

Sampling Instructions for the NALS Water Analysis Package

The reliability of analytical results depends on the integrity of the sample and the sampling procedure. The samples should be representative of the water in question. A sufficient volume needs to be collected to perform all the analyses requested and care needs to be taken to prevent contamination, mislabeling, or expiration. Different collection procedures are required for different tests and different types of source water.

For testing physical parameters, elemental analysis and dissolved anions the sample container must be appreciably free of contamination. Clear polypropylene (PPE), polyethylene (LDPE or HDPE) and polyethylene terephthalate (PET or PETE) plastics typical of drinking water bottles are sufficient for many applications. Where in question, contaminate free sample containers can be provided for a fee (\$2). Collect a grab sample by rinsing both the lid and bottle three times with the intended water. After the third rinse fill the container completely full (with limited headspace) and seal tightly. A single 150-500 mL bottle is sufficient for these three tests. Preservation is not required if samples are provided to the lab within 3 days. Label each bottle legibly with a sample name and its date using an indelible marker. Store bottles away from excess heat or light until delivery.

For bacteriological testing (coliforms and *E. coli*) samples should be analyzed within 3 to 6 hours of sampling. Samples will not be analyzed after 24 hours. Using a clean and sterile container collect at least 125 mL of a representative sample and seal the container tightly. Label the bottle using an indelible marker with a sample name, the date, and the **sampling time**. If water has a chlorinating agent (up to 10 ppm) or other oxidant as a treatment measure samples should be collected in a sterile container with a de-chlorinating additive (sodium thiosulfate). Sterile sample bottles with a de-chlorinating agent already added can be provided for a small fee (\$3). These containers are not meant to be pre-rinsed with sample. If sampling from a faucet, consider removing the screen/aerator from the tap and sterilizing the mouth of the faucet with an alcohol swab and flame. Let the faucet cool and run a small portion of water through before collecting a sample. If a tap has not been used for a prolonged period of time (and would not provide water representative of the water supply), run the tap vigorously for a few minutes to flush the lines and then collect a sample. Collected samples should immediately be put on ice and delivered as soon as possible for analysis. Given the time sensitive nature of bacteriological testing, pre-arrangement of a drop off time is recommended (call 250-960-5713 or e-mail nals@unbc.ca). Samples for biological testing are usually only accepted Monday to Thursday between 9 am and 4pm.

Samples can be delivered to room #4-234 at UNBC. There is a 10-minute loading zone at the north end of building 4 that is convenient for dropping off samples.

You can find NALS directions on Google maps at: <https://goo.gl/mun6v1>