

GEOCHEMICAL REPORT

7/88

ON A

SOI GEOCHEMISTRY SURVEY

OVER A PORTION OF THE

DOG CLAIM GROUP

CANNELL CREEK

KAMLOOPS MINING DIVISION

BRITISH COLUMBIA

PROPERTY : 28 km N35°W of Kamloops, B.C.
on Cannell Creek
: 50° 52' North Latitude
120° 34' West Longitude
: N.T.S. 92I/15E

WRITTEN FOR : TRANS-ARCTIC EXPLORATIONS LTD.
815-850 West Hastings Street
Vancouver, B.C., V6C 1E2

SURVEYED BY : TRANS-ARCTIC EXPLORATIONS LTD.
815-850 West Hastings Street
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WRITTEN BY : David G. Mark, Geophysicist
GEOTRONICS SURVEYS LTD.
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DATED : October 16, 1987



GEOTRONICS SURVEYS LTD.
Engineering & Mining Geophysicists
VANCOUVER, CANADA

16359

LOG NO: 1023

RD.

ACTION:

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FILE NO: 87-661-16359

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 OCT 19 1987
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 VANCOUVER, B.C.

GENERAL BRANCH
 REPORT

16,359

FILMED

LIST OF ILLUSTRATIONS

At Back of Report

Property Location Map	1:8,600,000	Map 1
Claim Map	1: 50,000	Map 2
Silver Soil Geochem Map	1: 2,000	Map 6A
Gold Soil Geochem Map	1: 2,000	Map 6B

In Back Pocket

Soil Sample Survey 1987	1: 5,000	Map 6
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SUMMARY

Some soil geochemical sampling was done over a portion of the Dog Claim Group owned by Trans-Arctic Explorations Ltd of Vancouver, B.C. from July 18th to 19th, 1987. The claims are located on Cannell Creek, 28 km N35°W of the City of Kamloops. Access is easily gained by vehicle, preferably 4-wheel drive. The terrain consists of mainly gentle to moderate slopes forested with light to moderately dense coniferous trees. The purpose of the survey was to map the window of Cache Creek sedimentary rocks within the background of Tertiary volcanics of the Kamloops group.

The Dog Claims are staked adjacent to the property containing the old Allies showings on which exploration was previously carried out for gold. The mineralization consists of pyrite, chalcopyrite, bornite, and galena within quartz veins. These veins are within dark grey porphyry dykes cutting serpentine of the Cache Creek group. Overlying the Cache Creek rocks on and around the Dog claims are Tertiary volcanics of the Kamloops Group.

The soil samples were dug every 20 m on two lines 20 meters apart, subsequently tested for gold and silver and plotted.

CONCLUSIONS

The silver and gold results are very flat. The survey area, however, consisted of a very small area, and therefore does not mean there could be gold/silver mineralization elsewhere on the property.

RECOMMENDATIONS

The results from the work done in this report does not change the recommendations from the writer's two previous reports.

1. The property should be thoroughly prospected and/or geologically mapped. This will also greatly aid in the interpretation of any geophysics and geochemistry that have been or may be carried out, especially the airborne survey.
2. Though a soil geochemistry survey has been done, another one should be considered. On the previous survey the sample was screened to -80 mesh. The total sample picked up should be pulverized and not screened in order to preclude the screening out of coarser gold.
3. An induced polarization-resistivity survey should be considered. The purpose of the induced polarization would be to pick up sulphide zones that are hopefully associated with gold mineralization and that of the resistivity to outline alteration zones related to the same mineralization.

4. Trenching and diamond drilling of promising targets resulting from the above work.

GEOCHEMICAL REPORT
ON A
SOI GEOCHEMISTRY SURVEY
OVER A PORTION OF THE
DOG CLAIM GROUP
CANNELL CREEK
KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

INTRODUCTION AND GENERAL REMARKS

This report discusses the survey procedure, compilation of data and the interpretation of a soil sample survey carried out over a portion of the Dog Claim Group located on Cannell Creek within the Kamloops M.D. from July 18th to the 19th, 1987. Some geological mapping and soil sampling were done as well.

The work was done by E.A. Dodd and W. Winter, both of whom are of Trans-Arctic Explorations Ltd. A total of 40 soil samples were picked up.

The object of the soil sampling was to locate possible areas of gold and/or silver mineralization similar to the nearby Allies showing.

PROPERTY AND OWNERSHIP

The property consists of three claims totalling 18 units as shown on Map 2 and as described below:

<u>Claim Name</u>	<u>No. Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Dog 2	10	4118	July 19, 1988
Dog 3	4	4119	July 19, 1988
Dog 4	4	6343	July 19, 1988

The expiry dates shown takes into account the surveys under discussion as being accepted for assessment credits.

The property is owned by Trans-Arctic Explorations Ltd. of Vancouver, British Columbia.

LOCATION AND ACCESS

The property is found 28 km N35°W of the City of Kamloops, B.C. on Cannell Creek located within the Tranquille Plateau.

The geographical coordinates are 50° 52' north latitude and 120° 34' west longitude.

Access to the property is by the Pass Lake dirt road to Pass Lake. This road starts approximately one mile north of the city centre of North Kamloops along the west side of the North Thompson River. From the agricultural research station at Pass Lake, one travels northwesterly for 1 km where one turns west and travels a further 8.5 km northwest to the Allies showing over a logging road.

Pass Lake is accessible by a two-wheel drive vehicle all year around, the road being kept open in winter. A four-wheel drive vehicle is recommended from Pass Lake to the property during summer months and a skidoo during winter months.

PHYSIOGRAPHY

The property lies at the southern end of the Tranquille Plateau which forms part of the physiographic division known as the Thompson Plateau System. The terrain varies from gentle and moderate slopes throughout most of the property to steeper slopes occurring along gullies and creeks.

Elevations vary from 1,020 meters a.s.l. on Cannell Creek at the southern property boundary to 1,530 meters a.s.l. within the northwest and southwest corners of the Dog 1 claim.

The main water sources would be Cannell Creek and its tributaries which cross the property as well as Sydney Lake located 850 m west of the Dog 5 claim.

The forest cover consists of fir, pine and spruce and varies from closely growing, immature stands to widely spaced, mature stands.

HISTORY OF PREVIOUS WORK

The adjacent property was previously known as the Allies Group upon which work was done in exploration for gold during the 1920's and 1930's. At this time several trenches, shafts and adits were dug out.

The property was staked as the Dog Claims in 1969-70 and in 1973, magnetic, VLF-EM, limited soil sampling and limited geological surveys were carried out. In 1976, further soil sampling was carried out producing gold-copper anomalies that were subsequently diamond drilled. No mineralization was encountered.

Over Trans-Arctic's property, the only previous work was a combined airborne magnetic and VLF-EM survey carried out in July of 1983, (results in a report by the writer dated October 20, 1983), and a ground magnetic survey with some geological mapping and soil sampling carried out in July of 1976 (results in report by writer dated Oct. 16, 1986).

GEOLOGY

The geological description of the property is taken from Cockfield and Saleken. (See Selected Bibliography.)

Much of the general area is underlain by Tertiary volcanics of the Kamloops Group. These consist of rhyolites, andesites and basalts with associated tuffs, breccias and agglomerates.

Forming a window in the Tertiary volcanics and underlying much of the Dog claims are rocks of the Carboniferous Cache Creek group. This group in this area consists of argillite, quartzite, hornstone, limestone, sheared conglomerate, breccia, greenstone, and serpentine. The units have a northwest trend with varied dips.

Cutting the Cache Creek rocks but not the Kamloops volcanics are light grey and dark grey porphyry dykes (or flows?). The dark grey porphyry is a dense rock with phenocrysts of hornblende and feldspar.

The mineralization of the Allies prospect occurs as pyrite, chalcopyrite, bornite and galeña within quartz veins which occur within the dark grey porphyry dykes (or flows?). Up to 1.42 oz/ton of gold has been assayed with the sulphides.

SURVEY PROCEDURE

The samples were picked up at 20-meter centers on two north-south lines within a separation of 20 m as shown on Map 6. They were dug with a D-handled shovel at about a 15- to 20-cm depth. The horizon sampled was B. Samples were placed in brown, wet-strength, paper bags (gussett bags) with the sample number marked thereon. A total of 40 samples were picked up.

TESTING PROCEDURE

All samples were tested by Min-En Laboratories of North Vancouver, B.C. The sample is first thoroughly dried and then pulverized in a ring pulverizer. It was then rolled on a rolling sheet to homogenize it.

For silver analysis, a measured amount of the pulverized material was put into a test tube with subsequent measured additions of perchloric acid and nitric acid. The mixture was next heated for a certain length of time. The parts per million (ppm) metal was then measured by atomic absorption.

These results are plotted on Map 6A at a scale of 1:2,000.

For the gold analysis, 10 grams of the sample was then fire-assayed with standard techniques. 2 mg of silver was then added to collect the gold. The lead button from the fire assay was

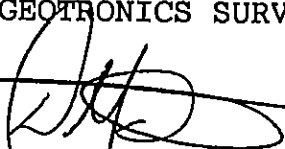
then cupelled and the silver-gold prill was dissolved in aqua regia. It was next analyzed by the atomic absorption technique to a detection limit of 5 parts per billion (ppb).

The results were plotted on Map 6B at a scale of 1:2,000.

DISCUSSION OF RESULTS

As can be seen by examining the results for silver and gold on Maps 6A and 6B, respectively, they are very flat. Silver varies from 0.4 to 2.6 ppm and gold from 2 to 5 ppb. In other words, the soil sampling has indicated no areas of gold and silver mineralization within the survey area. However, since the survey area is very small, this does not preclude silver/gold mineralization from occurring elsewhere on the property.

Respectfully submitted,
GEOTRONICS SURVEYS LTD.



David G. Mark,
Geophysicist

October 16, 1987
41/G406

SELECTED BIBLIOGRAPHY

- Aeromagnetic Map, Tranquille River, British Columbia, Geol. Surv. of Can., Map 5220G Sheet 92I/15, 1968. Vol. 73, No. 818, June 1980, P. 68-69.
- B.C. Minister of Mines, Annual Reports: 1924, p.147; 1931, p.107; 1932, p.145; 1933, p.193; 1934, p.D26. Bull No. 1, 1932, p.67.
- Carr, J.M., Deposits Associated with the Eastern Part of the Iron Mask Batholith near Kamloops, Annual Report of the Minister of Mines of British Columbia, pp.47-69, 1956.
- Cockfield, W.E., Geology and Mineral Deposits of Nicola Map - Area B.C., G.S.C. Memoir 249, 1948.
- Mark, David G., Geophysical Report on a Ground Magnetic and VLF-EM Survey and the Government Aeromagnetic Survey, Dog Claim Group, Cannell Creek, Kamloops M.D., B.C. for Bon Val Mines Ltd. (N.P.L.) Geotronics Surveys Ltd. March 31, 1973.
- Mark, David G., Geophysical Report on a Soil Geochemistry Survey, Cannell Claim Cannell Creek, Kamloops M.D., B.C. for Yamoto Industries Ltd., Geotronics Surveys Ltd. August 23, 1976.
- Mark, David G., Geophysical Report on a Airborne Magnetic and VLF-EM Surveys Over the Dog Claim Group, Cannell Creek, Kamloops M.D., B.C., for Stryder Explorations, Geotronics Surveys Ltd., October 20, 1983.
- Mark, David G., Geophysical Report on a Ground Magnetic Survey (with some geological mapping and soil sampling) Over the Dog Claim Group, Cannell Creek, Kamloops M.D., B.C., October 16, 1986.

Matthews, W.H., Geology of the Iron Mask Batholith; unpublished thesis for the degree of Master of Science, University of British Columbia, about 1942.

Parker, R.H., Examination of Government Aeromagnetic Survey, South Oak Mines Ltd., Doq Claim Group, Geotronics Surveys Ltd., January 1970.

Preto, V.A.G., Geology of the Eastern Part of the Iron Mark Batholith, Report of the Minister of Mines and Petroleum Resources, 1967.

Saleken, L.W. Preliminary Report on Doq Group, Kamloops, M.D. B.C., South Oak Mines Ltd. (N.P.L.) Geotronics Surveys Ltd., February 1970.

Sookochoff, Laurence, Geological Evaluation Report on the Cannell Creek Property, Kamloops, M.D., B.C. for Yamoto Industries Ltd. T.R. Tough & Associates Ltd., January 13, 1976.

Sookochoff, Laurence, Geological Report on the Cannell Creek Property, Kamloops, M.D. for Yamoto Industries Ltd. (N.P.L.) January 25, 1978.

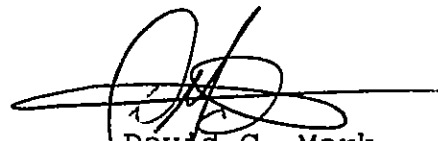
GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices located at #530-800 West Pender Street, Vancouver, British Columbia.

I further certify:

1. That I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
2. I have been practising my profession for the past 19 years and have been active in the mining industry for the past 22 years.
3. That I am an active member of the Society of Exploration Geophysicists and a member of the European Association for Exploration Geophysicists.
4. This report is compiled from data obtained from soil sampling survey carried out by Trans-Arctic Exploration Ltd., under the supervision of E.A. Dodd during July 18th to 19th, 1987.
5. I have no direct or indirect interest in any of the properties mentioned within this report, nor in Trans-Arctic Explorations Ltd, nor do I expect to receive any interest as a result of writing this report.


David G. Mark
Geophysicist

October 16, 1987


41/G406

AFFIDAVIT OF EXPENSES

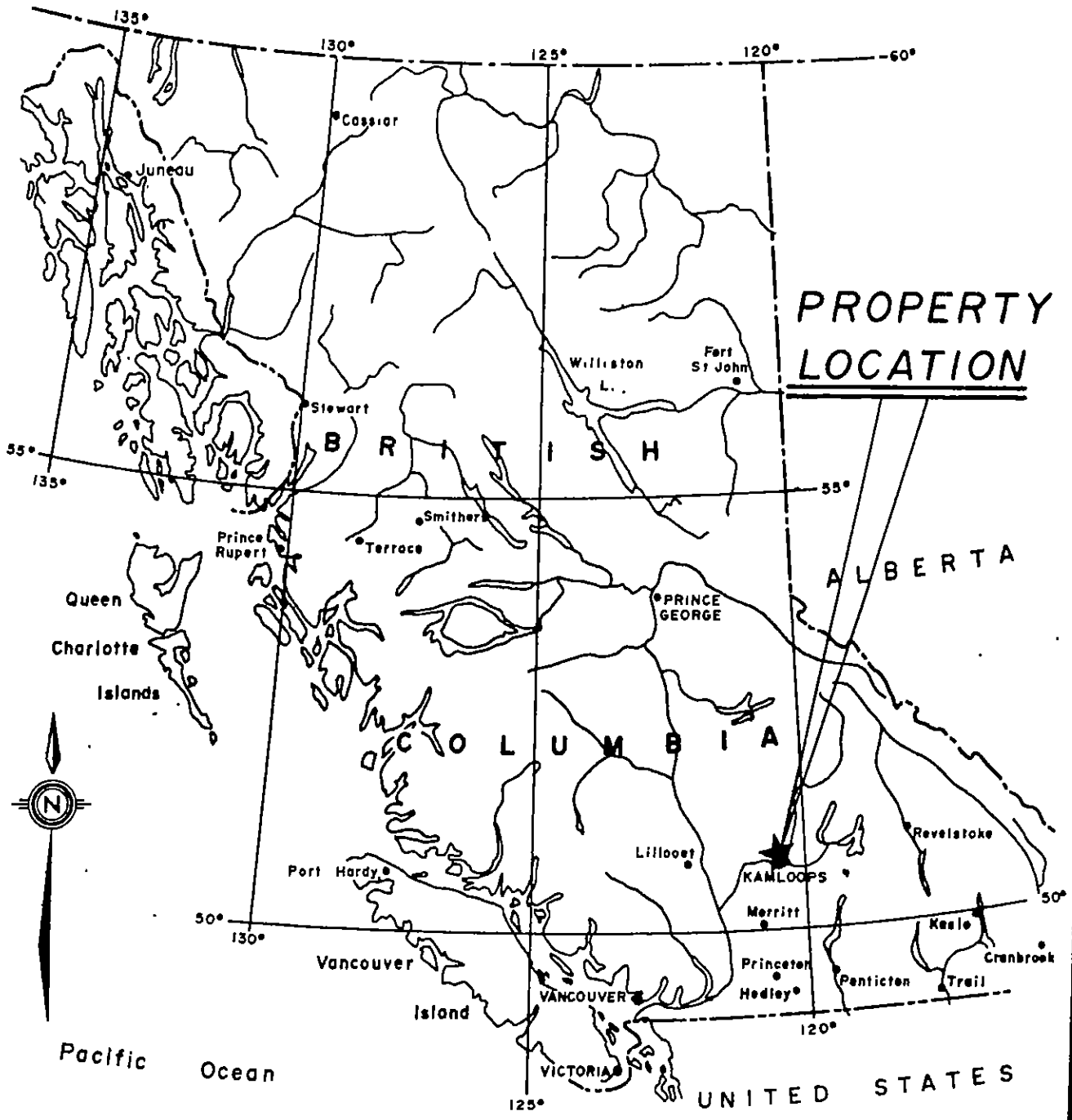
Soil sampling over a portion of the Dog 3 mineral claim, located in the Kamloops Mining Division, of B.C.

Crew chief, 1.5 days @ \$125/day	\$, ,187.50
Assistant, 1.5 days @ \$100/day	150.00
One 4X4 3/4 ton truck, 1.5 days @ \$90/day	135.00
Accommodation, 1.5 days @ \$50/day each man	150.00
Lab costs for sample analysis	503.00
Report and drafting	<u>486.50</u>
TOTAL	<u>\$1,612.00</u>

Respectfully submitted,
TRANS-ARCTIC EXPLORATIONS LTD.

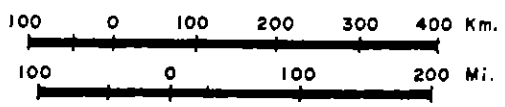

Richard S. Simpson,
General Manager

41/G406

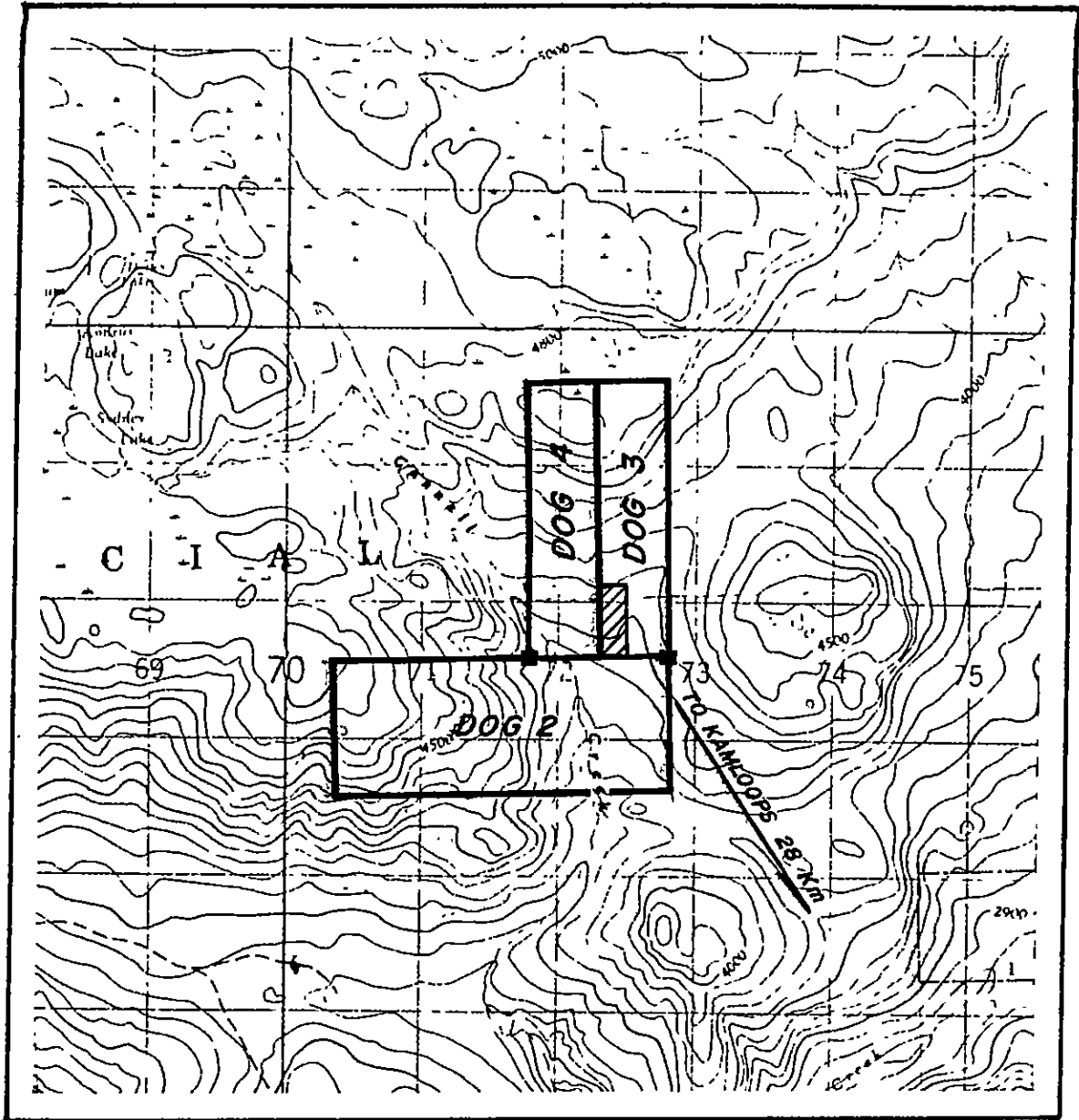


PROPERTY LOCATION

DOG CLAIM GROUP



120° 34'



50° 53'

50° 52'

Sample Area '87



TRANS-ARCTIC EXPLORATIONS LTD.

DOG CLAIM GROUP

CANNELL CREEK, KAMLOOPS AREA

KAMLOOPS M.D., B.C.

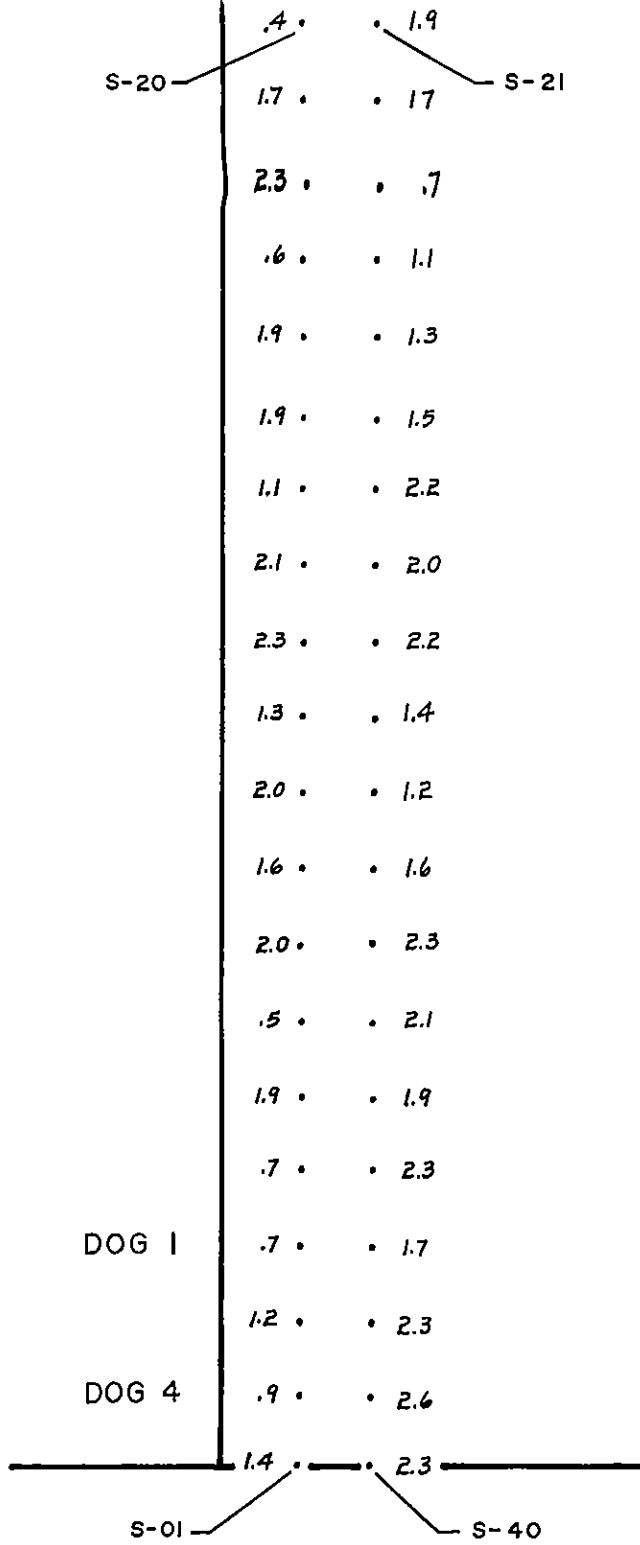
CLAIM LOCATION MAP

SCALE
1: 50,000

DATE
OCT. '87

MAP:
2

N.T.S.
921/15 E

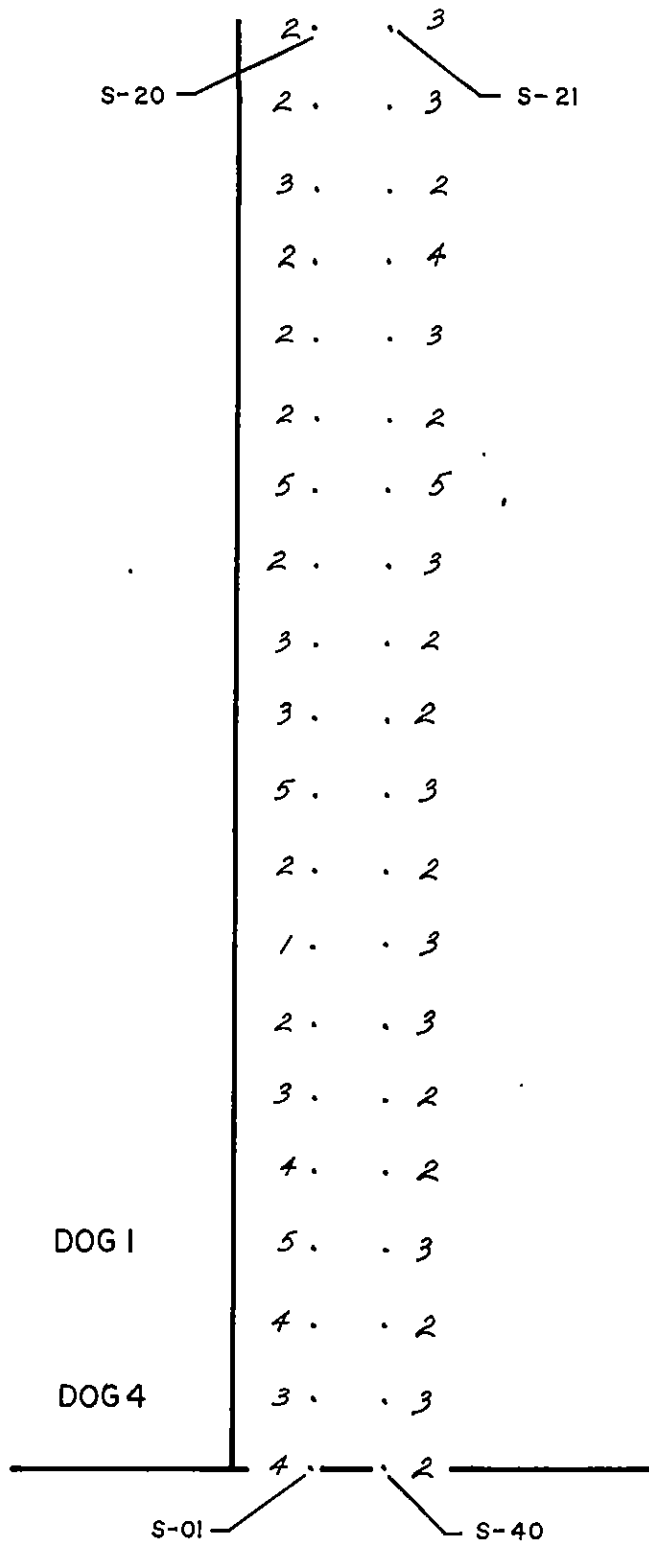
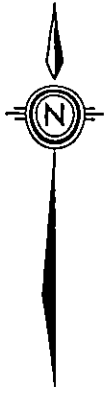


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DOG CLAIM GROUP
CANNELL CREEK, KAMLOOPS AREA
KAMLOOPS M.D., B.C.

SILVER SOIL GEOCHEM MAP

SCALE: 1:2,000	DATE: OCT. 87	NTS: 92 1/15 E	FIGURE: 6 A	DRAFTED F B.D.S.
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TRANS-ARCTIC EXPLORATIONS LTD.

DOG CLAIM GROUP
CANNELL CREEK, KAMLOOPS AREA
KAMLOOPS M.D., B.C.

GOLD SOIL GEOCHEM MAP

SCALE	DATE	N.T.S.	FIGURE	DRAWN BY:
1:2000	OCT 87	92 1 15 E	6 B	B.D.S.

5 + 00 W

Baseline

5 + 00 E

10 + 00 E

DOG 5

DOG 3 NOW REDUCED TO FOUR UNITS

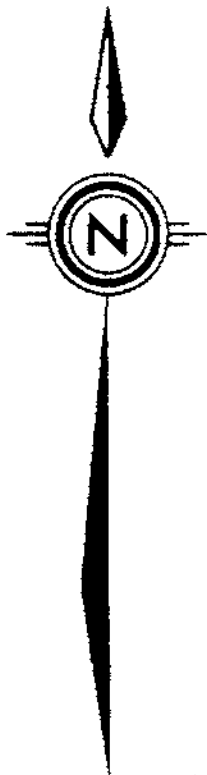
L 20 + 00 N

L 15 + 00 N

L 10 + 00 N

L 5 + 00 N

L 0 + 00 N



CANNELL CREEK

DOG 1
DOG 3

DOG 2

DOG 4

SOIL GRID: 20m Line space
20m Stationing space

S-1 S-20 S-21 S-40

GENERAL GEO BRANCH
APPENDIX REPORT

16,359
TO ACCOMPANY REPORT BY DAVID G. MARK, GEOPHYSICIST.

TRANS-ARCTIC EXPLORATIONS LTD.

DOG CLAIM GROUP
CANNELL CREEK, KAMLOOPS AREA
KAMLOOPS M.D., B.C.

MAGNETOMETER SURVEY 1986
* SOIL SAMPLE SURVEY 1987

SCALE: 1:5,000	DATE: OCT. 86.	N.T.S. 92 1/15 E	MAP: 6	DRAFTED BY: B.D.S.
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TRANS-ARCTIC EXPLORATIONS LTD.

LEGEND

- * • Soil sample location (1987)
- - - Road
- ~ Creek
- Station
- +— Claim boundary
- Legal corner post

Instrument: Sharpe MF 1 Magnetometer



KAMLOOPS

87-661-



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)
Geochemical

TOTAL COST
\$1,612.00

AUTHOR(S) David G. Mark

SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED July 20, 1987 YEAR OF WORK 1987

PROPERTY NAME(S)

DOG

COMMODITIES PRESENT

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION Kamloops

NTS 92I/15E

LATITUDE

50° 52'

LONGITUDE

120° 33' 06"

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

Dog 2

Dog 3

Dog 4

OWNER(S)

(1)

Eugene Dodd

(2)

MAILING ADDRESS

#815-850 West Hastings Street
Vancouver, B.C., V6C 1E2

OPERATOR(S) (that is, Company paying for the work)

(1) Trans-Arctic Explorations Ltd. (2)

MAILING ADDRESS

#815-850 West Hastings Street
Vancouver, B.C., V6C 1E2

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

The

property is underlain by
Pennsylvanian - Permian Cache Creek ^{Group} rocks and Tertiary
Kamloops Group volcanics.

REFERENCES TO PREVIOUS WORK