

140

ANUWON URANIUM MINES LTD., N.P.L.
REPORT ON THE FIDDLER AND F.B. CLAIMS
MAMETTE LAKE, B.C.

JAMES A. SOLES

September 24, 1956.

CONTENTS

	Page
Introduction	1
Claims, Ownership, and Accessibility	2
Crew and Equipment	2
Outline of Work	2
Physiography	3
Geology	4
General	4
Local Geology	4
Structure	5
Mineralization	6
Conclusions and Recommendations	7

APPENDIX

Expenditures and Distribution	9
-------------------------------	---

Maps

#1 Saddle and VFB Claims
Mammoth Lake
1" = 50'

#2 Saddle Group Trenches
1" = 50'

ANUWON URANIUM MINES LTD., N.P.L.
REPORT ON THE FIDDLER AND F.B. CLAIMS
MAMETTE LAKE, B.C.

Introduction

During the winter of 1955-56 the Fiddler group of 6 mineral claims at Mamette Lake, B.C., were optioned by Anuwon Uranium Mines Ltd. from Mr. T. Curnow under an agreement to carry out exploration work. Since an area of appreciable size on one claim was reported to contain abundant copper minerals, it was deemed advisable to stake further claims around the group, and in late January the Fiddler claims 7 - 30 inclusive were recorded in the Company's name. Later, four adjoining F.B. claims were purchased.

An exploration program on these claims was proposed for the summer of 1956. The work was to consist of:

- (a) Traversing the entire claims group from surveyed control lines, mapping the geology, structure, and mineralized areas;
- (b) Surveying in detail the zone of mineralization;
- (c) Trenching, blasting, and sampling the original showings, and any other mineralized area encountered on the group.

This report presents the details and results of the field work.

Claims, Ownership, and Accessibility

The claims examined comprise two groups: the Fiddler claims 1 - 30 inclusive, and the F.B. claims 1 - 4 inclusive. Under the terms of the option agreement, Mr. T.R. Gurnow retained ownership of the Fiddler 1 - 6 claims. Reference to the enclosed map shows that most of the Fiddlers 25, 27, 29, and F.B.s 1 and 3 are forfeit to the Rod claims, which were staked previously. The groups are located on the west side of the Guichon Creek valley, northwest of Mamette Lake, B.C. The lake is reached by twenty-four miles of secondary road following Guichon Creek, northward from the Merritt - Spences Bridge highway. The property lies three miles northwest of the north end of Mamette Lake on an old cart road leading to Billy Lake.

Crew and Equipment

On May 5, 1956, a party consisting of A. Stenerson, mining engineer, G. Leonard, geologist, J. Tregilges and G. Lewis, assistants, set up a camp on Mamette Lake and began working on the claims. Stenerson was moved from the property May 15 and Tregilges May 30; Leonard was in charge of the exploration crew when the writer assumed supervision June 5. Laborers were hired when required. A half-ton truck was rented to provide transportation for the crew, and camping equipment was purchased. When required a caterpillar tractor was contracted to build road or cut trenches. On one occasion a water pump was rented for washing down rock exposed in an important area. A gasoline rock drill (Pionjar) was obtained when needed.

Outline of Work

The following work was done on the claims from

May to August, 1956:

- (1) On May 8, Mr. Alfred R. Allen, consulting engineer, sampled the old open cuts on Fiddler claims 3, 4, and 6.
- (2) The existing Billy Lake road was repaired by a bulldozer for a distance of 2 miles in order to provide access for the truck as far as the workings.
- (3) Four trenches were cut by bulldozer to trace the extension of the mineralization found in the old pits Nos. 5 and 6. Trench Nos. 1 and 2 were subsequently cleaned by a water jet so that the bedrock could be examined closely. A detailed survey of this area was then made.
- (4) With the help of the stakers the location lines were found and re-blazed. Chain and compass surveys of the claim location lines were then carried out, and a working base map was drawn.
- (5) Using the surveyed base lines as controls, a pace and compass geological survey of the claims was made. An approximate 400 - foot interval was maintained between traverse lines. When mineralization was found, or when structure or petrology indicated its possibility, the area concerned was examined in closer detail.
- (6) The original showings were drilled and blasted in the higher grade portions to test extension of mineralization to a shallow depth. Test holes on other parts of the property were blasted when mineral concentration was sufficient to warrant detailed examination, and collect samples.

A list of the expenditures incurred in completing this work is included as an appendix.

Physiography

The claims lie approximately 4000 feet above sea level, on an irregular plateau which is a part of the Interior Plateau of central B.C. The upland is a series of rolling hills and ridges cut by occasional gullies; mountains rise to 2000 feet above the general level. Sheet glaciers have passed across the country, rounding off the protuberances; the movement was generally south by east. The claims area is heavily wooded with pine, spruce, and fir; swampy areas are

small and rare. The majority of the area is covered by a mantle of soil and glacial debris, leaving only 20% of the rock exposed.

Geology

General

The rock underlying most of the region includes the granodiorite and related (?) rocks of the Guichon Creek igneous series, described by W.E. Cockfield (1943)¹; it is classified as a part of the Jura-Cretaceous Coast Intrusive complex. The rocks are highly variable in composition, ranging from granite to gabbro. Rapid, extensive changes (e.g. in the Highland Valley, from coarse-grained albite granite on the west side to medium-grained quartz diorite on the east) indicate that either profound structural movement occurred, or the rocks are not genetically related. This particular regional problem does not arise in the Fiddler claim groups. Other rocks are older metamorphosed sedimentary and volcanic rocks of the Cache Creek and Nicola groups, and younger volcanic and clastic rocks of the Kamloops group.

Local Geology

Granodiorite predominates in the claims area. The rock is pinkish to grey in color, and coarse to medium grained in texture. Plagioclase feldspar near the albite end is the major mineral, potassic feldspar is present in small amounts; quartz is common, but not in great excess; biotite in flakes and hooks is abundant as the main feric mineral, and hornblende is sometimes present. Gradation or rapid transition to a finer grained phase approaching diorite is observed locally in the vicinity of metamorphic rocks, a feature which is ascribed to assimilation of foreign materials.

Sedimentary rocks are distributed over a fairly large

¹Cockfield, W.E. (1943) Nicola Map Area, B.C. G.S.C. Memoir 249.

area on the F.B. and Fiddler No. 1 claims and at the old workings. Elsewhere on the group such occurrences are rare, and small in extent. These rocks have been metamorphosed to a fairly high degree. Medium-grained biotite schists have developed in the more pelitic sections, but quartzite of variable impurity predominates, hence the series as a whole was arenaceous.

Contact relations of these rocks with the granodiorite is obscured in the south by overburden. In the occurrence at the workings the contact relations are clear, and show a rapid transition from igneous to metamorphic rock through a gneissose quartz dioritic phase bordering pelitic rocks. Contacts are steeply dipping. The relations suggest that the metamorphics are inclusions of rocks older than the intrusive granodiorite. Only three other occurrences of this were observed on the claims (see map); rock in the more favorable central area, however, is largely covered by overburden.

Structure

Rock on the western and northeastern claims is exposed mostly along irregular ridges which trend north-south. The inter-ridge areas are mostly covered, but no lithologic change is evident where rock is encountered hence the north-south trend is attributed to glacial action. Two north-south fault zones are apparent in the south central claims, one cutting through the metamorphic rocks, and the other bordering or within granodiorite. Shearing, brecciation, and an interrupted topographic lineation marked their direction. No idea of the extent or relative direction of movement could be ascertained. This north-south zone of weakness is possibly continuous through the central claims, since much of the quartzite at the workings has been intensely sheared and recrystallized.

Jointing and fracturing within the massive granodiorite

is approximately north-south and NE - SW. Prominent fracturing south of the workings is in the latter direction, but no signs of movement are evident.

Mineralization

The ore minerals at the workings are malachite and chalcopyrite with, locally, some molybdenite. Some magnetite appears to be associated with them, since a dip needle traverse revealed a magnetic high anomaly. The more highly mineralized area is at the apex of trenches Nos. 1 and 2, formerly the position of one of the old pits. The chalcopyrite is scattered along a band approximately 15 feet wide by 30 feet long at the northern end of the metamorphic rock body. It is disseminated in both the quartzites and transitional rock, but is more sparsely distributed in the former. The greatest concentration is at the nose of the body, where the contact plunges steeply northwest; apart from this confined area, copper mineralization is sparse.

Approximately 400 feet south of the main showing, granitic pegmatite veins lace through a large nose of granodiorite overhanging the nearby creek. Scattered aggregations of chalcopyrite and molybdenite occur in the pegmatite, preferentially following NE - SW fractures. Two hundred feet southeast along the creek bank sparse chalcopyrite and malachite are again found along NE - SW fractures, in a broken granodiorite. Elsewhere on the claims copper minerals are isolated in spot occurrences along joints and small fractures in the granodiorite on Fiddler claims 4, 6, 26, 24, 14, and 11, and FB claims 1 and 3 (see map). The mineralization is poor. The two faults observed in the southern part of the group do not appear to be associated with mineralization.

Samples taken from the main showing gave maximum copper assays of 2.5% for well mineralized selected specimens, and a general

assay of less than 0.75% across a 12-foot width. The pegmatite zone was not sampled because the scattered, thin fracture coatings obviously would yield low assays. Samples taken from the fractured zone to the southwest assayed less than 0.25% across 3 feet in freshly blasted rock. The other occurrences were blasted open, but most showed an insufficient concentration of copper minerals in the fresh rock to warrant assaying.

Conclusions and Recommendations

Copper mineralization in the immediate vicinity of the old workings on Fiddler claims 3, 4, 5 and 6 is concentrated in a 15 x 30 foot area at the steeply-plunging northern end of a body of metamorphosed sediments enclosed in granodiorite. The average grade over this surface area would be less than 1%. Elsewhere on the property mineralization is scattered, and localized in fractures and joints in granodiorite or pegmatite. Samples taken yielded poor assays.

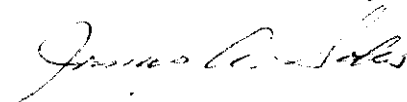
It is possible that mineral deposits are to be found beneath the abundant overburden, particularly in the central claims, and a geochemical or magnetometer survey could possibly reveal their presence. The more highly mineralized area at the workings should be considered, however, and specifically two important points:

- (1) The igneous metamorphic contact appears most favorable, but only locally so; the grade is too low for deposits of small tonnage.
- (2) The 'roof pendant' or inclusion type of deposit is invariably shallow, and since the granodiorite is poorly mineralized in contact with the inclusions (and elsewhere) it will likely remain so beneath them.

These two rather weighty points oppose a recommendation

for further work on these claims, although it is admitted that the rare exception could exist here. In view of the activity in the Highland Valley to the north, it is suggested that an application for work certificates be filed to protect the Fiddler claims 7 - 30 inclusive for one year. If further work is deemed necessary to protect the claims for a longer time, a magnetometer survey combined with a short diamond drilling program in the vicinity of the main workings would suffice and provide information on lateral and vertical continuation of mineralization as well.

Respectfully submitted,



James A. Soles,
Registered Professional Geological Engineer,
Province of British Columbia.

APPENDIX

Expenses Incurred in Carrying Out Field
Work on Fiddler and F.B. Claims¹

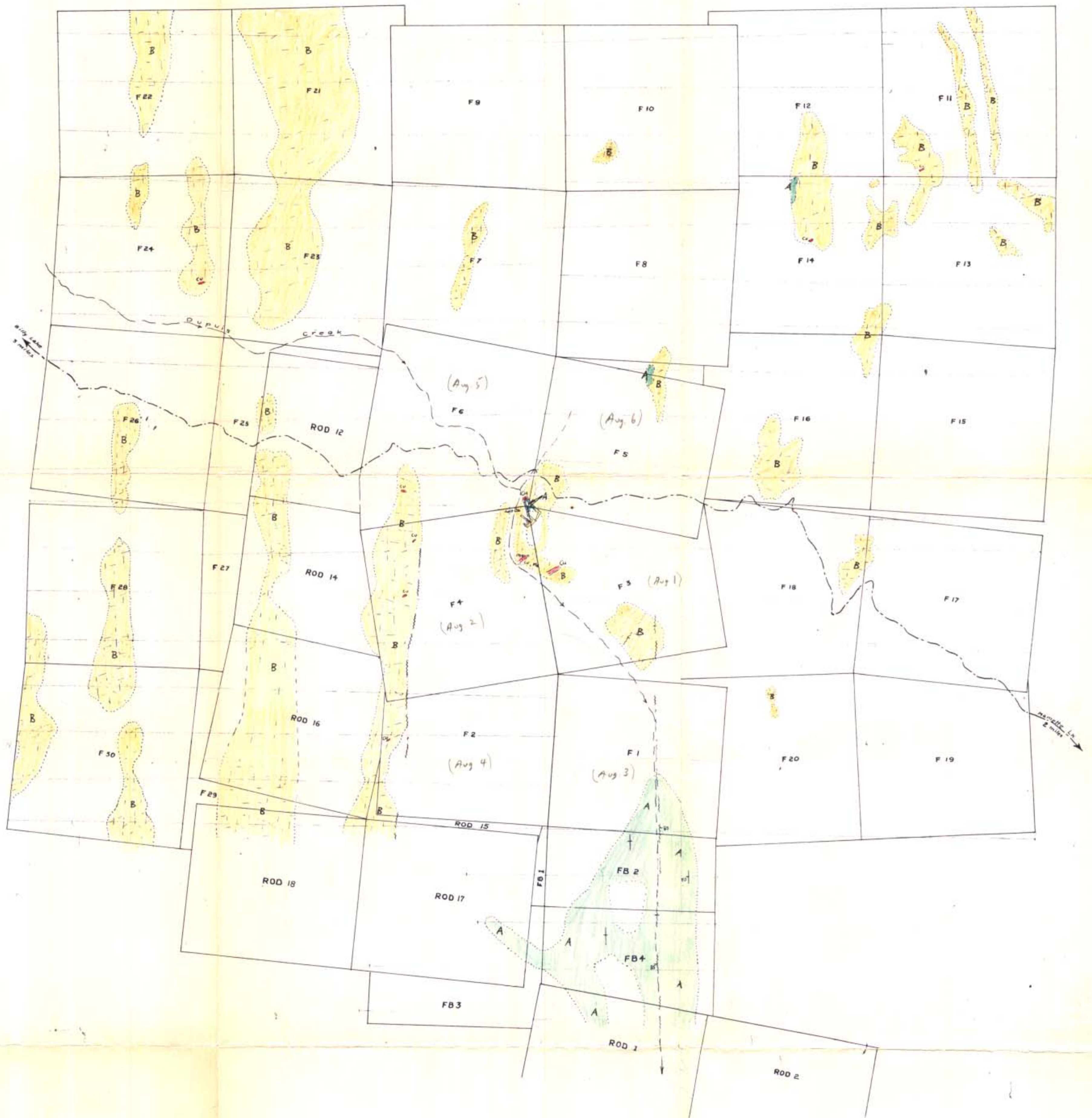
<u>Month</u>	<u>Equipment Rentals (Truck, Field Supplies)</u>	<u>Salaries</u>	<u>Supplies</u>
May	\$ 528.50	\$1,320.00	\$192.00
June	\$ 502.00	\$ 775.00	\$135.00
July	\$ 360.00	\$ 780.00	\$214.00
August	\$ <u>310.00</u>	\$ <u>780.00</u>	\$ <u>239.00</u>
	\$1,700.50	\$3,655.00	\$780.00

Tractor Rental	Trenching \$560.00	Road Work	\$350.00
Casual Labor			\$194.95
Blasting Supplies			\$ 44.20
Truck Expenses			\$ <u>345.20</u>
			\$934.35

Total Expenditures \$7,069.85

Approximately one-half of the total time was spent on the geological surveying and prospecting; the remainder was spent on trenching, etc., on the main workings.

¹An approximate estimate subject to final auditing of accounts. Does not include supervision charges by Amaco Development Ltd.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 140 MAP #1

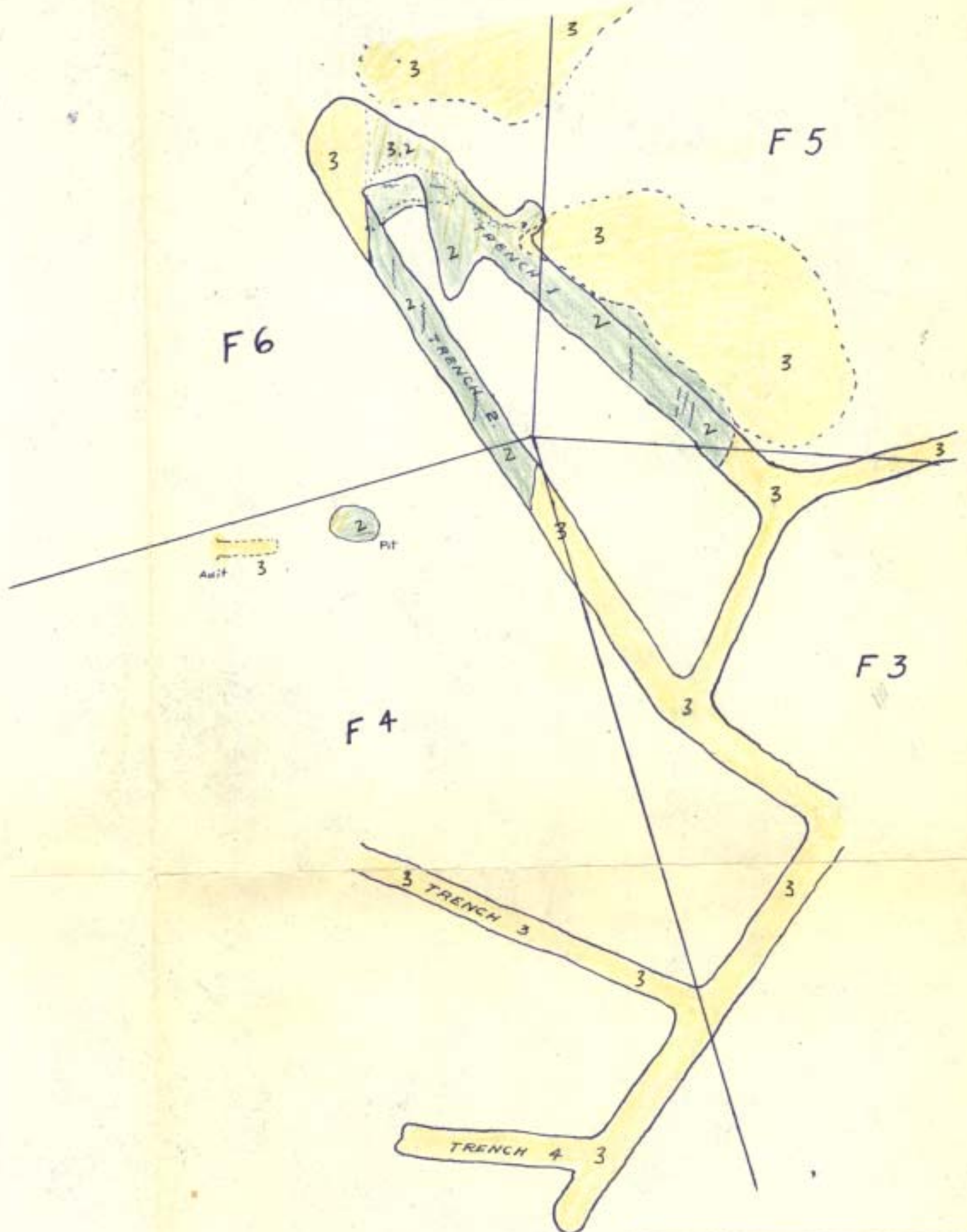
ANUWON URANIUM MINES LTD.
FIDDLER AND FB CLAIMS
MAMETTE LAKE, B.C.

- LEGEND**
- Granodiorite
 - Metamorphosed Sediments
 - Cu Mineralization
 - Joints, Fractures
 - Outcrop
 - Fault, Shear
 - Traverse Line
 - Road
 - Creek

SCALE: 1 INCH TO 500 FEET

To accompany Report by *John A. Sorens*

#140
MAP 1



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
ANUWON URANIUM MINES Ltd. NO. **140** MAP **#2**

FIDDLER GROUP TRENCHES
MAMETTE LAKE, B.C.

- | | | | |
|---|-----------------------|-------|----------------|
| 3 | Granodiorite | — | Claim Boundary |
| 2 | Metamorphic Rocks | ~~~~~ | Shear |
| 1 | Copper Mineralization | | |

Scale: 1" to 50'

#140
MAP 2