**Supplies list:**

*Field Supplies:*

Combusted GF/F filters (25 mm) (initial: 458 filters; use one filter for both replicates)

HCl Washed filter housing (1 per group/day; filter with sample water prior to use)

HCl Washed syringe (1 per group/day; filter with sample water prior to use)

Tweezers (1 per group/day)

Combusted glass vials (scintillation) w/ Teflon (PTFE) lined caps (initial: 778 vials)

Scintillation vials w/ Teflon caps

Vials: <https://www.fishersci.com/shop/products/kimble-20ml-glass-screw-thread-scintillation-vials-16/03340129?searchHijack=true&searchTerm=03340129&searchType=RAPID&matchedCatNo=03340129>

Caps: <https://www.fishersci.com/shop/products/white-polypropylene-caps-26/fb02912068?crossRef=02-912-068#?keyword=02-912-068>

*Eventual lab supplies:*

Quinine sulfate standard

Special squeeze bottle

Gloves

**SOP:**

*Supply prep:*

1. Combust filters at 450oC for 4 hours

(I usually just take a stack of GF/F filters, stick it in a small aluminum pouch you’ve created out of foil, keep one side of the foil pouch open and stick a bunch of foil pouch’s in the combustion oven; combust and then close the pouch once cooled. Would not recommend counting these out! In the field, we’ll just take several packs – in case one gets accidentally spilled! – along with tweezers to put the filters into the filter cartridge. The aluminum pouch keeps the filters clean prior to use)

1. Combust glassware (probably obvious, but DO NOT combust the caps : ) at 525oC for 4 hours

(I usually put X number of vials wrapped in a big thing of foil – aka: not individually wrapped, all wrapped as a present in one big piece of foil – and then combust. As we discussed, it makes sense to package these for the sampling day…see below)

*RCD Day:* Since there will be two field teams (or more?) it might be good to separate ‘packs’ into: 14 vials for BVR team and 20 vials for the FCR/stream team

*Monday FCR Day (pre-Ferrazine):* 8 vials per pack

*Monday FCR Day (w/ Ferrazine):* 10 vials per pack

*Thursday FCR/BVR day:* 12 vials per pack

1. The caps should be pretty ‘clean’ coming out of the package, so I would just recommend dividing them up into ziplock bags like the packs of vials above. When handling the caps, just make sure to either not touch the underside of the caps (i.e., what is going in contact with the sample) or wear gloves : ) Sorry to be picky, but it can be pretty easy to get contamination for oils on folks hands!

In terms of labeling: I’m not sure what your system for labeling is?? Important info is location and date (obvi!).

1. Acid wash reusable items: filter housing, syringe, and store in ziplock bag after dry.

*Filtering in the field!* (I’m assuming this will be pretty similar to filtering for DOC in the field??)

1. Use tweezers to put previously combusted GF/F filter into the filter holder.
2. Use syringe to suck up a small amount of sample water and filter (but do not collect!) through the filter/filter housing. This serves as a sample rinse for both the syringe and the filter/filter housing.
3. Use syringe to suck up ~ 20 mL of sample water, then filter sample water into previously combusted glass vial. ONLY fill the vial ¾ full (in order to prevent cracking when freezing; especially important for freshwaters).
4. Cap with lid.
5. Store in the dark, preferably in a cooler with ice, and transport back to the lab.
6. Once back in the lab, samples can be stored frozen in the divided, cardboard boxes they originally came in.