Canadian Cattle Identification Program

Canadian Cattle Identification Agency

Agenda

- Program Overview
- CCIA Information
- Program Enhancements
- Transition to RFID
- RFID Trials
- Industry Sector Responsibilities

Program Overview

- Provides a national identification system for animals for the purpose of determining the presence of and controlling or eradicating disease.

- Implemented in 2001- Fully enforced 2002

- Maintains consumer confidence and market access for Canadian beef.

- Provides a framework in which to build a competitive advantage.

The Agency (CCIA)

- A National, multi-sector industry organization developed to administer the Canadian Cattle Identification Program.
    - Board of directors- Commercial/Purebred, Feedlots, Auction Markets, Dealers, Packing Plants, Veterinarians, Dairy, Bison,ATQ.
    - Technical Committee
    - 8 Staff

CCIA's Role

- To develop and maintain the national animal ID system as required by federal regulations.
  - PIN #'s- Stray Identification, retirement.
  - Issuance and monitoring of unique ID numbers.
  - Provide Herd of Origin information to CFIA.
  - Technology verification and testing.
  - Facilitate the tag distribution network.
  - Continued development of National Standards
  - Industry/government liaison.
  - Provide education and information.

Canadian Food Inspection Agency

- National "Health of Animals Regulations"
  - Legislation Providing for a National Identification System for animals for the purpose of determining the presence of and controlling or eradicating animal disease.
- CFIA Compliance/Enforcement Strategy
  - Delivery of regulatory enforcement.
  - Issuance of warnings or fines for violations.
  - Providing education and information.

CCIA Achievements

- Successful industry/government partnership.
- Industry acceptance (97% to 100% Compliance)
- Development of National Standards
- All sectors and other species working together
- 34 million unique numbers allocated- 115 million events.
- Cost effective
- International recognition

CCIA Assistance to the BSE Investigations

- Provided CFIA with tag inventory of all quarantined herds involved in trace back.
- Provided tag history/activity on all tag numbers.
- Provided tag retirement data from the packing plants and dead stock operators involved in the investigations.
- Supplied export data, including U.S. plants receiving Canadian cattle.
- Provided readers and software for identifying animals that moved from the index herd.
- International review committee very complimentary of the CCIA program.

Post BSE Enhancements

- Transition to RFID tag technology by Jan 2005
- Enhance enforcement i.e. on the spot fines
- Enhance record keeping capabilities i.e. age verification, value-added, carcass etc.
- Ensure complete automation and electronic transfer of records i.e. retirement and export
- Incorporate full animal movement tracking
- Premise ID
- Group Lot ID
- Multi-Species integrated national system – CLIA
- Facilitate Full food chain response.
- Development/Harmonization of North American and International standards.

National Standards

- Current:
  - Individual Producer Identification i.e. PIN#
  - Individual Animal Identification
  - Identification Devices (tags)
  - Tag Distribution
  - Data reporting
  - National Audits

National Standards

- Under Development:
  - Premise Identification
  - Lot Identification
  - Full Animal Movement
  - Enhanced Record Keeping
    - Age verification/carcass information/etc.

Canadian Cattle Identification Agency
Producer Validation

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Registration (Step 1 of 3): Validation

Please enter your personal profile information below. The information entered will be compared to your existing profile to confirm your identity.

Note: '*' identifies a required field

Business Information	
CCIA Pin:	[_____]
Operating Name: *	[_____]

Business Address Information	
Address: *	[_____]
City: *	[_____]
Province: *	[– Select – ▾]
Postal Code: *	[_____] - [_____]

Business Contact Information	
Business #: *	([____]) [____] - [_____]
Home #:	([____]) [____] - [_____]
Mobile #:	([____]) [____] - [_____]
Fax #:	([____]) [____] - [_____]
Email:	[_____] (i.e. prod@canadaid.ca)

Personal Information	
First Name: *	[_____]
Last Name: *	[_____]

Business Tag Information	

For the CCIA tag, enter any single tag number that has been transferred to your CCIA pin.

Back   Search   Favorites

Address   https://www.clia.livestockid.ca/CCIARG/j_security_check   Go

Canadian Cattle Identification Agency
CCIA Producer Validation

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Land Location Information Questionnaire

Please enter details about your production facilities below. Future enhancements to the CCIA Cattle Tracking System may reference a Premise Location in support of disease control initiatives. A Premise represents a location that can be identified by Geo-Coordinates through a unique identification number in association with the Legal Land Description and approximated by the Postal Code. The Premise Identifier would provide a means of associating a location with an animal identifier (Tag # for example). CCIA would appreciate your assistance in providing us with the following information for your premises, providing us with the real world data that helps ensure the success of this program. Additional Feedback may be provided through the Contact Us link above.

Add New Premise

Primary Use: *   — Select —

Species at Premises: *

☐ Alpaca	☐ Deer	☐ Goats	☐ Pork
☐ Aquaculture	☐ Ducks	☐ Guineas	☐ Quail
☐ Beef	☐ Elk	☐ Llama	☐ Sheep
☐ Bison	☐ Emu	☐ Ostriches	☐ Turkey
☐ Chickens	☐ Equine	☐ Pheasants	☐ Wild Boar
☐ Dairy	☐ Geese	☐ Pigeon	

Postal Code: *   [   ] - [   ]

Legal Land Desc: *   Please enter your LLD by selecting one of the four appropriate choices below.

○ LSD [   ] SEC [   ] TWP [   ] RG [   ] W [   ]

○ Map Sheet [   ] Block [   ] Unit [   ] Qtr. Unit [   ]

○ Township [   ] Concession [   ] Lot (###) [   ]

○ Description [   ]

Geo-Coordinates: X-Coord: [   ]   Y-Coord: [   ]   (i.e. X: 32.1243 / Y: 12.23124)

Submit   Cancel

Done   Internet

National ID Traceback System
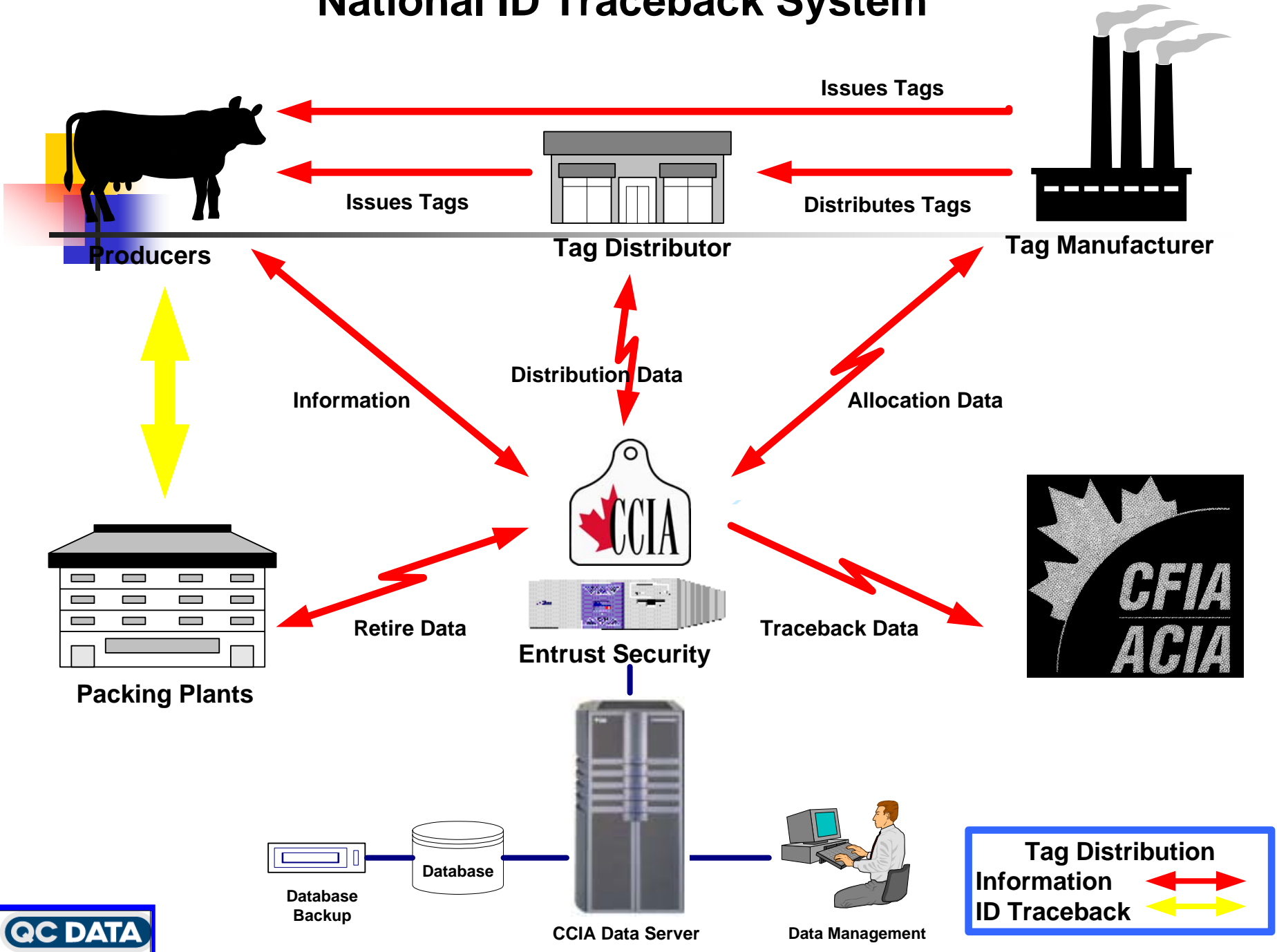
Transition to RFID

- Implementation of RFID by January 1/05
- Sale of bar code tags complete July 1/05
- Distribution
- Audits
- Benefits
  - Retention/readability
  - Data integrity
  - Read at a distance without line of sight
  - Full animal movement tracking/ Value Added

How RFID Works

- A transponder consists of an encoded chip and an antenna

- Reader transfers electromagnetic waves to the transponder

- The RF energy charges the transponder

- The transponder receives the message to transmit data

- The reader receives the response from the transponder

RFID- Overview

- **Passive Transponders**
  - Uses external power from the reader
  - Charges the capacitor on the transponder
    - Animal ID
    - Security access
    - Car immobilizers
    - Retail purchases (Esso)

Low Frequency 134.2 kHz

- Read range cm to 2 m, depending on the size of antennas and ability to operate at the resonance frequency
- LF penetrates tissue and moisture- not as affected by surrounding metals
- Data transfer rate of 70 ms
- 1 transponder can be read at a time- anti collision technology developing
- Electrical motors may interfere
- ISO standards for animal identification.

Half Duplex vs. Full Duplex

- ## Half Duplex (HDX)
  - The reader sends energy to the transponder.
  - Once the capacitor has received a full charge, the information is sent back to the reader.

- ## Full Duplex (FDX)
  - The transfer of information is initiated as soon as the capacitor starts to receive energy from the reader.

High Frequency 13.56MHz

- HF penetrates tissue and moisture but is more affected by surrounding metals than LF
- Orientation makes a difference in readability
- Regs limiting antenna power
- Multiple tag reading
- Antenna can be printed with conductive ink
  - Security, access control, ticket events, libraries.

Ultra High Frequency 860-956MHz

- Excellent for warehouses, etc
- Longer read range- not for security or access
- Can read up to 200 tags simultaneously
- Cheap to produce- except for animal ID
- Does not work in the presence of tissue, water, or metals

ISO Code Structure

- Reads Electronically as:

LA 00000 0 124 000299999999

↓ ↓ ↓ ↓ ↓

Animal Reserved Count Country Unique ID Number

CCIA Standards

- Visual
- Mechanical
- Physical
- Electrical
- Readability
- Environmental

RFID Tag Selections

- Trials and Testing
- Selections
- Colour
- Application
- Ear placement
- Code Structure
- Price

CCIA Approved RFID Tags
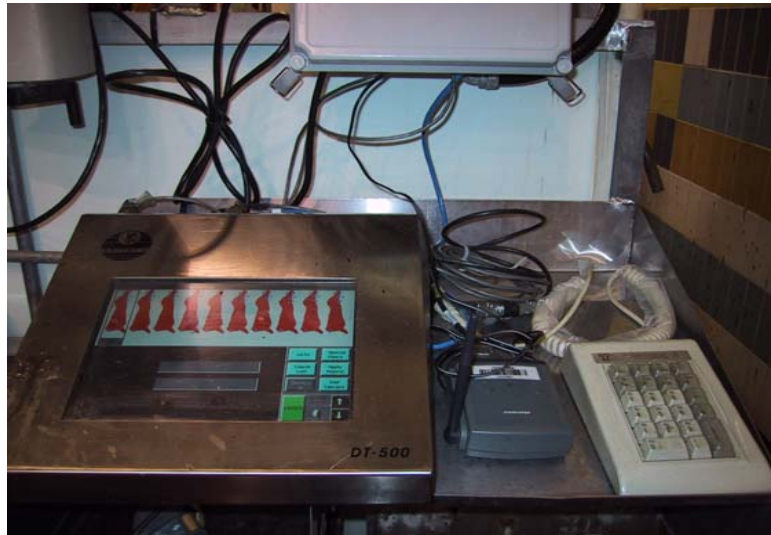

Allflex FDX

Ketchum

Nedap

Y-Tex

Destron

Allflex HDX

Hand Held Readers

- Allflex- 403-803-5532 http://www.allflexusa.com/
  - Allflex Stick
- Ketchum- 613-722-3451   http://www.ketchum.ca
  - Elisphere
- Destron- 816-386-5539 http://www.destronfearing.com/
  - Destron Pocket Reader EX
  - Destron 2001L-ISO
  - Destron Livestock Paddle Reader - LSRD01-1SO
- Y-Tex- 1-888-600-9839 http://www.ytex.com/
  - Tag Tracker II
- Ag-Info Link Canada- 403-214-2930 http://www.aginfolink.com
  - Tag Tracker
- Zee Tags New Zealand- +64 9 414-1790 http://zeetags.com
  - a-Boca

Panel Readers

- Allflex- 403-803-5532 http://www.allflexusa.com/
  - Allflex Panel
- Farnam- 1-800-720-0032 http://www.farnam.com - http:www.ztags.com
  - Edit ID panel
- Y-Tex- 1-888-600-9839 http://www.ytex.com/
- Y-Tex Panel
- Destron- 816-386-5539 http://www.destronfearing.com/
  - Destron panel

Set Aside Programs

- CCIA Approved Tags- (tag and backing stud)
- Sold through regular distribution as CCIA tags.
- Colored S/A backing studs sold separately
  - If included in package, done so at no additional charge.
- CCIA number is registered with the provincial agriculture ministry.
- All set aside programs are administered by the provincial agriculture ministries.

CCIA Tagging

- All cattle are tagged prior to leaving the herd of origin.

- Lost tags are replaced before leaving the herd.

- Cattle may be moved if going to an approved tagging site. (forms)

CCIA Tagging

- CCIA numbers are cross referenced when applying additional tags.

- CCIA tags are not removed until the number has been retired upon death or export.

- Tags applied according to manufacturers instructions with the electronic button or bar code facing forward have demonstrated excellent retention characteristics.
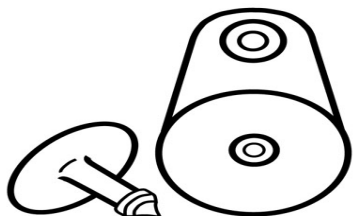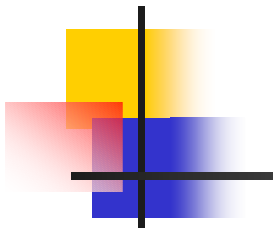
Y·TEX®
TechStar II™
DIRECTIONS FOR USE
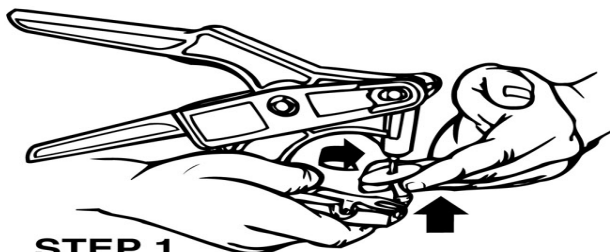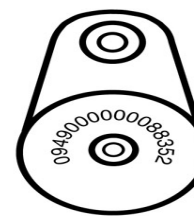
STEP 1
Seat male button firmly on pin, press down and give a slight twist.
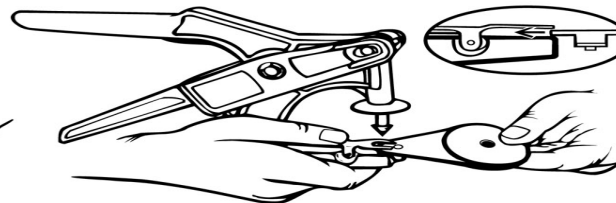
STEP 2
Place female tag firmly under clip. Collar on tag must be pointing away from pin.

STEP 3
Position applicator over ear and squeeze the handles together.
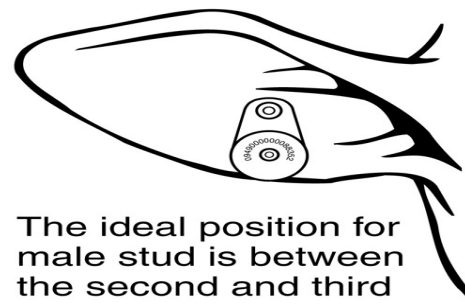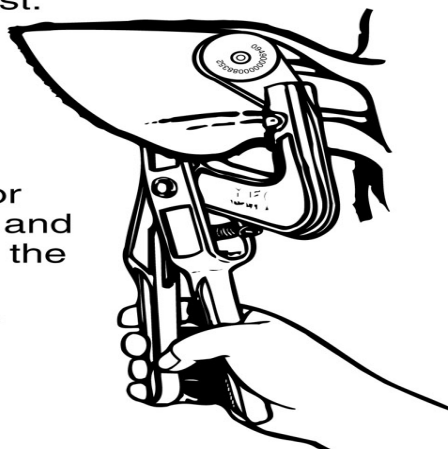
The ideal position for male stud is between the second and third radial cartilage as shown.

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Transportation

- All animals are tagged prior to transport and/or receipt unless being moved to an approved tagging facility.

- Transport exemptions forms are available.

- Provisions in place for lost tags.

Lost Tags

- Lost tag are replaced.
- When a new tag is applied, records are kept indicating:
    - The tag number
    - Enough information about animal or carcass origin including:
        - The previous number (if known)
        - Name and address
        - Date
        - Trucking ID

Lost in Transit

- An animal can be transported to its destination and unloaded if:
    - A new tag is applied
- At an auction barn, information regarding the origin and destination is required, including:
    - Name and address of owners * at the time the animal is received and removed
    - Dates

Abattoirs

- **If the animal is slaughtered:**
  - The tag may be removed, and
  - Must be reported to CCIA within 30 days
  - The abattoir is responsible for maintaining the identity of the carcass until it is approved for human consumption or condemned.

Lost in transit- abattoir

- A new tag is not required if:
  - The animal is slaughtered at the abattoir.
  - The operator keeps information enabling the origin to be traced, including:
    - The number of the lost tag (if known)
    - Name/address of person having possession, care, or control
    - Date
    - Trucking ID
  - This info is reported to the CCIA within 30 days

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Address ⬧ https://www.clia.livestockid.ca/CCIA/secure/service/jweb/Retirement01a

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Retire Tag Numbers
(Retired by *CANADIAN CATTLE IDENTIFACATION AGENCY*, at *T2E 7H7*)

Enter Information

CCIA Tag Number	Remark	Notifiable Reportable
1. CAN		Notifiable ☐ Reportable ☐
2. CAN		Notifiable ☐ Reportable ☐
3. CAN		Notifiable ☐ Reportable ☐
4. CAN		Notifiable ☐ Reportable ☐

File Edit View Insert Format Tools Data Window Help

Arial 10

N507 =

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
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23	183558_20	293	NEW	183558	183558	postal_cod	S6H 7T2	retired	20040415	bovine	fed cattle	1240002870137750		
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Sheet1 / Sheet2 / Sheet3

Ready

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Thank-You!

- For more information please contact:
  - **CCIA**
  - Phone 1-877-909-BEEF (2333)
  - Fax (403) 275-1668
- Website:www.canadaid.ca
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