



SCC DIAGNOSTICS TOOL BOX

QCF-13: Collecting and Shipping Samples

Source: Laboratory for Udder Health, Minnesota Veterinary Diagnostic Laboratory, University of Minnesota

PROCEDURE FOR COLLECTING AND SHIPPING BULK TANK MILK SAMPLES

1. Collect samples 5 days in a row. Five day sampling procedures achieve more accuracy than single day samples.
2. Days 1-5.
 - A. Agitate the tank well before sampling (5-10 minutes).
 - B. Use a clean dipper to draw the sample from the top of the tank. When in doubt ask the route truck driver. They have experience in taking samples. Fill the tube two-thirds full. (Remember, milk expands when frozen)
 - C. Place IMMEDIATELY in the coldest part of the freezer. DO NOT DELAY!! Extensive delays will allow bacteria to grow give erroneous results.

IMPORTANT: DO NOT COLLECT samples from the outlet valve unless absolutely necessary, because samples collected in this manner often will be contaminated. If you must collect from the outlet valve, allow 1-2 gallons of milk to run before collecting the sample (you can catch the excess milk cleanly and return it to the tank).

SHIPMENT

- A. Place the vials between the solidly frozen freezer packs. Wrap in newspaper or packing material and place in the thick walled Styrofoam container.
- B. Fill empty spaces with crumpled newspaper.
- C. Have the dairy fill out the bulk tank request form. Alternately give your name and veterinary clinic, if you want them to receive a copy of the results. Please enter your phone number, fax number and/or e-mail address and client name and address.
- D. Ship on Monday, Tuesday, Wednesday, Thursday or Saturday avoiding holidays. Ship to:

**Minnesota Veterinary Diagnostic Laboratory
University of Minnesota
1333 Gortner Avenue
St. Paul, MN 55108**
- E. Samples must be frozen or cold on arrival.

PROCEDURE FOR COLLECTING SAMPLES FROM INDIVIDUAL COWS

SAMPLE COLLECTION: Please follow these steps carefully to avoid contamination, which may give meaningless results.

1. The hands of the person collecting the sample must be clean and dry. Wearing latex or vinyl gloves is preferable.
2. The person collecting samples should not be milking at the same time.
3. Samples should be taken directly from teats. Bucket or milk meter samples tend to carry over bacteria from previous cows. Thus do not provide good samples.
4. It is BEST to sample at milking time (before milking the cow). If the sample is taken during midday, it should be taken at least 4 hours after the last milking.
5. Sample tubes should to be handled properly to ensure sterility at all times. The collection tube should be held at an angle. Do not put caps into pockets or touch the tops or inside of the collection tubes. Avoid getting particles of dust, dirt or manure into the sample tube.
6. The MOST important factor is that teats need to be clean and dry. Prep the cow as usual, but teats need to be dried completely by the person doing the sampling.
7. After the routine teat preparation, scrub the teat ends thoroughly with alcohol swab or sterile cotton ball saturated with alcohol. Discard a squirt of milk before sample collection
8. Open barn doors or tunnel ventilation can cause massive air movement, resulting in major contamination problems from bedding and dust. Feeding during sampling should be avoided.
9. Tighten the cap and properly label the collection tube. Immediately place in a refrigerator or freezer. Keep cold or frozen until it is delivered to the Minnesota Veterinary Diagnostic Laboratory. Bacteria in samples that are not cooled or frozen may grow, resulting in misleading information.

SHIPMENT

- A. Place the vials between the solidly frozen freezer packs. Wrap in news paper or packing material and place in the thick walled Styrofoam container.
- B. Fill empty spaces with crumpled newspaper.
- C. Have the dairy fill out the culture request form. Alternately give your name and veterinary clinic, if you want them to receive a copy of the results. Please enter your phone number, fax number and/or e-mail address and client name and address.
- D. Ship on Monday, Tuesday, Wednesday, Thursday or Saturday avoiding holidays. Ship to:

**Minnesota Veterinary Diagnostic Laboratory
Attn: Mastitis Lab
University of Minnesota
1333 Gortner Avenue
St. Paul, MN 55108**

- E. Samples must be frozen or cold on arrival.

PROCEDURE FOR COLLECTING AND SHIPPING BEDDING SAMPLES

1. Wear a clean vinyl glove or sleeve.
2. Randomly select a hand full of bedding from 4-5 stalls. Avoid manure or areas which appear dirty. Select areas where the udder will lie.
3. When collecting sand try to sample the surface and no deeper that one inch down. Carefully sweep the surface into a small pile and collect that.
4. Place the samples in a clean one gallon plastic bag.
5. Place the bedding samples in the refrigerator or freezer immediately after taking.

SHIPMENT

- A. Place the plastic bag between the solidly frozen freezer packs. Wrap in news paper or packing material and place in the thick walled Styrofoam container.
- B. Fill empty spaces with crumpled newspaper.
- C. Have the dairy fill out the bedding request form. Alternately give your name and veterinary clinic, if you want them to receive a copy of the results. Please enter your phone number, fax number and/or e-mail address and client name and address.
- D. Ship on Monday, Tuesday, Wednesday, Thursday or Saturday avoiding holidays. Ship to:

Minnesota Veterinary Diagnostic Laboratory
Attn: Mastitis Lab
University of Minnesota
1333 Gortner Avenue
St. Paul, MN 55108
- E. Samples must be frozen or cold on arrival.

