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ELC GEOPHYSICS LTD.

REPORT NO. 202-72

JUA CLAIMS GROUP

MERRITT, B. C. AREA NICOLA M.D.

50° N - 120° W

FOR G. ELDRIDGE

APRIL 10, 1972 to JUNE 2, 1972

by D.L. Hines, P. Eng.

3673

This is ELC Geophysics Ltd. Report No. 202-72
 Covering the Jua Claims Group
 Guichon Creek, Merritt, B.C. Area Nicola M.D.
 For G. Eldridge
 April 10, 1972 - 50° N - 120° W.
 to June 2, 1972

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3673
 GOVERNMENT ASSESSMENT
 RECEIVED
 MERRITT, B.C.

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3673
 MAP

PLANS

#3 Magnetometer Profile Plan	M-202-72
#2 Geochemical Contour Plan	GC-202-72
#1 Location Plan	L-202-72

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ELC GEOPHYSICS LTD. REPORT NO. 202-72 COVERING A
MAGNETOMETER AND GEOCHEMICAL SURVEY OVER THE JUA
CLAIMS GROUP FOR G. ELDRIDGE IN THE NICOLA MINING
DIVISION, APRIL 10, 1972. to JUNE 2, 1972.

Purpose:

The purpose of the survey was to determine the existence of magnetometer anomalous features combined with geochemical determinations for copper in order to better assess the subsurface geology.

Location:

See plan No. L-202-72. The claims group is on Guichon Creek approximately 10 miles north of Merritt, B.C. 50°15' N - 120°50' W.

Geological Reference:

Report and Maps issued by the Geological Survey of Canada (Memoir 249, W.E. Cockfield.).

Instrumentation:

The geochemical determinations were obtained

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from the 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 soil bag obtained from Acme Analytical Laboratories Ltd. and the sample determinations were also made by Acme Analytical Laboratories Ltd. 6455 Laurel Street, Burnaby, B.C.

The magnetometer survey was conducted with a Sabre M-100 fluxgate vertical field magnetometer made by Sabre Electronics Ltd. of Vancouver, B.C.

Personnel:

The survey was conducted by field crew - W, Mather, Kaare Pettersen and E. Wiggins. Plotting and mapping by D.A. Cramer, Interpretation by D.L.Hings.

Presentation - Mag:

The survey is shown on plan M-202-72 with the results plotted in profile form along the east-west grid lines and control lines. Approximately 18.7 miles of profile are shown with the values as indicated on the plan.

Presentation - Geochem:

Refer to plan No. GC-202-72, the figures shown on the grid indicate the values in PPM of CU of determinations taken at the locations indicated. The contour value of 70 PPM is shown against a background in the vicinity of 35 PPM.

Results - Mag:

The most anomalous features follow the linear strike indicated by F1 to the central control line and extend very closely to the control line to the north. A second group of anomalies occurs on the eastern portion of the survey extending northward along L3. A prominent linear anomaly L1 extends from the southwest to the northeast of the property and is closely paralleled by L2 in the northern portion. In the south L4 has a northerly trend and terminates apparently on the fault F1. A similar striking linear anomaly is L5 that crosses the central baseline to the northeast through the anomalous zone. L6 has a nearly north-south strike and is the principal magnetic feature within this anomalous area.

The eastern anomalous area is made up of

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linear strikes indicated as F2, F3, F4 and F5, mostly crossing the L3 northeast, southwest anomaly.

Results - Geochem:

The contours indicate values of the determinations having more than 70 PPM of CU with the largest geochem anomaly indicated as A1. This anomaly coincides with the magnetic anomalies L1, L4 and F1. The A1 anomaly generally speaking has more surface coverage than the other principal anomalies.

A2 geochem anomaly in the north appears to be associated with the magnetic linear anomalies L5 and L6 but does not conform directly with these strikes.

The A3 geochem anomaly to the east covers a relatively large area along the western slope of the valley, with the strike features following closely to the linear magnetic anomalies L3, F2, F4 and F5.

The A4 geochem anomaly between A1 and A2 is part of the eastern slope of the valley with some outcropping occurring in A2 and A4.

The magnetic linear anomalies L2, L5 and L8 appear to be associated with the geochem anomaly

A4 with the southwest boundary on F1. The A5 geochem anomaly to the west appears to be associated with the magnetic linear L9. These anomalies are in a well covered area.

The geochem anomalies A6 and A7 are in the vicinity of the creek and have normal valley coverage. The geochem anomaly A6 aligns with the magnetic anomaly L2 and F3. The geochem anomaly A7 may be associated with the magnetic linear L7.

Summary:

There is reasonably good correlation of the magnetic linear anomalies and the geochem contour anomalies.

The western ridge of the valley extends north and south close to the 0 base line, and the A2 and A4 geochem anomalies. It is believed the reduced coverage on this ridge has to some extent increased the magnetic anomalies. The A1 geochem anomaly extends into more level terrain to the southwest, and could be associated with the A5 anomaly along the strike of the magnetic L9 linear anomaly.

The magnetic anomaly F1 appears to be a fault between A1 and A4. This also suggests block faulting over the areas of A2 and A4.

The A3 eastern anomaly on the west slope also indicates block faulting. The copper values have a lower average in this area although the anomaly is quite extensive. The A6, A7 and A8 anomalies are all in the valley with A6 and A7 anomalies being closely associated with the Guichon Creek. The magnetic anomaly L7 follows very closely to the Guichon Creek course which changes to a northerly course as it enters the A7 geochem anomaly.

Conclusions:

The magnetic anomaly L1 southwest of the F1 anomaly, appears to be associated with the geochem enrichment of A1. L4 magnetic anomaly also appears to contribute to the A1 enrichment.

The A4 and A6 enrichment may be associated with the magnetic anomaly L2, north and east of the F1 magnetic anomaly. Both the geochem anomalies A2 and A3 are associated with block faulting and probably include A8. It is quite apparent that considerable shearing is evident in the areas of reduced overburden and possibly extends further into the valley and to the southwest.

Recommendations:

The average background geochem readings are high by nearly 20 PPM of CU. The correlation between the magnetic linear anomalies indicates considerable fracturing over the geochem anomalous areas. These results most certainly warrant further development of this property.


D.L.Hings, P. Eng.
Geophysicist.

A statement of Costs for ELC Geophysics Ltd. Report No.202-72
 Covering the Jua Claims Group
 Guichon Creek, Merritt, B.C. Area, Nicola M.D.
 For G. Eldridge
 April 10, 1972 to June 2, 1972
 50° N - 120° W.

Survey Crew:

W. Mather 18 days @ 40.00	720.00	
K. Pettersen 17 days @ 40.00	680.00	
E. Wiggins 15 days @ 30.00	<u>450.00</u>	1850.00

Transportation:

4 x 4 truck 16 days @ 18.00	288.00	
900 miles @ 10	<u>90.00</u>	378.00

Living Costs

Motel 14 days @ 16.00	224.00	
Food 47 man days @ 7.50	<u>352.50</u>	576.50

Instruments & Equipment

Magnetometer 16 days @ 10.00	160.00	
Misc. Supplies 16 days @ 5.00	<u>80.00</u>	240.00

Data Processing & Drafting

R.L. Reece 5 days @ 60.00	300.00	
D.A. Cramer 4 days @ 60.00	<u>240.00</u>	540.00

Interpretation & Report

D.L. Hings, P. Eng. 3 days @ 150.00	450.00	450.00
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Geochemical Analysis

930 Samples @ 1.00		930.00
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Total		<u>\$ 4964.50</u>
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June, 1971

ACME ANALYTICAL LABORATORIES LTD.

Methods of Analysis

A .50 gram of - 80 mesh sample is digested with mixed concentrated nitric acid and perchloric acid until all the organics are decomposed. This solution is diluted with water to 10.0 mls. and determined by Perkin-Elmer 305 Atomic Absorption Spectrophotometer for molybdenum, copper, nickel, and zinc in parts per million, iron and manganese in percent. Silver is determined with a Deuterium Background Corrector to .1 parts per million.

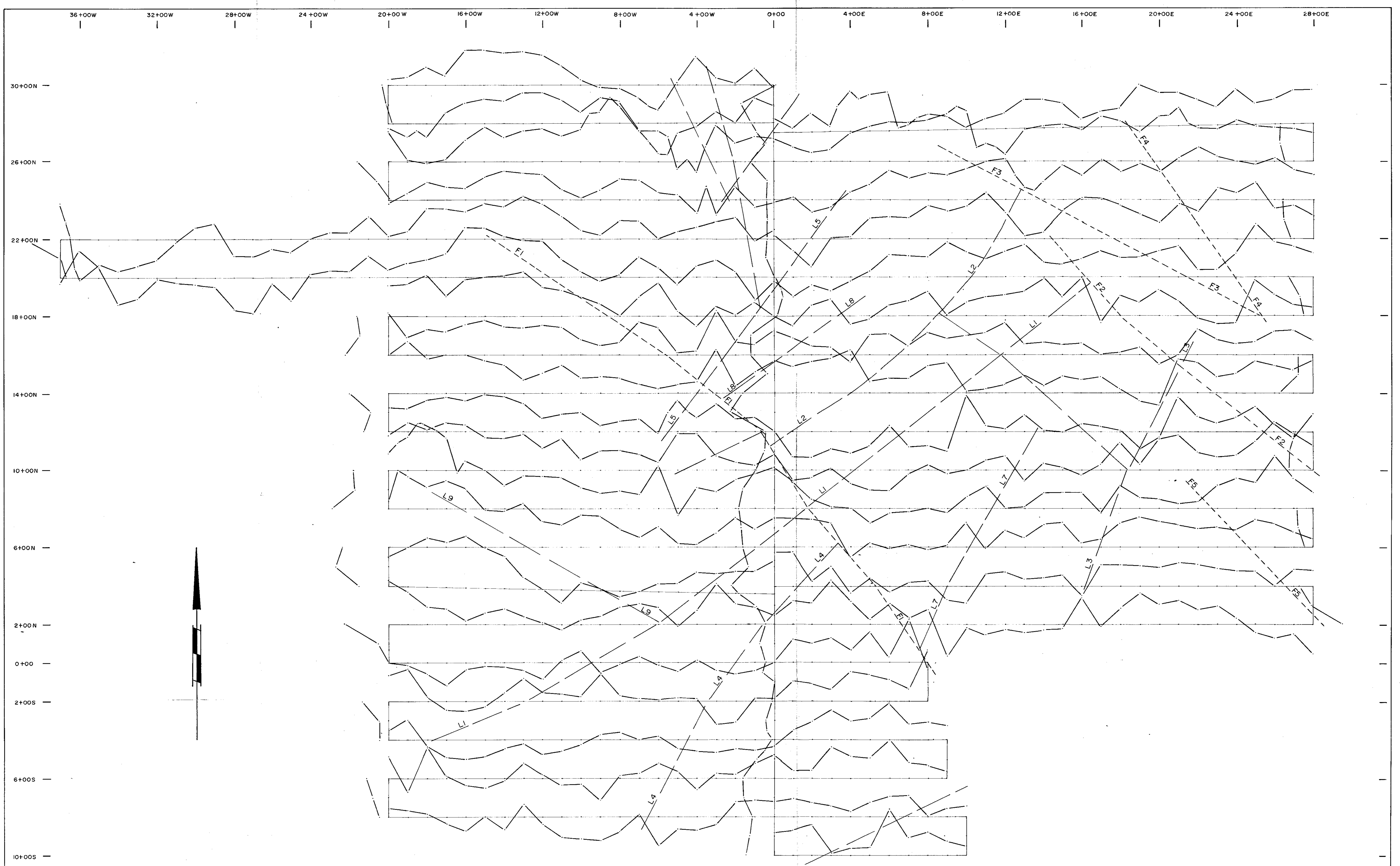
Tungsten, tin, and arsenic are determined colorimetric techniques.

Fluorine is determined by Specific Ion electrode.

All samples are determined with internal or U.S.G.S. standards.

Standard deviations for Atomic Absorption for geochemical assay are between 5 to 10%.

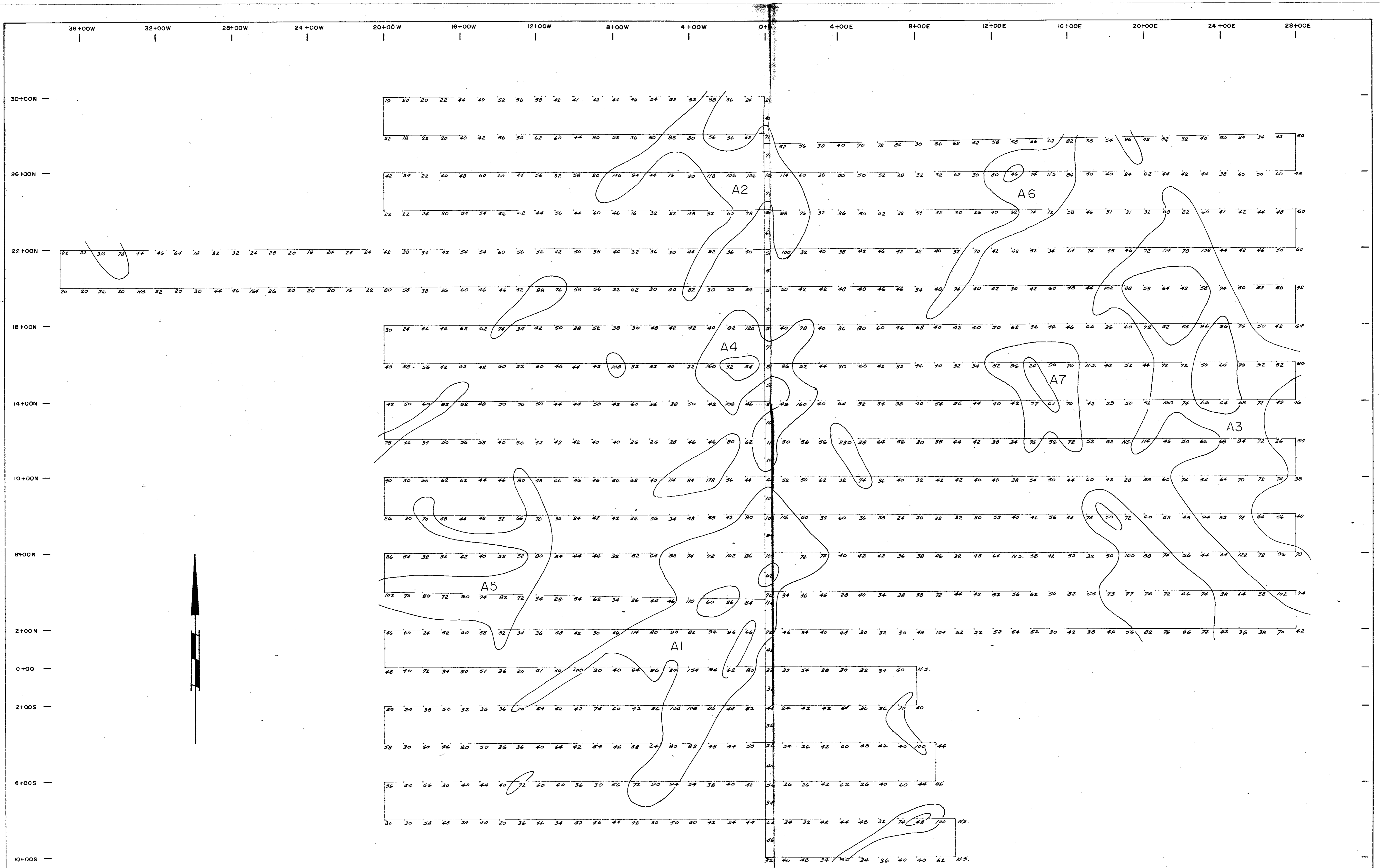
Standard deviations for ore assay are between .2 to 2%.



Department of
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 ASSESSMENT REPORT
 NO. 3673 MAP #3

ELC GEOPHYSICS LTD.
 JUA CLAIMS HIGHLAND VALLEY, B.C.
 MR. G.S. ELDRIDGE
 MAY 1972 SCALE: 1" = 200' DWG. NO. M-202-72
 MAG. PROFILES
 APPROVED: *[Signature]*

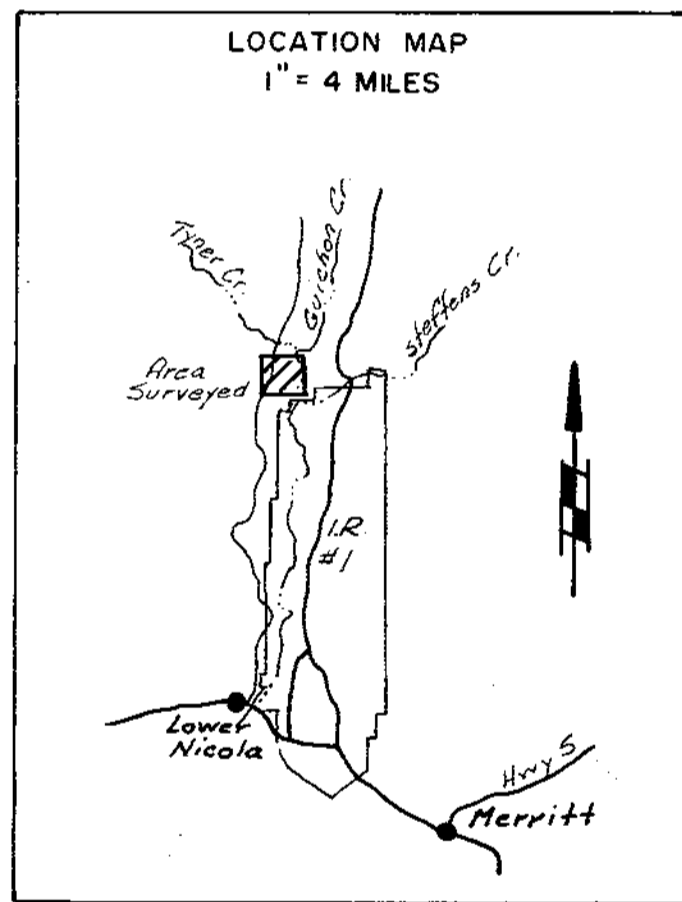
NOTE:--
 SURVEY LINES & STATIONS
 ZERO LINE 55,000 GAMMAS (1" = 500 GAMMAS)
 LINEAR ANOMALY ----- FAULT



Department of
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ASSESSMENT REPORT
NO. **3673** MAP. #2

ELC GEOPHYSICS LTD.
JUA CLAIMS HIGHLAND VALLEY, B.C.
MR. G.S. ELDRIDGE
MAY 1972 SCALE=1"=200' DWG. NO. GC-202-72
GEOCHEM PLAN
APPROVED: *[Signature]*

NOTE:-
— SURVEY LINES & STATIONS
70 PPM CU ○ 70 PPM CU CONTOUR



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M-2

ELC GEOPHYSICS LTD.
JUA CLAIMS HIGHLAND VALLEY, B.C.
MR. G. S. ELDRIDGE
MAY 1972 SCALE 1" = 400' DWG. NO. :-L-202-72
LOCATION PLAN
APPROVED *G.S. Eldridge*

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3673 MAP #1