 +00 west.

GEOCHEMICAL SURVEY

Samples were taken at 400' intervals along north south lines 1400 feet apart and east west lines 2800 feet apart. Silt samples were also taken from streams intersected by these lines. Soil augers were used, the samples placed in kraft envelopes and sent to Core Laboratories in Vancouver. Analysis were made for Cu, Zn, Mn and Mo using hot aqua regia extraction and the atomic absorption method.

Outcrop is rather sparse over much of the group and the thickness of till is unknown. A poorly developed podzol type soil profile is present, and samples were taken from the 'B' horizon were recognizable.

Copper background is quite low, averaging about 10 ppm and no anomalous zones were defined. Only those analysis above 30 ppm were plotted, and these tend to occur associated with high zinc analysis.

Zinc background is about 75 ppm and a well defined anomalous zone above 200 ppm, ranging to 3800 ppm, crosses the northern part of the group, roughly parallel to the valley of Spring Creek. The zone is about one mile wide by three miles long.

Manganese background is about 200 ppm, ranging to 1800 ppm with some tendency to higher analysis along and southeast of the Spring Creek Valley.

Mo background is below 1 ppm, and no anomalous zone was defined. A single reading of 80 ppm was associated with a high Mn analysis and can be discounted.

CONCLUSIONS AND RECOMMENDATIONS

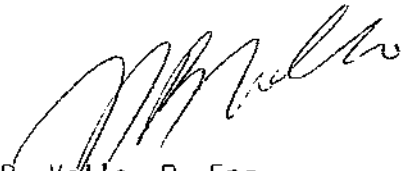
Although the highest zinc analysis do coincide with high Mn analysis the anomaly as a whole correlates poorly with overall Mn content, and cannot therefore be discounted as due to scavenging by manganese oxides. The anomaly also occurs within altered quartz porphyry, a favourable host for porphyry copper deposits, in which a minor copper showing has been noted. The lack of copper response is discouraging, but the extent and magnitude of the zinc anomaly warrants additional work as follows: -

1. Double up sample and line spacing between the 28 + 00 and 84 + 00 S tie lines.
2. Acquire ground to the east if possible, and sample on 800' x 200' grid.
3. Do EM-16 and magnetic surveys on a 700 to 800 foot line spacing.
4. Prospect and map the anomalous area thoroughly.

The cost of such a program would be approximately as follows:-

Grid chaining and sample collection	\$ 1,500.00
Sample analysis, 600 samples @ \$2.50	1,500.00
Magnetic & EM-16 Survey	2,500.00
Geological mapping and prospecting	1,000.00
Miscellaneous and contingencies	<u>500.00</u>
	\$ 7,000.00

Trenching or drilling would be contingent upon the results of this programme.


N.B. Vollo, P. Eng.
February 10th, 1972.

AFFIDAVIT ON EXPENDITURES

Personnel

N.B. Vollo, P. Eng., Supervision, interpretation and report - 7 days @ \$80.00	\$ 560.00
M. Hjelt, May 19th to June 4th, Sample collection 14 days @ \$45.00	\$ 630.00
Drafting & Plotting - 11 1/2 days @ \$ 45.00	517.50
L. Loranger, May 25th to June 4th, Sample collection 11 days @ \$45.00	495.00
Drafting and plotting 1/2 day @ \$45.00	22.50
M. Fennell, Sample Collection May 21st to June 4th, 12 days @ \$35.00	420.00
Drafting and plotting - 1 day @ \$35.00	35.00
T. Mann, Sample Collection - May 18th to June 4th 15 days @ \$35.00	525.00
Drafting & Plotting - 1 day @ \$35.00	35.00
A. Berke, Sample Collection - May 20th to June 4th 12 days @ \$30.00	360.00
Drafting and plotting - 1 day @ \$30.00	30.00

Analysis

Core Laboratories, Vancouver	2,856.25
Camp Expense	425.86
Transporation - Company vehicles - 1780 @ 12¢	213.60
Miscellaneous - Prints, flagging, communication, photos, etc.	314.63
	<u>7,404.84</u>
	\$ <u>7,404.84</u>

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



Nels B. Vollo, P. Eng.

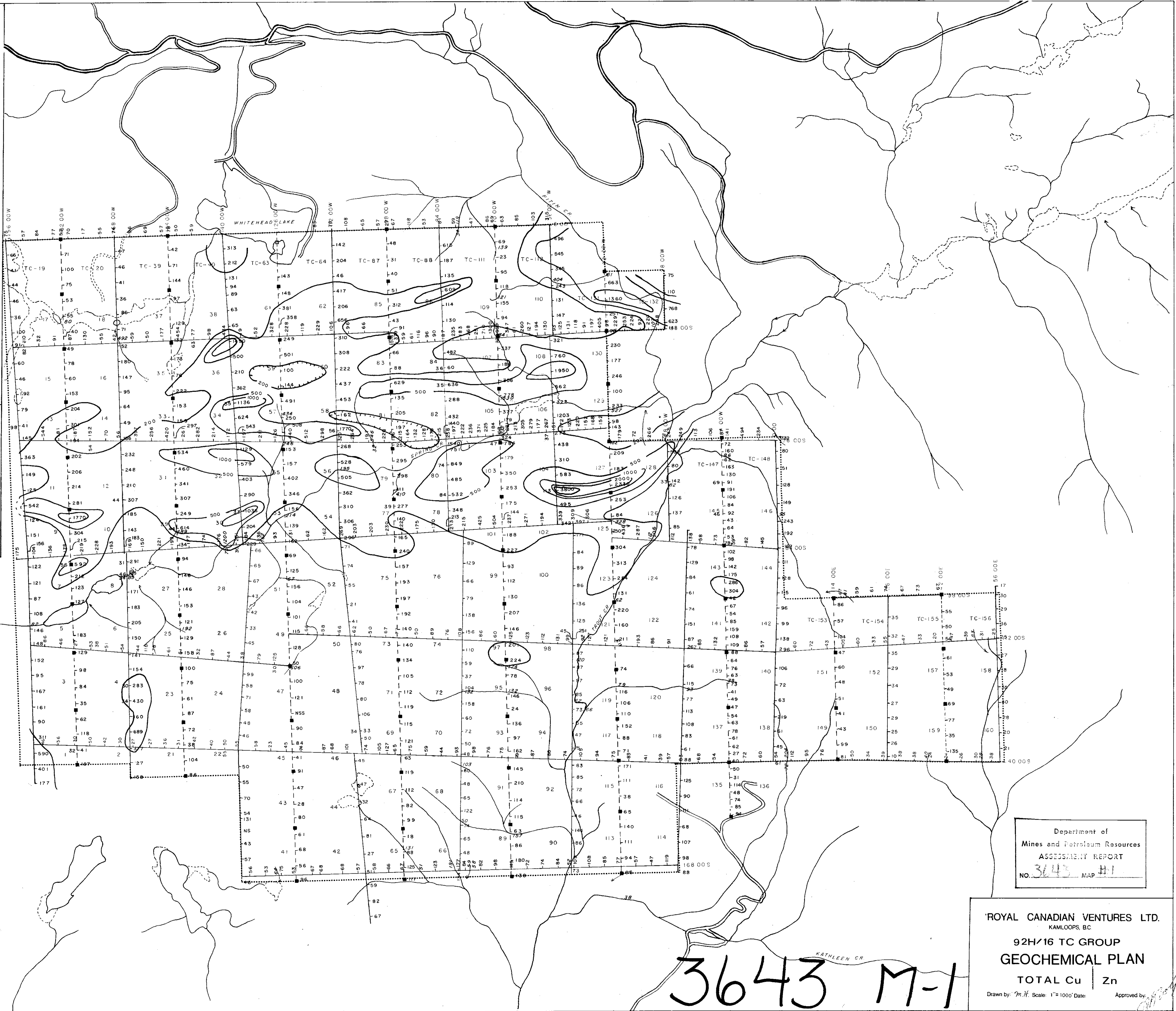
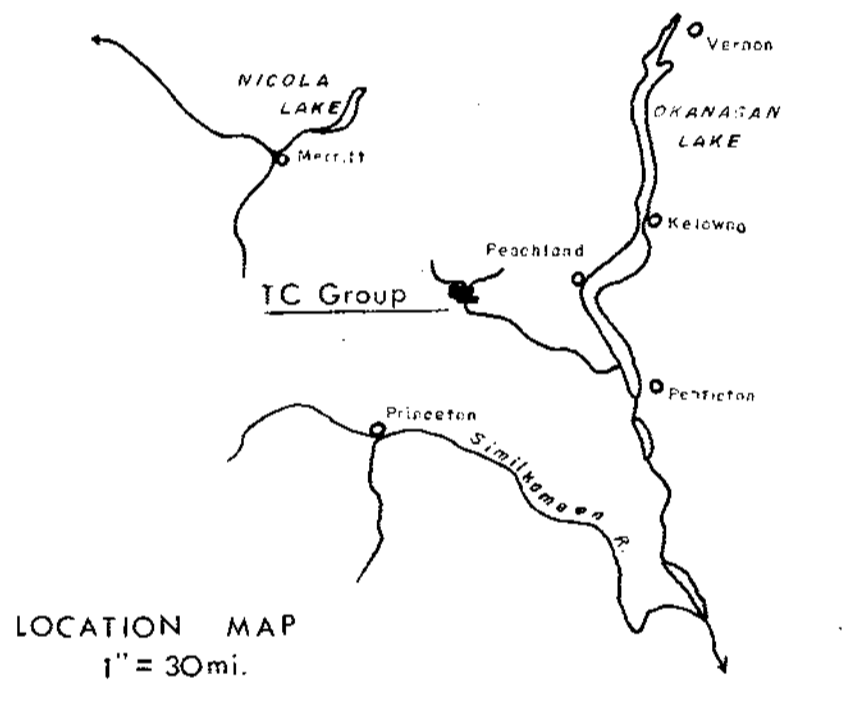
Declared before me at the City of Kamloops, in the Province of British Columbia, this 25 day of February 1972, A.D.,



Commissioner for taking affidavits for British Columbia.

LEGEND

Readings in p.p.m.
 Analysis by TSL
 Extraction by hot aqua regia
 Determined by atomic absorption
 Cu + 30ppm only plotted
 Stream sediments in sloped numbers i.e. 256
 Contour interval- 200, 500, 1000ppm



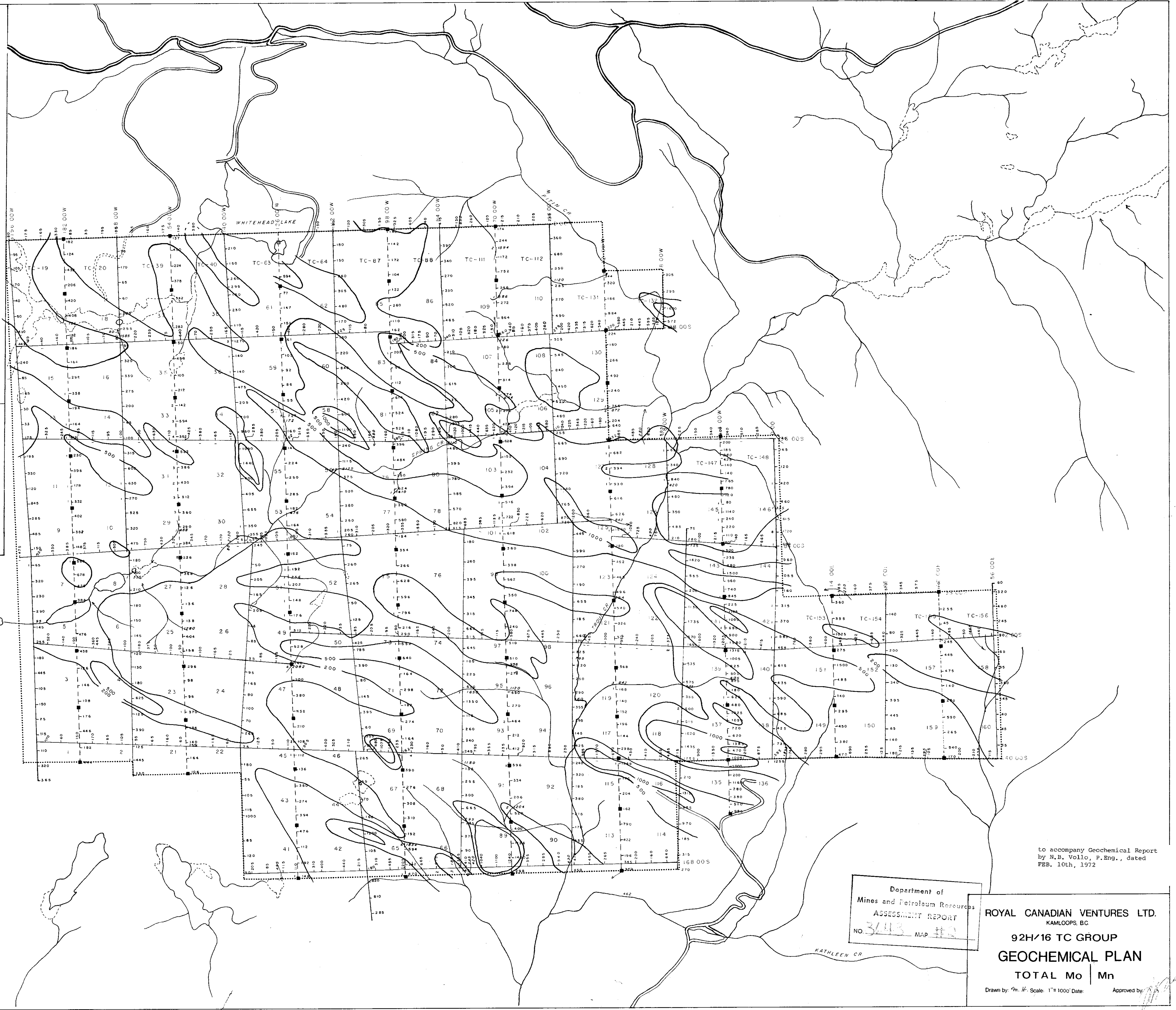
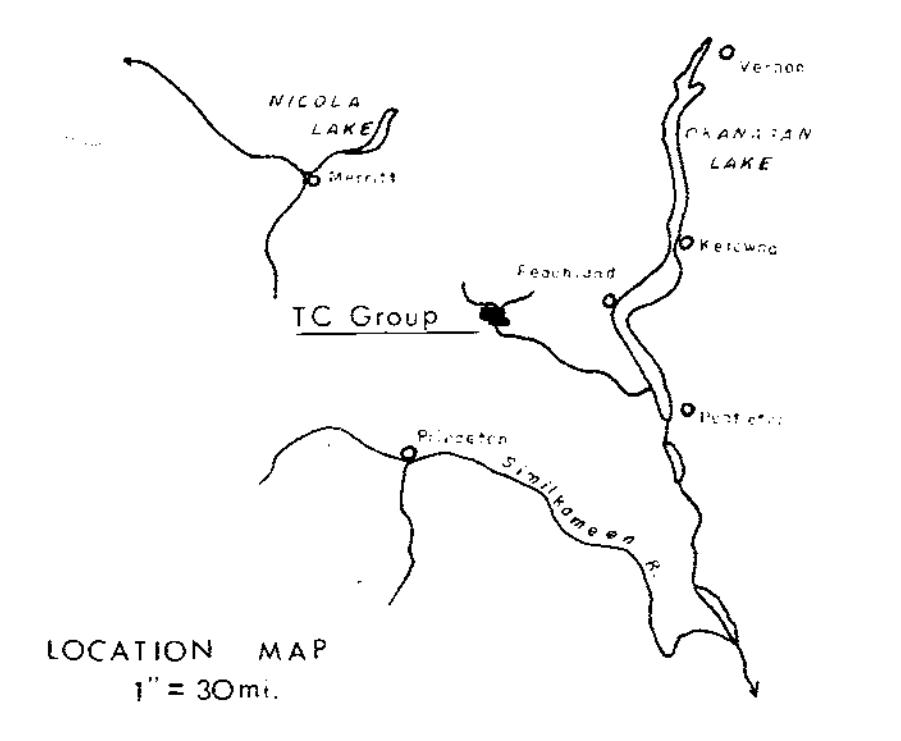
Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3643 MAP 41

ROYAL CANADIAN VENTURES LTD.
 KAMLOOPS, BC
 92H/16 TC GROUP
 GEOCHEMICAL PLAN
 TOTAL Cu | Zn
 Drawn by: J.M.H. Scale: 1"=1000' Date: Approved by:

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LEGEND

Readings in ppm.
 Analysis by TSL
 Extraction by hot aqua regia
 Determined by atomic absorption
 Mo 1ppm or > only plotted
 Stream sediments in sloped numbers ie 76
 Contour interval= 200, 500, 1000ppm



to accompany Geochemical Report
 by N.B. Vollo, P.Eng., dated
 FEB. 10th, 1972

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3443 MAP #10

ROYAL CANADIAN VENTURES LTD.
 KAMLOOPS, BC

**92H/16 TC GROUP
 GEOCHEMICAL PLAN**

TOTAL Mo | Mn

Drawn by G.M.H. Scale: 1"=1000' Date: Approved by