



SCPH ENVIRONMENTAL LABORATORY

Drinking Water Sample Collection Procedures for
Nitrate & Nitrite Analysis by EPA Method 353.2
Arsenic Analysis by EPA Method 200.9

Bottles to Use

Plastic or glass bottles may be used but plastic is preferred.

Note: SCPH provides 125mL sample bottles free of charge for nitrite and nitrate sampling

Preservative to Use

Sulfuric Acid (H₂SO₄) to pH < 2

General Sampling Instructions for Nitrite, Nitrate, and Arsenic Testing

Wear gloves and eye protection when handling acid and while collecting samples. If the bottle contains a preservative, do not rinse the bottle. If the preservatives are not included in the bottle, rinse the bottle and cap three times with sample water, fill the bottle. The bottle should be filled to within one to two inches from the top. It is important to ensure that holding times are met. Holding time starts at sample collection and ends at sample preparation and/or analysis. Deliver or ship the samples in a timely manner to the laboratory at:

Summit County Public Health Laboratory

1867 West Market Street, Building C

Akron, Ohio 44313

Nitrite

1. Collect sample from the cold water tap. Flush water for approximately 5 minutes before filling the sample bottle.
2. Fill one 125mL bottle (no preservatives) for each sample site.
3. Immediately cap the bottle tightly.
4. Fill out the appropriate paperwork including but not limited to the date and time of sample collection, sample identification, analysis requested (NO₂) and the address where the report should be sent.
5. There is a 48-hour holding time for this parameter. Return the sample, packed on ice, to the laboratory within 5 hours of collection in order to ensure time for the lab to process the samples.

Nitrate

1. Collect water from the cold water tap.
2. Before filling the bottle, flush any water from the tap until water runs cold.
3. Fill one 125mL container at each sample site. DO NOT overflow the sample.

4. Fill out the appropriate paperwork including but not limited to the date and time of sample collection, sample identification, analysis requested (NO₃) and the address where the report should be sent.

5. There is a 48-hour holding time for this parameter. Return the sample, packed on ice, to the laboratory within 5 hours of collection in order to ensure time for the lab to process the samples. Note: if samples are properly preserved with Sulfuric Acid (H₂SO₄) to pH < 2 at time of collection there is a 28 day holding time.

Arsenic

1. Collect water from the cold water tap.

2. Before filling the bottle, flush any water from the tap until water runs cold.

3. Fill one 125mL container at each sample site. DO NOT overflow the sample.

4. Fill out the appropriate paperwork including but not limited to the date and time of sample collection, sample identification, analysis requested (As) and the address where the report should be sent.

5. There is a 48-hour holding time for this parameter. Return the sample to the laboratory within 5 hours of collection in order to ensure time for the lab to process the samples. Note: if samples are properly preserved with Nitric Acid (HNO₃) to pH < 2 at time of collection there is a 28 day holding time.

NOTE: Failure to follow these instructions may necessitate re-sampling.

If you have any questions regarding these instructions please contact the SCPH Laboratory Manager at (330) 926-5600, or, visit us online at scph.org/waterlab.