

SECTION 8.12

SWAB SURFACE SAMPLING FOR CHEMICAL ANALYSIS

1.0 Purpose

To describe the procedure for collecting samples from non-porous surfaces for chemical analysis.

2.0 Responsibilities

- The site coordinator is responsible for assuring that this procedure is implemented.
- Survey team personnel are responsible for following this procedure.

3.0 Procedure

3.1 Equipment

- ✓ Swabs for sampling: sterile cotton gauze pads or similar type pad.
- ✓ Two containers of extractant: analytical parameter specific; generally solvent or dilute acid prepared prior to mobilization and stored in a properly cleaned glass or teflon container as specified in Section 8.13.
- ✓ 10 cm × 10 cm disposable templates.
- ✓ Sample holding container: Small, wide mouthed glass jar with teflon lined closure.
- ✓ Plastic zip-lock bags.
- ✓ Labels and security seals.
- ✓ Record forms and logbooks.
- ✓ Indelible pen.
- ✓ Sample gloves.
- ✓ Forceps.
- ✓ Shipment containers, sample packing materials, and ice or “blue ice”.

3.2 Sample Collection

NOTE: Prior to mobilization, a sufficient number of sampling kits should be assembled. Each kit should be compiled into a zip-lock bag and contain the following items: one prepackaged swab, sample holding container.

- 3.2.1 Unwrap swab from package, place in forceps, and soak with extractant. Press out excess liquid inside of sample container.
- 3.2.2 Hold template at sample point.
- 3.2.3 With one side of the swab, completely wipe the sample area with a vertical overlapping pattern.
- 3.2.4 Turn the swab over and completely wipe the sample area with a horizontal overlapping pattern.
- 3.2.5 Place the swab into the sample container, label, and secure sample container in accordance with Section 8.15 and the chain-of-custody procedures in Section 8.16. Record pertinent information on the Chain-of-Custody Form (Figure B-16 or equivalent).
- 3.2.6 Record sample identification, location, date, time, and other pertinent data on miscellaneous Sample Record Forms (Figure B-17 or equivalent), maps, and/or logbook.
- 3.2.7 Prior to taking next sample, change sample gloves and rinse forceps in a separate container of extractant than the one used for soaking the swabs in order to prevent cross contamination.