

**ALABAMA COAL ASSOCIATION
MINE RESCUE CONTEST
May 18, 2005**



INITIAL EXPLORATION

Team will check all openings to the area to be explored in by the fresh air base in Nos. 1, 2 and 3 entries and make all necessary roof and gas tests as indicated on the appropriate maps. Advance will be into the No. 3 entry to the 1st intersection.

TS-1 will be made in 3-1 intersection where team must make 50 foot apparatus check. Team will examine in by to the water over knee deep and to the crosscut to the left. Team will continue exploration to

TS-2 in the 2-2 intersection. Team will make roof tests and gas tests required out by in No. 2 entry and gas tests in by and into the crosscut to the left. Team will continue exploration to

TS-3 in the 1-1 intersection. **WHEN TEAM CAPTAIN BREAKS IMAGINARY LINE INTO 1-1 INTERSECTION, CHAIRMAN OF JUDGES WILL HAVE PATIENT READ PREPARED STATEMENT AS FOLLOWS:**

I am behind the barricade. Please get me out. My cap light is out and I do not know what is behind me. I am afraid to move. Please get me out.

Team will complete examination of the intersection outby to the unsafe roof and inby to the barricade where they will encounter the low oxygen. Since there is no means for the team to clear the low oxygen and ventilate the barricade at this point, they must continue to explore.

TS-4 will be continued advance in No. 2 entry to 2-2 intersection. Team will examine inby to the water over knee deep, to the crosscut to the left to the caved air tight and to the damaged stopping to the right. Team is still unable to ventilate to clear the barricade so exploration must continue.

TS-5 will be made in the 3-2 intersection. Team will examine outby to the inby end of the water over knee deep and inby in the No. 3 entry making all required gas tests at these locations. Team must continue to explore in order to ventilate.

TS-6 will be in the 3-3 intersection. Team will make all required gas tests from this location and continue exploration to

TS-7 in the 2-3 intersection. Team will examine outby to the inby end of the water over knee deep, inby to the outby end of the water over knee deep and to the crosscut to the left. At this location, team will find the four (4) timbers and ventilation to rescue the patient is now possible and **MUST BE DONE PRIOR TO CONTINUING EXPLORATION.** Team will also find the lunch bucket with the note inside. The note says:

“Joe, Jim, John and I tried to get out and we were too weak to continue. We are going back to the faces to barricade ourselves in. We could not locate the rest of the crew. Please hurry.” Linda.

FIRST VENTILATION

Team will retreat to the 1-1 intersection to set the four timbers they found at TS-7. They may set the timbers in the unsafe roof outby 1-1 and explore the in-between area. Team will build a stopping inby 2-1 intersection and build inby 3-1 intersection. Team must also build either outby 2-1 intersection or outby the caved area in No. 2 entry just inby the FAB. This will prevent the irrespirable mixture in No. 1 entry from being moved over the caved (unexplored) area. Team may now build (or have the briefing officer build for them) a stopping at the fresh air base between Nos. 1 and 2 entries. This will make No. 1 entry intake inby through the unsafe roof and through the first line of crosscuts and return out No. 3 entry through the exhausting fan. Team will erect curtain inby at 1-1 intersection to clear the barricade and **MUST BUILD TO ENTER THE BARRICADE AS CONDITIONS ARE UNKNOWN.**

ATTEMPTED RESCUE OF PATIENT BEHIND NO. 1 ENTRY BARRICADE

Team will enter the barricade after erecting air lock and find the unsafe roof immediately inby the barricade. Since they have used all of the timbers outby the 1-1 intersection, they have none to continue inby and must close the barricade and continue to explore in order to rescue patient. Team must leave one of the air locks in place to continue inby exploration and may tear down the stopping at the FAB which will leave the inby area unventilated. Team may make all required roof tests and gas tests while they are inside the barricade.

CONTINUED INITIAL EXPLORATION

TS-8 will be made in the 1-3 intersection. Team will examine outby and make roof test and required gas tests at that location. Team will examine inby and find the four (4) timbers on the inby rib. **Team must now return to rescue the patient behind the barricade since they now have means to do so with the timbers. Continued exploration will be considered delay.**

RECOVERY OF PATIENT BEHIND THE NO. 1 ENTRY OUTBY BARRICADE

Team must re-establish ventilation if they have interrupted same, and return to barricade and air lock through. They may set the timbers through the area of unsafe roof and bring the patient to the fresh air base open-face. They may now continue further exploration. Team does not have enough timbers to advance in No. 1 entry through the unsafe roof inby the patient.

CONTINUED INITIAL EXPLORATION

TS-9 will be made outby in 1-2 intersection. Team will examine to the crosscut to the right to the unsafe roof, and outby to the inby side of the unsafe roof. They have an insufficient number of timbers remaining to enter the unsafe roof either in the crosscut or outby the 1-2 intersection. Team will continue exploration inby in No. 1 entry to

TS-10 in 1-4 intersection. **When team breaks plane into the last open crosscut the chairman of the judges must have the patient behind the barricade read the prepared statement as follows:**

"HELP!! HELP!! I AM BEHIND THE BARRICADE. THE ROOF, RIBS AND FACE ARE SOLID AND THIS AREA IS AIRTIGHT. PLEASE GET ME OUT!!

There is no way, at this time, for the team to ventilate this location, so further exploration is necessary. Team will advance to

TS-11 at 2-4 intersection. Team will make all required checks at this location and examine to the barricade inby and to the unsafe roof to the right and outby to the water over knee deep. Team does not have enough timbers remaining to explore through the unsafe roof in the LOX between Nos. 2 and 3 entries, but ventilation can be accomplished at this point and they must do this without delay to rescue the patient behind the barricade in the No. 1 entry face.

2nd VENTILATION

There are several things for the team to consider when preparing to ventilate. The battery ram located outby the LOX in No. 3 entry, the three areas of water over knee deep which are still unexplored and the remaining areas of unsafe roof that have not been explored because of a lack of material. Since ventilation has been established across the line of first crosscuts, this area is clear of any contaminants at this time. Even though there are no contaminants to be moved inby in the No. 1 entry, the area in the second crosscut between Nos. 1 and 2 entries has not been explored and the potential exists for an irrespirable atmosphere to exist in the crosscut.

Team must clear each line of crosscuts individually or risk moving an irrespirable or explosive atmosphere over an area that has not been explored. Team has not accounted for all missing miners at this time.

The water over knee deep in the No. 3 entry must be pumped to facilitate ventilation. No. 2 entry cannot be used as a return because of the caved area outby the 2-1 intersection. The only option as a return is the area of No. 3 entry. In order to pump the water, the switch for the No. 2 pump (currently on) must be turned off (this switch is located in No. 3 entry inby the water). This will prevent the cable inby the water in No. 3 entry from being energized when the pump switch at the FAB is turned on. The cable to No. 2 pump runs through the explosive mixture in the crosscut to the right of 2-2 intersection. Energizing that cable will endanger the team and create the potential for an explosion. Once the No. 2 pump switch is off, the switch for No. 1 pump may be turned on and immediately the water placards will be turned over and the water is gone. Team will explore through the unexplored area between the placards and this area can then be used as a return.

To ventilate, team may use No. 1 entry as the intake already established and build inby 2-2 intersection, and close the open door between Nos. 2 and 3 entries in the third line of crosscuts. This will airlock the No. 3 entry inby the second crosscut. Team must also close the open door between 2-1 and 3-1. NOTE: The mixture to the left of 2-2 intersection will not be clear unless the team makes effort to do this. There is no reason that it has to be clear at this point.

This will ventilate the explosive mixture in the second crosscut out the return and will clear this area for the next ventilation.

Team may now pump the water over knee deep in by the 2-2 intersection should they choose to do so. This is not necessary as the air moved across the unexplored area will now be clear air. Should team choose to pump the water, they must isolate the No. 3 pump cable by turning off the switch to the No. 3 pump in by the No. 2 pump. If this is not done, the energized cable will pass through the explosive mixture between 2-3 and 3-3. This will allow this area to be used to pass irrespirable/explosive atmospheres through as explored.

In order to ventilate the LOX, however, team must pump the water in No. 2 entry out by the LOX. This may be done once the explosive mixture out by the water in the crosscut has been cleared and the cable energized by turning the No. 3 pump switch to the on position.

Once this water has been pumped, team may ventilate by retaining the stopping in by 1-1 intersection, closing the door in the crosscut between 2-1 and 3-1, repairing the damaged stopping between 2-2 and 3-2, building a diagonal stopping in 2-3 and opening the closed door between 2-3 and 3-3. Team must also isolate the No. 3 entry face by building in the LOX between 2-4 and 3-4.

Team is now ready to rescue the patient behind the barricade in the face of No. 1 entry where the patient was talking to them after clearing the irrespirable mixture out by the barricade.

PATIENT RECOVERY

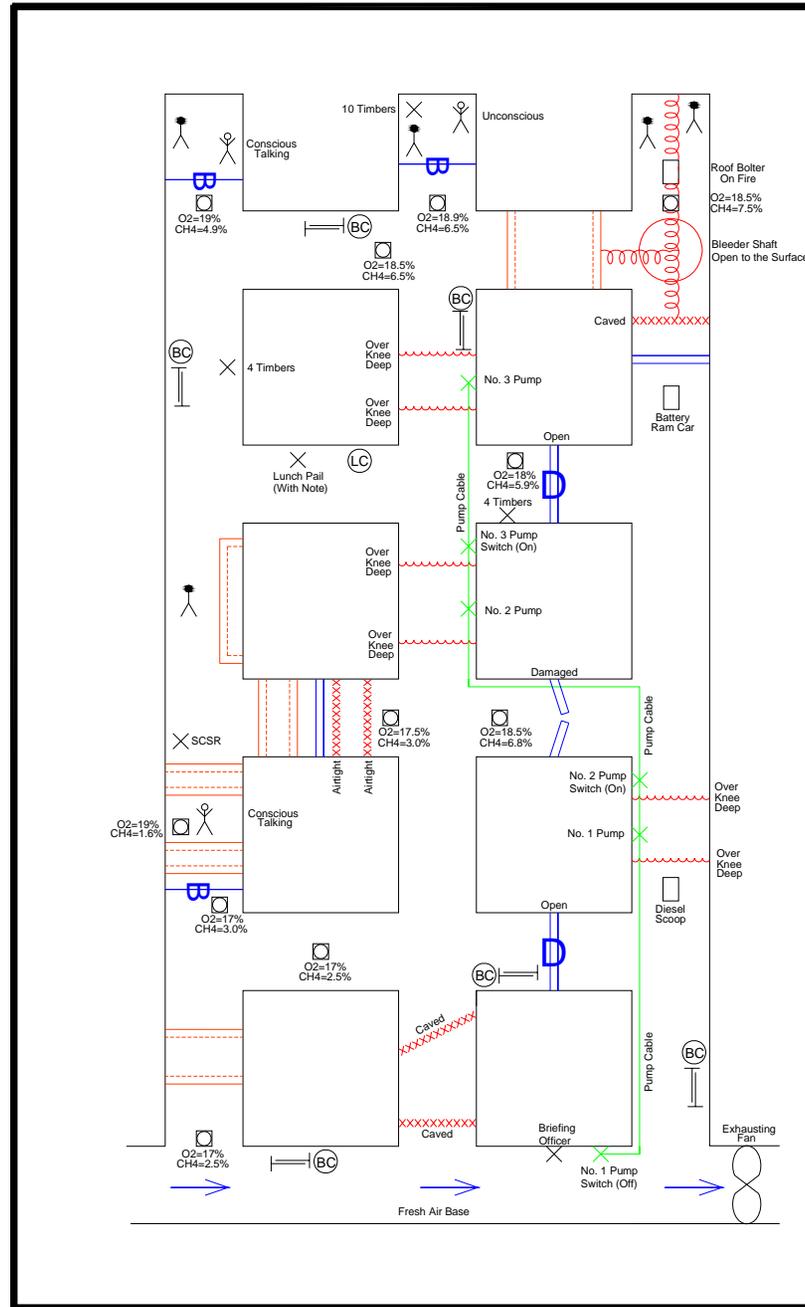
Team does not have to build to recover the patient behind this barricade as they have been informed that the area is airtight. They may just breach the barricade and bring the conscious patient to the FAB. While in the barricade, team may make all required tests in the face area.

To recover the victims behind the barricade in the face of No. 2 entry, team must clear the mixture out by the barricade. Team must then build to enter the area because conditions are unknown. Team may make all required tests in the face area while recovering the unconscious victim.

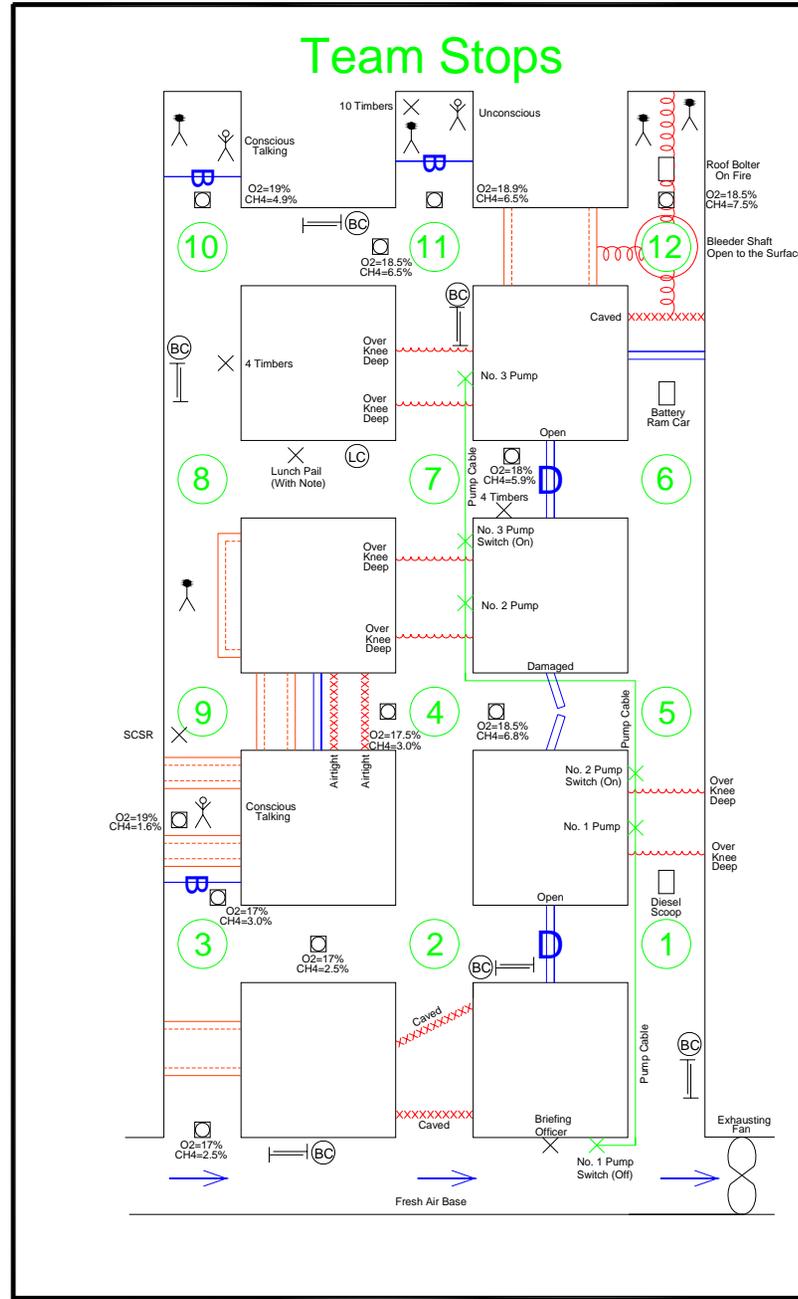
Team will find the 10 timbers at this location and, since they have not accounted for all missing persons, exploration must continue. Team may return and set timbers through unsafe roof in the LOX between No. 2 and No. 3 or may choose to retreat outby and set timbers in the areas of unsafe roof they have already encountered. They still will not account for all missing miners; if they choose this option it will only cost them time in the long run. **NOTE:** It is not a discount if team does not return to the outby areas at this point to timber through the unsafe roof. It is also not a discount if they do. They will be judged only on the area which they have explored and they would only be **REQUIRED** to explore this area once they have explored all areas that can be explored and failed to locate all missing miners.

CONTINUED EXPLORATION

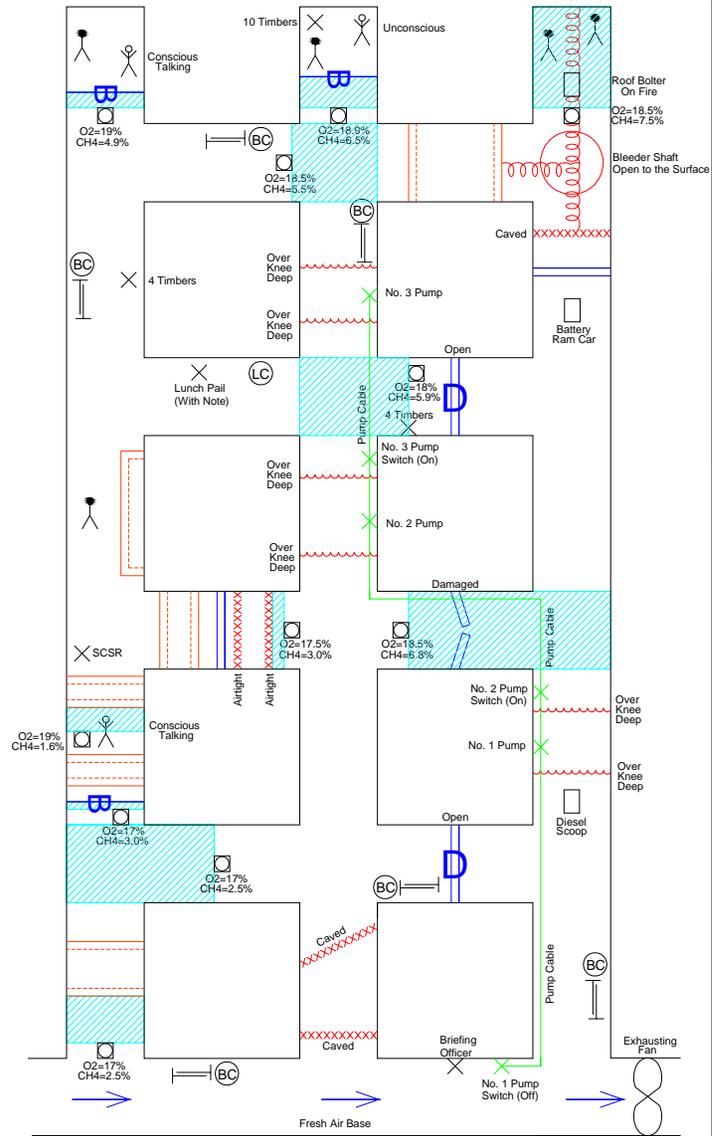
TS-12 will be made in the 3-4 intersection at the bleeder shaft. When team gets to right side of unsafe roof, they will encounter the smoke. When they examine inby toward the face of No. 3 entry, they will encounter the explosive mixture. Since there is no known clear air separation, team will withdraw from the mine at this point. They may make any required tests at this location, but must not continue to explore. Once they return to the fresh air base, they must stop the clock and the problem is completed.



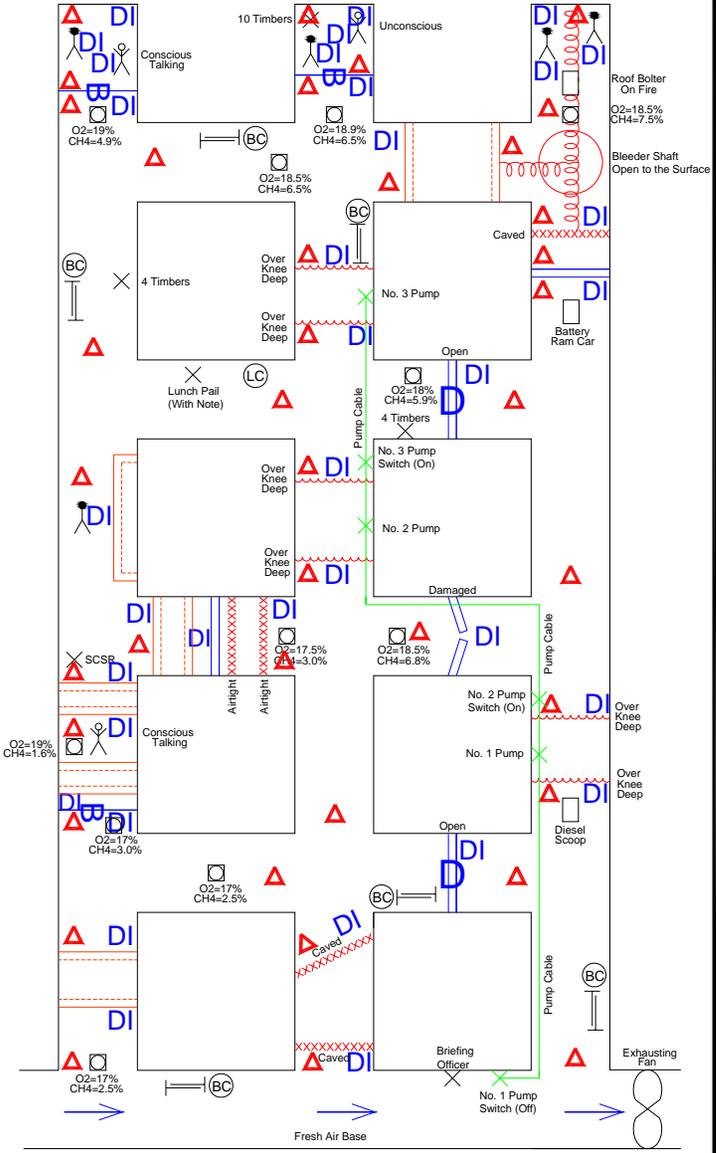
Team Stops



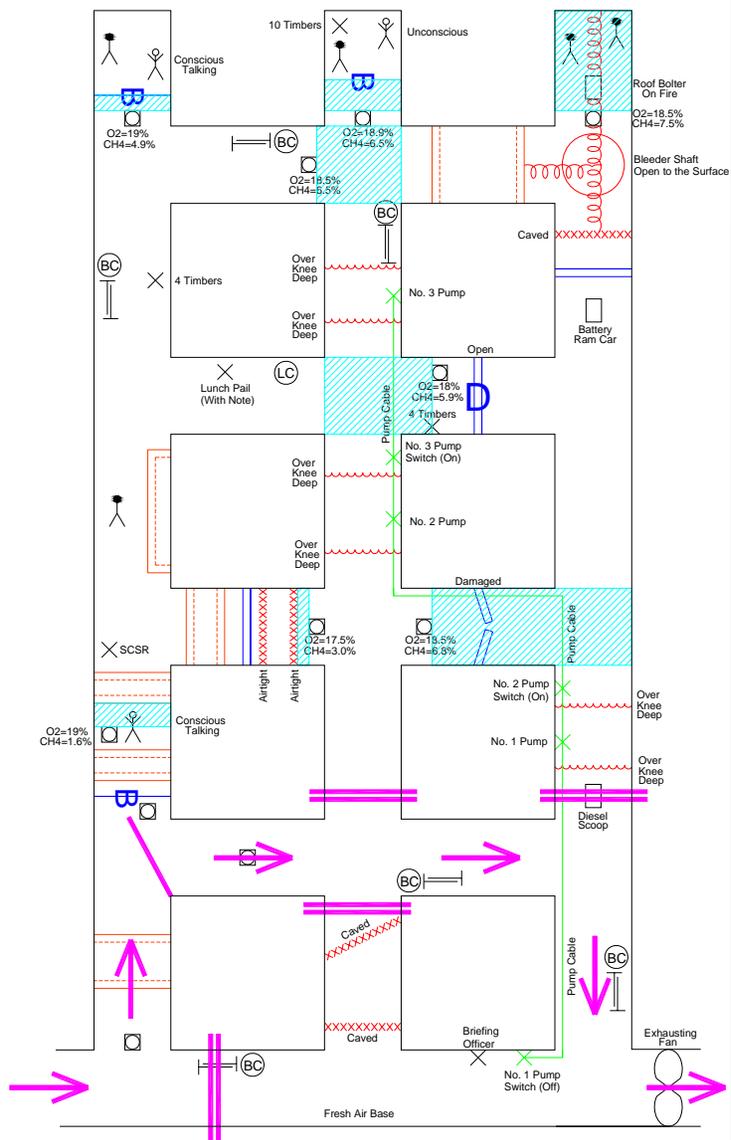
Extent of Gas



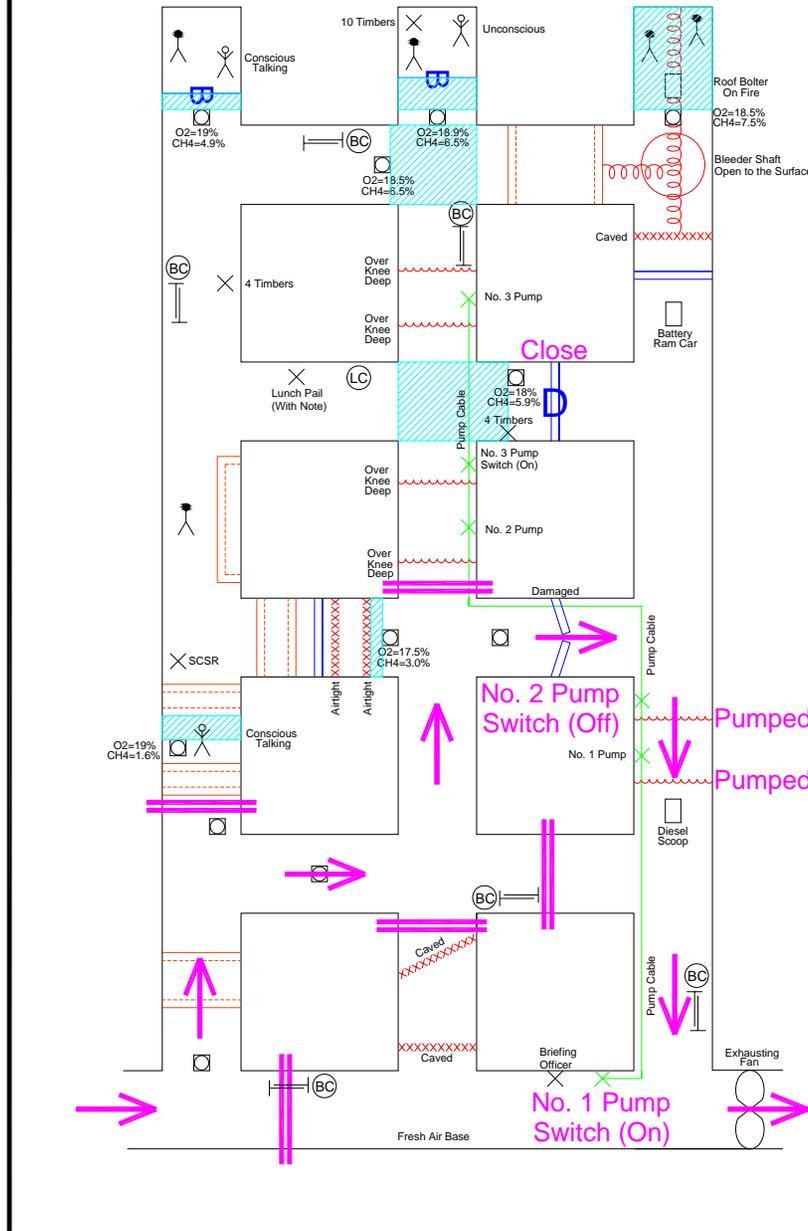
Gas Test and Date and Initial



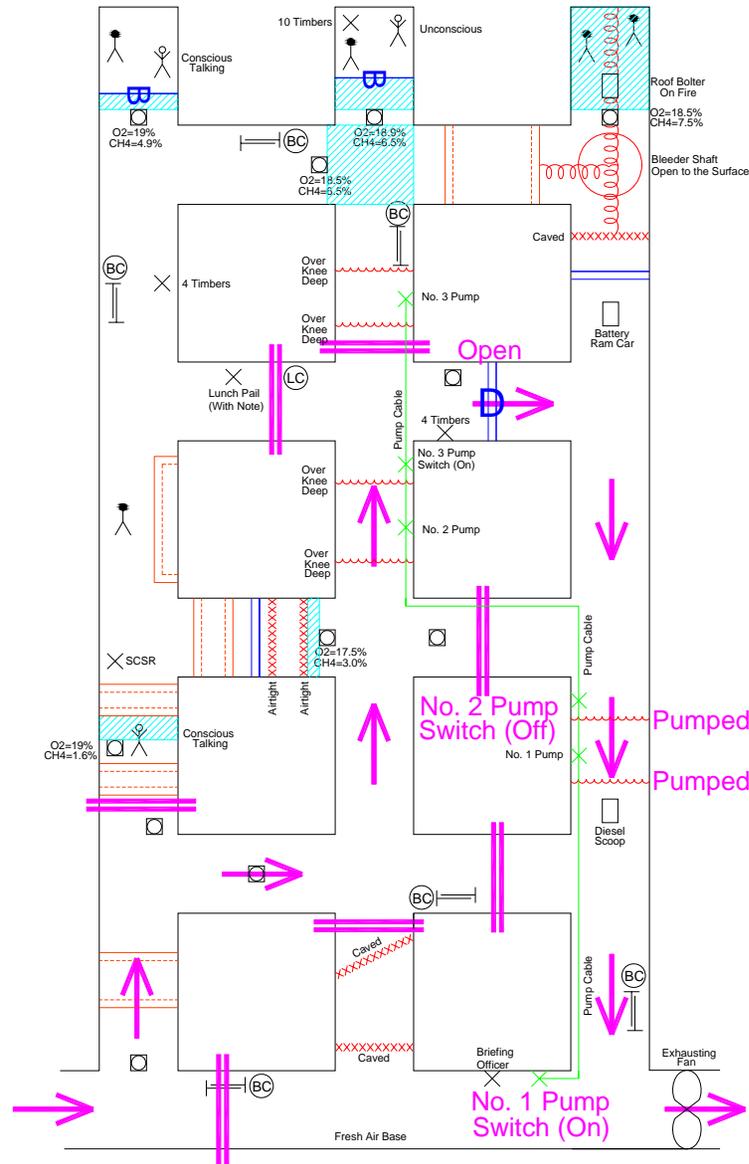
Ventilation #1



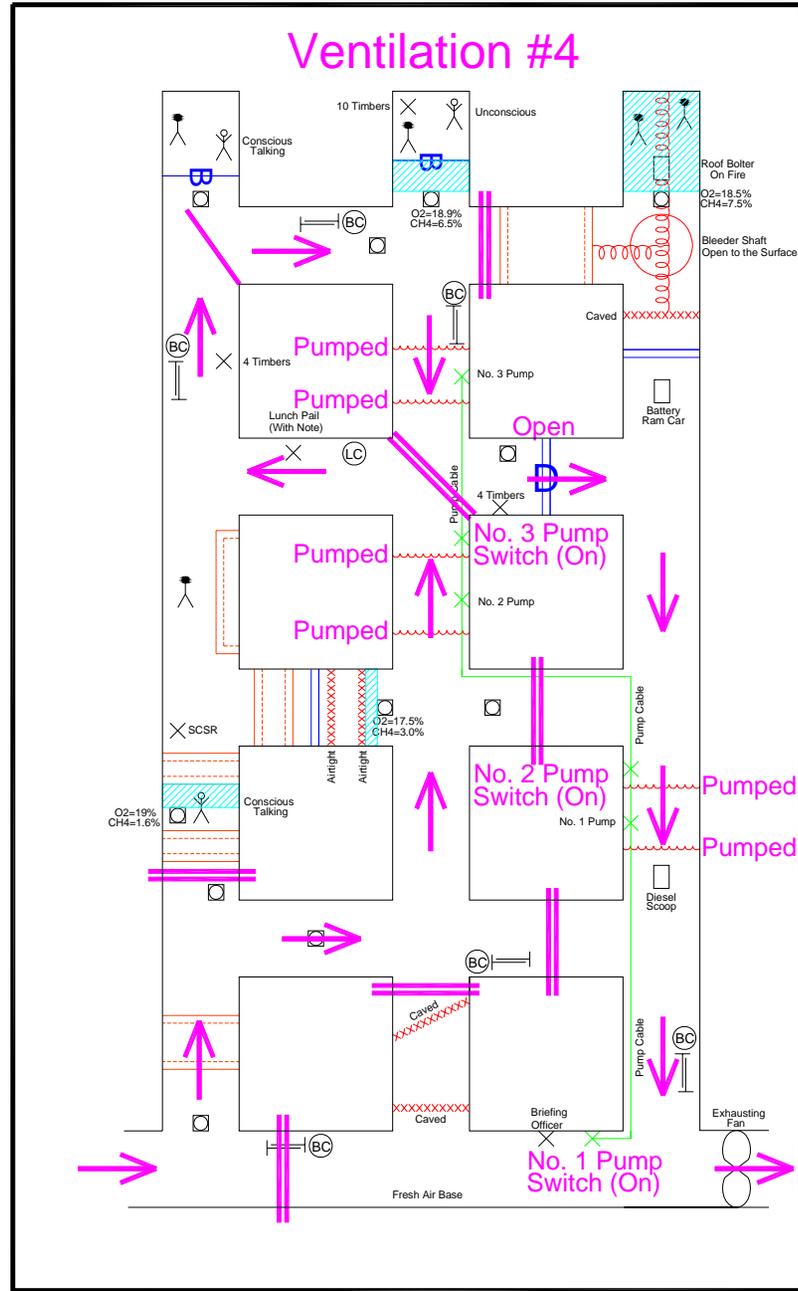
Ventilation #2



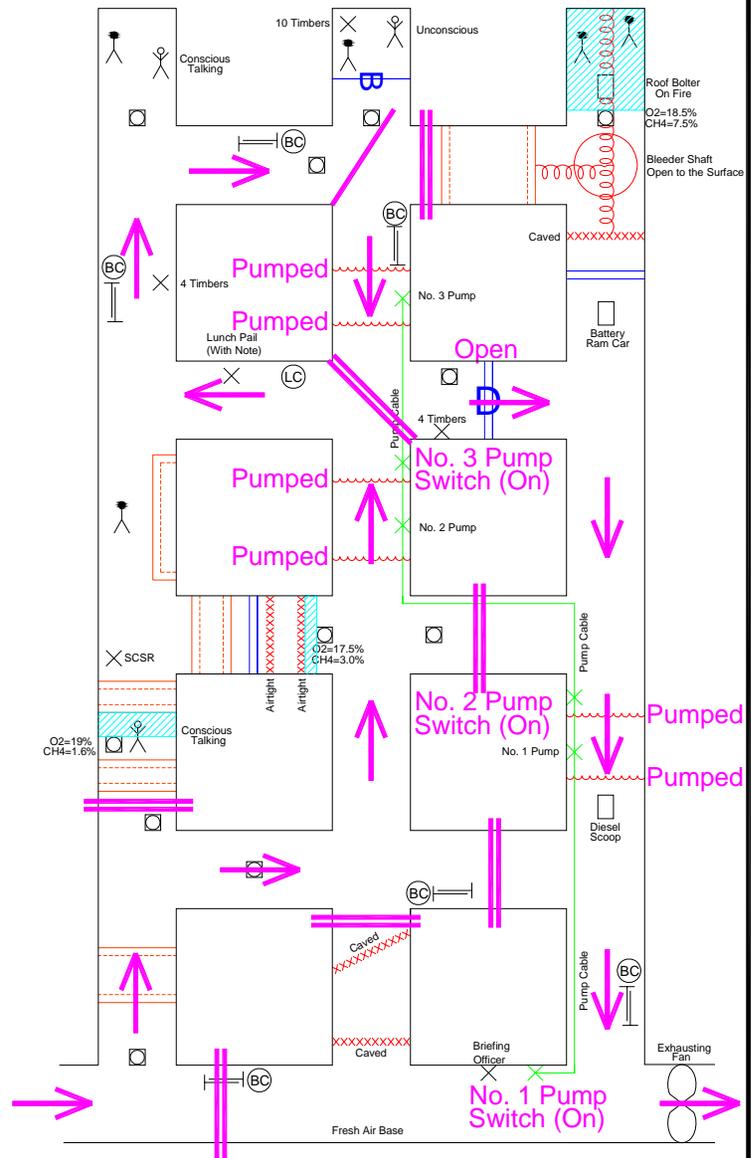
Ventilation #3



Ventilation #4



Ventilation #5



Team Map

