

## EARTH 471: Exploration project – Part 1

There are 15 boxes of core from the Ore Chimney Gold Mine in Ontario.

In groups of 4, log the core using the provided log coring sheets or do it digitally. **You must complete the core logging during the scheduled lab times.** The core will be unavailable outside the scheduled lab time. Core logs will be handed in as part of the whole exploration project report.

When logging the core, pay particular attention to:

- Colour
- Mineralogy (ore and gangue)
- Evidence of alteration
- Composition, thickness and proportion of vein material
- Planar fabrics and angle to core

Look for and indicate clearly on your log sheets the one major mineralized horizon in the core.  
*Hint: galena is present.*

Each group is responsible for logging all 15 boxes of core (box #1–15). You may divide up the task or log it as a group.

It is a privilege to use this core, which was generously loaned to us by the Ontario Geological Survey. In order to preserve the core for possible future exploration and educational projects...

### **PLEASE DO NOT:**

- Scratch the core with anything
- Take core samples around the room
- Place core in the wrong spot or orientation in the boxes

### **Tips for logging:**

- Briefly go through the entire core before you commence detailed logging – look for **MAJOR** changes in lithology/mineralogy.
- Log consistently as a group; decide what you will call different rock types (it is OK if you misidentify a rock as long as you are consistent throughout the entire core log).
- The core was collected in feet (1 foot = 0.3048 metres), you may log it in feet/inches or metric units.