

3401

GEOCHEMICAL SURVEY REPORT

ON THE

NIMPKISH GROUP OF CLAIMS

Nanaimo M.D.

FOR

50° 21' N , 126° 55' W

ACHERON MINES LTD. (NPL)

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. *3401* MAP

October 25, 1971

Vancouver, B.C.

By : *R. H. D. Philp, P. Eng.*

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GEOCHEMICAL SURVEY REPORT
ON THE
NIMPKISH GROUP OF CLAIMS FOR
ACHERON MINES LTD. (NPL)

INTRODUCTION:

The Nimpkish Group consists of 40 contiguous mineral claims located immediately east of Nimpkish Lake on north-central Vancouver Island, British Columbia.

Located in May, 1970 the claims were initially explored by reconnaissance geological mapping plus soil and silt sampling surveys during the summer of 1970.

During the 1971 season grids were established and geochemical surveys conducted in three anomalous areas located the previous year, the results of which are presented in this report. The program was initiated twice due to a forest closure which prevented completion initially. As a result of this closure attendant costs were higher than anticipated.

GENERAL:

The property lies immediately east of Nimpkish Lake, approximately 20 miles south - southeast of Port McNeill on northern Vancouver Island. Co-ordinates are 50° 21' north latitude, 126° 55' west longitude.

Access is along a railway grade from the Canadian Forest Products camp on the south end of Nimpkish Lake.

Topography is rugged throughout most of the claim group. In addition, the area is heavily timbered and underbrush is often dense, especially in the lower sections. Water for exploration purposes is available from several creeks.

Temperatures are moderate although rainfall is heavy and snow is present in the upper portions throughout the winter.

PROPERTY:

The property consists of the following 40 contiguous mineral claims located in the Nanaimo Mining Division of British Columbia.

<u>Claim</u>	<u>Record Number</u>	<u>Record Date</u>
B 1 - 9	31995-32003	May 12, 1970
E 1 - 22	31936-31957	May 12, 1970
C 1	32048	May 12, 1970
C 3	32050	May 12, 1970
C 5	32052	May 12, 1970
C 7	32054	May 12, 1970
C 9	32056	May 12, 1970
C 11 - 14	32058-32061	May 12, 1970

The accompanying plan shows the claims on which the surveys were conducted.

GEOLOGY:

The Nimpkish region is underlain by volcanic and sedimentary units of the Vancouver Group, Triassic in age, intruded by granitic rocks of the Coast Intrusions of Jurassic Age.

Within the property limits, the Vancouver Group consisting, in order of decreasing age, of the Karmutsen Formation, Quatsino Formation, and Bonanza Subgroup occupies the southwest flank of a northwesterly trending anticline. In the higher, eastern portion of the property these units have been intruded by quartz-diorite, which underlies much of this portion of the claims.

Replacement and contact metamorphic base metal deposits are common in the region, most being associated with the Quatsino limestone and/or Karmutsen volcanics near granitic contacts.

Within the three areas selected for detailed surveys, the first, in the northwest portion of the group, is underlain mainly by Quatsino limestone in contact with Karmutsen volcanics in the north and south. Several andesitic dikes occur cutting the limestone, often producing narrow skarn zones with minor sphalerite, magnetite and chalcopyrite.

The second area, in the northeast portion of the group, appears to be completely underlain by quartz-diorite, while the third area, in the south portion of the group, is underlain by Bonanza argillites, tuffs and andesites in contact with quartz

diorite in the north east. No mineralization has been noted in the latter two areas.

GEOCHEMICAL SURVEY:

Grid

The three areas surveyed are referred to as the northwest, northeast and south grids. In each instance base lines were established then cross-lines run at 400 foot intervals, with stations marked every 200 feet. Lines were established by chain and compass and marked by blazing and/or colored flagging.

Field Procedures:

Soil samples, collected by means of an auger, were taken wherever possible from the soil horizon immediately underlying the surface humous layer. Sample depth varied considerably to a maximum of four feet but averaged 8 - 12 inches over the two northern grids. Depth averaged approximately 18 - 24 inches over the south grid.

At each sample location notes were recorded describing soil type, depth taken, topography, vegetation and any other pertinent data that could be used later in interpreting the results.

Testing Procedure:

Samples were packaged in Kraft envelopes and forwarded to Core Laboratories - Canada Ltd. of Vancouver for analysis.

Following drying in an electric oven and screening to - 80 mesh the samples were digested in a perchloric - nitric acid mixture

and analyzed by atomic absorption for total copper and zinc, values being reported in parts per million (ppm).

Results of Surveys:

Frequency distribution plots of values in ppm. versus the cumulative percent frequency were made for both zinc and copper for the northwest grid, and zinc for the northeast and south grids, to determine thresholds for background and anomalous ranges.

Northwest grid:

The frequency distribution plot indicated the following ranges for zinc and copper:

<u>Zinc</u>	Background	<	54 ppm.
	Mixed zone	54 ≤	110 ppm.
	Anomalous	>	110 ppm.
<u>Copper</u>	Background	<	12 ppm.
	Mixed zone	12 ≤	51 ppm.
	Anomalous	>	51 ppm.

Several zinc anomalous areas are indicated by the survey, especially in the northwestern portion of the grid. The most significant area, which is centered near 20 + 00 N, 2 + 00 W, contains an area of greater than 200 ppm. zinc measuring approximately 800 by 800 feet, with a peak value of 1800 ppm. Limestone outcrops within a portion of the anomalous area but no mineralization has been noted.

Zinc mineralization has been observed within certain other

anomalous areas while many remain unexplained.

Copper values are generally low, the few anomalous areas generally consisting of only one or two isolated values. Where these occur though they are mostly coincident with zinc anomalies.

Northeast Grid:

The frequency distribution plot indicated the following ranges for zinc.

Background	<	27 ppm.
Mixed zone	27	≤ 100 ppm.
Anomalous	>	100 ppm.

Copper values were not plotted as values are low and little variation occurs throughout the area.

No significant anomalies for either zinc or copper were outlined by the survey. Four samples weakly anomalous for zinc occur in the southernmost portion of the grid where nearby outcrop consists of quartz diorite.

South Grid:

The following ranges for zinc were determined by the frequency distribution plot.

Background	<	50 ppm.
Mixed zone	50	≤ 86 ppm.
Anomalous	>	86 ppm.

As in the region of the northeast grid copper values were low and showed little variation, thus a frequency distribution plot was not made.

The limit for zinc anomalous values is lower here than in the other two areas, probably indicative of the different rock type, and possibly also due to variations in overburden.

Several areas weakly anomalous for zinc occur, most consisting of only one or two isolated values. Two more extensive areas occur in the western portion, although both are weak. The largest, measuring 1200 by 400 feet trends easterly near an assumed contact between Bonanza units and quartz diorite, while the other is believed to be underlain by units of the Bonanza Subgroup. No significant copper values are associated with the zinc anomalies.

CONCLUSIONS AND RECOMMENDATIONS:

Several zinc geochemical anomalies were indicated by the surveys conducted over three sections of the property. Most of these, and the most significant, occur on the northwest grid where minor magnetite - sphalerite - chalcopyrite mineralization has been noted in several places. Results of the geochemical survey indicate that additional, possibly more extensive zinc occurrences may be present here.

Copper values are generally low and no significant anomalies were indicated in any of the gridded areas.

No zinc anomalies of importance were outlined within the northeast grid, which is believed to be underlain by granitic rocks.

Two very weak zinc anomalies occur within the south grid. No mineralization has been noted in these areas which are believed

to be underlain by Bonanza volcanics and/or sediments.

Future work should be concentrated in the area of the north-west grid which should be extended to determine the limits of the existing anomalies. In addition, detailed geological, geochemical and magnetometer surveys on a 100 by 100 foot grid pattern should be conducted over the main anomalous areas, to be followed by trenching and/or shallow drilling where applicable.

Respectfully Submitted,


R.H.D. Philp, P. Eng.

October 25, 1971

Vancouver, B.C.

DOMINION OF CANADA:
 PROVINCE OF BRITISH COLUMBIA.
 To WIT:

In the Matter of the geochemical survey on
 the Nimpkish claims of Acheron Mines Ltd. (NPL)

I, M. Tekler, bookkeeper
 c/o Agilis Exploration Services Ltd.,
 of 107 - 325 Howe Street,
 Vancouver 1, B.C.

in the Province of British Columbia, do solemnly declare that the following personnel were employed and costs incurred in conducting the surveys.

Personnel:

R. Philp - geologist supervisor - report	\$ 150.00
R. MacBean - field, party chief 17 days @ \$59.67/day	1,014.39
- office 3 days @ \$59.67/day	179.01
R. Turner - field 6 days @ \$43.75/day	262.50
T. Morgan - field 6 days @ \$43.75/day	262.50
- office - plotting data	50.00
J. Seymour - field 10 days @ \$43.75/day	437.50
	<u>\$2,355.90</u>

Disbursements:

Groceries and supplies	\$258.38	
Gas	45.37	
Transportation - ferries, etc.	41.05	
Camp charges	40.00	
Meals and accomodation	337.60	
Truck rental	370.65	
Draughting, prints, typing	170.80	
Geochemical testing	506.90	
Telephone, etc	<u>50.00</u>	
		1,820.75
		<u>182.08</u>
		<u><u>\$4,358.73</u></u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
 of Vancouver, in the
 Province of British Columbia, this 9
 day of December 1971, A.D.

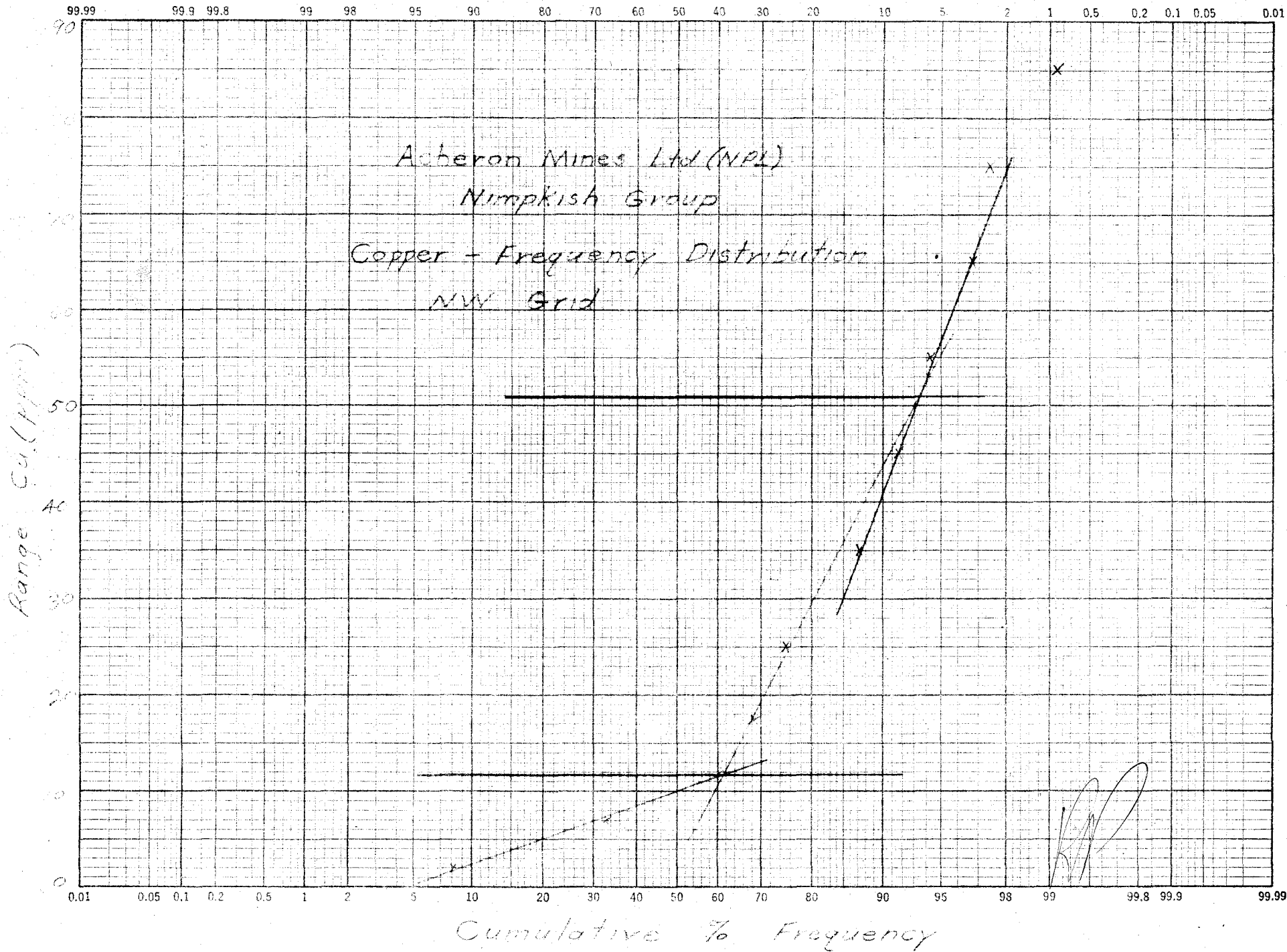
M. Tekler

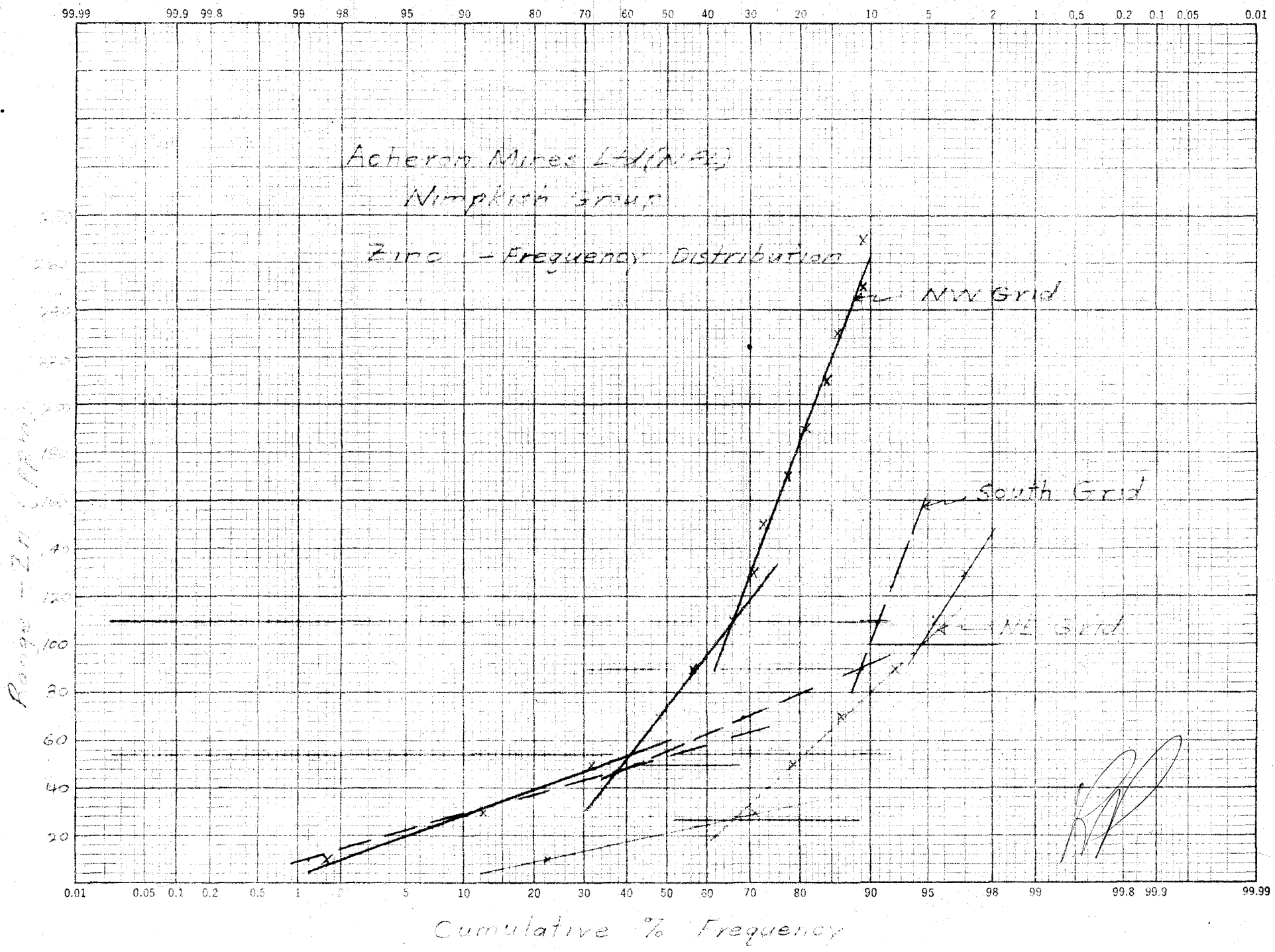
Jan Turner

A Commissioner for taking Affidavits for British Columbia or
 A Notary Public in and for the Province of British Columbia.

*0

Sub-Mining Recorder





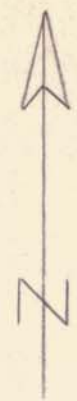


NIMPKISH
LAKE

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3401 M&P #1

3401 M-1

AGILIS EXPLORATION SERVICES LTD.
ACHERON MINES LTD (N.P.L.)
NIMPKISH LAKE
VANCOUVER ISLAND, B.C.
Base Map & Grids
DRAWN BY L.M. SCALE 1" = 400'
CHECKED BY R.P. DATE: SEPT. 1971



NORTH-WEST GRID

L28+00 N

L24+00 N

L20+00 N

L16+00 N

L12+00 N

L8+00 N

L4+00 N

L0+00 S

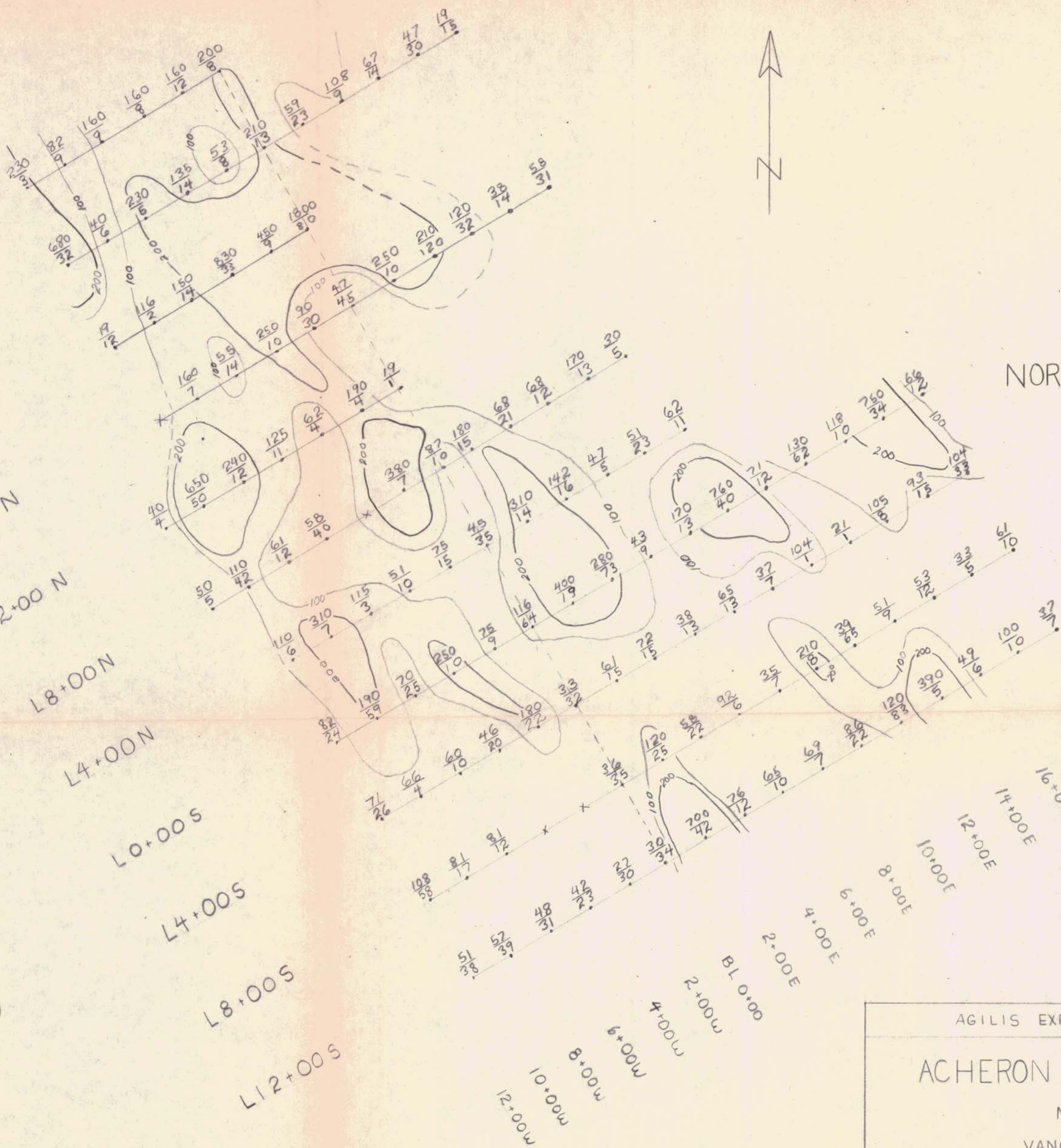
L4+00 S

L8+00 S

L12+00 S

LEGEND

$\frac{169}{92} \approx \frac{Zn (ppm)}{Cu}$



Department of
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AGILIS EXPLORATION SERVICES LTD.

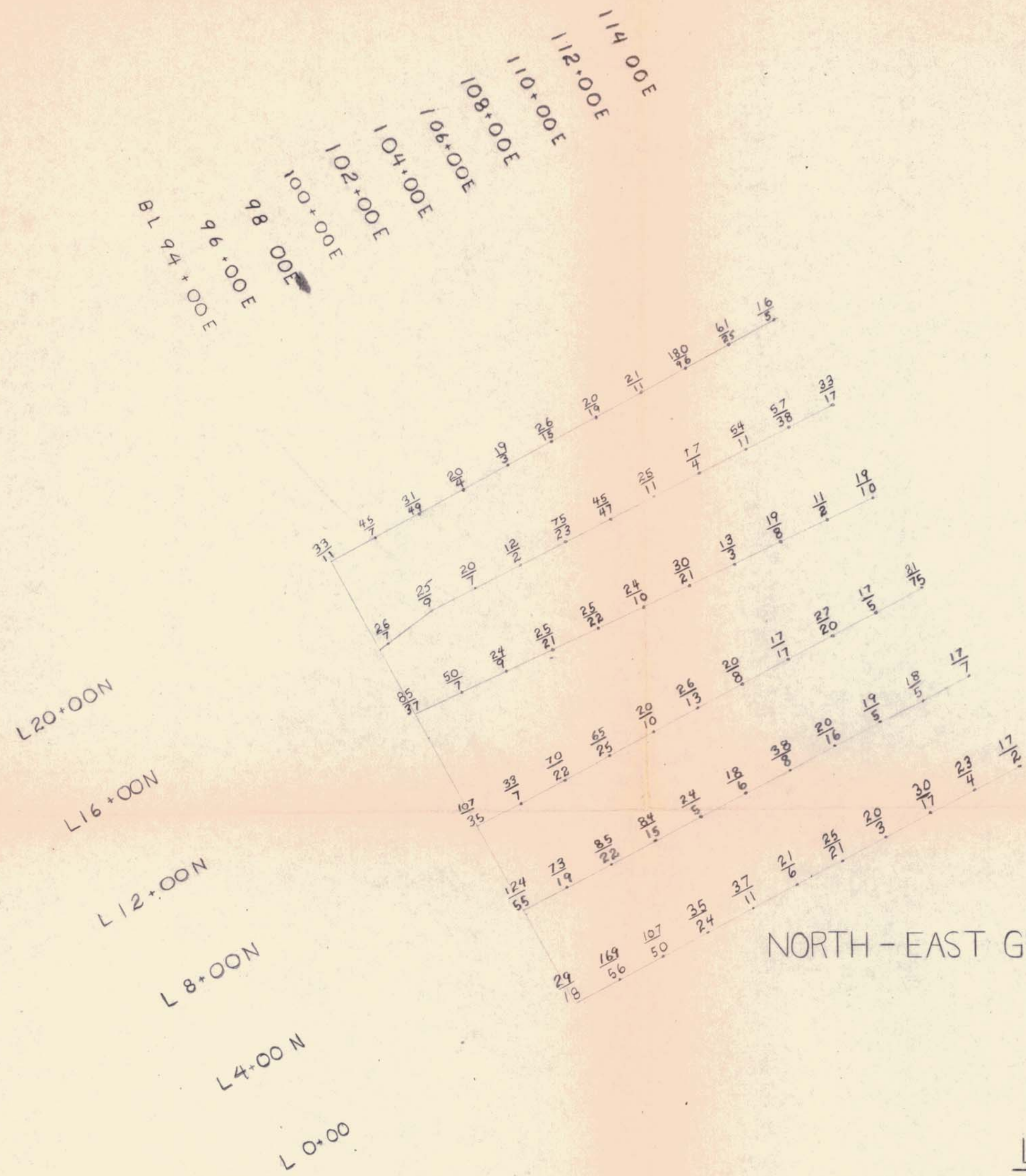
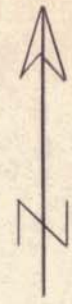
ACHERON MINES LTD. (N.P.L.)

NIMPKISH LAKE
VANCOUVER ISLAND, B.C.

Geochemical Survey

DRAWN BY: T.M. SCALE: 1" = 400'

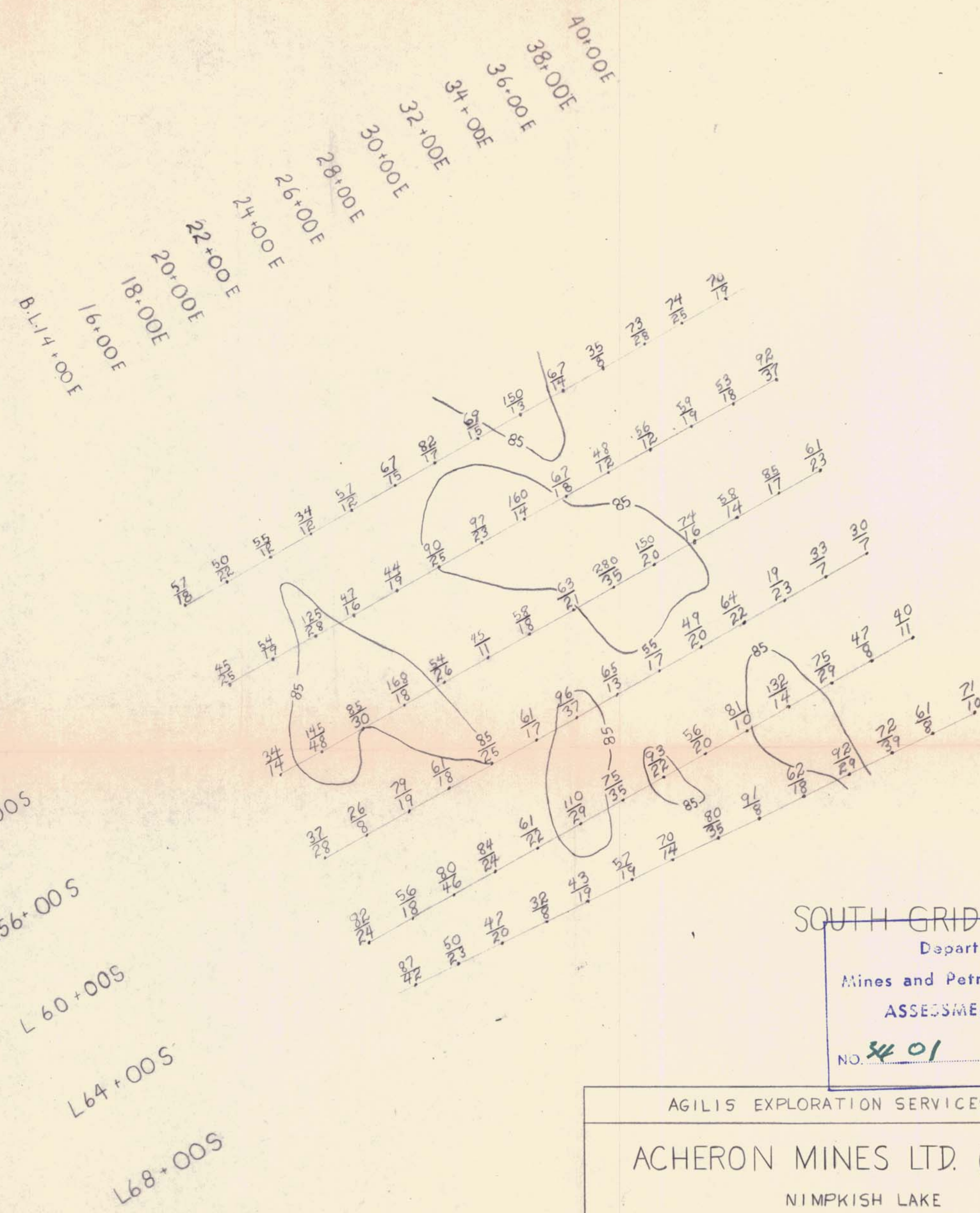
CHECKED BY: R.P. DATE: SEPT., 1971



NORTH-EAST GRID

LEGEND

$\frac{169}{92} \approx \frac{Zn}{Cu} \text{ (ppm)}$



SOUTH GRID

Department of
Mines and Petroleum Resources
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AGILIS EXPLORATION SERVICES LTD.

ACHERON MINES LTD. (N.P.L.)
NIMPKISH LAKE
VANCOUVER ISLAND, B.C.
Geochemical Survey

DRAWN BY TM. SCALE: 1" = 400'
CHECKED BY RP DATE: SEPT, 1971