

FINAL REPORT  
ON  
GRANITE MOUNTAIN, Y.T.

D.A. Howard

Jan, 1968

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FINAL REPORT

ON

GRANITE MOUNTAIN, Y.T.

by

D. A. HOWARD

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FINAL REPORT  
ON  
GRANITE MOUNTAIN, Y.T.

I INTRODUCTION

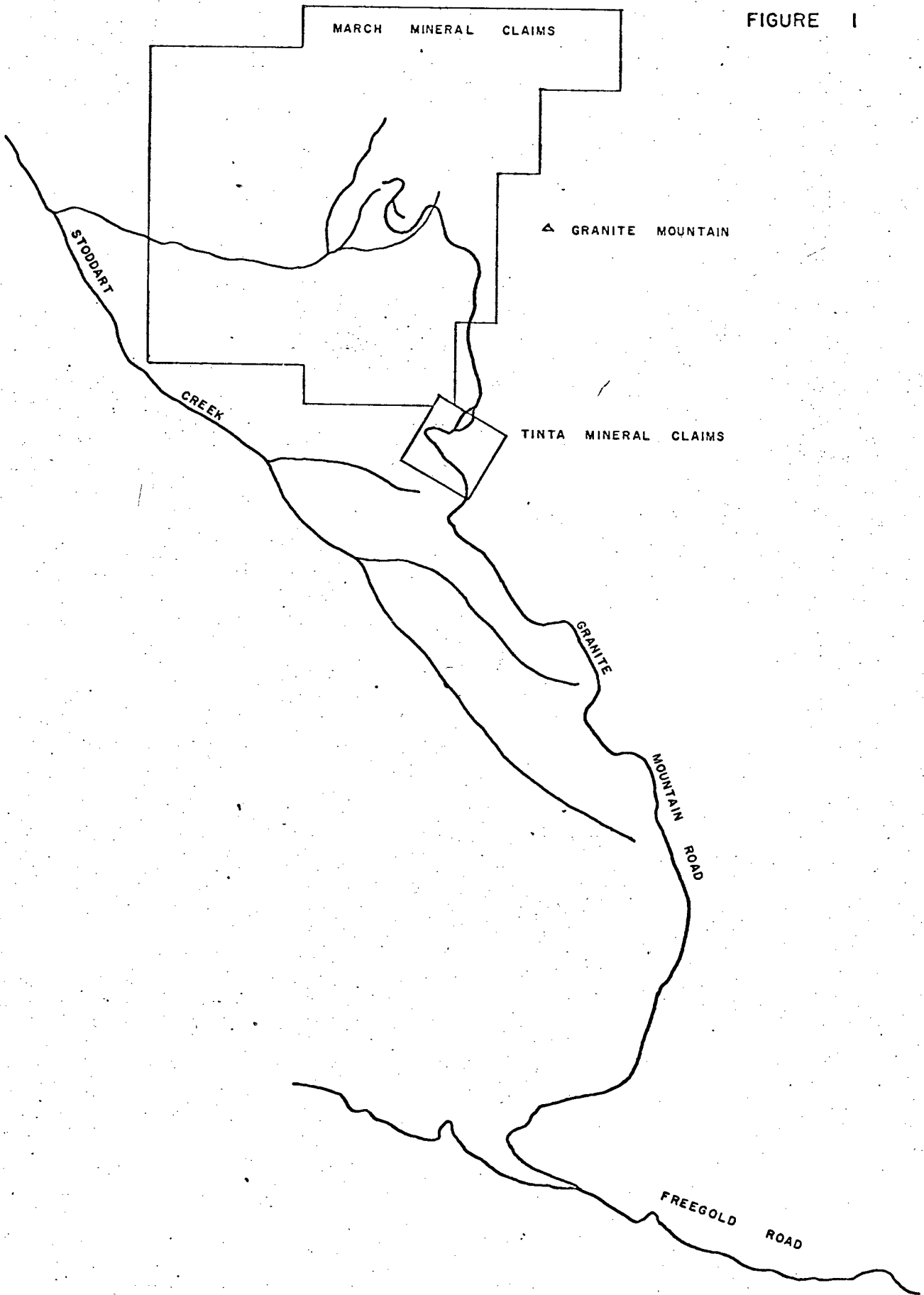
(a) Location, Ownership, Access and Topography

Granite Mountain is located approximately 25 miles northwest of Carmacks, Y.T. (map sheets 115-I-6 and 115-I-7). The property is 100 percent C.A.E.L.-owned and consists of 96 claims (Figures 1 and 2) with the following expiration dates:

<u>Claim Name</u>	<u>Expiry Date</u>
March 11-14	March 23/72
March 15-16	March 23/76
March 17-22	March 23/72
March 33-38	March 29/72
March 39-40	March 29/76
March 41-44	March 29/72
March 45-52	August 22/71
March 53-60	August 30/69
March 61-62	September 9/69
March 63-68	September 9/71
March 69-108	September 28/71
Tinta 1-4	August 22/69
Tinta 5-8	August 10/68

Access is via 45 miles of privately maintained dirt road from  
Carmacks, Y.T.

FIGURE 1

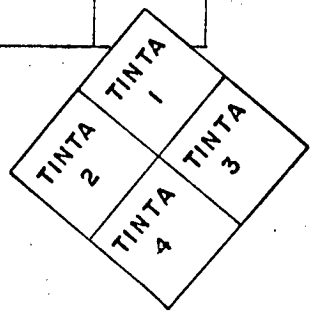


				93	95	97	99	101	103	105	107
91	92	75	76	94	96	98	100	102	104	106	108
89	90	73	74	37	39	41	43	50	52		
87	88	71	72	38	40	42	44	49	51		
85	86	69	70	35	33	15	13	11			
83	84	67	68	36	34	16	14	12			
81	82	65	66	45	46	17	19	21			
79	80	63	64	47	48	18	20	22			
77	78	61	62	53	55	57	59				
				54	56	58	60				

MARCH MINERAL CLAIMS  
 GRANITE MOUNTAIN  
 SCALE 1" = 0.5 MILE  
 FIGURE 2

Δ  
 4663

137° 00'



Relief within the area ranges from 3000 feet at the turnoff on Mount Freegold road to 4663 on Granite Mountain. The topography is gently rolling and there are few outcrops in the area due to heavy brush cover and a thick ash layer.

(b) Previous Investigation

In 1965, a total of 611 soil samples were analyzed for copper, molybdenum and zinc. This geochemistry outlined an anomalous zone 4000 feet eastwest by 2000 feet northsouth (Ainsworth, 1965).

During 1966 further soil sampling was done along extensions of the existing grid lines. No new anomalies were found. A magnetometer survey was conducted, but the values were too erratic to form an interpretable pattern. Several highly anomalous areas were outlined by an IP survey conducted by McPhar Geophysics. Later drilling showed that these anomalies were due to pyrite. For further information on the IP data see reports by McPhar (1966) and Ward (1966). Two rotary drill holes (each 450 feet deep) were completed and a third hole started before weather forced the closing of the 1966 field season.

(c) Present Investigations

During the 1967 field season six diamond drill holes were completed for a total of 3000 feet. The holes ranged in depth from 292 to 702 feet. Holes DDH #1 and DDH #2 were assayed in part. The remaining holes were not assayed because of the very low estimated grade.

A more detailed geologic map was compiled using additional thin section data from the core.

This report supersedes the earlier geologic report by Howard (1966) and any pertinent data included in the 1966 report will be included in this report.

## II SUMMARY AND RECOMMENDATIONS

The large, pervasive, extremely low-grade copper-molybdenum deposit occurs in a sequence of structurally complex granites and quartz monzonites. Mineralization is not restricted to any one rock type or position within a single intrusion. Widespread hydrothermal alteration is common throughout the mineralized zone, although the intensity appears to have little control over the amount of sulfides present. Pyrite and chalcopyrite are the major sulfides with minor amounts of bornite, chalcocite and molybdenite. Malachite and azurite are present in the weathered zone.

Only two holes were assayed because of the low estimated grades which range from Tr. to 0.39 copper and Tr. to 0.05  $\text{MoS}_2$ . The average values over any length are much lower (Tr. to 0.18 Cu and Tr. to 0.03  $\text{MoS}_2$ ). Slightly higher assays were obtained from rotary drill cuttings. The values from 0 to 200 feet are low and erratic with a further decrease in value past 200 feet.

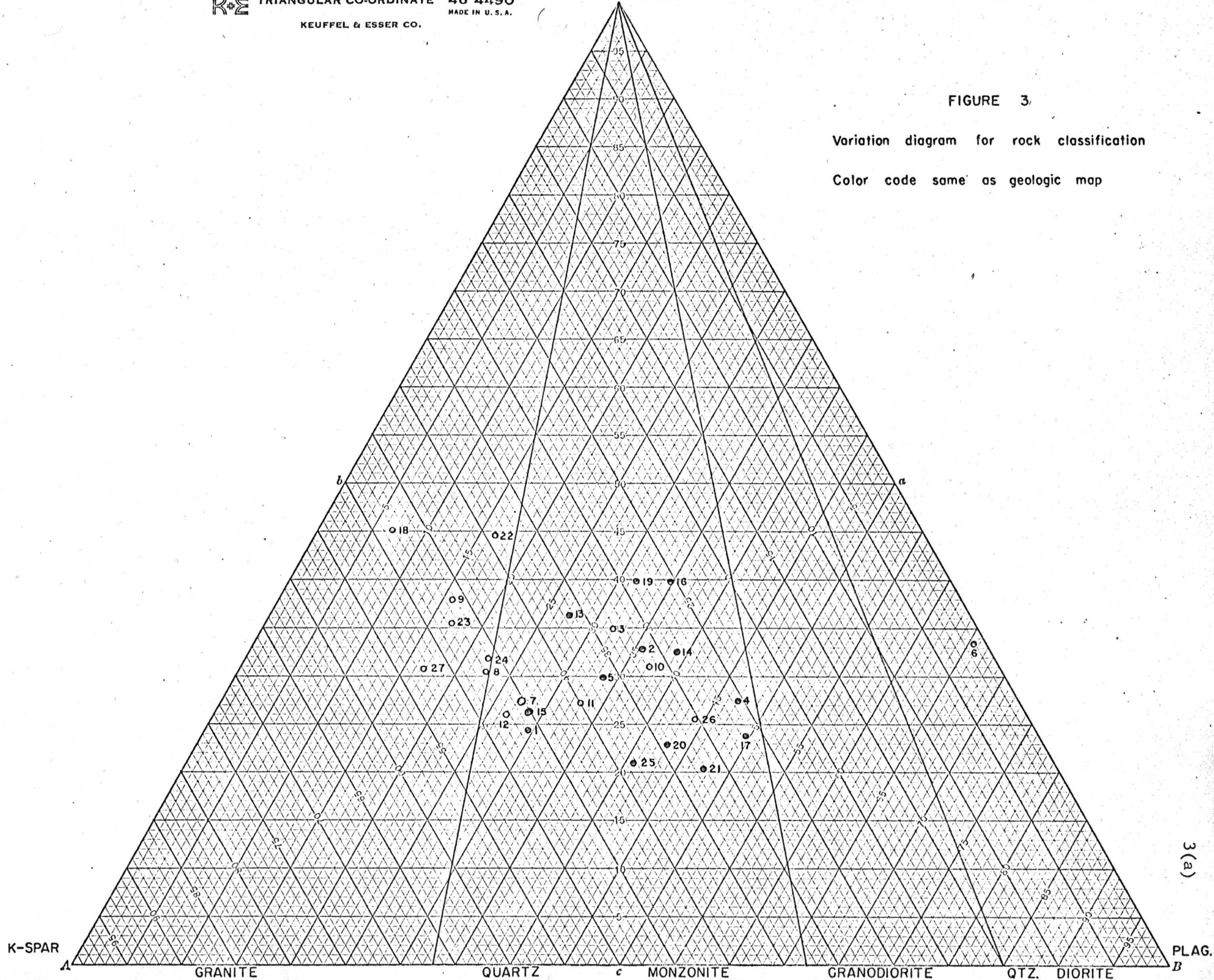
Despite good geological indications additional work at the present time is not warranted because of the consistent low metal content throughout the mineralized zone.

C QUARTZ

FIGURE 3

Variation diagram for rock classification

Color code same as geologic map



### III GENERAL GEOLOGY

#### (a) Introduction

Granite Mountain lies in a belt of structurally complex metamorphics that have been intruded by granites, quartz monzonites, quartz diorites and syenites of Mesozoic age. Numerous Tertiary rhyolite dikes and related flows are common to the area. A recent volcanic ash of variable thickness covers the area.

#### (b) Hornblende Feldspar Gneiss

The oldest unit exposed in the area is a fine- to coarse-grained weakly foliated hornblende feldspar gneiss belonging to the Yukon group. The Yukon group is thought to be Precambrian or early Paleozoic (Bostock, 1936). These rocks are exposed in the western part of the map area.

The gneiss is not hydrothermally altered, although a small amount of the biotite and hornblende is altered to chlorite. This alteration is probably due to retrograde metamorphism. No sulfides were observed in this unit.

The modal variation (Table 1) is common in foliated rocks because of differing thin section positioning with respect to the foliation. Table 1 is included mainly as an aid in comparing this unit with the younger rock units which may in part be derived from the Yukon rocks.

Due to questionable contact relationships between the gneiss and the younger rocks, it is not known if the western geochem anomaly lies on this unit or is associated with one of the younger rock units.

Sample Location	Sample Number	Plag.	K-spar	Qtz.	Bio.	Hbl.	Chl.	Opaq.	Acc.
1	4-29-9-66	23.5	36.9	19.1	3.0	12.2	3.6	1.2	0.6
2	3-29-9-66	26.3	23.7	24.4	3.1	18.7	1.1	2.67	-

TABLE 1:- Modal analyses for the hornblende feldspar gneiss.  
Modes based on 350 points.

(c) Biotite Granite

The central portion of the map area is underlain by a fine- to medium-grained, pale green to grey, hypidiomorphic biotite granite which locally grades into a quartz monzonite. Some specimens have a very faint foliation. In hand specimens the hornblende feldspar and the biotite granite are similar, but a comparison of Tables 1 and 2 will show that these are distinct rock units.

Sample Location	Sample Number	Plag.	K-spar.	Qtz.	Bio.	Chl.	Cal.	Epi.	Opaq.	Acc.
7	1-7-9-67	24.6	41.0	24.6	3.5	3.8	-	-	1.9	0.5
8	2-7-9-67	20.2	41.7	26.7	2.0	6.1	-	1.1	1.7	-
9	1-1-10-66	14.7	42.5	34.8	1.2	3.1	1.9	-	1.5	0.4
23	GM3-298	15.1	42.9	31.6	6.6	2.4	-	-	1.4	-
24	GM6-300	16.8	34.7	24.0	21.9	-	-	-	2.6	-
Average Comp.		18.3	40.5	28.3	7.0	3.1	0.4	0.2	1.8	0.5

TABLE 2:- Modal analyses for the biotite granite. Modes based on 350 points.

The composition of the biotite granite is nearly constant, particularly with respect to the K-spar content. An exception to this is sample 24 from DDH #6. Sample 24 contains less K-spar and much more biotite.

The discrepancy in composition may be due to intense biotitization, i.e. complete alteration of K-spar resulting in the formation of secondary biotite.

(d) Biotite Quartz Monzonite

A stock of unknown shape or size is located in the southeastern part of the map area. This stock is composed of fine- to medium-grained, pale green to pale pink, hypidiomorphic biotite quartz monzonite which grades into a hornblende quartz monzonite at depth or unaltered portions of the stock. Sample 17 (Table 3) is representative of the unaltered portion of the stock.

Sample Location	Sample Number	Plag.	K-spar	Qtz.	Bio.	Hbl.	Chl.	Ser.	Opaq.	Acc.
13	1-19-9-66	23.3	31.1	30.7	-	-	8.5	-	3.5	2.8
14	260	29.5	21.9	24.9	3.8	-	14.6	-	4.1	1.1
15	GM1-92	22.9	36.3	21.0	0.8	-	16.8	-	2.3	-
16	GM1-209	30.6	22.2	34.9	-	-	9.5	1.6	1.2	-
17	GM1-690	40.4	22.0	19.5	6.5	5.4	1.8	-	3.3	1.0
19	1-6-9-67	27.0	25.1	34.5			10.2		3.2	
20	2-6-9-67	36.0	29.0	19.2	1.0		9.4		3.4	2.0
21	3-6-9-67	35.7	24.6	15.4	3.1		16.1		1.5	0.5
Average Comp.		30.7	26.6	25.0	1.9	0.7	10.9	0.2	2.8	0.9

TABLE 3:- Modal analyses for the biotite quartz monzonite. Modes based on 350 points. Accessory minerals include calcite, epidote and sphene.

The biotite quartz monzonite has a wide compositional range (see Table 3 and Figure 3) which is due in part to differing intensities of alteration. This is evident from the amount of plagioclase and hornblende

in the unaltered rock versus the altered material. The only consistent variation in the altered quartz monzonite is the increase in plagioclase with depth. The increase occurs in both DDH-2 and DH-2 (Samples 13, 14 and 15, 16, 17 respectively).

(e) Hornblende Quartz Monzonite

A poorly exposed stock of hornblende quartz monzonite is located in the northwestern part of the map area. The hornblende quartz monzonite is fine- to medium-grained, light grey and generally hypidiomorphic, although there are a few medium-grained pink K-spar phenocrysts present. This unit is distinguished from the biotite quartz monzonite by the presence of hornblende, differing color and grain habit. Generally, the hornblende quartz monzonite is more equigranular than the biotite quartz monzonite. These relationships also apply to the unaltered biotite quartz monzonite unit which is compositionally a hornblende quartz monzonite. A comparison of Tables 3 and 4 suggests that these two units may in fact be two phases of the same intrusion, the differences being due to the intense alteration of the biotite quartz monzonite phase and the differing grain relationships being attributed to differing positions in the intrusion.

Sample Location	Sample Number	Plag.	K-spar	Qtz.	Bio	Hbl.	Chl.	Opq.	Acc.
4		39.0	21.2	23.1	8.2	5.9	0.4	1.9	0.4
5		28.6	31.2	24.8	4.1	1.5	6.8	3.0	
25		37.5	30.2	23.7	2.0	4.8	1.6	0.8	
Average Comp.		35.0	27.8	23.9	4.8	4.1	2.9	1.9	0.1

TABLE 4:- Modal analyses for the hornblende quartz monzonite. Modes based on 350 points.

(f) Chlorite Quartz Monzonite

In the center of the map area is an irregular shaped northeast trending chlorite quartz monzonite stock. The chlorite quartz monzonite has a hiatal porphyritic texture with a very fine- to fine-grained matrix and medium- to coarse-grained (1 - 5 mm.) phenocrysts. The grain size of the matrix increases from the contact toward the center of the intrusion. The color ranges from pale pink to light grey depending on the K-spar content.

Plagioclase content increases toward the center of the intrusion as well as at depth. The K-spar content is higher in the margins than in the central portion of the intrusion, which is just the reverse from what is expected in a normal differentiating intrusion. This reversal could be explained by the removal of potassium just after the intrusion of the chlorite quartz monzonite. Further support for this hypothesis is found in DDH #6 where the biotite granite contains a very high percentage of secondary biotite, i.e. the secondary biotite in the biotite granite being derived from the excess potassium in the chlorite quartz monzonite.

Figure 3 shows the wide compositional variation which could indicate a multiple intrusion, which would invalidate the previous hypothesis. Despite the compositional variation, all other evidence indicates a single intrusion, i.e. texture, color and appearance.

Sample Location	Sample Number	Plug	K-spar	Qtz.	Bio.	Chl.	Ser.	Cal.	Opaq.	Acc.
3	1-29-9-66	29.5	30.8	32.1	3.1	3.6	-	-	0.9	-
10	2-30-9-66	32.9	28.8	27.7	1.3	5.4	1.1	2.3	0.4	-
11	GM5-491	29.9	36.5	24.7	2.2	3.0	1.5	0.7	1.5	-
12	GM5-100	23.8	43.0	23.2	2.0	6.3	-	-	1.2	0.5
26	GM2-200	40.5	27.6	23.4	1.9	5.8	-	-	0.8	-
Average Comp.		31.3	33.3	26.2	1.9	4.8	0.5	0.6	1.0	0.1

TABLE 5:- Modal analyses for the chlorite quartz monzonite.  
Modes based on 350 points.

(g) Chlorite Granite

Approximately 500 feet southeast of DDH #1 a dike of porphyritic chlorite granite is exposed in a road cut. The dike is 100 feet wide and strikes N70W with a 70 degree dip to the northeast. The chlorite granite is fine- to medium-grained, pale green and has a hialial porphyritic texture. The rock is composed predominantly of K-spar (34.4%), quartz (32.1%), chlorite (12.2%), sericite (10.2%) and minor plagioclase (4.8%), calcite (4.7%), opaques (1.6%) and trace amounts of fibrolite (a variety of sillimanite). All of the plagioclase occurred as phenocrysts. Chlorite and a small amount of K-spar make up the remainder of the phenocrysts. The matrix is composed of approximately equal parts of quartz and K-spar with sericite.

Alteration in the chlorite granite is very intense as shown by the large amounts of sericite and chlorite. The calcite is probably derived from the alteration of the plagioclase. Secondary quartz is

present in association with the feldspars.

Most of the opaques are disseminated in the chlorite and are mainly chalcopyrite with hematite rims and trace amounts of malachite.

This dike could not be traced beyond the one exposure.

(h) Hornblende Granite

A dike of unknown width or trend is exposed in a road cut near the eastern boundary of the map area. The dike is fine- to medium-grained light pink, seriate porphyritic "hornblende" granite which locally contains pegmatitic fractions. The term "hornblende" granite is a field term when actually the rock is a chlorite granite. The chlorite phenocrysts are pseudomorphic after hornblende. In hand specimens it is nearly impossible to distinguish the two (for this particular case). This terminology also prevents confusion with the other chlorite granite.

The "hornblende" granite is composed of predominantly K-spar (32.3%), quartz (36.1%), plagioclase (13.2%), chlorite (9.0%), and minor sericite (3.1%), calcite (4.3%), opaques (1.6%), and epidote (0.5%). The phenocrysts are plagioclase, K-spar, lumpy quartz and chlorite. Most of the opaques (chalcopyrite) are associated with the chlorite. The composition of the "hornblende" granite is very similar to the chlorite granite dike exposed 700 feet to the east, but differs in color and texture.

Sericite alteration of the feldspars and chlorite alteration of the mafics is very intense. The plagioclase phenocrysts are particularly altered with up to 40 percent of the individual plagioclase grain being

altered to medium-grained sericite. Only pseudomorphs of the original mafics remain. In addition to the sericite alteration all of the feldspars are dusty which indicates some kaolinization.

(i) Biotite Quartz Diorite

In the northwestern part of the map area a dike of fine- to medium-grained, grey, hiatal porphyritic biotite quartz diorite is exposed in a road cut. The width and trend of the dike could not be determined because of thick overburden. The biotite quartz diorite is composed of plagioclase (45.0%), K-spar (0.9%), quartz (23.1%), biotite (26.2%), hornblende (2.3%), magnetite (2.0%) and sphene (0.5%).

The dike may be related to the numerous fine-grained, dark green to grey, porphyritic andesite dikes that are encountered in DDH #1 and DDH #5. The matrix in the andesite is finer-grained and there is some color variation. Dikes of similar composition are found outside the map area to the west and to the northeast.

The biotite quartz diorite dike contains traces of malachite, although no sulfides are present. The malachite may have been introduced during weathering of the surrounding sulfide-bearing intrusions because the quartz diorite is essentially unaltered. Some of the andesite dikes contain sulfides, particularly along joints.

(j) Rhyolite

The youngest rock unit exposed in the map area is a fine-grained, white to buff, unaltered, porphyritic rhyolite. Prior to diamond drilling

this unit was thought to be a flow (Howard, 1966), but definite intrusive relationships exist at the contact intersection in DDH #3. Inclusions of hornfelsed biotite granite occur in the rhyolite and the granite is brecciated several feet out from the contact.

The rhyolite is 236 feet thick at DDH #3 and approximately 10 feet thick at DDH #2. The dike strikes northwest and has an apparent dip of 11 degrees to the northeast.

The rhyolite is intensely jointed and most of the near surface (0 - 70 feet) joint planes are coated with light brown limonite. Below 70 feet, in addition to limonite, some pyrite, molybdenite, chalcopyrite and bornite are present along the joints, but in very minor amounts. There is a slight increase in the amount of mineralization near the contact.

(k) Structure

The regional northwest trend is fairly well developed in the Granite Mountain area. The chlorite quartz monzonite stock, the rhyolite dike and several minor faults strike northwest. Superimposed on these with the possible exception of the minor faults is a well developed northeast fault trend.

On the surface, two major faults (A and B) were mapped and a third (C) is implied. Both A and B faults strike N70E and dip 70 degrees northwest. The fault zone of "A" is approximately 50 feet wide and consists of a fine-grained quartz-feldspar-sericite mylonite. This fault is premineralization as evidenced by the presence of chalcopyrite in the

hanging wall of the fault and cubes of pyrite in the mylonite. "B" fault is 25 - 30 feet wide and is probably premineralization, but intense weathering at surface has removed any sulfides present. Numerous large shear zones are intersected in the drill holes. Most of the subsurface faults are premineralization, but intense leaching has removed all the sulfides from some of them, thus the age of faulting is questionable.

Fault "C" is implied from the radial change in rock types along Cannon Creek and the alignment of IP anomalies.

No joint patterns were evident because of limited outcrop. The exposed joints are poorly developed, but are well developed at depth. On the average there is better than one joint per foot. Sulfides occur along some joints in all the holes, but do not follow any set pattern or particular joint set. Unmineralized joints are more common and again follow no set pattern. All the joints appear to be the same age because numerous joint intersections were logged with no apparent offset.

(1) Hydrothermal Alteration

Evidence for hydrothermal alteration is present in all rock units except the hornblende feldspar gneiss and the biotite quartz diorite. The alteration is highly variable both in type and intensity. Chloritization is the most prominent and intense type of alteration and is pervasive throughout the mineralized area. Moderate to intense biotitization is encountered in DH-2 and DDH #6. Sericitization is slight to moderate throughout the mineralized zone. Kaolinization is prominent near surface and in fault zones. Much of the kaolin is probably due to weathering

rather than hydrothermal alteration.

Generally the prominence and intensity of alteration is variable with depth as well as laterally. This variation is probably due to either the varying rock types and/or the amount of fracturing. Faulting and fracturing have affected the alteration as evidenced by the intensity of alteration in the vicinity of faults.

Previous investigations (Howard, 1966) indicated that the degree of mineralization is directly related to the intensity of alteration. The present study indicates that this is not true and in some cases it is just the reverse.

(m) Mineralization

Anomalous geochemical data indicates a mineralized (copper) zone approximately 1600 feet north-south by 4000 feet east-west (Ainsworth 1965). A subsequent IP survey, rotary and diamond drilling showed that the central copper zone is bounded on the north and east by a pyrite halo, thus increasing the mineralized zone to 4800 feet by 4800 feet (approximation from IP data). This dimension includes the possible extension of the pyrite halo to the south and west.

Pyrite, chalcopyrite, bornite, covellite, malachite, native copper, and molybdenite are present although only traces of the copper minerals or molybdenite are present in the pyrite halo. Trace amounts of chalcopyrite are present at depth in the pyrite halo in DDH #4 and DDH #6. In both instances the chalcopyrite occurs as thin coatings on joint planes.

In the central part of the zone chalcopyrite is the prominent

sulfide with minor amounts of bornite, covellite, molybdenite and malachite. Generally, pyrite occurs in minor amounts with a slight increase in ratio to chalcopyrite with depth. This increase is particularly prominent in DDH #3 where chalcopyrite disappears completely near the bottom of the hole. The total sulfide content for the central mineralized zone is generally less than one percent.

In the outer zone or pyrite halo the total sulfide content is greater than in the central zone. The pyrite content ranges from 0.5 to 2.0 percent (based on drill core). Rotary drill hole one encountered some zones that contained up to 7 percent (Howard, 1966). In DDH #4 all of the pyrite occurred as one sixteenth inch veins or joint coatings. The occurrence of only vein pyrite in DDH #4 is rather odd because in all other drill holes the sulfides occur as disseminations as well as joint fillings. The disseminated sulfides generally are associated with the altered mafic minerals where it is found as a replacement along the cleavages of the chlorite and biotite.

Malachite is present in the weathered zone and along faults. It was previously thought that the leached zone was much thicker because of the presence of malachite at 450 feet in DH-2 (Howard, 1966), but subsequent diamond drilling shows that the leached zone is much thinner (33 to 383 feet) and the malachite found at 450 feet was in a fault zone. The deepest leaching was in DDH-6 (383 feet) and may be related to its proximity to a possible fault (not shown on map) up Hart Creek.

The effect of leaching and the formation of a supergene is questionable because of the low copper values throughout the mineralized

zone. The effect of leaching is quite prominent in DDH-1 where nearly all of the sulfides have been removed down to 140 feet. The interval from 140 feet to 200 feet contained the best values for the hole (0.2 - 0.3 percent Cu). This interval is also marked by the presence of bornite which in this case may be a supergene mineral. Bornite is present deeper in the hole, but in extremely small amounts. Traces of covellite and chalcocite are also present in the bornite zone.

The age of mineralization may be post rhyolite which is the youngest rock unit in the area because of the presence of sulfides in this unit. It is also possible that the mineralization is pre-rhyolite with the sulfides being implaced in the rhyolite by remobilization of the sulfide during intrusion of the rhyolite. The only sulfides present in the rhyolite are near the contact with the underlying biotite granite, although abundant limonite staining is present on the joint planes from surface down to the contact.

Differences in ages between the pyrite and chalcopyrite could not be determined. Bornite generally occurred as coatings on the pyrite and/or chalcopyrite and therefore is probably late, i.e. due to supergene alteration. The molybdenite is probably the same age as the pyrite and chalcopyrite because they are intermixed on the joint surfaces. No cross cutting relationships were observed in any of the core.

#### IV DRILL RESULTS

The initial plan called for drilling three holes, each 1000 feet deep. The program was subsequently changed to drilling 6 holes totalling 3000 feet to gain greater coverage and to obviate the technical problems involved in drilling the deeper holes.

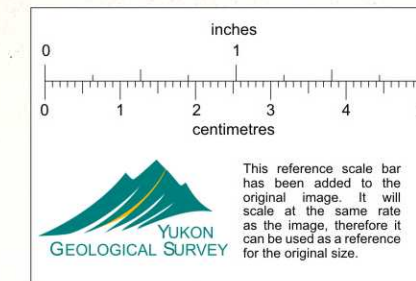
The following is a list of holes and their respective depth:

<u>Hole No.</u>	<u>Depth</u>
DDH 1	702'
DDH 2	697'
DDH 3	426'
DDH 4	292'
DDH 5	500'
DDH 6	383'

The overall grade of copper and molybdenum mineralization is very low. After the first two diamond drill holes (DDH #1 and DDH #2) no assays were taken because of the low visual estimates (Tr. to 0.08). Core recovery for DDH #1 and DDH #2 was 74 percent and 76 percent respectively.

The following are average assays over 100-foot intervals for DDH #1, DDH #2 and DH-2:

	Cu	MoS <sub>2</sub>
<u>DDH 1</u>		
0 -100	No assays	No assays
100-200	0.18	0.03
200-300	0.03	0.02
300-400	Tr.	0.01
400-500	Tr.	0.01
500-600	Tr.	0.01
600-702	No assays	No assays
<u>DDH 2</u>		
10 -100	0.11	0.01
100-200	0.07	0.02
200-260	0.05	0.02
260-697	No assays	No assays
<u>DH 2</u>		
0 -100	0.20	-
100-200	0.21	-
200-300	0.18	-
300-400	0.08	-
400-450	0.06	-



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GEOCHEMICAL SOIL SURVEY

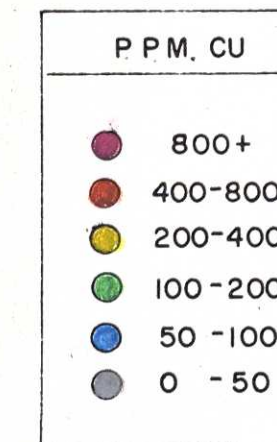
MARCH CLAIMS - GRANITE MOUNTAIN

YUKON TERRITORY

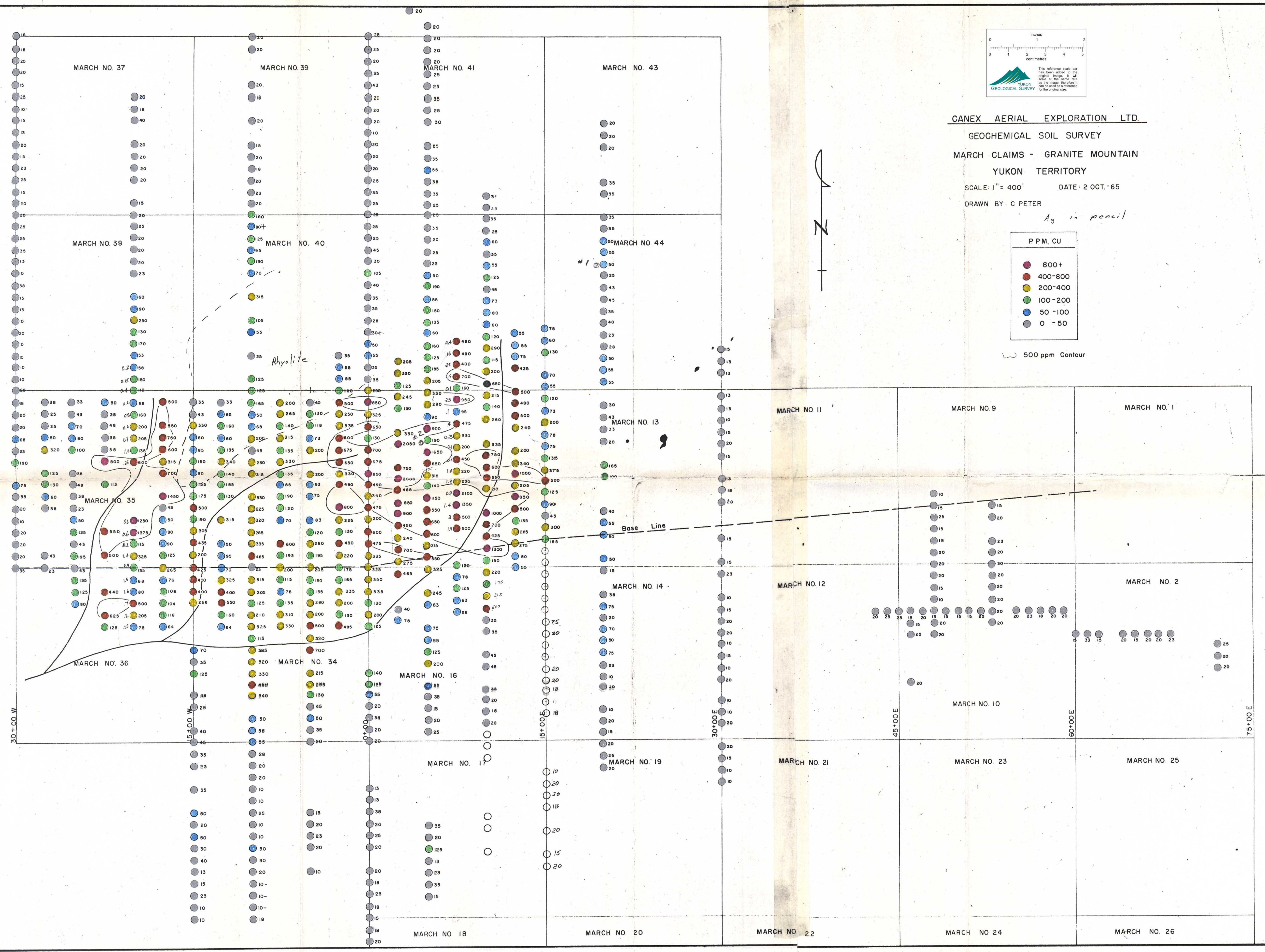
SCALE: 1" = 400' DATE: 2 OCT. -65

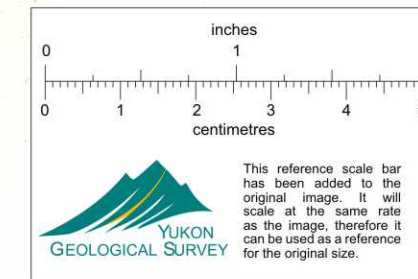
DRAWN BY: C PETER

*A<sub>9</sub> in pencil*



500 ppm Contour





CANEX AERIAL EXPLORATION LTD.

GEOCHEMICAL SOIL SURVEY

MARCH CLAIMS - GRANITE MOUNTAIN

YUKON TERRITORY

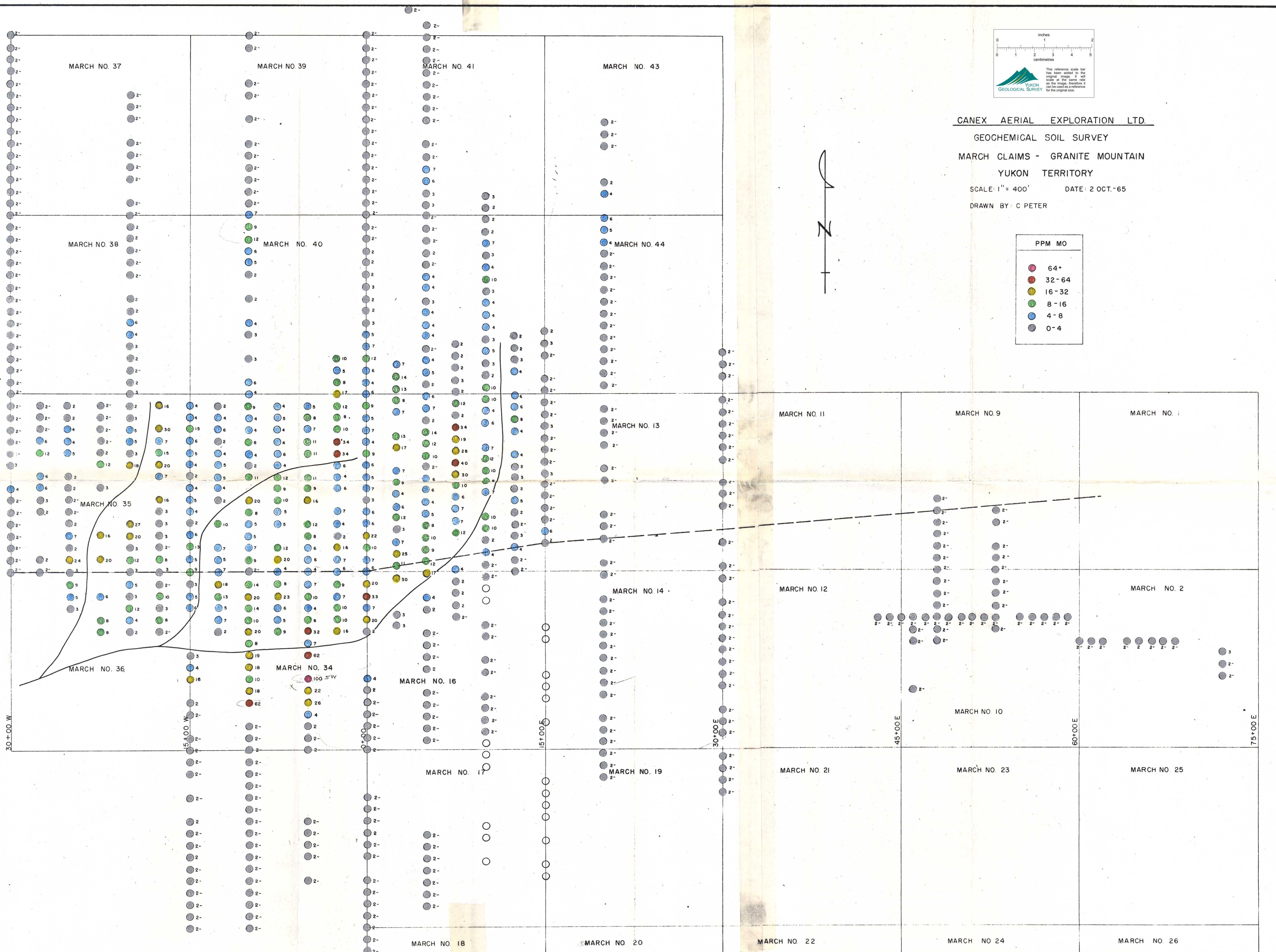
SCALE: 1" = 400'

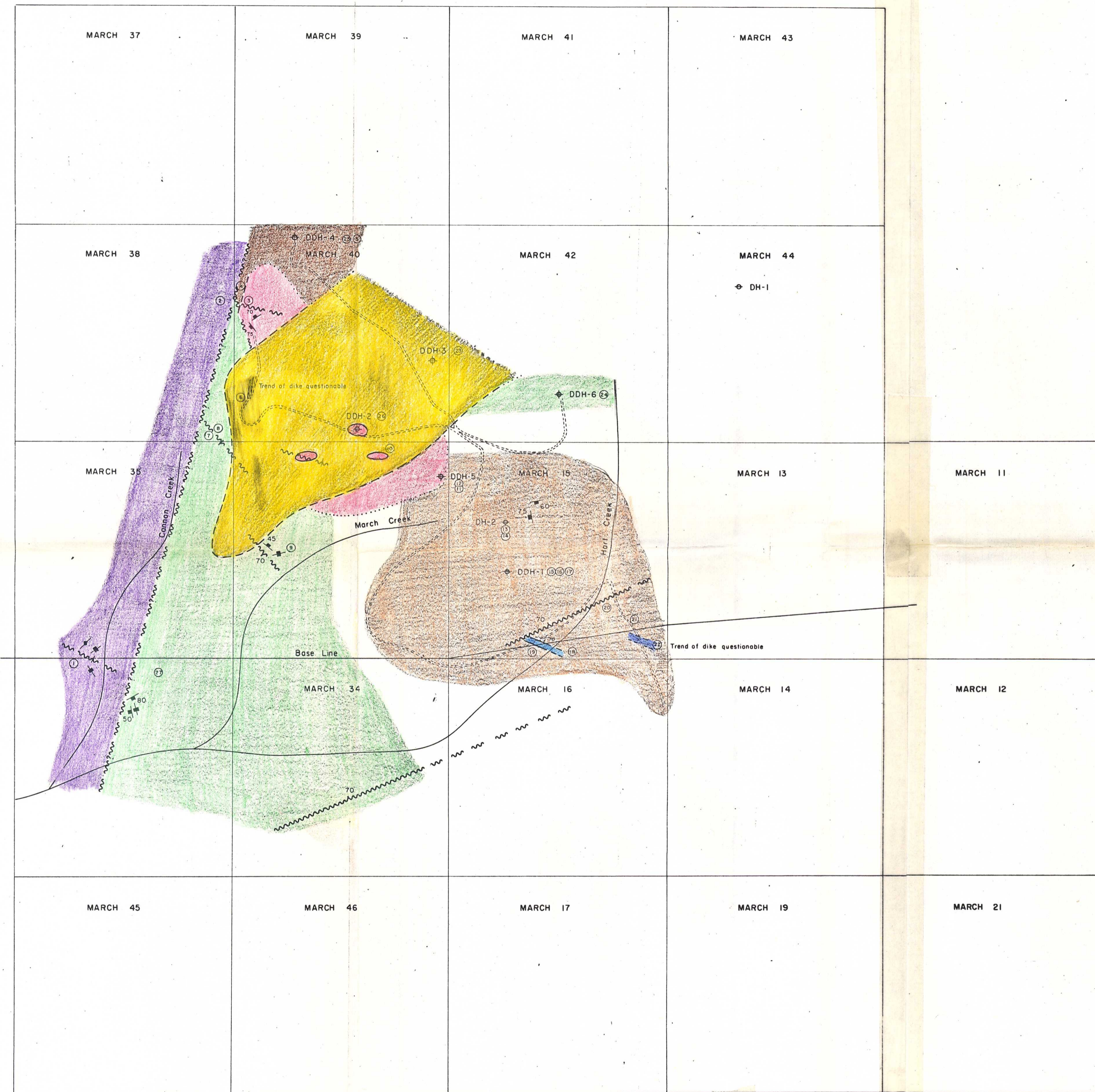
DATE: 2 OCT.-65

DRAWN BY: C PETER



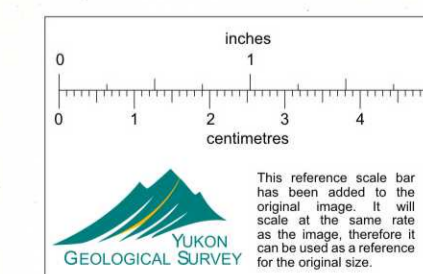
PPM MO	
<span style="color: red;">●</span>	64+
<span style="color: orange;">●</span>	32-64
<span style="color: yellow;">●</span>	16-32
<span style="color: green;">●</span>	8-16
<span style="color: blue;">●</span>	4-8
<span style="color: grey;">●</span>	0-4



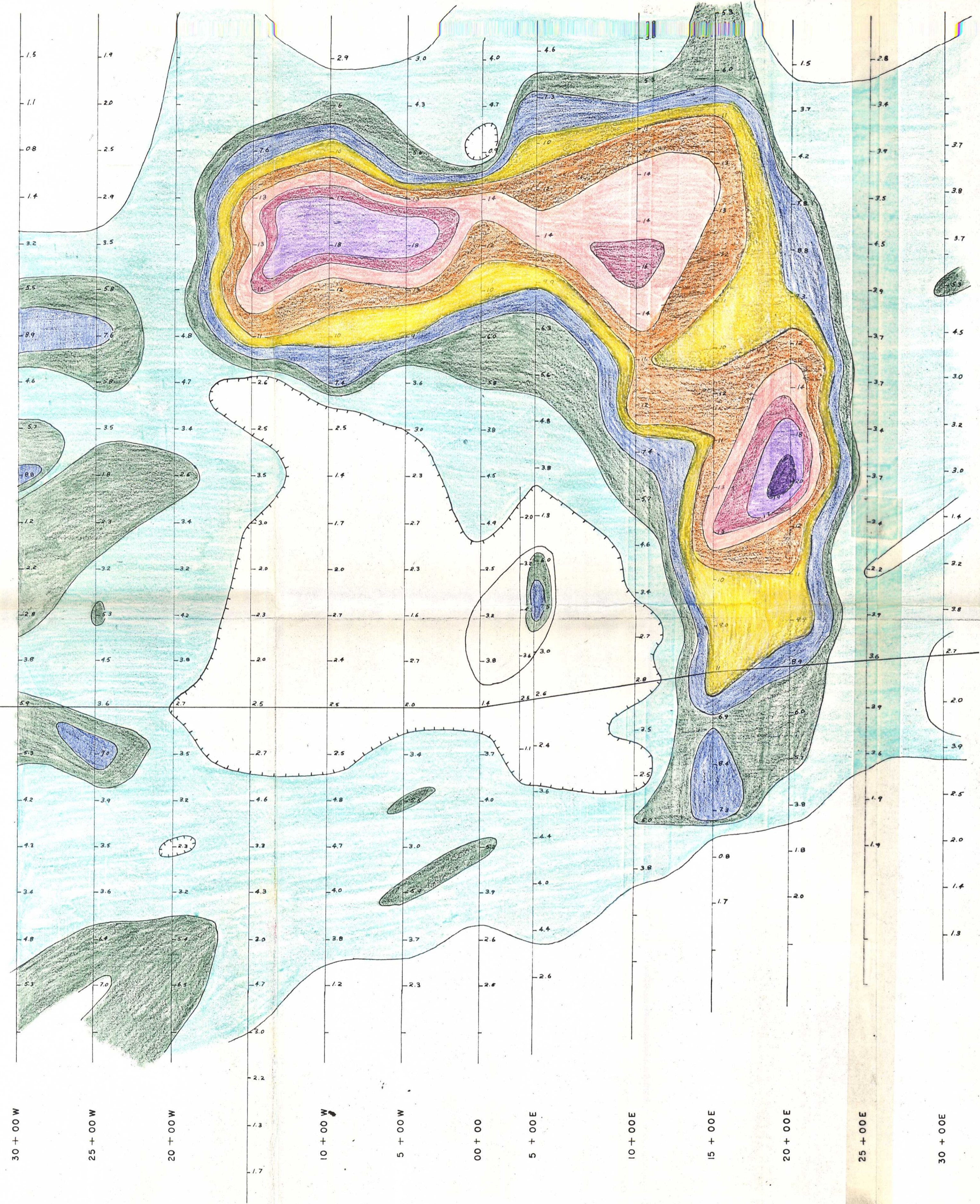


### LEGEND

- Rhyolite**      Fine grained, white to buff, slightly porphyritic, unaltered, limonite staining along joints
- Biotite quartz diorite**      Very fine to fine grained, grey, hialal porphyritic, unaltered
- Hornblende granite**      Fine to medium grained, light pink, seriate porphyritic, selective alteration of plagioclase
- Chlorite granite**      Fine to medium grained, pale green, hialal porphyritic, intensely altered
- Chlorite quartz monzonite**      Very fine to fine grained matrix, medium to coarse grained phenocrysts, pale pink to light grey, hialal porphyritic
- Hornblende quartz monzonite**      Fine to medium grained, light grey, hypidiomorphic
- Biotite quartz monzonite**      Fine to medium grained, pale green to pale pink, hypidiomorphic
- Biotite granite**      Fine to medium grained, pale green to grey, hypidiomorphic, locally grades into quartz monzonite
- Hornblende feldspar gneiss**      Medium to coarse grained, weakly foliated
- Exposed contact
- Covered contact
- Inferred contact
- 70 Fault
- Joint
- Foliation
- Diamond drill hole - vertical
- Rotary drill hole - vertical
- Thin section location
- Road

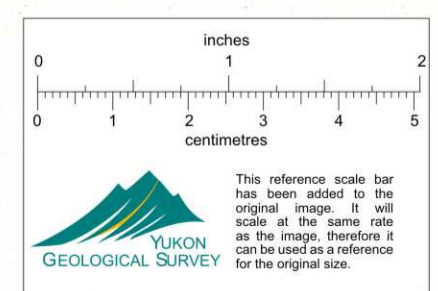


DRAWN D. A. H.	SCALE 1" = 400'	CANEX AERIAL EXPLORATION	
TRACED	DATE 21-11-67	GEOLOGIC MAP	
APPROVED		GRANITE MOUNTAIN, Y.T.	
		FILE No. 15-117	VENTURE 79



**LEGEND**

Color	Range	PERCENT
Dark Purple	> 19	PERCENT
Purple	17 - 19	
Reddish Purple	15 - 17	
Red	13 - 15	
Orange	11 - 13	
Yellow	9 - 11	
Blue	7 - 9	
Green	5 - 7	
Light Blue	3 - 5	
White	0 - 3	



DRAWN D.A.H.	SCALE 1" = 400'	GRANITE MOUNTAIN Y.T.	McPHAR I.P. SURVEY
TRACED	DATE 4-12-66		FREQUENCY EFFECT 2nd. SEPERATION
APPROVED			FILE No. 115-1-7 VENTURE 79