

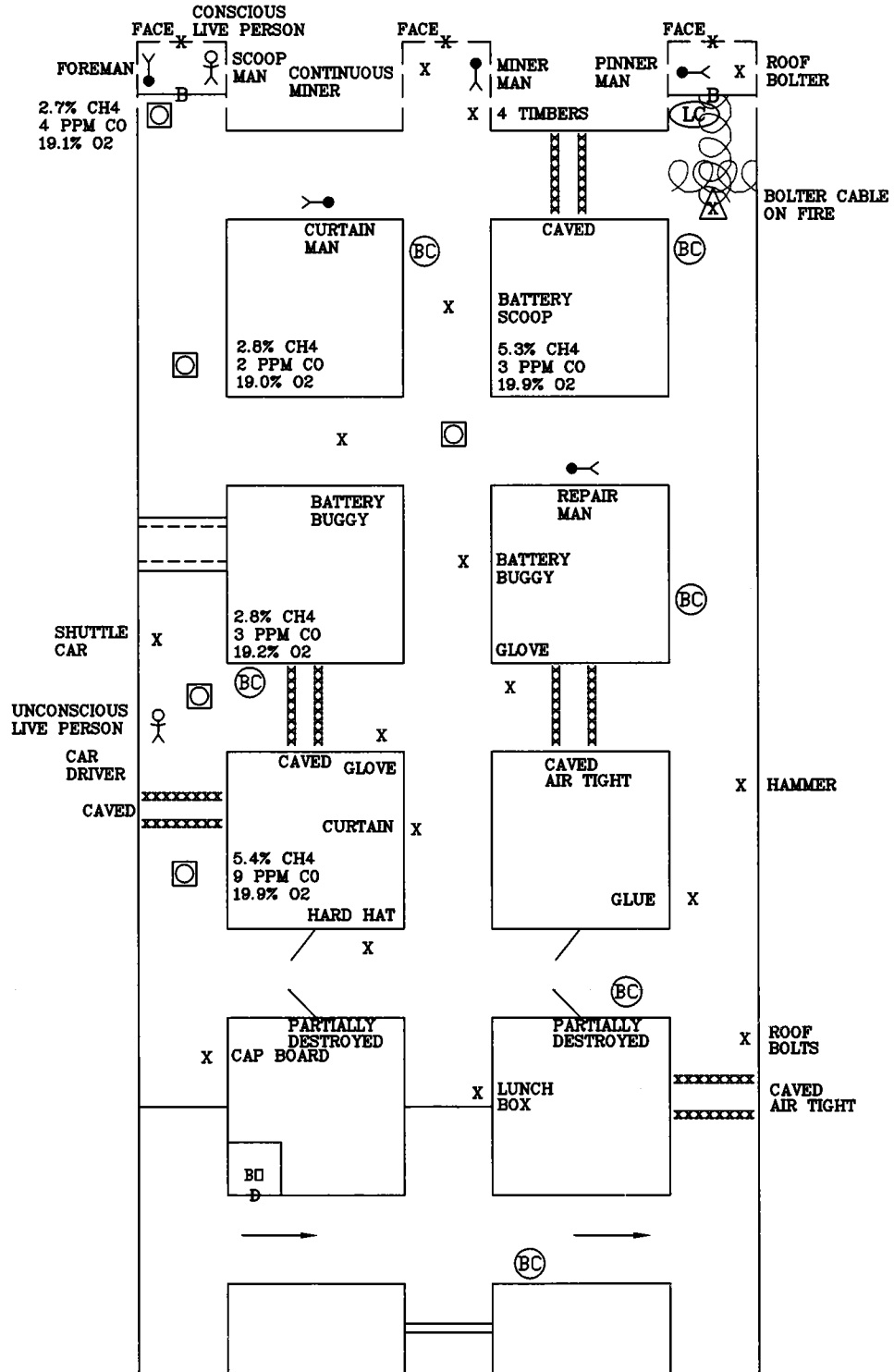
Kentucky River  
Mine Rescue Contest  
June 13, 2012

Day 1 Problem

# Kentucky River 2012 Day #1

Scale: 1 inch = 20 feet

*John Swancy  
1496*



**KENTUCKY RIVER MINE RESCUE CONTEST  
DAY ONE**

**SUPERINTENDENT STATEMENT**

Thank you for answering our call for help. You are standing in the Fresh Air Base on the 001 MMU. This is the only section in this mine.

This morning, an eight-man crew went to this section to run coal. At approximately 8:30 am, the foreman called out and stated that the roof bolter cable was smoking, and they were going to try to take care of it. About 20 minutes later, one of the pinner men called out and said the cable was on fire. He didn't know where anyone else was, but he was coming out. I called MSHA and State authorities and reported the fire, and got our company mine rescue teams assembled. They got here about the time the pinner man got outside.

The teams explored to this fresh air base, where they ran into some bad roof in the # 3 entry. They built temporary stoppings across the # 1 and # 2 entries. All electrical power is off and being guarded. The mine fan is an exhausting fan, and it is on and guarded and being monitored. The fan cannot be stopped or reversed. Intake air comes up the # 1 entry and returns out the # 3 entry.

There are areas of bad roof in this mine, and we do have problems with methane. We have not had any problems with water.

After the team goes underground, the Briefing Officer will be stationed in a hardened room that has its own fresh air supply from the surface. When the door is closed, the room will be airtight.

The mine maps are up-to-date except for the areas mined in by the last open crosscut. All authorities are on-site, and back-up teams are ready to assist you should you need any help. We have a life line man to take your signals should that be necessary. Thank you and good luck.

# **PROBLEM**

**FIND ALL MISSING MINERS**

**BRING SURVIVORS TO THE FRESH AIR  
BASE**

**TEAM MUST REPORT THE JOB POSITION  
OF THE MISSING MINERS TO THE  
SUPERINTENDENT AT THE TEAM STOP IN  
WHICH THE CAPTAIN TOUCHES EACH  
MISSING MINER BEFORE LEAVING THAT  
TEAM STOP**

**YOUR TEAM CAN ONLY CARRY TWO  
BRATTICE CLOTHS AT A TIME WHILE  
TRAVELING**

**YOUR TEAM HAS 75 MINUTES TO  
COMPLETE YOUR WORK BEFORE  
ANOTHER TEAM TAKES YOUR PLACE**

# JOB POSITIONS

\_\_\_\_\_REPAIR MAN

\_\_\_\_\_CURTAIN MAN

\_\_\_\_\_MINER MAN

\_\_\_\_\_CAR DRIVER

\_\_\_\_\_FOREMAN

\_\_\_\_\_SCOOP MAN

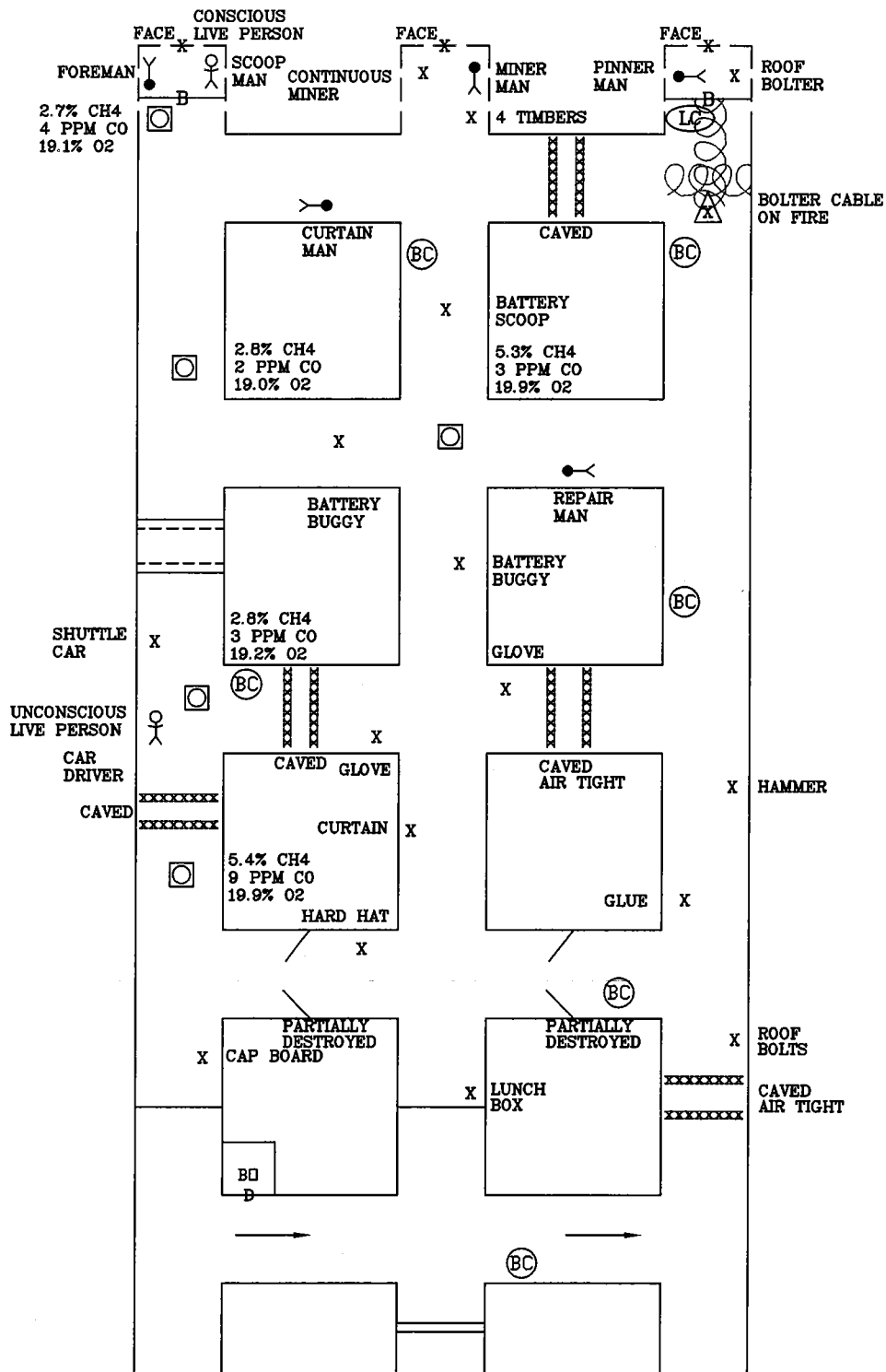
\_\_\_\_\_PINNER MAN

**# 1 ENTRY BARRICADE  
PATIENT STATEMENT**

**HELP!!  
GET ME OUT OF HERE! MY  
BUDDY IN HERE IS SICK!**

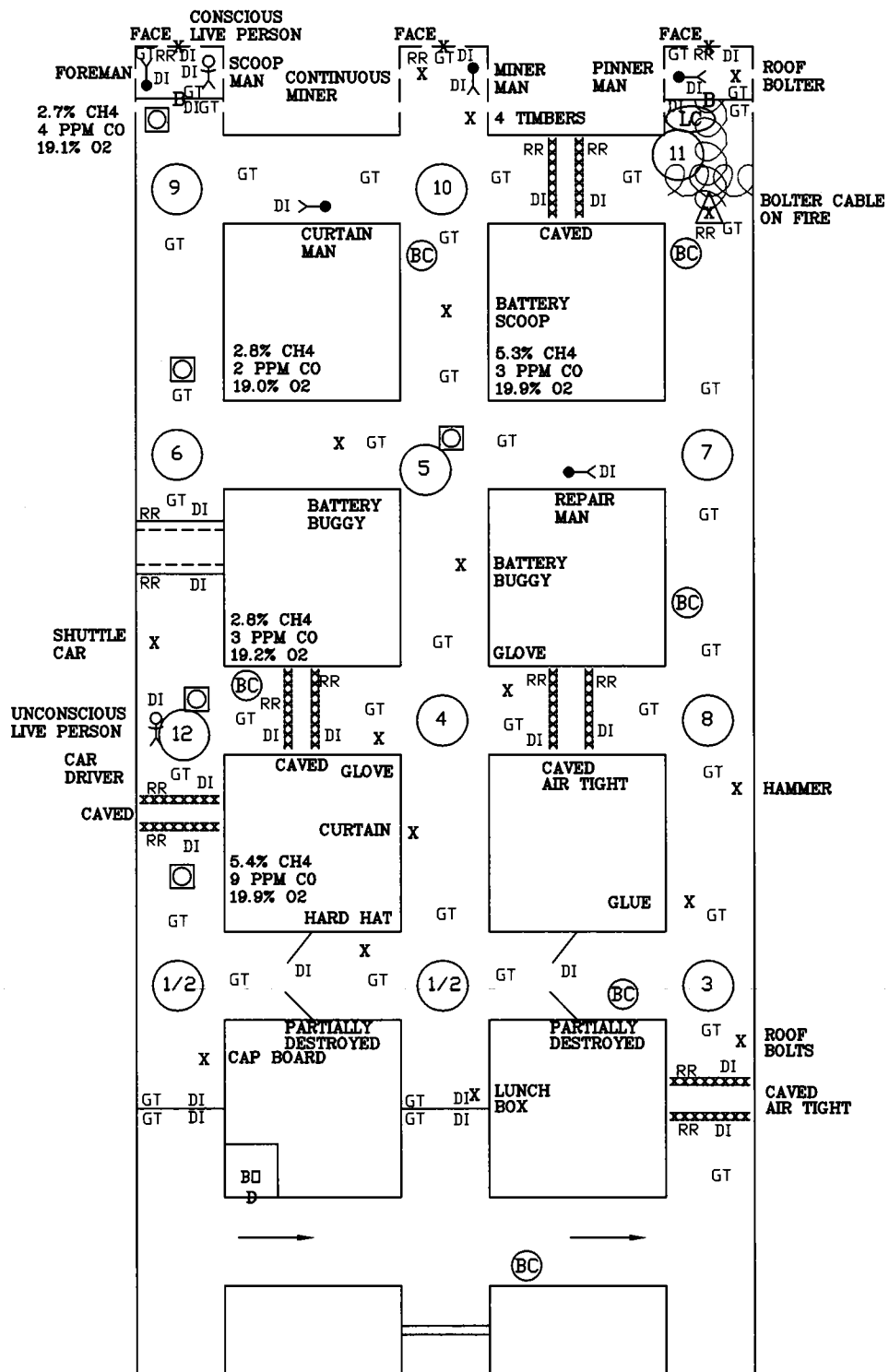
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# TEAM STOP

Scale: 1 inch = 20 feet





**KENTUCKY RIVER MINE RESCUE CONTEST  
JUNE 13, 2012**

**JUDGE'S BRIEFING**

**Fresh Air Base Exploration**

After the clock has been started, the teams will explore the openings to the section. The teams can explore the openings in any order. For this briefing, the teams will start in the # 1 opening. The teams will find a temporary stopping. The captain must DI at the stopping, and a GT must be made at the stopping. In the # 2 opening, the teams will find another temporary stopping. The captain must DI at the stopping, and a GT must be made at the stopping. In the # 3 opening, the team will find a caved airtight area. The captain must do a RR test and DI at the caved airtight area, and the team must make a GT inby the opening. Teams will be ready to airlock to go into the mine now. The teams can go into either the # 1 or the # 2 entry. For this briefing, we will follow the team up the # 1 entry. Once the entire team is airlocked in, the 50 foot apparatus check must be conducted before the team advances further inby. The captain must take a GT inby the temporary stopping when it is breached.

At this time the briefing officer must be isolated from the team for the remainder of the problem.

**Team Stop # 1**

The team will advance up the # 1 entry to the first crosscut inby the FAB. The team will find an explosive mixture and a caved area in the entry inby the intersection, and a partially destroyed temporary stopping in the crosscut to the right. The team must make a GT in the openings inby the intersection and to the right of the intersection, and the captain must DI at the partially destroyed temporary stopping and the caved area. The captain must do a RR at the caved area.

**Team Stop # 2**

The team will advance to the intersection in the # 2 entry. A GT must be made in the openings inby and to the right of the intersection. A GT must be made at the temporary stopping in the entry outby the intersection, and the captain must DI at the temporary stopping. The team will find a partially destroyed temporary stopping in the crosscut to the right. The captain must DI at the partially destroyed temporary stopping.

### **Team Stop # 3**

The team must advance to the intersection in the # 3 entry. The team must make a GT inby and outby the intersection. The team will find the backside of the caved airtight area in the entry outby the intersection. The captain must do a RR test and must DI at the caved airtight area.

### **Team Stop # 4**

The team must advance up the # 2 entry to travel the entry adjacent to the contaminant in the # 1 entry. The team will travel to the intersection in the # 2 entry in the second line of crosscuts inby the FAB. The team will find a cave area in the crosscut to the left and a caved airtight area in the crosscut to the right. The captain must do a RR test at both areas, and must DI at both areas. A GT must be made in the openings inby and to the left and right of the intersection.

### **Team Stop # 5**

The team will advance in the # 2 entry to the intersection in the third line of crosscuts inby the FAB. The team must make a GT in the openings inby and to the left and right of the intersection. The team will find a body in the crosscut to the right. The captain must touch the body and DI at the body. The position of the missing miner must be called out and reported to the superintendent before the team leaves this steam stop. The team will also find an explosive mixture in the intersection.

### **Team Stop # 6**

The team must travel to the intersection in the # 1 entry in this line of crosscuts to try to find the end of the contaminant. The team will find an irrespirable atmosphere inby the intersection, and an area of unsafe roof outby the intersection. The team must make a GT inby and outby the intersection, and the captain must do a RR test and must DI at the unsafe roof.

### **Team Stop # 7**

The team must advance to the intersection in the # 3 entry in this line of crosscuts. The team must make a GT in the openings inby and outby the intersection.

### **Team Stop # 8**

The team must tie outby in the # 3 entry to the intersection in the second line of crosscuts inby the FAB. The team will find the backside of the caved airtight area in the crosscut toward the # 2 entry. The teams must make a GT in the openings outby and to the left of the intersection. The captain must do a RR test and must DI at the caved airtight area.

### **Team Stop # 9**

The team must travel up the # 1 or # 2 entry to because of the contaminant in the # 1 entry. For this briefing, the team travels up the # 1 entry to the intersection in the fourth line of crosscuts inby the FAB. The teams will find a barricade in the heading inby the intersection, and a body in the crosscut to the right. When the team enters the intersection, the patient inside the barricade will read his statement. The captain must touch the body and DI at the body. The position of the missing miner must be called out and reported to the superintendent before the team leaves this steam stop. The captain must DI at the barricade, and a GT must be made at the barricade. Since there is an irrespirable atmosphere in front of the barricade, it must be ventilated before the team can recover the patient.

**Note:** All headings are a dotted line map inby the last open crosscut.

### **Team Stop # 10**

The team will advance to the intersection in the # 2 entry. The team will find a caved area in the crosscut to the right, and a face inby the intersection. There is also a body inby the intersection. The captain must touch the body and DI at the body. The position of the missing miner must be called out and reported to the superintendent before the team leaves this steam stop. The captain must do a RR test at the face, and must DI at the face. A GT must be made at the face. The captain must do a RR test at the caved area, and must DI at the caved area. A GT must be made in the openings to the right and outby and the intersection. The team will also find 4 timbers at this team stop, and may use them to go through the unsafe roof in the # 1 entry, but are not required to do so at this time.

### **Team Stop # 11**

The team may travel to the # 3 entry and advance up the entry to the intersection in the fourth line of crosscuts inby the FAB. Just inby the imaginary ribline, the team will find a fire. The captain must do a RR test at the fire, and a GT must be made at the fire. Once the fire is extinguished, the team must stay on the lifeline or linkline as long as anyone is in the smoke inby the fire. The team will find the backside of the caved area in the crosscut toward the # 2 entry, and a barricade in the heading inby the intersection. There is no response from the barricade. The captain must do a RR test and must DI at the caved area, and must DI at the barricade. A GT must be made at the barricade.

### **Team Stop # 12**

Team must travel to the # 1 entry, and set timbers to travel through the unsafe roof outby the intersection in the third line of crosscuts. The captain must use at least three timbers to get through the unsafe roof. When the timber is set in

good roof outby the unsafe roof, the captain must do a RR test before anyone else enters the area or any other work is done. The team will travel onto the intersection. The team will find an unconscious live person in the intersection. The captain must touch the live person and DI at the live person. There is an irrespirable atmosphere in the intersection. The team must conduct a patient assessment on the unconscious live person, put an apparatus on him, and put him on a stretcher. While this is being done, the captain may continue exploring at the team stop. The team will find the backside of the caved areas in the entry outby the intersection and in the crosscut to the right of the intersection. The captain must do a RR test at the caved areas, and must DI at the caved areas. A GT must be made in the openings outby and to the right of the intersection. The team must call out the job description of the missing miner and must report it to the superintendent before leaving this team stop. The team will then bring the patient to the FAB.

At this time the barricade in the # 1 heading can be ventilated. SEE VENTILATION # 1.

After the barricade is ventilated, an airlock must be built before breaching the barricade. Once the barricade is breached, the captain must make a GT. Inside the barricade, the team will find a body and a conscious live person. The captain must touch both missing miners and must DI at both missing miners. A patient assessment must be conducted on the conscious live person. The job description of both missing miners must be called out and reported to the superintendent before leaving this team stop. The captain must do a RR test and must DI at the face, and a GT must be made at the face. The teams do not have to airlock back out, and can now bring the patient to the FAB.

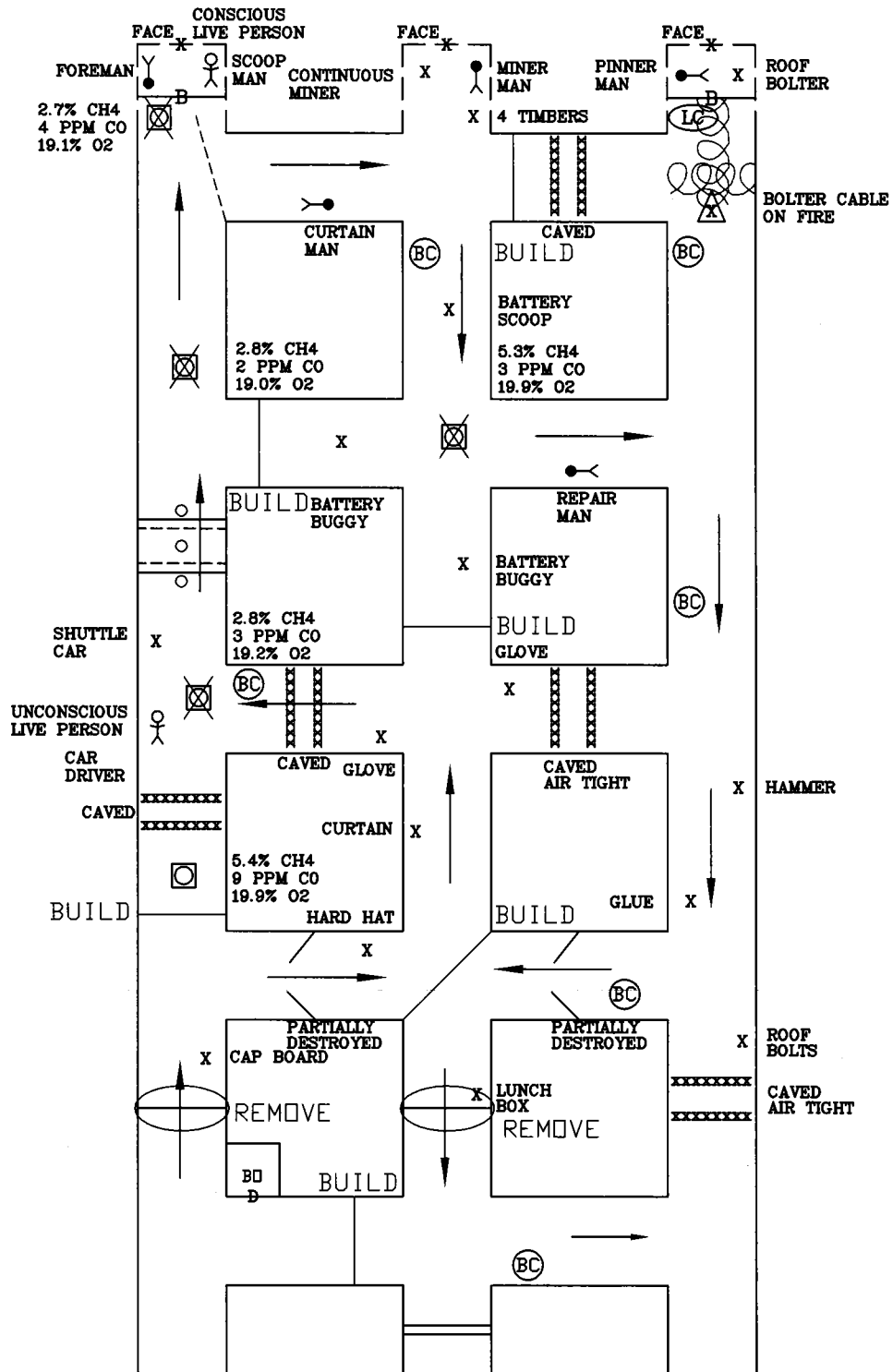
There is still one missing miner, and the only place he could be is the barricade in the # 3 heading. The team will travel back to this area. A RR test must be made before anyone passes the extinguished fire area. Teams will ventilate the barricade. SEE VENTILATION # 2.

After the barricade is ventilated, an airlock must be built before breaching the barricade. Once the barricade is breached, the captain must make a GT. Inside the barricade the team will find a body. The captain must touch the body and DI at the body. The captain must do a RR test at the face and must DI at the face. A GT must be made at the face. The team must call out the job description of the missing miner and must report it to the superintendent before leaving this team stop.

The team has now finished the problem. The team will return to the FAB and the captain will stop the clock.

# Ventilation #1

Scale: 1 inch = 20 feet



# Ventilation #2

Scale: 1 inch = 20 feet

