Mineral Exploration in Wek'èezhìi

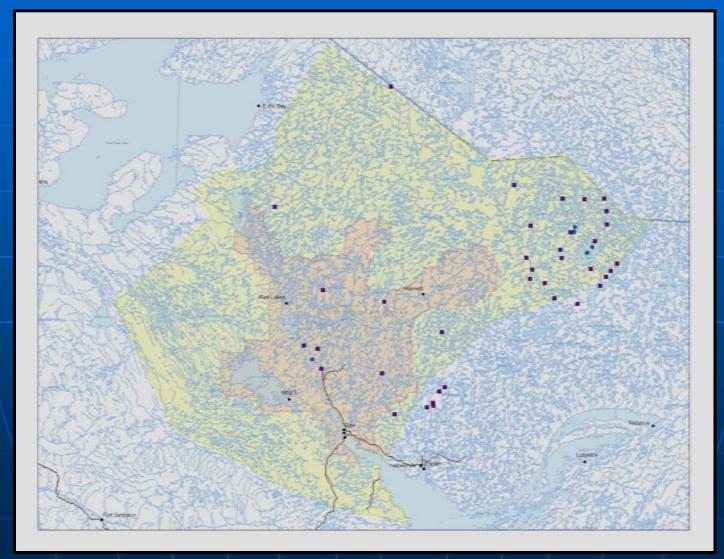
Mineral Exploration in Wek'èezhìi

 37 mineral exploration files, 25 different proponents
 Mostly land use permits
 Mostly private companies, some government mapping





Mineral Exploration in Wek'èezhìi



Mineral Exploration

Goal: target an ore body for mining

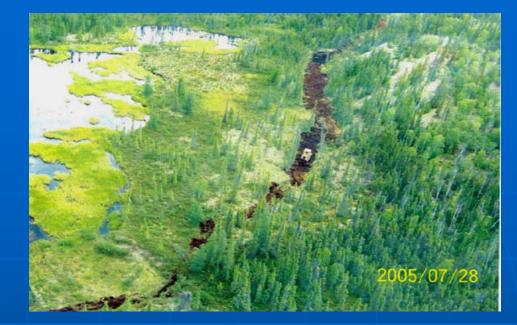
Activities include:
 Sampling/Mapping
 Geophysics Survey
 Drill Program
 Bulk Samples





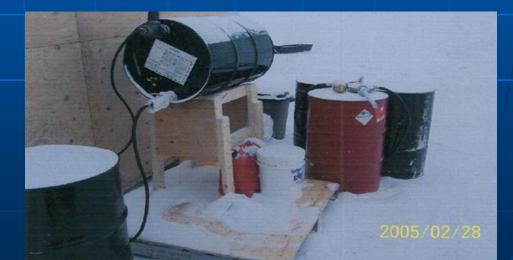
Triggers

■ Camps, fuel, explosives, heavy equipment, and trails → LUP



Fortune Minerals, Road

■ Water usage and waste deposition→ WL



LUP Triggers

 Camps:
 200 person days or more



Fuel:

 cache larger than 4000 litres

Trails:wider than 10m



Water License Triggers

Water Use: > 100 m³ of water is used

Waste Disposal

 Major Stream Crossings or Instream Works





Geological Mapping/Sampling

 Examine rocks and land features, collect samples for examination and analysis

Low impact

 LUP required if camp or fuel storage triggers met







GEOLOGICAL SAMPLING





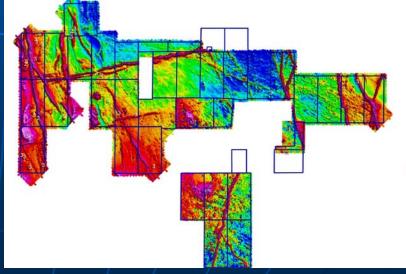
Geophysics Surveys

 Determine what is beneath the earth: magnetic, gravity, seismic, etc.

 LUP (camps, fuel cache, trails, line cutting, heavy equipment)

WL if triggers are met





GEOPHYSICS SURVEYS



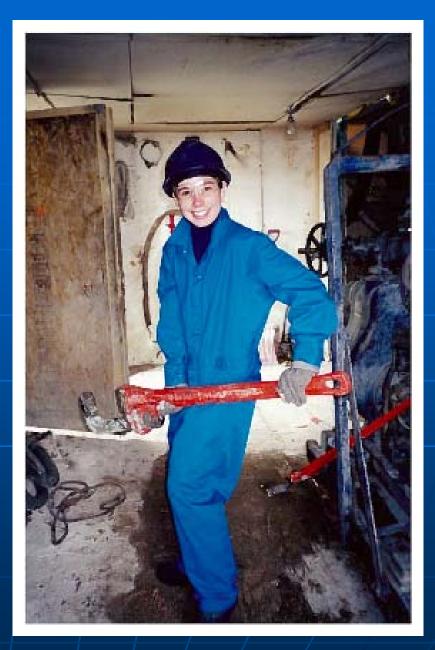






DRILL
PROGRAM
Land Use Permit
Water License





LUP Conditions (Example)

 Dispose of all combustible waste petroleum products by incineration or removal.

- Recirculating drill if close to high water mark.
- Notify inspector of drill locations prior to drilling

- Non-toxic drill waste to a sump
- Toxic drill waste off-site
- All drill waste removed from ice surface

Bulk Sampling

Extract a large sample for analysis
Determine quality and size of the ore body
LUP & WL

 Fortune Minerals' Nico Au-Co-Bi-Cu Project
 Merc's Damoti Lake Gold Project



1 Tonne Sample Bags

Water License Conditions (Example)

Effluent criteria
Water sampling requirements
Plans (A&R, Minewater, Contingency)

