

81-#175-# 9088

GEOLOGICAL REPORT

on the

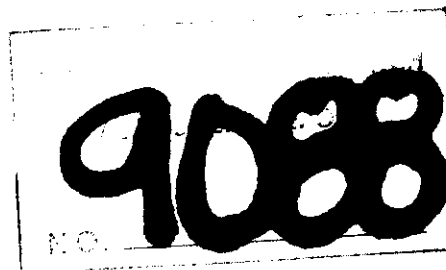
CATHY PROPERTY

NICOLA MINING DIVISION

Latitude 51°06'N; Longitude 121°49' NTS 92I/2W

for

HARLIN RESOURCES LTD.



Vancouver, B.C.
June 26, 1980

Paul Plicka
Consulting Geologist

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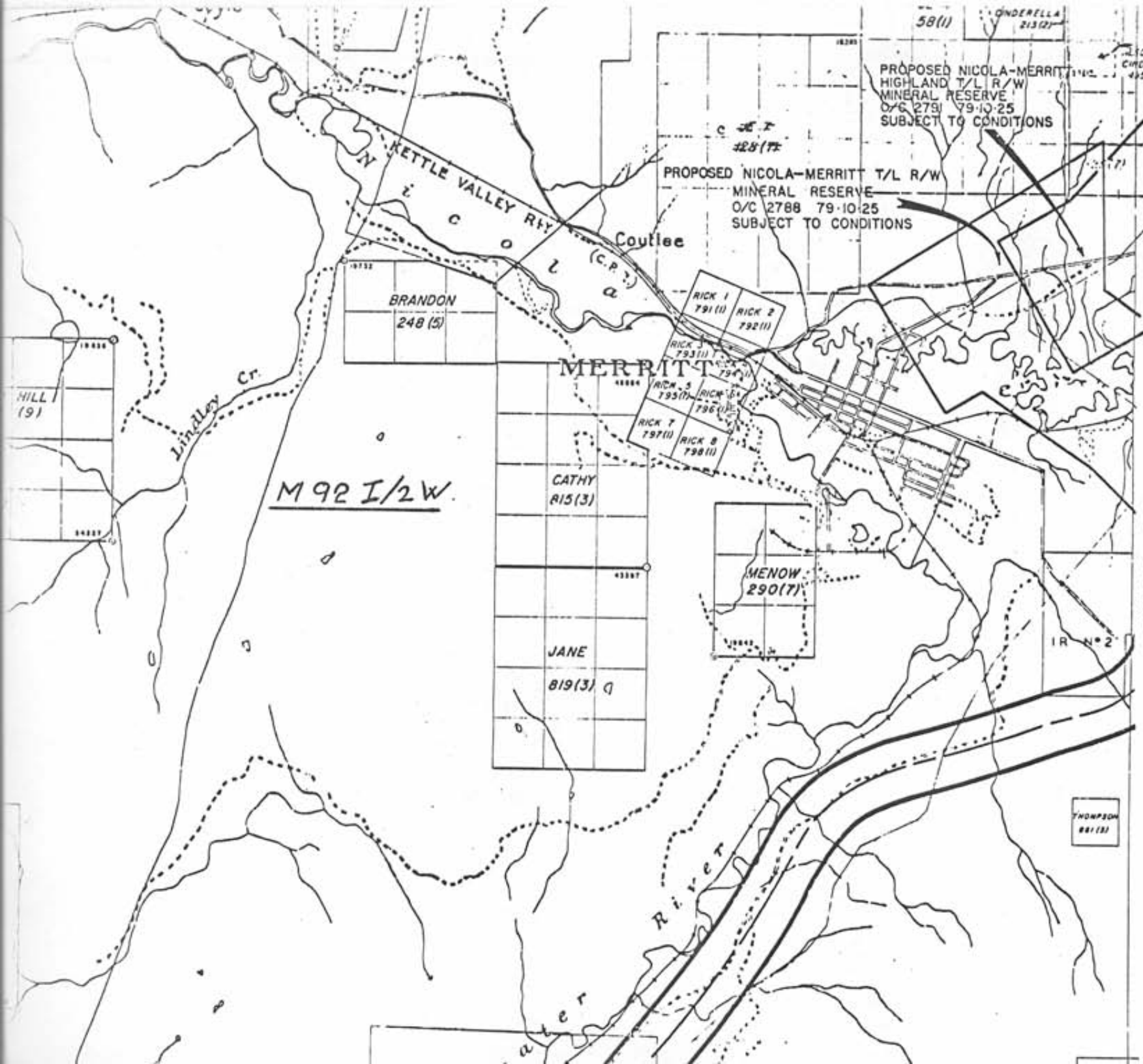
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CATHY CLAIMS
(APPROX. LOCATION)

HARLIN RESOURCES LTD.
LOCATION MAP
OF
CATHY CLAIMS





TO EAST MAP 92 I/2 E

LEGEND

- CROWN-GRANTED MINERAL CLAIM
- - - REVERTED CG MINERAL CLAIM
- ▭ FORFEITED MINERAL CLAIM
- ▭ VERIFIED LEGAL CORNER POST
- ▭ LEGAL SURVEY
- ▲ LEGAL CORNER POST
- ▲ TAG NUMBER ONLY



INTRODUCTION

On request of Mr. J.C. Simpson, Director of Harlin Resources Ltd., the writer and crew of three carried out Partial Phase I of exploration programme as outlined in the geological report on the Cathy property dated April 9, 1980.

CLAIMS AND OWNERSHIP

The property consists of a 12 unit claim, known as Cathy. Harlin Resources Ltd. is the 100% owner of the claim. For location, see claim maps.

LOCATION AND ACCESS

The claim group is located at $121^{\circ}49'W$ and $50^{\circ}06'N$, 2 km west of the town of Merritt in the Nicola Mining Division. The property is reached by a good gravel road on the south side of Nicola River.

GEOGRAPHY AND VEGETATION

The claim is located on steep hills rising from the Nicola Valley's 2,600 feet to a high plateau of 3,800 feet to 4,000 feet. The plateau is covered with a growth of pine and some willows and bushes. The area is used for grazing by local ranchers.

HISTORY

The area became active in the late 1950's upon discovery of copper in Highland Valley. The Bethlehem Copper Mine started operation in 1962. Subsequent detail exploration in "Copper Valley" discovered several high grade showings. The largest of these was developed into Craigmont Mine. Today's renewed interest in copper rekindled exploration in Copper Valley.

GEOLOGY REGIONAL

The claims are underlain by volcanic flows and tuffs and minor sediments of the Nicola Series of Triassic age. Where exposed, these are relatively thin bedded, of the order of a few feet to a few tens of feet in thickness. The tuffs are moderately coarse, frequently brown

to reddish, and only a few feet thick. The flows are generally andesitic, often exhibit broken flow tops with considerable calcification, and some are strongly amygdaloidal. The amygdules are often much elongated, especially near the flow bases, and consist mostly of silica with some calcite on occasion. Copper mineralization in the area is found disseminated in the flows and occupying fine fractures.

GEOLOGY LOCAL

The rocks in the property area belong to two distinguished groups:

Nicola Group of Upper Triassic age chiefly consist of volcanic greenstones which are mainly andesitic with minor basaltic flows. The andesite is prophytic in places.

Coast Intrusion of Jurassic age possibly member of Iron Mask batholith the member consists of granite, granodiorite, syonite, monzonite and gabbro.

The rocks observed in the property area are different volcanic flows. The mineralization is observed in highly siliceous chloritic andesite.

WORK DONE

The crew carried out partial geochemical survey on the property. 6,700 metres of flag line grid was established on the property. The crew collected 67 samples mostly soil, however where applicable, rock chips were collected. General geological mapping of the area was carried out. The crew carried out limited hand trenching in areas of shallow overburden to expose underlying bedrock. The total cost of Partial Phase I is \$9,662.00.

SAMPLE PREPARATION

The samples were dried and ground to -80 mesh size. The pulp was treated in hot hydrochloric acid and read on atomic absorption for copper and silver.

DISCUSSION OF RESULTS

The samples were collected in the "C" horizon. Generally the soils are sandy with thin infrequent clay beds.

The assay profile is as follows:

Samples assay between

		ppmCu	
0	-	9	- 38.8%
10	-	19	- 16.4%
20	-	29	- 28.4%
30	→		- 16.4%

The highest copper assay being 60 ppmCu.

ppm = parts per million.

The silver assays are very low, the majority less than 0.1 ppmAg and thus were not plotted.

The geochemical contour map shows six primary target locations at BL 400W, 900N 600W, 1000N 1200W, 700N 1400W, 500N 1400W, 300N 1200W, BL 1000W.

Low zone separate the high target zone in the southeast corner of the property. The low strikes northeasterly from the southwest corner.

ROCK DESCRIPTION

All of the observed outcrops are andesitic flows. The andesite grades from brown siliceous chloritic to greyish black uniform, fine grain

flows. Trenching in the target areas would reveal the flow associated with mineralization or possibly thinly covered intrusions.

CONCLUSIONS AND RECOMMENDATIONS

The distinct separation of the target areas on the base line and north-western corner should be investigated. The topography is generally gently rolling high plateau, thus eliminating down hill propagation of mineralization. This profile could indicate two different mineralized volcanic flows.

To determine the exact nature of the mineralization it is recommended to proceed with Phase II as follows:

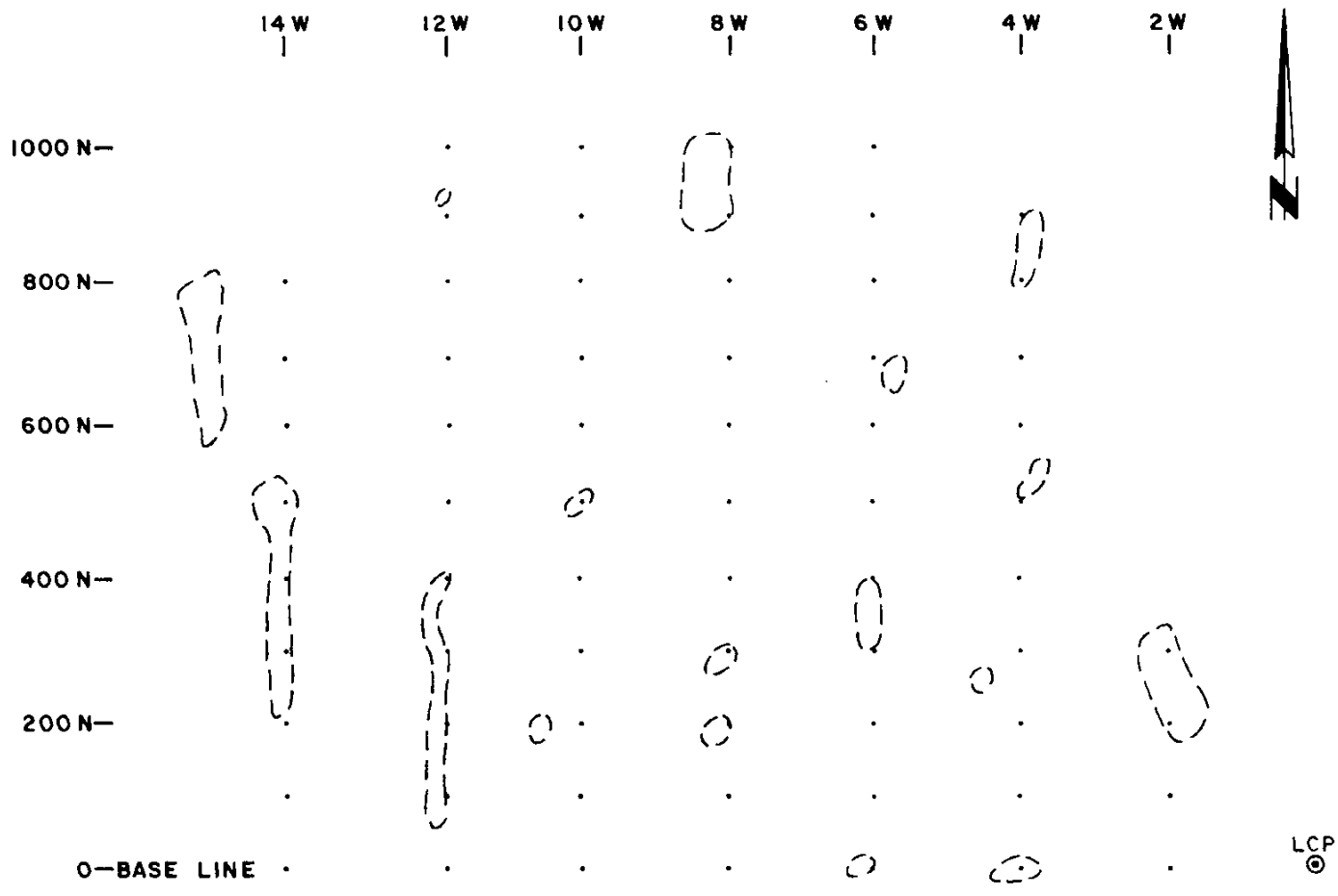
PHASE II

Mag Survey \$150/km: 20 km	\$ 3,000
E.M. Survey \$100/km: 20 km	2,000
I.P. Survey \$600/km: 10 km	6,000
Trenching Targets	8,000
Sampling Targets	5,000
Geologist	4,000
Travel and Contingencies	<u>4,500</u>
Total, Phase II	<u>\$32,500</u>

Respectfully submitted,



Paul Plicka
Consulting Geologist



HARLIN RESOURCES LTD.
 — CATHY CLAIMS —
 OUTCROP LOCATIONS



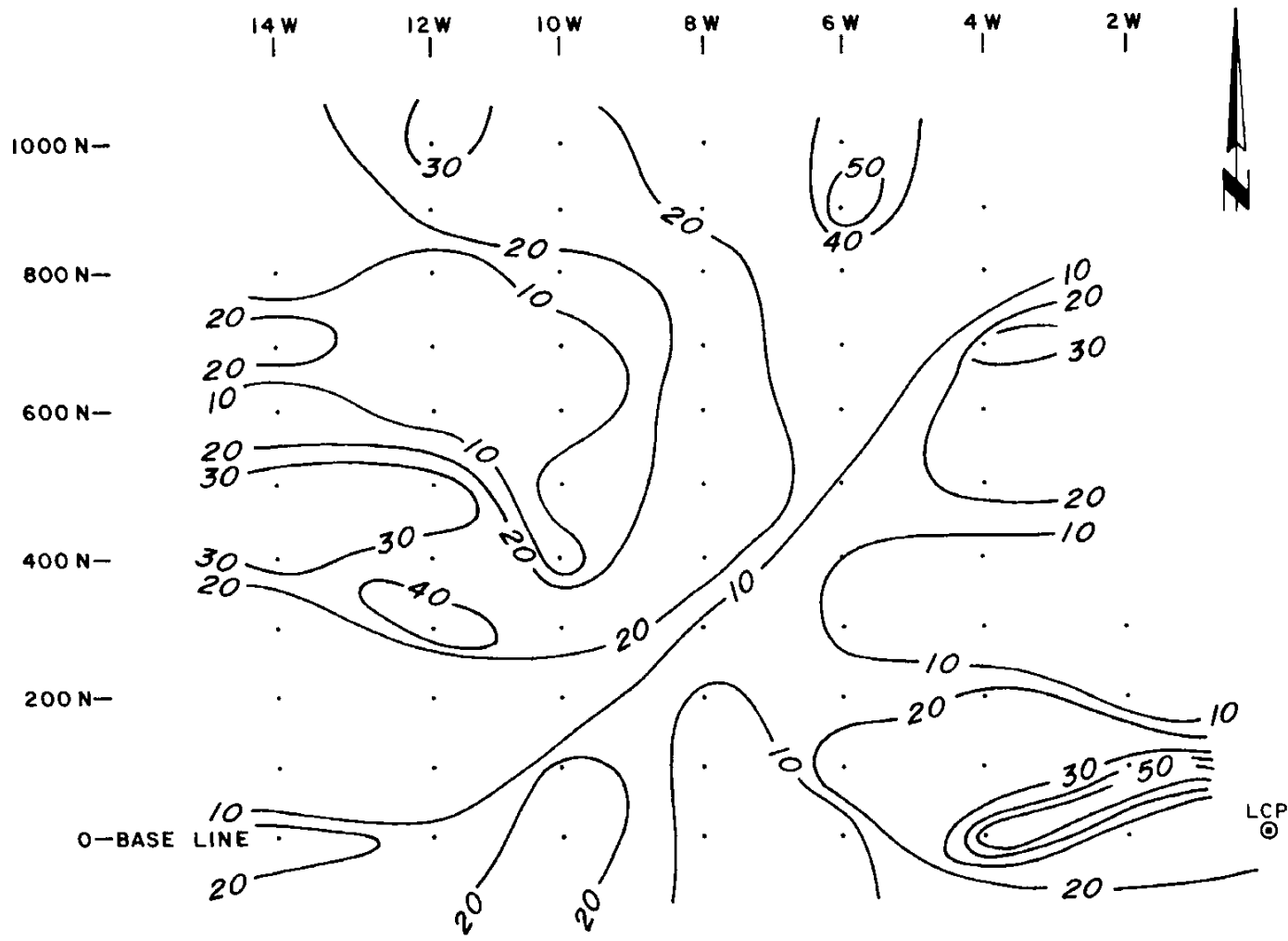
	14 W	12 W	10 W	8 W	6 W	4 W	2 W
1000 N-		.330	.200	.30	.380		
		.210	.260	.50	.520	.30	
800 N-	.60	.150	.20	.280	.40	.40	
	.280	.170	.120	.200	.90	.330	
600 N-	.50	.190	.180	.230	.90	.210	
	.380	.310	.30	.290	.120	.230	
400 N-	.340	.20	.160	.240	.100	.80	
	.20	.410	.250	.120	.80	.60	.30
200 N-	.30	.70	.30	.70	.190	.280	.30
	.60	.20	.230	.60	.300	.220	.520
0-BASE LINE	.290	.440	.280	.30	.30	.600	.230



LCP
⊙

HARLIN RESOURCES LTD.
 - CATHY CLAIMS -
 GEOCHEMICAL RESULTS
 (COPPER P.P.M.)





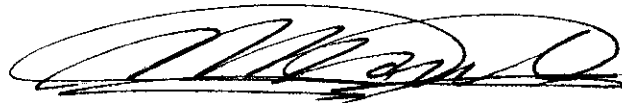
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 — CATHY CLAIMS —
 GEOCHEMICAL CONTOURS
 COPPER P.P.M.



CERTIFICATE

I, Paul Plicka, of Suite 609, 525 Seymour Street, Vancouver, British Columbia, V6B 3H7, hereby certify as follows:

1. I am a graduate of Prague Technical University, 1966.
2. I have practised my profession for eleven years in British Columbia.
3. I am a fellow of the Geological Association of Canada, in good standing since 1973.
4. I have no direct or indirect interest in the securities of Harlin Resources Ltd., nor do I expect to receive any interest in the future.



Paul Plicka
Consulting Geologist

Dated at Vancouver, British Columbia, this 26th day of June, 1980.

PAUL PLICKA
CONSULTING GEOLOGIST
609 - 525 Seymour Dr.
Vancouver, B. C.

September 4, 1981

Ministry of Energy, Mines
and Petroleum Resources
Parliament Building
Victoria, B. C.
V8V 1X4

Attention: Mr. R. Rutherford
Chief Gold Commissioner

Re: 81-#175 Nicola
Geochemical Report

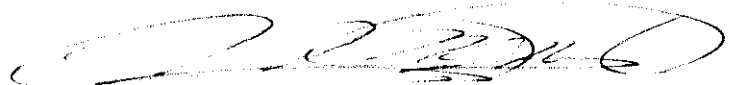
The crew of three carried out preliminary investigations of the Kathy property between April 7 and 17, 1981. Mr. F. Bartik was the supervisor on the job. The crews wages were \$125.00 per man day or \$3,750.00. The accommodation in Copper Valley Motel was \$42.50 per day or \$425.00. The food averaged \$110.00 per day or \$1,100.00 for the duration of the job. CAN-TEST assayed all the samples at a cost of \$6.50 per sample, or total \$435.00. The report typing and preparation with drafting - \$550.00. The writer's visit to the property plus expenses - \$1,450.00.

Thus the expenditures as filed on Kathy claim are \$9,662.00.

Wages	\$3,750
Accommodation	425
Food	1,100
Assay	935
Report	550
Geologist	1,950
Flag line grid contract to Mr. M. Michovsky	<u>1,952</u>
TOTAL	<u>\$9,662</u>

I trust this information is sufficient for your records.

Yours very truly,



Paul Plicka