

MAP NO. ASSESSMENT REPORT X
PROSPECTUS
CONFIDENTIAL X
OPEN FILE

DOCUMENT NO.: 092086
MINING DISTRICT: WHITEHORSE
TYPE OF WORK: Geochemical Survey

115 I 6

REPORT FILED UNDER: Big Creek Joint Venture

DATE PERFORMED: July 9, 1987 DATE FILED: February 3, 1988

LOCATION: LAT.: 62°16'N AREA: Mt. Freegold

 LONG.: 137°06'W VALUE \$: 400.00

CLAIM NAME & NO.: PEGGY 1, 2F-5F YA95146-YA96268

WORK DONE BY: C.A. Main

WORK DONE FOR: Big Creek Joint Venture

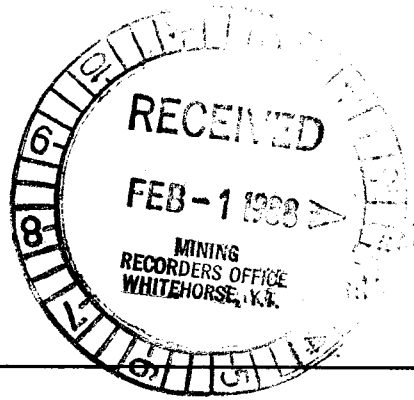
DATE TO GOOD STANDING	REMARKS:
	#34 LAFORMA
	# 33 ANTONIUK

ARCHER, CATHRO

• ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

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VANCOUVER, B. C. V6B 1L8



(604) 688-2568

REPORT ON
GEOCHEMICAL SURVEY
ANTONIUK PROPERTY
MT. FREEGOLD, YUKON TERRITORY

Mayflower	Lease 2751
Baker	Lease 2765
Connie	Lease 2766
Jim	Lease 2768
Donalda 1-9	Lease 2773-81
Donalda 13	Lease 2782
Nat 1-29	YA86843-YA86871
Nat 30F-33F	YA93013-YA93016
Peggy 1	YA95146
Peggy 2F-4F	YA95147-YA95149
Peggy 5F	YA96268

Latitude 62°16' Longitude 137°06' NTS 115I/6

Whitehorse Mining District


BIG CREEK JOINT VENTURE

C.A. Main, B.Sc.

Work done July 9, 1987

092086

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 400,000.



for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

TABLE OF CONTENTS

	<u>PAGE</u>
Summary and Recommendations	1
Introduction	3
Property, Location and Access	4
Physiography and Geomorphology	5
History and Previous Work	6
Geology and Mineralization	7
Geochemical Survey	8

APPENDICES

Appendix One Statement of Qualifications

Appendix Two List of Employees

LIST OF FIGURES

<u>FIGURE</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
A-1	Location Map	Follows Page 4
A-2	Property Location Map	Follows Page 4
A-3	Claim Location Map	Follows Page 4
A-4	Geology and Gold Geochemistry	Follows Page 7

SUMMARY AND RECOMMENDATIONS

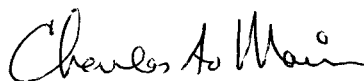
Gold mineralization was first discovered about 1931 at the Rambler Vein, which is adjacent to the Antoniuk deposit. A geochemical survey in 1974 led to discovery of the Antoniuk mineralization which was drilled in 1975, 1981 and 1986, and bulldozer trenched in 1985 and 1987. The Peggy claims, which are part of the Antoniuk property, lie to the southwest of the Antoniuk deposit. The 1987 program, discussed in this report, consisted of a soil geochemical survey over part of the Peggy claims. The program was managed by Archer, Cathro & Associates (1981) Limited on behalf of Big Creek Joint Venture [Big Creek Resources Ltd., formerly Nordac Mining Corporation (66.7%) and Rexford Minerals Ltd. (33.3%)], which has optioned the property from Discovery Mines Ltd.

The geochemical survey did not show any anomalous response in gold, with maximum values only ranging up to 35 ppb Au. The Peggy claims lie to the southwest of the Pal Fault, a prominent northwesterly-trending structure, and are underlain by Jurassic syenite and Cretaceous granodiorite. The low geochemical response indicates that the area of the Peggy claims tested by the geochemical survey does not host gold mineralization similar to that found on the northwest side of the Pal Fault, such as the G3 and Rambler Veins or the Antoniuk porphyry gold deposit.

The geochemical results of this survey are negative and no further work is warranted on the surveyed part of the claims. However, no conclusion can be made about the unexplored balance of the Peggy claims and, considering the close proximity to gold mineralization, geochemical exploration of the rest of the Peggy claims is warranted.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

A handwritten signature in cursive script that reads "Charles A. Main".

C.A. Main, B.Sc.

/mc

INTRODUCTION

The Antoniuk property covers an oxidized heap leach gold target that was acquired by Archer, Cathro & Associates (1981) Limited through option and staking in March, 1985. The option was assigned to Big Creek Resources Ltd. (formerly Nordac Mining Corporation) and explored later in the year in a joint venture with Permian Resources Ltd. A 1986 program of grid diamond drilling served as the basis of mineral reserve calculations and provided samples for metallurgical testing. In 1987, Big Creek Resources Ltd. formed Big Creek Joint Venture (BCJV) with Rexford Minerals Ltd. to continue development. The 1987 program, which cost approximately \$45,000, consisted of bulldozer trenching and excavator test pitting on the Antoniuk deposit and geochemical sampling of the Peggy claims. It was planned and managed by Archer, Cathro with C.A. Main serving as project manager. The work on the Peggy claims was performed by field assistants F. Andersen and G. MacIntosh.

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PROPERTY, LOCATION AND ACCESS

The Antoniuk property consists of fourteen surveyed and leased claims which are held under an option agreement and amending agreement dated March 12, 1985 and September 10, 1987, respectively, with Discovery Mines Ltd. of Toronto and 38 adjoining mineral claims which were acquired by staking during 1985 and 1986 and are part of the same agreements. Claim details are listed below.

<u>Name</u>	<u>Number</u>	<u>Lease Number</u>	<u>Expiry Date</u>
Surveyed and Leased Claims			
Mayflower	1	2751	March 19, 2001
Baker	1	2765	March 19, 2001
Connie	1	2766	March 19, 2001
Jim	1	2768	March 19, 2001
Donalda 1-9	9	2773-81	March 19, 2001
Donalda 13	<u>1</u>	2782	March 19, 2001
	14		
Mineral Claims			
Nat 1-29	29	YA86843-YA86871	June 5, 1988*
Nat 30F-33F	4	YA93013-YA93016	August 12, 1988*
Peggy 1	1	YA95146	July 14, 1988*
Peggy 2F-4F	3	YA95147-YA95149	July 14, 1988*
Peggy 5F	<u>1</u>	YA96268	September 19, 1988*
	38		

* assessment work will be applied to these claims

The Antoniuk property is situated on Mt. Freegold, which lies at the southeast end of the Dawson Range (see Figures A-1 to A-3 on the following pages), 65 km by all-weather road northwest of Carmacks, Y.T. It is located at latitude 62°16'N and longitude 137°06'W within NTS claim sheet 115I/6.

The 1987 program was conducted from a permanent campsite situated 700 m east of the former LaForma Mine and 900 m west of the Carmacks Road turnoff. Travel between camp and the deposit was by means of four-wheel drive vehicle.

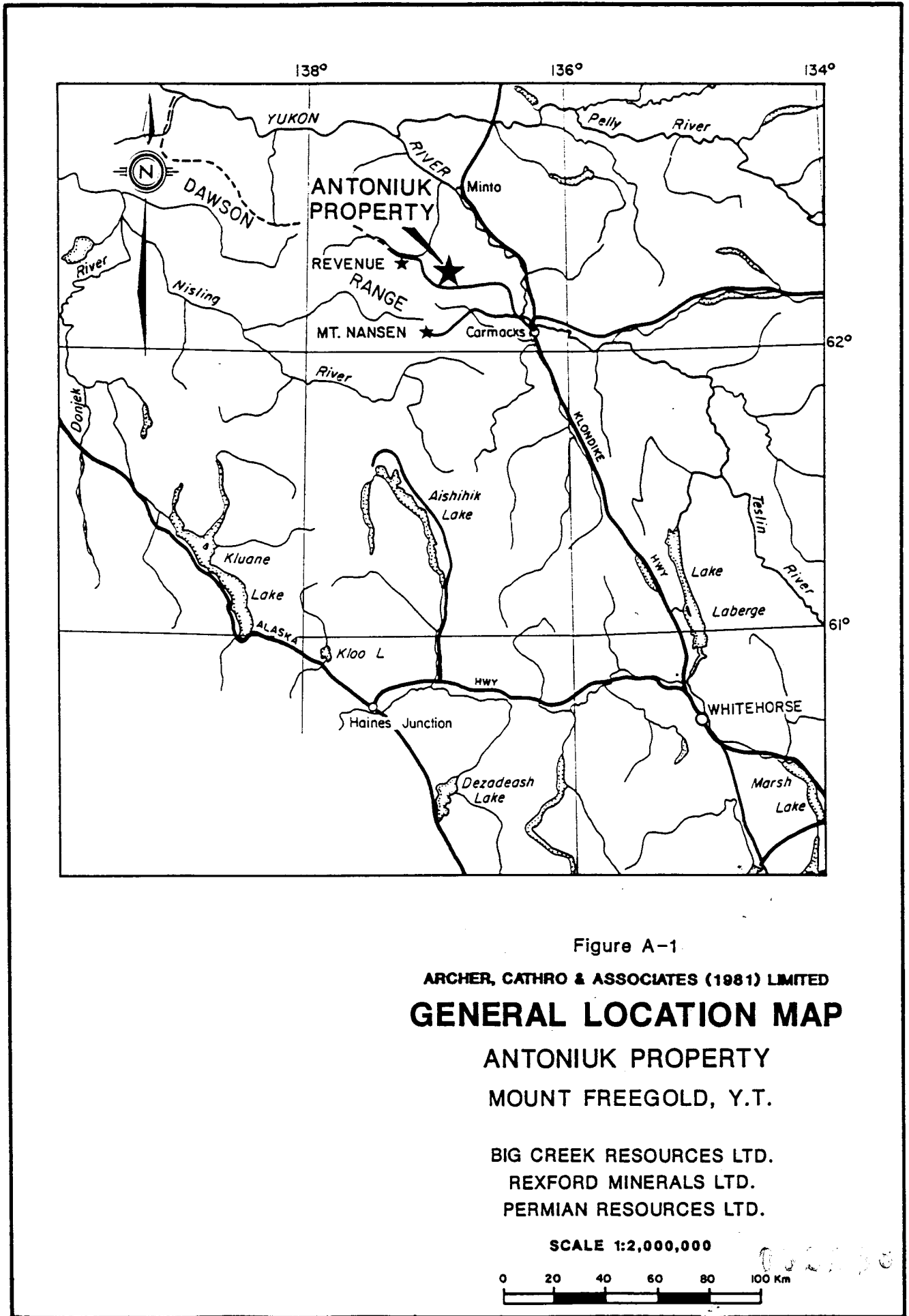


Figure A-1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
GENERAL LOCATION MAP

ANTONIUK PROPERTY
 MOUNT FREEGOLD, Y.T.

BIG CREEK RESOURCES LTD.
 REXFORD MINERALS LTD.
 PERMIAN RESOURCES LTD.

SCALE 1:2,000,000



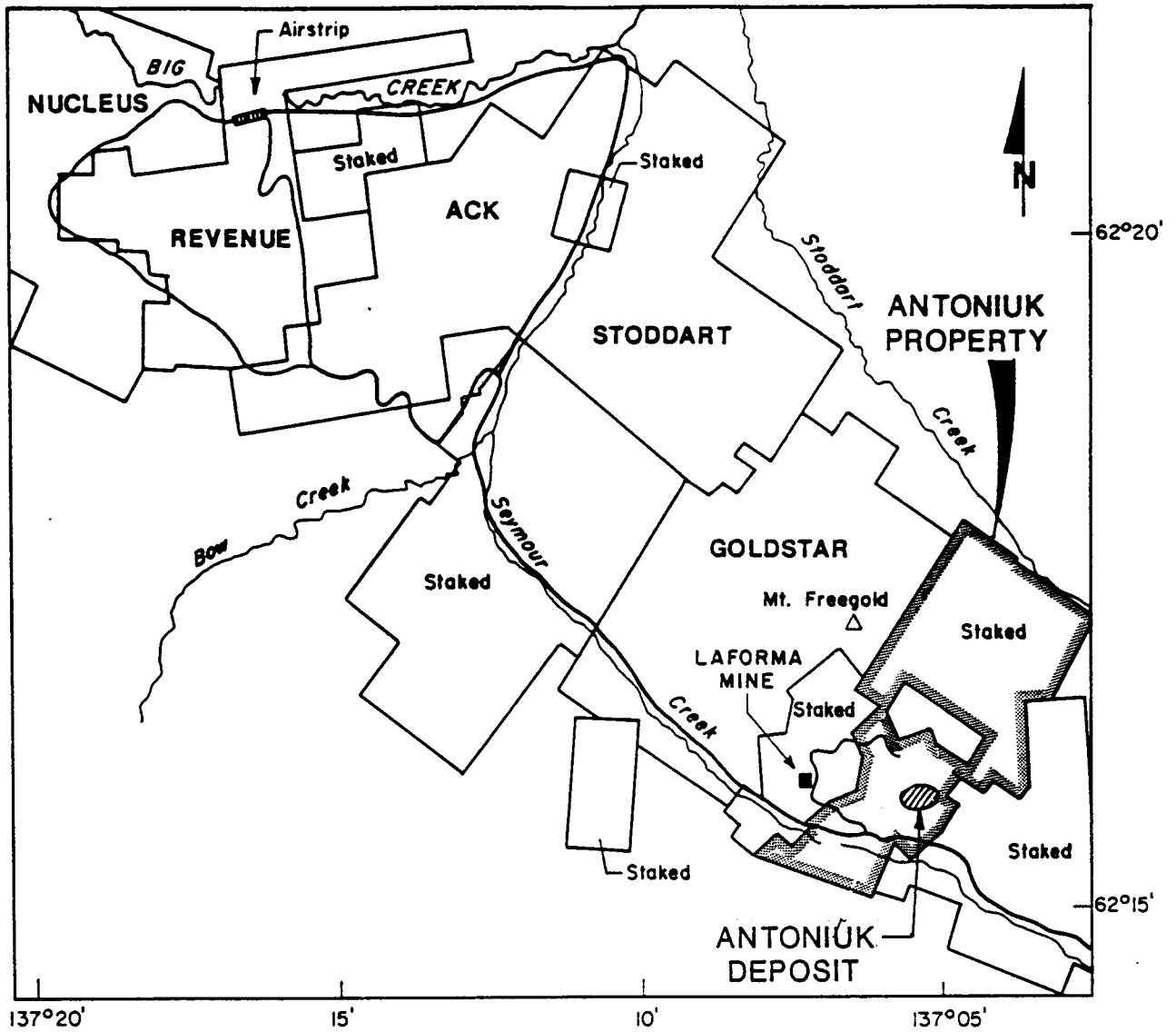


Figure A-2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PROPERTY LOCATION MAP

ANTONIUK PROPERTY

MOUNT FREEGOLD, Y.T.

BIG CREEK RESOURCES LTD.

REXFORD MINERALS LTD.

PERMIAN RESOURCES LTD.

SCALE 1:100,000



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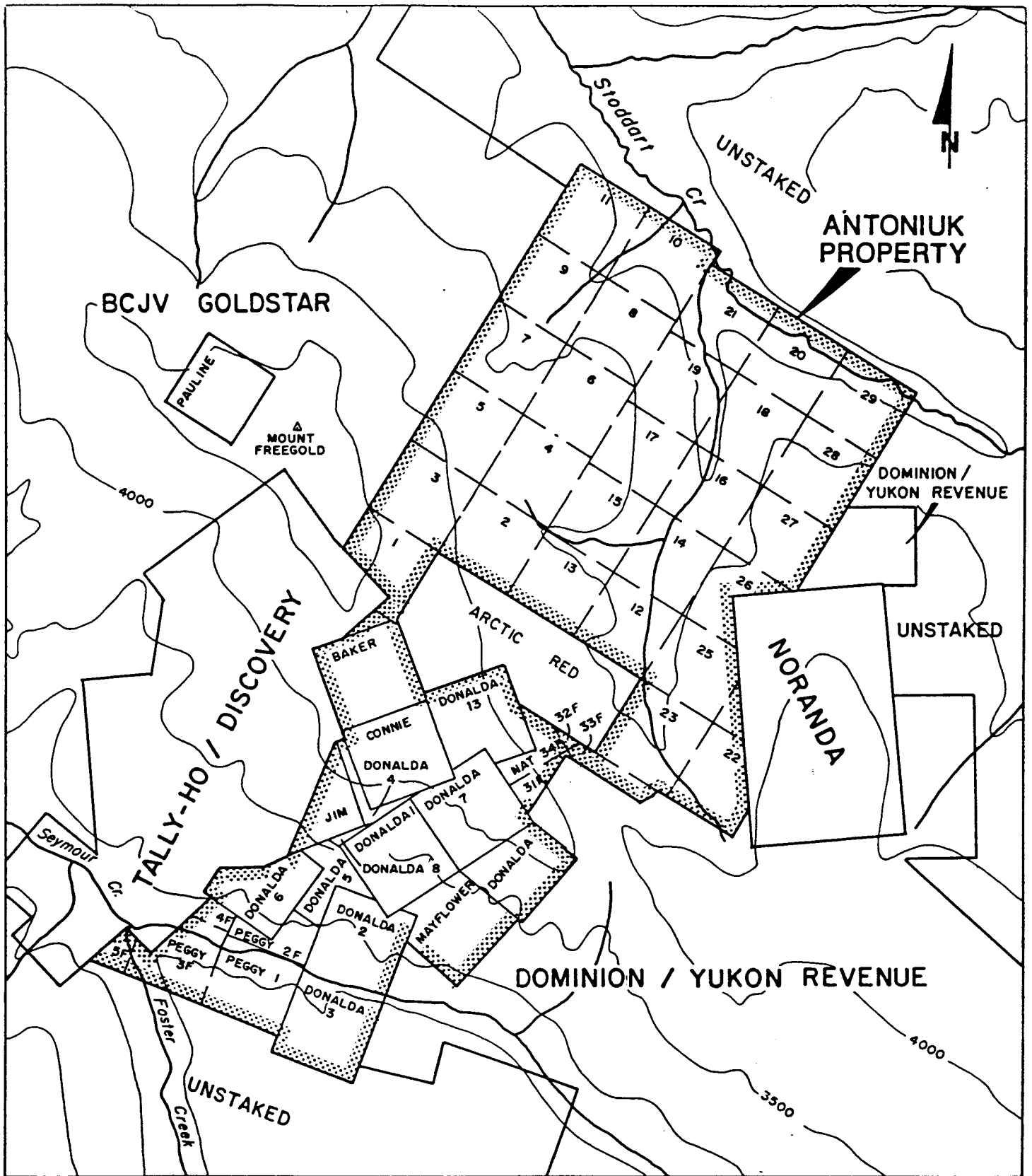


Figure A-3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

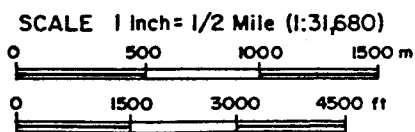
CLAIM LOCATION MAP

ANTONIUK PROPERTY

BIG CREEK RESOURCES LTD.

REXFORD MINERALS LTD. 092086

PERMIAN RESOURCES LTD.



PHYSIOGRAPHY AND GEOMORPHOLOGY

The Antoniuk property lies on the east side of Mt. Freegold covering a broad, gentle sloping ridge separating Seymour Creek to the south and Stoddart Creek to the north. Seymour Creek has cut a deep V-shaped valley and, the south facing part of the property adjacent to Seymour Creek, where the Peggy claims are located, is much steeper than the rest of the property with slopes locally exceeding 30°. Local elevations range from 850 m on the floor of Seymour Creek Valley to 1300 m on the crest of the ridge. Vegetation ranges from spruce and poplar trees on south- and east-facing hills to stunted black spruce and thick moss on north- and west-facing slopes.

Soil profiles typically include 1 to 10 cm of "A" horizon organics, 0 to 100 cm of volcanic ash, 5 to 50 cm of "B" horizon soil and 100 to 300 cm of "C" horizon soil over deeply weathered bedrock. Glacial and fluvial deposits are rare except perhaps on the floor of Seymour Valley. Permafrost is extensive, particularly on north- and west-facing slopes. Outcrop and talus is restricted to ridge crests and steep southeast-facing slopes.

HISTORY AND PREVIOUS WORK

The Antoniuk property has a long work history, extending back to 1931, when it was first located by Afe Brown and George Fairclough during the staking rush triggered by Fred Guder's 1930 discovery of gold veins near the northwest end of Mt. Freegold. After the initial claims lapsed, they were restaked as the Mayflower and Donalda claims in November, 1939.

Exploration between 1931 and 1974 was directed towards gold-bearing quartz veins resembling the G-3 Vein at the LaForma Mine. It included four adits between 7 to 45 m long, ten diamond drill holes (+ 300 m) and approximately 50 hand trenches and 40 bulldozer trenches to bedrock, most of which were performed on the Rambler Vein. This early exploration gave disappointing results.

Commencing in 1965, Discovery performed mapping of the property in conjunction with development of the LaForma Mine which they put into production the same year. A geochemical sampling program was conducted over the Discovery claims in 1974 under the direction of Terry Antoniuk and that survey outlined a strong gold-arsenic anomaly in soil extending about 500 by 300 m. This anomaly outlined low grade gold mineralization associated with poorly exposed porphyritic and brecciated intrusive rocks, which is now called the Antoniuk deposit. Subsequent exploration included further detailed mapping, soil sampling, geophysical surveys, ten diamond drill holes (1393 m) in 1975 and ten diamond drill holes (1193 m) in 1981. The 1981 work was financed by Arctic Red Resources Corp. under a brief option.

In 1985, the Antoniuk property was optioned by Archer, Cathro and assigned to Big Creek Resources and Permian Resources. Later that year, about 4950 m of bulldozer trenches were excavated and sampled and eight rotary percussion holes were drilled. Preliminary metallurgical testing was undertaken in 1985. The 1985 field work was summarized in two reports by R.J. Cathro and J.T. Dennett, dated December 20, 1985 and February, 1986. In 1986, twenty-two NQ and two HQ holes were drilled. The 1986 field work is described in a report by R.J. Cathro and C.A. Main dated November, 1986.

GEOLOGY AND MINERALIZATION

The geology of the Peggy claims, shown on Figure A-4 on the following page, is a summary of observations during exploration as well as the regional interpretation by the Department of Indian Affairs and Northern Development (DIAND) in Open File 1987-2. The Peggy claims are underlain by Early Jurassic Mount Freegold orthoclase-hornblende porphyritic syenite intruded by Early Cretaceous Dawson Range Suite Casino granodiorite. There is no evidence on the Peggy claims of later porphyritic dykes or breccias similar to those found at the Antoniuk deposit located 1000 m to the northeast.

No gold or sulphide mineralization has been found or reported from the Peggy claims.

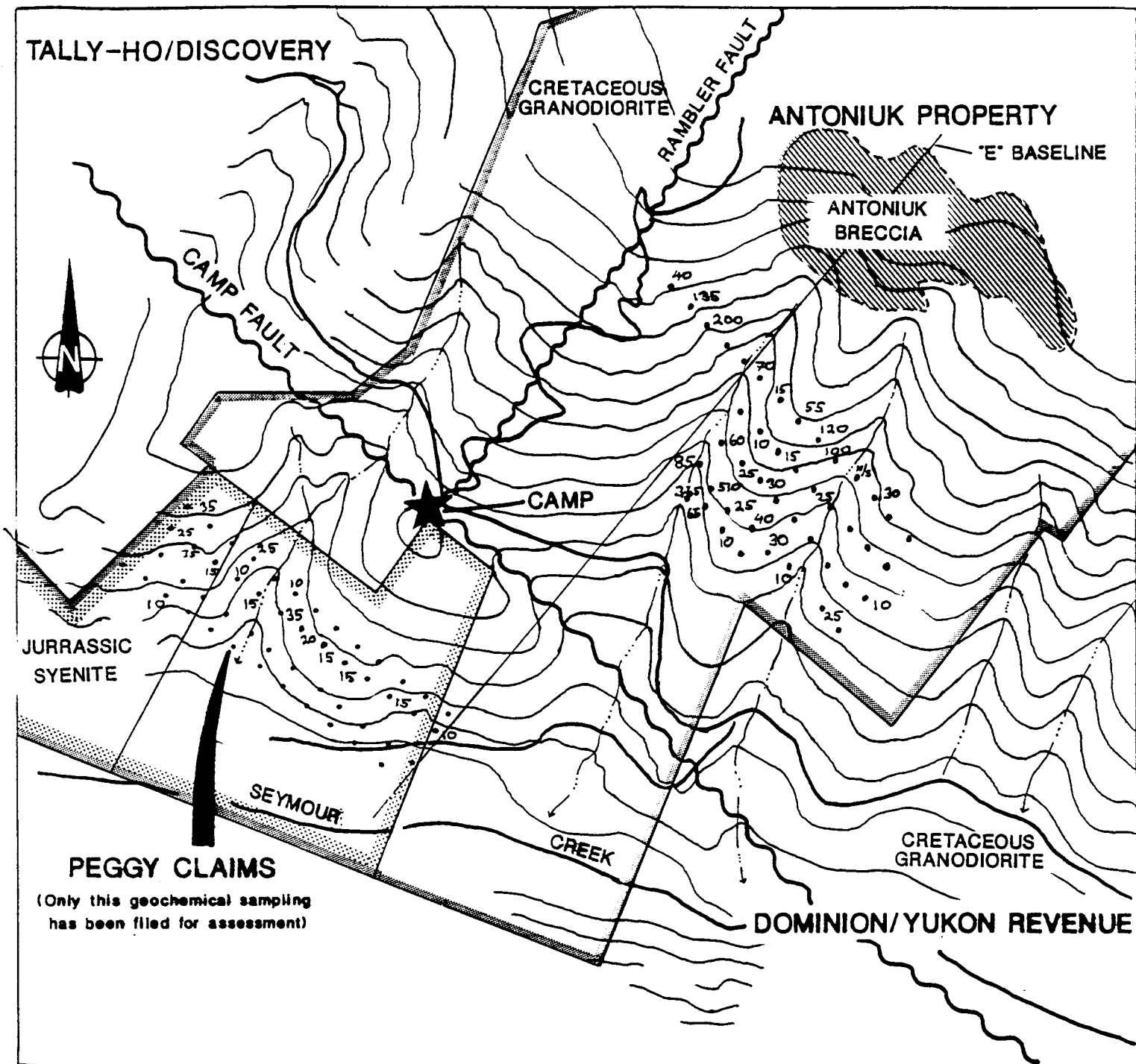


FIGURE A-4

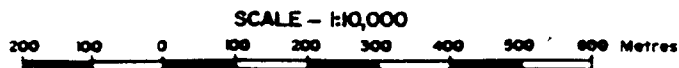
LEGEND

- SAMPLE LOCATION
- 5/0 SOIL GEOCHEM VALUE
IN PPB AU (Only values >10ppb are plotted)
- ROAD

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**GEOLOGY AND
GOLD GEOCHEMISTRY**

**ANTONIUK PROPERTY
BIG CREEK JOINT VENTURE
FREEGOLD MOUNTAIN, Y.T.**



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GEOCHEMICAL SURVEY

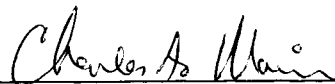
In 1987, a geochemical survey was conducted over the Peggy claims. The original 'E' baseline established in 1974 by Discovery was rechaind and extended to the south and crosslines were established by compass and hipchain. Sample sites were located at 50 m intervals on lines 50 m apart. All samples were collected in numbered kraft bags and analyzed for gold at Chemex Labs Ltd., North Vancouver, B.C. by fire assay followed by atomic absorption measurement for gold content. A portion of the original sample was digested in nitric acid and aqua regia and measured by an Inductively Coupled Plasma technique for the content of 32 elements. No anomalous values were noted although a number of samples contain from 20 to 35 ppb Au.

APPENDIX I
AUTHOR'S STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Charles A. Main, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1971 with a B.Sc. majoring in Geological Sciences and Chemistry.
2. I have been actively engaged as a geologist in mineral exploration since 1971 and as a partner of Archer, Cathro & Associates (1981) Limited since June 1, 1981.
3. I have personally participated in or supervised the field work reported herein.



Charles A. Main, B.Sc.

APPENDIX II

PERSONNEL

NAME

POSITION

DATES ON PROPERTY

C.A. Main

Geologist

July 9

F. Andersen

Fieldman

July 9

G. MacIntosh

Fieldman

July 9