

RECONNAISSANCE RADIOMETRIC & GEOCHEMICAL SURVEY

Watson Lake WEASEL 1-16 CLAIMS

~~Whitehorse~~ Mining District, Claim Sheet 105F/1

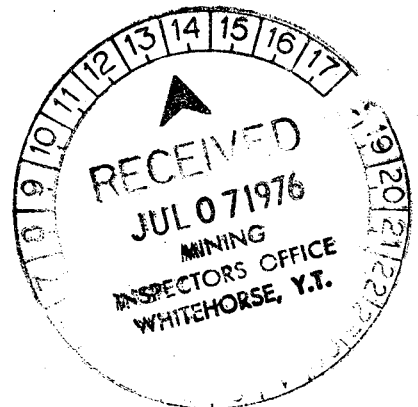
Latitude 61°11'

Longitude 132°25'

June 26, 1976

R.J. Cathro, P.Eng.

Consulting Engineer



090 108



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 2600⁰⁰

W.D. Sinclair

~~Resident Geologist or
Resident Mining Engineer~~

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

B.R. BAXTER
Supervising Mining Recorder

P. Commissioner of Yukon Territory

ARCHER, CATHRO
AND ASSOCIATES LTD.
CONSULTING GEOLOGICAL ENGINEERS

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RECONNAISSANCE RADIOMETRIC AND
GEOCHEMICAL SURVEY

WEASEL 1-16 CLAIMS

WHITEHORSE MINING DISTRICT

Claim Sheet 105F/1

Latitude 61°11'

Longitude 132°25'

June 25, 1976

R.J. Cathro, P.Eng.

Consulting Engineer

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INTRODUCTION

The Weasel claims were staked by Archer, Cathro & Assoc. Ltd. to cover a molybdenum showing previously owned by Conwest Exploration Ltd. The present staking was prompted by the recognition of anomalous radioactivity. The claims were explored between July 25 and 27, 1975 by R.J. Cathro, R. Dennett and J. West with reconnaissance radiometric and geochemical prospecting.

All uranium assaying discussed in this report was performed at Chemex Labs Ltd., North Vancouver, B.C. with a technique that consists of a 15 minute ashing at 550°C of a minus 80 mesh fraction, double drying in four molar nitric acid, pickup in acidified water, fusion with a standard sodium fluoride flux and analysis with G.K. Turner fluorometer. Other metals were analyzed by atomic absorption spectrometry of a nitric perchloric digestion.

CLAIMS

The property consists of 16 contiguous claims that were staked on 24 June, 1975 and are recorded in Watson Lake Mining District as follows:

<u>Claims</u>	<u>Grant Number</u>	<u>Expiry Date</u>
Weasel 1-16	Y84197-Y84212	27 June, 1976

LOCATION AND ACCESS

The claims are situated at 61°11' north, 132°25' west within claim sheet 105F/1, about 95 miles northeast of Whitehorse and 140 miles northwest of Watson Lake. Access is by helicopter from the Canol Road, 25 miles to the west, or from Moss Lake, 6 miles to the northeast.

HISTORY AND PREVIOUS WORK

The showing was discovered by Conwest prospectors O. Haug and G. Fairclough in August, 1962 and was staked as the 115 claim Molly group (79713), which were recorded in September, 1962 and July, 1963. During 1963, Conwest carried out an extensive surface sampling program that included grid layout, geological mapping at a scale of 1 inch = 100 ft. by W.W. Moorehouse, 10 rock trenches (580 cu. yds) blasted in rock, and 15 diamond drill holes (1482 ft). All the drilling and 8 of the trenches were situated on the main showing, while one trench was cut in a separate zone about 2000 ft southwest and the other was on the Saddle (or North) Zone some 4000 ft northwest. The Conwest work was described in a report by A.S. Ashton dated September, 1963 that was submitted for assessment credit.

Conwest's claims covering the Saddle Zone did not expire until June, 1975 but those covering the Main Zone lapsed earlier and were restaked by A. Racicot in June, 1969 as the Skarn group and by O. Haug in September, 1970 as the MO group. No work was recorded by Racicot or Haug.

GENERAL GEOLOGY

The showing occurs in a skarn zone that has developed in a 50 foot thick band of Middle Devonian limestone. The limestone is part of a thick sequence of undivided, weakly metamorphosed limy argillite that has been designated by the G.S.C. as unit A. This unit is locally altered to skarn and rusty hornfels near the contact with porphyritic granodiorite of the Cretaceous Weasel Batholith.

The main zone is composed of bands of diopside-garnet skarn and wollastonite-garnet skarn and is well exposed for a length of 800 feet on a rock terrace at the foot of a steep cliff. The skarn zone disappears under overburden at the northeast end but appears to pinch out to the southwest. The zone dips about

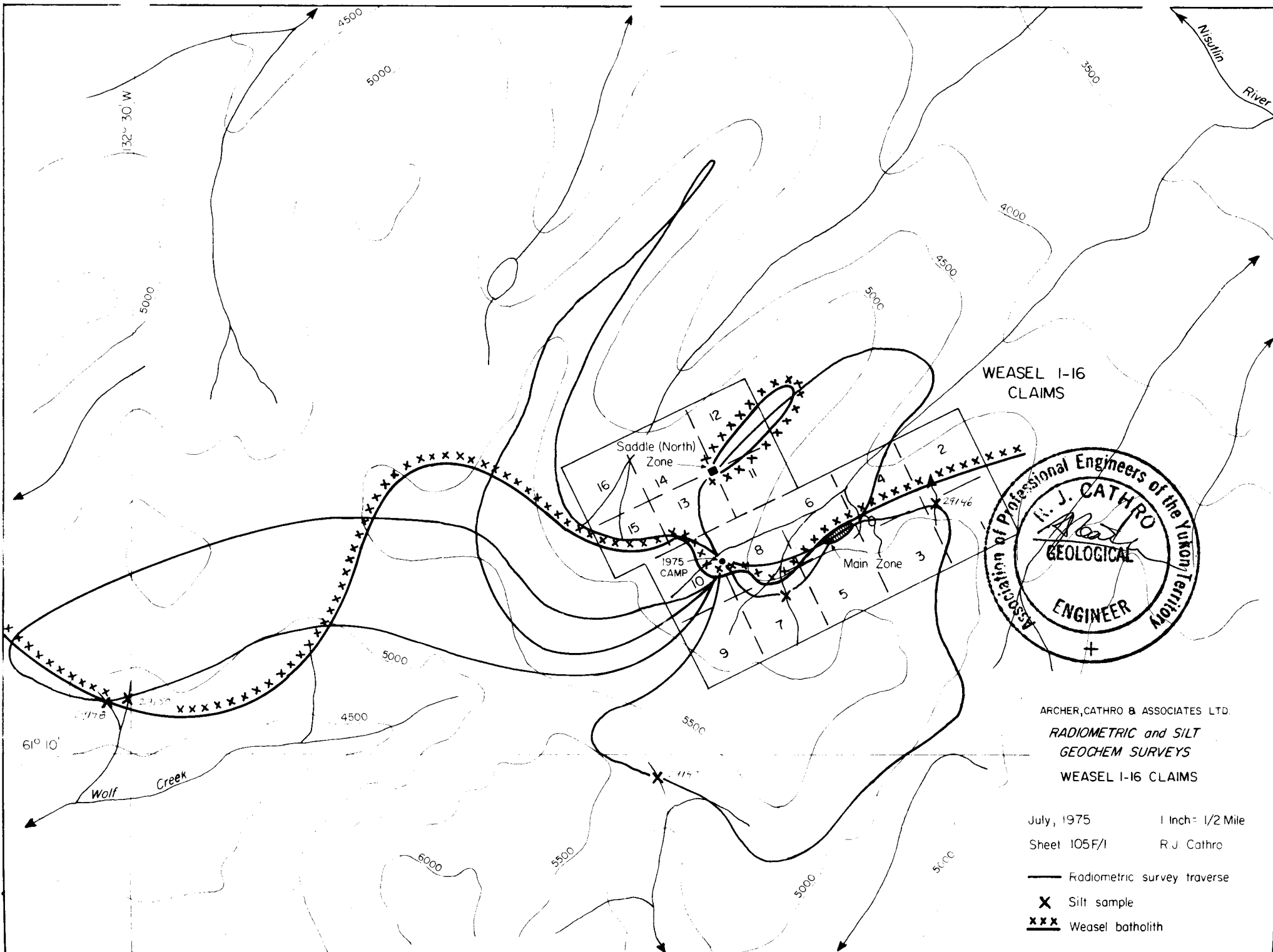
20° to 30° into the cliff between overlying hornfelsed sediments and underlying intrusive rock. Mineralization consists of erratic patches of coarse grained molybdenite accompanied by pyrrhotite, lesser amounts of chalcopyrite and purple fluorite and traces of scheelite and an unidentified uranium mineral. The best drill hole intersection graded 1.08% MoS₂ across a 13.3 ft interval. A few samples were also tested for copper but all assays were 0.1% Cu or less.

The Saddle (North) Zone consists of disseminated molybdenite in a siliceous zone that has developed in a hybrid granite along the intrusive contact.

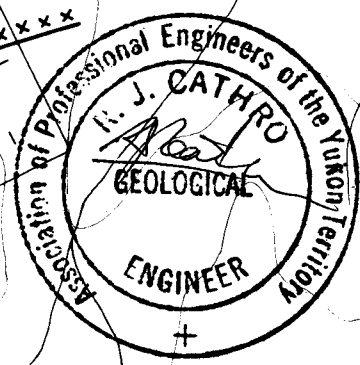
CURRENT WORK

The presence of a radioactive mineral on this property was first recognized by Archer, Cathro personnel while routinely testing rock samples with a scintillometer in the Whitehorse office that had been collected on this property on a previous examination. The best response was obtained on a siliceous, hybrid intrusive specimen about 2 inches by 1 inch in size that had been picked up at an old fly camp just north of the North Zone. The source of this specimen is not known although it resembles mineralization on the North Zone. The specimen gave a response of 80 cps over a background of 40 when tested with a Scintrex BGS-1S broadband scintillometer (1" x 1" crystal) and assayed 0.025% U₃O₈.

The 1975 program consisted of nine mandays of detailed radiometric prospecting of the showings and the metasediments and intrusive rocks along the contact in the vicinity of the claims. The routes prospected are shown on the attached plan. The same model of scintillometer was used for the field work as was mentioned earlier. This radiometric prospecting failed to locate a specific zone of strong radioactivity although a substantial range was measured in the



WEASEL 1-16 CLAIMS



ARCHER, CATHRO & ASSOCIATES LTD.
 RADIOMETRIC and SILT
 GEOCHEM SURVEYS
 WEASEL 1-16 CLAIMS

July, 1975 1 Inch = 1/2 Mile
 Sheet 105F/1 R. J. Cathro

- Radiometric survey traverse
- X Silt sample
- xxx Weasel batholith

field. The background in the Weasel Batholith is about 120 cps but locally reaches 150 to 180 cps in phases near the contact that have a slightly higher mafic content. Background over the metasediments is normally in the 50-60 cps range. Testing of the old Conwest core, from which all mineralized intersections were removed for assay, gave only background response.

The best results were a local response of 1100 cps (vs. 150 cps background) along the intrusive contact exposed in Conwest Trench IV and a count of 400 cps from a 1 inch wide quartz vein exposed a few feet to the east. Difficulty was encountered in obtaining a good sample from this zone but a piece about 1 inch x 1 inch x 1 inch that counted 140 cps (background of 80 cps) in camp, described as a limonitic, siliceous contact phase with spotty black minerals (possibly mafics) and a trace of pyrite, assayed only 30 ppm uranium, 66 ppm copper, 18 ppm molybdenum, and less than 4 ppm tungsten.

A second zone of interest about 25 feet square was found about 25 feet north of Conwest Trench V, just west of 75N on Conwest line 400 E. This zone consists of large fragments of garnet-diopside skarn in soil, which counted up to 400 cps in place. A sample consisting of 30 to 40 pieces up to 1 inch long broken off corners of the large skarn fragments that counted 150 cps (background of 80 cps) in camp assayed only 30 ppm uranium, 16 ppm copper, 175 ppm molybdenum and less than 4 ppm tungsten.

A fist sized specimen of garnet skarn float picked up near the Main Zone that counted 100 cps (background of 60 cps) in the office assayed 41 ppm uranium.

In summary, the rock samples submitted for assay all returned about half of the anticipated uranium content. No obvious leaching was observed but that possibility cannot be discounted.

During the radiometric prospecting, five silt samples were collected from the locations shown on the attached plan. The results are as follows:

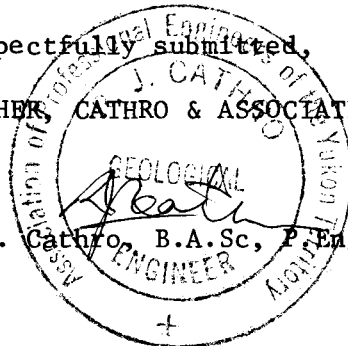
<u>Sample No.</u>	<u>Cu (ppm)</u>	<u>Mo (ppm)</u>	<u>U (ppm)</u>	<u>W (ppm)</u>
29145	31	3	4.5	6
29146	7	10	44.0	4
29147	13	1	3.0	6
29148	4	1	55.0	20
29150	3	1	77.0	6

The uranium response from three of the five samples appears to be strongly anomalous and suggests that further geochemical and radiometric prospecting is warranted along the intrusive contact. However, there are no published case histories of uranium response in silts in mountainous terrain and the possibility must be considered that only insignificant amounts of uranium are present that are being concentrated in organic-rich silts.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES LTD.

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



RJC:st