

4349

92H/10E

GEOPHYSICAL & GEOCHEMICAL REPORT

on the

MAGNETOMETER and SOIL SAMPLING SURVEYS

on the

AT No. 1 - 29 and AT 31 - 54 Mineral Claims

situated 16 road miles

North of Princeton

Similkameen M.D.

Latitude 49°38'N: Longitude 120°48'W

NTS 92H/10E

on behalf of

KOMO EXPLORATIONS LTD.

Field Work Between October 20 and November 1, 1972

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO **4349** MAP

Report by:

Frank P. O'Grady, B.Sc.
A. Scott, B.Sc.
D. R. Cochrane, P.Eng.
November 24, 1972,
Delta, B.C.



Cochrane Consultants Limited
4882 Delta Street, Delta B.C. (604) 946-9221

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A-1 INTRODUCTION:

Between October 20 and November 1, 1972 a program of 14.4 line miles of linecutting, reconnaissance geochemistry and reconnaissance magnetometer was carried out on the AT claim group. This recent work was preceded by a reconnaissance type geological mapping program completed in September and October, 1972. The work was done by a crew employed by Cochrane Consultants Ltd. of Delta, B.C. and conducted on behalf of Komo Explorations Ltd.

The object of the magnetometer and geochemical work was to:

1. Geochemically

Determine if there is an anomalous amount of copper and or silver in the soil which may indicate copper and/or silver mineralization within the survey area.

2. Magnetically

- a. Determine the location of the volcanic-intrusive contact.
- b. Determine the location and presence of any geological structures.

The purpose of this report is to describe and interpret all geological, geochemical, and geophysical work done on the AT claim group as of November 24, 1972.

A-2 SUMMARY AND CONCLUSIONS:

Mining exploration in the form of (a) reconnaissance geological mapping, and (b) coincident magnetometer and geochemical surveys has been carried out on the AT claim group in a two phase program during the summer and fall of 1972. The following conclusions have been reached.

1. The AT claims form a contiguous block of 53 located mineral claims, located west and southwest of Dry Lake, 16 miles north of Princeton in the Similkameen Mining Division.

2. Komo Explorations Ltd. of Vancouver, B.C. holds title to the AT claims.

3. The AT claims straddle the contact between the Nicola volcanic series (Triassic Age) and the Allison Lake pluton of the Coast intrusive series (Jurassic and (?) later in age).

4. A copper showing exposed by bulldozer trenching is located on the AT 13 and AT 14 claim boundary at the volcanic-intrusive fault contact.

5. The Nicola series is host to several copper occurrences including three producing mines and many prospects.

6. Hydrothermal alteration, in several forms, is present in both volcanic and intrusive rocks.



7. Five geochemical anomalies have been defined on the explored area.

8. Magnetics indicate a major fault crossing the explored area.

9. Magnetic anomalies in some locations are coincident with geochemical anomalies and within the mapped limits of the contact.

10. A program of induced polarization is recommended to test the geochemical anomalies.

11. The estimated cost of the induced polarization program is four thousand dollars.

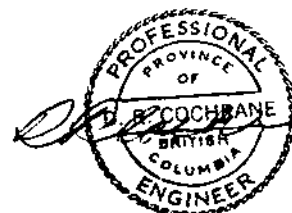
Respectfully submitted,

Frank P. O'Grady

Frank P. O'Grady, B.Sc.,

A. Scott per F.P.O.G.

A. Scott, B.Sc.,



D. R. Cochrane, P.Eng.,
November 24, 1972,

Delta, B.C.



B-1 HISTORY:

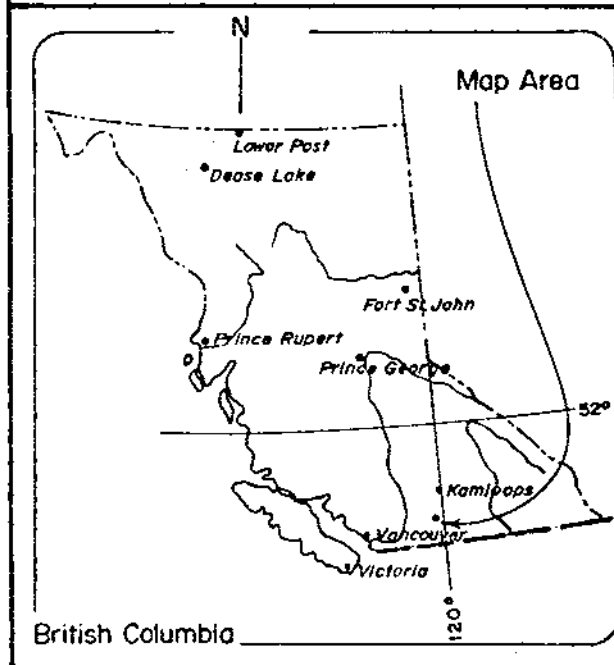
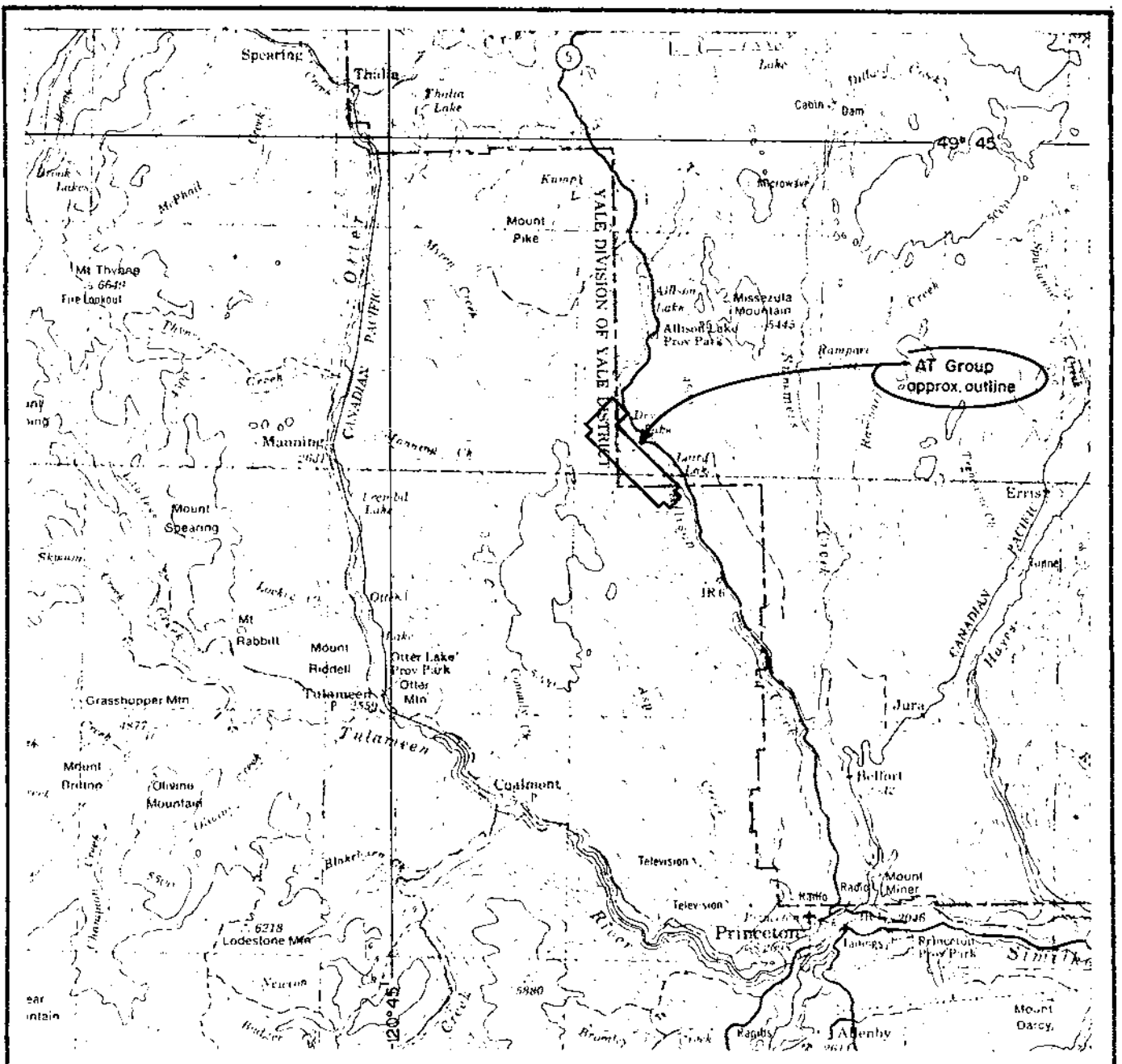
The AT claim group was located in June, 1972 and subsequently acquired by Komo Explorations Ltd. Previous to this acquisition some bulldozer trenching on a copper showing on claim AT 15 and AT 16 had been done. There is also evidence of limited geochemical soil sampling in the vicinity of the trenches.

On July 15 and 16, 1972, a property examination was done by Frank P. O'Grady of Cochrane Consultants Ltd. on behalf of Komo Explorations and a program of geological reconnaissance was recommended. This program was carried out between September 29 and October 5, 1972. After evaluation of this work a program of linecutting, geochemistry and magnetometer was recommended. This last program forms the substance of this report.

B-2 LOCATION AND ACCESS:

The AT claims are easily accessible by proceeding north on Highway 5 from Princeton to Dry Lake. (A distance of approximately 16 miles). The initial post for AT 1 and 2 is visible from Highway 5 at the north end of Dry Lake.

Access to the trenches is by a bulldozer trail from the south end of Dry Lake. The trail switchbacks up the hill for approximately three quarters of a mile to the showing.



KOMO EXPLORATIONS LTD. (N.P.L.)
AT Group

Location Map

N.T.S. 92 H

Scale: 1 to 250000 or 1 inch equals approx. 4 miles

Cochran Consultants Limited
4822 Delta Street Delta B.C.

figure 1

Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. **4349** M.P. **#1**

The remainder of the claim group is accessible by foot. The latitude is 49 degrees 38 minutes north and longitude 120 degrees and 48 minutes west. The N.T.S. co-ordinate reference square is 92/H10e.

B-3 CLAIMS AND OWNERSHIP:

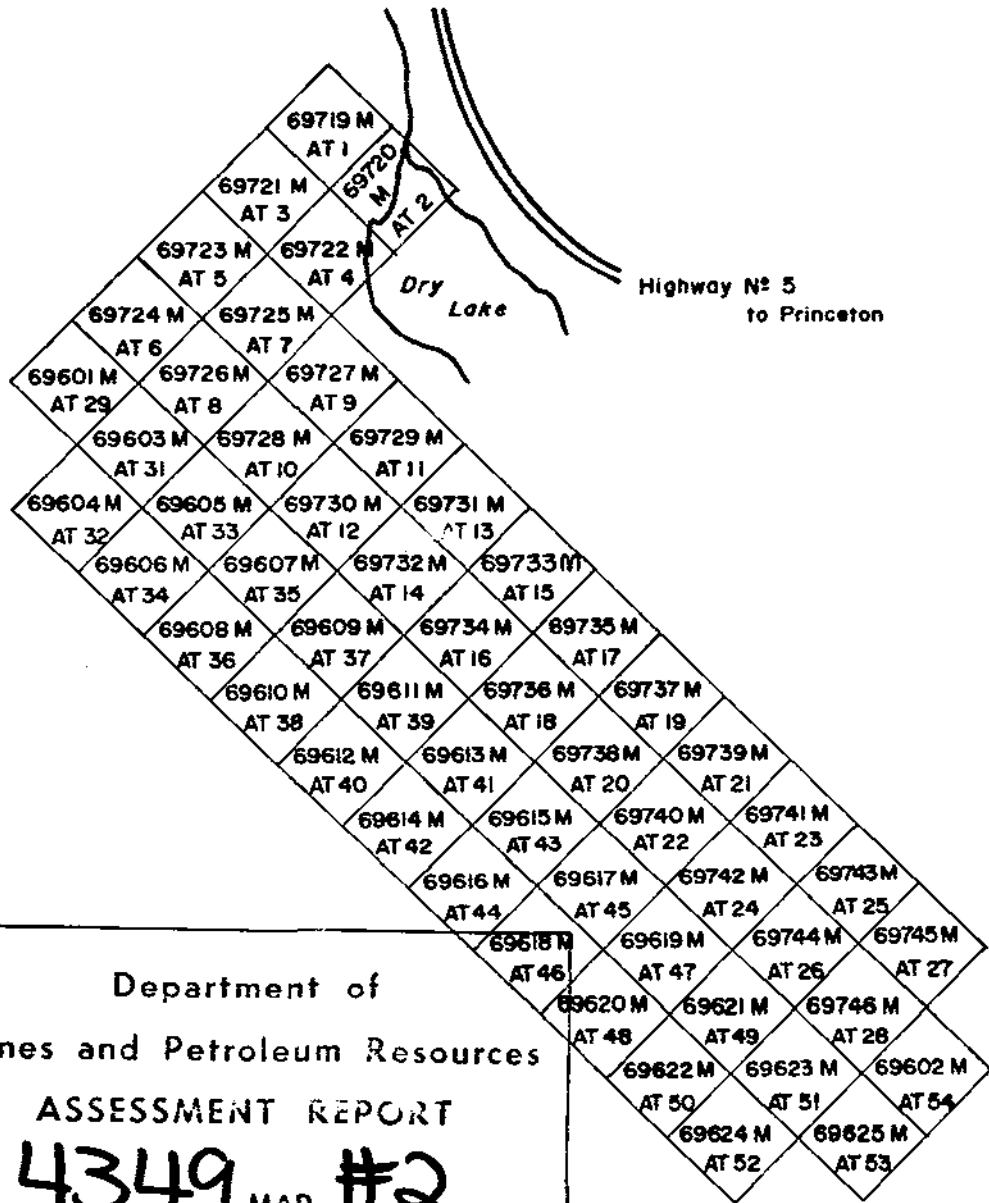
The AT claim group is an L-shaped contiguous block of 53 full sized mineral claims recorded in the Similkameen Mining Division. The claims are owned by Komo Explorations Ltd. 549 Howe Street, Vancouver, B.C.

The claim names and tag numbers are as follows:

| <u>CLAIM NAMES</u> | <u>TAG NUMBERS</u> |
|--------------------|--------------------|
| AT 1 - 28 | 69719 - 746 |
| AT 29 | 69601 |
| AT 54 | 69602 |
| AT 31 - 53 | 69603 - 625 |

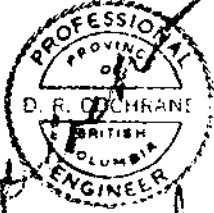
Several claim posts on the AT group were checked. The staking was very well done and is in accordance with the regulations set out in the Mineral Act of the Province of British Columbia. In the immediate area of the showing there was no evidence of overstaking.





Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **4349** MAP **#2**

KOMO EXPLORATIONS LTD. (N.P.L.)
 AT Group
 Claims Map

[Handwritten signature]

[Handwritten signature]

Scale: One inch equals approx. 3000 feet.
 3000 0 3000 feet


 Cochrane Consultants Limited
 4882 Delta Street Delta B.C.

figure 2

B-4 GENERAL SETTING:

The AT claims are situated on the west side of the Allison Creek valley in south central British Columbia. Near Dry Lake, the elevation ranges from 2750 feet at the valley floor to just over 4500 feet. The copper showing is at an elevation of 3550 feet. The claims are located on a steep hillside. The area is well forested with some areas of thick underbrush.

Geological Map 888A (Princeton Sheet by H. M. A. Rice) shows the claims straddling the contact between the Allison Lake pluton and the Nicola group volcanics. The volcanics that underlay the claim group are purple andesite and the pluton is composed of a medium grain granodiorite. The area was glaciated during the Pleistocene Epoch and approximately sixty percent of the claim group is covered by overburden.

B-5 GROUND CONTROL GRID:

A ground control grid was established on the property for soil sampling and magnetometer control.

A base line was cut and chained in a northwest-southeast direction. This was accomplished by cutting out the northeasterly location line that was used for staking the claim group. The base line was chained and 200 foot station intervals were flagged and numbered. A 0 + 00 point was established at the initial post



of claims AT 13 and AT 14. The base line is flagged and chained to 43 + 50N in a northwesterly direction from this point, and to 64 + 00S in a southeasterly direction. Cross lines, in most instances were turned off at a right angle to the base line at 800 foot intervals along the base line. The cross lines extended 1600 feet to the northeast and 2600 feet to 2800 feet to the northwest. In some instances the cross lines were put in 1000 feet apart; when this occurred a shorter cross line was turned off 500 feet from each of the longer lines. The shorter fill in lines were cut 800 feet each way from the base line.

It was along the above described ground control grid that the soil sampling and the magnetometer survey took place.

C-1 GEOCHEMICAL FIELD AND LABORATORY PROCEDURES:

Soil samples were collected from holes excavated by grubhoe. A sample of approximately $\frac{1}{4}$ lb. was placed in a water resistant kraft paper geochemical bag. The sampler recorded the line number; colour of soil; type of soil; soil horizon; depth of sample and remarks at each sample position on a standard printed soil sampling note forms.

Soil samples were collected at 200 foot intervals along all cross lines of the ground control grid and along the base line. The samples were collected at various depths ranging from 2 inches to 8 inches but averaging approximately 6 inches deep. The samples were threaded on a piece of heavy twine in the field to avoid confusion and also save time sorting later on. After each days sampling the samples were hung to dry in a motel unit. On completion of sampling the samples were delivered to Crest Laboratories of Vancouver, B.C. by Cochrane Consultant's staff.

At Crest Laboratories the samples were oven dried, screened to minus 80 mesh, digested in hot HClO_4 and HNO_3 and analyzed for copper and silver by atomic absorption methods.



C-2 MAGNETOMETER FIELD PROCEDURE:

Scintrex MF-2 portable fluxgate magnetometers were utilized on the survey. The specifications are presented in Appendix II.

A main base/recording base station was established near the camp and on the first day of the survey the instruments were calibrated to give a "zero" reading at this station. (This ensures that readings will be obtained on the most sensitive scales).

The field magnetometer was checked into the main base station in the morning and at night to determine day to day magnetic changes. One crew member monitored diurnal changes on a second instrument at the recording base station.

Readings were taken with the operator facing magnetic north and with the magnetometer held level. Notes show the magnetic field strength, line and station number and time of the reading.

"Along line" readings were taken at 100 foot intervals except in areas of steep magnetic gradient where they were recorded at 50 foot intervals.



C-3 DATA PROCESSING:

The magnetic data was corrected for diurnal and day to day variations using the standard graphic time-drift procedure.

The frequency histogram and statistical analysis was done with the aid of an electronic calculator using a representative sample of every fifth magnetic value (139 values) and every 3rd geochemical value (129 values).



D-1 GEOCHEMICAL RESULTS:

(a) Soil Description

The colour of the soil varied from a light brown through red brown to dark brown. A few samples were gray in colour. The soil was classed as clay in most cases with some as rocky clay.

Soil horizons are well developed in the explored area. All samples are from the B horizon.

(b) Copper

The soil sample copper results are presented in the map pocket at the rear of this report as Figure 6. The inset graph shows the relative frequency of occurrence of the copper values.

The results vary from a high of 910 p.p.m. at 32N:4E to a low of 4 p.p.m. at several stations. The arithmetic mean is 32 p.p.m. and the standard deviation is 91 p.p.m. Threshold has been set at 60 p.p.m. and this value represents the upper limit of the "normal" frequency curve. The following categories of copper content in soils are herein defined:



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| | |
|-------------------------|----------------------|
| less than 32 p.p.m. | below average |
| 32 to 60 p.p.m. | weakly anomalous |
| 60 to 120 p.p.m. | moderately anomalous |
| greater than 120 p.p.m. | strongly anomalous |

Hawkes and Webb give an average value for copper in soils as 20 p.p.m. with a normal range of from 2 - 100 p.p.m. Hence copper content in the AT group soils is slightly above average and the range is considerably above average.

(c) Silver

Silver results are presented as Figure 7. The relative frequency distribution of silver values is indicated by the inset graph.

The results vary from a high of 2.0 p.p.m. at 18S:BL and 32N:4E to 0.4 p.p.m. at several sample sites. The arithmetic mean is 0.9 p.p.m. and the standard deviation is 0.3 p.p.m. Hawkes and Webb give an average value of 0.1 p.p.m. for silver in soils. Hence the soils over the AT claim group are considered to be silver enriched.

The following categories of silver content are herein defined:

| | |
|-------------------------|----------------------|
| less than .9 p.p.m. | below average |
| .9 to 1.2 p.p.m. | weakly anomalous |
| 1.2 to 1.5 p.p.m. | moderately anomalous |
| greater than 1.5 p.p.m. | strongly anomalous |



(d) Anomalies

Five geochemical anomalies are situated on the explored area. Each of the anomalies is a coincident copper and silver anomaly. Two strong anomalies, two moderate anomalies and one weak geochemical anomaly were outlined.

Anomaly Number 1, the most northerly anomaly, is classed as moderately anomalous and is located near the junction of the base line and line 43 + 50 north. This anomaly is approximately 400 feet wide and is open to the north. The peak copper value in this anomaly is 230 p.p.m., while the peak silver value is 1.8 p.p.m.

Anomaly Number 2, a strong anomaly, is located between lines 32N and 22N and is east of the base line. The copper values are two separate anomalies in this area whereas the silver forms one continuous anomaly. The peak Cu value in this anomaly is 910 p.p.m. where the peak silver value is 2.0 p.p.m. The trough of low copper values within anomaly number 2 may be a function of increased overburden or other physiochemical factors. If this anomaly is considered without the trough of low copper values its length is 1600 feet and its width is 600 to 800 feet.

Anomaly Number 3, a strong anomaly, is situated astride the eastern portion of line 16S. The peak copper value in this anomaly is 280 p.p.m. while the peak silver value is 2.0 p.p.m. The bulldozer trenched copper showing is also situated in this area. This anomaly is approximately 1200 feet long and approximately 400 feet wide.

Anomaly Number 4, a weak anomaly, is situated on the eastern portion of line 40S and 46S. This anomaly is poorly defined therefore no attempt has been made to define its dimensions.

Anomaly Number 5 is a zone of weakly anomalous copper coincident with strongly anomalous silver. The anomalous silver zone is approximately 800 feet long and 400 feet wide.

The pH of the soil in the explored area is probably in the acid range. In an acid environment copper is more mobile than silver. Therefore it is expected that stronger copper values would prevail in a two tier anomaly. Anomaly Number 5 is possibly a result of the copper and silver ions having been transported from different sources uphill and to the west. This anomaly is not considered as significant as anomalies one to four but still deserves further investigation as to its source.

A single high copper value is situated at 16E on line 64S. This station is on the edge of the property. It may not be significant but deserves further investigation if the more significant anomalies withstood further testing.

D-2 MAGNETOMETER RESULTS:

The magnetometer survey results are plotted on Figure 3 and Figure 4 is an isomagnetic (contoured) plan. The plotted values represent the vertical magnetic field strength at the plotted point minus 50,370 gammas.

The results vary from a high of plus 1840 at 23W: L48S to a low of minus 760 gammas at 4E:L 8S. The arithmetic mean is 17 gammas and the standard deviation is 320 gammas. The inset diagram on Figure 3 shows the relative frequency of occurrence of the magnetic values. The mode lies in the -199 to -100 gamma class (which encompasses 22 percent of the values) and the distribution is skewed strongly in the positive direction.

The following categories of the vertical magnetic field strength are herein defined:



| | |
|-------------------------------------|----------------------------|
| -300 to +300 gammas | background (average) |
| <u>+</u> 300 to <u>+</u> 600 gammas | weak magnetic high/low |
| <u>+</u> 600 to <u>+</u> 900 gammas | moderate magnetic high/low |
| greater than <u>+</u> 900 gammas | strong magnetic high/low |

Several narrow strongly anomalous magnetic highs are evident on the contour plan. These anomalous zones are subparallel to one another and to the baseline.

A major disruption in the magnetic pattern occurs in the vicinity of line 16S. This disruption is thought to represent the magnetic response to a fault, and its approximate location is indicated on the compilation plan, Figure 8.

Anomalous geochemical zones are associated with these magnetic highs, particularly those around and to the north of the baseline.

D-3 CORRELATION AND DISCUSSION:

Investigation of the AT claim group by indirect exploration techniques was recommended by the geological staff of Cochrane Consultants. This recommendation was made with the knowledge of the existence of a favourable geological contact underlying the claim group coupled with the fact that similar geological environments in this area host potential copper producers.



Geochemically anomalous zones have been defined on the property in the proximity of the aforementioned contact. Coincident magnetic anomalies, particularly in the northern portion of the property have also been discovered. In addition, the geochemically and magnetically anomalous zones are within the geologically mapped limits of the contact. During previous geological field work (Cochrane, O'Grady, October 16, 1972) an increased amount of visible magnetite was noted near this contact.

Geological postulation is that there is a possibility of mineralization on the AT group, other than that exposed in the old bulldozer trenches, and that if present, it would in all probability be localized along the contact. This theory has so far withstood testing. However, further indirect testing of the area is warranted prior to trenching or diamond drilling. The further testing is warranted because of the steep hillside underlying the AT claim group. In this physical environment the geochemical anomalies are often transported varying distances downhill. Hence, mineralization responsible for the anomaly may be up slope.



An induced polarization survey is warranted at this phase of the exploration program for two reasons:

- (a) Chargeability results will detect any sulphide zones responsible for the geochemical anomalies, and
- (b) The resistivity results will further aid in location of the contact and may also depict the attitude of the contact.

D-4 RECOMMENDATIONS:

An induced polarization survey is recommended for the AT claim group to further delineate the location and extent of the source of the soil geochemical anomalies discussed in this report.

The survey could be conducted on the existing grid. An "a" spacing of some 600 feet in the Wenner field array, on cross lines 800 feet apart, will provide sufficient overlap between lines and an effective depth of exploration in excess of 200 feet.

The main geochemically anomalous zones could be investigated by surveying from line 26S to line 43 + 50N (inclusive) between stations 16E and 26W, a total of some 7.2 line miles.

Frank P. O'Grady
Frank P. O'Grady, B.Sc.
A. Scott per F.O.G.
A. Scott, B.Sc.

Respectfully submitted,


D. R. Cochrane, P. Eng.,
November 1972, Delta, B.C.

APPENDICES

Appendix I

GEOLOGY:

A contact between the Allison Lake intrusive and the Nicola volcanics is the most significant geological factor on the AT claim group. This contact trends northwesterly across the southern portion of the claims and is exposed in two places. Firstly in the bulldozer trenches on claims AT 12 and AT 14, and second in a road cut on the access road that crosses claim AT 13. In each of these locations the two rock types have been faulted into contact with each other and therefore the contact is structural rather than intrusive in nature.

Appendix I (cont'd)

The Allison Lake intrusive is a member of the coast intrusions of Jurassic (or later) age. It is generally a quartz diorite, with an increase of potassium feldspar in some areas making the rock type a quartz monzonite. The quartz is present as quartz phenocrysts.

The Nicola volcanics are of Triassic age. The rock types are andesites and andesite agglomerates.

The contact strikes across the property for approximately 12,000 feet and the location is known within certain limits as defined by geological mapping. However, because of overburden cover the contact is virtually obscured for its entire length. Alteration is present in both the intrusive and volcanic rocks.

Three types of alteration are present in the intrusive rock. The most significant type of alteration is chloritization of the biotite and hornblende.

All intrusive outcrops mapped exhibited this type of alteration. The amount of alteration appears to increase towards the contact. In the mapped outcrops, furthest from the contact, only the center edges of the biotite and hornblende is altered to chlorite. In the outcrops near the contact the mafic minerals are nearly completely altered to chlorite.



Epidotization represents the second type of alteration within the intrusive and occurs in most of the fractures and slickensided surfaces. This type of alteration also increases towards the contact but epidotization is less markedly than chloritization.

Finally pyritization is exhibited in some of the intrusive. Intrusive outcrops with this type of alteration are exposed in the creek canyon on claim AT 12. The pyrite is patchy and disseminated. Most of the outcrops containing pyrite now contain limonite in the fractures. This type of alteration is located within a few hundred feet of the contact.

Two types of alteration were observed in the volcanic rocks. Both types are exhibited near the contact in the proximity of the copper showing on claims AT 11 and AT 12.

The first type is chloritization of the mafics. This type of alteration is only slight but it gives the rock a dense, fine grain, dull green appearance and the altered volcanics are less competent than the surrounding volcanics. Associated with this type of alteration are many fine, randomly oriented veinlets of limonite.

Appendix I (cont'd)

Pyritization is the second type of alteration in volcanic rocks. This alteration is exhibited in the trenches that contain copper showings and in the outcrop on the northwest side of the canyon formed by the nearby creek. The pyrite is finely disseminated and fairly pervasive.

Three other criteria concerning the intrusive rock near the contact were observed during the course of investigation of the AT claim group.

- (a) There is an apparent change in grain size of the intrusive body near the contact. The coarse grain rock becomes a fine to medium grain rock;
 - (b) There is a marked increase in the mafic mineral content near the contact;
- Finally, (c) There is an apparent increase in visible magnetite near the contact. The latter accompanies the preceding phenomena.



APPENDIX II

Specifications of Fluxgate Magnetometer Model MF-2

| | RANGES | SENSITIVITY |
|--------------------------------------|---|-----------------|
| Standard: | Plus or minus | |
| | 1,000 gamma f.s.c. | 20 gamma/div. |
| | 3,000 gamma f.s.c. | 50 gamma/div. |
| | 10,000 gamma f.s.c. | 200 gamma/div. |
| | 30,000 gamma f.s.c. | 500 gamma/div. |
| | 100,000 gamma f.s.c. | 2000 gamma/div. |
| Optional: | 100 gamma f.s.c. | 2 gamma/div. |
| | 300 gamma f.s.c. | 5 gamma/div. |
| Meter: | Taut-band suspension | |
| | 100 gamma scale 2.1" long - 50 div. | |
| | 300 gamma scale 1.9" long - 30 div. | |
| Accuracy: | 1000 to 10,000 gamma ranges \pm 0.5% of full scale. | |
| Operating Temperature: | -40°C to +40°C -40°F to +100°F | |
| Temperature Coefficient: | Less than 1 gamma per °C (1/2 gamma/°F) | |
| Noise Level: | Less than 1 gamma rms | |
| Bucking Adjustments: (5 settings) | -20,000 to +20,000 gamma 2 steps of 10,000 gamma plus fine control of \pm 10,000 gamma by ten turn potentiometer Reversible for southern hemisphere. | |
| Recording Circuit: | Optional. | |
| Electrical Response: | D.C. to 0.1 cps (3dB down) on 100 gamma range with meter in circuit. D.C. to 20 cps with meter in circuit, shorted for recording purpose. | |
| Connector: | Canon 140-15-111 for plug, Canon 303-1-14-21 and cover 303-15-111. | |
| Batteries: | Interad 3 x 1.5V type, sealed lead acid rechargeable, model 60 6101; recharge time 2 hrs. | |
| Consumption: | 60 milliamperes @ 30V. Batteries are rated for 16 hours continuous use. | |

Dimensions: 6 1/4" x 2 3/4" x 1 1/2" instrument.
161 mm x 71 mm x 254 mm

Weights: 5 lb. 8 oz. - 2.5 kg.

Battery Charger: 6" x 2 1/2" x 2 1/2"
155 mm x 64 mm x 64 mm
110V - 220V 50/60 Hz supply or 28 - 42V D.C.
supply Automatic charge rate and cutoff
preset for Centralab CC6101 batteries.

APPENDIX III

Certificates

NAME: COCHRANE, Donald Robert
EDUCATION: B.A.Sc. - U. of T., M.Sc. (Eng.) - Queen's
PROFESSIONAL Member of C.I.M.M., G.A.C., M.A.C., - Geological
ASSOCIATIONS: Engineer. P.Eng. of B.C., Ontario, and Sask.
EXPERIENCE: Engaged in the profession since 1962 while employed
with Noranda Exploration Co. Ltd., Quebec Cartier
Mines Ltd., and Meridian Exploration Syndicate.

NAME: SCOTT, Alan R.
EDUCATION: B.Sc. - Geophysics, U.B.C.
EXPERIENCE: Two summers - crew member and operator with
Geo-X Surveys Ltd. Presently employed with
Cochrane Consultants Ltd. - Geophysicist
PROFESSIONAL Member of S.E.G.
ASSOCIATIONS:

NAME: O'GRADY, Frank P.
EDUCATION: B.Sc. - Geology, U.B.C.
EXPERIENCE: Employed as an Exploration Geologist by American
Smelting and Refining Co. from April, 1969 until
August, 1972
PROFESSIONAL Member of C.I.M.M. Associate Member of the
ASSOCIATIONS: Canadian Geological Society

NAME: ROSSIER, Jean-Claude
AGE: 27
EDUCATION: Secondary and Vocational School - Architectural
Drafting Courses
EXPERIENCE: Since 1965 - General Drafting Experience
Geophysical Drafting, Seigel Associates - 1969 - 1972

NAME: CHASE, William
Age: 21
EDUCATION: Grade 12 Diploma
EXPERIENCE: Employed since September, 1970 and engaged in EM
and IP Surveying with Cochrane Consultants.
Previous experience at the Anvil Mine, Y.T.,
Summer, 1970.

NAME: FORRESTER, Greg
AGE: 20
EDUCATION: Grade 12 Diploma, 1 yr. Douglas College
EXPERIENCE: Since 1971 - Cochrane Consultants Ltd. &
Montgomery-Wolfe and Associates.

APPENDIX IV

Cost Breakdown

As per contract between Komo Explorations Ltd. (client) and Cochrane Consultants Ltd. (contractor) dated October 18, 1972 and regarding exploration work on the AT claims, Similkameen M.D.

| | |
|--|-----------------|
| 14.4 line miles of linecutting @ \$80.00/line mile | \$ 1,152.00 |
| 14.4 line miles of geochemical soil sampling with a 200 foot sample interval and including analysis for Cu and Ag @ \$225.00/line mile | 3,240.00 |
| 14.4 line miles of a fluxgate magnetometer survey recording interval 100 feet along grid lines @ \$165.00/line mile | <u>2,376.00</u> |
| TOTAL | \$ 6,768.00 |

[Handwritten signature]

Declared before me at the
of
Province of British Columbia,
day of
MAY 16 1973

[Handwritten signature]
Subj: Mining Recorder
Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia,



D. R. Cochrane, P.Eng.,
November 24, 1972.

APPENDIX V

Survey Details

PROPERTY: AT Claim Group MINING DIVISION: Similkameen

SPONSOR: Komo Explorations Ltd.

LOCATION: 16 miles north of Princeton, B.C. on Highway 5

SURVEY: Geochemical
Fluxgate Magnetometer (Vertical Field)

SURVEY MAN DAYS: 11 x 3 = 33 (October 20 - November 1)

MOBILIZATION MAN DAYS: 2 x 3 = 6

DATA PROCESSING AND REPORT PREPARATION: 5 man days

DRAFTING MAN DAYS: 10

NO. ALONG LINE READINGS: 900

NO. ALONG LINE SOIL SAMPLES: 372

LINE MILES: 14.4

DATA PROCESSING AND REPORT PREPARATION:

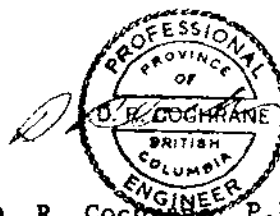
A. Scott, B.Sc., Geophysics, U.B.C.
Frank P. O'Grady, B.Sc., Geology, U.B.C.
D. R. Cochrane, P.Eng.,

FIELD CREW:

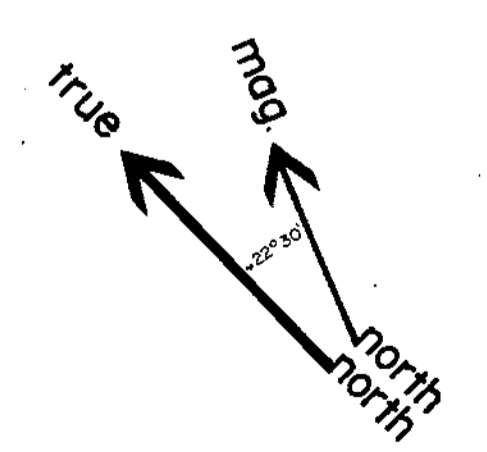
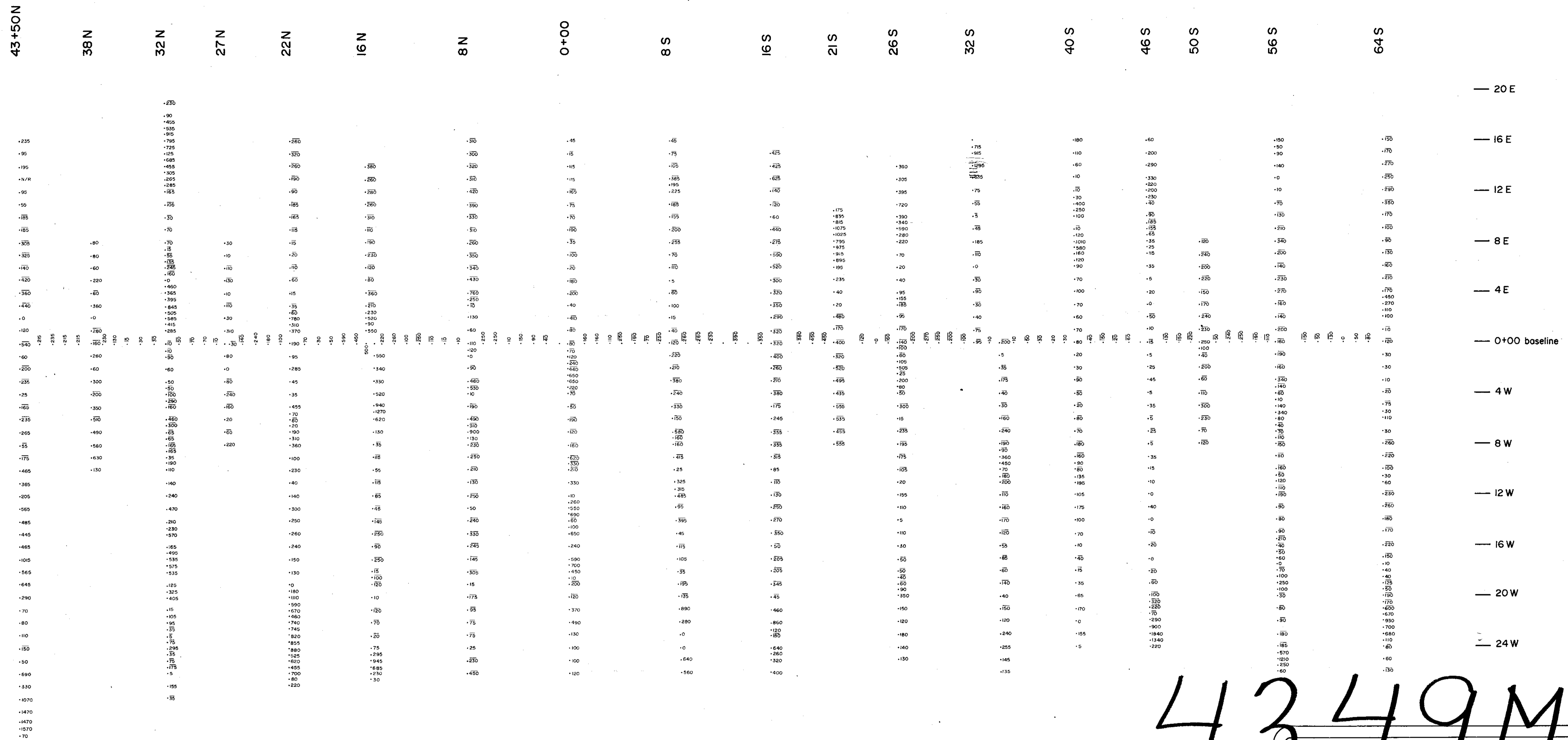
Frank P. O'Grady
Bill Chase
Greg Forrester

DRAFTING:

J. C. Rossier



D. R. Cochrane, P.Eng.,
Cochrane Consultants Ltd.



Legend
 — Indicates Negative Value
 All Values in Gammas

4349M3

Komo Explorations Limited (N.P.L.)
 AT Claim Group
 Dry Lake Area, British Columbia
 Similkameen Mining Division
 Department of
 Mines and Petroleum Resources
 MAGNETOMETER VALUES
 ASSESSMENT REPORT
 NO. 4349 M.P. #3



John A. O'Grady
 Fund. O'Grady

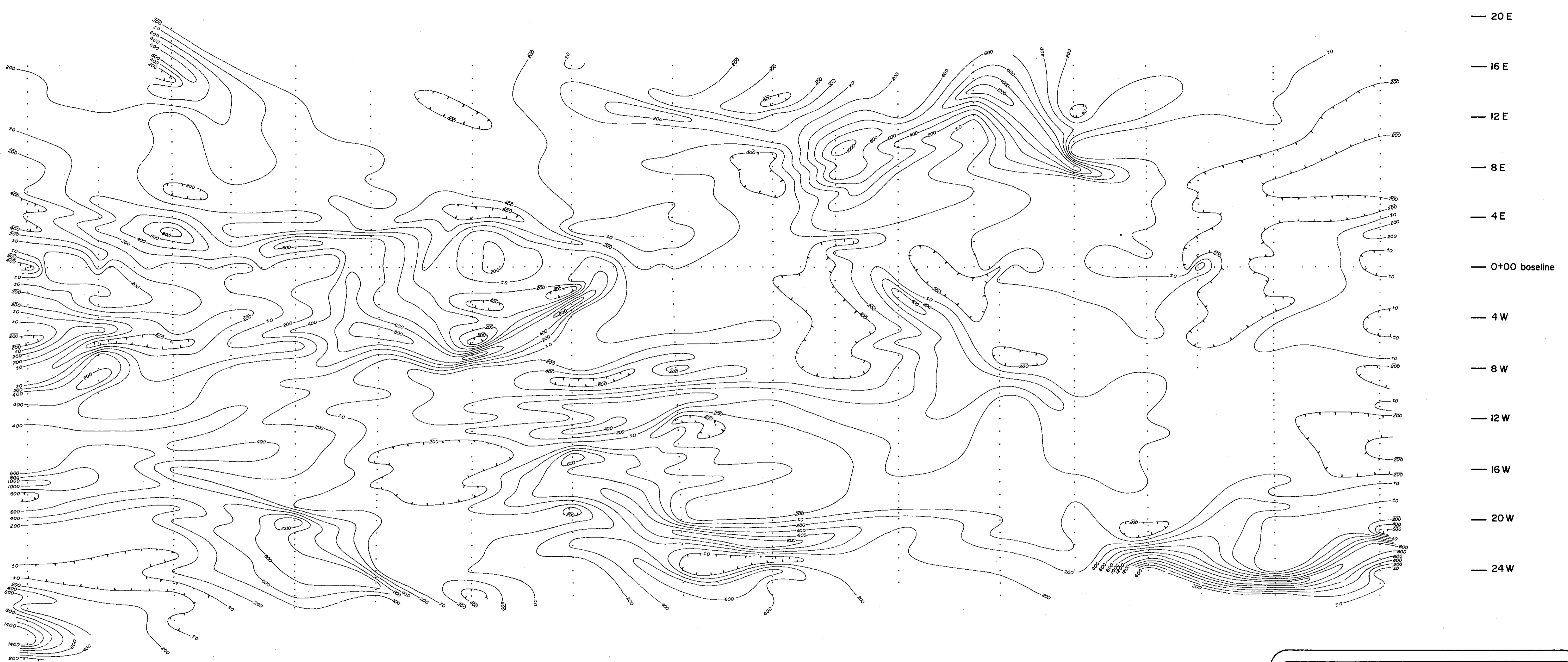


Scale: 1 inch = 400 feet
 SCALE IN FEET

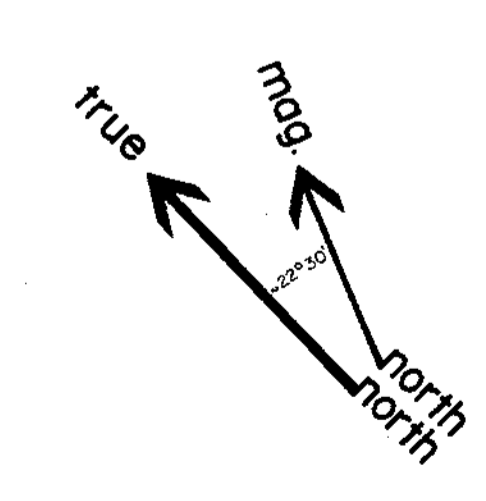
to accompany a report by
 A. R. SCOTT B.Sc., F.P.O'GRADY B.Sc.
 and D. R. COCHRANE P.Eng. NOVEMBER 24, 1972.

figure 3

43+50N 38N 32N 27N 22N 16N 8N 0+00 8S 16S 21S 26S 32S 40S 46S 50S 56S 64S



— 20 E
 — 16 E
 — 12 E
 — 8 E
 — 4 E
 — 0+00 baseline
 — 4 W
 — 8 W
 — 12 W
 — 16 W
 — 20 W
 — 24 W



Legend

Contour Interval:

500
 400
 300
 200
 100
 0
 100
 200
 300
 400
 500
 600
 800
 1000
 1200

000 Indicates Negative Values

All values in gammas.



Frank B. O'Sullivan

Komo Explorations Limited (N.P.L.)

AT Claim Group
 Dry Lake Area, British Columbia
 Similkameen Mining Division

Department of
 Mines and Petroleum Resources

ISOMAGNETIC PLAN

ASSESSMENT REPORT
 NO. 4349 MAP #4

Scale: 1 inch = 400 feet

SCALE IN FEET
 0 400

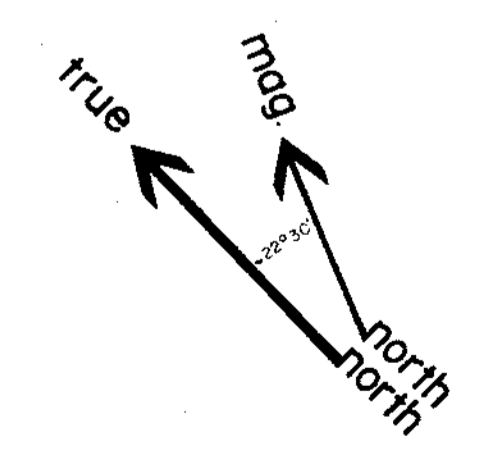
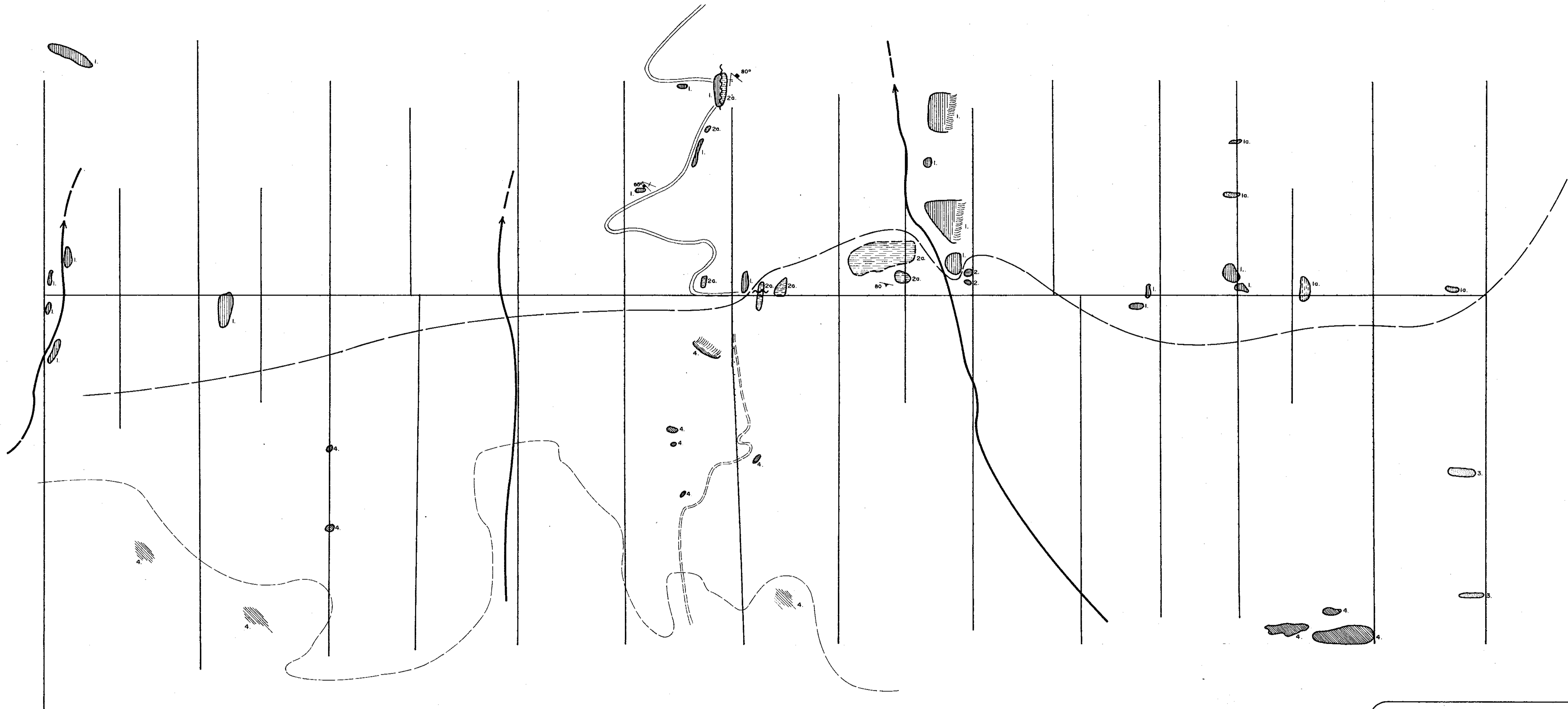
to accompany a report by
 A. R. SCOTT B.Sc., F.P.O'GRADY B.Sc.
 and D. R. COCHRANE P. Eng. NOVEMBER 24, 1972

Cochrane Consultants Limited
 4882 Delta Street — Delta B.C.

figure 4

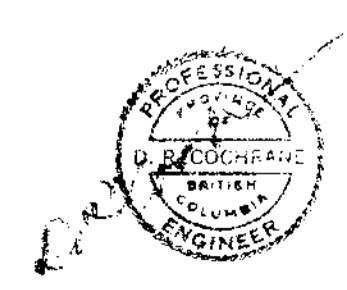
43+50N 38N 32N 27N 22N 16N 8N 0+00 8S 16S 21S 26S 32S 40S 46S 50S 56S 64S

— 20E
— 16E
— 12E
— 8E
— 4E
— 0+00 baseline
— 4W
— 8W
— 12W
— 16W
— 20W
— 24W



Legend

- | | | | |
|--|--|--|--|
| | Purple Andesite Agglomerate (magnetite probable) | | Approximate Limit of Extensive Outcrop |
| | Green Andesite Agglomerate | | Joint |
| | Medium Grain Green Andesite | | Outcrop |
| | Altered Volcanic Rocks | | Outcrop - Poorly Exposed |
| | Quartz Diorite | | Bluff |
| | Quartz Monzonite | | Approximate Intrusive Volcanic Contact |
| | Schistosity | | Creek |
| | Fault | | Horse Trail |
| | Line | | Cat Road |



David A. O'Grady
David A. O'Grady

Komo Explorations Limited (N.P.L.)

AT Claim Group
Dry Lake Area, British Columbia
Similkameen Mining Division

GEOLOGY MAP - REVISED

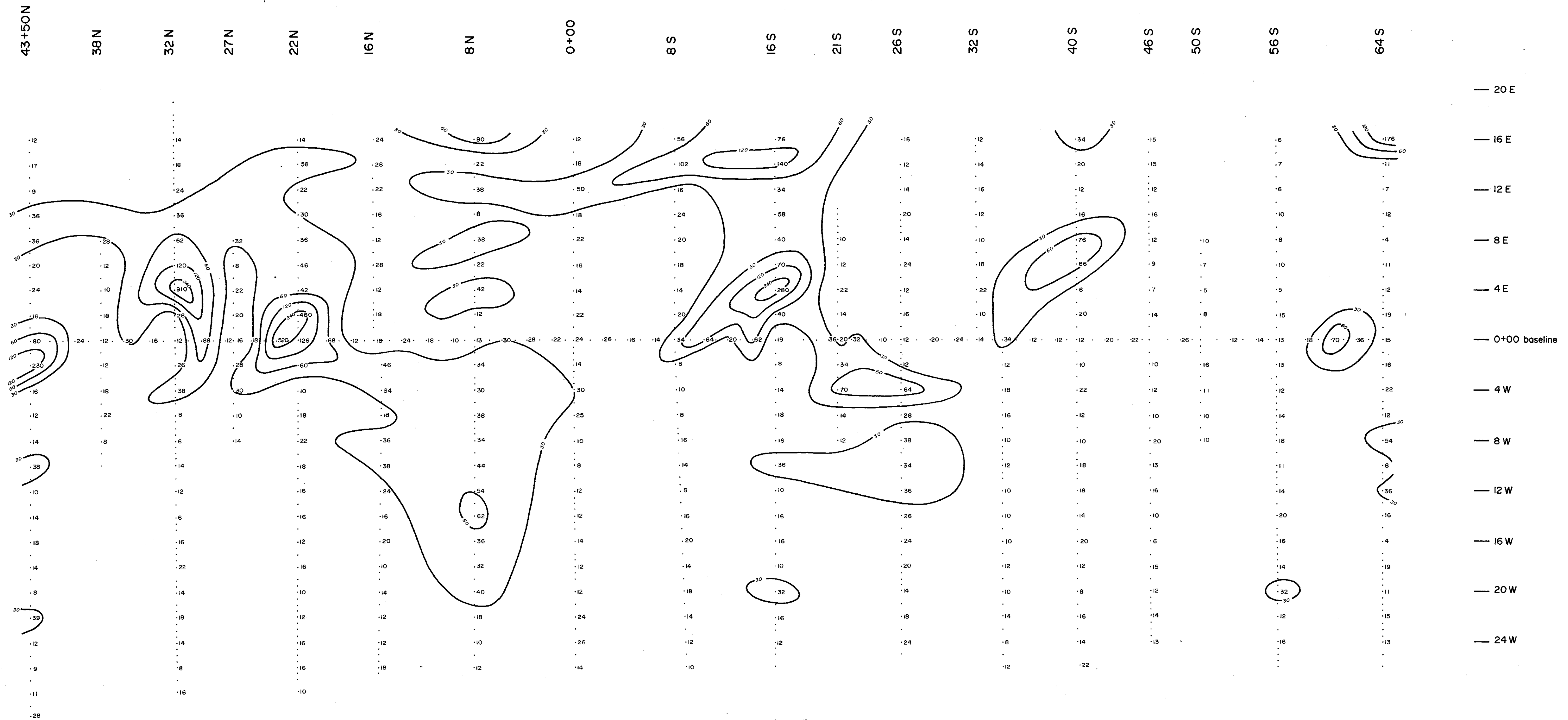
Department of
Mines and Metallurgical Resources
ASSESSMENT REPORT
NO. **4349** MAP #5

Scale: 1 inch = 400 feet
400 0 400
SCALE IN FEET

to accompany a report by
A. R. SCOTT B.Sc., F. P. O'GRADY B.Sc.
and D. R. COCHRANE P. Eng. NOVEMBER 24, 1972.



Cochrane Consultants Limited
4802 Delta Street Delta B.C.

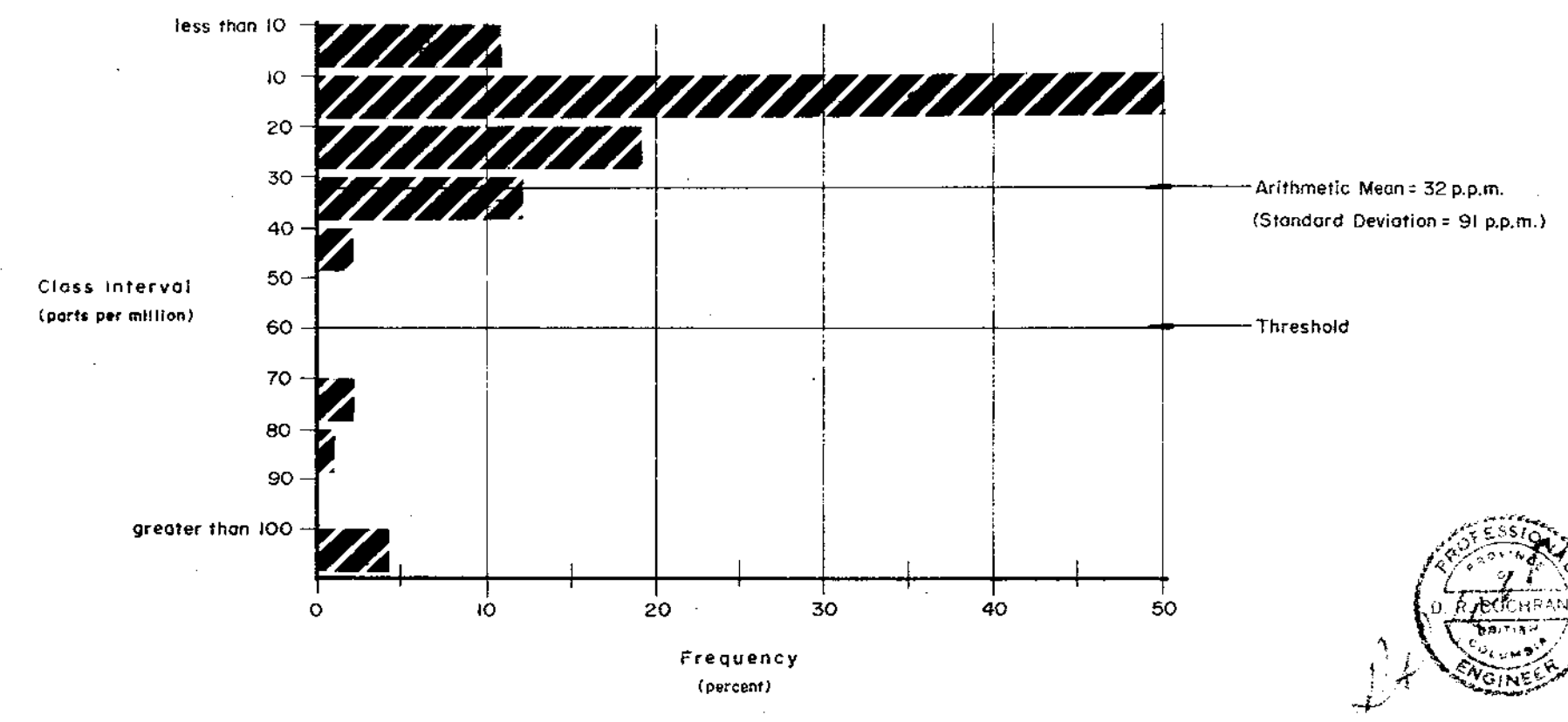
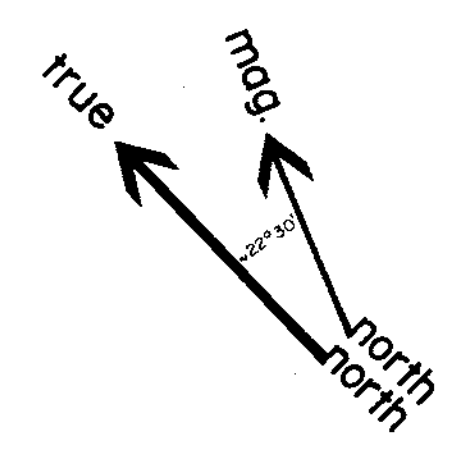


Legend

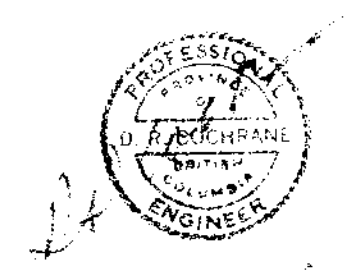
Contour Interval:

30
60
120
240

All values in parts per million copper.



relative frequency histogram



Komo Explorations Limited (N.P.L.)

AT Claim Group
Dry Lake Area, British Columbia
Similkameen Mining Division

GEOCHEMICAL PLAN - COPPER

Department of Mines and Technical Surveys
ASSESSMENT REPORT
NO. **4349** MAP #6

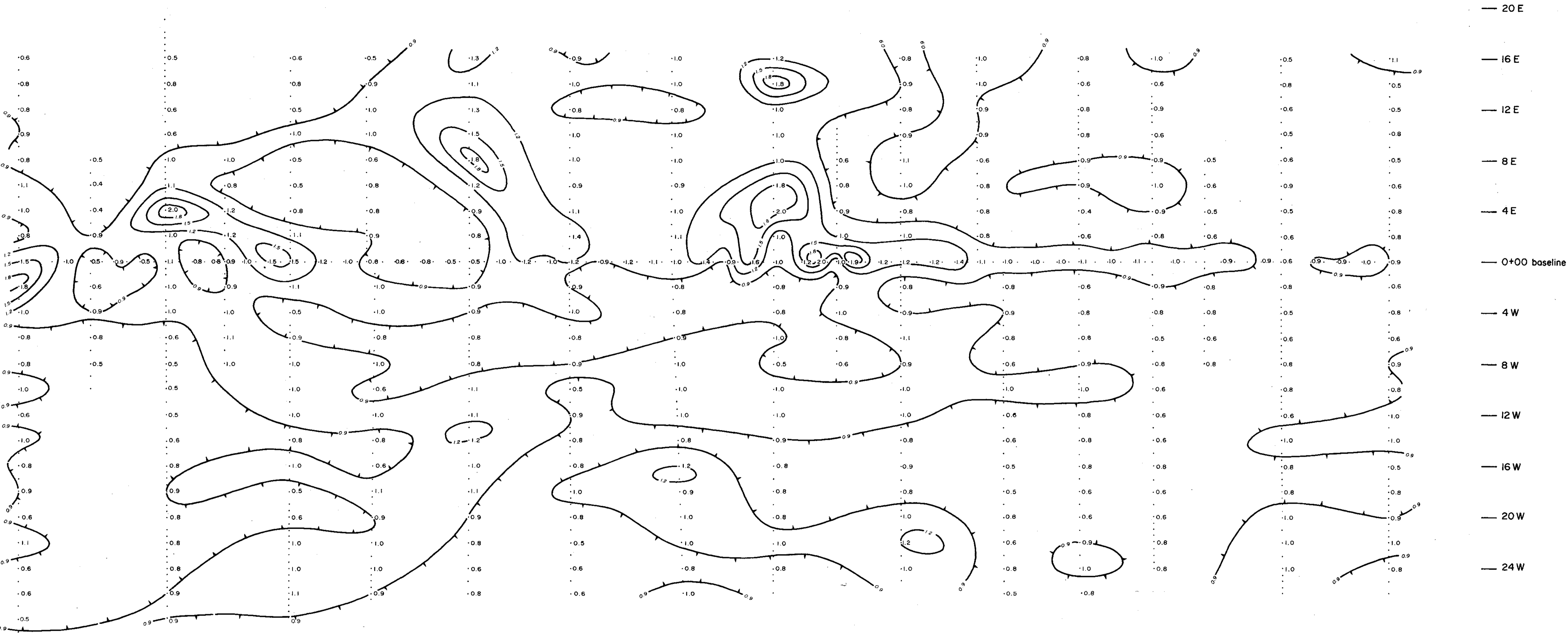
Scale: 1 inch = 400 feet
SCALE IN FEET

to accompany a report by
A. R. SCOTT, B.Sc., F.P.O'GRADY, B.Sc.
and D. R. COCHRANE, P. Eng. NOVEMBER 24, 1972.

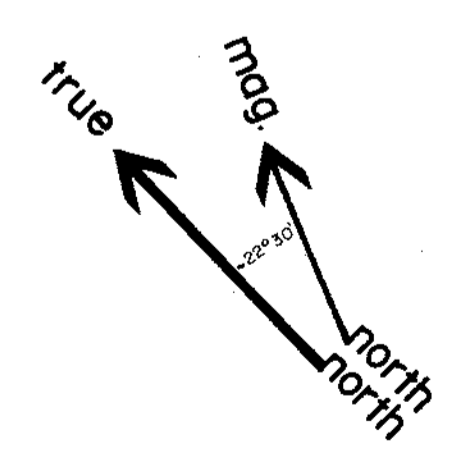
Cochrane Consultants Limited
4882 Delta Street - Delta B.C.

figure 6

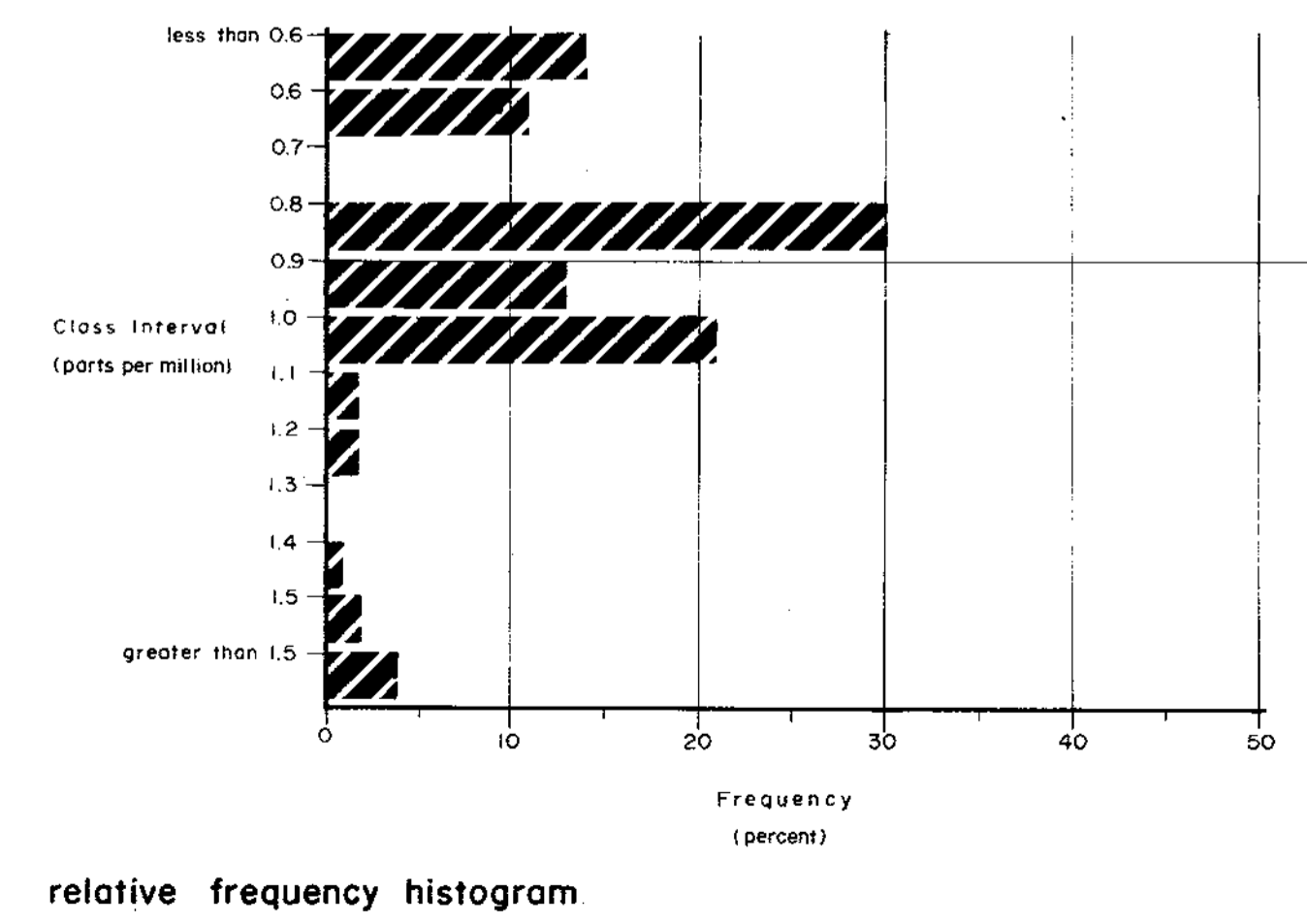
43+50N 38N 32N 27N 22N 16N 8N 0+00 8S 16S 21S 26S 32S 40S 46S 50S 56S 64S



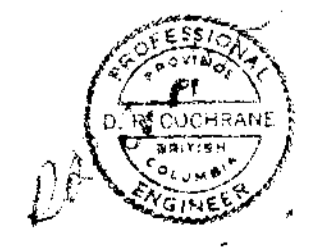
— 20 E
 — 16 E
 — 12 E
 — 8 E
 — 4 E
 — 0+00 baseline
 — 4 W
 — 8 W
 — 12 W
 — 16 W
 — 20 W
 — 24 W



Legend
 Contour Interval
 0.9
 1.2
 1.5
 1.8
 All values in parts per million silver.



Arithmetic Mean = 0.9 p.p.m.
 (Standard Deviation = 0.3 p.p.m.)



Frank J. O'Grady

Komo Explorations Limited (N.P.L.)
 AT Claim Group
 Dry Lake Area, British Columbia
 Similkameen Mining Division

GEOCHEMICAL PLAN - SILVER

NO. **4349** M-**#7**

Scale: 1 inch = 400 feet
 SCALE IN FEET

to accompany a report by
 A. R. SCOTT B.Sc., F.P. O'GRADY B.Sc.
 and D. R. COCHRANE P. Eng. NOVEMBER 24, 1972



43+50N

38 N

32 N

27 N

22 N

16 N

8 N

0+00

8 S

16 S

21 S

26 S

32 S

40 S

46 S

50 S

56 S

64 S

— 20 E

— 16 E

— 12 E

— 8 E

— 4 E

— 0+00 baseline

— 4 W

— 8 W

— 12 W

— 16 W

— 20 W

— 24 W

AT 5

AT 7

AT 9

AT 11

AT 13

AT 15

AT 17

AT 19

AT 21

AT 6

AT 8

AT 10

AT 12

AT 14

AT 16

AT 18

AT 20

AT 22

AT 29

AT 31

AT 33

AT 35

AT 37


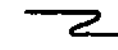
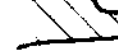




AT 39

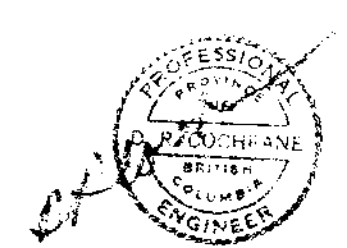
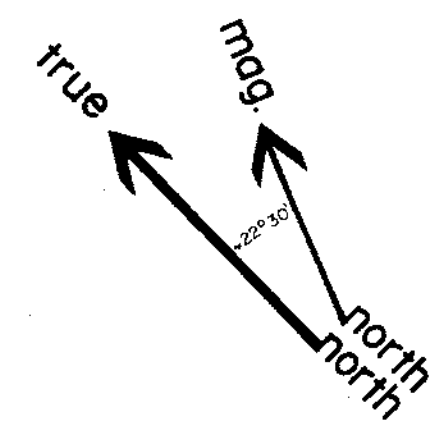
AT 41

AT 43

AT 45

Legend

-  Magnetic High
-  Probable Fault
-  Moderately - Strongly Anomalous Silver
-  Moderately - Strongly Anomalous Copper
-  Approximate Intrusive Volcanic Contact (from Geology Map)
-  Anomaly Number (as discussed in report)
-  Claim Line



Handwritten signature: A.R. Scott
Handwritten name: Frank P. O'Grady

Komo Explorations Limited (N.P.L.)

AT Claim Group
Dry Lake Area, British Columbia
Similkameen Mining Division

COMPILATION PLAN

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4349 MAP #8

Scale: 1 inch = 400 feet
 400 0 400
 SCALE IN FEET

As accompany a report by
 A.R. SCOTT B.Sc., P.P. O'GRADY B.Sc.
 and D.R. COCHRANE P.Eng. NOVEMBER 24, 1972.



figure 8