

ELC GEOPHYSICS LTD.
REPORT NO 72-212

FOR GAYLORD MINES LIMITED
GAMBIER ISLAND, B. C.
49° N - 123° W

AUGUST 8 - SEPTEMBER 25, 1972

by D.L.HINGS, P.ENG.

Jon, Dale, JD, Blue Grouse

92G/11W

3908

This is ELC Geophysics Ltd. Report No. 72-212
Geophysical and Geochemical Surveys over "A" "B" and "C" Areas
For Gaylord Mines Limited (NPL)
Gambier Island, B.C. 49° N - 123° W
August 8, 1972 to September 25, 1972

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3908

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ELC GEOPHYSICS LTD.
250 N. GROSVENOR AVE.
BURNABY 2, B.C.

298-9619

NO. 3908 MAP

ELC Geophysics Ltd. Report No. 72-212
For Gaylord Mine Limited

PLANS

"A" Area plans

| | | |
|----------------------------|----------------|---|
| #1 All profiles EM - Mag | 72-212-A-ME | ✓ |
| #2 Geochem Values & Claims | 72-212-A-GC | ✓ |
| #3 Copper Contours | 72-212-A-CU | ✓ |
| #4 Moly & Zinc Contours | 72-212-A-MO-ZN | ✓ |
| #5 Geophysical Anomalies | 72-212-A-A | ✓ |

"B" Area Plans

| | | |
|----------------------------|-------------------|---|
| #6 Profiles EM - Mag | 72-212-B-ME | ✓ |
| #7 Geochem Values & Claims | 72-212-B-GC | |
| #8 Geochem Contours | 72-212-B-CU-MO-ZN | |
| #9 Interpreted Anomalies | 72-212-B-A | ✓ |

"C" Area Plans

| | | |
|-----------------------------|----------------|--|
| #10 Profiles EM-Mag | 72-212-C-ME | |
| #11 Geochem Values & Claims | 72-212-C-GC | |
| #12 Copper Contours | 72-212-C-CU | |
| #13 Geochem Contours | 72-212-C-MO-ZN | |
| #14 Interpreted Anomalies | 72-212-C-A | |

#15 Layout Location Plan 72-212-ABC-L
#16 Location Plan 1:50,000

elc geophysics ltd.

250 NORTH GROSVENOR, VANCOUVER, CANADA TELEPHONE: (604) 298-9619

ELC GEOPHYSICS LTD. REPORT NO. 72-212 COVERING THE
GEOPHYSICAL AND GEOCHEMICAL SURVEYS OVER "A", "B" AND
"C" DESIGNATED AREAS FOR GAYLORD MINES LIMITED ON
GAMBIER ISLAND, B.C. 49° N - 123° W AUGUST 8, 1972 to
SEPT. 25, 1972.

Purpose:

The "A" area covering the N and J claims shows outcrops of copper mineralization and the area designated as "B" on the JON and GALE claims were gridded and surveyed with a magnetometer in June, 1972 reported on in ELC Geophysics Ltd. report No. 72-206. The geophysical program was made on the recommendations of A.F. Roberts, P.Eng.

This report pertains to an extension of the previous magnetometer survey and includes both the "A" "B" and a new area "C" that adjoins the "B" section. This report covers a geochemical, electromagnetic and magnetometer results, and the interpretation of these three areas on Gambier Island for Gaylord Mines Ltd.

Location:

The location and layout of the survey and claims group is shown on plan 72-212-ABC-L. The

...con't...

property is located on the north and east coast of Gambier Island in Howe Sound, B.C. Latitude 49°31' N longitude 123°22'W.

Geological Reference:

Report by A.F. Roberts, P.Eng. April 7, 1972,
on the Gambier Island Property for Gaylord Mines Ltd.

Personnel:

The surveys were conducted under the supervision of Wayne Mather, assisted by Kaare Pettersen, Eric Wiggins, John Krygsveld and Jim Caldwell.

Instrumentation:

The electromagnetic survey was conducted with a type EM16 Ronka instrument operating on 18.6 KHZ from the US Navy Station NPG located in Arlington, Washington, USA.

The magnetometer survey was conducted with a vertical field fluxgate self-levelling magnetometer model M110 manufactured by Sabre Electronics Ltd. of Vancouver, B.C.

The geochemical samples were taken from the

...con't..

B horizon first by removal of any overlaying debris, then digging a hole, using a round mouthed spade, approximately 15 inches below the surface. A sample from the hole was packaged using a standard kraft bag obtained from Acme Analytical Labs. In areas where soil was not available, rock samples were taken and packaged in a standard kraft bag. The sample determinations were made by Acme Analytical Laboratories, Ltd., 6455 Laurel Street, Burnaby, B.C.

Presentation:

The report is presented in three sections, "A" "B" and "C". The "A" section covers the electromagnetic and geochemical survey over 34,700 feet of grid line on the N & J and BLUEGROUSE claims on the southern end of the Gaylord Property.

The "B" section of the report covers the EM and geochemical results on the northeastern portion of the JON and GALE claims. The survey covers 40,600 feet of grid line as indicated on the "B" plans.

The "C" section of the report relates to the area south and west but adjoining the "B" area. The "B" and "C" plans have common coordinates. The survey covers 46,000 feet of gridline as indicated on the "C" plans.

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Interpretation Considerations:

From the geophysical standpoint, it was desirable to obtain the magnetometer profiles of the gridlines, to determine discontinuities in the subsurface rock formations. The EM surveys were conducted to determine variations in the conductivity, relevant to the profile gradient, phase and amplitude variations.

Geochemical Interpretations:

Soil and rock sampling was made at the same locations as the instrumentation for geophysics. The geochem determinations were analyzed for copper, molybdenite, zinc and silver. Anomalous values were contoured as follows.

The copper contour value was for 300 ppm for both soil and rock samples against a background of 30 ppm for rock samples and 25 ppm for soil samples.

The zinc contour value was for 200 ppm for rock and soil determinations against a background of 95 ppm for rock samples and 65 ppm for soil samples.

The molybdenite contours were made at 15 ppm for rock and soil samples against a background of 1 ppm for rock samples and 2 ppm for soil samples. Higher

...con't...

value contours are indicated, and hatching has been included to clarify the high value anomalous areas.

SURVEY RESULTS FROM AREA "A"

Electromagnetic:

Referring to plan 72-212-A-ME. This plan shows the profile values for the vertical and horizontal components of the electromagnetic survey in dashed and solid lines. In addition the previous magnetometer profiles are shown in a thin solid line. Claim posts and surface features such as shore line, are also indicated on this plan.

Referring to the plan 72-212-A-A. This plan indicates the interpreted linear and contoured anomalies for EM and includes the previous survey magnetometer results over the same grid with linear interpretations.

It will be noted there are two contoured zones, A-E1 and A-E2 indicating areas of increased conductivity. In addition linear anomalies EL1 and EL2 having a northwest-southeast trend separate these anomalies. The linear anomalies EL3 and EL4 appear to follow closely to the magnetometer anomalies L3C and L7.

...con't...

Area "A" Geochemical Results:

Refer to plan 72-212-A-GC showing the respective values in ppm for molybdenum, copper, zinc and silver in that order at each station.

Refer to plan 72-212-A-CU showing the contour for copper having 300 ppm or more. It will be noted the westerly portion of the anomaly A-CU2 between coordinates 6+00 W and 8+00 W follows closely to the EM linear anomaly EL-1. The most easterly anomaly A-CU-1 near the shoreline falls within the general area of the anomalous EM zone A-El. It seems probable that the anomalies along the line 0+00 following the shoreline are somewhat inconsistent geochemically owing to slide rock and debris from work conducted higher up the relatively steep surface to the west. It will be noted line 0+00 was not run with EM instrumentation.

Geochem Results on MO and ZN - Area "A":

Reference plan 72-212-A-MO-ZN. A small molybdenum anomaly A-MO-1 extends from the north-south baseline 0+00 close to the magnetic linear anomaly L4B with the enrichment again appearing in the vicinity of 10+00 W on the east-west base line and to the south. Although this is relatively weak geochemical anomaly it may indicate mineralization.

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The zinc anomalies A-ZN-1 and A-ZN-2 appear to join on the north south baseline. The A-ZN-1 anomaly parallels the east-west baseline to the north and A-ZN-2 follows closely to the copper anomaly A-CU-2. Random enrichment is shown and appears to align to some extent with the eastern linear geophysical anomalies.

SURVEY RESULTS FROM AREA "B"

Electromagnetic:

Referring to plan 72-212-B-ME. This plan shows the profile values for the vertical and horizontal components of the electromagnetic survey in dashed and solid lines. In addition the previous magnetometer profiles are shown in a thin solid line. Claim posts and surface features such as shore line are also indicated in this plan.

Referring to the plan 72-212-B-A. This plan indicates the interpreted linear contoured anomalies for EM and include the previous survey magnetometer results over the same grid with linear interpretations. There are two contoured areas, B-ME-1 and B-ME-2, indicating increased conductivity. The remaining anomalies are shown in linear form with the more prominent north-south strikes indicated as L1-B and L2-B. These

...con't...

anomalies extend to the south into the "C" area and show perpendicular linears to the east. The L4-B, L5-B and L6-B anomalies follow closely to the zinc geochemical high for the "B" area, the contoured anomaly B-ME-1 appears to be closely associated with the L6-B linear anomaly. The L3-B northwest-southeast anomaly follows a similar strike to the magnetic anomaly L3N to the northeast that appears to be offset at the junction of L2-B. The L3-B anomaly continues into the "C" zone to the southeast. The large contoured anomaly B-ME-2 appears to be from the increased conductivity created by Gambier Creek on the south end of the survey, however on the southwest corner the linear anomalies L1-B and L2-B show increased conductivity to the south of Gambier Creek as they approach the "C" area.

Geochemical Results - Area "B":

Referring to plan 72-212-B-CU-MO-ZN. With the exception of a few random enrichments the only significant copper anomaly is in the extreme southwest corner of the survey indicated as B-CU-1 and suggesting further enrichment into the "C" zone.

Only spot random anomalies of molybdenum are present in the "B" area. The zinc enrichment is indicated by the anomalies B-ZN-1 and B-ZN-2. These

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anomalies show an east-west trend and include some molybdenum enrichment.

The anomaly B-ZN-1 follows closely to the EM anomaly L6-B but does not follow the contoured conductive area B-ME-1.

The zinc anomaly B-ZN-2 aligns with the EM anomaly L5-B but does not appear to follow geophysical anomalies to the east. It is interesting to note that the zinc anomalies although having an east-west trend show random enrichment in a north-south direction.

SURVEY RESULTS FOR THE AREA "C"

Electromagnetic:

Referring to the plan 72-212-C-ME. This plan shows the profile values for the vertical and horizontal components of the electromagnetic survey in dashed and solid lines. In addition the previous magnetometer profiles are shown in a thin solid line. Claim posts and surface features such as creeks, etc. are also indicated on this plan.

Referring to the plan 72-212-C-A. This plan indicates the interpreted linear anomalies for EM and

...con't...

includes the magnetometer anomalies over the same grid and includes linear and contoured areas of increased conductivity.

The anomaly C-E1 covers an area having a number of parallel linear anomalies with a strike of approximately 110°. A second triangular shaped contoured anomaly, C-E2 to the north shows a second area of conductivity that includes the linear anomaly L2-C which is a continuation of the linear anomaly L2-B from the "B" area. A third prominent conductive anomaly is indicated by C-E3 made up of several linear conductive features and extending to the linear anomaly L1-C that becomes Ll-B in the "B" area.

The linear EM anomaly L4-C has an east-west trend and appears to be caused by a formation change or contact.

Conductive anomalies derived from combined magnetometer and EM gradients are shown by the contours indicated with the letters ME. It is believed the conduction within these contours are devoid of surface conduction effects. There are ten areas extending from C-ME-1 through to C-ME-10 all basically west of the L2-B linear anomaly. The anomaly C-ME-5 follows closely to the creek bed.

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Geochem Results For Copper:

Referring to plan 72-212-C-CU. An extensive copper anomaly is indicated within the boundaries of CU-Z1 combined with CU-Z2 wherein all copper determinations exceeded 300 ppm. Within this area the solid line contoured zones CU-1 through CU-5 are all anomalous zones having a copper enrichment in excess of 800 ppm and in some cases to several thousand ppm.

The copper anomalies appear to follow a general east-west trend and correlate quite closely with most of the conductive EM anomalies.

The copper enrichment does not appear to extend to the north beyond the contact anomaly L4-C shown on plan 72-212-C-ME.

Geochem Results on MO and ZN:

Referring to the plan 72-212-C-MO-ZN. An extensive anomaly of molybdenum enrichment exceeding 15 ppm is within the contours of the anomalies MO-Z1 and MO-Z2. Within this contour further enrichment of moly is indicated by the solid line contours of 40 ppm shown by MO-1 through to MO-4, including some reading in excess of 100 ppm, plus two separate small anomalies MO-5 and MO-6.

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The molybdenum anomalies follow very closely with the copper anomalies and perhaps indicate in more detail the general trend of mineralization, also correlating in strike with the EM results.

The zinc anomalies are random and almost without exception are separated from the copper and moly anomalies. The C-ZN-1 zinc anomaly borders the southern edge of the main anomalous zone for copper and moly, other random small anomalies are indicated up to C-ZN-5. The principal zinc anomalies are well north of the "C" area, in the "B" area.

Summary:

The enrichment of copper and moly in the "C" area extends north and south on the eastern side of the anomaly for approximately 2000 feet and extends to the west and south to the limits of the survey. To find the full extent of the anomaly to the east of the survey would require more grid lines east and west of the baseline beyond coordinates 44+00 W.

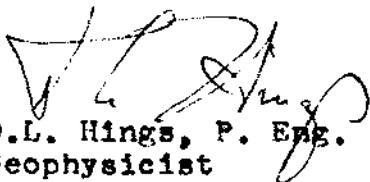
The same procedure would be required on the "B" survey if the zinc anomalies were to be closed to the west.

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The south and west portion of the "B" - "C" areas show the existence of extensive anomalies for moly and copper with unusually high enrichment. These results are most encouraging.

Conclusions:

The "C" area appears to be the choice of the three areas surveyed. Further extension to the east is warranted.



D.L. Hings, P. Eng.
Geophysicist

cb

A statement of costs for ELC Geophysics Ltd.
Survey Report No. 72-212
For Gaylord Mines Ltd.
Gambier Island, B.C.
August 8, 1972 to September 25, 1972

Survey Crew:

| | | |
|--------------|-----------------|------------|
| W. Mather | 15 days @ 50.00 | 750.00 |
| K. Pettersen | 10 days @ 50.00 | 500.00 |
| J. Krygsveld | 23 days @ 35.00 | 705.00 |
| E. Wiggins | 15 days @ 35.00 | 525.00 |
| J. Caldwell | 23 days @ 35.00 | 705.00 |
| D. Cramer | 3 days @ 60.00 | 180.00 |
| | | \$ 3365.00 |

Transportation

| | |
|------------------------------|-----------|
| Truck 4 days @ 12.00 | 48.00 |
| 100 miles @ 12¢ | 12.00 |
| Boat & Motor Rental | 280.00 |
| Water Taxi - 6 trips @ 22.00 | 132.00 |
| 1 trip @ 48.00 | 48.00 |
| | \$ 520.00 |

Living Costs

| | |
|-------------------|-----------|
| 89 mandays @ 5.00 | \$ 445.00 |
|-------------------|-----------|

Equipment

| | | |
|--------------|-----------------|-----------|
| Magnetometer | 23 days @ 10.00 | 230.00 |
| EM16 | 23 days @ 10.00 | 230.00 |
| Misc. | 23 days @ 5.00 | 115.00 |
| | | \$ 575.00 |

Data Processing & Drafting

| | | |
|-------------|-----------------|------------|
| R.L. Reece | 10 days @ 60.00 | 600.00 |
| D.A. Cramer | 12 days @ 60.00 | 720.00 |
| | | \$ 1320.00 |

Interpretation & Report

| | |
|--------------------|-----------|
| D.L. Hings, P. Eng | |
| 5 days @ 120.00 | \$ 600.00 |

Geochemical Determinations \$ 2211.75

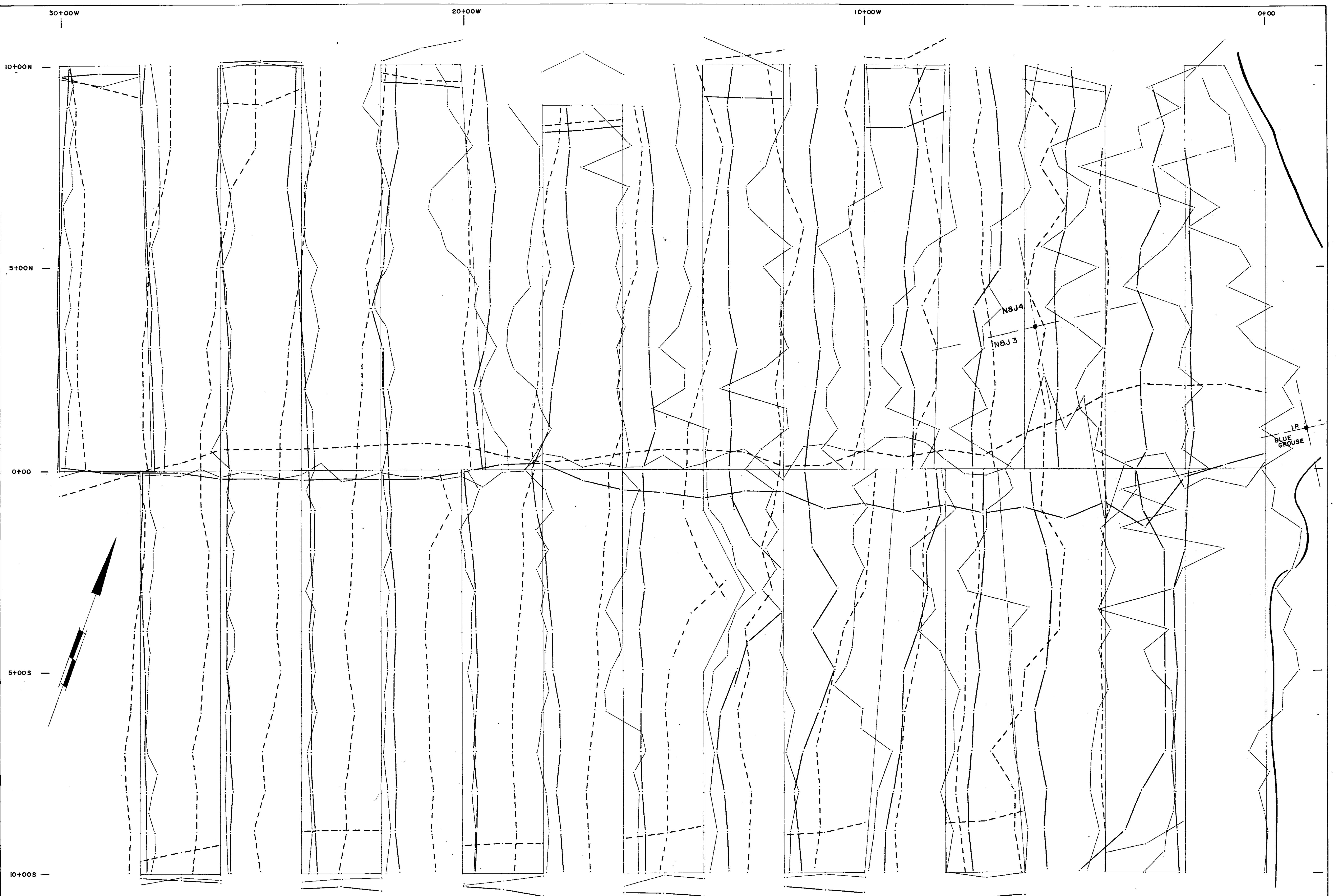
TOTAL COSTS \$ 9036.75

Declared before me at the City of Vancouver, in the Province of British Columbia, this 29 day of September 1972, A.D.



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

Sub : mining Recorder



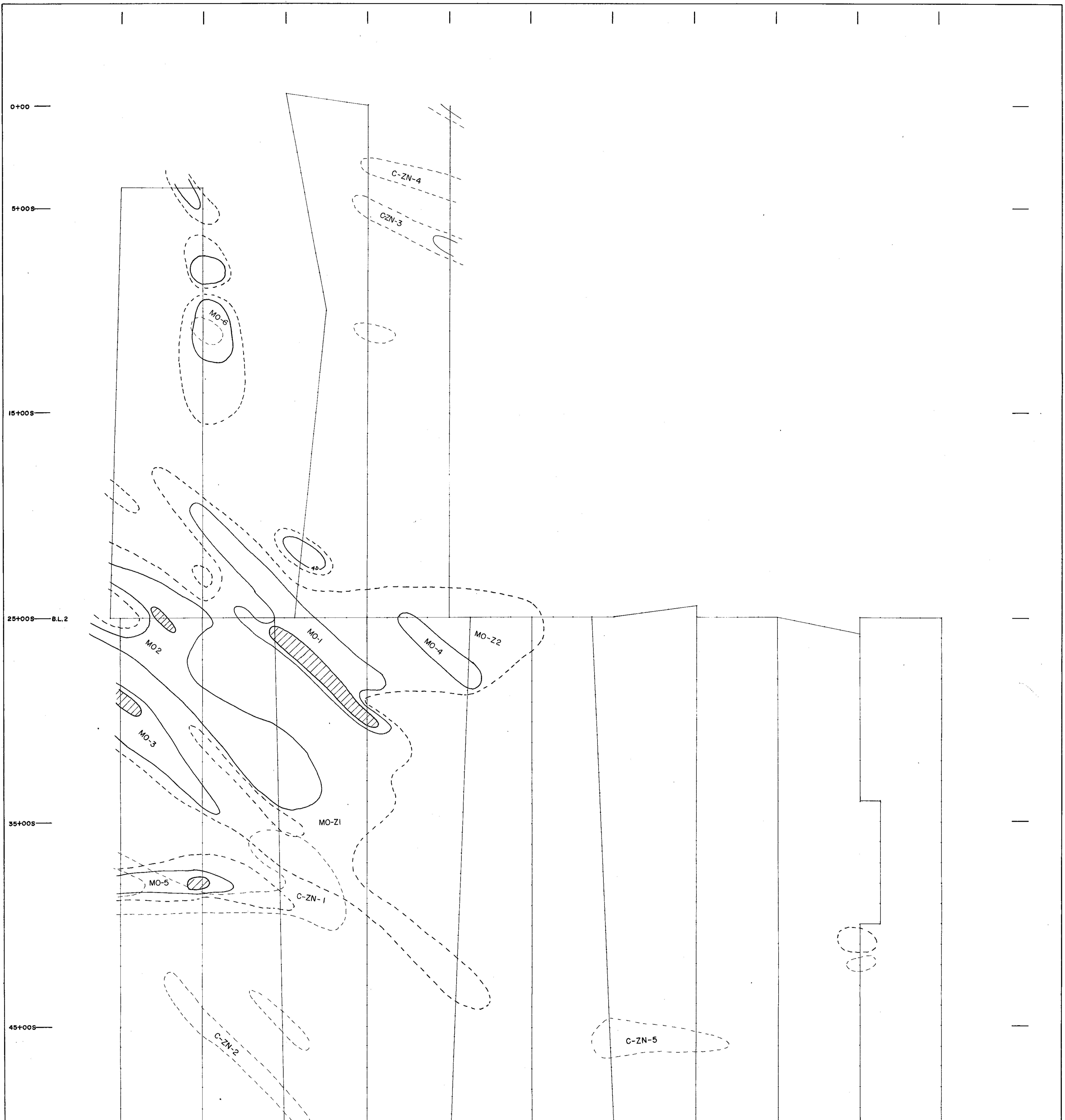
3908 M-1

ELC GEOPHYSICS LTD.
N&J CLAIMS GAMBIER ISL., B.C.
GAYLORD MINES LTD.
SEPT. 1972 SCALE 1"=100' DWG. NO. 72-212-A-ME
EM & MAG PROFILES
APPROVED

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3908 M-P #1

NOTE:
SURVEY LINES & STATIONS
— CLAIM LINE • CLAIM POST
— SHORE LINE

1" = 1000 Gammas (Zero line = 54,000 Gammas) MAG.
+/- ZERO LINE (E.M.)
+/- VERTICAL (1"=100%)
--- HORIZONTAL (1"=20%)



ELC GEOPHYSICS LTD.

JON & DALE CLAIMS GAMBIER ISL., B.C.

GAYLORD MINES LTD.

SEPT. 1972 SCALE: 1"=200' DWG. NO. 72-212-C-MO-ZN

GEOCHEM CONTOURS

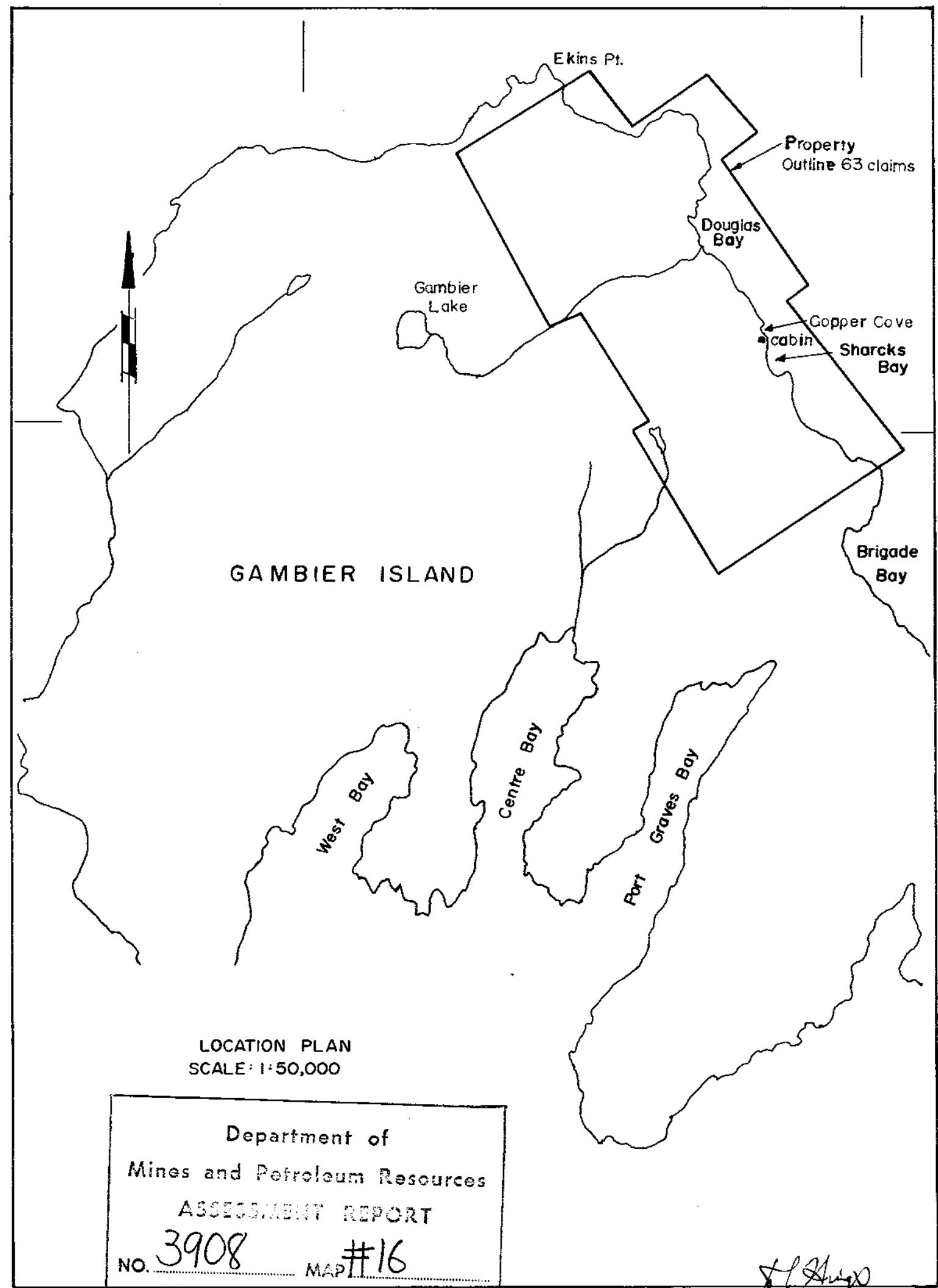
APPROVED: *[Signature]*

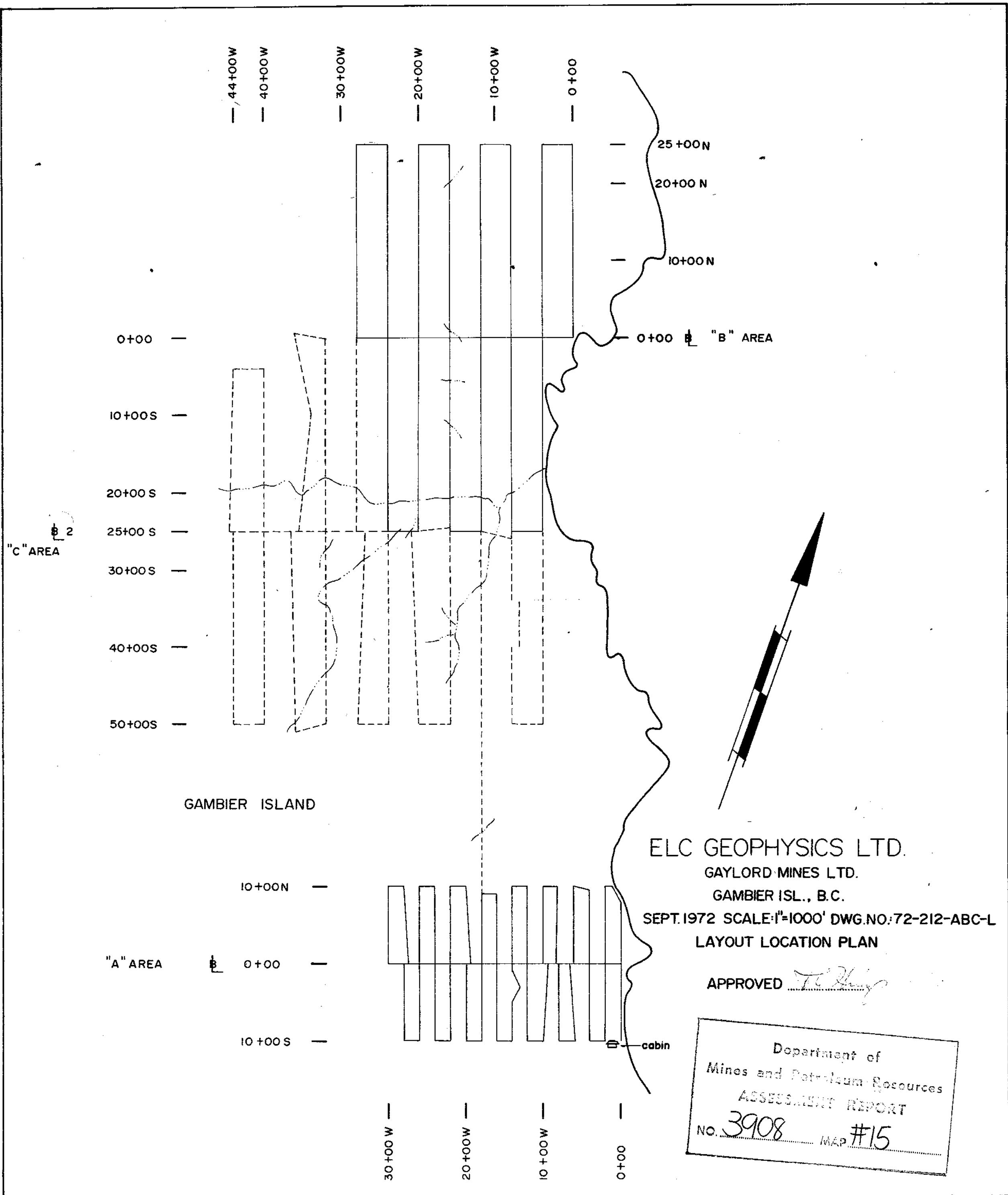
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3908 MAP #13

NOTE: SURVEY LINES & STATIONS

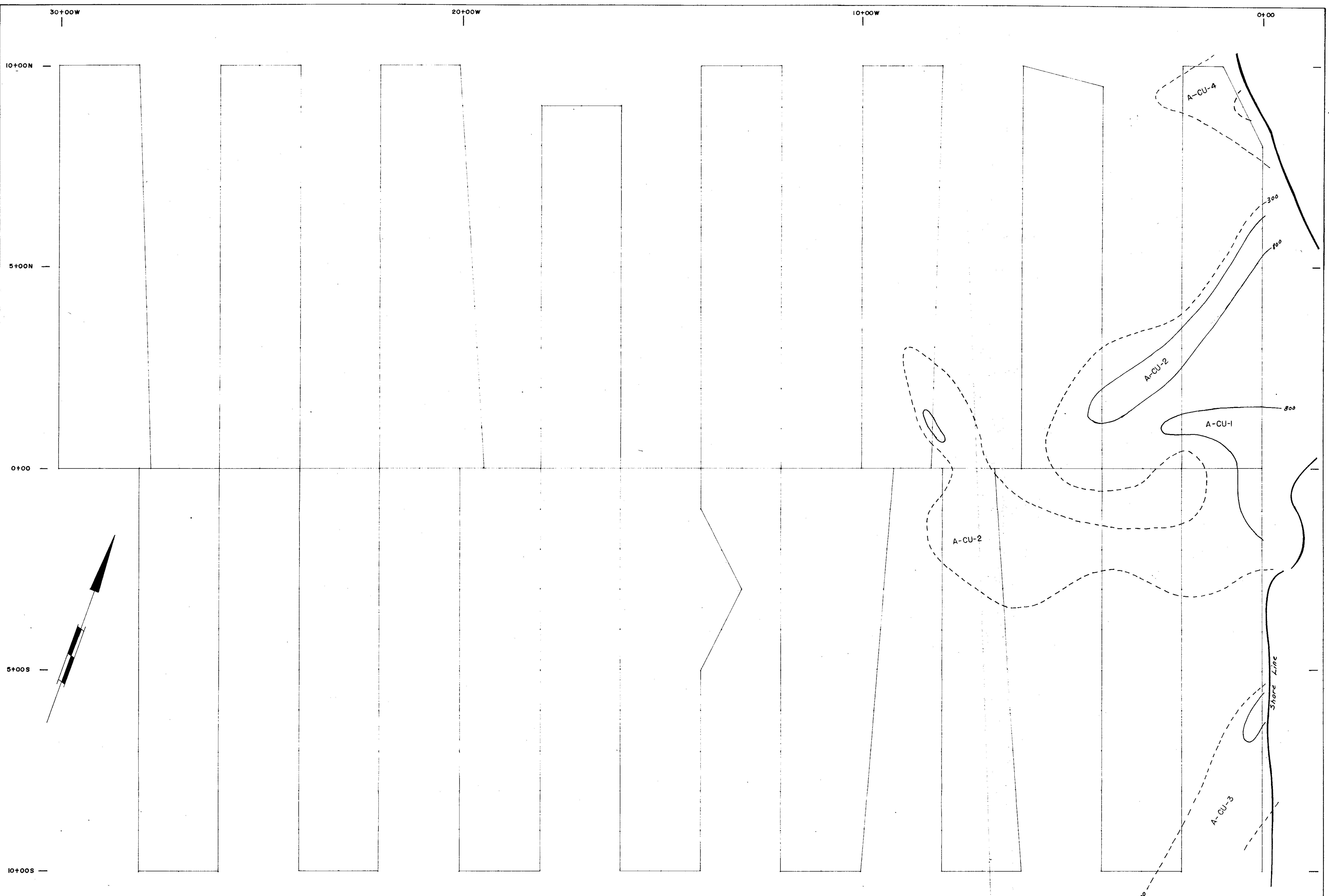
 200 PPM ZN
 500 PPM ZN
 15 PPM MO
 40 PPM MO
 100 PPM MO

44+00W 40+00W 36+00W 32+00W 28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W





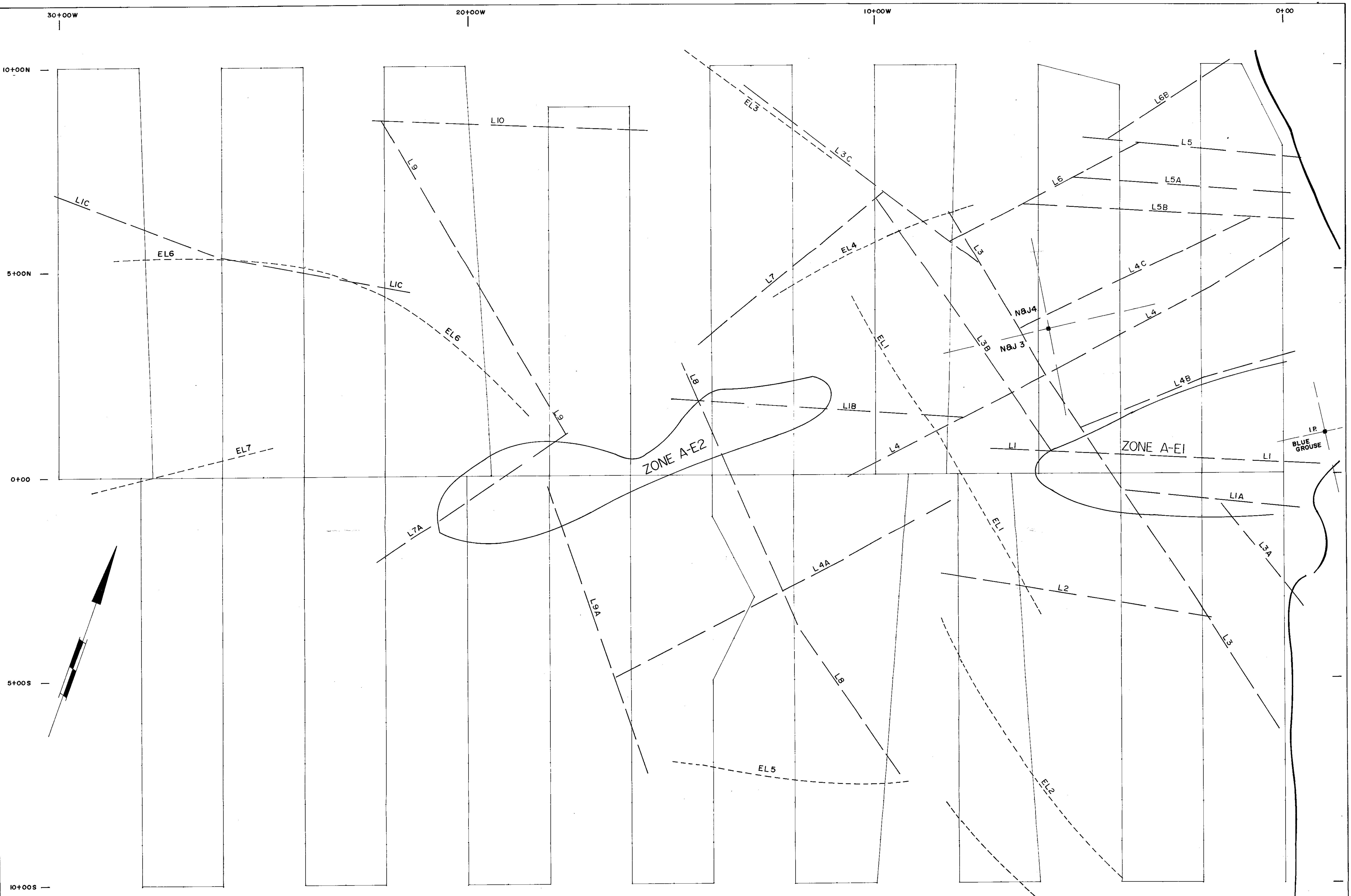




ELC GEOPHYSICS LTD.
N&J CLAIMS GAMBIER ISL., B.C.
GAYLORD MINES LTD.
SEPT. 1972 SCALE 1"=100' DWG NO. 72-212-A-CU
COPPER CONTOURS
APPROVED *T. H. King*

NOTE SURVEY LINES & STATIONS
 300 PPM CU
 600 PPM CU
 800 PPM CU

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3908 MPD #3

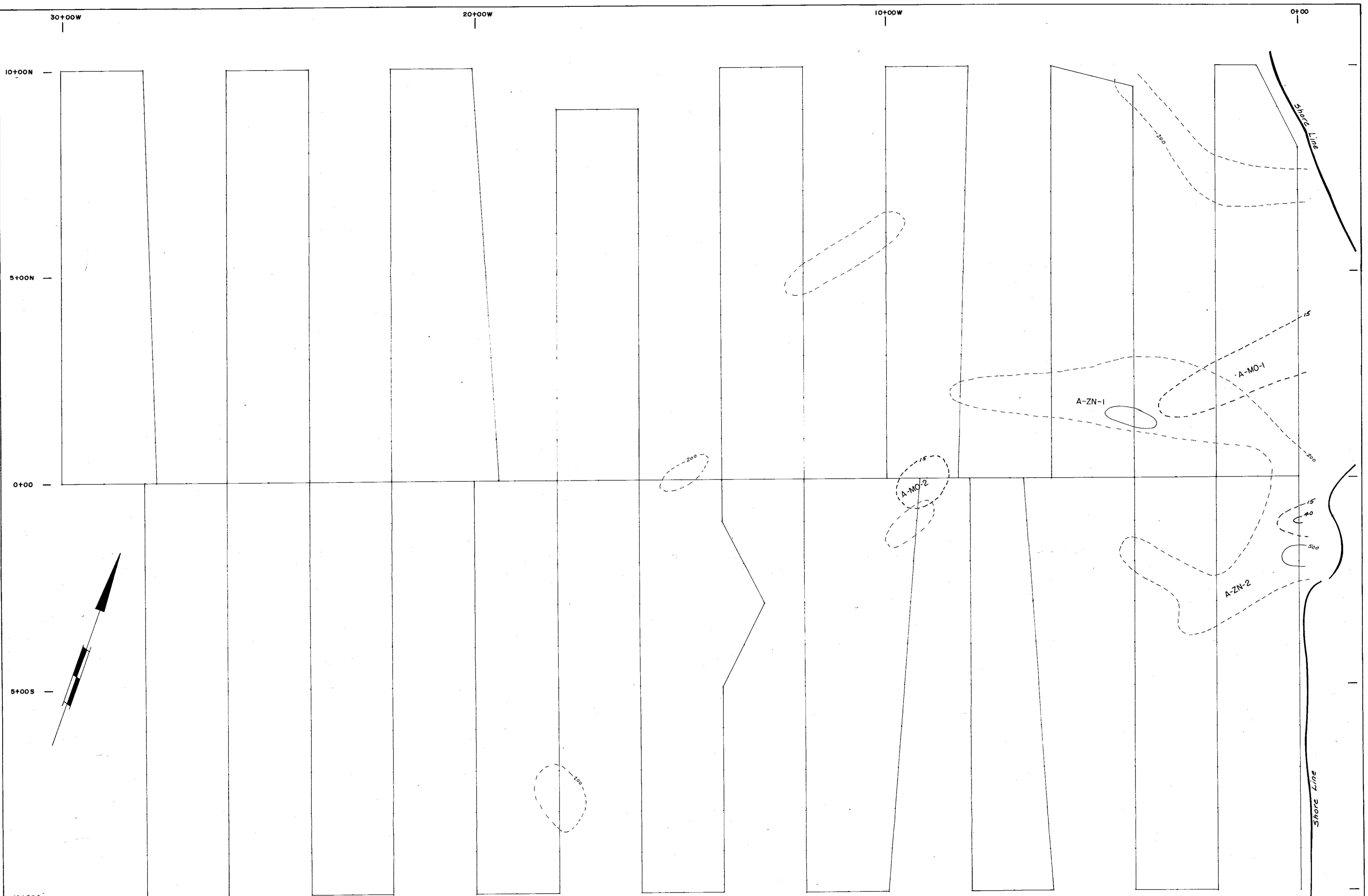


ELC GEOPHYSICS LTD.
N&J CLAIMS GAMBIER ISL., B.C.
GAYLORD MINES LTD.
SEPT. 1972 SCALE: 1"=100' DWG. NO. 72-212-A-A
GEOPHYSICAL ANOMALIES
APPROVED

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NOTE:

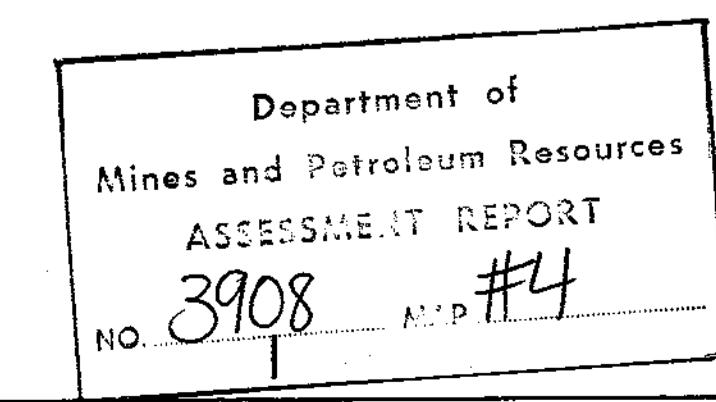
— SURVEY LINES & STATIONS
— — CLAIM LINE ● CLAIM POST
— SHORE LINE
— — LINEAR ANOMALY (MAG)
— — LINEAR ANOMALY (EM)
— CONTOURED ANOMALY

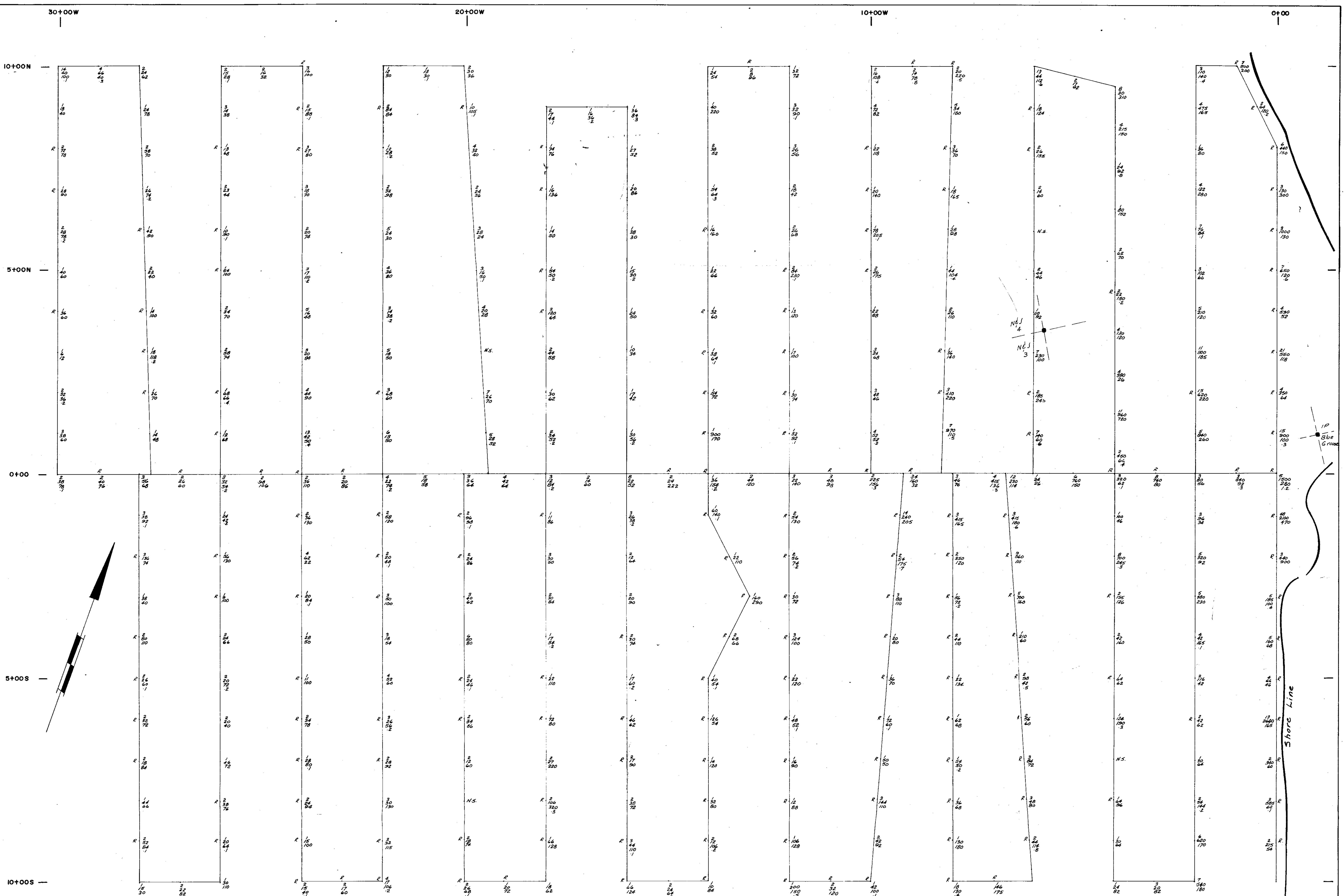


ELC GEOPHYSICS LTD.
N&J CLAIMS GAMBIER ISL., B.C.
GAYLORD MINES LTD.
SEPT. 1972 SCALE: 1"=100' DWG NO. 72-212-A-MO-ZN

GEOCHEM CONTOURS
APPROVED: [Signature]

NOTE:
SURVEY LINES & STATIONS
15 PPM MO
40 PPM MO
200 PPM ZN
500 PPM ZN





ELC GEOPHYSICS LTD.
N&J CLAIMS GAMBIER ISL., B.C.

GAYLORD MINES LTD.

SEPT. 1972 SCALE: 1"-100' DWG NO: 72-212-A-GC

GEOCHEM VALUES

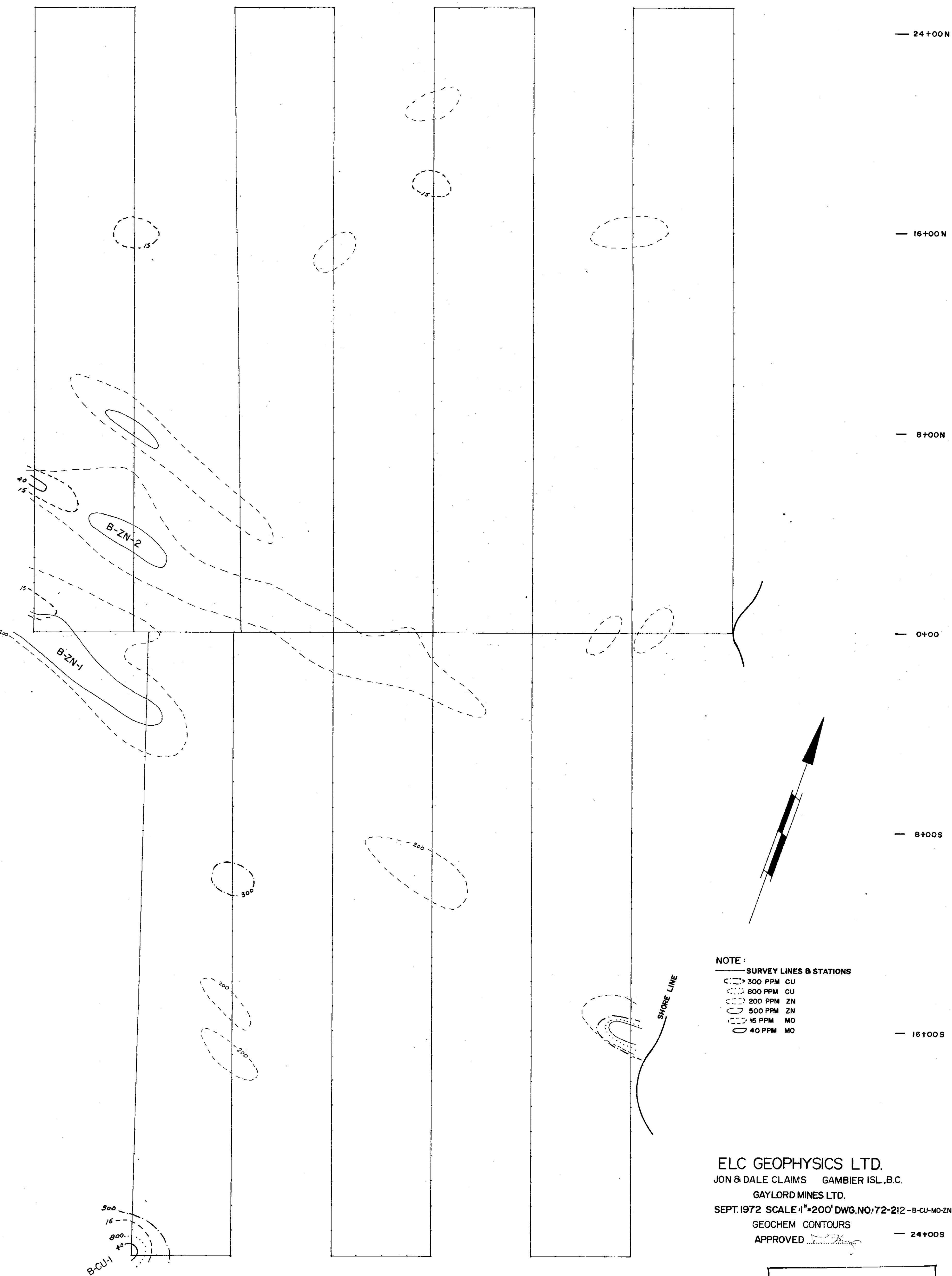
APPROVED

| | |
|--|--------|
| Department of Mines and Petroleum Resources | |
| ASSESSMENT REPORT | |
| NO. 3908 | MAP #2 |

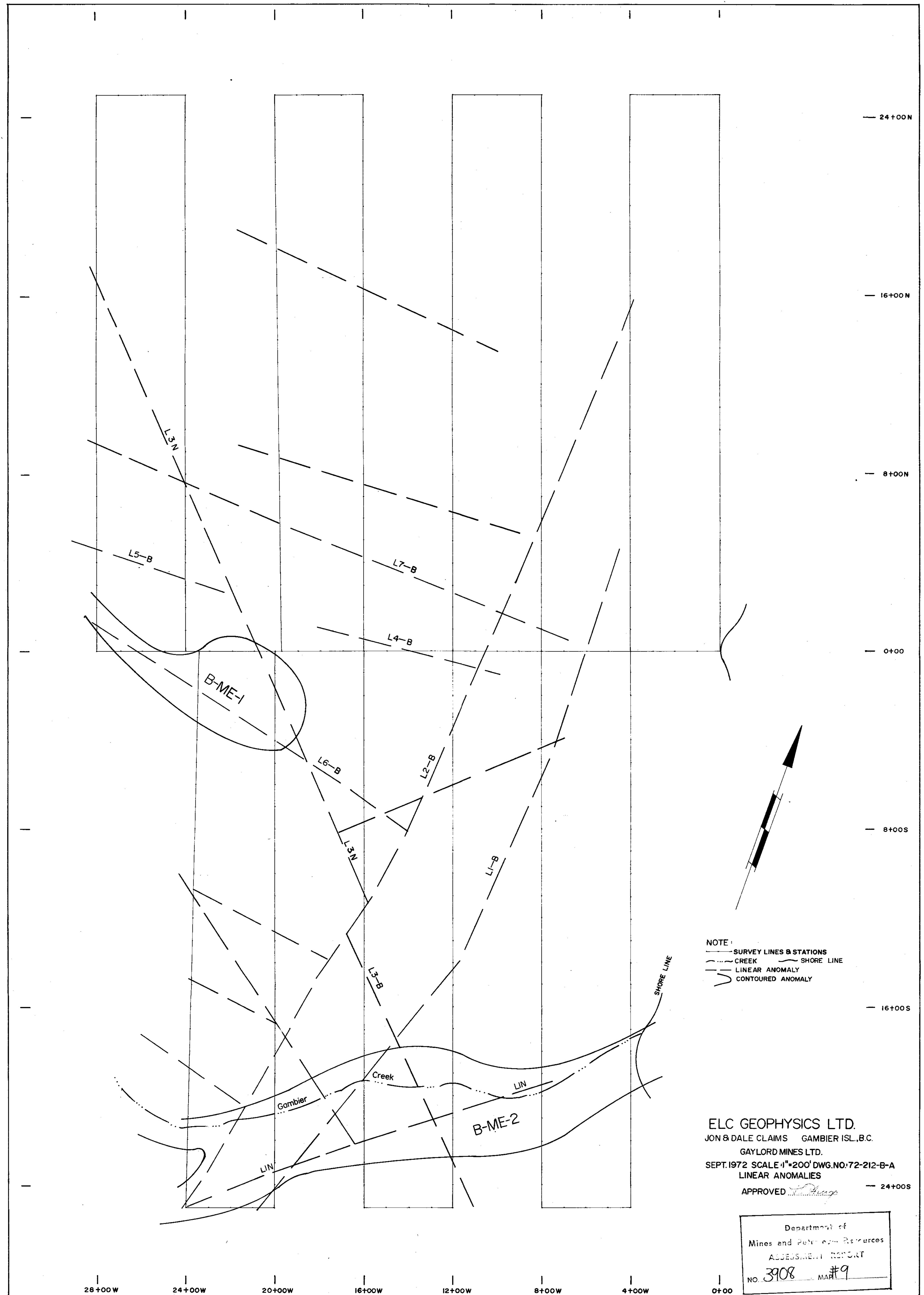
NOTE:
PPM MO
PPM U
PPM ZH
PPM AG

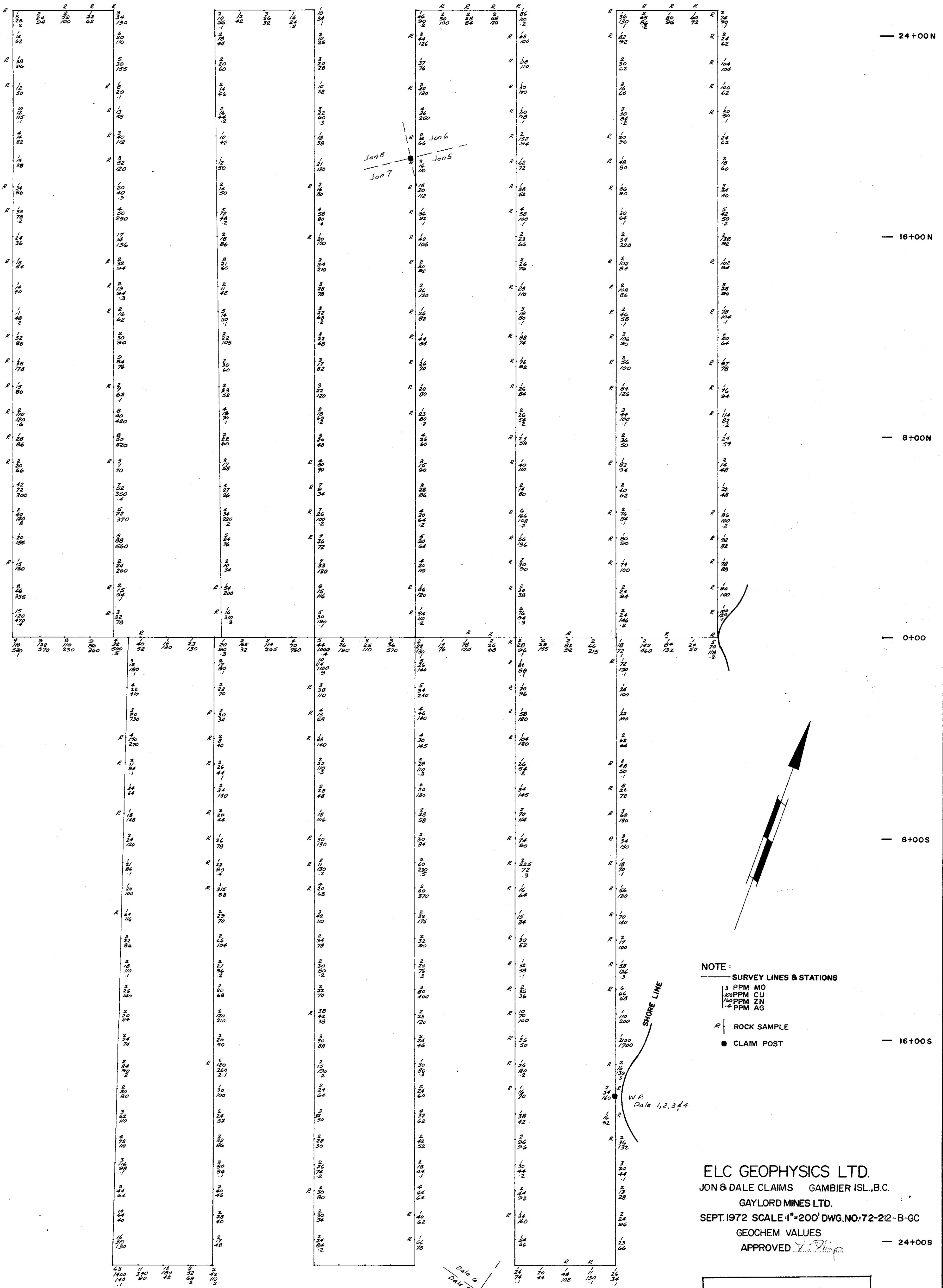
ROCK SAMPLE

CLAIM POST



| | |
|--|--|
| Department of Mines and Petroleum Resources | |
| ASSESSMENT REPORT | |
| NO. 3908 <i>#8</i> | |





ELC GEOPHYSICS LTD.
JON & DALE CLAIMS GAMBIER ISL., B.C.

GAYLORD MINES LTD.

1972 SCALE: 1" = 200' DW

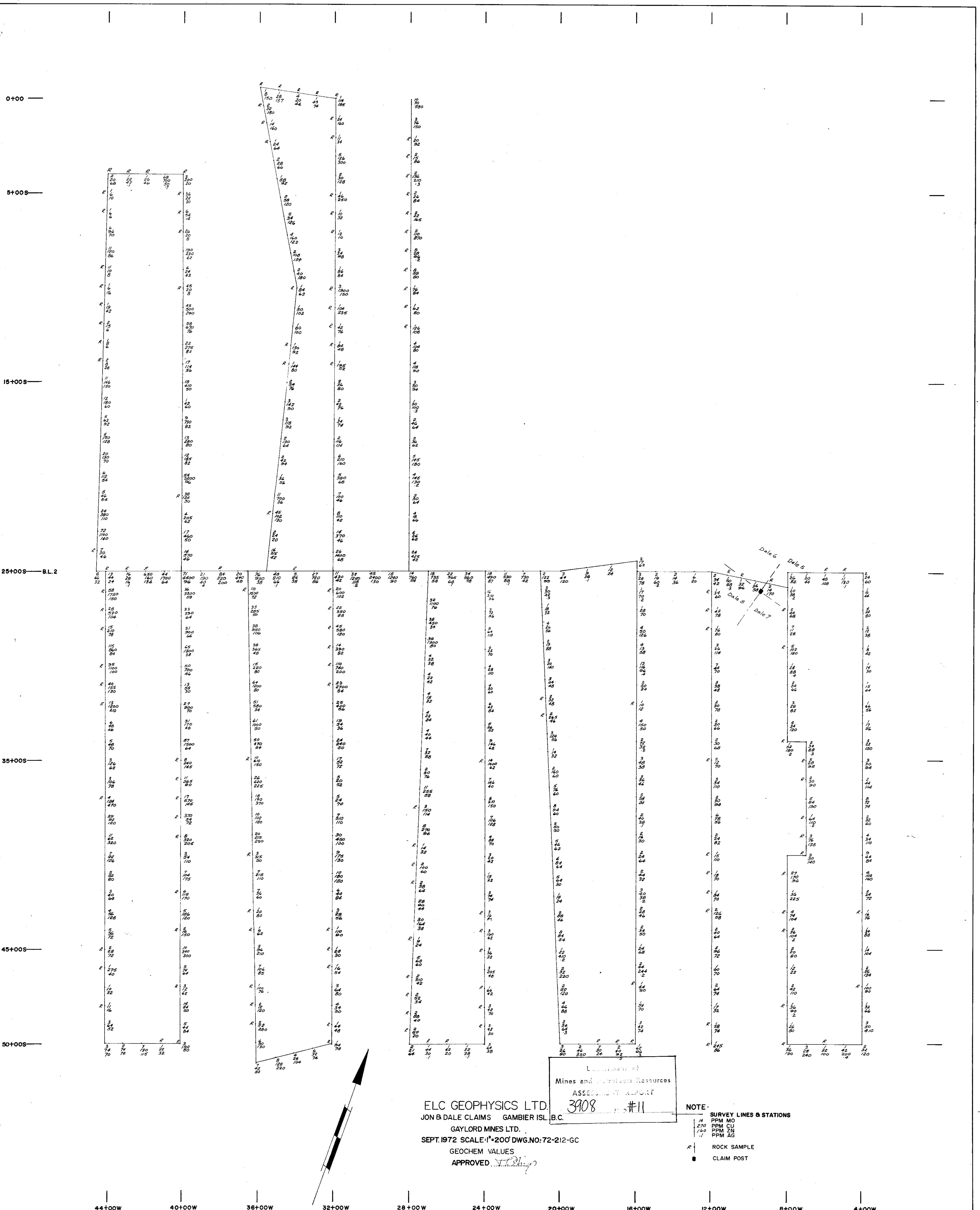
GEOCHEM VALUES

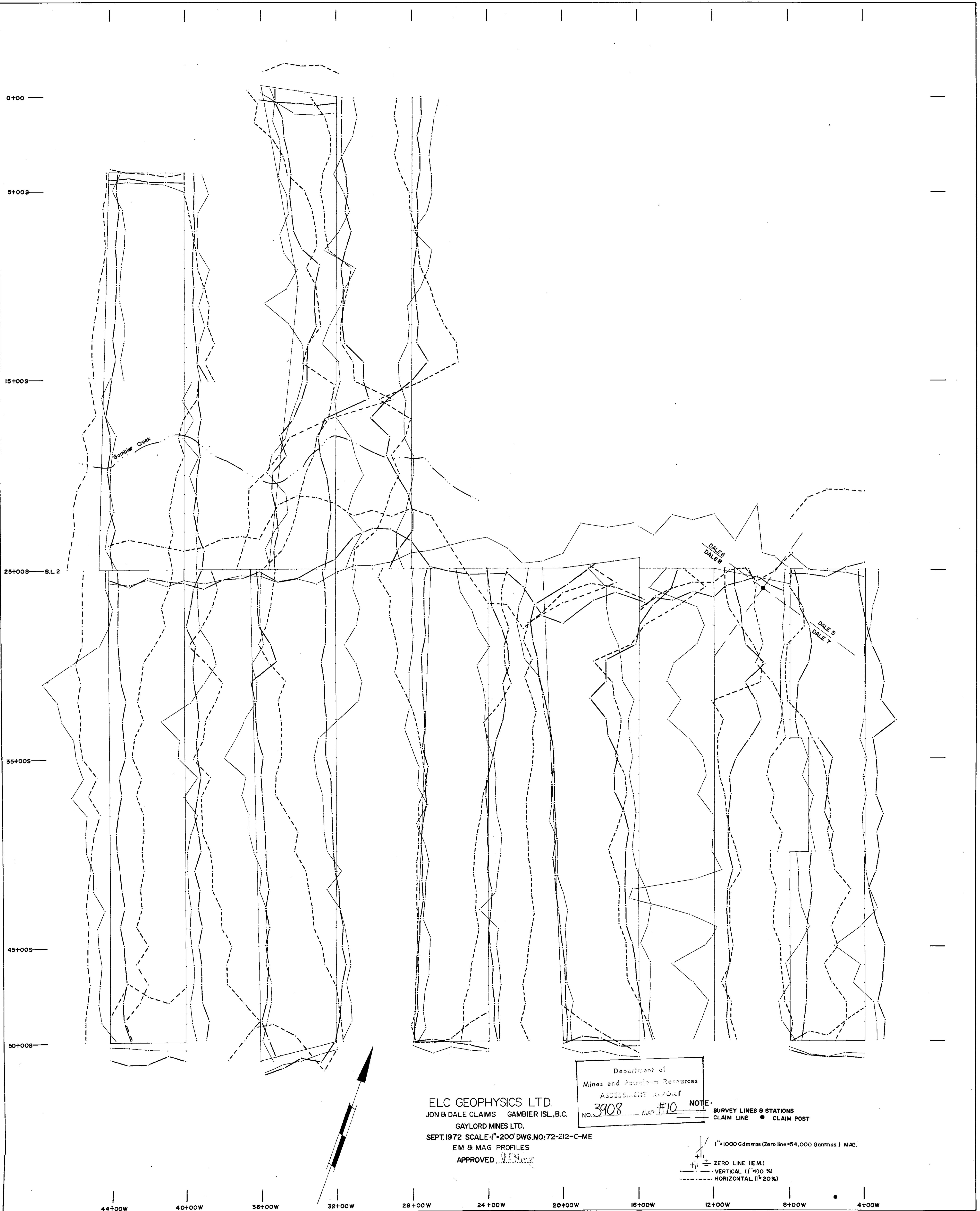
APPROVED *J. P.*

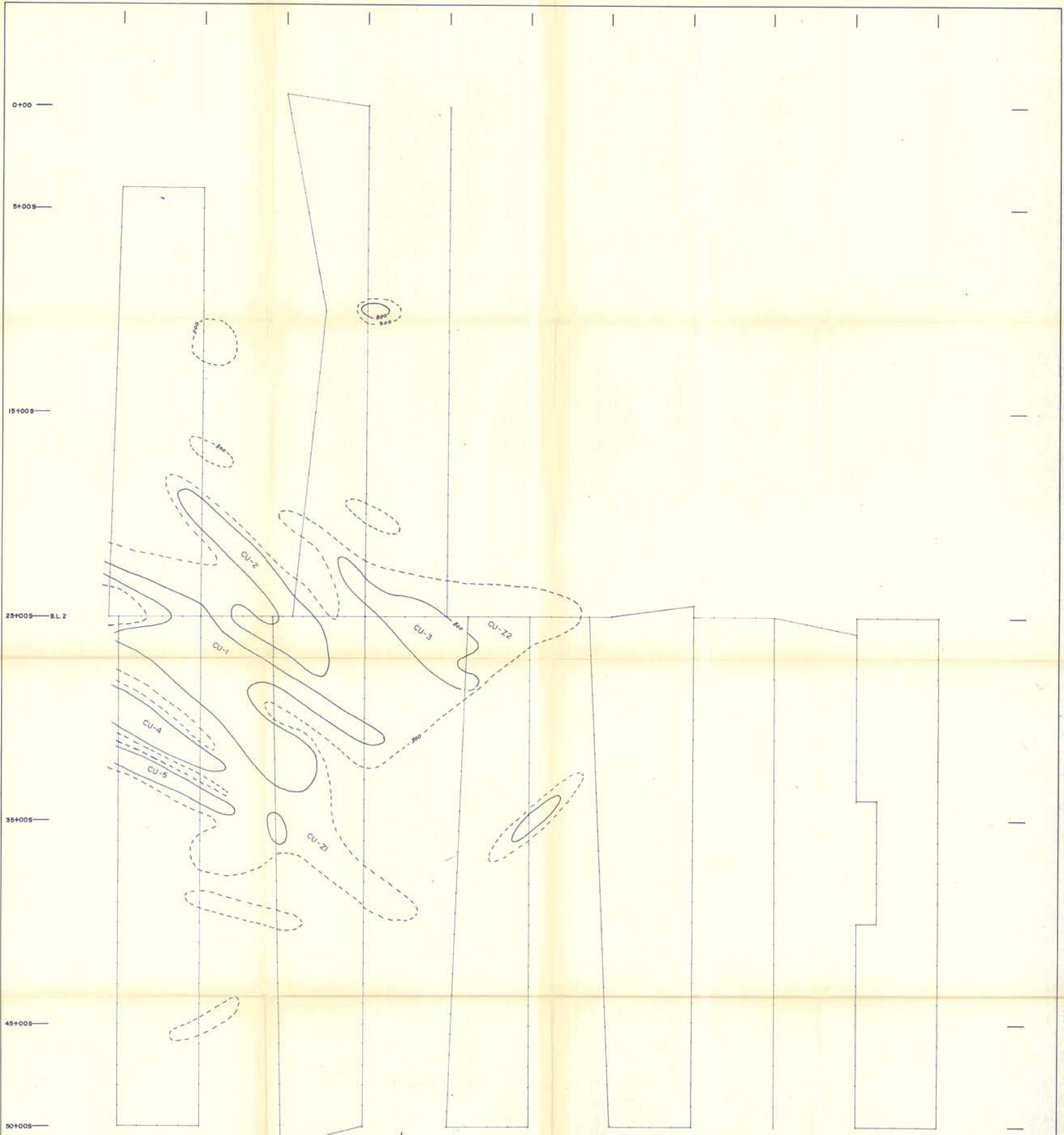
APPROVED

— 24+00s

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
Nb. 3908 MIP #7
at 00







ELC GEOPHYSICS LTD.
JON & DALE CLAIMS GAMBIER ISL., BC
GAYLORD MINES LTD.
SEPT. 1972 SCALE 1:200 DWG. NO. 72-212-C-CU
GEOCHEM CONTOURS
APPROVED

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3908 M #12

NOTE:
SURVEY LINES & STATIONS
Circles 300 PPM CU
Ellipses 800 PPM CU

