Feb 10 Encl

ANVIL MINING CORPORATION LIMITED

000917

MEMORANDUM

TO: W. Krats FROM: P. Pettigrew

SUBJECT: RATIONALE FOR CROSS-SECTION INTERPRETATION AND WEIGHTING OF AREAS OF INFLUENCE IN ZONES 1 AND 3 DATE: December 14, 1972

1. The mineralized zone (1 + 3) is lenticular in shape with the upper and lower contacts being satisfactorily described by a straight line projection between drill hole intersections with same. Waste bands within the ore zone have been interpreted in projection using a competent/incompetent layering model. It has been assumed that, along with this model, the mineralized zone is analagous (and may still partly be) a sedimentary unit with lensing out of the unit at its periphery and internal facies changes of a similar nature.

   Essentially small scale folds and faults observed in mapping have, of course, been smoothed out in this approach, except in areas where drilling has for some reason been exceptionally closely spaced.

2. An attempt has been made to characterise massive sulphides of very dubious economic significance (i.e. 5% Pb + Zn) as distinct from conventional waste (e.g. schist) having the same (Pb + Zn) values. The purpose of this is to get some idea of possible sorting problems which would not otherwise be apparent. There may also be some metallurgical significance in relation, say, to grinding.

3. Observations of grade distribution in blast holes and comparison of data contributed by 300'-centre, 150'-centre, and closer-spaced D.D.H.'s has shown that Pb and Zn values trend longitudinally (i.e. parallel to the NW-SE sections). Conversely, grades are less continuous (less reliably predicted) transversely.

   This phenomenon seems to relate to undulations of the waste/ore contacts (accompanied by the sub-parallel incipient layering of the economic sulphides) such that the crests (H.G.) and troughs (L.G.) are spaced 140 ft. to 150 ft. apart.

   Because of this, the longitudinal sections were completed first and the transverse sections, as far as possible, were made to fit them. This reasoning, in fact, lies behind the ground rules outlined elsewhere for allocating areas of influence.

4. The Faro Fault as previously interpreted on the cross-sections has no precise structural control and it does not seem desirable at this time to introduce what is essentially a subjective element into an attempt at an objective analysis of ore volumes. For this reason, it does not appear on any of the sections completed for the present ore reserve estimates. The resulting interpretations do not seem to introduce any problematical structures "requiring" faulting for their solution.

P.M. Pettigrew

P. Pettigrew
Ore Control Geologist

Till Reserve Estimates 16

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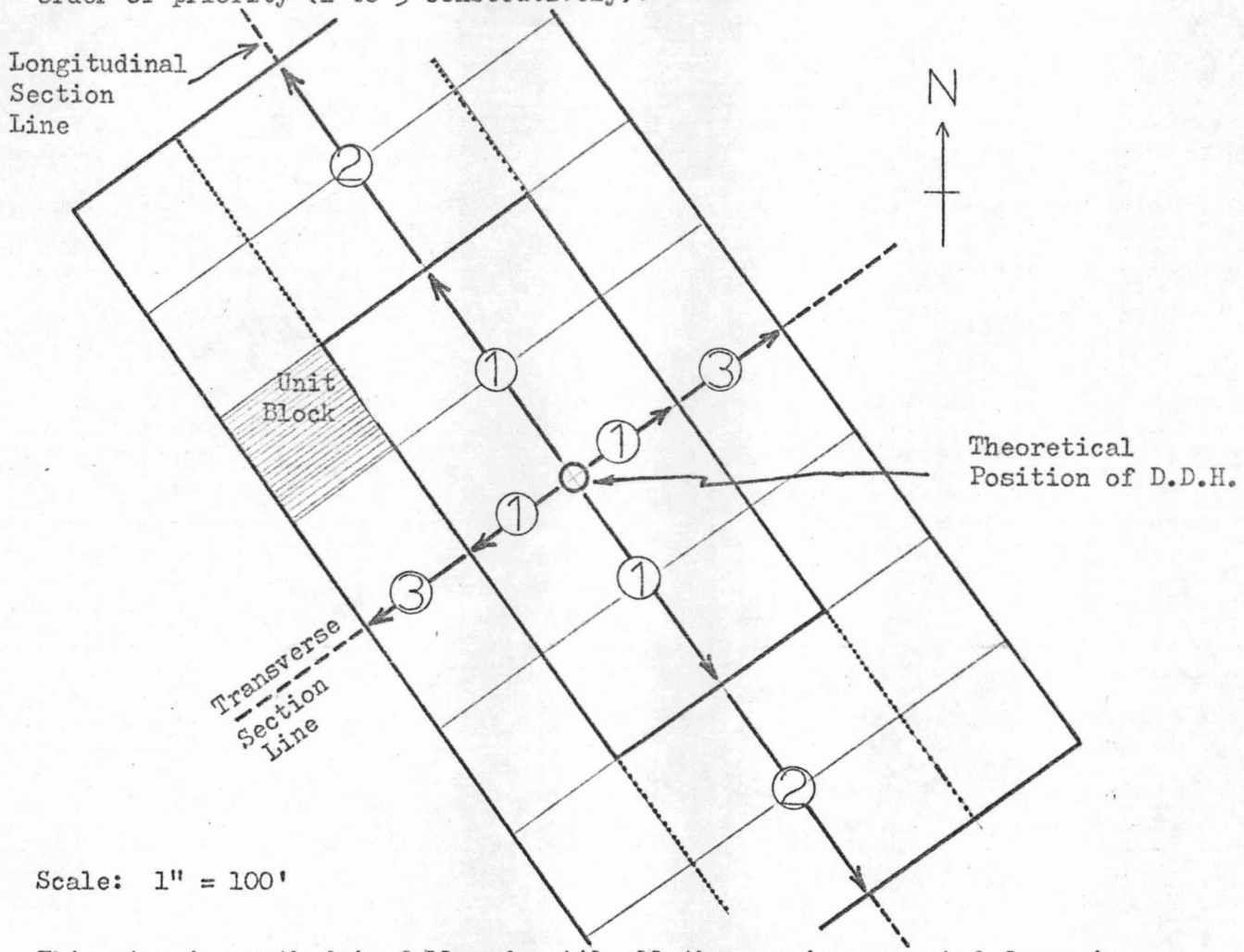
STEPS IN DETERMINING ORE RESERVES

1. Areas of influence are assigned to a specific D.D.H. by using the following order of priority (1 to 3 consecutively):



This stepwise method is followed until all the ore is accounted for using only the holes intersecting the bench concerned. Any area covered by Step 1 is coloured red and is restricted to a maximum of 4 unit-block lengths longitudinally and 2 unit-block lengths transversely. Any area(s) covered by steps 2 and 3 are coloured orange. The maximum area that could be covered by the latter is precisely three times that of the red area.

No part-blocks can by definition, exist unless they are bounded by the ½ bench line.

An example is attached.

2. The areas of influence are measured in terms of unit-blocks using the mylar strip which has been ruled up in terms of smaller units representing 4% of a block. An area is measured by overlaying the mylar strip in the appropriate orientation over the relevant area of influence and counting the number of these smaller units. Some estimation must be made at the ½ bench line of the number of incomplete 4% areas which together would make up a complete one.

The total is written on the bench plan in terms of one of the smaller units being 0.04 of a unit block. That is the percentage is converted to a decimal value.

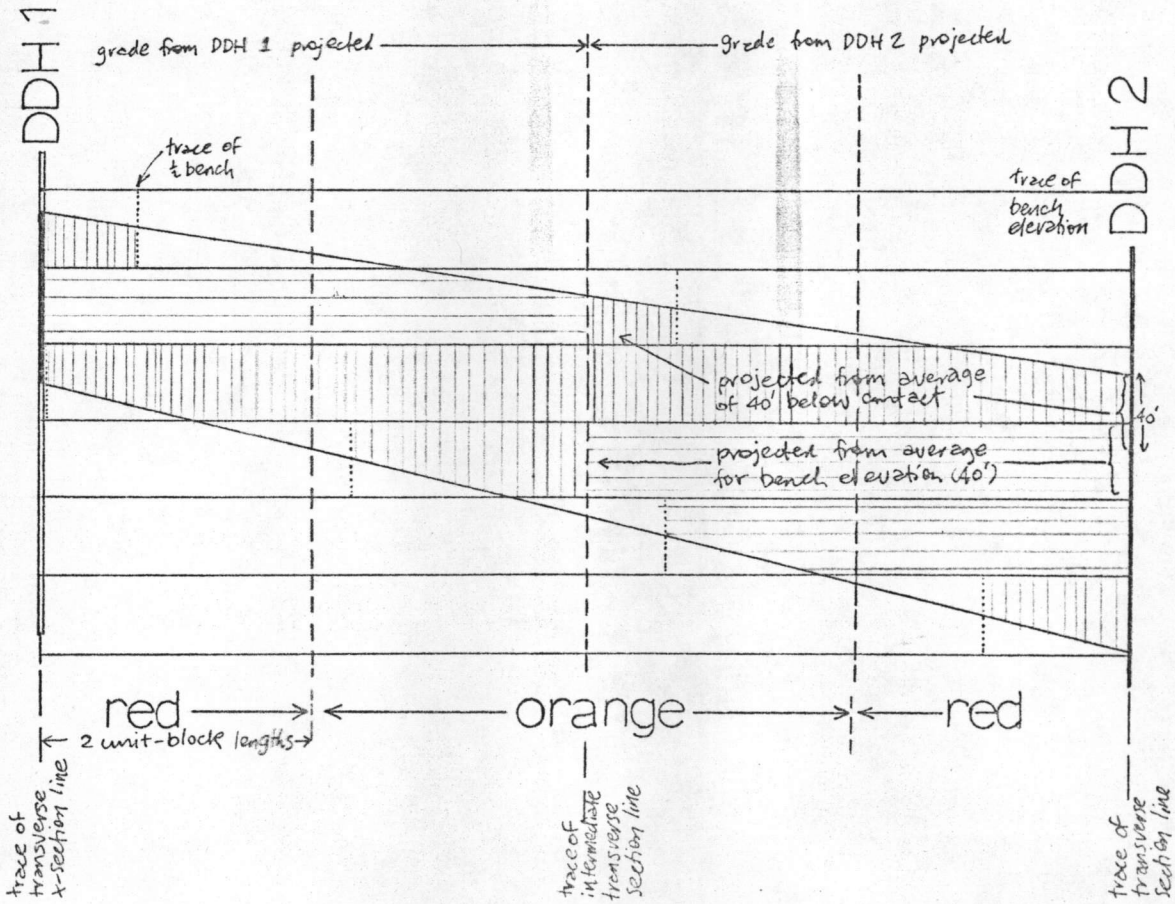
The "red"-area-of-influence is measured this way for any specified D.D.H. amd a separate "orange"-area of influence is measured if applicable. The latter are referred to as "extended blocks."

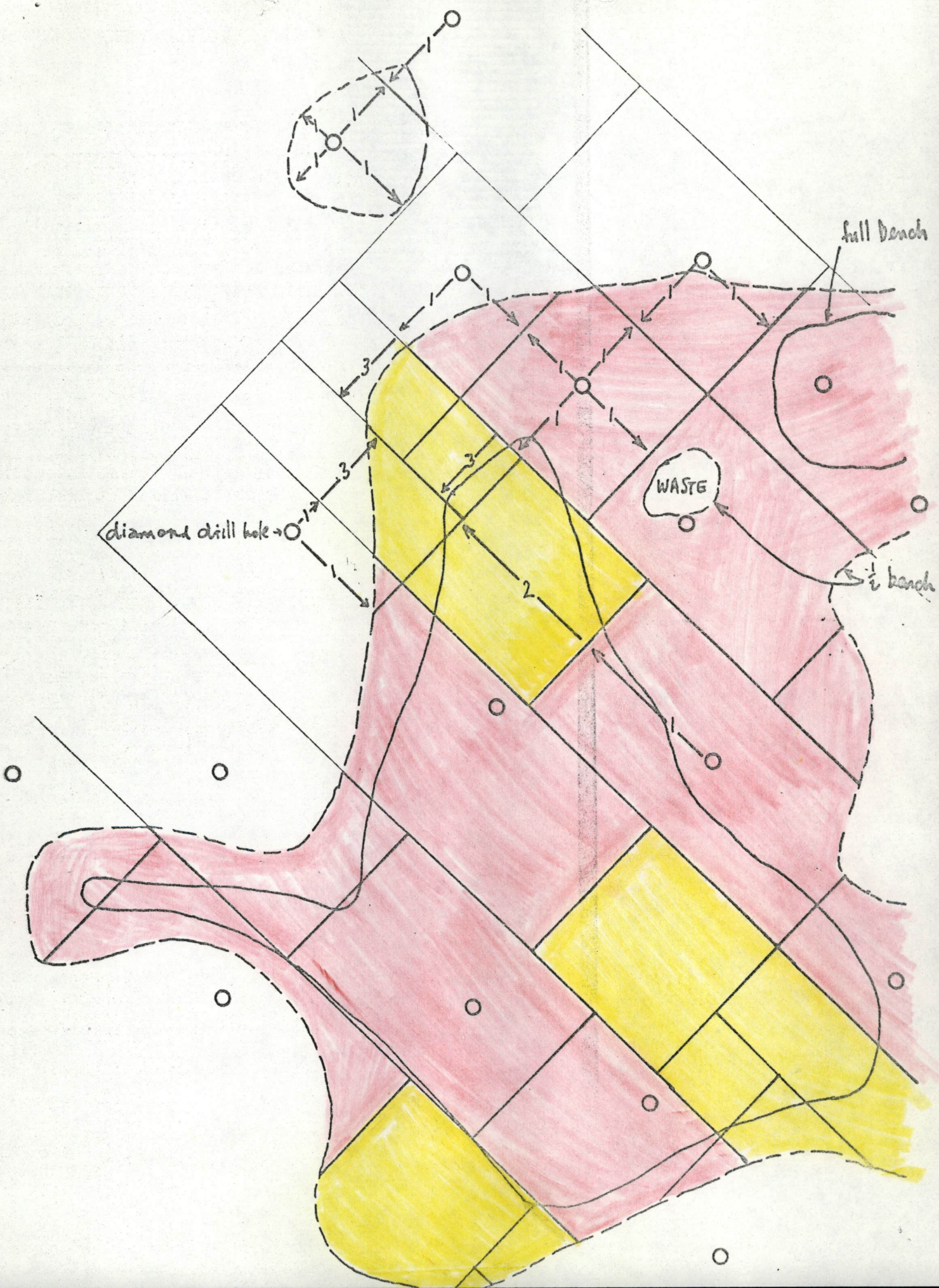
3. List all areas of influence per drill hole in numerical order, thus: 65-1, 65-3, 66-12, 67-1, 70-2, etc. on spread sheet, leaving a line for any extended blocks for separate follow-through. An intermediate step is required on scratch paper to list all required areas.

4. For holes outside the ½ bench and for holes intersecting the uppermost and lowermost contacts of the ore body with the enclosing waste, allocate the average grade of the (vertically) nearest 40' commencing at the waste/ore contact. The grade must be projected into an area of influence parallel to the local apparent dip of the same contact.

If the nearest waste/ore contact is more than one bench removed from the 40' intersection being considered, project the grade from the nearest suitable hole(s) by extension following the rules used in (1).

Below is a sketch which attempts to illustrate this. It is a longitudinal section (looking NE) and is drawn to the scale 1" = 100'.




full Bench
WASTE
diamond drill hole
½ bench
1
2
3