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REPORT ON
ASSESSMENT WORK
ON THE OLD COMPLEX AND DAM
MINERAL CLAIMS
NE OF MERRITT
NICOLA MINING DIVISION, B.C.

BY
SHERWIN F. KELLY, P.ENG.
SEPTEMBER 29, 1984

Assessment work by
Geochemical Soil Survey

on the
Old Complex and Dam
Mineral Claims
in the Corona Group
on Swakum Mtn.
NE of Merritt
Nicola Mining Division, B.C.
50° 17½' N, 120° 42½' W

921/7E

by
Sherwin F. Kelly, P.Eng.
Geophysicist & Geologist
Owner of the Old Complex Claims
September 29, 1984

on work done
July 2, 1984
by
Pacific Northwest Geotech, Ltd
Kamloops, B.C.
and
August 28, 1984
by
Eco-Tech Laboratories, Ltd
Kamloops, B.C.
for
Pacific Northwest Geotech Ltd
Kamloops, B.C.
the operator.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,960

ASSESSMENT WORK REPORT
ON THE OLD COMPLEX AND DAM
MINERAL CLAIMS
NICOLA MINING DIVISION, B.C.

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Eco-Tech Invoice for Analyses) in back
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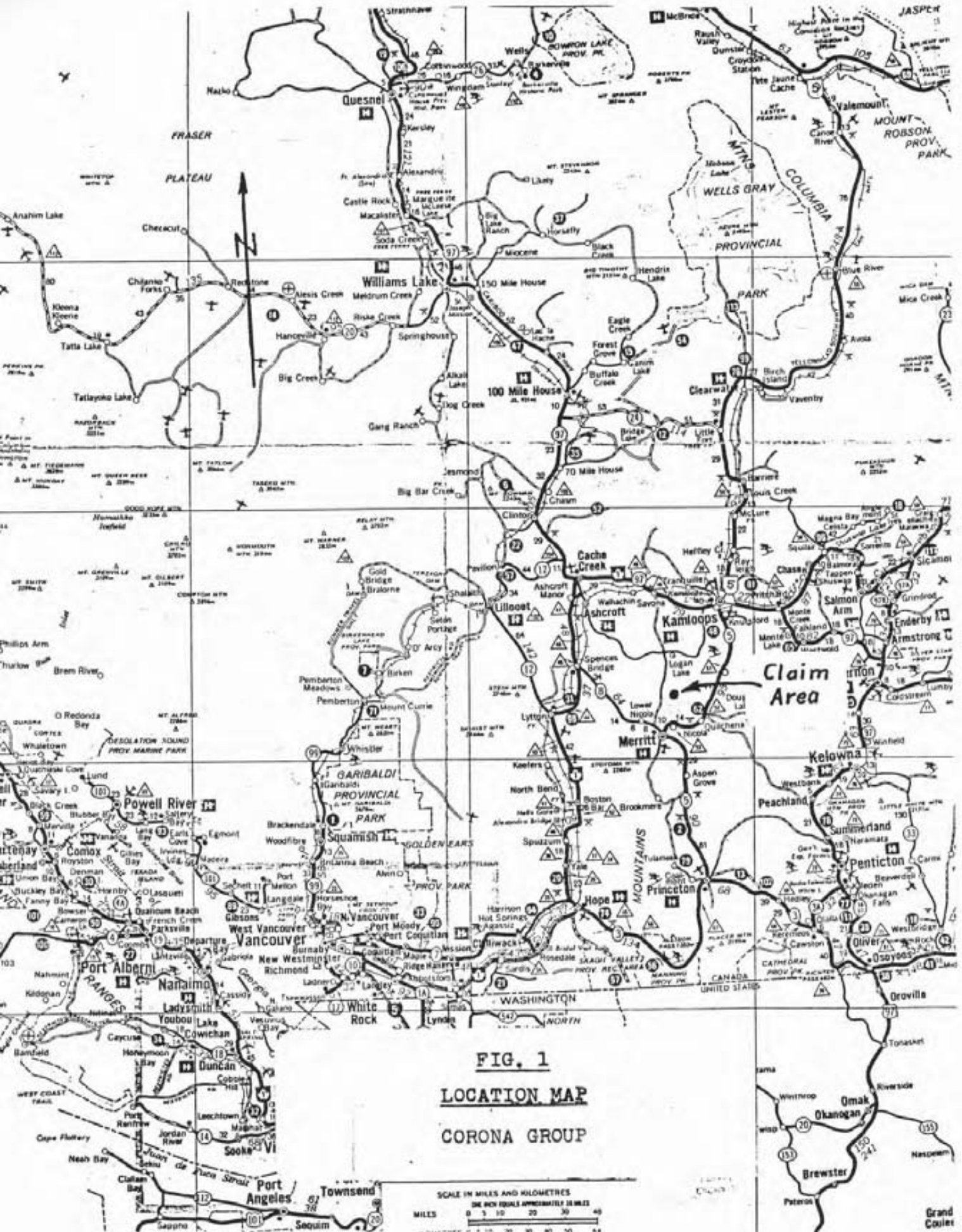


FIG. 1
LOCATION MAP
CORONA GROUP

Grand Coulee

REPORT ON
ASSESSMENT WORK
ON THE OLD COMPLEX AND DAM
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BY
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INTRODUCTION

This report covers the gathering and analysing of soil samples taken from the Dam mineral claim, the cost of which is to be applied to the Old Complex and Dam claims, in satisfaction of assessment work requirements. The three claims are included in the Corona Group of mineral claims, located on the summit of Swakum Mtn., 19 km north of Merritt, in the Nicola Mining Division of south central British Columbia.

LOCATION AND ACCESS

Merritt, the location of the office of the Gold Commissioner for the Nicola Mining Division, lies about 200 km NE of Vancouver, at the intersection of highways #5 & #8. From the traffic lights at that intersection, easterly and northerly along highway #5 towards Kamloops, a graded, gravel road turns off to the left (north) about 3.7 km from the traffic lights. It is a logging road which gives access to the summit of Swakum Mtn., an area lying 25 to 30 km from the highway turn-off. The summit area is one of rolling, upland topography with open stands of timber, some portions of which have been logged off. The elevation is 1,500 to 1730 m.

The Location Map, Fig. 1, faces this page.

CLAIMS

The Corona Group of mineral claims is somewhat irregular in shape, extending $5\frac{1}{2}$ km north-south with a width up to 1,000 metres.

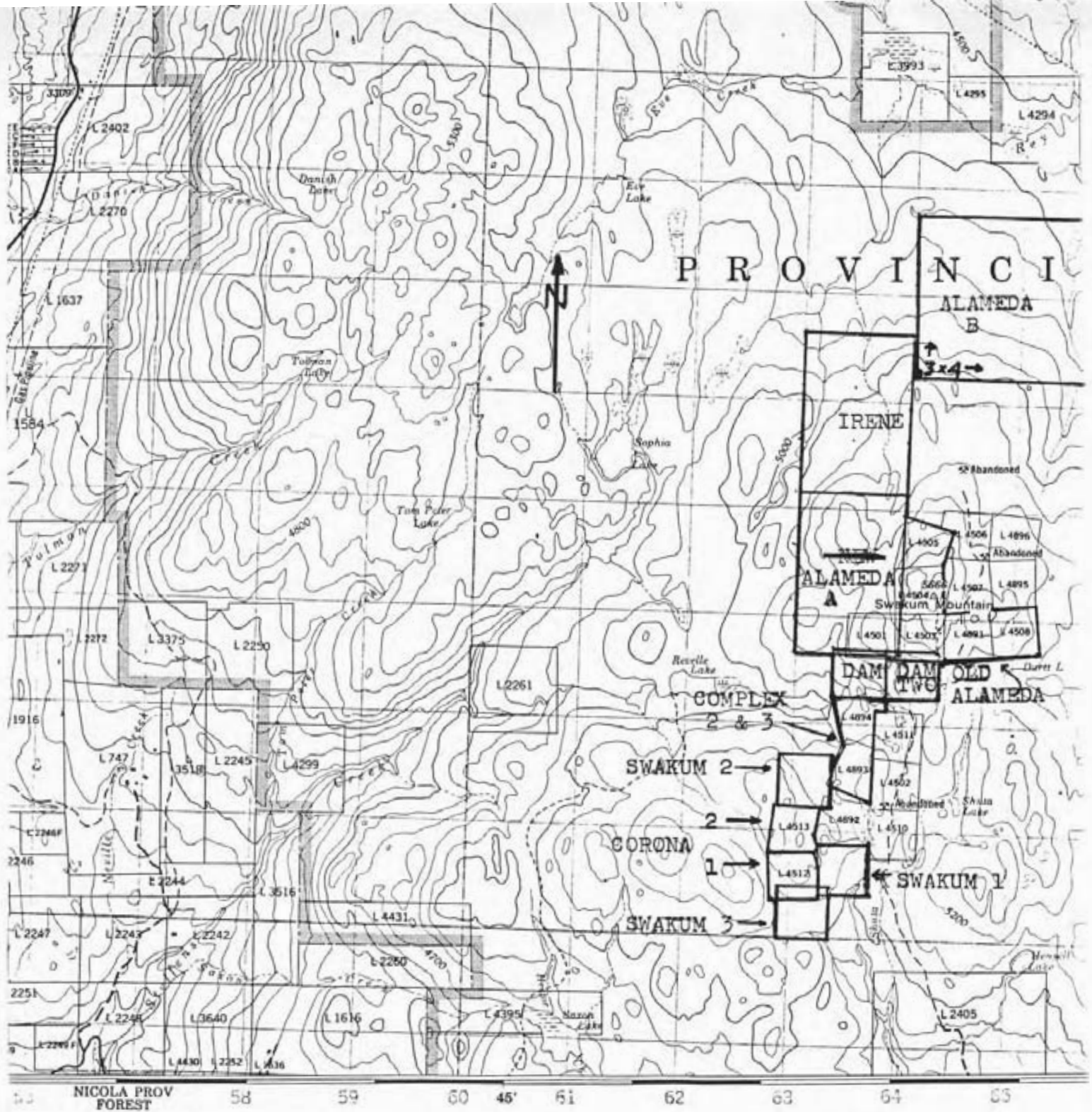


FIGURE
2

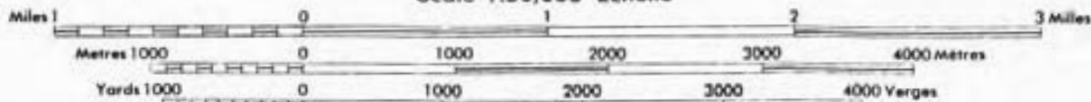
MAMIT LAKE

KAMLOOPS DIVISION OF YALE LAND DISTRICT
BRITISH COLUMBIA

CLAIM MAP

CORONA
GROUP

Scale 1:50,000 Échelle



The widest portion, north-central of the N-S alignment, embraces portions of the peak of the mountain; the larger part of the holdings lies just west of the peak and extends north and south along the west flank of Swakum Mtn. The peak is at 5666 ft. elevation, or 1730m.

The Corona Group consists of the Irene claim at the north end, the New Alameda and the Old Alameda, the Dam and Dam Two claims, which serve to connect the above with the holdings to the south, Old Complex, Old Corona and Swakum.

The Claim Map, Fig. 2 faces this page.

The geochemical survey was performed on the Dam claim and applied to it and the Old Complex #2 and #3.

HISTORY

Copper was discovered on the peak of Swakum Mtn. in 1916, by Oscar Schmidt, who staked the Lucky Mike (later called the Last Chance) from which some small shipments of ore were made. During World War II and subsequently, some tungsten ore bodies were outlined by drilling just south of the Lucky Mike shaft. The mineralization is contact-metamorphic, with a gangue of garnet and epidote carrying chalcopyrite, pyrrhotite, pyrite and scheelite. Some 800m south of the Lucky Mike, the Old Alameda shaft in the SE corner of Lot 4506, explored a quartz vein carrying chalcopyrite, galena and sphalerite in a bed of limestone. Another 2½ km south, the Thelma and Bernice shafts on Lot 4502, along with various pits and trenches, explored quartz veins in both limestone and greenstone which carried sphalerite, galena, pyrite and tetrahedrite. Some 1,000m south of west from the Thelma shaft, a shaft and various pits and trenches on the Corona #1 claim, Lot 4512, revealed

quartz veins, carrying galena, sphalerite and some tetrahedrite, in greenstone formations.

Tests were made on small shipments of ore, possibly hand-sorted, which revealed a zonal pattern in the mineral distribution from contact-metasomatic at the Lucky Mike, to hydrothermal vein deposits of lower temperatures at the Old Alameda, Thelma and Old Corona. Copper was high, 3.7% at the Lucky Mike (the only one assayed for copper), while on the Old Alameda to the south, lead at 9.6% and gold at 0.33 oz/ton were at their maxima and farther south at the Thelma, zinc at 5.75% and silver at 83.35 oz/ton were at their highest. No shipments were recorded from the Old Corona, but the mineralization there is similar to that at the Thelma.

This zonal pattern was commented upon by W.E. Cockfield in his Memoir 249 of the Geological Survey of Canada, 1948, p. 60:- "the Old Alameda and Thelma"...are presumably lower temperature types than the Last Chance deposit, and may suggest a temperature zoning around a concealed body of intrusive rock." No outcropping has been recorded of any igneous body which might have been the source of the hydrothermal mineralizing solutions. There are now available, however, geophysical data which may indicate such a body underlying the northern part of the Corona Group, as described in the section on "Geology", below.

GEOLOGY

Swakum Mtn. is formed of the Nicola beds of Triassic age, consisting largely of volcanic flows and tuffs with some intercalated strata of sedimentaries such as argillites and conglomerates, but with limestone predominating. The flows and tuffs are mostly andesitic in nature, usually greenish in color, and are

frequently lumped together as "greenstone".

The Nicola beds underlying Swakum Mtn. have been folded into an asymmetric anticline whose nearly north-south axis plunges to the south, passing just west of the mountain summit and in part lying within the Corona Group. The volcanics and sedimentaries carrying the Last Chance (Lucky Mike), Old Alameda and Thelma deposits strike northerly and dip easterly, whereas on the Corona claims the dip is westerly and the strike is northwesterly, towards Sophia Lake.

Throughout the band of Nicola rocks, extending from the American border to Kamloops, there are many intrusive bodies of Jurassic age, mostly granodiorite and quartz diorite, although they range from granite to gabbro. These intrusives are the source rocks and often also the host rocks, of mineralizing solutions responsible for the many types of ore bodies found in this area. The various copper mines operating in the Highland Valley, some 30 km to the NW, are located in the great Guichon Batholith of granodiorite to quartz diorite, both source rock and host rock for the deposits. The recently closed copper mine, Cragmont, some 10 km NW of Merritt, was in the Nicola beds at the contact with the south end of the Guichon intrusive. The mountain east of Swakum is formed of intrusive granodiorite and quartz diorite, the Central Nicola Batholith. It carries copper deposits associated with a quartz "pipe" in the batholith and with quartz veins at its contact with the Nicola beds along its west side. It is logical to assume that there lies within the body of Swakum Mtn., an igneous intrusive which was the source of the mineralizing solutions responsible for the deposits which have been discovered around the peak.

The validity of that assumption is implied in the magnetic data recorded on the 1968 aeromagnetic map, "Mamit Lake", Map 5212G at the scale of one inch to one mile. It depicts a strong, oval-shaped anomaly elongated N-S tangent to the west side of the peak of Swakum Mtn. and extending from the Dam claim north, through the New Alameda and Irene claims, almost to Rey Creek. The peak values are from 2,700 to 3,700 gammas. In its values and appearance it strongly resembles the magnetic anomalies associated with the Guichon batholith intrusive. From the central portion of this magnetic high, it is only about 1,000 metres east to the contact-metasomatic-garnet-skarn deposit of copper-tungsten at the Lucky Mike shaft.

That copper-tungsten deposit on the Lucky Mike, is the highest temperature deposit of any around the peak of Swakum; it is also the closest to the presumed intrusive. The magnetic data imply that the surface of the intrusive plug slopes downwards when going away from the peak values, so the intrusive should be at greater depths to the south. This accounts for the lower temperature deposits in that area, at the Old Alameda, Bernice and Thelma, and Old Corona. The same sequence might be repeated to the north, but no evidence for it is yet available.

The surface pattern of zoning provides a valuable clue as to the probable distribution of mineralization in depth. Structures, such as beds, faults and veins, which carry medium-temperature mineralization at surface, usually silver, lead and zinc, when followed in depth down-dip and/or along strike towards the igneous source body, may be expected to carry increasing amounts of higher temperature mineralization, including gold, copper and tungsten.

Also, as the intrusive is approached, the body which was composed of superheated, molten magma loaded with mineral-carrying hydrothermal solutions, a zone is entered wherein the hydrothermal and contact-metasomatic actions were at their maxima. It is to be expected that, in this zone, there will not only be a change in the balance between various metallic minerals, but that there will also be a marked increase in the intensity of mineralization and in the volume of mineral-bearing rock.

Detail mapping of surface manifestations of mineralization, as by geochemical surveys, is essential for providing the guidelines needed to investigate the ore-bearing structures at greater depths, as they approach the parent intrusive body.

EXPLORATION WORK

The exploration work hereby claimed for assessment credit, consists of collecting and analysing 31 soil samples. Each sample was tested for 4 metals, copper, silver, lead and zinc. The samples were taken at 25m intervals along 0.75km of line by Mr. Keith D'Angelo, Field Manager of Pacific Northwest Geotech Ltd. of Kamloops, an established firm which acts as consultant and contractor for field services in mining exploration. The analyses were made by Eco-Tech Laboratories Ltd., of Kamloops. The analytical returns and relevant invoices are bound in back of this text. The samples were gathered on July 2nd, 1984.

The "Statement of Exploration and Development" to apply \$400 to Old Complex #2, 656(7) and to Old Complex #3, 657(7), \$200 to each, was filed July 3, 1984; the "Statement of Exploration and Development" to apply \$100 to the Dam claim, 1444(8), was filed Aug. 22, 1984. The Dam and Old Complex claims belong to the Corona

Group of mineral claims (Supplementary Notice to Group, Sep. 2, 1983).

The maps accompanying this report will serve to correct an error on those enclosed in a prior report of June 15, 1984, "Report on Assessment Work on the Irene and Dam Claims NE of Merritt...." I explained the situation in a letter to the Gold Commissioner in Merritt, Mr. Pat Lean, on July 14, 1984. Confusion arose because the field operator showed a planned lay-out of lines running E-W and spaced 50m apart. For the actual sampling, however, he used lines spaced 100m apart and numbered consecutively from south to north. In entering the results on the map I mistakenly used the numbering of the more closely spaced lines. This error does not affect the amount or value of the work done, nor the application of the work. The values now entered on the map are correctly placed. The maps enclosed in the June 15 report should be cancelled and reference made to the maps in the present report.

The itemization of the work is as follows:-

Laying out 0.75km of line and gathering 31 samples.....	\$170.50
Analysing for 4 metals on 31 samples.....	176.70
Cost of report.....	400.00
	<u>\$747.20</u>
Add \$58 balance left over from Feb. 22, 1984 statement.....	58.00
Total.....	<u>\$805.20</u>

The above is to apply:-

Old Complex #2, 656(7), 1 year,	\$200.00	
Old Complex #3, 657(7), 1 year,	200.00	
(Per "Statement..." of Jul 3/84)		
Dam Claim, 1444(8), 1 year.....	<u>100.00</u>	
(Per "Statement.." Aug. 22/84)	<u>\$500.00</u>	\$805.20
		<u>500.00</u>
Balance remaining may be claimed later.....	<u>\$305.20</u>	

In the "Statement of Exploration and Development", filed July 3, 1984, for the Old Complex #2 & #3, and filed Aug. 22, 1984 for the Dam claim, I under-estimated slightly the values for gathering and analysing the samples; the total then claimed was \$329.10, but the revised figure is now \$347.20. The balance remaining to be claimed at a later date is now corrected to the sum of \$305.20.

The samples were taken from the B horizon, some 8 to 12 inches deep, packed in kraft paper bags and delivered to the Eco-Tech Laboratories Ltd. in Kamloops.

ANALYSES

The soil samples were screened through 80 mesh and subjected to aqua regia extraction; examination was by atomic absorption. The results were recorded on the return dated Sept. 7, 1984, copy of which is bound in the back of this text.

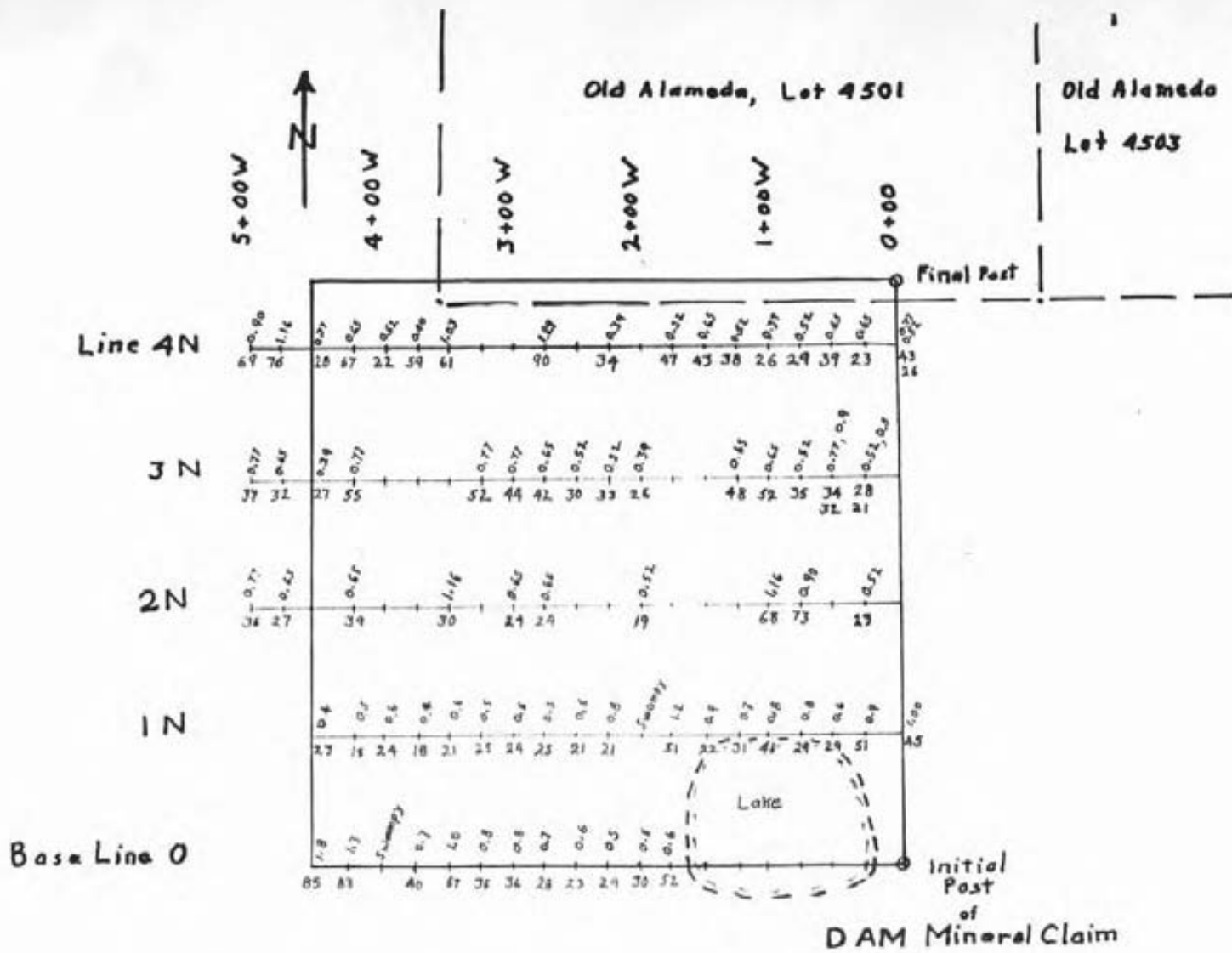
The area covered was too small and the samples too few in number to permit deducing an entirely satisfactory background value. To arrive at an approximate value, I averaged the results from this survey, the previous one reported June 15, 1984, and the results obtained in September on the newly-staked Dam Two claim which adjoins the Dam claim on the east.

The silver background values are, 0.48, 0.6 and 0.6. I adopted 0.5 ppm (parts per million). These presented a good concordance.

The copper background values are, 27, 24 and 25. I adopted 25 ppm. These also are in good agreement.

The lead background values are, 18, 12 and 14. I adopted 15 ppm. These figures are in fairly good agreement.

The zinc background values are, 50, 34 and 24. I adopted



Scale 1:5,000

0 50 100 m

Geochemical Soil Survey
Fig. 3

SILVER & COPPER	
<u>silver</u>	<u>copper</u>
0.5....background.....	25
1.0....threshold.....	50
1.5.....anomalous.....	75

Values in parts per million (ppm)

Silver above the line.

Copper below the line.

Map to accompany the
assessment report by
Sherwin F. Kelly, P.Eng.
dated Sept. 29, 1984.

Sherwin F. Kelly, P.Eng.

35 ppm. The values in this case are in poor concordance, but zinc is a highly mobile ion and readily becomes widely and erratically distributed. Hence a large area must be involved in order to obtain a representative background value. A final figure will have to await results over a larger area.

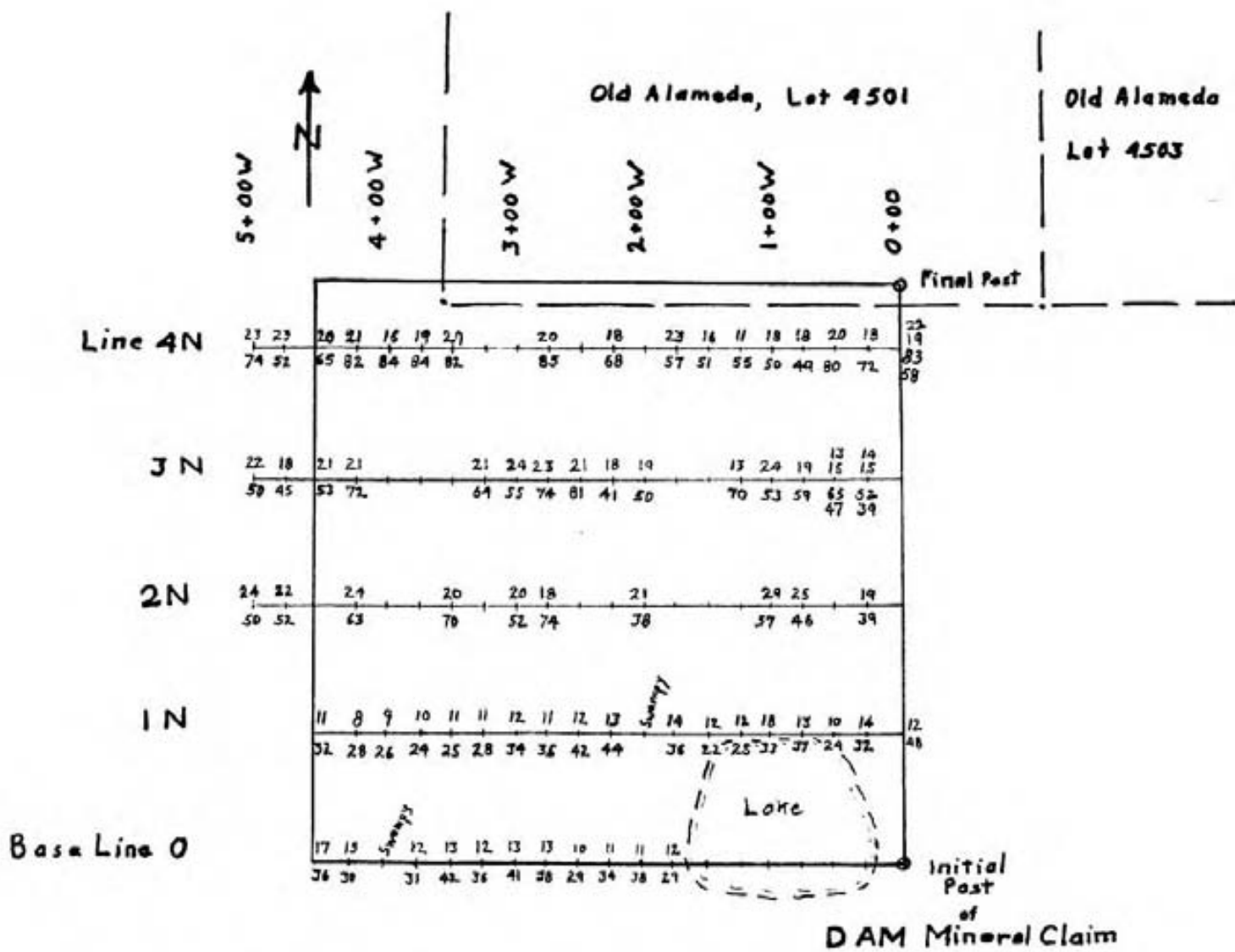
The silver and copper results are shown on Fig. 3, bound opposite this page.

There is only one location showing anomalous silver and copper readings, at the southwest corner of the claim. That station is flanked by a silver threshold and copper anomalous reading. The rest of Line C contains threshold silver and copper at 3+50W and a copper threshold at the west shore of the lake.

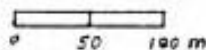
The next line north, Line 1N, carries a threshold copper at the east shore of the lake and threshold silvers just east, at the claim boundary and again just west of the lake. Line 2N carries a couple of threshold coppers and a threshold silver north of the lake and a threshold silver at 3+50W. There are no silver threshold values on Line 3N and only three threshold coppers, one north of the lake, one at 3+25W and the third near the west boundary.

Line 4N, however, exhibits two copper anomalies, four threshold coppers and three threshold silvers. The two copper anomalies coincide with two strong silver threshold readings, at 2+75W and 4+75W. Threshold silver and copper coincide at 3+50W.

The only strongly anomalous readings were on the samples from the southwest corner of the claim. Further testing in this area is worthwhile to see if staking should be extended south and west; the only other anomalous reading is just west of the claim boundary on



Scale 1:5,000



Geochemical Soil Survey

FIG. 4

LEAD & ZINC
lead zinc

15...background...35

30...threshold...70

45...anomalous...105

Values in parts per million (ppm)

Lead above the line.

Zinc below the line.

Map to accompany the
 assessment report by
 Sherwin F. Kelly, P.Eng.
 dated Sept. 29, 1984.

Sherwin F. Kelly P.Eng.

Line 4N. There is a possible indication of a weakly mineralized vein trending N-S about through stations 3+25N or 3+50N. The greater abundance of threshold and anomalous values on the northern line, 4N, suggests that a more strongly mineralized area is being approached, lying within the claim to the north, the New Alameda.

The lead and zinc results are shown on Fig. 4, bound opposite this page.

There are no anomalous or threshold readings on lead. There are no anomalous readings on zinc, but there zinc threshold values.

On Lines 0 and 1N, however, even zinc threshold readings are absent. There are two on Line 2N, one of them being at the station 3+50W. Four zinc thresholds are found on Line 3N and on Line 4N there are nine. The one at 2+75W coincides with anomalous copper and threshold zinc, while the one at 3+50W occurs with threshold silver and copper. Just west of the boundary, at 5+00W, a threshold zinc occurs with a threshold copper, adjacent to a threshold silver and anomalous copper values.

The lead values, it should be noted, tend to increase on going north from Line 0, showing their maxima on Line 4N, even though they do not reach threshold values. This re-enforces the suggestion above, that a more generously mineralized area may lie to the north, on the New Alameda claim and, of course, including Lot 4501 of the Old Alameda. My report of Sept. 30, 1981, on the Old Alameda, recorded strong silver-zinc anomalies on Lot 4501, extending over a length of 300m north and south and open at both ends.

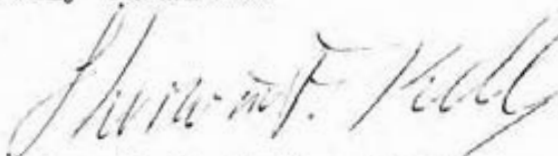
A reconnaissance survey with widely spaced lines, 250m apart,

and only four lines run, was made on the New Alameda in 1981 and covered by my report of Feb. 9, 1982. The data indicated three, roughly parallel zones of copper-silver anomalies deserving more intensive investigation. The values tended, in general, to increase towards the north.

There are some gaps in the readings on the Dam claim. These are due to the fact that, while the soil samples were in storage, prior to being sent to the laboratory, some of the soil sample envelopes were tampered with and the opened ones had to be discarded. This was explained in my report of June 15, 1984, on the Irene and Dam mineral claims.

The exploration work thus far conducted on the Dam mineral claim indicates the probable presence of some copper and silver mineralization and possibly zinc. The claim lies in the "matrix" of mineralization encompassing the summit area of Swakum Mtn., in which the Corona Group has been staked. Further study of the Dam and other claims is essential in order to determine the pattern and concentration of mineral occurrences within these holdings.

Respectfully submitted



Sherwin F. Kelly, P.Eng.

Box 277
Merritt, B.C.
VOK 2B0
Sept. 29, 1984

CERTIFICATE OF QUALIFICATIONS

I, Sherwin F. Kelly, P.Eng., residing in Merritt, B.C.,
certify that:-

(1) I am a registered Professional Engineer in the
Province of British Columbia:

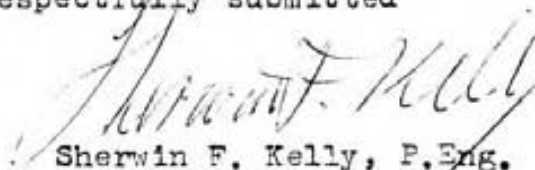
(2) I received the degree of Bachelor of Science in
Mining Engineering from the University of Kansas in
1917. I pursued graduate studies in geology and mineralogy
at the University of Kansas, University of Toronto and at
the Université de Paris (the Sorbonne), the Ecole des Mines
and the Museum d'Histoire Naturelle, in Paris. I received
instruction in geophysics from Prof. Conrad Schlumberger
of the Ecole des Mines in Paris.

(3) I have practised as a geophysicist and geologist
in Europe, North Africa, North, Central and South America
and the Caribbean, since 1920.

(4) I am the author of the accompanying "Report on Assess-
ment Work on the Old Complex and Dam Mineral Claims NE of
Merritt, Nicola Mining Division, B.C.," dated Sept. 29, 1984.

(5) I am the owner of the Old Complex claims.

Respectfully submitted


Sherwin F. Kelly, P.Eng.

Box 277
Merritt, B.C.
VOK 2EO
Sept. 29, 1984



September 7, 1984

CERTIFICATE OF ANALYSIS

CLIENT: Primont Resources
P. O. Box 3064
KAMLOOPS, B. C.
V2C 6B7

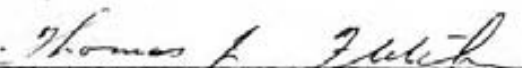
ATTENTION: Mr. G. D'Angelo

SAMPLE IDENTIFICATION: 31 soil samples (The Dam Claim) received Aug. 28, 1984

CERTIFICATE OF ANALYSIS NUMBER: ET339

<u>Description</u>	<u>Ag (ppm)</u>	<u>Cu (ppm)</u>	<u>Pb (ppm)</u>	<u>Zn (ppm)</u>
DAM ON 1+75W	0.6	52.	12.	29.
2+00	0.8	30.	11.	38.
2+25	0.5	24.	11.	34.
2+50	0.6	23.	10.	29.
2+75	0.7	28.	13.	38.
3+00	0.8	36.	13.	41.
3+25	0.8	35.	12.	36.
3+50	1.0	67.	13.	42.
3+75	0.7	40.	12.	31.
4+25	1.3	83.	15.	30.
4+50	1.8	85.	17.	36.
DAM IN 0+00W	1.0	45.	12.	48.
0+25	0.9	51.	14.	32.
0+50	0.6	29.	10.	24.
0+75	0.8	29.	13.	37.
1+00	0.8	46.	18.	33.
1+25	0.7	31.	12.	25.
1+50	0.9	22.	12.	22.
1+75	1.2	51.	14.	36.
2+25	0.8	21.	13.	44.
2+50	0.6	21.	12.	42.
2+75	0.5	25.	11.	35.

<u>Description</u>	<u>Ag (ppm)</u>	<u>Cu (ppm)</u>	<u>Pb (ppm)</u>	<u>Zn (ppm)</u>
DAM 1N 3+00W	0.5	24.	12.	34.
3+25	0.5	25.	11.	28.
3+50	0.6	21.	11.	25.
3+75	0.4	18.	10.	24.
4+00	0.6	24.	9.	26.
4+25	0.5	15.	8.	28.
4+50	0.4	23.	11.	32.
DAM 3N 0+25W	0.5	21.	14.	39.
0+50	0.9	32.	13.	47.


ECO-TECH LABORATORIES LTD.
Thomas J. Fletcher, B.Sc.
Chief Assayer

TJF/ml

cc: Sherwin F. Kelly
P. O. Box 277
Merritt, B. C. VOK 2B0



10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 — Telephone (604) 573-5700 Telex 048-8393

DATE September 7 19 84

Attention: Mr. G. D'Angelo

CLIENT Primont Resources
P. O. Box 3064
KAMLOOPS, B. C. V2C 6B7

INVOICE NO. ET339

DESCRIPTION	AMOUNT
31 Sample Preps @ \$0.75 ea.	\$ 23 25
31 Ag/Cu/Pb/Zn Geochems @ \$4.95 ea.	<u>153 45</u>
TOTAL DUE AND PAYABLE UPON RECEIPT	\$ <u>176 70</u>

TERMS: Net 30 days. Interest at the rate of 1 1/2 % per month may be charged on overdue accounts.

KAMLOOPS — CALGARY — BURNABY

PACIFIC NORTHWEST GEO TECH LTD.

INVOICE NO.3- 1984

To; G. D'Angelo
2246 Sifton ave.
Kamloops V1S 1A5

July 1,1984

Regarding the running lines and taking soil samples from the DAM mineral claim, record no. 1444 Nicola Mining Division-Swakum Mtn

To the taking of 31 geochem samples at the "B" horizon

line 0-North-- 11 samples
line 1-North-- 18 samples
line 3-north-- 2 samples

31 samples at \$5.50 per sample

\$ 170.50

Geochem, Geophysics, EM, Reports, Computer Graphics

PO Box 3064 Kamloops, BC V2C 5N3 (604) 374-6437