

REPORT TO  
PACIFIC NORTHWEST GEO TECH LTD.  
ON ASSESSMENT WORK  
ON NEW ALAMEDA MINERAL CLAIM  
NEAR MERRITT  
NICOLA MINING DIVISION, B.C.

BY  
SHERWIN F. KELLY, P.ENG.

FEB. 9, 1982

Report on  
Assessment Work  
by  
Geochemical Soil Survey

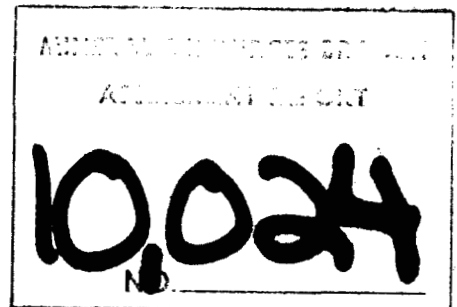
on the  
New Alameda Claim  
on Swakum Mtn.  
NNE of Merritt  
Nicola Mining Division, B.C.  
50° 17½ N, 120° 43 W

by  
Sherwin F. Kelly, P.Eng  
Geophysicist & Geologist  
Owner of the Claims  
Feb. 9, 1982

to  
Pacific Northwest Geotech Ltd.  
Kamloops, B.C.  
the Operator

on Work Done  
Sept. 24, 1981

by  
Scope Exploration Services Ltd.  
Merritt, B.C.



REPORT TO  
PACIFIC NORTHWEST GEO TECH LTD.  
ON ASSESSMENT WORK  
ON NEW ALAMEDA MINERAL CLAIM

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In envelope bound in  
back of report.

DOCUMENTS

GEOCHEMICAL LAB REPORT  
KAMLOOPS RESEARCH AND ASSAY  
LABORATORY LTD. ACCOUNT  
SCOPE EXPLORATION SERVICES  
LTD. ACCOUNT  
SHERWIN F. KELLY, P.ENG.  
ACCOUNT FOR THIS REPORT

ALL BOUND  
IN BACK  
OF  
REPORT.

REPORT TO  
PACIFIC NORTHWEST GEO TECH LTD.  
ON  
ASSESSMENT WORK  
ON NEW ALAMEDA MINERAL CLAIM  
NEAR MERRITT  
NICOLA MINING DIVISION, B.C.  
BY  
SHERWIN F. KELLY, P.ENG.

INTRODUCTION

This report is to record the assessment work conducted on the New Alameda Claim, in the form of a geochemical soil survey. The staked claim of six units lies on the summit of Swakum Mtn., just west of the peak, about 21km NNE of Merritt, in the Nicola Mining Division of British Columbia. The claim is registered in my name.

LOCATION AND ACCESS

The New Alameda Mineral Claim consists of 6 units, centered about 800m west of the peak of Swakum Mtn. (elev. 5,666 ft. or about 1,730m) roughly 21km (12.5 miles) in a straight line NNE of Merritt, B.C. The claim area is located in the SW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of map 92-I/7, the Mamit Lake sheet of the NTS series at the scale of 1:50,000. The elevation of the claim area is largely between 5,200 and 5,400 ft. (1,590 and 1,650m). The co-ordinates are 120° 43' W longitude and 50° 17 $\frac{1}{2}$ ' N latitude. The General Location Map,

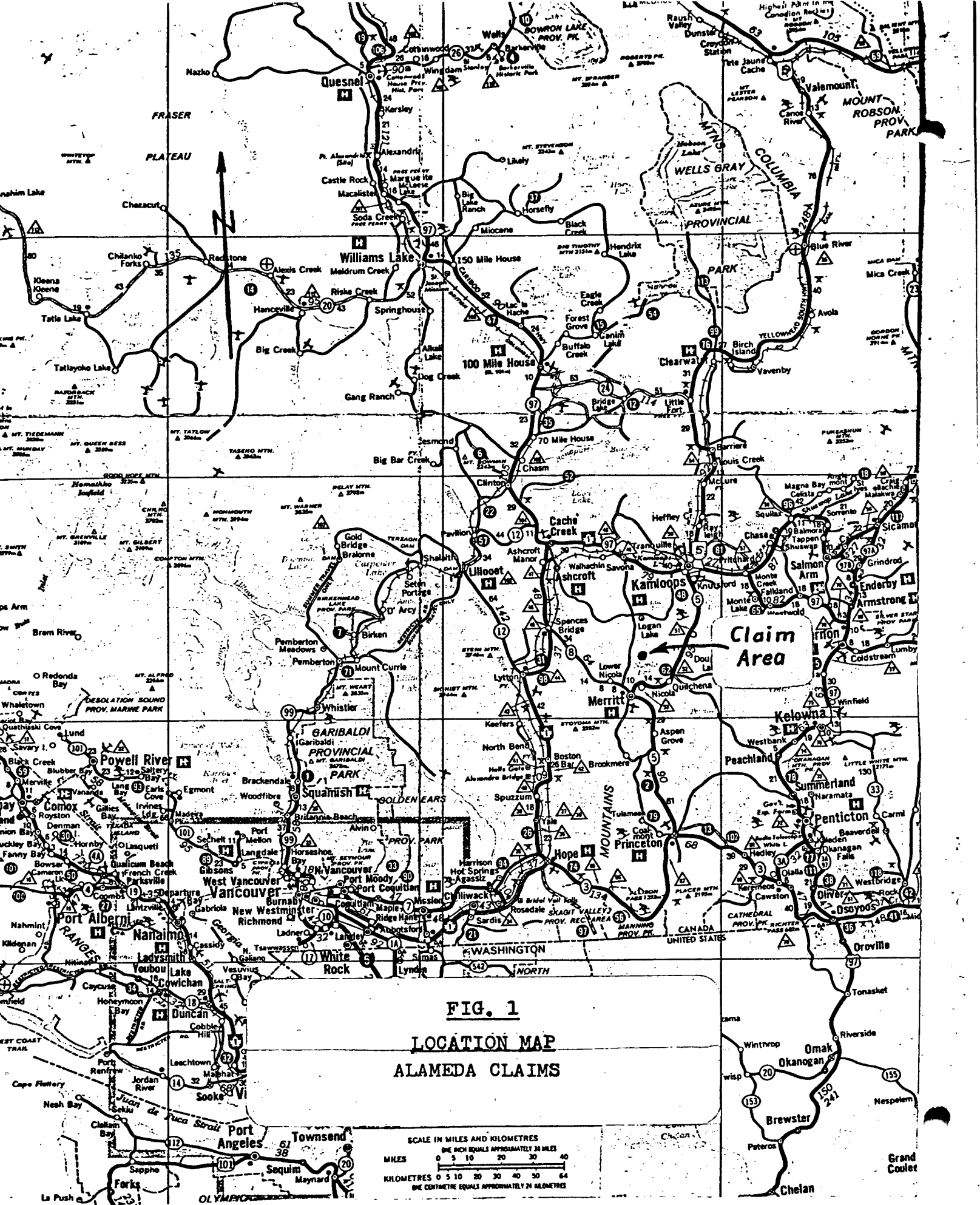


FIG. 1

LOCATION MAP  
ALAMEDA CLAIMS

SCALE IN MILES AND KILOMETRES  
 ONE INCH EQUALS APPROXIMATELY 25 MILES  
 MILES 0 5 10 20 30 40  
 KILOMETRES 0 5 10 20 30 40 50 60  
 ONE CENTIMETRE EQUALS APPROXIMATELY 2.5 KILOMETRES

Fig. 1, faces this page.

The claim area may be reached by car, for which a 4x4 drive is advisable. Driving 3.7km north-easterly from Merritt on No. 5 Highway (the road to Kamloops), a gravel road turns off to the left (N). About 21.5km from the Highway, a left turn is made off this logging road onto the dirt road leading north to the peak of Swakum Mtn. Some 5km north of this turn-off, the road crosses the south boundary of the group of Old Alameda claims (reverted Crown Grants) which adjoin the east side of the New Alameda claim. The peak of Swakum Mtn. lies about one kilometre further north. Various logging and old exploration roads give access to the areas around the mountain peak. The summit area is of generally rolling topography, close to the treeline.

#### CLAIM

The six-unit New Alameda claim was staked on September 18, 1980, by Ray Wells, of Merritt, acting as agent for Sherwin F. Kelly, also of Merritt. The claim was recorded in the office of the Gold Commissioner of the Nicola Mining Division, in Merritt, on September 30, 1980, with Record No. 960.

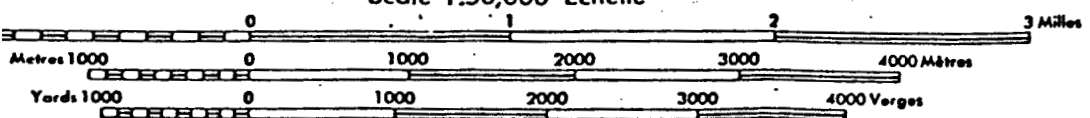


FIG. 2

**MAMIT LAKE**  
 KAMLOOPS DIVISION OF YALE LAND DISTRICT  
 BRITISH COLUMBIA

**CLAIM MAP**  
 NEW ALAMEDA CLAIM

Scale 1:50,000 Échelle



CONTOUR INTERVAL 100 FEET  
 Elevations in Feet above Mean Sea Level  
 North American Datum 1927  
 Transverse Mercator Projection

The legal corner post is 0.6km southwest of the peak of Swakum Mtn., at the north boundary of the Dartt #1 mineral claim. The units extend 3N and 2W.

The southeast unit, 1N 1W, is in large part an overstaking of Lot 4501, now held as Old Alameda #6 by G. D'Angelo of Kamloops, with Record No. 936. The NE corner of the New Alameda claim, unit 3N, 1W, shows a small overlap at its NE corner with the HEL 4 mineral claim, held by Cominco.

The Claim Map, Fig. 2, faces this page.

#### GEOCHEMICAL SOIL SURVEY

A reconnaissance soil survey was conducted on the New Alameda claim, with samples analysed for copper, silver, lead and zinc. The line-cutting and sampling were carried out by Scope Exploration Services of Merritt and the analyses of the samples were made by Kamloops Research and Assay Laboratory Ltd., of Kamloops. The operator was Pacific Northwest Geo Tech Ltd., of Kamloops. The field work was done on Sept. 24, 1981.

The grid system of 3.5km was laid out with four lines spaced 250m apart. These lines ran E-W and were sampled at 25m intervals, the stations

being numbered from 4+00W to 14+00W. The lines were numbered 1+00S, 3+50S, 6+00S and 8+50S. The lines were arranged to co-ordinate with those of a prior survey on the group of Old Alameda claims adjoining to the east. Lines 1+00S and 6+00S actually lie on the projections of Lines 1S and 6S of the Old Alameda survey. The stations on those lines ended with 3+00W, so with a 100m gap, the stations on the New Alameda lines start with 4+00W.

Samples were taken from the B horizon, packed in kraft paper sample bags and shipped to the Kamloops Laboratory. Analyses were made there on the -80 mesh fraction for copper, lead, zinc and silver by means of hot acid extraction and atomic absorption. The results are set forth in the copy of the "Geochemical Lab Report" bound in back of this report.

The statements of expenses for the field work and for the assays are also bound in back of this report. In summary they are:

Line cutting and flagging and gathering of samples, plus incidental expenses.....	\$386.50
Assays on 133 samples.....	518.70
	<u>\$905.20</u>

(N.B. The bill from Scope Explorations listed 134 samples, whereas the Kamloops Lab. bill was



for 133 samples. Consequently the total is reduced by \$3,90, the cost of the omitted sample.)

The cost of this present report is \$600 which, when added to the above figures gives \$1505.20 as the sum applicable for the assessment credit.

On September 29, 1981, I filed a Statement of Exploration and Development with the Gold Commissioner in the Merritt office of the Nicola Mining Division. This document recorded expenditures of \$1,509.10 and requested that \$1,200 be applied to cover two years for each of the 6 units of New Alameda mineral claim, Record No. 960(9), stating that the balance of \$300 may be claimed at a later date. The minor correction in the total expenditure, noted above, does not affect these final figures.

#### DISCUSSION OF RESULTS

Two maps of the claims and grid lines, on which are entered the soil values for copper, lead, zinc and silver in parts per million (ppm) are bound in back of this report.

Soil values in copper range from a low of 14 ppm to a high of 181 ppm. For lead, the range is between 8 ppm and 40 ppm, although in general the top figures are in the neighborhood of 18 to

20 ppm. Zinc, a mobile ion, has a higher range, from 44 ppm to 1370 ppm. Aside from that singular reading, however, the highs are mostly in the range of 75 to 105 ppm. Silver values are consistently lower than these base metals, exhibiting a range of 0.4 to 1.3 ppm.

Background value for copper I calculate at 28 ppm. This approximates very closely the value of 30 ppm found on the survey grid of the adjoining Old Alameda claims to the east. The value of 30 ppm is therefor adopted for this New Alameda grid, to keep the results comparable with those on the adjoining claims. Threshold value is 60 ppm and anomalous values are 90 ppm and higher.

Background for zinc is calculated at 59 ppm. This is slightly higher than for the Old Alameda group, where it was put at 50 ppm. Zinc is a mobile ion, showing wide variations in soil concentrations, so the two values are not seriously discrepant. In order to keep the results comparable, the value of 50 ppm is also adopted for the New Alameda survey. Threshold zinc values are therefor 100 ppm and anomalous ones are 150 ppm and higher.

For lead the background works out at 13 ppm. Threshold is consequently 26 ppm (say 25 ppm) and

anomalous, is 39 ppm (say 40 ppm).

Silver presents a different situation. Background here works out at 0.6 ppm whereas on the Old Alameda it was found to be 0.2 ppm! In brief, background on the New Alameda is already at anomalous value for the adjoining Old Alameda grid. On the New Alameda, threshold values are 1.2 ppm and anomalous are 1.8 and higher. This situation will require further and careful study, to determine whether or not the higher values on the New Alameda result from more widespread silver mineralisation.

The values recorded from this geochemical soil survey are entered on two plan maps, in an envelope bound in back of this report. The copper-silver values are on Fig. 3 and the lead-zinc results are shown on Fig. 4.

On the copper-silver map, Fig. 3, Line 1+00S exhibits a couple of sets of anomalies, one of 97 ppm in copper at 5+25W, which also corresponds with a silver threshold value of 1.3 ppm, a lead anomaly of 40 ppm and a very high zinc reading of 1370 ppm, (Fig. 4). The neighbouring stations are below threshold in copper, silver, lead and zinc (zinc is barely below, at 86 to 98 ppm) leading to the suspicion that it may be a boulder in the overburden, which is responsible for these high readings.

On the other hand, however, on the next line south, Line 3+50S, there are near-anomalies in

copper (79 & 81 ppm) at stations 5+25W and 5+50W, with near-threshold silver readings (1.0 ppm) at stations 5+50W and 5+75W. Lead and zinc are below threshold.

On the succeeding line south, Line 6+00S, at station 5+75W, there is a strong copper anomaly of 159 ppm and an above-threshold silver value of 1.3 ppm. Lead and zinc are below threshold.

The alignment of these copper and silver values on a NNE strike suggests a copper-silver vein as the underlying, causative structure. The very wide spacing of these reconnaissance lines precludes any firm opinion, however, and the area requires a detail survey.

The second set of anomalies on Line 1+00S, Fig. 3, lies at stations 6+25W and 6+50W, with copper readings of 181 and 96 ppm. Silver is just below threshold, at 1.0 and 0.9 ppm. Lead and zinc are below threshold.

On Line 3+50S, at 6+50W there is a near-anomaly in copper, reading 81 ppm, with near-threshold silver at 1.0 ppm. Zinc and lead are below threshold.

At 7+00W on Line 6+00S, there is a near-anomaly in copper at 76 ppm, with a near-threshold silver reading of 1.0 ppm. Lead and zinc are below threshold.

This set of anomalies and near-anomalies also lines up with a NNE strike, sub-parallel to the first set described.

There are some isolated threshold and anomalous values scattered about in the survey area, but which are worth noting. On Line 8+50S there is a copper near-anomaly of 77 ppm at station 9+75W. On Line 6+00S there are threshold values in silver (1.2 ppm) and copper (65 ppm) at station 9+50W. On Line 3+50S, there is a copper anomaly of 91 ppm at station 8+75W. On Line 1+00S, stations 9+25W to 9+75W, there are zinc threshold and anomalous readings of 101, 198 and 200 ppm.

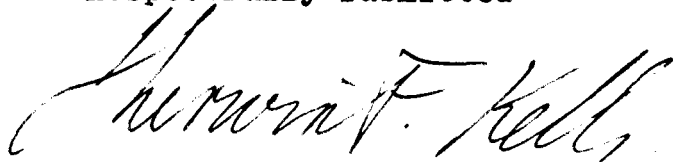
The above data put in evidence three, roughly parallel, north-south zones which deserve more intensive investigation. The westernmost and weakest, lies between 8+75W and 9+75W. To the east, a second zone lies between 6+25W and 7+00W. The third zone, which in some ways appears the stronger, lies between 5+25W and 5+75W.

A further point of interest on all these zones, is that the values, in general, tend to increase towards the north. Thus, it is necessary, first, to carry out detail investigations over this survey area to determine whether or not the present, widely separated anomalies do represent vein systems. This work must also be extended to the north boundary of the claim to reveal whether or not the soil values are stronger in that area.

The matter of discrepancies in background values for silver in this area versus the lower values in the Old Alameda to the east, has already been discussed. This will necessitate extending the survey to connect with the Old Alameda lines and possibly working to the west, and even south and north, beyond the boundaries of the New Alameda claim, to determine the areal background.

The present reconnaissance survey has indicated that the area covered possesses possibilities for the occurrence of metallic deposits, principally copper and possibly silver and zinc. It is consequently worth devoting further effort, in the nature of detailed surveys, to explore those potentialities.

Respectfully submitted

A handwritten signature in cursive script, reading "Sherwin F. Kelly".

Sherwin F. Kelly, P.Eng

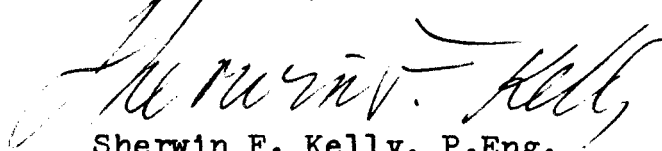
Box 277  
Merritt, B.C.  
VOK 2B0  
February 9, 1982

CERTIFICATE OF QUALIFICATIONS

I, Sherwin F. Kelly, P.Eng., residing at the Adelphi Hotel 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 Universite de Paris (the Sorbonne) and 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. My work has principally been as a consultant since 1936.
- (4) I am the author of the "Report to Pacific Northwest Geo Tech Ltd. on Assessment Work on New Alameda Mineral Claim near Merritt, Nicola Mining Division, B.C." dated February 9, 1982.
- (5) I am the owner of the claim.

Respectfully submitted



Sherwin F. Kelly, P.Eng.  
Geologist and Geophysicist

Box 277  
Merritt, B.C.  
VOK 2B0  
February 9, 1982

**KAMLOOPS  
RESEARCH & ASSAY  
LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

2095 WEST TRANS CANADA HIGHWAY — KAMLOOPS B.C.  
V1S 1A7  
PHONE: (604) 372-2784 — TELEX: 048-8320

**GEOCHEMICAL LAB REPORT**

Scope Explorations Ltd.  
Box 1101  
Merritt, B.C.  
VOK 2B0

NEW ALAMEADA-SWAKUM MINT

DATE October 2, 1981

ATTENTION: MR. MAURICE MATHIEU

ANALYST \_\_\_\_\_

FILE NO. G-630

KRAL NO.	IDENTIFICATION	ppm Cu	ppm Pb	ppm Zn	ppm Ag				
1	L1+00S 4+00W	38	16	98	1.0				
2	4+25W	35	16	92	1.0				
3	4+50W	35	15	86	.9				
4	4+75W	36	16	94	.9				
5	5+00W	36	16	98	1.0				
6	5+25W	97	40	1370	1.3				
7	5+75W	48	16	86	.8				
8	6+00W	77	17	75	.7				
9	6+25W	181	17	73	1.0				
10	6+50W	96	14	52	.9				
11	6+75W	29	15	72	.8				
12	7+00W	24	13	63	.6				
13	7+25W	39	18	73	.7				
14	7+75W	39	17	69	.9				
15	8+25W	48	17	58	.8				
16	8+50W	35	16	56	.6				
17	8+75W	44	15	70	.6				
18	9+00W	35	16	73	.7				
19	9+25W	34	17	101	.5				
20	9+50W	28	14	198	.5				
21	9+75W	29	14	200	.8				
22	10+00W	27	13	71	.7				
23	10+25W	25	16	77	1.0				
24	10+50W	26	16	62	.7				
25	10+75W	32	15	67	.6				
26	11+00W	41	14	55	.9				
27	11+25W	40	16	63	.9				
28	11+50W	59	14	57	1.1				



**KAMLOOPS  
RESEARCH & ASSAY  
LABORATORY LTD.**

**GEOCHEMICAL LAB REPORT**

FILE NO. G-630

PAGE 2

KRAL NO.	IDENTIFICATION	ppm Cu	ppm Pb	ppm Zn	ppm Ag				
31	L1+00S 12+25W	36	16	67	.7				
32	12+50W	32	15	62	.7				
33	12+75W	37	18	76	1.0				
34	13+00W	14	9	52	.5				
35	13+25W	19	11	46	.5				
36	13+50W	19	12	53	.6				
37	13+75W	69	16	56	1.3				
38	14+00W	19	10	55	.5				
39	L3+50S 4+00W	18	8	46	.5				
40	4+25W	29	12	52	.8				
41	4+50W	32	12	72	.7				
42	4+75W	25	8	56	1.0				
43	5+00W	25	10	57	.8				
44	5+25W	81	12	55	.8				
45	5+50W	79	13	50	1.0				
46	5+75W	58	13	64	1.0				
47	6+00W	33	13	61	.9				
48	6+25W	35	11	54	.6				
49	6+50W	81	14	70	1.0				
50	6+75W	43	14	68	.9				
51	7+00W	32	14	72	.8				
52	7+25W	43	14	73	.8				
53	7+50W	42	15	61	.8				
54	8+00W	31	14	76	.6				
55	8+25W	37	14	88	1.1				
56	8+50W	35	12	64	.6				
57	8+75W	91	19	96	1.0				
58	9+00W	32	11	66	.6				

**KAMLOOPS  
RESEARCH & ASSAY  
LABORATORY LTD.**

**GEOCHEMICAL LAB REPORT**

FILE NO. G-630

PAGE 3

KRAL NO.	IDENTIFICATION	ppm Cu	ppm Pb	ppm Zn	ppm Ag				
61	L3+50S 9+75W	38	14	60	.6				
62	10+00W	29	14	62	.8				
63	10+25W	35	10	52	.6				
64	10+50W	37	10	49	.7				
65	11+25W	32	11	75	.8				
66	11+50W	35	11	68	1.0				
67	11+75W	27	12	64	1.0				
68	12+00W	29	16	69	1.2				
69	12+25W	26	16	72	1.2				
70	12+50W	32	14	56	.8				
71	12+75W	19	11	60	.6				
72	13+00W	19	12	58	.8				
73	13+25W	20	11	51	.6				
74	13+50W	30	14	57	.9				
75	13+75W	25	13	69	1.0				
76	14+00W	21	10	58	.9				
77	L6+00S 4+00W	36	14	86	.8				
78	4+25W	32	14	64	1.0				
79	4+50W	20	13	76	1.2				
80	4+75W	28	13	66	1.1				
81	5+00W	28	12	59	.8				
82	5+25W	31	11	58	.7				
83	5+75W	159	13	53	1.3				
84	6+00W	52	13	72	1.0				
85	6+25W	47	14	59	1.1				
86	6+50W	69	14	58	1.0				
87	6+75W	42	13	59	.9				
88	7+00W	76	14	52	1.0				

**KAMLOOPS  
RESEARCH & ASSAY  
LABORATORY LTD.**

**GEOCHEMICAL LAB REPORT**

FILE NO. G-630

PAGE 4

KRAL NO.	IDENTIFICATION	ppm Cu	ppm Pb	ppm Zn	ppm Ag				
91	L6+00S 7+75W	19	12	65	.6				
92	8+00W	22	11	53	.5				
93	8+25W	22	10	66	.5				
94	8+50W	19	10	53	.5				
95	8+75W	21	13	63	.7				
96	9+50W	65	14	65	1.2				
97	9+75W	31	13	62	.5				
98	10+00W	30	12	68	.6				
99	10+25W	24	13	70	.8				
100	10+50W	42	17	58	.9				
101	10+75W	33	14	51	.7				
102	11+00W	26	16	59	.6				
103	11+25W	41	16	105	1.2				
104	11+50W	42	12	53	.6				
105	11+75W	26	13	57	1.0				
106	12+00W	22	14	53	.6				
107	12+25W	29	9	74	.4				
108	12+50W	28	14	63	.5				
109	12+75W	22	13	54	.6				
110	13+00W	26	12	60	.5				
111	13+25W	23	16	53	.7				
112	13+50W	27	14	57	.6				
113	13+75W	22	14	58	.5				
114	14+00W	19	13	49	.6				
115	L8+50S 9+00W	29	14	69	.6				
116	9+75W	77	18	46	.9				
117	10+00W	21	10	44	.5				
118	10+25W	29	8	64	.5				



Scope Exploration Services Ltd.

Box 1101  
Merritt, B.C. V0K 2B0

DATE

September 25, 1981

NUMBER

Phone 378-5384

Pacific - Northwest Geo Tech Ltd.

P.O. Box 3064

Kamloops, B.C.

ATTENTION: Mr. D'Angelo

TERMS:

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE

\$ \_\_\_\_\_

DATE	CHARGES AND CREDITS	BALANCE
	BALANCE FORWARD	
	Re: Geochemical Survey done on your New Alameda M.C., on Swakum Mnt., in the Nicola Mining Division. Flagging 3.5 km of grid lines, and gathering 134 samples.	
	John Begg; September 24, 1981	97 75
	Peter Johnston; September 24, 1981	97 75
	Maurice Mathieu; Supervisor; Sept. 24	115 00
	4X4 Truck Rental	36 00
	Gas for Truck	15 00
	Geochem bags, topo string, and flagging tape.	25 00
	Assay 134 geochem @ \$3.90 each for Ag, Cu, Zn, Pb	<u>522 60</u>
	THANK YOU	<u>\$909 10</u>

Scope Exploration Services Ltd.

*Thank You*

PAY LAST AMOUNT  
IN THIS COLUMN

SHERWIN F. KELLY  
P. Eng.  
Geophysicist and Geologist

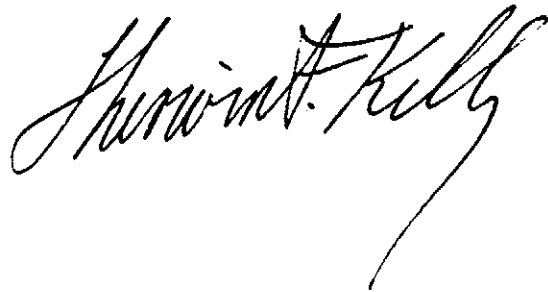
BOX 277 - MERRITT, B.C. - V0K 2B0  
CANADA  
PHONE 378-5513  
Feb. 9, 1982

In account with

Pacific Northwest Geo Tech Ltd.  
Box 3064  
Kamloops, B.C., V2C 5N3

for professional  
services in January and February, 1982.

To preparation of report on assessment  
work, carried out on the New Alameda  
claim of six units, set forth in a  
report dated Feb. 9, 1982.....\$600.00



**KAMLOOPS  
RESEARCH & ASSAY  
LABORATORY LTD.**

*Sherwin Kelly*

Scope Explorations Ltd.  
Box 1101  
Merritt, B.C.  
VOK 2B0

ATTENTION: MR. MAURICE MATHIEU

**B.C. CERTIFIED ASSAYERS**

2095 WEST TRANS CANADA HIGHWAY — KAMLOOPS B.C.  
V1S 1A7  
PHONE: (604) 372-2784 — TELEX: 048-8320

**INVOICE:** 81-1491  
**DATE:** October 5, 1981  
**FILE No.** G-630

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133 Copper, Zinc, Lead and Silver Geochemical Analysis @ \$ 3.90 \$ 518.70

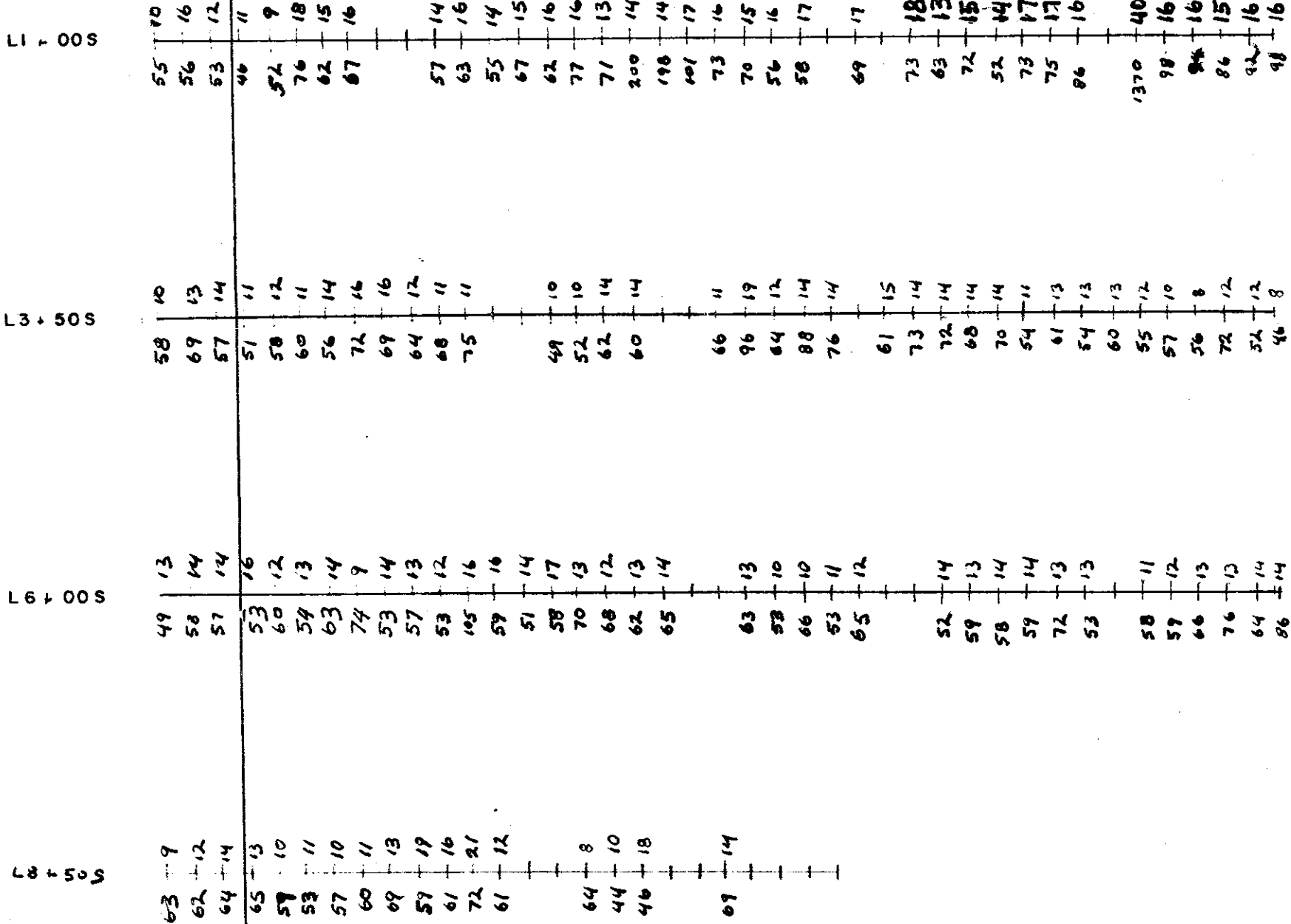
FIG. 4

NEW ALAMEDA MINERAL CLAIM

GEOCHEMICAL SOIL SURVEY SEPTEMBER, 1981

14+00 W 12+00 W 10+00 W 8+00 W 6+00 W 4+00 W

10,024



SOIL VALUES OF LEAD AND ZINC IN PARTS PER MILLION (ppm)

LEAD	BACKGROUND	ZINC
13 ppm	THRESHHOLD	50 ppm
26	ANOMALOUS	100
39		150

+++++ OBSERVATION LINES ; STATIONS AT 25 m INTERVALS  
 LEAD VALUES ENTERED ABOVE THE LINE  
 ZINC VALUES ENTERED BELOW THE LINE

To accompany report on assessment work to Pacific Northwest Geo Tech Ltd. by Sherwin F. Kelly, P. Eng., dated Feb. 9, 1982.

SCALE 1:5000

