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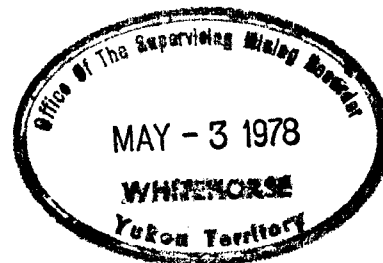
Box 4127, WHITEHORSE, Y.T. Y1A 3S9 667-4415

STANDARD BUILDING, VANCOUVER, B.C. 688-2568



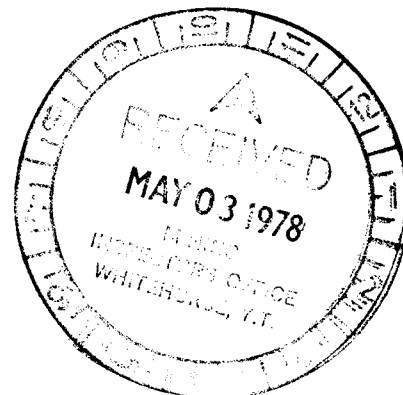
1016 STANDARD BUILDING
510 WEST HASTINGS STREET
VANCOUVER, B. C.
V6B 1L8

Assessment Report
on
Murphy 1-24 Claims



Whitehorse Mining District
Claim Sheets 105C/13 and 105F/4
Latitude 61°00'N, Longitude 133°25'W

April 13, 1978



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090342

This report has been prepared by the
Geological Survey of Canada
under the direction of the
Secretary of the Department of
Mines and Technical Surveys

A. R. Craig

Geological Survey of Canada
Section of



B. R. BAXTER
Supervising Mining Recorder
Commissioner of Yukon Territory

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INTRODUCTION

The Murphy property was staked in April, 1976 to cover an area underlain by intrusive rocks where reanalysis of silt samples from a previous project returned values up to 190 ppm U. Airborne radiometrics followed by limited prospecting later in the year located two small areas of anomalous radioactivity in bedrock (A and B Zones) near a prominent gossan, as well as isolated boulders of radioactive float elsewhere on the property that assayed up to 0.264% U_3O_8 .

The 1977 program was conducted from August 10 to 17 and consisted of grid radiometrics and soil sampling over the area of best grade float plus one trench at the A zone and six trenches at the B zone. The work was conducted by W. Eaton and J. Cockell and supervised by the writer.

Geochemical analysis for uranium was done at Chemex Labs Ltd., North Vancouver, B.C. by hot acid extraction of a minus 80 mesh fraction followed by a fusion in a sodium fluoride-based flux and examination with a G.K. Turner fluorometer.

PROPERTY, LOCATION AND ACCESS

The Murphy property consists of a subrectangular, contiguous block of 24 mineral claims recorded in Whitehorse as follows:

<u>CLAIM NAME</u>	<u>GRANT NUMBERS</u>	<u>EXPIRY DATE</u>
Murphy 1024	YA 4191 - YA 4213	20 April, 1978

The claims are located at 61°00'N, 133°25'W, straddling NTS claim sheets 105C/13 and 105F/4 some 85 km (53 miles) northeast of Whitehorse. The nearest road point is Km 64 (Mile 40) on the South Canal Road, 30 km (19 miles) to the east. Access during 1977 was by helicopter from Whitehorse.

1977 EXPLORATION PROGRAM

Prospecting and Trenching

The property lies above timberline on a rugged mountain with peak elevation of 2000 m (6500 feet) and relief up to 750 m (2500 feet). Although the area has been strongly glaciated, overburden consists mainly of locally derived talus and felsenmeer.

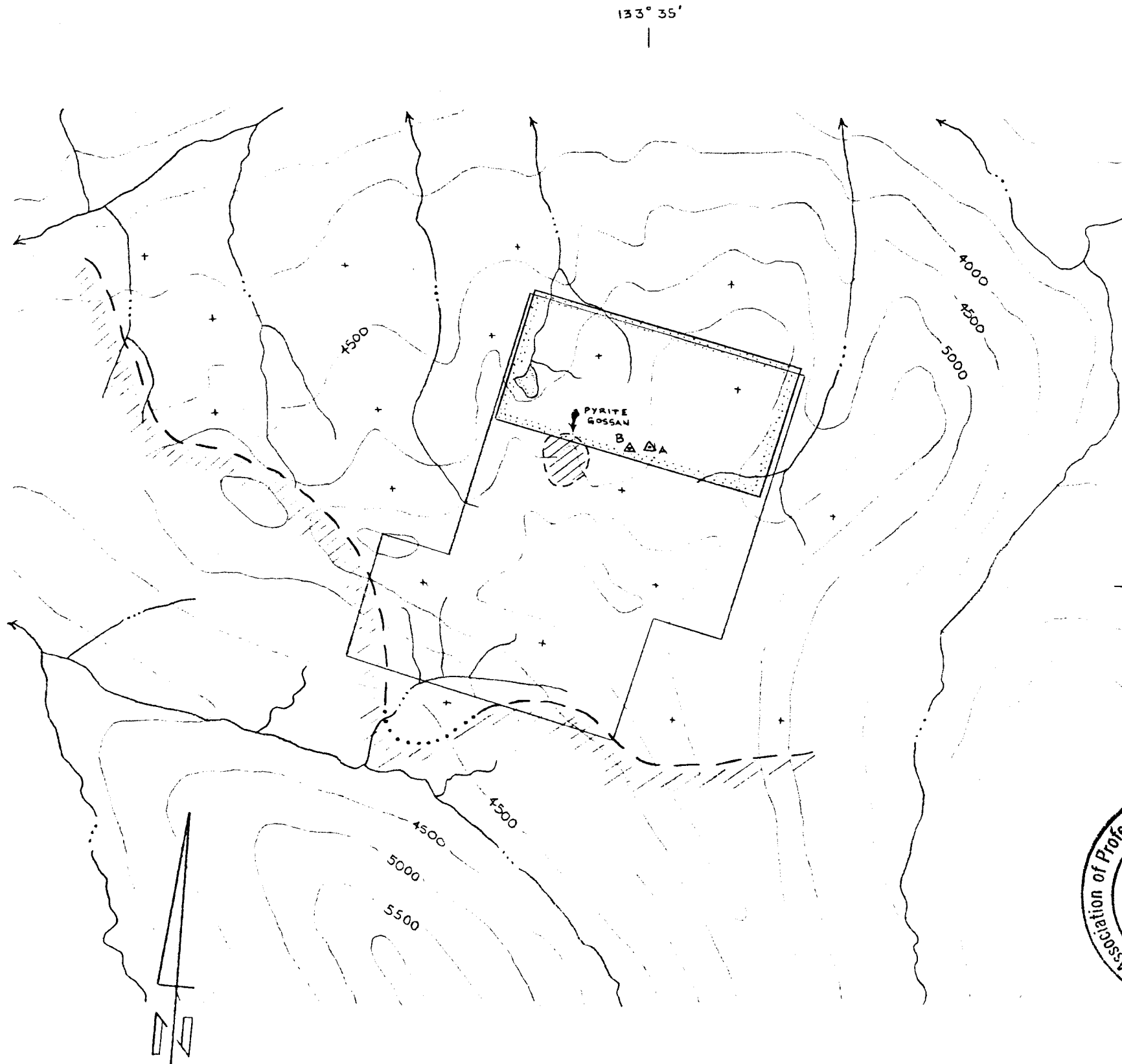
The claims are centered on a prominent 800 m wide gossan within a Cretaceous granodiorite and granite batholith that intrudes metamorphosed sedimentary rocks of the Hadrynian (?) Big Salmon Complex (see Figure U-MM3 on the following page). The gossan is caused by disseminated pyrite weathering to pale yellow and dark brown limonite. The gossaned portion of the intrusion is coarse grained, quartz-rich and has a slightly higher radioactive background. Assays of four representative specimens returned weakly anomalous values ranging from 9 ppm U to 18 ppm U.

Prospecting failed to locate any specific area of strong radioactivity associated with the gossan or any additional areas of mineralized float not located in 1976.

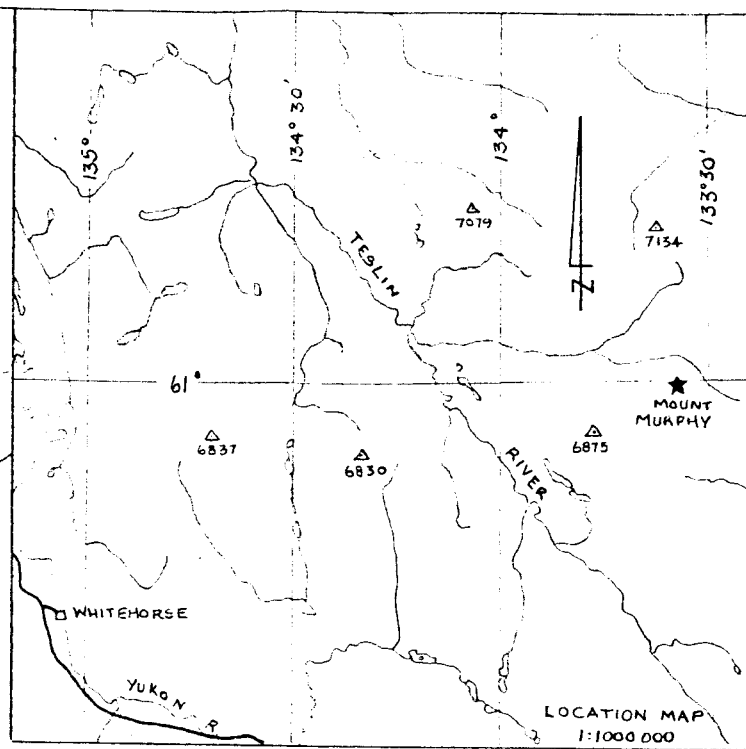
Zones A and B, situated 600 m east of the gossan, were explored with eight hand trenches using a Cobra drill and explosives. The location of these trenches is shown on Figure U-MM5 following page 3. Results were as follows:

Zone A - a single 2 m by 1 m trench (MA 1) was cut to a depth of 1.6 m into the outcrop with highest radioactivity. The radioactivity was found to be related to small, discontinuous, biotite-rich patches or clots, counting up to 5200/1000 cps, specimens of which assayed only 0.018% U_3O_8 . There was no linear trend to the radioactivity.

Zone B - two trenches (MB1 and MB 2) were cut into bedrock and four trenches (MB3 to MB6) into radioactive talus downhill from the outcrop. The four trenches in talus were cut between 1 and 1.5 m deep without reaching bedrock. Radioactive float



133° 35'



LEGEND

- Δ^B 1976 ZONES
- MURPHY 1-24 CLAIM BOUNDARY
- ▨ FIG. U-MM4 MAP AREA

— 61°00'

GEOLOGY

- PYRITE GOSSAN
- COAST/CASSIAR INTRUSIONS
- GRANODIORITE
- BIG SALMON COMPLEX
- SCHIST, GNEISS, QUARTZITE,
GREENSTONE, LIMESTONE
CONTACT (APPROXIMATE, ASSUMED)

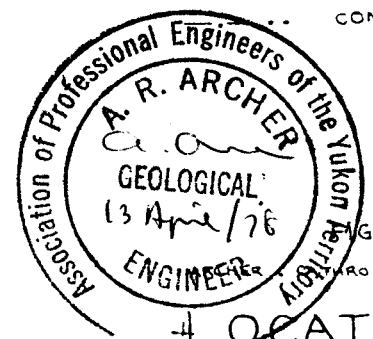
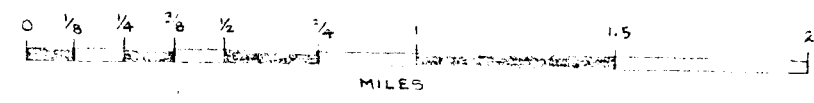


FIG. U-MM3
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LOCATION MAP

MURPHY 1-24 CLAIMS
UKGN JOINT VENTURE

SCALE 1:31,680
(1 inch to 1/2 mile)



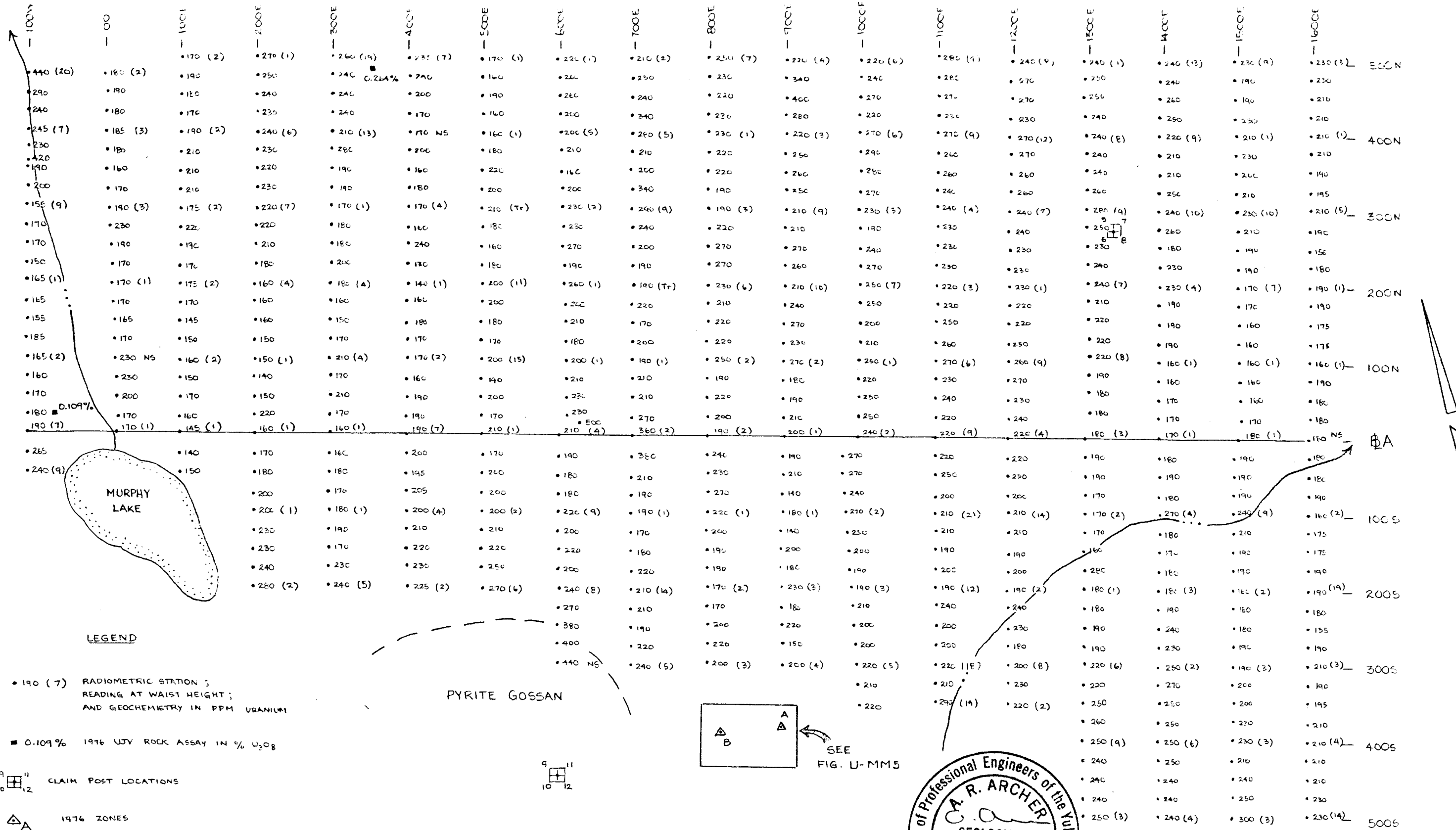
was encountered at increasingly deeper depths as the trenching progressed uphill, suggesting the source is probably near the outcrop. The two trenches in bedrock exposed small, discontinuous strongly radioactive biotite-rich patches with no specific linear trend similar to Zone A. The best patch counted 9000/1000 cps but assayed only 0.137% U_3O_8 . Assaying of additional radioactive patches and float returned assays between 0.001 and 0.057 U_3O_8 , with one float specimen assaying 0.226% U_3O_8 . Radioactive zones are weakly leached and exhibit traces of yellow secondary uranium oxides.

Radiometrics and Geochemical Surveys

A grid radiometric and geochemical survey was conducted over the northern portion of the property and a detailed grid radiometric survey was performed over the B zone, as illustrated on Figure U-MM4 and U-MM5 on the following pages. Radiometric readings were taken at 25 m intervals on lines 100 m apart on the main grid, and at 10 m intervals on lines 10 m apart on the detailed grid, using a Scintrex BGS-1SL broadband scintillometer (43 cc crystal) at waist height. The radiometric background of the intrusion ranges from 180 to 250 cps. The only area of anomalous radioactivity was located on the detail grid over Zone B, where an area about 30 m by 30 m ranges from 320 to 520 cps, which is about twice background.

CONCLUSIONS AND RECOMMENDATIONS

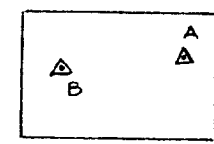
Trenching has proven that the source of the mineralization found at Zones A and B is discontinuous biotite-rich patches or clots in the granodiorite. Assaying of strongly radioactive specimens returned low uranium values in the 0.05 to 0.23% U_3O_8 range, suggesting that a large portion of the radioactivity is caused by thorium. Radiometric surveys indicate the mineralized area is less than 30 m by 30 m in size



LEGEND

- 190 (7) RADIOMETRIC STATION ;
READING AT WAIST HEIGHT ;
AND GEOCHEMISTRY IN PPM URANIUM
- 0.109% 1976 UJV ROCK ASSAY IN % U₃O₈
- 9 11
10 12 CLAIM POST LOCATIONS
- △ A 1976 ZONES

PYRITE GOSSAN



SEE
FIG. U-MMS

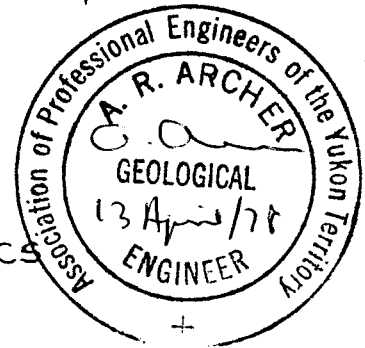
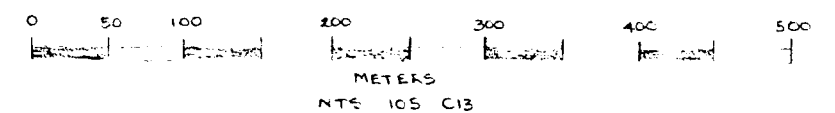


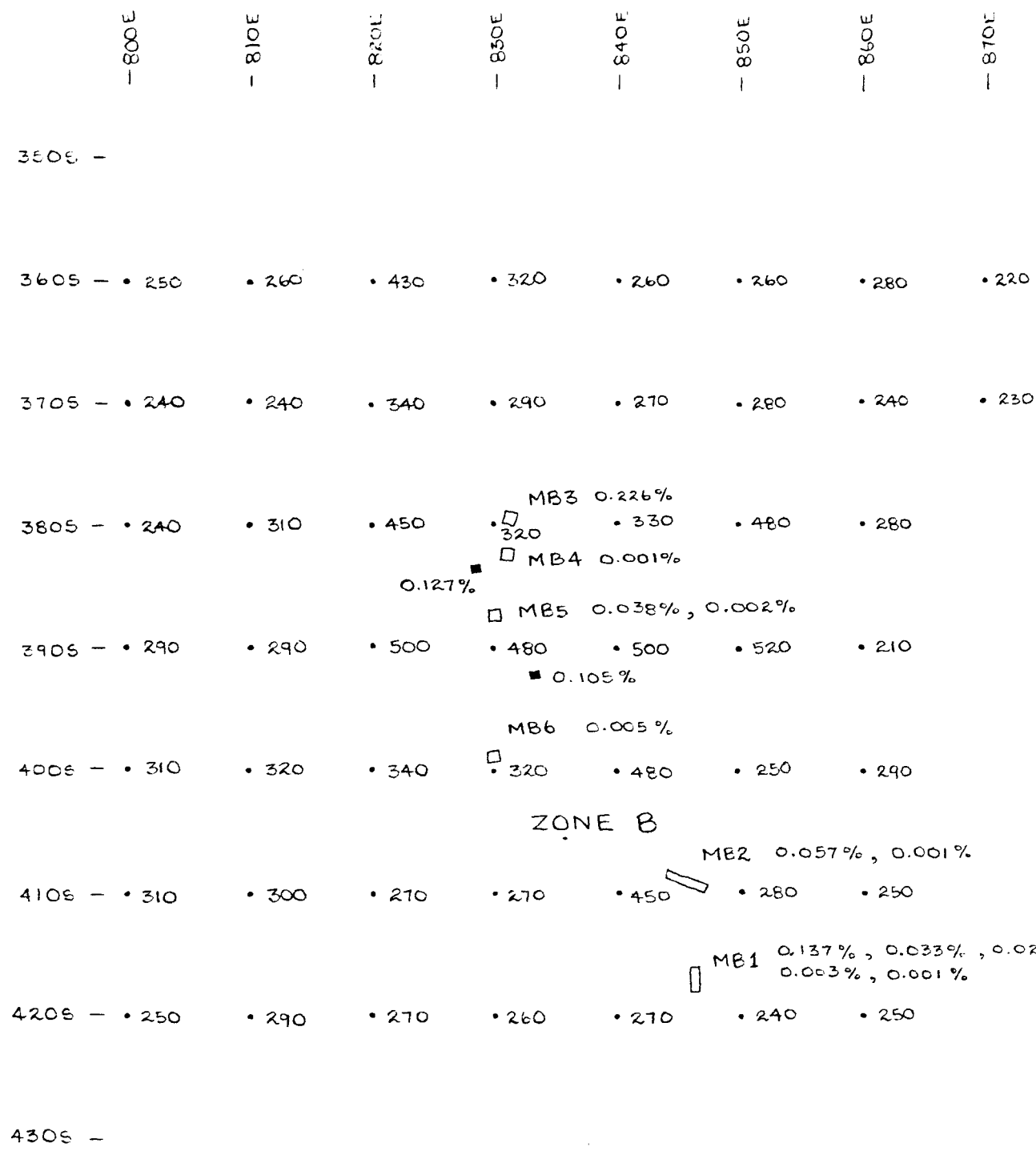
FIG. U-MM4
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GEOCHEMISTRY AND RADIOMETRICS

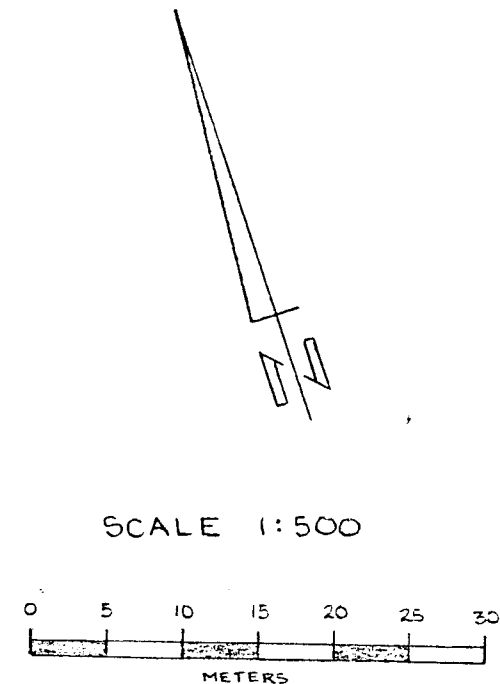
MURPHY 1-24 CLAIMS
UKON JOINT VENTURE

SCALE 1:5000





ZONE A
 ■ 0.149%
 ▤ MA1 0.018%

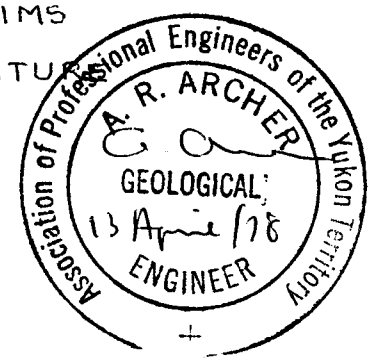


ZONE B

LEGEND

- 290 RADIOMETRIC STATION AND READING AT WAIST HEIGHT WITH SCINTREX EGS-15L (43 cc CRYSTAL)
- 0.127% 1976 UJV ROCK ASSAYS IN % U₃O₈
- ▤ MB2 0.057% TRENCH LOCATIONS AND ROCK ASSAY FROM TRENCH IN % U₃O₈

FIG. U-MM5
 ARCHER, CATHRO AND ASSOCIATES
 DETAIL RADIOMETRICS AND
 TRENCH LOCATIONS
 - MURPHY 1-24 CLAIMS
 UKON JOINT VENTURE

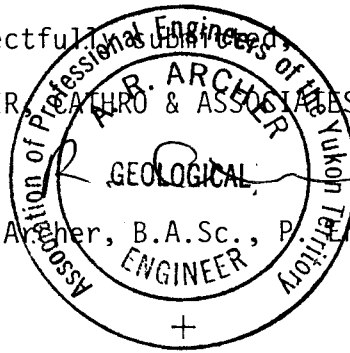


and failed to locate any other areas of interest.

No further work is recommended.

ARA:jm

Respectfully,
ARCHER, CATHERINE & ASSOCIATES LTD.,
A.R. Archer, B.A.Sc., P. Eng.
GEOLOGICAL ENGINEER

A circular professional seal for the Yukon Territory. The outer ring contains the text "Association of Professional Engineers of the Yukon Territory" and a plus sign at the bottom. The inner circle contains the name "A.R. ARCHER" and the title "GEOLOGICAL ENGINEER". There are handwritten initials "C" and "R" on the left side of the seal, and a horizontal line on the right side.