



Curragh  
Resources Inc.

003172

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Whitehorse, Yukon Y1A 2T8  
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1988 12 19

Mr. Jim Vinnell  
Vancouver Petrographics Ltd.  
P.O. Box 39  
8887 Nash Street  
Fort Langley, B.C.  
VOX 1J0

Dear Jim:

Enclosed are 40 samples for thin section preparation and petrographic description. Reject blocks for the samples should be stained for K-feldspar. I am enclosing a separate sheet listing the samples and indicating questions of interest which should be considered during the petrography. Please indicate on your invoice that the work is for the FARO northwest project.

Sincerely yours,

CURRAGH RESOURCES INC.

Lee C. Pigage  
Senior Geologist

The 40 samples come from a polydeformed and metamorphosed terrane. The dominant foliation results from the phase 2 deformation; generally the phase 1 schistosity is preserved only in microlithons. Pelite assemblages delineate pressure of about 3-4 kilobars and temperatures up to 600 degrees C during metamorphism.

Regional mapping has delineated a homoclinal, thick-bedded sequence of interbedded calc-silicates and pelitic schists. Calc-silicates appear to be high metamorphic grade equivalents of muscovite-chlorite-quartz-carbonate phyllites. Locally the calc-silicates contain marbles which are variably argillaceous. I suspect that some of the pelites and calc-silicates sequences are actually structural repetition of the same units through faulting or folding.

In the following list, the samples have been grouped into their different categories. Specific questions about certain specimens are indicated.

#### INTRUSIVE ROCKS

Sample Number	Rock Type
88-90	10AB granite
FARO NW	10E granite
FARO DIV	10E granite
88-413	10E granite
88-414	10E? granite
88-169	10E granite
88-470	ultramafic
88-477	ultramafic

Sample 88-90 contains a strongly developed S-C banding related to late extensional faulting.

With all of the granite samples I am interested in modal amounts of hornblende, biotite, muscovite, and K-feldspar. Biotite pleochroism is also important. I would like to know if any of the samples contain a deformation foliation. Samples 88-414 and 88-169 are spatially associated with intrusive dytes represented by samples 88-413, FARO NW, and FARO DIV; petrographically do all these samples look like they could come from the same intrusive suite?

I am interested in ascertaining whether a deformation foliation is visible in the ultramafic samples (88-470, 88-477).

## PELITES

Sample Number	Rock Type
88-115	schist
88-137	schist
88-189	schist
88-214	schist
88-483	schist
88-258	schist
88-151	schist
88-33	schist
88-144	schist
88-227	schist

With all of these samples I am interested in the metamorphic grade as suggested by the mineral assemblage. For samples 88-115, 88-214, and 88-151 I would specifically like to know if fibrolite or sillimanite are present.

I would like to know if sample 88-137 appears altered or retrograded. I also need to know why this sample is so rusty-weathering.

For sample 88-189 I would like to have the dark green mineral forming splays on the S2 deformation surface identified. Is this green mineral pseudomorphing an earlier metamorphic mineral which can also be identified.

I also would like you to compare and contrast sample 88-214 to the other schist samples.

## CALC-SILCATES

Sample Number	Rock Type
88-468-1	skarn
88-468-2	marble
88-468-3	calc-silicate
88-422-1	skarn
88-422-2	calc-silicate
88-260-1	calc-silicate
88-260-2	marble
88-464-1	calc-silicate
88-464-2	marble
88-365-1	biotite schist
88-365-2	calc-silicate
88-183	calc-silicate
88-229	calc-silicate
88-383	biotite schist
88-428	biotite schist
88-433	biotite schist
88-400	calc-silicate
88-544	calc-silicate
88-203	marble

88-180 marble  
88-450 calc-silicate  
88-105 marble

Stations 88-468 and 88-422 contain skarn-type mineralogy associated with the calc-silicates and marbles. Station 88-468 also contains some sphalerite in outcrop. For both of these stations please identify the skarn minerals. Can you tell if the skarns predate or postdate the dominant foliation evident in the associated calc-silicates?

Please compare sample 88-203 to 88-180 and 88-464-2 to 88-260-2. I am considering correlating these samples in each case.

Samples 88-383, 88-428, and 88-433 were mapped in outcrop as carbonaceous biotite schists. I would like to know if any of these samples contain calc-silicate minerals more typical of the other calc-silicate samples.

Sample 88-365-1 was also recorded as a carbonaceous biotite schist in outcrop. Please comment.

Please comment on the possible correlation of samples 88-450 and 88-365-2. Sample 88-450 is mapped as a "contact metamorphosed, calcareous pelite adjacent to a pre-metamorphic greenstone sill.



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1988 12 19

Dr. J.K. Mortensen  
Geochronology Section  
Geological Survey of Canada  
601 Booth St.  
Ottawa, Ontario  
K1A 0E8

Dear Jim:

I am sending 6 samples to you by truck for isotopic dating. They correspond exactly to the samples we discussed and viewed together when you were here in late November. An abbreviated list of the samples is as follows:

88-90	Anvil Batholith granite
FARO DIVERSION	10E dyke northeast of Faro pit
FARO NW	10E dyke at northwest end of Faro pit
88-169	10E? granite associated with 10E dyke
88-413	10E dyke about 9 km northwest of Faro pit
88-414	10E? granite associated with 10E dyke

Sample 88-90 contains an extremely well developed S-C banding texture related to late extensional faulting on the margins of the granite. The Faro Diversion sample is an unfoliated dyke which intrudes the Anvil Batholith near Station 88-90 and does not contain the S-C banding. We interpret the porphyritic texture as a marginal phase for this particular intrusive suite.

These samples should complement your other collection of material from the Anvil Range. It will help answer some deformation timing questions. If you require further information concerning the samples, give me a call. If you want to BS about results or anything, you can also call.

Dr. J.K. Mortensen  
1988 12 19  
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At some time we would appreciate receiving hard copy data of your dating efforts in the Anvil area. Have fun with your analyses.

Sincerely,

CURRAGH RESOURCES INC.

A handwritten signature in cursive script, reading "Lee Pigage". The signature is written in black ink and is positioned above the typed name and title.

Lee Pigage  
Senior Geologist