

# D-Lab

## Water Testing Worksheet

Due: October 30, 2009

Team Name: \_\_\_\_\_

You have been sent to a small academic community nestled on the banks of a river in the state of Massachusetts. There is some concern that the water that flows through this community is contaminated and may not be safe for drinking. Your job is to test the water and make a report to the community leaders.

### List of Biological Contaminant Tests:

Membrane Filtration, PetriFilm, Colilert, Pathoscreen

### List of Chemical Contaminant Tests:

Ammonia-Nitrogen, Arsenic

### List of Water Quality Tests:

Dissolved Oxygen, pH, Salinity

1. Describe the results achieved when adding PuR to turbid water. How does PuR work to flocculate? What is turbidity and how is it measured?
2. What are the potential health risks faced by this community if they continue drinking water from this source? Please include the health effects of any potential chemical or bacteriological contaminant for which we tested and list some potential sources of that contaminant.
3. Given the results of our water quality tests, what can you say about the quality of the water sources tested? Why might one test for pH, salinity and dissolved oxygen?
4. What are your recommendations for treatment of this water source?

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