

## **ENHANCED AEROBIC BIOREMEDIATION**

EBS will supply free bottles for contracted projects with 5-days prior notice to sampling. Bottle Types Per Well for Enhanced Bioremediation Microbial Studies using Groundwater Samples:

<b><u>ANALYSES</u></b>	<b><u>BOTTLE TYPE</u></b>
<b>BIOLOGICAL ANALYSES:</b>	
Heterotrophic Count and Specific Hydrocarbon Degraders	1 Liter Plastic; UP
<b>CHEMICAL ANALYSES:</b>	
pH, Alkalinity, o-Phosphate, Nitrate, Sulfate, BOD	1 Liter Plastic; UP
Total Dissolved Solids (TDS)	1 Liter Plastic; UP
Total Inorganic Carbon (TIC)	125 ml Amber; UP
Total Organic Carbon (TOC)	125 ml Amber; HCl
Ammonia as nitrogen	2 Liter Plastic; H <sub>2</sub> SO <sub>4</sub>
Chemical Oxygen Demand (COD)	500 ml Amber, H <sub>2</sub> SO <sub>4</sub>

\* Plastic: high density polyethylene

\*\* Better performed in the field

UP Unpreserved

Amber Colored Glass Bottle

BOD Biological Oxygen Demand

2 Liter Appx. ½ gallon

### **Field Tests:**

Dissolved oxygen (DO), pH, temp,  
Oxidation-Reduction Potential (ORP),  
Ferrous Iron (Fe<sup>2+</sup>) Reduced Form,  
Total Iron

### **Calculations:**

(Fe<sup>3+</sup>) Oxidized Form,  
Dissolved carbon dioxide (CO<sub>2</sub>)

- Please provide a separate 1-liter container for BOD so there is sufficient volume to do all the additional tests with just one liter. Also, BOD needs to be measured from a container with minimal or no headspace.

**SOIL SAMPLES:**

For Soil Sample Bench Tests: Please provide a minimum of 5 to 8 soil tubes (2-inch diameter by 6-inch long tubes). Bench tests require 3 to 4 gallons of soil with 3 to 4 gallons of groundwater.

Analyses that can be conducted: sediment oxygen demand (SOD) (also called solid oxygen demand); pH evaluation, treatment testing.

Please note there is another list for enhanced anaerobic bioremediation testing.

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