

## Charles Hughes

---

**From:** Gary McArthur <gary@modapl.com.au>  
**Sent:** Friday, 13 December 2013 5:20 AM  
**To:** 'Charles Hughes'  
**Subject:** RE: Corona MineralsChamonix Zinc mineralogy

Hi Charles

The number of polished thin sections I examine is up to you. I guess it will depend on the length of your intersection and the diversity of textures you see in the core. All I ask is that you try and pick REPRESENTATIVE samples, not just the extra-sparkly or unusual features. If you provide us with say ¼ PQ core pieces with a flat sawn surface 5-7cm long, we will mark up a representative 50 x 25mm area for the polished thin. We normally make good use of the offcuts for QXRD and assaying (Cu,Pb,Zn,Ag,Fe,As,Sb,Au?) – to get data as close as possible to the polished section.

I would propose quantitative scanning of each polished thin using a 53µm “virtual grind”: using a grid with a 53µm circular mask to simulate a nominal 53µm grind. This will give basic mineral liberation and mineral association data for the mets. I will then use quality photomicrography to document the textures (annotated in PowerPoint) and comment on paragenesis.

It would be a good idea to get some limited microanalyses done at UTas to ascertain Fe in sphalerite, Ag in tetrahedrite and galena etc.

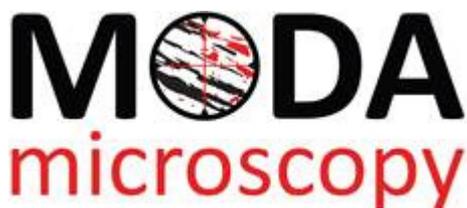
At a grade of 0.3g/t Au it is extremely unlikely I will see any gold. At that level it could well be refractory in pyrite or arsenopyrite.

I note your concern about sulphide oxidation. Oxidation of sulphides in Western Tasmania is not that common. At the Que River VMS, unoxidised sulphides were found under a thin soil horizon. Grieves Siding is a totally different kettle of fish – re-precipitation of sulphides in a hydrocarbon-rich peat. Anyway, if there is any oxidation, that should be obvious in the polished thin.

Does the approach I've suggested sound ok to you?

Cheers

Gary



**Gary McArthur** PhD FAusIMM MMICA MSEG  
**Director and Principal Mineralogist**  
*McArthur Ore Deposit Assessments Pty Ltd (MODA)*  
*Sulphide Ore Microscopy - Ore Type Classification*  
Suite 6, 1st Floor, Brownell Place, 11 Wilson St (PO Box 1303)  
Burnie TAS 7320 Australia  
Phone (03) 6431-1701 Fax (03) 6431-1278 Mobile 0419 367240  
Email [gary@modapl.com.au](mailto:gary@modapl.com.au) Website [www.modapl.com.au](http://www.modapl.com.au)

---

**From:** Charles Hughes [<mailto:c.hughes@coronaminerals.com>]  
**Sent:** Thursday, 12 December 2013 7:53 PM  
**To:** [gary@modapl.com.au](mailto:gary@modapl.com.au)  
**Subject:** Corona MineralsChamonix Zinc mineralogy

Hi Gary,

I spoke to you on the telephone the other week. We've hit some zinc-lead-silver mineralisation in the Linda valley and would like to kick off some mineralogy with you. We start a PQ3 diamond drilling program early January. We would like to possibly do some indicative metallurgy following on from your mineralogy. You recommended 5 sections on the phone so I would like to submit at least that to you. Maybe as many as 10 depending on what I see in the drilling.

Just a bit of a background we are in the Gordon group in the Linda Valley, I think we're in the top of the Gordon Group. We see sphalerite and Galena and pyrite stratabound and possibly strataform within a clay/shale horizon we've termed the Chamonix Shale. Bedding parallel quartz veining accompanies mineralisation in some instances, sulphides range from super coarse to v.fine with the coarser stuff possibly associated with the qtz veining. Significant amount of sulphides were lost in our drilling-running out with the fines-even so we hit 8m @10%Zn Eq. Weathered then fresh Limestone in the footwall, qtz rich clay/silt/sandstone in the hangingwall which is possibly unconformable/Eldon group.

Everything is near surface, so worried about oxidation of sulphides, RE Grieves Siding.

Rather unusually we are seeing gold up to 0.3g/t Au in with this and in the footwall Limestone so we would like to know where that is sitting/ what relation it is to everything else.

If you would like any more info or would like to discuss things further please send me an email or get me on my mobile.

Cheers and best regards,

Charles

Charles Hughes  
Senior Geologist  
Corona Minerals Ltd

Ph: +61 (0) 894 864 482  
Mob: +61 (0) 408 122 202  
Level 1, 703 Murray St  
West Perth, WA 6005

---

Message protected by MailGuard: e-mail anti-virus, anti-spam and content filtering.  
<http://www.mailguard.com.au>

---

Message protected by MailGuard: e-mail anti-virus, anti-spam and content filtering.  
<http://www.mailguard.com.au>

[Report this message as spam](#)