

2011 PA Regional Skills Contest



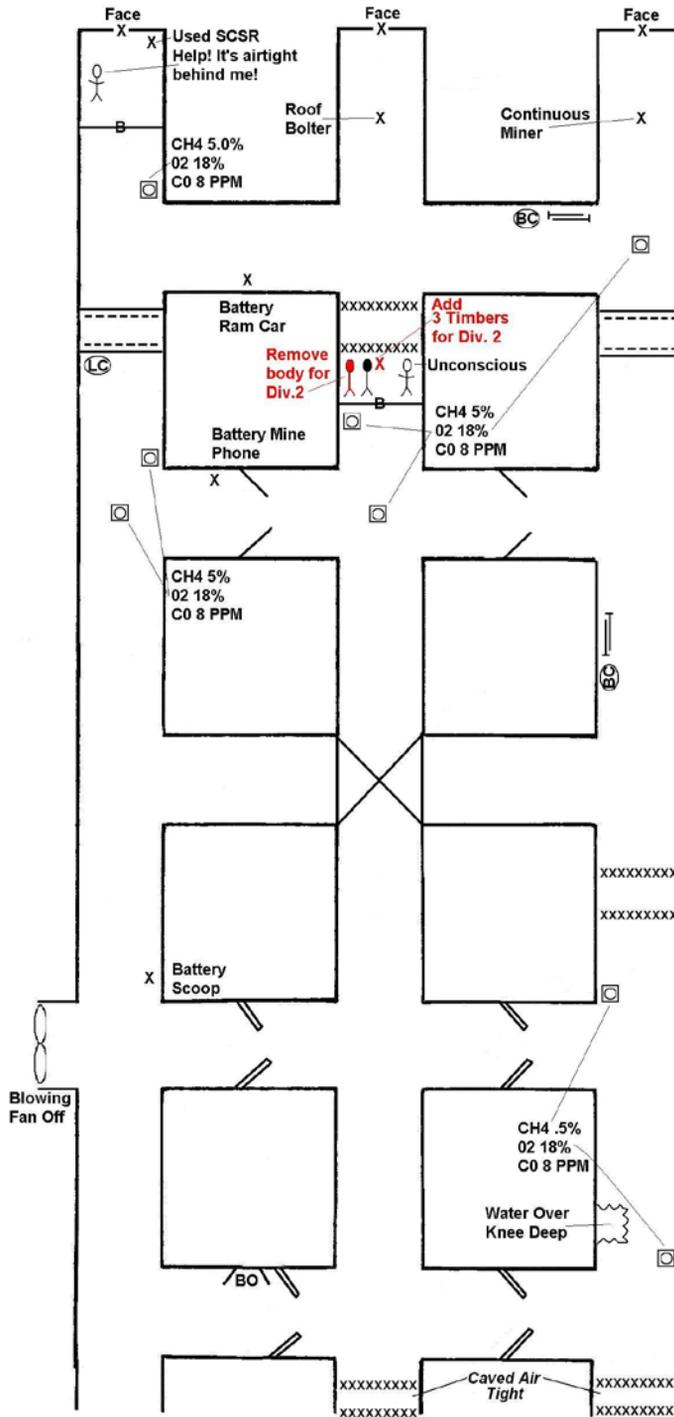
April 18-21, 2011

Problem Statement

I am _____ Superintendent of the Cokeburg #2 Mine. You are presently standing at the established fresh air base in the first crosscut. The mine is ventilated by a blowing fan which is off at the present time, but can be started by asking me.

Early this morning, a 2 man maintenance crew along with their foreman entered the mine to repair a continuous miner located in the #3 entry. A call from the section stated that there was a large inundation of gas, that the crew was feeling dis-oriented, and they needed immediate assistance. Shortly after the call, an explosion was heard and the fan stopped. This was the last communication we had with the crew.

We have de-energized all electrical power inby this fresh air base. All the federal and state agencies have been notified and are on site to offer assistance. The maps are up to date. The mine is noted for poor roof, high liberations of methane, and low oxygen levels. Water accumulations are also frequently found. A fully equipped back up mine rescue team is stationed here while you work inby the fresh air base. You may start work when your team is ready. Good luck, and thank you for responding to our emergency.

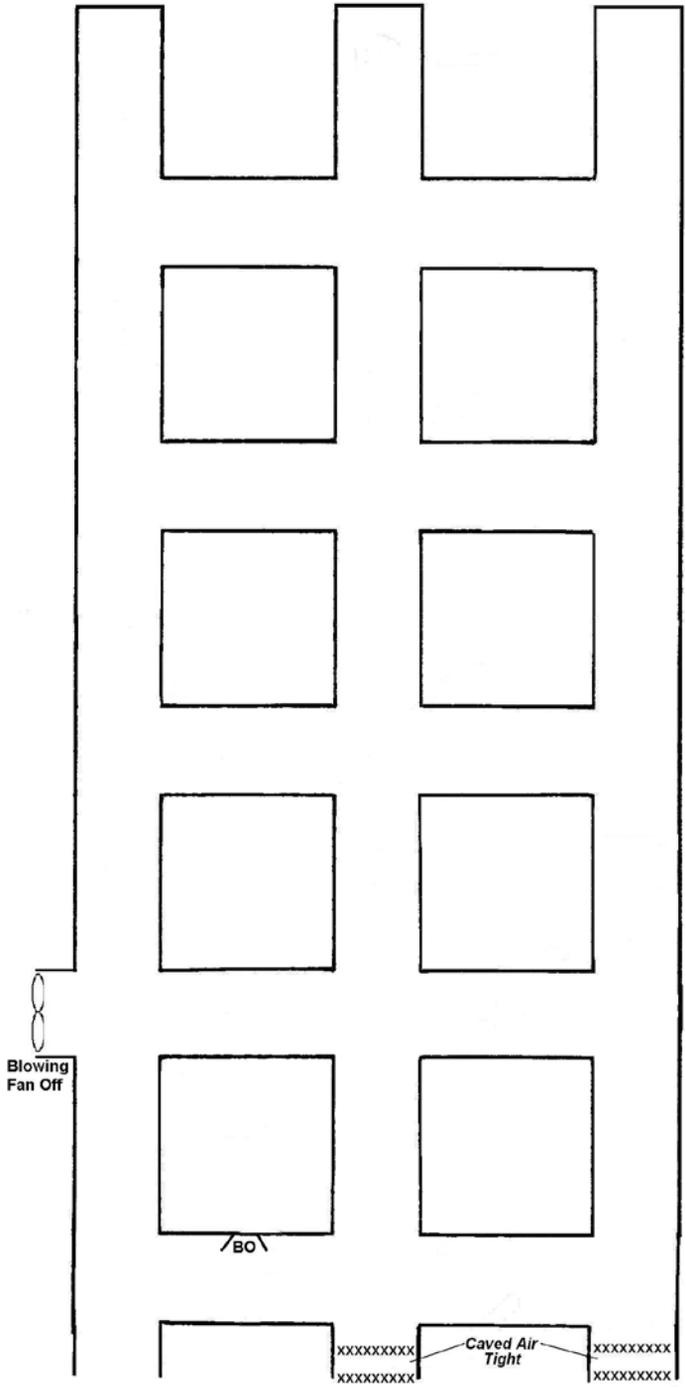


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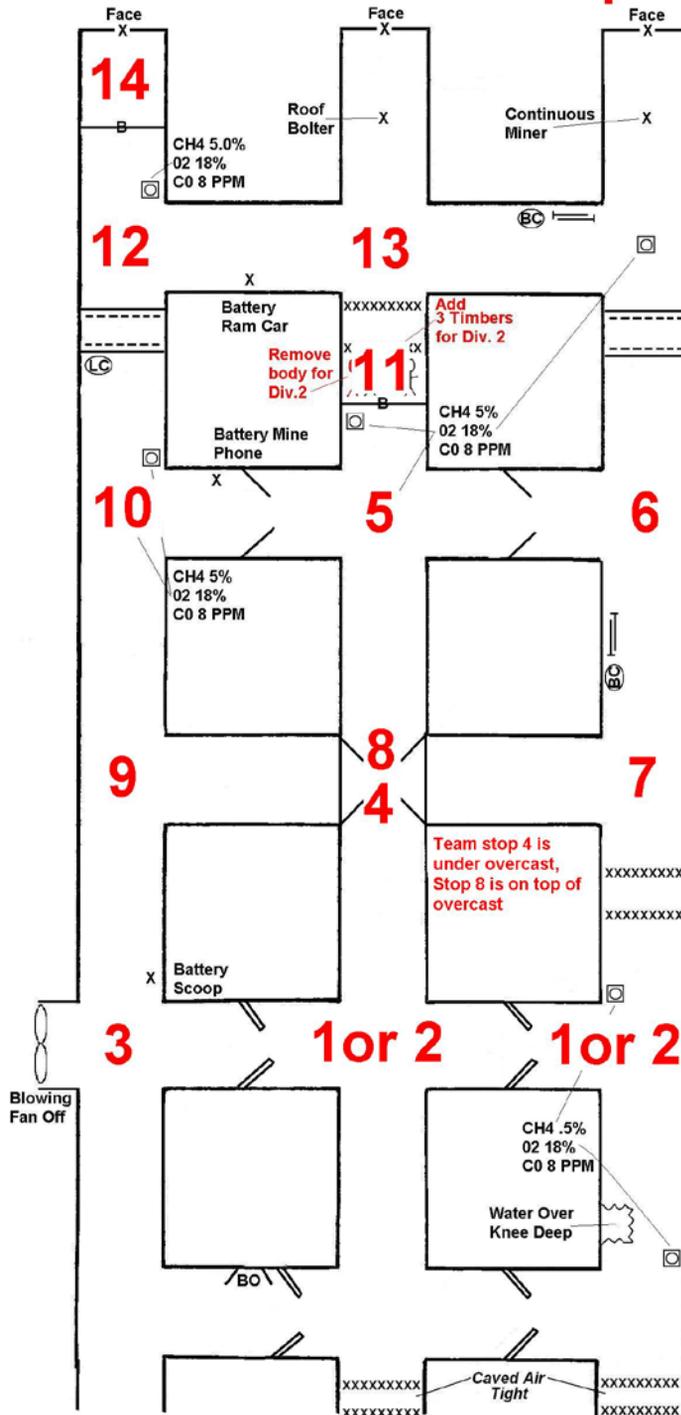
Written Instructions

**ACCOUNT FOR ALL MISSING
MINERS**

**THE BLOWING FAN CAN BE
STARTED AND STOPPED
BY ASKING THE
SUPERINTENDENT. THE
BLOWING FAN CAN NEVER
BE REVERSED**

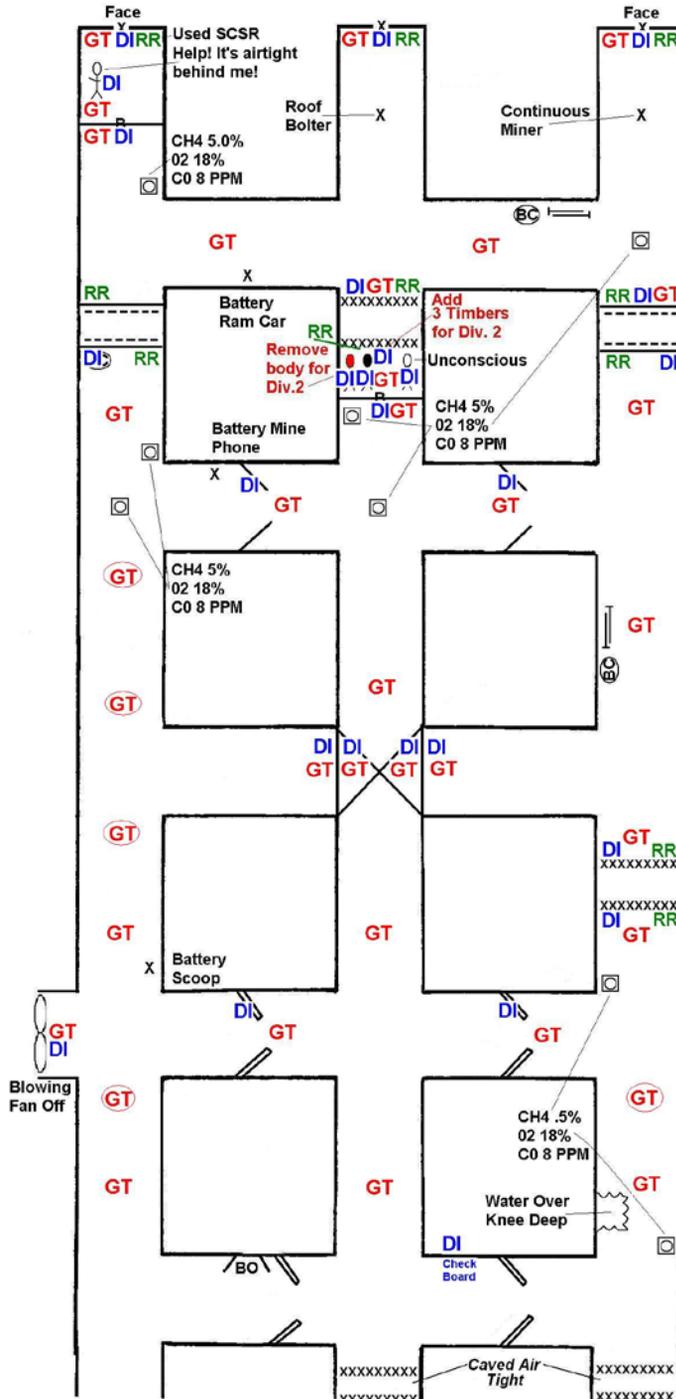


Possible Team Stops



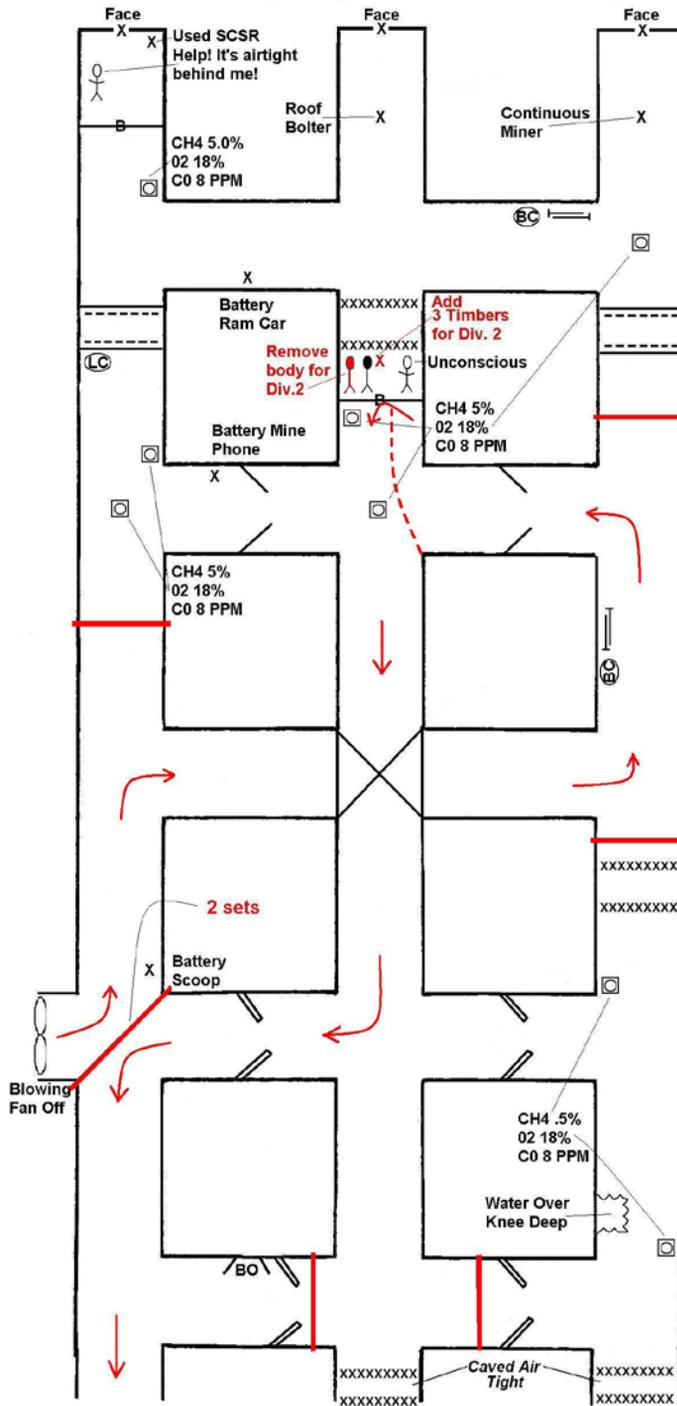
***Teams can explore on top of the overcast at this contest**

Gas Test Date & Initial Roof & Rib

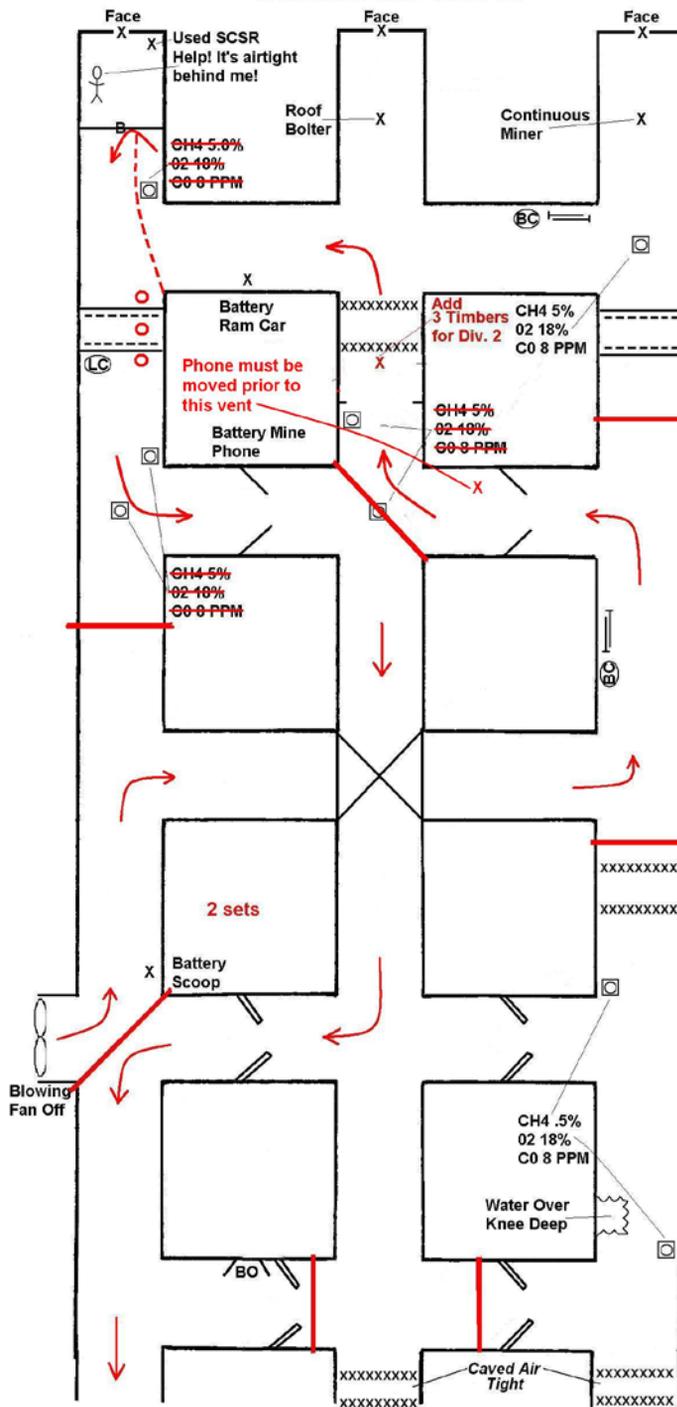


Gas tests are made according to team exploration. Some of the above gas tests (GT) may or may not be required by rules. Chief judge will go over during judge's briefing.

Vent 1 (Only vent for Div. 1)



Vent 2 for Div 2



PATIENT STATEMENT
IN BARRICADE IN NO.
1 ENTRY

HELP! IT'S
AIRTIGHT
BEHIND ME.....

Keys to Problem

- **Blowing fan is in by fresh air base and will create air migration after turning on**
- **Team must follow contaminated entry while exploring**
- **Team must not send low O₂ or explosive mixtures over unexplored areas**
- **Team must not send explosive mixture over battery mine phone or other battery equipment**
- **Team must move battery mine phone before 2nd ventilation**
- **Team must timber in no.1 entry to follow contaminate into last open crosscut**
- **Team must ventilate barricade in no. 1 entry before exploring to no.3 entry in last open crosscut**
- **Team cannot compare maps after 2nd ventilation**