2523

DOLMAGE CAMPBELL & ASSOCIATES LTD.
CONSULTING GEOLOGICAL & MINING ENGINEERS
1000 GUINNESS TOWER
VANCOUVER 1, B.C.

GEOCHEMICAL REPORT

on

TAM MINERAL CLAIMS

Nos. 1-20 incl.

Claim Sheet No. 93 N/13E

OMINECA RIVER AREA
Omineca Mining Division, B.C.

125°30'W. Long., 55°55'N Lat.

Owner of Claims:

Union Miniere Explorations and Mining Corporation Limited.

Supervision and Report by;

R.S. Adamson, P.Eng.

Work completed between Aug. 5/1969 to Aug. 17/1969.

August 19th, 1970.

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DOLMAGE CAMPBELL & ASSOCIATES LTD.
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INTRODUCTION

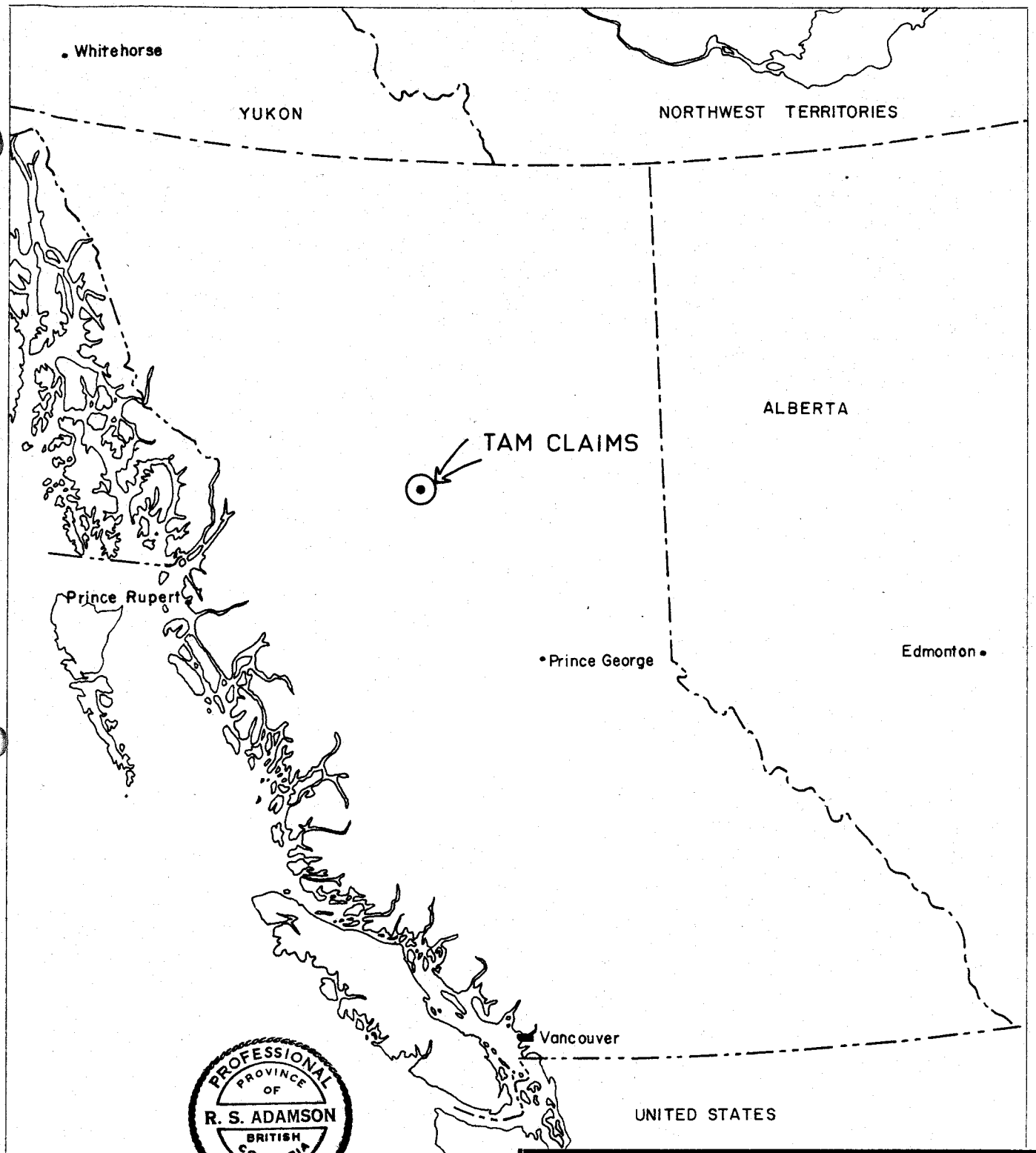
On behalf of Union Miniere Explorations and Mining Corporation Ltd., the present owners of TAM Mineral Claims Nos. 1-20, a geochemical survey was executed by Dolmage Campbell & Associates Ltd., Consultants, on Nos. 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 20 of those claims, under the supervision of R.S. Adamson, P.Eng. The claim block was staked on the basis of a mineralized exposure.

LOCATION AND ACCESS: (125°30'W; 55°55'N)

The Tam claim group is situated 1½ miles northeast of the Omineca River. A road, presently open for about six months each year, connecting with Fort St. James some 100 miles to the southeast, passes two miles east of the claim group.

TOPOGRAPHY:

The claim block lies partially above timberline in alpine grasslands where rock outcrops are rather limited, and partially below timberline in high valleys and on mountain flanks where rock outcrops are quite scarce. Average elevation is 4500ft. with local relief in the range of 200 to 300ft. The southeastern corner of the claim block, a portion of TAM 19 M.C. covers swampy ground.



PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
R. S. ADAMSON

R. S. Adamson

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UMEX
MONTREAL, CANADA

HAHA CREEK AREA

LOCATION MAP

TAM CLAIMS GROUP

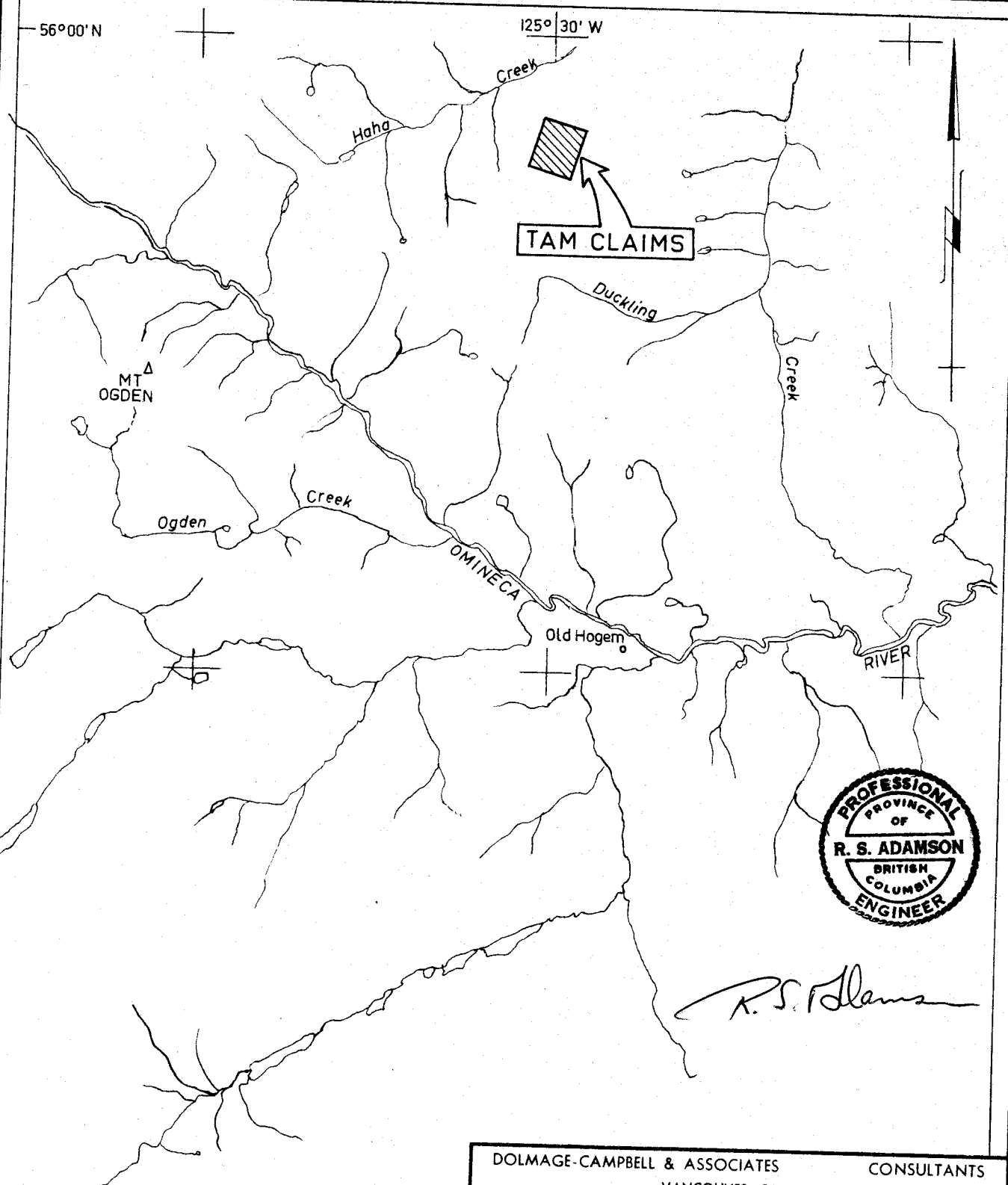
SCALE: 1 inch = 120 miles	AUG. 1970	FIG. 70-209

SUMMARY AND CONCLUSIONS

A geochemical survey was carried out on TAM mineral claims Nos. 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 20 (a total of 12 of the 20 claims block).

Anomalous values in copper range beyond 80 ppm copper. Economically significant values are judged to be in excess of 200 ppm copper; anomalous zones above 200 ppm are few, scattered, and small. Therefore in the writer's view the goechemical survey produced no anomalies of economic significance.

It is recommended that the value of the 1969 geochemical survey be applied for assessment credit in order to retain TAM mineral claims Nos. 1-20 in good standing for one year in view of the continuing exploration program in this area. However, the results of the survey do not justify further expenditures on detailed exploration of these claims at present.



To accompany Geochemical Report on Tam Claims
Omineca Mining Division by R.S. Adamson, P.Eng.
dated: Aug. 19/70

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HAHA CREEK AREA

TAM CLAIMS 1-20

SCALE: 1 : 250,000 | AUGUST 1970 | FIG. 70-210

GEOLOGICAL SETTING

The area containing the TAM Claim group has been mapped geologically by the Geological Survey of Canada, Map 844A, "Takla, Cassiar District, British Columbia" has been published to provide the regional geology on a scale of 1" = 4 miles.

The TAM property is located within the Omineca district, an area underlain by a north-northwesterly trending graben of Mesozoic (mainly Upper Triassic) volcanic and lesser sedimentary rocks which have been intruded by intermediate to acidic bodies ranging in age from Jurassic to Early Tertiary. The belt extends northwesterly from Nation Lakes for 160 miles and varies from 15 to 40 miles in width. Steep, major regional fault structures which are traceable across north central British Columbia for several hundred miles bound the unit on the west and east. To the west, the Pinchi Fault separates the Mesozoic volcanic rocks and intrusive bodies from Late Paleozoic sedimentary formations; to the east, the Manson Fault separates the volcanics from Late Proterozoic to Lower Paleozoic sedimentary rocks.

The Hogem batholith, the largest of the Omineca intrusions, lies in the heart of the Mesozoic belt and abuts the western bounding Pinchi Fault. It extends northerly for 100 miles and varies in width from 10 miles south of the Omineca River to 20 miles north of the river. The batholith ranges in composition from granite to granodiorite to diorite.

Intrusive into the Hogem batholith and the Upper Triassic volcanics and sedimentary formations are numerous small to medium-sized bosses and stocks of probably Tertiary age. Although the composition of these bodies is essentially syenitic, potash metasomatic influences on the intruded rocks (principally volcanics and earlier Omineca intrusives) have developed a variety of allied rock types. Associated with the syenite intrusions are magnetite bearing amphibolites which may be more basic differentiates of the Tertiary magma related to the syenite intrusions. The syenite intrusives are of economic importance because of the proliferation of copper occurrences associated with them.

The TAM property is associated with one of the small intermediate intrusive bodies which lies within a larger area of granodiorite. Small, metasomatized volcanic remnants are also present. The syenite intrusion may in fact be a calcic metasomatism of pre-existing dioritic rocks which has resulted in a composition closely resembling a syenite (or monzonite?). Contacts with the enclosing granodiorite, where locally observed, are rather vague and gradational, tending to support this theory.

The bluffs along the northern edge of the soils survey grid provide excellent rock exposures and contain the only significant mineralized zone to be located on the TAM claim group. This zone consists of a malachite-stained cliff face of altered andesite. The andesite is fine grained, slightly gneissic and is weakly to moderately altered by pink orthoclase feldspar. A prominent set of joints strikes N10°E and dips 30°east. Although the andesite is moderately weathered, visible chalcopyrite is present on fracture faces and as disseminations across a width of 200ft.

SAMPLING TECHNIQUES

The geochemical survey was first laid out by establishing two parallel north-south base lines 2500ft. apart, the western base line being 2800ft. in length and the eastern 3600ft. The sample lines were then marked by chain and compass between the two base lines as well as 600ft. to the west and 2000ft. to the east. Lines were run east-west at 400ft. intervals, and sampling stations were marked at 100ft. intervals. These lines were tied to both base lines and to the TAM claims.

Soil samples were taken by first digging a hole with a pointed-blade, long-handled shovel; a small handful of soil was then taken from the 'B' horizon thus exposed, and packaged in a standard high wet strength brown Kraft paper sample bag. The samples were sent to Chemex Labs Ltd. of North Vancouver, B.C. They were dried in a fire-proof, thermostatically-controlled, electrically heated oven for 24 hours at a temperature of 150°F, in the original sample bags. The samples were then screened through a 6 inch diameter No. 80 screen, consisting of a stainless steel mesh in a nylon frame. (The screen used is manufactured by Miners and Prospectors' Supply Inc. of California.) Assaying was then carried out on the -80 mesh fraction, using the atomic obsorption method after hot acid extraction.

The results were plotted and contoured according to values, and are presented in Figure 70-211 of this report.

INTERPRETATION

The majority of soil copper values are less than 80 ppm and many are less than 40 ppm. A few small zones (generally less than 1,000ft. in long dimension) contain values over 80 ppm with occasional higher-values. Very few assays are over 200 ppm, considered to be the lower limit for truly interesting anomalies. A relatively weak anomaly extends for 1,000ft. southeast of the mineralized exposure.

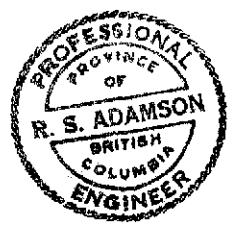
The largest anomaly lies on the west side of the surveyed area. The anomaly covers a pear-shaped area approximately 1200 feet by 800 feet with anomalous copper values in excess of 80 ppm. The anomaly contains a core of higher values in excess of 200 ppm copper but the core is relatively limited in size; not large enough to be of economic significance.

CONCLUSIONS

The TAM claim group has been explored by a geochemical soils survey conducted over grassy plateau-like terrain immediately south of a copper mineralized shear zone exposed on a cliff. The survey was conducted with a view to tracing the southerly extension of the shear zone beneath thin overburden and also to indicate parallel and possibly larger zones of mineralization in the immediate vicinity.

The geochemical survey failed to define such zones with the necessary economic potential. Therefore no further work should be conducted on these claims at this time. The writer recommends the claims be retained in good standing for a year pending results of additional exploration work being carried out in the area.

Respectfully submitted,
DOLMAGE CAMPBELL & ASSOCIATES LTD.



R.S. Adamson, P.Eng.

Vancouver, Canada.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of **Statement of Expenditures**

re the Tam Claims

I, R. S. ADAMSON

of #1000 - 1055 West Hastings Street, Vancouver

in the Province of British Columbia, do solemnly declare that **the following is a true statement of Expenditures for work performed on the Tam Claim Group.**

Expenditures - Wages 39 man day @ $37.00 =	$1,443.00
Camp Maintenance Food at $6./man/day	234.00
Assay & Freight on 623 samples	682.84
Transportation - Helicopter Inv. K1446-11 hr. 10 min. @$125.	1,395.83
Typing, Secretarial & Drafting	60.00
Supervision & Report	1,100.00
TOTAL:	$4,915.67

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 25 day of August 1970, A.D.

R. S. Adamson

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA R. S. ADAMSON

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

Sub-mining Recorder

TAM 2 TAM 1 TAM 12 TAM 11

TAM 4 TAM 3 TAM 14 TAM 13

MINERALIZED EXPOSURE

TAM 6 TAM 5 TAM 16 TAM 15

Cu
Mo

TAM 8 TAM 7 TAM 18 TAM 17

SNOW

TAM 10 WEST BASELINE TAM 9 TAM 20 EAST BASELINE TAM 19

To accompany Geochemical Report on Tam Claims
Omineca Mining Division by R.S.Adamson
dated: Aug. 19 / 70

R.S. Adamson

LEGEND

- > 80 ppm Copper
- > 200 ppm Copper
- 80 Sample point Copper
- 2 Sample point Molybdenum
- Swampy area
- Base line
- Δ Claim post

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HAHA CREEK AREA

GEOCHEMISTRY COPPER

TAM CLAIMS

SCALE: 1" = 400'	AUG. 19 1970	FIG 70-211