2284

Geochemical and Geophysical Report

on the

Ark No. 1 to 53 claims and fractions
and Ark Fraction

Situated Immediately west of

Owen Lake

Houston Area

Omineca Mining Division

North Central B. C.

Latitude 54°05'N; Longitude 126°45'W

NTS 93 L/2

and owned by

Arcadia Explorations Ltd.

of Vancouver, B.C.

Field Work between September 1 and November 15, 1969

Report by:

D. R. Cochrane, P.Eng.

Delta, B.C.

March 9, 1970.

d. r. cochrane, p. eng.

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FIGURES

SUMMARY AND CONCLUSIONS:

In the fall of 1969, Arcadia Explorations conducted mineral exploration work on their Ark group of 54 contiguous claims, located immediately west of Owen Lake, and 27 miles south of the town of Houston, B.C. Work consisted of cutting and chaining 34.5 line miles of grid, a ground magnetometer survey, and geochemical soil sampling. Cross lines run 70° (true) are 600 feet apart, extend 90 + 00 feet east-west and number from 0 + 00 to 144 + 00 south. The exception to the above are lines 60 to 114 + 00S inclusive which extend only a short distance east from 90 + 00W and thus, the overall surveyed area is "C" shaped in plan.

The vertical component fluxgate magnetometer survey indicates that the Ark claims may be divided into two magnetic provinces. The south province is characterized by fairly steep magnetic relief with NNW trends predominating. The north section is characterized by more gentle relief, with NW trends predominating. A rock type or phase change is thereby suggested from south to north across the claims.

A standard program and a Programma 101 computer was used to calculate the arithmetic means and standard deviations of the geochemical copper, zinc, silver and lead contents in the upper B horizon soils. The Ark group soils are fairly high in copper and lead content but quite enriched in silver and zinc. The average silver content is 1.8 ppm.

Several anomalous areas, (above threshold) of zinc, copper and silver were outlined, and many of these anomalies are quite linear and trend NW. The most notable is situated just west of a small lake in the NW property sector.

At this position, there is considerable overlap of anomalous copper, zinc, and silver soil values.

Only very slight correlation of anomalous metals in soil was found with magnetic features.

The geochemical soil sampling certainly appears to provide adequate contrast and detailed followup of the anomalous areas is recommended. Additional fill-in lines are warranted especially lines 3, 9, 15 and 21 south. Work should also transgress northward onto lines 3N, 6N, etc. Depth profiling should also be conducted to add a third dimension to the geochemical information. Cross checking results with a second commercial laboratory is also worthwhile.

The magnetometer work is not nearly as useful, and therefore a few test lines of a ground electromagnetic survey is suggested as an alternative.

The proximity of Nadina Mines, and the nature, shape, and amplitude of the geochemical anomalies makes the above described followup work high priority.

Respectfully submitted,

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. R. COCHRANE

D. R. Cochrane, P.Eng.
Delta, B.C.,
March 9, 1970.

d. r. cochrane, p. eng.

INTRODUCTION:

In the fall of 1969, Arcadia Explorations Ltd. carried out exploration work on the Ark group of 54 claims and fractions, situated immediately west of Owen Lake, North Central B.C. The work consisted of linecutting, a ground magnetometer survey and geochemical soil sampling. This report describes the field and data processing procedures and discusses the results of the program.

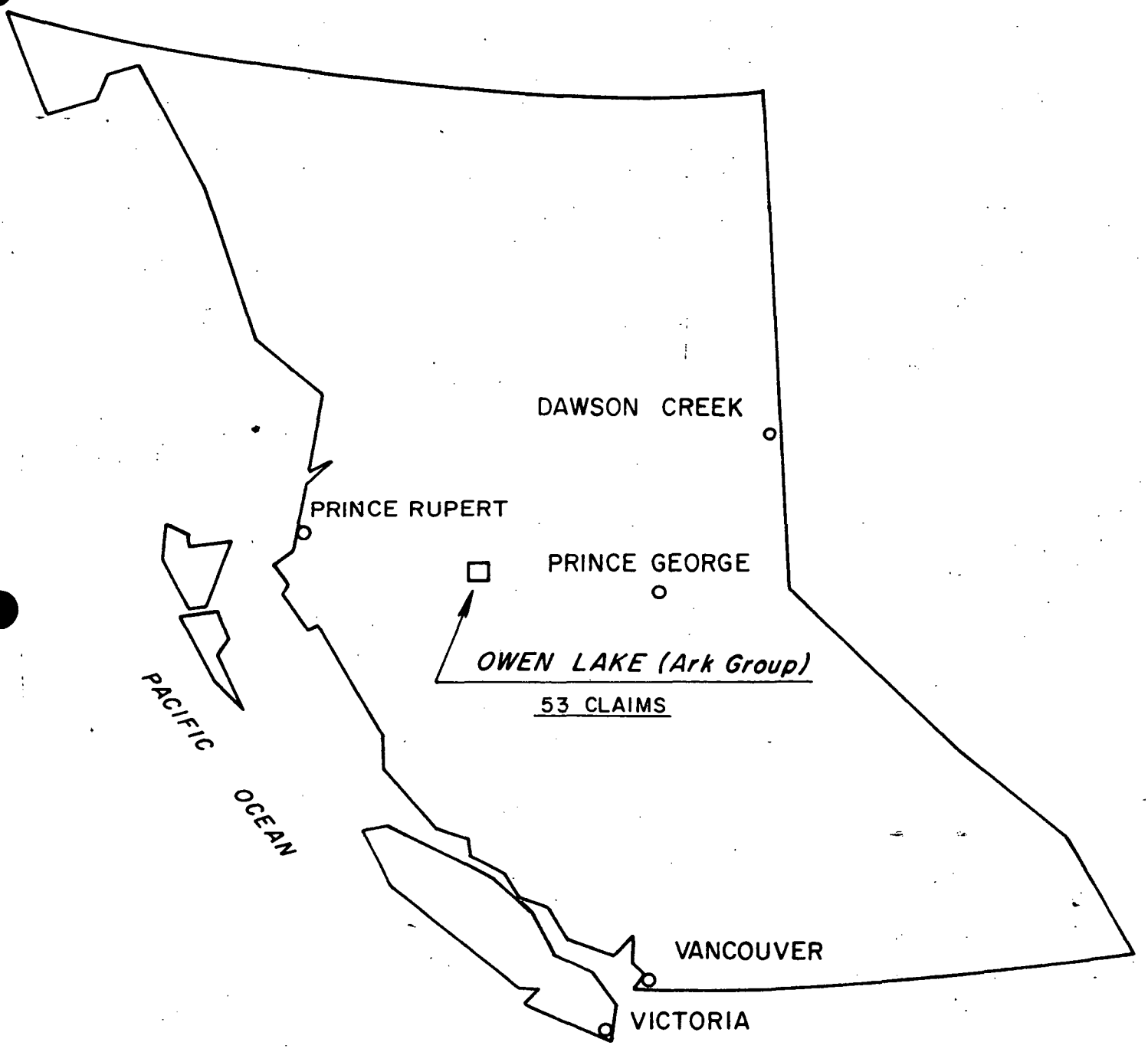
LOCATION AND ACCESS:

The Ark group is located just west of Owen Lake, and across the lake from Nadina Mines camp, in an area generally referred to as the Houston-Topley area. Access is normally by car or truck, south from Houston on Highway No. 16, for a distance of 27 miles on the Morice River gravel road. At the north end of Owen Lake, there is a branch road which hugs the west shore and procedes to a tourist lodge. The claims are situated just south of the lodge. Access may also be gained, by small boat, from the east (Nadina Mines) side of the lake, directly across the center of the lake to line 72S which is cut to the lake shore. The longitude is 126°45'W, latitude 54°05'N, and NTS code for the area 93L/2. (See location map, Figure 1)

PROPERTY:

The property consists of some 51 located full sized claims, and 3 fractions forming a contiguous block. (See Claim Map, Figure 2) The claims are situated in the Omineca Mining Division and may be viewed on the mineral claims map for that area at any Mining Recorder's Office.

ARCADIA EXPLORATIONS LTD. NPL.



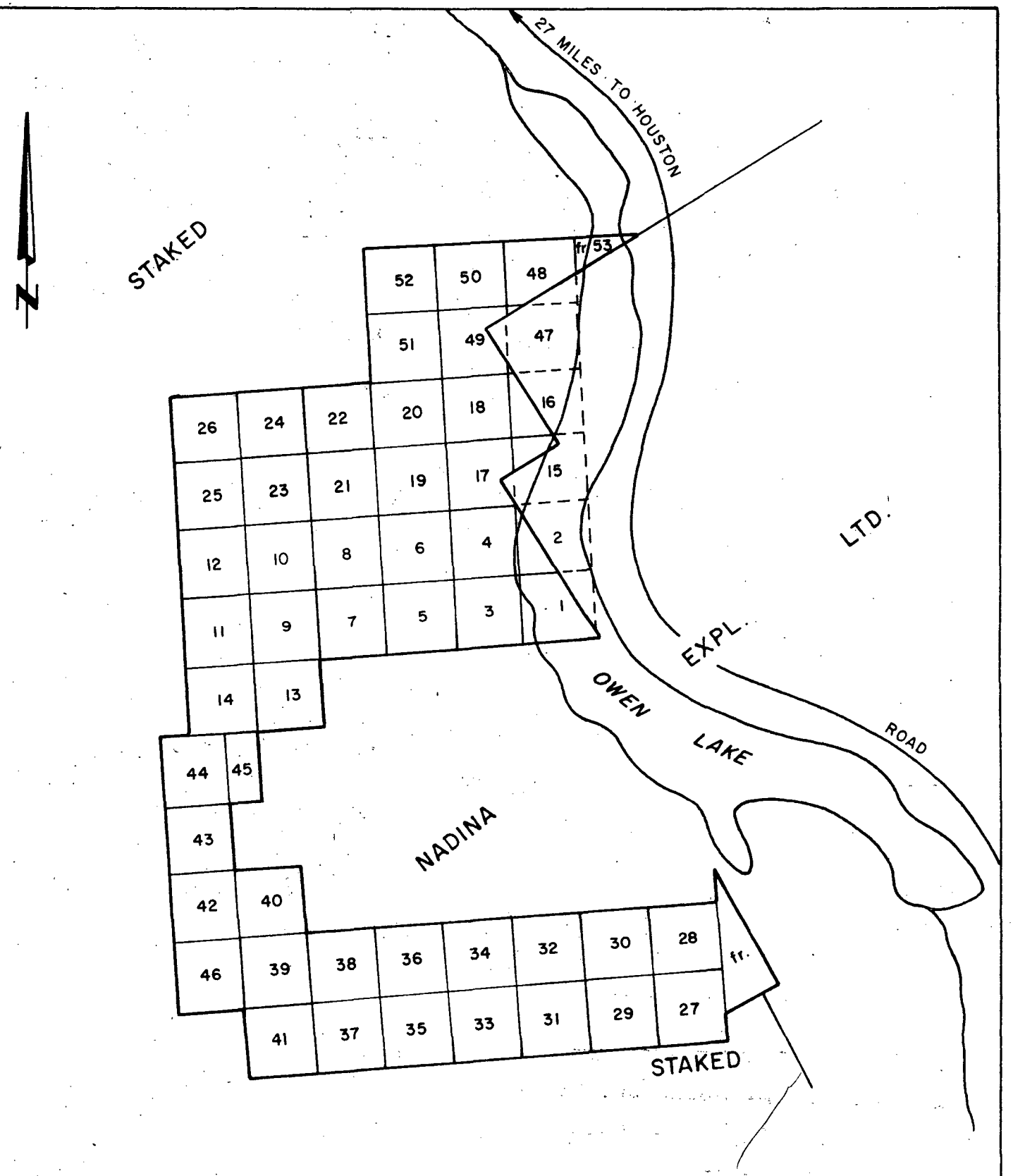
B.C. PROPERTY LOCATION

OWEN LAKE PROJECT

ARK GROUP CLAIMS

MARCH 2, 1970

FIG. 1.



ARCADIA EXPLORATIONS LTD. NPL

OWEN LAKE PROJECT

ARK GROUP CLAIMS

SCALE: 1" = 3000'

MARCH 2, 1970.

FIG. 2

The claims are owned outright by Arcadia Explorations Ltd. (N.P.L.), registered office, 1119 - 409 Granville Street, Vancouver, British Columbia. The administrative office is located at 5 - 435 Howe Street, Vancouver.

Table 1 lists pertinent claims data:

Table 1
Claims Data

Claim Names	Record No. (s)	Anniversary Date
Ark No. 1 to 26 inclusive	68216 to 68241 incl.	March 6
Ark No. 27 to 40 incl.	67721 to 67734 incl.	April 3
Ark No. 41 to 44 incl.	77355 to 77358 incl.	April 14
Ark 45 fraction	77359	"
Ark 46 to 52 incl.	77360 to 77366 incl.	"
Ark 53 fraction	77367	"
Ark Fraction	67825	April 3

The claims form a "C" shaped block surrounding a claim group owned by Nadina Mines.

GENERAL SETTING:

The Ark claims lie close to the transition zone between the Hazelton Mountain Range to the west, and the Nechaco Plateau, the latter a subdivision of the interior plateau physiographic region. The highest prominence in the vicinity is Nadina Mountain, situated about 5 miles west of Owen Lake, which rises to 7065 feet above sea level. Much of the local area, however, is a gently rolling upland seldom rising to over 4500 feet above sea level. Tertiary basalt flows often form steep bluffs along the hillsides to the east of Owen Lake. The lake itself is part of the Morice River Drainage system which empties into the Bulkley River to the north. The elevation of Owen Lake is 2400feet,

and the valley sides are quite gently sloping on the west (claims) side, and the highest prominence on the claims is about 800 feet above the lake.

The area has not been mapped in any great geological detail, but the general aspects are shown on Map 971A (Smithers-Fort St. James, 1 in.: 8 mi. geology by H. M. A. Rice) and on a more recent compilation (B.C. Dept. of Mines Map 69-1) by N. C. Carter and R. V. Kirkham. These maps show the Ark group underlain by a Lower-Middle Jurasic (Hazelton) volcanic sequence made up of intermediate flows, tuffs, breccias and minor amounts of incalated sedimentary rocks. The Hazelton is usually strongly deformed and altered. A small acidic pluton is shown intruding the Hazelton some 1½ miles south of the SW corner of the claim group, and a second, a microdiorite sill, is present at Nadina Mines on the east side of the lake.

Flat lying Tertiary basalt flows cover much of the older complex in the Nadina Mine area, and to the east of the campsite. However, the mine geology is reasonably well known. (See B.C. Minister of Mines Reports for 1965 (pp. 81 to 87) and 1966). The Jurassic sequence there consists of andesite and dacite thought to be fairly gently dipping to the west. Most of the throughgoing structures trend northwesterly.

Pleistocene ice covered the area, and a thick mantle of drift covers much of the bedrock. Lacustrine deposits are present at lower elevations, and eskers have been reported on the Ark Group.

GROUND CONTROL GRID:

Lines were cut, on a contract basis, by employees of the Winnipeg Industrial Development Company. A zero Base Line or (BLE) was

layed out at azimuth 340° (true) just west of the lake shore. It extends from 0 South (S) to 144 + 00 South (144S) and is 4 feet wide and picketed. A cross line was cut at 72 + 00 S west to 90 + 00 W and a second tie line parallel to BLE was cut out in the same manner as BLE. Cross lines were cut, blazed and flagged, and trend 70° (true) and are spaced at 600 foot intervals. Approximately 34.5 line miles were cut on Arcadia's ground, and extensions of the same grid passes into claims held by Nadina.

FIELD PROCEDURES:

A. GEOCHEMICAL SOIL SAMPLING AND THE SETTING

Soil samples for trace element analysis, were collected by Mr. K. Olsen at the same time Mr. Williamson was recording magnetometer readings. Samples were collected along all the cross lines at intervals of 100 feet. Analysis on every other soil sample was made, however, and the remainder are in storage for future reference if necessary. Samples were collected from a small pit excavated with a shovel, and the sample depth varied from 6 to 24 inches but would average about 8 inches in depth. About at ½ lb. sample of the (upper B, red)soil horizon was placed in a standard kraft paper soil bag, and the grid co-ordinates felt-penned on the outside. Bags were folded shut and at the end of the project, crated and delivered to the laboratory (Vancouver Geochem.) in Vancouver. In the lab, samples were dried (if necessary) sieved, and the -80 mesh digested in hot acid before atomic adsorption analysis (see Appendix IV for laboratory procedure).

Notes were kept on each sample, by Mr. Olsen, on pre-printed

field note forms, which included description of the sample location, soil variety, colour, depth and remarks. A few of the samples were collected from the thick humus soil horizon in muskeg and swampy areas.

FIELD PROCEDURES:

B. MAGNETOMETER SURVEY

The magnetometer survey was conducted by Mr. J. T. Williamson, deploying a Sharpe MF-1 vertical component fluxgate magnetometer (see appendix V for instrument specifications). Three "check-in" points were established, the first on the east shore of Owen Lake (before boating across); the second on the west shore; and the third on BLE at 7sS. These three points were checked in the morning and at night.

BLE was surveyed first, and corrected for diurnal drift. The cross lines were run later in loops, from BLE, west along the cross line (in the morning) then back east on an adjacent line (in the afternoon). The cross line readings were then tied into the base line checks. Notes were kept on position, reading, slope and remarks.

PRESENTATION AND PROCESSING OF DATA:

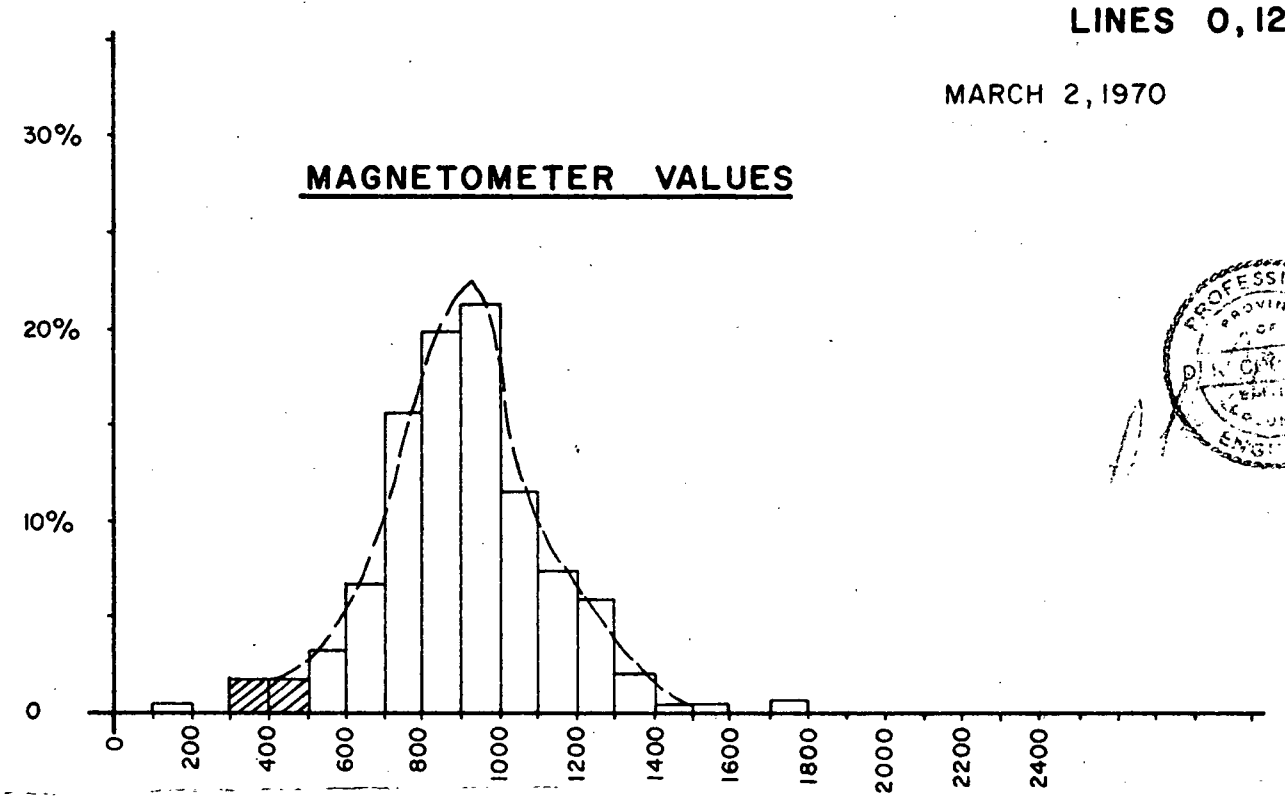
Mr. R. Forshaw corrected the magnetometer readings from Mr. Williamson's notes early this year. The corrected values are plotted in Figure 8, the isomagnetic plan (at 1 in.:500 feet scale). The approximate poition of the claims are superimposed on the mag map. A frequency histogram was prepared by the author, from readings on lines 0, 12, 24 and 36S, in order to aid interpretation. (See Figure 3(a), frequency Histograms). The magnetometer readings were contoured by the author then checked and final drafted by Mr. R. Key. (Certificates for the personnel employed on the project are located in Appendix I).

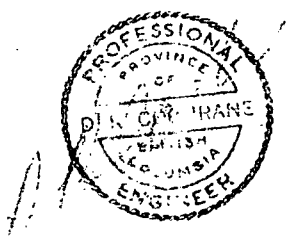
ARCADIA EXPLORATIONS LTD. NPL.
OWEN LAKE PROJECT
ARK GROUP CLAIMS

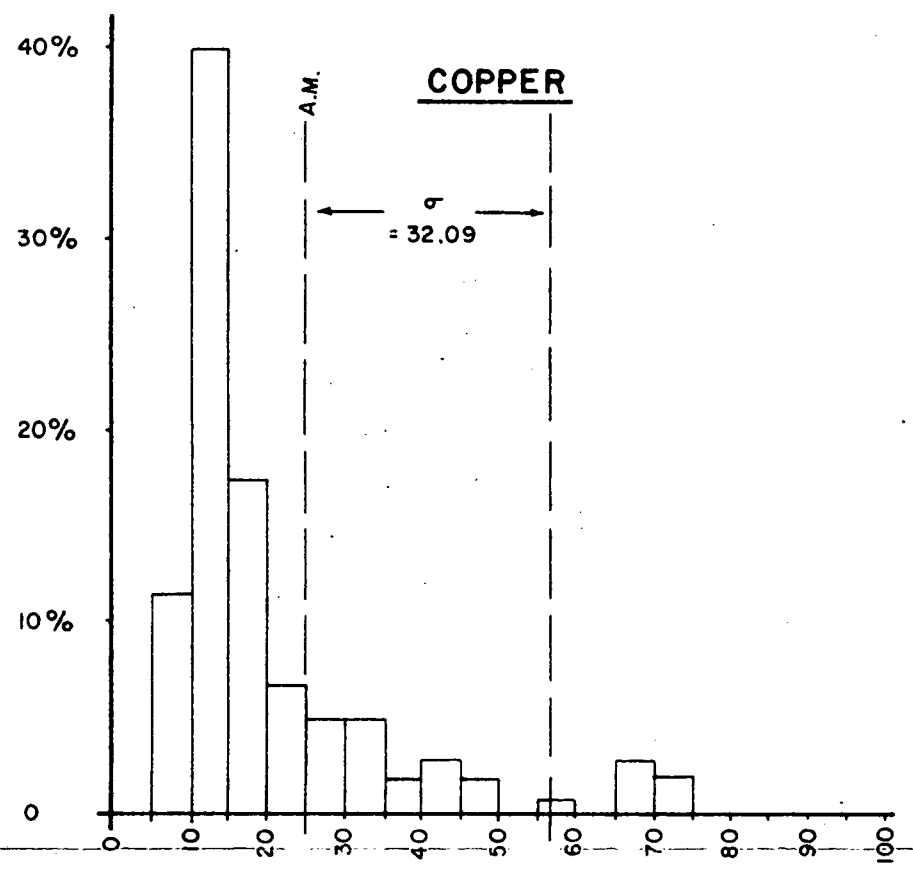
FREQUENCY HISTOGRAMS OF LINES 0, 12S, 24S, & 36S.

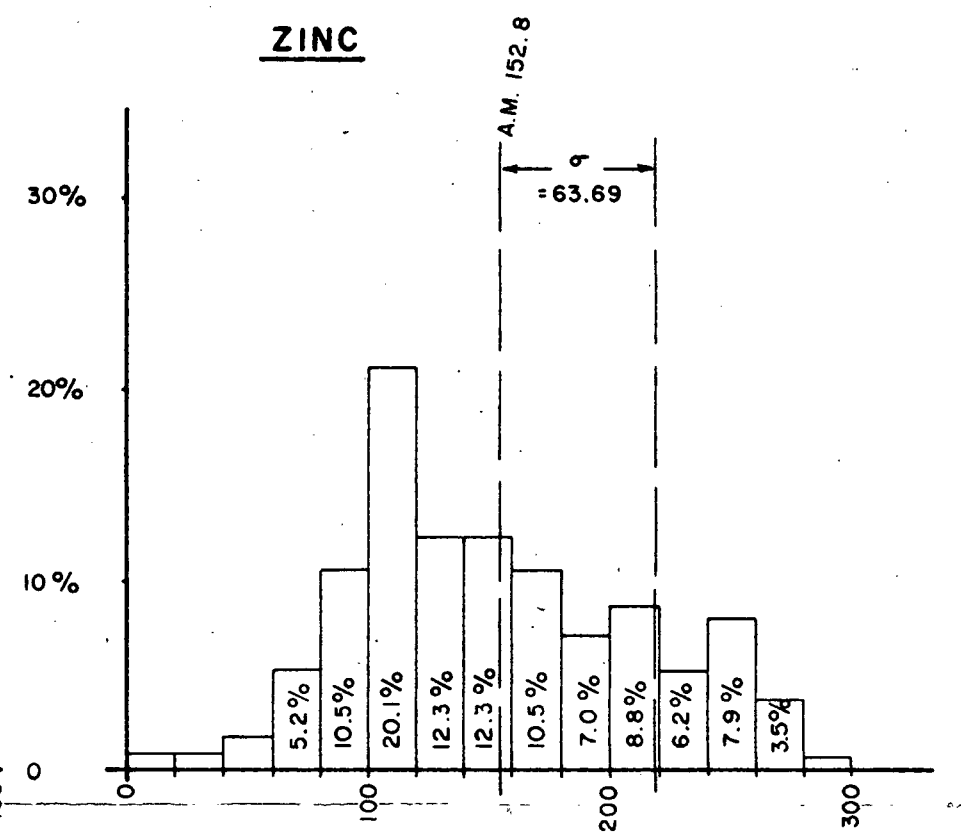
MARCH 2, 1970

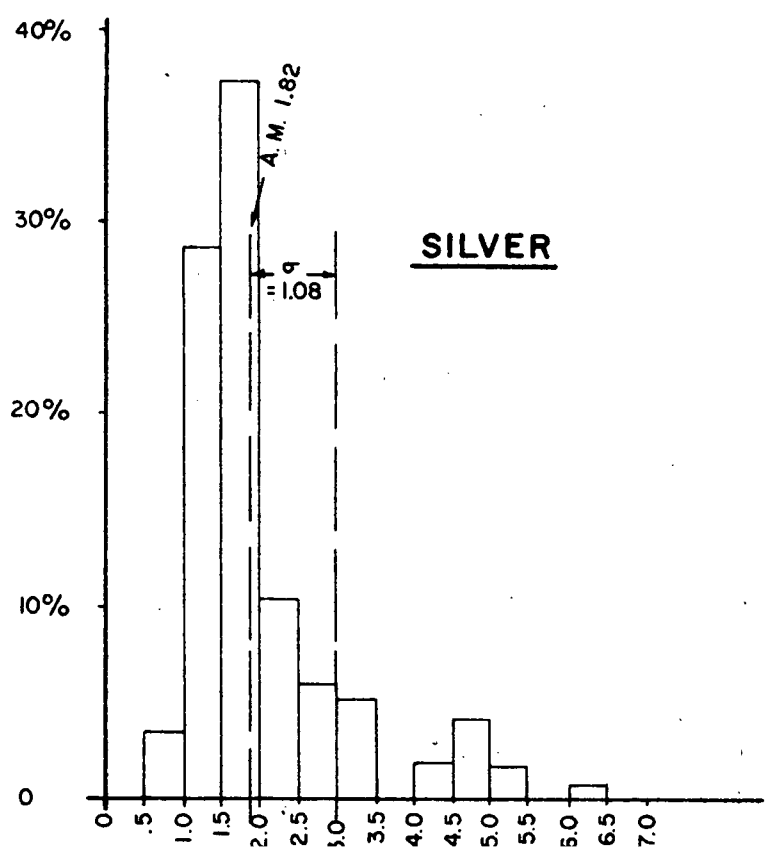
FIG 3.

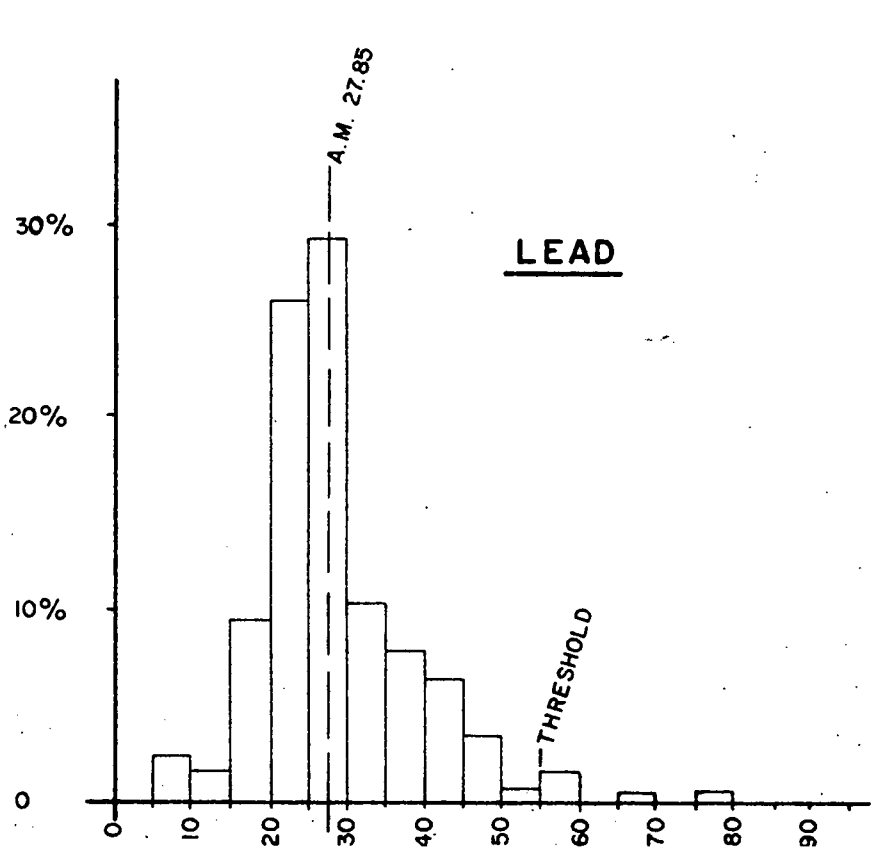












Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2284 MAP

The results of the trace element analysis by Vancouver Geochem. included 697 samples analyzed for their copper, zinc and silver content, and 127 of these for lead content. Frequency histograms of samples from lines 0, 6S, 12S, 18S, 24S and parts of 30, 36 and 48 (approx. 120) were prepared by the author (see Figures 3(b) to (d)). Calculation of the sample arithmetic mean and standard deviation was conducted on a Programma 101 computer by W. Cochrane. This information was then used to calculate threshold.

The results of the copper, zinc, silver and lead analysis are shown in Figures 4, 5, 6 and 7 respectively. All are at a scale of 1 in. to 500 feet and the approximate claim boundaries are superimposed. The contour interval in each case, is the arithmetic mean (to categorize values into below average and above average) and the arithmetic mean plus one standard deviation (approximately) which is herein defined as threshold. (see Table II, Geochemical Data).

Contouring of the geochemical data was completed by Mr. R. Key and checked by the author.

DISCUSSION OF RESULTS:

A. GEOCHEMICAL SOIL SAMPLING (GENERAL)

The geochemical analytic results are presented in Appendix VI, and the analytical method in Appendix IV.

The property is fairly flat, and the south half drains to Owen Lake away from a prominence about 800 feet above the lake level. The northwest property quadrant drains west, into a small lake on the grid area, and the northeast quadrant drains east into Owen Lake. The forest cover varies from fairly dense bush(lodgepole pine etc.) to fairly open

country, and there is a number of low swampy areas. The soil variety varies from a boulder till to lacustrine sediments, near the Owen Lake shore, and includes partially sorted gravels and sand of morains and eskers. It varies in texture from humus, to boulder clay to sandy clay to gravelly sand, and in colours which include yellow, yellow-brown, red-brown, and grey-brown. Samples were collected from the iron rich layer, presumably the upper B.

The geochemical statistical data is shown in Table II.

Table II

Geochemical Data*

Metal	Sample Arithmetic Mean	Standard Deviation	Mode	From a Population of	Range Low - High	No. of Families (at least)	Reported Crustal Abundance **
Copper	25.78	32.09	10 to 15	114	5 - 240	2	20
Zinc	152.86	63.69	100 to 120	122	8 - 375	3 (?)	50
Silver	1.83	1.08	1.5	120	0.5 - 6.0	2	0.1
Lead	27.85	appr.30	25 to 30	127	4 - 135	2	10

*Note: Statistics from samples on lines 0, 6S, 12S, 18S, 24S, 30S, and parts of 36 & 42 only.

**From Hawkes, H.E. and Webb, J.S. (1962), Geochemistry in Mineral Exploration, Harper and Row, N.Y.

A comparison with averages reported by Hawkes and Webb shows that the Ark group soil may be classed as relatively rich in copper and lead content, and quite enriched with respect to silver and zinc. The Ark soils silver average is 10 times that normally considered average, and the zinc 3 times normal average.

B. COPPER

Analysis of the copper results shows that the frequency distribution is moderately positive skewed (see Figure 3(b)) with an average content of 25.78 parts per million (ppm). The mode lies in the 10 to 15

range (containing 20.1 % of the population) and the standard deviation is 32.09. Based on these statistics then, the following categories may be designed.

Range	Classification
0 to 24 ppm	below average
25 to 59 ppm	above average
above 60	anomalous

Thus, as is shown in Figure 4, there are several areas characterized by anomalous copper content in the Ark group soils. The most complex areas lies in the northwest property quadrant, where a series of subparallel linear anomalies occur. There is some directional bias to the contouring, and this is based on trends evident on the isomagnetic plan.

C. ZINC

The zinc data is quite complex, and the frequency distribution analysis indicates the presence of several "families". It is unknown if these different families are related to various rock types, soil types, physical conditions or combinations of these variables. However, general classification, based on the statistical data suggests the following:

Range	Classification
below 150 ppm	below average
150 to 214 ppm	above average
above 214 ppm	anomalous

The area distribution of these categories of zinc is shown in Figure 5. A remarkable similarity with the distribution of copper is evident. Once again the north property sector contains several linear NW trending anomalous zones. The most widespread transects claims

named Ark 3, 4, 17 18 and presumably continues onto claims Ark 49 and 51.

D. SILVER

In general, the silver content of the Ark group soils is quite high. Many soils in B.C. average less than 0.5 ppm, however, here the silver content averaged 1.83. The mode lies at 1.5 ppm. At least two families are evident from the frequency histogram, and threshold lies close to 30. Thus the following categories may be established.

Range	Classification
less than 1.8	below average
1.8 to 2.5 ppm	above average
greater than 2.5	anomalous

The areal distribution of these classes is shown in Figure 6. There are several areas consisting of two or more juxtaposed values in the anomalous category. The most notable is situated immediately west of the small lake on the Ark 21 and 22 claims. These areas of silver content abnormality overlap areas characterized by copper and zinc highs.

E. LEAD

The distribution of lead in the upper B soil horizon is shown in Figure 7. The arithmetic mean of 127 samples is 27.85 and the mode lies in the 25 to 30 range. The frequency distribution histogram is only slightly positively skewed, but nevertheless two families are suggested. Threshold appears to be close to 55 ppm. The following categories have been established.

Range	Classification
below 30 ppm	below average
30 to 54 ppm	above average
above 55 ppm	anomalous

Based on the above classification, a total of 4 samples only may be classed as anomalous. These individual anomalous values are shown to be separate, but distributed in the north sector of the property.

F. MAGNETOMETER SURVEY

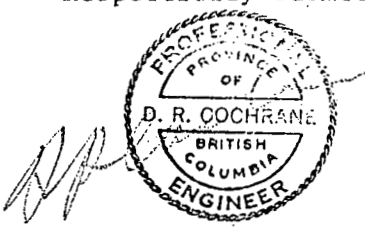
A frequency histogram of some 342 magnetometer readings, categorized at 100 gamma intervals, is shown in Figure 3A. The magnetometer plan is Figure 8 located in the map pocket. The mode of the north area magnetometer reading is the 900 to 999 range, (containing 21.3% of the population) and the distribution is very close to normal. The anomalous threshold lies close to 1400 gammas.

Based on the magnetometer work, the Ark group may be divided into two divisions, a north section, characterized by relatively gentle magnetic relief with moderate values predominating, and the south section which is much more complex and characterized by higher amplitude. This strongly suggests that the two property sections are underlain by different rock phases or types. The south section is more diagnostic of intermediate volcanic terrain, while the north, a more homogeneous and more acidic rock variety.

The dominant magnetic trends are northwesterly, and magnetic linears and "highs" are shown on the compilation map, Figure 9. Little or no correlation is immeidately evident with the magnetometer and geochemical data. West of the small lake however, are a series of magnetic linears transecting the aforementioned silver, copper and zinc anomalies.

d. r. cochrane, p. eng.

Respectfully submitted,



D. R. Cochrane, P.Eng.
March 9, 1970,
Delta, B.C.

APPENDIX I

PERSONNEL

Name: KEY, Robert A.

Education: Grade XII Diploma.

1 year Petroleum Geology at the Institute of Technology and Arts in Calgary.

Experience: 2 years in Steam Heating Design Drafting.

12 years with Mobil Oil Canada Limited, Senior Draftsman.

2 years, mining exploration with Geo-X Surveys Limited as Chief Draftsman.

APPENDIX I

CERTIFICATES

COCHRANE, W.E.: B.A., University of B.C., 1969.

Employed in assembling engineering reports and compiling data since 1963 while employed with Geo-X Surveys, Meridian Exploration Syndicate, and D. R. Cochrane, P.Eng.

APPENDIX I

WILLIAMSON, J. Thomas, President and Managing Director
Arcadia Explorations Ltd. (NPL) - July 31, 1968 to date
developing prospects at Anyox

Experience: Interior Mining Services Ltd.,
June 30, 1968 to July 31, 1968
Diamond Drilling Prospect in Northern B.C.

Arcadia Explorations,
May, 1967 to June, 1968
Prospecting & Developing claims at Anyox.

Interior Mining Services,
June 1, 1965 to April, 1967
Prospecting & Developing - Nadina Explorations Ltd.
Mapping - Owen Lake Mine

Copper Ridge Mines Ltd.,
May 15, 1962 to December 1964
Prospecting & Developing prospects
Mag, Geochemistry, Drilling, etc.

Kerr Addison Gold Mines Ltd.,
February 28, 1961 to May 15, 1962
Field Representative,
Prospecting & Development,
Mag, SP, etc.

Farwest Mining Ltd.,
June, 1958 to May, 1960
Field Representative
Exploration, etc. prospects
Geochemistry, Mag., Drilling, etc.

Prior to above dates, self employed -
prospecting, etc.

APPENDIX I

Certificates

OLSEN, Kenneth: Age 30, employed as bushman, fisherman, logger for a number of years, and conducted geochemical soil sampling in the fall of 1969 under the supervision of J. T. Williamson.

FORSHAW, Robin Thomas: Age 22, High School Diploma; Grade 13 (Oliver) Previous experience in mineral exploration with: The Granby Mining Company Ltd., April 1967 to June 1969 supervising and cutting lines, magnetometer operator, claim staking, and surveying (level, transit). Huntec Ltd: Induced polarization operator and helper. San Jacinto Mines: line cutter, IP helper. James Foreshaw Ltd: July-September 1966, line cutter, claim staking. Employed by Orequest starting July 1, 1969, Soil Sampling and Linecutting under supervision and supervising line cutting and soil sampling.

APPENDIX II

Personnel and Dates Worked

Name	Function	Date(s)
J. T. Williamson	Supervision, Mag. Survey	Oct. 15 to Nov. 15
R. Olsen	Geochemical soil sampling	" "
Winnipeg Dev. Co.	Linecutting (3 men, 3 weeks) J. Carrol, Supervisor	Sept. 1 to 20
D. R. Cochrane	Report preparation, Interpretation	March 4, 5, 6, 7, 8, 9
W. E. Cochrane	Computer Work, Report preparation	March 5, 7, 15
R. Key	Drafting, Data Reduction	March 2,3,4,7,9,10, 11,12,14,15,16
R. Forshaw	Drafting	Jan. 23
D. T. Conrow	Preliminary Data Reduction	Feb. 13, 14, 15

APPENDIX III

Cost Breakdown & Appropriation

Project	Personnel	Cost
Transportation		$ 629.30
Gas and Oil		138.70
Food and Lodging		540.00
Linecutting	Winnipeg Dev. Co.	1,500.00
Wages & Supervision	3 men, J. Carrol Supervisor Williamson and Olsen	1,910.00
Analytical Costs	Vancouver Geochem.	1,683.50
Preliminary Data Reduction	Conrow	182.46
Mag. Rental		100.00
Data Processing, Interpretation	Cochrane & Key	724.00
	TOTAL	$7,407.96

Expenditures to apply to the Ark No. 1 group (Ark 1 - 26; Ark 47-52, Ark 53 fraction and Ark 45 fr.) of 34 claims for a period of one year. Total $3,400.00

Also to apply to the Ark No. 2 group of 20 claims (Ark fraction, Ark 27 to 44, and Ark 46) for a period of two years

2 x $2,000.00 = $4,000.00

TOTAL $7,400.00

J. Thomas Williamson

Per Arcadia Explorations Ltd.

Vancouver Geochemical Laboratories Ltd.

1521 PEMBERTON AVENUE NORTH VANCOUVER, B.C., CANADA TELEPHONE: 604-988-2171

J. R. WOODCOCK
CONWAY CHUN

January 12, 1970

TO: Mr. Tom Williamson
Arcadia Explorations Ltd.
#5, 425 Howe Street,
Vancouver, B.C.

FROM: Mr. Laurie Nicol, Supervisor Chemist
Vancouver Geochemical Laboratories Ltd.
1521 Pemberton Avenue
North Vancouver, B.C.

SUBJECT: Analytical procedure used to process acid soluble Cu, Pb, Ag & Zn in geochemical samples received from Arcadia Explorations Ltd.

1. Sample Preparation

(a) Geochemical soil, silt and rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft paper bags.

(b) The wet samples were dried in a ventilated oven.

(c) The dried soil and silt samples were sifted, using an 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(d) The dried rock samples were crushed and pulverized to minus 80-mesh. The pulverized sample was then put in a new bag for later analysis.

2. Methods of Digestion

(a) 1.00 gram or 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.

(b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

Continued . . . .

2. Methods of Digestion (Continued)

(c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Method of Analysis

Cu, Pb, Ag & Zn analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective hollow-cathode lamp. The digested samples were aspirated directly into an air and acetylene flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit.

4. The analyses were supervised or determined by Mr. Conway Chun, or Mr. Laurie Nicol and their laboratory staff.

L.J. Nicol

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

LJN/ati

APPENDIX V

Specifications for MF-1 Fluxgate Magnetometer

Maximum Sensitivity:	20 gammas (per scale division) on 1000 gamma range.
Readability:	5 gammas (¼ scale division) on 1000 gamma range.
Ranges: (full scale)	1,000 gammas 3,000 gammas 10,000 gammas 30,000 gammas 100,000 gammas
Maximum Range:	± 100,000 gammas
Latitude Adjustment Ranges:	10,000 to 75,000 gammas, Northern Hemisphere convertible to: 10,000 to 75,000 gammas, Southern Hemisphere or ± 30,000 gammas equatorial.
Dimensions: (Including Battery Case)	7" x 4" x 16"
Weight: (Including Battery Case)	9 lbs.
Batteries:	12 flashlight Batteries ("C" cell)

APPENDIX VI

Geochemical Results

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

GEOCHEMICAL ANALYTICAL REPORT

1521 Pemberton Ave.
North Vancouver, B.C.
988-2171

Date: December 17, 1969

Report Number: 69-71-001B

From: Acadia Explorations Ltd.,
c/o 502, 1200 West Pender St.,
Vancouver, B. C.

Submitted By: Mr. J.T. Williamson

Report On: 240 geochem samples

Analyzed For: ~~Mo~~ Ag, Zn & Cu & Pb

Date Sample Received: November 24, 1969

Date Report Mailed: December ~~22~~ 12/69

Weight of Sample Used: 0.5 gm

Extraction: Hot HNO_3 & $HClO_4$

Method of Analyses: Atomic Absorption Spec.

Volume of Dilution: 10 ml

Instrument Used: Techtron AA4 & AA5

Disposition of Sieved Material: in file

Analyst: L. Nicol

Signed: L.J. Nicol

REMARKS: nd = none detected
The report has been sent to Mr. J.T. Williamson
~~#310, 945 Marine Drive~~, 4674 Keith Rd.
West Vancouver, B. C.

All values are reported in parts per million unless specified otherwise. All values are believed to be correct to the best knowledge of the analyst based on the method and instrument used.

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag	Pb		Remarks
01	OS - 0 W		40	150	4.5	35	✓	
02	2		15	121	1.5	25	✓	
03	6		9	45	0.5	8	✓	
04	8		10	145	1.5	25	✓	
05	10		15	110	1.5	20	✓	
06	12		15	128	1.5	22	✓	
07	14		14	205	1.0	28		
08	16		15	149	1.5	25		
09	18		10	275	1.0	20		
10	20		25	175	1.5	23		A) Marked in Lab
11	20		26	185	1.0	25		B)
12	22		17	170	1.0	25		
13	24		12	214	1.5	25		
14	26		92	335	4.5	45		
15	OS - 28 W		165	240	6.0	45		

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

GEOCHEMICAL ANALYTICAL REPORT

1521 Pemberton Ave.
North Vancouver, B.C.
988-2171

Date: December 17, 1969 Report Number: 69-71-001B

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	Mo	Cu	Zn	Ag	Pb		Remarks
01	0S - 30 W		14	90	1.0	18		
02	32		14	120	1.5	25		
03	34		87	227	5.0	43		
04	36		60	250	4.0	47		
05	38		12	92	1.0	20		
06	40		18	96	1.5	23		
07	42		17	168	1.0	15		
08	48		8	119	1.5	29		
09	52		89	450	2.0	25		organic
10	54		30	375	0.5	7		
11	56		75	350	4.5	40		
12	62		25	206	1.0	24		
13	66		6	183	0.5	10		organic
14	68		5	39	nd	9		organic
15	72		10	80	1.0	14		
16	74		30	42	1.5	22		
17	76		6	81	1.5	18		
18	78		11	87	2.0	31		
19	80		14	110	1.5	22		
20	82		12	108	1.5	23		
21	84		22	114	2.0	25		
22	86		15	67	1.5	25		
23	88		10	100	1.0	16		
24	0S - 90 W		15	107	1.0	24		
25	6S - 2 W		58	145	3.0	30		
26	4		74	225	3.5	38		
27	6		8	100	1.5			
28	8		21	140	2.0	26		
29	10		8	156	1.5			
30	6S - 12 W		19	121	1.5			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

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North Vancouver, B.C.
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Date: December 17, 1969 Report Number: 69-71-001B

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag	Pb		Remarks
01	6S - 14 W		9	107	1.0			
02	16		10	100	1.5			
03	18		13	190	1.5			
04	20		19	189	1.5			
05	22		11	260	1.5	21		
06	24		10	102	1.0			
07	26		32	152	2.0	27		
08	28		76	275	4.0	36		
09	30		50	174	2.0	35		
10	32		41	222	2.5	36		
11	34		9	133	1.0			
12	36		13	129	1.0			
13	38		11	163	1.0			
14	40		9	75	1.0			
15	42		14	110	1.5			
16	44		45	245	2.5	25		
17	48		6	83	1.0			
18	50		18	132	1.5			
19	58		18	139	2.0	22		
20	62		15	107	2.0	24		
21	64		13	93	1.5			organic
22	66		11	69	0.5			"
23	68		9	78	0.5			very organic
24	70		17	83	0.5			
25	72		14	84	2.0	25		
26	74		33	77	2.0	26		
27	76		16	102	1.5			
28	78		12	74	1.0			
29	80		12	84	1.0			
30	6S - 82 W		20	132	1.5			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~XS~~	Cu	Zn	Ag	Pb		Remarks
01	6S - 84 W		54	83	2.0	23		
02	86		12	87	1.0			
03	88		9	64	1.0			
04	6S - 90 W		23	93	4.5	20		
05	12S - 000		10	60	1.0			
06	12S - 2 W		13	110	1.5			
07	4		15	93	2.0	24		
08	6		17	116	1.5			
09	8		22	112	2.5	20		
10	10		22	115	2.0	19		
11	12		33	223	2.5	30		
12	14		16	205	1.0	35		
13	16		122	360	5.5	55		
14	18		11	162	1.5			
15	20		8	100	0.5			
16	22		10	124	1.0			
17	24		12	176	1.5			
18	26		64	213	3.0	43		
19	28		28	165	2.0	29		
20	30		25	230	2.0	33		
21	32		11	130	1.0			
22	34		12	114	1.5			
23	36		13	133	1.5			
24	38		10	89	1.0			
25	40		9	102	1.0			
26	42		11	105	1.0			
27	44		39	228	3.0	38		
28	46		110	325	5.0	65		
29	58		13	156	1.5			
30	12S - 60 W		17	255	3.0	32		

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag	Pb		Remarks
01	12S - 62 W		30	192	3.0	28		
02	64		26	181	2.5	25		
03	66		14	280	2.0	24		
04	68		18	8	1.0			organic
05	70		14	172	3.0	29		
06	72		30	148	2.5	25		
07	74		21	225	2.5	32		
08	76		18	105	2.5	30		
09	78		18	163	3.0	34		
10	80		28	161	2.0	21		
11	82		23	104	1.5			
12	84		29	160	1.5			organic
13	86		9	104	1.0			
14	88		16	103	1.0			
15	12S - 90 W		10	98	1.5			
16	18S - 000		11	98	1.5			
17	18S - 2 W		9	103	1.0			
18	4		13	157	1.5			
19	6		18	70	1.0			
20	8		24	206	2.0	25		
21	10		16	79	1.5			
22	12		8	140	1.0			
23	14		8	132	1.0			
24	16		16	107	1.0			
25	18		33	260	2.5	78		
26	20		12	83	1.0			
27	22		15	62	1.5			
28	24		15	245	1.5	19		
29	26		14	151	1.5			
30	18S - 28 W		15	147	1.0			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag	Pb		Remarks
01	18S - 30 W		17	170	1.5			
02	32		14	244	1.5	22		
03	36		6	135	1.0			
04	38		13	177	1.5			
05	40		10	63	1.0			
06	42		17	136	1.5			
07	44		10	290	1.5	28		
08	46		30	265	2.0	40		
09	48		8	200	1.0	20		
10	56		17	150	1.5			
11	58		21	210	2.5	26		
12	60		13	123	1.5			
13	62		25	117	3.0	29		
14	64		32	144	3.0	28		
15	66		162	54	3.0	28		
16	68		21	206	2.5	25		Zn= 206
17	70		39	300	3.0	30		
18	72		20	90	2.0	25		
19	74		20	100	1.5			
20	76		65	175	4.0	42		
21	78		25	185	2.0	20		
22	80		12	131	1.5			Zn= 131
23	82		34	132	2.0	42		
24	84		15	150	1.5			
25	86		16	110	1.5			
26	88		36	122	2.0	46		
27	18S - 90 W		11	102	1.0			
28	24S - 000		67	162	3.5	29		
29	24S - 2 W		12	200	1.5	58		
30	24S - 4 W		20	93	2.0	50		

VANCOUVER GEOCHEMICAL LABORATORIES LTD.
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1521 Pemberton Ave.
North Vancouver, B.C.
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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag	Pb		Remarks
01	24S - 6 W		14	106	1.5			
02	8		35	~~2.5~~	~~20~~	20		Zn=185, Ag=2.5
03	10		10	197	1.0			
04	12		11	86	1.0			
05	14		10	165	1.5			
06	16		12	164	1.5			
07	18		7	138	1.5			
08	20		10	100	1.0			
09	22		44	260	1.5	22		
10	24		23	405	1.5	18		
11	26		14	167	1.5			
12	28		10	110	1.0			
13	30		9	108	1.0			
14	32		6	210	1.0	20		
15	34		11	200	1.5	15		
16	36		10	152	1.5			
17	38		58	236	4.5	20		
18	40		14	123	1.5			
19	42		~~8~~9	160	1.0			Cu= 9
20	44		15	162	1.0			
21	54		65	255	5.0	15		
22	56		91	250	4.0	19		
23	58		14	255	1.5	17		
24	60		13	132	1.5			
25	62		10	109	1.0			
26	64		85	207	3.5	26		
27	66		10	98	1.0			
28	68		20	184	2.0	32		
29	70		~~70~~	125	3.5	22		Cu= 77
30	24S - 72 W		16	104	1.5			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag	Pb		Remarks
01	24S - 74 W		13	192	1.0			
02	76		20	144	2.0	24		
03	78		10	161	1.5			
04	80		13	103	1.5			
05	82		17	251	1.5	22		
06	84		52	156	3.0	35		
07	86		21	142	1.5			
08	88		12	129	1.5			
09	24S - 90 W		10	230	1.0	21		
10	30S - 1 W		16	34	1.0			organic
11	3		11	87	1.0			
12	5		9	154	1.0			
13	7		12	112	1.5			
14	9		27	320	2.0	32		
15	11		72	176	3.0	28		
16	13		15	116	1.5			
17	63		16	152	1.5			
18	65		44	245	2.5	30		
19	30S - 67 W		74	192	4.0	38		
20	42S ~~36~~S - 71 W		10	155	1.0			
21	42 42S ~~36~~S - 73 W		14	108	1.5			
22	(36) ~~42~~S - 25 W		8	320	1.0	25		
23	" 27		17	100	1.5			
24	" 41		10	98	1.0			
25	" 43		26	145	1.5			
26	" 71		10	73	1.0			
27	36S ~~42~~S - 73 W		18	96	1.0			
28	48S - 9 W		12	90	1.0			
29	11		49	110	2.0	24		
30	48S - 29 W		26	260	1.5	30		

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North Vancouver, B.C.
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Date: December 17, 1969 Report Number: 69-71-001B

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	Mo	Cu	Zn	Ag	Pb		Remarks
01	48S - 31 W		11	159	1.5			
02	81		26	125	1.5			
03	48S - 83 W		240	186	4.5	43		
04	54S - 13 W		37	148	2.5	29		
05	15		18	169	1.5			
06	33		16	132	1.0			
07	54S - 35 W		31	135	2.0	27		
08	120S - 7 W		22	90	1.0			
09	120S - 9 W		10	200	1.0	15		
10	132S - 7 W		113	225	4.5	40		
11	9		120	116	4.5	35		
12	41		10	66	0.5			
13	43		15	148	1.5			
14	55		37	99	2.0	23		
15	132S - 57 W		45	126	2.5	25		
16								
17			✓	✓	✓	✓		
18								
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27								
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VANCOUVER GEOCHEMICAL LABORATORIES LTD.

GEOCHEMICAL ANALYTICAL REPORT

1521 Pemberton Ave.
North Vancouver, B.C.
988-2171

Date: November 24, 1969

Report Number: 69-71-001

From: Acadia Explorations Ltd.

Submitted By: Mr. J.T. Williamson

Report On: 458 geochem samples

Analyzed For: Cu, Zn & Ag

Date Sample Received: November 24, 1969

Date Report Mailed: _____

Weight of Sample Used: 0.5 gm

Extraction: Hot HNO_3 & $HClO_4$

Method of Analyses: Atomic Absorption Spec.

Volume of Dilution: 10 ml

Instrument Used: Techtron AA4 & AA5

Disposition of Sieved Material: in file

Analyst: L. Nicol

Signed: L. J. Nicol

REMARKS: Ag sensitivity 0.5 ppm

INVOICE SENT TO: c/o 502, 1200 West Pender ST. VANC. B.C.

All values are reported in parts per million unless specified otherwise. All values are believed to be correct to the best knowledge of the analyst based on the method and instrument used.

Lab. No.	Sample Number	xxx	Cu	xxx Zn	Ag			Remarks
01	30S - 000		27	78	7.5			
02	30S - 2 W		16	49	2.0			
03	4		127	265	6.0			
04	6		15	110	2.0			
05	8		14	129	1.0			
06	10		13	268	2.0			
07	12		181	183	4.0			
08	14		12	137	1.0			
09	16		7	145	1.0			
10	18		11	103	1.0			
11	20		8	135	1.0			
12	22		9	270	1.0			
13	24		10	350	1.5			
14	26		7	133	1.0			
15	30S - 28 W		15	315	1.5			

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Date: November 24/69 Report Number: 69-71-001

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	30S - 30 W		6	140	1.0			
02	32		8	108	1.0			
03	34		9	175	1.0			
04	36		11	218	1.0			
05	38		12	112	1.5			
06	40		12	118	1.5			
07	42		45	207	2.5			
08	44		23	138	1.0			
09	46		35	173	2.0			
10	48		54	260	2.5			
11	50		41	172	1.5			
12	52		6	102	1.0			
13	54		19	115	1.0			
14	56		72	225	2.5			
15	58		11	109	1.0			
16	60		13	189	1.0			
17	62		9	134	1.0			
18	64		72	260	3.5			
19	66		50	128	2.5			
20	68		15	123	1.0			
21	70		10	79	1.0			
22	72		8	42	0.5			
23	74		8	121	1.0			
24	76		11	143	1.0			
25	78		103	155	2.5			
26	80		15	68	1.0			
27	82		13	100	1.0			
28	84		16	113	1.0			
29	86		9	105	0.5			
30	30S - 88 W		11	161	1.0			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	42S ~~35S~~ - 000		8	275	1.0			BL
02	42S ~~35S~~ - 2 W		8	225	1.5			
03	4		11	185	1.5			
04	6		17	106	1.0			
05	8		21	122	1.0			
06	10		13	158	1.0			
07	12		15	70	1.0			
08	14		14	200	1.0			
09	16		10	88	1.0			
10	18		10	210	1.5			
11	20		8	151	1.0			
12	22		14	72	0.5			
13	24		14	123	1.0			
14	26		8	231	1.0			
15	28		9	246	1.0			
16	30		8	198	1.0			
17	32		8	124	0.5			
18	34		9	132	1.0			
19	36		9	157	1.0			
20	38		9	91	1.0			
21	40		9	132	1.0			
22	42		12	110	1.0			
23	44		7	137	1.0			
24	46		8	109	0.5			
25	48		15	178	1.5			
26	50		14	145	1.0			
27	52		10	103	1.0			
28	54		10	142	1.5			
29	56		38	153	2.0			
30	42S ~~35S~~ - 58 W		13	134	1.0			

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Date: November 24, 1969 Report Number: 69-71-001

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~Mo~~	Cu	Zn	Ag			Remarks
01	425 ~~36~~S - 60 W		14	100	1.0			
02	62		14	166	1.5			
03	64		5	95	1.0			
04	66		13	124	1.5			
05	68		14	79	1.5			
06	70		12	73	1.5			
07	72		73	261	5.0			
08	74		16	106	1.5			
09	76		16	200	2.0			
10	78		13	133	1.5			
11	- 80		8	63	1.5			
12	82		11	78	1.0			
13	84		13	135	2.0			
14	86		9	79	0.5			
15	88		14	82	1.0			
16	425 ~~36~~S - 90 W		11	68	1.0			
17	365 ~~4~~S - 000		9	152	1.5			
18	365 ~~4~~S - 2 W		12	54	1.0			
19	4		12	89	1.5			
20	6		27	132	2.0			
21	8		17	70	1.5			
22	10		14	218	2.0			
23	12		47	295	2.0			
24	14		13	114	1.5			
25	16		20	123	1.5			
26	18		10	132	1.5			
27	20		14	214	1.5			
28	22		9	244	1.5			
29	24		12	200	1.5			
30	365 ~~4~~S - 26 W		130	410	5.5			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	~~MS~~	Cu	Zn	Ag			Remarks
01	36S ~~28~~ S - 28 W		18	125	2.0			
02	30		10	141	1.0			
03	32		27	114	2.0			
04	34		15	83	1.5			
05	36		13	175	2.0			
06	38		18	75	1.5			
07	40		7	90	1.0			
08	42		98	255	5.0			
09	44		12	94	1.5			
10	46		30	172	2.0			
11	48		13	145	1.5			
12	50		12	160	1.5			
13	52		30	140	2.0			
14	54		12	82	1.5			
15	56		8	111	1.5			
16	58		19	150	2.0			
17	60		26	156	1.5			
18	62		13	124	2.0			
19	64		11	77	1.5			
20	66		9	80	1.0			
21	68		8	68	1.0			
22	70		9	86	1.0			
23	72		45	158	3.0			
24	74		30	159	2.0			
25	76		12	87	1.0			
26	78		14	92	1.5			
27	80		25	97	1.5			
28	82		16	185	2.0			
29	84		210	121	2.0			Cu= 21
30	36S ~~28~~ S - 86 W		18	143	2.5			

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988-2171

Date: November 24, 1969 Report Number: 69-71-001

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	Mo	Cu	Zn	Ag			Remarks
01	36S ~~42~~S - 88 W		14	68	1.0			
02	36S ~~42~~S - 90 W		10	98	1.5			
03	36S ~~42~~S - 92 W		15	163	1.5			
04	48S - 2 W		12	78	1.5			
05	4		9	187	1.5			
06	6		18	76	2.5			
07	8		29	150	2.5			
08	10		93	246	5.0			
09	12		23	139	1.5			
10	14		17	115	1.5			
11	16		32	77	1.5			
12	18		19	133	1.5			
13	20		42	77	1.5			
14	22		10	183	1.5			
15	24		17	161	1.5			
16	26		7	152	0.5			
17	28		10	88	1.0			
18	30		93	230	4.5			
19	32		11	164	1.0			
20	34		17	101	1.5			
21	36		8	129	1.0			
22	38		10	136	1.5			
23	40		21	128	1.5			
24	42		16	98	1.5			
25	44		14	138	2.0			
26	46		18	140	1.5			
27	48		17	83	1.0			
28	50		23	132	2.0			
29	52		11	100	1.0			
30	48S - 54 W		16	97	1.5			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

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Date: November 24/69 Report Number: 69-71-001

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	48S - 56 W		19	121	1.5			
02	58		20	175	2.0			
03	60		9	100	1.0			
04	62		9	80	1.0			
05	64		8	64	1.0			
06	66		18	82	2.0			
07	68		8	95	1.0			
08	70		21	146	2.5			
09	72		12	69	1.5			
10	74		13	115	1.5			
11	76		8	102	1.0			
12	78		11	98	1.0			
13	80		12	157	2.0			
14	82		272	148	4.0			
15	84		20	139	1.5			
16	86		26	175	2.5			
17	88		24	108	2.0			
18	48S - 90 W		21	158	2.0			
19	54S - 2 W		12	138	1.5			
20	4		10	215	1.5			
21	6		14	133	1.0			
22	8		18	101	1.5			
23	10		13	127	1.5			
24	12		12	86	1.0			
25	14		67	265	4.0			
26	16		15	140	1.5			
27	18		17	225	1.0			
28	20		29	136	1.5			
29	22		15	193	1.5			
30	54S - 24 W		15	158	1.5			

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Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	54S - 26 W		17	84	1.5			
02	28		11	221	1.5			
03	30		13	378	2.0			
04	32		9	113	1.0			
05	34		60	206	3.0			
06	36		10	100	1.0			
07	38		9	95	1.0			
08	40		13	134	1.5			
09	42		13	95	1.0			
10	44		8	65	1.0			
11	46		14	200	1.5			
12	48		12	150	1.5			
13	50		9	93	1.0			
14	52		13	145	1.5			
15	54		22	124	1.0			
16	56		14	255	2.0			
17	58		18	112	1.0			
18	60		23	200	1.5			
19	62		17	97	1.0			
20	64		8	137	1.0			
21	66		44	123	2.0			
22	68		15	146	1.0			
23	70		12	114	1.0			
24	72		17	122	1.0			
25	74		14	136	1.0			
26	76		16	145	1.0			
27	78		15	188	1.5			
28	80		13	132	1.0			
29	82		11	125	1.5			
30	54S - 84 W		12	87	1.5			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.
GEOCHEMICAL ANALYTICAL REPORT
1521 Pemberton Ave.
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Date: November 24/69 Report Number: 69-71-001

From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XMX	Cu	Zn	Ag			Remarks
01	54S - 86 W		17	81	1.0			
02	88		14	178	2.0			
03	54S - 90 W		11	152	1.0			
04	120S - 0+00BL		15	167	1.5			East
05	120S - 2 W		7	69	1.0			
06	4		8	83	0.5			
07	6		10	84	1.0			
08	8		91	191	3.5			
09	10		10	68	1.0			
10	12		13	190	1.0			
11	14		9	115	1.0			
12	16		12	192	1.5			
13	18		11	110	1.0			
14	20		16	144	1.0			
15	22		15	68	1.0			
16	24		12	107	1.0			
17	26		13	103	1.0			
18	28		13	123	1.5			
19	30		13	183	1.5			
20	32		13	90	1.0			
21	34		14	82	1.0			
22	36		10	70	1.0			
23	38		11	67	1.0			
24	40		13	98	1.5			
25	42		14	106	1.5			
26	44		15	88	1.0			
27	46		14	115	1.5			
28	48		12	100	1.0			
29	50		13	98	1.0			
30	120S - 52 W		26	123	2.0			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

GEOCHEMICAL ANALYTICAL REPORT

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	120S - 54 W		12	94	1.0			
02	56		11	141	1.5			
03	58		12	62	1.5			
04	60		14	190	1.5			
05	62		20	91	1.5			
06	64		13	105	1.0			
07	66		16	94	1.5			
08	68		13	120	1.5			
09	70		20	165	1.5			
10	72		15	67	1.0			
11	74		10	115	1.0			
12	76		11	65	1.0			
13	78		15	100	1.0			
14	80		13	154	1.5			
15	82		16	135	1.5			
16	84		13	67	1.5			
17	86		13	102	1.5			
18	88		10	55	1.0			
19	120S - 90 W		11	80	1.0			
20	126S - 0+00		34	136	1.5			
21	126S - 2 W		31	94	1.5			
22	4		12	114	1.0			
23	6		15	113	1.0			
24	8		13	240	1.5			
25	10		23	103	1.5			
26	12		12	109	1.5			
27	14		14	103	1.0			
28	16		9	93	1.0			
29	18		14	99	1.0			
30	126S - 20 W		10	106	1.0			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

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North Vancouver, B.C.
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Lab. No.	Sample Number	XMX	Cu	Zn	Ag			Remarks
01	126S - 22 W		13	89	1.0			
02	24		13	63	1.0			
03	26		17	80	1.5			
04	28		17	72	1.5			
05	30		12	191	1.0			
06	32		12	108	1.5			
07	34		11	127	1.0			
08	36		7	120	1.0			
09	38		8	35	0.5			
10	40		37	132	2.0			A Zone
11	42		15	62	1.0			
12	44		12	152	1.5			
13	46		16	91	1.5			
14	48		11	165	1.5			
15	50		10	73	1.0			
16	52		13	115	1.5			
17	54		6	63	1.0			
18	56		10	255	1.0			
19	58		9	65	1.0			
20	60		12	125	1.5			
21	62		11	67	1.0			
22	64		12	102	1.0			
23	66		16	100	1.5			
24	68		21	345	2.0			
25	70		13	120	1.5			
26	72		15	106	1.0			
27	74		13	113	1.5			
28	76		14	187	1.5			
29	78		14	63	1.5			
30	126S - 80 W		26	126	1.5			A Zone

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	126S - 82 W		23	76	1.5			
02	84		10	102	1.5			A(A&B marked in
03	84		10	100	1.5			B the Lab)
04	86		8	109	1.0			
05	126S - 88 W		10	125	1.0			
06	BLE - 132S		12	117	1.0			
07	132S - 2 W		20	155	1.5			A Zone
08	4		9	74	1.0			
09	6		13	252	1.0			
10	8		107	247	3.5			
11	10		19	132	1.5			
12	12		13	113	1.0			
13	14		16	111	1.5			
14	16		14	125	1.0			
15	18		12	142	1.5			
16	20		9	87	0.5			
17	22		9	53	1.0			
18	24		9	163	1.0			
19	26		14	119	1.0			
20	28		10	165	1.0			
21	30		19	215	1.0			
22	32		18	123	~~.8~~ 1.5			
23	34		12	151	2.0			
24	36		19	79	1.5			
25	38							sample not found
26	40		12	117	1.5			
27	42		75	154	3.5			A Zone
28	44		11	61	1.0			
29	46		11	98	1.0			
30	132S - 48 W		15	213	1.5			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	132S - 50 W		9	98	1.5			
02	52		13	175	1.5			
03	54		9	113	1.0			
04	56		126	170	3.5			A Zone
05	58		39	135	2.0			
06	60		10	85	1.0			
07	62		12	80	0.5			
08	64		10	183	0.5			
09	66		81	445	2.5			A Zone
10	68		12	185	1.5			
11	70		13	89	1.0			
12	72		13	138	1.0			
13	74		13	112	1.0			
14	76		13	89	1.0			
15	78		12	59	1.0			
16	80		19	95	1.5			
17	82		19	96	1.0			A Zone
18	84		32	160	1.0			
19	86		13	152	1.0			
20	88		11	121	1.0			
21	BLW 132S - 90 W		13	126	1.0			
22	138S - 2 W		10	148	1.0			
23	4		14	68	1.0			
24	6		9	122	1.0			
25	8		9	145	1.0			
26	10		12	147	1.0			
27	12		13	118	1.0			
28	14		14	182	1.5			
29	16		14	155	1.5			
30	138S - 18 W		15	245	1.5			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	138S - 20 W		13	117	1.5			
02	22		12	134	1.0			
03	24		16	111	1.0			
04	26		11	85	0.5			
05	28		11	108	1.0			
06	30		14	60	1.0			
07	32		12	115	1.0			
08	34		14	118	1.5			
09	36		13	152	1.0			
10	38		31	106	2.0			A Zone
11	40		37	125	2.5			A Zone
12	42		14	103	1.5			
13	44		53	210	2.5			
14	46		9	97	1.0			
15	48		10	78	1.0			
16	50		10	62	0.5			
17	52		10	119	0.5			
18	54		9	100	0.5			
19	56		10	65	0.5			
20	58		53	135	2.0			A Zone
21	60		13	77	1.0			
22	62		12	73	1.0			
23	64		11	167	1.0			
24	66		12	206	1.5			
25	68		12	98	1.0			
26	70		12	138	1.0			
27	72		35	198	1.0			A Zone
28	74		25	93	1.5			
29	76		30	80	1.0			
30	138S - 78 W		32	90	1.0			

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From: Acadia Explorations Ltd. Analyst: L. Nicol

Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	138S - 80 W		14	235	1.0			
02	82		16	120	1.0			
03	84		10	185	0.5			
04	86		15	110	1.0			
05	88		11	64	0.5			
06	138S - 90 W		15	121	1.0			
07	144S - BL		11	127	1.0			at line
08	144S - BL-0+00		8	56	0.5			
09	144S - 2 W		12	95	1.0			
10	4		11	123	1.0			
11	6		14	128	1.0			
12	8		14	150	1.0			
13	10		10	95	0.5			
14	12		11	260	1.0			
15	14		13	90	1.0			
16	16		10	63	0.5			
17	18		12	147	1.0			
18	20		13	252	1.0			
19	22		13	123	1.0			
20	24		12	163	1.0			
21	26		11	205	1.0			
22	28		14	146	1.0			
23	30		16	82	1.0			
24	32		14	124	1.0			
25	34		15	69	1.0			
26	36		14	208	1.0			
27	38		11	192	1.0			
28	40		10	146	1.0			
29	42		12	138	1.0			
30	144S - 44 W		11	151	1.0			

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

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Lab. No.	Sample Number	XXX	Cu	Zn	Ag			Remarks
01	144S - 46 W		14	144	1.0			
02	48		11	107	1.0			
03	50		11	56	0.5			
04	52		7	102	0.5			
05	54		12	93	1.0			
06	56		13	191	1.0			
07	58		14	240	1.0			
08	60		12	149	1.0			
09	62		10	106	1.0			
10	64		7	108	1.0			
11	66		7	118	1.0			
12	68		8	130	0.5			
13	70		8	74	1.0			
14	72		8	159	1.0			
15	74		8	72	1.0			
16	76		7	58	1.0			
17	78		12	60	0.5			
18	80		16	86	1.0			
19	82		10	76	1.0			
20	84		12	143	1.0			
21	86		11	125	1.0			
22	144S - 90 W		8	94	1.0			
23	144S - ?		11	168	1.0			144S - 88 W ?
24								
25								
26								
27								
28								
29								
30								

ARCADIA EXPLORATIONS LTD. NPL.

OWEN LAKE PROJECT

ARK GROUP CLAIMS

GEOCHEM GRID
COPPER PPM.

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2284 MAP #3

FIG. 4.

0 500 1000 1500
SCALE : FEET

March 2, 1970.

TO ACCOMPANY THE GEOPHYSICAL AND GEOCHEMICAL REPORT ON THE OWEN LAKE PROJECT OF ARCADIA EXPLORATIONS LTD. NPL. BY D.R. COCHRANE, P. ENG. DATED: MARCH 9, 1970.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D.R. COCHRANE

0S 6S 12S 18S 24S 30S 36S 42S 48S 54S 60S 66S 72S 78S 84S 90S 96S 102S 108S 114S 120S 126S 132S 138S 144S

Base Line 0 W

- 5W
- 10W
- 15W
- 20W
- 25W
- 30W
- 35W
- 40W
- 45W
- 50W
- 55W
- 60W
- 65W
- 70W
- 75
- 80W
- 85W

Base Line 90W

APPROXIMATE OUTLINE OF CLAIMS

45 Fr.

2284

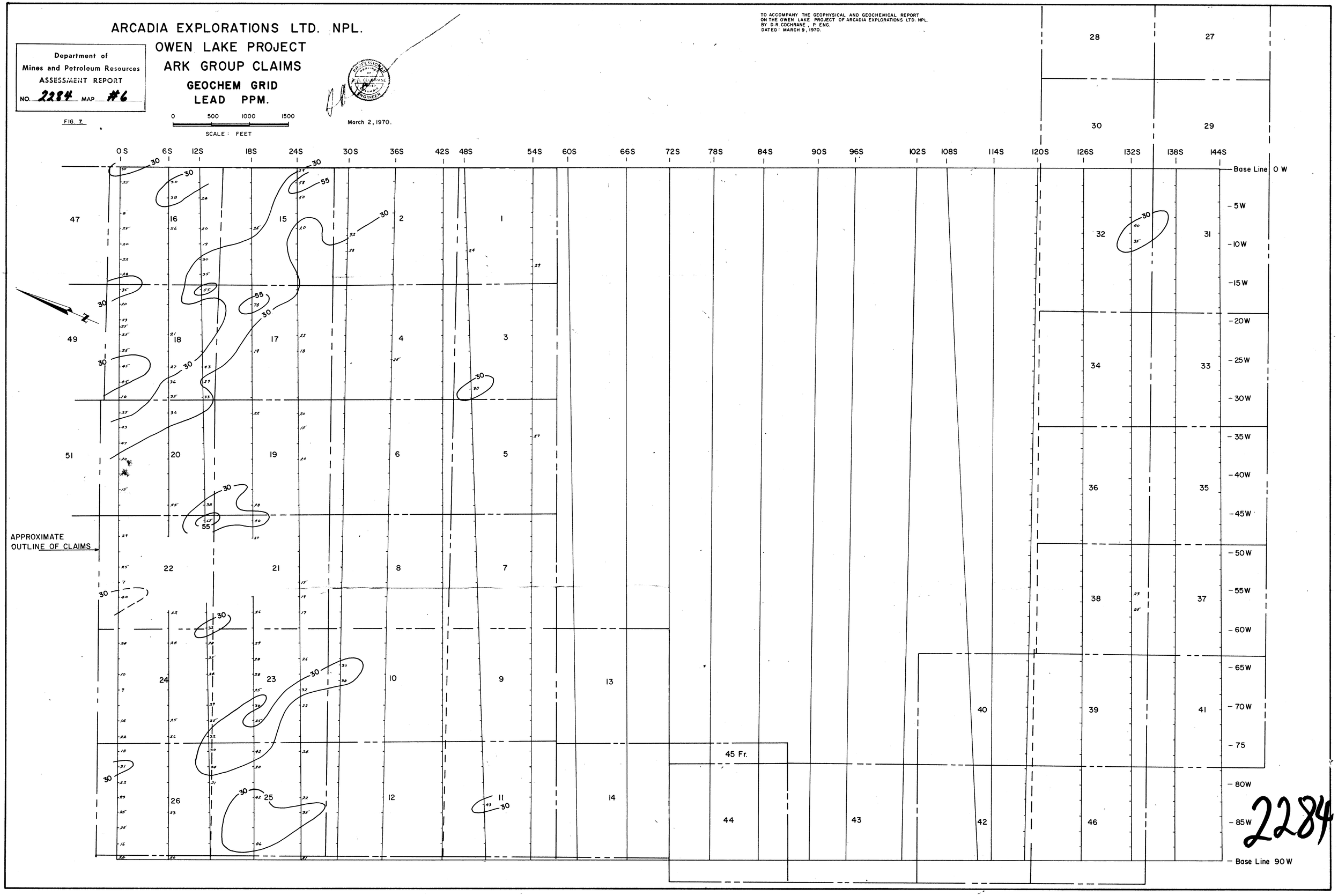
ARCADIA EXPLORATIONS LTD. NPL.
OWEN LAKE PROJECT
ARK GROUP CLAIMS
GEOCHEM GRID
LEAD PPM.

FIG. 7.

0 500 1000 1500
SCALE : FEET

March 2, 1970.

TO ACCOMPANY THE GEOPHYSICAL AND GEOCHEMICAL REPORT
ON THE OWEN LAKE PROJECT OF ARCADIA EXPLORATIONS LTD. NPL.
BY D.R. COCHRANE , P. ENG.
DATED: MARCH 9 , 1970.



2284

ARCADIA EXPLORATIONS LTD. NPL.
OWEN LAKE PROJECT
ARK GROUP CLAIMS
GEOCHEM GRID
SILVER PPM.

FIG. 6.

0 500 1000 1500
SCALE : FEET

PROFESSIONAL ENGINEER
O. R. COCHRANE
B.C.

March 2, 1970.

TO ACCOMPANY THE GEOPHYSICAL AND GEOCHEMICAL REPORT
ON THE OWEN LAKE PROJECT OF ARCADIA EXPLORATIONS LTD. NPL.
BY D.R. COCHRANE , P. ENG.
DATED: MARCH 9, 1970.

0S 6S 12S 18S 24S 30S 36S 42S 48S 54S 60S 66S 72S 78S 84S 90S 96S 102S 108S 114S 120S 126S 132S 138S 144S

Base Line 0 W

- 5W
- 10W
- 15W
- 20W
- 25W
- 30W
- 35W
- 40W
- 45W
- 50W
- 55W
- 60W
- 65W
- 70W
- 75
- 80W
- 85W
- Base Line 90W

APPROXIMATE
OUTLINE OF CLAIMS

45 Fr.

2284

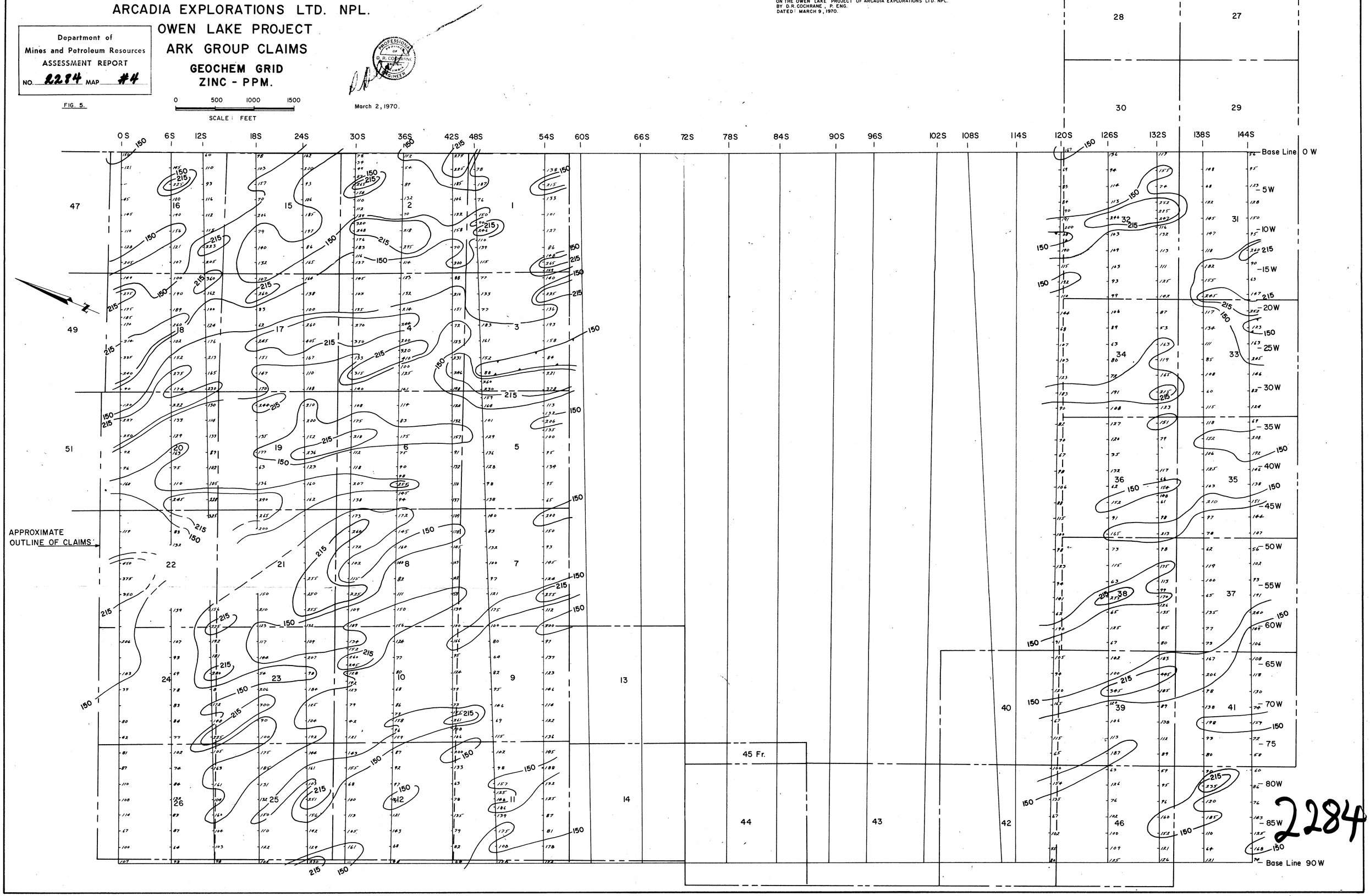
ARCADIA EXPLORATIONS LTD. NPL.
OWEN LAKE PROJECT
ARK GROUP CLAIMS
GEOCHEM GRID
ZINC - PPM.

FIG. 5.

0 500 1000 1500
SCALE : FEET

March 2, 1970.

TO ACCOMPANY THE GEOPHYSICAL AND GEOCHEMICAL REPORT
ON THE OWEN LAKE PROJECT OF ARCADIA EXPLORATIONS LTD. NPL.
BY D.R. COCHRANE , P. ENG.
DATED: MARCH 9, 1970.



ARCADIA EXPLORATIONS LTD. NPL.
OWEN LAKE PROJECT
ARK GROUP CLAIMS
COMPOSITE PLAN

FIG. 9.

0 500 1000 1500
SCALE : FEET

March 2, 1970.

LEGEND

- MAGNETIC ANOMALIES
- " LINEARS
- COPPER ANOMALIES
- ZINC "
- SILVER "
- LEAD "

TO ACCOMPANY THE GEOPHYSICAL AND GEOCHEMICAL REPORT ON THE OWEN LAKE PROJECT OF ARCADIA EXPLORATIONS LTD. NPL. BY D.R. COCHRANE, P. ENG. DATED: MARCH 9, 1970.

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2284 MAP #8

0S 6S 12S 18S 24S 30S 36S 42S 48S 54S 60S 66S 72S 78S 84S 90S 96S 102S 108S 114S 120S 126S 132S 138S 144S Base Line 0 W

- 5W
- 10W
- 15W
- 20W
- 25W
- 30W
- 35W
- 40W
- 45W
- 50W
- 55W
- 60W
- 65W
- 70W
- 75
- 80W
- 85W
- Base Line 90W

APPROXIMATE OUTLINE OF CLAIMS

Lake

45 Fr.

2284

ARCADIA EXPLORATIONS LTD. NPL.
OWEN LAKE PROJECT
ARK GROUP CLAIMS
ISOMAGNETIC PLAN

Department of Mines and Petroleum Resource
ASSESSMENT REPORT
NO. 2284 MAP #7

FIG. 8.

0 500 1000 1500
SCALE : FEET

March 2, 1970.

TO ACCOMPANY THE GEOPHYSICAL AND GEOCHEMICAL REPORT
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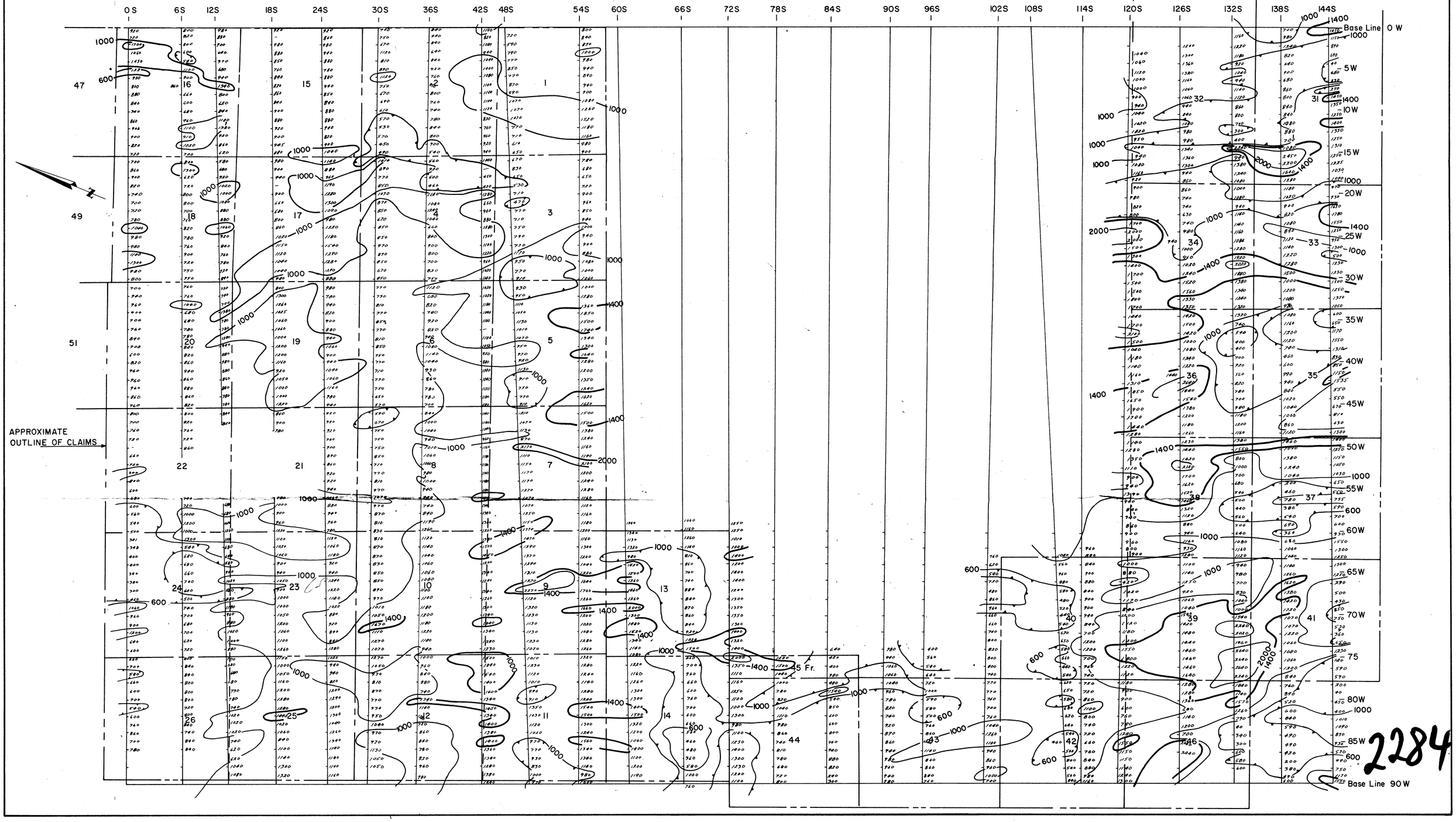
BY D.R. COCHRANE , P. ENG.
DATED: MARCH 9 , 1970.



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