APPENDIX "A"
to the application of Canol Mines Limited for Northern Mineral Grant under the Northern Mineral Exploration Assistance Regulations program of exploratory work for the period April 1, 1969 to October 31, 1969 inclusive.

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

Canol Mines Ltd.

Summary Report

SEAGULL LAKE PROPERTIES

Yukon Territory

November 5, 1968.

J. Kruzick
R.S. Adamson
D.D. Campbell

Dolmage-Campbell & Associates Ltd. Vancouver, Canada.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

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

INTRODUCTION

From mid May until early September, 1968 Dolmage-Campbell & Associates Ltd. supervised an exploration program on the Seagull Lakes property of Canol Mines Ltd. in the central Yukon.

The program consisted of: diamond drill exploration of two lead-silver veins, geochemical prospecting, bulldozer trenching of geochemical anomalies and of known veins, and the sampling and mapping of the various veins.

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 lies about 40 road miles from Ross River and 200 road miles from Whitehorse. A ten mile tote road connects the campsite with mile 100 on the Canol Road. (Figure 1)

The claim area lies between 4500 and 6500 feet elevation, thus much of the property lies above timberline. Rock outcrops are not abundant in the valleys but are relatively plentiful above 5,500 feet. Overburden depths except in the deeper Seagull Lakes valley rarely exceed twenty feet.

Annual precipitation averages less than 20 inches per year. The annual snowfall ranges from 24-36 inches; melting by June.

HISTORY:

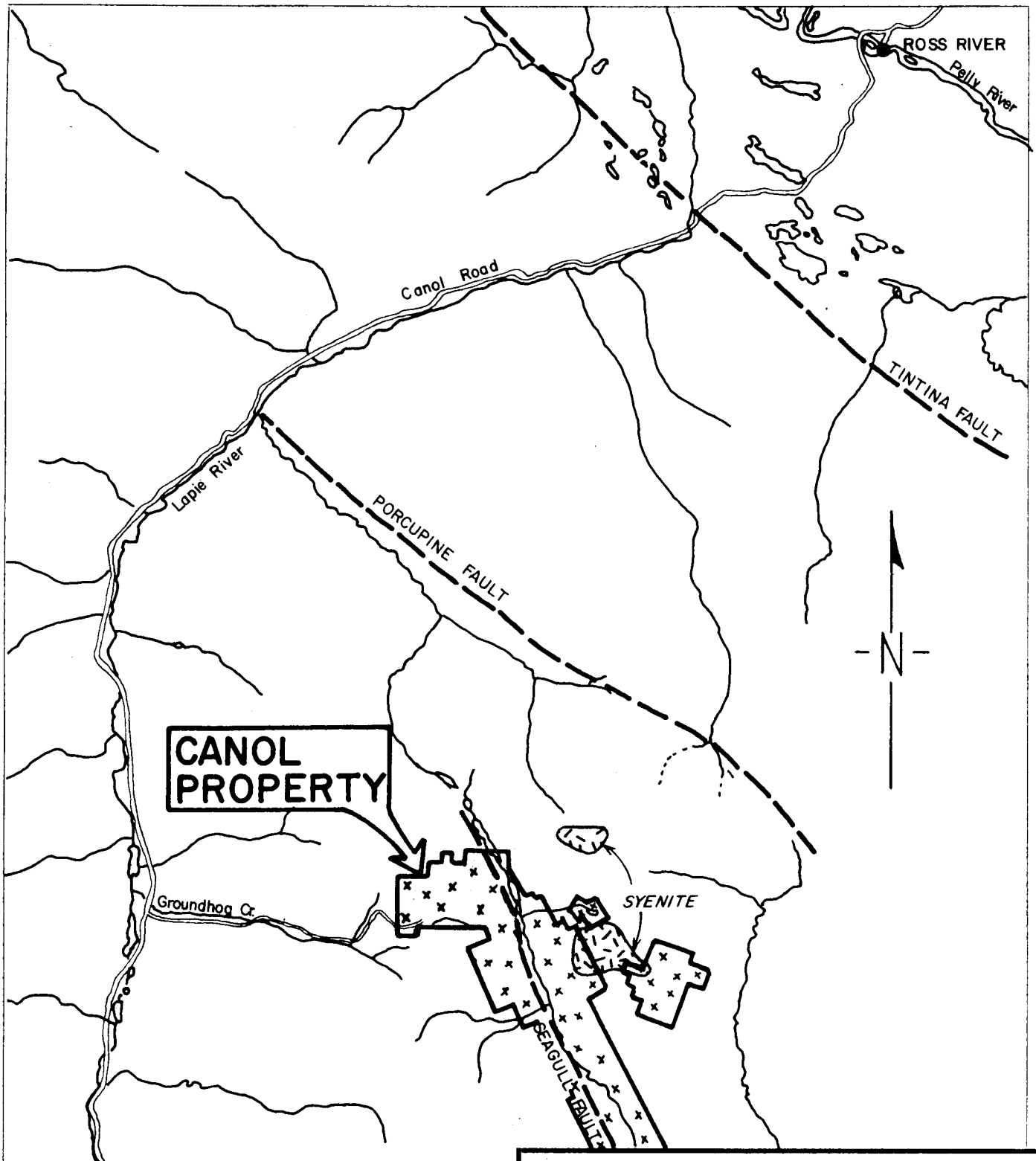
Prior to acquisition of the claims by Canol Mines Ltd. very little work was done on the property. The area was prospected for placer gold early in this century and some reconnaissance was done by the Geological Survey in the thirties. The entire area was relatively dormant until the Canol road, built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

A combination of interest in the Dynasty-Vangorda Creek area plus the increase in the silver price resulted in further prospecting and eventual staking. During the summer of 1966 and 1967 Canol Mines Ltd. carried out 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.

PROPERTY:

The Seagull Lakes property of Canol Mines Ltd. comprised a contiguous block of 72 claims located immediately west of lower Seagull Lake.

In late 1968 additional claims were staked and acquired by option on a number of other lead-silver veins and float occurrences in the vicinity. The total number of mineral claims owned by Canol Mines Ltd. in the Seagull Lakes area at the time of writing is 392 claims. Further staking is in progress.



DOLMAGE - CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

CANOL MINES LTD.
VANCOUVER ; CANADA

LOCATION PLAN

CANOL MINES LTD.

YUKON TERRITORY

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

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

SUMMARY AND RECOMMENDATIONS

The Seagull Lakes Property of Canol Mines Ltd, is comprised of a southeast-trending block of approximately 392 mineral claims located down the valley of Seagull Creek from Seagull Lakes, 10 miles east of the Canol Road, 40 miles south of Ross River, Y.T.

Numerous silver-bearing galena veins have been exposed on the original Canol claims that form the western extension of the present claim group, and extensive float of the same mineralization has been located southwest and southeast of Seagull Lake on other claims of the property. The veins all occur within dolomites of Silurian-Devonian age which unconformably overlie phyllites of Upper Cambrian age. The veins extend downwards into the phyllites as barren fracture zones. The veins occupy tension cracks that are related to gentle folds in the dolomites and/or to regional faults that trend southeastward along Seagull Creek Valley.

The 1968 exploration program was comprised of the following phases:

1. Diamond drilling of the previously trenched No's. 1 and 6 veins.
2. Bulldozer stripping of No's. 2 and 3 veins.
3. Bulldozer trenching of the geochemical soil anomalies found in 1967 on the original claim block.
4. Geochemical prospecting, mapping and sampling.

The results of the above program have been:

1. A silver-lead ore shoot of 2820 tons, at 20.3 oz. Ag/ton and 42.5% Pb, has been delimited on No. 1 Vein. No ore was found on No. 6 Vein because it pinches out in phyllite about 30 feet below the surface.

2. The No. 2 and 3 veins occur in dolomite adjacent to strong fault structures and 1300 feet stratigraphically above the dolomite-phyllite contact. Continuity of mineralization was established on the No. 2 Vein but not on the No. 3 Vein. Surface sampling of No. 2 Vein returned an average grade of 8.6 ounces silver and 14.7% lead across an average width of 17.5 feet for an exposed length of 200 feet and open to the north.

3. None of the 1967 geochemical anomalies was found to reflect ore occurrences.
4. Extensive silver-bearing galena float has been exposed by bulldozer cuts immediately west and southeast of the south end of Seagull Lake. This mineralization is identical to that in No's. 1 and 2 veins and has the usual 1:2 silver:lead ratio common to this district.

RECOMMENDATIONS:

In view of the low silver:lead ratio of the known mineralization in the area the Canol property should be further explored for relatively large orebodies of the No.2 Vein type in order that sufficient tonnage of ore be outlined to support a mill. Thus, the indicated ore shoot on No. 2 Vein should be delineated by diamond drilling and all of the newly discovered float occurrences should be explored by extensive, systematic bulldozer trenching to be followed by drilling if warranted. The cost of such a program is estimated to be:

A) Bulldozer trenching	$ 30,000.00
B) Access Roads	50,000.00
C) Diamond Drilling - $15. per foot	120,000.00
No. 2 Vein 3000 feet	
Other Veins 5000 feet	
D) Camp and support facilities	25,000.00
E) Sampling, mapping, assaying, engineering, etc.	12,000.00
F) Administration, overhead	15,000.00
G) Consulting, supervision	10,000.00
H) Contingencies	15,000.00
Total:	$277,000.00

Respectfully submitted,

Douglas D. Campbell, P.Eng., Ph.D.

Robert S. Adamson, P.Eng.

Vancouver, Canada.

GEOLOGICAL SETTING

REGIONAL GEOLOGY:

The Seagull Lake properties of Canol Mines Ltd. are underlain by a belt of folded and faulted Upper Cambrian-Devonian rocks which is bounded on the southwest by a broad belt of granitic and metamorphic rocks and on the northeast by an intensely deformed zone between the Porcupine Thrust and the Tintina Fault Zone.

The Paleozoic formations on the property consist of middle and upper Cambrian phyllites overlain by dolomites of Silurian to Devonian age. The phyllites form an extensive unit of unknown thickness, in part limy, dolomitic and locally metamorphosed to hornfels. In some areas, the phyllite is separated from the overlying dolomite by black slates, siltstones and locally by volcanic breccia totalling less than 700 feet thick. The overlying dolomite, varying in thickness from 1000 to 5000 feet, 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.

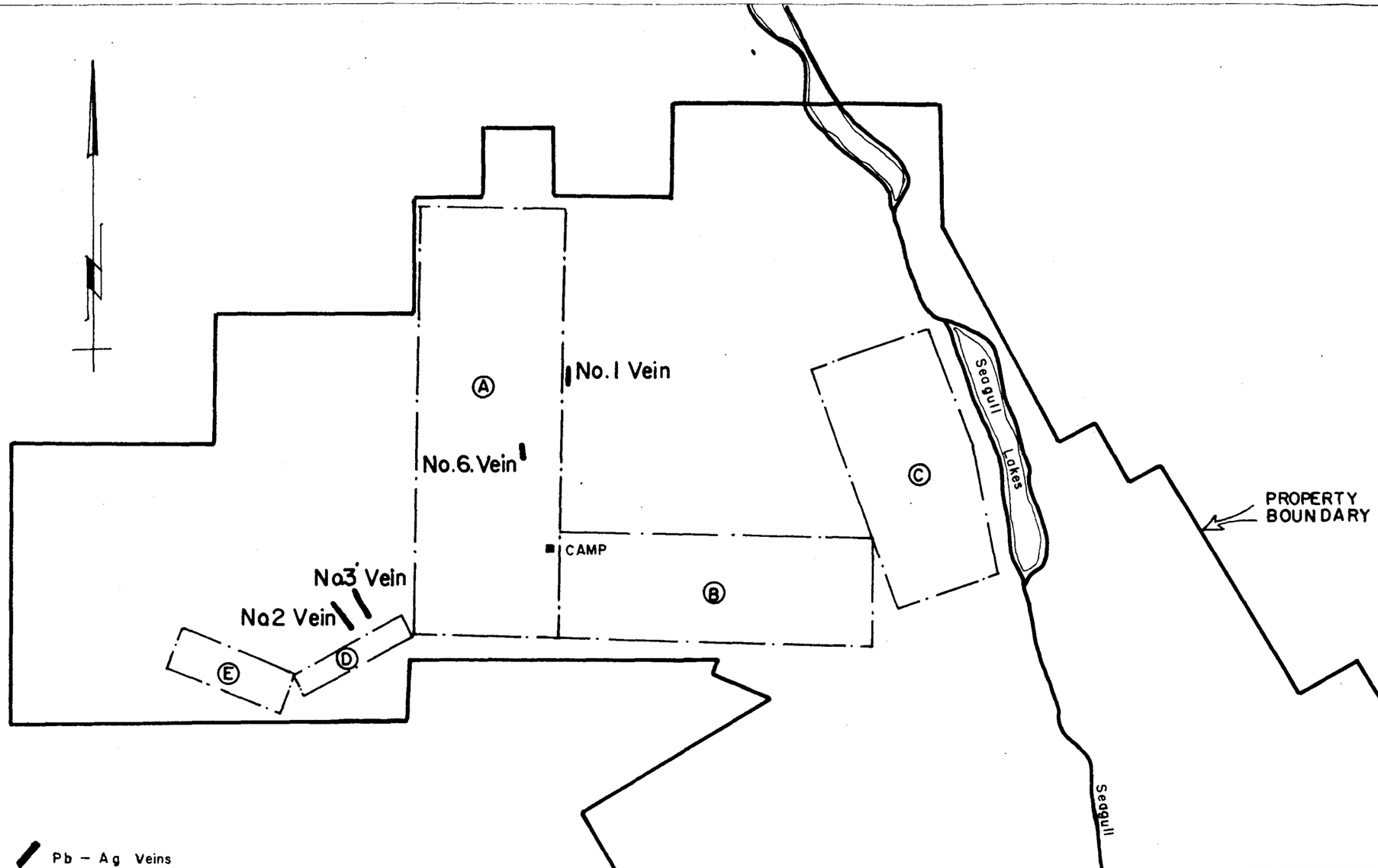
Major geological structures in the area trend northwest. The Tintina Fault, the dominant structure in the area and a major crustal break, lies 20 miles northeast of the Canol propetties. The northern end of the Seagull Fault, a structure that has been traced for approximately 30 miles, cuts through the main Canol claim block. 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.

Syenitic intrusive stocks usually associated with greenstones and meta-diorites crop out a few miles east of Seagull Lakes.

PROPERTY GEOLOGY:

Detailed geological mapping of the property has not been carried out. However, in general, the land above the 5500 ft. elevation is underlain by Silurian-Devonian thick-bedded dolomites which lie unconformably on Cambrian phyllites and minor interbedded dolomite at lower elevations. Generally the phyllites occupy the valley bottoms where outcrops are less plentiful than the higher elevations. The overlying dolomites trend northwestwards in broad, gentle folds.

Excepting the northwest striking Seagull Fault, the only fault or fracture zones exposed to date on the properties are the lead-silver mineralized vein structures. The mineralized structures appear to be either shear fractures related to regional fault zones or tension fractures related to folds in the host dolomite formations.



DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

CANOL MINES LTD.
VANCOUVER, CANADA

PROPERTY MAP

CANOL MINES

VEIN LOCATION

SCALE: 1" = 1/2 mile	NOVEMBER, 1968	FIG. 1A

ORE OCCURRENCES

NO. 1 VEIN:

This is a narrow vein occupying a tension fracture that pinches and branches through the dolomites at a bearing of N10° E. The vein lies within the favourable dolomite unit approximately 600 feet above the unfavourable phyllite formation.

During 1967 and 1968 bulldozer trenching of the No. 1 Vein exposed the vein zone for a length of 250 feet with an average width of 2.0 feet. Several short veins branch from the main vein zone. Mineralization consists solely of massive galena which carries values in silver in a consistent ratio of 1 oz. Ag/ton to 2% lead.

In 1967 five diamond drill holes were drilled beneath the vein outcrop in order to intersect the vein at 60 and 120 feet below the surface. This drilling delineated the galena mineralization at a depth of 50 feet beneath the southern end of the surface exposure, but failed to limit it to the north and indicated a possible ore shoot plunging to the north.

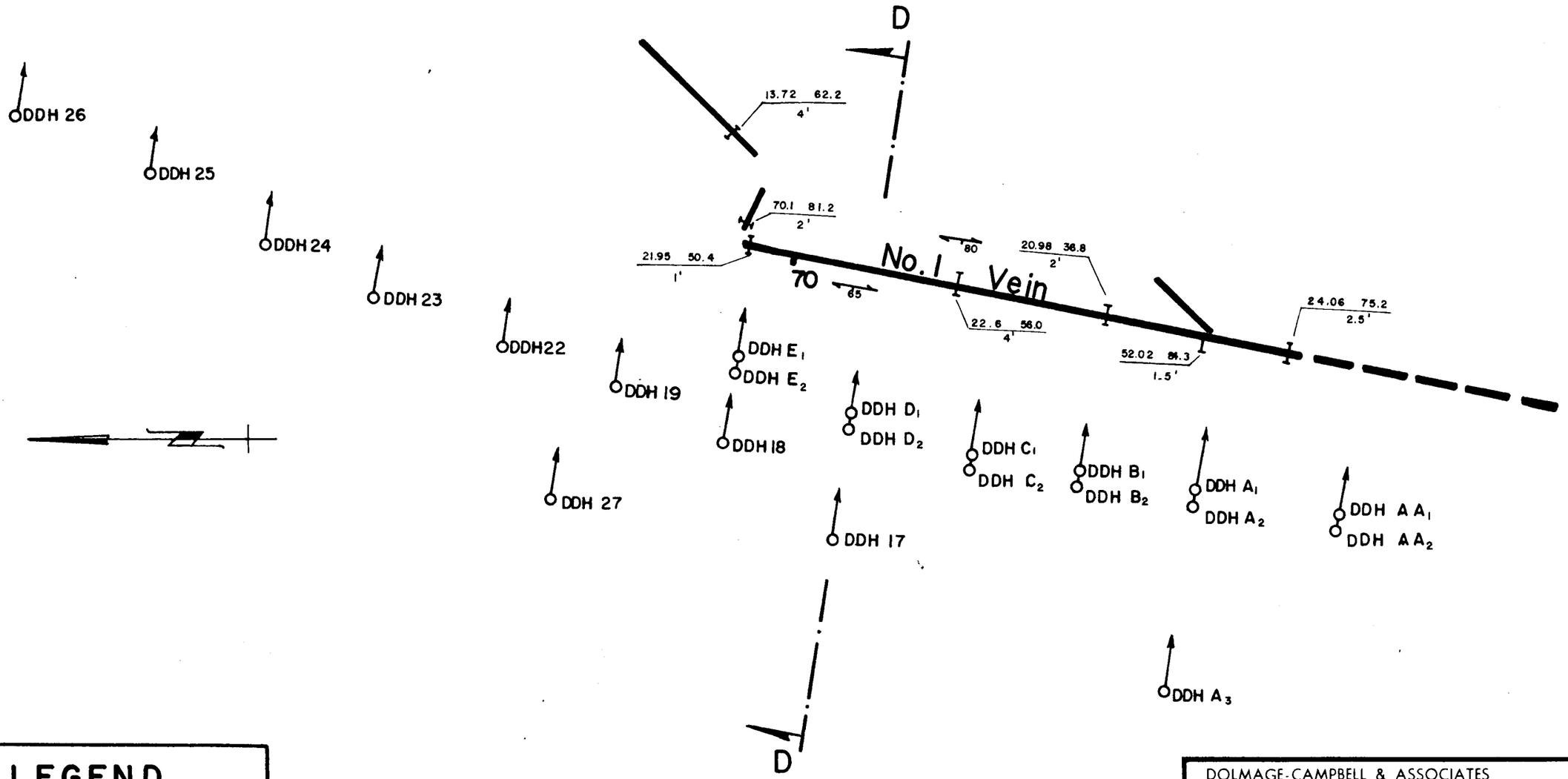
In 1968 seventeen diamond drill holes totalling 3474 feet probed the rake possibilities of the indicated shoot by intersecting the structure at 50, 100 and 150 feet beneath the surface outcrop (Figure 3).

As shown in Figure 3, although the vein structure was intersected in the drill holes, consistent economically significant lead-silver values did not occur in enough of the holes to indicate a large orebody. The drilling has indicated a mineralized shoot 2820 tons in size grading 20.3 oz. Ag/ton and 42.5 % Pb. The potential for extensions or repetitions of this possible ore shoot on this structure is not encouraging.

NO. 2 VEIN:

The No. 2 Vein, which strikes north 50° west and dips vertically, is located approximately one mile southwest of the No. 1 Vein and 700 feet higher at elevation 6400 feet.

A strong gouge-filled fault zone cuts massive dolomites which are sheared parallel and adjacent to the fault for 50 feet on each side of the fault.



LEGEND

- defined / probable — VEIN
- DIAMOND DRILL HOLE
- 22.6 56.0 / 4' — SAMPLE INTERVAL — Ag(oz) Pb(%) / sample width
- 65 — SHEARING

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

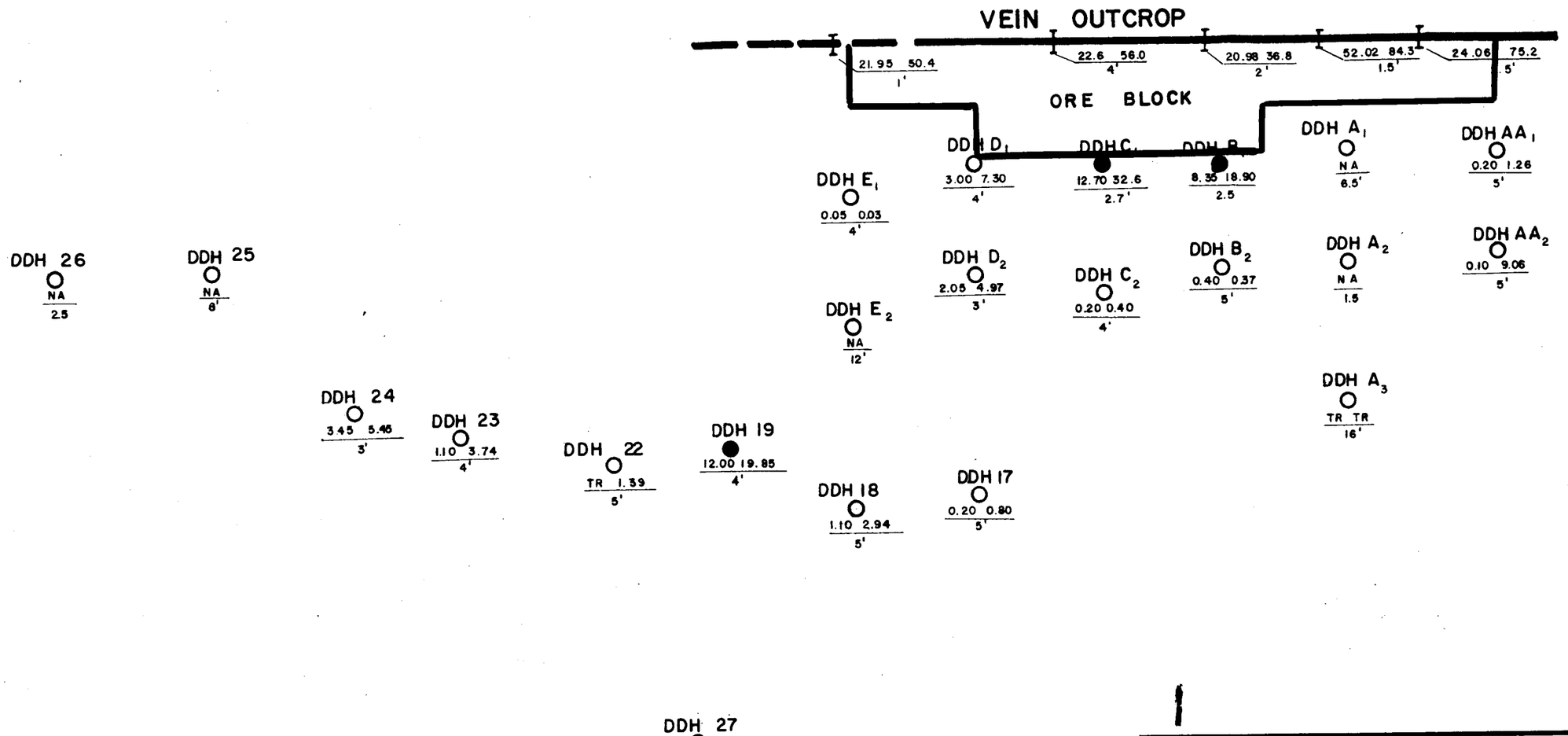
CANOL MINES LTD.
VANCOUVER, CANADA

PLAN

No. 1 VEIN

LOCATION, DIAMOND DRILL HOLES

SCALE 1" = 50'	NOVEMBER, 1968	FIG. 2



LEGEND

3.45 / 3' 5.45 — ASSAY VALUES — Ag (oz) / sample width, Pb(%) / width

NA / 5' — NOT ASSAYED VEIN ZONE

O — VEIN INTERSECTION

1

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

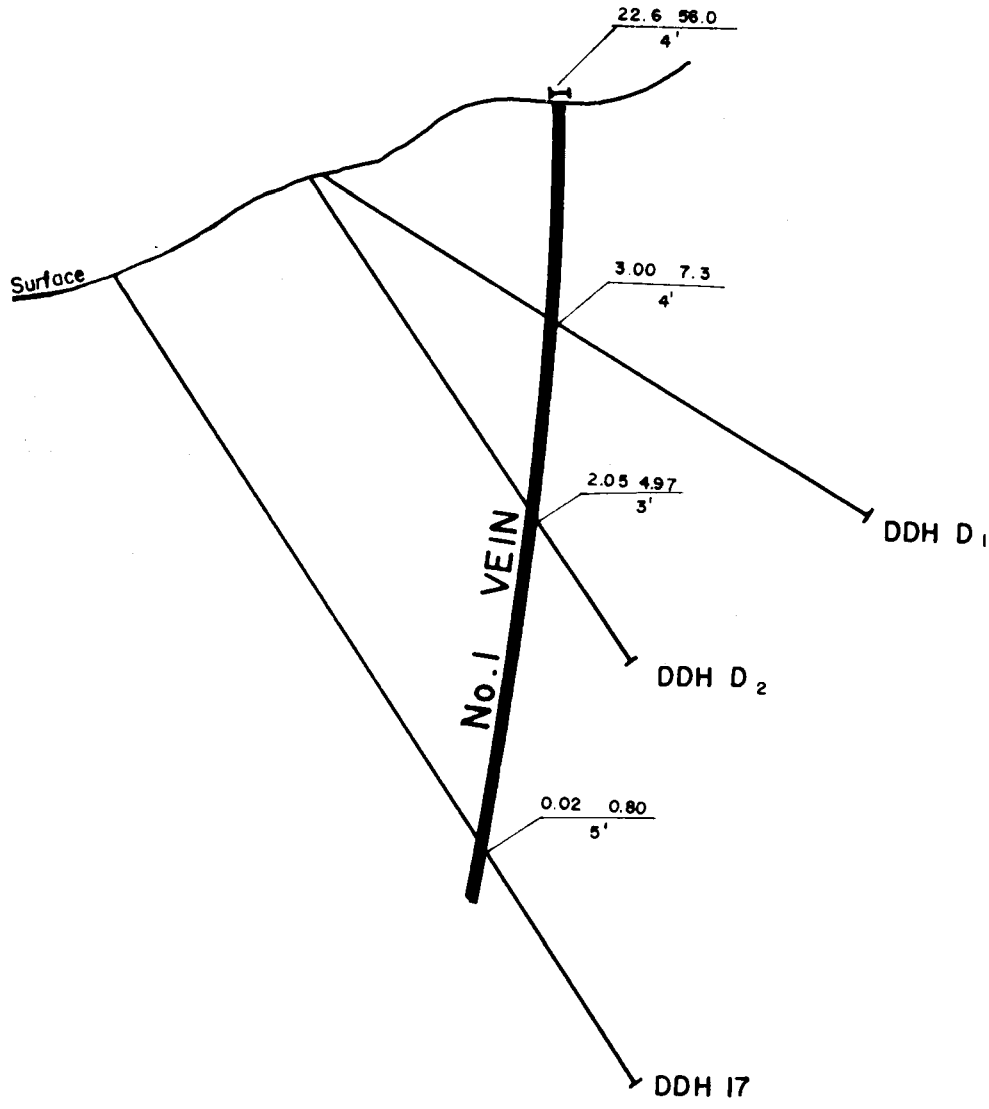
CANOL MINES LTD
VANCOUVER, CANADA

LONGITUDINAL SECTION

No. 1 VEIN

ASSAY VALUES

SCALE: 1" = 50' | NOVEMBER, 1968 | FIG. 3



22.6 56.0 / 4' SAMPLE INTERVAL Ag(oz) Pb(%) / sample width

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

CANOL MINES LTD.
VANCOUVER, CANADA

CROSS SECTION 'D'

No. 1 VEIN

SCALE 1" = 50' | NOV. 1968 | FIG. 4

With reference to Figure 4, a possible ore shoot, indicated by surface sampling and mapping, lies adjacent to the fault. The potential shoot, assaying 8.60 oz. silver/ton and 14.7% lead across an average width of 17.5 feet, has an indicated surface strike length of 200 feet. The controlling fault structure has been exposed at the crest of the mountain for approximately 900 feet along strike, disappearing beneath talus at each end.

Because the potential ore shoot is not limited on the north, bulldozer trenching of the fault structure beneath the talus should be undertaken. A series of diamond drill holes is recommended to test the mineralized zone for continuity at depth.

At present metal prices the gross value of the No. 2 Vein material is approximately $54/ton. Such material would be profitable in this area if sufficient tonnage could be found to warrant the installation of a mill.

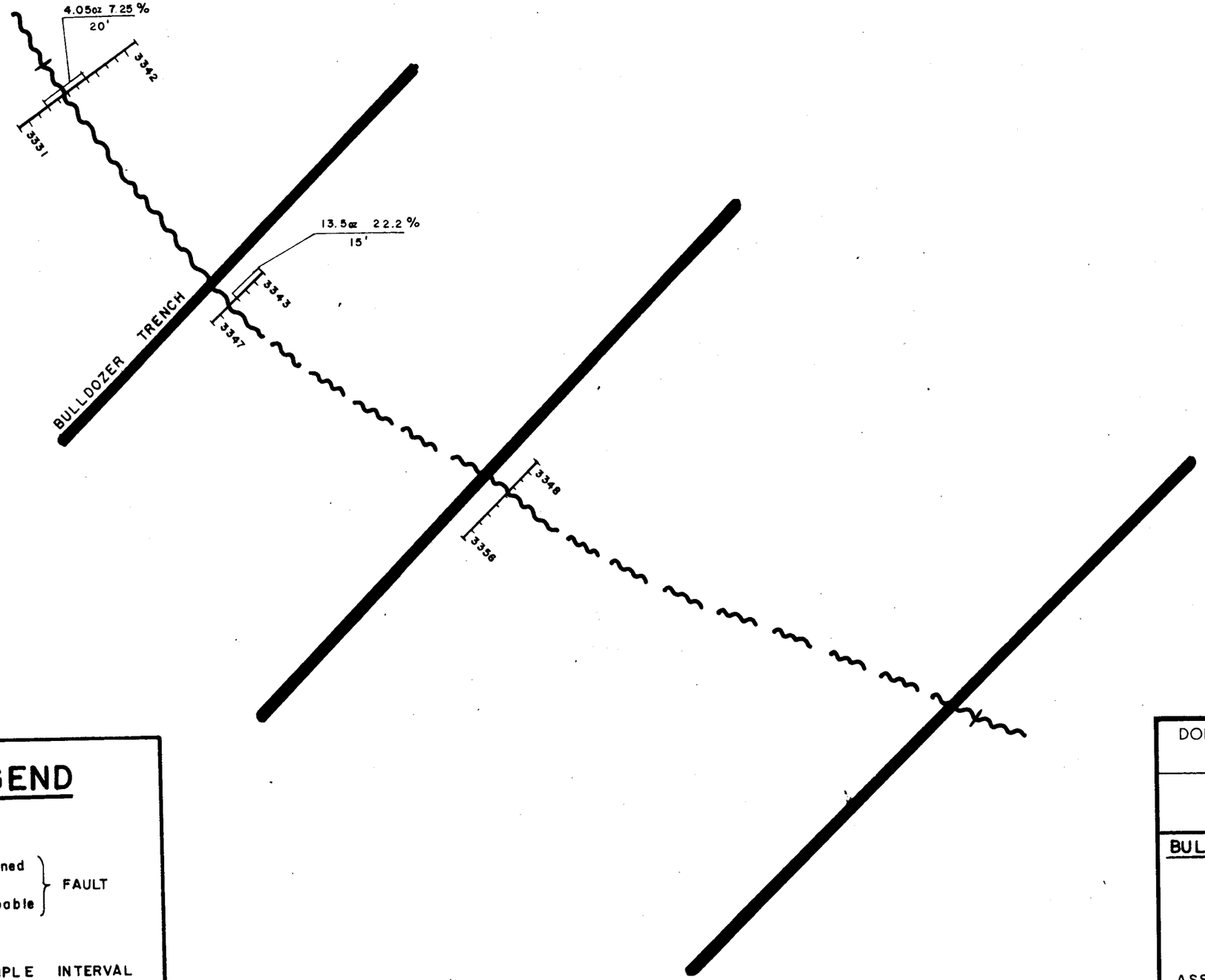
NO. 3 VEIN:

The No. 3 Vein, a vertical fault zone striking north 25° west, lies 1,000 feet east of the No. 2 Vein at the same elevation. The mineralized zone was exposed by bulldozer trenching as a galena float train in talus. The float train extended northwest for approximately 700 feet along strike, disappearing beneath talus at each end. Excavation of the float train revealed a wide zone of shearing in the dolomites, paralleling the gouge-filled fault structure.

Galena mineralization occurs erratically distributed on the shear planes (see Figure 6). Surface sampling and mapping failed to establish the necessary continuity to delineate an ore shoot. Therefore no further work is recommended on this vein zone.

NO. 6 VEIN:

The No. 6 vein was originally exposed in a single trench lying about 30 feet above the gently dipping unconformable contact of the phyllite and dolomite units (see Figure 7). Although the vein zone was strong and assayed 8.2 ounces silver and 21.9% lead across true width of 15 feet, further trenching to the north and south of the initial trench failed to reveal any extension along strike. The vein strikes north and dips 30° W.



SAMPLES

No.	Ag/oz	Pb/%
3331	.10	Tr
3332	Tr	Tr
3333	.15	.30
3334	4.30	8.70
3335	2.95	6.45
3336	4.40	7.15
3337	4.80	6.70
3338	1.20	2.08
3339	1.15	2.45
3340	1.30	2.55
3341	.05	Tr
3342	Tr	Tr
3343	26.10	41.85
3344	10.95	16.20
3345	3.55	8.45
3346	.20	.55
3347	.30	.58
3348	.50	.95
3349	1.90	1.90
3350	.90	1.40
3351	.05	.15
3352	.25	.20
3353	.40	Tr
3354	.30	.40
3355	.60	.54
3356	.90	3.20

LEGEND

defined, probable } FAULT

SAMPLE INTERVAL
SAMPLE NUMBERS
3356

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

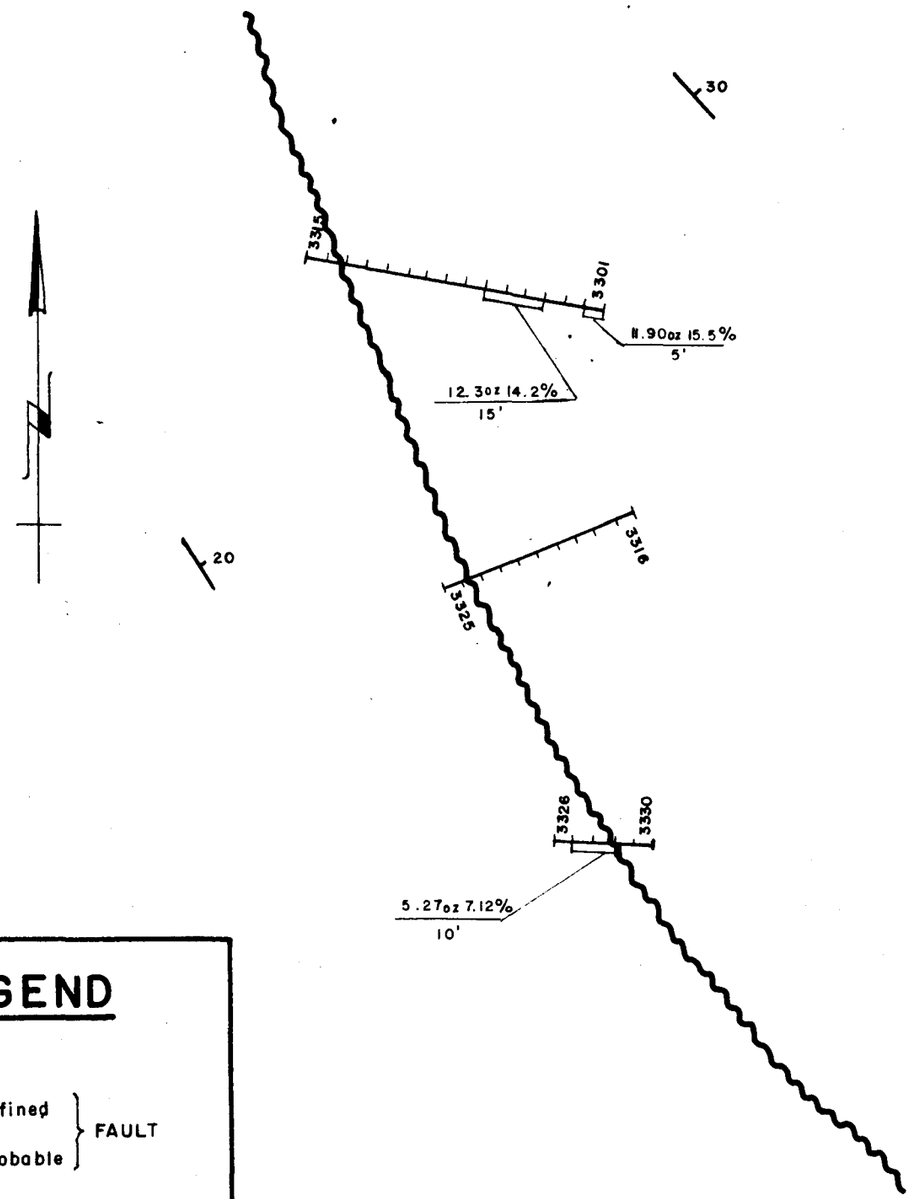
CANOL MINES LTD.
VANCOUVER, CANADA

BULLDOZER TRENCHING

No. 2 VEIN

ASSAY VALUES

SCALE: 1" = 50' | NOVEMBER, 1968 | FIG. 5



SAMPLES

No.	Ag/oz	Pb/%
3301	11.90	15.55
3302	.85	.10
3303	.70	.74
3304	12.90	12.80
3305	20.75	26.70
3306	3.25	3.20
3307	.75	.85
3308	.25	Tr
3309	.20	.85
3310	.20	.85
3311	1.85	3.60
3312	.10	.40
3313	.70	1.12
3314	1.45	2.35
3315	.25	.15
3316	.05	.80
3317	2.65	4.10
3318	1.35	2.40
3319	.30	.33
3320	.25	.12
3321	1.75	3.10
3322	1.00	1.35
3323	1.25	1.65
3324	.30	.40
3325	1.35	2.67
3326	.55	.95
3327	6.70	9.35
3328	3.85	4.90
3329	.60	1.30
3330	.35	.23

LEGEND

- defined / probable } FAULT
- SAMPLE INTERVAL
- 3325 SAMPLE NUMBERS
- BEDDING

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

CANOL MINES LTD.
VANCOUVER, CANADA

PLAN

No. 3 VEIN

ASSAY VALUES

SCALE: 1" = 40' | NOVEMBER, 1968 | FIG. 6

Two diamond drill holes, with a total footage of 388 ft. were spotted and drilled to intersect the No. 6 vein directly beneath the exposed mineralization. Because the rock types changed from the competent dolomite unit to fissile phyllites a short distance beneath the surface (Fig. 7) the vein zone pinched out and a mineralized intersection comparable in grade to that in the trench was not encountered.

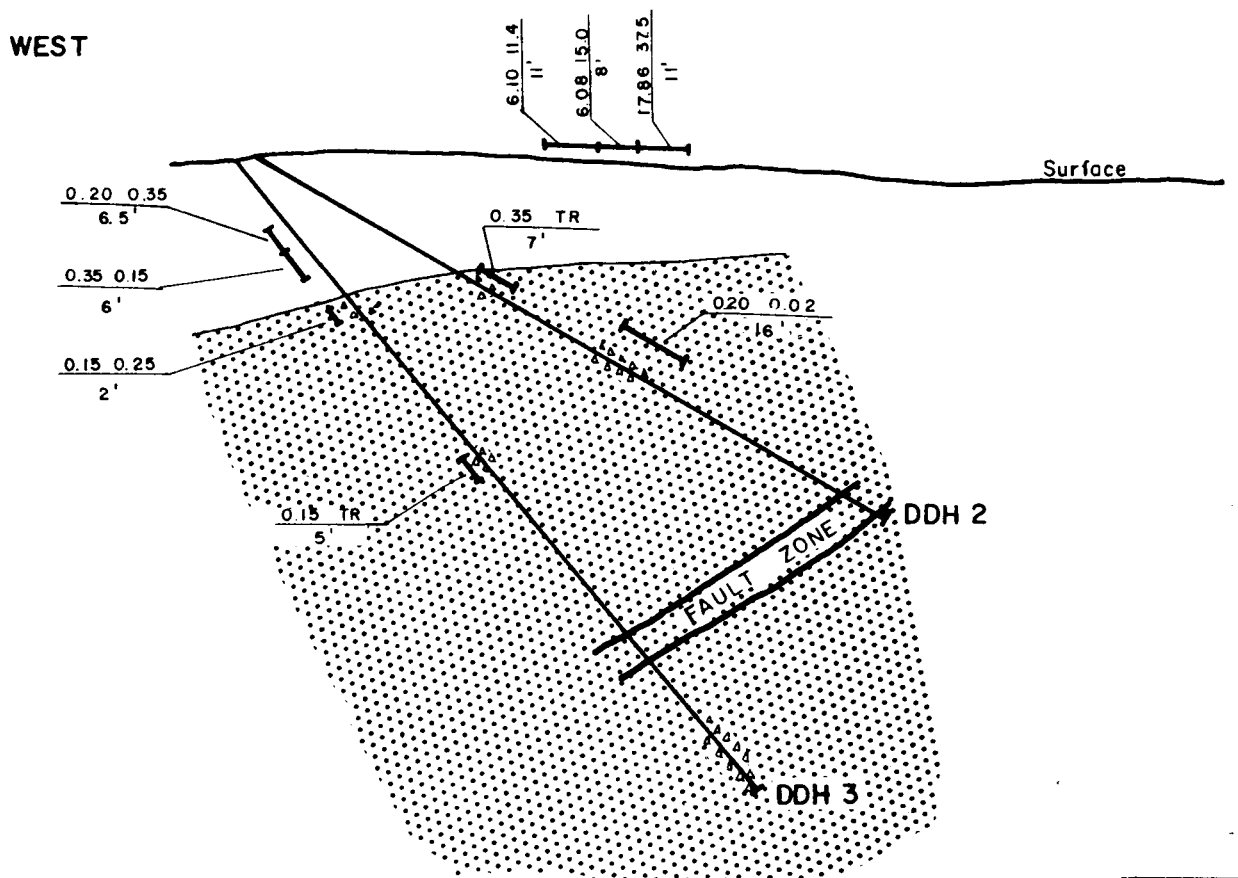
No further work is recommended for the No. 6 vein.

OTHER VEINS:

In September, 1968, Canol Mines Ltd. optioned and located a block of mineral claims four miles southeast of the south end of Seagull Lake. These claims contain several veins comparable in grade and widths to those under investigation by Canol west of Seagull Lakes. In September, 1968, during the construction of a road from Seagull Lake to these newly acquired claims, several occurrences of float of galena-silver mineralization were uncovered by the bulldozer east of the south end of Seagull Lake and southeast of the lake. These new discoveries prompted additional staking.

The frost-heaved rock float exposed in the new areas is comprised of banded galena and pyrite in dolomite as well as massive fragments of solid, steel galena. Specimens of this float assayed insignificantly in gold and zinc but ranged from 18 to 56% in lead and 10 to 29 oz. Ag/ton, for a consistent 1:2 silver-lead ratio. This material is identical to that found in No. 1 and 2 veins and probably originates from similar structures; however, it is possible that some of it may originate from larger, replacement-type deposits.

In view of the relatively large number of lead-silver veins and float occurrences presently known on the extensive claim holdings of Canol Mines Ltd. in the Seagull Lakes district, consideration should be given to developing mineable tonnages of a number of lead-silver bodies from several areas. A mill located centrally to these sources could be constructed in the Seagull Lake valley.



LEGEND

- DOLOMITE UNIT
- PHYLLITE UNIT
- BRECCIATION

0.15 0.25 / 2' SAMPLE INTERVAL Ag (oz) Pb (%) / sample width

DOLMAGE - CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

CANOL MINES LTD.
VANCOUVER, CANADA

CROSS SECTION

No. 6 VEIN

SCALE: 1" = 40' NOV., 1968 FIG. 7

GEOCHEMICAL SURVEY

Five separate areas were soil sampled in a geochemical reconnaissance (see Figure 1). These areas were chosen in order to assess those parts of the property which were essentially devoid of outcrop. Anomalous lead values were detected in the soils on all of the outlined blocks, particularly blocks A and C. A total of 309 soil samples were taken and analyzed.

Bulldozer stripping and two diamond drill holes totalling 377 feet tested several of the anomalous zones on block A. However, as the underlying bedrock proved to be fissile phyllites, unfavourable for deposition of lead-silver mineralization in the Seagull Lakes area, the high geochemical values were ultimately attributed to higher background lead in the phyllites and isolated galena float derived from showings in the overlying dolomite.

In general, the area devoid of outcrop is underlain by phyllites whereas the topographically higher peaks are composed of the dolomite unit. Hence, further geochemical prospecting is not warranted in the lower elevations.

CONCLUSIONS

As a result of the diamond drilling, bulldozer trenching and geochemical prospecting done on the Canol properties during the 1967 and 1968 seasons four silver-bearing galena veins were investigated and three of them, No's. 1, 3 and 6, were found to be so lacking in continuity of mineralization as to be of no economic value. However, the fourth vein, No. 2, has shown sufficient surficial indications of potentially profitable grade and tonnage to warrant further exploration by drilling. The gross value of the No. 2 Vein ore is approximately $54/ton and the mining widths are about 17 feet; therefore if enough tonnage of such material can be developed on this and other veins to warrant the construction of a mill a profitable operat ion could be realized on the Canol property. In view of the fact that there is over 1,000 feet of depth between the No. 2 Vein surface showings and the phyllite contact the tonnage potential on this vein is good. (No's. 1 and 6 Veins lie so close to the phyllite contact as to render their tonnage potential too limited to be economic.)

It is evident that probably no economic vein-type orebodies occur within the phyllitic formations that underlie the lower elevations of the property area; therefore, orebodies with significant tonnage potential will only be found within the dolomite formations at higher elevations. In the dolomite environment many of the veins occupy gash-type tension fractures which do not have persistent enough continuity to provide large tonnages of ore but may provide small tonnages of high grade to supplement production from larger orebodies.

The foregoing features have been disclosed by the 1968 stripping and drilling, and the results of this work that can now be used as a guide for the assessment and further exploration of the properties of Canol Mines Ltd. In this regard it is recommended that further stripping and geochemical surveys not be undertaken on ground underlain by phyllite formations (valley bottoms), but that any galena float in the dolomite areas should be trenched with a bulldozer and drilled if warranted. It is probable that several orebearing vein structures, besides No. 2 Vein, occur on the Canol property and if the orebodies on them are sufficiently large they all could be ore sources for a central mill constructed at Seagull Lake. Thus the objective of future exploration of the Canol claims should be to look for and investigate ore structures similar in size and tenor to No. 2 Vein. It is possible that replacement-type orebodies may be found although there are no indications to date of such structures occurring on the property.

Attention should be directed to those lead-silver showings which are controlled by gouge-filled faults and occur well above the phyllite-dolomite contact with a view to establishing the optimum continuity of mineralization. In all cases, the indicated continuity should be clearly established by bulldozer trenching before embarking upon diamond drilling.

Of paramount significance on the Seagull Lakes property is the very large number of known veins and float occurrences. If a fraction of these zones contain comparable grades and widths to the No. 2 vein zone, then an economically viable mining operation can be readily forseen.

Therefore, the program recommended for 1969 on the Seagull Lakes property should be as follows:

A) Bulldozer trenches at 50 foot intervals across all known showings.
B) Sampling and mapping of these showings.
C) Diamond drilling the No. 2 vein zone plus those other vein zones which respond from a grade and continuity standpoint upon bulldozing and sampling.

RECOMMENDATIONS:

A)	Bulldozer trenching	$ 30,000.
B)	Access Roads	50,000.
C)	Diamond Drilling - $15/foot	120,000.
	No. 2 Vein 3000 feet	
	Other Veins 5000 feet	
D)	Camp and support facilities	25,000.
E)	Sampling, mapping, assaying, engineering, etc.	12,000.
F)	Administration, overhead	15,000.
G)	Consulting, supervision	10,000.
H)	Contingencies	15,000.
	Total:	$277,000.

Respectfully submitted,

Douglas D. Campbell, P.Eng., Ph.D.

Robert S. Adamson, P.Eng.