Prairie Creek Mine
Environmental Assessment
Public Hearing Fort Simpson
June 23rd & 24th, 2011

CANADIAN ZINC CORPORATION
The Prairie Creek Mine: An Opportunity Waiting to Happen
Legend

1. Airstrip
2. Access Road
3. Water Storage Pond
4. Waste Rock Pile Proposed Location
5. Main Yard
6. Mill Concentrator
7. 870 Portal
8. 930 Portal
9. 970 Portal
10. Parts Yard
11. Tank Farm
12. South Yard
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
Main Quartz Vein Mineralization

UNDERGROUND 930 LEVEL: X-CUT 09

5.9% Pb, 39.4% Zn, 176.8 gpt Ag/1.9 m
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
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
Operations Overview

- Up to 1,300 tonnes/day mining
- Up to 1,000 tonnes/day milling
- 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
Prairie Creek Open at Depth Open to North Along Strike

Northernmost Drill Hole (95-125): 6.3m @ 28% Pb+Zn, 239 g/t Ag

Deepest Intercept Drill Hole (04-159): 8.2m @ 50% Pb+Zn, 376 g/t Ag

Detailed Mineral Resource
5.8 Million Tonnes Grading:
- Zinc - 11%
- Lead - 10%
- Silver - 161 (g/t)

Underground Workings (3 Levels, 5 km)

Current Defined Resource Strike Length: 2.1 km
43-101 Compliant (MineFill Report: May 2007)

Scale: Metres
0 250 500 1000

Vein Resource
Stratabound Resource
Mining Method
LONGITUDINAL SECTION
CROSS SECTION

PRAIRIE CREEK MINE

PROPOSED MINING METHOD - CUT AND FILL STOPING

Figure 6.9.1:
PROPOSED MINING METHOD - CUT AND FILL STOPING

Date: October 2009
Scale: Not To Scale
File Name: DAR Fig 6.9.1.dwg
Drawn By: C. Reeves