

ACA Mine Rescue

Day 2

Judges Book

Day 2 Alabama State Contest

Thank you for responding to our call for help. Something has happened in the mine and we cannot contact the 3 missing miners. The tracking system indicates that they are still on the section.

The exhaust fan is running. Samples are being taken every 20 minutes at the fan. The last one indicated there was 10 PPM CO, 0.0% CH₄, and 20.1% O₂. The fan must remain running to ventilate the rest of the mine.

The rest of the mine has been explored and is safe to ventilate through. This section was driving towards an old abandoned mine. The plans were to connect the entries to the old works for future ventilation. The map is not up to date.

The proper authorities have been notified. Medical personnel are on the scene. A back up team is available.

Day 2 Alabama State Contest

Problem

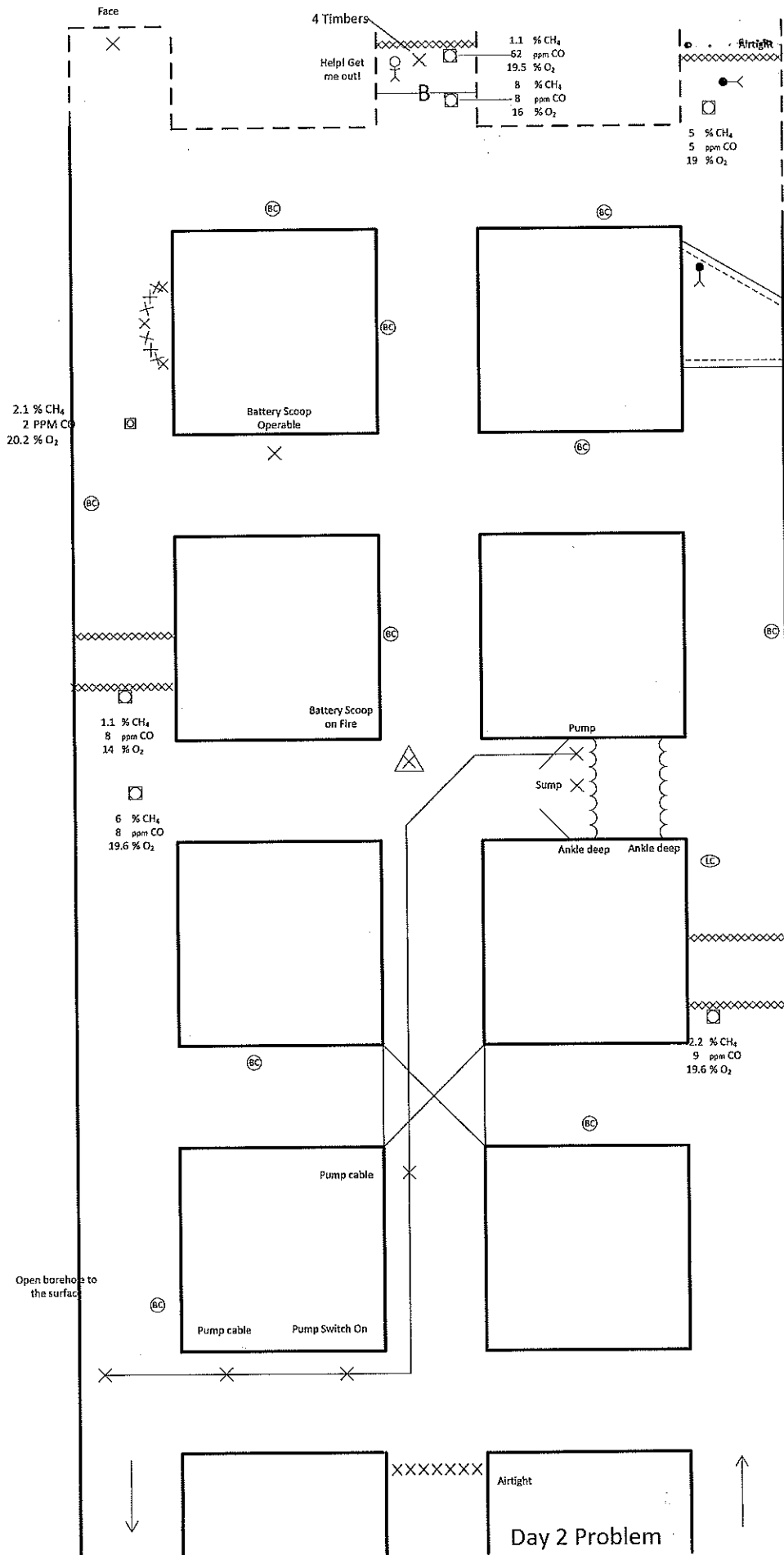
Find the missing miners and bring any survivors to the fresh air base.

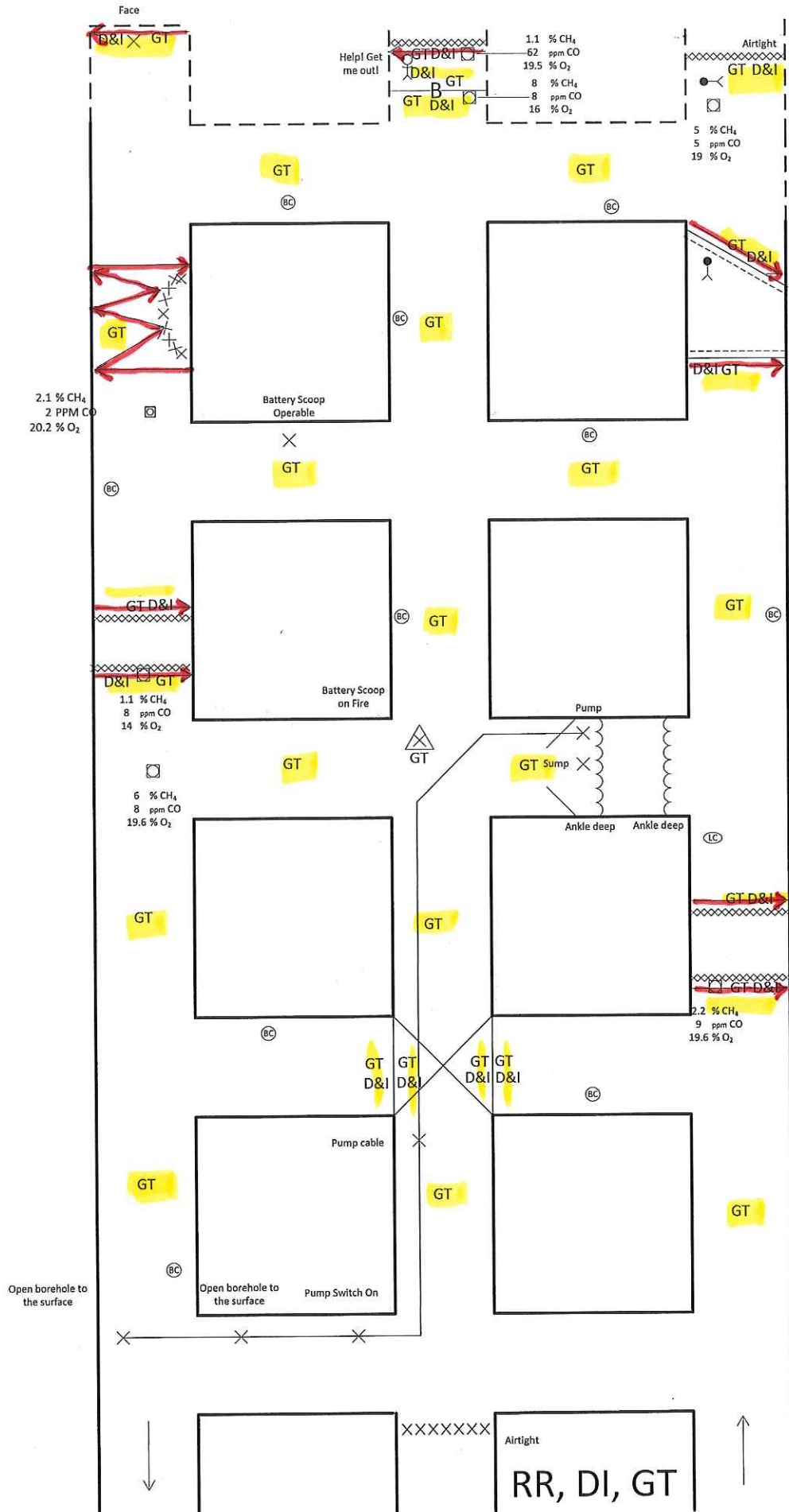
The fan cannot be stopped, stalled, or reversed.

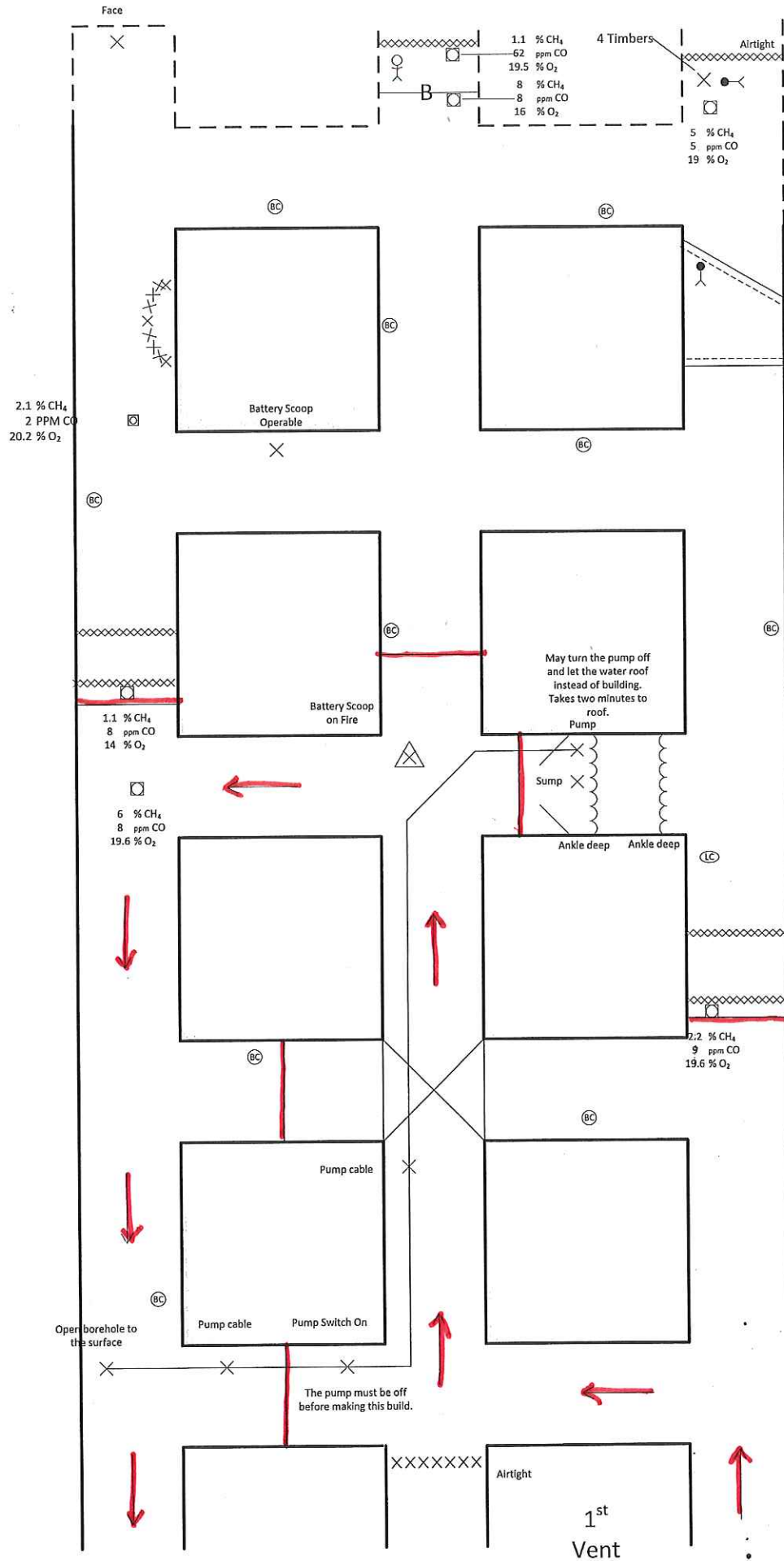
There is a pump set up in the 2nd crosscut between #2 and #3 entries. The power to the pump comes down a borehole located in the Fresh Air Base. It is currently on. If turned off the water will roof in two minutes. You must tell the superintendent when turning on or off the pump.

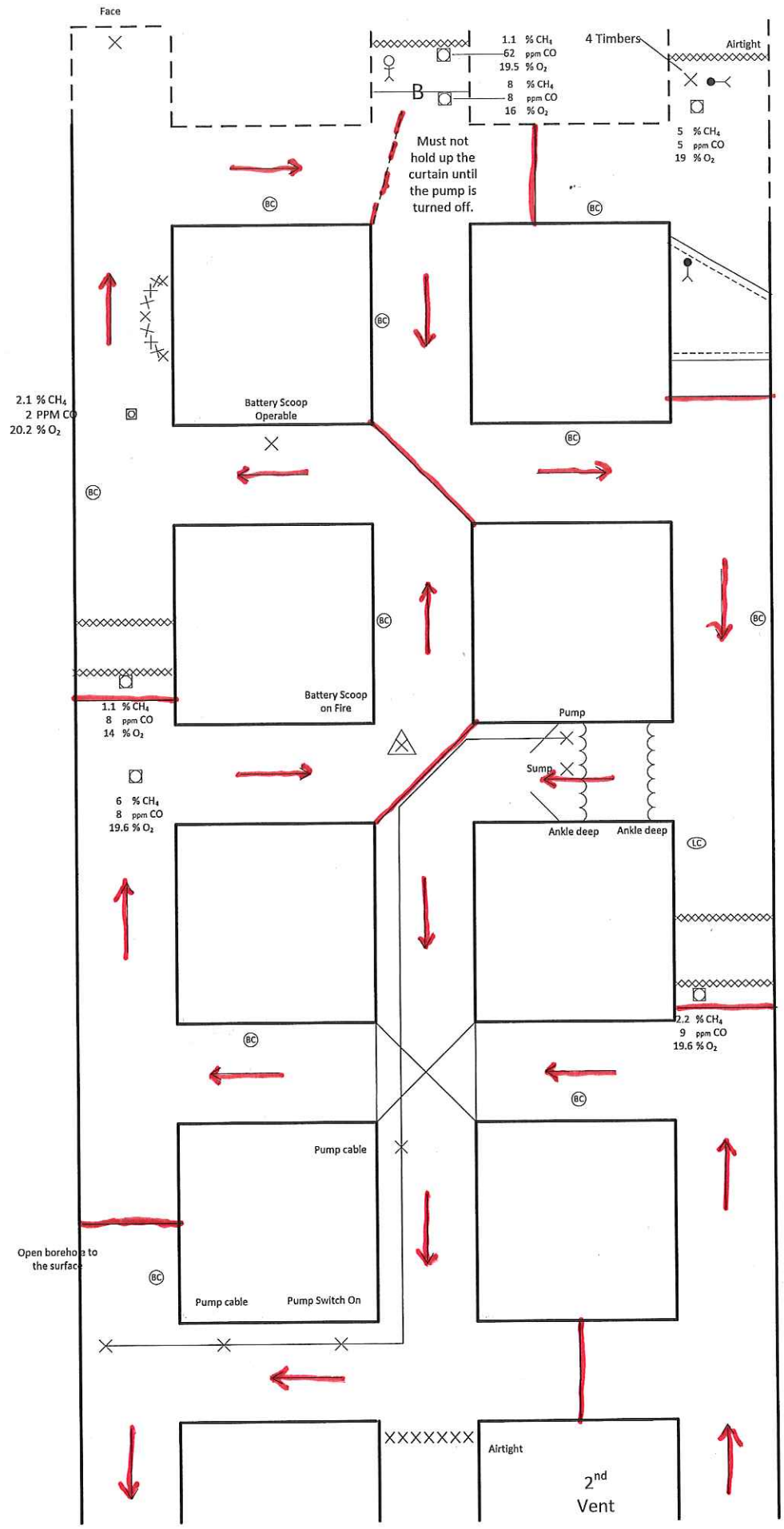
The back up team may be used barefaced in the Fresh Air base.

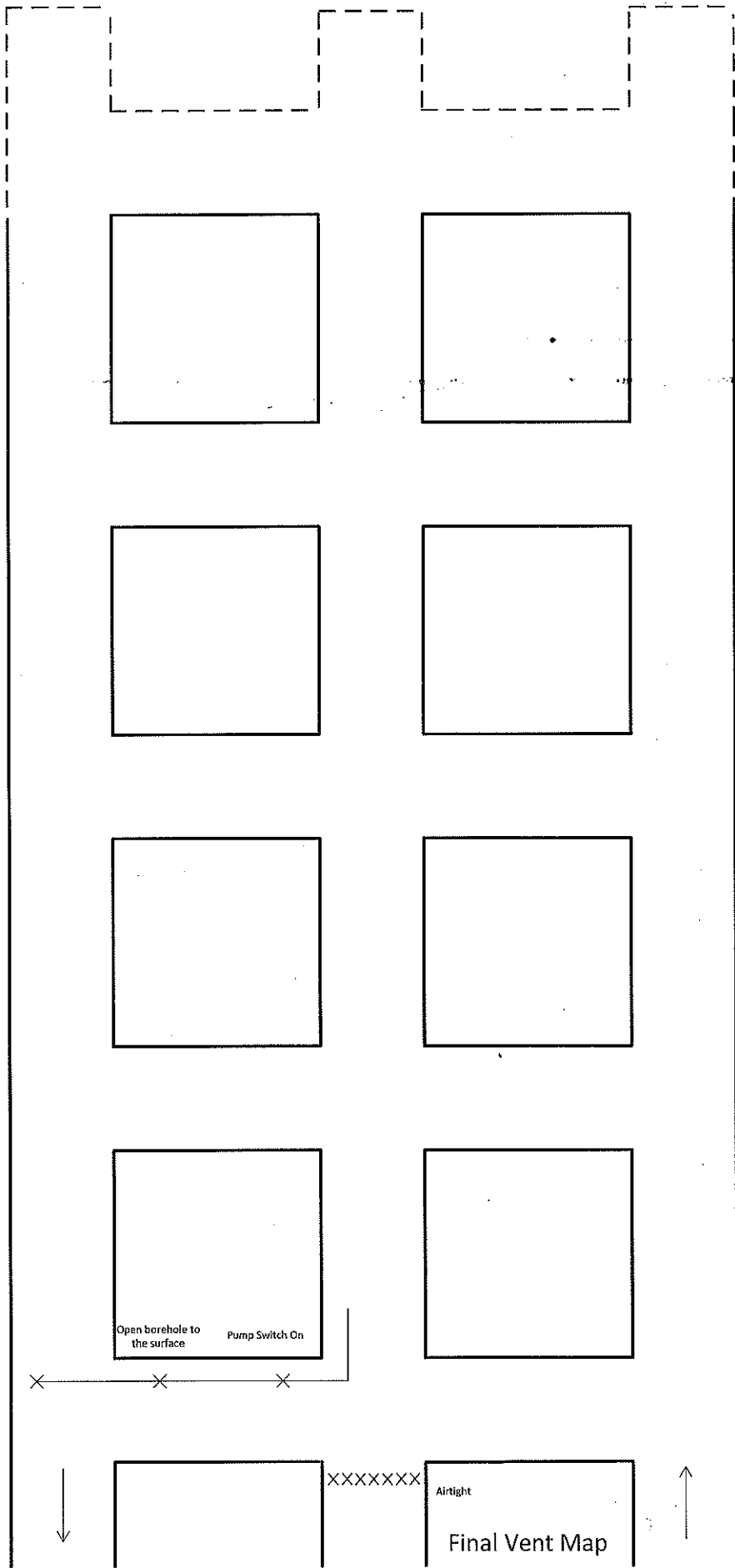
You have 75 minutes to work the problem.











Open borehole to the surface

Open borehole to the surface

Pump Switch On

XXXXXXXXXX

Airtight

Final Vent Map