

## PROVIDED

- 10 mL Syringe
- 50 mL Syringe
- Luer-Lock Filter
- Sterile Flocked Swab w/breakpoint
- Forceps (2)
- Sampling Spoon
- Sterile Water Tube
- Preservation Buffer Tube (Inside Foil Pouch)
- Disposable Exam Gloves
- Chain of Custody and Terms & Conditions Forms
- Absorbent Pad in Resealable Bag
- Peel-Off Shipping Tape
- Shipping Box (Kit Box)

## REQUIRED BUT NOT PROVIDED

- Safety glasses
- Tube Rack(s) (for holding 5 mL and 2 mL tubes)
- Waste Receptacle

## GETTING STARTED

- Wear safety glasses and disposable exam gloves.
- Clean and set up a work area to process samples.

## 1. PROCESS RESPECTIVE SAMPLE

The DNA Sample Preservation Kit V1 provides options to collect and preserve three types of samples.

**A. Solid Sample-** Any non-viscous material.

**B. Surface Swab-** Biofilm coupons, rust, etc.

**C. Liquid Sample-** Any fluid sample.

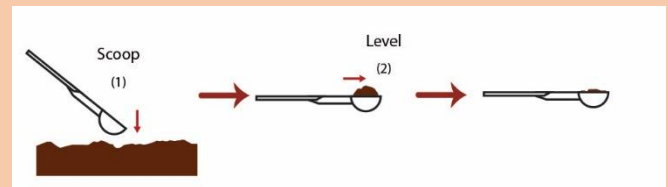
Choose an option based on sample type A, B, or C and process according to the corresponding method. After processing proceed to step 2.

### OPTION A- SOLID SAMPLE

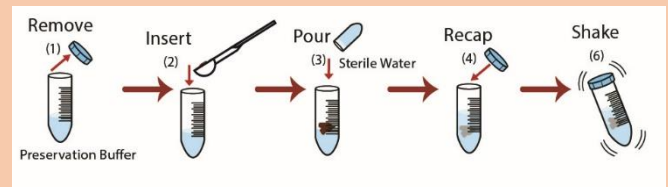
- Mix or homogenize sample if possible, to ensure it is a good representative sample.

## Test Kit Instructions (ver. 0200) GeneCount™ DNA Sample Preservation Kit SV

- Loosen the cap on the freeze-dried **Preservation Buffer** tube and place into a tube rack.
- Remove the **Sampling Spoon** from the plastic bag, being careful not to contaminate the head.
- Scoop the solid sample using the **Sampling Spoon**.
- Level off the solid sample by shaking gently.

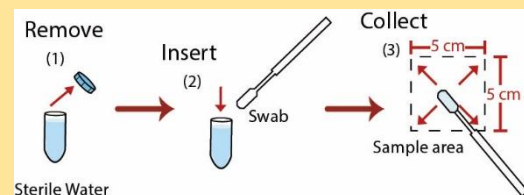


- Remove the loosened cap from the **Preservation Buffer** tube and empty the solid sample from the **Sampling Spoon** into the tube.
- Empty the entire contents of the **Sterile Water** tube into the **Preservation Buffer** tube.
- Close the tube tightly and shake vigorously for 30 seconds to rehydrate and mix the contents.

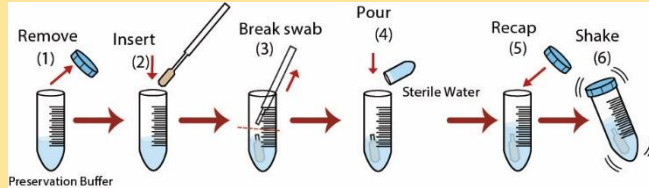


### OPTION B- SURFACE SWAB

- Loosen the caps on the freeze-dried **Preservation Buffer** and **Sterile Water** tubes and place the tubes into a tube rack.
- Remove the swab from the wrapper, being careful not to touch or contaminate the tip.
- Wet the swab tip by dipping it into the **Sterile Water** tube.
- Swab an approximate 5x5 cm (2x2 in) surface area.



- Insert and snap off the swab tip into the **Preservation Buffer** tube.
- Empty the entire contents of the **Sterile Water** tube into the **Preservation Buffer** tube.
- Close the tube tightly and shake vigorously for 30 seconds to rehydrate and mix the contents.



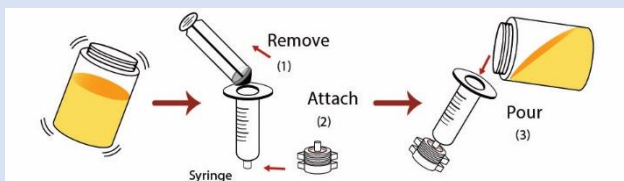
### OPTION C- LIQUID SAMPLE

- Refer to the Kit Volume Recommendations chart below for the recommendations for your sample type.

**Water V1 Kit Volume Recommendations**

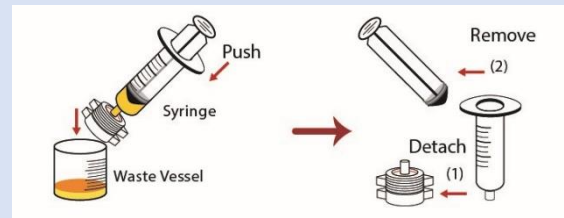
Sample Type	Recommended Syringe (mL)	Recommended Volume (mL)
White Water, Wastewater or Activated Sludge	10	1 – 3
Process or Surface Water	50	50
Oilfield, Oily Brines	50	50
Drinking Water	50	300

- Mix the sample well.
- Remove the plunger from the recommended syringe and attach the Luer-Lock Filter.
- Pour the recommended volume of sample into the syringe.



- Re-insert the plunger and slowly push the sample through the filter into a waste receptacle.

- Detach the filter and remove the plunger from the syringe.



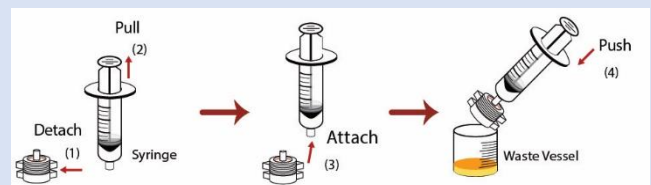
- Repeat previous steps if necessary, until all the recommended volume of sample has been pushed through the filter.

**NOTE: If the recommended volume of sample could not be filtered, record the actual volume processed.**

- Re-insert the plunger and draw up 10 mL of air into the syringe. Reattach the filter.

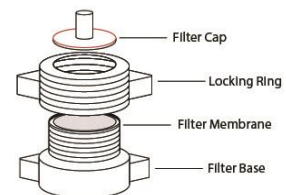
**NOTE: Do NOT draw air up through the syringe with the filter attached.**

- Hold the syringe over the waste receptacle and push the plunger through the barrel to dry the filter.



- Detach the filter and place on a clean surface such as a paper towel.
- Loosen the cap on the freeze-dried **Preservation Buffer** tube and place into a tube rack.
- Carefully begin to open the filter by first unscrewing and then removing the locking ring.

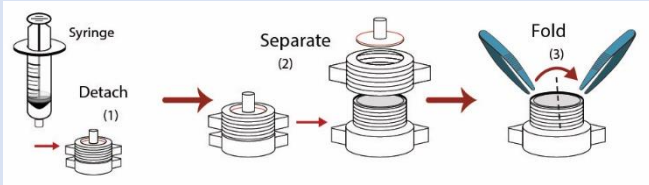
Filter Components



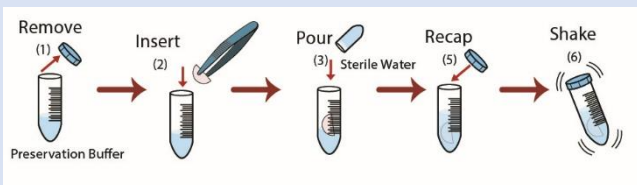
- Being careful to avoid contaminating the tips, use the provided forceps to gently lift the filter cap off to reveal the filter membrane.

**NOTE: Make sure the filter membrane remains stuck to the filter base. If the membrane sticks to the filter cap, use the forceps (avoiding the middle of the membrane) to gently remove the membrane from the cap and lay it back on the filter base in the same orientation as it was during filtering.**

- Use the forceps to grip the outer edges of the filter and gently fold it in half.

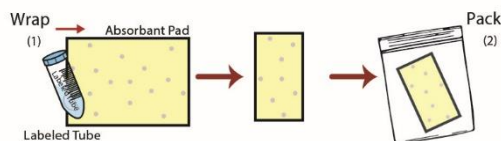


- Remove the cap from **Preservation Buffer** tube and use the forceps to place the folded filter into the tube.
- Empty the entire contents of the **Sterile Water** tube into the **Preservation Buffer** tube.
- Close the tube tightly and shake vigorously for 30 seconds to rehydrate and mix the contents.



## 2. LABEL

- Label the **Preservation Buffer** tube with identifying information about the sample.
- Tightly wrap the absorbent pad around the **Preservation Buffer** tube.
- Place the wrapped **Preservation Buffer** tube into the provided resealable bag.



- Complete the **Chain of Custody (COC)** and **Terms & Conditions** forms provided with the kit. Be sure to indicate the amount of sample processed and the type of analysis required.

## 3. PACK & SHIP

- Pack the resealable bag containing the **Preservation Buffer** tube into the cardboard shipping box along with the completed **Chain of Custody** and signed **Terms & Conditions** forms. *Multiple samples may be shipped in the same box if each sample is labeled and documented appropriately.*
- Peel off the backing from the provided shipping tape and seal the box to ensure it does not open during transport.
- Attach your completed shipping label to the outside of the box, addressed to the correct LuminUltra facility.
- Ship the sample(s) to the respective LuminUltra facility below.

### For Samples in the USA:

LuminUltra Technologies, Inc.  
 1448 South Rolling Road, Suite 018  
 Baltimore, MD 21227  
 USA

### For Samples in Canada and Worldwide:

LuminUltra Technologies Ltd.  
 520 King Street  
 Fredericton, NB E3B6G3  
 Canada

- Email LuminUltra at [orders@luminultra.com](mailto:orders@luminultra.com) with the subject line DNA ANALYSIS SAMPLES to alert that a sample is being shipped for analysis. Be sure to provide the shipment tracking number and your contact details.