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# INTERIM REPORT ON CATFACE COPPER PROSPECT TO OCTOBER 15, 1962



J. J. MCDOUGALL

GEOLOGIST

# INTERIM REPORT

# ON

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Vancouver, B. C.
October 18, 1962

J. J. McDougall,
Geologist.

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# INTERIM REPORT

# ON

# CATFACE COPPER PROSPECT

# TO OCTOBER 15, 1962

## PROPERTY:

We now own by location 131 claims on Catface peninsula. About half of these (the central core) have been surveyed well enough (chain and compass) to show that no unstaked ground exists within a reasonable distance of the mineralized area.

Several years assessment work can be recorded against all claims held.

## ACCESS AND LOCATION:

Access to date has been by trail or helicopter. Five heliports have been constructed along a 1500 foot section of the cliff zone at elevations ranging from 1400 to 2350 feet, and one has recently been completed at about 1300 feet elevation south of Irishman Creek.

Three worthwhile mineralized zones are known to date. Besides the cliff deposit these include Irishman Creek and the Lower Road Showing at 600 - 800 feet elevation above Hecate Bay Camp. A portion of the cliff deposit has been tested but neither of the others have been seriously gone over. A trail has been cut to all showings.

Work is due to commence on extensions of the existing logging road as far as Irishman Slough. This will provide easy access to the Irishman Creek showings by late next year.

## EXPLORATION AND DEVELOPMENT:

Besides the six heliports, a four-building, all-weather camp suitable for eight men and a cook was constructed on a ridge below

the cliff showing (elevation 1950 feet).

Geological and topographic surveying on a scale of 50 feet/inch, which has taken several months, has been almost completed on the cliff deposit and the showings on Irishman Creek have been tied in via a 500-foot grid (Sections A to H). Preliminary evaluatory geophysical testing has been carried out in several spots using EM, SP and magnetometer equipment.

Diamond drilling to date totals 9,306 feet in 17 holes (including 6 packsack holes totalling 357 feet completed in 1961). Five of these holes have been over 1,000 feet in length. (Drill logs are attached to this report as is a tabulated one-page summary of condensed drilling results.)

RESULTS:

Surface Mapping

The geological map enclosed (CF 62-4) depicts existing geology on the cliff faces as close as such could be mapped under such dangerous working conditions. Continuity of dykes, etc. is probably thus much better than indicated by the map's dashed lines. Main geological features are shown without an ultimate rock classification which is unnecessary at this time. Approximate contour values (intelligent ? guessing) are given mineralized zones without any sampling whatsoever having been carried out - such being valueless near surface anyway.

At least two main mineralized zones are indicated by surface mapping of the cliff area. Both appear to be the result of intensive east-west shattering imposed on the general north-south joint and fracture controlled regional or master trend. Such could

well be the result of excess folding in this area brought about through or with the emplacement of pipe-like diorite bodies evident near the cliffs but not in less well mineralized areas beyond. The geological setting is far more complicated than can stand description here. The huge unpredictable volcanic blocks "floating" at random or being concentrated near the contacts of two granitic rocks, volcanic fragments in some of the sill-like dioritic bodies well removed from any volcanic outcrops, the unusual age relation involving late rather than early diorite in respect to the more siliceous monzonites, and the presence of diorite "slabs" having no predictable roots are only a few of the problems involved in this intrusive complex. Cases for breccia pipes, flow or intrusive breccias, granitization, etc. could well be built up at some late date but the amount and distribution of the sulphides regardless of rock type is of more immediate importance. The following descriptions require continuing reference to Map CF 62-4.

No. 1 block, in the vicinity of DDH's #6 and #8, has a suggested grade of 0.6 to 1.0% copper and occupies an area of some 330,000 square feet between elevations 1500 and 2500 feet. It is bounded irregularly on the north and south by less fractured quartz monzonite whose grade is only half that of the shatter blocks. To the west the block is cut off by a strong north-south "footwall" shear although mineralization of interest continues 50 to 100 feet into the quartz monzonites beyond the shear. To the east the cutoff is less certain. At the south east end the steep easterly dipping, northerly trending diorite which appears intrusive into the monzonite, acts as an effective cut off. While throughout the rest of the block copper values are generally in the more brittle quartz monzonite, to the

east all rock types involved contain above average amounts of copper - i.e. large volcanic inclusions, portions of the usually poorly mineralized diorite, and even the through-going quartz-andesite porphyry dykes are much better mineralized, through increased fracturing, than is the case elsewhere. The dip of the block at depth is not known but is thought to be steeply south. The plunge of the shoot (thought somewhat pipe-like in outline) is probably controlled by the strong footwall shear (-50 to -75° east to southeasterly) and this possibly acts as the lower boundary throughout unless the fracture system breaks through it more thoroughly than is indicated on surface.

In general the block is more silicified (secondary or re-constituted quartz) than are less well mineralized areas. Pyrite and epidote are essentially lacking. (For a description of these important exploratory guides, see earlier interim reports).

No. 2 block is described as occurring at the southeast edge of the cliff face. Here more clearly than elsewhere the inter-section of stronger east-west fracture systems with the master north-south jointing, particularly in the quartz-monzonite, has produced an irregular block some 400 feet long by 300 feet wide of material which on the surface seems to be as well mineralized as that of block No. 1. It occurs between elevation 2100 to 2500 feet. It is bounded on the east by a steep easterly dipping diorite-volcanic complex and to the west by less shattered quartz monzonite. The boundary to the south appears sharper than usual and the copper mineralization diminishes rapidly as the quartz monzonite becomes more massive and takes on a maroon weathering hue. To the north mineralization boundaries are much more irregular but are probably again determined by less fractured monzonite plus a widening of the weakly mineralized diorite.

At least one well defined easterly trending fault or shear zone occurs paralleling the southern limit and it is within this zone that the oldtimers (1890's) did the only recognizable work on Catface. Shovelling away of a talus slide exposed a narrow, water-filled drift 50 feet in length, which, driven in much weathered green-stained quartz monzonite, paralleled a well-defined wall bearing S77°E and dipping 75° to the south. If east-west faulting of significance occurs, it must have been pre-diorite as related north-south dykes cutting the quartz monzonite in this area are not visibly offset on crossing these zones.

Little else is known about Block No. 2 except that the mineralogy and rock types are similar to those of No. 1 Block. However the dioritic dykes in Block No. 2 appear more weakly mineralized.

The zone between the two blocks described, except for less rusty weathering of its fewer east-west joints or fracture planes, is not readily distinguished otherwise. A number of massive chalcopyrite-bornite veins, 1/2 to 6 inches wide and occupying master fractures which strike north-south, can be traced without a break from one zone to the other for almost 800 feet. Some of these are in the diorite but more generally favour the quartz monzonite.

Other blocks of reasonably well mineralized material (#3, #4 and #5) appear on the surface but their extent is rather limited. No. 3 occupies an area of about 40,000 square feet between elevations 2450 and 2750 feet. However, they may reflect oreshoots which may have value at some time.

Block No. 6 consists of a narrow ridge of blue (copper-stained) quartz monzonite. In this area the dominant joint system is more northwest than north. The importance of this occurrence is that it may reflect the beginning (downhill to the north) of another shatter

zone of importance. It itself is of little importance as better mineralized widths are generally less than 100 feet wide.

The ground between Block No. 6 and No. 1 is essentially lower grade on the surface with the exception of Block No. 7 of which grade, despite drilling, is uncertain.

Block No. 8 (2700 feet north of Block No. 1) as suggested by the SP, trends northeasterly for at least 900 feet and is from 50 to 350 feet wide. Copper values of importance may extend beyond these limits as the SP is seldom able to pick up values as low as 2 or 3% sulphides. The occurrence consists of chalcopyrite-pyrite replacement of a rather extensive breccia zone in the quartz monzonite. The poorly exposed zone has been only partially tested but more work is contemplated in the near future as the material is visibly of higher grade than is common on Catface (i.e. up to 4% copper). In general, the showings occurring on the Irishman Creek drainage contain pyrite and lack bornite, a mineralogical change probably taking place between sections "D" and "E". However, slightly higher gold values are probably the rule in this section.

InIrishman Creek itself two or possibly three poorly exposed chalcopyrite and chalcopyrite-pyrrhotite deposits have been exposed and will be further checked. These react only weakly to the SP and EM equipment. About 600 feet of Irishman Creek (E.W.) is weakly mineralized with chalcopyrite but with amounts well worth drilling. In addition several better mineralized and sizeable breccia zones occur. Epidote and pyrite are present in this continuation of the quartz monzonite. North of Irishman Creek any extensions are obliterated first by heavy drift and second by capping volcanics underneath which the granitic rock plunges.

Geophysical Surveying

Although the Ronka EM has proven useless because of the disseminated type mineralization, the SP has produced far beyond expectations and will be more widely used in the future. A distinct magnetic high (7,000 gammas) was outlined in an area of zone #8 as cutting off the SP high but other than being useful to predict volcanic contacts, little value can be obtained from it. I.P. equipment would probably respond well to this type of deposit.

Diamond Drilling

Diamond drilling to the present has been designed to test mineralogical continuations rather than to outline the possible ore blocks as now known. It has been done from the only approachable set-ups which are on the "footwall" side of the cliff deposits. Thus the down dip drilling has not been too efficient other than to indicate in general terms the presence and absence of worthwhile mineralization and associated alterations. The small (2 to 6 inch) but continuous massive sulphide veins commonly exposed on the surface have never been recovered in the drilling (they are usually in softer breccia zones and have been obviously ground). However so much cementing would be needed to seal the myriad of joints through which the return water escapes that we would have accomplished very little drilling had sludges to be collected. In general, it is thought that grade within the brecciated quartz monzonite zones is probably a little higher than indicated by drilling but that in other rocks is quite accurately represented. Drilling is good within the better mineralized sections (i.e. Block No. 1) probably because of the increased silicification, and excellent within the poorly fractured, fine-grained diorite. However the poorly mineralized monzonite and volcanics tend to be blocky and give considerable trouble, especially on flat holes.

Holes #6 and #8 prove the existence of a low-grade but important body of copper-bearing rock particularly within, but not restricted to, the quartz monzonite band of Block No. 1. Hole #14, which was designed to cut this zone at a higher angle, and which intersected 160 feet of volcanics not present on surface, unavoidably stayed in a 35-foot wide dyke for 153 feet in a zone where higher copper values are almost certain to occur in the flanking granitic rock, and the last 323 feet of the hole did the same, entering and paralleling the poorly mineralized diorite. The dyke, however, was much better mineralized in this hole than in other ones. The remaining holes proved the country rock mineralization to be less than hoped for. Hole #9 appears to have straddled a "bridge" between zones #1 and #2 but may have caught a bit of the latter at depth, if such persists over 1000 feet vertically. It penetrated immediately below a sizeable diorite body without indicating such within the core. Values shown by holes #7, #10, #11, #12, #13, the upper part of #14, plus 15 and 16 could well be 10 to 20% lower in copper than actually is or was the case because of poor core recovery in zones where limonitic alteration indicates unusually deep oxidation of the copper minerals.

A 20-foot cut was recently put across a portion of the Irishman Creek breccia body but nothing beyond this has yet been done.

ASSAYS AND RESERVES:

All assays of this year's drilling to date are included in the accompanying logs and significant sections are shown on the 1-page chart (C-1).

Copper and molybdenite assays are given as received. A factor used to convert molybdenite values to their copper equivalent is also introduced and this sum added to the copper. Kennecott Copper

last year reportedly used a factor of 3 copper for 1 molybdenite during exploration stages. Based on this year's molybdenite price, plus the discounted dollar which also affects the copper, we have frequently used a factor of 3.3 and only occasionally added anything for gold-silver, although in actual practice even "trace" amounts often add up to about $.25/ton. The molybdenite is visible in almost all core and is reportedly easily extracted along with the copper.

Minerals accounting for copper values in zones #1 and #2 are bornite and chalcopyrite. Other sulphides except for molybdenite and secondary chalcocite are extremely rare. Rare pyrite and occasional specks of pyrrhotite may occur in the lower grade sections, particularly in the dykes, in the footwall and along strike to the north and south. Minor cuprite and native copper are occasionally noted. Blue copper coloration imparted to certain of the feldspars (selective staining) is often pronounced but has no effect on the assays. Thin copper - carbonate coatings are occasionally noted, being restricted to shear zones, etc.

In zone #8 and the Irishman Creek sections, chalcopyrite and grey pyrite are the most common minerals. Massive pyrrhotite occurs with chalcopyrite in individual veins or replacement bodies but is not otherwise widespread. The showings near Hecate Bay consist largely of chalcopyrite, brassy pyrite and molybdenite.

There is nowhere near enough sound data present to assign a true average assay value to any block of mineralized rock (other than the whole mountain) at this time as sufficient drilling has not been done and the drill results are possibly unreliable in part. The indicated grade of the quartz monzonite body within the limits of zone #1, without eliminating poorly mineralized dykes, appears to be

about 0.8% or about 0.85 or 0.90% if a few dykes are eliminated and the molybdenite equivalent applied. Within the zone (Block No. 1) as a whole, and above the 1700-foot level to which depth mineralization has been proven, about 15,000,000 tons grading 0.65 to 0.8% (operating grade at Phoenix, B.C., at 1500 tons/day) could possibly be outlined. Possible reserves in round figures of the better outlined areas, based solely on surface observation, are presented below:

| | | | |
|---|---|---|---|
| #1 Zone | - 330,000 square feet | - | 30,000 tons/v. foot |
| #2 Zone | - 120,000 square feet | - | 10,000 tons/v. foot |
| #3 Zone | - 40,000 square feet | - | 3,300 tons/v. foot |
| #8 Zone | - 120,000 square feet | - | 10,000 tons/v. foot |
| | | Total - | 53,300 tons/v. foot |

To conservative depths of 500 feet this would represent 26,650,000 tons.

Zone #8 and the Hecate Bay showing would present no great problems to open pit mining and the former, if persistent, could stand underground mining, as could the vein-like showings in Irishman Creek. Zone #1 could probably be mined as an open cut making use of the down-hill waste-dumping area. A very sharp pencil would be required to determine cut-off point of mineralized slough and access stripping. Underground block caving of a smaller, higher grade portion of Zone #1 should be practical providing the numerous joints and weaker dyke occupied shears could be used to advantage.

## CONCLUSIONS AND RECOMMENDATIONS

The presence at Catface of well over 100 million tons of sub-marginal copper-bearing rock with a grade of between 0.3 and 0.4% copper is practically a certainty. The problem now is to find higher grade mineable areas within this huge mineralized mass. The locations

of a number of such areas have been indicated on the surface, and one partially tested by diamond drilling. We are now reasonably certain that at least one "hot control core" - the heart of all porphyry coppers - has been approximately located. Sampling required to accurately determine grade must now be carried out from underground and until such is done and the deposits outlined by more efficient underground drilling there seems little point in trying to predict mining costs and procedures. The area most likely to produce is Zone #1. The product will be low grade ( est. 0.75 to 0.85) as indicated to depths drilled although there are reasonable prospects of a grade increase towards the more shattered centre of such a block. (Granby Mining at Phoenix, B.C., last year made a small profit at 1000 tons/day open pit on material from which they recovered less than 0.65% copper plus about $.25 gold/silver/ton.)* If the workable grade at Catface could be dropped to 0.65% copper, fifty million tons to open pit depths could be a reasonable goal.

As future steps, the following are offered for consideration:

1. Drilling of Zone #1 to outline it more accurately. (This work is already in progress with about 2,000 feet of drilling planned.)

2. Driving of a high level exploration adit from which partially outlined oreblocks can be tested. The writer favours a drift at the 1700-foot level driven as far as possible in the hangingwall diorite which is an excellent easy drilling rock free of fractures. From this elevation a body of some thirty million tons could be outlined employing upholes as well as normal crosscutting flat and downholes across the deposit. Upholes would not be too long from this elevation yet would test the rather large tonnage possibilities (backs to 1,000 feet) to within a couple hundred feet of surface which otherwise could not be drilled

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* 1961 B. C. Department of Mines Report

except by much longer holes from poor set-ups on top of the mountain. Such an adit could best be collared on the Irishman Creek slopes ("X" on Map CF 62-4 "B") several hundred feet east of the section line and would have a minimum length of 2,000 feet (2,500 to test Zone #2). The disadvantage of this site is that it will not be available to us by road until late summer of 1963. An alternative site ("Y") would be approximately in the treed area south of the cliffs on section line A. An adit from this site would have the advantage of being in a more favourable location to test Zone 2 and 3 as well as Zone 1 and would be driven in better rock. A minimum length of 1500 feet would be required at this location but we would have to construct our own 1/2 mile access road. Such could, however, probably be done this winter without interfering too much with logging operations, or the present road contractors could possibly put an extra cat to work for us.

A low level adit (i.e. 1000 to 1300 feet elevation) could be easily collared below the Catface Cliffs and driven as a cross cut but such would be far too big a bite at this stage and (unnecessary) raises would have to be driven before the known zones could be tested.

Further discussion of adit locations, etc. could best be presented in a separate report. A third step, and one which will be partially undertaken shortly, is to drill the "Cross" showing near Irishman Creek. This is the highest grade material (except for the narrow veins) yet encountered at Catface. If grade indicated locally is distributed over the distances suggested by the SP survey, and the showings persist to depth, an important deposit would be indicated. Several hundred feet of packsack drilling can be done on the shallow overburdened showing yet this year to help determine its attitude as the SP may be merely outlining a high-grade cross-cutting shoot in a

less well but still importantly mineralized rock mass. Core recovery will be poor and such drilling cannot be expected to establish grade. "A" equipment, using swivel core-barrels, should be used at a later date when some 5,000 feet of drilling is required in the area.

A couple of short packsack test holes should be put into some of the better material on the Hecate Bay showing in order to evaluate possibilities in this area. This may be done this fall while ample drilling water is near at hand.

COSTS

An 8 x 9 exploration-development adit (minimum width required for reportedly efficient 3-wheeled "trackless" diesel 3-ton ore carriers) could probably be driven at Catface for no more than $40.00 per foot direct cost, or $50.00 per foot including camp expenses, etc. Thus from location "Y", 1500 feet of drift would cost about $60,000. To this must be added about 1000 feet of crosscut at $40,000 and about 1/2 mile of road at $6,000 for a total of $106,000. The same amount of work from "X" would cost at least $140,000. Probably 14,000 feet of drilling from seven 100-foot spaced setups would be required to reasonably outline tonnages such as suggested. Estimated at $4.00/foot, costs would then be $56,000 for a total, from point "Y", of at least $156,000 beyond the amount already budgeted for. Preliminary drilling of the Irishman Creek shows (5000 feet) would cost an additional $35,000 and road access about $5,000. Additional geological and SP surveys yet required will cost several thousand dollars.

It thus appears that, counting indirect costs, a $250,000 budget could decide the future of Catface. Certainly we have no other copper-bearing area in such a favourable location and with such prospecting

potential where for several miles the copper and molybdenite content is many times that occurring in normal country rock. In the writer's opinion the value of ore in sight, including high grade only, far exceeds this amount.

Vancouver, B. C.
October 18, 1962

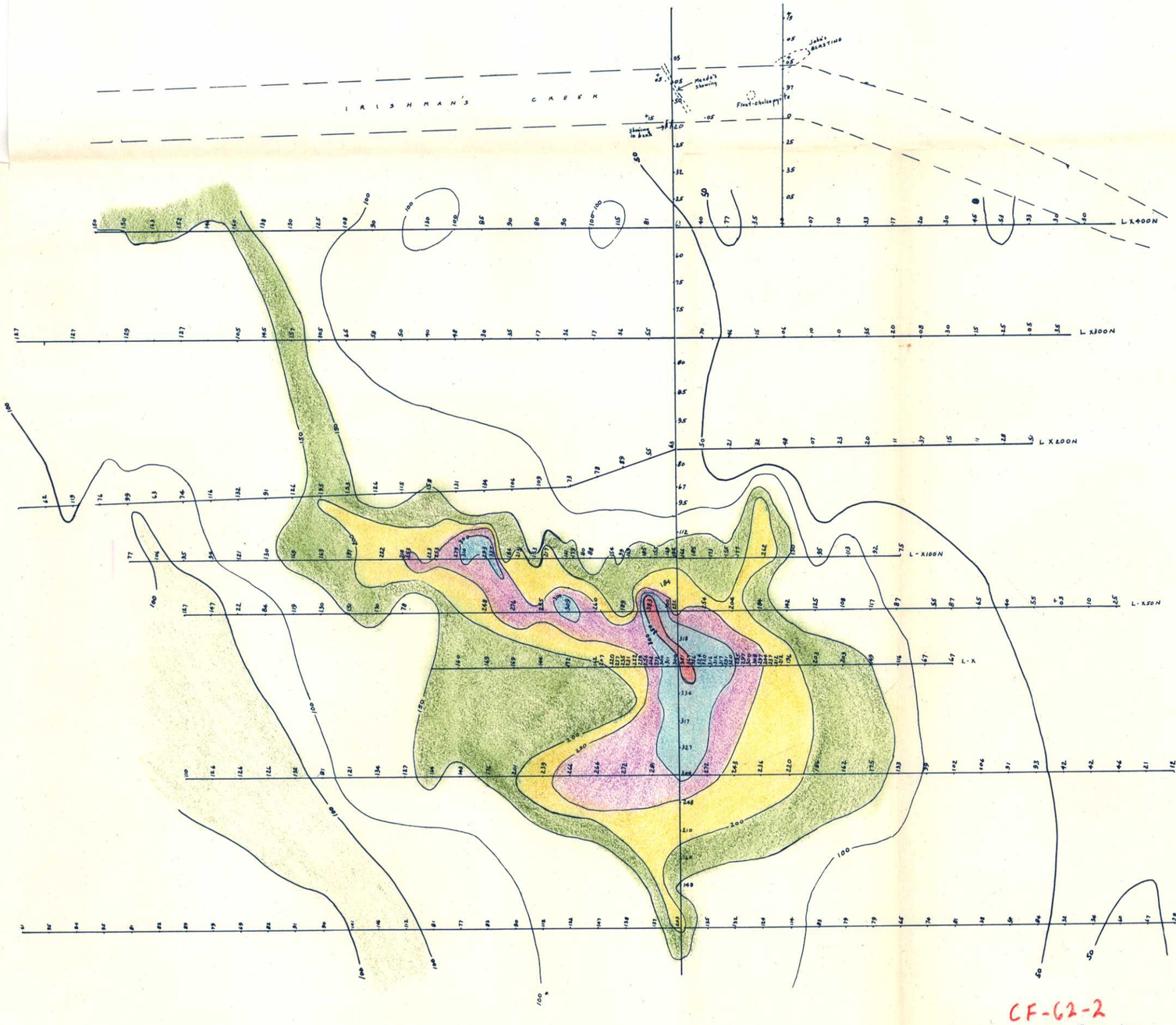
J. J. McDougall,
Geologist.

# CATFACE DRILLING to OCTOBER 15th. 1962



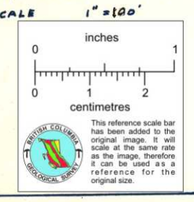
| DIAMOND DRILL HOLE | LATITUDE | DEPARTURE | ELEVATION | BEARING | INCLINATION AT START | LENGTH | CORE RECOVERY | (A) Av. Cu. / Av. Mo$_2$S | (A) Cu + Mo$_2$S equiv. total hole | (B) #1 ORE SHOT (Ft.) Av. Cu. / Av. Mo$_2$S | (B) Cu + Mo$_2$S | (C) #2 ORE SHOT (Ft.) Av. Cu. / Av. Mo$_2$S | (C) Cu + Mo$_2$S | (D) BEST SHOT (Ft.) Av. Cu. / Av. Mo$_2$S | (D) Cu + Mo$_2$S | (E) "D" + Au-Ag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| #1 | +887.00 | +9.30 | 1869' | N 60° E | -30° | 65' | 65% | 0.826 | | 30-65 (35') | | | | 30-50 (20') | | |
| | | | | | | | | | | 0.740 | | | | 0.585 | | |
| #2 | +886.70 | +10.00 | 1869' | N 65° E | -19° | 65' | 70% | 0.738 | | 20-65 (45') | | | | 30-50 (20') | | |
| | | | | | | | | | | 0.880 | | | | 1.170 | | |
| #3 | +665.20 | +65.30 | 1696' | N 75° W | -48° | 65' | 75% | 0.570 | | 0-60 (60') | | | | 0-10 (10') | | |
| | | | | | | | | | | 0.607 | | | | 0.980 | | |
| #4 | +662.70 | +66.40 | 1696' | S 75° E | -15° | 38' | 60% | 0.624 | | | | | | 10-20 (10') | | |
| | | | | | | | | | | | | | | 0.840 | | |
| #5 | +756.50 | +53.50 | 1793' | N 75° W | -52° | 80' | 90% | 0.440 | | | | | | 20-30 (10') | | |
| | | | | | | | | | | | | | | 0.760 | | |
| #6 | +996.40 | +3.20 | 2010' | S 75° E | -15° | 124' | 90.9% | 0.400 | | 0.810 (810') | | 0.610 (610') | | 0-310 (310') | | |
| | | | | | | | | | | 0.640 | 0.760 | 0.727 | 0.820 | 0.815 | 0.900 | |
| | | | | | | | | | | 0.038 | | 0.028 | | 0.024 | | |
| #7 | +990.00 | -6.40 | 2010' | ~~~~ | -90° | 340' | 98.9% | 0.400 | 0.347 | 0-180 (180') | | | | 120-130 (10') | | |
| | | | | | | | | 0.015 | | 0.461 | 0.502 | | | 0.910 | | |
| | | | | | | | | | | 0.012 | | | | | | |
| #7 [PACK SACK] | +1056.17 | -49.00 | 2024' | N 70° W | -50° | 44' | 95% | 0.400 | | | | | | 0-10 (10') | | |
| | | | | | | | | | | | | | | 0.600 | | |
| #8 | +1000.00 | 0.0 | 2010' | N 65° E | -15° | 124' | 88.7% | 0.571 | 0.637 | 0.600' less 50' | | 0-800' less 50' | | 0-200 (200') | | 1.085 |
| | | | | | | | | 0.020 | | 0.800 | 0.846 | 0.652 | 0.780 | 1.010 | 1.068 | |
| | | | | | | | | | | 0.015 | | 0.017 | | est. 0.016 | | |
| #9 | +491.90 | +87.80 | 1594' | EAST | -15° | 1221' | 88.0% | 0.232 | 0.279 | 545-595 (50') | | 900-970 (70') | | 510-530 (20') | | |
| | | | | | | | | 0.014 | | 0.529 | 0.575 | 0.477 | 0.534 | 0.730 | 0.820 | |
| | | | | | | | | | | 0.014 | | 0.017 | | 0.015 | | |
| #10 | +350.60 | +41.40 | 1523' | S 36° E | -15° | 321' | 64.0% | 0.120 | 0.170 | | | | | 60-110 (50') | | |
| | | | | | | | | 0.015 | | | | | | 0.360 | 0.390 | |
| | | | | | | | | | | | | | | 0.010 | | |
| #11 | +1563.70 | -159.00 | 2320' | WEST | -60° | 285' | 93.0% | 0.283 | 0.278 | | | | | 50-90 (40') | | |
| | | | | | | | | 0.013 | | | | | | 0.410 | 0.476 | |
| | | | | | | | | | | | | | | 0.020 | | |
| #12 | +1505.90 | -115.10 | 2311' | EAST | -16° | 185' | 74.0% | 0.290 | 0.351 | | | | | 90-185 (95') | | |
| | | | | | | | | 0.018 | | | | | | 0.378 | 0.444 | |
| | | | | | | | | | | | | | | 0.020 | | |
| #13 | +1505.90 | -115.10 | 2311' | EAST | -20° | 1100' | 74.6% | 0.339 | 0.424 | 180-320 (140') | | | | 880-920 (40') | | |
| | | | | | | | | 0.025 | | 0.480 | 0.564 | | | 0.610 | 0.709 | |
| | | | | | | | | | | 0.026 | | | | 0.030 | | |
| #14 | +1503.20 | -116.50 | 2311' | S 55° E | -40° | 1203' | 84.5% | 0.455 | 0.550 | 370-870 (500') | | | | 270' | | 0.820 |
| | | | | | | | | 0.029 | | 0.628 | 0.730 | | | 0.810 | 0.890 | |
| | | | | | | | | | | 0.033 | | | | 0.026 | | |
| #15 | +1986.50 | +116.90 | 2343' | N 71° W | -60° | 335' | 56.2% | 0.240 | 0.300 | 90-130 (40') | | | | 20' | | |
| | | | | | | | | 0.020 | | 0.490 | | | | 0.725 | 0.788 | |
| | | | | | | | | | | | | | | 0.021 | | |
| #16 | +1986.50 | +127.00 | 2343' | EAST | -75° | 900' | 67.0% | 0.284 | | 90-270 (180') | | 620-700 (80') | | 640-660 (20') | | |
| | | | | | | | | | | 0.429 | | 0.620 | | 0.385 | | |
| #17 | +1966.50 | +128.00 (APPROX) | 2343' | EAST | -20° | 565' | 71.0% | | | | | | | | | |
| #18 TO BE DRILLED | +1000.00 | -12.00 (APPROX) | 2010' | N 65° E | -50° | | | | | | | | | | | |

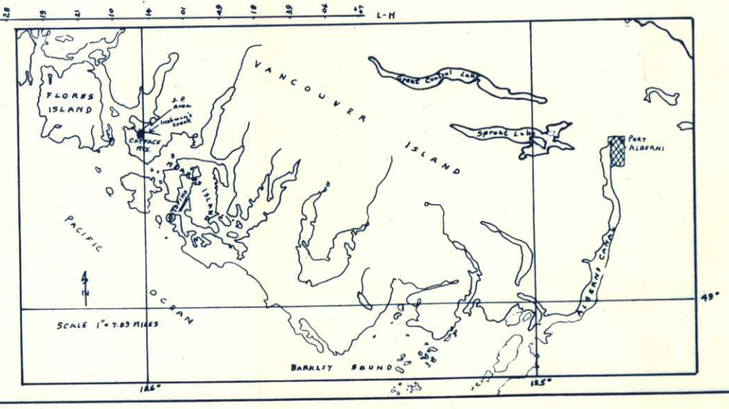
N.B. ORIGIN OF CO-ORDINATES IS 1000 FEET DUE SOUTH OF D.D.H. #8




CF-62-2

FALCONBRIDGE NICKEL MINES LTD,
CATFACE AREA TOFINO B.C.
SELF POTENTIAL SEPT. 1962
SCALE 1" = 100'




SP

# INTERIM
# MAP OF CATFACE CLIFFS

TO OCTOBER 1st. 1962

FALCONBRIDGE NICKEL MINES LIMITED (J.J. McDougall / D.F. Hight)

Scale: 1 inch = 50 feet (Reduced to 1" = 200 feet)

Vertical Interval = 10 feet

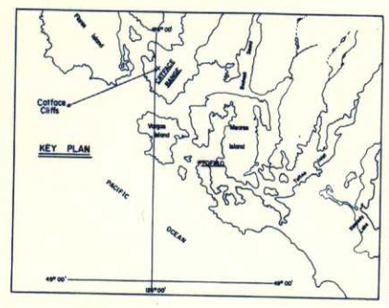
Feet 50 0 0 50 100 150 200 250 300 350 400 450 Feet

LEGEND

- Fine grain Diorite or Tonalite
- Granitic rock (undivided) - outcrop darkened
- Quartz Monzonite
- Fine grained, mafic-rich monzonite, quartz diorite etc.
- Basalts to Andesitic volcanics
- Andesite porphyry or related dyke rock
- Main and secondary jointing
- Contact (observed, assumed, possible)
- Heliports shown thus
- Camp buildings shown thus +LAT. 49° 45'N. LG. 125° 59'W.

Mineralization boundaries (visual relative estimations only), except in proximity to drill holes

- 1 - 2% cu
- 2 - 4 % cu
- 4 - 6% cu
- 6 - 8% cu
- 8 - 10% cu




#8

"X"

#7

#5

#4

#3

#2

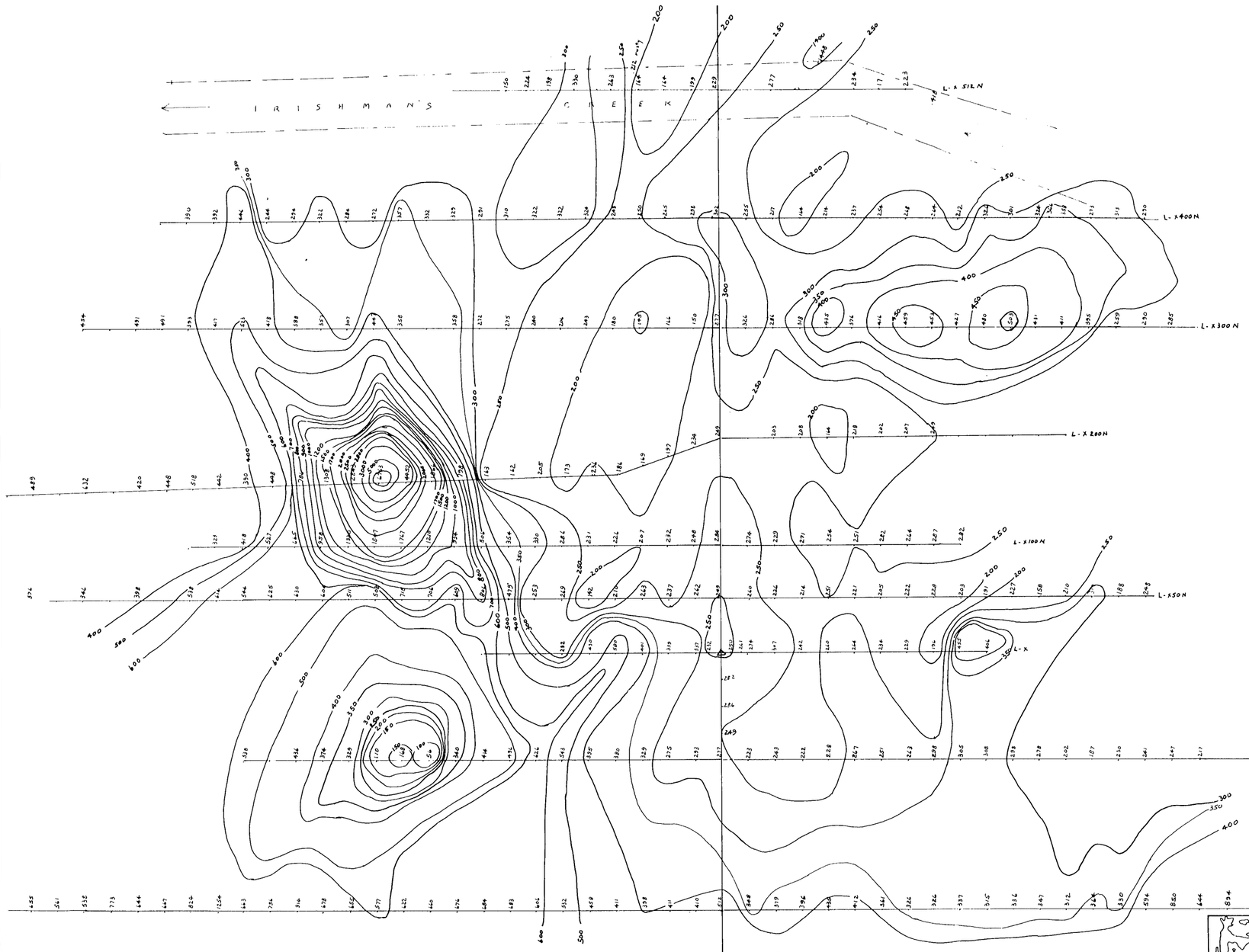
INDICATED CENTRE SILICEOUS CORE

ALTERNATE ROUTE ONLY

"Y"

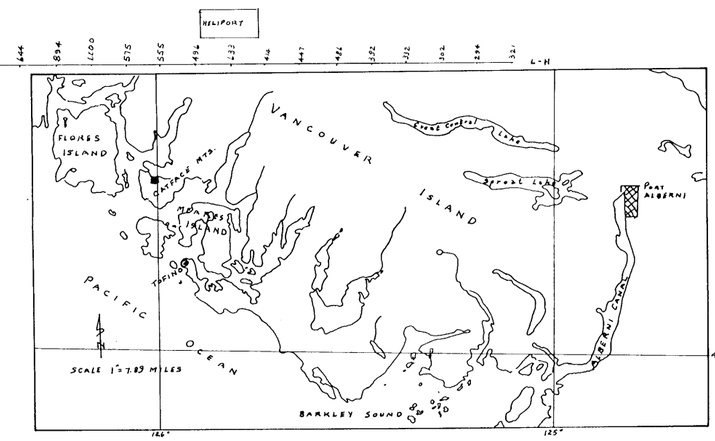
C. F. - 62 - 1 - A

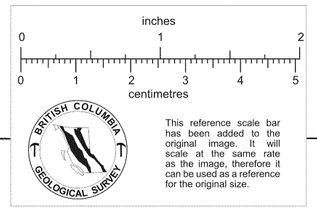
MINERAL ZONES
PROPOSED ADITS
] see text




CF 62-3

FALCONBRIDGE NICKEL MINES LTD.
CATFACE AREA TOFINO B.C.
MAGNETOMETER SURVEY
ASKANIA
SCALE 1"=50 FEET SEPT. 1962.
100




This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

S.P

# INTERIM
# MAP OF CATFACE CLIFFS

TO OCTOBER 1st. 1962

FALCONBRIDGE NICKEL MINES LIMITED ( J. J. McDougall, D. P. Highe )

Scale: 1 inch = 50 feet (Reduced to 1" = 100 feet)

Vertical Interval = 10 feet

Feet 50 0 0 50 100 150 200 250 300 350 400 450 Feet

inches 0 1 2

0 1 2 3 4 5 centimetres



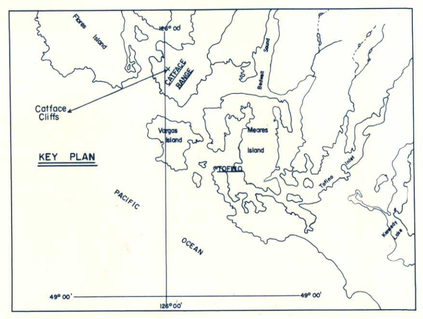
## LEGEND

- Fine grain Diorite or Tonalite
- Granitic rock (undivided) - outcrop darkened
- Quartz Monzonite
- Finer grained, mafic-rich monzonite, quartz diorite etc.
- Basaltic to Andesitic volcanics
- Andesite porphyry or related dyke rock
- Main and secondary jointing
- Contact (observed, assumed, possible)
- Heliports shown thus
- Camp buildings shown thus +LAT. 49° 16'N. & 125° 59'W.

Mineralisation boundaries (visual relative estimations only), except in proximity to drill holes

- 1 - 2% cu.
- 2 - 4 % cu.
- 4 - 6 % cu.
- 6 - 8% cu.
- 8 - 15% cu.

KEY PLAN




LIGHT TALUS

LIGHT TALUS

Origin of coordinates

'A' LINE 'B' LINE 'C' LINE 'D' LINE 'E' LINE

E 500 E 1000 E 1500 E 2000 S 500

CATFACE - UPPER CAMP
S. POTENTIAL READINGS ⊙75
Test Runs.

1" = 50'

To Irishmen's creek
From Cookhouse = 3000' N10.W.

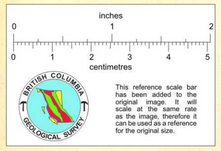
MAP CF 62-4

4

MALACHITE ON CLIFF FACE HERE

**SCALE:** HORIZONTAL 1" = 100 FEET

VERTICAL 1" = 100 FEET



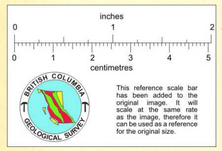

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

B

B'

SCALE: HORIZONTAL 1" = 100 FEET

VERTICAL 1" = 100 FEET

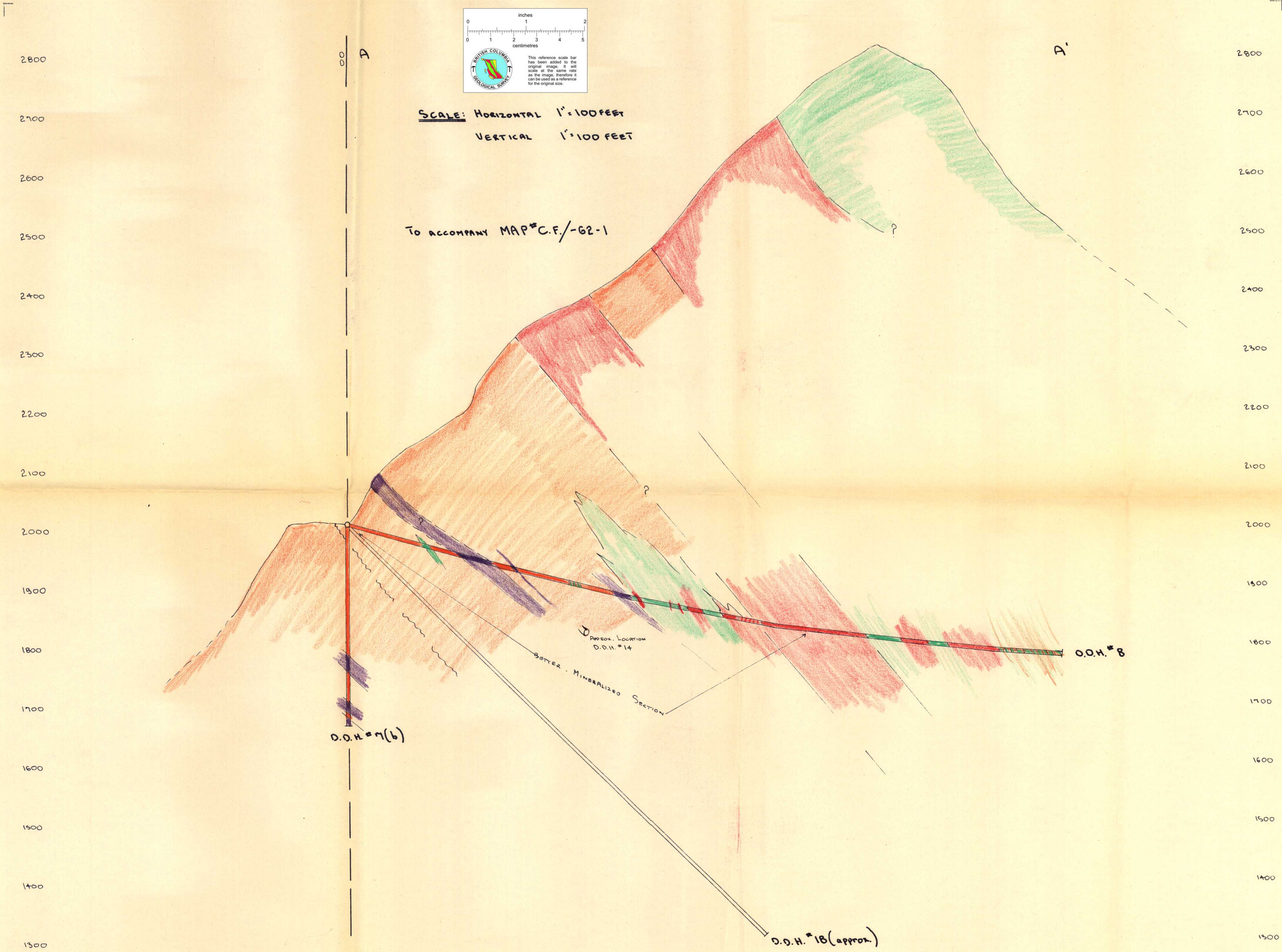



?

BETTER MINERALIZED SECTION

D.O.H. #6

2800
2700
2600
2500
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300


inches
0 1 2
0 1 2 3 4 5
centimetres
BRITISH COLUMBIA GEOLOGICAL SURVEY
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.
SCALE: HORIZONTAL 1" = 100 FEET
VERTICAL 1" = 100 FEET
TO ACCOMPANY MAP # C.F./-62-1
A
A'
2800
2700
2600
2500
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
?
?
?
APPROX. LOCATION D.D.H. # 14
BETTER MINERALIZED SECTION
D.D.H. # 7(b)
D.D.H. # B
D.D.H. # 18 (approx.)