

### Sample Containers/Shipping Kits

We will provide and ship the appropriate sample supplies/containers by non-priority status to clients within the continental United States at no charge. Clients requesting overnight delivery of supplies and those outside the continental U.S. will be invoiced for the associated charges when applicable. It is the client's responsibility to ensure proper sampling, packing, and return shipping to the laboratory under proper storage/preservation conditions.

We request that the kits/coolers be returned to us within 30 days. Please notify your Client Services Representative if you cannot meet this deadline. Clients will be billed for any unreturned kits/coolers, inserts, packing material, and bottles. The value of the kits and coolers ranges between \$50 and \$250.

### **Sample Collection and Preservation Guidelines**

Preservatives must be added in the field at the time of sample collection unless sample containers are pre-preserved. Preservatives should be recorded on the Chain-of-Custody (COC) form in the "Preservative" column on a per sample basis.

For certain methods and parameters, the laboratory verifies upon receipt that the sample pH falls within an acceptable range. Improperly preserved samples or samples with pH values outside of the specified range are noted in the sample container receipt form. The client is contacted and given the option of re-sampling, directing the laboratory to preserve the sample in-house, or processing the sample as it was received, and recorded on the COC.

When obtaining aqueous samples for the determination of volatile organics, the collector should ensure the absence of headspace by filling the 40-ml bottle to the top. This procedure should produce a positive meniscus across the surface of the vial. The Teflon-lined septum should be placed gently over the sample surface, with the Teflon side down, and the top screwed firmly on over the septum. A proper seal should be verified by inverting the sealed bottle and gently tapping on the sides with your finger, ensuring that no air bubbles appear.

#### Bottles:

- Do not open any bottles until you actually put your sample in them—this prevents contamination.
- Do not substitute your own bottles or interchange any lids or labels on our bottles.
- Securely repack all bottles provided. Otherwise, bottle breakage may occur.
- Do not rinse bottles prior to sample collection. Rinsing will contaminate them and remove preservative. Some states may require that non-preserved containers be rinsed with sample water before collection.

#### Ice/Blue Ice:

 A wet ice slurry is ideal for sample collection and the use of blue ice is discouraged and not allowed by some state certifying bodies. When samples arrive at the



laboratory, the temperature of each shipping container is measured and recorded. Samples should be packed such that they maintain a temperature of 2-6°C during shipment.

- If you must use blue ice, freeze in a standard freezer for at least 12 hours and no more than 18 hours prior to sampling. Do not freeze the blue ice using dry ice. This freezes your sample and breaks bottles.
- Do not freeze the sample itself.
- Please repack the blue ice with red caps upward. Otherwise, your sample results may not be accurate or bottle breakage may occur during shipment.

#### Sample Records:

- Three types of labels will be supplied: a return shipping label, custody seals, and a sufficient number of sample identification labels. On the sample identification labels, please complete all sections of the label to eliminate the possibility of samples being mixed up.
- A Chain-of-Custody record and packing list are also provided.
- Provide as much identifying information about your company on the COC, including your account number.

Analytics processes thousands of samples a year—often from several plants of the same company, and very often on the same day!

### How to Submit a Sample

- Complete all the pertinent information on the chain of custody (COC) about your company and the project. Please include the state where the samples were collected. Please include the following information:
  - a. Sample Identification: A unique sample description that will appear on the report. Date and time collected should always be recorded.
  - b. Grab or Composite: Indicate whether the sample is a grab (taken at one time from a single location) or a composite (taking multiple samples and combining them into one).
  - c. Matrix: Mark the type of sample and number of containers. If applicable, indicate whether the water is a groundwater, waste water, or drinking water.
  - d. Analyses Requested: Write the analysis name or abbreviation. Clearly indicate the analyses needed on every sample.
  - e. Preservative: Please indicate what preservative was used, if any.
  - f. Turnaround Time: Indicate whether the samples are to be analyzed on a normal (5 working days) or rush basis. To assist the lab in scheduling, you can also include the date you need results. All rush work should be prescheduled. Also indicate if you would like preliminary results phoned or faxed to you, and include the number.
  - g. Data Package Options: When a detailed data packaged is required, indicate the type of data package and if site QC is being submitted.
  - h. Relinquished by/Received by: Each time there is a change in the samples custody, this section must be signed by the person relinquishing and the



person receiving the samples. Chain-of-custody seals for the sample containers and the outside of the package are available upon request.

- 2. Each sample bottle must be clearly labeled and cross-referenced on your chain of custody.
- 3. Samples which may present health hazards, such as those containing high levels of toxic materials, MUST be clearly marked.
- 4. If accurate and detailed information is not available, it will delay sample processing and possibly inhibit meeting your reporting date.

#### **Data Deliverables**

Analytical reports convey to the client all of the information that is needed to evaluate the analytical results and draw conclusions about the levels those samples represent. Each COC submitted is considered a Work Order (WO), therefore a separate data package is prepared for each COC submitted unless otherwise requested. Unless a specific format is requested, the standard laboratory procedure is to report Level 1 results to the limit of quantitation (LOQ). In many instances, it is possible to estimate to a value below the LOQ, if lower values are needed. These estimates are made to the method detection limit (MDL). Values reported below the LOQ are flagged with a "J" to indicate that the value is estimated.

### A typical Level 1 analytical report will include the following:

- 1. Laboratory name, address, telephone number, and certification/ID number
- 2. Client name and/or site name
- 3. Date and time of sample collection or pickup
- 4. Date and time of sample receipt, extraction, and analysis
- 5. Laboratory sample ID number
- 6. Customer sample ID number
- 7. Method reference (EPA, Standard Methods, etc.)
- 8. Sample type
- 9. Requested analytes
- 10. Analytical results with units of measurement
- 11. Reporting limits
- 12. Data qualifier code(s) if needed
- 13. Remarks about sample irregularities or problem in analysis
- 14. Initials of laboratory analyst, signatures of lab director and QC Manager, and project manager initials

Detailed data packages are also available which document QA/QC in addition to the sample analyses for each batch of samples. For data package purposes, a batch is defined as the samples listed on a COC and is generally less than 20 field samples. If you request site-specific QA/QC samples, one sample in each batch must be submitted in triplicate in order to meet volume requirements. An additional charge for these samples will be incurred if less than 10 samples are submitted. If your data package does not require site-specific QC, you will not be charged for laboratory batch QC samples. The



turnaround time for extended data packages is contingent upon the level of the data package.

Analytics can provide our clients any report format since all laboratory data is stored and generated from a common database. In order to meet both regulatory agency and client requirements, we are constantly updating our data package formats.