

## **Statement**

**Welcome to our mine and Thank you for your response we have a back-up team on site and all agencies are here to assist in this recovery. I will explain our situation to you in this statement and these are the facts as we know them now.**

**Recently we dropped an exhaust air shaft into an area of the mine where we are trying to develop new mains. There is an exhaust fan on top of this shaft located in # 3 entry that is currently off but can be started by the team at their request to the superintendent in the Fresh Air Base. We thought that we were several hundred feet away from an old abandoned mine but when we started to mine the face of # 1 we hit the old mine and backed equipment out. The boss and another man went back up to the face area to hang curtains but did not come back. We started back up to find them but encountered very low oxygen in # 2 entry and pulled back and called for help.**

**The intake air course has been set up to travel up the # 1 entry from the slope bottom which is outby and return out the exhaust shaft. The old works we encountered is full of water and is open to the surface. There is a pump located in the # 2 entry inby the Fresh Air Base that can be turned on and off by the team from a switch located in the Fresh Air Base, but the team must inform the superintendent in the fresh air base when they turn it on and off.**

**We hope that you can find our two missing miners and bring them back to us safely.**

**Good Luck**

## **PROBLEM/TEAM INSTRUCTIONS**

**ONCE THE EXHAUST FAN IS TURNED ON IT CAN NOT BE TURNED OFF IT  
MUST BE KEPT RUNNING AND DO NOT STALL THE FAN**

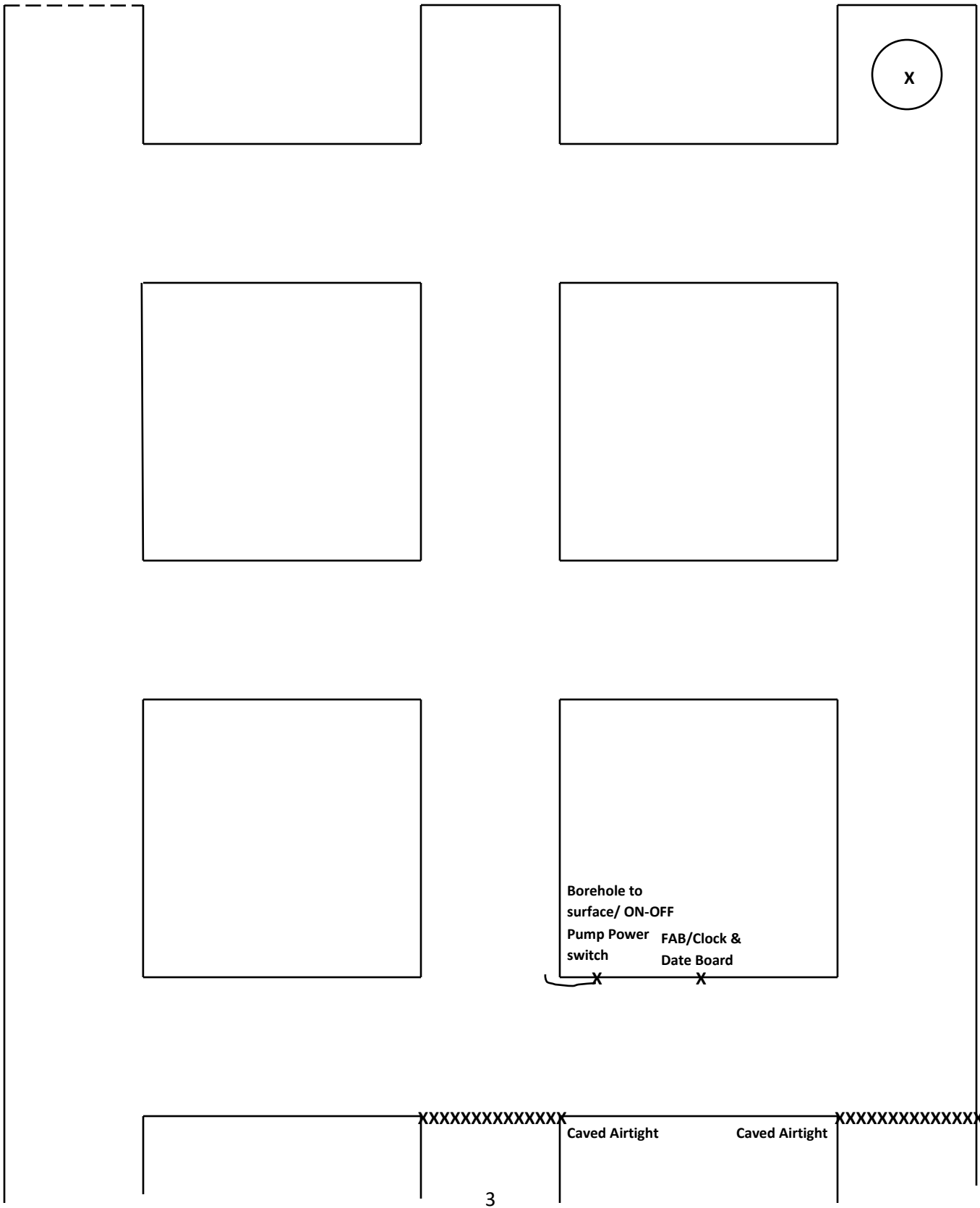
**THE EXHAUST FAN CAN ONLY BE RUN IN THE EXHAUST MODE AND CAN  
BE STARTED BY THE TEAM BY ASKING THE SUPERINTENDENT AT THE  
FRESH AIR BASE TO TURN IT ON**

**MAPS ARE NOT UP TO DATE**

**BAD ROOF, WATER ACCUMULATIONS, METHANE GAS ARE PROBLEMS  
THAT WE HAVE ENCOUNETRED HERE**

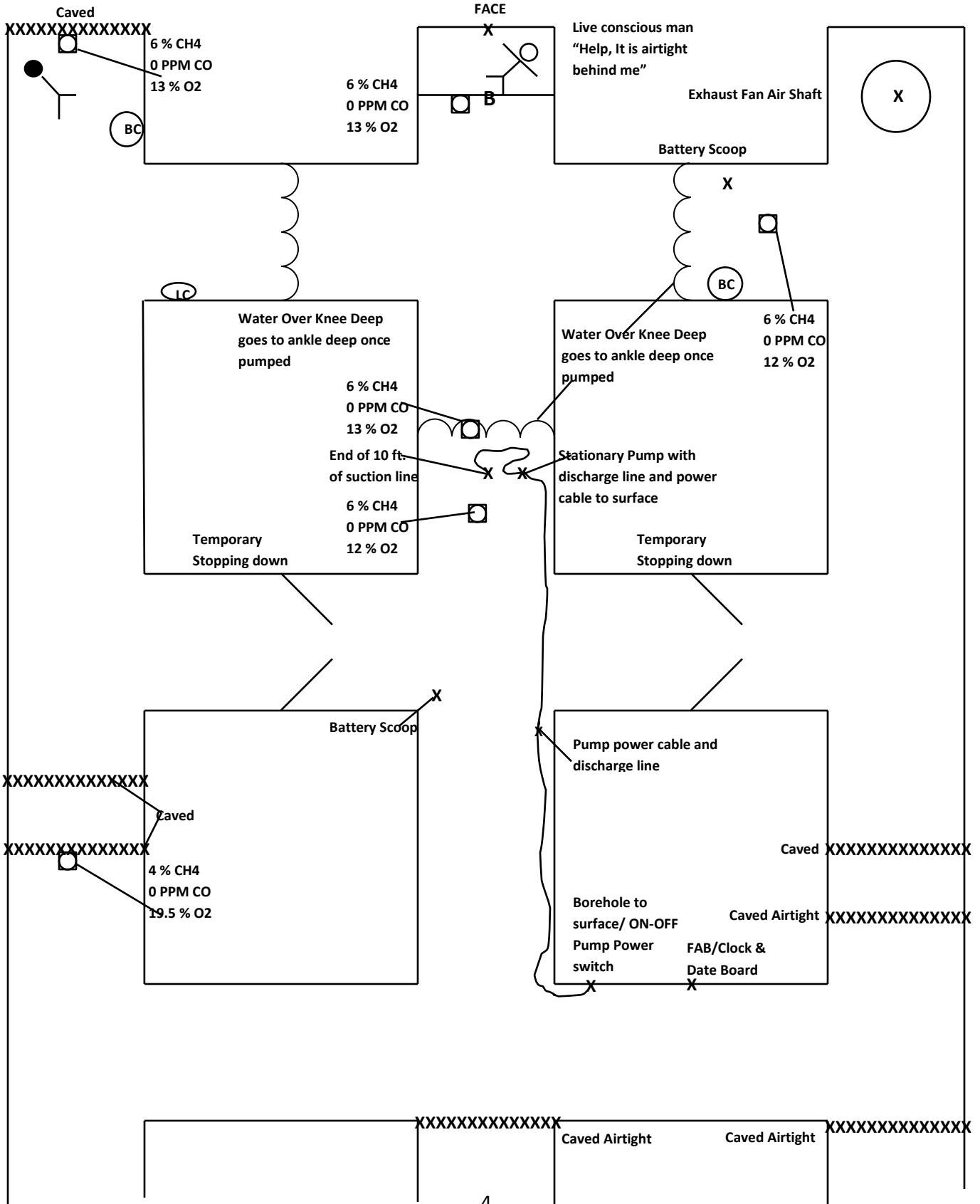
**THE TEAM MUST TELL THE SUPERINTENDENT AT THE FRESH AIR BASE  
THEY INTEND TO PUMP THE WATER BEFORE TURNING ON THE POWER  
SWITCH AND ALSO TELL HIM WHEN THEY INTEND ON TURNING THE  
SWITCH OFF**

**EXPLORE ALL AREAS OF THE MINE THAT CAN BE EXPLORED SAFELY**

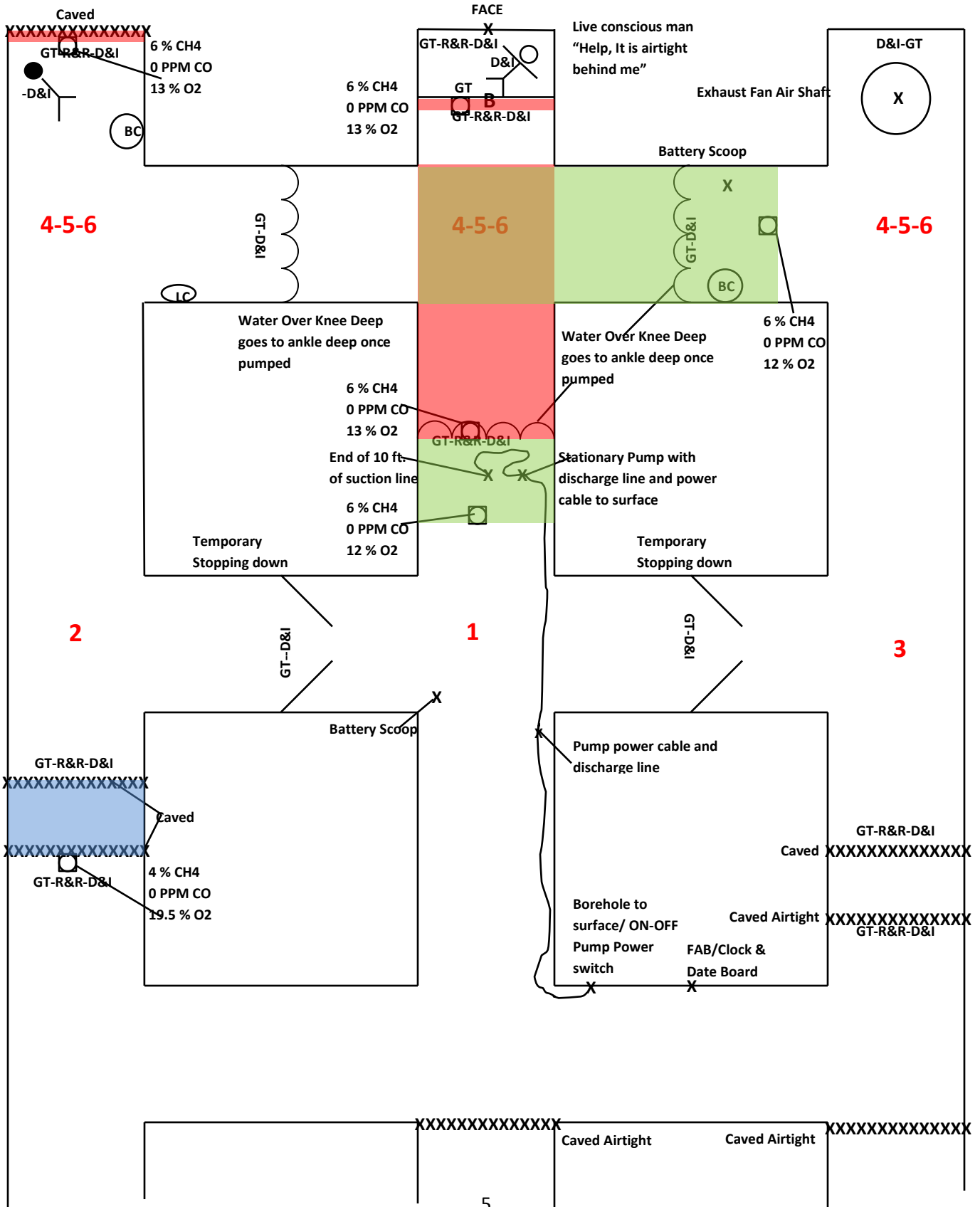


Borehole to  
surface/ ON-OFF  
Pump Power switch FAB/Clock &  
Date Board

XXXXXXXXXXXXXXXXXXXX Caved Airtight Caved Airtight XXXXXXXXXXXXXXXXXXXX



# Team Stops, Extent of Gas & Test





## Judges Instructions

1. Portal checks made after the team starts the clock will find # 3 entry blocked by a caved airtight area and the # 1 entry also blocked by a caved area. There is contaminate air gas mixture at the caved area which will extend into the caved area. The # 2 entry is open and has a pump power cable and discharge line in it on the right rib heading inby.
2. **Team Stop # 1** will be in A-line of # 2 entry the cross toward # 1 and #3 entries are both open due to the temporary stoppings located in the cross cuts being down. There is a battery scoop located in the intersection on the left outby corner and as the team makes the reach toward # 1 entry they find only the temporary stopping down their reach inby will find an irrespirable/non-explosive air gas mixture then a pump with a power cable, discharge line, and 10 feet of suction hose that is not in the water. Then they find an explosive/irrespirable air gas mixture which is at water over knee deep and blocking the entry this gas will extend into the water over knee deep.
3. **Team Stop # 2** will be in A-line of # 1 entry due to the contaminate the team found in # 1 entry at the caved area if they chose to go to # 3 entry first they should be discounted under Rule # 44 C. The teams reach outby finds the inby side of the caved area inby the intersection they find nothing.
4. Team Stop # 3 will be in A-line of # 3 entry where the team will find the inby side if the caved area and inby there is nothing. Note that the inby side of the caved area is CAVED and the outby side is caved airtight.
5. **Team Stop # 4** will be in B-line but it can be in #1, #2, or #3 entries, I believe that most team will since they are in # 3 entry will advance inby in # 3 entry to B-line but I will describe each location under team stop # 4.
  - If Team Stop # 4 is in B-line of # 3 entry** the team will find just inby the intersection, the bottom of the exhaust fan shaft. Inby the shaft location there is what is normally the face but it is not indicated as such so it will only require a gas test and the captain's date and initials. In the cross cut back toward # 2 entry of B-line the team will find an irrespirable/non-explosive air gas mixture extending due to travel over to # 2 entry. Next there is a battery scoop and a brattice cloth then water over knee deep across the entry.
  - If Team Stop #4 is in #2 entry in B-line** the team will need to pump the water in # 2 to travel inby. If the team chooses to pump the water to advance up #2 entry they will need to put the end of the suction line into the water over knee deep, if they do not put the end of the suction line into the water do not change the water placard. Their written instructions tell them they must tell the superintendent at the Fresh Air Base that they are turning on or off the pump switch if they do not tell that judge they should be discounted under Rule #50. Superintendent please let the judges on the field know that the pump is on or off. Once the suction line is in the water and the power to the pump is on please change the water over knee deep placards to ankle deep at the locations in #2 and

in the cross cuts. After the water is pumped the team can advance inby to Team Stop #4 in B-line of #2 entry. Judges please note if the pump power has been left on or off since it can be a problem later in the problem when the team ventilates. Inby the intersection please have the patient start reading his statement as soon as the captain cross the imaginary line heading to the barricade. The team will find an explosive/irrespirable air gas mixture at the barricade which will need removed before breaching under rule #35 and a gas test along with the captain's date and initials are also require here under Rules #24 and #27. As the team explores toward # 3 entry they will end of the water ankle deep a brattice cloth, a battery scoop and an irrespirable/non-explosive air gas mixture that because of direction of travel will extend into the intersection in # 3 entry. Making their reach toward #1 entry the team will encounter the end of the ankle deep water and a line curtain. If the team has come up # 2 entry their next advance under Rule #45 will be to advance to #3 entry for Team Stop # 5 due to the contaminate in the cross cut. Actions there are described above in the second paragraph.

**If Team Stop #4 is in #1 entry of B-line** the team encounters in the cross cut toward #2 entry a line curtain and water knee deep. Going inby in #1 entry the team encounters a brattice cloth, a body that will require a date and initials by the captain under Rule #27, and his touch by hand under Rule #32. Then an explosive/irrespirable air gas mixture touching a caved area allowing the gas to extend into the caved area. This will require a roof and rib test under Rule #23, the captains date and initials under Rule #27, and a gas test under Rule #24.

**Since team Stops #5 or #6 have been described in the options for team Stop #4 we will skip a recap and go into the ventilation steps to recover the patient.**

After the last Team Stop which should be # 6 the team will need to ventilated, (see the ventilation map). The intake air should travel up the # 1 entry from outby once the fan has been started and the ventilation controls are in place. A diagonal will need built in # 2 entry of A-line with the inby corner on the left inby corner of the intersection toward #1 entry. This allows the intake to travel through the caved in #1 entry and up # 2 entry to A-line the diagonal will isolate the battery scoop from explosive gas passing over it. From A-line the intake air will course up # 1 entry to B-line and over to #2 entry. A stopping must be built in #1 entry inby the imaginary line of the intersection to prevent explosive gas from being pulled through an unexplored area if the team does not build here discount them under Rule 31C and do not clear the barricade until the stopping is built. A line curtain must be used to remove the irrespirable/explosive gas at the barricade and the outby end of the line curtain should be on the left outby corner of the intersection. There should be a stopping built before turning on the fan in the cross cut of #2 to #3 in B-line to keep explosive gas which is in the intersection and the explosive gas at the barricade from being vented over the scoop batteries in the cross cut. If the team does not have this stopping in discount them for venting the explosive gas in the intersection over the batteries and if the sweep the barricade this will be a second explosive sent over the batteries under Rule 31D, but the barricade can be cleared. The air will travel down # 2 entry to the diagonal and over to # 3 entry in A-line the up # 3 entry and out the exhaust fan.

Once the barricade is cleared the team does not need to air lock in since the patient said it was air tight behind him. They can breach the barricade with the captain required to take a gas test inby the barricade then proceed into the barricade where they will find a live conscious man. The captain is required under Rule #32 to touch that person by hand, then date and initial at that person, an assessment of the patient is required by a team member under Rule #12. Inby the patient there is a face which requires a roof, face, and rib test a gas test and the captain's date and initials. This completed the team then can bring the patient out to the fresh Air Base please note that if the follow their intake air out down # 1 entry there are not gas boxes to re-check however if they come out # 2 entry there are to gas boxes that will need re checked under Rule #24F.