

81-#827-9617

REPORT ON THE GEOLOGY, TRENCHING
AND SAMPLING OF THE
MARG AND DOK CLAIMS

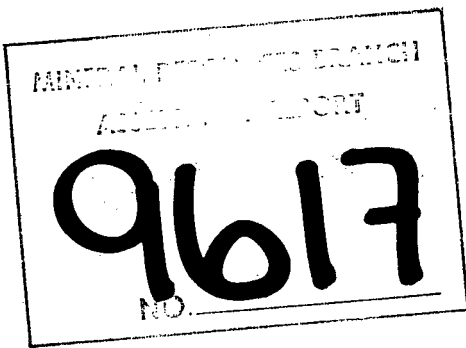
LIARD MINING DIVISION
NTS 104 G/5E

131° 32' Longitude
57° 27' Latitude

OWNER: TECK CORPORATION

OPERATOR: TECK EXPLORATIONS

Peter G. Folk, P.Eng.



October 1981

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Enclosed

INTRODUCTION

1. Location and Access

The DOK and MARG claims are located in the Stikine River drainage astride Dokdaon Creek within the Coast Mountains. The approximate centre of the property is 131° 32' longitude, 57° 27' latitude.

Access is by helicopter only from Schaft Creek, 35 km to the east-southeast which is serviced by fixed wing aircraft from Terrace, about 300 km southeast.

Topography is typically rugged and steep with glaciers nearby. Dokdaon Creek is a braided glacial stream which may or may not be fordable depending on weather conditions.

2. Vegetation

Most of the property consists of steep slopes barren of significant vegetation and the gravel flood plain of Dokdaon Creek. Thick bush but no usable timber is encountered on the lower slopes just above the flood plain.

3. Claims

Work was done on two contiguous claims having a common legal corner post:

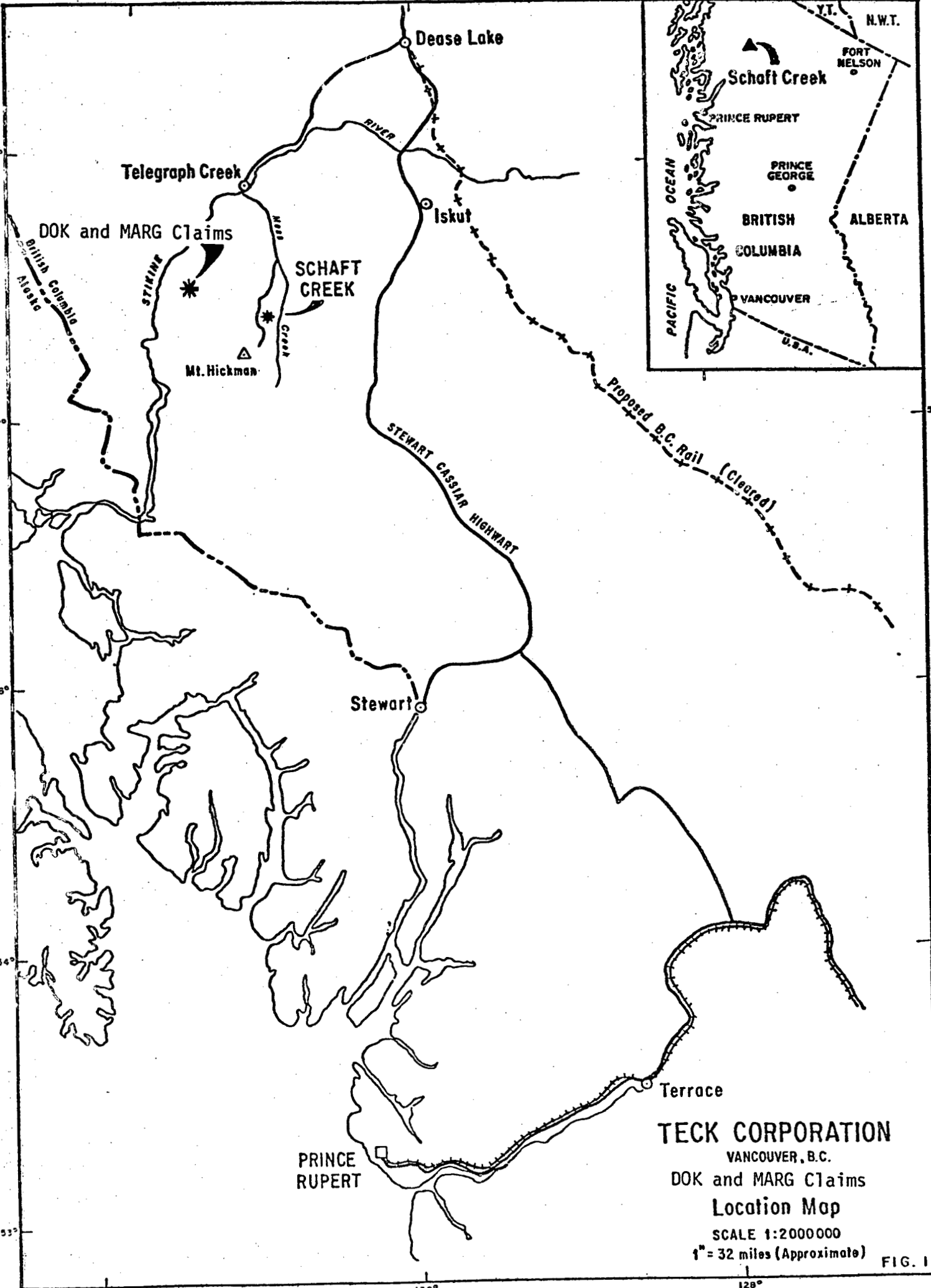
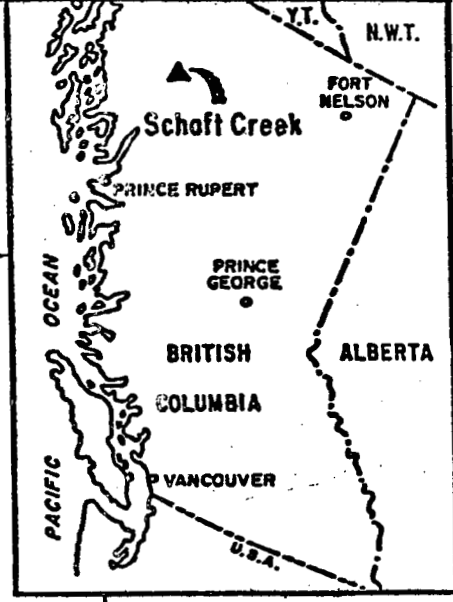
MARG	4 units	Record No. 1621 (9)
DOK	6 units	Record No. 1622 (9)

4. History

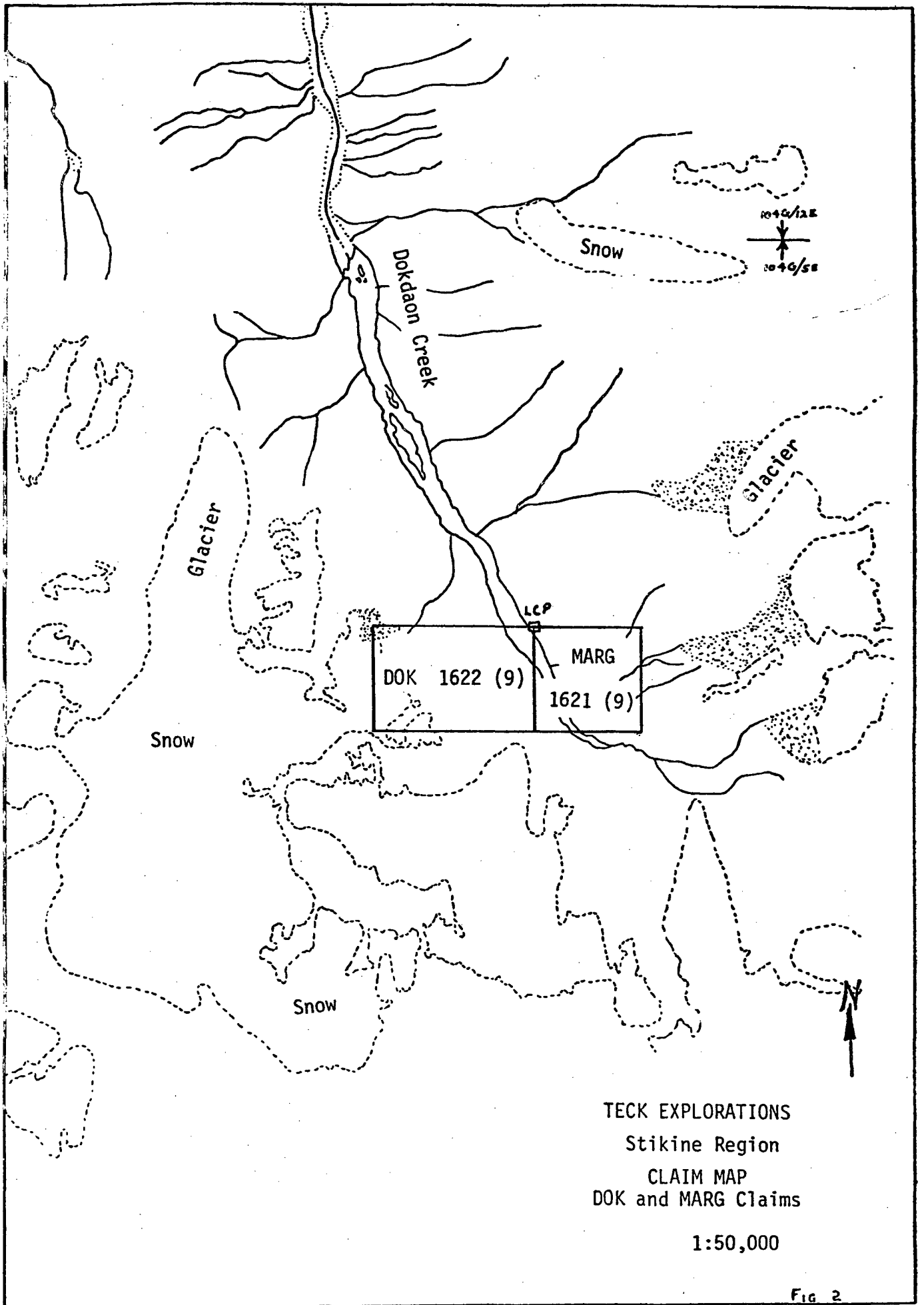
In 1958, Ed Freeze, a Silver Standard prospector, recognized molybdenite and chalcopyrite in the area. In 1980, the author traversed the area, recognized scheelite as well and had the claims staked.

5. Assessment Work

At the end of the 1980 and beginning of the 1981 seasons, geological mapping, chip sampling and drilling and blasting were undertaken on the DOK and MARG claims. The object of this work was to assess the molybdenum, tungsten, copper, gold and silver values which had been located in the summer of 1980.



TECK CORPORATION
 VANCOUVER, B.C.
 DOK and MARG Claims
 Location Map
 SCALE 1:2000000
 1" = 32 miles (Approximate)



TECK EXPLORATIONS
Stikine Region
CLAIM MAP
DOK and MARG Claims

1:50,000

Fig 2

GEOLOGY

G.S.C. Map 11-1971 by Souther indicates that the claims are underlain by post-Upper Triassic granodiorite. There is, however, a pendant of Upper Triassic pyroclastic volcanics which have been extensively mineralized with pyrite. Occurrences of Au, Ag, Cu, Mo and W associated with quartz filled fractures and fault zones have been found in both granitic and volcanic rocks near the contact between the two.

In detail the geology is quite complex with at least three ages of igneous intrusion represented by granodiorite, felsitic rocks and feldspar porphyry, rhyolite dykes and later fine grained diorite, basalt and andesite dykes.

A. Rock Types

1. Volcanic Breccia

At least 600 m long and 300 m wide, a pendant of volcanic material extends northeasterly from Dokdaon Creek. These distinctive rocks are usually well fractured and contain round and sub-round clasts mostly less than 2 cm in diameter in a fine grained matrix. The breccia is matrix supported, contains altered felsitic, feldspar porphyry and rhyolitic clasts which in one location exhibit graded bedding. Pyrite is ubiquitous.

Up on the mountain west of Dokdaon Creek traverses indicate that similar material is present.

2. Granodiorite

A large mass of hornblende granodiorite typical of the Stikine region surrounds the volcanic breccia. It is a nondescript medium grained intrusive rock in which the mafics are altered at least in part to chlorite. Pyrite associated with fracturing and faulting and minor amounts of epidote are common. In the vicinity of the pendant two types of breccia have been formed: one is interpreted as being of tectonic origin while the other is strictly related to the granodiorite-volcanic contact.

3. Granodiorite Breccia

Coarse round and sub-round clasts of granodiorite are found in a matrix of granulated granodiorite which has been subsequently healed. Granodiorite breccia is found in linear bodies adjacent to dykes or mineralized fault zones and is of tectonic origin.

4. Contact Breccia

Intermittently at the contact a breccia has been formed which contains greater than 50% granodiorite as poorly sorted but generally large subround clasts as well as lesser amounts of volcanic fragments in a fine grained matrix. This breccia can be either matrix or clast supported and is interpreted as being a contact effect formed when the granodiorite was intruded.

5. Felsite, Feldspar Porphyry

Feldspar rich dykes up to a few metres wide cut the granodiorite and volcanic breccia. The porphyritic variety contains only small (3 mm) phenocrysts in a light coloured feldspathic ground mass.

6. Rhyolite

Dykes of rhyolite are similar to felsite but are harder, contain fine silica and can exhibit flow layering. The age relationship between rhyolites and felsites is unknown.

7. Late Dykes

Fine grained dioritic, basaltic and andesitic dykes cut all other rock types, veins, and alteration.

B. Structure and Mineralization

A vein-fracture system with as many as 14 parallel quartz veinlets usually 3 mm to 8 cm wide per metre contains pyrite, chalcopyrite, molybdenite, scheelite and minor galena in apparently sub-economic amounts. Veinlets in this system are steep dipping with a north-westerly strike. The zone of consistent veinlets averages about 100 m wide and is at least 250 m long, being obscured by overburden at both ends. Similar but sporadic veining occurs outside the mapped limits of the zone. There are neither indications of quartz veinlets in other directions, nor are there cross-cutting relationships indicating more than one age of mineralization.

East of this zone are two faults which have undergone intense bleaching, silicification and pyritization. They contain sub-economic values in gold, silver and copper. The best of these structures trends northerly, is near the granodiorite contact and can be traced for about 50 m. Values range from 1.26% Cu, 3.34 oz. Ag/T, 0.035 oz. Au/T over 1.9 m to .03% Cu, 0.20 oz. Ag/T, 0.001 oz. Au/T over 2.1 m.

C. Alteration

Both the quartz filled fracture system and mineralized fault zones lie within an envelope of pyritization and chloritic alteration. Secondary biotite and epidote were noted in a few places. All rock types except late dykes have been more or less effected by mineralization and alteration.

SAMPLING AND ASSAYING

34.7 metres of trenches about 12 inches deep were drilled using a gasoline powered portable rock drill and blasted. These trenches and other locations were then chip sampled. Locations and results are plotted on the geology map as are Al Morton's 1980 sampling (sample numbers 80 B DOK 1, etc.)

Rock samples were assayed by standard rock assay techniques at Acme Analytical Labs, Vancouver.

RESULTS

Results from the system of mineralized veinlets are consistently low with no values above .05% Mo, .2% Cu, .31 oz. Ag/T, .025 oz. Au/T or 0.17% W.

Values from the two silicified fault zones (samples 1-9) were better but still far from economic for this type of deposit in a remote location.

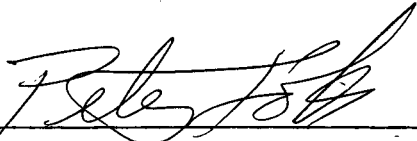
CONCLUSIONS

Although the occurrence contains Cu, Mo, W, with some Au and Ag, over a substantial area, the sampling does not indicate values near economic grade. The existence of only one set of parallel veinlets of one age does not indicate that a major deposit is hidden nearby. The mineralized fault zones are neither extensive enough nor mineralized enough to be of economic interest.


Peter G. Folk, P.Eng.

COST STATEMENT

<u>Wages</u>		\$
Al Marton, Geologist 5 days @ \$90/day	September 10-15/81	450.00
J. Bacon, Helper, Driller 8 days @ \$60/day	September 10-15/81 June 15-17/81	480.00
W. Willows, Helper 3 days @ \$55/day	June 15-17/81	165.00
R. Winram, Helper 6 days @ \$50/day	June 12-17/81	300.00
P. Folk, P.Eng. 6 days @ \$200/day	June 12-17/81	1,200.00
Helicopter, Bell 206B, based at Schaft Creek 5 hours @ \$500/hr. including fuel		2,500.00
Food and accommodation 23 man days @ \$20/day/man		460.00
Blasting supplies		200.00
Assays - 45 rock assays @ \$25.00 each		<u>1,125.00</u>
	<u>TOTAL</u>	<u>\$6,880.00</u>



Peter G. Folk, P.Eng.

APPENDIX I

CERTIFICATE OF QUALIFICATIONS

I hereby certify that:

1. I graduated from the University of British Columbia in 1971 with a B.A.S.C. degree in geological engineering.
2. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
3. I have worked since graduation as an exploration geologist and mine geologist in Canada and the United States.
4. The work described herein was done under my direct supervision.

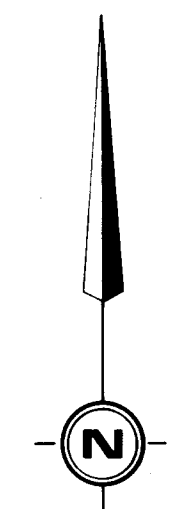


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SAMPLE DATA

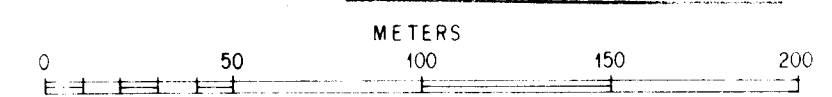
SAMPLE N°	LENGTH (m)	Mo (%)	Cu (%)	Ag (oz/T)	Au (oz/T)	W (%)
1	2.0	.002	.41	1.89	.008	.04
2	2.7	.016	.07	.11	.002	.03
3	1.5	.002	.08	.26	.024	TR
4	1.9	.002	1.26	3.34	.035	.02
5	2.3	.001	.17	1.28	.014	.04
6	2.1	.001	.12	.51	.001	.01
7	1.5	.007	.03	.20	.001	.02
8	1.7	.002	.02	.96	.009	.02
9	1.7	.003	.01	.47	.036	TR
0	3.0	.005	.05	.12	.001	.06
11	0.5	.001	.03	.04	.001	.02
12	2.0	.002	.02	.06	.001	.03
13	1.0	.001	.02	.03	.001	TR
14	3.0	.013	.07	.11	.002	.03
15	3.0	.006	.04	.06	.001	.03
16	3.0	.012	.18	.22	.001	.03
17	3.0	.007	.06	.08	.001	.17
18	3.0	.007	.07	.08	.001	.02
19	1.5	.008	.08	.10	.001	.03
20	3.0	.017	.05	.06	.001	.07
21	3.0	.005	.03	.05	.001	.02
22	3.0	.005	.04	.05	.001	.02
23	3.0	.012	.08	.09	.001	.04
24	2.7	.004	.01	.07	.025	.02
25	2.0	.012	.06	.06	.001	.06
26	2.5	.020	.18	.27	.001	.04
27	3.5	.003	.04	.11	.001	.05
28	1.5	.048	.05	.31	.001	.04

		Mo S ₂	Cu	Ag	Au	WO ₃
80B DOK 1	GRAB	.058	.02	.34	.001	.01
80B DOK 2	GRAB	2.12	.25	.8	.005	.01
80B DOK 3	GRAB	.006	.05	.21	.003	.01
80B DOK 4	GRAB	.005	.01	.01	.001	.01
80B DOK 5	GRAB	.004	.01	.06	.018	TR
80B DOK 6	GRAB	.002	.01	.01	.001	TR
80B DOK 7	GRAB	.005	.01	.13	.001	.01
80B DOK 8	GRAB	.002	2.58	5.46	.036	.02
80B DOK 9	GRAB	.002	.13	1.82	.026	.13
80B DOK 10	GRAB	.004	.07	.96	.006	.05
80B DOK 11	GRAB	.039	.02	.05	.001	.03
80B DOK 12	GRAB	.098	.23	.42	.001	.02
80B DOK 13	GRAB	.026	.14	.16	.001	.05
80B DOK 14	GRAB	.008	.04	.29	.001	.09
80B DOK 15	GRAB	.004	.05	.04	.001	.02
80B DOK 16	GRAB	.006	.02	.04	.001	.01
80B DOK 17	GRAB	.039	.41	.21	.002	.01



LEGEND

- MASSIVE SILICA WITH PYRITE
- FINE GRAINED DIORITE, BASALTIC TO ANDESITIC DYKES
- RHYOLITE DYKES
- FELSITE, FELDSPAR PORPHYRY
- GRANODIORITE
- CONTACT BRECCIA
- VOLCANIC BRECCIA
- GRANODIORITE BRECCIA
- PYRITIC ZONE
- ZONE OF CONSISTENT QUARTZ FILLED FRACTURES
- SAMPLE SITE - 1980
- SAMPLE SITE - 1981
- PYRITE
- CHALCOPYRITE
- GALENA
- MOLYBDENITE
- EPIDOTE
- BIOTITE



TECK EXPLORATIONS LTD.

**STIKINE REGION
DOK GROUP
GEOLOGY**

COMPLD. P. FOLK DATE OCT. 1981
DRAWN WR