Total Oxidant Demand Sampling Requirements

For aquifer TOD tests (not vadose zone), approximately 300 grams of soil and approximately 300 ml of water are required for each sample. Typically, the soil samples are collected in an acetate liner with a Geoprobe. The core samples may be cut in half so that they fit in a typical sample cooler. The acetate liner should be marked with the sample ID and depth. Cap each end of the liner with a cap or plastic and tape. Note that for a Geoprobe macro-core liner, 100 grams of soil is only about 3 or 4 inches of sleeve. Therefore if you know which interval you are interested in, or are collecting other samples from the same core, a six to 12 inch liner section is adequate for testing. If the samples are collected with an augering technique, fill a 250 ml plastic or glass widemouth sampling jar with the soil. Mark the location and approximate depth on the soil jar. Groundwater is typically collected and stored in a narrow mouth, glass container with no preservative. It is not crucial to collect groundwater, because most oxidant demand is derived from the soil. If it is not practical to collect groundwater, we will use distilled water to saturate the soil samples for the test. If groundwater is going to be collected, we recommend taking the sample from monitoring wells that are closest to the treatment area and the location of the soil sample. DO NOT USE PRESERVATIVE WITH THE WATER SAMPLES.

For vadose zone samples, distilled water will be used to saturate the sample for the TOD test.

Store the samples on ice (if glass containers are used, ensure that they protected from breakage) and ship them to:

Redox Tech, LLC C/O Blair Mitchell 200 Quade Drive Cary, NC 27513 919-678-0140

Please call or email Markus MacNamara (512-969-8480 or macnamara@redox-tech.com) one or more days before the samples will arrive to let us know that they will be delivered. We do not normally accept weekend deliveries as our offices are closed.