Canadian Dairy Lab Network
2008 ICAR Session with North American Lab Manager’s Association

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CANADIAN DHI

Snapshot of Dairy Canada

• 988,500 dairy cows
• 14,660 dairy farms
• 12 dairy laboratories

> 5000 km
Dairy Laboratory Analysis Services

- Herd Management (DHI) Analysis
- Payment Analysis (for all herds)
  - Bulk Tank and truck samples (F,P,L, TS)
- Quality Testing
  - Somatic Cell Count, Bacteria, Antibiotics
- CLS (Canadian Laboratory Service)
  + Standards Council of Canada:
    - Interlab exchanges,
    - Audits,
    - ISO 17025 accreditation

12 Dairy Laboratories in Canada
6 Canadian DHI Laboratories

- 2 Valacta labs
- 4 CanWest DHI labs
  - 15 Infrared and Somatic Cell analysers
  - Including: Foss 4000’s, 6000’s, 400’s, FC Bentley 2000’s, 300’s and 500’s

Canadian DHI Laboratories
- Montreal, Quebec
- Winnipeg, Manitoba
- Edmonton, Alberta
- Guelph, Ontario

### Percentage of Dairy Herds Enrolled in Milk Recording Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>BC</th>
<th>AB</th>
<th>SK</th>
<th>MB</th>
<th>ON</th>
<th>QC</th>
<th>NB</th>
<th>NS</th>
<th>PE</th>
<th>NL</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>2003</td>
<td>56.5</td>
<td>65.5</td>
<td>67.5</td>
<td>64.5</td>
<td>66.5</td>
<td>71.4</td>
<td>71.5</td>
<td>62.3</td>
<td>59.0</td>
<td>67.4</td>
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**Source:** Canadian Dairy Herd Improvement and Canadian Dairy Commission (CDC)

Calculations done by AAF/ICD Dairy West

*hour_trends_milk_recording.pub鐫บายb_provincial*
Trend since 1990 / Tendance depuis 1990
## Dairy Herd Management Analysis

Individual cow analysis, monthly
F, P, SCC, Lactose and MUN optional

### CANWEST DHI HERDS vs VALACTA HERDS

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>CANWEST DHI Total Samples</th>
<th>VALACTA DHI Total Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C.</td>
<td></td>
<td>5,311,106</td>
<td></td>
</tr>
<tr>
<td>B.C.</td>
<td></td>
<td>27,592</td>
<td>209,094</td>
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<tr>
<td>Sask.</td>
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<td>6,061</td>
<td>186,050</td>
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<td>Man.</td>
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<td>15,570</td>
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<td>Alta.</td>
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<td>153,098</td>
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<td>Que.</td>
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### Sample Collection

- Field technicians or producers collect milk and herd data
- All samples are bar coded
- Samples are preserved with Bronopol
- Transport:
  - Most samples are shipped by courier and delivered within 24-hour
Analyses Provided

- All samples are analysed for Fat, Protein and Cell Count
- Urea and lactose analysis is offered in several labs
- Same day analysis is provided across Canada.
- CanWest offers Johne’s and leukosis testing
- Forage analysis is provided at the Valacta lab.
- Analysis results are transferred to Canadian DHI processing centre and made available to clients via web site or hard copy.

<table>
<thead>
<tr>
<th>BC</th>
<th>Saskatchewan</th>
<th>Manitoba</th>
<th>Ontario</th>
<th>Quebec</th>
<th>Prince-Edward Is.</th>
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<tr>
<td>Lactose</td>
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ISO 17025
Canadian Lab Accreditation Program

- All Canadian dairy laboratories are ISO 17025 accredited
- The Canadian Lab Services (CLS) and the Standards Council of Canada are responsible for auditing of all Valacta, CanWest and payment analysis laboratories
- The C.L.S is also responsible to coordinate and oversee unknown interlab exchange program. Samples are distributed and analysed 6 times per year and results from all laboratories are compared to the reference.