D.C. Findlay, Ph.D

GEOLOGIST

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BOX 1029
WHITEHORSE, YUKON, CANADA

Reconnaissance Geology and Geochemistry

FREE MINERAL CLAIMS
Freegold Mountain Area, Yukon

Whitehorse M.D. N.T.S. 115 I-6

62° 17' N; 137° 2.5' W.

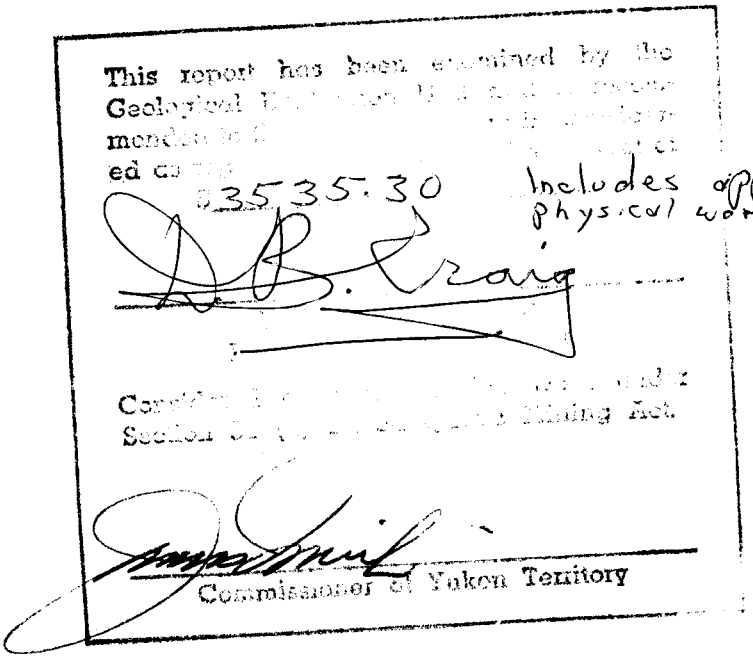
for
TANZILLA EXPLORATIONS LTD. (N.P.L.)

6 June - 21 September, 1970

With an Appendix describing Physical Work

by

D.C. Findlay, F.G.A.C.



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Illustrations

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FREE MINERAL CLAIMS

Freegold Mountain Area, Yukon Territory

Whitehorse M.D. N.T.S. 115 I-6

SUMMARY AND CONCLUSIONS

1. The FREE property consists of a total of 72 contiguous mineral claims located on the southeast flank of Freegold Mountain, about 30 air miles northwest of Carmacks, Yukon. This report pertains mainly to the original block of 56 claims (FREE 1-56) although examination was also made of parts of the two other blocks (FREE 57-64, FREE 65-72) comprising the total group.

2. A preliminary examination of the claims was conducted on 6 June, 1970. Following recommendations to the owners, TANZILLA EXPLORATIONS LTD, (N.P.L.), a reconnaisance stream silt and soil geochemistry survey was carried out during the period September 8 - 13, 1970. Reconnaissance geological mapping and some bulldozer physical work was also done at this time. A further examination of bulldozer excavations was made on 21 September, 1970.

3. The FREE claims contain less than 10 per cent outcrop. The central part of the property is underlain mainly by banded schists and gneisses of the Proterozoic (?) Yukon Group. The western and eastern parts are underlain by a variety of igneous rocks, including Cretaceous granodiorite and hornblende syenite, and dykes, sills and irregular bodies of quartz-feldspar porphyry, rhyolite porphyry, and andesite porphyry of probable Tertiary age.

4. A number of old showings occur on the property, chief of which are the 'Whale' showing (gold) and the 'American Yukon' prospect (gold, antimony). They were examined and sampled for reference purposes. They are considered only of cursory interest at this stage.

5. Stream silt and soil geochemical results for copper, molybdenum and antimony indicate a number of weakly-anomalous areas that should be further investigated by detailed work.

6. A bulldozer was used to cut a short access road to the property, and located so as to provide a fresh excavation through geologically-favourable igneous rocks on the southern part of the claim block. The cut was geochemically-sampled with, in one case, distinctly anomalous results for copper and antimony.

7. Based on this preliminary geological, geochemical, and physical work, two groups of 16 claims each (FREE 1-6, 17-20, 34,35, 49-52; and FREE 7-12,21-26,53-56) of the original FREE 1-56 block are considered most favourable, and it is recommended that these 32 claims be retained.

8. A total of $2,535.30 was expended on geological and geochemical work on the FREE claims. In addition, assessment credit of $1,000.00 is claimed for physical (bulldozer) work conducted.

9. A program for additional work on the FREE property is recommended. The estimated cost of this program is $20,000.00.

INTRODUCTION

The FREE claims lie in an area that has been actively prospected and worked for lode gold since the original discovery of the metal by prospector P.F. Guder on Freegold Mountain in 1930. This activity culminated in 1966 with the opening of the Laforma (gold) Mine by Discovery Mines Limited. Although the mine remained in production for only six months, prospecting activity in the area has continued, although on a more sporadic basis. More recently the general area has been re-activated due to intensive exploration for copper and molybdenum in Dawson Range over the past two years. Two properties in the general Freegold area are currently (1970) receiving detailed attention - the Revenue Creek copper prospect of Yukon Revenue Mines Limited (under option to Kaiser Resources Company) about 6 miles northwest of Freegold Mountain, and the Granite Mountain copper prospect (Placer Development Limited) 5 miles east of Freegold Mountain. This part of Dawson Range is a geologically-complex area characterized by a great variety of relatively young (Tertiary) intrusive and extrusive rock suites, some of which have associated copper, molybdenum, gold, silver and antimony mineralization.

The region is thus favourable from an exploration viewpoint, and the FREE claims are favourably located within this region.

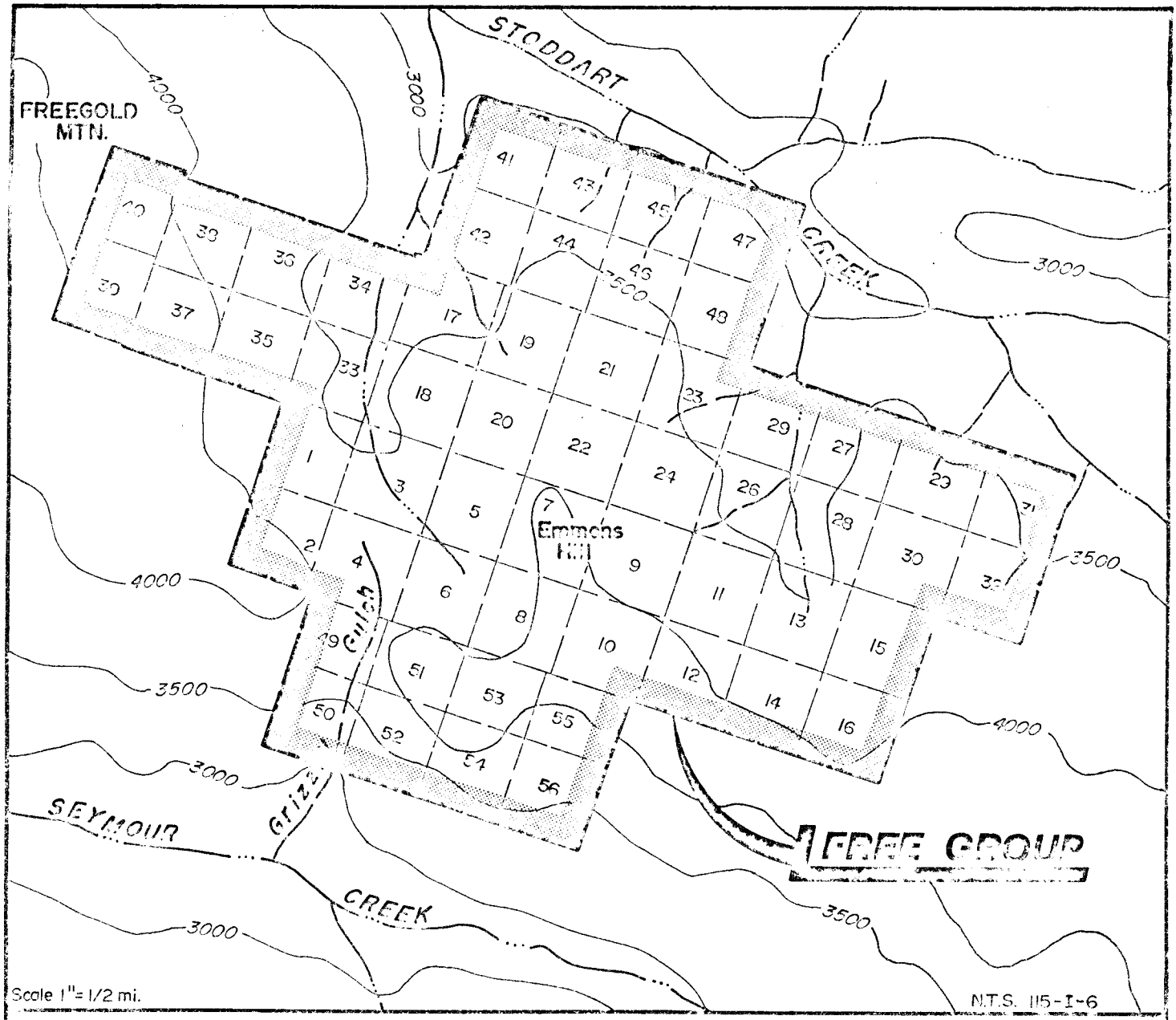
CLAIMS

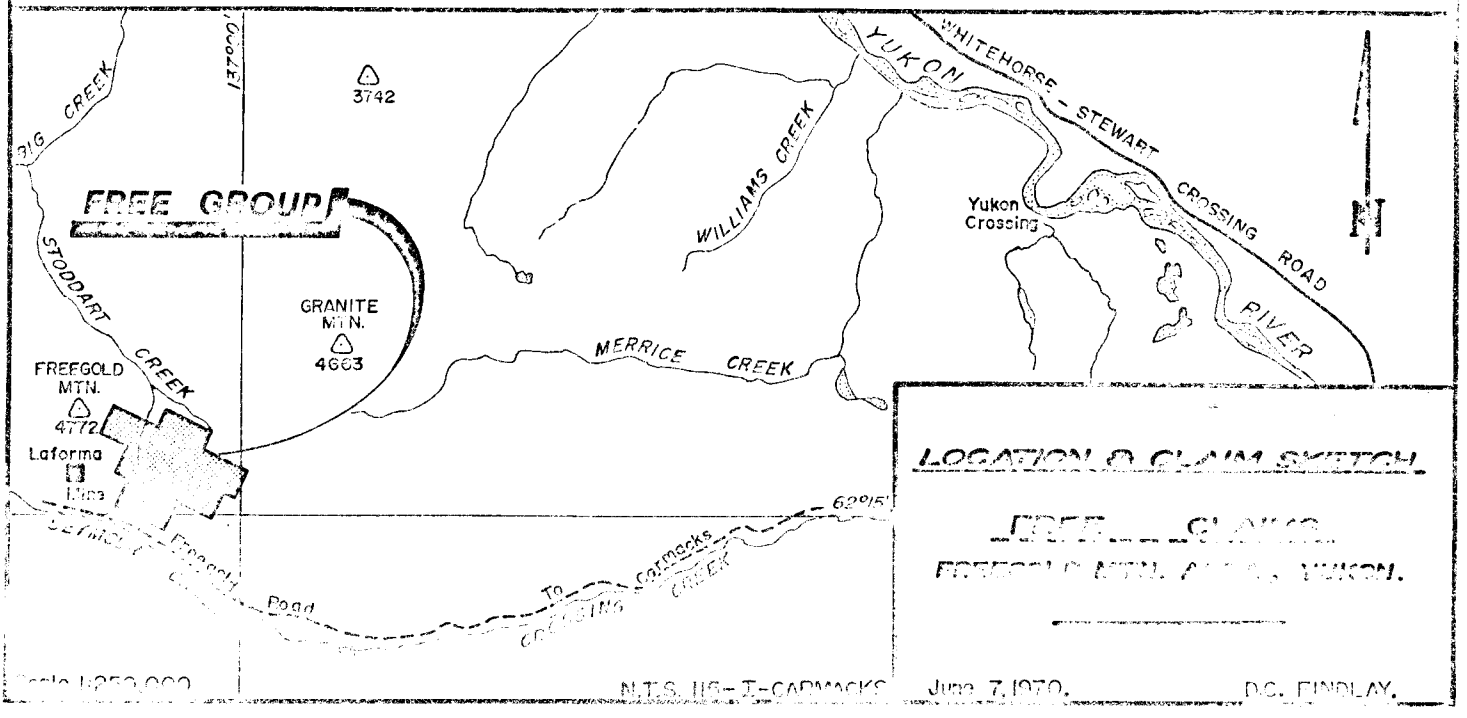
The original FREE group consists of 56 mineral claims recorded in the Whitehorse Mining District, Yukon. Claim and Grant Numbers, with Anniversary Dates are as follows:

Claim	Grant Number	Anniversary Date
FREE 1-32	Y 44182 - Y 44213	12 December, 1970
FREE 33-56	Y 47598 - Y 47621	30 December, 1970

LOCATION AND ACCESS

The FREE claims are located on the southeast flank of Freegold Mountain, between the main fork of Stoddart Creek on the north, and Seymour


STODDART
FREEGOLD MTN.
4000
3000
3500
CREEK
Emmons Hill
Gulch
SEYMOUR
Griz
CREEK
FREE GROUP
Scale 1"= 1/2 mi.
N.T.S. 115-I-6


YUKON
WHITEHORSE - STEWART
CROSSING ROAD
Yukon Crossing
RIVER
WILLIAMS CREEK
MERRICE CREEK
3742
BIG CREEK
FREE GROUP
STODDART CREEK
GRANITE MTN.
4603
FREEGOLD MTN.
4772
Laforma Mine
62°15'
To Carmacks
CROSSING
Scale 1:250,000
N.T.S. 115-I-CARMACKS
LOCATION & CLAIM SKETCH
FREE GROUP
FREEGOLD MTN. AREA, YUKON.
June 7, 1970.
D.C. FINDLAY.

Creek and the Freegold road on the south. The claims are about 30 air miles northwest of the community of Carmacks on the Whitehorse-Stewart Crossing road, and the geographic co-ordinates of the approximate centre of the block are:- 62-17 N; 137-2.5 W. The National Topographic Series reference sheet is 115 I-6 (Freegold Mountain).

Access to the claims is from the Freegold road, which leads west from Carmacks to the former Laforma Mine on the southwest flank of Freegold Mountain. At mile 38.5 (from Carmacks) on this road, a jeep-trail follows the west bank of Grizzly Gulch upslope to the top of the gulch and thence southeast for about $\frac{1}{2}$ mile. From here, a faintly-marked bulldozer trail leads north across open upland to Emmons Hill, near the approximate centre of the Free property. The original Grizzly Gulch trail was impassable to vehicles because of excessively steep grade and sloughing of banks; however, during this work a new access road was constructed west of the original trail (see APPENDIX I, this report).

PREVIOUS WORK IN THE AREA

The FREE property lies within the Carmacks geologic sheet, mapped by Bostock (1936). Greater geologic detail of the Freegold Mountain area is provided by Johnston (1937), although his map includes only the western part of the area covered by the FREE claims. The FREE property is included on the extreme southeast part of Geological Survey of Canada airborne magnetic sheet 115 I/6 (Geophysics Paper 3313 - Freegold Mountain).

PRESENT WORK

A preliminary examination of part of the FREE property was made on 6 June, 1970. At this time the known showings ('Whale' and 'American Yukon') were visited and reference samples collected. A report dated 7 June, 1970 was prepared for the owners on the basis of this examination, and a follow-up program of exploration was recommended.

During the period 8-13 September, 1970, a reconnaissance geology and geochemical survey was made of the property. A helicopter chartered from Trans North Turbo Air Limited, Whitehorse was utilized to collect stream silt samples from the principal creeks draining the claims area, and to

examine helicopter-accessible outcrops within and adjacent to the claims for the purposes of establishing control geology. A number of ground traverses were then run across parts of the claim group and soil samples were collected at approximately 500 to 750-foot intervals along selected traverses (see DWG 70012-4, in pocket). Claim location lines, air photographs, and pace-and-compass methods were used for ground control.

A D-8 bulldozer (General Enterprises Ltd., Whitehorse) was used to cut a new access road down the west side of Grizzly Gulch, and in the process, provided an open-cut section through bedrock on claims FREE 49 and 50. The open-cut was geochemically-sampled (see inset sketch, DWG 70012-4, in pocket) and the geological section was subsequently re-examined on a return visit to the property on 21 September, 1970.

During the course of the present work, a total of 6 days was spent on the property by the writer.

TOPOGRAPHY AND VEGETATION

Much of the FREE property lies on the open, upland backslope of Freegold Mountain east flank. With the exception of scattered, locally-castlelated outcrops such as at Emmons Hill, the area is largely overburden-covered. Elevations range from about 3,000 feet to 4,000 feet A.S.L. Vegetation consists mainly of moss, tag-alder and dwarf birch. At lower elevations and along creek valleys, moderately-heavy spruce stands are present.

The southernmost part of the claim block (FREE 49-56) lies mainly on the relatively steep slope of Seymour Creek valley, above Freegold road. Vegetation is moderately-heavy, with mixed stands of spruce, poplar and alder. Outcrop is largely limited to slope-crest areas, at elevations about 4,000 feet A.S.L.

GEOLOGY

The general geology of the claims area is shown on DWG 70012-5 (in pocket). The oldest rocks are banded gneisses and schists of the Proterozoic (?) Yukon Group (unit 1) that underlie much of the central

part of the claim group. The rocks range from coarse, sub-massive granitic gneiss to finer-grained quartz-feldspar-biotite (± amphibole) schist. Locally, as at Emmons Hill, amphibolite bands and lenses are present. Foliation trends are generally northwesterly, except near contacts with intrusive rocks where local changes in trend are evident.

The northeastern third of the claim block is underlain mainly by grey to greenish-grey, medium- to coarse-grained granodiorite (unit 3) containing quartz, K-feldspar, plagioclase and accessory hornblende and/or biotite. The rock is locally crudely foliated and in places (e.g. south-east part of the FREE 65-72 claim group) difficult to distinguish from the more massive granitic gneiss members of the Yukon Group assemblage. Johnston (1937) considered the granodiorite as "Upper Jurassic or Later" in age; from accumulating data on the geochronology of similar rocks in Dawson Range and adjacent regions, it is probable that the granodiorite is Cretaceous (100 m.y. ± 10 m.y.*).

Much of the southwest part of the claim block, in the Grizzly Gulch area, is underlain by green to mottled green and pink, medium-to very coarse-grained hornblende syenite. The rock is typically porphyritic and locally pegmatitic (unit 2). According to Johnston (op. cit.) the syenite is older than the granodiorite (unit 3), but intrusive relationships between the two rock types were not observed during this work.

A variety of igneous rocks cut units 1, 2 and 3 as dykes and irregular masses. Although there is considerable variation in composition and texture of the younger intrusive rocks, they can be divided into two general groups; andesite porphyry (unit 4) and quartz-feldspar porphyry and rhyolite porphyry (unit 5). These rocks are present in a profusion of detail in the southern part of the claim group, and on the present scale of investigation it was not possible to sort out their distribution as distinct units. The andesite dykes are typically greenish, fine-grained, and have prominent plagioclase phenocrysts. Locally, as on the ridge northwest of Grizzly Gulch, the rock is more properly termed dacite porphyry. Andesitic dyke rocks are common in

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* million years

the vicinity of the 'Whale' showing, east of Grizzly Gulch. The acidic dykes (unit 5) are typically pale cream or white, fine-grained, and contain small quartz and feldspar phenocrysts. Locally they are non-porphyritic, cryptocrystalline felsites.

MINERALIZATION

Two main showings are known on the FREE property, both of which are old ones and were described by Johnston (1937). The 'American Yukon' prospect is located about 1,000 feet north of Emmons Hill. The original workings apparently consisted of a number of surface trenches and a shaft 92 feet deep, with short crosscuts at depths of 40 and 92 feet (op. cit. p. 19). The shaft is now blocked by ice and water, but dump material near the collar includes grey-white, suggary vein quartz containing graphitic fragments and lenses. A grab sample of this material assayed:* 0.70 ounces per ton gold and 0.16 ounces per ton silver.

Near the old 'American Yukon' shaft, four northerly-trending shallow bulldozer trenches have been cut down the hillslope at some time subsequent to the original work. In the trench immediately west of the shaft, bedrock rubble is exposed. Slumping of the trench walls has obscured relationahips, but vuggy quartz-carbonate vein material carrying patches and blebs of stibnite up to 1 inch across is present in the trench. A grab sample of this material assayed:* 0.01 ounces per ton gold, 0.10 ounces per ton silver and 3.60 per cent antimony. Neither the width nor the attitude of the vein structure could be determined, due to the present state of disrepair of the trench. According to Johnston (op. cit. p. 19) gold assays as high as $60.00 per ton were obtained from similar material intersected at a depth of 15 feet in the shaft.

The 'Whale' showing is located about 1,600 feet east of Grizzly Gulch at an elevation of about 3,900 feet. It was described by Johnston (op. cit.) as consisting of a white quartz-feldspar porphyry dyke containing vein quartz carrying low gold values (op. cit. p. 20). An open-cut across part

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* Assayed by G. Spalding, Whitehorse Assay Office, Whitehorse, Yukon

of the 'dyke' was examined during the present work. Material exposed in the cut is pale brown, cryptocrystalline chalcedonish quartz. No visible mineralization was observed and a grab sample of the material assayed:* 0.005 ounces per ton gold and 0.04 ounces per ton silver.

In banded schists (unit 1) near the summit of Emmons Hill a small, patchy rust zone is present. The rock is partly decomposed and carries disseminated pyrite (minor). A grab sample of the material assayed:* trace gold, 0.06 ounces per ton silver, and 0.02 per cent copper.

A sample of vein quartz rubble from a shallow trench in quartz-feldspar porphyry near the jeep-trail east of Grizzly Gulch (see DWG 70012-5, in pocket) assayed:* trace gold, trace tungsten.

On the southeast part of the claim block (FREE 68) above Freegold road, a series of small pits and trenches have been cut in fractured and silicified rhyolite, quartz-feldspar porphyry and minor dacite porphyry. The rocks are locally brecciated and rust-stained (limonite) and have been cut by several ages or stages of quartz-ankerite vein material. In places, very minor pyrite is visible. A grab sample of typical silicified material assayed:* trace gold, 0.14 ounces per ton silver.

A few specks of chalcopyrite were noted in hornblende syenite exposed in the new road cut west of Grizzly Gulch. Anomalous copper and antimony geochemical values were obtained from a sample in this area, as discussed in the following section.

GEOCHEMISTRY

Analytical Methods

All stream silt and soil samples were analyzed for copper, molybdenum, and antimony by Bondar-Clegg and Company Limited at their Vancouver laboratory. Hot aqua regia extraction on minus eighty mesh sample fractions, and atomic absorption spectrometry and colorometric detection methods were utilized. Detection limits for all three elements are 1 part per million

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* Assayed by G.Spalding, Whitehorse Assay Office, Whitehorse, Yukon

Stream Silt Results

A total of 15 silt samples were analyzed. Sample locations and analytical values are shown on DWG 70012-4 in the pocket of this report. The number of samples is too small for any meaningful statistical treatment of results; however, a number of conclusions are obvious, as follows:

i) no strongly anomalous values were recorded;

ii) samples from Schist Creek and its tributaries show consistently higher values for copper (12 to 18 p.p.m.) and antimony (2 to 6 p.p.m.) than samples from the other main creeks which yielded values in the range 5 to 10 p.p.m. copper and 1 to 3 p.p.m. antimony;

iii) molybdenum does not show significant variation or concentration in silt samples.

Soil Sample Results

A total of 72 soil samples were analyzed. Sample locations and metal values are shown on DWG 70012-4 (in pocket) and distribution patterns for the elements are illustrated on DWG 70012-3 (in pocket). Although the population (number of samples) is somewhat small for rigorous statistical treatment, the following approximate statistical factors have been calculated, or derived from DWG 70012-3:

	Arithmetic Mean (ppm)	Geometric Mean (ppm)	Mean+3S* (ppm)
Copper	15	13	24
Molybdenum	1	-	-
Antimony	3	1.4	6

* Geometric mean plus 3 Standard Deviations, which in this case is used as the threshold limit for anomalous values.

The 97 per cent population values for copper and antimony (from DWG 70012-3) are 24 p.p.m. and 6.6 p.p.m. respectively, values which are in approximate agreement with the anomalous threshold limits as given above.

On the basis of the foregoing data, anomalous threshold values for the three elements are estimated as follows:

Copper -	24 p.p.m.
Antimony -	6 p.p.m.
Molybdenum -	3 p.p.m.

Based on these preliminary soil results, there are four areas on the FREE claims which would appear to warrant follow-up work, as follows:

Area 1 , on the right limit slope (east) of Schist Creek (sample No. 8) shows strongly anomalous antimony (30 p.p.m.) and weakly anomalous copper (24 p.p.m.);

Area 2 (samples 20, 96) in the headwaters area of Schist Creek yielded weakly anomalous copper (24 - 25 p.p.m.) and sub-anomalous to anomalous antimony (4 - 8 p.p.m.);

Area 3, in the extreme southeast part of the claim block (samples 71, 72, 76)* yielded weakly anomalous copper (24 - 26 p.p.m.) and one anomalous antimony value (sample 76 - 8 p.p.m.);

Area 4, along the new road/open cut west of Grizzly Gulch yielded one anomalous copper (48 p.p.m.), molybdenum (4 p.p.m.) and antimony (15 p.p.m.) sample (No. 100). These latter results should be treated with some caution however, since samples from this area in part included rock fragments and are thus probably not directly comparable to the bulk of the soil samples.

CONCLUSIONS

On a geologic and geographic basis, the FREE claims are well located with respect to known mineralization in the district. The general Freegold Mountain area is a complex geologic environment, with several ages and stages of intrusive and extrusive events represented in the rock types present. The FREE claims cover a part of this geologically-complex area, and known showings on the property attest to at least local mineralizer activity. Locally intensive quartz veining and silicification is associated with Tertiary

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* Note Sample 73, collected from this area also, was not included in the Bondar-Clegg analytical report, for as yet undetermined reasons.

porphyritic dyke rocks on the property. Such silicification is typical of that associated with lode-gold occurrences on adjacent Freegold Mountain, and the possibility of similar hidden lode-gold occurrences on the FREE property may be considered.

Gold-antimony associations are well-known, and the presence of at least one stibnite-bearing vein ('American Yukon') on the property suggests the possibility that other more significant (but hidden) gold-antimony occurrences may be present.

The reconnaissance geochemistry results, although not spectacular, suggest that copper mineralization of unknown significance may be associated with intrusive rocks on the property, and also that other buried sources of antimony mineralization are present.

In view of the above considerations, it is concluded that the FREE property is worthy of additional investigation.

RECOMMENDATIONS

It is recommended that:

i) A total of 32 claims of the original FREE 1-56 group be retained. These to comprise two groups of 16 claims each, as follows;

Group A	FREE 1-6	(Y 44182 - Y 44186)
	FREE 17-20	(Y 44198 - Y 44201)
	FREE 34,35	(Y 47599, Y 47598)
	FREE 49-52	(Y 47614 - Y 47617)
Group B	FREE 7-12	(Y 44188 - Y 44193)
	FREE 21-26	(Y 44202 - Y 44207)
	FREE 53-56	(Y 47618 - Y 47621)

ii) Assessment work credits to the value of $3200.00, comprising the work described in this report as well as physical work (see Appendix I) be applied for on the above claims;

iii) Pulps of soil samples discussed in this report, currently in storage with Bondar-Clegg and Company, be analyzed for gold and arsenic;

iv) A detail soil survey be conducted over the claims during the 1971 season, including an orientation gold-geochemical survey in the vicinity of the 'American Yukon' showing. Routine analysis of soil samples should be for copper, arsenic and antimony, with provision for gold analyses in selected areas.

ESTIMATED COSTS OF RECOMMENDED PROGRAM

A. Geochemical analysis of current samples for gold and arsenic			
	72 samples @ $4.50	.....	$ 324.00
B. Preparation of phototopographic base map		.....	200.00
C. Linecutting and picketing			
	16 miles @ $75.00	....$ 1,200.00	
	18 miles @ $100.00	..... 1,800.00	
		3,000.00	3,000.00
D. Geochemical Survey			
	Analyses 2,000 samples @ $4.00	....	8,000.00
	Sampling 2,000 samples @ 1.50	....	3,000.00
	Camp costs 80 man days @ $12.00	....	960.00
E. Camp costs (fixed)		.....	300.00
F. Vehicle rental		.....	500.00
G. Supervision and Consulting		.....	2,000.00
H. Contingencies			
	at about 10 per cent	.....	1,716.00
		TOTAL	$ 20,000.00

Morrisburg, Ontario
30 November, 1970

Respectfully submitted,

D.C. Findlay, F.G.A.C.

REFERENCES

Bostock, H.S. (1936): Carmacks District, Yukon; Geol. Surv. Can. Mem. 189 (reissued, 1956)

Johnston, J.R. (1937): Geology and mineral deposits of Freegold Mountain, Carmacks District, Yukon; Geol. Surv. Can. Mem. 214 (reissued, 1963)

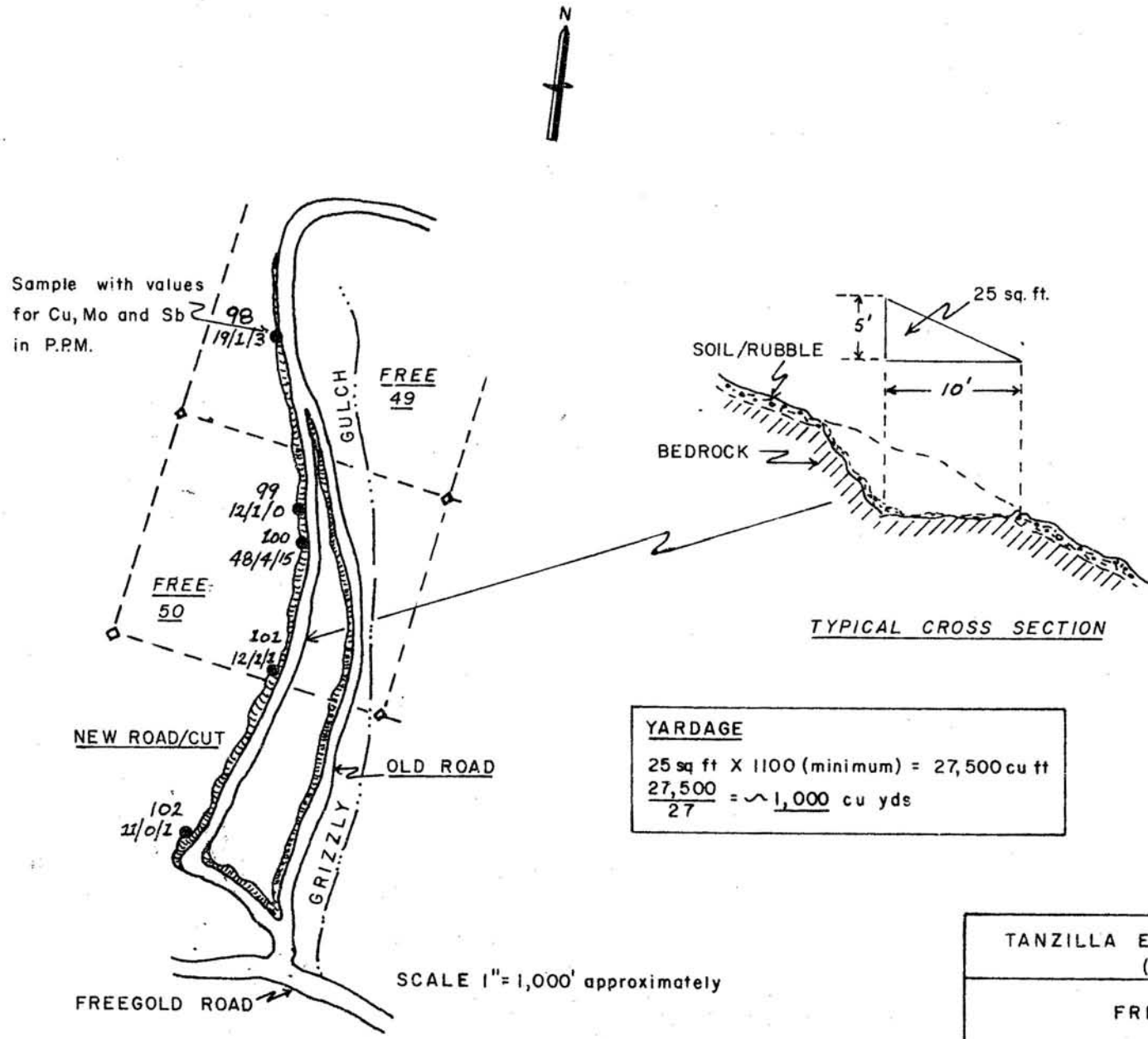
APPENDIX I

STATEMENT OF PHYSICAL WORK - FREE CLAIMS

To serve the dual purpose of providing an access road and bedrock section, an open cut was made with a D-8 bulldozer on the west side of Grizzly Gulch, on FREE claims 49 and 50. The bulldozer was rented from General Enterprises Limited, Whitehorse and worked approximately 8 hours to complete the road/cut. The cut exposed bedrock (hornblende syenite, quartz-feldspar porphyry) over most of its length and allowed geological examination and geochemical sampling of soil/rubble at the bedrock/soil interface (see attached sketch; also DWG 70012-4, this report).

It is calculated that well in excess of 1,000 cu. yards of rock and bedrock rubble was excavated on the claims in question (see sketch). In accordance with ' SHEDULE OF REPRESENTATION WORK, YUKON QUARTZ MINING ACT' assessment work credit to the value of $1,000.00 is thus requested.

D.C. Findlay, F.G.A.C.



YARDAGE

25 sq ft X 1100 (minimum) = 27,500 cu ft

$\frac{27,500}{27}$ = ~1,000 cu yds

Note - Claim lines and post locations approximate only

TANZILLA EXPLORATIONS LTD (N.P.L.)		
FREE CLAIMS *SKETCH OF PHYSICAL WORK*		
70012-2	Nov/70	D.C. Findlay

APPENDIX II

STATEMENT OF EXPENDITURES AND COSTS - FREE CLAIMS

A. D.C. Findlay

Property Examination and Preliminary Report
INVOICE No. 704, 15 June, 1970 .. $ 500.40

B. Trans North Turbo Air Ltd.

Helicopter charter 325.00

C. Bondar-Clegg and Company Ltd.

Geochemical assays 325.60

D. D.C. Findlay

Geological, Geochemical surveys; report
INVOICE No. 711, 30 November, 1970 ... 1,384.30

TOTAL 2,535.30

E. Value of Physical Work claimed (APPENDIX I) 1,000.00

$ 3,535.30

D.C. Findlay, F.G.A.C.

APPENDIX III

PERSONNEL

The following persons were engaged in the work outlined in this report on the FREE Claims:

D.C. Findlay	Geologist	Box 220, Morrisburg, Ontario
Howard Vance	Bulldozer Operator	Porter Creek, Yukon

CERTIFICATION

I, DAVID CHRISTOPHER FINDLAY OF 17 Lakeshore Drive, in the village of MORRISBURG, Province of ONTARIO do HEREBY CERTIFY:

1. That I am a Consulting Geologist with an office located at Room 4 Terminal Building, Whitehorse Airport, Whitehorse, Yukon , and a postal address of Box 1029, Whitehorse, Yukon:

2. That I am a graduate of MCGILL UNIVERSITY, Montreal, P.Q. where I obtained a BACHELOR OF SCIENCE degree in 1955, and a MASTER OF SCIENCE degree in 1958; and, QUEEN'S UNIVERSITY, Kingston, Ontario where I obtained a DOCTOR OF PHILOSOPHY degree in 1963:

3. That I have practised my profession as a geologist for a total of 15 years, approximately 8 years of which time I was an employee of the GEOLOGICAL SURVEY OF CANADA:

4. That I am a FELLOW of the GEOLOGICAL ASSOCIATION OF CANADA:

5. That I have personally examined the FREE MINERAL CLAIMS located in the WHITEHORSE MINING DISTRICT, Yukon:

6. That I have no direct or indirect interest in all of, or any of, the FREE MINERAL CLAIMS, nor in any of the securities held by the owners of said claims, TANZILLA EXPLORATIONS LIMITED (N.P.L.)

Dated this 30th day of November, 1970.

D.C. Findlay, F.G.A.C.

N

SCHIST CREEK

STODDART CREEK

to FREEGOLD MT. Summit

numerous shallow trenches

EMMONS HILL

Cat trail

GRIZZLY GULCH

trail

FREEGOLD ROAD

numerous small trenches

to Carmacks (~38 miles)

FREE 57-64

FREE 1-56

FREE 65-72

EXPLANATION

- X, 82 - Outcrop, outcrop/rubble area; 82 - With station number
- 21 ▲ 9/0/1 - Stream silt sample, number and metal content as - Cu/Mo/Sb (parts per million) "0" means not detected
- 93 ● 23/1/3 - Soil sample - Cu/Mo/Sb (p.p.m.)
- Trench or shallow cut

DETAIL SKETCH OF GRIZZLY GULCH AREA

NEW ROAD/ OPEN CUT

OLD JEEP TRAIL

SCALE - approx 1" = 800'

SCALE; 1" = 1/4 mile approximately

Base map constructed from air photograph No. A11522 - 258

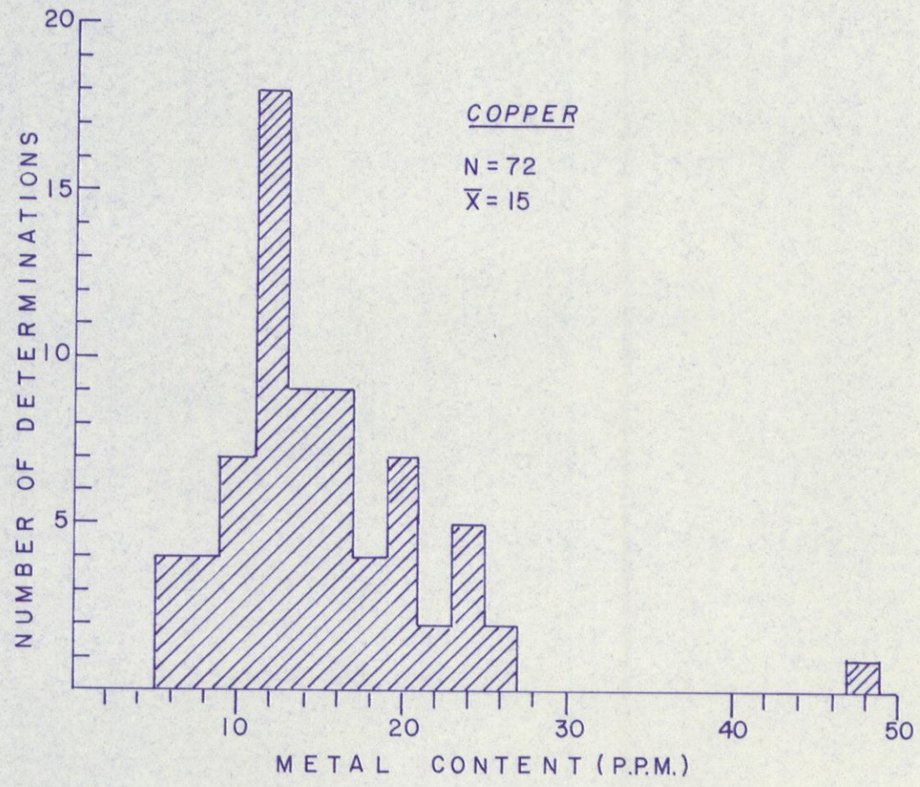
TANZILLA EXPLORATIONS LTD.
(N.P.L.)

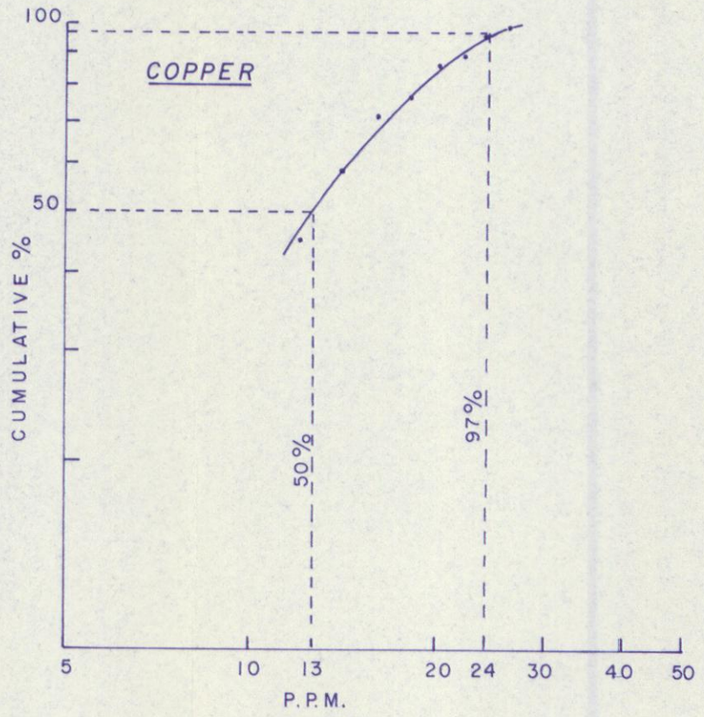
FREE CLAIMS

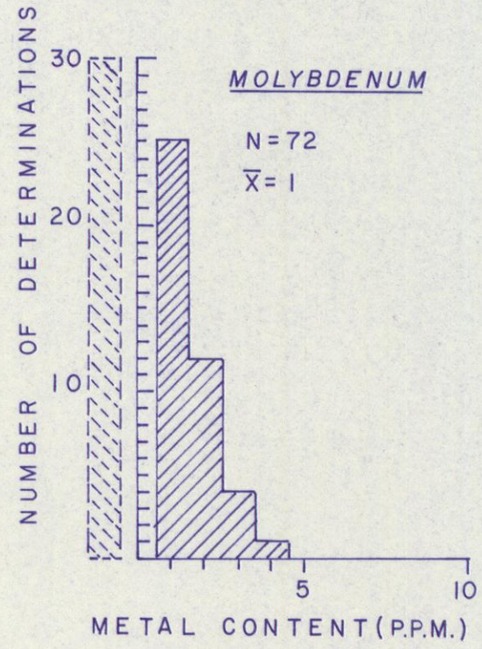
FREEGOLD MTN AREA, YUKON

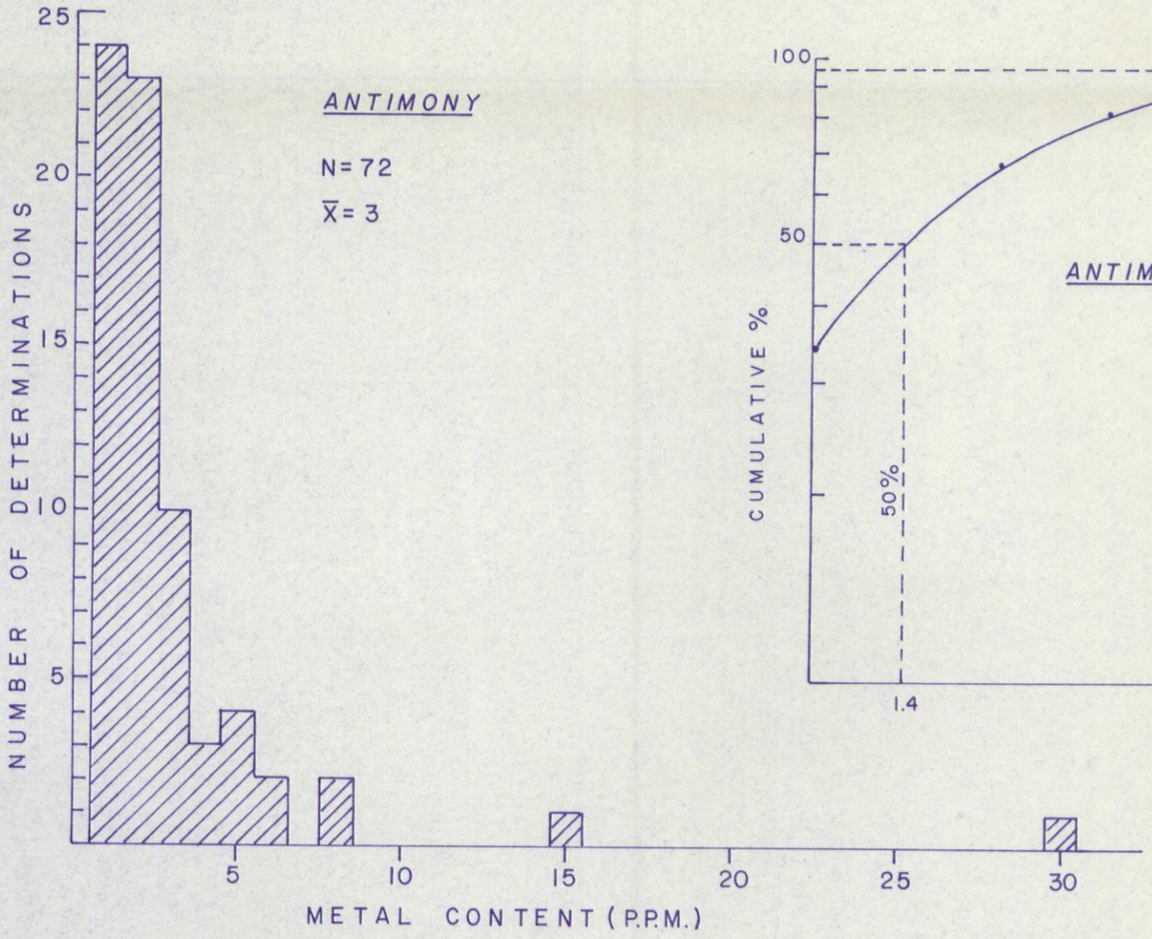
RECONNAISSANCE GEOCHEMISTRY

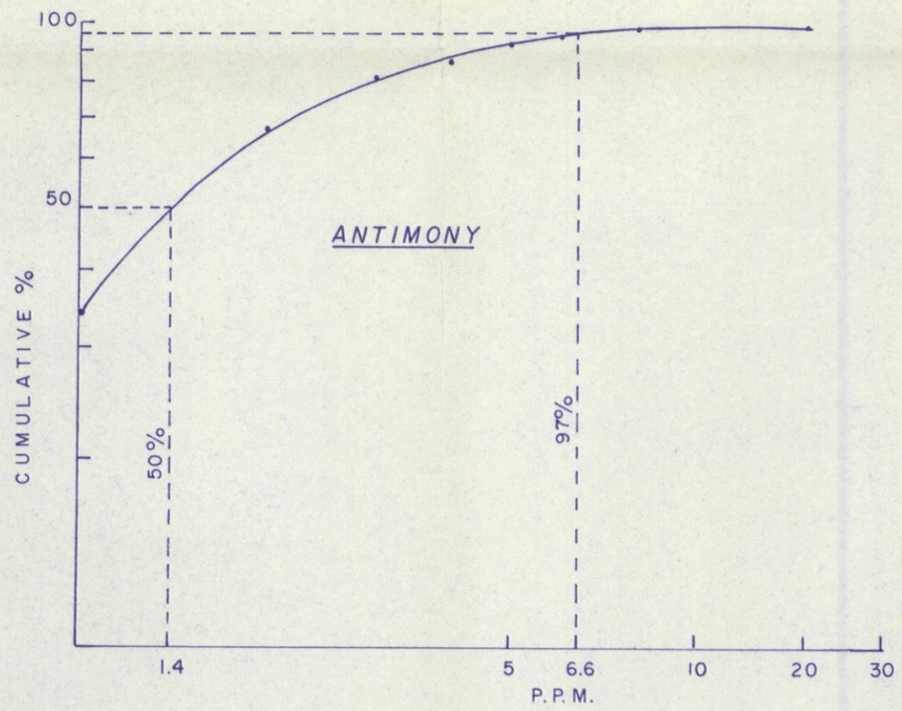
70012-4	Nov/1970	D.C. Findlay











N = number of samples

X̄ = arithmetic mean in p.p.m.

TANZILLA EXPLORATIONS LTD.
(N.P.L.)

FREE CLAIMS

HISTOGRAMS AND FREQUENCY PLOTS
for
Cu, Mo and Sb IN SOILS

70012-3	Nov/1970	D.C. Findlay

N

STODDART CREEK

SCHIST CREEK

← to FREE-GOLD MTN. Summit 5,3,2

'AMERICAN YUKON' SHOWING 1,5 Old shaft, dump grab
Au-0.70
Ag-0.16 oz/t
Trench grab
Au-0.01 oz/t
Ag-0.10 oz/t
Sb-3.60%

numerous shallow trenches in granodiorite and qtz-feldspar porphyry 3,5

small rust zone
Au-tr.
Ag-0.06 oz/t
Cu-0.02%

Qtz vein rubble
Au-tr
W03-tr

jeep road

Gulch

Grizzly

trail

'WHALE' SHOWING
Vein grab
Au-0.005 oz/t
Ag-0.04 oz/t

vein grab
Au-tr
Ag-0.14 oz/t

numerous small trenches and pits with siliceous vein material in rhyolite porphyry

FREEGOLD ROAD

to Carmacks (~38 miles)

FREE 57-64

FREE 1-56

FREE 65-72

SCALE; 1" = 1/4 mile approximately

LEGEND

TERTIARY

5 — Quartz-feldspar porphyry, rhyolite porphyry

4 — Andesite porphyry

JURASSIC and/or CRETACEOUS

3 — Granodiorite

2 — Syenite porphyry, hornblende syenite

PROTEROZOIC (?)

1 — *Yukon Group* Banded gneiss, granitic gneiss, quartz-feldspar-biotite schist

SYMBOLS

- Outcrop, outcrop/rubble area
- Geological contact; approximate, inferred
- Trench
- 60 — Schistosity, gneissosity

Base map constructed from air photograph No. A11522-258

TANZILLA EXPLORATIONS LTD.
(N.P.L.)

FREE CLAIMS

FREEGOLD MTN. AREA, YUKON

GEOLOGY

70012-5	Nov/1970	D.C. Findlay