

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.04.12

ASSESSMENT REPORT 17294

MINING DIVISION: Omineca

PROPERTY: Butter
 LOCATION: LAT 54 33 14 LONG 125 32 44
 UTM 10 6047914 335374
 NTS 093K12E

CLAIM(S): Butter
 OPERATOR(S): Shaede, E.A.
 AUTHOR(S): Shaede, E.A.
 REPORT YEAR: 1988, 26 Pages

COMMODITIES
 SEARCHED FOR: Copper, Silver, Lead, Zinc

GEOLOGICAL

SUMMARY:

Permian-Pennsylvanian Cache Creek Group(?) volcanics are sandwiched between a quartz monzonite intrusion to the west and peridotite intrusions to the east. The belt of volcanics strikes about north-northwest. A linear multielement soil anomaly has the same trend as the volcanic rocks and topographic lineament. Soil values range to 8 ppm silver, 275 ppm copper, 277 ppm lead, 975 ppm zinc, 61 ppm arsenic and 4 ppm molybdenum. No significant gold, platinum or palladium values occur.

WORK

DONE:

Geochemical
 ROCK 9 sample(s) ;ME
 SILT 5 sample(s) ;ME
 SOIL 42 sample(s) ;ME

MINFILE: 093K 054

LOG NO: 0419	RD.
ACTUAL:	
FILE NO:	

GEOCHEMICAL REPORT
ON
BUTTER CLAIM
RECORD #8758
OMINECA MINING DIVISION
NTS: 93K/12E

LATITUDE: 54⁰ 34' N. (UTM 6048000M N.)
LONGITUDE: 125⁰ 31' W. (UTM 336000M E.)

OWNER & OPERATOR: Eric A. Shaede

FILED

AUTHOR: Eric A. Shaede

DATE: February 29, 1988

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

17,294

TABLE OF CONTENTS

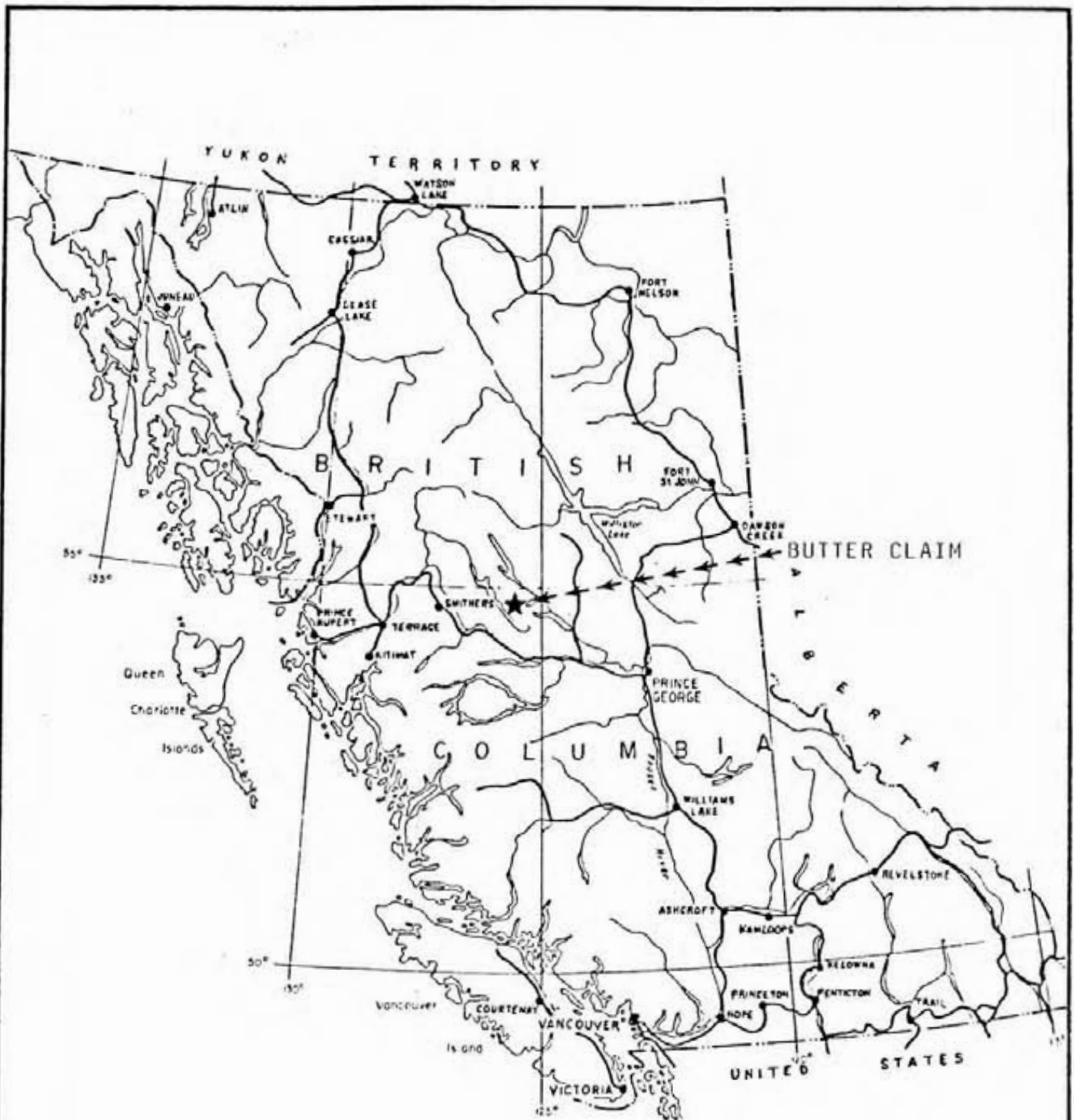
	<u>Pages</u>
INTRODUCTION:	1-8
1. Property Description	1
2. Location and Access	1-5
Map 1 - General Location Map	2
Map 2 - Index Map	3
Map 3 - Detailed Index Map	4
3. Physiography	5-6
4. Previous Work	6-7
5. Scope of Present Work	7-8
RESULTS AND DISCUSSION:	8-18
Map 4 - Sample Location Map	10
Map 5 - Soil Sample Analyses - Copper	11
Map 6 - Soil Sample Analyses - Silver	12
Map 7 - Soil Sample Analyses - Lead	13
Map 8 - Soil Sample Analyses - Zinc	14
Map 9 - Soil Sample Analyses - Arsenic	15
Map 10- Soil Sample Analyses - Molybdenum	16
CONCLUSION:	19
REFERENCES:	19
DETAILED COST STATEMENT:	20
ACKNOWLEDGEMENT:	20
AUTHOR'S CERTIFICATE:	21
APPENDIX 1 - Analyses Certificates	A1-1 - A1-4

INTRODUCTION:

1. Property Description: The Butter claim property consists of a single metric grid claim of 15 units, record number 8758, in the Omineca Mining Division. The anniversary date is August 26th and with the application of the work reported herein, the claim will be in good standing until 1990. The claim was staked by the author on July 29, 1987 to cover a portion of the forfeited SMJ #2 claim (record 4780) which had been located and explored by Riocanex in 1982/83. The recorded owner of the Butter claim is Eric A. Shaede of R.R. #1, Sicamous, B.C., VOE 2V0.

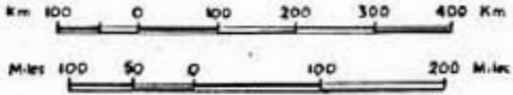
2. Location and Access: The Butter claim is located on the eastern slope of a 1400M high, northnorthwesterly trending mountain ridge west of Butterfield Lake, approximately 40 km by air north-northeast of Burns Lake, B.C.. The legal corner post (LCP) is situated about 250 meters west of the west shoreline of Butterfield Lake about 1 km from its' southern end. The claim extends 5 units west and 3 units north of the LCP. Maps 1,2 and 3 show the claim relative to major highways, roads and topography. There are no other claims in good standing in the immediate vicinity of Butterfield Lake.

The claim is accessable only by air since the closest logging road on the north shore of Babine Lake is about 10 km away. The most economical access is via float equipped aircraft from Burns Lake (40km south). A Lakes District Air Services



MAP 1
 GENERAL LOCATION MAP
 BUTTER CLAIM

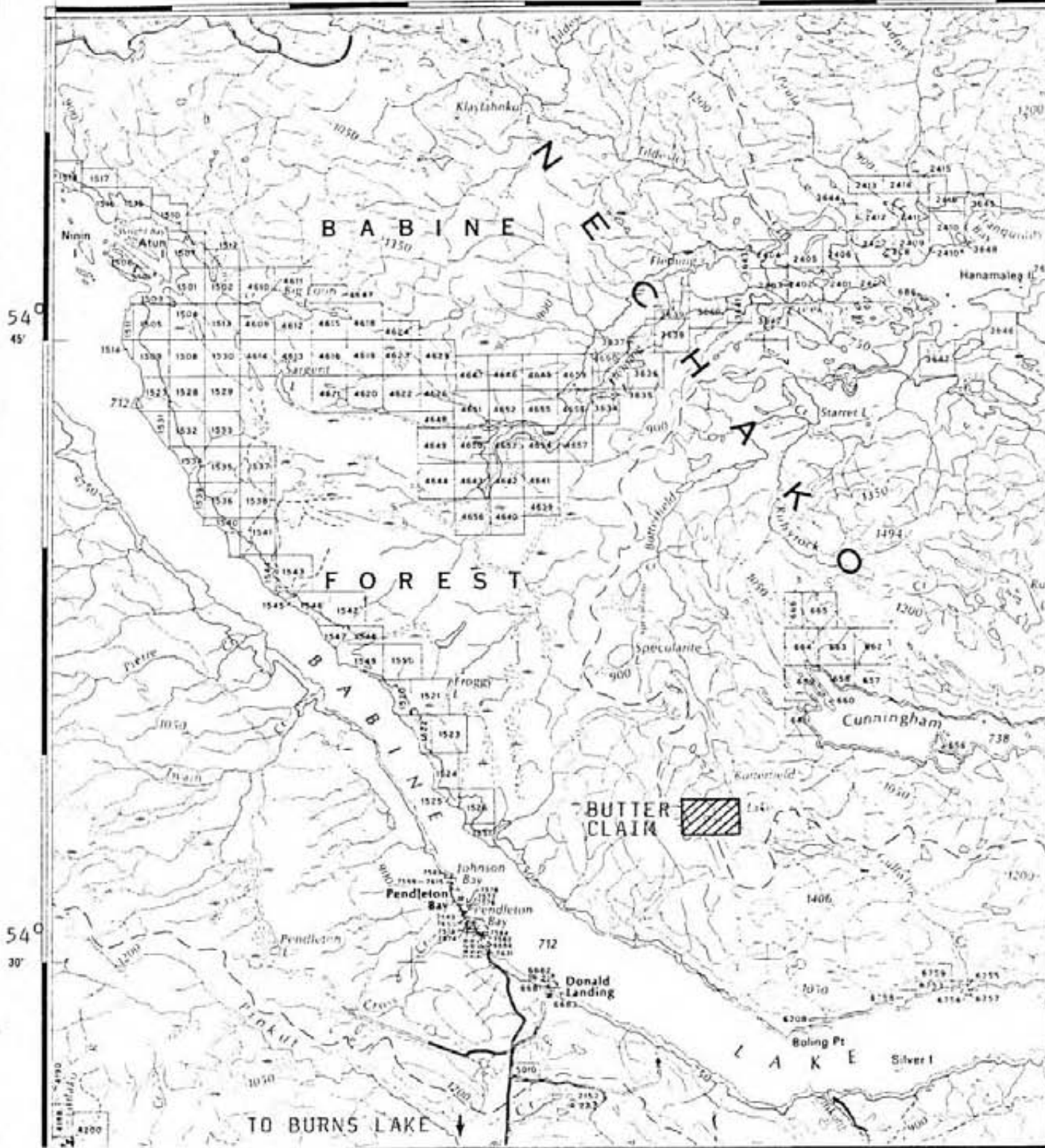
Drawn: EAS	Checked: EAS
Scale: As shown	Date: 22/02/88



128°00'

45'

30'

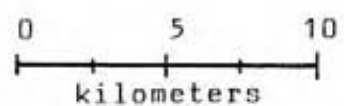


54°
45'

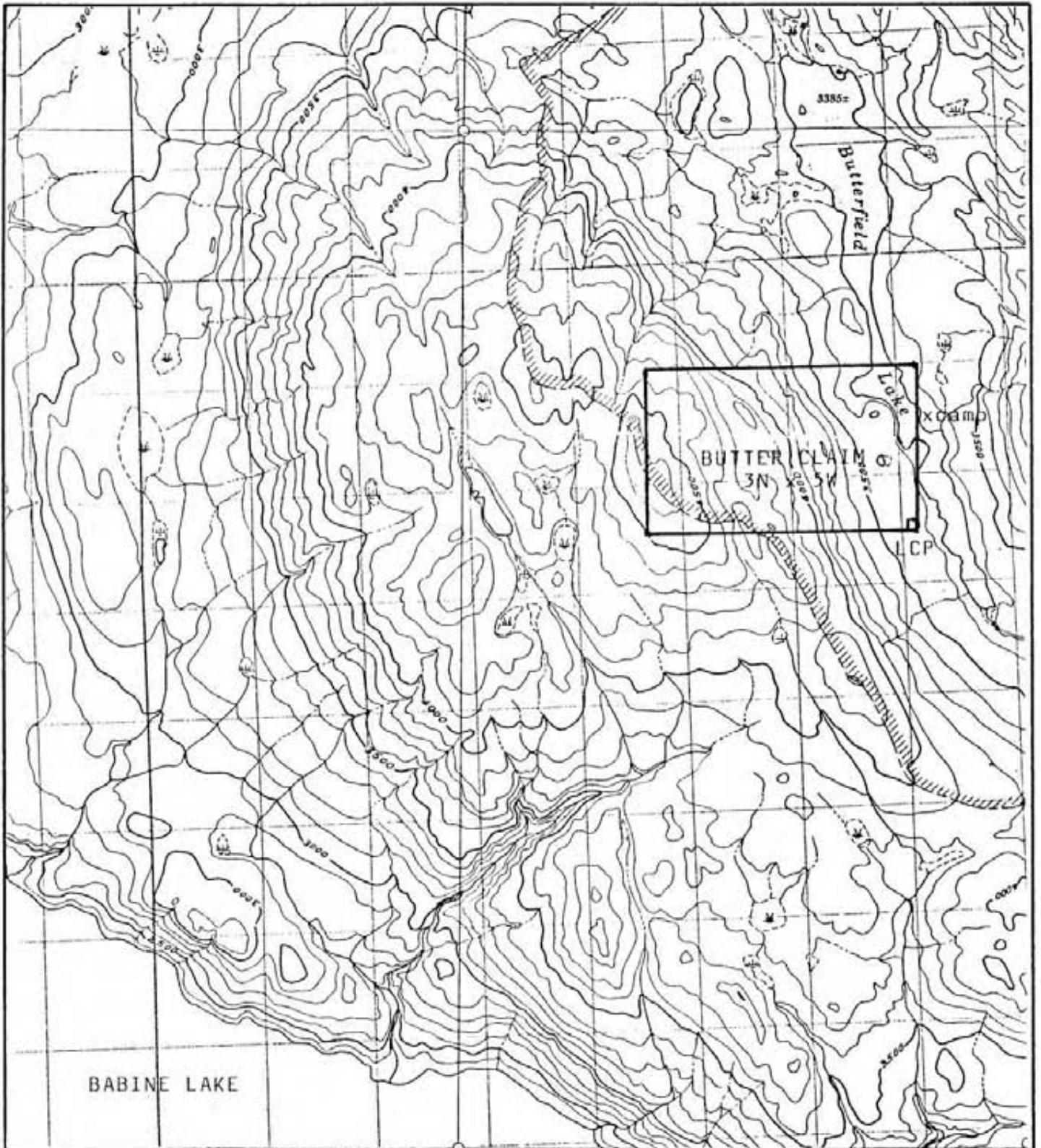
54°
30'



MAP 2
INDEX MAP
BUTTER CLAIM



NTS 93K Scale = 1:250,000



BABINE LAKE

BUTTER CLAIM
3N x 5W

x camp

LCP

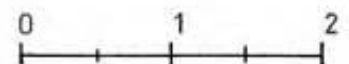


MAP 3

DETAILED INDEX MAP

BUTTER CLAIM

NTS 93K/12E Scale = 1:50,000



Beaver floatplane was used to travel to the property for this work program and the one-way flying time was only 15 minutes. Access to the western part of the claim would be easier by helicopter and several suitable landing sites are available near the summit of the ridge. Pendelton Bay on the south shore of Babine Lake would be a good staging area for a helicopter supported exploration program. An exploration camp site was established by Riocanex on the east shore of Butterfield Lake about 2 km from its' south end and a fair amount of useable lumber and plywood remains there and could be utilised for a new camp. For the exploration work reported herein, a small tent camp was established on the west shore of the lake about 500 meters north of the LCP.

3. Physiography: The claim area is mostly covered with a mature forest of balsam and spruce with some pine. Underbrush is extremely heavy in some places with willows and devils club being common. There are some wet and swampy areas, particularly along the lakeshore. The elevation rises fairly steadily going to the west from the lakeshore, with a total elevation gain of about 400 meters to the crest of the north-northwesterly trending ridge near the western claim boundary. Some outcrop was found along the upper portion of the ridge and at a few places along the lakeshore. At other places, an indeterminate amount of soil and till cover exists. Several small creeks drain from the mountain slopes, primarily into Butterfield Lake. These creeks would provide adequate water for camp and exploration at lower

elevations. Water supply at the top of the ridge is scarce. Snowfall is expected to be moderate in the area due to the regional climatic influence of Babine Lake and the claim is probably snowfree from June to November.

4. Previous Work: The Minfile reference number for the original exploration work is 93K/54. The BL claims were staked over the ridge west of Butterfield Lake by Royal Canadian Ventures Ltd. in 1969 in response to the release of aeromagnetic survey data which showed a large magnetic anomaly in the area. Royal Canadian published two assessment reports, 2319 and 2917, which contained the results of their soil sampling, magnetic and VLF-EM surveys on these claims. They subsequently drilled two short pack-sack holes totalling 165 feet in 1971 but the results of this drilling were not published and the claims were later allowed to forfeit. Riocanex Ltd. discovered anomalous copper and silver values in lake sediment samples taken from the south end of Butterfield Lake in 1982 and they subsequently staked a block of 4 SMJ claims covering the ground peripheral to the lake. In 1983 Riocanex mapped the geology and collected 1845 soil samples on a 50 x 100 meter grid covering their claims and published their results in A.R. #11,520. Several large copper anomalies were found on the east side of the lake and several smaller ones on the west side. Silver was considered to be unimportant and did not show any large anomalies. Apparently Riocanex never followed up on this work and the claims were allowed to forfeit in 1986.

Riocanex's geological mapping identified three sill-like bodies of rock with a NNW strike (parallel to Butterfield Lake which is postulated to be underlain by a major fault). The most westerly of the rock units is a pyroxenite porphyry - possibly volcanic in origin. The central unit is a fine grained serpentinitised peridotite and east of Butterfield Lake a very coarse grained pyroxenite outcrops. The ultramafic units are considered to be equivalent to the Trembleur Intrusions shown on GSC Map 907A. Mapping by Royal Canadian Ventures further to the west identified volcanic greenstones and tuffs in addition to the pyroxene porphyry in a northwesterly trending belt about 2 km wide sandwiched between a large body of quartz-monzonite to the west and the peridotite on the east. Gabbroic sills are reported to intrude the volcanics.

5. Scope of the Present Work: Riocanex, in A.R. #11,520, noted a minor concentration of silver up to 11.6 ppm with copper, lead and zinc, for a few soils on the western part of their grid but they apparently considered the anomaly to be too small and unimportant. The author reviewed their data and plotted the silver, lead, zinc and arsenic values and found that a multi-element anomaly about 100 meters wide and probably several kilometers long existed. The strike of the anomaly is coincident with the major structural trend. Examination of the Royal Canadian Ventures VLF-EM data indicated the presence of a strong conductor in about the same location as the soil anomaly but unfortunately the published maps are inadequate to allow exact

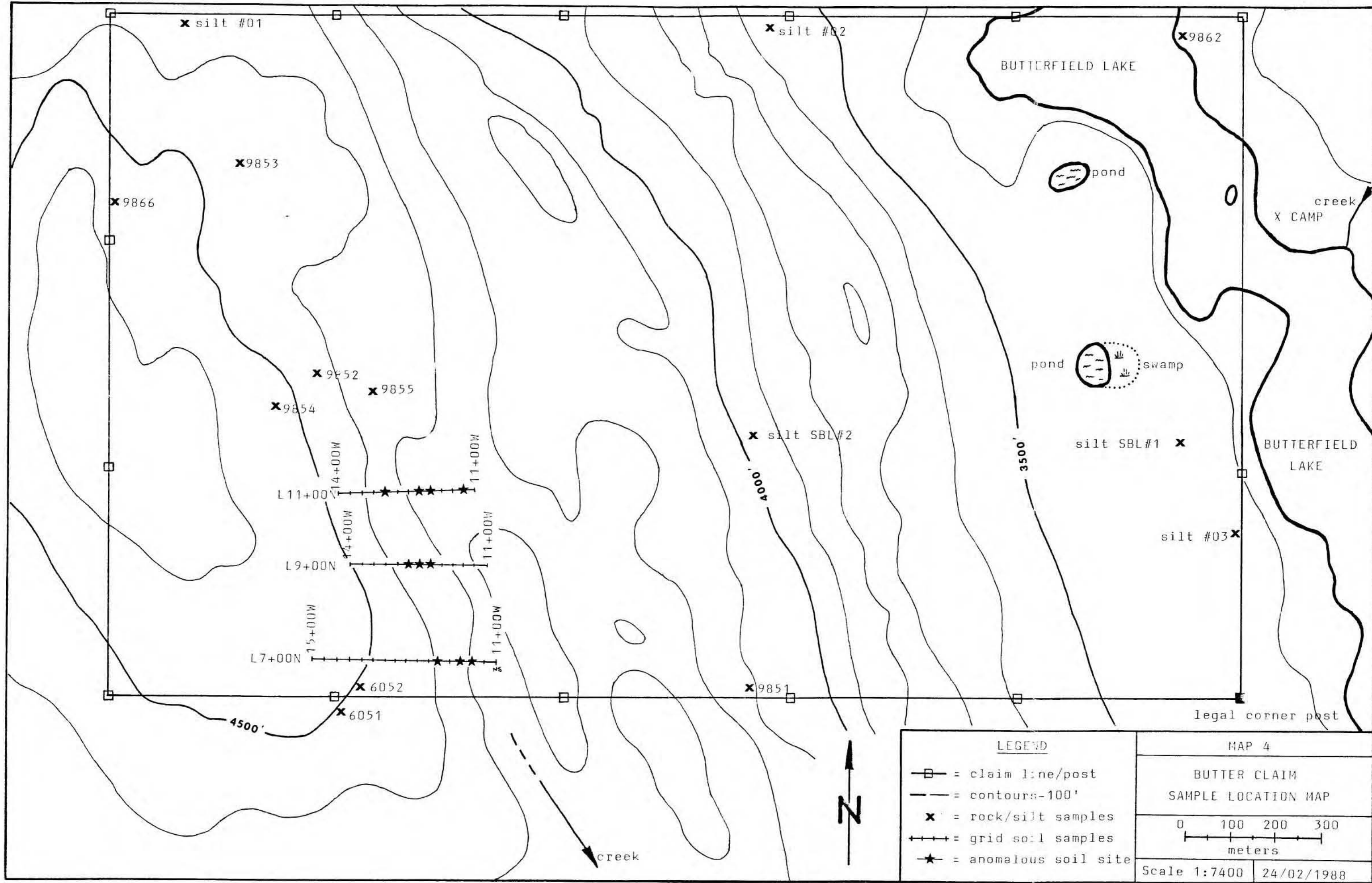
correlation of the two survey grids. Therefore the author concluded that the multi-element soil anomaly was more significant than Riocanex originally suggested and was worthy of follow-up work. On July 29th, 1987 the author completed staking the Butter claim to cover the most intense portion of the soil anomaly and with the assistance of Lacana Mining Corporation personnel conducted follow-up geochemical soil, silt and rock sampling in order to confirm and further evaluate the prospect. A total of 42 soil samples, 5 silt samples and 9 rock samples were collected within the Butter claim boundaries and these samples were analysed for gold, platinum and palladium by a fire assay - ICP mass spectrometer procedure and multi-element ICP trace analyses. At a later date, 10 of the anomalous soil samples were analysed for barium and flourine by ICP and mercury by flameless AA.

RESULTS AND DISCUSSION:

The old Riocanex grid lines were found to be still useable and these were used for the determination of sample locations where possible. A total of 9 rock samples were collected from outcrop. No heavily mineralized rocks were found during a limited amount of prospecting. Five silt samples were collected from some of the creeks on the claim. The west end of lines 7+00N, 9+00N and 11+00N were selected to be soil resampled between 11+00W and 14+00W (15+00W for L7+00N only). In addition to resampling the 50M stations, additional samples were collected

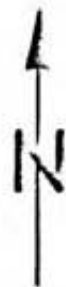
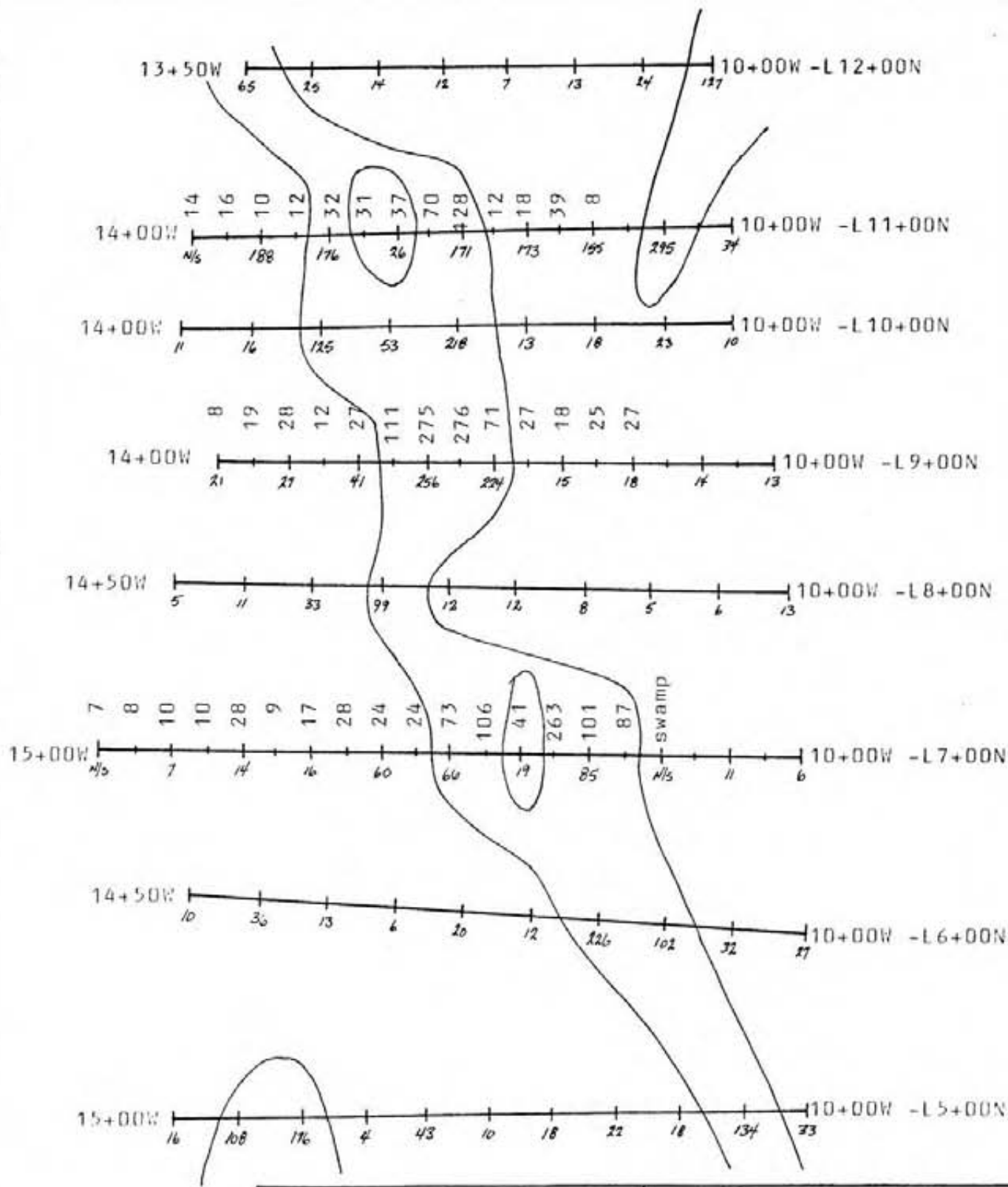
at 25M intervals to give more detail. In total 42 soil samples were taken from "B" horizon soils using a mattock. In some places no distinct "B" horizon was observed and a "C" horizon soil was taken. In all cases, care was used to avoid organic soils. All samples were submitted to Acme Analytical Laboratories Ltd. in Vancouver, B.C.. The soil and silt samples were dried and sieved on 80 mesh. Rock samples were dried, crushed and pulverised to about -100 mesh. All pulps were analysed for gold, platinum and palladium using a 10 gram fire-assay preconcentration followed by ICP-mass spectrometer detection procedure. In addition, all of the pulps were run for multi-elements by ICP using the method noted on the analyses certificates given in Appendix 1. All sample locations are plotted on Map 4 which shows the location of the resampled portion of the old Riocanex grid relative to the lake and topography. The grid location was only roughly verified and was assumed to be exactly as given in A.R. #11,520. Soil sample analyses results for copper, silver, lead, zinc, arsenic and molybdenum are plotted on Maps 5 to 10 inclusive. Riocanex's data is also included on these maps to assist in contouring of the anomalous zone. A description of the rock samples character is given on the analysis certificate in Appendix 1.

None of the rock samples taken contained any precious metals values although some contained minor copper and a few have minor amounts of other trace elements. No significant alteration was observed for any of the outcrop sampled, except for silicification in one andesite sample. Unfortunately, no outcrop was found in the immediate vicinity of the soil anomaly.



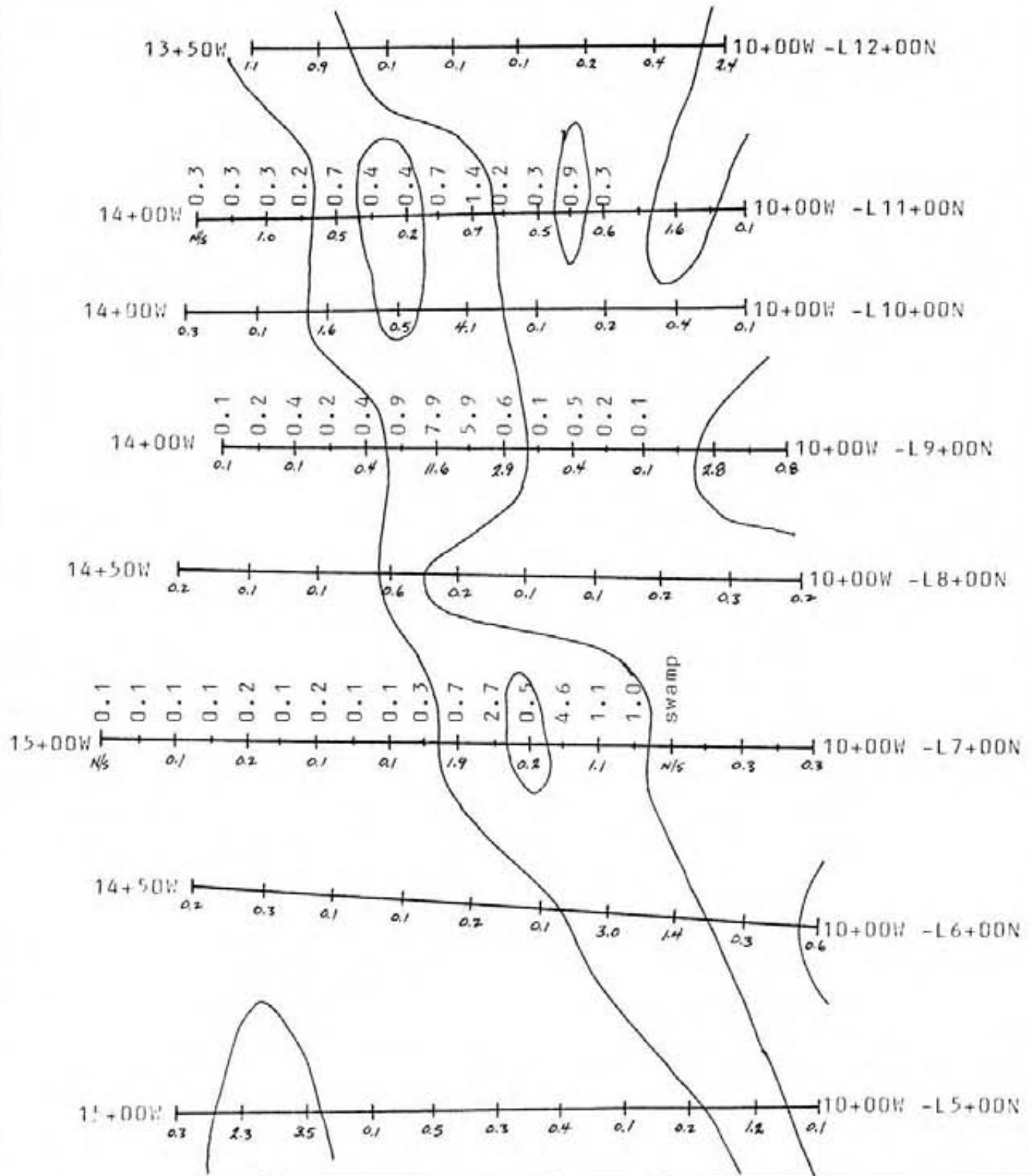
LEGEND	
	= claim line/post
	= contours-100'
	= rock/silt samples
	= grid soil samples
	= anomalous soil site

MAP 4	
BUTTER CLAIM SAMPLE LOCATION MAP	
0 100 200 300 meters	
Scale 1:7400	24/02/1988



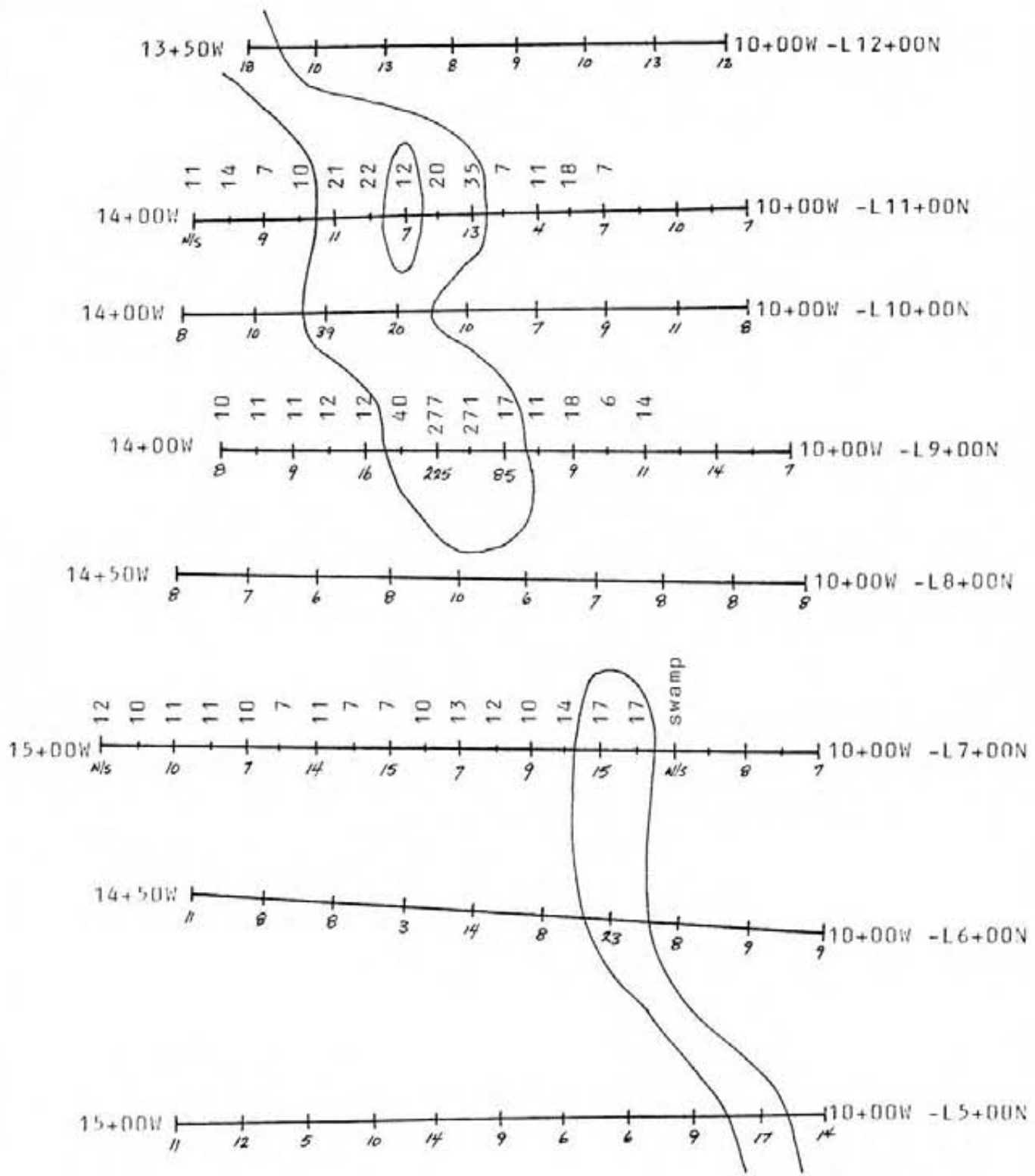
NOTE: Typewritten values above the lines are from present samples.
 Handwritten values below lines are RioCanex data from A.R. #11,520.
 Contoured @ 50 ppm copper.

MAP 5	
SOIL SAMPLE ANALYSES COPPER (PPM)	
0 100 200 meters	
Scale 1:4000	25/02/1988



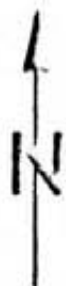
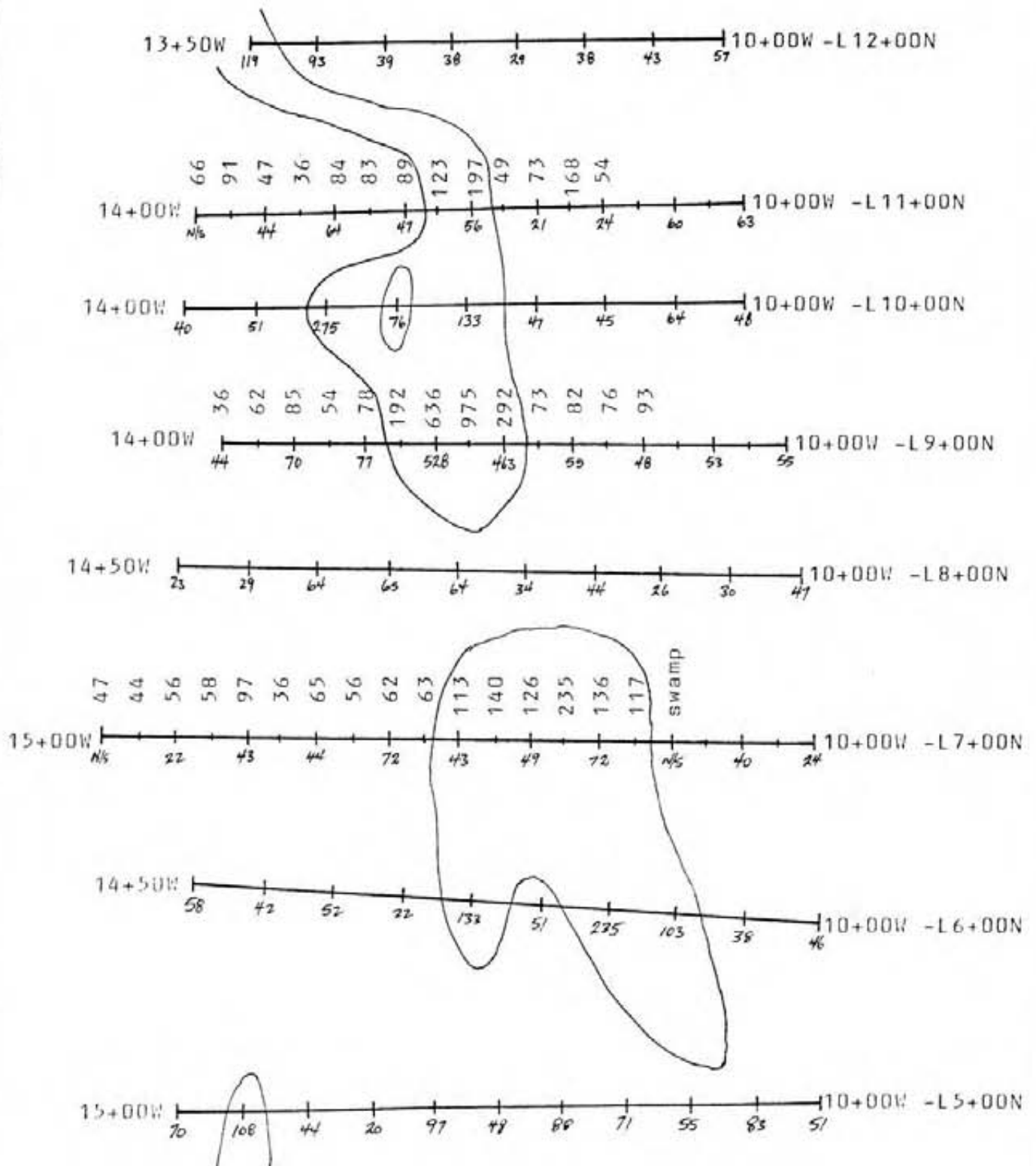
NOTE: Typewritten values above the lines are from present samples.
 Handwritten values below lines are Riocanex data from A.R. #11,520.
 Contoured @ 0.5 ppm silver.

MAP 6	
SOIL SAMPLE ANALYSES SILVER (PPM)	
Scale 1:4000	25/02/1988



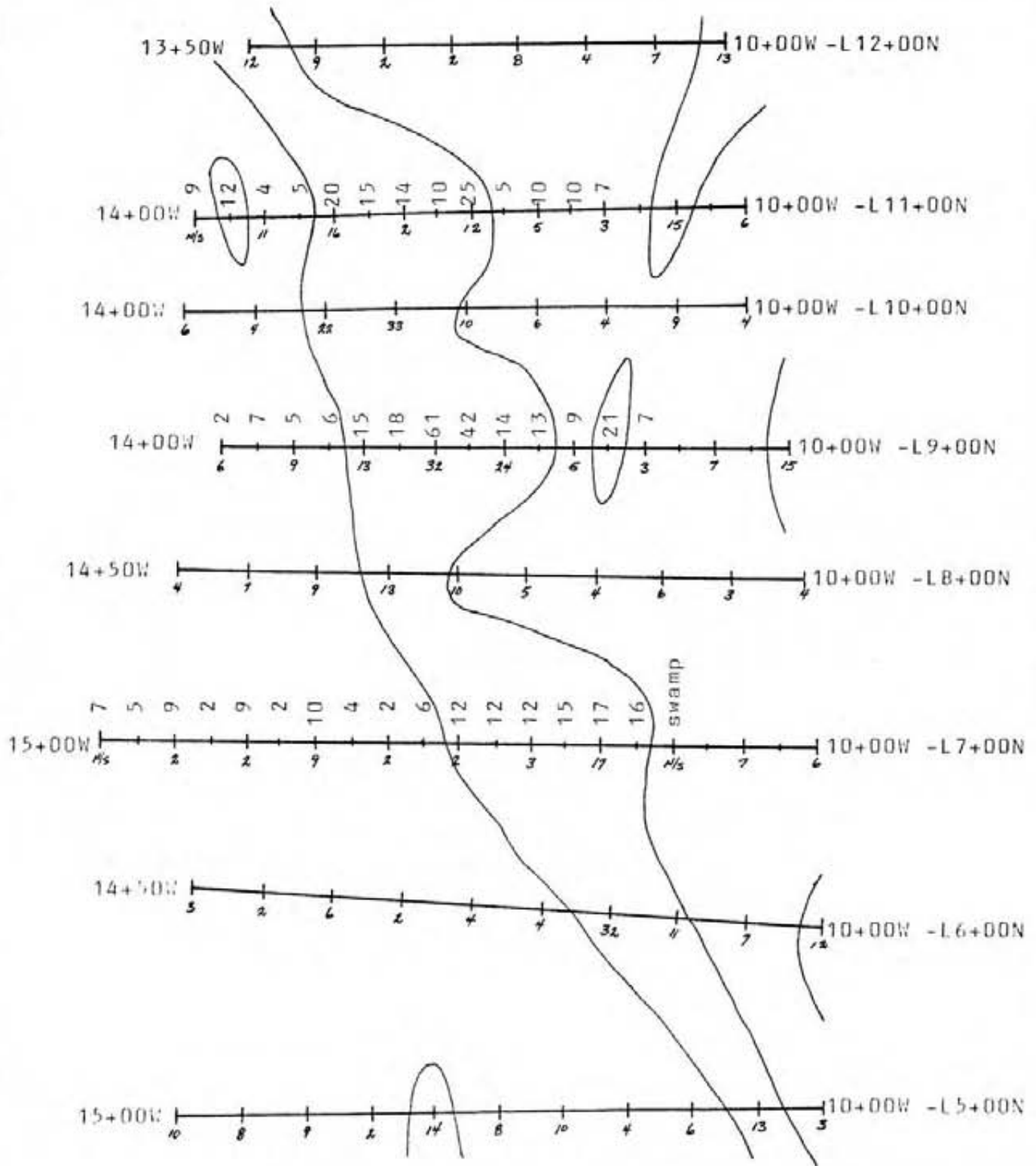
NOTE: Typewritten values above the lines are from present samples.
 Handwritten values below lines are Riocanex data from A.R. #11,520.
 Contoured @ 15 ppm lead.

MAP 7	
SOIL SAMPLE ANALYSES LEAD (PPM)	
Scale 1:4000	25/02/1988



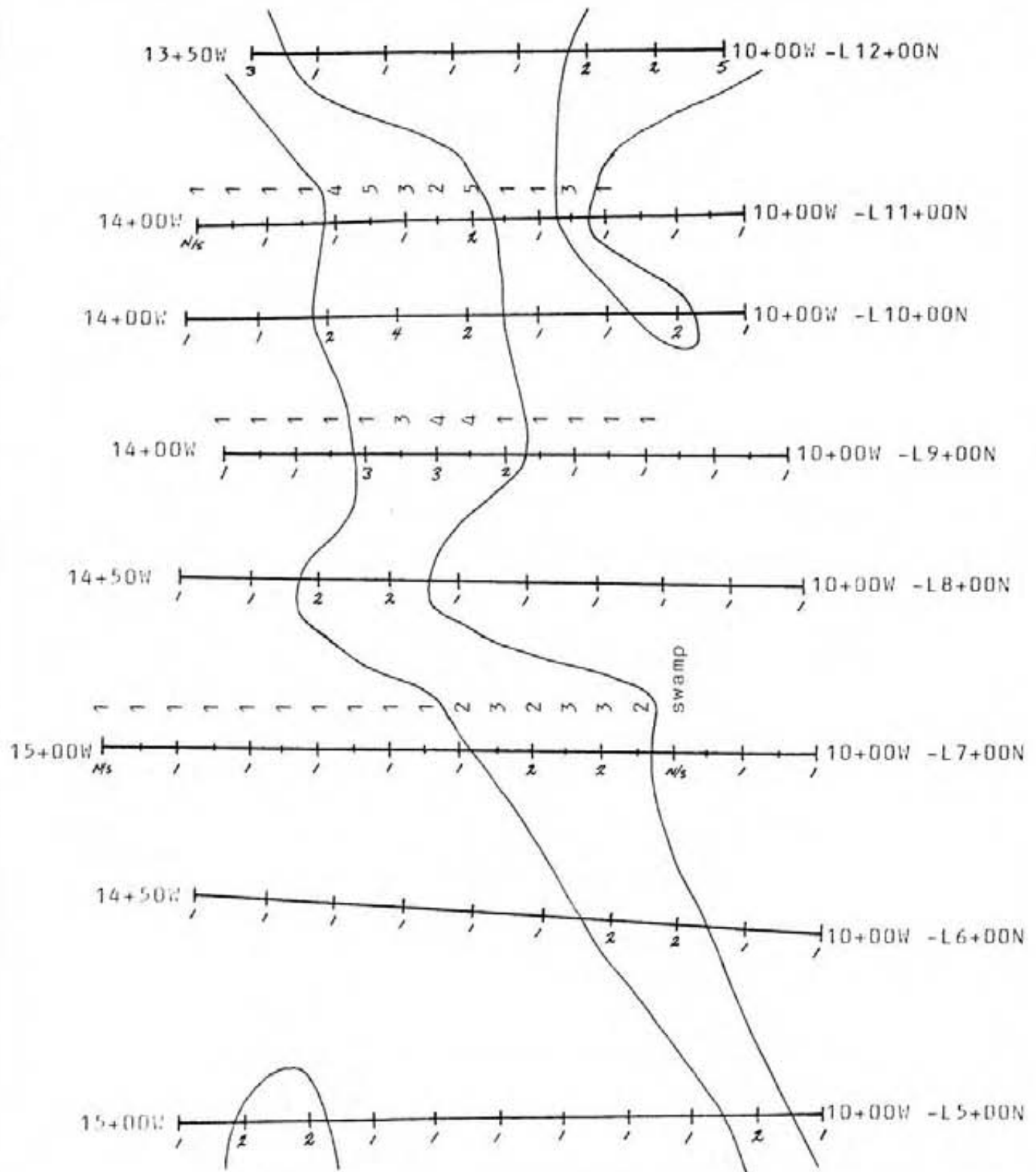
NOTE: Typewritten values above the lines are from present samples.
 Handwritten values below lines are Riocanex data from A.R. #11,520.
 Contoured @ 100 ppm zinc.

MAP 8	
SOIL SAMPLE ANALYSES ZINC (PPM)	
0 100 200 meters	
Scale 1:4000	25/02/1988



NOTE: Typewritten values above the lines are from present samples. Handwritten values below lines are Riocanex data from A.R. #11,520. Contoured @ 10 ppm arsenic.

MAP 9	
SOIL SAMPLE ANALYSES ARSENIC (PPM)	
Scale 1:4000	25/02/1988



NOTE: Typewritten values above the lines are from present samples.
 Handwritten values below lines are Riocanex data from A.R. #11,520.
 Contoured @ 2 ppm moly.

MAP 10	
SOIL SAMPLE ANALYSES MOLYBDENUM (PPM)	
<p>0 100 200 meters</p>	
Scale 1:4000	25/02/1988

Two of the silt samples, silt #01 and SBL #2, contained anomalous silver and zinc values based on a comparison to the regional silt sample data for map sheet 93N (93K has not been surveyed). Lead, antimony and molybdenum are also elevated and probably anomalous in sample SBL #2 which was taken from a small creek near the center of the claim. The precious metals values in the silts are low and based on the regional survey data for 93L, the traces of gold indicated for a couple of the samples is probably not significant. All of the samples showed traces of palladium above the detection limit but the significance of such low values is unknown. The samples were tested for platinum and palladium because of the known presence of ultrabasic rocks on the property.

The soil samples taken in this work confirmed the existence of a strong linear multi-element geochemical anomaly at the west end of grid lines 7,9 and 11. The values obtained from the resampled stations generally agreed well with the original data of Riocanex. Maximum values found in the samples of the present survey were: 7.9 ppm silver, 276 ppm copper, 277 ppm lead, 975 ppm zinc, 61 ppm arsenic and 5 ppm molybdenum. In addition, nickel, cobalt, strontium, cadmium, antimony, calcium, lanthanum, barium, aluminum and potassium all are elevated in the anomalous samples as compared to the background samples. A few of the samples from the anomalous zones on each line were analysed for barium, flourine and mercury. Barium values were confirmed to be elevated and one sample was definitely anomalous. Flourine and mercury values showed some variation but none were particularly

anomalous. None of the samples contained any significant precious metals values, only three isolated low golds (11-13 ppb) were found. Using Riocanex's data to assist in contouring, the general strike of the anomalous soils was determined to be 335° ($N25^{\circ}W$). This strike is essentially identical to the strike of a prominent topographical linear feature immediately adjacent to the anomaly. The anomaly is traceable (using Riocanex's data) for at least 700 meters along strike as shown on Maps 5-10. North of line 12+00N, the projected strike of the anomaly takes it west of the west end of the Riocanex grid. Anomalous values do occur at the ends of some of the lines to 24+00N and these probably are the result of downslope dispersion of metals from the same source structure. South of line 5+00N, anomalous samples occur on strike to line 2+00N. Thus the potential strike length of the mineralised source structure is more than 2000 meters.

A comparison of the position of the soil anomaly to the Royal Canadian Ventures geological map (A.R. #2917) suggests the mineralization may be in a thin bed of volcanic tuffs which were inferred to exist from geophysical data (no outcrop is shown on their map for this particular tuff zone). A strong VLF-EM anomaly was found by R.C.V. with a strike of NNW in the area of the soil anomaly and was inferred to be a tuff zone based on other conductive zones found with outcrop of pyritic tuff. R.C.V. had also obtained a couple of highly anomalous silver-in-soil values for samples taken in the area of the present survey. As noted above, the R.C.V. maps from A.R. 2319 and 2917 are not accurate enough to allow exact correlation of the two data sets.

CONCLUSION:

A narrow (100 M. wide) linear, multi-element (Ag, Cu, Pb, Zn As, Mo, etc.) soil anomaly at least 700 M. and probably more than 2000 M. long was confirmed to exist near the summit of a broad mountain ridge west of Butterfield Lake. The strike of the anomaly was determined to be 335° ($N25^{\circ}W$) which is coincident with the major structural trends of the region. The source of the anomaly was not located but it is probably a vein or mineralized shear zone. The anomaly is approximately coincident with the published location of a strong VLF-EM conductor discovered in 1970.

Future work should involve detailed prospecting for outcrop, a new VLF-EM survey and hand-trenching immediately up-slope from the strongest part of the soil anomaly (i.e. L9+00N, 13+00W). Additional soil sampling along the projected strike to the north and south is also recommended to further evaluate the total extent of the mineralization.

REFERENCES:

B.C.D.M. Assessment Reports, 2319, 2917 and 11,520.

DETAILED COST STATEMENT:*

Sampling & travel, July 29-30,1987 - 3 man-days @ \$150...	\$450.00
Field accomodation and meals - 3 man-days @ \$35.....	\$105.00
Analyses - Acme Analytical Labs - 47 soils/silts @ \$16 $\frac{1}{2}$...	\$787.25
- 9 rocks @ \$19.....	\$171.00
- 10 soils @ \$10.....	\$100.00
Total analyses....	\$1058.25
Freight on samples - Greyhound - estimated.....	\$30.00
Transportation - Lakes District Air Services - $\frac{1}{2}$ total...	\$171.00
Transportation - truck - Smithers-Burns Lake - $\frac{1}{2}$ total....	\$31.00
Transportation - truck - Smithers-Sicamous - $\frac{1}{2}$ total.....	\$100.00
Sample bags, flagging, thread, phone, etc.....	\$25.00
Report costs - copies, maps, air-photos, etc.....	\$100.00
Report writing, typing, drafting - 3 man-days @ \$150.....	\$450.00
TOTAL COSTS	<u>\$2520.25</u>

*Only costs incurred after claim staking was completed are expensed here.

ACKNOWLEDGEMENT:

Lacana Mining Corporation's financial support for this project (analyses, camp costs and transportation) and the assistance of their field geologists, R.G. Johnston and L. Uher, who collected most of the samples, is very gratefully acknowledged.

AUTHOR'S CERTIFICATE:

I, ERIC ALBERT SHAEDE, of 411 Coach Road, R.R. #1, Sicamous, B.C., V0E 2V0, do hereby certify that:

- I am a graduate of the University of B.C. and I received degrees of B.Sc., M.Sc. and Ph.D. from that University in 1966, 1968 and 1971 respectively.
- I have been employed in the mining industry from 1973 at various positions ranging from metallurgist to mill superintendent to mine manager.
- I have successfully completed the Province of B.C., Mineral Exploration Course for Prospectors on May 18, 1985 and I have been engaged in prospecting and mineral exploration full-time from that date.
- I personally supervised the work program reported herein and personally wrote this report based on that work and information gathered from published reports.

Dated at Sicamous, B.C., February 29, 1988,



Eric A. Shaede, Ph.D.

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 MCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-ROCK P2-SOIL P3-SOIL/SILT AURIF PT# PD# BY FA-MS.

DATE RECEIVED: AUG 04 1987 DATE REPORT MAILED: *Aug 14/87* ASSAYER: *A. J. ...* DEAN TOYE, CERTIFIED B.C. ASSAYER

LACANA MINING PROJECT-EL File # B7-2485 Page 1

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AURIF	PT#	PD#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM	PPM	PPM	
G-6051	1	32	6	27	.3	21	9	675	1.41	2	15	ND	1	42	1	2	2	30	8.02	.055	2	46	.84	22	.07	2	.87	.04	.04	2	2	5	6
G-6052	2	12	12	77	.4	2	5	830	2.43	6	9	ND	2	41	1	2	2	22	.67	.077	10	1	.87	126	.05	22	1.22	.08	.09	1	2	2	2
S-9851	1	23	9	32	.3	28	8	232	1.94	6	6	ND	3	185	1	2	2	57	2.14	.173	7	9	1.14	27	.14	2	1.28	.08	.19	2	1	2	4
S-9852	11	135	11	81	.4	39	20	835	4.88	7	7	ND	2	178	1	3	2	105	1.37	.130	5	73	2.14	181	.30	2	2.58	.08	.47	1	11	2	7
S-9853	2	530	6	68	.5	48	14	461	2.39	6	5	ND	1	133	1	2	2	58	1.55	.154	2	133	1.64	130	.16	2	1.60	.07	.43	2	3	7	6
S-9854	1	65	2	56	.3	80	17	474	2.66	10	5	ND	2	55	1	2	2	57	1.42	.367	2	277	2.43	97	.12	21	1.73	.07	.34	2	1	7	10
S-9855	1	218	10	118	.3	83	29	1284	5.97	20	5	ND	1	87	1	2	2	161	3.20	.213	2	236	5.15	226	.18	2	3.97	.02	.65	4	1	6	6
S-9862	1	130	8	54	.3	100	25	775	4.47	9	5	ND	3	211	1	6	2	85	5.37	.145	7	303	4.49	385	.07	4	1.89	.05	1.08	3	1	10	9
S-9866	2	107	2	21	.4	5	8	289	2.31	2	5	ND	1	146	1	2	2	51	1.51	.182	2	9	.59	29	.18	2	.86	.12	.13	1	4	2	7
STD C/FA-5X	19	58	39	131	7.1	72	28	946	3.97	41	13	8	37	48	19	15	24	58	.48	.092	37	63	.88	171	.08	33	1.85	.08	.13	14	102	97	100

ROCK SAMPLE DESCRIPTIONS:

- G-6051 = Highly silicified, vuggy, rusty andesite from outcrop about 30M south of I.D. post 4W.
- G-6052 = "Jasperite" from float boulder about 50M east of I.D. post 4W.
- S-9851 = Chloritised pyroxenite with small amt of chalcopryrite from outcrop about 100W of 2W post.
- S-9852 = Sheared, chloritised pyroxenite with cpy and spec. hem. from outcrop , 13+00N just off grid
- S-9853 = Por. Pyroxenite with cpy, malachite from outcrop about 400M SE of NW corner of claim.
- S-9854 = Sheared por. pyroxenite with epidote from outcrop about 300M east of old R.C.V. camp.
- S-9855 = Sheared pyroxenite with minor qtz & calcite veins from outcrop about 250M east of 9854.
- S-9862 = Sheared andesite(?) with rusty qtz from outcrop on east shore of Butterfield Lake.
- S-9866 = Andesite with minor sulfides from outcrop about 70M north of post 5W2N.

APPENDIX 1

PAGE A1-1

.../A1-2

LACANA MINING PROJECT - EL FILE # B7-2445

Page 2

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	PT	PD	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	PPM	PPM	
BUTTERFLD	1	200	8	99	.8	58	14	644	3.58	9	11	ND	1	16	1	2	2	68	.70	.062	9	133	1.17	265	.08	2	1.68	.01	.21	1	5	1	0
1100N 1400W	1	14	11	66	.3	12	5	210	2.47	9	5	ND	1	15	1	2	2	48	.12	.052	8	24	.27	106	.05	2	1.17	.01	.06	1	2	2	2
1100N 1375W	1	16	14	91	.3	21	6	227	3.38	12	5	ND	2	17	1	2	2	58	.15	.157	7	43	.44	103	.06	2	2.35	.01	.05	2	2	2	2
1100N 1350W	1	10	7	47	.3	52	7	140	1.94	4	6	ND	1	13	1	2	2	42	.14	.044	4	96	.78	66	.12	2	1.16	.02	.06	2	6	3	2
1100N 1325W	1	12	10	36	.2	20	3	109	1.47	5	5	ND	1	15	1	2	2	37	.11	.020	8	52	.32	78	.07	2	.94	.01	.05	1	1	2	2
1100N 1300W	4	32	21	84	.7	27	9	1083	4.05	20	5	ND	1	18	1	2	2	72	.19	.070	11	71	.21	137	.03	2	1.12	.01	.06	1	4	2	2
1100N 1275W	5	31	22	83	.4	34	8	296	3.49	15	5	ND	1	21	1	3	2	73	.23	.075	9	70	.62	117	.07	2	1.45	.02	.07	1	3	2	2
1100N 1250W	3	27	12	69	.4	41	8	306	3.21	14	5	ND	1	20	1	2	2	68	.29	.064	7	91	.82	120	.09	2	1.53	.02	.09	1	2	2	2
1100N 1225W	2	70	26	123	.7	39	12	764	3.38	10	5	ND	2	52	1	2	2	59	.38	.067	18	66	.77	117	.02	2	2.37	.01	.11	2	13	2	3
1100N 1200W	5	128	35	147	1.4	57	28	1947	6.30	25	6	ND	2	74	2	2	2	97	.66	.079	11	82	1.25	515	.01	2	4.09	.01	.22	2	3	2	2
1100N 1175W	1	12	7	49	.2	6	3	100	1.88	5	5	ND	1	16	1	3	2	49	.09	.017	6	26	.05	122	.05	2	.55	.02	.04	1	11	2	2
1100N 1150W	1	18	11	73	.3	11	4	197	2.60	10	11	ND	1	29	1	2	2	71	.28	.020	7	31	.19	162	.09	2	.74	.01	.05	1	4	2	2
1100N 1125W	3	39	18	168	.9	28	10	394	3.52	10	5	ND	2	40	1	2	2	67	.31	.035	12	43	.50	193	.02	2	2.43	.01	.06	2	1	2	2
1100N 1100W	1	8	7	54	.3	8	3	115	1.72	7	5	ND	1	18	1	2	2	40	.15	.031	7	18	.15	110	.05	2	.77	.01	.04	1	4	2	2
900N 1400W	1	8	10	36	.1	8	3	132	1.76	2	5	ND	1	15	1	2	2	47	.13	.029	7	22	.14	66	.09	8	.73	.02	.05	1	1	2	2
900N 1375W	1	19	11	62	.2	20	5	187	2.75	7	5	ND	1	23	1	2	3	62	.26	.058	7	52	.46	90	.08	7	1.15	.02	.07	2	12	2	2
900N 1350W	1	28	11	85	.4	20	7	423	2.71	5	5	ND	1	27	1	2	2	56	.33	.047	7	40	.42	160	.05	2	1.34	.01	.08	1	1	2	2
900N 1325W	1	12	12	54	.2	9	3	121	2.06	6	5	ND	1	16	1	2	2	48	.17	.033	7	22	.14	131	.05	2	.82	.01	.05	1	2	2	2
900N 1300W	1	27	12	78	.4	20	6	156	2.39	15	5	ND	1	24	1	2	2	50	.21	.031	7	35	.39	109	.04	2	1.67	.01	.04	1	2	2	2
900N 1275W	3	111	40	192	.9	46	17	851	4.05	18	6	ND	1	60	1	2	2	87	.72	.041	9	47	.94	177	.05	2	2.85	.01	.06	2	5	2	2
900N 1250W	4	275	277	636	7.9	66	16	1778	5.38	61	5	ND	2	101	7	3	2	77	1.57	.102	24	54	.79	461	.01	2	4.02	.01	.15	2	5	2	4
900N 1225W	4	276	271	975	5.9	56	14	1801	4.71	42	9	ND	3	91	14	2	2	72	1.34	.091	21	48	.67	375	.01	2	3.44	.01	.12	1	4	2	4
900N 1200W	1	71	17	292	.6	44	11	484	3.16	14	5	ND	1	36	1	4	2	58	.46	.033	8	63	.80	118	.08	2	1.86	.02	.06	1	2	2	2
900N 1175W	1	27	11	73	.1	13	5	187	3.05	13	5	ND	1	21	1	4	2	78	.14	.067	7	24	.35	98	.09	4	1.46	.02	.06	1	1	2	2
900N 1150W	1	18	18	82	.5	16	6	544	2.49	9	9	ND	1	43	1	2	2	45	.65	.036	7	23	.45	154	.04	2	1.50	.01	.04	1	1	2	2
900N 1125W	1	25	6	76	.2	37	10	417	2.91	21	5	ND	1	34	1	2	2	59	.38	.030	8	65	.85	181	.07	2	1.69	.02	.04	1	3	2	2
900N 1100W	1	27	14	93	.1	28	9	377	3.77	7	5	ND	1	21	1	2	2	82	.17	.040	8	67	.70	261	.06	2	1.93	.02	.08	1	1	2	2
700N 1500W	1	7	12	47	.1	10	3	144	1.95	7	5	ND	1	16	1	2	2	53	.13	.026	7	25	.23	70	.06	2	1.12	.01	.04	1	2	2	2
700N 1475W	1	8	10	44	.1	11	4	137	2.14	5	5	ND	2	16	1	2	2	56	.11	.022	7	28	.28	66	.08	2	1.22	.02	.03	1	1	2	2
700N 1450W	1	10	11	56	.1	11	4	207	2.77	9	5	ND	1	16	1	2	2	64	.11	.047	7	23	.26	79	.06	2	1.41	.02	.06	1	1	2	2
700N 1425W	1	10	11	58	.1	12	4	199	2.04	2	5	ND	1	21	1	2	2	51	.19	.068	8	37	.37	72	.11	2	1.16	.02	.05	1	2	2	2
700N 1400W	1	28	10	97	.2	23	7	210	3.80	9	6	ND	1	19	1	2	2	79	.17	.149	7	59	.57	64	.09	6	1.92	.02	.06	1	1	2	2
700N 1375W	1	9	7	36	.1	7	2	96	1.20	2	5	ND	1	25	1	2	2	39	.23	.021	7	23	.19	73	.11	2	.61	.02	.04	1	2	2	2
700N 1350W	1	17	11	65	.2	13	5	179	2.80	10	5	ND	1	15	1	2	2	60	.09	.039	6	26	.31	79	.04	2	1.42	.02	.05	1	3	2	2
700N 1325W	1	28	7	56	.1	14	7	417	2.01	4	5	ND	1	24	1	3	2	46	.23	.030	9	29	.35	149	.04	2	1.11	.01	.05	1	2	2	2
700N 1300W	1	24	7	62	.1	19	6	214	2.27	2	5	ND	1	23	1	2	2	49	.31	.050	7	36	.47	100	.06	2	1.38	.01	.05	1	2	2	2
STD C/FA-5X	19	61	41	133	7.6	72	29	1022	4.00	40	19	8	39	52	19	18	23	60	.48	.094	39	59	.88	180	.09	36	1.85	.06	.13	14	102	99	101

.../A1-3

PAGE A1-2

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	AR PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	M PPM	AUT# PPB	PT# PPB	PD# PPB	
700N 1275W	1	24	10	63	.3	17	7	288	2.37	6	5	ND	1	23	1	2	2	54	.27	.028	8	33	.45	118	.07	2	1.37	.01	.04	1	2	2	2	2
700N 1250W	2	73	13	113	.7	26	17	1106	3.92	12	5	ND	1	56	1	2	2	66	.90	.112	12	40	.60	265	.02	2	3.07	.01	.09	1	1	2	2	2
700N 1225W	3	106	12	140	2.7	35	15	717	4.20	12	5	ND	2	62	2	2	2	62	.97	.096	20	37	.49	233	.02	2	3.33	.01	.07	1	1	2	4	4
700N 1200W	2	41	10	126	.5	36	12	703	3.01	12	5	ND	1	40	1	2	2	57	.76	.061	8	60	.66	147	.06	11	1.98	.01	.05	1	1	2	2	2
700N 1175W	3	263	14	235	4.6	49	11	1504	3.79	15	5	ND	3	82	4	2	2	56	1.64	.106	23	41	.58	328	.01	2	3.46	.01	.09	1	3	2	3	3
700N 1150W	3	101	17	136	1.1	37	12	876	3.44	17	5	ND	2	38	2	2	2	63	.64	.050	11	50	.66	162	.04	2	2.11	.01	.06	1	2	2	2	2
700N 1125W	2	87	17	117	1.0	34	10	751	3.49	16	5	ND	2	43	2	2	2	59	.74	.053	14	41	.63	225	.04	2	2.14	.01	.07	3	2	2	4	4
BUTTERFIELD #01	2	62	6	118	1.2	25	6	586	2.59	13	5	ND	1	62	1	2	2	43	1.06	.090	14	26	.40	244	.03	2	1.99	.01	.04	1	1	2	5	5
BUTTERFIELD #02	1	55	11	58	.2	59	11	496	2.92	11	5	ND	2	55	1	3	2	60	.92	.092	6	116	.85	160	.07	2	1.22	.01	.09	1	2	4	5	5
BUTTERFIELD #03	1	47	9	73	.3	38	11	379	2.53	9	5	ND	1	52	1	2	2	52	.74	.102	6	78	1.06	109	.07	2	1.49	.01	.09	1	3	4	5	5
SBL-1	1	96	5	94	.6	55	16	790	3.72	10	5	ND	2	68	1	2	2	78	1.04	.144	7	117	1.53	186	.09	2	2.03	.01	.20	1	5	3	7	7
SBL-2	4	58	18	154	.9	52	12	3403	3.44	14	5	ND	2	66	3	4	2	51	.90	.102	13	55	.60	311	.04	2	1.52	.01	.08	1	1	2	4	4
STD C/FA-5X	20	60	41	134	7.6	73	29	1024	3.96	45	20	8	40	52	20	14	21	61	.48	.094	40	59	.88	180	.09	34	1.85	.07	.13	13	97	100	97	97

.../A1-4

PAGE A1-3

