

TECHNIQUE FOR OBTAINING A WATER SAMPLE FOR ALL DENTAL TREATMENT WATER TESTING

1 Pre-Sampling Preparation

- Read Instructions for Use (IFU) for the product being used. If using an outside lab, remove and freeze ice pack for safe, chilled transport (Length of freezing time dependent on product IFU).
- Select appropriate number of vials/tests based on number of operatories and specific lines in each operatory to be tested.

Label each vial/test using a wet pen (or indelible ink marker) with the treatment room # and specific line to be tested (or label and document per product IFU).

- It is recommended to use one vial/test per line, per treatment room (e.g., 3 vials: one each for AWS, ultrasonic scaler and a waterline handpiece).

If pooling lines:

- A pooled sample must use equal amounts of water from each waterline.
- Should not include more than 10 lines.
- Pooling samples from units in different operatories into one sample is not acceptable.
- Ensure to document which lines are being pooled.

If CFU Counts exceed recommended levels, a pooled sample will not allow identification of line-specific contamination.

Please note: Pooling samples can result in a passing CFU count as samples are diluted when pooled. I.e.: if three lines are under 500 CFU/mL and one line is over 500 CFU/mL, the pooling of these samples may dilute the failing line and provide a passing result.



Perform hand hygiene.

- If using soap and water, follow CDC guidelines.
- If using alcohol-based hand rub, follow product manufacturer IFUs.
- Don disposable treatment gloves.

2 Treatment Room Preparation

- Remove dynamic instruments attached to the dental unit lines to be tested. Follow CDC guidelines for sterilization prior to patient use.
- Wipe contact areas with disinfectant wipe allowing appropriate dwell/contact time per manufacturer IFU.

If using a metal AWS Tip:

- Remove tip.
- Wipe contact areas with disinfectant wipe allowing appropriate dwell/contact time per manufacturer IFU.
- DO NOT replace with a metal tip. Draw sample directly from the port.

If using disposable AWS tips (such as the Sparkle™ AWS Tip):

- Remove tip. Wipe contact areas with disinfectant wipe allowing appropriate dwell/contact time per manufacturer IFU.
- Place a new disposable AWS tip on the AWS.

Flush all lines connected to water on the system for two-minutes into a sink or separate container.

- This is necessary as water may become stagnant in the lines - CFU count may not be accurate.
- Compliance with ongoing flushing protocols or continuous waterline treatments (e.g., DentaPure™ Cartridges) will promote more accurate test results.
- It is especially important to flush waterlines that are infrequently used, unused or extra, such as low-speed handpieces, air-water syringes, and ultrasonic scaler ports. These lines create stagnant water (dead legs) and can harbor biofilm and continuously re-contaminate the water system.

Note:

Always follow CDC Infection Control Guidelines for Dental Healthcare Settings.

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3 Continue with the water sampling technique that applies to the type of testing you are using (general details provided below). Always defer to your product's Instructions for Use (IFU).

Lab

- Organize UNOPENED vials on clean surface.
- Select vial for first test line.

Remove the cap from the vial. Cap and vial MUST remain in your hand.

- If you are unable to maintain aseptic technique in your hand, the cap may be placed open side up on a clean surface.
- Only remove cap from the vial that you are sampling. To avoid contamination, test tubes should be open for the shortest amount of time possible.
- DO NOT touch the outlet of the waterline or the interior of the collection vial while collecting sample.

Begin filling vials to recommended volume (avg is 2/3 to 3/4 full per sampling).

- Best to flow/trickle water down the side of the vial rather than squirting it directly into the bottom of the vial. Follow manufacturer IFU.
- Disruption of the dehydrated neutralizer (if used) by a forceful flow of water can skew the test results.

Repeat above steps for remaining vials.

Ship water samples.

- Place filled and labeled vials into the shipping container provided by the testing laboratory.
- Apply frozen ice pack as directed.
- Complete shipping label information appropriately.
- Arrange for pick-up/shipment with the recommended time limits as directed by the IFU.


4 Record Keeping

Maintain a log that includes the following:

- Sample date
- Clinician name
- Treatment rooms/chairs
- Pass/fail
- Line identification
- CFU count

For in-office testing, include an Image of the test post-incubation (pre-incubation image is also recommended with a vial-style in-office test).

Consult your state dental board for the required retention of dental unit waterline testing records.

 **Note:** In the event of a failed CFU test (e.g., Count >500 CFU mL), consult your waterline treatment manufacturer or HuFriedyGroup for remediation assistance.

In-office (paddle or vial style)

- Organize UNOPENED tests on clean surface.
- Select test for first line to be tested.

Separate paddle from plastic sampler case or remove the cap from the first vial to be filled. Hold the paddle by the handle, or vial cap in your hand.

- If you are unable to maintain aseptic technique by holding the vial cap in your hand, you may place it open side up on a clean surface.
- Only remove paddle or vial cap from the test being sampled. To avoid contamination, paddle or open vial should be exposed for the shortest amount of time possible.
- DO NOT touch the outlet of the waterline or the interior of the sampler case, or vial while collecting sample.

Begin filling sampler case, or vial to volume recommended per the IFU.

- Best to flow/trickle water down the side of the sampler case/vial rather than squirting it directly into the bottom of the sampler case/vial. Follow manufacturer IFU.
- Disruption of a neutralization solution (if present) may be caused by a forceful flow of water and can potentially skew the test results.

If using a Paddle-style Test:

- Firmly place the paddle back into the plastic case and place the case down horizontally (filter side down) for time specified per the IFU.
- Remove the paddle from the water sample and shake the excess water from the paddle. Empty the sampler case and firmly replace paddle.
- Incubate the water test sampler filter side down at room temperature 68-77°F (20-25°C) for time period specified in the IFU.
- Examine the filter to perform colony counts and record results.
 - Compare the paddle with the instruction sheet that accompanied the water test kit to determine if action is required.

If using a Vial-Style Test:

- Place the cap onto the vial to seal.
- Shake the vial to incorporate any media deposited at the bottom of the vial.
- Incubate the water test at room temperature in an upright position for time specified by the IFU.
- Examine the vial and compare the water color against the provided color chart to determine if action is required.

Repeat above steps for remaining test kits.