

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$14,820

[Signature]

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 52 (4) Yukon Quartz Mining Act.

[Signature]

WALTER
Supervising Mining Recorder

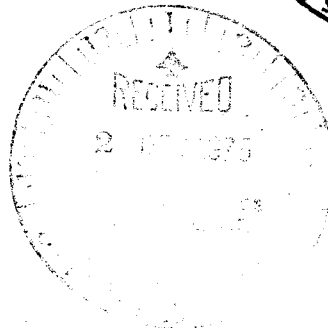
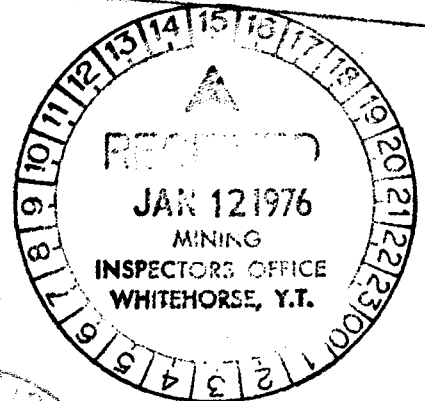
Commissioner of Yukon Territory

SUMMARY REPORT, 1975

MT. FREEGOLD PROJECT

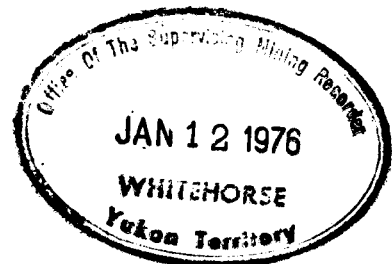
CARMACKS, YUKON TERRITORY

NTS 115 I/5E
Lat. 62° 25' N
Long. 137° 38' W



August 1975

WESTERN MINES LIMITED
R. H. BEATON, P. ENG.



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FOREWARD

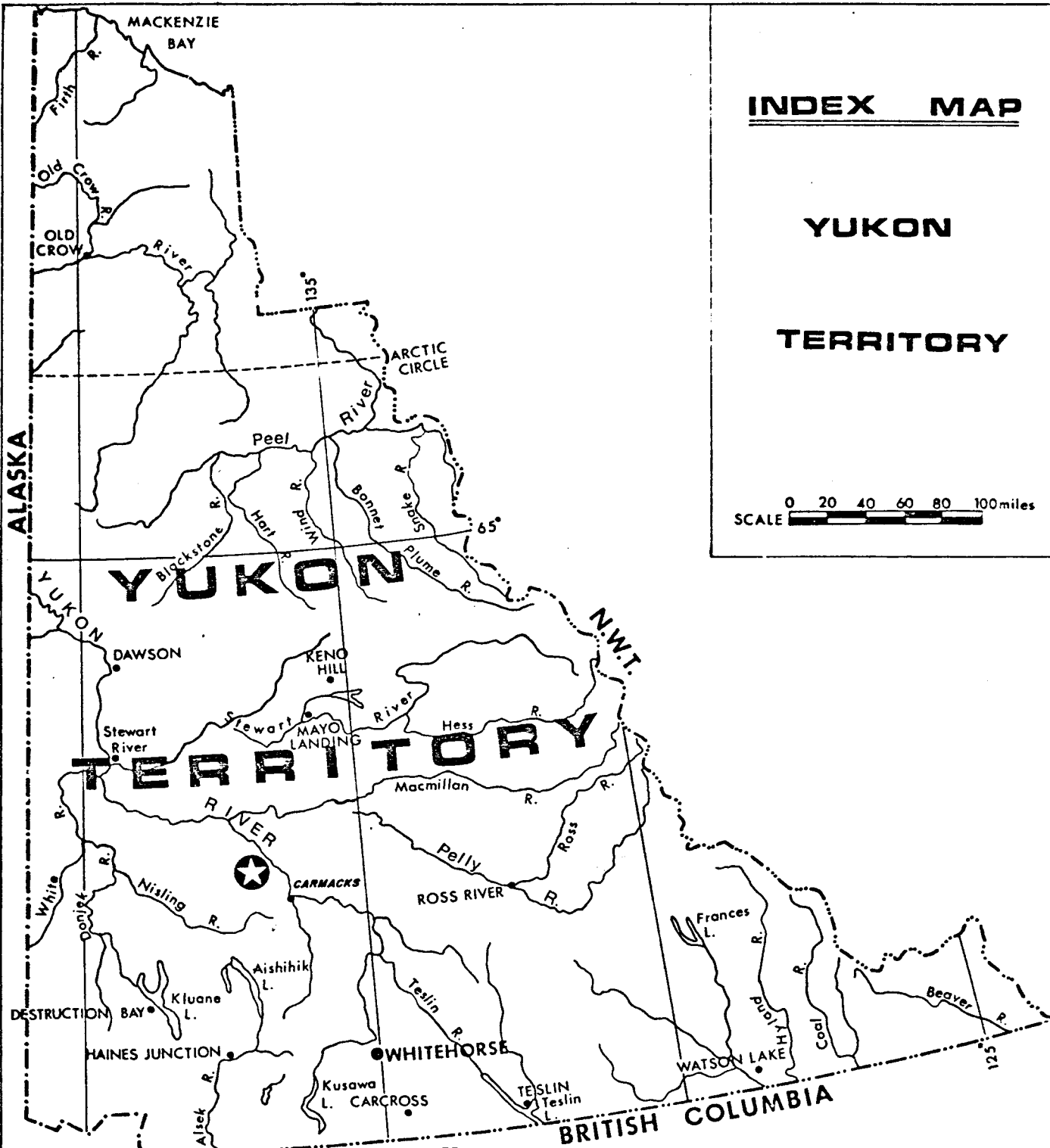
The following report includes the results of exploratory work performed on the Car 57-72 claims. Yukon during the months of May, June and July, 1975. The program was instigated as a result of the defining of a large copper-molybdenum geochemical anomaly the previous year. Work in 1975 included additional line cutting, re-surveying of the grid, complete Induced Potential coverage of the Car 57-72 claims and a diamond drilling program consisting of 12 holes for a total of 3,367 feet.

INDEX MAP

YUKON

TERRITORY

SCALE 0 20 40 60 80 100 miles



WESTERN MINES LTD.

Mt Freegold Project

INDEX MAP

August 1975

Figure No.-

SUMMARY AND CONCLUSIONS

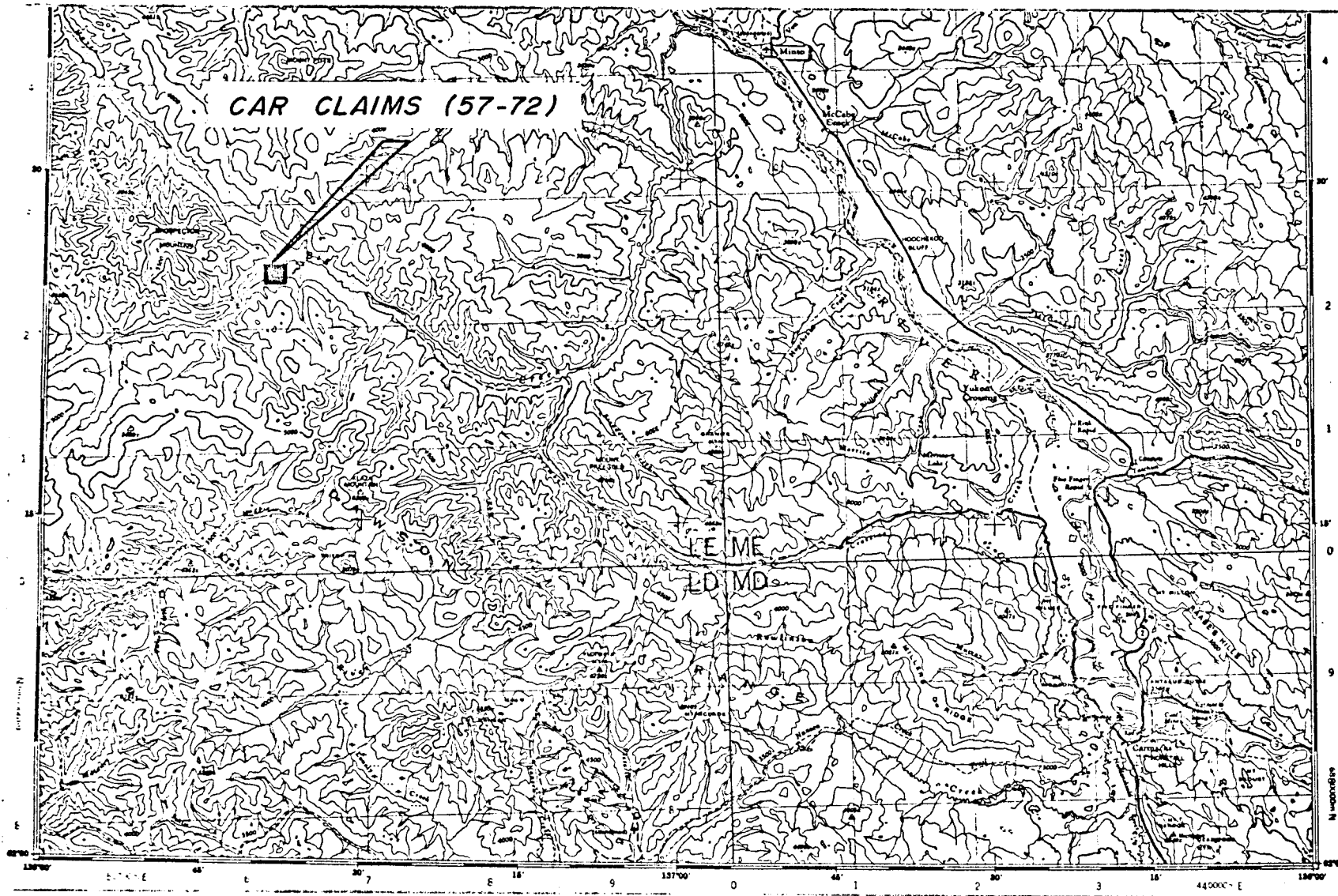
The follow-up geophysical and preliminary diamond drilling program performed on the Car 57-72 mineral claims northwest of Carmacks in Yukon from May to July, 1975 have served to delineate in part a sizeable copper-molybdenum porphyry deposit of sub-economic grade i.e. copper 0.15 - 0.20%, molybdenite 0.015 - 0.020%. There is little to suggest that improvement could be made by drilling deeper or by employing further holes. Although the mineralized zone, at least 4,000 feet in length, continues beyond the claims under agreement, values obtained near the boundaries were not found generally to be better than those more central to the property.

In view of the relative remoteness and disappointing results, it is concluded that further investigation on the claims is not warranted.

LOCATION AND ACCESS

The property is situated on the south side of Big Creek some 5 miles southeast of Prospector Mountain in Whitehorse Mining Division, Yukon. Straight-line distance northwesterly from Carmacks is 50 miles; and by access road utilizing Freegold Road as far as the junction of Bow and Seymour Creeks, 45 miles. Helicopter distance from this point to the property is 16 miles; and by tractor possibly 18 miles.

Elevation of the camp situated near the centre of the property was taken as 2,940 feet. Elevation of Big Creek, about one half mile north of the camp, was approximately 2,760 feet; and of the south property boundary about one half mile south of the camp, maximum was found to be in the order of 3,450 feet. Driving time from Whitehorse north to Carmacks is about two hours via Klondyke Highway.



WESTERN MINES LTD
 MT. FREEGOLD PROJECT
 YUKON
 PROPERTY LOCATION MAP

0 5 10 Miles

PROPERTY AND OWNERSHIP

Subsequent to the 1974 joint-venture program between Western Mines, Cream Silver Mines and Belmoral Mines on five separate claim blocks in the Mt. Freegold area, a further program on the Car 57-72 claim block was planned for 1975.

The five groups, optioned from Castlemaine Explorations Limited, W. M. Bath Investments Limited, Ventures West Capital Limited and Welcome North Mines Limited for a 10% net profit interest after payback of senior production financing require payments as follows:

- (a) \$16,500 on June 19, 1974
- (b) \$25,000 before December 31, 1974
- (c) \$50,000 before December 31, 1975
- (d) \$100,000 before December 31, 1976
- (e) \$200,000 before December 31, 1977
- (f) \$275,000 before December 31, 1978

Acquisition and exploration costs under the agreement are shared by Western (60%), Cream Silver (20%) and Belmoral (20%).

The five groups under option are:

<u>Claims</u>	<u>Record Number</u>	<u>Expiry Date</u>
MJK 1-32	Y 78884 - Y 78915	May 27, 1979
MJK 33-40	Y 78916 - Y 78927	May 27, 1980
CAR 1-40	Y 78678 - Y 78717	May 1, 1978
CAR 41-56	Y 78718 - Y 78733	May 1, 1979
CAR 57-72	Y 78734 - Y 78749	May 1, 1980
CAR 73-88	Y 78750 - Y 79765	May 1, 1979

Claims subsequently acquired by staking are EX 1-96.

Those (EX 1-80_ northwest of Car 57-72 are 100% owned by the joint venture; those (EX 81-96) southeast of Car 57-72 are subject to the agreement with the vendors...

HISTORY

The area west of Carmacks was prospected around the turn of the century for gold placers. There has been intermittent alluvial exploration with minor production since then up until the present time. Activity in hardrock exploration received little attention until the mid forties when gold quartz occurrences were found thirty miles west of Carmacks in the vicinity of Mount Nansen and Mount Freegold. Three of these (Laforma, Brown McDade, Mount Nansen) with modest tonnage reserves (\pm 100,000); and with values in the order of 0.50 ounces gold and from 5 to 10 ounces silver were found uneconomic when put into production.

During the period 1971 to 1973, Cyprus Mines jointly with Mount Nansen Mines investigated a porphyry copper-molybdenum occurrence $4\frac{1}{2}$ miles east of Mount Nansen (mountain). A total of 13,800 feet of drilling outlined a deposit with greater dimension of 3,500 feet running 0.10 to 0.15% copper and 0.01% molybdenum. The Car 57-72 group of claims is 27 miles due northwest of this occurrence.

In 1974, a program consisting of mapping, soil sampling and ground magnetics was conducted on the Car 57-72 block resulting in defining an attractive geochemical soil anomaly measuring 5,000 feet by 3,000 feet. Originally, as the Johnny Cash Group, optioned in 1970 by Atlas Exploration Limited, it had attracted attention due to the presence of anomalous heavy metal in stream sediment. Staked as a gold prospect because of magnetite outcroppings (gold is associated with magnetite on Mt. Freegold), subsequent work in 1974 by Agilis Engineering for the Joint Venture outlined a large geochemical target area which required drilling for follow up. Just prior to this evaluation, Archer Cathro and Associates of Whitehorse had staked around the Car 57-72 block when their own independent stream sediment work suggested porphyry copper potential.

GEOLOGY

1. AREA

The Carmacks Sheet (G.S.C. Edition 2, 1974) shows the Car 57-72 claim block and vicinity to be underlain by schists and gneisses of the Yukon Metamorphic Complex in contact with Mesozoic?, mafic-rich syenite or porphyritic syenite outcropping extensively to the south. Immediately north of the claim block across Big Creek, coarse-grained foliated biotite hornblende granodiorite is shown in contact (concealed, fault?) with the syenite and schist; and to a minor degree, with dark green ultrabasic rock (diorite and related types) and possibly volcanics of the Mt. Nansen Group. Recent alluvium overlies the northerly half of the claim block.

2. LOCAL

Although there is no outcrop on the Car 57-72 block of sixteen claims, mapping of outcrop on adjacent ground and of rock fragments from near-surfaces overburden have served to provide a preliminary bedrock map of the property. A copy of this map prepared by Archer, Cathro & Associates entitled Cash Property, Klotassin Joint Venture, December, 1974 is appended.

3. DRILLING RESULTS

(a) Lithology

The twelve-hole diamond drilling program (total of 3,367 feet) has provided factual assay data and bedrock information sufficient to evaluate the approximate extent and grades of the copper-molybdenum mineralization within the Car 57-72 block of claims. Logs of this work are appended.

In summary, four rock types (other than small dykes) were intersected by drilling. The oldest rock, schists of the Yukon Complex, were found to underlie the bulk of the property. Probably comprising a pendant, they consist of pale grey to pale greenish grey rocks with mafic foliation varying from sharply defined to absent. Quartzite beds of varying thickness are common and generally exhibit little or no banding. Alteration consisting of bleaching, silicification and argillation was present to more or less degree in most holes where the schists were encountered. Mineralization consisting of persistent moderate to heavy pyrite both disseminated and in fractures; and lesser sporadic magnetite as small masses and veinlets is common to all drill holes in schist. Chalcopyrite as very fine dissemination and to a much

lesser extent in fractures together with a little molybdenite is present in holes in the southerly half of the claim block.

Apparently intruding the schist but subjected to similar regional metamorphism is a medium grained gneiss or gneissic hornblende granodiorite intersected in 3 holes (nos. 9, 11, 12) near the south boundary of the claims. Hole 75-12 was lost in what appears to be fault gouge after following same for some 70 feet. Foliation dip is similar to that in the schist i.e. about 40° ; Attitude again was not determined. The gneiss, like the schist, has been subjected to similar alteration and mineralization. Contact with the underlying schist was noted in hole 75-11 at 93 feet.

A much younger intrusive mass of unknown dimension was drilled largely by hole 75-10 at the south claim boundary. Unaltered material consisted of fresh, medium to coarse grained rock typified by large (to $\frac{1}{2}$ inch) flesh phenocrysts of orthoclase in a medium grained mass of dominant grey feldspar, small rounded quartz eyes, and lesser hornblende and biotite. Classed tentatively as porphyritic quartz monzonite or alternately feldspar quartz porphyry, its fresh

appearance where not altered or weathered indicates relatively young, possibly Tertiary, intrusive activity. The contact with the gneiss is near hole 75-9 where the large flesh phenocrysts typical of the porphyry were noted in places down the hole suggesting interfingering. A small finger of similar rock was also noted in hole 75-16. The porphyry has also been subjected to silicification, especially along fractures; and to pyritization both as strong persistent fracture fillings and dissemination. Copper-molybdenum mineralization was found to be somewhat weaker than the average computed for the more-significant holes.

Volcanic extrusive rock possibly of Mount Mansen age (Eocene?) was found to occur in the northwesterly corner of the property as cored by hole 75-15. Characterized by very dark greenish-grey color with fragmental inclusions of similar and lighter (tuff?) coloring, it showed no mineralization other than very sparse disseminated pyrite. Depth of the flow was not determined.

Pleistocene and/or recent stream alluvium has accumulated as well-defined benches which locally overlie the

northerly half of the claim block. The lower bench, about one half mile in width, rises gently southerly from Big Creek drainage level to a second bench about 50 to 100 feet higher and approximately 1,000 feet in width. Drilling has shown that bedrock floor is relatively flat under the benches which are of stream origin (boulders, stratified sand, pea gravel); and also that permafrost is locally present below surface weathering level. Because bedrock rises more rapidly south of the base line, greatest overburden thickness occurs north of the baseline below the upper bench. Oxidation has penetrated to less than 100 feet near the south claim boundary and under the benches; but may exceed 200 feet beneath the lower hill slope where slope wash has accumulated.

(b) MINERALIZATION AND ALTERATION

Three principal phases of alteration exist. First the schists and gneiss appear to show some variation in response to regional effects of metamorphism within individual beds.

Secondly the intrusive and mineralizing activity have resulted in extensive alteration and metasomatism extending well out from the source (?) porphyry (or possible underlying concealed intrusives) and including much if not all of the claim block.

Thirdly, oxidation has penetrated to a depth of about 65 feet upslope near the south boundary to as much as 217 feet near toe of slope where slope wash has accumulated on the uppermost of the two alluvial river benches.

Because of the masking effects of the latter two forms of alteration, normal schist and gneiss may not have been observed. Quartzites, metasiltstones, light and dark banded phases in the schist and featureless horizons are all present; but probably modified to some extent by subsequent intrusive and surface alteration.

The intrusive and mineralizing stage of alteration is probably best demonstrated by widespread silicification both as general flooding and as silicification along fracture walls. Pyritization is closely associated occurring as persistent fine crystal dissemination throughout the claim area and also as moderate to, in places, heavy fracture filling. A little white vein quartz invariably with crystalline pyrite cores is also present. Rock which has been subjected to silicic flooding, tends to be hard and competent with good coring characteristics. Rather weak chalcopyrite mineralization (0.1-0.4%) occurs as a dust-fine dissemination,

in hair fractures, and occasionally as blebs or in quartz stringers within the extensive silicified pyritized zone along a northeasterly trend which crosses both the south central and east central boundaries of the claim block. Although molybdenite mineralization follows a similar but more restricted trend, it does not show direct correlation in grade with copper mineralization at least where unoxidized holes intervals were compared. The copper mineralization appears best developed in the schist near the schist-gneiss contact; the molybdenum apparently trends slightly more northerly crossing the contact at a low angle with no obvious control other than proximity to the south or upslope limit of the geochemical anomaly. Both holes 75-14 and 75-17 gave MoS₂ values averaging 0.057%; but the general average of anomalous mineralization would not likely exceed 0.020%.

Argillation and kaolinization are locally well developed particularly bounding gougy faults (Kaolinization of orthoclase phenocrysts in the porphyry varies from negligible to complete). Bleaching may extend several feet out from such faults. Clay development both from faulting and alteration is well developed in southerly holes; but diminishes to the north and west away from the centre of copper-molybdenum

mineralization. Phyllitic alteration was either absent or very weakly developed in the drill area.

Ground-water alteration varying between 30 and 190 feet in bedrock has resulted in incomplete breakdown of iron minerals (pyrite, magnetite) forming limonite-jarosite in fractures and variable breakdown of chalcopyrite to malachite-azurite as spotty staining and in fractures. Assay results show that copper values from the oxidized zone, except for the holes 75-2 and 75-3 are approximately $2/3$ those from below the oxidized level suggesting that copper loss through leaching has not been high. This is also confirmed by scant development of secondary enrichment mineralization. Chalcocite in a definitely discernable amount was noted in only one hole (75-17) although it may possibly be more widespread as occasional sooty films with Tenorite?, in fractures. Bornite and covellite if present occur in trace amounts. Gypsum as fracture fillings in the weathered zone was common and in places heavy (such as in fault material in hole 75-12).

Magnetite and much lesser hematite were of frequent occurrence especially in hole 75-3 where faulting was suspected because of slickensiding being present. This same hole returned

the best average copper and good molybdenite values i.e. 0.383% Cu, 0.047% MoS₂ from unoxidized material. Fluorite filling a 3/8" fracture was noted in hole 75-13 well to the north of significant copper values; but not too distant from the molybdenite trend intersected in holes 75-14 and 75-17.

(c) TONNAGE AND GRADE

The reconnaissance nature of the drilling program, precludes any definitive values being assigned to the occurrence. Those holes which returned values of interest were cored to depths of from 100 to 200 feet below the level of surface weathering. Assay values from the oxidized zone, although they differ little from those obtained from fresh rock, visually include oxide copper and therefore are misleading when referred to in terms of extraction. For the sake of completeness assay returns are tabulated for non-oxidized and oxidized sections of each hole. The non-oxidized intervals are given emphasis in this report.

Sampling was done on the normal 10 foot split-core interval basis; but in some holes where grades appeared low, alternate intervals or partial increments only were selected for analysis. Results have demonstrated that normally, particularly in the lower-grade holes, variance is not great; hence partial sampling probably reflects the tenor of the hole.

SUMMARY OF ASSAY RESULTS

<u>Hole</u>	<u>Interval(ft)</u>	<u>Cu%</u>	<u>MoS₂%</u>		
75-1	86-132 (2)	0.037	0.002	x	
	132-191 (2)	0.048	0.002	✓	
75-2 *	121-180 (6)	0.05	0.002	x	
	180-260 (14)	0.228	0.002	✓	
75-3 *	24-217 (13)	0.241	0.031	x) Fault?
	217-284 (6)	0.383	0.047	✓	
75-9 *	40-100 (6)	0.130	0.007	x	
	100-288 (19)	0.186	0.014	✓	
75-10	60-100 (3)	0.097	0.005	x	
	100-320 (22)	0.139	0.004	✓	
75-11	60-270 (21)	0.154	0.010	✓	
75-12	40-60 (2)	0.120	0.005	x) Largely fault gouge-results unreliable
	60-120 (6)	0.097	0.011	✓	
75-13	90-100 (1)	0.03	0.002	✓	
75-14	200-210 (1)	0.11	0.057	✓	

x Oxidized zone (carbonate and sulphide mineralization)

✓ Unoxidized zone (sulphide mineralization)

(3) Number of samples, generally 10-foot increments

<u>Hole</u>	<u>Interval (ft.)</u>	<u>Cu%</u>	<u>MoS₂%</u>	
75-15	Mt. Nansen volcanics (non mineralized)			
75-16	51-185 (8)	0.12	0.015	x
	185-442 (17)	0.166	0.014	✓
75-17	50-170 (12)	0.201 ✓	0.026	x
	170-276 (11)	0.230 ✓	0.057	✓

Weighted average - unoxidized zone only ✓
 Holes 75 - 2, 3, 9, 10, 11, 16, 17

Cu 0.185%
 MoS₂ 0.016%

Weighted average - oxidized zone only x
 Holes 75 - 2, 3, 9, 10, 16, 17

Cu 0.167% (strongly influenced by 75-3)
 MoS₂ 0.019%

Note 1: Because longer sections in holes carry greater weight and influence average results, the above values are therefore considered approximate; but within reason for depths drilled since values showed good uniformity.

Note 2: Gold-silver values determined from a few samples or composites of samples returned low uniform results.

Averages are:	<u>Hole</u>	<u>Au (ox/ton)</u>	<u>Ag (oz/ton)</u>
	75-10	0.005	0.07
	75-3	0.010	0.12
	75-9	0.008	0.11

Assigning a tonnage factor to the occurrence is not practicable in view of the grades and scope of drilling. Most holes in mineralization probably if deepened would have shown continuance of similar grades with depth. Areally the better grade material (say 0.2% Cu-MoS₂ equivalent) appears to trend northeasterly through holes 75-9, 3, 17 and possibly 14 suggesting that the occurrence is essentially linear, at least near surface, over a width (best grade) in the order of some 600 feet or more. Were the grade found to be economical, say 0.5% Cu or better, such width would impose restriction on open pit mining particularly in view of depth of overburden (30 to 150 feet); and of oxidized material (30 to 190 feet) for a total average of between 100 and 200 feet. Open at both ends, length of the zone within the Car 57-72 claims is in the order of 4,000 feet. Geologic controls are speculative; but thus far it can be seen that the main zone is apparently elongate, that it includes in part a mass of relatively young feldspar porphyry, that it follows in part the schist-gneiss contact, and that the silicified-pyritized zone is widespread suggesting either relative freedom of movement of mineralizing solution or that a mineralizing source may be beneath the schist pendant.

GEOCHEMISTRY

Copper-molybdenum soil values along grid lines 400 feet apart were determined during the 1974 program. The resultant anomaly, half of which was included in the Car 57-72 claim block, generally provided copper values in the order of 200 ppm or better and peaking at 1,000 ppm or better. Drilling has demonstrated that much of the anomaly is the result of leaching and downslope migration of copper ions to soil or alluvium on the benches. The high sulphide content of much of the rock has probably facilitated this movement, although surprisingly the assay returns from oxidized rock do not reflect heavy copper leaching. Subsequent drilling has also shown that the better assay values came from holes near the south or upslope limit of the anomaly generally within a few hundred feet from its perimeter. The genetic source of the copper-iron silica mineralization is not apparent. The porphyry body may be associated with mineralizing activity but it too has been subjected to late-stage silicification and pyritization and also where drilled carried lower copper-molybdenum values than the bordering schists. An alternate source is not obvious although faulting and fracturing have certainly contributed to movement of mineralizing solutions; and larger breaks are almost certainly present.

GEOPHYSICS

1. Magnetic Survey

Although massive magnetite occurs in outcrop to provide a strong anomaly just east of the claim block, the magnetic survey done the previous year by Agilis Engineering Limited has shown little responses in the Car 57-72 claim block. Near the south boundary, an anomaly of some 600 gammas above background was checked by holes 75-9 and 75-11. Although some magnetite was present in both holes, the amount was considerably less than that in 75-3 which was sited at the east end of a 200 gamma low. Subsequent drilling has shown that the overburden depth has probably influenced magnetic readings since more character or definition in contouring is demonstrated upslope where overburden is less than 50 feet; and that magnetite distribution in rock tends to be patchy favouring fractures. A second magnetic anomaly of some 800 gammas relief on the southeast claim boundary was not drilled; but interestingly both it and the first anomaly mentioned lie on or adjacent to the schist-gneiss contact or projection of same.

2. Induced Polarization Survey

Eagle Geophysics Limited of North Vancouver conducted an Induced Polarization (time domain) survey on the Car 57-72 block from June 19 to July 11, 1975. Observations south of

the baseline were run on grid lines (resurveyed in 1975) of 400-foot spacing, while those to the north were run at 800-foot spacing. A final report on this work will not be available until after the field season; but discussion with Mr. John Lloyd who conducted the survey resulted in the following very brief interpretation of results. Chargeability from the three separations used was generally high and well above normal for most of the property. The high response is attributed to the widespread pyritization (both fracture and disseminated) known to be present. Preliminary examination of plotted and contoured values has not as yet indicated any trend which might serve as a guide to copper mineralization. There does not appear to be any decline in pyritization where chalcopyrite-molybdenite mineralization occurs; nor does the pyritization appear to form a peripheral halo about a copper-enriched core zone. On line 10 W where a small gully drains northerly the pattern of contouring (chargeability on second separation) shows a northerly sense where a fault was previously suspected due to the lithology change indicated on the Archer-Cathro map.

Resistivity values are generally low as would be expected save for a number of highs which trend easterly through the centre of the claim block. Hole 75-14 drilled on the baseline within this trend showed nothing unusual except that the overburden was relatively deep; that it

included bouldery, gravelly and sandy horizons; and that permafrost was found to be present below the oxidized horizon.

The I. P. data is plotted on a resurveyed (1975) grid essentially the same as previously used but embodying slight corrections in line bearings and station spacing.

DIAMOND DRILLING PROGRAM

As mentioned earlier, twelve holes were drilled for a total of 3,367 feet. Pertinent data follows:

Hole	Collar El (altimeter)	Re-surveyed Line	Grid (1975) Stn	Depth* Overburden	Depth* Oxidized	Depth Total
1	2,970	2W	7S	86	127	340
2	3,045	6E	11+50S	121	180	289
3	3,115	14E	15+10S	24	217	286
9	3,320	1+18W	27+85S	36	?	288
10	3,420	5+75E	27+50S	28	101	320
11	3,285	2W	23S	28	65	273
12	3,135	22E	17S	35	63+	144
13	2,800	22E	16N	63	In O.B.?	256½
14	2,920	22E	Baseline	152½	105 in O. B.	257
15	2,835	10W	13N	109	In O.B.	196
16	3,040	14E	11+10S	51	185	442
17	3,025	18E	9+85S	37	165-170	276
Big Creek	2,760	14E				3,367½
Camp	2,940 (datum)	2W	3-4S			

- * Depth of overburden is seldom precise since overburden merges with decomposed bedrock. Depths given are those where core in first recovered, usually where rock is showing competency.
- + Weathered depth may be arbitrary since lower limit is frequently gradational.

The drilling program performed by Arctic Diamond Drilling Limited of Whitehorse involved about two months of work, (June and July) averaging about 3 holes per fortnight, and employing a single Longyear 34 drill with two 12-hour working shifts per day. Moves were done by Trans North Turbo Air Bell Jet Ranger based at Carmacks. The two main problems encountered were water supply and overburden. The first caused delays initially because of necessity of moving water up to 1 mile from Big Creek over a vertical distance of close to 700 feet. Rain in late June and early July permitted use of local water eliminating tedious pump and line maintenance. The second, problem, that of overburden resulted from not emplacing casing to depths where ground conditions obviously necessitated same. The relatively shallow holes, however, would in certain cases have required casing throughout both the overburden and oxidized ground to ensure keeping them open. The policy of using minimal casing for shallow holes probably involved savings; but drill rod and bits suffered. Of the 12 holes only 3 were stopped because of impossibility to continue without drilling the casing to appreciably greater depth. Finally, the distinct possibility of losing casing in tight or sticky ground at a relatively remote job site provided further incentive to conserve its usage.



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- Cash Property, Klotassin Joint Venture - Archer,
Cathro & Associates - soil and stream geochemical,
magnetic, geology maps December 1974
- Progress Report, Mt. Freegold Project, Carmacks, Y.T.
Western Mines Limited, B. E. Spencer March 12, 1975
- Induced Potential Survey on Car 57-72 and Klotassin
Joint Venture Property, Eagle Geophysics Limited,
John Lloyd (Preliminary changeability & resistivity) July 1975

Hole No. 75-2 Sheet 1 Started _____ Completed June 1975 Logged by R. Tschach Property Big Creek

Length 289' Dip 90° Hor. Comp. _____ Vert. Comp. _____ Bearing _____ Latitude _____ Departure _____

Elev. Collar 3045' (altimeter) % Recovery _____ Location Geochem. Old Grid: 6E, 10 + 50 S
New Grid 6E 11 + 50 S

Object Check Geochem. Cu - MoS₂ Anomaly

Remark - Surface weathered to 180' NB Camp Eleve. 2940' (altimeter)

Footage From To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis							
							Au	Ag	Cu	Pb	MoS ₂			
0	121	Overburden												
	0-66	No recovery	split-core	basis		180	oxidized							
	66-121	37% recovery, angular rubble and sandy sections (syenite, granodiorite, sandy schist and Mt. Nansen-tuffs)	2808	180	190				0.27				0.002	
121	165	Yukon Schist: Metaquartzites: yellow and brown hydrous iron oxides (limonite) color the highly weathered top part of the Yukon schist, schistosity is 75° with core axis, quartz-threads in plane of schistosity or in fracture network carry pyrite and are oxidised too with vugs, core is brittle, broken core	2809	220	230				0.16				0.003	
			2810	250	260				0.26				0.003	
165	289	Yukon Schist: Metaquartzite with Gneissic bands and sections: whitish-grey or greenish-grey with blackish-green gneissic sections or greenish gneissic bands, schistosity approximately 75° with core axis bands, of mostly white quartz mostly in plane of schistosity,					Note: This hole was check assayed by taking 1 inch pieces of core at every foot and Combining them to form 10-foot sample (increments) Results follow:-							
			A	121	130				.02				.002	
			B	130	140				.03				.003	
			C	140	150				.04				.002	
			D	150	160				.05				.003	

Hole No. 75-2 Sheet 2 Started _____ Completed _____ Logged by _____ Property _____

Length _____ Dip _____ Hor. Comp. _____ Vert. Comp. _____ Bearing _____ Latitude _____ Departure _____

Elev. Collar _____ % Recovery _____ Location _____

Object _____

Footage From To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis				
							Au	Ag	Cu	Pb	MoS ₂
cont'd 289		fractures at various angles with schistosity often with pyrite,	E	160	170				.05		.003
		mud seam from 223½ to 225' approximately	F	170	180				.13		.001
		(secondary) short sections past 223';	G	180	190				.14		.001
		dyke from 271' to 286' ; feldspar porphyry type to dacitic type: greenish-grey	H	190	200				.28		tr
		fine grained groundmass with porphyritic feldspar and feldspathoids	I	200	210				.58		tr
		dyke shows compact core, but is hairline-fractured with pyrite common	J	210	220				.16		tr
		hard but easily () broken along these fractures	K	220	230				.18		.002
	Min.	pyrite is present in the fractures in the Metaquartzite, but not common; some	L	230	240				.27		.007
		magnetite; see especially at and around 183'	M	240	250				.25		.007
		End of hole.	N	250	260				.22		.002
			O	260	270				.19		.002
			P	270	280				.10		.002
			Q	280	289				.12		.002

Hole No. 75-3 Sheet 2 Started _____ Completed _____ Logged by _____ Property _____

Length _____ Dip _____ Hor. Comp. _____ Vert. Comp. _____ Bearing _____ Latitude _____ Departure _____

Elev. Collar _____ % Recovery _____ Location _____

Object _____

Footage om	To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis						
								Au	Ag	Cu	Pb	MoS ₂		
cont'd														
162	227	50%-199'	Yukon Schist: Gneissic and Metaquartzitic:	2763	162	192		.005		0.25			0.022	
		100%-220'	brittle, fractured, oxidised schist with fine, dark remnants of biotite;	64	192	199		tr		0.19			.013	
			the brown hydrous iron oxide colors are not dominant but rather	65	199	207		.005		0.16			.017	
		Min.	the black, fine grained bands, streaks, blebs of magnetite	66	207	217		.005		0.14			.015	
			(217' to 220' over 50% magnetite);	67	217	227	217' oxidized	.005		0.24			.147	
			little malachite or other Cu-oxides especially past 199';											
			mud section from 166' to 175'; some chalcopyrite											
227	252		Chlorite - Quartz-Schist (Yukon Schist)	2768	227	242		-		0.58			.047	
			+ green with irregular whitish-grey patches and stringers of quartz	2782	242	250		*	*	0.50			.013	
			throughout, angle of schistosity with core axis down to about 30°	2783	250	260		*	*	0.18			.012	
			badly broken core in many places, "mud" sections	2784	260	270		*	*	0.19			.038	
				2785	270	284		*	*	0.49			.027	

Car 57-72 YC.s
Mt. Freegold Area
Big Creek Property

Hole No. 75-9 Sheet 1 Started June 23, 1975 Completed June 27, 1975 Logged by R. H. Beaton Property

Length 288' Dip 90° Hor. Comp. -- Vert. Comp. -- Bearing -- Latitude 1+18 W Departure 27 + 85 S New Grid

Elev. Collar 3320' altimeter % Recovery 90% below 38' Location Whitehorse M. D., Yukon, N.T.S. 115 I/SE Lat 62° 25' N Long. 137° 38' W
100% below 68'

Object Investigate Cu - Mo geochem. anomaly

Remark - surface weathering depth not definite

composites

Footage m	To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis						
								Au	Ag	Cu	Pb	MoS ₂		
0	36	nil	O. B. and decomposed bedrock											
36	193		Gneissic granodiorite or qtz. diorite characterized by weak gneissic orientation of	2787	40	50	2796			0.11		0.003		
			hornblende (chloritized), prominent large distinct orthoclase phenocrysts,	2811	50	60				0.11		0.007		
			and minor qtz. eyes. The rock is pyritized more or less throughout both by	2812	60	70				0.09		0.003		
			fracture fillings to 1/4" or more thick; but generally much less; and also by	2788	70	80			+.01	+.08	0.22		0.015	
			persistent dissemination. Magnetite is moderately strong as patches and veinlets	2813				80	90			0.12		0.005
			at top; but declines with depth to weak and sporadic. Silicification is	2814	90	100				0.13		0.007		
			moderately developed along some fractures which invariably include a pyrite	2789	100	110				0.14		0.005		
			core. Some small faults containing gouge are present; but none appear large.	2815	110	120				0.18		0.003		
			Minor Chalcopyrite is sparsely present usually in hair fractures; but also as a	2816	120	130				0.18		0.020		
			weak dissemination at widely spaced intervals. Estimated average grade is	2790	130	140				0.17		0.010		
			+ 0.05% Cu. Molybdenite is rare being present in little more than	2817	140	150			0.24		0.020			
			trace amounts. Alteration is moderate green schist; but locally, especially	2818	150	160			0.17		0.003			
				2791	160	170	- 2797	*.005	*.08	0.21		0.017		

Hole No. 75-10 Sheet 1 Started June 15, 1975 Completed June 23, 1975 Logged by R. H. Beaton Property Big Creek Property
 Length 320' Dip 90° Hor. Comp. -- Vert. Comp. -- Bearing -- Latitude Line 6E Departure Stn. 27+50 S New
 Elev. Collar 3420' altimeter % Recovery 100% below 57' Location Whitehorse M.D. ; Yukon, NTS 115 I/5E, Lat 62° 25' N Long 137° 38' W
 Object Investigate Cu-Mo geochem. anomaly

Remark - Surface weathering to 101'

Au Ag 60-130, 150-
Composites 220, 240-310

Footage From	To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis				MoS ₂
								Au	Ag	Cu	Pb	
0	28	0.3	Few leached rock fragments. (Overburden)	2769 ⁺	60	70				0.11		.003
28	33	1.0	Rusty fragments & gouge, porphyry?	7251	70	80				0.13		.005
33	45	2.7	Probably bedrock, badly broken, fractured, leached, porphyritic	7260	80	90				0.08		.003
45	57.6	3.8	Fragments in gougy, rusty, decomposed rock, claylike, few flecks malachite and 1/16" pyrite veinlet noted between 53' & 56'	2770 ⁺ 7252	90	100	2779	.005	.04	0.07		.005
57.6	100	40.9	Porphyritic rock, light grey in color, light rusty coloration, leached & generally incompetent. Characterized by white feldspar phenocrysts more or less kaolinized, much lesser small rounded smoky? quartz eyes and complete absence of mafics, Phenocrysts locally crowded Pyrite occurs in fairly frequent fractures from threads to 1/8". Surprisingly pyrite appears fresh looking. Fracturing varies from fairly frequent to locally crowded. Silicification along fractures is common with penetration up to 1". Some pyrite veinlets show offsetting Gypsum? up to 1/8" thick noted on some fractures	7262 2771 ⁺ 7253 7263 2772 ^o 7254 7264 2773 ^o	110	120				0.12		.003
					120	130				0.08		.020
					130	140				0.07		.002
					140	150				0.09		.007
					150	160				0.11		.002
					160	170				0.08		.003
					170	180				0.08		.003
					180	190	2780	.005	.08	0.11		.003

Hole No. 75-10 Sheet 2 Started _____ Completed _____ Logged by _____ Property _____

Length _____ Dip _____ Hor. Comp. _____ Vert. Comp. _____ Bearing _____ Latitude _____ Departure _____

Elev. Collar _____ % Recovery _____ Location _____

Object _____

Footage m	To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis				
								Au	Ag	Cu	Pb	MnS ₂
			Minor chalcopyrite noted between 72' and 82' (0.05-0.10% Cu) and	7255	190	200				0.15		.005
			between 82-91 (\pm 0.05% Cu). Occasional small flecks and patches of malachite	7265	200	210				0.12		.003
100	320	100%	Rock as preceding but coloration is greyish green characterized by large	2774 _o	210	220				0.16		.002
			(up to $\frac{1}{2}$ ") pink orthoclase phenocrysts (\pm 5%), and no mafics. Bulk of rock	7256	220	230				0.12		.003
			is probably made up of plagioclase and possibly alteration products such as	7261	230	240				0.18		.003
			chlorite. Alteration is well developed in green schist phase. Original rock	2775 -	240	250				0.29		.007
			was probably a porphyritic rock of intermediate classification possibly	7257	250	260				0.21		.003
			quartz diorite or granodiorite. Competency of rock much improved; and	7266	260	270				0.26		.005
			cores and drills well.	2776	270	280	2781	.005	.08	0.19		.005
			Silicification along fractures persists throughout and is locally	7258	280	290				0.12		.005
			intense particularly between 163 and 201 where it is approximately 75%	7267	290	300				0.16		.003
			of core as smoky quartz. Pyrite content increases to above 5% where silicification	2777 -	300	310				0.16		.002
			heavy; but probably never drops below about 3% average. The pyrite occurs as	7259	310	320				0.14		.002

Car 57-72 M.C.s
Mt. Freegold Area
Big Creek Property

Hole No. 75-11 Sheet 1 Started June 27, 1975 Completed June 30, 1975 Logged by R. H. Beaton Property 22 S old grid

Length 273' Dip 90° Hor. Comp. -- Vert. Comp. -- Bearing -- Latitude Line 2 W Departure 23 S New grid

Elev. Collar 3,285' altimeter % Recovery --- Location Whitehorse M.D., Yukon, N.T.S. 115 I/SE Lat 62° 25'N Long 137° 38' W

Object Investigate coincident geochem, magnetic, I. P. high

Remark: - surface weathering to 65'

Footage m	To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis				
								Au	Ag	Cu	Pb	
0	28	0	Overburden and decomposed bedrock									
28	31	2	Gneissic (50% core) rusty, leached, fractured with gypsum, ankerite, limonite, jarosite fillings.	--	50	60	weathered poor					
				2800	60	70				0.23		0.007
31	34	4	As preceding, fragmental, gougy in places, no copper min. or magnetite.	2828	70	80				0.16		0.003
34	40	5	Same. Gneissic hornblende diorite. Soft, decomposed, rusty, clayey	2801	80	90				0.21		0.013
			36-39. Minor magnetite @39'. Little gypsum and possibly sericite in fractures with dissem. pyrite.	2829	90	100				0.16		0.013
				2830	100	110				0.08		0.003
40	52	0.2	Essentially no recovery	2802	110	120				0.10		0.007
52	93	52-64/3.8'	Altered gneissic hornblende granodiorite with interval (porphyritic?)	2831	120	130				0.17		0.007
		64-93/100%	characterized by cloudy small grey phenocrysts (73-84). Pink orthoclase	2832	130	140				0.19		0.012
			phenocrysts noted from 88' to 91'. Bleached to orange tan color 84-88.	2803	140	150				0.22		0.015
			Rusty fractures common, moderate to low pyritization, weakly and	2833	150	160				0.14		0.012
			sporadically magnetic (Magnetite as small patches and stringers). Trace	2834	160	170				0.17		0.007
			malachite in occasional hair fracture.	2804	170	180				0.12		0.003
				2835	180	190				0.19		0.015

Hole No. 75-11 Sheet 2 Started _____ Completed _____ Logged by _____ Property _____

Length _____ Dip _____ Hor. Comp. _____ Vert. Comp. _____ Bearing _____ Latitude _____ Departure _____

Elev. Collar _____ % Recovery _____ Location _____

Object _____

Footage From To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis			
							Au	Ag	Cu	Pb
93 273	95-100%	Altered hornblende (& biotite?) quartz schist with banding attitude varying	2836	190	200			0.15	0.007	
		from sharp at 50° - 60° with core axis to vague or absent at similar attitude	2805	200	210			0.21	0.015	
		except at 250' where 40°. Pyritization weak to moderate in fractures; and	2837	210	220			0.14	0.012	
		disseminated. Magnetite weak and sporadic as small patches and stringers.	2838	220	230			0.15	0.013	
		Locally fracture borders are silicified; and chloritization varies from weak to	2806	230	240			0.15	0.013	
		intense. Porphyritic in frequent intervals characterized by small grey	2839	240	250			0.13	0.013	
		phenocrysts (possibly an alteration characteristic). Small faults, bleached	2840	250	260			0.09	0.005	
		intervals, decomposed sections (soft incompetent core) fairly frequent.	2807	260	270			0.09	0.005	
		Copper mineralization evidenced by minor malachite and lesser azurite								
		in clayey fractures and rarely as chalcopyrite in fractures. MoS ₂ was noted only								
		once in a quartz veinlet at 175½.								
		In detail: Malachite and occasionally azurite noted in sparse amounts								
		@ 94, 97½, 108-118, 131-133, 140, 225, 225½, 233½, 250½-259, 268-273.								

Hole No. 75-16 Sheet 1 Started July 15, 1975 Completed July 22, 1975 Logged by R. H. Beaton Property

Length 442' Dip 90° Hor. Comp. -- Vert. Comp. -- Bearing -- Latitude New Grid 14E Departure 10+90 S

Elev. Collar 3,040' (altimeter) % Recovery Location Whitehorse M.D., Yukon, N.T.S. 115 I/5E Lat. 62° 25' N Long 137° 38' W

Object

Remarks - Surface weathering to 185' (rusty, oxide copper stain). Frost noted on core tube around 170'-180'

Feetage To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis				
							Au	Ag	Cu	Pb	Zn
APPROX. 51		Overburden, no recovery	2842	51	60				0.15	0.005	
51	235 51-79 (16) 64%	Schist, badly broken, some short (few inches) gougy.	2843	60	70				0.08	0.005	
	79-102 (16 2/3) 72%	sections, light grey to light greenish grey color, distinct schistose	2844	70	80				0.14	0.010	
	102-158 (33) 68%	banding in places @ 50°/core axis, very minor magnetite (sporadic), pyrite weak									
	158-185' (13) 66%	to absent, silification weak, alt'n surface and regional, malachite and	2845	90	100				0.19	0.005	
		azurite, weak and persistent to 179 feet. Surface oxidation to approximately 185.									
185	215 1/2 135-245 1/2 (33) 62%	Schist, no surface oxidation, sparse pyrite except local increase with	2846	110	120				0.11	0.005	
		occasional quartz veinlets which favour schistosity. Schist is light									
		to medium grey color with well developed schistosity and variable dip	2847	130	140				0.09	0.005	
		90'-70°/core, 115'-65°/core, 150'-70°/core, 165'-45°-50°/core, 192'-50°/core,									
		223'-70°/core, 242'-70°/core. Core is weak, clayey, fissile with poor	2848	150	160				0.09	0.010	
		recovery. Molybdenite (scant) noted @ 188' (slicken face), 192'									
		(1/8" Qtz. stringer following schist), 213' (fly specks) chalcopyrite	7279	170	180				0.12	0.005	
		at 213' as fly specks. Mineralization has apparently moved into schist along				185'	oxidized				

Hole No. 75-16 Sheet 2 Started _____ Completed _____ Logged by _____ Property _____

Length _____ Dip _____ Hor. Comp. _____ Vert. Comp. _____ Bearing _____ Latitude _____ Departure _____

Elev. Collar _____ % Recovery _____ Location _____

Object _____

Footage From To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis				
							Au	Ag	Cu	Pb	Mo
		schistose partings together with a little quartz.	2849	190	200				0.07	0.027	
245'	296'	38'	77%	Porphyry, pale grey with tabular cream phenocrysts to 1/4" bleached, silicified (hornfelsic) and well pyritized 252 1/2-253 1/2 also 285-288. Some larger phenocrysts to 1/2" bleached white but locally pale flesh as at 259'.	7277	210	220			0.11	0.028
		Occasional small 1/8" quartz eye. Magnetite not noted. Pyrite weak to moderately dissem. Chalcopyrite weak but persistent (+ 0.05%). Silification present but not strong, Kaolin and clay alt'n. very strong.	7278	230	240				0.09	0.027	
		Minor chlorite, Rock is generally weak, incompetent, clayey.	7281	260	270				0.18	0.028	
316'	320'	14'	100%	Schist, medium grey with banding @ 50°/core axis, Very weak, incompetent, silty consistency in places. A little Chalcopyrite and Molybdenite in places.	7282	270	280			0.27	0.027
					7283	280	290			0.18	0.028
					7284	290	300			0.22	0.028
					7285	300	310			0.21	0.028
					7286	310	320			0.20	0.027
					7287	320	330			0.14	0.028

Hole No. 75-17 Sheet 1 Started July 22, 1975 Completed July 25, 1975 Logged by R. H. Beaton Property Big Creek Property

Length 276 Dip 90° Hor. Comp. -- Vert. Comp. -- Bearing -- Latitude New Grid 18E Departure 9 + 85 S

Elev. Collar 3,025 (altimeter) % Recovery 53-276 95%+ Location Whitehorse M.D., Yukon, N.T.S. 115I/5E Lat. 62° 25' N Long 137° 38' W

Object _____

Remarks - Weathering to about 165'-170 feet (rust, oxide copper)

Depth To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis						
							Au	Ag	Cu	Pb	MoS ₂		
0	approx. few pieces	Overburden, slightly gneissic medium grained hornblende biotite syenite,											
		granodiorite, schist, and volcanic boulders or talus present.	7294	50	60				0.16				.027
37	37-53 30%	Schist, light grey and greenish grey, finely banded with attitude	7295	60	70				0.18				.020
	53-276 95% +	showing little variance from 70°/core axis. Moderately pyritized throughout	7296	70	80				0.17				.017
		but partially leached or rusted in weathered zone. Magnetite not noted.	7297	80	90				0.18				.027
		Silicification, as quartz veinlets which tend to favour schistosity,	7298	90	100				0.16				.025
		moderate and persistent; as flooding or hornfelsing, general throughout hole.	7299	100	110				0.14				.019
		Bleached to white or pale grey or buff 51-65, 95½-99, 109-117, 125-142	7300	110	120				0.18				.019
		188-192, 214-218 (patchy). Fault gouge 55-56, 95½-96½, 192-192½.	7601	120	130				0.25				.037
		Soft, incompetent 101-102, 106-107, 108, 192½-193½ (Kaolin), 193½-196	7602	130	140				0.15				.035
		(drab grey clay). Minor brecciation 134-137, 138½-140½. Core has distinct	7603	140	150				0.24				.028
		greenish coloration 182½-186; and has appearance of quartzite 82½-85,	7604	150	160				0.30				.037
		86-86½, 86½-89.	7606	160	170	165-170 oxidized			0.31				.047
		Mineralization: -	7605	170	180				0.25				.021

Hole No. 75-12 Sheet 1 Started June 30, 1975 Completed July 2, 1975 Logged by R. H. Beaton Property Big Creek Property

Length 144' Dip 90° Hor. Comp. -- Vert. Comp. -- Bearing -- Latitude Line 22 Departure Stn 17 S

Elev. Collar 3,135 altimeter % Recovery 90-100% Location Whitehorse M.D., Yukon, NTS 115 I/5E Lat 62° 25'N Long 137° 38'W

Object Investigate large area at moderate IP chargeability

Remark - Surface weathering at least to 63'

Footage From To	Core Recovered	Description	Sample No.	From	To	Recovery %	Analysis					
							Au	Ag	Cu	Pb		
0	35	Nil										
0	35	Overburden and weathered bedrock	7270	40	50				0.13		0.008	
35	72 1/2	35' (93%) Weakly gneissic altered hornblende granodiorite well fractured with gypsum	7268	50	60				0.11		0.008	
		and some quartz fillings, scant to low pyrite, trace copper as negligible malachite,	7269	60	70				0.10		0.007	
		frequent soft intervals which are gouge like and rusty. Malachite noted in	7271	70	80				0.11		0.008	
		gypsum fracture filling @ 65'. The gneissic tendency appears to disappear	7272	80	90				0.07		0.011	
		just above base	7273	90	100				0.09		0.011	
72 1/2	144	44' (50%) Rusty buff clay-like decomposed material (equivalent of foregoing?)	7274	100	110				0.10		0.012	
		Considerable gypsum veining. No strength. Severe sticking in core tube. Rock	7275	110	120				0.11		0.013	
		fragments and reworked appearance suggests fault. Occasional speck pyrite.										
		A few small core fragments at 144' are bleached and well pyritized.										
		(Gypsum veinlets to 1/4" thick at varying attitudes.)										
		End of Hole.	7276	140	144				0.10		0.005	
		Note: Hole was abandoned at 144' when core barrel broke in hole and was not recovered										

Soft earthy consistency for greater part with much gypsum

63' - oxidized

few fragments only

MONTH

YEAR TO DATE

OPERATING

Labour (Geological)

Supplies

14,820

7

DIAMOND DRILLING

Contractor

Labour

Supplies

66,042

PERCUSSION DRILLING

Contractor

Labour

Supplies

GEOCHEMISTRY

Contractor

Labour

Supplies

LINE CUTTING

Contractor

Labour

Supplies

3,630

DRILL SITE PREPARATION

Contractor

Labour

Supplies (Helicopter services)

1,858

37,348

ASSESSMENT AND RECORDING FEES

2,503

OPTION PAYMENTS

3,490

OFFICE RENTAL AND EXPENSES

8

458

TRANSPORTATION

2,238

BOARD AND LODGING

1,135

SAMPLING AND ASSAYING

459

1,572

GEOPHYSICS

Labour

7,155

OVERHEAD

194

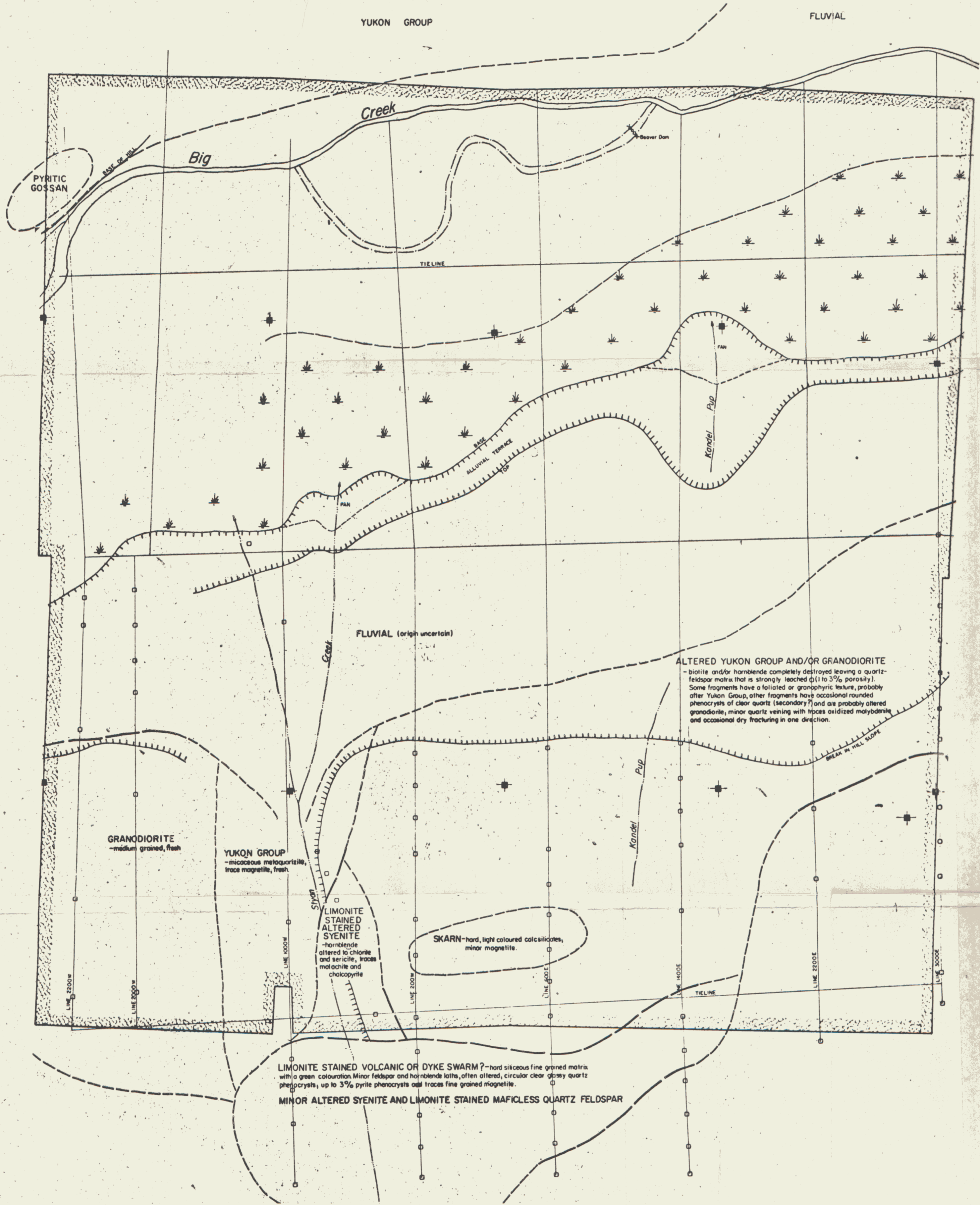
TOTAL PROJECT COST

142,450

TOTAL

467

142,450



YUKON GROUP

FLUVIAL

PYRITIC GOSSAN

Big

Creek

Beaver Dam

TIELINE

FAN

Kandel PUP

ALLUVIAL TERRACE

FLUVIAL (origin uncertain)

Creek

ALTERED YUKON GROUP AND/OR GRANODIORITE
- biotite and/or hornblende completely destroyed leaving a quartz-feldspar matrix that is strongly leached (11 to 3% porosity).
Some fragments have a foliated or granophyric texture, probably after Yukon Group, other fragments have occasional rounded phenocrysts of clear quartz (secondary?) and are probably altered granodiorite, minor quartz veining with trace oxidized molybdenite and occasional dry fracturing in one direction.

GRANODIORITE
- medium grained, fresh

YUKON GROUP
- micaceous metagranite,
trace magnetite, fresh

LIMONITE STAINED ALTERED SYENITE
- hornblende altered to chlorite and sericite, traces malachite and chalcocopyrite

SKARN - hard, light coloured calcisilicates, minor magnetite.

LIMONITE STAINED VOLCANIC OR DYKE SWARM? - hard siliceous fine grained matrix with a green coloration. Minor feldspar and hornblende laths, often altered, circular clear glassy quartz phenocrysts, up to 3% pyrite phenocrysts and traces fine grained magnetite.

MINOR ALTERED SYENITE AND LIMONITE STAINED MAFICLESS QUARTZ FELDSPAR

magnetite outcrop

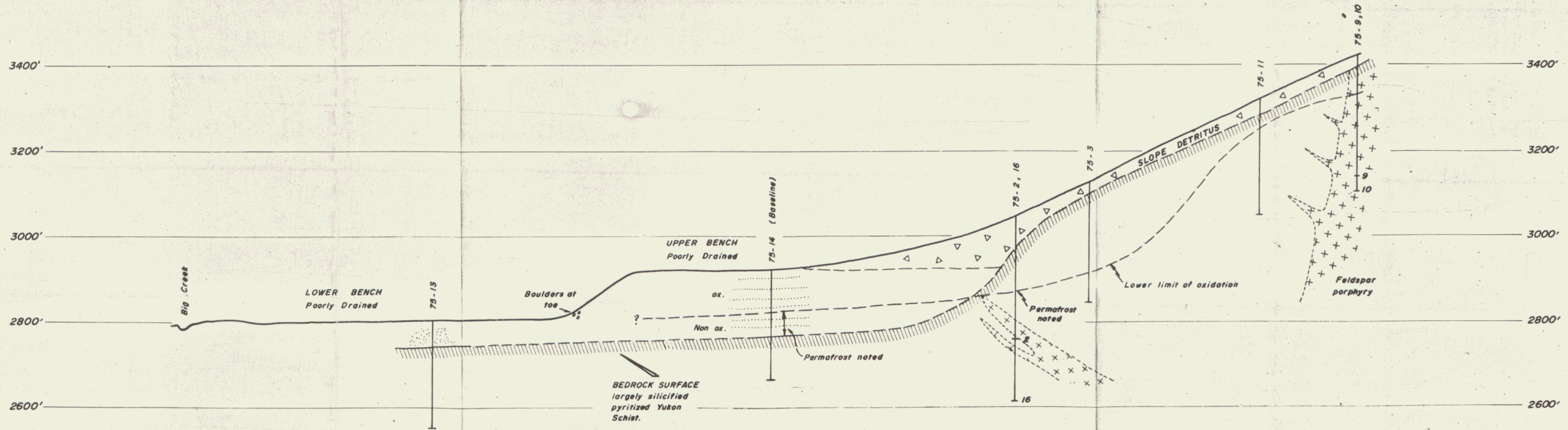
2

Map And Information Taken In Part From
Fig. C4

ARCHER, CATHRO & ASSOCIATES LTD.
GEOLOGY
CASH PROPERTY
KLOTASSIN JOINT VENTURE

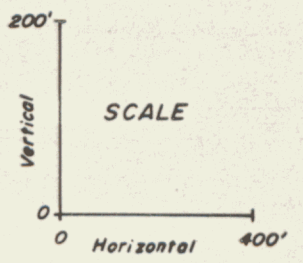
400 0 400 800
SCALE IN FEET

Date - Dec. 1974

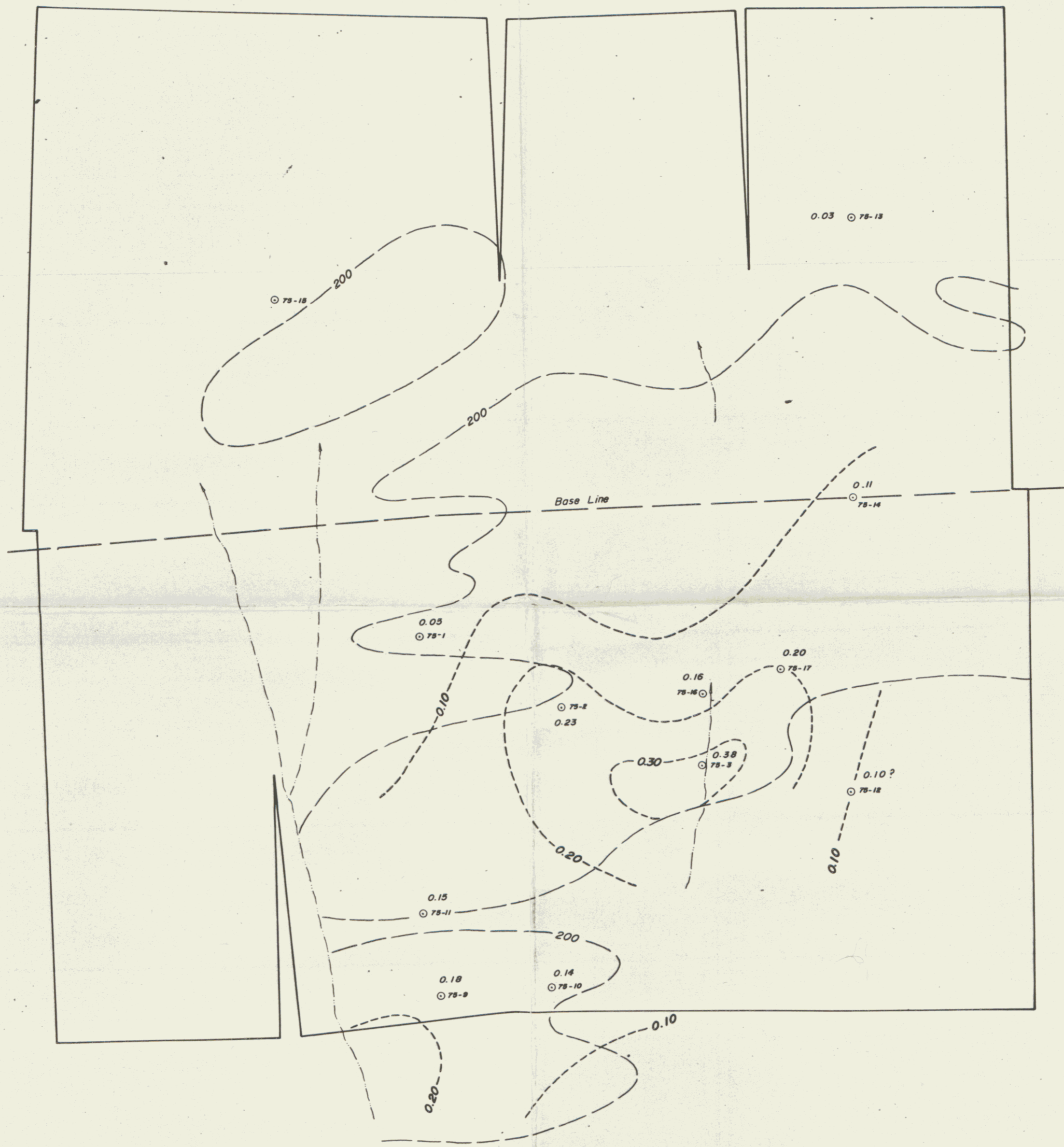


NORTH - SOUTH GENERALIZED GEOLOGIC PROFILE

Showing relationship of oxidized to non-oxidized zones in both bedrock and alluvial benches
Attitudes of Yukon Schist and Porphyry are purely pictorial



WESTERN MINES LTD	
MT. FREEGOLD PROJECT YUKON	
GEOLOGIC PROFILE	
NTS 1151/5E	
By - R. Beaton	August 13 1975



4

LEGEND

- % Cu in unoxidized portion of drill holes
- Cu in soil - 200 ppm or better

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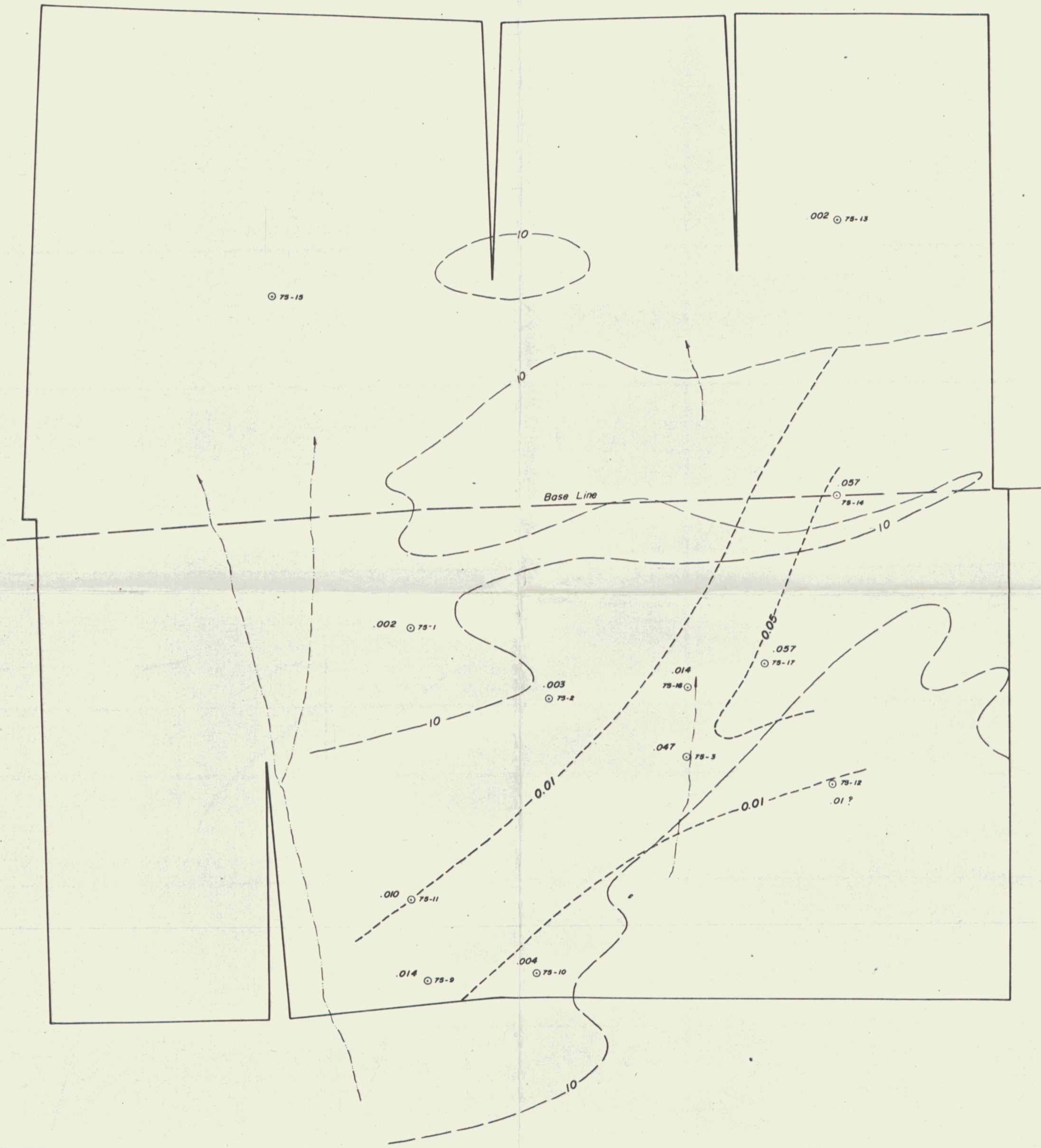
MT. FREEGOLD PROJECT
BIG CREEK - YUKON TERRITORY

Cu GEOCHEMISTRY & DRILL HOLE ASSAYS

400 0 400 800 Feet

SCALE

By - R. Beaton August 1975 Figure - 4



5

LEGEND

- % MoS₂ in unoxidized portion of drill holes
- MoS₂ in soil - 10 ppm or better

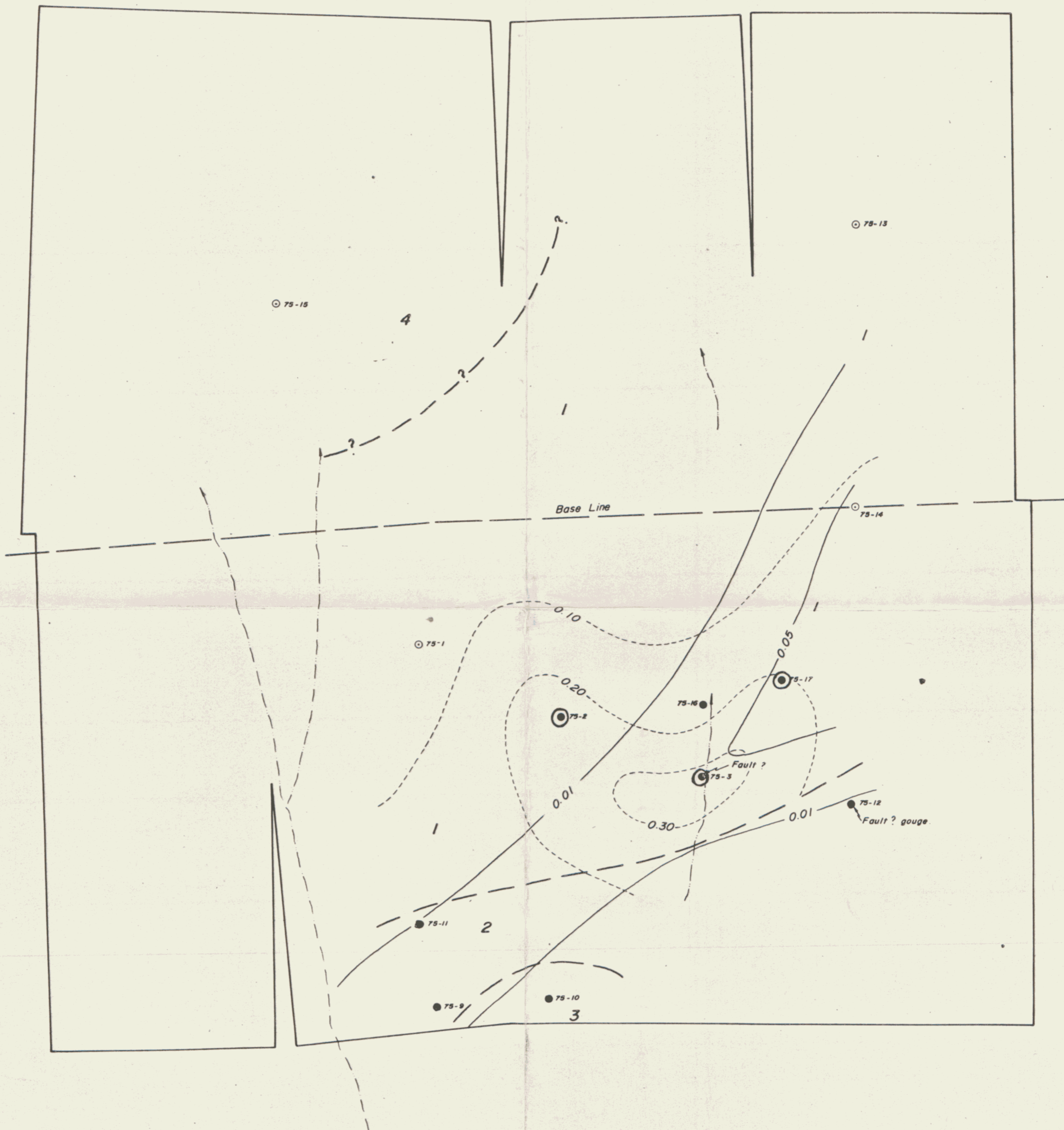
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MT. FREEGOLD PROJECT
BIG CREEK - YUKON TERRITORY

MoS₂ GEOCHEMISTRY & DRILL HOLE ASSAYS

400 0 400 800 Feet
SCALE

By - R. Beaton August 1975 Figure - 5



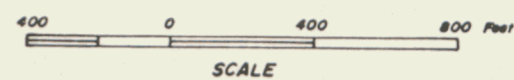
6

LEGEND

EOCENE			
4	Mt Nansen ? - basaltic flow	---	Contact (assumed)
CENOZOIC - MESOZOIC ?		---	% Cu in drill holes
3	Feldspar quartz porphyry (large flesh phenocrysts)	---	% MoS ₄ in drill holes
PROTEROZOIC			
2	Gneiss or gneissic granodiorite		
1	Yukon Schist		

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BIG CREEK - YUKON TERRITORY
GEOLOGY & DRILL HOLE ASSAYS



SCALE

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August 1975

Figure - 6