

Arsenic Team Detailed Task List Fall 2013

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December 13, 2013

Lab Area Preparation

Finish by 9/25/13

- Signage
- Find proper disposal container and talk to EH&S
- Taping off work area
- Choosing a good lab spot (discuss with Casey)
- Get lab safety equipment (gloves, coats, goggles, etc.)

Obtain Testing Materials and Equipment

Finish by 10/2/13

- Centrifuge and centrifuge tubes
- Vial tumbler
- Clay
- Coagulant
- Copper or Zinc solution
- Acid solution (most likely nitric acid)
- Arsenic solution
- Groundwater test solution

Method Development

Finish by 10/16/13

- Learning how to operate the GFAAS
- Develop testing procedure
- Testing various types of centrifuge tubes (e.g. flat v. tapered bottom)
- Determining the necessary coagulant concentration

Initial Trial Testing

Finish by 10/30/13

- Trial runs using only coagulant and clay
- Trials including a metal solution (copper/zinc)
- Creating a calibration curve through serial dilution measurements

Arsenic Testing

Finish by 11/13/13

- Research alternative ways to measure arsenic if GFAAS is unsuccessful
- Begin including arsenic in testing
- Possibly develop more true to AguaClara system testing design