

ARCHER, CATHRO

& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

VANCOUVER, B.C. (604) 688-2568

Box 4127, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415

1016 - 510 WEST HASTINGS STREET
VANCOUVER, B.C. V6B 1L8



REPORT ON

GEOLOGICAL AND GEOCHEMICAL SURVEYS
CONDUCTED JULY 17 - AUGUST 20, 1980

FYIQ 1-8 CLAIMS - YA55525-YA55532
FYIQ 9-16 CLAIMS - YA56312-YA56319



WATSON LAKE MINING DISTRICT

CLAIM SHEET 95E/3

CUB JOINT VENTURE

Latitude 61°13'N Longitude 127°26'W

C.A. Main, B.Sc.

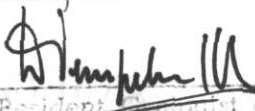
R.J. Cathro, B.A.Sc., P.Eng.

January 15, 1981

090735

This report has been examined by the Geological Evaluation Unit and is recommended to the Council to be considered as representing the amount of


\$ 2400.00



Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

 Commissioner of Yukon Territory



090732

FROM Mining Recorder at WATSON LAKE

TO: Supervising Mining Recorder at Whitehorse, Y.T.



FOR ACTION ARE:

NEW APPL'N for PLACER LEASE to PROSPECT: Name:

RENEWAL APPL'N PLACER LEASE to PROSPECT: Name:

Lease No.

AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name:

Lease No.

ASSIGNMENT of PLACER LEASE No.
From: To:

GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner:

DIAMOND DRILL LOGS:
Claims:

Claim sheet no.

QUARTZ ASSESSMENT REPORT
Claims: FY1Q 1-16

Claim sheet no.

95-E-3

Type of report:

Geological + Geochemical

Submitted by:

Archer, Cathro + Assoc. LTD.

Cls. work performed on:

FY1Q 1-8

\$ Req. for ren. application

\$ 2,400⁰⁰

[Signature]
Signature

REPLY ACTION.

Date Ret.

090735

Signature

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SUMMARY AND RECOMMENDATIONS

The FYIQ claim group is located within the Logan Mountains of eastern Yukon. It was staked by CUB Joint Venture to cover low grade lead/zinc/copper mineralization developed adjacent to a Cretaceous batholith within lower Paleozoic (?) sediments. The mineralization outcrops along the side of a glacial outwash channel and the extent of mineralization is difficult to determine since outcrop is scarce away from this outwash channel. A small soil geochemical survey around the showing indicates that anomalous lead and zinc geochemical values extend well away from the showing. Additional work is recommended to determine the extent and nature of mineralization, particularly if the showing is shale hosted and hence has the potential for large tonnage.

INTRODUCTION

The FYIQ claim group was staked in July and August, 1980 by CUB Joint Venture (Cassiar Asbestos Corporation Ltd., Highland Crow Resources Ltd. and Union Carbide Canada Ltd.). The program was managed by C.A. Main of Archer, Cathro and Associates Ltd.

The property covers a small lead/zinc/copper-bearing skarn (?) zone developed along the contact between Paleozoic (?) limestones or limy shales and a Cretaceous pluton.

Geological mapping and grid geochemical sampling were conducted by C.A. Main between July 17 and August 20.

PROPERTY, LOCATION AND ACCESS

The property consists of 24 contiguous claims recorded in the name of Archer, Cathro & Associates Limited at the Watson Lake Mining Recorder's office as follows:

<u>Claim Name</u>	<u>Grant Numbers</u>	<u>Expiry Date</u>
FYIQ 1-8	YA55525-YA55532	16 July 1981
FYIQ 9-16	YA56312-YA56319	15 August 1981

The FYIQ property is situated near the headwaters of the Coal River at 61°13'N, 127°26'W; 60 km SSE of Tungsten and 50 km east of the Nahanni Range Road. Access in 1980 was by helicopter from a base camp at Cristos Lake, Y.T., 20 km east.

FIELD AND ANALYTICAL PROCEDURES

The 1980 program was a small geochemical orientation survey. Approximately 130 grid soil samples were collected from the B soil horizons (where possible) at 50 m intervals on lines spaced about 100 m apart. The sample lines were located using compass and hip-chain and sample sites were marked with 0.5 m lath pickets.

The samples were shipped by air freight to Chemex Labs Ltd., North Vancouver, B.C. where they were dried, screened to a minus 80 mesh fraction and analyzed for lead and zinc using a nitric-perchloric acid extraction and atomic absorption spectrometry. A portion of the minus 80 mesh fraction from each sample was stored at the lab.

GEOMORPHOLOGY

The geomorphology of the FYIQ property, unlike most areas with similar geology further north within the Logan Mountains, consists of relatively subdued rolling hills below timberline. The Coal River valley, adjacent to the east, is

particularly wide and overburden is unusually extensive along the valley floor. The FYIQ property is covered by glaciofluvial overburden that may exceed 30 m in thickness, especially at lower elevations. A relic glacial outwash channel has scoured away the overburden along the valley side to expose the FYIQ showing.

GEOLOGY

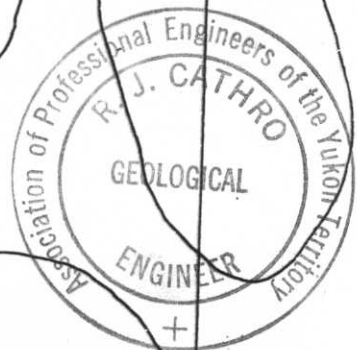
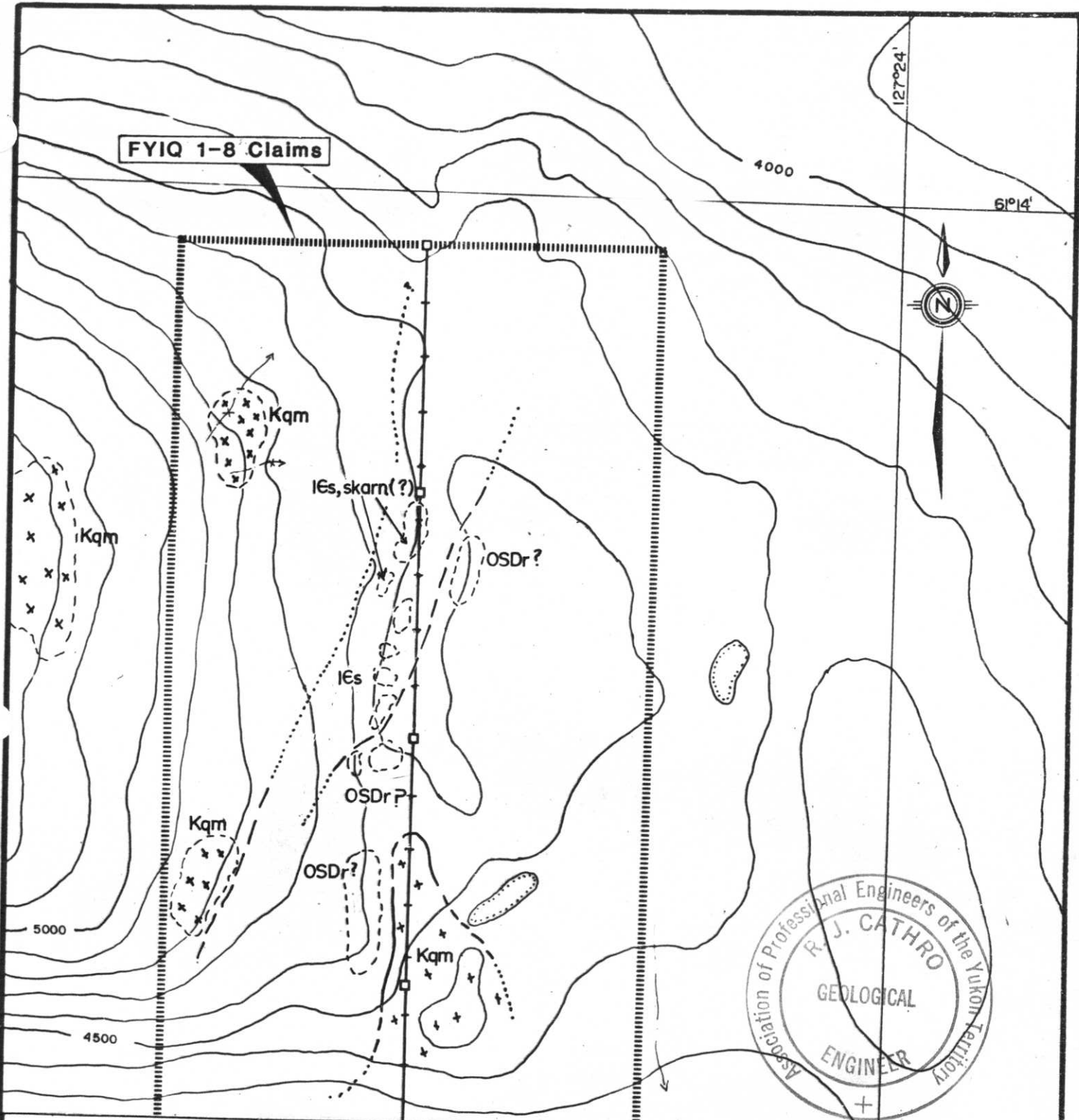
The geology of the FYIQ property, shown at 1:10,000 scale on Figure 1 on the following page and described in the Table of Formations following Figure 1, consists of limestones and dolomites overlain (?) by argillites and shales adjacent to the margin of a Cretaceous batholith. Contacts between differing rock types are obscured and the relationships of the sediments is unknown due to poor exposure. The GSC 1:250,000 Coal River geology map does not show any sediments in this area but exposures along strike are identified as equivalent to lower Cambrian Sekwi formation and hence, the limestones and dolomites are tentatively mapped as Sekwi formation. The overlying shales and argillites are tentatively identified as Ordovician-Silurian Road River Formation on the basis of lithology and similarity to rocks exposed along Coal River that have been dated as lower Ordovician by fossil evidence.

The intrusion, called the South Coal Stock, is a typical medium grained granodiorite body.

MINERALIZATION

Two types of mineralization are present, of which the most common consists of disseminated sulphides in a pale green cherty calcsilicate (?) or bleached and altered argillite. Galena with lesser sphalerite also occurs in crosscutting veins. The best assay of the disseminated sulphide mineralization graded 3.05% lead plus zinc with 0.62% Cu and 5.8 ppm (0.17 oz/ton) Ag. Selected specimens of

FYIQ 1-8 Claims

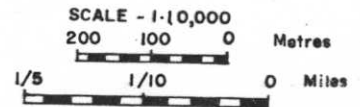


LEGEND

- Kqm Cretaceous granite
- OSDr (?) Road River Formation
- grey argillite, locally bleached and altered, locally gossaned
- IEs Sekwi Formation
- massive rusty dolomite with minor limestone
- IEsk Skarn
- green calc-silicates, minor hornfels

FIGURE 1
ARCHER, CATHRO & ASSOCIATES LTD.

GEOLOGY
FYIQ PROPERTY
CUB JOINT VENTURE



To accompany report dated Jan./81

TABLE OF FORMATIONS

CRETACEOUS

Kq Quartz monzonite, granodiorite; minor granite and diorite

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

OSDr ROAD RIVER FORMATION: black, pyritic shale, locally phyllitic; thin-bedded, black, argillaceous limestone; pale olive-green, shaly limestone, grey and black chert; calcareous siltstone; black cherty dolomite; locally includes strata of middle Devonian to Carboniferous age

MIDDLE ORDOVICIAN

Os SUNBLOOD FORMATION: dark and light grey dolomite; pink, moddled limestone; orange brown sandstone

Osv Vesicular, mafic flow(s)

EOr RABBITKETTLE FORMATION: brown weathering, wavy banded, silty limestone; platy impure limestone; siltstone; limestone

CAMBRIAN (?)

1E Dark grey-brown to black calcareous argillite, slate, shale, locally pyritic; minor argillaceous limestone

LOWER CAMBRIAN

1Es SEKWI FORMATION: undivided; massive, light pink and orange dolomite, light grey and brown limestone; 1Eshf; cherty calc-silicate rocks

1Esv Vesicular, green and maroon weathering volcanic rocks

1Ebrq BACKBONE RANGES FORMATION: resistant, thick bedded grey quartzite, grey phyllite, minor sandy limestone and pebble conglomerate

1E BACKBONE RANGES FORMATION: massive buff or pink weathering dolomite, grey limestone; local sandy to pebbly limestone and dolomite

CAMBRIAN AND (?) HADRYNIAN

Hv Vesicular and amygdaloidal, blocky, green, purple, volcanic flows and breccias; minor buff dolomite

EH "Phyllite Unit": phyllite, slate, fine-grained quartzite, siltstone, argillite

HADRYNIAN

H "Grit Unit": dark shale and slate, gritty quartzite, calcarenite, quartz-pebble conglomerate; sandstone; maroon, green and buff shale and slate; minor limestone and phyllite

H1s Massive grey limestone

the vein material would undoubtedly give higher assays. The exposed outcrop is 15 m wide but is not consistently mineralized. Dolomites and limestones are exposed adjacent to the mineralized skarn (?) and these are overlain (?) to the south and east by fractured argillites. The contact of the South Coal Stock lies 100-200 m west of the mineralized outcrop.

The origin and type of mineralization present has not received any study. It could be:

- a) shale hosted - the eastern half of the lead anomaly and the anomalous reconnaissance samples are underlain by argillite.
- b) skarn mineralization - the mineralized outcrop is altered and limy and is located near a granite contact.
- c) structurally controlled - several regional N/S faults parallel the South Coal Stock near its margin. The outwash channel that exposed the mineralized outcrop may follow one of these structures.

Further exploration should be directed to evaluating the actual character of mineralization since a shale-hosted stratabound deposit would have attractive size potential.

GEOCHEMISTRY

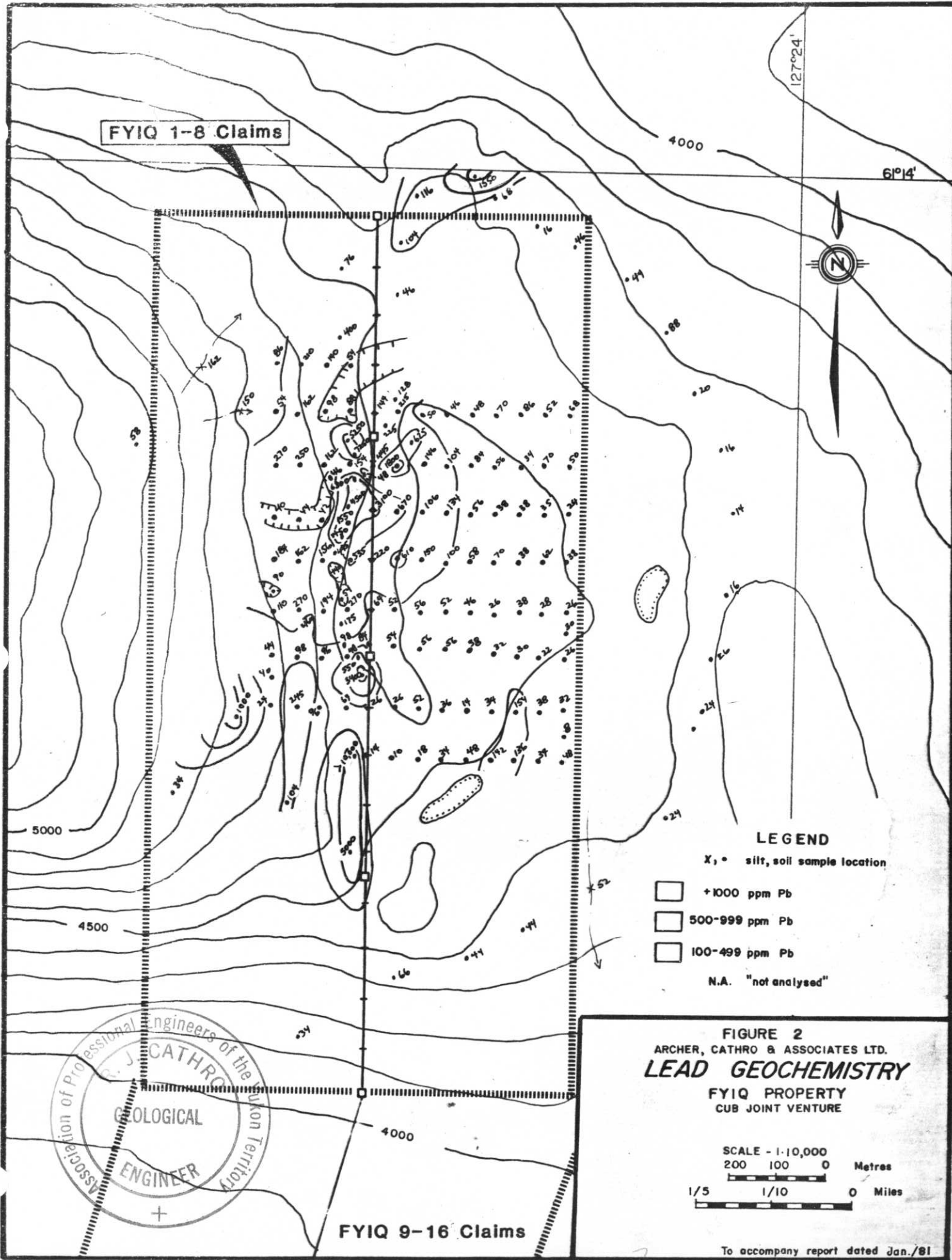
Soil samples were collected within a covered area 800 m by 600 m in size along the projected granite contact. Samples were analyzed for lead and zinc and the results are plotted on Figures 2 and 3 on the following pages.

Analysis of this small number of samples would suggest a local background of about 40 ppm Pb and about 100 ppm Zn. The grid sampling outlined an anomalous area at least 800 m long containing lead values over 200 ppm, centered on the mineralized outcrops. Reconnaissance samples nearby returned assays of over 10,000 ppm Pb and 4000 ppm Zn.

FYIQ 1-8 Claims

127°24'

6°14'



LEGEND

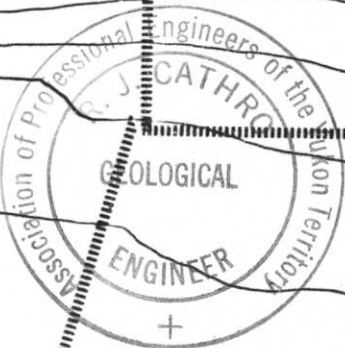
X, • silt, soil sample location

□ +1000 ppm Pb

□ 500-999 ppm Pb

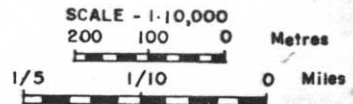
□ 100-499 ppm Pb

N.A. "not analysed"



FYIQ 9-16 Claims

FIGURE 2
ARCHER, CATHRO & ASSOCIATES LTD.
LEAD GEOCHEMISTRY
FYIQ PROPERTY
CUB JOINT VENTURE

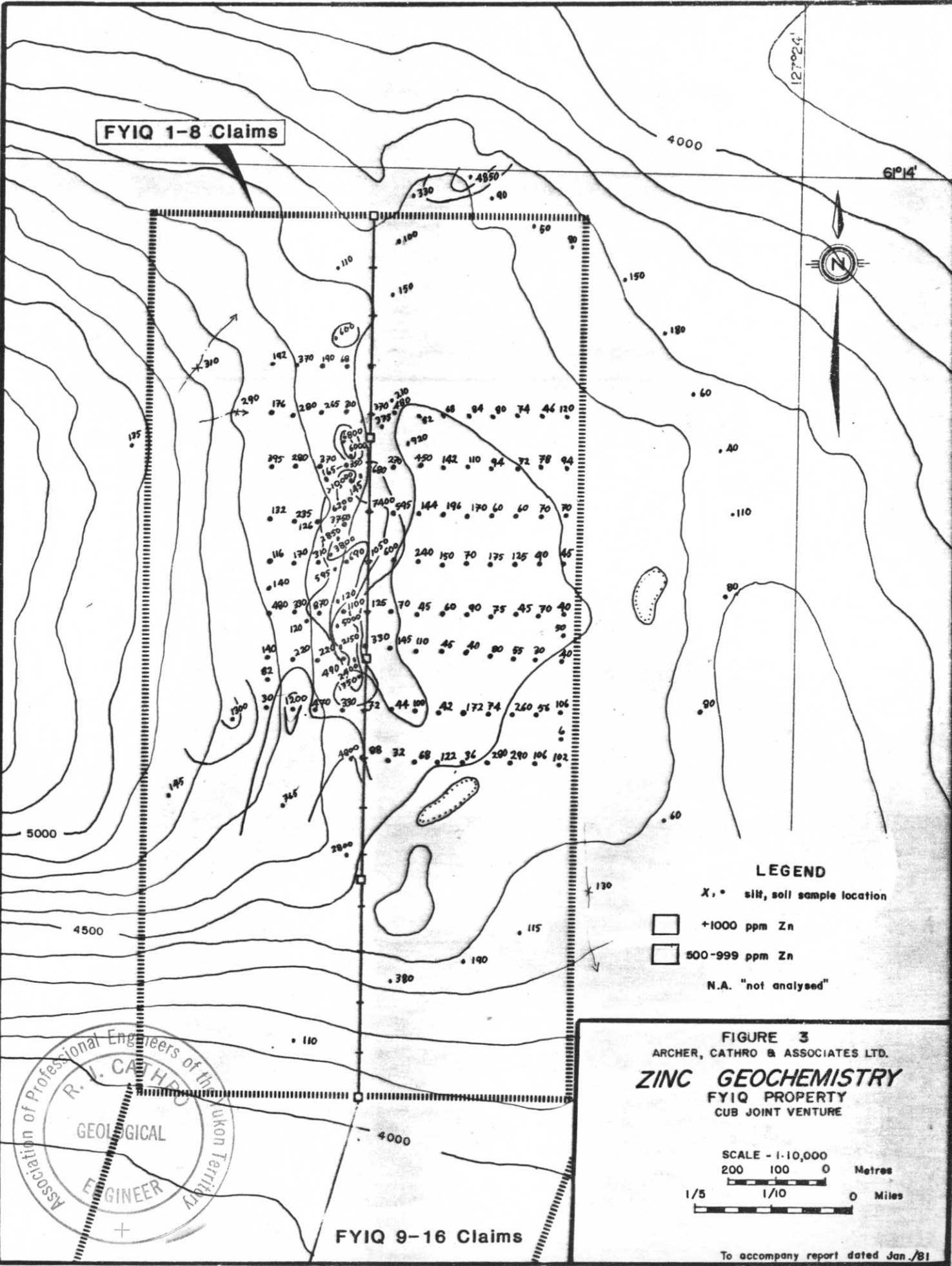


To accompany report dated Jan./81

FYIQ 1-8 Claims

127°24'

6°14'



LEGEND

X, • silt, soil sample location

■ +1000 ppm Zn

▨ 500-999 ppm Zn

N.A. "not analysed"

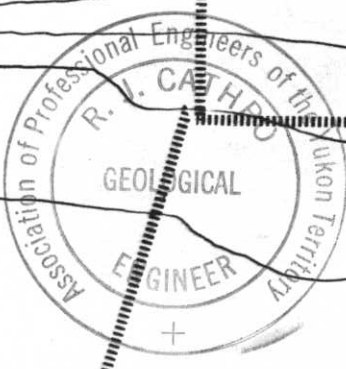
FIGURE 3
ARCHER, CATHRO & ASSOCIATES LTD.
ZINC GEOCHEMISTRY
FYIQ PROPERTY
CUB JOINT VENTURE

SCALE - 1:10,000

200 100 0 Metres

1/5 1/10 0 Miles

FYIQ 9-16 Claims



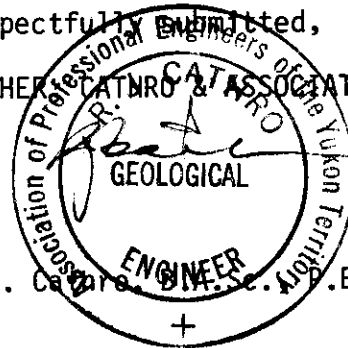
CONCLUSIONS

A low grade lead-zinc-copper showing has been staked as the FYIQ 1-16 claims. There is no record or evidence of previous work on this occurrence. Although exposure around the showing is very poor, it appears to be hosted by carbonates and shales of Upper Cambrian to Devonian age near the margin of a Cretaceous stock. A small geochemical survey indicated that mineralization may extend well away from the showing. The nature of the mineralization is uncertain but the possibility that it may be shale-hosted should be investigated further because shales of similar age host the large Howard Pass deposits some 160 km to the northwest.

Charles A. Main

C.A. Main, B.Sc.

Respectfully Submitted,
ARCHER CATRO & ASSOCIATES LIMITED



R.J. Catro, B.Sc., P.Eng.