

APPENDIX N BULK MILK TANKER SCREENING TEST FORM

**IDEXX - NEW SNAP® BETA-LACTAM TEST
(Raw Commingled Cow, Raw Commingled Camel, and Raw Commingled Goat Milk)
IMS # 9-11**

[Unless otherwise stated all tolerances are $\pm 5\%$]

GENERAL REQUIREMENTS

1. See Appendix N General Requirements (App. N GR) items 1-8 & 15 _____

SAMPLES

2. See App. N GR item 9 _____

APPARATUS & REAGENTS

3. **Equipment** _____

- a. Heater block with SNAP insert thermostatically controlled at $45\pm 5^\circ\text{C}$ _____

1. Check temperature by placing standardized temperature measuring device in a tube containing liquid (bulb submersed) maintain records _____

2. Or, use 6-inch partial immersion thermometer placed directly into small thermometer well in middle of heating unit; maintain records _____

- b. Single-use $450\ \mu\text{L} \pm 50\ \mu\text{L}$ poly-pipet with indicator line to measure amount of sample, supplied by manufacturer, or pipettor to dispense $450\ \mu\text{L} \pm 50\ \mu\text{L}$ (**screening only**) _____

- c. Pipettor to dispense $450\ \mu\text{L}$ (see App. N GR item 7). **Required for confirmation labs** _____

- d. SNAP Kit _____

Lot #: _____ Exp Date: _____

QC Date: _____ By: _____

- e. Sample tubes containing reagent pellet _____

- f. Kits only required to be refrigerated if received after 72 hours of shipping _____

- g. Store kits at $0-7^\circ\text{C}$ _____

- h. Timer _____

- i. IDEXX Readers for SNAP devices, with printer or data download capability _____

 - 1. SNAPshot® Reader _____

 - a. Check Set, Part Number 87-05856-01 (black skirt) _____

 - 2. SNAPshot® DSR Reader _____

 - a. Check Set, Part Number 87-14761-00 (blue skirt) _____

4. Daily Performance and Operation Checks (see App. N GR item 10) _____

- a. Read Performance Check Set (Device #1 as Negative and Device #2 as Positive) _____
- b. Both devices must read within the limits as indicated on the storage box label of the check set devices _____

Positive Range: _____ Negative Range: _____

- c. If check sets fail, call IDEXX before proceeding _____

5. Controls _____

- a. Positive Control, 5.0 ppb ± 0.5 ppb Penicillin G _____

 - 1. Store according to label instructions _____

Mfg.: _____ Lot #: _____ Exp. Date: _____

 - 2. Re-hydrate as per manufacturer's instructions with fresh or frozen previously screened beta-lactam negative raw milk _____
 - 3. Positive control must produce greater than 1.2 on the IDEXX reader; maintain records _____

Reader value: _____

 - 4. Store reconstituted positive control at 0.0-4.5°C for no more than 24 hours _____

Lab Prep. Date: _____ Lab Exp. Date: _____

- b. Negative Control - beta-lactam negative raw milk (fresh or frozen) _____
1. Negative control must produce less than 0.95 on the IDEXX reader; (SNAP Test Negative Control can be any of the approved species milk); maintain records _____
 Sample ID: _____ Date Tested: _____
 Reader value: _____
 2. Store fresh negative control milk at 0.0-4.5°C for no more than 72 hours _____
 3. Negative control milk frozen for later use _____
 - a. Aliquot within 24 hours and freeze at -15°C or colder in a non-frost-free freezer or in an insulated foam container in a frost-free freezer; use within 2 months _____
 Lab Prep. Date: _____ Lab Exp. Date: _____
 - b. Thaw frozen milk at 0.0-4.5°C _____
 - c. Once thawed mix thoroughly, **Do Not** use if noticeable protein precipitation is present after thawing _____
 - d. Thawed negative control milk held at 0.0-4.5°C and use within 24 hours _____
 4. Milk controls may not be refrozen _____

TECHNIQUE

6. Test Procedure _____

- a. Set out required number of SNAP devices, sample tubes and pipets for the samples to be tested _____
 1. Discard unused, un-refrigerated devices at the end of the day _____
- b. Pre-warm heater block(s) to 45±5°C, and maintain 45±5°C range for at least 5 min before beginning the test _____
 1. Check initial pre-heating with a temperature measuring device (see App. N GR item 3); maintain records _____
 2. Continuous use block heaters, check temperature daily with temperature measuring device (see App. N GR item 3); maintain records _____

- c. Label each device and sample tube _____
- d. Place device(s) on incubator block(s) _____
- e. Verify that blue reagent pellet is in bottom of tube before removing cap. If not in bottom, tap to bring down _____
- f. Remove and discard sample tube cap(s) _____
- g. Mix milk sample(s)/control(s) 25 times in 7 sec with a 1 ft movement or vortex for 10 sec at maximum setting; use within 3 min (samples must be in appropriate containers to allow the use of vortexing) _____
- h. Add 450 uL of mixed sample/control to corresponding tube(s) _____
 - 1. Using a new single-use 450 $\mu\text{L} \pm 50 \mu\text{l}$ poly-pipet with indicator line supplied by manufacturer, (item 3b.) for each sample/control, draw up 450 uL to indicator line or use pipettor to dispense 450 $\mu\text{L} \pm 50 \mu\text{L}$ avoiding foam and bubbles **(Screening Only)** _____
 - 2. Using Pipettor (item 3.c) with a new tip for each sample/control draw up 450 μL avoiding foam and bubbles **(Required for confirmation labs)** _____
- i. Agitate sample tube(s) to dissolve reagent pellet _____
- j. Place tube(s) in heater block next to device with the corresponding ID _____
- k. Incubate tube(s) for 5 min (use timer) at $45 \pm 5^\circ\text{C}$ _____
- l. After incubation, pour content of each tube into sample well of corresponding device _____
- m. Watch blue activation circle, as it begins to disappear push the activator firmly until it "snaps" flush with the body of the SNAP device (device remains on heater block) _____
- n. Incubate device for 4 min (use timer) at $45 \pm 5^\circ\text{C}$ _____
- o. At the end of incubation, visually inspect the control and test spots. The test is invalid and the same sample should be retested with a new SNAP device if: _____
 - 1. The control spot fails to develop color _____
 - 2. Blue streaking occurs in the background or the background is the same color as the sample or control spots _____
 - 3. The sample or control spots are not uniform in color or exhibit poor spot quality _____

p. Insert only valid tests in the reader **IMMEDIATELY (no longer than 30 sec)** after completion of incubation

q. Tap OK

7. Interpretation with Idexx Reader for SNAP Devices

a. IDEXX Reader for SNAP devices automatically prints results as Positive or Negative (NF)

8. Verification of Initial Positive Tanker Samples (see App. N GR item 11); Confirmation of Presumptive Positive Tanker Samples (see App. N GR item 12); and Traceback of Producer(s) on a Confirmed Positive Tanker (see App. N GR item 13)

9. Reporting (see App. N GR item 14)
