

1983 Assessment Work

Geochemical Survey

Property: Bates Creek

Claim: TORO, ARGO

Location: Five km at 140 from Aspen Grove, B.C.
 Nicola Mining Division
 92 H 15 E
 49° 53' N 120° 36' W

Owner and Operator: Pan-American Consultants Ltd.
 1406-1055 West Georgia Street
 Vancouver, B.C., V6E 3P3

Dates of Work: May 18-19, 1982

Submittal Date: April 26, 1983

Consultant and Author: L. Sookochoff, P. Eng.
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,229

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1983 Assessment Work
Geochemical Survey
TORO AND ARGO MINERAL CLAIMS
(BATES CREEK PROPERTY)

INTRODUCTION

In May 1982 a localized geochemical survey was completed on the Bates Creek Property located in the Aspen Grove area.

The purpose of the survey was to determine the feasibility of utilizing a geochemical survey to the location of potential copper with associated gold-silver mineralization.

This report provides information on the geochemical survey as to procedure, results and conclusions thereof.

PROPERTY

The property consists of two contiguous mineral claims totaling 10 units within the Nicola Mining Division of N.T.S. map sheet 92H 15E. Particulars are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry</u>
Toro	1062	April 21, 1983
Argo	1061	April 21, 1983

LOCATION AND ACCESS

The Rush mineral claim is within three km west of Missezula Mountain and 24 km north of Princeton. Alison Lake borders the claim to the north with Borgeson Lake bordering the western boundary of the claim.

Highway No. 5 from Princeton to Merritt passes through the northwestern portion of the property. Secondary roads from the highway provide access to the northern and southern portion of the claim.

WATER AND POWER

A year-round water supply could be available from a westerly flowing creek bisecting the property in addition to other sporadic water courses within the property boundaries.

Diesel-electric power would be required in the initial phases of exploration and development. The Princeton-Merritt power transmission line R.O.W. crosses the western portion of the property.

PHYSIOGRAPHY AND CLIMATE

The property lies within the southern portion of the Thompson Plateau which forms part of the Interior Plateau System. The terrain is of gentle slopes to the south and north of the Bates Creek Valley which bisects the property.

Elevations range up to 1190 meters above sea level with a relief of 150 meters.

Moderate stands of pine with fir, alder and poplar are predominant over the claim area.

The general climate is of long arid summers, with moderate winters which are commonly less severe than the average within the southern region of the Thompson Plateau.

The property is located within the Nicola Volcanic Belt stretching from the U.S. border 50 km south of Princeton north to Kamloops Lake. This Belt has been the object of continued mineral exploration since the late 1800's when gold and platinum placer deposits were discovered along the Tulameen and Similkameen Rivers. Subsequent exploration of the Nicola belt led to the discovery of numerous copper with often associated gold and silver occurrences most of which are presently indicated by either trenches, pits, shafts and/or adits.

Although most of the occurrences were determined to be uneconomical at the time of discovery and exploration, persistent and often varying exploratory and technological procedures led to the productivity of the Copper Mountain deposits - originally in 1925, secondly in 1937 and most recently in 1972 - the Craigmont deposit at Merritt in 1961 and the Afton deposit near Kamloops in 1977.

GENERAL GEOLOGY

A northerly trending belt of Nicola rocks, ranging up to 40 km wide stretches northward from near the U.S. border in the south, northward to beyond Kamloops Lake. Within the Nicola Group, which is comprised of vari-colored lavas, argillites, tuffs, limestones and chlorite and sericite schists are more recent formations of sedimentary rocks as well as stocks and plugs of Coast or Copper Mountain Intrusives. Coast Intrusives are also peripheral to the belt of Nicola Rocks.

Three major ore bodies in addition to many mineral showings occur within the Nicola rocks; The Afton deposit is associated with the Iron Mask Intrusive near Kamloops; the Craigmont deposit near Merritt is associated with a limestone of the Nicola series and adjacent to the Guichon batholith; and the Similkameen deposit near Princeton is associated with the Lost Horse Intrusive and Nicola rocks. These three deposits are intimately associated with intrusives.

The geology of the area also lends itself to volcanogenic related deposits to which many occurrences in the area may relate to.

PROPERTY GEOLOGY

The property covers a sequence of northerly trending red and green volcanics which are in transitional, in addition to a fault, contact. A syenitic stock is indicated as occurring within the central part of the claim group.

Three mineral showings are also indicated (Geology of the Nicola Group between Merritt and Princeton - Figure 1) as occurring within the claim group. Two of these showings are indicated in the east within a sequence of reddish to green augite-plagioclase andesite and basalt flows. One mineral showing is indicated within a green volcanic breccia and lahar deposit.

GEOCHEMICAL SURVEY

1. Survey Procedure

A north south grid line was established from which 23 samples 30 meters apart were taken.

Samples were selected from the B horizon of the brown to brownish gray sandy-loam forest soil at a depth of commonly 30 centimeters or more. The soil was placed in a brown wet-strength paper bag with the grid co-ordinates marked thereon and submitted for assay.

2. Testing Procedure

All samples were tested by Acme Analytical of Burnaby, B.C. The testing procedure is first to thoroughly dry and sift the sample through a -80 mesh screen. Then a measured amount of the sifted material is placed into a test tube, aqua regia added, heated, and the parts per million (ppm) metal measured by atomic absorption. The samples were analysed in this manner for three metals - copper, lead and zinc.

3. Treatment of Data

In assessing the data results there was not a sufficient number of samples to statistically determine anomalous values, thus anomalous values were determined as to relative values.

Utilizing this procedure, the anomalous values were selected as follows

	Cu	Pb	Zn
Anomalous threshold value	30	10	50

All values are in parts per million.

RESULTS

Three contiguous anomalous values occur for 90 meters southerly from the Bates Creek road. Coincident with the copper are one anomalous lead and two anomalous zinc values.

CONCLUSIONS

The anomalous area is restricted to and north of Bates Creek and the Bates Creek road. Within this area is an indicated syenitic intrusive with which copper mineralization is occasionally associated in the Princeton and Kamloops area. Thus the area in the vicinity of the determined anomalous zones should be followed up with a geochemical survey and should be geologically mapped to determine the favorable host rock or structural control for mineralization.

Respectfully submitted,



Laurence Sopkochev, P.Eng.
Consulting Geologist

April 26, 1983
Vancouver, B.C.

REFERENCES

- DOLAN, W.M. et al - Geophysics of the Copper Mountain and Ingerbelle Orebodies in -British Columbia, C.I.M. Bulletin, July 1975 p. 90-97
- PARLIAMENT, J.H. - The Similkameen Project, The Canadian Mining and Metallurgical Bulletin, August 1973 p. 58-64
- PRETO, V.A. - Geology of the Nicola group between Merritt and Princeton, Ministry of Energy, Mines and Petroleum Resources, Bulletin 69, 1979.
- RICE, H.M.A. - Geology and Mineral Deposits of the Princeton Map-Area, British Columbia, Geological Survey of Canada, Memoir 243 1906
- SCHALRAS, W. - Afton may go underground for more copper, gold Canadian Mining Journal, November 1981 p. 62-72.
- SOOKOCHOFF, L. - 1982 Assessment Work, Geochemical Survey, Toro Argo Claims, May 14, 1982

CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist with the firm of Pan-American Consultants Ltd. of 1406-1055 West Georgia Street, Vancouver, B.C.

I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
2. I have been practising my profession for the past seventeen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for the accompanying report is based on pertinent material as cited under references and from a geochemical survey carried out by the writer as reported herein.

Laurence Sookochoff, P.Eng.
Consulting Geologist

April 26, 1983
Vancouver, B.C.



CERTIFICATE OF EXPENDITURES

A geochemical survey on the Toro group of claims was carried out on May 18-19, 1982 to the value of:

Car rental and and mileage	
Vancouver to Merrit	\$ 285
L. Sookochoff 2 days @ \$300	600
Room and board 2 days @ \$50	100
Assays	<u>140</u>
	\$1,125
	=====

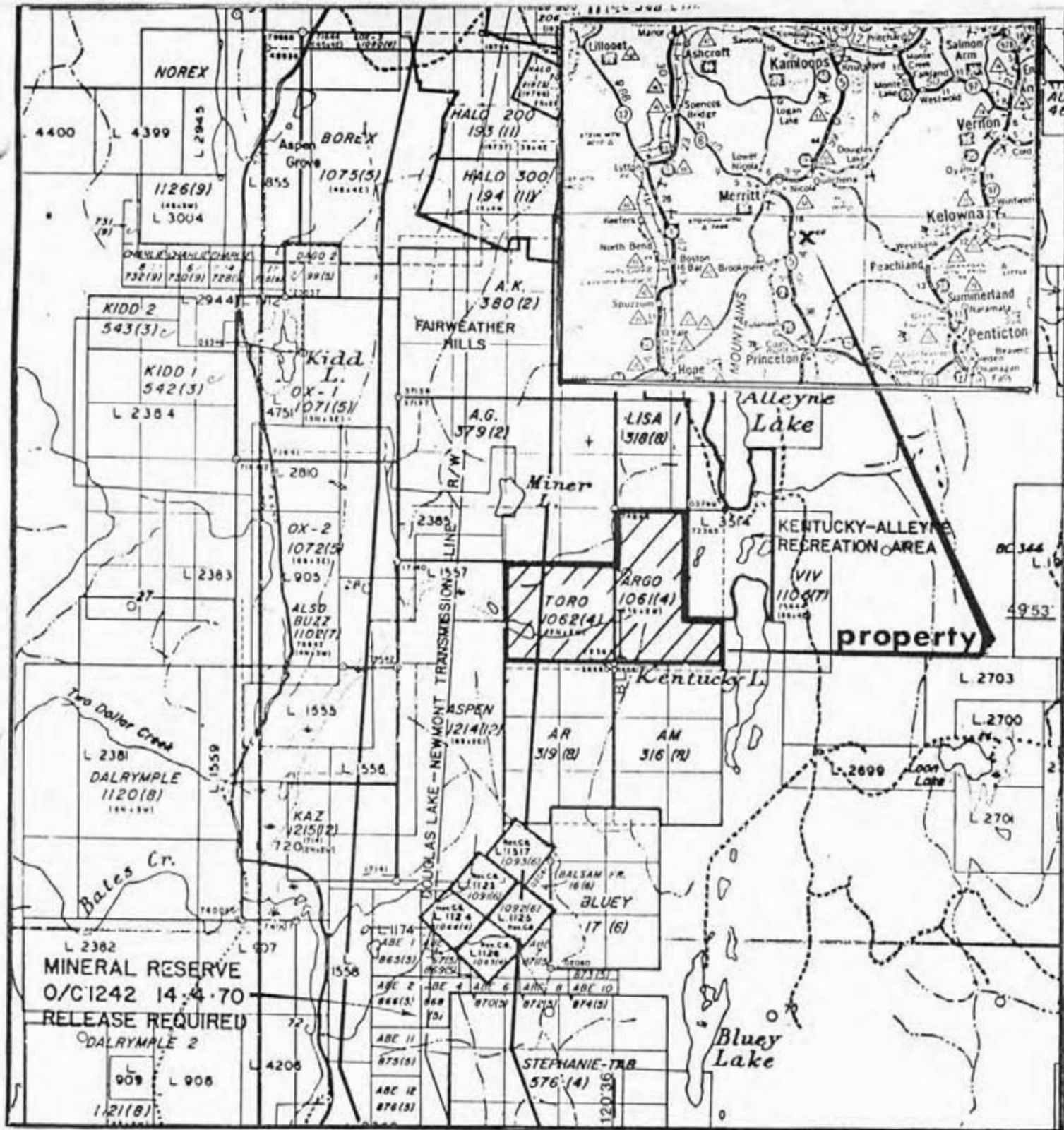


Figure 1

TORO & ARGO CLAIMS

NICOLA MINING DIVISION

NTS 92 H 15 E

INDEX MAP

0 1500
meters



