

Understanding Test Day- Milk Shipped Deviations

Idaho DHIA
Field Supervisor Meeting



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Importance of Test Day/Milk Shipped Deviations

- Validation of DHI test day equipment/procedures
- Validation of correct A/P factoring
- Accuracy of bulk tank measurements
- Builds credibility among industry partners
 - Breed associations
 - A.I. organizations
 - Veterinarians and Consultants
 - Agricultural Lenders
- Mandatory QCS Field Service Requirement



What is the Test Day/Milk Shipped Deviation ?

$(\text{Herd Test-Day Milk Yield}/\text{Milk Shipped}) * 100$

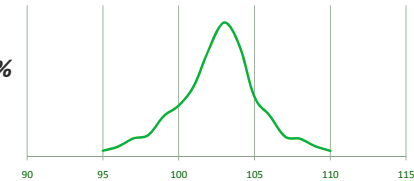
where:

- Herd Test Day Milk Yield = sum of test-day milk weights for all cows in the herd
- Milk Shipped = daily estimate of milk shipped (bulk tank) based on weights from three previous shipments
- Rounded to 1 (one) decimal place



What is the Normal TD/MS Deviation?

- Average = 102.8%
- Standard Deviation = 7%
- Acceptable Range =
96% to 110%



Follow-up is required when:

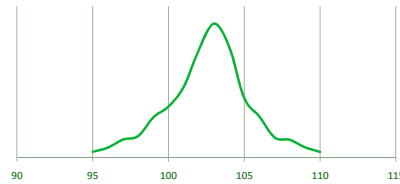
- ✓ TD/MS = 0 (milk shipped not reported)
- ✓ TD/MS < 96%
- ✓ TD/MS > 110%



Why isn't the average 100%?

We need to account for:

- ✓ Fresh cows
- ✓ Treated cows
- ✓ 3-10 day EMM averages
- ✓ Test-day behaviors



The challenge...

Balance dairyman's desire to see 100% TD/MS with uniform and proper data recording



Test Day/Milk Shipped Deviations = Zero

Supervised Herds

- ✓ New herd?
- ✓ Field tech fails to report?
- ✓ Not entered or uploaded?
- ✓ Owner fails to provide milk shipped totals?
- ✓ Field tech is afraid to ask for milk shipped?

Unsupervised Herds

- ✓ Instructions to owner?
- ✓ Not uploaded on direct herds?
- ✓ Owner does not see value in reporting?
- ✓ *There is a misconception that 'owner-sampler' data is not used by AIPL – this is FALSE!*



Test Day/Milk Shipped Deviations < 96%

- | | |
|---|--|
| <ul style="list-style-type: none"> ✓ Use of milk for calf feeding? ✓ Correct accounting for treated milk? ✓ All hospital cows in tank? ✓ Multiple pickups or direct to tanker shipping? ✓ Vacuum issues leading to incomplete milkout? | <ul style="list-style-type: none"> ✓ Incorrect reporting of milk sold/shipped? ✓ Correct milking times? ✓ Correct milking frequency? ✓ Drying cows off on test day? ✓ Multiple herd codes going into one bulk tank? |
|---|--|

Test-Day Events

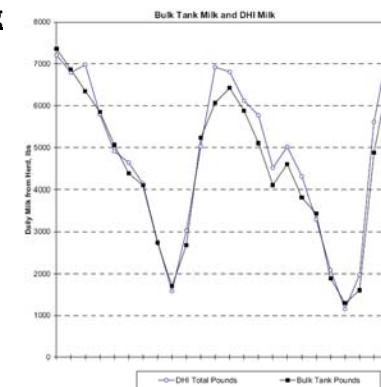
Data Entry Errors



Low Test-Day/Milk Shipped Deviation - Example

Grazier w/ Seasonal Calving

- ✓ Monthly MS fluctuations
- ✓ Use of milk for calves?
- ✓ Grain supplementation in anticipation of test day?
- ✓ *Bottom line – does not meet QC but easily explained.*



Current Month Percent Shipped = 90
12 Month Average Percent Shipped = 93



Test Day/Milk Shipped Deviations >110%

- ✓ Extended milking interval?
- ✓ Intentional manipulation?
- ✓ Machine stripping?
- ✓ Meter function and/or installation?
- ✓ Meter reading errors?
- ✓ Multiple pickups or direct to tanker shipping?
- ✓ Incorrect reporting of milk sold/shipped?
- ✓ Correct milking times?
- ✓ Correct milking frequency?

Test-Day Events

Data Entry Errors

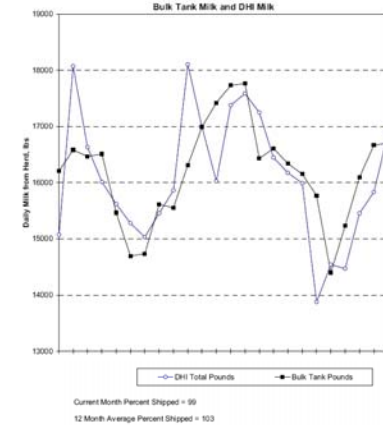


High Test-Day/Milk Shipped Deviation - Example

High Monthly Variation

- ✓ Field tech procedures?
- ✓ Meter issues?
- ✓ Vacuum issues?
- ✓ Estimation of milk shipped?
- ✓ Correct milking times reported if it is an A/P herd?

✓ *Bottom line – need to dig deeper – meets QC but???*



How are TD/MS Deviations Used by the Industry?

- Deviation is not part of Data Collection Rating
- Exclusion of outliers for 'unsupervised' herds
 - ✓ Deviation = 0
 - ✓ Deviation < 81%
 - ✓ Deviation > 117%
- Deviation is not part of Herdmate Deviation calculations

Rather...

- Deviation is a check of local procedures and technician/equipment performance
- Monitoring and investigation 'reduces' the likelihood and/or appearance of manipulation
- Credibility of records – which herd would you buy from?



The responsibility of ISDA staff is...

1. Use proper test day procedures
2. Record accurate milking times & parameters
3. Work with 'unsupervised' herds on reporting of accurate milk shipped totals
4. Regular investigation or follow-up on deviating herds
5. Report to QCS annually herds with annual deviations equal to zero, <96% or >110%
6. Doing it right... Doing it better... Building value...



Questions?

