92P-13

GEOCHEMICAL SURVEY OF AREA "F", (EAGLE CREEK), BRITISH COLUMBIA.

BARRINGER RESEARCH LIMITED
TORONTO, CANADA

GEOCHEMICAL SURVEY OF AREA "F",

(EAGLE CREEK), BRITISH COLUMBIA.

PREPARED FOR

CYPRUS EXPLORATION CORPORATION LIMITED,

510 WEST HASTINGS STREET,

VANCOUVER, B.C.

PREPARED BY

BARRINGER RESEARCH LIMITED,

304 CARLINGVIEW DRIVE,

REXDALE, ONTARIO.

OCTOBER 1969.

LIST OF CONTENTS

LIST OF DRAWINGS

Drawn by Semco	Sample Locations	1" = 2640'
Drawn by Semco	Mo & Cu stream silt sampling	1" = 2640'

INTODUCTION

A reconnaissance stream sediment geochemical survey was completed over approximately 15 square miles of ground held by Cyprus Exploration near Eagle Creek, B.C. For logistic reasons the southern half of the area was sampled by personnel of Barringer Research and the northern half of the area by personnel of Semco. The sample interval was 1/4 mile and active stream sediments samples were collected in all locations.

The typography is generally rolling with moderate to locally steep relief and outcrop is moderate to poor. The geology has been mapped by personnel of Semco and their map was available at the time of writing this report.

The drainage is low with only a few moderate size streams. Sorting is generally good with ample sediment available, and the streams have a moderate flow rate and generally little and no accumulation of organics. In a number of streams, a slight development of ironoxide and possibly manganese oxide precipitation was observed.

Soil development was generally good with a very thin A horizon (generally less than one inch), a well developed medium to dark brown B horizon (up to six inches thick) overlying a grey till. Thickness of this till was not readily determined but in general terms is probably less than five to ten feet thick and is thought to be of moderately local derevation.

RESULTS

The sample locations and molybdenum and copper results are shown in the two accompanying maps. From a consideration of all the data, the following threshold and anomalous values are chosen:

	Mo ppm	Cu ppm	
		Qtz. diorite	other rock types
Background	0 - 2	0 - 30	0 - 90
Threshold	2	30	90
3rd Order Anomaly	3 - 4	31 - 60	91 - 120
2nd Order Anomaly	5 - 6	61 - 90	120 - 150
1st Order Anomaly	>6	>90	>150

The molybdenum values are uniformly low with only scattered samples showing values greater than 2 ppm. The few anomalous samples that do exist are isolated and show no well or even moderately developed anomaly and are not supported by anomalus copper values. On this basis molybdenum does not want any further follow up. The copper distribution shows two contrasting populations thought to be related to rock type, although the fact that the division between populations coincides with the division in areas covered by the 2 sampling teams may be significant. In the northern half of the area the main copper concentration in the stream sediments is 20 ppm and highest recorded value is 60 ppm. In the southern half of the map area the mean is about 75 ppm Cu with isolated values greater than 100 ppm. This variation is quite clearly related to geology rather than economic mineralization. It is important to keep this in mind when interpreting the results and

the threshold must be chosen according to the rock type as shown in the accompanying table. When this is done, it is evident that there are only scattered third order anomalous samples in the surveyed area. As for molybdenum these do not form any well defined anomaly and do not coincide with anomalus molybdenum values and therefore do not warrant any further follow up. Broad scale soil sampling was undertaken over a large part of the surveyed area by Semco. These results, which were for copper only, are contained in Semco's report to Cyprus Exploration and were available to the writer. The soil results do not show the same dramatic change over geology as the stream sediments, however, like the stream sediments, they show only scattered isolated anomalus values.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of the molybdenum and copper stream sediment results and the broadly spaced soil copper results no further follow up is warranted in this area. The variations in copper concentration in both the soil and the stream sediments are explained on the basis of the geology or very minor mineralization and there is no molybdenum anomaly of any significance.

BARRINGER RESEARCH LIMITED,

PMDB/kn.

P. M. D. Bradshaw,
Chief Geochemist.

BARRINGER RESEARCH

Geochemical Laboratory Report

BARRINGER RESEARCH LIMITED
304 CARLINGVIEW DRIVE
METROPOLITAN TORONTO
REXDALE, ONTARIO, CANADA
PHONE: 416-677-2491
CABLE: BARESEARCH

DATE August 7, 1969.

Cyprus Exploration Corp. Ltd.,
510 W. Hastings,
VANCOUVER, B.C.
ATT: PAUL SAWYER cc: Dave Stone.

REPORT NUMBER 99-B

SAMPLE NUMBER	HCl Cu ppm	Bis Mo ppm		Sample Number	HCl Cu ppm	Bis Mo ppm		Sample Number	HCl Cu ppm	Bis Mo ppm
F-1	54	1		F-21	79	2		F-109	25	1
2	66	1		2	75	2		110	37	1.
3	50	1		3	84	1		1	37	1
4	62	1		4	62	1		2	43	1
5	37	1		5	79	1		3	31	1
6	162	1		6	75	1		4	102	2
7	58	1		7	79	2		RF-115	54	1
8	43	1		8	66	2		BF-101	54	2
9	37	1		9	84	2		2	18	1
RF-10	50	2		30	84	2		3	22	2
11	54	1		1	70	1				
F-12	37	2		2	66	1				
13	50	2		3	43	1				
14	58	3		4	43	2				
15	218	1		100	31	1				
16	93	2		4	62	2				
17	143	2		5	62	1				
18	125	2		6	58	1				
19	84	2		7	62	1				
20	70	2		8	43	1				

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304 CARLINGVIEW DRIVE
METROPOLITAN TORONTO
REXDALE, ONTARIO, CANADA
PHONE: 416-677-2491
CABLE: BARESEARCH

DATE August 13, 1969.

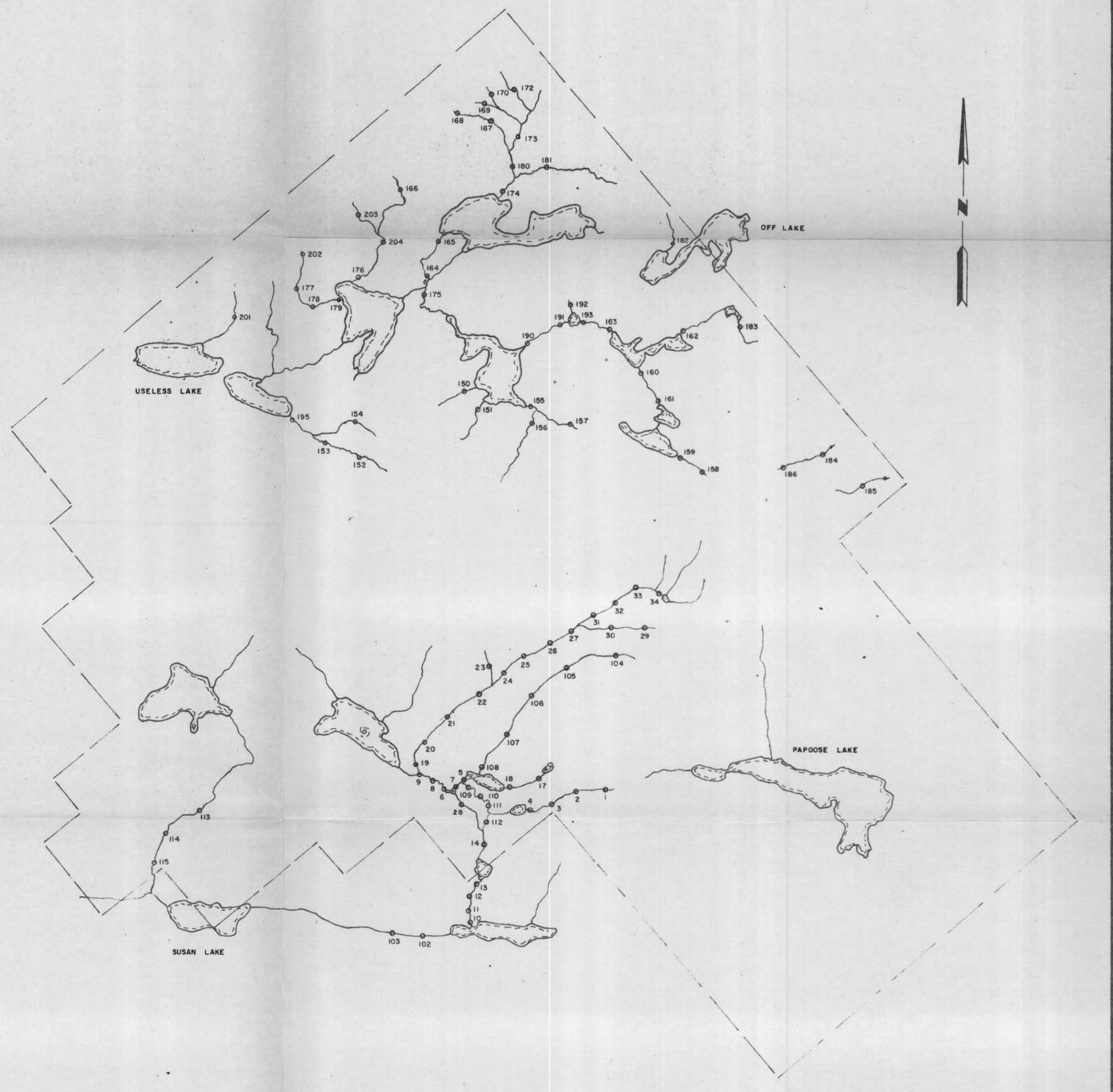
Cyprus Exploration Corp. Ltd.,
510 W. Hastings,
VANCOUVER B.C.
ATT: P. Sawyer.

cc: Semco,
PRINCETON, B.C.
D. RIDLEY.

G. Parker

REPORT NUMBER 127-B

SAMPLE NUMBER	HCl Cu ppm	Bis Mo ppm		Sample Number	HCl Cu ppm	Bis Mo ppm		Sample Number	HCl Cu ppm	Bis Mo ppm
F-150	20	1		170	26	2		193	37	2
1	50	2		1	13	2		5	28	1
2	30	2		2	22	2		6	23	1
3	31	1		3	16	2		7	21	2
4	47	1		4	26	1		8	10	1
5	46	1		5	13	1		9	11	1
6	55	2		6	19	2		200	20	1
7	26	2		7	14	2		1	15	1
8	16	2		8	13	2		2	13	1
9	29	1		9	11	1		3	11	1
160	12	1		180	17	1		4	17	1
1	28	3		1	12	2				
2	10	1		2	34	2				
3	33	2		3	24	5				
4	14	3		4	60	1				
5	13	1		5	53	4				
6	20	2		6	24	3				
7	26	2		190	20	1				
8	26	1		1	20	2				
9	16	2		2	30	1				

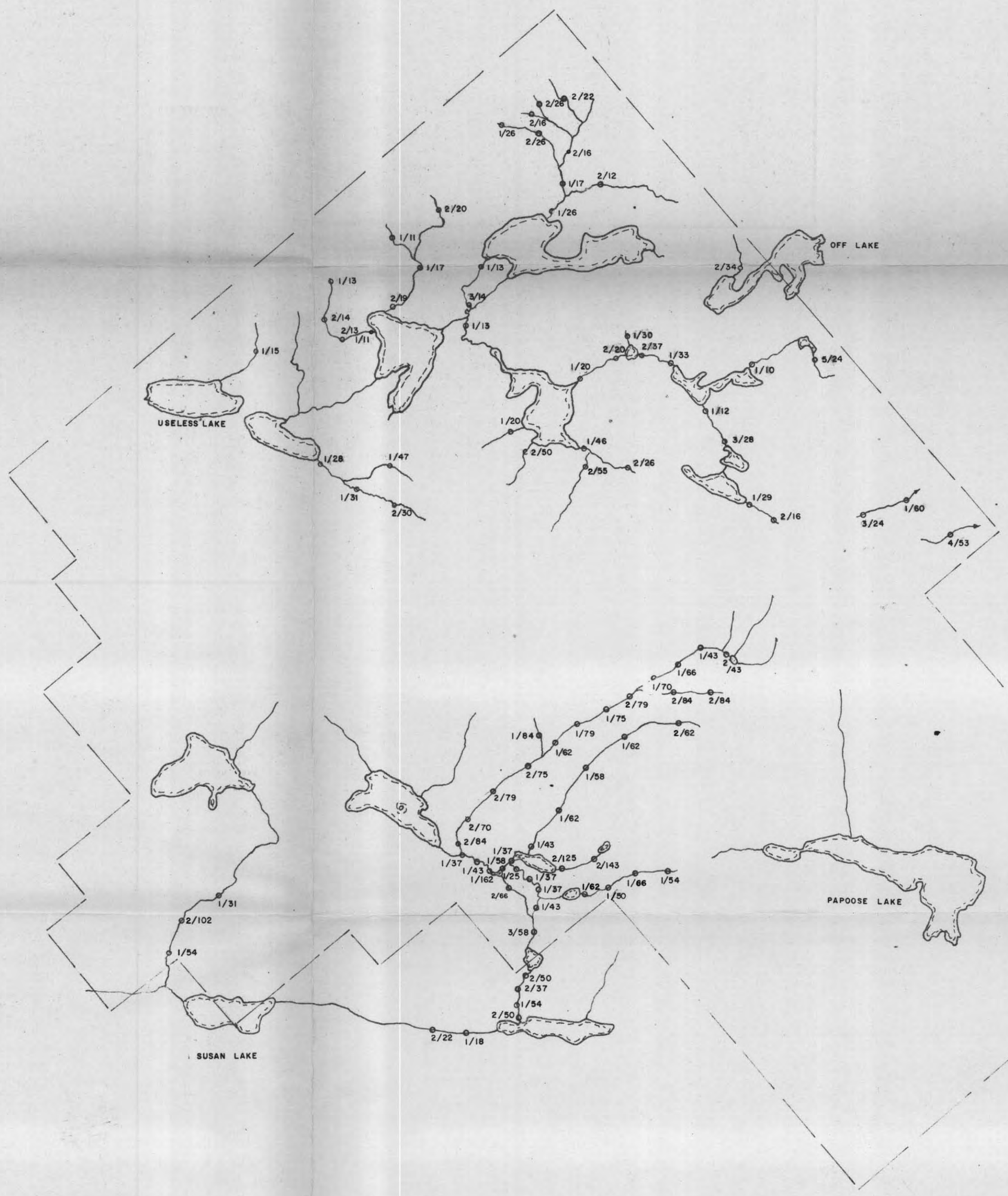


inches
0 1 2
0 1 2 3 4 5
centimetres

CYPRUS EXPLORATION CORPORATION LTD.

STREAM SILT SAMPLING
AREA " F "
SAMPLE LOCATIONS

DRAWN BY – SEMCO	AUGUST, 1969	SCALE: 1" = 2640'



inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

CYPRUS EXPLORATION CORPORATION LTD.

STREAM SILT SAMPLING
AREA "F"
MOLYBDENUM AND COPPER IN PPM

DRAWN BY — SEMCO	AUGUST, 1969	SCALE: 1" = 2640'