93M/4E

GEOLOGICAL AND GEOPHYSICAL REPORT

on the

BRUNSWICK PROJECT

Bill #1 to #14 Mineral Claims

situated on

Rocher DeBoule Mountain

10 air miles outh of

Hazelton

Omineca Mining Division

British Columbia

N.T.S. 93M/4 (E1/2)

Latitude 55°07'N, Longitude 127°35'W

REPORT BY:

D.R. Cochrane P. Eng.,
August 13, 1973
Delta, B.C.

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

TABLE OF CONTENTS

APPENDICES

FIGURES

FIGURE NUMBER		TITLE	LOCATION
1.	#1	Location Map	Report Body
2. & 2(a)	#2	General Geology & Claims Map	Report Body
3.	#3	Veins and Underground Workings	Map Pocket
4.	#4	Surveying and Topographic Plan	Map Pocket
5.	#5	Self Potential Data	Map Pocket
6.	#6	Iso - Self Potential Plan	Map Pocket
7.	#7 (a)	Section A - A^1	Map Pocket
	#7 (b)	Section B - B^1	Map Pocket
	#7 (c)	Section C - C^1	Map Pocket
8.	#8	Geology	Map Pocket

PART A:

A-1 INTRODUCTION

On July 27, 28, and 29, 1973, the author and Mr. G. Williamson completed a short tie in underground to surface transit survey, geologically mapped and conducted self potential and electromagnetic test surveys on the Brunswick silver occurrence in the Rocher DeBoule range of North Central British Columbia.

The purpose of the work was to:

(a) recheck the bearing of veins and the alignment of the 80 feet of tunnel extension completed in the fall of 1972 and
(b) determine if the vein could be traced on surface by self potential and/or electromagnetic geophysical surveys.

This report describes the setting of the occurrence and the procedures employed, and discusses the results obtained.

A-2 SUMMARY AND CONCLUSIONS

1. Arcadia Explorations Ltd. (N.P.L.) by agreement, with Mr. T. Williamson of Vancouver, B.C. has the right to explore and develop the 14 contiguous Bill Claims which cover the Brunswick Silver occurrence located some 10 miles south of Hazelton, B.C.

2. The prospect has a long history, and exploration work has continued intermittently to the present. In April, 1972, the author prepaired a report on the property and recommended an extension of the lower drift, and this work was completed in the late fall of 1972.

3. The drift extension intersected a horse of mineralized vein material close to the projected diamond drill intersection sought after, and underground to surface transit surveying was

completed to recheck old survey plans.

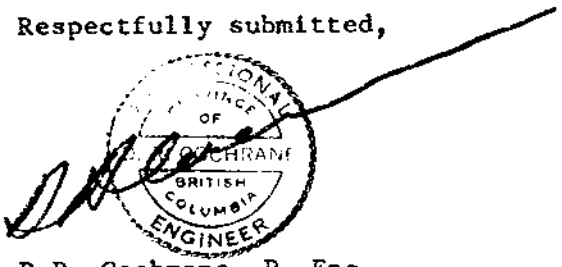
4. Geological mapping and sampling confirmed earlier reports that the upper adit vein contains excellent values in silver, and the lower adit fault vein is not as well mineralized by comparison. Grab samples from a 1.5' wide vein located just outside the upper adit portal ran 8.40% Pb, 4.05% Zn, and 67.00 oz. silver per ton. Two samples from the upper adit vein near the face (80' in from the portal) averaged 4.83% Pb, 5.15% Zn, and 39.30 oz. of silver per ton.

5. The electromagnetic (Sharpe SE 300) survey test line over the upper adit vein revealed that there is an insufficient conductivity contrast between the vein material and pyrrhotite flecked diorite to cause a diagnostic tilt angle response profile.

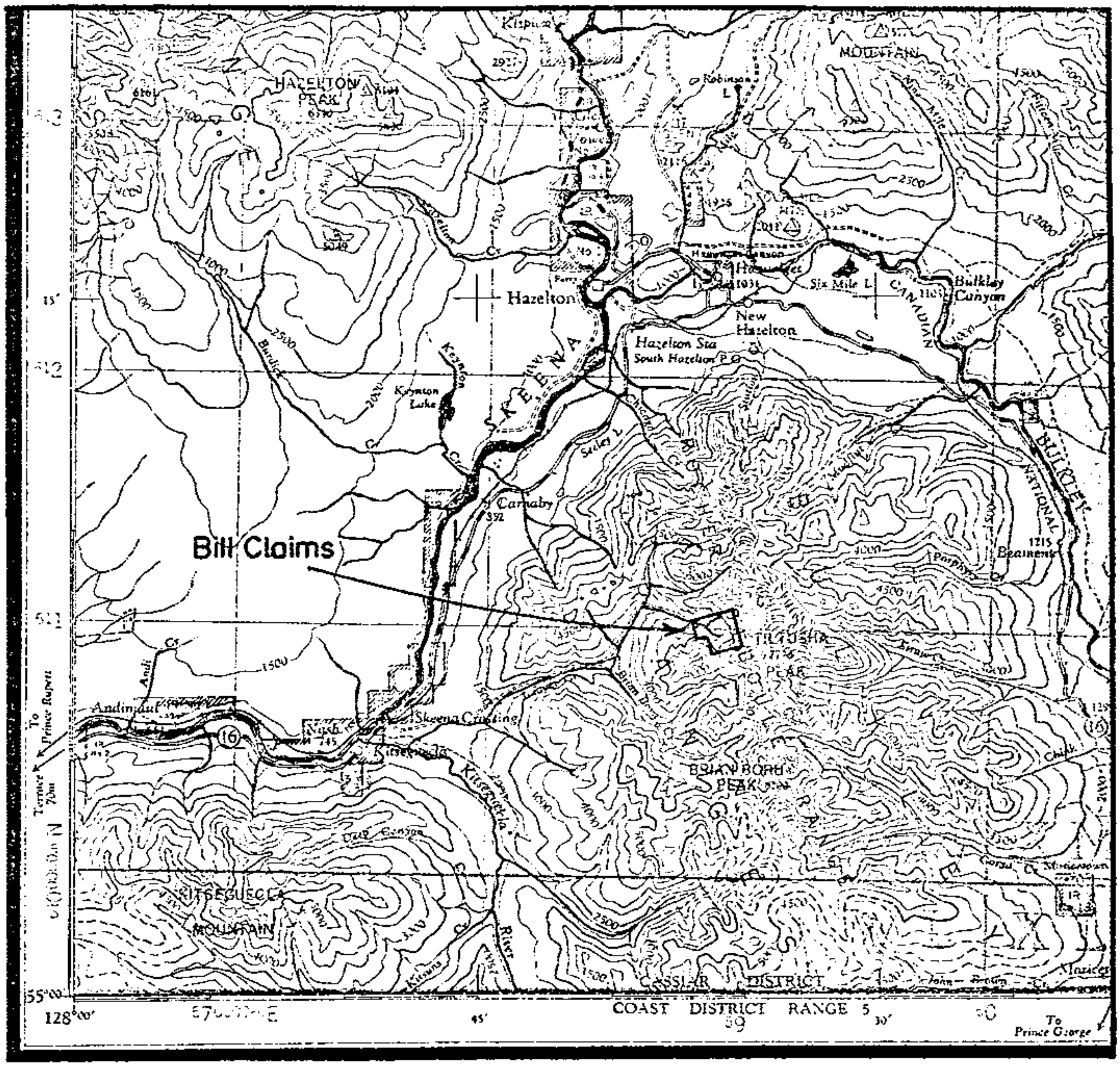
6. A self potential survey was conducted on 5 cross lines and response ranged from a high of +62 to a low of -135 millivolts. The upper adit vein is situated between two minus 120 millivolt self potential anomalies and their elongation along the strike length suggests that the vein continues some 150 feet uphill and northeasterly before either being faulted off, pinching out, or the SP response being dampened by a wedge of cemented till.

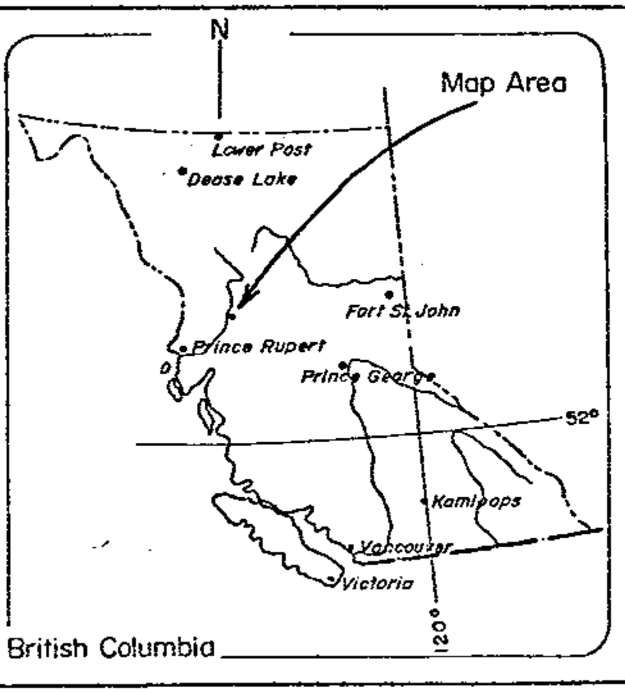
7. Continued exploration and testing of the 1 to 2 foot wide upper adit vein is recommended. The most expedient method would be to bulldozer strip the uphill SP anomaly in order to determine of the vein continues in this direction and maintains its high content of silver

Respectfully submitted,



D.R. Cochrane, P. Eng.,
August 9, 1973
Delta, B.C.





British Columbia

Arcadia Explorations Limited (N.P.L.)

Brunswick Project — Omineca M.D.

near Hazelton, B.C. — Bill Claims

Location Map

N.T.S. 93 M

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

4 0 4 miles

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

figure 1

4839 M1

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4839 MAP #1

PART B: SETTING

B-1 LOCATION AND ACCESS

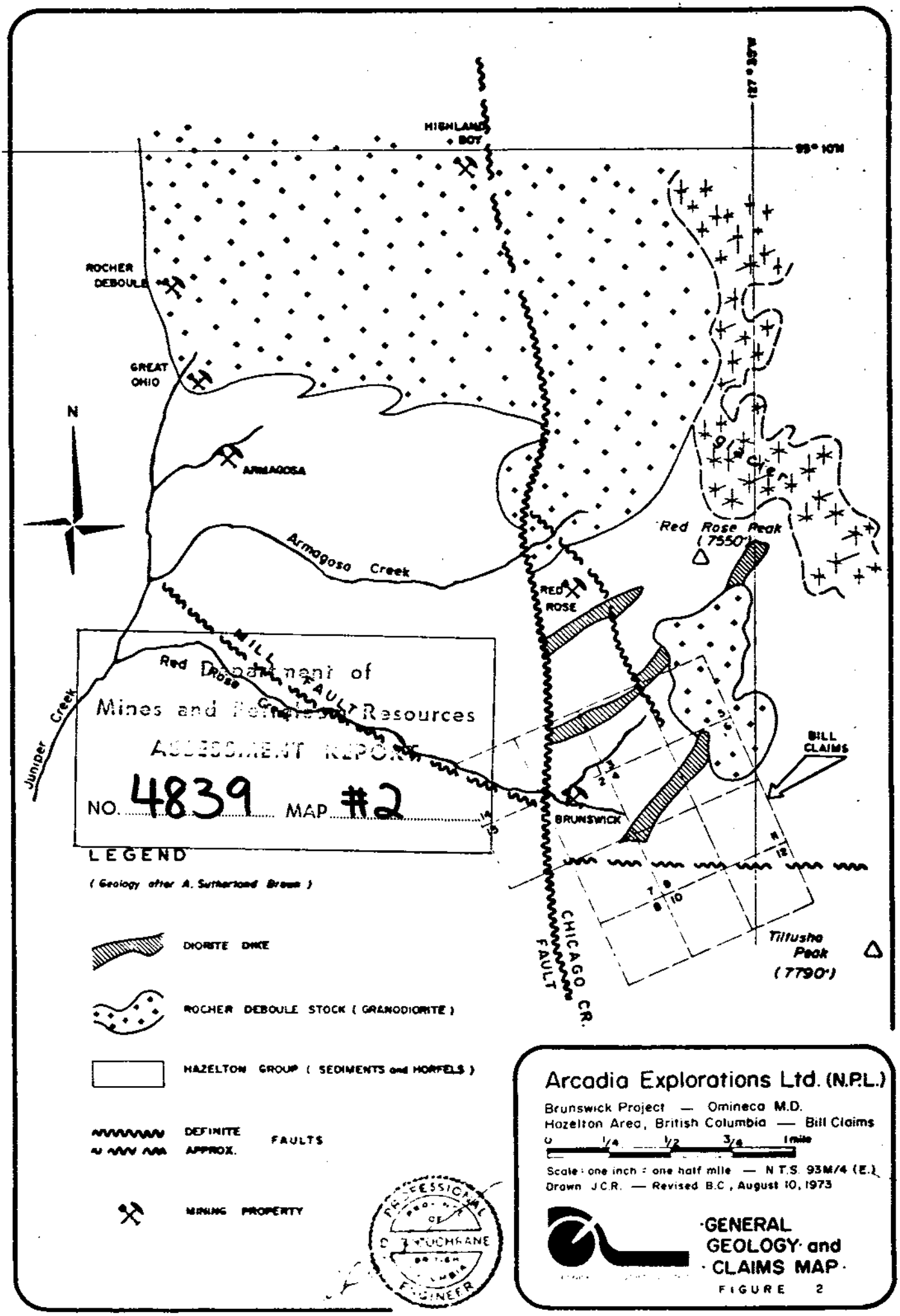
The Bill claims are located near the headwaters of Red Rose Creek, a westerly flowing stream draining Red Rose and Tiltusha Peaks in the Rocher Deboule Range, near Hazelton, B.C. (see location map). Normal access is by 4 x 4 truck from Highway No.16, and then southerly along a mining access road a distance of approximately 9 1/2 miles. Alternate and facile access is by helicopter from either Smithers (30 air miles southeast) or Terrace (60 air miles southwest of the claims). There are some abondoned buildings on the property, a part of the Skeena Silver Mines Camp, situated just below the two old adits, one at an elevation of 4,730 feet and the other (lower adit) at about 4,645 feet above mean sea level.

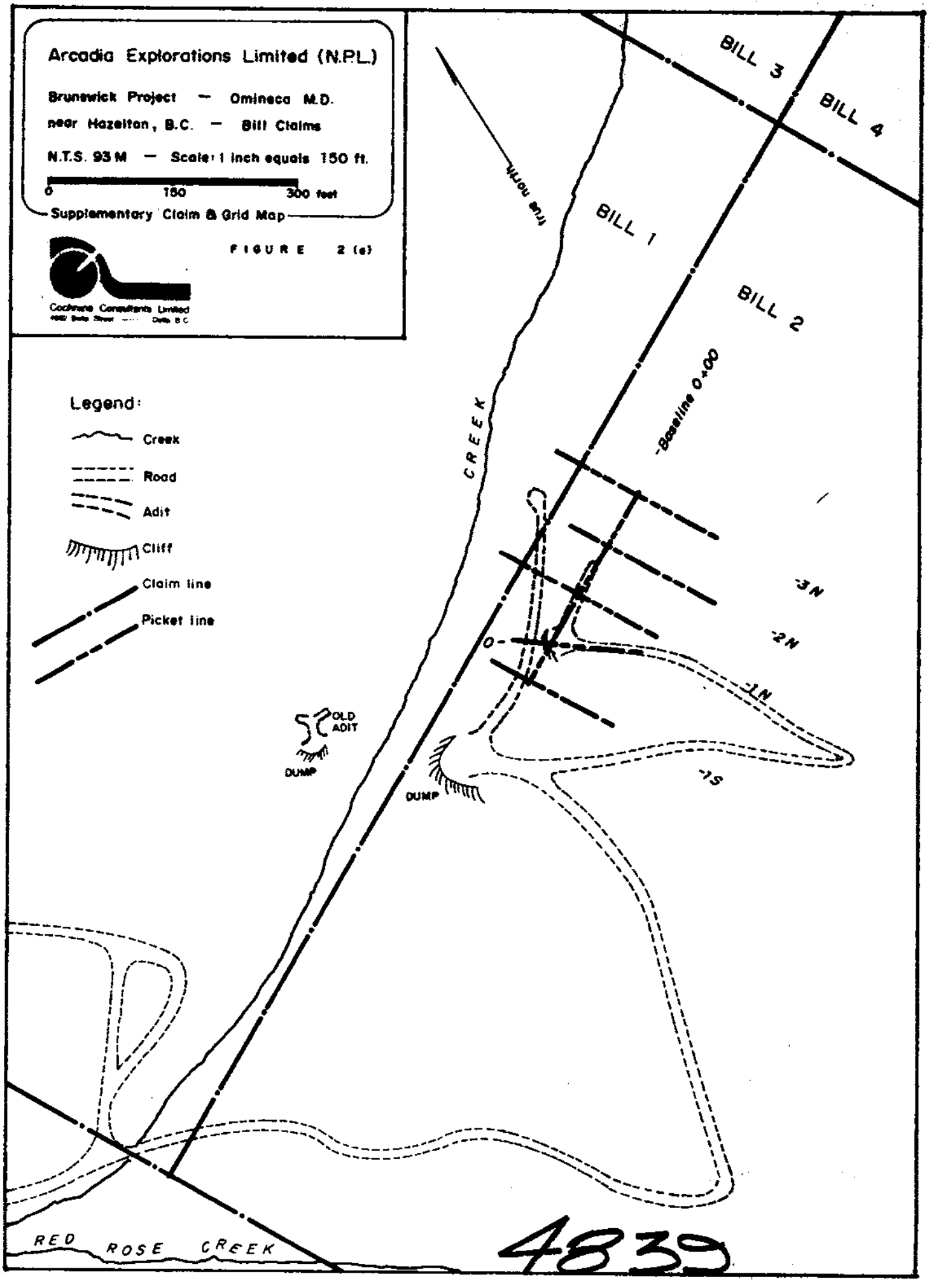
B-2 CLAIMS AND OWNERSHIP

The 14 located full sized "Bill" mineral claims form a contiguous block between 3 and 4 claims (each approximately 1500 feet square) wide and 4 claims long in the Omineca Mining Division. (see Figure 2, Geology and Claims Sketch).

Bill No. 1 to 14 inclusive, were located by Mr. J.T. Williamson of Vancouver, B.C., and claims information is set out in tabular form below:

Claim Name	Record No.	Location Date	Expiry Date as of April, 1972
Bill No. 1 to 4	15699 to 15702	July 18, 1962	July 26, 1975
Bill No. 5 to 12	19000 to 19007	April 27, 1963	April 29, 1976
Bill No. 13 to 14	31096 and 31097	July 2, 1965	July 20, 1975


HIGHLAND BOY
ROCHER DEBOULE
GREAT OHIO
ARMAGOSA
Armagosa Creek
Juniper Creek
Red Rose Creek
RED ROSE
BILL FAULT
Red Rose Peak (7550')
BILL CLAIMS
BRUNSWICK
CHICAGO CR. FAULT
Tiltusha Peak (7790')
N
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4839 MAP #2
LEGEND
(Geology after A. Sutherland Brown)
DIORITE DIKE
ROCHER DEBOULE STOCK (GRANODIORITE)
HAZELTON GROUP (SEDIMENTS and HORFELS)
DEFINITE
APPROX.
FAULTS
MINING PROPERTY
PROFESSIONAL ENGINEER
Arcadia Explorations Ltd. (N.P.L.)
Brunswick Project — Omineca M.D.
Hazelton Area, British Columbia — Bill Claims
Scale : one inch = one half mile — N.T.S. 93M/4 (E.)
Drawn J.C.R. — Revised B.C., August 10, 1973
GENERAL GEOLOGY and CLAIMS MAP
FIGURE 2


Arcadia Explorations Limited (N.P.L.)
Brunswick Project — Omineca M.D.
near Hazelton, B.C. — Bill Claims
N.T.S. 93 M — Scale: 1 inch equals 150 ft.
0
150
300 feet
Supplementary Claim & Grid Map
FIGURE 2 (e)
Cochrane Consultants Limited
Legend:
Creek
Road
Adit
Cliff
Claim line
Picket line
BILL 1
BILL 2
BILL 3
BILL 4
CREEK
Baseline 0+00
3N
2N
1N
0
1S
OLD ADIT
DUMP
DUMP
RED ROSE CREEK
4839

The claims, as of April, 1972 are owned outright by Mr. J. Thomas Williamson, of Vancouver, B.C. The author examined the claim posts for Bill No. 1 and 2 claims, and claims appear to be staked in accordance with the regulations set out in the Miner Ace, Province of B.C.

B-3 GENERAL SETTING

The Rocher Deboule Range is a somewhat isolated mountainous region which projects easterly from the Coast Mountains into the interior plateau physiographic subdivision of northcentral British Columbia. The range is characterized by a north south trending central core with high peaks (7,000 to 8,000 feet) and is composed mainly of dense granitic rocks in addition to a competent metasedimentary and a metavolcanic sequence. Preciptous ridges and deeply incised stream valleys extend laterally from the central core, and are underlain by Upper Jurassic and Lower Cretaceous Hazelton Group sedimentary and volcanic rocks. The original central core horst has been greatly modified by alpine glaciation, and a number of glaciers still remain on the north and east sides of the central spine. Thus, aretes, cirques, tarn lakes and hanging valleys are characteristic features at higher elevations, morains, outwash plains and drumlins are present at lower elevations. The Skeena River Valley to the north is just under 1,000 feet above sea level, and Brian Boru peak the highest prominence at the south end of the mountainous chain is just over 8,200 feet above sea level.

The twenty or so mineral occurrences in the Rocher Deboule Range are, in general, concentrated about the periphery of the central intrusive stock and especially around the northernmost porphyritic grandiorite. Ores worth approximately eight million dollars have been produced in this area since the turn of the century and include such metals as tungsten, copper, gold, silver, arsenic, cobalt, molybdenum, lead and zinc. Uranium is also present in some of the occurrences.

B-4 HISTORY

During the first decade of the 1900s, several mineral occurrences were discovered and partially developed in the Rocher Deboule Range. New impetus was given to the area in 1915 on the completion of the CNR railway and a few years later during the latter part of World War I when high copper prices prevailed. According to Jasper the "Brunswick" was originally located in 1912 by a Mr. J. Miller and a Mr. Scholfield and was limited to two claims, the Kaslo and the Brunswick. The 1914 B.C. Report of the Minister of Mines recorded a 45 foot tunnel on the Brunswick. The 1925 B.C. Minister of Mines Report describes two adits on the Brunswick, the upper tunnel (number 1) driven to 65 feet, and the lower tunnel to 170 feet. Apparently Mr. J. Miller worked single-handedly on the project.

Jasper reports that the original claims lapsed in 1949, and in December 1950 the Brunswick numbers 1 to 7 inclusive were staked by Skeena Silver Mines and covered ground including both

the original Brunswick and Kaslo claims. The 1952 Minister of Mines Report describes the Skeena Silver Mines work as consisting of drifting, prospecting and diamond drilling. This work in the early '50s was sufficient to maintain the claims in good standing for 10 years. Early in the 1960s the claims lapsed and were then staked by Mr. J.T. Williamson. Mr. Williamson immediately did some exploration work followed by reopening the upper drift in 1970 and including diamond drilling sampling and prospecting.

There are two former producing mines in the vicinity, the Red Rose Mine, 3/4 mile north, and the Rocher Deboule Mine, 2 1/2 air miles northwest of the Brunswick. Between 1942 and 1954, about 115,000 tones of ore were mined from the Red Rose, and the ore carried values in gold, silver, copper, and tungsten. The recorded production of the Rocher Deboule Mine is 52,000 tons averaging about 6 percent copper, just less than 2 oz. per ton of silver, and values in lead, zinc, and uranium. Production ceased in 1952.

PART C: PROCEDURES

C-1 SURVEYING FIELD PROCEDURE

A K & E transit, K & E rod, and fiberglass surveyors chain were used in surveying the Brunswick workings. Station pegs were cut from 1" x 2" stock, spray painted blaze orange and station numbers were written on the pegs with a paint pen. Station A-1 was set up immediately outside the lower adit portal, and the elevation of the top of the peg was designated 4645.00

feet above sea level. A survey loop was then made from station A1 to A2, A3, A4, A5, A7, A8, A11, A12, A13, and back to A-1. All horizontal and vertical angles were turned and slope distances between stations were measured by chain and checked by stadia intercept. Underground surveying was completed in the same manner however stations were placed in the tunnel back. The results of the survey works are shown in the accompanying plan.

C-2 SELF POTENTIAL FIELD PROCEDURE

The SP survey was completed with a Terra Physics Hi-Z SP unit and station A-7 was used as the near pot (zero value) electrode position. A wire reel with a commutator was deployed so that the wire length (and therefore the line resistance) was a constant. The author operated the unit from the A-7 position and the five lines were surveyed at 10 foot intervals by excavating a hole to seat the far pot at each station. Copper sulphate was used as the electrolyte in the SP pots.

C-3 ELECTROMAGNETIC FIELD PROCEDURE

An EM test survey was conducted along line 1 North with a Sharpe SE 300 EM unit. (instrument specifications appended). The author operated the transmitter in a vertical loop mode from station A-8 close to the upper adit vein, and Mr. G. Williamson recorded the dip angles of the resultant field, on both high (1600 Hz) and low (4000 Hz) frequencies. The station interval was 10 feet along line 1 N. The results are tabulated in section D-3 of this report.

C-4 DATA PROCESSING AND PRESENTATION OF DATA

The horizontal and vertical distances between survey stations were calculated from stadia tables using an electronic calculator. A plan plot of the work revealed that no corrections were necessary to angles or horizontal distances. Elevation corrections, proportional to the difference in elevations between stations were made in order that the loop check in error would be 0.0 feet.

The geophysical, geological and survey data is presented in the accompanying maps, all prepaired from a common base map drafted at a scale of 1":50 feet.

PART D: DISCUSSION OF RESULTS

D-1 SURVEYING

The surveying results confirmed earlier work, however the recent survey shows that the upper adit is some 20 vertical feet above the elevation recorded for the adit in earlier work. A significant difference in determining the trace of the fault on to the surface was found to exist since the fault is moderately dipping and the topography is steep.

D-2 GEOLOGY AND SAMPLING

The lower adit portal host rocks are metasediments, and diotite was encountered in the drift just south of station U-2. The contact underground, as in Balsam Creek on surface is rather difficult to determinevisually, and is somewhat gradational over a distance of up to 10 feet. Diorite continues to the face of the lower adit.

The upper adit portal is collared in metasediments, however

the rock at the face is diorite, as is the outcrop in the upper road cut some 30 feet east of the upper portal. The diorite contact then is apparently somewhat irregular, and in the vicinity of the workings appears to dip steeply to the south.

The author inspected the intersection of the original lower adit vein, and the lower adit fault vein, (between stations U-1 and U-2) and is of the opinion that they are two separate vein systems. The fault vein continues past the original lower adit vein towards the portal, and also continues towards the face where it pinches out before reaching station U-2. The attitude and extent of the "horse" of vein material between stations U-3 and U-4 intersected during the 1972 drift extension work is not clear at this time because of the complex faulting and fracturing at this point. The main fault splays in this area, and some gouge seams are in excess of 6" wide. Slickensides plunge between 10° and 30° south west within the main fault which varies somewhat in strike attitude around 033° (true), amd varies in dip between 45° and 60° northwest. The fault is a major structure and grey clay-like gouge material is present up to a width of 12".

A narrow quartz vein was discovered in the lower adit about 30 feet ahead of the "horse" and this vein is subparallel to the original lower adit vein and the upper adit vein. It varies in width from 1" to 6" wide, strikes 060° and dips 80°NW. Arsenopyrite, pyrite and a finely disseminated grey metallic acicular mineral is present. This vein however contains relatively low amounts of silver at this point. (see assays following)

The upper adit vein is quite impressive, being well mineralized with galena, sphalerite and minor chaclopyrite, set in a carbonate (ankerite?) and milky quartz matrix. The 1.5' wide vein is faulted just outside the portal by a fault with the same general attitude as the lower adit fault. Cross sections' accompanying this report suggest that the upward extension of the lower adit fault should extend close to the upper adit portal. The upper adit vein has the following attitudes and dimensions:

Position	Width	Strike (true)	Dip
outside portal	18"	067°	51°NW
36' inside portal	+18"	064°	61°NW
55' inside portal	13 1/2"	064°	61°NW
80' inside portal (face)	24"	063°	62°NW

Samples were collected by the author, and assayed by Min-En Laboratories Ltd., 705 West 15th Street, North Vancouver, B.C. The results are tabulated below:

Sample No.	From	Pb%	Zn%	Ag(oz./ton)	Au(oz./ton)
9476	U. adit 80' in	3.65	4.05	37.60	0.013
9477	U. adit portal	8.40	6.60	67.00	0.012
9478	L. adit small vein	0.31	0.18	1.75	0.002
9479	L. adit "horse" good material	6.00	6.08	14.40	0.010
9480	L. adit fault gouge	0.20	0.09	1.60	0.033
9481	L. adit "horse"	1.08	1.32	7.50	0.003
9482	U. adit 80' in (check)	6.00	6.25	41.00	0.011

D-3 ELECTROMAGNETIC SURVEYING

It was postulated that the upper adit vein was wide enough and contained sufficient volume percent sulphide to be

detected on surface by an electromagnetic technique. The test line (line 1N) showed however that this was not the case. The following table lists EM results. L is a left dip angle, and R a right dip angle, all values in degrees from the vertical.

Sta.	Hi. Freq.	Low Freq.	Sta.	Hi. Freq.	Low Freq.
100E	2L	0	0+00	2L	2L
90E	2L	0	10W	2L	2L
80E	2L	0	20W	2L	2L
70E	2L	1L	30W	2L	2L
60E	1L	1L	40W	2L	2L
50E	2L	1L	50W	0	0
40E	2L	1L	60W	1L	1L
0+35E	3L	3L	70W	1R	1R
30E	3L	3L	80W	0	0
0+25E	3 1/2L	3L			
20E	2L	3L			
10E	2L	2L			

There is a very slight change at 30E on line 1N but response is so slight that further work was necessarily abandoned.

D-4 SELF POTENTIAL SURVEY

The self potential results ranged from a high of +62 to a low of -135 millivolts (m.v.). All values are relative to an arbitrary 0 at station A7. Station 0+00 on line 0 lies on the exposed vein outside the upper adit portal, and the SP response here was - 98m.v. The iso-self potential plan shows a rather complex anomalous zone composed of three lobes of -120m.v response. These lows are elongated northeasterly parallel to the strike direction of the vein. Response decreases in amplitude to the

northeast and this may be due to one or more of the following conditions:

(a) the vein pinches or is faulted off to the northwest

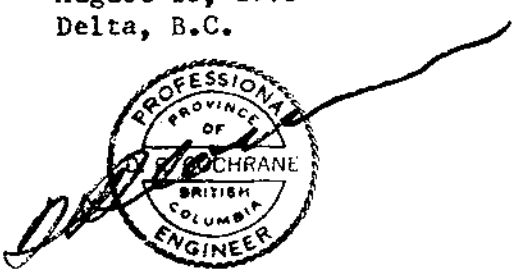
(b) the vein plunges to the northwest

(c) the cemented conglomeritic overburden thickens to the northwest causing decreased SP response

The SP anomalies are not believed to be caused entirely by the relatively narrow silver bearing vein, since disseminated pyrrhotite, pyrite and minor chalcopyrite occur in the diorite and metasedimentary host rocks. None the less, the cause of the self potential anomaly should be investigated and the author suggests that bulldozer trenching would be the most expedient method.

Respectfully submitted,

D.R. Cochrane, P. Eng.,
August 10, 1973
Delta, B.C.



APPENDIX I

Certificates

NAME:	COCHRANE, Donald Robert
EDUCATION:	B.A.Sc. University of Toronto L962, M.Sc. (Eng.) Queen's University 1964
PROFESSIONAL ASSOCIATIONS:	Member in Good Standing, Association of Professional Engineers in B.C., Yukon, Ontario, and Saskatchewan Member B.C. Geophysical Society
EXPERIENCE:	since 1958 while employed with U.S. Steel, Milliken Lake Uranium Mines, Noranda Exploration, Geo-X-Surveys Limited and Meridian Syndicate

NAME:	WILLIAMSON, George, President Arcadia Explorations Limited, prospector and bush work for many years

NAME:	COCHRANE, Bruce A.
EDUCATION:	Grade 12 Ontario, Diploma Ontario College of Art
EXPERIENCE:	Employed in field, office since 1967 while conducting geophysical work and geophysical/geological drafting
AGE:	28

APPENDIX II

Survey Details

CLAIMS:	Bill Group
LOCATION:	10 miles south of Hazelton
MINING DIVISION:	Skeena N.T.S. 93 M/4W
SPONSOR:	Arcadia Explorations Limited, Vancouver, B.C.
TYPE OF SURVEY:	Transit, Geological mapping, EM, SP
FIELD WORK:	D.R. Cochrane P. Eng. July 27, 28, 29 G. Williamson July 27, 28, 29
FIELD WORK MAN DAYS:	6; STANDBY MAN DAYS: 0
MOBILIZATION/DEMOBILIZATION:	July 26, July 30, 31
NO. SP READINGS:	97
NO. EM READINGS:	21, 2 frequencies
NO. SURVEY STATIONS:	21
DRAFTING:	B.A. Cochrane August 9, 10, 13, 14
DATA REDUCTION:	D.R. Cochrane August 7, 9

APPENDIX III

Statement of Expenditures

A. Cochrane Consultants Costs, as per invoice dated August 22, 1973

1.	Mobilization/Demobilization	$ 231.75
2.	Equipment Rental	132.00
3.	Field Work, D.R. Cochrane P. Eng. 3 days @ $136	408.00
4.	Data Processing - Report and Map Preparation	630.50
5.	Assaying 8 samples @ $14.50 each	116.00
	TOTAL	$1518.25

D.R. Cochrane P. Eng.,
August 22, 1973
Delta, B.C.

B. Arcadia Explorations Costs

PLUS 3 DAYS LABOR G. WILLIAMSON
AND CAMP EXPENSES AND TRANSPORTATION $345.12

$1863.37

Declared before me at the City of Vancouver, in the Province of British Columbia, this 27 day of December, 1973, A.D.

G.H. Williamson

A. Jeanotte

APPENDIX IV

Instrument Specifications

A. SHARPE SE 300 EM UNIT

DESCRIPTION: Unit consists of two identical loops, transmitters and receivers, each will center zero type meters on the coils and earphones for null positioning

OPERATING FREQUENCIES: Lo 400 Hz, Hi 1600 Hz

MAXIMUM COIL SEPARATION: Approximately 1000 feet

SIZE OF CREW: 2

SWITCHES: 5 position; Transmit Hi, Transmit Lo, off receive lo, receive hi. Tuning knob in addition

POWER: Two Sportsman 6 volt dry cells

B. SELF POTENTIAL

MANUFACTURED BY: Terra Physics, Salt Lake City, Utah

METER: Center zero, ±50, ±100 divisions, visual

RANGES: ±50 m.v. ±100, ±500, ±1000 m.v.

ZERO: by 10 tum 10K potentiometer

POWER: Two 9 volt transistor radio batteries

Cochrane Consultants Limited
4000 Delta Street, Delta B.C. (604) 946-9221

48

October 12, 1973

Arcadia Explorations Limited,
P.O. Box 35368 Stn. E,
2021 West 42nd Avenue,
Vancouver 13, B.C.

Attention: Mr. G. Williamson

Re: Brunswick Project

During the period September 21 to September 24, 1973, the author and Mr. G. Williamson supervised bulldozer trenching on the "Brunswick" property, Rocher de Boule range, near Hazelton, B.C. Two trenches were excavated, trench #1 being located between the upper and lower adits, and bedrock was not obtained at a depth of approximately 16 feet at the deepest point.

Trench #2 was excavated to bedrock from 125 feet to 200 feet north (uphill) of the upper adit and across the projected strike of the vein. A well cemented (limonite) gossan was exposed, and covered a 30 foot wide diorite dike which is subparallel with the vein. The dike contains disseminated pyrrhotite, arsenopyrite, chalcopyrite and traces of galena and molybdenite in siliceous fractures. The vein was not uncovered, and the following possibilities exist:

1. the Brunswick vein "splays" in this area
2. the vein is faulted off
3. the vein plunges steeply and therefore pinches on surface within the "new" trench area

The author collected a series of chip samples across the trench and the following results were obtained:

Location	Cu(%)	Ag(oz/ton)	Au(oz/ton)
Grabs from upper portion of trench	0.037		
0' to 30' E in trench	0.023	0.04	.001
30' to 60' E in trench	0.029		
60' to 90' E in trench	0.035		

(Min-En Laboratories Certificate of Assay #555)

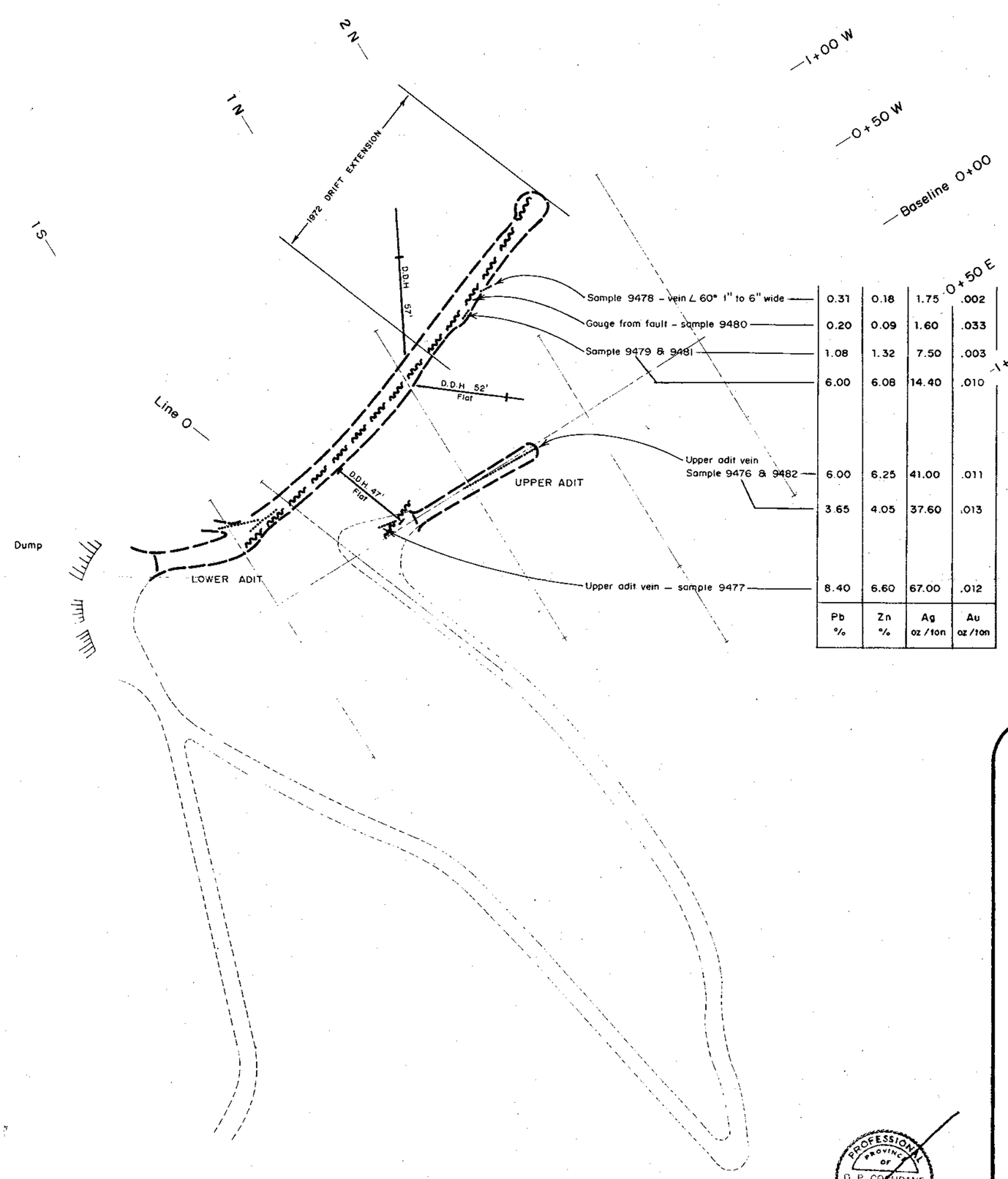
The values of course are far to low to be of commercial interest. It is suggested that field work be suspended on the Brunswick project and a review of available data be made.

INVOICE FOR THIS REPORT $675.00

Yours truly,

D.R. Cochrane P. Eng.

DRC/hlk rev



Pb %	Zn %	Ag oz/ton	Au oz/ton
0.31	0.18	1.75	.002
0.20	0.09	1.60	.033
1.08	1.32	7.50	.003
6.00	6.08	14.40	.010
6.00	6.25	41.00	.011
3.65	4.05	37.60	.013
8.40	6.60	67.00	.012

Legend:

- Cliff
- Road
- Picket Line
- Outline of adit
- Vein
- D.D.H. — Diamond Drill Hole
- Fault

Arcadia Explorations Limited (N.P.L.)

Brunswick Project
Omineca Mining Division
Hazelton Area, British Columbia
Bill Claims

VEINS and ASSAYS — UNDERGROUND WORKINGS

N.T.S. 93M/4 (E.half)
Scale: one inch equals 50 feet
Drawn: B.C.

0 25 50 FEET 100 150

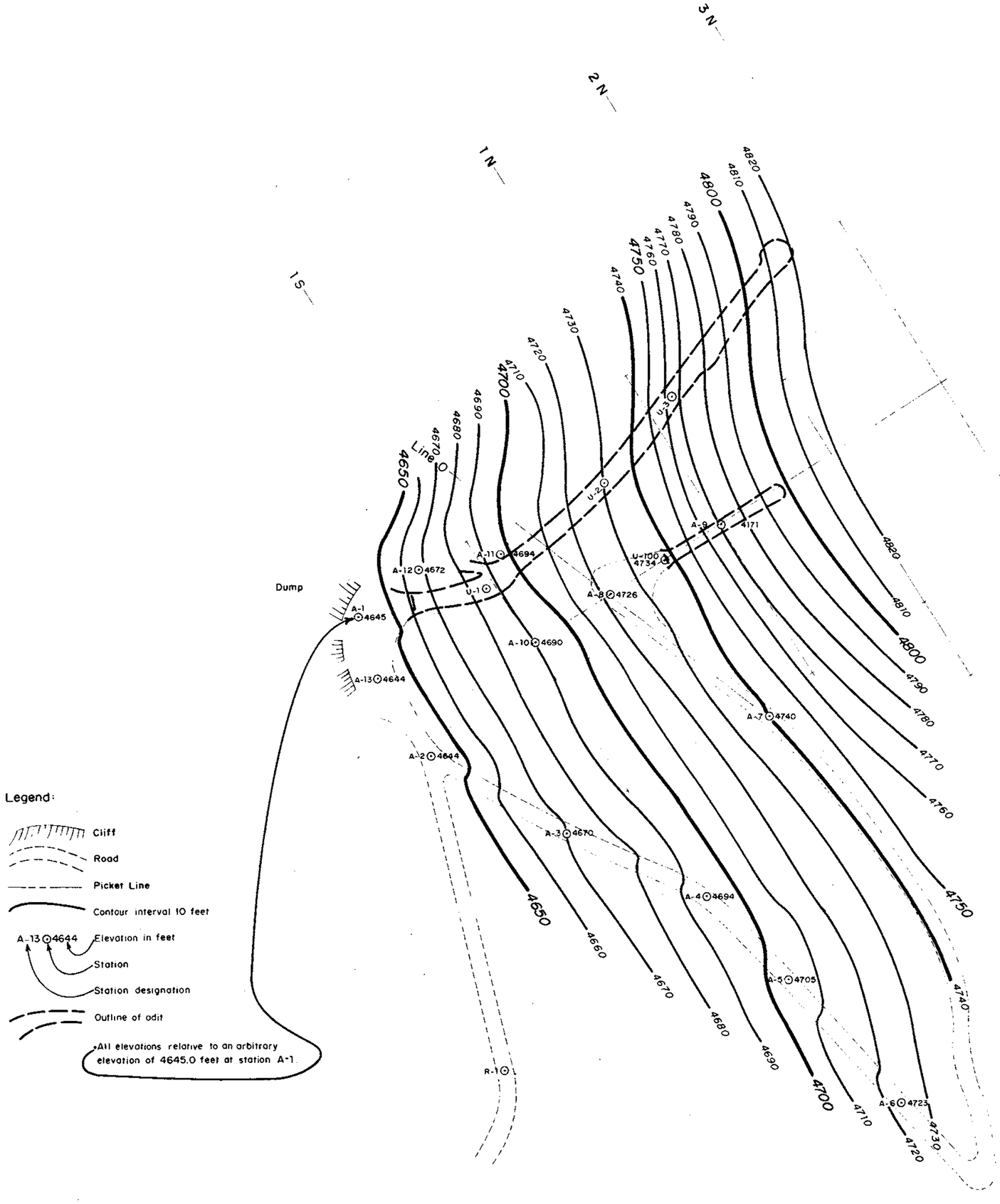
To accompany a report by D.R. Cochrane, P.Eng.
dated August 10, 1973.

FIGURE 3

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

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. R. COCHRANE

4839 M3



Legend:

- Cliff
- Road
- Picket Line
- Contour interval 10 feet
- A-13 4644 — Elevation in feet
- Station
- Station designation
- Outline of adit

*All elevations relative to an arbitrary elevation of 4645.0 feet at station A-1.

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4839 MAP #4

Arcadia Explorations Limited (N.P.L.)

Brunswick Project
Omineca Mining Division
Hazelton Area, British Columbia
Bill Claims

SURVEYING and TOPOGRAPHIC PLAN

N.T.S. 93M/4 (E.half)
Scale: one inch equals 50 feet
Drawn: B.C.

0 25 50 FEET 100 150

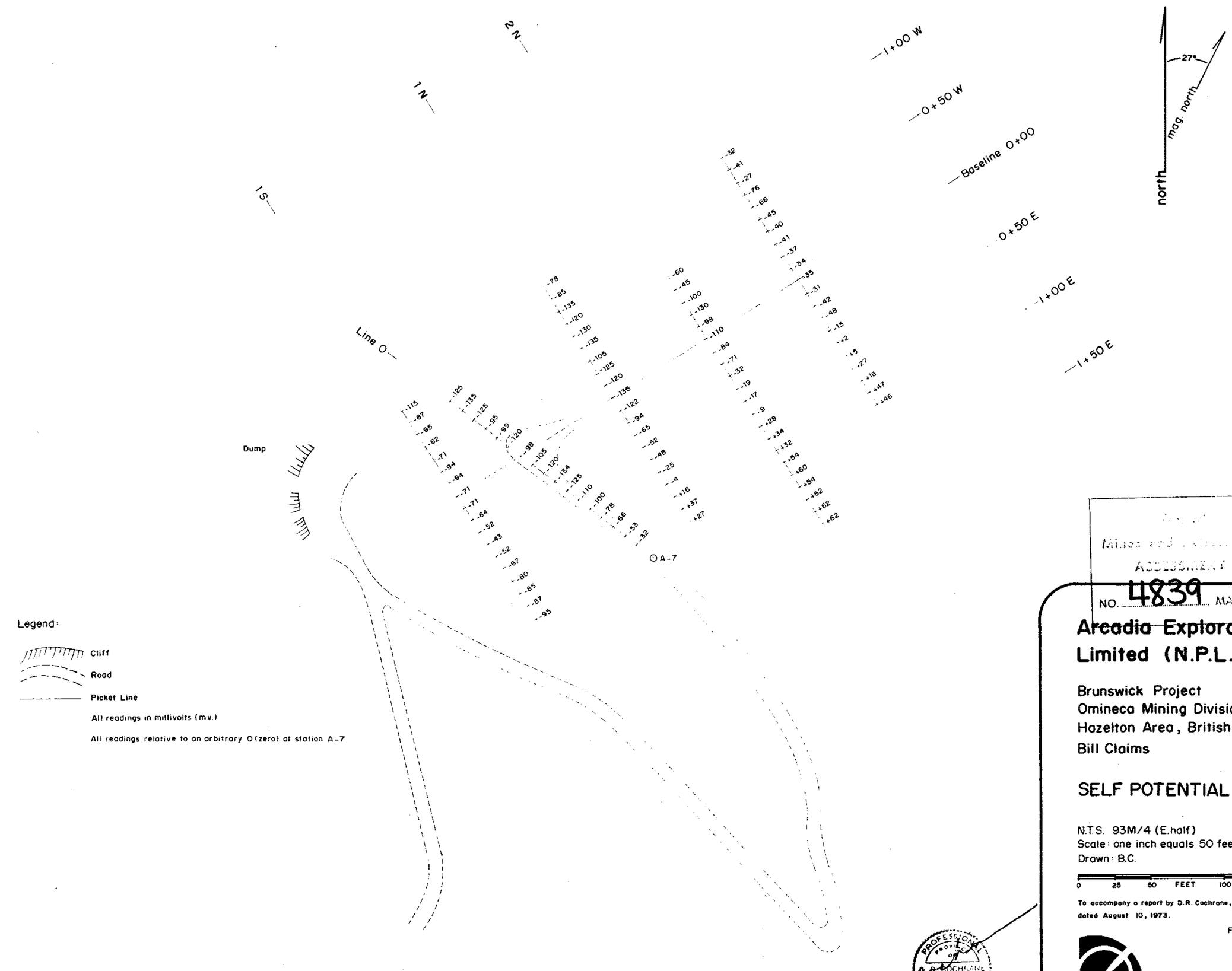
To accompany a report by D.R. Cochrane, P.Eng.
dated August 10, 1973.

FIGURE 4

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — D. R. COCHRANE

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

4839 M4



Legend:

Cliff

Road

Picket Line

All readings in millivolts (m.v.)

All readings relative to an arbitrary 0 (zero) at station A-7

Arcadia Explorations Limited (N.P.L.)

Brunswick Project
Omineca Mining Division
Hazelton Area, British Columbia
Bill Claims

SELF POTENTIAL DATA

N.T.S. 93M/4 (E.half)
Scale: one inch equals 50 feet
Drawn: B.C.

0 25 50 FEET 100 150

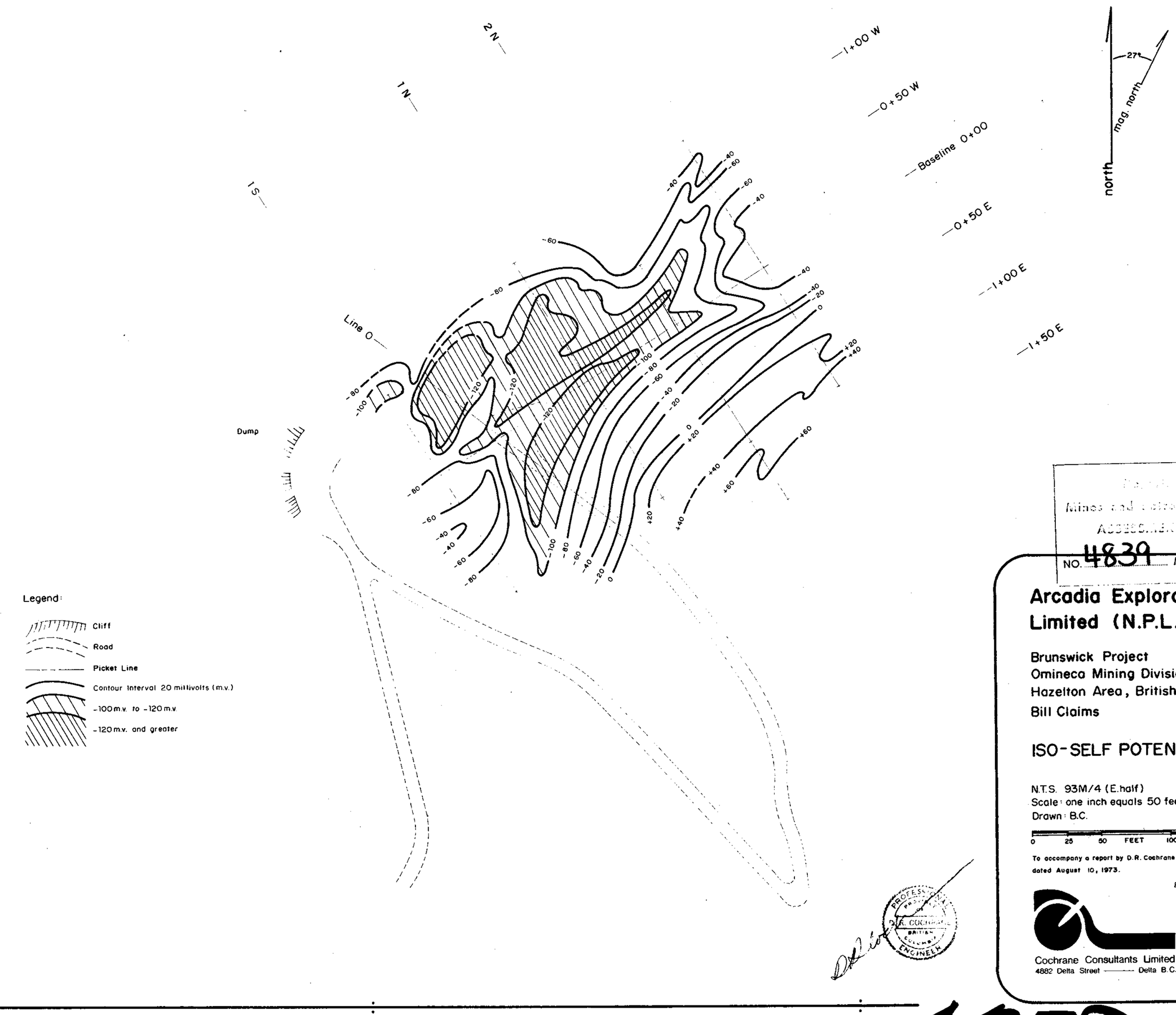
To accompany a report by D.R. Cochrane, P.Eng.
dated August 10, 1973.

FIGURE 5

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

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D.R. COCHRANE

4839 M5



Legend:

- Cliff
- Road
- Picket Line
- Contour Interval 20 millivolts (m.v.)
- -100 m.v. to -120 m.v.
- -120 m.v. and greater

Arcadia Explorations Limited (N.P.L.)

Brunswick Project
Omineca Mining Division
Hazelton Area, British Columbia
Bill Claims

ISO-SELF POTENTIAL PLAN

N.T.S. 93M/4 (E.half)
Scale: one inch equals 50 feet
Drawn: B.C.

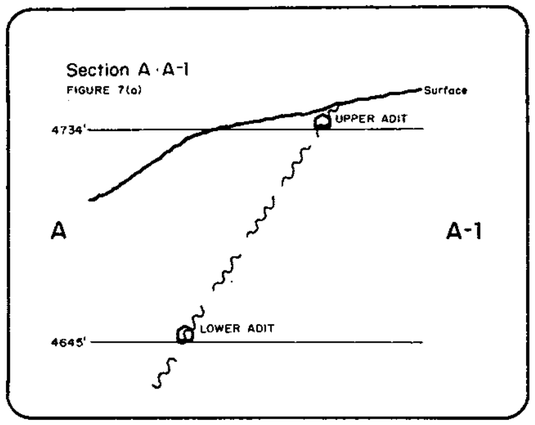
0 25 50 FEET 100 150

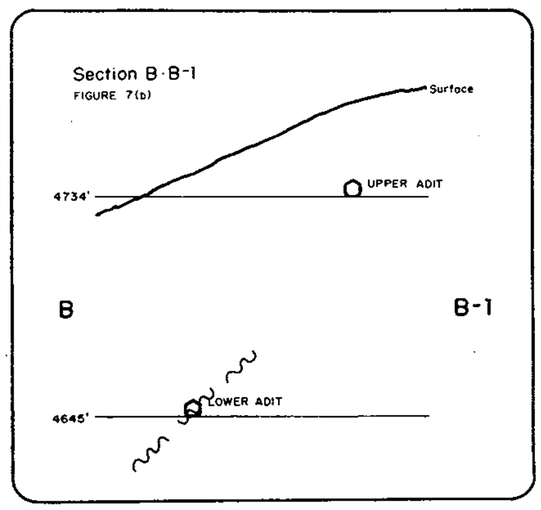
To accompany a report by D.R. Cochrane, P.Eng.
dated August 10, 1973.

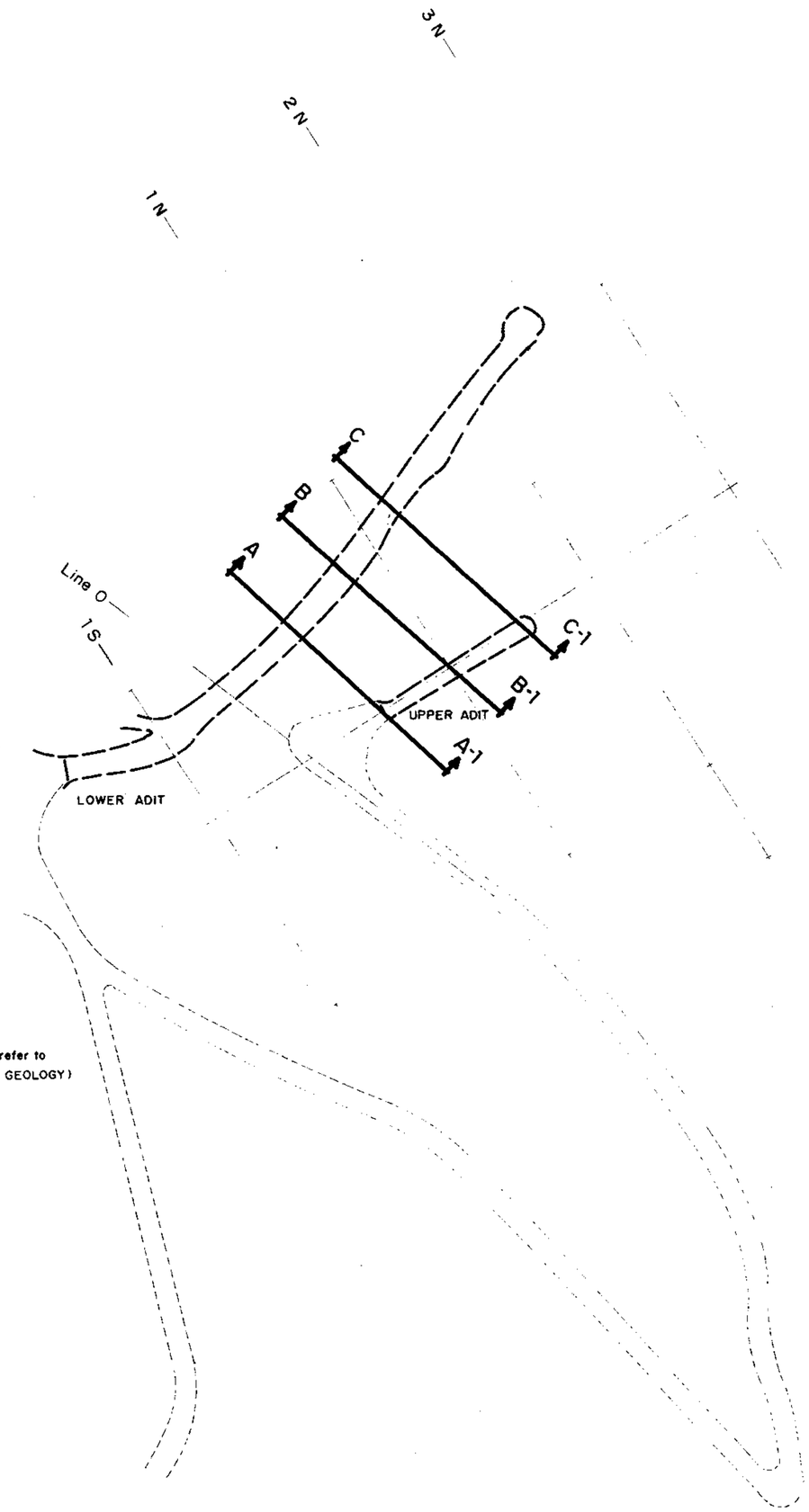
FIGURE 6

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

4839 M6

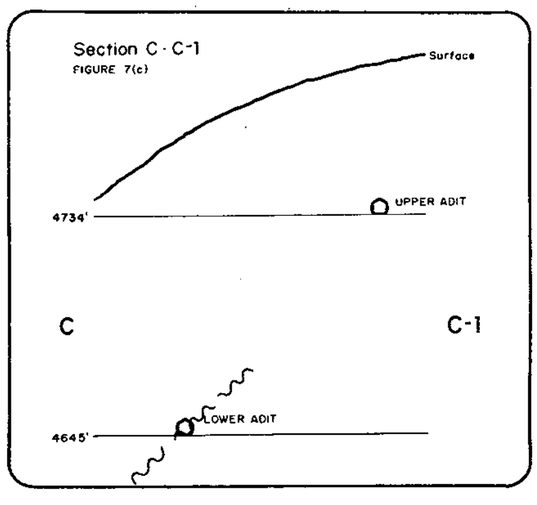






Legend:

- Cliff
- Road
- Picket Line
- Outline of adit
- Fault (note: refer to Figure 8 for GEOLOGY)



Arcadia Explorations Limited (N.P.L.)

Brunswick Project
Omineca Mining Division
Hazelton Area, British Columbia
Bill Claims

SECTIONS

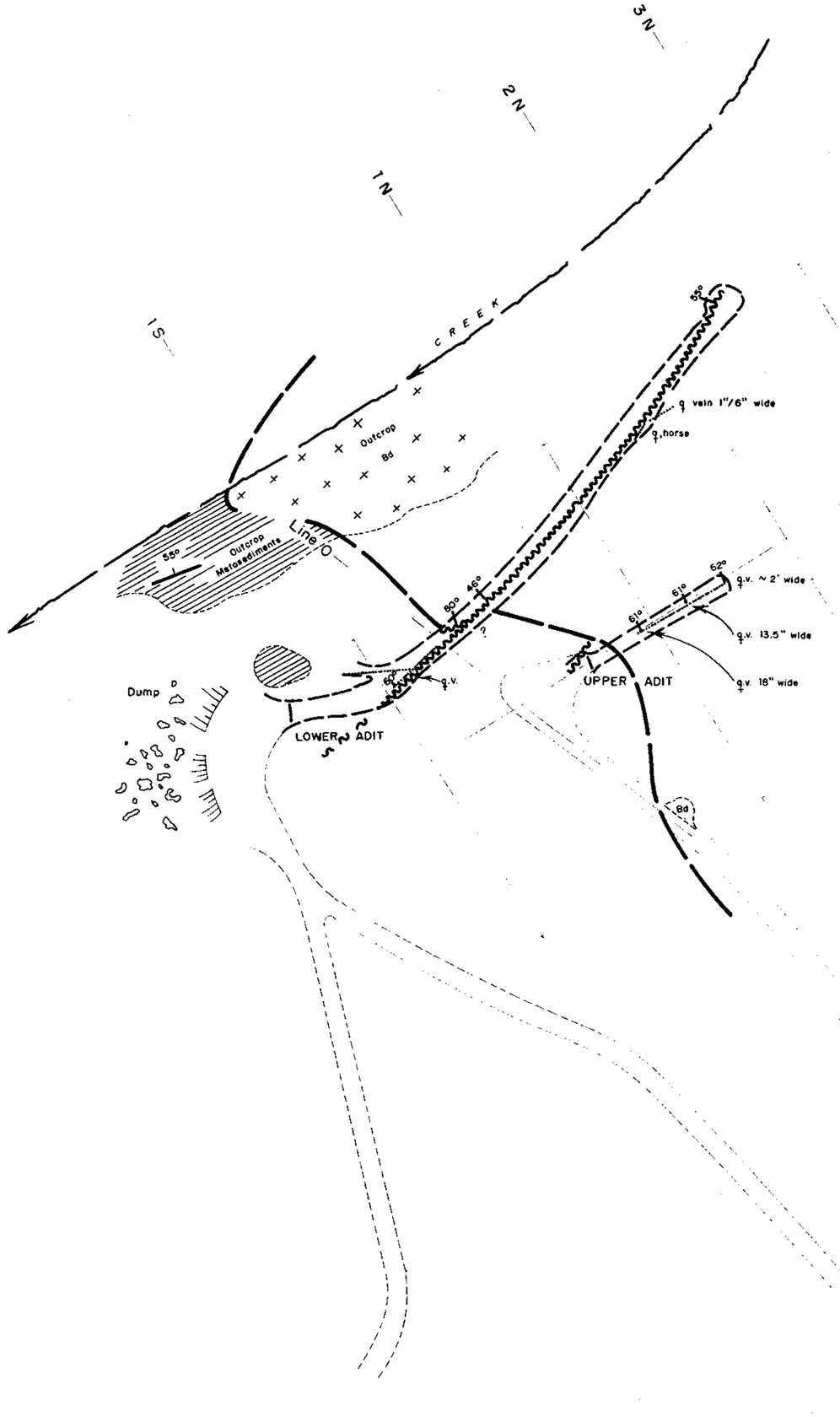
N.T.S. 93M/4 (E.half)
Scale: one inch equals 50 feet
Drawn: B.C.

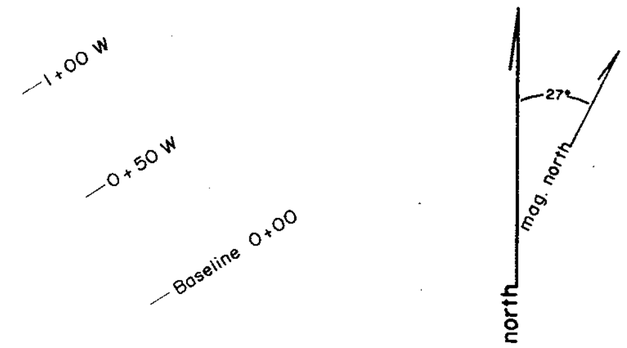
0 25 50 FEET 100 150

To accompany a report by D.R. Cochrane, P.Eng.
dated August 10, 1973.

FIGURE 7(a,b,c)

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





Legend:

- Cliff
- Road
- Picket Line
- Metasediments
- Diorite (Bd)
- Contact
- Outcrop
- Fault
- q.v. Quartz vein
- Outline of adit

Arcadia Explorations Limited (N.P.L.)

Brunswick Project
Omineca Mining Division
Hazelton Area, British Columbia
Bill Claims

GEOLOGY

N.T.S. 93M/4 (E.half)
Scale: one inch equals 50 feet
Drawn: B.C.

0 25 50 FEET 100 150

To accompany a report by D.R. Cochrane, P.Eng.
dated August 10, 1973.

FIGURE 8

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