Lefebure, Dave EM:EX

To: Cathro, Mike EM:EX
Subject: RE: GQ

Mike:

In the upper Third Creek drainage the rock is approaching a migmatite with what I would interpret as the pegmatite zones stretched, boudined and cooked (i.e. much of it no longer looks like pegmatite and the biotite is gone). There are some fine-grained leucogranitic dykes that cut the metamorphic rocks.

The mineral occurrence located by Warner has three calc-silicate layers, but only one with mineralization. The mineralized layer (<10 to 15 cm) is sandwiched between thin, quartz layers that are unlike the metasediments or the pegmatite. I don't understand their origin, although they do look a bit like some of the organish quartz we saw in a couple of places on Sunday.

One of the questions I asked Jim was whether there was a correlation between more obvious pegmatite and better sulphide development. We didn't really feel that there was enough well exposed occurrences for this assessment. The clearest association with mineralization enclosed with in pegmatite were the Southeast and lowermost occurrence on the north side of Second Creek.

Cheers,
Dave

From: Cathro, Mike EM:EX
Sent: Tuesday, July 18, 2000 11:41 AM
To: Lefebure, Dave EM:EX
Subject: RE: GQ

Dave, thanks for that update. The Rip sounds a bit like Mt. Copeland Moly perhaps - I think it is associated with nephelene syenite intrusive rocks (low/no qtz?).

I agree that the skarns look like intrusion-related "smoke". Hopefully Warner will be able to find some quartz vein hosted mineralization around there somewhere. The skarns are curious and are certainly widespread geographically, but may have limited tonnage potential unless he can find a larger marble unit or some significant structural disruption.

So if I understand you, the skarn is upper third creek had no pegmatite associated with it? That would be different. Did you see any more of the coarse-grained granite/qtz monzonite like on the south side of Second Cr?

Mike

Mike Cathro
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From: Lefebure, Dave EM:EX
Sent: Tuesday, July 18, 2000 9:54 AM
To: Cathro, Mike EM:EX
Cc: Logan, Jim EM:EX; 'marshall@sfu.ca'
Subject: RE: GQ

Mike:

Nice to be travelling with such "fast" company.

We had a good day yesterday looking on the north side of Second Creek at Warner's mineral occurrences (all scapolite-diopside skarn, sometimes with garnet and rare laminae with pyrite or pyrrhotite). Still lots of pegmatite in that area.

We then jumped over to Third Creek to have a quick look at the Anastey intrusive and another scapolite-diopside occurrence with one bed with sulphides. The deformation is more intense and the metamorphic grade probably

higher (some excellent coarse sillimanite) at the upper end of the logging roads. Based on the relationships at this occurrence, it would appear that it is more likely that the scapolite-diopside calc-silicates reflect regional metamorphism than contact metamorphism.

Jim is hoping to spend another day in the area. Still lots of questions. I wonder if GQ represents an indication of plutonic-related gold, but there are better places to look?

There is a moly occurrence (Rip) with associated pegmatites located a considerable distance north-northeast of GQ that might be interesting to look at some time (see below).

Cheers,
Dave

RIP - 082M 027
UTM11 5677890 379781
Commodities Molybdenum

The area lies within the Shuswap Complex along the western margin of the Frenchman Cap Dome. The core of the dome rocks are probable Aphebian Age paragneiss and orthogneiss. Lying unconformably on the dome are a succession of metasedimentary quartzites and pelites and concordant nepheline syenite gneisses.

Molybdenite occurs disseminated in nepheline and pegmatite dykes which intrude biotite schists and gneisses. Limonite staining is associated with pyrite and pyrrhotite.

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From: Cathro, Mike EM:EX
Sent: Tuesday, July 18, 2000 9:02 AM
To: 'marshall@sfu.ca'
Cc: Logan, Jim EM:EX; Lefebure, Dave EM:EX
Subject: RE: GQ

Dan,
That was sure fast! I actually do owe you at least one beer because I never paid you the $4 you lent me at dinner! I think I've got one of the possible scheelite samples and will lamp it and the others this week.

The emails for Dave and Jim are shown on the cc: list above.

Mike

Mike Cathro
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From: Dan Marshall[SMTP:rnarshall@sfu.ca]
Reply To: marshall@sfu.ca
Sent: Monday, July 17, 2000 2:11 PM
To: Cathro, Mike EM:EX
Subject: GQ

Mike:
I made it to Hope last night and then got back to Van this morning.
I sent some of my samples off for thin sections, and I had a look at some of the others.
Your Bismuth(inite) is graphite, the good news is you don't owe me two beers.
It was definitely sillimanite in those bioite rich rocks.
There are lots of flincs in the marble samples I took, but they are all pretty shitty and I don't think there would be any usable data from them. So that is a bit of a bummer in terms of figuring out P T conditions. I'll think about it for a while and see if I can come up with any ideas.
Also could you send me Jim's email and I can copy this stuff to him.

Thanks for the trip, Dan