

# Diagenesis Lab Water Sampling Protocol

## Materials

- DO and pH/cond. field meters
- 2 sampling bottles
- zip-lock bag for samples
- 60mL syringe
- 0.45µm filters
- Concentrated  $\text{HNO}_3$
- Plastic pipet
- Gloves
- Sharpie pen
- Paper Towels



## Methods

In field book, record date, location, time.  
Using meters nearest sampling point, record T, pH, conductance and total dissolved solids. Record DO in mg/L and %.

### Anion and Alkalinity Sample

- Use the larger bottle if using multiple sizes
- Label the sample bottle
- Rinse the inside of bottle and cap with sample 3 times
- Completely fill bottle with sample, leaving no head space (can be done by submerging if possible)

### Cation and Metals Sample

- Label the sample bottle
- Rinse syringe 3 times with sample water
- Fill syringe with sample water and twist filter onto syringe (touch only the edges, not the outlet)
- Rinse the inside of bottle and cap with filtered sample 3 times with ~2 - 5 mL filtered water
- Fill the bottle with filtered water, changing filters if necessary (collect a minimum of 30-50 mL)
- Put on gloves
- Add 3-5 drops of  $\text{HNO}_3$  to filtered water with plastic pipet
- Put an X on the cap to indicate sample was filtered and acidified, and an "F/A" on the bottle near the sample label

Put both bottles into a labelled zip-lock bag and refrigerate until analysis.

