



Drug Residue Testing – Program Requirements

Kate Angeles, Lisa Roskom, Mary Wegner, and Melissa Francois – Laboratory Evaluation Officers – Division of Food and Recreational Safety


WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

Fall 2024 Workshop

NCIMS REQUIREMENTS

Every load of raw milk that is received in this country **MUST** be tested for Beta-lactam* drug residues.

* *Beta Lactam drugs are members of the Penicillin family of drugs.*




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WHAT ABOUT OTHER TESTS?

- Sulfonamides, Tetracycline, Chloramphenicol, Aflatoxin...
- Currently, you are not required by NCIMS or Wisconsin rules to test for any of these.

BUT

- If you test for a chemical that does not belong in the milk and get a positive test result, you must treat the milk as adulterated under Wisconsin law.



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WHERE TO GET THE NCIMS 2400 FORMS

1. Contact the LEOs for the forms you need:
 - datcpleo@wisconsin.gov
2. Go on the DATCP website (for Appendix N forms only):
 - https://datcp.wi.gov/Pages/Programs_Services/DairyProcessors.aspx
3. Go to the NCIMS website for all forms:
 - <https://ncims.org/forms/>

All PDF files can be downloaded and printed.



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FACILITY REQUIREMENTS

- Every facility that receives raw milk must be approved to do Beta lactam drug residue testing on the milk they receive.
- or**
- The facility must have an arrangement, pre-approved by DATCP, to have its milk tested elsewhere.



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FACILITY APPROVAL

To be approved to do drug residue testing, a facility must:

- Have at least one approved Industry Supervisor.
- Meet the requirements of the Beta lactam drug residue testing program.



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FACILITY APPROVAL

To meet the requirements of the Beta lactam drug residue testing program, a facility using a test that uses a **reader and printer** must have one Industry Supervisor submit annually:

- ▣ Internal Audit showing that their facility meets the requirements of the Beta lactam drug residue testing program.
- ▣ Document training and testing of all analysts at the facility.



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FACILITY APPROVAL

To meet the requirements of the Beta lactam drug residue testing program, a facility using a test that is **visually read** must:

- Go through an initial on-site evaluation (all analysts). If you hire a new analyst, they must also have an on-site evaluation before testing.
- Analysts must run and pass state split samples.
- One Industry Supervisor must submit annually:
 - ▣ Internal Audit showing that their facility meets the requirements of the Beta lactam drug residue testing program annually.
 - ▣ Documentation of training of all analysts at the facility.



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INDUSTRY SUPERVISORS

As an Industry Supervisor, it will be your responsibility to show that your facility is meeting the requirements of the program:

- ▣ State requirements:
 - Internal audit as well as training and testing.
- ▣ 2400 series forms:
 - Testing records (every load and controls).
 - Quality control (follow 2400 series forms).



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STATE REQUIREMENTS

Internal Audit

- Must be done annually by an Industry Supervisor using the 2400 series forms.

Training and testing

- Analysts must be trained by an Industry Supervisor on the test procedure per 2400 series forms and analysts must test unknowns annually.

Confirmation

- Facility must have a written agreement with a certified lab that will do their confirmation testing.



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STATE REQUIREMENTS

Training of Industry Analysts

- Must train all personnel who test incoming loads of milk (screen) initially and annually.

Training includes:

- 2400 series General Requirements
- 2400 series for test kits that you are using
- All QC forms used at your facility
- Positive Drug Residue Report form
- Tanker Disposal Report



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STATE REQUIREMENTS

Annual testing of Industry Analysts

- Analysts using a reader/printer must test at least three samples (one positive, one negative, third positive or negative).
 - Must correctly identify all three samples
 - Samples can be made in-house.
- Analysts using a visually read test must test DATCP-provided split samples.
 - Eight samples – must correctly identify at least seven samples



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INDUSTRY ANALYSTS (IA)

Analysts trained and tested in this manner can:

- Screen loads of milk.
- Do verification of initial positive tanker.
 - Duplicate testing with positive and negative controls.

They CANNOT:

- Confirm positive loads.
- Test producer samples.
- Clear a positive producer.
- Train other analysts.



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INDUSTRY SUPERVISORS (IS)

Industry Supervisors that are not certified can:

- Screen loads of milk.
- Do verification of initial positive tanker.
 - Duplicate testing with positive and negative controls.
- Train other analysts.

They CANNOT:

- Confirm positive loads.
- Test producer samples.
- Clear a positive producer.



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ONLY CERTIFIED ANALYSTS (CA OR CIS)

CAN:

- Confirm positive loads.
- Test producer samples.
- Clear a positive producer.

How do I know if I'm certified?

- Is the lab you are working at certified?
- Have you gone through an on-site evaluation?
- Do you have a license as a certified analyst?

YOU CAN BE APPROVED AS AN INDUSTRY SUPERVISOR (IS), BUT YOU WILL NOT BE A CERTIFIED INDUSTRY SUPERVISOR (or a CIS) IF YOU DO NOT MEET THESE CRITERIA



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Wisconsin Appendix N Personnel Chart

	Screen Loads	Confirm Loads	Train Industry Analyst(s) (IA)	Test** Industry Analyst(s) (IA)	Unknown/PT Samples			Evaluation	
					Attend IS Workshop	In-house (3 unknowns)	State Provided	Internal Audit	LEO On-site
Industry Supervisor (IS) doing Reader Printer Test	X		Initial & Annual	Initial & Annual	Biennial			Annual	
Industry Supervisor (IS) doing Visual Read Test	X**		Initial & Annual				Annual	Annual	Initial
Certified Industry Supervisor (CS)	X	X	Initial & Annual	Initial & Annual	Biennial		Annual		Biennial
Industry Analyst (IA) doing Reader Printer Test	X						Initial & Annual		
Industry Analyst (IA) doing Visual Read Test	X*						Annual		Initial
Certified Analyst (CA)	X	X					Annual		Biennial

Certified Analysts and **Certified** Industry Supervisors MUST work at a Certified Lab

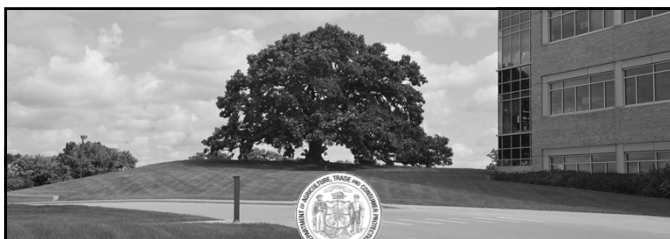
*NOTE: Industry Supervisor (IS) or Industry (IA) doing a Visual Read Test must pass an on-site evaluation by an LEO before screening any loads of milk.

NOTE: Certified Industry Supervisor (CS) or Industry Supervisors doing Reader Printer test (IS) must create at least 3 unknown samples for only **non-certified Industry Analyst(s) doing Reader Printer test (IA)

Visual Read Test • Delvotest P mini • Delvotest 5 Pack • Charm BDA	Reader Printer Test • Charm SL, 3 SLA, BLJ95C • Idexx SNAP BL & Teta • Charm II	• Charm Teta, Sulf6, TRIO
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 Fall 2024 Workshop



Drug Residue Testing – 2400 Series Forms - General Requirements



Kate Angeles, Lisa Roskom, Mary Wegner, and Melissa Francois – Laboratory Evaluation Officers – Division of Food and Recreational Safety

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WORK AREA AND STORAGE

- Ample work and storage space
 - Areas neat, clean, and orderly
- Well ventilated and temperature controlled
 - Temperature is specified by test kit manufacturer.
 - Humidity is a concern.
- Adequate lighting (>50 FC, 100 FC suggested)
 - Placement is important.
 - Analysts must not work in their own shadow.






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THERMOMETERS OR TEMPERATURE MEASURING DEVICES

NIST traceable thermometer (“reference” thermometer)

- Must come with certificate (showing calibration at 3 temperature points or more)
- Must be checked at ice point annually
- Must cover appropriate range of temperatures measured
- Must be graduated in 1.0°C increments
 - Certified labs graduated in 0.5°C increments

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THERMOMETERS OR TEMPERATURE MEASURING DEVICES

Working thermometers ("in use" thermometers)

- Sample, incubator, refrigerator, and freezer

Must be checked against NIST thermometer

- Annually (within 12-month period)
- At temperature of use
- Accurate to $\pm 1.0^{\circ}\text{C}$
- All results documented (date, thermometer IDs, certified thermometer reading, working thermometer reading, correction factor, analyst ID)
- Tagged with ID, date of check, temperature checked at, and correction factor



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THERMOMETERS OR TEMPERATURE MEASURING DEVICES

May be calibrated at another location

- Testing done annually
- Documentation of the calibration check must be kept at your lab.
- Thermometers tagged with ID, date of check, temperature checked at, and correction factor
- Lab doing calibration should send documentation of their NIST thermometer.



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TEMPERATURE MONITORING SYSTEMS

Continuous temperature monitoring: electronic monitoring or chart recorder (App N - refrigeration)


- System must record temperature at same or greater frequency as required for MIG/AIG thermometers.
 - An alert can be set to register when out of acceptable temperature range.
 - If temperature is out of range more than two hours, document corrective action taken.
 - Backup power source for system in case of power failure
- Records available and accessible for auditing
- Weekly comparisons against accurate thermometer (chart recorder)
- Annual accuracy check required (all systems)



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REFRIGERATION


- Size appropriate for workload
 - Too small impedes proper air flow
- Maintains samples at 0.0 to 4.5°C
- Controls, media and reagents stored
 - No food or drink stored
- Temperature recorded once a day
 - Certified labs twice per day – AM and PM
 - Corrective action noted if temp unacceptable
- Thermometers on top and bottom shelves of use
- Thermometer bulb/sensor immersed in liquid



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FREEZER


- Size appropriate for work load
- Maintains temperature of -15.0°C or colder
- Controls, media and reagents stored
 - No food or drink stored
- Temperature recorded once a day
 - Certified labs twice per day – AM and PM
 - Corrective action noted if temperature unacceptable.
- Thermometer bulb submerged in anti-freeze liquid



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PIPETTORS

- Fixed volume
- Etched or imprinted with identification #
- Proper tips used with pipettor
 - Tips do not need to be sterile (single use).
 - Big enough to allow air space



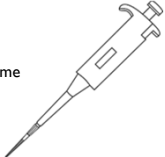

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PIPETTORS

Accuracy checked every six months

- On-site or at another location (maintain records)
- Tag pipettor with date accuracy check done
 - 10 weighings; average must be within $\pm 5\%$ of specified volume
- Use deionized water at room temperature.



Recommend a "spare" (certified labs).

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BALANCE/SCALE


- Only needed if checking the accuracy of a fixed volume pipettor in-house
- Sensitivity appropriate to use (0.001g sensitivity appropriate in most instances)
- Checked monthly with ASTM 1, 2, 3 or Class S or S1 weights (weights need certificate).
 - Within 30 days prior to pipettor accuracy checks
- Checked annually by a qualified service representative
- Records maintained

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TANKER SAMPLE REQUIREMENTS

<ol style="list-style-type: none"> 1. Take and record the temperature of tanker. 2. Collect a representative sample for antibiotic testing. <ul style="list-style-type: none"> ▫ Record time of sample collection. ▫ Temperature control (TC) is required if not tested "without delay". 3. Transport samples to lab. <ul style="list-style-type: none"> ▫ Protect samples from contamination. ▫ Protect samples from temp abuse. 	<ol style="list-style-type: none"> 4. Test samples promptly. <ul style="list-style-type: none"> ▫ Record date/time at start of testing. ▫ Check and record temperature of TC. <ul style="list-style-type: none"> • Or use temperature of tanker if tested "without delay." • Sample temperature needs to be documented in °C.
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PRODUCER TRACE BACK SAMPLES



- Samples should be accompanied by hauler TC (pilot) sample to determine temperature of samples.
- Samples should not be leaking.
- Sample tops should not be in direct contact with ice.
- Samples should not be submerged or floating in water/ice.
- Samples not meeting these requirements may still be tested.
 - Condition of samples must be documented.



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PERFORMANCE TESTING

- Positive and negative controls run on each new lot of test kits before the lot is used (QC or suitability).
 - Recommend testing upon receipt.
- Positive and negative controls run each day that testing is done.
- Reader calibrator strips/check devices run each day testing is performed.
- Rotate analysts who do performance checks.
- Maintain records for all performance testing.



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INITIAL TESTING OF TANKER SAMPLE

Documentation must show:

- Lab ID
- Test method used
- Sample ID
- Date and time testing started
- Test result
 - Numeric value (Charm/SNAP) or color (Delvo)
 - Interpretation (NF or POS)
- Analyst ID



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VERIFICATION OF INITIAL POSITIVE

Same analyst tests the same sample in duplicate with positive and negative controls using the same test kit.

Positive and negative controls must work properly.

- If both duplicates of the sample are negative, the milk may be received (reported as NF).
- If one or both of duplicate samples test positive, the tanker is presumptive positive.
- All testing to be documented.

Start filling out positive drug residue report form (for presumptive positive load sample).
End of testing for screening analyst.



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CONFIRMATION OF PRESUMPTIVE POSITIVE

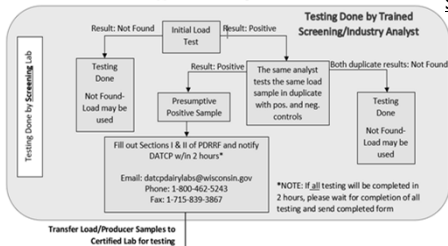
- Original tanker load and producer samples must be forwarded to a certified lab that uses an equivalent test method as the screening lab.
- If certified lab confirms load as negative, milk may be used.
- If certified lab confirms load as positive, milk must be disposed of and producer samples must be tested.
- Producer samples must be tested at the certified lab using the same test that was used to confirm the load as positive.
- All load confirmation testing and producer traceback testing is to be documented.



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APPENDIX N FLOWCHART

Appendix N Testing Flowchart

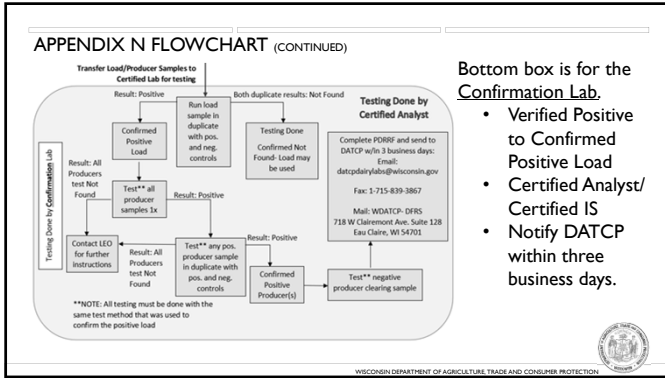


Top box is for the Screening Lab.

- Presumptive Positive to Verified Positive Load
- Trained Screening/ Industry Analyst
- Notify DATCP within two hours.



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DIRECT MILK SHIPMENTS REJECTED FOR DRUG RESIDUE

Collecting a clearing sample at a licensed dairy plant

- Sample taken at facility with a lab using the same or equivalent test.
- Sampling shall be done in accordance with ATCP 65.72(3)(c).
- Direct loads that are shipped to be tested as a clearing sample shall be shipped no more than 24 hours after the initial confirmed positive.
- Clearing samples tested within 24 hours may be "offered for sale" when screened negative.
- Loads shipped after 24 hours that test positive will be considered a second violation under ATCP 65.922(4).

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DIRECT MILK SHIPMENTS REJECTED FOR DRUG RESIDUE

Collecting a clearing sample when approved on the farm

- Sampled in accordance with ATCP 82.12(2m)
- From a properly agitated tanker that is located in a suitable shelter adjacent to, but not in the milkhouse ("suitable shelter" shall meet milkhouse standards)
- Using a division approved inline milk sampling device installed on the milk pipeline.

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REPORTS AND RECORDS

Report a positive result interpretation as POS.

- Not just a + sign (contrary to 2400 forms)

Report a negative result interpretation as NF (for "not found").

Keep all written records and printouts for at least two years.

Legibility of records is critical.

- No write-overs or whiteout
- If you make a mistake, strike out the incorrect information with a single line (example), initial it, and write correct info next to it.



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POSITIVE DRUG RESIDUE REPORT FORM

- Use most current version (10/2017).
- Section I and II to be filled out by screening lab.
- Original copy must go to certified lab doing the load confirmation (screening lab keep a copy).
- Certified lab completes sections III (load confirmation test data) and V (positive producer test data).
- Section IV – disposition of milk
- Section VI – negative recheck (producer) to resume shipping
- Forward completed form to DATCP.



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MISCELLANEOUS


- Heater block temperature to be documented each day of testing (thermometer to be in block when testing)
- If using Charm EZ reader for incubating test strips, the EZ printout is acceptable for the daily temperature documentation.
 - Charm thermometer needed for annual accuracy check of the Charm EZ incubator/reader unit.
- Heater block needs to be level.
- Positive and negative control information to be documented
 - Positive control – lot #, date made, expiration date
 - Negative control – source, date tested, expiration date




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MISCELLANEOUS


- Current safety data sheets
 - Test kits and positive control
- Current 2400 series forms (needed for annual internal audit)
- Tanker Disposal form
- Analyst Training Report form (send to LEOs)
 - Annual training/testing of analysts
 - Within 30 days, any addition/removal of analysts



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Drug Residue Testing – NCIMS Approved Drug Residue Tests


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COVERED IN THIS PRESENTATION:

- Types of tests approved
- Basic requirements for each test
- Basic procedures for each test
- Tests approved for other species
- Changes in the 2400 forms




NOTE: This presentation is a basic overview. Refer to the NCIMS 2400 forms for more specific information on each test.



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CONFIRMATION WITH EQUIVALENT TESTS

- If you confirm a screened positive with an equivalent test, it must detect the same drugs at or below the safe level.
- Be aware that two tests that detect the same drug may not detect it at the same level.
- A confirming test that detects more drugs than the screening test can be used.
 - As long as it detects the same drugs as the screening test at or below the safe level



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HOT OFF THE PRESS!!!!



BIG NEWS!

- ALL 2400 forms have been updated with new footers.
- Removed "FDA" in footer as the NCIMS Lab Committee now revises all the forms.
- All labs need to replace their old forms with these new forms


Not so big news:

- Only one form has had more changes than just the revision date. This is the 2400 form for the Charm SL, Charm 3 SL-3, and Charm BL30SEC tests.

HOWEVER - (BIG NEWS!!):

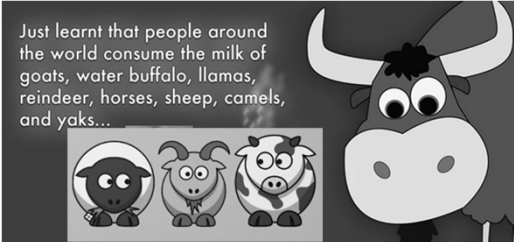

- This 2400 form has several MAJOR updates (more on this later)
- These changes only apply to the tests in this form.

FORM NCIMS 2400n Appendix N - General Requirements Rev. 03/2024



TESTS APPROVED FOR OTHER SPECIES

Just learnt that people around the world consume the milk of goats, water buffalo, llamas, reindeer, horses, sheep, camels, and yaks...

NCIMS TESTS APPROVED FOR GOAT MILK

- CHARM SL
- CHARM II
 - Sequential Assay
- CHARM BsDA
- Delvotest P
- Delvo 5-Pack
- IDEXX New SNAP




NCIMS APPROVED TESTS FOR SHEEP MILK

• **CHARM SL**



Sheep milk may be frozen prior to testing.

- Sample must be taken prior to freezing.
- Sample and container frozen and maintained together for up to 60 days
- Sample thawed and tested within 24 hours
- Frozen sheep milk sample(s) and controls must be centrifuged per procedure before running the assay.



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NCIMS APPROVED TESTS



Water Buffalo milk:

- CHARM SL
- Delvotest® P



Camel milk:

- IDEXX New SNAP



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TEST KITS APPROVED FOR APPENDIX N TESTING

(NOTE: THE CHARM FLUSBL FLUNIXIN AND BETA-LACTAM ASSAY HAS BEEN DISCONTINUED)

Commonly Used Tests

- Charm SL
- Charm 3 SL-3
- Charm BL30SEC
- Charm SULF
- Charm Tetracycline-SL
- Charm TRIO
- IDEXX SNAP
- Delvo 5 Pack
- Delvotest P



Uncommonly Used Tests

- Charm BsDA
- Charm II Beta-Lactam Assays:
 - Competitive
 - Sequential
 - Quantitative
- IDEXX Tetracycline
- Charm II Non-Beta-Lactam Assays:
 - Sulfonamide
 - Tetracycline



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VISUAL READ TESTS

- Charm BsDA
- Delvotest® P Mini
- Delvotest® 5-Pack

All tests use *Geobacillus stearothermophilus* spores and take about 2½ to 3 hours for the spores to germinate at 64°C. Presence of inhibitors will kill spores in seeded medium.



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VISUAL READ TESTS

Visual Read tests are recognized to detect:

- Penicillin
- Amoxicillin
- Ampicillin
- Cepapharin
- May also be able to detect other drugs as well, but not consistently



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VISUAL READ TESTS

- Confirmation requires samples and controls heated in a 82±2°C water bath for two minutes (TC required), tested in duplicate.
- Beta-lactamase:
 - Optional for verification of the initial positive in screening sites
 - However, if used, results must be reported.
 - Required for Appendix N confirmation
- Refer to 2400 form for reporting details.



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DELVOTEST®



Delvotest P Mini
▪ Individual test wells detect Beta-lactams.



Delvotest 5 Pack
▪ 96-well blocks can be broken into strips of 16 wells. Usually used for Section 6 (milk quality) testing due to minimum volume of wells necessary per use.



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DELVOTEST REQUIREMENTS

- Room temperature range for testing 16-27°C (61-81°F)
- Heater block temperature:
 - 64±1°C for Delvo P Mini
 - 64±2°C for Delvo 5-Pack
- Nutrient tablets maintained in original opened bottle at room temperature with desiccant enclosed (mark with date opened). Discard remaining tablets when last ampoule/well used.
- Kits stored at 0-15°C.
- Beta-lactamase instructions now refer to manufacturer for directions on use, due to multiple manufacturers.



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DELVOTEST PROCEDURE

- Add one tablet to each labeled ampoule/well. Make sure nutrient tablets are touching the media.
- Add 100µL mixed sample.
- Seal Delvotest 5 Pack wells with provided sealing strips.
- Incubate at 64°C for the time period specified by the manufacturer (about 2½ hours). Controls must show proper color reactions.
- Ampoules **yellow** or **yellow/purple** after incubation are negative (NF).
- Ampoules **purple** are presumptive positive and must be confirmed with heating step.
- After heating, any **yellow** in the ampoule/well is negative (Not Found).



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COMMON TESTS USING A READER/PRINTER -
BETA LACTAM ASSAYS:

- Charm Sciences
 - Charm SL
 - Charm 3 SL-3
 - Charm BL30SEC
 - Charm TRIO
- Idexx New SNAP®



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ALL CHARM TEST STRIP ASSAYS
SHARE THESE SAME REQUIREMENTS:

- Charm SL
- Charm 3 SL-3
- Charm BL30SEC
- Charm SULF
- Charm Tetracycline-SL
- Charm TRIO
- Incubator temperature $56 \pm 1^\circ\text{C}$
- Negative control -600 or more negative
- Positive control +400 or more positive



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BASIC PROCEDURE FOR CHARM TEST STRIP ASSAYS

1. Take out test strips.
 1. As needed.
 2. Or store extras in a dry, labeled container at room temperature.
 1. Dispose of unused test strips at the end of the day.
2. Label each test strip, avoid crushing sample compartment.
3. Mix sample, pipette within three minutes.



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BASIC PROCEDURE FOR CHARM TEST STRIP ASSAYS (CONT.)

- 4. **Place** first strip in incubator.
- 5. **Peel** strip cover back.
- 6. **Pipette** sample (avoid foam and bubbles).
 - i. With the pipettor/pipet vertical, slowly dispense into sample compartment.
- 7. **Seal** strip and repeat for next sample.



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BASIC PROCEDURE FOR CHARM TEST STRIP ASSAYS (CONT.)

- All samples completed within test kit time frames after placing first strip in incubator.
- Close and latch incubator cover, start timer.
- Total time of incubation as per test kit.
- Hold strips vertically if not reading immediately.
- Read within time specified per test kit.



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CHARM EZ INCUBATE AND READ PROCEDURE

Charm EZ Reader automatically sets channel and incubation temperature when strip is inserted.

- Mix sample, pipette within three minutes.
- **Place** strip in EZ Reader.
- **Peel** strip cover back.
- **Pipette** sample (avoid foam and bubbles).
 - With the pipettor/pipet vertical, slowly dispense into sample compartment.
- **Seal** strip.
- Close door to begin test.
 - EZ Reader automatically prompts for further testing when positive.



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CHARM EZ READER

- Charm is replacing old ROSA (and Pearl) readers with the EZ reader if the ROSA stops working.
- Is considered an equivalent (not the same) reader as the ROSA and Pearl readers.
 - Switching between readers is not allowed within a testing process (verification, load confirmation, etc.) when using both readers at a facility.



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CHARM EZ READER

- If you wish to switch modes between “Read Only” and “Incubate and Read”, you will first need to send the reader to Charm Sciences so they can change the mode and recalibrate the reader.



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CHANGES TO THE CHARM SL/3 SL-3/BL30SEC 2400 FORM

- New EZ-Protect Reader is included on form (but not available yet).
- Removed “EZ Compatible Strips” statement since all strips are now EZ compatible.
- SL-3 strips can now be shipped unrefrigerated if received within seven days.
 - Over seven days must be refrigerated
- A few wording updates/clarifications



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

CHANGES TO THE CHARM SL/3 SL-3/BL30SEC 2400 FORM NEGATIVE CONTROL QUALIFIER HAS BEEN ADDED

- ONLY approved for Charm SL, Charm 3 SL-3, and Charm BL30SEC tests.
- **No other tests can use this option.**
 - Other Charm SL-type tests to be approved to use the NCQ soon.
- Charm Freeze Dried Negative Control Qualifier (NCQ)
 - Can be used if no previously tested negative control milk is available for use
 - Basic procedure (see 2400 form for specifics):
 1. Rehydrate Negative Control Qualifier.
 2. Qualify raw milk sample as Negative Control.
 - Test NCQ and raw milk twice (all results \leq -600) and compare average to see if raw milk sample can be used as a Negative Control.



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CHARM SL

- Detects five of six Beta-lactams using ROSA Reader V1.03 or higher.
- Centrifuge required if using frozen controls.
 - After slowly thawing controls, centrifuge 3 minutes and cool.
 - Test portion below fat layer without mixing.
- Testing procedure specifications:
 - Close lid within 2 minutes of placing first strip in incubator
 - Total incubation time: 8 minutes, 9 minutes MAXIMUM.
 - Read within 5 minutes.



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CHARM 3 SL-3

- Detects all six Beta-lactams.
- ROSA Pearl Reader V3.00 or higher.
- Due to tight time frames of test, use an extra timer when running multiple samples to maintain time limits.
 - Testing procedure specifications:
 - Close lid within 1 minute, 15 seconds of placing first strip in incubator.
 - Total incubation time: 3 minutes.
 - 3 minutes, 30 seconds MAXIMUM.
 - Read within 3 minutes.



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CHARM BL30SEC

- Detects all six Beta-lactams.
- Testing procedure specifications:
 - EZ Reader in incubate and read mode required for this test.



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CHARM TRIO

- Detects Beta-lactams, Sulfonamides, and Tetracyclines.
 - **Confirmation must be performed with separate drug-specific tests.**
 - Tetracycline must be confirmed with Charm TET SL test (dilution confirmation).
- Must read with EZ Reader.
- EZ Reader must be in "Read Only" mode for Verification step



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CHARM TRIO REQUIREMENTS

- Can initially screen samples, and verify in duplicate with TRIO for BL and Sulfa. However, ANY positives in verification step must be confirmed with individual tests.
- Confirmation procedure must run each drug **separately** (using drug-specific tests – not Charm TRIO).
 - Tetracycline: Verification and confirmation tests are diluted.
 - Beta-lactam test picks up all six BL drugs, so must be confirmed with an equivalent test.
- Positive control contains all three drugs.
- Negative control must be cleared on all three drugs.



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CHARM TRIO PROCEDURE

- Testing procedure specifications:
 - Close lid within 90 seconds of placing first strip in incubator.
 - Total incubation time: 3 minutes, 4 minutes MAXIMUM.
 - Read within 3 minutes.
- EZ Reader will indicate what drug line(s) is(are) causing a positive.
 - Follow procedure in 2400 form for each drug's verification and confirmation step.
 - If duplicate testing detects drugs other than the drugs detected on the initial test, redo verification step for new drug that was detected.



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IDEXX NEW SNAP®



- Individual test kits for use with reader.
- Testing area must be well lit.
- Testing complete in about 10 minutes.



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

IDEXX NEW SNAP REQUIREMENTS

- Heater Block 45±5°C.
 - Testing area must be well lit.
- Kits stored at 0-7°C.
- Must use SNAPshot DSR Reader with printer.
- Reader Performance Check Set must be within limits.
- Can use frozen negative control. Positive control cannot be frozen, but can be made with frozen negative milk.



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

IDEXX NEW SNAP PROCEDURE

- Set out SNAP devices, samples tubes and pipettes for each sample.
 - Discard unused devices at the end of day.
- Label each device and sample tube.
- Place SNAP device on incubator block.
 - Make sure blue reagent pellet is in bottom of tube before removing cap.
- Mix sample, pipette within three minutes.
- Pipette 450 (± 50) µL sample into sample tube.
 - Sample tube should not be placed in heater block until after sample is pipetted into tube.



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IDEXX NEW SNAP PROCEDURE

- Incubate tube in heater block for 5 minutes (use timer).
- Pour contents of tube into sample well of SNAP device.
- Unit must be snapped when blue activation circle first **BEGINS** to disappear (unit remains in heater block).
- Incubate device for 4 minutes (use timer).
- Inspect control and test spots to determine if test is valid.
- Read **IMMEDIATELY** after final incubation with IDEXX Reader.
 - Read within 30 seconds maximum – test no more than two samples at a time to stay within this time limit.



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

COMMON TESTS USING A READER/PRINTER OTHER INHIBITOR ASSAYS:

Testing for other than beta-lactams:

- Currently, you are not required to test for other inhibitors, BUT
- If you test for it and find it, you must have it confirmed.

- Charm Sciences (ROSA)
 - Charm SULF
 - Charm Tetracycline SL
 - Charm TRIO



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

CHARM SULF SULFONAMIDE TEST

- Uses ROSA Reader V1.03 or higher set to SULF channel
 - or use EZ Reader
- Positive control made with 10ppb Sulfamethazine
- Test times are the same as SLBL (8-minute) test.
- All testing is run on an UNDILUTED sample (screening, verification, and confirmation).
- EZ Reader must be in "Read Only" mode for Verification and Confirmation steps.



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CHARM ROSA TETRACYCLINE SL TEST

- Uses ROSA Reader V1.03 or higher set to TETRA channel
 - or use EZ Reader
- Test times are the same as SLBL (8-minute) test.
- Screening and producer traceback run with UNDILUTED sample
- Verification, load confirmation, and producer confirmation run with DILUTED sample
- EZ Reader must be in "Read Only" mode for Verification and Confirmation steps.



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CHARM ROSA TETRACYCLINE SL

- Negative control
 - Previously tested tetracycline negative raw milk
- Positive control.
 - Prepare with three tablets 100ppb Oxytetracycline in 5mL negative control (raw milk).
- ROSA Reader – TETRA slow blink
- Test procedure is the same as SL Beta-lactam (screen).



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CHARM ROSA TETRACYCLINE SL

- DILUTION STEP REQUIRED FOR CONFIRMATION.
- Initial screen, producer traceback, and negative clearing samples are run UNDILUTED.
 - Any positive load or producer result is retested in duplicate with the dilution step.
- Load verification, load confirmation, and producer confirmation samples are run DILUTED.
 - Dilute the sample using 1 mL Tetracycline Dilution Buffer and 1 mL sample/control and mix before testing (1 mL = 1000µL).



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

UNCOMMON TESTS – BETA LACTAM ASSAYS:

- Charm BSDA
- Charm II Beta-lactam Assays
 - Competitive Assay
 - Sequential Assay
 - Quantitative Assay



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

UNCOMMON TESTS USING A READER/PRINTER
OTHER INHIBITOR ASSAYS:

- IDEXX Tetracycline
- Charm II Non-Beta-Lactam Assays:
 - Sulfonamide
 - Tetracycline

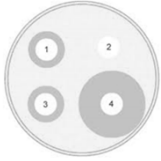
Testing for other than beta-lactams

- Currently, you are not required to test for other inhibitors, BUT
- If you test for it and find it, you must have it confirmed.



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

CHARM BSDA (BACILLUS STEAROTHERMOPHILUS DISK ASSAY) VISUAL READ TEST



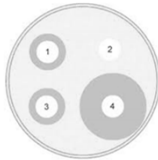
- One of the oldest approved tests. Uses media prepared in-house.
- 2½- to 3-hour incubation.
- May detect other inhibitors as well as Beta-lactams.



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CHARM BSDA (BACILLUS STEAROTHERMOPHILUS DISK ASSAY)

- Paper discs placed 10mm apart on agar media (use template).
- Dispense 90 µL of positive control (5ppb Pen G standard), negative control (zero standard), and up to five samples per plate.
- Incubate at 64±2°C, 2½ to 3 hours until well defined zones of inhibition are obtained on the positive control.
- Valid positive control zone is 16-20mm (use calipers readable to 0.1mm).
- Measurable zones >12.7mm must be promptly confirmed to report as positive for inhibitor or Beta-lactam residue.



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CHARM II TESTS

- Uses all equipment shown below to run test.
- It takes about 20 minutes to complete the test.
- Radioactive material needs proper handling and disposal.



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CHARM II TESTS

All Charm II tests have been consolidated into two forms (Rev 4/16):

- **Charm II Beta-Lactam Assays:** Competitive, Sequential, Quantitative, and Cloxacillin
 - Cloxacillin test has been withdrawn.
- **Charm II Other Inhibitor Assays:** Sulfonamides, Tetracyclines, and Chloramphenicol (this test is not NCIMS approved)

Carefully review forms – procedures are intermixed



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CHARM II TESTS

- Incubation temperatures are different for each assay – check form for temperature requirements.
- Vortex mixer and centrifuge required.
- Scintillation fluid expires six months after opening (mark with open date). Dispose of properly.
- Must establish positive and negative control points (watch percentages).
- Sample results less than 50 greater than control point are recounted (Beta-lactam Competitive, Sequential, and Quantitative assays only).
- Tests use radioactive materials – handle properly.



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IDEXX SNAP® TETRACYCLINE TEST REQUIREMENTS

- Same test requirements as Idexx SNAP Beta-lactam test
- Same test procedure as Beta-lactam test (screening only)

HOWEVER...



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

IDEXX NEW SNAP® PROCEDURE

- DILUTION STEP REQUIRED FOR CONFIRMATION.
- Initial screen, producer traceback, and negative clearing samples are run UNDILUTED.
 - Any positive load or producer result is retested in duplicate with the dilution step.
- Load verification, load confirmation, and producer confirmation samples are run DILUTED.
 - Dilute the sample using one part sample to nine parts tetracycline negative milk (fresh or frozen).
 - Controls are not diluted.



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Kate Angeles, Lisa Roskom, Mary Wegner, and Melissa Francois

Laboratory Evaluation Officers – Division of Food and Recreational Safety

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Fall 2024 Workshop



Drug Residue Testing – Industry Supervisor Responsibilities

Kate Angeles, Lisa Roskom, Mary Wegner, and Melissa Francois – Laboratory Evaluation Officers – Division of Food and Recreational Safety


WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION (DATCP)

Fall 2024 Workshop

THE BIG THREE

Responsibilities of Industry Supervisors

Training Analysts <ul style="list-style-type: none"> ▪ New hires ▪ All analysts annually 	Internal Audit <ul style="list-style-type: none"> ▪ NIST Thermometers ▪ Pipettors ▪ Performance testing ▪ Verification of initial positive tanker sample 	Submit Paperwork <ul style="list-style-type: none"> ▪ First page identification ▪ Fill in all blanks correctly ▪ Send to LEOs
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WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

#1. TRAINING ANALYSTS

New Hires <ul style="list-style-type: none"> ▪ Must be done before testing loads 	All Analysts <ul style="list-style-type: none"> ▪ Review and retrain annually
--	---

Training Should Include:

- Testing method procedures according to the pertaining 2400 Form
- Knowledge of the Appendix N General Requirements 2400 Form
- Ability to utilize all laboratory QC forms
- Positive Drug Residue Report Form completion
- "Unknown" sample testing with all methods



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

#1 TRAINING ANALYSTS-- ANALYST TRAINING LOG

Wisconsin Department of Agriculture,
Trade & Consumer Protection
Division of Food Safety
P.O. Box 8974, Madison, WI 53708
Telephone (608) 224-4712

APPENDIX N ANALYST TRAINING REPORT
Wis. Stats. § 19.23 & 19.25

1. IS YOUR NAME HERE CERTIFICATE EXPIRATION DATE YOUR EXP. DATE

2. IS _____ CERTIFICATE EXPIRATION DATE _____

FACILITY _____ PLANT # _____

ADDRESS _____

CITY/STATE _____

FACILITY INTERNAL AUDIT DATE: _____ DATE AUDIT COMPLETED _____

ANALYST NAME	DATE TRAINED	TEST METHOD	PROFICIENCY TEST RESULT PASS/FAIL	DATE OF PROFICIENCY TEST	IS INITIALS
		Charm SL			
		Delvo P			
		Charm SL3			

■ "Unknown" samples are three unknown samples (made in-house or purchased.)
 ■ Form can be filled out for all analysts.
 ■ Test method is the procedure used.
 ■ Include all needed information.
 ■ Send to the Lab Evaluation Officer within 30 days.

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#2 THE INTERNAL AUDIT

- Must be completed annually by due date
(This is required for screening labs.)
- Use the Appendix N General Requirements 2400 Form.
- Use the pertaining 2400 form(s) for each specific test kit (ie. Charm, Delvo, etc.)
- Locate these forms at www.ncims.org.

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#2 THE INTERNAL AUDIT....CONT'D

- Be sure to include the following information:
 - Thermometer Verification
 - Includes NIST certificate info and Ice Point Check
 - Pipette Verification
 - Twice a year – outlined on 2400 Form
 - Performance Testing of Equipment and Controls
 - i.e. Charm Reader calibration, positive and negatives values, positive follow up testing

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#2 THE INTERNAL AUDIT...CONT'D

TIME TO AUDIT

Use the 2400 Forms as a "checklist."
Verify your facility is in compliance by going line by line.

Have Questions?
Contact an LEO.
DATCPLEO@wisconsin.gov

- A checkmark, ok, or yes are acceptable answers on each line. ("RO" or "O" on electronic version)
- If not in compliance – don't just panic. FIX it.
- Mark a line "NA" if an item does not apply to your lab.
- **Fill in blank lines with needed information.**

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#2 THE INTERNAL AUDIT...
THERMOMETERS

3. Temperature Measuring Devices


a. National Institute of Standards and Testing (NIST) traceable thermometer or other temperature measuring device with certificate. Must be checked annually at ice point

1. Reference temperature measuring device identity:

	Serial #	Date of Certificate	Ice Point Date
a:	<input type="text"/>	<input type="text"/>	<input type="text"/>
b:	<input type="text"/>	<input type="text"/>	<input type="text"/>

2. Graduation/recording interval not greater than 1.0°C [NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, 0.5°C]


This requirement is found on the App N Gen. Req Form under #3



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#2 THE INTERNAL AUDIT: THERMOMETERS


- **HAVE** a National Institute of Standards and Testing (NIST) Traceable thermometer or other temperature measuring device **with Certificate.**
- **CHECK** the NIST annually at Ice Point (use ice slurry mix).
- **USE** your NIST to check the accuracy of lab thermometers.
 - *Check all in-use/working thermometers annually (12 month period).
 - * Document calibrations on a designated form at your facility.
 - *If calibrated off site, maintain copies of results.
 - * Tag thermometers with calibration information.




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#2 THE INTERNAL AUDIT ...

PIPETTES

BY WEIGHT 

BY VOLUME 

7. Pipettors, Calibrated, Fixed Volume or Electronic Only [Required for NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities]

- a. Pipettors etched with identification (imprinted serial numbers acceptable) and tagged with date accuracy checked
- b. Appropriate tips for pipettor(s) used **Tagged & Dated**
- c. Follow manufacturer's instructions unless otherwise stated regarding proper technique for use
- d. Pipetting devices accuracy checked on-site
- e. Pipetting devices accuracy checked at another location
 - 1. Location: _____
 - 2. Current and acceptable

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#2 THE INTERNAL AUDIT: PIPETTES

Average $\pm 5\%$ of the specified volume.
i.e. $300\mu\text{L} \pm 5\%$

- f. Check accuracy with ten (10) consecutive measurements, by weight or by volume (>1.0 ml using a class A graduated cylinder), using separate tip for each measurement, every 6 months
- g. Average of all 10 measurements must be $\pm 5\%$ of specified delivery volume; maintain records

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#2 THE INTERNAL AUDIT: PERFORMANCE TESTING

PERFORMANCE TESTING

10. Performance Testing

- a. Run a positive and negative control before use on each new lot of kits, must give appropriate results; maintain records
- b. Run a negative and positive control **DAILY** (on days testing), at each test site, must give appropriate results, if not, re-run controls (may be necessary to prepare new controls); if problem persists discontinue testing, contact State regulatory and seek technical assistance; maintain records
- c. If available from manufacturer, check instrument calibration with check devices **DAILY** (on days testing), must give appropriate results, if not, discontinue testing and seek technical assistance; maintain records
- d. If more than one analyst performs analysis, have different analyst run performance check on rotational basis

Common information to fill in for all the 2400 Forms:

- ▣ Incubator temperature
- ▣ Incubator time
- ▣ Serial # of the Charm reader
- ▣ High and low ranges for the calibrator strips
- ▣ Lot number and expiration date for the test kit
- ▣ Lot number and expiration date for the controls

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#2 THE INTERNAL AUDIT: FOLLOW-UP TESTING STEP #1

- Verification of an initial positive sample is the responsibility of the screening lab.
- Same sample tested by the same analyst using the same test in duplicate w/controls.

FOLLOW-UP ON TEST KIT POSITIVE RESULTS
 [Must comply with PMO Appendix N, current revision]

11. Verification of Initial Positive Tanker Samples

- The **SAME** sample is re-tested by the **SAME** analyst using the **SAME** test kit in **DUPLICATE** along with a positive and negative control
- Positive and negative controls give the appropriate result(s)
 - If positive and/or negative controls do not give appropriate results, re-run controls and samples. If problem persists seek technical assistance



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#2 THE INTERNAL AUDIT: FOLLOW-UP TESTING STEP #2



- * The confirmation and trace back testing is **NOT** done at a screening lab.
- * Write in the name of confirmation lab.
- * Fill lines with **"N/A"**.

12. Confirmation of Presumptive Positive Tanker Samples

[Only in an accredited laboratory or by a CIS (refer to M-a-85 current revision for listing of test kits to assure equivalence)]

- The **SAME** sample (or if it is suspect, a re-sample may be in **DUPLICATE** along with a...
- Positive and negative control

13. Trace back of Producers on a Confirmed Positive Tanker

[Only performed in an accredited laboratory or by a CIS (refer to current revision for listing of test kits to assure equivalence)]

- Samples must be between 0.0 and 4.5°C. Maintain records
- Perform an initial single test on each producer sample



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#3 SUBMITTAL OF INTERNAL AUDIT TO LEO

1.

First page identification includes: lab name and plant number, the date of the audit, and the name of the IS.

2.

Make a copy of the internal audit for your file.

3.


Submit the internal audit to the LEOs.




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And lastly.....

4. Set a reminder for due date of next years audit.



**CONGRATULATIONS!
YOUR AUDIT IS COMPLETE.**



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DAIRY SANITARIAN CHECKLIST

- Industry Supervisor certificate – good for two years
- Analyst training log on hand and current
- Incubator temperature records
- Incubator thermometer calibrated (tagged)?
- Pipettor calibrated (tagged)?
- Daily controls run?
- Are the daily reader checks run and in range?



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

LEO CONTACT INFORMATION

datcpleo@Wisconsin.gov


-OR-

Kate.Angeles@Wisconsin.gov (608) 416-0244


Lisa.Roskom@Wisconsin.gov (920) 360-3459

Mary.Wegner@Wisconsin.gov (608) 720-9612


Melissa.Francois@Wisconsin.gov (608) 419-4642



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION



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Drug Residue Testing – Guess Who?

Kate Angeles, Lisa Roskom, Mary Wegner, and Melissa Francois – Laboratory Evaluation Officers – Division of Food and Recreational Safety

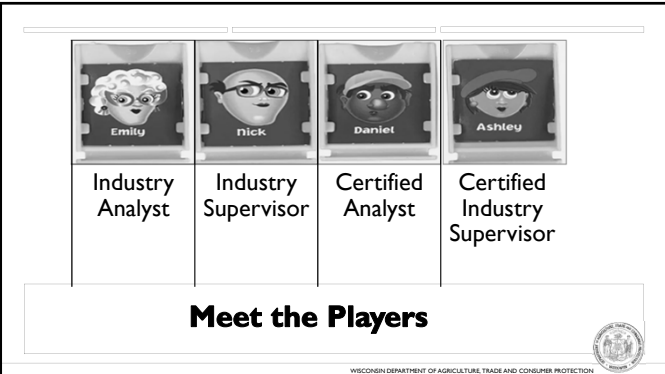
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LABORATORY EDITION

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 Emily	 Nick	 Daniel	 Ashley
Industry Analyst	Industry Supervisor	Certified Analyst	Certified Industry Supervisor

Meet the Players

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GUESS WHO?


- Train Industry (screening) Analysts
- Complete the lab's Internal Audit
- Screen incoming tanker samples
- Only approved to do the verification step of an initial positive



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

GUESS WHO?


- Observed by LEO during on-site evaluation
- Participates in State Provided Splits/PT testing
- Can confirm a positive load
- Never has attended Industry Supervisor training



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

GUESS WHO?


- Tested and correctly identified at least three unknown samples
- Trained with 2400 forms by Industry Supervisor
- Can screen incoming loads of milk



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

GUESS WHO?


- Train Industry (screening) Analysts
- Complete the lab's Internal Audit
- Observed by LEO during on-site evaluation
- Participates in State Provided Splits/PT testing



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

GUESS WHO?


- Individual passed Industry Supervisor (IS) test five years ago and hasn't been to an IS training since.
- Observed by LEO during on-site evaluation
- Participates in State Provided Splits/PT testing



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

GUESS WHO?

- Passed Industry Supervisor test one year ago
- Participates in State Provided Splits/PT testing
- Has NOT been observed by LEO at on-site



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

GUESS WHO?

- Tested and correctly identified at least three unknown samples three years ago
- Initial training with Industry supervisor was three years ago
- Has NOT been observed by LEO at on-site



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

PLEASE SEND INTERNAL AUDITS/TRAINING FORMS AND ANY QUESTIONS TO:

Team Email : datcpleo@Wisconsin.gov

Lisa Roskom: Lisa.Roskom@Wisconsin.gov or (920) 360-3459

Mary Wegner: Mary.Wegner@Wisconsin.gov or (608) 720-9612

Melissa Francois: Melissa.Francois@Wisconsin.gov or (608) 419-4642

Mail to: DATCP Attn: Laboratory Evaluation Officers PO Box 8911 Madison WI 53708

Remember: Legibility of all documents is critical -- electronic forms are available if needed



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

TO TAKE THE TESTS FOR INDUSTRY SUPERVISOR APPROVAL


Contact the LEO Team Email at datcpleo@Wisconsin.gov

To receive your test:

- Please provide your name, dairy plant name and number, email address, and test(s) requested.
- Previous Industry Supervisors will receive a testing link for each test.
- New Industry Supervisors will be trained and tested via Microsoft Teams.
 - You must have video and audio capability on your computer in order to receive the training/testing via Teams.



WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION



Kate Angeles, Lisa Roskom, Mary Wegner, and Melissa Francois
Laboratory Evaluation Officers – Division of Food and Recreational Safety
Email: datcpleo@wisconsin.gov Website: datcp.wi.gov
WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION (DATCP)
Fall 2024 Workshop

**APPENDIX N BULK MILK TANKER SCREENING TEST FORM
GENERAL REQUIREMENTS**

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

1. Work Area _____

- a. Ample working space and utilities _____
- b. Clean well ventilated, test kit used in temperature range specified by manufacturer, reasonably free from dust and drafts _____
- c. Adequate lighting, **[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, > 50 foot-candles at working surface (pref. 100)]** _____
- d. Eating and drinking not permitted in immediate testing area _____

2. Storage Space _____

- a. Cabinets, drawers, and shelves adequate _____
- b. Areas neat, clean and orderly _____

3. Temperature Measuring Devices _____

- a. National Institute of Standards and Testing (NIST) traceable thermometer or other temperature measuring device with certificate. Must be checked annually at ice point _____

1. Reference temperature measuring device identity: _____

Serial #	Date of Certificate	Ice Point Date
----------	---------------------	----------------

a: _____

b: _____

2. Graduation/recording interval not greater than 1.0°C **[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, 0.5°C]** _____

b. Range of test temperature measuring device appropriate for designated use _____

1. Mercury-in-glass (MIG), alcohol/spirit-in-glass (AIG) or electronic/digital thermometers in degrees centigrade _____

2. Plastic lamination recommended for mercury thermometers _____

3. Graduation/recording interval not greater than 1.0°C **[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, 0.5°C]** _____

- c. Accuracy of all test temperature measuring devices checked before initial use and annually _____
 - 1. Checked against NIST traceable thermometer _____
 - 2. Accurate to $\pm 1^{\circ}\text{C}$ when checked at temperature(s) of use _____
 - 3. Results recorded/documented and individual devices tagged _____
 - a. Tag includes identification/location, date of check, temperature(s) checked and correction factor(s), as applicable _____
- d. Temperature measuring devices are to be read to the nearest graduation/ recording interval, optionally labs may interpolate between graduations _____
- e. Temperature Monitoring Systems (wired/wireless) _____
 - 1. The software must record temperature reading from each sensor/probe in the piece of equipment being monitored at the same or greater frequency as stipulated for MIG or AIG thermometers. Optionally, set to register an alert/alarm when out of the acceptable temperature range _____
 - a. When temperature(s) are out of acceptable range for greater than two hours, event must be documented and corrective action taken as necessary; maintain records _____
 - 2. Optionally, a minimum two-day backup power source (battery/electrical) for the temperature monitoring system and/or all required sensors/probes, remote signal device and monitor/controller may be employed in case of power failure _____
 - 3. Temperature monitoring system records for each piece of equipment must be available/accessible for auditing as described in item 3.c above _____
- f. Automatic temperature recording instruments, if used, compared weekly against an accurate thermometer; maintain records _____
- g. Temperature measuring device(s) checked for accuracy at another location _____
 - 1. Location: _____ _____
 - 2. Current and acceptable _____
 - 3. Copy of record on-site _____
- h. Dial thermometers not used in the laboratory _____

4. Refrigeration (Sample _____)
 (Reagent _____)
- a. Size adequate for workload _____
 - b. Maintains samples at 0.0-4.5°C _____
 - c. Used for storage of milk or milk products, media and reagents only _____
 - 1. Not to be used to store food or drink for consumption _____
 - d. Record/download temperature (corrected) daily, from two temperature measuring devices with bulbs or sensor/probe immersed in liquid (in sealed containers) **[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, AM and PM]** _____
 - e. Temperature measuring devices located on upper and lower shelves of use _____
5. Freezer (_____)
- a. Size adequate for workload _____
 - b. Maintains -15°C or below _____
 - c. Used for storage of frozen milk products, controls, media and reagents only _____
 - 1. Not to be used to store food or drink for consumption _____
 - d. Record/download temperature (corrected) daily, from temperature measuring device with bulb or sensor/probe immersed in liquid (in sealed container) **[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, AM and PM]** _____
6. Balance, Electronic (if necessary) _____
- a. Weight capability appropriate for intended use _____
 - b. Appropriate sensitivity for accuracy check of pipetting devices within a tolerance of ±5% (0.001g sensitivity appropriate in most instances) _____
 - c. Checked monthly with Class S or S1, or equivalent ASTM 1, 2, or 3 weights corresponding to normal use of balance (At a minimum, Appendix N drug residue testing only laboratories must check the balance calibration within 30 days prior to the pipettor accuracy check) _____
 - 1. Certificate or other verification of authenticity _____
 - 2. Free from excessive wear, filth and corrosion _____

3. Weights within class tolerance _____

d. Checked annually by a qualified service representative _____

1. Date of Last Check: _____

e. Maintain records _____

7. Pipettors, Calibrated, Fixed Volume or Electronic Only [Required for NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities] _____

a. Pipettors etched with identification (imprinted serial numbers acceptable) and tagged with date accuracy checked _____

b. Appropriate tips for pipettor(s) used _____

c. Follow manufacturer's instructions unless otherwise stated regarding proper technique for use _____

d. Pipetting devices accuracy checked on-site _____

e. Pipetting devices accuracy checked at another location _____

1. Location: _____

2. Current and acceptable _____

3. Copy of record on-site _____

f. Check accuracy with ten (10) consecutive measurements, by weight or by volume (>1.0 ml using a class A graduated cylinder), using separate tip for each measurement, every 6 months _____

g. Average of all 10 measurements must be $\pm 5\%$ of specified delivery volume; maintain records _____

h. Or, check accuracy with 10 consecutive readings once every 6 months using the Artel PCS Pipette Calibration System, average of all 10 readings must be $\pm 5\%$ of specified delivery volume; maintain records/printouts _____

1. PCS Calibration System Validation, upon receipt, validate the instrument by following the manufacturer's protocol _____

2. PCS Pipette System Quality Control _____

a. Following manufacturer's Procedure Guide and instrument prompts, perform an instrument calibration every 30 days or just prior to use _____

b. Record results and file Calibration Certificate (printout) _____

3. Store reagent kits and Instrument Calibrator kits at room temperature _____

Lot #: _____ Exp. Date: _____

4. Reagent Blanks and Sample Solutions are the same lot _____

5. PCS Pipette Calibration System Procedure, follow manufacturer's Procedure Guide and instrument prompts _____

i. Maintain records _____

8. Deionized Water or Equivalent, or as specified by manufacturer _____

SAMPLES

9. Sample Requirements _____

a. Appendix N tanker sample(s) _____

1. Prevent contamination with disinfectants from hands or other sources _____

2. Ascertain temperature of bulk milk tanker; maintain records _____

3. Secure a representative sample for testing. If sample will not be tested without delay then a temperature control (TC) sample must be taken at the same time, transported, and maintained with the tanker sample(s) until it is tested _____

4. Tanker sample(s) tested promptly upon arrival at the testing location (date and time recorded) _____

a. Determine sample temperature by inserting a pre-cooled thermometer (pre-cooling of electronic/digital thermometer probes is not necessary) into temperature control _____

b. Temperature of bulk milk tanker may be used for temperature as received and tested if sample testing begins without delay _____

b. Appendix N Producer Trace Back Samples (Sample(s) not meeting the conditions outlined below may still be tested. The certified laboratory or CIS will document the condition of the sample(s)) _____

1. Samples should be accompanied by a temperature control (TC). If no TC, aliquot sample(s) for testing and measure temperature using one of the producer samples _____

2. Sample(s) should not be leaking _____

3. Tops of samples should be protected from direct contact with ice _____

- 4. Unprotected samples should not be submerged in water and/or ice or slush

PERFORMANCE TESTING

10. Performance Testing

- a. Run a positive and negative control before use on each new lot of kits, must give appropriate results; maintain records
- b. Run a negative and positive control **DAILY** (on days testing), at each test site, must give appropriate results, if not, re-run controls (may be necessary to prepare new controls); if problem persists discontinue testing, contact State regulatory and seek technical assistance; maintain records
- c. If available from manufacturer, check instrument calibration with check devices **DAILY** (on days testing), must give appropriate results, if not, discontinue testing and seek technical assistance; maintain records
- d. If more than one analyst performs analysis, have different analyst run performance check on rotational basis

FOLLOW-UP ON TEST KIT POSITIVE RESULTS
[Must comply with PMO Appendix N, current revision]

11. Verification of Initial Positive Tanker Samples

- a. The **SAME** sample is re-tested by the **SAME** analyst using the **SAME** test kit in **DUPLICATE** along with a positive and negative control
- b. Positive and negative controls give the appropriate result(s)
 - 1. If positive and/or negative controls do not give appropriate results, re-run controls and samples. If problem persists seek technical assistance
- c. If one or both duplicates is positive the tanker sample is **PRESUMPTIVE POSITIVE** and the sample is referred to the designated certified laboratory or Certified Industry Supervisor (CIS) as specified by the facility's protocol as per Agreement with the State Regulatory Agency
- d. Presumptive positive samples must be forwarded to a certified laboratory, not tested by screening facility; producer samples must be tested by a certified laboratory
- e. If both duplicates are negative milk may be received and processed, record and report as **NOT FOUND**

- f. Complete applicable section of Positive Report form and maintain records of all analyses

- 1. For Presumptive Positive samples, maintain a copy of the Positive Report form and forward the original to the certified laboratory or CIS

12. Confirmation of Presumptive Positive Tanker Samples
[Only in an accredited laboratory or by a CIS (refer to M-a-85 current revision for listing of test kits to assure equivalence)]

- a. The **SAME** sample [or if it can be demonstrated that the original sample is suspect, a re-sample may be used at the State's discretion] is tested in **DUPLICATE** along with a positive and negative control

- b. Positive and negative controls give the appropriate result(s)

- 1. If positive and/or negative control do not give appropriate results, re-run controls and samples, if problem persists seek technical assistance

- c. If one or both duplicates is positive the tanker sample is **CONFIRMED POSITIVE**, milk may not be processed, contact State Regulatory

- d. Producer trace back performed on all producer samples from the load, see item 13

- e. If both duplicates are negative milk may be received and processed, record and report as **NOT FOUND**, producer trace back is not performed

- f. Complete applicable section of Positive Report form and maintain records of all analyses

- 1. For Confirmed Positive samples, maintain a copy of the Positive Report form and forward the original to the State Regulatory Agency

13. Trace back of Producers on a Confirmed Positive Tanker
[Only performed in an accredited laboratory or by a CIS (refer to M-a-85 current revision for listing of test kits to assure equivalence)]

- a. Samples must be between 0.0 and 4.5°C. Maintain records

- b. Perform an initial single test on each producer sample

- c. Any producer sample that is positive must be re-tested

- d. The **SAME** sample is re-tested by the **SAME** analyst using the **SAME** test in **DUPLICATE** along with a positive and negative control

- e. Positive and negative controls give the appropriate result(s)

- 1. If positive and/or negative control do not give appropriate results, re-run controls and samples, if problem persists seek technical assistance

- f. If one or both duplicates is positive the producer sample(s) is (are) **POSITIVE** _____
- g. If both duplicates are negative record and report the appropriate producer sample(s) **NOT FOUND** _____
- h. Complete applicable section of Positive Report form and maintain records of all analysis _____
 - 1. For Confirmed Producer Positive samples, maintain a copy of the Positive Report form and forward the original to the State Regulatory Agency _____

REPORTING AND RECORDS

14. Reporting and Records _____

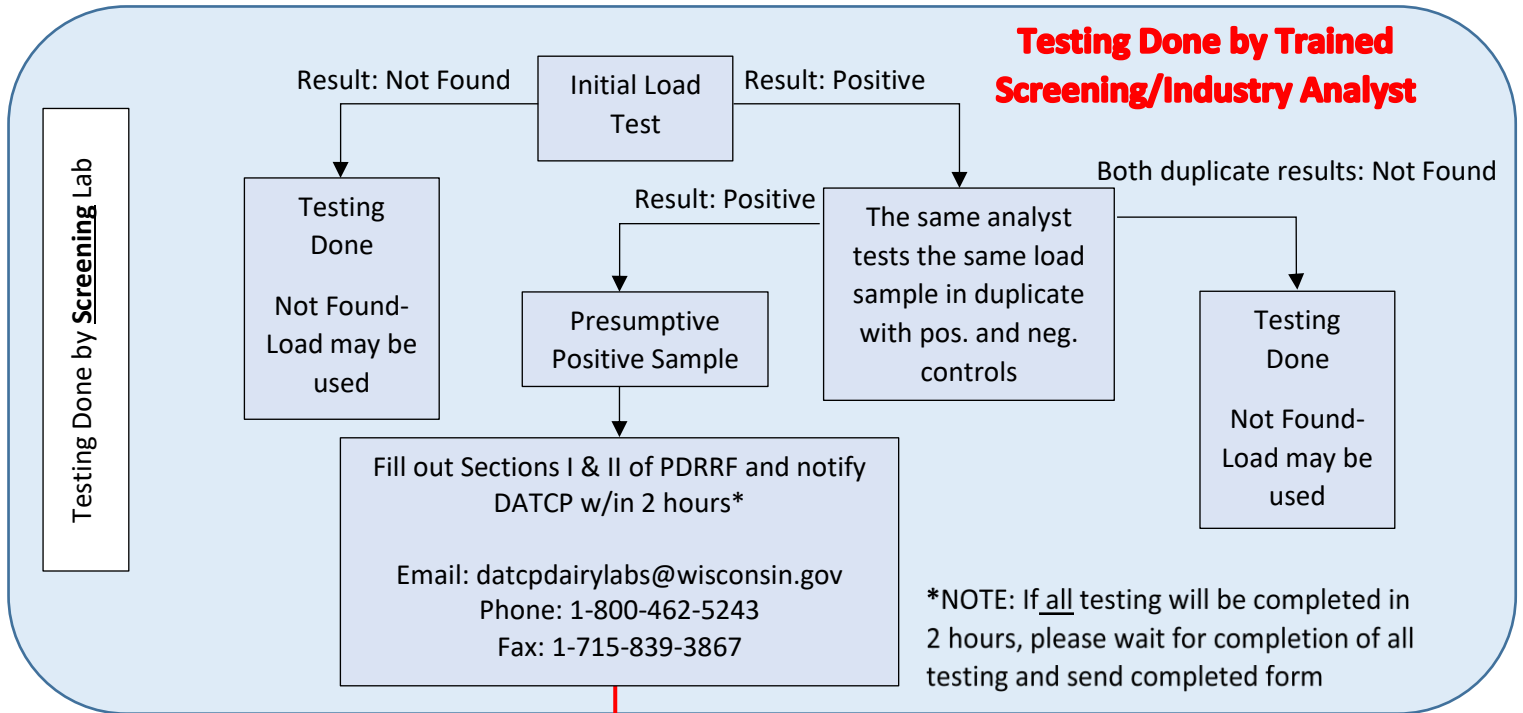
- a. Report as **Positive (+)** for beta-lactam, specific drug or inhibitor (when a non-specific microbial inhibitor test used without beta-lactamase) when demonstrated _____
- b. Report as **Not Found (NF)** when demonstrated _____
- c. Record test performed, interpretation of unknowns (samples) and controls _____
- d. Records, including all printouts, maintained for 2 years _____

MISCELLANEOUS

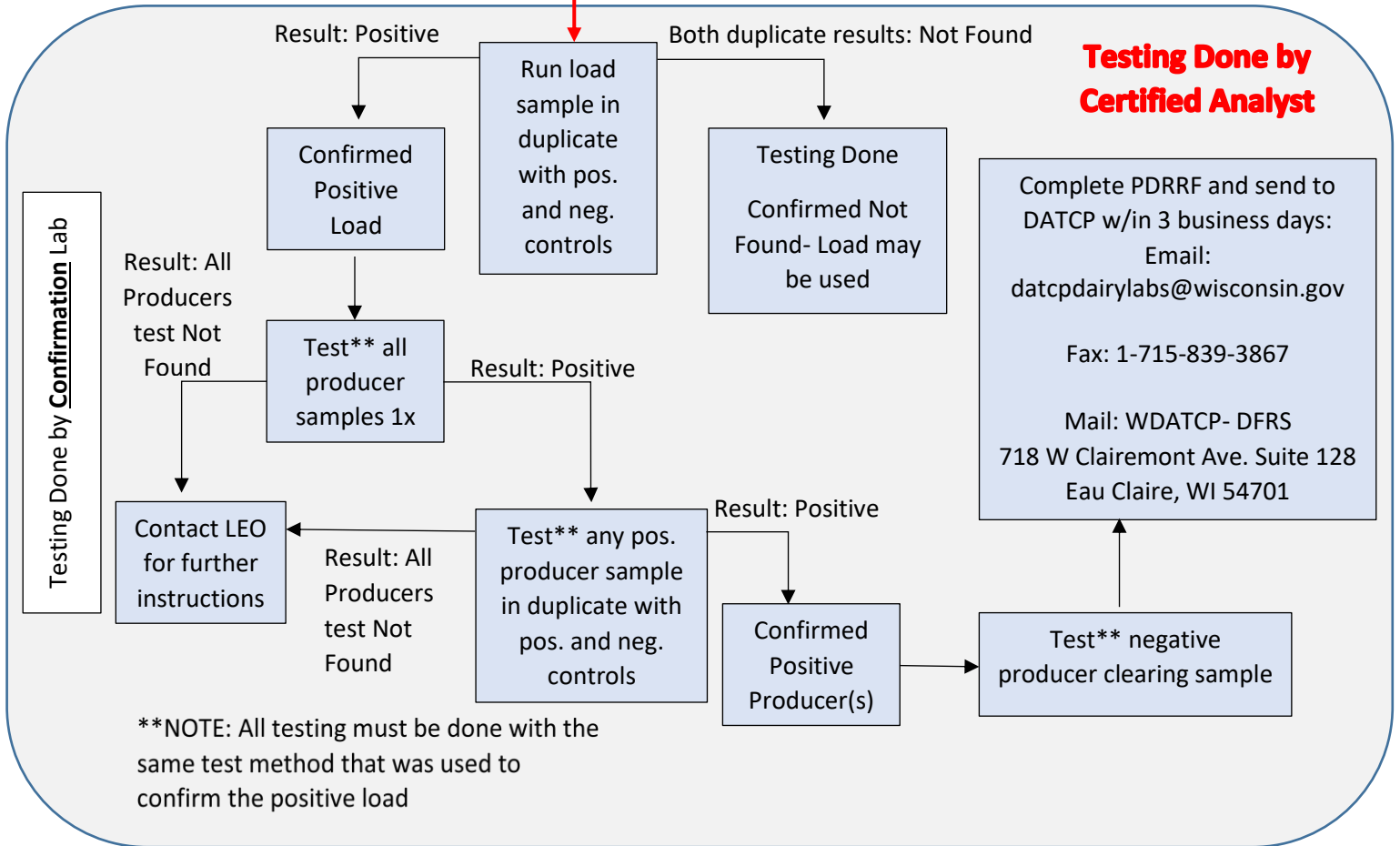
15. Miscellaneous _____

- a. Current Safety Data Sheets (SDS) accessible to analysts _____
- b. Current, applicable survey forms available in laboratory _____
- c. Positive Report forms available with instructions _____
- d. Personnel adequately trained _____
- e. Required split/check sample participation _____

Appendix N Testing Flowchart



Transfer Load/Producer Samples to Certified Lab for testing





Wisconsin Department of Agriculture, Trade and Consumer Protection
 Division of Food and Recreational Safety
 718 W. Clairemont Ave., Ste. 128, Eau Claire, WI 54701
 Phone: (715) 839-3844 Fax: (715) 839-3867

POSITIVE DRUG RESIDUE REPORT FORM

Wis. Stat. §§ 97.22 and 97.20

REPORT LOADS OF MILK CONTAINING DRUG RESIDUE ON THIS FORM

Complete the information in sections I and II immediately (within 2 hours) and provide this information to the Department's Division of Food and Recreational Safety by telephone, fax or e-mail. Then, complete the rest of the form and submit within 3 business days to: WDATCP, Division of Food and Recreational Safety, 718 W. Clairemont Ave., Ste. 128, Eau Claire, WI 54701. Retain a copy for your records.

HOT LINE NUMBER: (800) 462-5243 **FAX NUMBER:** (715) 839-3867 **E-MAIL:** datcpdairylibs@wisconsin.gov

I. LOAD IDENTIFICATION							
RECEIVING PLANT:					PLANT NUMBER:		
PLANT ADDRESS/LOCATION:				CITY:		STATE:	ZIP:
TANKER LICENSE NUMBER:	WEIGHT OF LOAD:	LOAD NUMBER:	NAME OF HAULER:				
ORIGINATING PLANT NAME (if different from receiving plant):					PLANT NUMBER:		
II. LOAD SCREENING TEST INFORMATION							
DATE LOAD SCREENED POSITIVE:	TIME:	<input type="checkbox"/> AM	TEST METHOD:	TEST KIT LOT #:			
		<input type="checkbox"/> PM					
SCREENED POSITIVE FOR:		DATE POSITIVE RESULT PHONED, FAXED, EMAILED TO DATCP:			TIME:		
<input type="checkbox"/> BETA LACTAMS <input type="checkbox"/> TETRACYCLINES					<input type="checkbox"/> AM		
					<input type="checkbox"/> PM		
NAME OF PERSON REPORTING:					PHONE NUMBER:		
III. LOAD CONFIRMATION TEST							
TESTING SITE:	SAMPLE RECEIVED:		<input type="checkbox"/> AM	TEST STARTED:	<input type="checkbox"/> AM		
	DATE:	TIME:	<input type="checkbox"/> PM	DATE:	TIME:	<input type="checkbox"/> PM	TEMP:
TEST METHOD:	TEST KIT LOT #:		TEST RESULT #1:		TEST RESULT #2:		
			<input type="checkbox"/> POS <input type="checkbox"/> NF		<input type="checkbox"/> POS <input type="checkbox"/> NF		
CERTIFIED WI LAB LICENSE #:		NAME OF CERTIFIED INDIVIDUAL:			CERTIFIED LAB ANALYST LICENSE #:		
105 -							
IV. DISPOSITION OF MILK							
<input type="checkbox"/> DUMPED** <input type="checkbox"/> USED IN PROCESSING <input type="checkbox"/> LOAD REJECTED & RETURNED TO SELLER**							
**Complete Tanker Disposal Report Form and maintain on file.							
NAME OF SELLER CONTACT PERSON - Reporting plant must notify supplying plant IMMEDIATELY. (ONLY FOR LOAD REJECTED):					DESTINATION STATE:		
V. POSITIVE PRODUCER SAMPLE & TEST DATA							
PLANT # - PATRON #:	PRODUCER NAME:			PRODUCER GRADE:	DIRECT SHIPPER:		
				<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> YES <input type="checkbox"/> NO		
SAMPLE COLLECTION:		<input type="checkbox"/> AM	SAMPLE COLLECTED BY - BMWS NAME & LICENSE #:				
DATE:	TIME:	<input type="checkbox"/> PM	TEMP:				
TEST STARTED:	<input type="checkbox"/> AM	TEST METHOD:	TEST KIT LOT #:	TEST RESULT #1:	TEST RESULT #2:		
DATE:	TIME:	<input type="checkbox"/> PM		<input type="checkbox"/> POS <input type="checkbox"/> NF	<input type="checkbox"/> POS <input type="checkbox"/> NF		
CERTIFIED WI LAB LICENSE #:		CERTIFIED LAB ANALYST LICENSE #:					
105 -							
VI. NEGATIVE RECHECK/RESUME SHIPPING							
SAMPLE COLLECTION:		<input type="checkbox"/> AM	SAMPLE COLLECTED BY - BMWS NAME & LICENSE #:				
DATE:	TIME:	<input type="checkbox"/> PM	TEMP:				
TEST STARTED:	<input type="checkbox"/> AM	TEST METHOD:	TEST KIT LOT #:	TEST RESULT:			
DATE:	TIME:	<input type="checkbox"/> PM		<input type="checkbox"/> NF			
CERTIFIED WI LAB LICENSE #:		CERTIFIED LAB ANALYST LICENSE #:					
105 -							

POSITIVE DRUG RESIDUE REPORT FORM

INSTRUCTIONS

All tanker loads of milk, including direct ship tankers from single producers, received by a dairy plant shall be tested for drug residue. If the screening site gets a positive test result on the first test of the load, the screening site must test the same sample, in duplicate, with positive and negative controls.

All positive test results, including direct ship tankers from single producers, must be reported to the Department using this form.

All confirmed positive tankers must be disposed of properly. The disposal is the responsibility of the dairy plant.

1. The information in Sections I and II must be completed IMMEDIATELY (within 2 hours) and this information is reported to the Division of Food and Recreational Safety.

By Telephone: 1-800-462-5243
By FAX: 1-715-839-3867
By E-mail: datcpdairylibs@wisconsin.gov

2. The dairy plant screening the load positive is responsible for assuring that the confirmation testing is done on the load and all patron samples for that load are tested. Complete the remainder of the form as follows:
 - A. If load confirms NEGATIVE, complete Sections III and IV. Sections V and VI apply if there was a positive producer.
 - B. If load confirms POSITIVE, complete entire form, including Sections V and VI. Provide all the information needed for lab results on the individual producer. No other paperwork on the producer (s) is necessary.

Mail, fax or e-mail the completed form within 3 business days to:

WDATCP - DFRS
718 W Clairemont Ave. Suite 128
Eau Claire, WI 54701

**Retain a copy of form and the Tanker Milk Disposal Report for your records



Wisconsin Department of Agriculture, Trade and Consumer Protection
 Division of Food and Recreational Safety
 718 W. Clairemont Ave., Ste. 128, Eau Claire, WI 54701
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HOT LINE NUMBER: (800) 462-5243 **FAX NUMBER:** (715) 839-3867 **E-MAIL:** datcpdairylibs@wisconsin.gov

I. LOAD IDENTIFICATION					
RECEIVING PLANT:				PLANT NUMBER:	
PLANT ADDRESS/LOCATION:			CITY:	STATE:	ZIP:
TANKER LICENSE NUMBER:	WEIGHT OF LOAD:	LOAD NUMBER:	NAME OF HAULER:		
ORIGINATING PLANT NAME (if different from receiving plant):				PLANT NUMBER:	
II. LOAD SCREENING TEST INFORMATION					
DATE LOAD SCREENED POSITIVE:	TIME:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEST METHOD:	TEST KIT LOT #:	
SCREENED POSITIVE FOR: <input type="checkbox"/> BETA LACTAMS <input type="checkbox"/> TETRACYCLINES		DATE POSITIVE RESULT PHONED, FAXED, EMAILED TO DATCP:		TIME:	<input type="checkbox"/> AM <input type="checkbox"/> PM
NAME OF PERSON REPORTING:				PHONE NUMBER:	
III. LOAD CONFIRMATION TEST					
TESTING SITE:	SAMPLE RECEIVED:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEST STARTED:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEMP:
TEST METHOD:	TEST KIT LOT #:	TEST RESULT #1:	TEST RESULT #2:		
CERTIFIED WI LAB LICENSE #: 105 -	NAME OF CERTIFIED INDIVIDUAL:		CERTIFIED LAB ANALYST LICENSE #:		
IV. DISPOSITION OF MILK					
<input type="checkbox"/> DUMPED** <input type="checkbox"/> USED IN PROCESSING <input type="checkbox"/> LOAD REJECTED & RETURNED TO SELLER** **Complete Tanker Disposal Report Form and maintain on file.					
NAME OF SELLER CONTACT PERSON - Reporting plant must notify supplying plant IMMEDIATELY. (ONLY FOR LOAD REJECTED):				DESTINATION STATE:	
V. POSITIVE PRODUCER SAMPLE & TEST DATA					
PLANT # - PATRON #:	PRODUCER NAME:		PRODUCER GRADE:	DIRECT SHIPPER:	
SAMPLE COLLECTION:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEMP:	SAMPLE COLLECTED BY - BMWS NAME & LICENSE #:		
TEST STARTED:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEST METHOD:	TEST KIT LOT #:	TEST RESULT #1:	TEST RESULT #2:
CERTIFIED WI LAB LICENSE #: 105 -	CERTIFIED LAB ANALYST LICENSE #:				
VI. NEGATIVE RECHECK/RESUME SHIPPING					
SAMPLE COLLECTION:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEMP:	SAMPLE COLLECTED BY - BMWS NAME & LICENSE #:		
TEST STARTED:	<input type="checkbox"/> AM <input type="checkbox"/> PM	TEST METHOD:	TEST KIT LOT #:	TEST RESULT: <input type="checkbox"/> NF	
CERTIFIED WI LAB LICENSE #: 105 -	CERTIFIED LAB ANALYST LICENSE #:				

POSITIVE DRUG RESIDUE REPORT FORM

INSTRUCTIONS

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By FAX: 1-715-839-3867
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 - A. If load confirms NEGATIVE, complete Sections III and IV. Sections V and VI apply if there was a positive producer.
 - B. If load confirms POSITIVE, complete entire form, including Sections V and VI. Provide all the information needed for lab results on the individual producer. No other paperwork on the producer (s) is necessary.

Mail, fax or e-mail the completed form within 3 business days to:

WDATCP - DFRS
718 W Clairemont Ave. Suite 128
Eau Claire, WI 54701

**Retain a copy of form and the Tanker Milk Disposal Report for your records



Wisconsin Department of Agriculture, Trade and Consumer Protection
 Division of Food and Recreational Safety
 PO Box 8911, Madison, WI 53708-8911
 Phone: (608) 224-4683 Email: datcpleo@wisconsin.gov

TANKER MILK DISPOSAL REPORT

Wis. Stat. §§ 97.20 & 97.22

Disposition of all tanker loads of milk that test positive for drug residues must be thoroughly documented. Complete this form and maintain on file at the plant.

I. BULK LOAD IDENTIFICATION			
RECEIVING DAIRY PLANT:			PLANT NUMBER:
PLANT ADDRESS/LOCATION:		CITY:	STATE:
TANKER LICENSE NUMBER:	WEIGHT OF LOAD:	LOAD NUMBER:	NAME OF HAULER THAT DELIVERED LOAD :
<input type="checkbox"/> YES <input type="checkbox"/> NO PLANT TO PLANT TRANSFER LOAD REJECTED & RETURNED TO SELLER (If YES, fill out seller information)			
NAME OF SELLER CONTACT PERSON:			
PLANT ADDRESS/LOCATION:		CITY:	DESTINATION STATE:
II. TRANSPORTATION OF MILK FOR DISPOSAL			
DATE OF TRANSPORTATION:		TIME OF TRANSPORTATION:	
NAME OF HAULER (Please Print):			
SIGNATURE:			
III. DISPOSAL OF MILK			
NAME OF DISPOSAL SITE:			
DISPOSAL ADDRESS/LOCATION:		CITY:	STATE:
DISPOSAL METHOD <input type="checkbox"/> VEAL OPERATION <input type="checkbox"/> MUNICIPAL SEWER <input type="checkbox"/> FIELD SPREAD <input type="checkbox"/> MANURE PIT <input type="checkbox"/> OTHER (Please Explain):			
DATE RECEIVED:		TIME RECEIVED:	
NAME OF PERSON RECEIVING MILK (Please Print):			
SIGNATURE:			



Wisconsin Department of Agriculture, Trade and Consumer Protection

Division of Food and Recreational Safety

PO Box 8911, Madison, WI 53708-8911

Phone: (608) 224-4683 Email: datcpleo@wisconsin.gov

TANKER MILK DISPOSAL REPORT

Wis. Stat. §§ 97.20 & 97.22

Disposition of all tanker loads of milk that test positive for drug residues must be thoroughly documented. Complete this form and maintain on file at the plant.

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RECEIVING DAIRY PLANT:			PLANT NUMBER:
PLANT ADDRESS/LOCATION:		CITY:	STATE:
TANKER LICENSE NUMBER:	WEIGHT OF LOAD:	LOAD NUMBER:	NAME OF HAULER THAT DELIVERED LOAD :
<input type="checkbox"/> YES <input type="checkbox"/> NO PLANT TO PLANT TRANSFER LOAD REJECTED & RETURNED TO SELLER (If YES, fill out seller information)			
NAME OF SELLER CONTACT PERSON:			
PLANT ADDRESS/LOCATION:		CITY:	DESTINATION STATE:
II. TRANSPORTATION OF MILK FOR DISPOSAL			
DATE OF TRANSPORTATION:		TIME OF TRANSPORTATION:	
NAME OF HAULER (Please Print):			
SIGNATURE:			
III. DISPOSAL OF MILK			
NAME OF DISPOSAL SITE:			
DISPOSAL ADDRESS/LOCATION:		CITY:	STATE:
DISPOSAL METHOD <input type="checkbox"/> VEAL OPERATION <input type="checkbox"/> MUNICIPAL SEWER <input type="checkbox"/> FIELD SPREAD <input type="checkbox"/> MANURE PIT <input type="checkbox"/> OTHER (Please Explain):			
DATE RECEIVED:		TIME RECEIVED:	
NAME OF PERSON RECEIVING MILK (Please Print):			
SIGNATURE:			



Wisconsin Department of Agriculture,
 Trade & Consumer Protection
 Division of Food Safety
 PO Box 8911, Madison, WI 53708
 Telephone (608) 224-4712

APPENDIX N ANALYST TRAINING REPORT

Wis. Stats. s. 97.22 & 97.20

1. IS _____ CERTIFICATE EXPIRATION DATE _____

2. IS _____ CERTIFICATE EXPIRATION DATE _____

FACILITY _____ PLANT # _____

ADDRESS _____

CITY/STATE _____

FACILITY INTERNAL AUDIT DATE: _____

ANALYST NAME	DATE TRAINED	TEST METHOD	PROFICIENCY TEST RESULT P=PASS F=FAIL	DATE OF PROFICIENCY TEST	IS INITIALS

Instructions: All industry analysts must be trained and run proficiency tests at least annually. The screening facility needs to keep this original form for their records and submit a photocopy of this form, along with the Internal Audit Report to the address above. **Please mark the envelope to the attention of the Laboratory Evaluation Officers.**



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Wisconsin Appendix N Personnel Chart

	Screen Loads	Confirm Loads	Train Industry Analyst(s) (IA)	Test** Industry Analyst(s) (IA)	Attend IS Workshop	Unknown/PT Samples		Evaluation	
						In-house (3 unknowns)	State Provided	Internal Audit	LEO On-site
Industry Supervisor (IS) doing Reader Printer Test	X		Initial & Annual	Initial & Annual	Biennial			Annual	
Industry Supervisor (IS) doing Visual Read Test	X*		Initial & Annual		Biennial		Annual	Annual	Initial
<u>Certified</u> Industry Supervisor (CIS)	X	X	Initial & Annual	Initial & Annual	Biennial		Annual		Biennial
Industry Analyst (IA) doing Reader Printer Test	X					Initial & Annual			
Industry Analyst (IA) doing Visual Read Test	X*						Annual		Initial
<u>Certified</u> Analyst (CA)	X	X					Annual		Biennial

Certified Analysts and **Certified** Industry Supervisors MUST work at a Certified Lab

*NOTE: Industry Supervisor (IS) or Industry (IA) doing a Visual Read Test must pass an on-site evaluation by an LEO **before** screening any loads of milk.

NOTE: Certified Industry Supervisor (CIS) or Industry Supervisors doing Reader Printer test (IS) must create at least 3 unknown samples for only **non-certified Industry Analyst(s) doing Reader Printer test (IA)

Visual Read Test

- Delvotest P mini
- Delvotest 5 Pack
- Charm BsDA

Reader Printer Test

- Charm SL, 3 SL3, BL30SEC
- Idexx SNAP BL & Tetra
- Charm II
- Charm Tetra, Sulfa, TRIO