Prairie Creek Mine
Environmental Assessment
Community Meeting Nahanni Butte
June 22, 2011
The Prairie Creek Mine: An Opportunity Waiting to Happen
Status before CZN came in

• Mine water discharge without treatment
• 40 tonnes of cyanide
• PCB waste
• Large, scattered waste oil inventory
• Road banks without armour
• Poor engagement with First Nations
CZN Program

• Doubled defined mineral resource
• Mine water is now treated
• Cyanide and PCB’s removed
• Road banks are armoured
• Good direct relations with First Nations and full engagement
Community and Regional Initiatives

**ENVIRONMENTAL MONITORING**
Training in Partnership with NWT MINE TRAINING SOCIETY
Monitoring Services Provided by NOGHA ENTERPRISES

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**Prairie Creek Employment - Summer 2007**
- Nahanni Butte: 7
- Fort Liard: 6
- Fort Simpson: 5
- Jean Marie River: 1

Total people employed at mine: 47
First Nations employment: 22 (47%)
Dehcho-based employment: 19 (40%)

Local Expenditure Since 2004:
- Direct First Nation Payments: $433,411
- Direct First Nation Services (including education and training): $1,061,185
- Education and Training: $35,150
- Total: $1,793,746

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**Canadian Northern Economic Development Agency**
**Agence canadienne de développement économique du Nord**

**Aurora College**
Your Career Starts Here!

**Canadian Zinc Corporation**

**Mine Training Society**
Northwest Territories
Main Quartz Vein Mineralization

UNDERGROUND 930 LEVEL: X-CUT 09

Footwall contact
Hanging wall contact

5.9% Pb, 39.4% Zn, 176.8 gpt Ag/1.9 m
Prairie Creek Mining Operations
CZN Development Plan

- Cadillac - tailings on surface
- CZN - tailings backfilled
  - covered waste rock pile
  - water recycle & treatment
  - mineral concentrates in bags
  - low risk closure plan
  - First Nation partnerships/benefits
- Responsible Development
Tank Farm
Mill and Catchment Pond
Geological Resources

• Total resource = 12 million tonnes:
  • Zinc; Lead; Silver; Copper
    – over 60 million ounces silver
    – over 3 billion lbs of zinc
    – over 2.2 billion lbs of lead
• Current 14 year mine life
Mining and Milling

• Mine up to 1,300 tonnes/day
• Mill up to 1,000 tonnes/day
• Crushing/grinding/flotation process, addition of dense media separation and backfill plants
• Production of zinc and lead concentrates, transport by truck to railhead via winter road
Mill: Grinding & Flotation Circuit

- 700 hp ball mill
- 1000 tpd flotation cells
- Thickener tanks
- Larox filters
- To Install: Paste backfill plant & Pb Ox circuit
- Produce Pb and Zn Cons