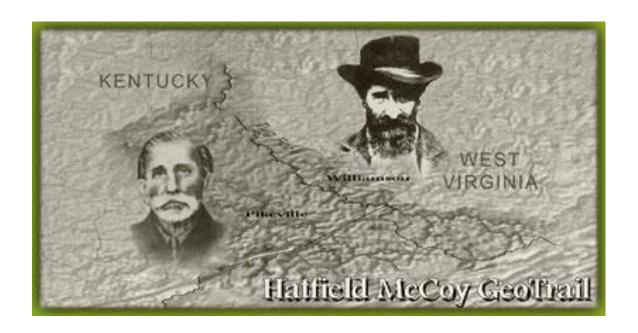
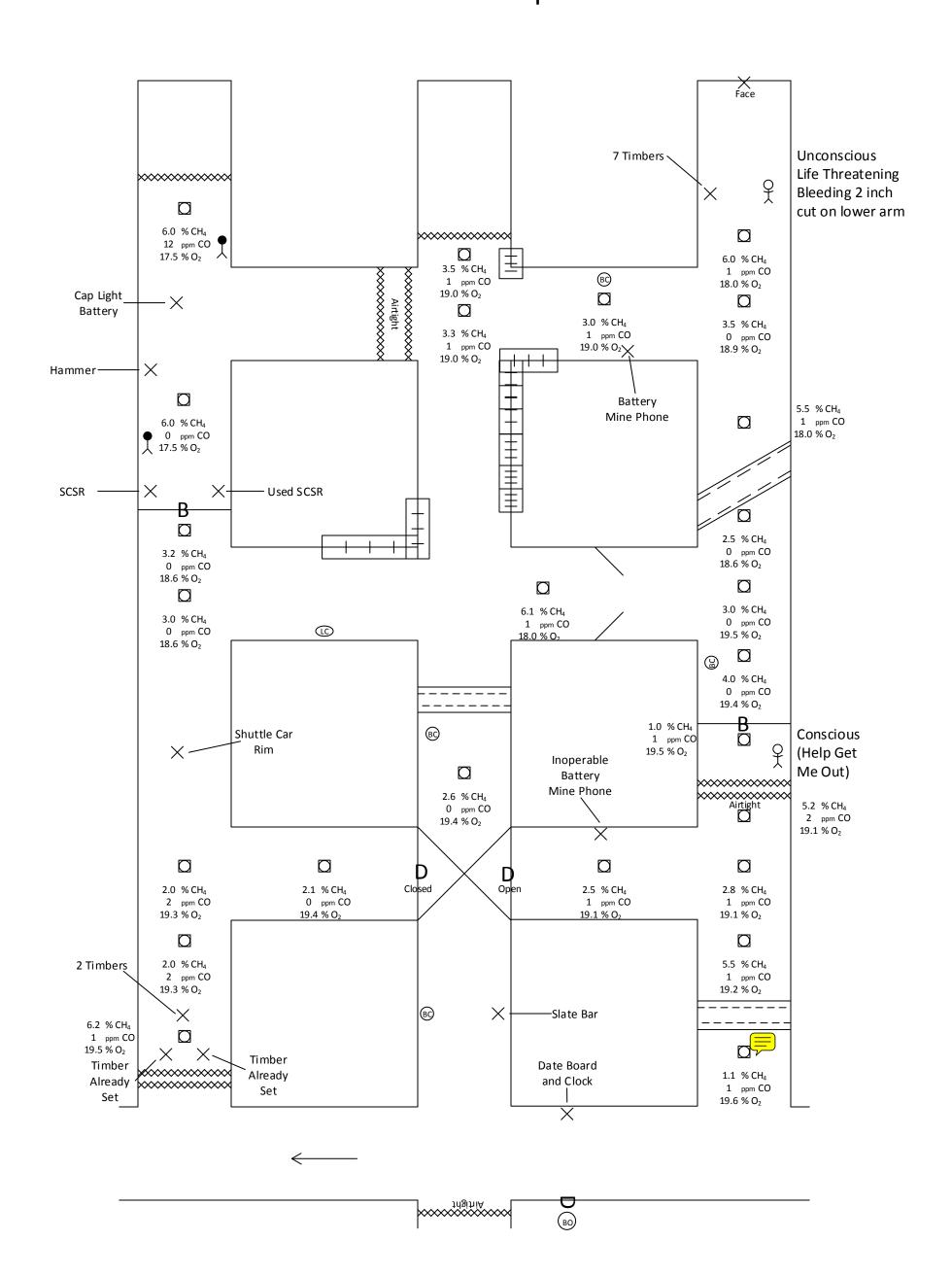
Hatfield & McCoy Mine Safety Competition Day 2

MINE RESCUE PROBLEM



Problem Map



STATEMENT

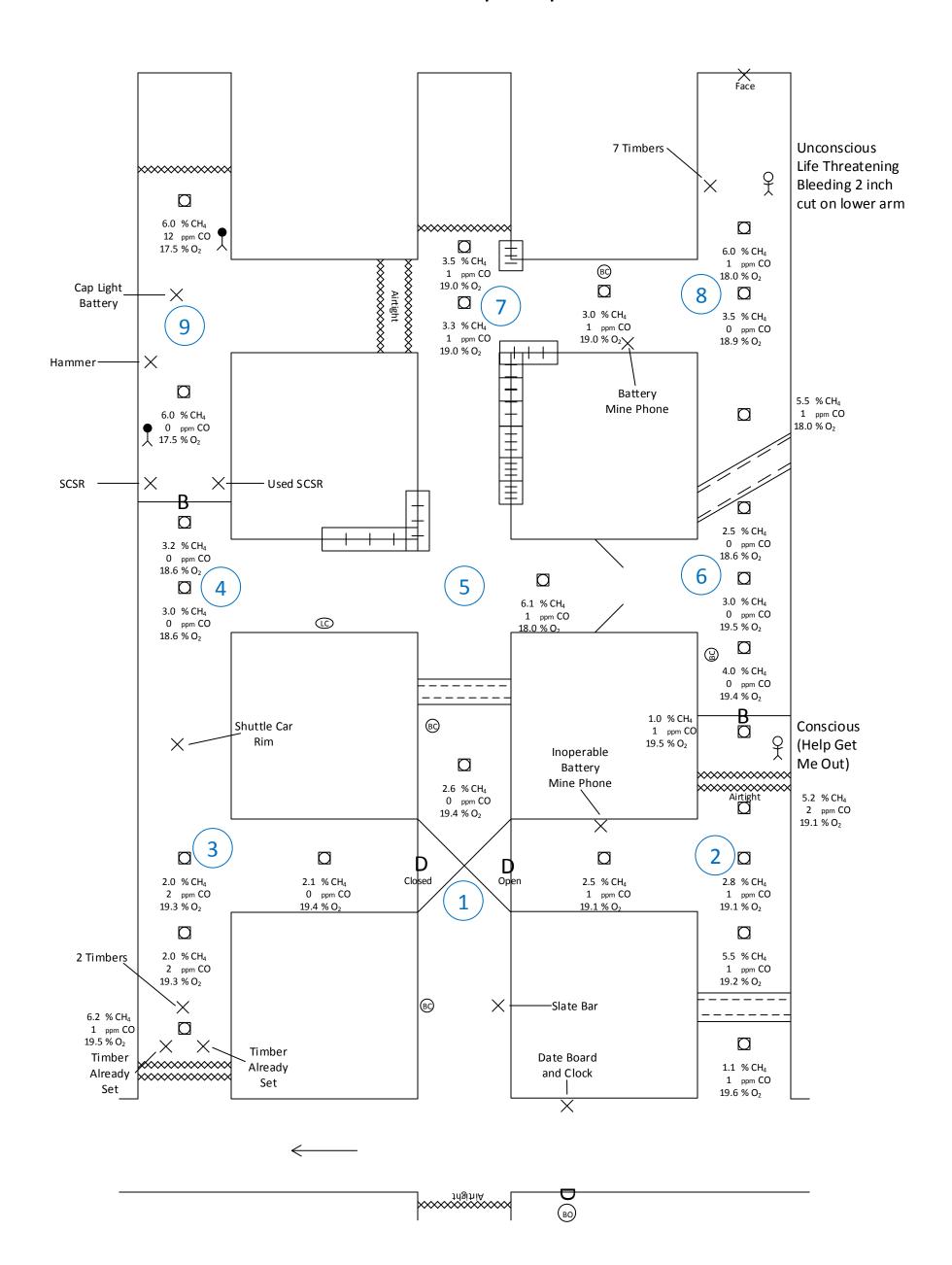
Welcome to our mine, you are located in the fresh air base at the mouth of the old Pony Manes. All miners except for four have been accounted for. These miners were last tracked entering the old Pony Manes. All areas of the rest of the mine have been explored and is cleared for ventilation purposes. The mine is known for bad roof and methane. The fan is running and air is traveling across the fresh air base from right to left. The map is up-to-date. Good Luck!!

Captains Briefing

The briefing officer will have a designated airtight isolation room located off the fresh air base line, when in this room with the door shut irrespirable air can pass without endangering him/her or anyone else that may be inside. Once the team makes the first team stop inby the FAB that requires an apparatus check the team may not have communications with the briefing office except through the communication system until the clock is stopped. The briefing officer will remain isolated from the team until the clock is stopped. The briefing officer's map will remain at the briefing officer's station during working of the problem. The briefing officer will remain in the designated location when the team is working inby the FAB except when it is necessary to perform work outside that location in the FAB. All mapping by the teams map man, briefing officer and command center attendant must stop when the captain stops the clock or time to complete the problem has ended. All gases on each gas placard found and called out must be recorded accurately on the briefing officer's map, if there are any discounts on the BO's map and these discounts are correct on the Attendant's map, no discount will be assessed on the BO's map. Q and A's from this year may be used to supplement the rules. Brattice cloth will be caution tape attached to clothes pins. In order to be airtight the clothes pins must be attached on both sides and if a diagonal is built the team must use two curtains and they must be attached on both ends and at least once in middle to be considered airtight. All doors in the problem will be tied on one end and a clothes pin on the other end, when the clothes pin is connected to rib line string it will be considered as airtight. At the discretion of the team, apparatus face pieces may be removed 30 minutes after the working clock has been started.

WRITTEN INSTRUCTIONS

- (1) ACCOUNT FOR ALL MISSING MINERS THAT CAN BE DONE SAFELY.
- (2) EXPLORE ALL AREAS OF THE MINE THAT CAN BE DONE SAFELY
- (3) THE FAN CANNOT BE STOPPED, STALLED OR REVERSED.
- (4) ANY MINER THAT HAS BEEN
 TREATED FOR LIFE THREATENING
 BLEEDING, CONSCIOUS OR
 UNCONSIOUS MUST BE
 TRANSPORTED TO THE FRESH AIR
 BASE ON A STRECTER.
- (5) YOUR TEAM HAS 90 MINUTES TO COMPLETE THE PROBLEM.



Prior to starting the clock

The team will have 4 minutes to position their equipment and lay out lifeline. Rule 50- if the team fails to start clock after 4 minutes has elapsed.

After clock is started

RULE 26-captain must place date, initials and team number on check board.

RULE 14-communication system shall be tested and gas detectors used must be examined in the presence of a judge.

RULE 17-pull signals arranged if lifeline is used instead of wireless communication system.

RULE 6-examine of gauges and apparatus of all team members prior to going inby the FAB.

Initial check inby in openings

RULE 23-the captain must make all entrances to the mine inby the FAB and Roof and Rib test at the caved in #1 entry and R&R at unsafe in #3 entry.

RULE 24C-gas test in#1, #2 and #3 openings.

RULE 27- the captain must place date and initials at the cave area in #1 entry and at the unsafe in #3 entry.

Team stops

#1stop- RULE 28-50 foot apparatus check

RULE 24A-a gas test at the wall of the overcast on side the door is shut.

RULE 24B-gas test in the opening of #2 entry and thur open door in X-cut.

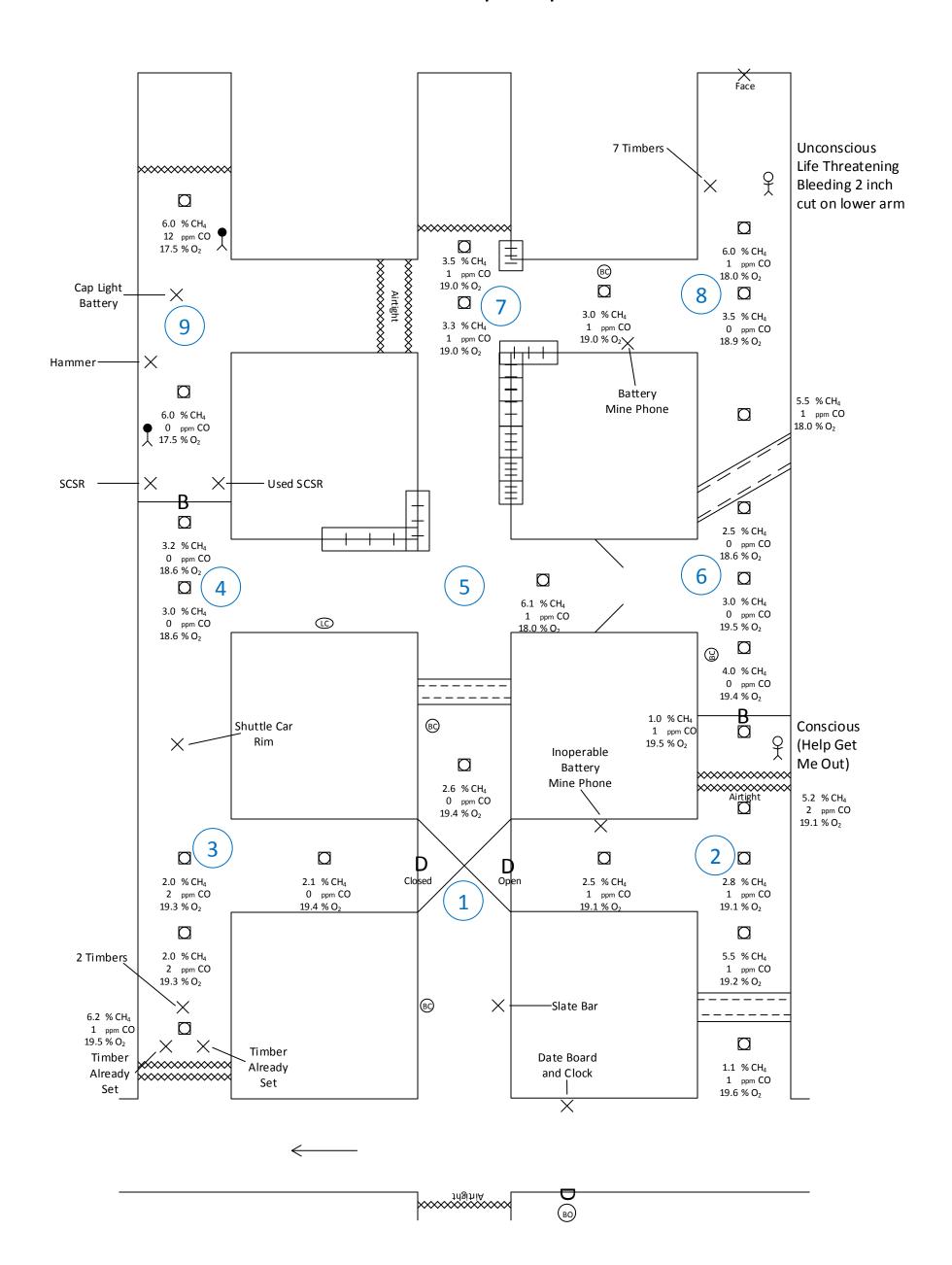
RULE 27- date and initials on both walls of the overcast

#2stop- RULE 45D-the team must advance to #3 entry through open door.

RULE 23-the captain must roof and rib test at the caved in #3 entry and a R&R at unsafe in #3 entry.

RULE 27- the captain must place date and initials at the cave area and at the unsafe.

RULE 24B-gas test at both inby and out openings to the intersection



The team is now ready to advance to next stop and to do so they must airlock on both sides of the overcast in #2 before opening the closed overcast door.

RULE43-airlocking

RULE23-prior to building the 2 airlock roof and rib test.

RULE27-date and initials on both team built stoppings.

The team is now ready to open the door.

RULE24D-the captain must take a gas test through the open door before other team members enter area.

The team will now advance to stop #3.

#3stop- RULE23-roof and rib at the backside of caved and a visual in the inby opening of #1 entry.

RULE27-date and initials at caved area

RULE24B-both inby and outby openings must be gas tested

#4stop- RULE23-visual roof and rib of both areas (no roof and rib required at unsafe ribs)

RULE 24A-gas test at barricade

RULE24B-gas test opening x-cut

RULE27-date and initial on barricade

(no response from barricade)

#5stop- RULE23-roof and rib at backside of unsafe roof and a visual in the other two openings.

RULE27-date and initials at the unsafe roof and on the temporary stopping in x-cut.

RULE 24B-gas test in all three openings.

#6stop- RULE45D-Team must tie to #3 intersection thru open x-cut RULE23-Roof and rib test at unsafe and a visual outby toward barricade.

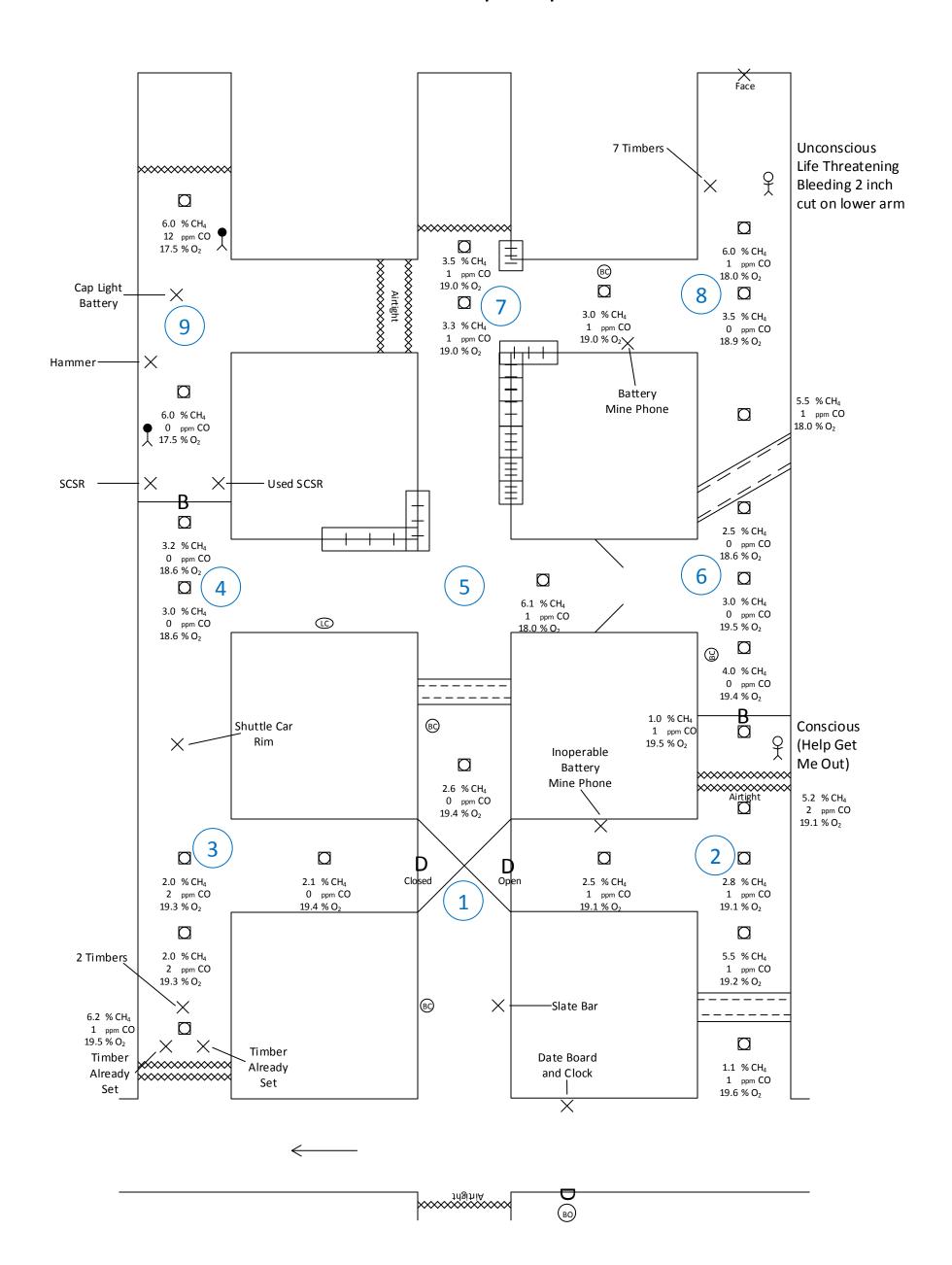
RULE24A-gas test at barricade

RULE24B-gas test the inby opening

RULE27-date and initials at barricade and unsafe roof

(person behind barricade states" help get me out")

The team will continue to explore cannot be ventilated at this time.



#7stop- RULE23-roof and rib test at caved areas, no test required at unsafe ribs

RULE24B-gas test in all three openings

RULE27-date and initials at caved areas

#8stop- RULE23-roof,rib and face test also roof and rib backside of unsafe roof

RULE24A-gas test at face

RULE24B-gas test outby opening

RULE27-date and initials at face, unsafe roof and location of person.

RULE12-assessment on person unconscious.

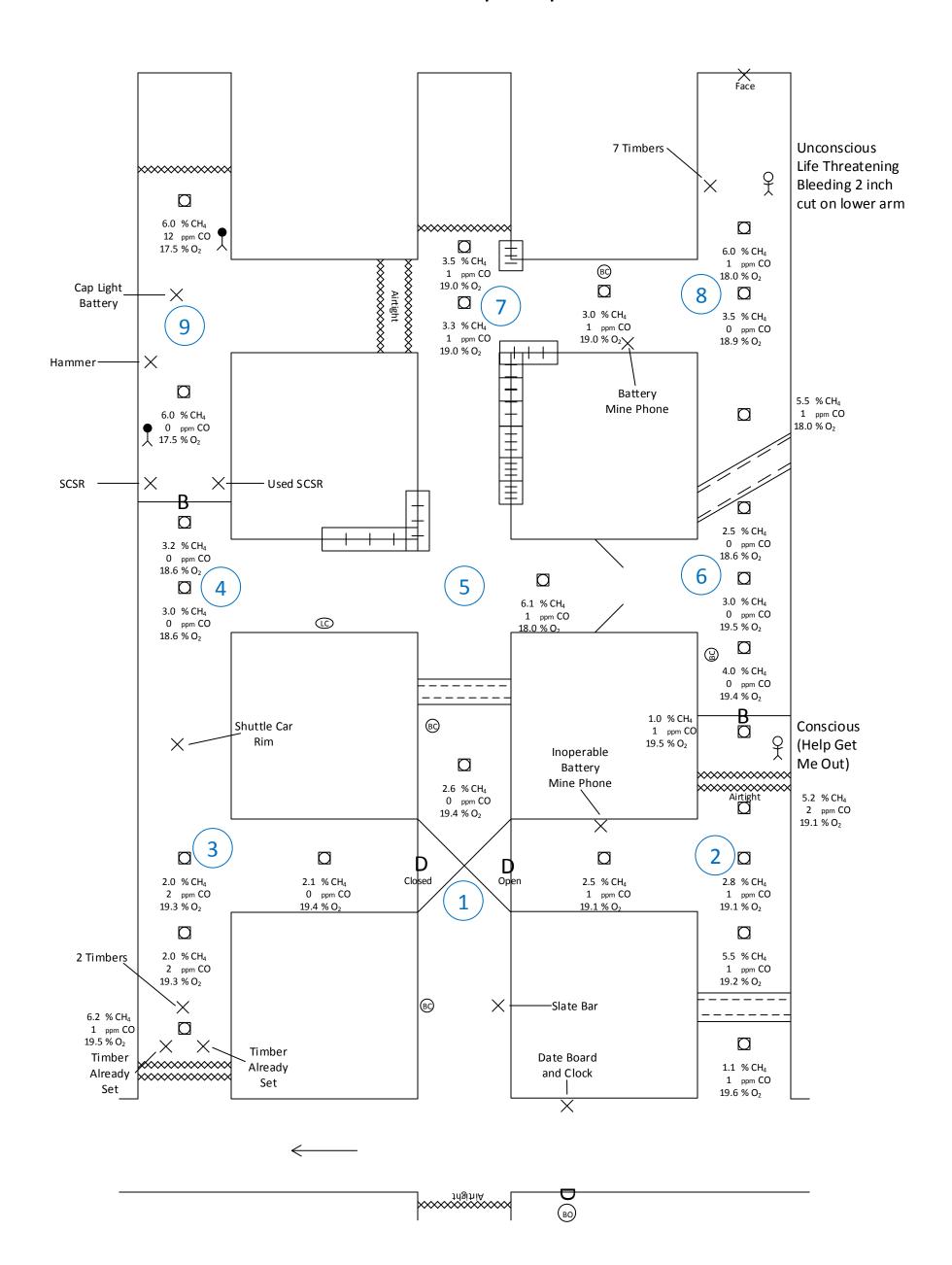
- a. Ask if okay or alright(verbalize)
- b. Look for absence of breathing or gasping(verbalize)
- c. Check for presence of a carotid pulse 5-10 seconds (**verbalize**) Q&A page 11.
- d. Person has life threatening bleeding on left lower arm 2 inch cut and is also located in low oxygen

RULE34B

- a.apply direct pressure with glove hand (verbalize) Q&A pg7-8
- b. apply dressing to wound (cover entire wound) (verbalize)
- c. elevate the cut arm while still applying direct pressure (**verbalize**)
- d. bleeding is now controlled (verbalize)
- e. the team must now place a bandage dressing over the wound dressing prior to loading him on the stretcher.

RULE34A- the person is unconscious and is located in 18.0% Oxygen and must be protected with an apparatus with a full face piece cannot be a SCSR. (This can be done after treatment of bleeding or before) Q&A page6

After taking person to FAB the team now can ventilate the barricade in #3 without exploring anymore. (See vent #1)



After vent #1

No airlock is needed to breech barricade, solid line map with airtight caved area already map on backside.

RULE24D-captain must take gas test after breaching barricade before any other member enters area.

RULE27- date and initials location of person and caved area

RULE1 2-assessment on conscious person

a. Ask if okay or alright(verbalize)

RULE23-roof and rib at caved area

After taking person to FAB now ready for Vent #2

The barricade must be ventilated from #1 side due to no way to airlock from the #2 intersection side with unsafe ribs see vent #2.

After vent #2

RULE43-prior to breech barricade airlock must be erected

RULE23-roof and rib prior to build stopping

RULE 27-date and initials on stopping

RULE24D-captain must take gas test after breaching barricade before any other member enters area.

RULE27-date and initials location of body behind barricade

#9 stop-(cap light battery is not an ignition source rule3lb)

If the captain goes to backside of barricade in x-cut first before traveling to the gas box that would cause a withdraw situation

THEN RULE24A- gas test at barricade

RULE27- date and initials on wall of barricade

IF the captain travel toward face of #1 first and has not been in x-cut

THEN RULE24B-gas test is required in opening toward face only

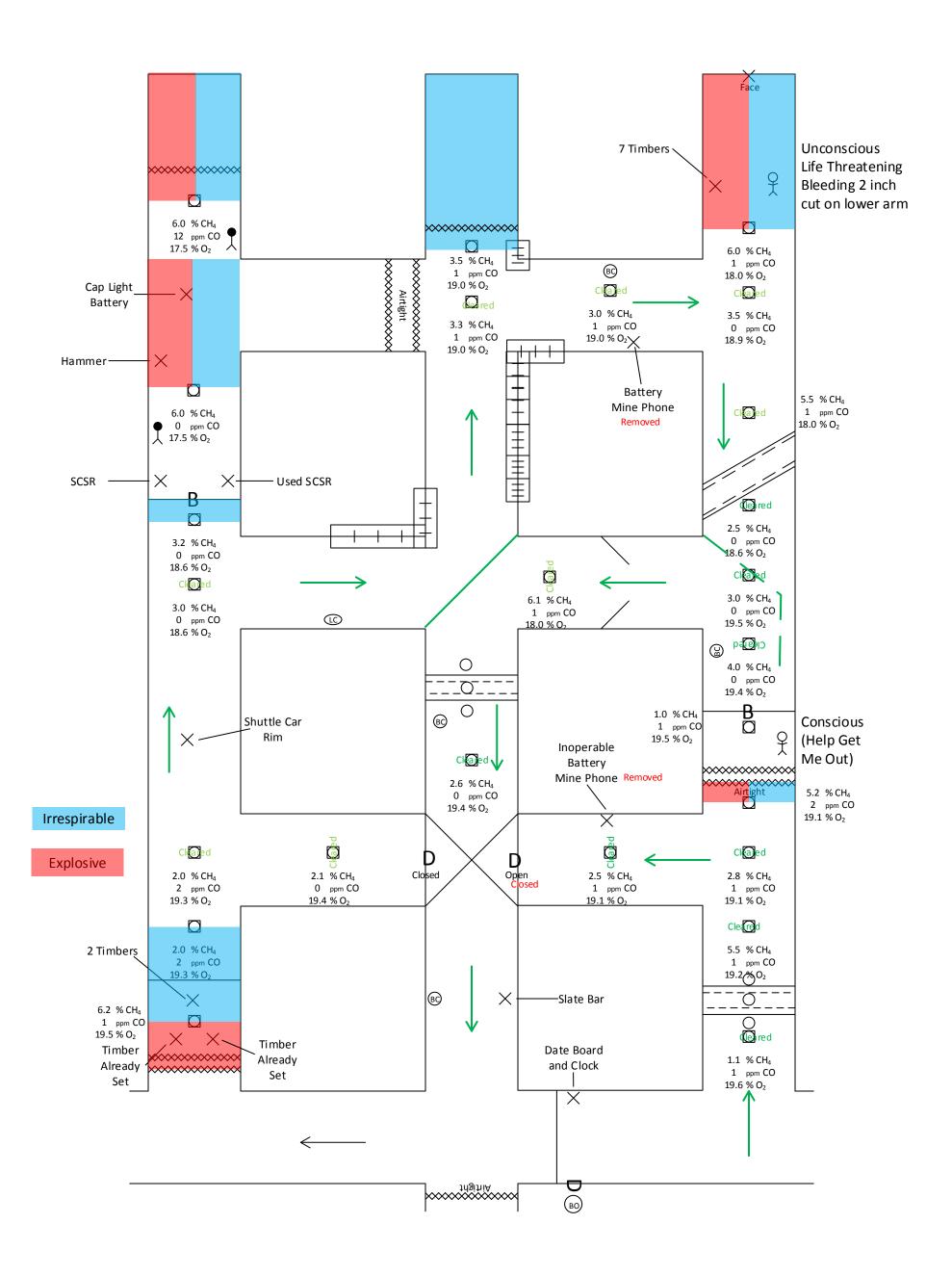
RULE27- date and initials at location of body but cannot pass the gas box or he will be docked under

RULE31B-imminent explosion is possible.

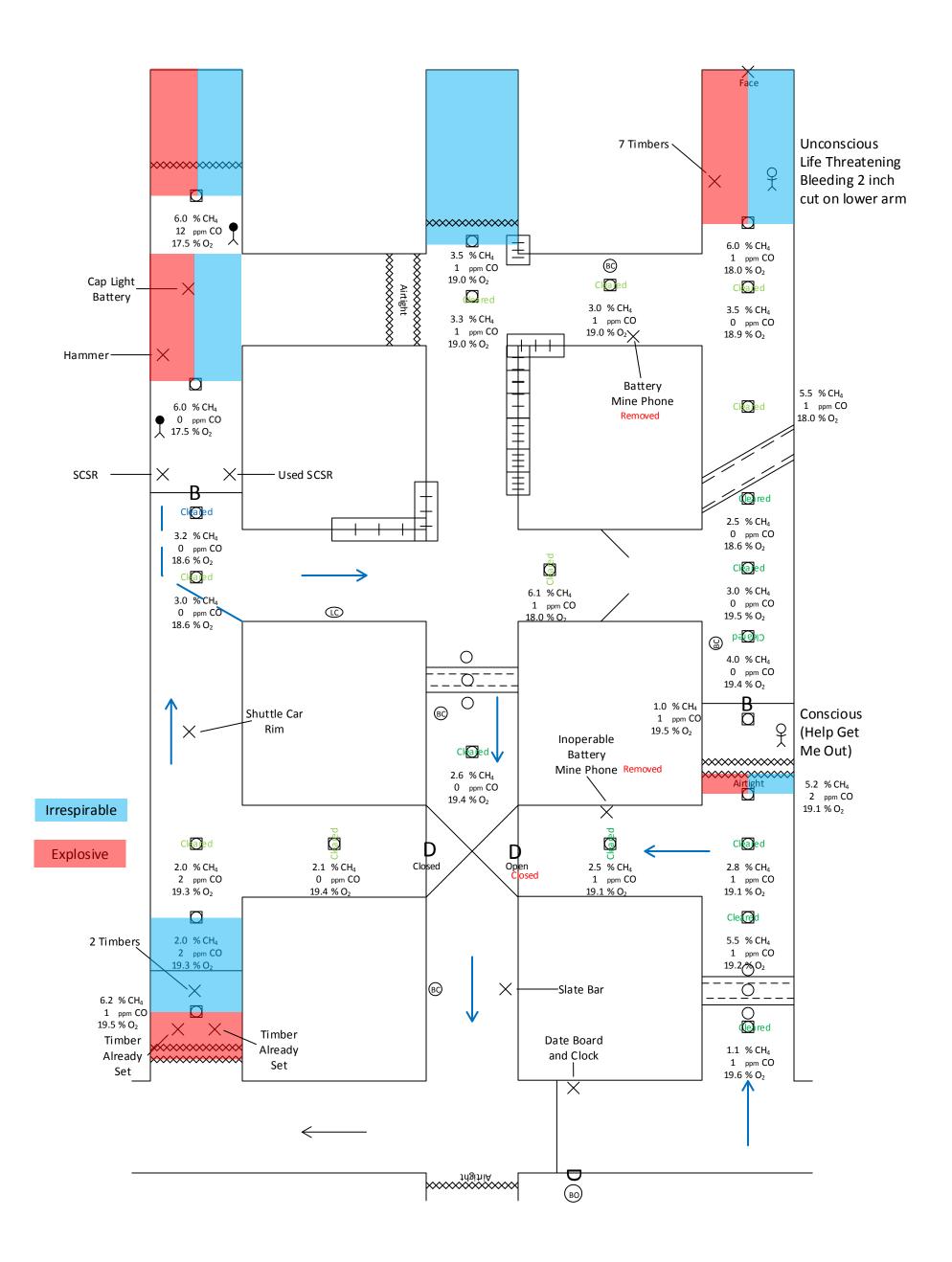
RULE 5F on the A-card- the team map may have two FPA's on map, 1 at gas box and 1 at entrance to x-cut if worked proper and didn't go pass gas box and didn't travel into x-cut.

RULE 6 on the A-card also FPA's applies to the briefings officer map also.

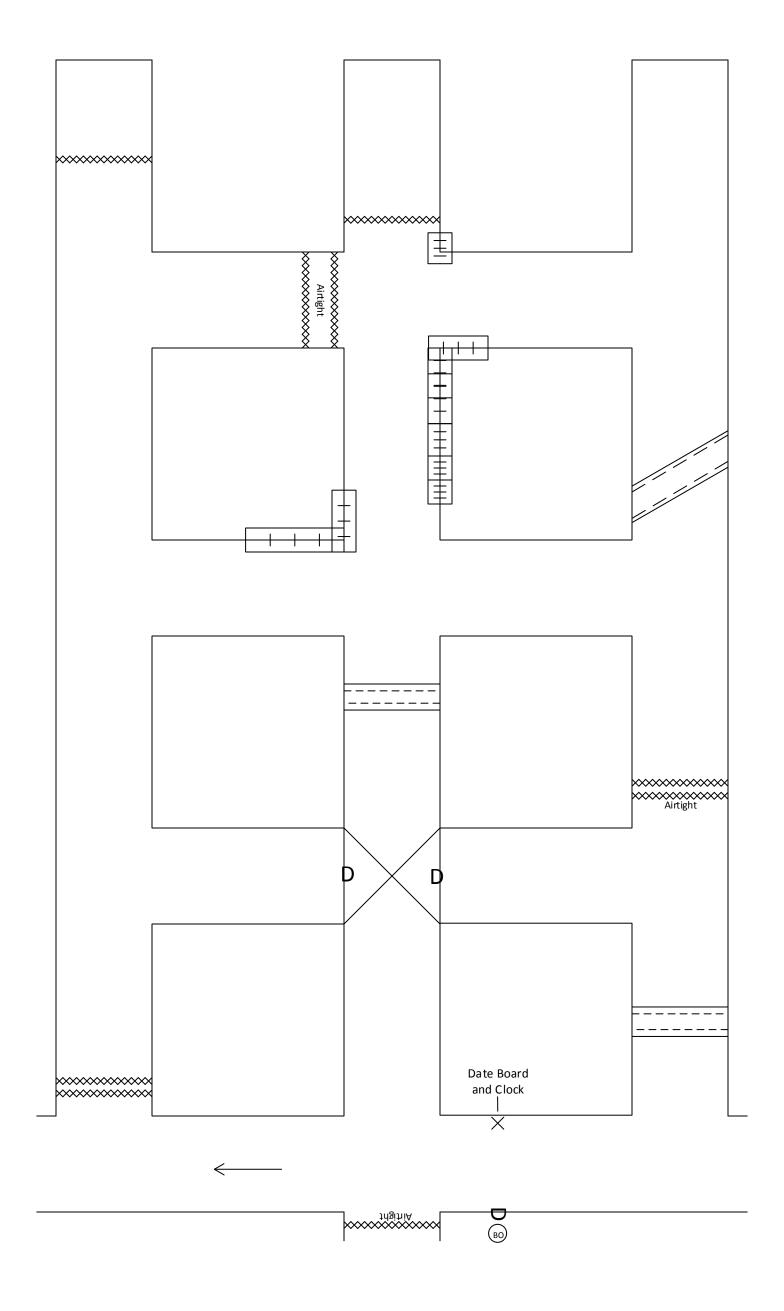
VENT #1



VENT #2



FINAL VENT MAP



Show the following as they were left in the mine and fresh air base:

- vent controls left intact
- doors open or closed in overcast