



UCMR 4 Sampling Instructions

UCMR 4 samples must not be composited (i.e., combined, mixed or blended); samples from each sampling point must be collected, preserved and processed separately.

PWSs that ship the samples for analysis should recognize that samples must be collected early enough in the day to allow adequate time to send these samples for overnight delivery to the laboratory. The PWS should avoid collecting samples on Thursday and should not collect samples on Friday, Saturday, or Sunday unless special arrangements have been made for the receipt of samples at the laboratory within 48-hours of collection.

Disinfectant Type - All of the disinfectants/oxidants that have been added prior to the entry point to the distribution system.

PEMB = Permanganate

HPXB = Hydrogen peroxide

CLGA = Gaseous chlorine

CLOF = Offsite Generated Hypochlorite (stored as a liquid form)

CLON = Onsite Generated Hypochlorite

CAGC = Chloramine (formed with gaseous chlorine)

CAOF = Chloramine (formed with offsite hypochlorite)

CAON = Chloramine (formed with onsite hypochlorite)

CLDB = Chlorine dioxide

OZON = Ozone

ULVL = Ultraviolet light

OTHD = All other types of disinfectant/oxidant

NODU = No disinfectant/oxidant used

Supplies should be assembled and taken to the sampling point at the same time. These will include:

Cooler

Sampling Containers

Gloves

Chain of Custody

Labels

Markers

Bagged Ice

Tape for securing the cooler



Optional:

Paper Towels for drying the outside of the containers after sampling
Plastic storage bags for ice or samples

General Sampling Procedure for All Methods:

Use the proper container to collect your sample and **do not rinse out any preservatives present.** Specific sample containers are required for all UCMR4 analyses to comply with each method.

Samples will be **rejected** if collected in the incorrect container and will require re-sampling. If you have any questions, please contact us before sampling at 877-252-9262.

Wash your hands before and after sampling. Label sample bottles prior to sampling using a permanent marker. Label should include sample location, date and time collected.

- [EPA 200.8 Metals](#) - Bottles: 500 mL HDPE plastic (one bottle for each entry point)
- [EPA 300.1 Bromide](#) - Bottles: 125 mL HDPE plastic (one bottle for each entry point)
- [EPA 415.3 / SM5310 B Total Organic Carbon](#) - Bottles: 40mL glass vials (2 bottles for each entry point)
- [EPA 525.3 Pesticides](#) - Bottles: 1L amber glass (2 bottles for each entry point)
- [EPA 530 Semi volatiles](#) - Bottles: 1L amber glass (2 bottles for each entry point)
- [EPA 541 Alcohols](#) - Bottles: 250 mL amber glass vials (2 per each entry point)
- [EPA 552.3: Haloacetic Acids](#) - Bottles: 40 mL amber glass vials (3 per each entry point)
- [EPA 544: Microcystins & Nodularin](#) - Bottles: 500 mL amber glass (1bottle for each entry point)
- [EPA 545: Cyndrospermopsin & Anatoxin-a](#) - Bottles: 125 mL amber glass (1 bottle for each entry point)
- [EPA 546 \(ELISA\): Total Microcystins](#) - Bottles: 120 mL amber glass (1 bottle for each entry point)

Open the tap and allow the system to flush until the water temperature has stabilized (approximately 3 minutes). Decrease the flow to approximately ¼ inch across (width of a pencil). Collect samples from the flowing system.

Fill sample bottle at an angle pointing away from you. Fill to the shoulder, but do not flush out the preservation reagents. Cap the bottle and agitate by hand until preservative is dissolved.



Before submitting your samples to the lab, complete a chain of custody form for each point (EP).

Refrigerate samples or place samples on ice immediately after sampling prior to shipping to lab. Samples must be submitted to the lab within 48 hours of sampling.

Sample Transport and Storage

Samples should arrive at the laboratory packed on ice or with frozen gel packs in a sample bottle constructed of appropriate material as described in the analytical method. Samples that are shipped from the PWS should be sent by priority overnight delivery to the laboratory.

UCMR samples that arrive at the laboratory within 48 hours of collection must not exceed 10°C.

Samples with water temperatures significantly above 10°C at the time of collection (e.g., summer sampling events with elevated ambient water temperature), must be iced or refrigerated for a period of time prior to shipping to ensure the laboratory receipt temperature criteria are met.

Samples that arrive at the laboratory on the same day of sample collection (exclusively due to the close proximity of a PWS to the laboratory), may not yet have stabilized to 10°C or less when they arrive at the lab. These samples are acceptable ONLY if packed on ice or with frozen gel packs immediately after sample collection and hence, delivered while samples are in the process of reaching an equilibrium temperature less than 10°C. Samples must not be analyzed if they were not shipped properly.

For additional questions / clarification please contact:

Email: main@mcccampbell.com

Phone: 877-252-9262

Sales – New client setup, Clarification of testing, pricing / TAT's

Login – Clarification for submitting samples

Project Manager – Report inquiry