

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3534 MAP.....

GEOPHYSICAL & GEOCHEMICAL REPORT
on portions of the Knob Hill Group and Sunshine
Group of Mineral Claims

Anyox, B.C.

Observatory Inlet, Skeena Mining District

Latitude $55^{\circ}30'$ N; Longitude $129^{\circ}30'$ W

N.T.S. 103 P/5

on behalf of

ARCADIA EXPLORATIONS LTD.

103P/5W

3534

Field work between July 22 and July 31, 1971

Report and Surveys by:

D. R. Cochrane, P.Eng.,
Delta, B.C.,
September 1, 1971.

FIGURES

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PART A

A - 1 INTRODUCTION:

Between July 22 and July 31, 1971, a field crew employed by D. R. Cochrane, P. Eng., conducted reconnaissance geochemical and geophysical work in two different areas of Arcadia Explorations Anyox area mineral property. Rock geochemistry and an induced polarization survey was completed on four (4) lines on the Sunshine Claims.

The purpose of the Sunshine Claims work was to investigate on the ground an area found to be anomalously conductive during an airborne EM survey done previously.

In the second survey, (Line A on the Cu claims), rock geochemistry, magnetometer and an induced polarization survey was completed across a geological contact known to be favourable for the deposition of massive sulphides.

The field and data processing procedures are described in Part C of this report. The results of the Sunshine Claims work is discussed in Part D, and the Cu claims results in Part E of this report.

A Hewitt Enterprises Pulse Type Induced Polarization unit was used for IP surveying, and a Scintrex MF - 2 for magnetometer work. Rock chip samples were analyzed in Vancouver by Crest Laboratories.

PART A

A - 2 SUMMARY AND CONCLUSIONS:

1. Sunshine Claims: -

Significant chargeability and apparent resistivity changes were observed across the greenstone-argillite contact. Apparent resistivity changed from about 17,000 ohm-feet (greenstone) to below 300 ohm-feet. An apparent resistivity low of less than 300 ohm-feet was outlined and the lowest recorded value within this anomaly is 49 ohm-feet. The anomaly is sufficient to be detected from the air by EM methods and is believed to be a conductor--outlined by Seigel and Associates. A single station 44 millisecond chargeability high was recorded within the resistivity anomaly.

The cause of the low resistivity - high chargeability zone is not completely understood but may be a combination of -

- (a) presence of disseminated pyrite
- (b) conductive argillaceous sediments
- (c) the possibility of the presence of graphite in the argillites.

One rock geochemical copper high (84 parts per million) was collected from the tie line some 1200 feet north of the chargeability peak.

2. CD Claims: -

Significant changes in background resistivity and chargeability were also observed across the volcanic-sedimentary rock contact on Line A. The volcanic rocks are characterized by

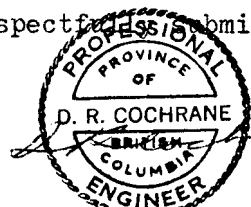
PART A SUMMARY AND CONCLUSIONS cont'd

2. CD Claims: (continued from previous page) -

high apparent resistivity, relatively low chargeability, and slightly higher average copper content. A major anomaly was recorded just south of the contact at Station 5, south of 24 south on Line A. Chargeability peaks at 63.7 ms and is coincident with extremely low resistivity and a major change in the self potential gradient (-374 to +681 mv). A moderate amplitude magnetic high of 500 gammas above background was recorded some distance south of this point, however a high rock geochem zinc value of 132 ppm occurs at the chargeability high.

The cause of this anomaly is not known, and additional surveying is necessary in order to fully define its limits. Investigation as to the cause of the coincident geochemical and geophysical changes is recommended.

Respectfully submitted,



D. R. Cochrane, P. Eng.,
Delta, B. C.,
September 1, 1971.

PART B

B- 1 LOCATION AND ACCESS:

Arcadia's Anoyx property is situated in and around the now abandoned town of Anoyx, B. C., on Observatory Inlet, some 80 air miles north of Prince Rupert. Normal access is by boat or float equipped charter aircraft north from Prince Rupert. At the old townsite, several roads and trails provide reasonable access to most parts of the claims. The latitude is 55 degrees 30 minutes north, and longitude 129 degrees 45 minutes west. The National Topographic System code for the area is 103 P/5W.

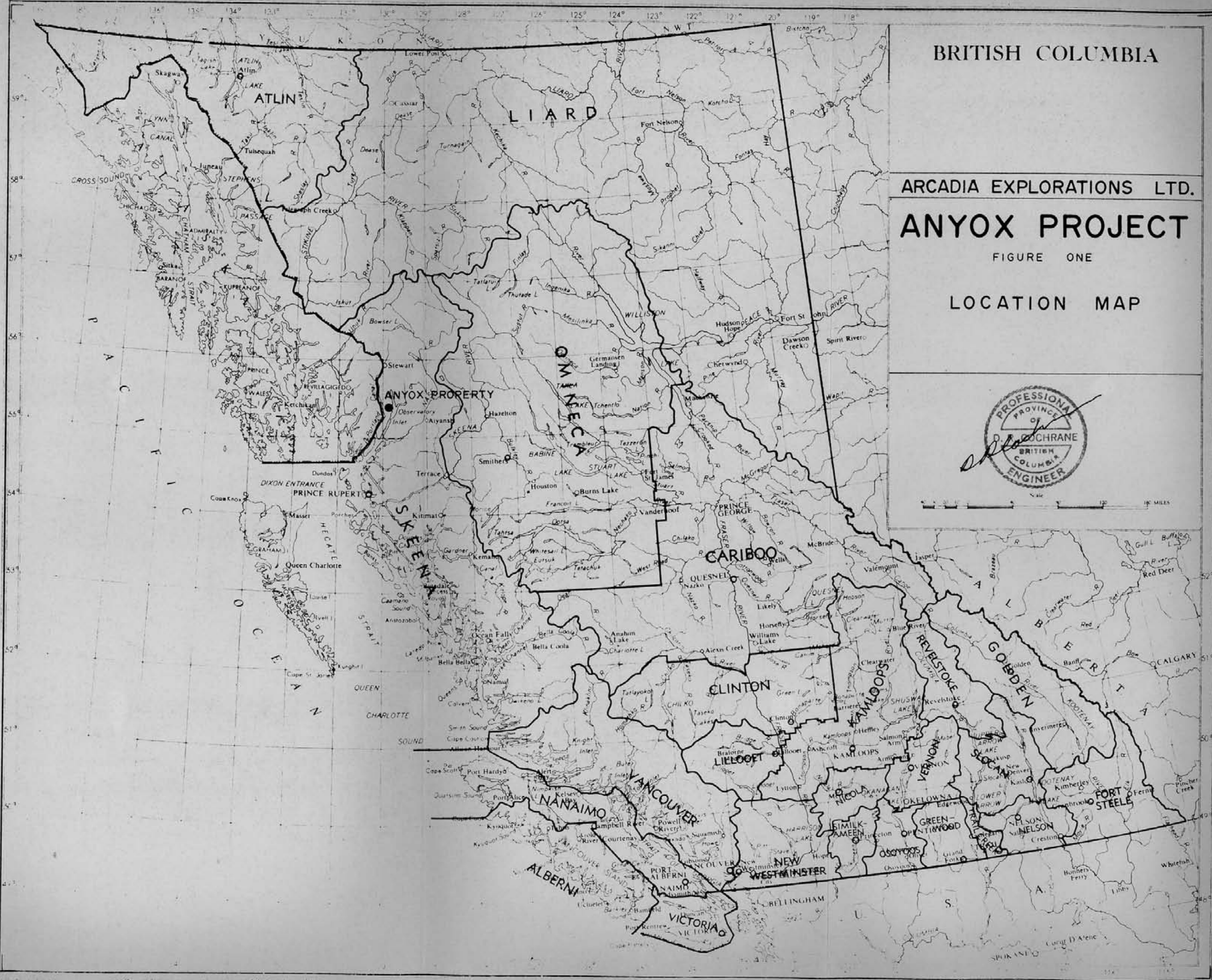
B - 2 CLAIMS AND OWNERSHIP:

Arcadia Exploration owns title to a large number of claims surrounding the Hidden Creek Mine. These claims are situated in the Skeena Mining Division, and are owned outright by Arcadia Explorations Ltd., 502-1200 West Pender Street, Vancouver, B. C.

The following lists a group of claims involved in the present survey work:

<u>Claim Name</u>	<u>Record Numbers</u>	<u>Anniversary Dates</u>
Sunshine No. 1 to 10	31738 to 31747	August 4
CD No. 15 to 18	28566 to 28569	Feb. 21

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BRITISH COLUMBIA

ARCADIA EXPLORATIONS LTD.

ANYOX PROJECT

FIGURE ONE

LOCATION MAP

B - 2 CLAIMS AND OWNERSHIP cont'd -

<u>Claim Name</u>	<u>Record Numbers</u>	<u>Anniversary Dates</u>
CD No. 19 Fraction	28570	Feb. 21
CD No. 20	28571	Feb. 21
CD No. 21 Fraction	28572	Feb. 21
CD No. 22 to 29	28573 to 28580	Feb. 21

These claims are shown in relation to the grid lines in Figure Number Two.

B - 3 GENERAL SETTING:

E. W. Grove has recently mapped the Anyox area, and the following remarks are extracted from his report on "Observatory Inlet", in the B. C. Minister of Mines Annual Report for 1965, page 57.

"Volcanic and sedimentary rocks which underlie most of the Granby Bay area form a large inclusion in the granitic matrix of the Coast Range complex. The surrounding granitic rocks are generally coarse-grained granodiorites which grade variably between hornblende quartz diorite and leucocratic quartz monzonite. The volcanic rocks in the Granby Bay inclusions consists (sic) largely of altered, pillowed, and massive andesites, some banded crystal tuffs, and massive basic sills. The volcanics have been intruded by small gabbroic plugs and various dykes. The overlying sediments include thinly striped argillites, colour-banded dark siltstones, dark sandstones, and minor limestone as lenses."

The sedimentary and volcanic rocks were contemporaneously deformed, along northerly and easterly directed axis. In addition these rocks are cut by swarms of granitic to gabbroic

B - 3 GENERAL SETTING cont'd

dikes mainly in Northeast and Northwest directions. The sediments have been metamorphosed to the amphibolite phase of regional metamorphism, and the volcanics are variously altered.

E. W. Grove continues:

"All mineral occurrences occur at or near a volcanic-sedimentary contact and are largely confined to shear zones apparently controlled by hinge (or "nose") structures in the contact zone. Mineralization in these deposits is similar and generally consists of massive, variably banded sulphides, of which pyrite, pyrrhotite, and chalcopyrite are the most common. The gangue generally includes quartz and calcite, plus epidote and altered wallrocks in various proportions. Very generally, shearing, skarnification, and silicification were followed by sulphide replacement."

The claims are situated in a fairly rugged physiographic region characterized by prominences up to just over 5000 feet with deeply incised valleys such as Bonanza and Tauw Creeks. Topographic lineation is predominantly northerly directed in the north claims sector, and many of these lineations are presumably fault controlled as well as indicating the **strike** of the sedimentary sequence. Much of the country has been denuded by a forest fire, and bedrock exposure is quite extensive.

PART C FIELD PROCEDURES

C - 1 ROCK GEOCHEMISTRY:

Rock chips for geochemical analysis were collected by the author. The tie line on the Northern Survey area (Sunshine Claims) was used for control, and Line A on the Southern Survey area was also used for control. Samples were collected at 500 foot intervals on the tie line, and at 300 foot intervals on Line A. The procedure was as follows: -

Between six (6) to fifteen (15) small rock chips were collected from outcrops within a few tens of feet from the particular sample site; notes were kept on the sample, and describe the rock type, alteration and mineralization (if any). The rock chips were placed in a plastic sample bag, in which was placed a sample number from an assay tag book. The samples were shipped to Vancouver where they were analyzed for copper and zinc by Crest Laboratories of Vancouver, B. C.

In the laboratory, the rock chips were crushed and seived to -100 mesh. Samples from the fines were digested in HClO_4 and HNO_3 and analyzed for their copper and zinc content by atomic adsorption methods. The results are tabulated in Lab. Report No. 647G.

C - 2 GEOPHYSICAL FIELD PROCEDURES

(A) INDUCED POLARIZATION cont'd. -

milliamperes) and impressed EMF between the receiving pots (dV in millivolts) was recorded. On cessation of the square wave current pulse, an integrated value of the residual decay voltage is automatically registered on the receiver galvanometer. This value was recorded (IP in millivolts) along with the position of the instrument, RC filter, integration function setting, output voltage of the transmitter, notes on the terrain, steadiness of SP, and sharpness of IP response. Normally integration function one was used, and on this setting the decay voltage is integrated for 0.8 seconds commencing 0.3 seconds after current pulse termination. Often an 8 second current pulse was used in various combinations of filters and integration times to assist in the interpretation of the results.

After completion of several pulse cycles the order was then given to move an 'a' distance to the next set up position where the procedure was repeated.

C - 2 GEOPHYSICAL FIELD PROCEDURES cont'd

(B) MAGNETOMETER SURVEY:

A Scintrex vertical force, fluxgate model MF-2 was used for magnetic surveying on the Anyox Project. Instrument specifications are tabulated in Appendix IV.

A main base station was established near camp and the instrument was adjusted to 700 gammas at this position. The true value of the vertical component of the field as measured at this station was 53,800 gammas. Therefore to obtain the true amplitude of the field along Line A, a constant value of 53,100 must be added to each reading. (As noted on Figure 8).

After several readings were recorded each morning at the main base station (readings taken 5 minutes apart to check the steadyness of the field) the operator moved onto the line and checked into station O. From this position, readings were taken at 100 foot intervals along Line A, with the operator facing magnetic north. The field values were recorded on standard preprinted Magnetometer Note Forms along with the time of each reading, and notes on geology and terrain. At the end of each days work, spot checks were taken at various positions along the line, and a final check -out was recorded at the main base station. The magnetic field was normally quite steady, however drift was noted on July 28 and the field readings were corrected by standard time-drift charts. The largest single correction was 115 gammas.

PART C PROCEDURES cont'd

C - 4 DATA PROCESSING:

a slide rule. In the office, the induced polarization data was punched onto paper punch tape, and with the aid of a standard program prepared by D. R. Cochrane personnel, the calculations were rerun in a Diehl Computer. The computer calculated results were then plotted and accompany this report.

The chargeability is defined by the relationship: -

$$\text{milliseconds} = \frac{100 \times \text{IP (mv)}}{\text{DV (mv)}} \text{ -----}$$

The apparent resistivity is defined by the relation: -

$$\text{ohm-feet} = \frac{2 \times 3.14 \times \text{dV} \times \text{'a'}}{\text{I (ma)}} \text{ ----- where,}$$

'a' is the A spacing in feet

I is the transmitting current in milliamperes

DV is the impressed EMF between pots

IP is the decay voltage in millivolts

The self potential gradient data was corrected for a standard pole but otherwise remained unprocessed.

PART D DISCUSSION OF RESULTS - SUNSHINE CLAIMS

D - 1 ROCK GEOCHEMISTRY:

A total of eight rock chip samples were collected along the tie line on the Sunshine Grid, and analyzed for their copper content only. The high is 84 parts per million (ppm) Cu, low 16 ppm and the arithmetic mean is 32 ppm. The rock geochemical results in relation to stations on the tie line are presented in the following table:

<u>Sample No.</u>	<u>Station</u>	<u>Copper (ppm)</u>
50326 C	10 S	84
50327 C	15 S	38
50328 C	20 S	28
50329 C	25 S	19
50330 C	30 S	29
50331 C	35 S	26
50332 C	40 S	19
50333 C	45 S	16

The two 'above average' values of 84 and 38 ppm are the only significant results and occur on the tie line immediately north of Line 3. The rocks are argillitic, and were taken in the sediments a few hundred feet east of the greenstone-sediment contact. The chargeability is moderately high in the area, and the apparent resistivity moderately low.

PART D DISCUSSION OF RESULTS cont'd

D - 2 SELF POTENTIAL:

Profiles of the self potential results on the Sunshine Claims are presented as Figure Three.

Response ranged from a low of -270 millivolts (mv) to a high of 191 mv. Due to the rather restricted nature of the survey there is very little cross line correlation that is readily apparent. The most noteworthy feature is the change from 191 to -270 mv recorded on Line 2 immediately west of the base line. This SP anomaly coincides with the single high chargeability result of 44 milliseconds (see Figure Five). The cause of the SP anomaly is not known.

D - 3 APPARENT RESISTIVITY:

The apparent resistivity values on the Sunshine Grid ranged from a low of 49 to a high of 25010 ohm-feet. There are two distinct families, one less than 1000 ohm-feet and the other considerably above this value. All the results to the east of the 1000 ohm-foot resistivity contour are extremely low, the arithmetic mean is 440 and are subsurface response from 'dirty' (graphitic?) argillites. Values to the west of the 1000 contour occur in an area underlain by greenstone, and the average apparent resistivity value in this area is just over 17,000 ohm-feet. (See Figure Four).

The 'anomalously low' resistivity values are those

PART D DISCUSSION OF RESULTS cont'd

D - 3 APPARENT RESISTIVITY:

values below 300 ohm-feet, and a north northwest trending anomalous zone extends along the tie line for some 2800 feet and is up to 600 feet wide. The lowest recorded resistivity value in the anomalous area is 49 ohm-feet and represents extremely high subsurface conductivity conditions.

The author examined outcrops in this area and minor to moderate amounts of sulphides were present, however, the rock is a thin lamellar argillite and may contain finely disseminated graphite.

The apparent resistivity anomaly is certainly of sufficient amplitude and size to be detected in airborne EM surveying, and is presumably the cause of the large EM high detected by Seigel and Associates.

D - 4 CHARGEABILITY:

The normalized chargeability results of the Sunshine Claims area is presented in contoured plan as Figure Five. Results ranged from a low of 6.1 milliseconds to a high of 44.0 milliseconds. The arithmetic mean of 23 values is 20 ms. As with the apparent resistivity case, two distinct families are apparent. The values below 10 ms lie in greenstone terrain, and those values above 10 ms lie, for the most part in the area underlain by argillites.

PART D DISCUSSION OF RESULTS cont'd

D - 4 CHARGEABILITY:

A single high value of 44 ms was recorded on Line 2 immediately west of the tie line. The corresponding apparent resistivity value is anomalously low (249 ohm-feet) and this station is also characterized by a very sharp and anomalous self potential gradient (-270 mv).

The author examined the outcrops in the vicinity and they are rusty argillaceous sediments, with minor folding, (crenulated) but in general strike 005 degrees and dip easterly at -70 degrees.

The single high rock geochem sample, an 84 ppm Cu determination, occurs some 1200 feet north of the high chargeability zone.

PART E DISCUSSION OF RESULTS - CD CLAIMS (LINE A)

E - 1 ROCK GEOCHEMISTRY:

A total of 23 rock chip samples were collected along Line A. The samples were collected at 300 foot intervals and analyzed for their copper and zinc content. The results are plotted in profile form and accompany this report as Figure 6.

The copper results ranged from a low of 12 ppm to a high of 57 ppm and the arithmetic mean is 25 ppm. This average is slightly lower than that obtained in the 1969 field work. (See 'Geochemical and Geophysical Report of the Anyox Property of Arcadia Explorations Ltd., by D. R. Cochrane and filed for assessment credits in January, 1970). In this earlier work the arithmetic mean of a total of 176 rock chip samples was 64 ppm and range 9 to 120,000 ppm. (Note - four extremely high copper values including the above were omitted when calculating the arithmetic mean on the 1969 work).

However, if the current results are considered statistically by themselves, the two high values, one of 55 ppm and the other of 57 ppm, are significant. They were taken from the north end of Line A, in and around a showing designated Knob Hill.

The zinc results ranged from a low of 32 to a high of 132 ppm and the arithmetic mean is 70 ppm. This compares with a 1969 average of 120 ppm, with the mode lying in the 40 to 50 ppm class.

PART E DISCUSSION OF RESULTS - CD CLAIMS (LINE A)

E - 1 ROCK GEOCHEMISTRY: cont'd

In 1969, Mr. Williamson collected a total of 15 samples along a traverse 'C', and 6 of the samples were of argillite and the remainder of greenstone. It is interesting to compare those results with the current work, also across the argillite-greenstone contact.

(a) 1969 "C" Traverse: -

	<u>Overall Averages (15 samples)</u>	<u>Hi.</u>	<u>Low</u>	<u>Argillite Average (6 samples)</u>	<u>Greenstone Average (11 samples)</u>
Cu	36	77	9	19	43
Zn	59	195	8	48	60

(b) "Line A" -

	<u>Overall Averages (23 samples)</u>	<u>Hi.</u>	<u>Low</u>	<u>Argillite Average (8 samples)</u>	<u>Greenstone Average (15 samples)</u>
Cu	25	57	12	21	27
Zn	70	132	32	81	64

Thus the greenstone appears to contain higher copper content, but the zinc content is not correlative. The single zinc high of 132 ppm, from station 30S on Line A, confirms the previous observation that the zinc content of the bedrock increases sharply at, or close to the contact.

PART E DISCUSSION OF RESULTS - CD CLAIMS (LINE A)

E - 2 SELF POTENTIAL:

The self potential gradient results are shown in profile form in Figure Eight. Results varied from a low of -374 to a high of +681 m.v., between the two receiving pots placed 300 feet apart. This range of values is certainly impressive, and occurs close to the greenstone argillite contact at 24S. This sharp and significant self potential change coincides with a chargeability high and resistivity low (see Figure 7).

E - 3 APPARENT RESISTIVITY:

The apparent resistivity results are shown in profile form in Figure Seven. As with the Sunshine Claims work, a very significant change in subsurface resistivities occurs across the contact. Values on the argillite side (south of Line A) range from a low of 240 to a high of 565 ohm-feet, whereas values on the greenstone side are above 8000 and up to 13,200 ohm-feet. Apart from the major **change** across the contact, two variations occur in the data, and both are coincident with areas containing disseminated pyrite. These are located at 16 N, and 2 S, where apparent resistivities decrease to below the 9000 ohm-foot level.

PART E DISCUSSION OF RESULTS - CD CLAIMS (LINE A)

E - 4 CHARGEABILITY:

The chargeability results on Line A are presented in profile form in Figure Seven. Response ranged from just over 8 milliseconds (ms) to a high of 63.7 ms. As occurred with resistivity data, a significant shift of background is observable at the contact, with background in the greenstone being about 10 ms and background in the argillites approximately 30 ms. A very small "bump" is present on the Knob Hill showing and a high of 17 ms was recorded over a sulphide zone in and around 2 S, Line A. }

The significant feature however is the major peak occurring at 26 S, which is coincident with extremely low resistivities, a very sharp, high amplitude self potential change, and a rock geochem zinc high of 132 ppm.

A similar chargeability high was located at 44 S in an area covered by overburden.

The cause of these anomalies is not known.

E - 5 MAGNETOMETER SURVEY:

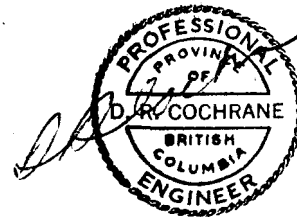
The magnetometer results are presented in profile form in Figure Eight. Response ranged from a low of 390 to a high of 1160 gammas. The arithmetic mean is 705 gammas.

A noteworthy high occurred over the Knob Hill Showing (at 17 N) and similarly a peak at 3 S occurs close to the }

PART E DISCUSSION OF RESULTS - CD CLAIMS (LINE A)

E - 5 MAGNETOMETER SURVEY: cont'd

disseminated sulphide zone there. Several other peaks between 8 S and 24 S on Line A may be due to narrow diabase dikes. The most significant high, however, occurs at 45 S, and is coincident with a chargeability high (of 58 ms) and a sharp self-potential gradient (-255 to + 322mv). The area is covered by overburden and the cause of these geophysical changes is not known at this time.



APPENDIX I

Certificates

Name: COCHRANE, Donald Robert
Education: B.A.Sc. - U. of T.
M.Sc. (Eng.) - Queen's University
Professional Associations: Professional Engineer of B.C., Ontario, and Saskatchewan.
Member of C.I.M.M., G.A.C., M.A.C., Geological Eng.
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 D.R. Cochrane - Geophysicist
Professional Associations: Member of S.E.G.

Name: GRIFFITH, David
Education: B.A. (English), Queen's, 1970
Experience: 1 Field Season, general experience in mining exploration.
1 Field Season with D.R. Cochrane - Chief Operator

Name: CHASE, William
Age: 20
Education: Grade 12 Diploma
Experience: Employed since September, 1970 and engaged in EM and IP surveying. Previous experience at the Anvil Mine, Y.T. Summer, 1970.

Name: ESTACAILLE, N.
Age: 24
Education: Grade 12 Diploma
Experience: One-half year exploration experience with Huntec.

Name: ELLIOTT, David
Education: Presently - student B.C.I.T. - Computer Technology
Experience: 2 years - Geology - Geophysics - U.B.C.
5 years - Field Work and Geological Drafting

APPENDIX II

Personnel and Dates Worked

The following personnel employed by D. R. Cochrane, P.Eng. were engaged on the Arcadia Explorations Anyox Project.

<u>Name</u>	<u>Work</u>	<u>Date(s)</u>
D. R. Cochrane, P.Eng.	Field Work (Geophysics and Geochem.) Report Preparation	July 22 - 30 Aug. 3, 4, 30, 31 Sept. 1
D. Griffith	Field Work (IP Operator)	July 22 - 30
N. Estacaille	Field Work (IP Helper)	July 22 - 30
W. Chase	Field Work (IP Helper)	July 22 - 30
D. Elliott	Drafting	5½ days - August
A. Scott	Data Processing	August 3, 4

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *15*
day of *Feb.* *72.*, A.D.

D. Cochrane

Neil Turner
A Commissioner for the Province of British Columbia or
A Notary Public in and for the Province of British Columbia.

Sub - mining Recorder

APPENDIX III

Cost Breakdown

By contract dated July, 1971, between D. R. Cochrane, P.Eng. and
Arcadia Explorations Ltd.

Geochemical and Geophysical Surveys, Knob Hill
and Sunshine Claim Groups, Anyex Area

Induced polarization, magnetometer and rock geochemical
surveys:

TOTAL \$ 4,675.00

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *15*
day of *Feb.* 1972.

D. Ploen

Jill Turner
A Commissioner for taking Affidavits within British Columbia or
A Notary Public for the Province of British Columbia.
Sub - mining Recorder

APPENDIX IV (a)

Instrument Specifications - IP

Transmitter Unit

Current pulse period (D.C. Pulse)	
Manual initiated timer	1 - 10 seconds
Current measuring ranges	0 - 500
	0 - 1000 milliamperes
	0 - 5000
Internal voltage converter	250
27 volt D.C. 350 watt output with belt pack batteries	500 volts D.C.
	1000 Nominal

500 watts using 27 volt aircraft batteries

Transmitter can switch up to 3 amps at 1000 volts from generator or battery supply with resistive load. The switching is done internally in the transmitter unit. Remote control output can switch up to 10 kilowatts of power by using a separate control unit. A remote control cord is supplied with auxiliary equipment.

Receiver Unit

Self Potential Range	0 - 1000 millivolts
	1 millivolt resolution
Integration time periods	.8 seconds
	1.6 seconds
Tandem Integration time periods	1.6 seconds
	3.2 seconds
Input filtering	3 ranges plus 4 integration combinations
Delay time from cessation of current pulse	.3 seconds

(Combined Photo Electric Coupled Receiver and Transmitter)

Operation Temperature	.25°F - 120°F
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POWER SUPPLY

Receiver Unit	4 Eveready E136 Mercury Batteries
	2 Eveready E134 " "
	2 Eveready E401 " "
Transmitter Unit (recon. mode)	Sealed Rechargeable 8 amp. hr. belt pack capable of driving the converter at 350 watts for a minimum of one day's operation before recharge.
Transmitter Unit (med. power mode)	Aircraft 11 amp. hr. Battery
Battery Charger	Custom Automatic cutoff for charging sealed batteries.

**SPECIFICATIONS OF
FLUXGATE MAGNETOMETER
MODEL MF-2**

	RANGES	SENSITIVITY
Standard:	Plus or minus 1,000 gammas f.sc. 3,000 gammas f.sc. 10,000 gammas f.sc. 30,000 gammas f.sc. 100,000 gammas f.sc.	20 gammas/div. 50 gammas/div. 200 gammas/div. 500 gammas/div. 2000 gammas/div.
Optional:	100 gammas f.sc. 300 gammas f.sc.	2 gammas/div. 5 gammas/div.
Meter:	Taut-band suspension 100 gamma scale 2.1" long — 50 div. 300 gamma scale 1.9" long — 60 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 ($\frac{1}{2}$ gamma/°F)	
Noise Level:	Less than 1 gamma P-P	
Bucking Adjustments: (Latitude)	—20,000 to +80,000 gammas 9 steps of 10,000 gammas plus fine control of 0 - 10,000 gammas by ten turn potentiometer. Reversible for southern hemisphere.	
Recording Output:	Optional.	
Electrical Response:	D.C. to 0.3 cps (3db down) on 1000 gamma range with meter in circuit. D.C. to 20 cps with meter network shorted for recording purposes.	
Connector:	Cannon KO2-16-10SN for plug Cannon KO3-16-10-PN and cover KO6-16-3/8.	
Batteries:	Internal 3 x 6V-1 amp/hr. Sealed Lead Acid rechargeable Centralab GC 6101; recharge time 8 Hrs.	
Consumption:	60 milliamperes — GC6101 batteries are rated for 16 hours continuous use.	
Dimensions:	6¼" x 2¾" x 10" Instrument. 161 mm x 71 mm x 254 mm	
Weights:	5 lb. 8 oz. — 2.5 kg.	
Battery Charger:	6" x 2½" x 2½" 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 GC6101 batteries.	



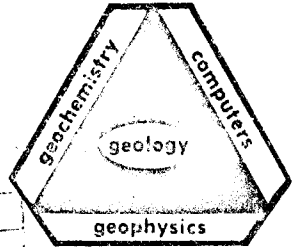
SCINTREX LIMITED

79 Martin Ross Avenue, Downsview, Ontario, Canada

d. r. cochrane, p. eng.

4952-8A AVE.,

Delta, B.C. 943-3738



RA	
D.M.	✓
C.G.C.	✓
D.C.	
D.G.R.C.	
D.O.E.	
ACCTS	
C.M.P.	
SA	
C.A.	
R. T.	
C.P.E.	

March 13, 1972.

3155

Mr. McCrimmon,
Department of Mines and Petroleum Resources,
Victoria, B.C.

Dear Mr. McCrimmon:

Re: Arcadia-Anyox Property Rock Geochemical Traverse, Tie Line,
Sunshine Group

As you kindly brought to my attention, there is a drafting omission on Figures 3, 4 and 5 which accompany "Geophysical and Geochemical Report" on portions of the Knob Hill and Sunshine Groups, Anyox, B.C. on behalf of Arcadia Explorations Ltd.

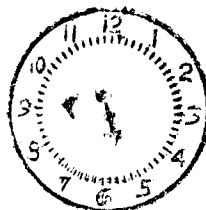
Station 20 + 00 East on line 3 coincides exactly with station 15 + 00 South on the tie line. Thus line 2 intersects the tie line at 23 + 00 South, and line 1 at 31 + 00 South.

The above average copper results on the tie line then fall at line 3 (15 + 00S, value of 38 p.p.m.) and 500 feet north of line 3 (10 + 00 S, value of 84 p.p.m. Cu).

Yours truly,

D. R. Cochrane, P.Eng.

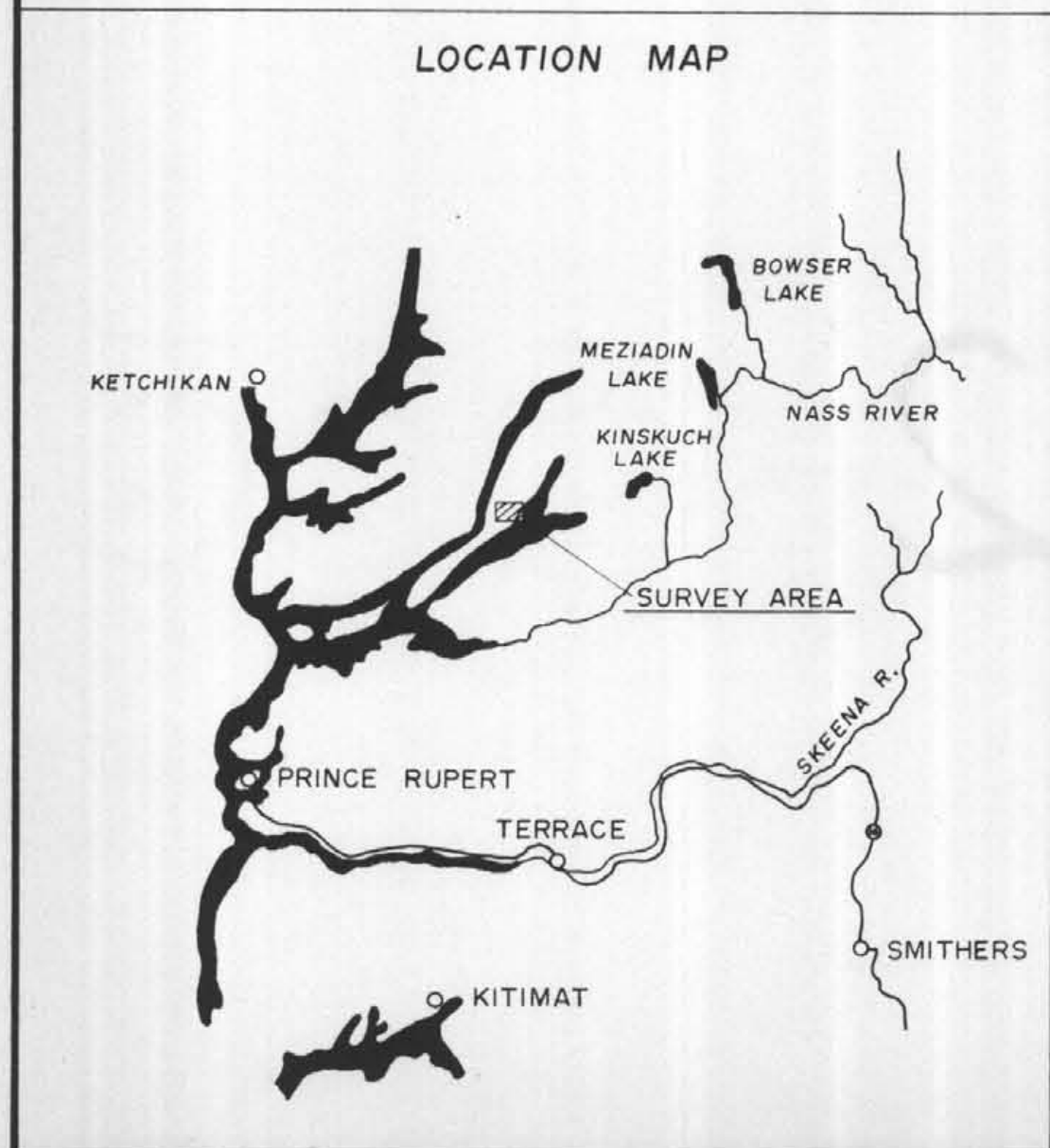
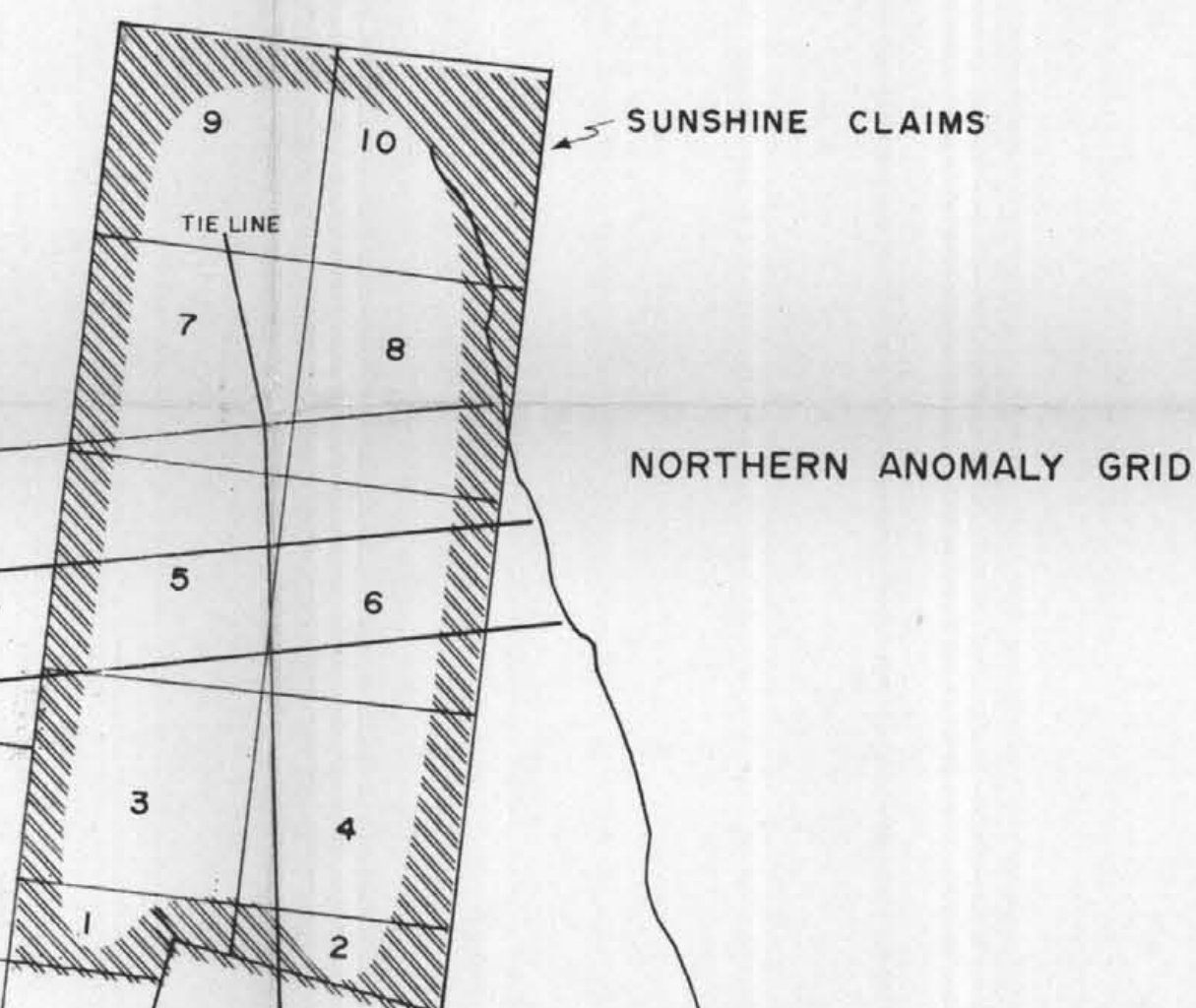
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DEPT. OF MINES
AND PETROLEUM RESOURCES



3534 M-2

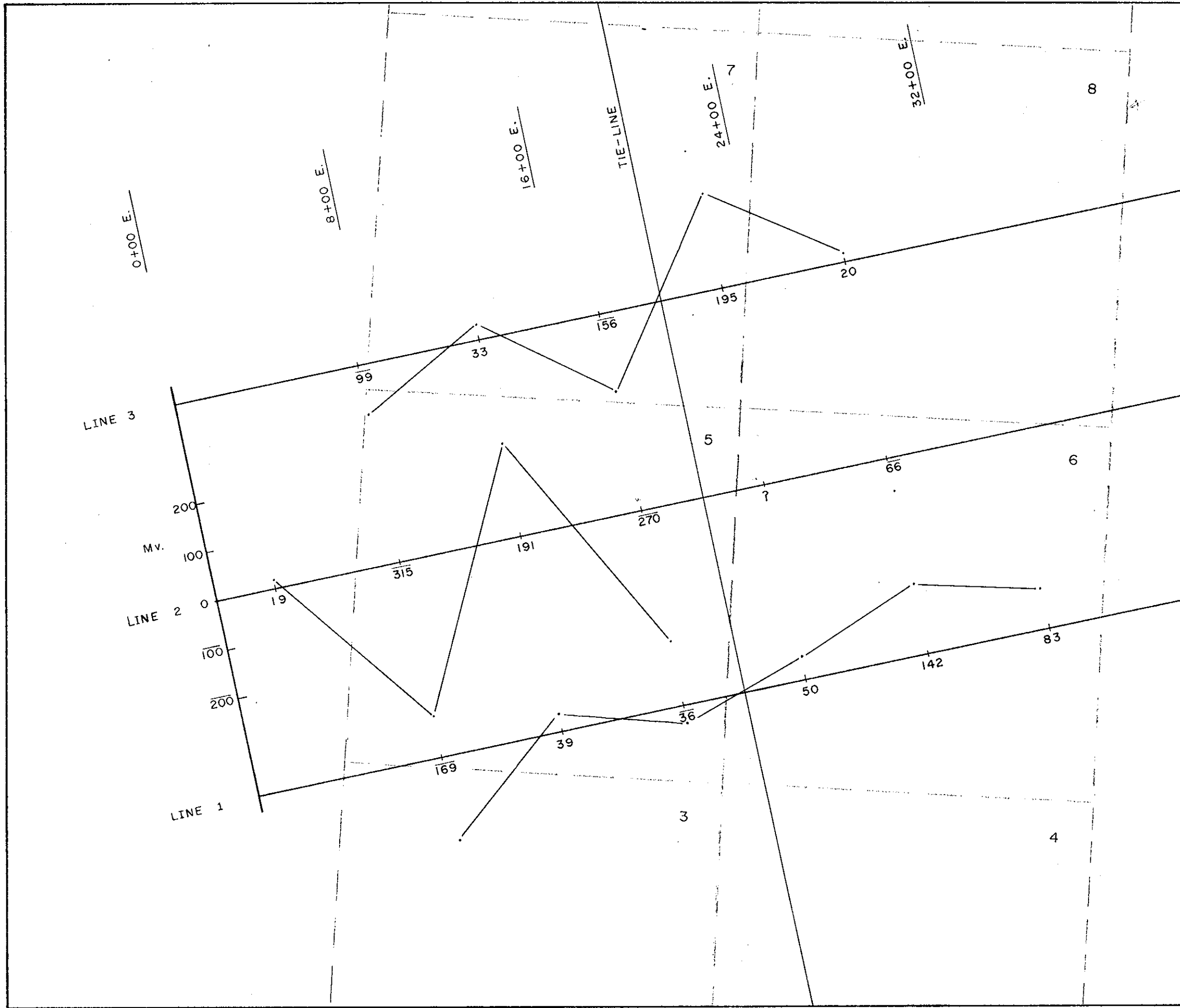


Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3534 MAP #2

3534 M-2



ARCADIA EXPLORATIONS LTD.
ANYOX PROJECT
FIGURE TWO
CLAIMS & GRID MAP
SCALE
1" = 1320'
0 660 1320 2640 3960
To accompany report by D.R. Cochrane, P. Eng. on the Anyox Project located 15 miles West of Alice Arm, B.C. in the Skeena M.D.; dated August 21, 1971 at Delta, B.C.



Approx. position
SUNSHINE CLAIMS



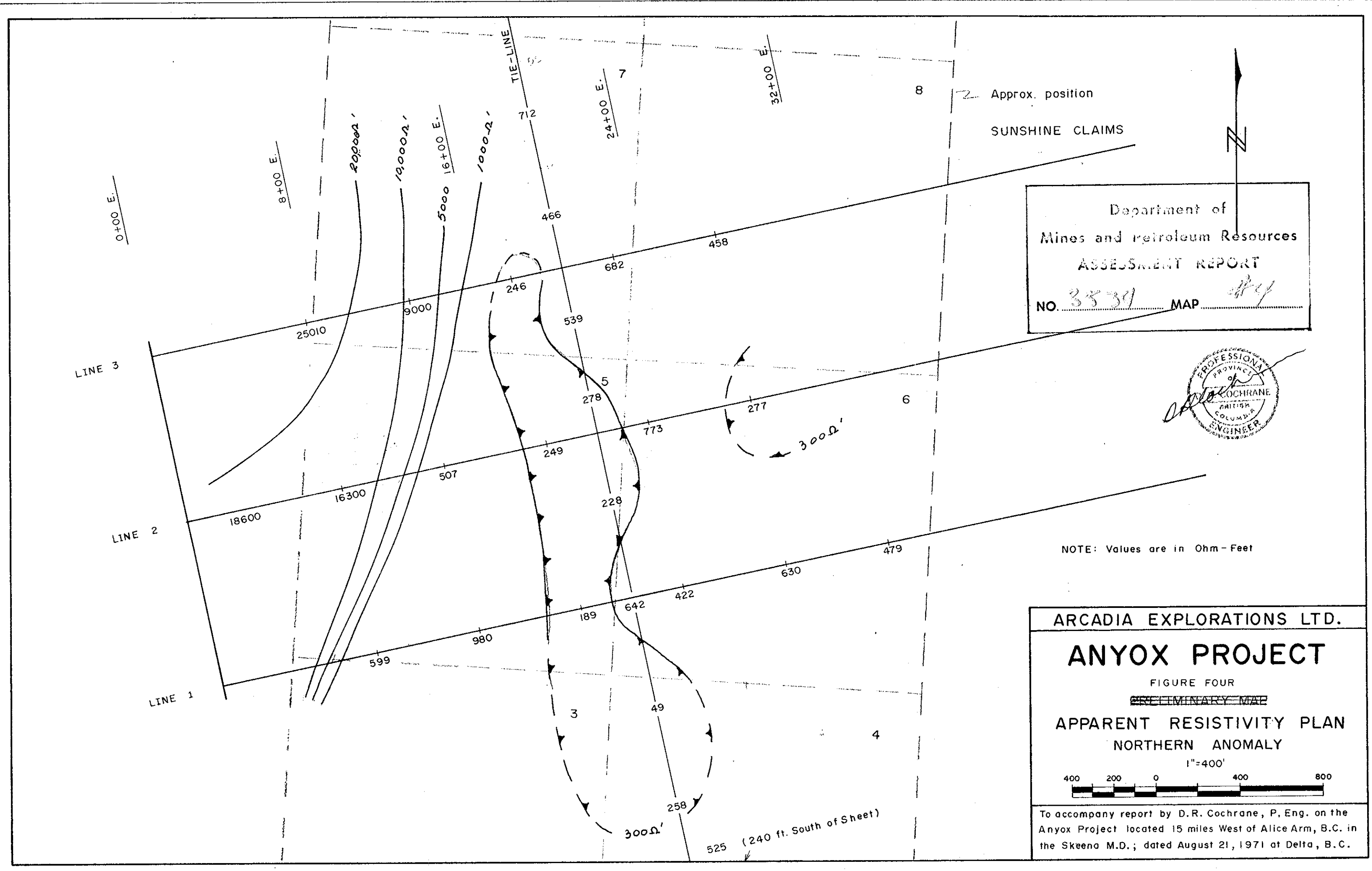
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3534 MAP 43



NOTE: Values are in millivolts

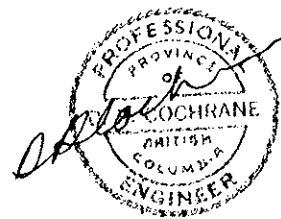
ARCADIA EXPLORATIONS LTD.
ANYOX PROJECT
FIGURE THREE
~~PRELIMINARY MAP~~
S.P. GRADIENT PROFILE
NORTHERN ANOMALY
1"=400'
400 200 0 400 800

To accompany report by D.R. Cochrane, P. Eng. on the Anyox Project located 15 miles West of Alice Arm, B.C. in the Skeena M.D.; dated August 21, 1971 at Delta, B.C.



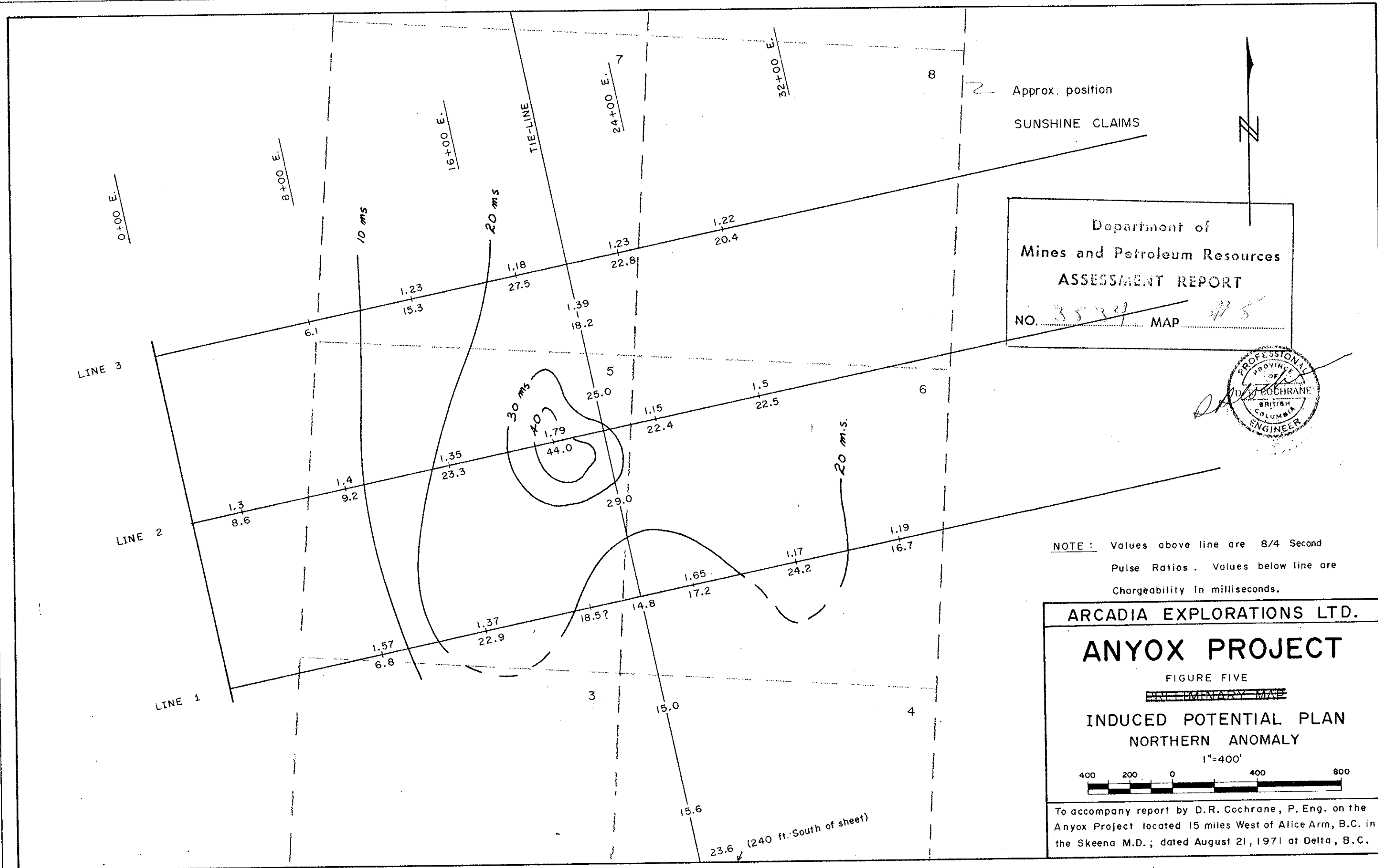
Approx. position
SUNSHINE CLAIMS

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3334 MAP



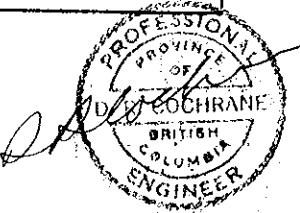
NOTE: Values are in Ohm-Feet

ARCADIA EXPLORATIONS LTD.
ANYOX PROJECT
FIGURE FOUR
~~PRELIMINARY MAP~~
APPARENT RESISTIVITY PLAN
NORTHERN ANOMALY
1"=400'
400 200 0 400 800
To accompany report by D.R. Cochrane, P. Eng. on the Anyox Project located 15 miles West of Alice Arm, B.C. in the Skeena M.D.; dated August 21, 1971 at Delta, B.C.



Approx. position
SUNSHINE CLAIMS

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3534 MAP #5



NOTE: Values above line are 8/4 Second
Pulse Ratios. Values below line are
Chargeability In milliseconds.

ARCADIA EXPLORATIONS LTD.

ANYOX PROJECT

FIGURE FIVE
~~PRELIMINARY MAP~~
INDUCED POTENTIAL PLAN
NORTHERN ANOMALY
1"=400'

To accompany report by D.R. Cochrane, P. Eng. on the Anyox Project located 15 miles West of Alice Arm, B.C. in the Skeena M.D.; dated August 21, 1971 at Delta, B.C.

140
120
100
80
60
40
20
0

16 N 8 N 0+00 8 S 16 S 24 S 32 S 40 S 48 S

ZINC (ppm)

COPPER (ppm)

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3534 MAP #6

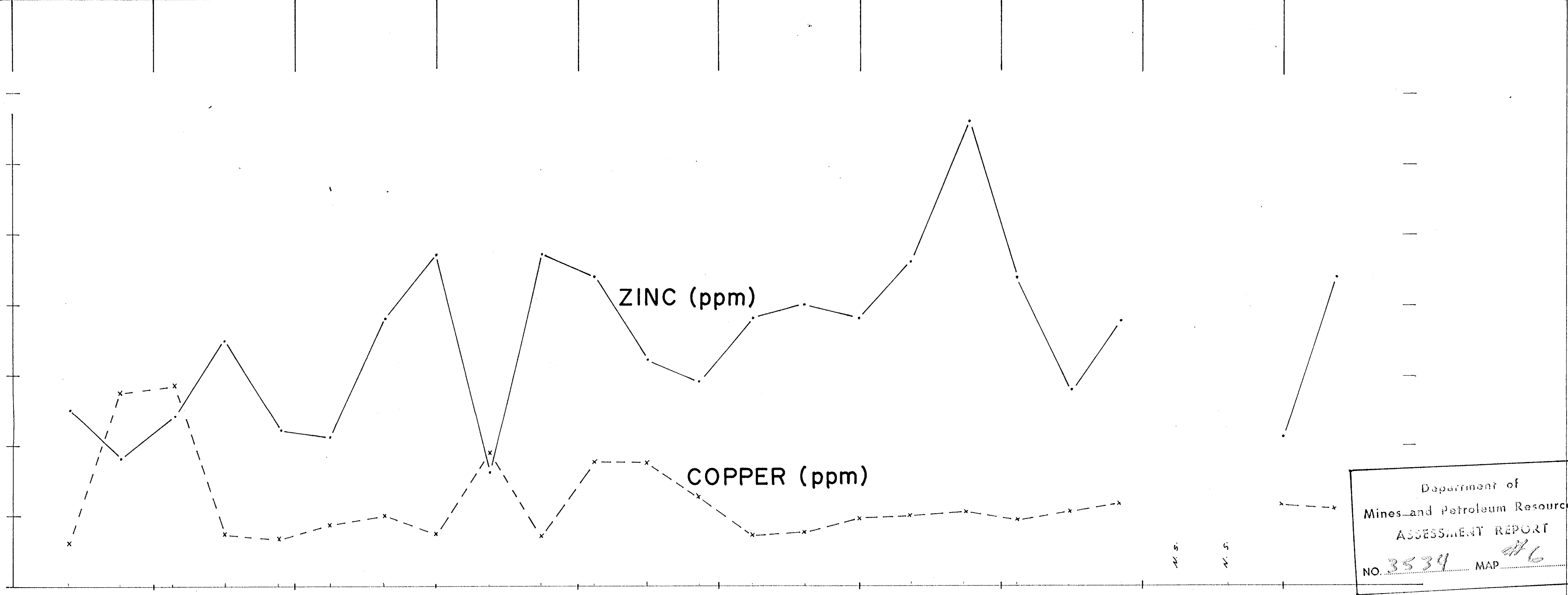
ARCADIA EXPLORATIONS LTD.

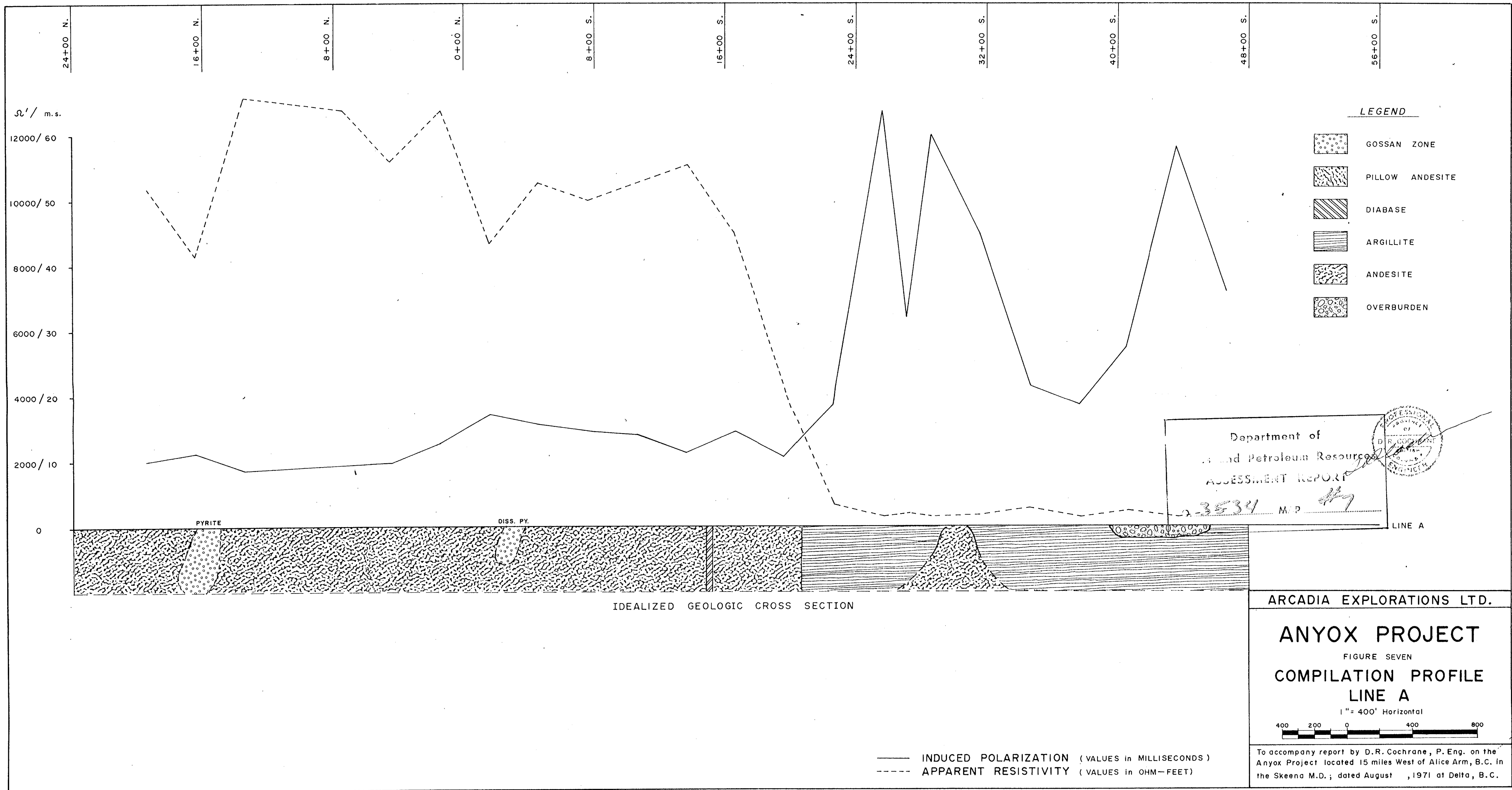
ANYOX PROJECT
FIGURE 6
**ROCK GEOCHEM
LINE A**

Scale: 1" = 400' (hor.)



To accompany report by D.R. Cochrane P.Eng. on Arcadia Exploration's Anyox Project located 15 mi. west of Alice Arm B.C., Skeena M.D., August 31, 1971, Delta B.C.





γ / M.V.

700mv
600mv
500mv
400mv
300mv
200mv
100mv
0mv
100mv
200mv
300mv

16+00 N.

8+00 N.

0+00

8+00 S.

16+00 S.

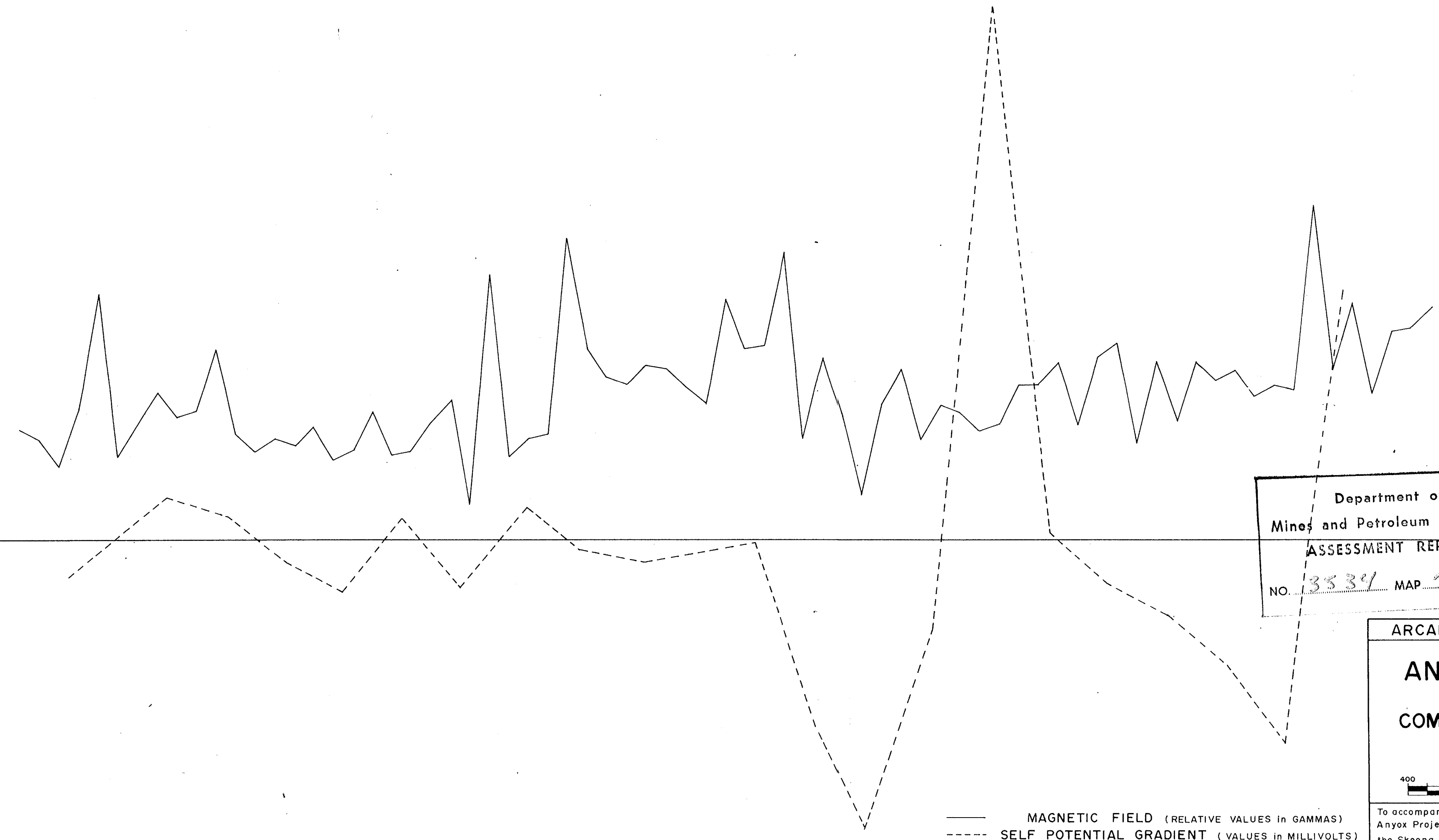
24+00 S.

32+00 S.

40+00 S.

48+00 S.

56+00 S.



NOTE: Add 53,100 gammas to plotted values to obtain total field strength at any point.

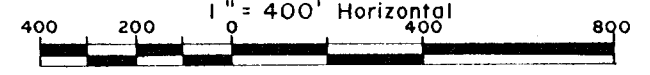
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3534 MAP #8



LINE A

ARCADIA EXPLORATIONS LTD.

ANYOX PROJECT
FIGURE EIGHT
COMPILATION PROFILE
LINE A



— MAGNETIC FIELD (RELATIVE VALUES in GAMMAS)
- - - SELF POTENTIAL GRADIENT (VALUES in MILLIVOLTS)

To accompany report by D.R. Cochrane, P. Eng. on the Anyox Project located 15 miles West of Alice Arm, B.C. in the Skeena M.D.; dated August , 1971 at Delta, B.C.