



**Alabama Coal Association**



## 2013 Day 1 Problem Briefing



**Beville State Community College**

# 2013 ACA DAY 1

## Statement

**You are located on the surface of RT #15 mine. This is a new highwall mine that just started production a few months ago. Thanks for answering our call for help.**

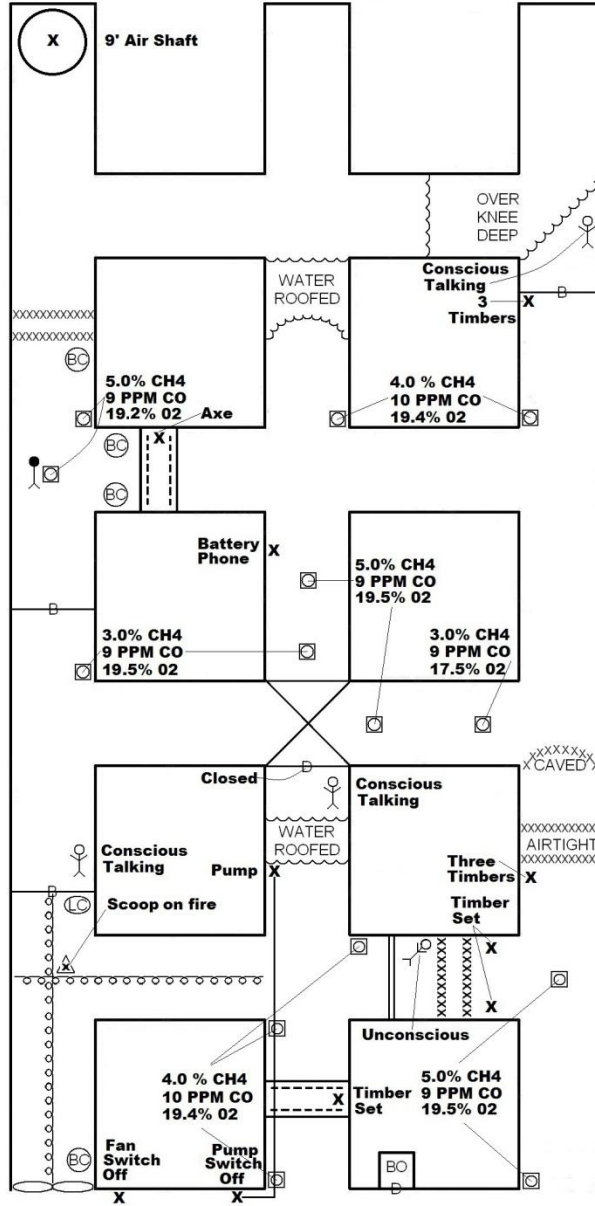
**About 2 hours ago, a foreman and a 4 man crew entered the mine to rock dust and do some bolting around the new air shaft in the no.1 entry. We heard a large boom a short time after they entered the mine and have not been able to contact the crew since. We tried to enter the portals but found conditions unsafe for us to explore. The mine has had numerous problems with water, methane and bad roof. The mine liberates high amounts of methane every 24 hours and the mine has had several roof falls in the last week.**

**The exhaust fan is off, but can be started by using the fan switch located near the fan. The power going underground has been locked out and is being guarded. The pump switch on the surface has been damaged and is being repaired. You will be notified when it is ready for use. A trained mine rescue team is here to back you up and the mine maps that you will receive once the clock is started are up to date.**

**The mine is equipped with a new communication and tracking system that we hope can be useful to you as you explore. We will let you know if we can give you further information about the last known location of the missing miners as soon as we can.**

**Please be careful and let us know when are ready to begin.**

## 2013 ACA Day 1



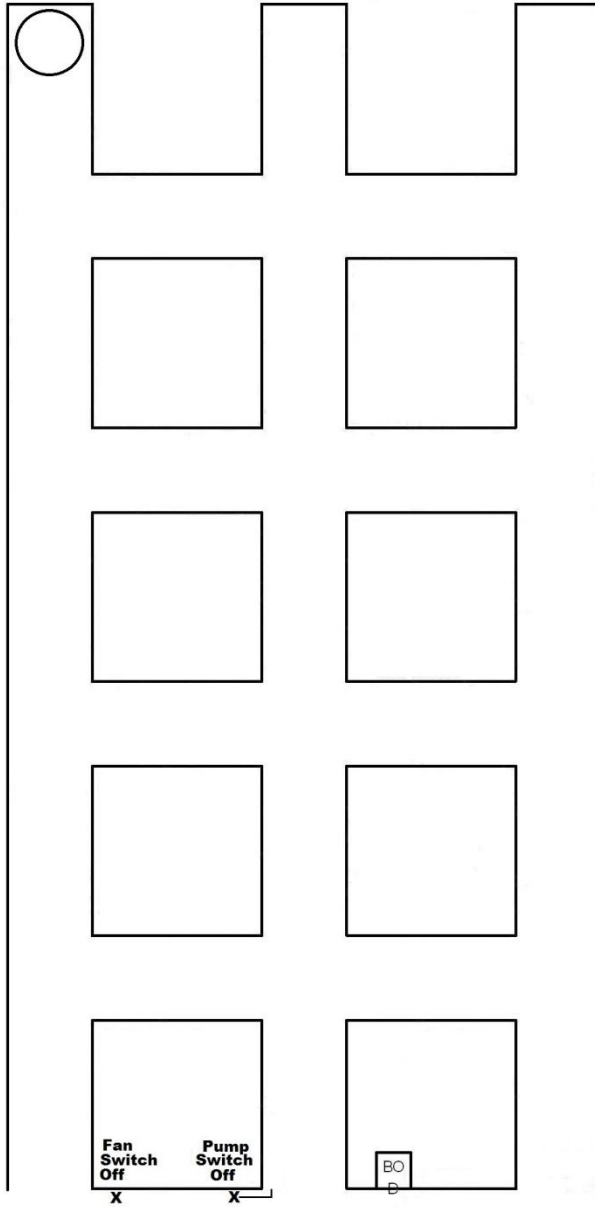
# 2013 ACA Contest

## Day 1 Problem

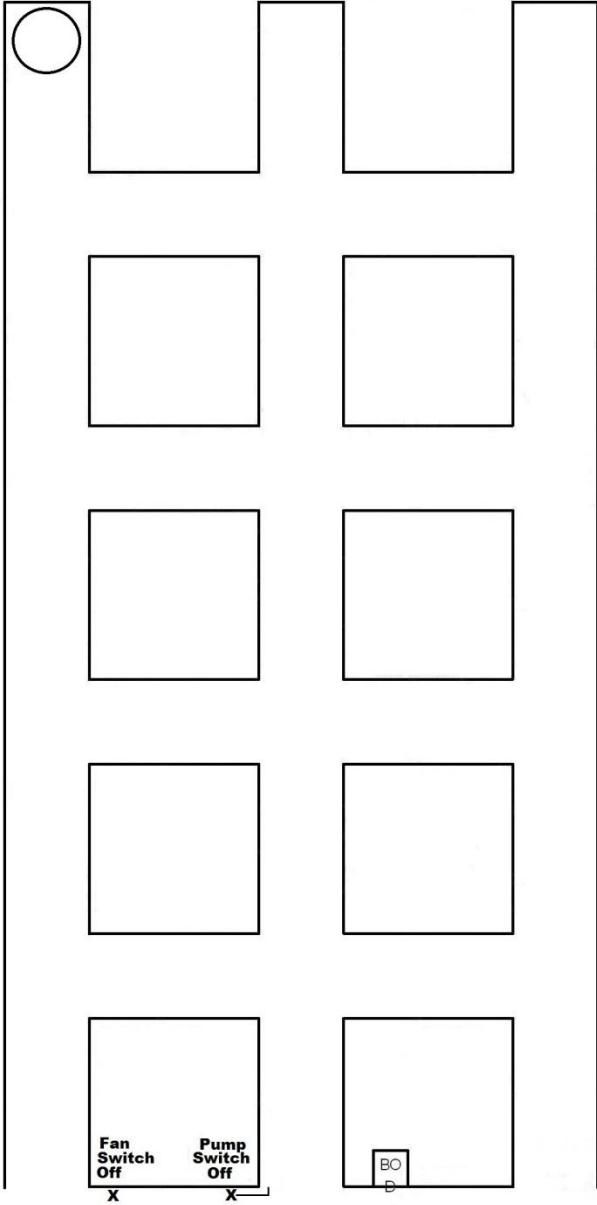
### (Written Instructions)

- **YOU CAN ONLY CARRY TWO SETS OF BRATTICE CLOTH WITH YOU AT A TIME**
- **ACCOUNT FOR THE MISSING MINERS AND BRING LIVE PERSONS OUTSIDE**
- **BARRICADES AND STOPPINGS FOUND INTACT CANNOT BE MOVED FROM LOCATION FOUND. THEY CAN BE TAKEN DOWN AND PUT BACK UP IF NEEDED**
- **REPORT ALL EXPLOSIVE MIXTURES TO THE SUPERINTENDENT BEFORE MOVING TO NEXT TEAM STOP**
- **THE EXHAUST FAN CANNOT BE REVERSED**
- **ONCE STARTED, THE EXHAUST FAN CANNOT BE STOPPED OR STALLED**
- **YOU WILL HAVE 80 MINUTES TO WORK BEFORE BEING REPLACED BY ANOTHER TEAM**
- **BRIEFING OFFICER IS OUTSIDE AND ISOLATED**

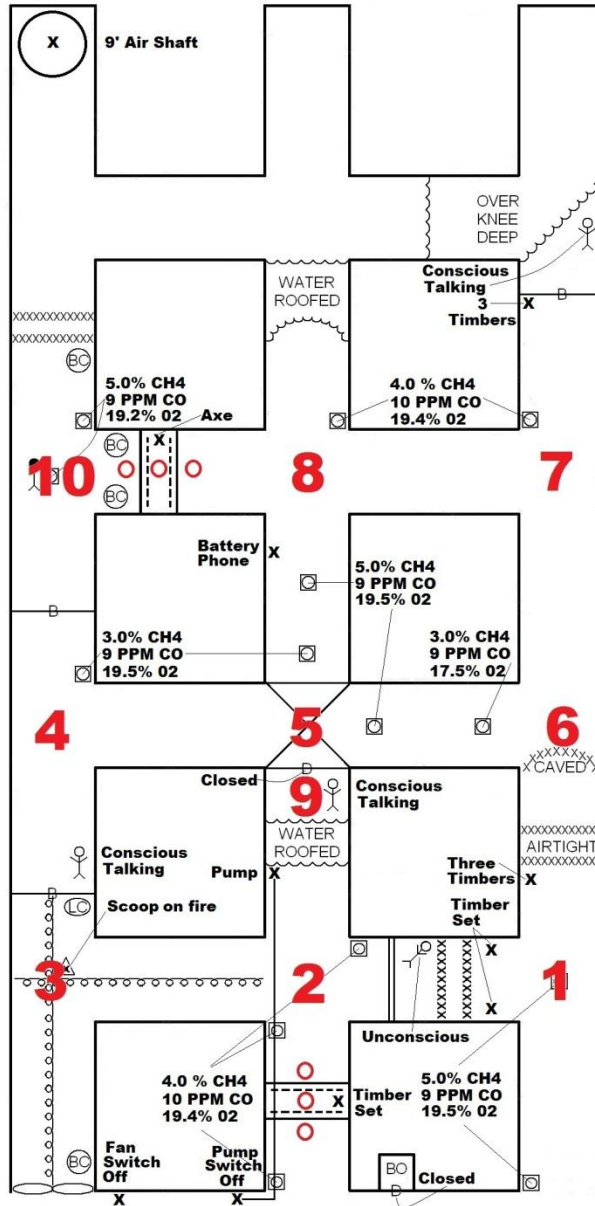
**Briefing Officer Map**



**Team Map**



## Team Stops



PATIENT STATEMENT  
IN BARRICADE IN  
NO.1 ENTRY INBY 1<sup>ST</sup>  
CROSSCUT

Help! Get me out of here!

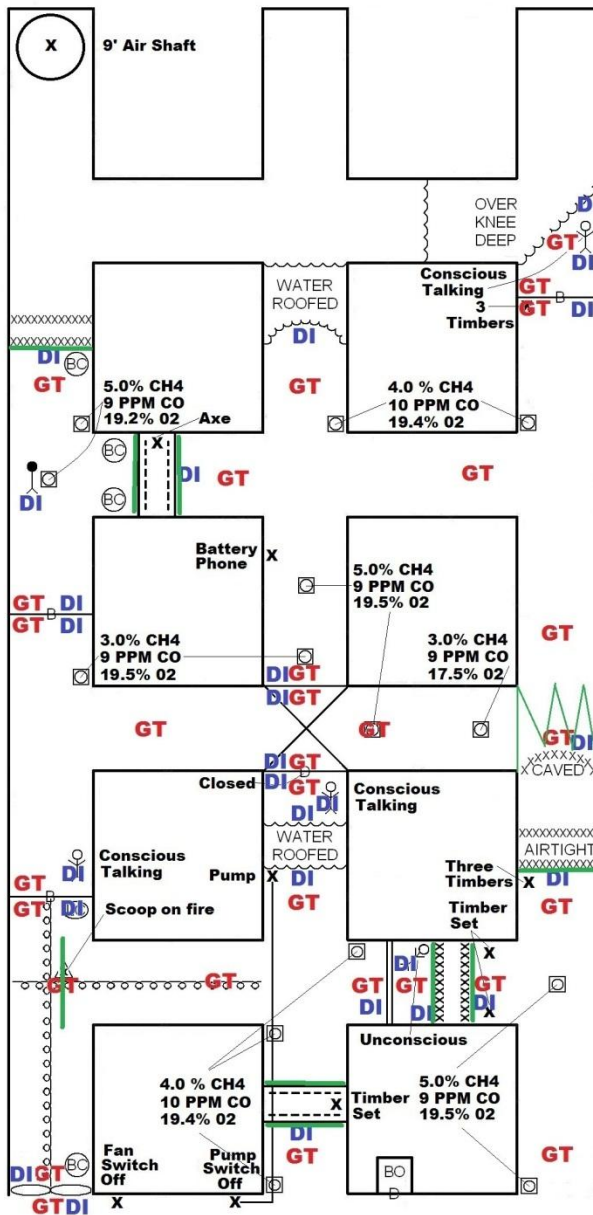
PATIENT STATEMENT  
BEHIND OVERCAST  
DOOR

Help ! Get me out of here!

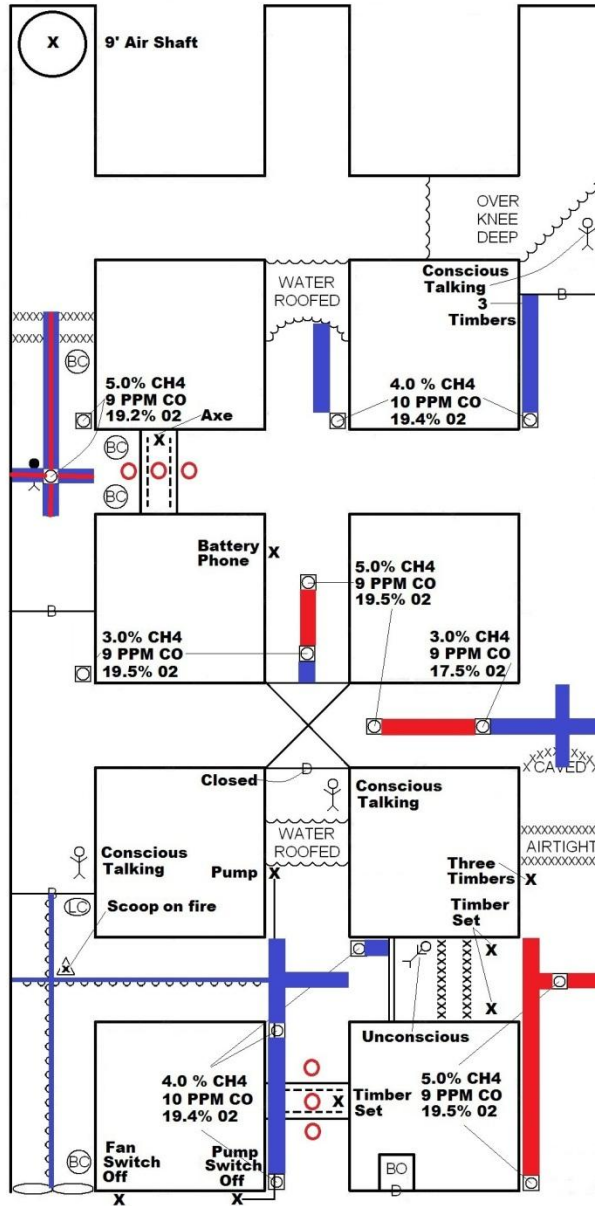
PATIENT STATEMENT  
IN BARRICADE IN NO. 3  
ENTRY

Help! Get me out of here!

## Gas Test Date & Int. Roof & Rib

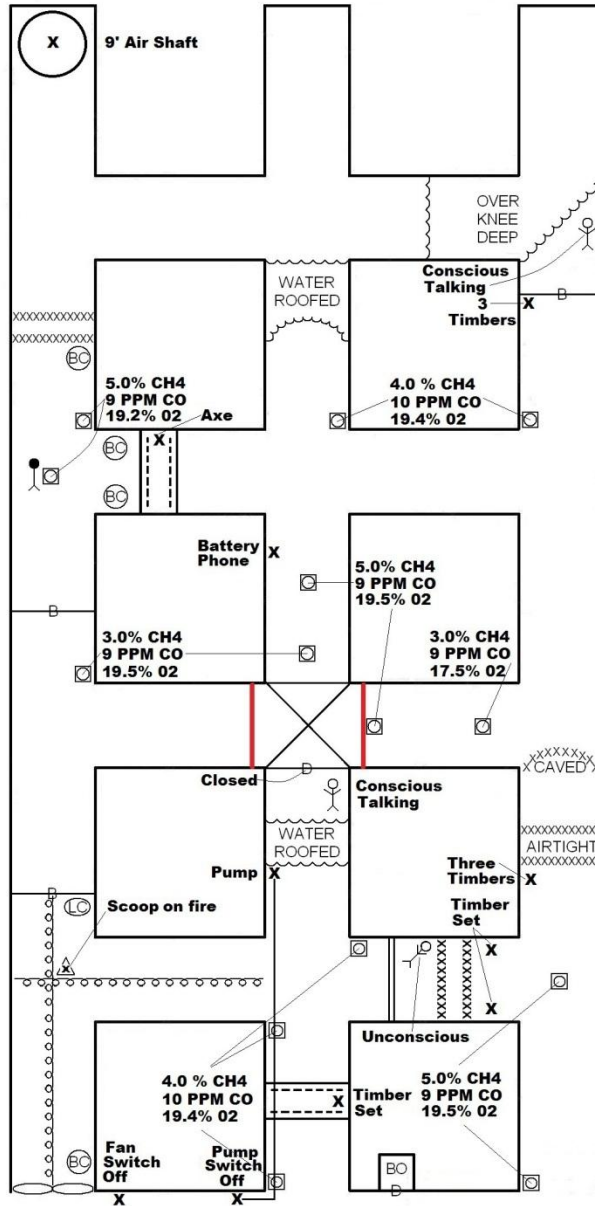


# EXPLOSIVE IRRESPIRABLE

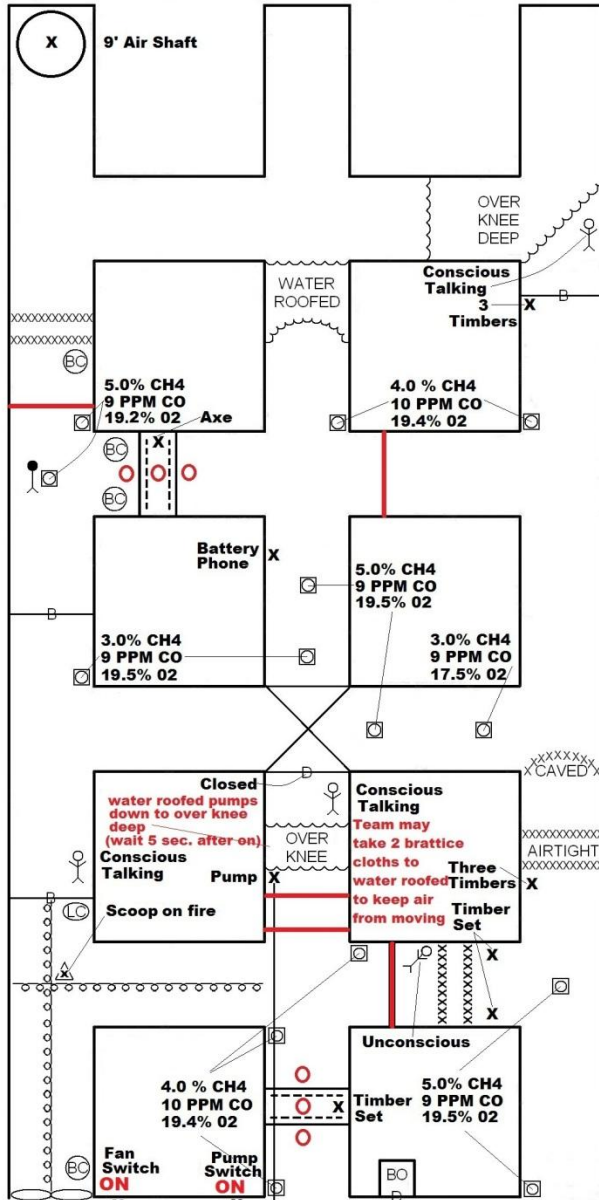




## Airlocking to Conscious man at overcast

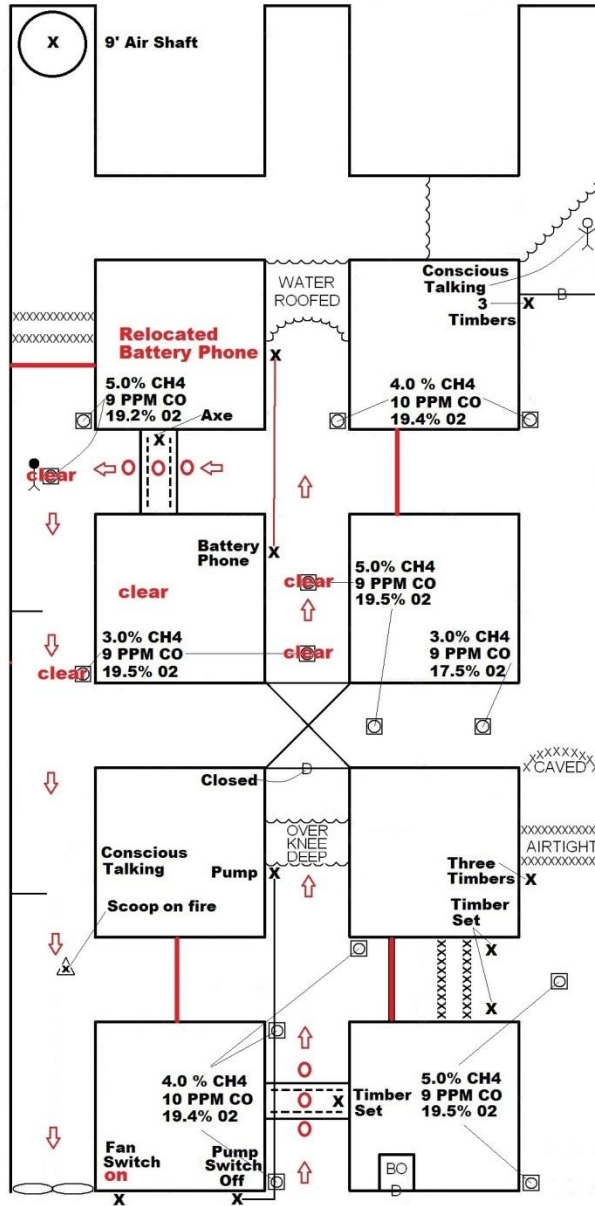


## Pumping Water Roofed

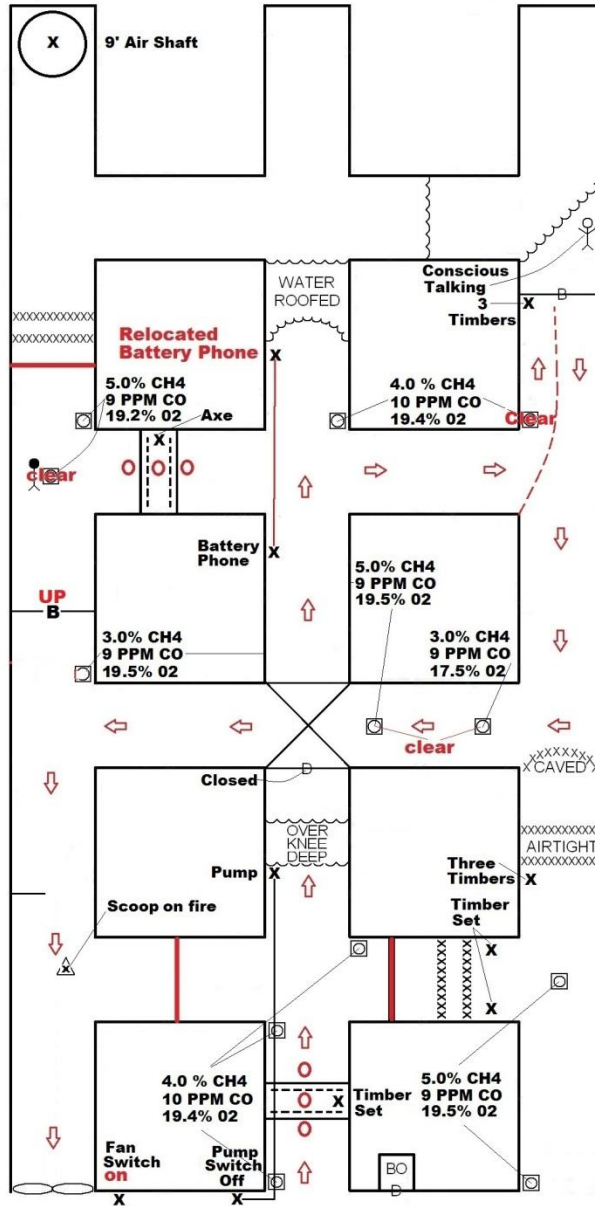


**When pumping water, team must keep air from pulling from airshaft or moving explosive mixture over unexplored areas and ignition source**

## 2nd Vent



### 3rd Vent



# Keys to Problem

- Timber unsafe roof in proper manner
- Remain air-locked from air shaft after turning on fan for first ventilation
- Keeping explosive mixture from pulling over caved area from air shaft in no.1 entry
- Tying behind permanent stopping in first crosscut before advancing in by 2<sup>nd</sup> crosscut
- Put Care Vent or apparatus on unconscious man
- Team not advancing past brattice cloths in third crosscut between 1 and 2 entry to airlock into overcast with conscious man
- Building 2 airlocks to rescue conscious man behind door of overcast
- Pump switch is repaired after team explores to team stop 10 (3<sup>rd</sup> crosscut between 1 & 2 entry)
- When pumping water, team must take 2 brattice cloths or be ready for ventilation to change when water pumps from roofed to over knee deep
- Moving battery mine phone to safe area before 2<sup>nd</sup> vent
- Not sending explosive mixture over caved area in no.3 entry 2<sup>nd</sup> intersection during any ventilation moves
- Not stalling the fan