QCS Laboratory Auditing and The On-Line System
for The Monthly Proficiency Testing Program

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Niagara Falls, New York

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Laboratory Certification

- Certified laboratories must meet the requirements of the auditing guidelines established by the *Council on Dairy Cattle Breeding (CDCB)*.
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• Conformance is assessed during on-site audits conducted every two years.

• Analytical performance is assessed on an ongoing basis via the monthly “samples unknown” program.
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- Conformance is assessed during on-site audits conducted every two years.
- Analytical performance is assessed on an ongoing basis via the monthly “samples unknown” program.
- *Quality Certification Services (QCS)* coordinates laboratory certification with the help of external contractors.
- Similar certification systems are in place for field services, meter centers and data processing centers.
Levels of Certification

• Laboratories failing to satisfy the CDCB guidelines risk loss of certification.
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Certification: All CDCB guidelines satisfied.

Conditional Certification: Most CDCB Guidelines satisfied. Minor deficiencies need to be corrected prior to an established deadline.
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Provisional Certification: Several CDCB guidelines not satisfied calling into question the reliability of the analytical data. *

Decertification: Provisional laboratories showing no effort and/or making no progress.
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- In all cases, QCS works closely with the laboratory staff to achieve and maintain full certification.

Constant Improvement
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  • full formal documentation of all lab procedures;
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  - increased emphasis on records associated with instrument maintenance and reagent preparation;
  - pilot sample preparation logs and uniformity checks;
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• Some recent additions/changes:

  • mandatory use of the “B” fat filter;
  • full formal documentation of all lab procedures;
  • increased emphasis on records associated with instrument maintenance and reagent preparation;
  • pilot sample preparation logs and uniformity checks;
  • reduction in tolerances for MD and SDD in the samples unknown program.
Constant Improvement:

• Even fully certified laboratories can do better. Lab Managers and staff are expected to evaluate and upgrade their quality system on an ongoing basis.

• During on-site audits, lab staff are generally provided with a number of suggestions related to potential improvements.
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- During on-site audits, lab staff are generally provided with a number of suggestions related to potential improvements.
- If these specific areas are not addressed by the next on-site audit, the lab status may be downgraded to **conditionally certified** until corrective measures are implemented.

CDCB Auditing Guidelines for Laboratories
CDCB Auditing Guidelines for Laboratories

Lab Manager Training

Technician Training
CDCB Auditing Guidelines for Laboratories

Lab Manager Training
Technician Training
Lab Documentation

General Record Keeping
CDCB Auditing Guidelines for Laboratories

- Lab Manager Training
- Technician Training
- Lab Documentation
- General Record Keeping
- Equipment Maintenance

Sample Handling / Preparation
CDCB Auditing Guidelines for Laboratories

Lab Manager Training
Technician Training
Lab Documentation
General Record Keeping
Equipment Maintenance
Sample Handling / Preparation
Temperature Monitoring / Control

Lab Supplies / Reagents
CDCB Auditing Guidelines for Laboratories

Lab Manager Training
Technician Training
Lab Documentation
General Record Keeping
Equipment Maintenance
Sample Handling / Preparation
Temperature Monitoring / Control
Lab Supplies / Reagents
Analytical Performance

CDCB Auditing Guidelines for Laboratories

Lab Manager Training
Technician Training
Lab Documentation
General Record Keeping
Equipment Maintenance
Sample Handling / Preparation
Temperature Monitoring / Control
Lab Supplies / Reagents
Analytical Performance
<table>
<thead>
<tr>
<th>Category</th>
<th>Training Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Manager Training</td>
<td>Basic Lab QC</td>
</tr>
<tr>
<td>Technician Training</td>
<td>Pre-calibration Checks</td>
</tr>
<tr>
<td>Lab Documentation</td>
<td></td>
</tr>
<tr>
<td>General Record Keeping</td>
<td></td>
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<tr>
<td>Equipment Maintenance</td>
<td></td>
</tr>
<tr>
<td>Sample Handling / Preparation</td>
<td></td>
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<tr>
<td>Temperature Monitoring / Control</td>
<td></td>
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<tr>
<td>Lab Supplies / Reagents</td>
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<td>Analytical Performance</td>
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</table>
CDCB Auditing Guidelines for Laboratories

<table>
<thead>
<tr>
<th>Category</th>
<th>Training/Check</th>
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<tbody>
<tr>
<td>Lab Manager Training</td>
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<tr>
<td>Lab Documentation</td>
<td>Calibration checks / Adjustments</td>
</tr>
<tr>
<td>General Record Keeping</td>
<td>Repeatability Checks</td>
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<tr>
<td>Equipment Maintenance</td>
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<td></td>
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<td>Temperature Monitoring / Control</td>
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<tr>
<td>Lab Supplies / Reagents</td>
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<td>Description</td>
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<tr>
<td>Lab Manager Training</td>
<td>Basic Lab QC</td>
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<td>Pre-calibration Checks</td>
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<tr>
<td>Lab Documentation</td>
<td>Calibration checks / Adjustments</td>
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<tr>
<td>General Record Keeping</td>
<td>Repeatability Checks</td>
</tr>
<tr>
<td>Equipment Maintenance</td>
<td>Zero Drift / Stability</td>
</tr>
<tr>
<td>Sample Handling / Preparation</td>
<td>Pilot sample collection</td>
</tr>
<tr>
<td>Temperature Monitoring / Control</td>
<td>Pilot sample Uniformity</td>
</tr>
<tr>
<td>Lab Supplies / Reagents</td>
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</tr>
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<td>Analytical Performance</td>
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### CDCB Auditing Guidelines for Laboratories

<table>
<thead>
<tr>
<th>Area</th>
<th>Practice</th>
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<tbody>
<tr>
<td>Lab Manager Training</td>
<td>Basic Lab QC</td>
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<tr>
<td>Technician Training</td>
<td>Pre-calibration Checks</td>
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<td>Lab Documentation</td>
<td>Calibration checks / Adjustments</td>
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<td>General Record Keeping</td>
<td>Repeatability Checks</td>
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<tr>
<td>Equipment Maintenance</td>
<td>Zero Drift / Stability</td>
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<td>Sample Handling / Preparation</td>
<td>Pilot sample collection</td>
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<td>Hourly Control Samples</td>
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<td>Analytical Performance</td>
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### The Certification Process

[Diagram of the certification process]

- **CDCB Compliance**
  - Initial review
  - Site visit
  - Initial report

- **Monthly Sample Collection**
  - Samples distributed
  - Samples received
  - Samples analyzed

- **Weekly Sample Collection**
  - Weekly samples analyzed
  - Reporting

- **CDCB Compliance**
  - Final report
  - Certification decision
Monthly Proficiency Testing - “Samples Unknown

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- Data submission and retrieval of reports is done using a secure web site.
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Main Menu

Quality Certification Service, Inc.
Welcome Lancaster DHIA Lab
Lab Code R24
To Our Website

Batch Selection

Quality Certification Service, Inc.
Lancaster DHIA Lab
Lab Code R24

Batch 127

Select the Batch from the dropdown list you wish to change to, then submit.
### Batch Certification Report

**B2500A**
Butterfat

<table>
<thead>
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<th>Number</th>
<th>Ref Inst Diff</th>
<th>Rep1</th>
<th>Rep2</th>
<th>Range SD Reps</th>
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**FAT Results**

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<th>Month</th>
<th>MD</th>
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<tr>
<td>Oct</td>
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<tr>
<td>Nov</td>
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<tr>
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<tr>
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<tr>
<td>Feb</td>
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<td>Mar</td>
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<td>May</td>
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Batch Certification Report
Main Menu

Batch Comparison Report

FIT Comparison

- Other Data
- My Data