

CURRAGH RESOURCES INC
INTEROFFICE MEMORANDUM
FARO OFFICE

Date: May 15, 1990

TO: LEE PIGAGE
SENIOR GEOLOGIST
FROM: DAVE TENNEY
CHIEF GEOLOGIST
SUBJECT: ROCK CODES

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This is a comment on your memo dated May 3, 1990. As a result of our discussion on Friday I wonder if you would consider the following modifications to the lithostratigraphic code?

- 1) Keep rock code lithologic only, by removing references to stratigraphy. (A separate stratigraphic table showing rock types could, however, be useful for reference).
- 2) Include a rock code number for all rock types (or hybrid rock types) characteristic of the Faro mine areas. (These will be of known stratigraphic significance but should be kept to a minimum).
- 3) Provide a set of notes for all those lithologic characters which you consider must be recorded to determine stratigraphic position, in as far as possible removing the need for "2" above. These notes would, of course, only be needed for rock types where errors are likely to occur, or some critical parameters may be missed. I note that we should routinely do tests for calcite (10% HCL) and ankerite (20% HCL) so I assume these would be included in your notes.
- 4) Could you change all lithologic numerical codes to one or two digit numbers by removing the trailing "zero". This would also mean finding a new number for your current # "55", carbonate bearing pyritic massive sulphide. Perhaps it could be recorded using a mineral identifier and the rock type number for massive sulphide eg: "50c" (c=calcite) or "50k" (if k= ankerite).

- 5) Faults, clay gouge, fault breccia ought to have a numerical identifier if possible, and if the parent rock type can be determined a slash "/" may be used to indicate both fault and rock type. I am not sure faults should be modeled for grade so I would prefer to see the code number for the fault, gDuge, etc come first and be recorded in the database along with "rock types".
- 6) Since some rocks will not fit into a predetermined rock code plan as precise as the one we now use could generic rock terms also be included; eg: schist, phyllite, skarn, quartzite, silstone etc.
- 7) If you could agree to implement the above generic rock types (with suitable guidelines mentioned in "3") then it would be possible to simplify the rock coding system considerably.
- 8) If generic rock types are used, the definition of stratigraphic units, and rock units for mine modelling would have to be done later on plotted and interpreted sections. If you could agree to this procedure I see the way paved to a very simple and easy to administer rock coding system with far fewer rock type numbers than now exist. (see large attachment under column "preferred". Of course a set of notes would be needed to ensure that all critical information needed to designate stratigraphic position is recorded (as noted under "3").
- 9) I agree with additional textures but would like to see "skarn" as a rock type. Weathered (i.e oxidised) is a very necessary description when dealing with core from which we wish to prepare metallurgical test samples. Textures used to describe faults (mylonite, clay gouge, brecciated) may also be important for correlative purposes.
- 10) The mineral descriptors required for "Table 2" do not look as though they will present a problem. If we run out of available characters any character which can be plotted can be used (e.g. Greek alphabet), but legibility may become a problem.

A mixture of "locally important rock types" mixed with "generic rock types" with suitable appended descriptors will provide a sound basis for geological interpretations on section without the need for constant reference to the drill logs. It looks as though we are approaching the point where we will have something suitable for both our purposes.

Dave Tenney
Chief Geologist

DT:cc

encl.

cc: G. Jilson
W. Weymark
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