



New England Testing Laboratory, Inc.

Guidelines for Submitting Samples to the Laboratory

The integrity of samples and the validity of analytical results require that certain conditions exist upon sample log-in. These conditions are verified by our log-in technicians as required by our State and NELAP certifications, the analytical methodologies themselves, and our internal quality assurance program. When an anomaly is identified, you will be contacted to determine if you wish to continue with the analytical process despite non-conformance with the requirements. If you choose to continue with analysis, the case narrative will reflect the non-conformance and what, if any, impact the excursion has on data quality.

Sample identification requirements:

Each sample container must be labeled with:

- a unique sample identification
- sample location
- date and time of collection
- collector's name
- preservation type
- sample type (composite, grab, waste liquid, groundwater, etc.)

Sample temperature requirements:

Samples that require thermal preservation must be between just above freezing to 6°C for analyses specifying a 4°C preservation. Otherwise samples must be within +/- 2°C of the method-required temperature or within the method-specified range. It is acceptable if samples are on ice and still cooling after sampling when received by us.

Sample container preservative and holding time requirements:

Samples must be submitted in the appropriate containers and be preserved in accordance with the method requirements. Furthermore, samples must arrive at the laboratory with adequate time to perform the analysis within the required holding time. VOC vials are required for volatiles analysis. These containers must be filled completely leaving no headspace.

Chain of custody requirements:

With each sample submission a chain of custody form must be completed. This form details sample identification, date and time collected, the identity of the collector, a list of tests to be performed, a complete trail of those persons who had custody of the samples (commercial carriers excluded), and any remarks the submitter wishes to include.



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Control sample requirements:

Environmental analytical methods, SW-846, 40 CFR 136, 40 CFR 141, as well as laboratory certification programs require the collection and analysis of control samples (matrix spike samples, duplicate samples, field blanks, and VOCs trip blanks). If these samples are not submitted for water samples or not requested by the client for either water samples or soil samples, then we cannot produce a data package that complies with regulatory requirements. In this event we must comment in the sample narrative that the control samples have not been submitted. Understand that the regulatory authority to which you are submitting your data can reject your data for insufficient QA/QC data.

To ensure compliance with regulatory requirements for analytical data we recommend you write a Site Specific Quality Assurance Plan (QAP) which details appropriate data quality objectives for the project.

Your first QAP may be a substantial level of effort, but once prepared it can easily be edited for subsequent projects. We have extensive experience with the form and content of these documents and our staff can provide you with an outline (and recommend content) for their preparation. We will also provide content relevant to lab procedures and QA/QC audits, e.g. acceptance criteria for ms/msd audits. Also, in preparing plans, consider SW846 (chapter 1 and chapter 9) <http://www.epa.gov/epaoswer/hazwaste/test/main.htm>

Your QAP will include data quality objectives that the lab needs to know, e.g. detection limit requirements. Be sure they get a copy – if possible in advance of sample delivery. Also, your QAP should require certain field QC samples be collected:

- Submitting a trip blank with each cooler of samples submitted to the lab for analysis of VOCs and VPH. A pair of vials is required for each test.
- Submitting a sampling equipment rinsate blank (field blank) for analysis of all parameters. If more than 20 samples are to be taken, submit one blank per 20 samples.
- Submitting sample for an ms/msd analysis. Pick a sample to be collected in triplicate. Label one with the sample ID, label one with the sample ID-ms, and one with the sample ID-msd. If more than 20 samples are to be taken, repeat this submittal once for every 20 samples.
- Consider submitting blind duplicate samples and blind proficiency standards.