

1.6.2 RECOMMENDATIONS

- Prior to startup, a thorough cleanup must be carried out of the crushing and process plants.
- The concentrator improvements, including the installation of zinc circuit high intensity conditioning, additional lead regrind mill and centralized process control system must be completed before startup to achieve projected metallurgical results.
- Modifications to the materials handling system in the crushing plant are required to reduce spills.

combined with the written log, and I am in favor of this suggestion.

(iv) When time permits, the holes now drilled should be re-logged, following the foregoing suggestions.

(v) It is expected that drilling with NQ size bit will give satisfactory core recovery and obviate the need for taking sludge samples. Should this not be the case, then sludge samples must be taken much more carefully than at present. This will require larger sludge boxes equipped with baffles.

(c) Assaying and Check Assaying

Check assaying should be continued, with a critical analyses to be made when more results become available. At present it appears from checking some of the limited data now at hand that composites have not always been made with weighed precision. If this be true, then procedures should be improved.

3. General Evaluation of Drilling Program

(a) Hole spacing and depth.

(i) The spacing of holes 200 feet apart in both directions is approved. A hole at the centers of one or two selected squares may be worthwhile to check the average grade of the block as determination by calculations based on the four holes at the corners of these squares. I still am inclined to recommend that a shaft be sunk on a selected drill hole to check the grade, to provide a bulk metallurgical sample, and, as Mr. E. S. Allen points out, to examine the occurrence and migration of ground water.

(ii) A few deeper holes will definitely be required in the Faro No. 1 and No. 2 zones to search for deeper horizons of ore. This should be done this summer, because, should such discoveries be made, they would influence plans now being evolved. Definite recommendations will be made when sections have been completed and studied.

(b) Location of drilling outside of but in the immediate area of known Faro mineralization.

(i) Such recommendations will be made when the study just mentioned has been further advanced.

4. Review of Geological Data

(a) Interpretation of available geological data.

(i) Study is now in progress.

(b) Recommendation as to additional requirements.

(i) Such will be made in due course.

5. Review of exploration plans for targets other than Faro.

(a) Geological reconnaissance.

(i) I plan on doing this about May, 1966.

(b) Ground geophysics.

(i) This will be considered when the geophysical studies already completed become available to me.

(c) Geochemistry.

(i) Same comment as above.

(d) Drilling.

(i) In general I believe that ground geophysics, geochemistry and drilling (outside of Faro) should be distributed in two zones of somewhat different geologic characteristics. In the Faro-Vangorda zone there have been several significant discoveries to date (Faro, Van Gorda, Swim, and B.S. deposits). The host rock here is phyllite and schist. Certainly one or two showings should be investigated and drilled in this same zone during the coming season, and the DEA and PEA localities appear to be promising. The ACE locality, although farther north, contains the same phyllite and schist as bedrock and also appears promising.

(ii) A second zone is farther north and also trends NW-SE. The bedrock here is a somewhat older formation consisting of chert, black slate, etc. Promising airborne geophysical results and reported gossan made this zone of much interest. Localities that now appear favorable are ZEUS, YETI, IVAN and TEDDY.

Mr. Robert E. Thurmond - 4 - January 25, 1966

- (iii) I plan to study this matter of targets other than Faro in the very near future and am hoping that the geophysical and geochemical data reported to be filed in Vancouver will soon be made available.
- (iv) To me the Beta area is also of interest because of its situation near the anticlinal crest shown on Campbell's sketch (Fig. 2), and the relations here will be studied with much interest.

6. General Evaluation of the Faro deposit.

- (a) Comparison with other economic ore deposits as to grade, size, location, etc.
 - (i) This will be done at a later date.

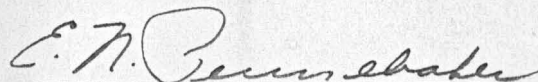
Rubidium

The occurrence of the rare and valuable metal, rubidium, in appreciable amounts in several samples (1 to 2 pounds per ton) makes it necessary to learn more about its occurrence in the Faro ore body. The writer recommends that two composite samples be accurately made up from assay pulps for each drill hole in the massive sulfide zone (one for the upper half of the zone; the other for the lower half) and that another be made up for any zones of disseminated sulfides encountered above or below the massive sulfide zone. These should be accurately analyzed for rubidium by a chemist familiar with such procedures.

GENERAL OBSERVATION

Much of the activity now under way at Faro is for the purpose of obtaining accurate samples of the ore body, upon which much critical analysis and many plans will be based. Therefore proper sampling and logging of diamond drill core should be a paramount, not an incidental, activity, and attention should not be diverted from this task by the other numerous and pressing activities that are going on.

Yours very truly


E. N. Pennebaker

ENP:mc

SUGGESTIONS FROM E. N. PENNEBAKER 25 JAN 66

Critical Evaluation of Basic Data

(a) Drilling Techniques.

- (i) The use of wire-line and drilling to cut NQ core are heartily approved. This should give better core recovery and will provide a larger sample. Core recovery in the past with AXF bit size was not satisfactory in many holes.

(b) Sampling Techniques.

- (i) Core recovery and sample intervals need to be measured more precisely, say to 0.10 foot.
- (ii) Better classification of the local rock types will be provided, and this terminology should be followed in logging.
- (iii) A graphic log should be combined with the written log.
- (iv) When time permits, the holes now drilled should be re-logged, following the foregoing suggestions.
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