DOLMAGE, CAMPBELL & ASSOCIATES
CONSULTING GEOLOGICAL & MINING ENGINEERS
808 BANK OF CANADA BUILDING
VANCOUVER 1, B.C.

Canol Mines Ltd.

Summary Report

CANOL PROPERTY
Yukon

June 28, 1968

C.R. Saunders
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INTRODUCTION

On May 22, 1968 the writer, accompanied by Mr. Peter Gillis and Mr. John Kruzick visited the Canol Mines Ltd. property located at the headwaters of Groundhog Creek, southwest of Ross River, Yukon, (Fig. 1) Mr. Kruzick of Dolmage-Campbell & Associates Ltd. remained at the property to do prospecting, geological mapping, and to supervise bulldozer trenching and surface diamond drilling. This report is compiled from government and private reports, from the writer's examination, and from subsequent communications with Mr. Kruzick.

LOCATION: (~~134°40'~~ 61°38' N, 132°47'E)

The Canol Mines Ltd. property is located approximately 25 miles south-southwest of the community of Ross River, Yukon. It is about 40 road miles from Ross River and 200 road miles from Whitehorse. A ten mile tote road connects the campsite with mile 100 of the Canol Road. (Fig. 1).

The claim area lies between 4500 and 6500 feet elevation and thus much of the property is above timberline. Rock outcrops are not abundant, with much of the area being covered by overburden to depths of 20 feet.

Annual precipitation averages less than 20 inches per year. The annual snowfall is approximately 24-36 inches; it melts from the higher slopes by early June.

PROPERTY:

At the time of this report the Canol Mines Ltd. claim group consists of 72 recorded mineral claims. Thirty-two claims Ben 1 to 24 and AGI to VIII are owned by Canol Mines Ltd. and 24 claims, Cariboo 1 to 3 and Snowhite 1 to 21, are held by option. The record numbers of these claims, which are on file at the mining recorder's office are:

Ben 1 to 24 inclusive	Y13583 to Y13606 inclusive
AG1 to AGVIII inclusive	Y16404 to Y16411 inclusive
Cariboo 1 to 3 inclusive	89296 to 89298 inclusive
Snowhite 1 to 21 inclusive	Y2540 to Y2560 inclusive

In addition the company holds the following claims:

Ben 25 to 26	Y19979 to Y19980
Ben 27 to 28	Y19993 to Y19994
AG 9 to 10	Y19977 to Y19978
AG 11 to 16 inclusive	Y19995 to Y20000 inclusive
Trime 1 to 4 inclusive	Y17789 to Y17792 inclusive

HISTORY:

Prior to acquisition of the claims by Canol Mines Ltd. very little work was done on the property. The area was prospected for placer gold early in this century and some reconnaissance work was done by the Geological Survey in the thirties. The entire area was relatively dormant until the Canol Road, built during World War II provided better access. Prospecting in 1963 uncovered mineralized showings on the property and a certain amount of exploration work was carried out before the property was dropped.

A combination of interest in the Dynasty and Vangorda areas plus the increase in silver price resulted in more prospecting and eventual staking. During the summer of 1966 and 1967 Canol Mines Ltd. did prospecting, a partial soil sampling survey, and limited bulldozer trenching plus some surface diamond drilling. In early 1968 a camp was established near the mineral showings and exploration was recommenced by diamond drilling and bulldozer stripping.

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SUMMARY AND RECOMMENDATIONS

The Canol Mines Ltd. property consists of one block of ~~56~~ 72 mineral claims located 10 miles east of the Canol Road approximately 200 miles northeast of Whitehorse and 25 miles southsouthwest of Ross River, Y.T.

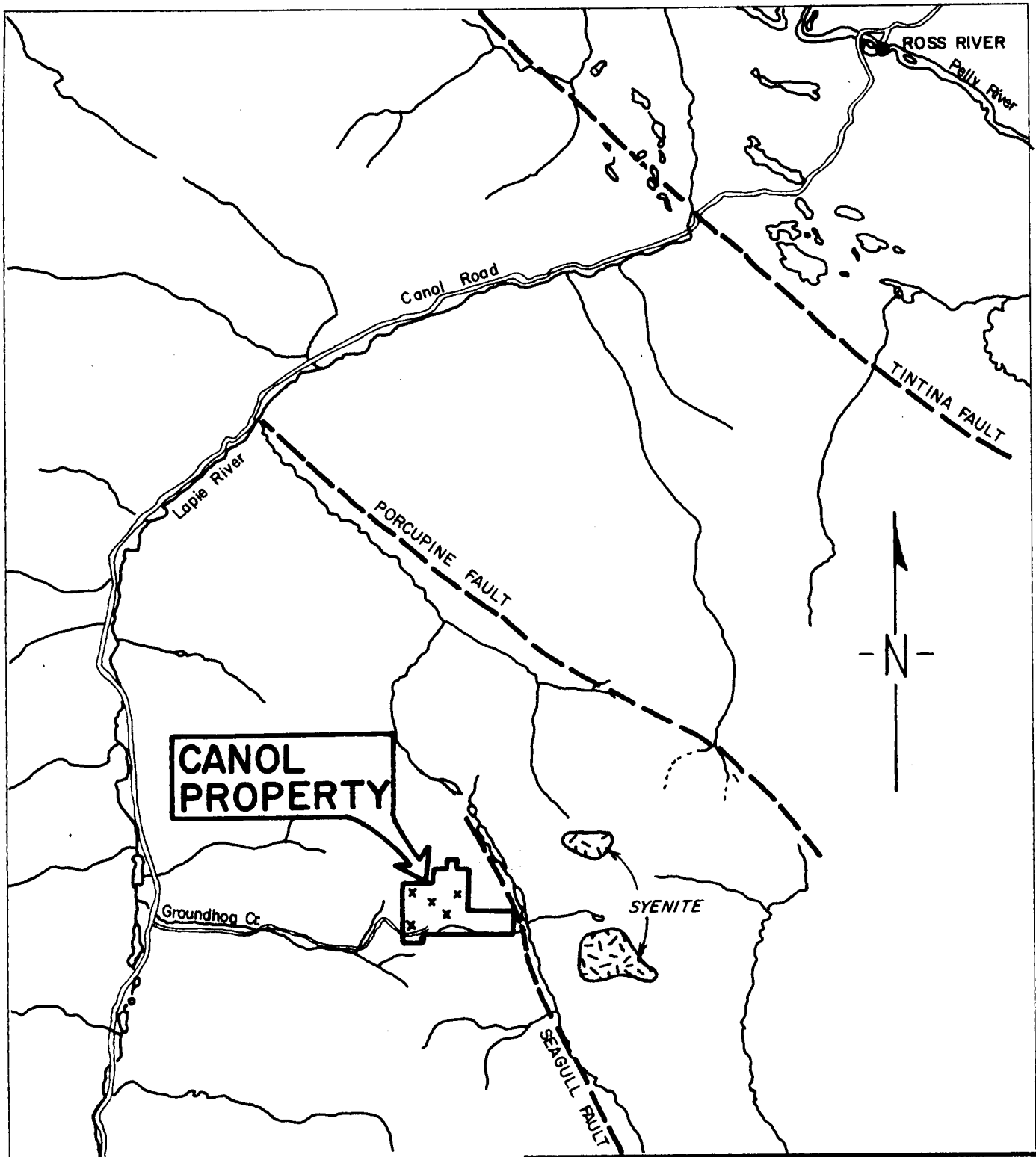
The property is underlain by gently dipping Paleozoic dolomitic formations which strike northwestward and which are cut by north-trending fracture zones. Overburden covers most of the property. Several regional faults trending northwestward, parallel to the Tintina Fault, lie a few miles east of the property. Also to the east (10 miles) are two stocks of intrusive syenite.

The ore structures on the property consist of the north-trending, vertical fracture zones, three of which are exposed by trending and are mineralized up to widths of 3 feet by solid galena averaging 1/2 to 1 oz. of silver per 1% lead. Bulldozer stripping and limited drilling have indicated an ore shoot on No. 1 Zone 200 feet in length and 1.5 feet in width for a tonnage of approximately 2000 tons, open at depth at one end. The silver value of this tonnage is $200,000. Other trenches expose at least 3 other similar veins that warrant exploration.

The high grade ore on several persistent structures, together with the potential for other veins suggested by soil sample anomalies elsewhere on the property, indicate that the Canol property may have the potential to be a profitable, high grade silver-lead mine. For this reason an extensive exploration program is recommended for 1968 as follows:

RECOMMENDATIONS:

Phase 1:	Bulldozer stripping, drilling, prospecting	$187,000.
Phase 2:	Underground exploration. (Contingent on Phase 1)	$140,000.
	TOTAL:-	$327,000.



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VANCOUVER, CANADA

CANOL MINES LTD.
VANCOUVER; CANADA

LOCATION PLAN

CANOL MINES LTD.

YUKON TERRITORY

SCALE: 1" = 4 miles | JUNE 28, 1968 | FIG. 1

GEOLOGICAL SETTING

REGIONAL SETTING:

The Canol property lies in a belt of folded and faulted Paleozoic rocks of Upper Cambrian to Devonian age. These rocks are bounded to the southwest by a broad belt of granitic and metamorphic rocks and to the northeast by an intensely deformed zone between the Porcupine thrust and the Tintina Fault.

The Paleozoic rocks of primary interest consist of middle and upper Cambrian phyllites overlain by dolomites of Silurian to Devonian age. The phyllite is an extensive unit of unknown thickness. It is in part limy and dolomitic and locally is metamorphosed to hornfels. In some areas, though apparently not on the Canol property, the phyllite is separated from the overlying dolomite by black slates, siltstones and, locally, volcanic breccia totalling less than 700 feet in thickness. The dolomite unit varies in thickness from 1000 feet to 5000 feet. It consists of three members; a basal member comprised of sandy and silty dolomites with lenses of massive grey dolomite; a middle member consisting of dolomitic sandstone and quartzite; and an upper member composed mainly of dark grey dolomite.

Major structures in the area trend northwest. The Tintina fault, the most dominant structure in the area and a major crustal break, lies 20 miles northeast of the Canol property. The northern end of the Seagull fault, a structure which has been traced some 30 miles, is about two miles east of the Canol mineralization. Thrust faulting along the base of the dolomitic unit is common and suggests that some of the dolomite exposures may be parts of folded thrust sheets.

Some syenitic intrusive stocks usually associated with greenstones and meta-diorites occur a few miles east of the Canol mineralized area.

PROPERTY GEOLOGY:

Because of the sparcity of outcrops the detailed geology of the Canol property is imperfectly known; however, generally the land above 5500 ft. elevation is underlain by Silurian-Devonian thick-bedded dolomites which lie unconformably on Cambrian phyllites and minor dolomite. The distribution of the phyllites is not well established because they generally occupy the valley bottoms where outcrops are rare. The overlying dolomites trend northwestward

and lie in rather gentle open folds.

The only fault or fracture zones exposed to date on the property are the vein structures, all of which trend northwestward, parallel to the folds of the country rock. These structures are not strong fault or shear zones but are apparently mineralized tension fractures, possibly related to the folding of the host formations.

ORE STRUCTURES:

Bulldozer trenches, float and the 1967 diamond drilling on a small portion of the Canol property have exposed a number of vertical mineralized fracture zones that range in widths from one to five feet and which are locally mineralized with argentiferous galena up to these widths. The one zone that has been extensively exposed by surface trenching, No. 1 Zone, has an exposed length of 200 feet with widths up to 3 feet of galena mineralization. The average grade of this length of No. 1 Zone, as sampled on the surface, is 45.4 oz. silver per ton and 71.1% lead over 1.5 feet.

Other single trenches on the property have exposed two other similar vein zones, No. 6 and No. 10, with grades and widths similar to No. 1 Zone. These exposures are to be extended and drilled in the 1968 season.

Obviously, if sufficient tonnages of such vein material can be outlined on the Canol claims a profitable mining operation can be readily started, especially considering the current rising price of silver.

ORE OCCURRENCES

VEIN ZONES:

No. 1 Zone: Because of the lack of outcrops on most of the Canol property all of the exploration must eventually be confirmed by trench exposures. The discovery of the property was due to the rather extensive distribution in one area of boulders of solid silver-bearing galena up to several tons in individual weight. Lesser sizes of such galena float occur in other localities on the property and all showings warrant investigation by stripping.

The area of the rich float was stripped in 1966 and 1967 to reveal a principal vein, No. 1, which was stripped for a length of 200 feet, open at both ends, striking N10°E with an average width of 1.5 feet. The average grade of this exposure is 45.4 oz. silver per ton and 71.1% lead. At the north end of this stripping a branch vein was exposed trending northeast from the sampled vein. Only a 10 ft. length of this vein was exposed and it assayed 41.7 oz. Ag, 74.2% Pb over 2.5 feet. Midway in the main trench another eastward split is exposed for a few feet. Both of these branch veins are to be explored and the exposures extended in 1968.

In 1968 five diamond drill holes were drilled under the stripped portion of No. 1 Vein to intersect it at 60 and 120 feet below surface. Of these holes the northernmost one, (C1), intersected 3.5 feet of vein assaying 12.7 oz. Ag and 32.6% Pb, with 30% core loss. The other holes, 50 and 100 feet to the south, intersected the vein zone but with no significant mineralization. The results of this drilling indicate that the No. 1 Zone orebody probably bottoms at a depth of 50 feet under the southern portion of the surface exposure but that it rakes deeper to the north where it is open.

It is the purpose of the 1968 program to continue to drill the No. 1 Vein Zone in order to establish the limits of the ore shoot exposed on the surface. At the present price of silver, ($2.50 Can.), the gross value of the ore from the exposed vein is over $100. per ton for silver alone. Approximately 2000 tons of such ore is presently indicated on No. 1 Vein for a value of over $200,000. It is obvious that a few such ore shoots, combined with lower grade mill feed ore, would provide the basis for a profitable mining operation at the Canol Mines Ltd. property.

No. 6 Zone: In 1967 a trench was cut over a soil sample anomaly that is 1200 feet in length, located 2700 feet southwest of Nol Zone and 250 feet lower in elevation. The trench cut through 20 feet of overburden to expose a north-trending limonitic-galena gozzan zone 30 feet in total width. Samples 3 feet in length across this zone assayed from 1 to 3 oz./t. Ag and 2-6% Pb.

In view of the fact that the exposed vein material is highly oxidized and is silver-bearing, on a wide structure, it is felt that drill holes to explore it below the oxidized zone are warranted in 1968.

No. 10 Zone: Hand trenches in the area of galena float reported by Dr. A. Aho in 1956 revealed about 1/2 ton of galena float assaying 60.65 oz./t. Ag and 76.7% Pb.

This zone is to be trenched by bulldozer in 1968.

POTENTIAL ZONES:

Most of the area of the above showings was surveyed by soil sampling in 1967, with samples taken at 200 ft. intervals along lines spaced 400 feet apart. This survey consisted of 744 samples, including some fill in samples. The results of this survey indicated extensions of No. 1 Zone of several hundreds of feet in both directions from the stripped area. In addition, other broad anomalies were found in other portions of the sampled area and all warrant further sampling and bulldozer stripping.

A very large portion of the Canol claim block has yet to be explored. This is to be prospected and soil sampled in 1968 in order to guide its evaluation in 1968.

CONCLUSIONS

Bulldozer stripping and preliminary diamond drilling on three widely separated showings on the Canol property in 1967 revealed the existence of very high grade (plus $100./ton) silver-lead ore in fairly appreciable tonnages. A reconnaissance geochemical soil survey has indicated that the exposed zones probably extend for several hundreds of feet beyond their trenched portions. In addition, several other geochemical anomalies suggest the existence of other economic vein zones that warrant exploration.

The limits of the known vein zones have not been established, nor have the limits of the ore shoots on them been delimited. Also, the potential of the property for other such zones has not been determined. All of these objectives must be attained in order to permit a proper evaluation of the Canol Mines Ltd. property. To this end the writers recommend for the 1968 summer season an extensive program of bulldozer stripping, diamond drilling, geochemical soil sampling and prospecting in order to provide a basis for possible underground exploration during the winter of 1968-69 if warranted. This recommended program thus falls into two phases, with the second (underground) phase contingent on the results of the first.

RECOMMENDATIONS:

(The following program has been begun and is now well underway with encouraging initial results.)