

2013

KY STATE MINE

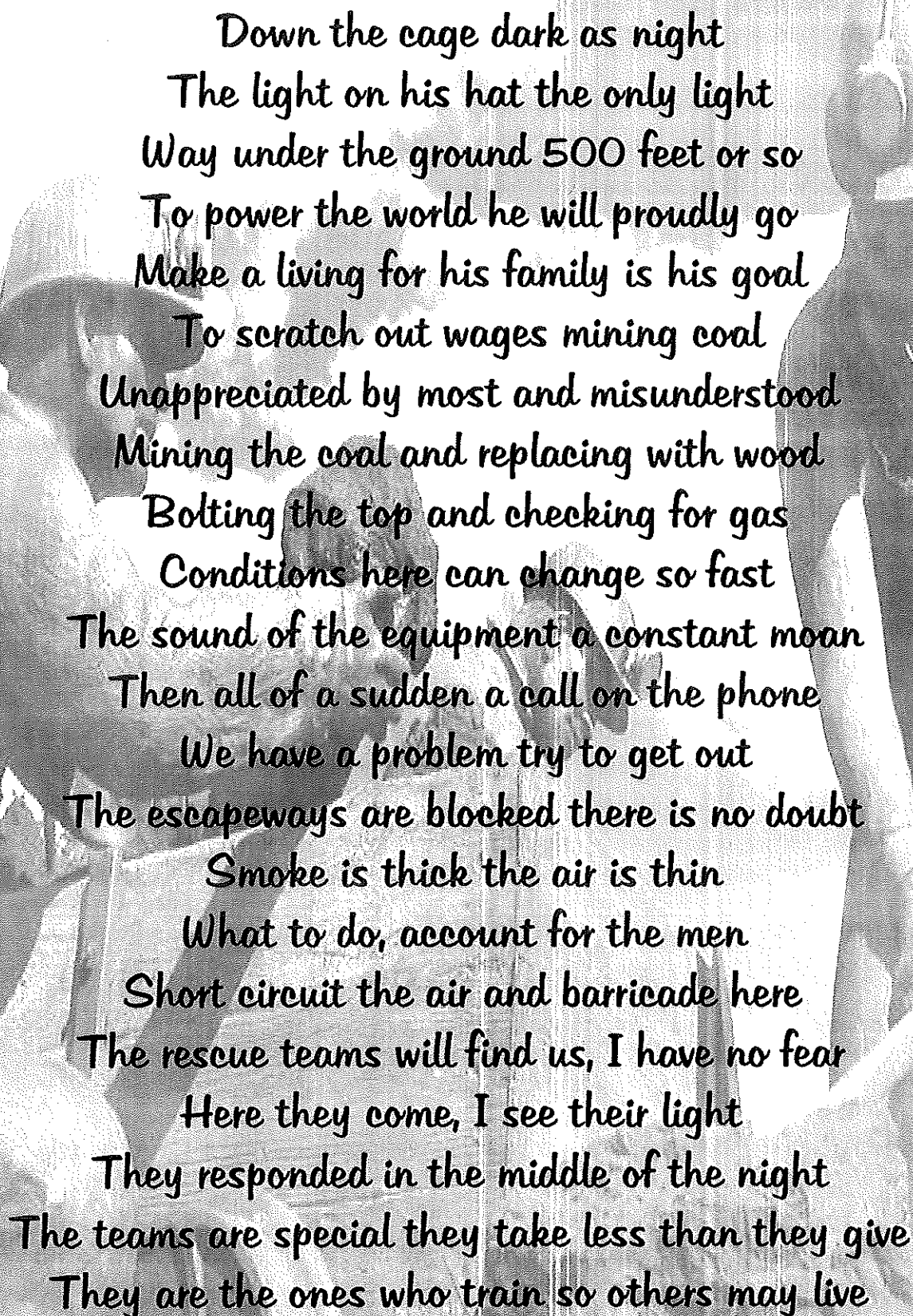
RESCUE

CONTEST

DAY 2

AUGUST 22, 2013

So Others May Live



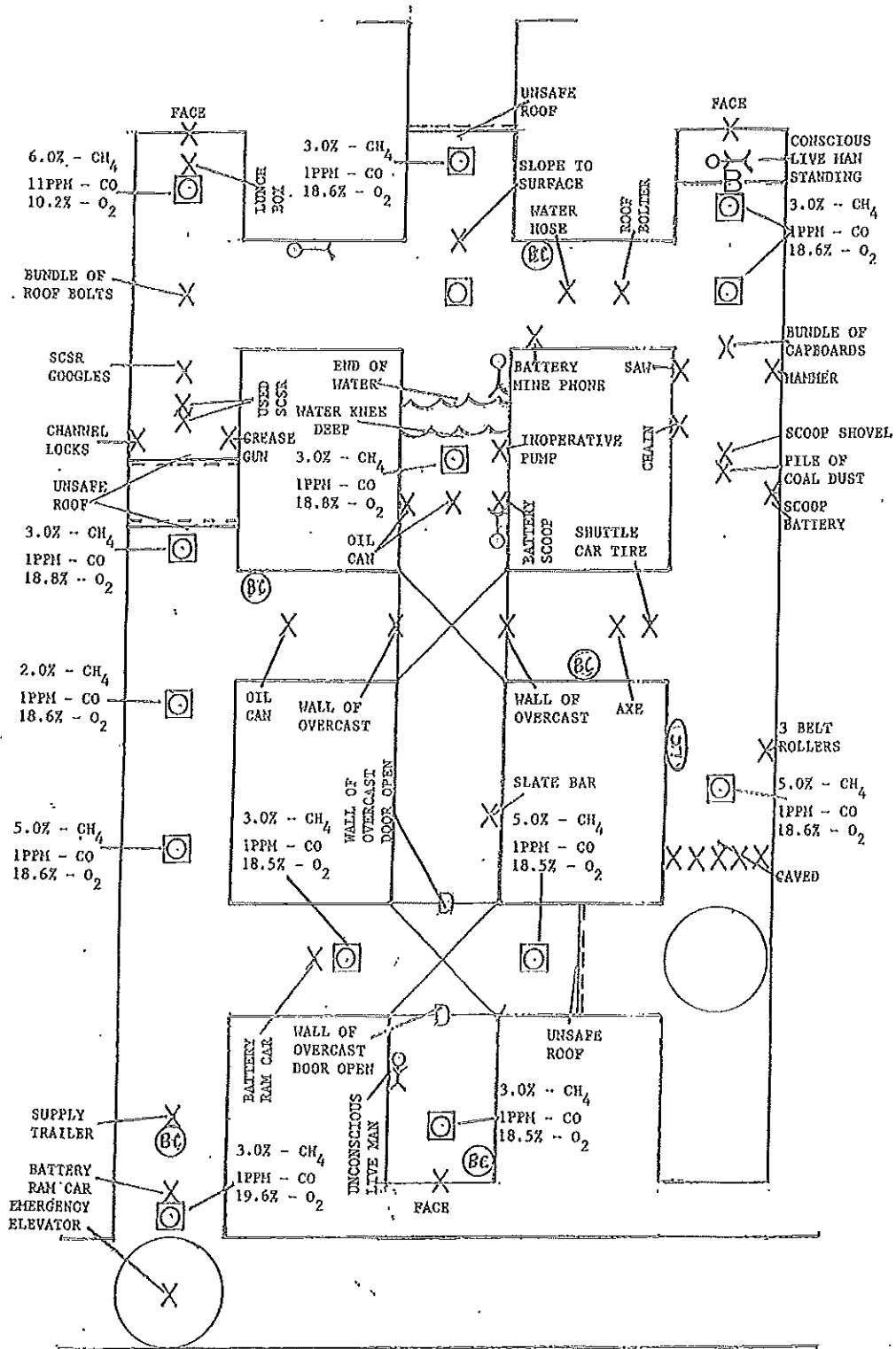
Down the cage dark as night
The light on his hat the only light
Way under the ground 500 feet or so
To power the world he will proudly go
Make a living for his family is his goal
To scratch out wages mining coal
Unappreciated by most and misunderstood
Mining the coal and replacing with wood
Bolting the top and checking for gas
Conditions here can change so fast
The sound of the equipment a constant moan
Then all of a sudden a call on the phone
We have a problem try to get out
The escapeways are blocked there is no doubt
Smoke is thick the air is thin
What to do, account for the men
Short circuit the air and barricade here
The rescue teams will find us, I have no fear
Here they come, I see their light
They responded in the middle of the night
The teams are special they take less than they give
They are the ones who train so others may live

-Ronnie Drake

KENTUCKY STATE MINE RESCUE CONTEST
DAY 2
AUGUST 22, 2013

YOU HAVE 4 MINUTES TO POSITION YOUR EQUIPMENT. YOU MUST START THE CLOCK WITH IN 4 MINUTES OR THE JUDGE WILL START IT FOR YOU.

The KMI Mine thanks you for answering the call for help. You are located on the surface of our Number 2 mine where a 5 man crew went in on third shift to do routine service and maintenance work. We have been unable to contact anyone underground since arriving here this morning. Our attempts to enter the mine traveling down the slope was stopped by unsafe roof across the slope. We decided to call for a trained mine rescue team to check it out. This mine is presently one section that is developing for our long term mining plan. You will enter the mine thru our emergency elevator that enters into the underground workings. You will operate the elevator by standing in the circle and closing the surface gate, you will immediately be transported underground and you will open the underground gate to enter the staging area in the #1 entry. Once the underground gate is closed the elevator will immediately be back to the surface. The emergency elevator shaft is also equipped with a blowing fan located on the surface. The fan is currently off, but can be started if needed, by requesting that the superintendant start the fan, but once started it cannot be stopped, reversed or stalled. The mine also has a return airshaft (no fan) that is indicated on your map. The slope is located three crosscuts from the emergency airshaft and has been examined and found to be safe down to the point the unsafe roof was found. It will not be necessary for your team to explore the surface side of the slope. Both of the shafts and the blowing fan has also been examined on the surface and found to be in safe operating condition. It will not be necessary for your team to examine the surface side of the shafts or fan. This mine has had some problems with methane and the roof, but we have been able to control them. The mine maps are up to date. The underground power has been de-energized, locked and guarded, all regulatory agencies have been notified and are on site. All available supplies are located underground. A trained mine rescue team is on site to serve as your back-up. That is all the information available at this time.
GOOD LUCK!

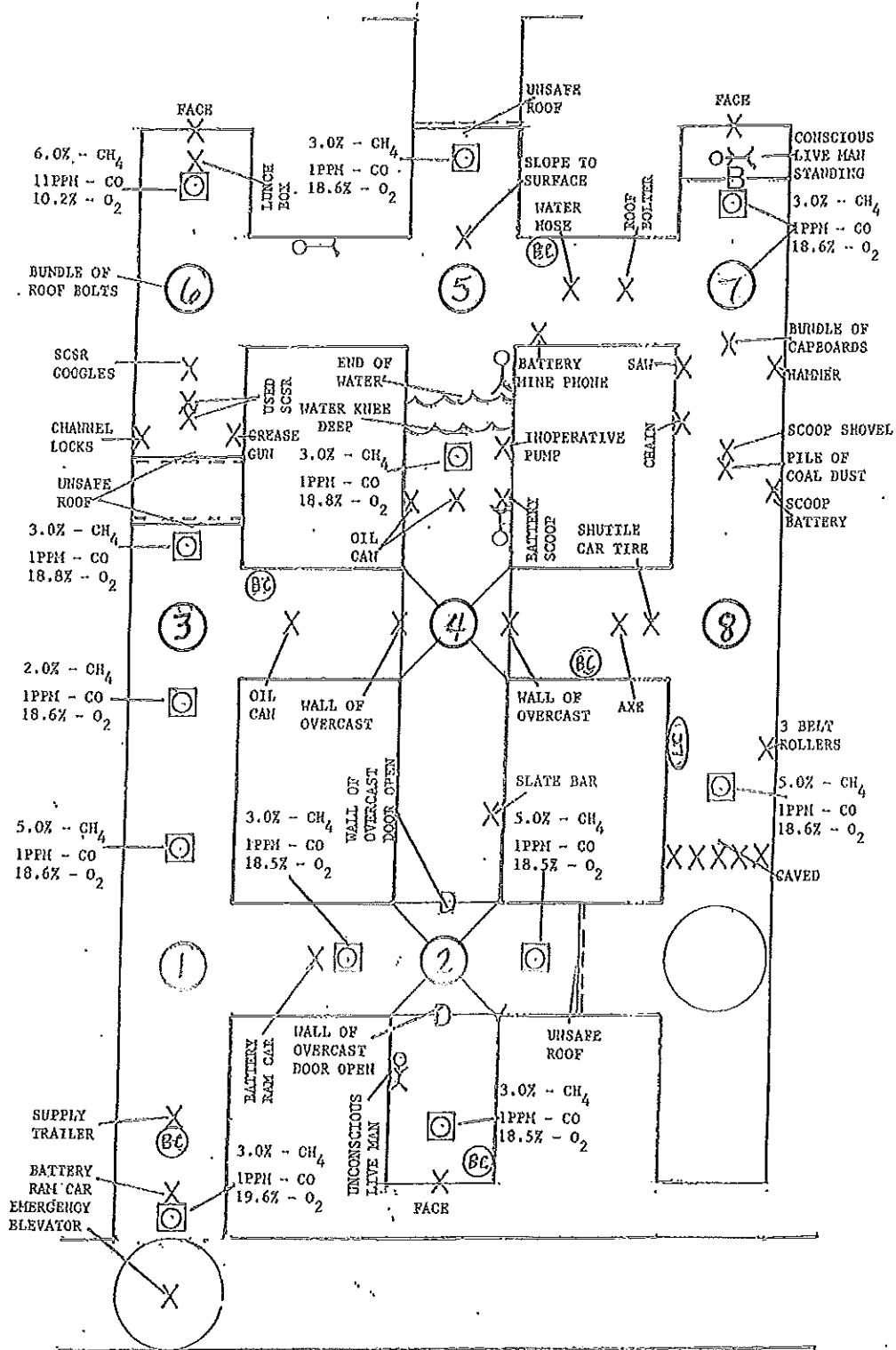


KY State Mine Rescue Contest
Day 2 – August 22, 2013
JUDGES BRIEFING

When the team enters the Fresh Air Base, the Supt. will introduce himself to the team captain and Briefing Officer. The team will have 4 minutes to arrange their equipment, lay out life line Etc.. If the team captain does not start the clock within that four minutes the Supt. will start the clock. The team does not have to unload and test stretchers. They must however check their gas detectors after the clock has started as well as their communications between the team and the B.O. Teams must go over standard lifeline signals with the lifeline judge unless wireless communications are used.

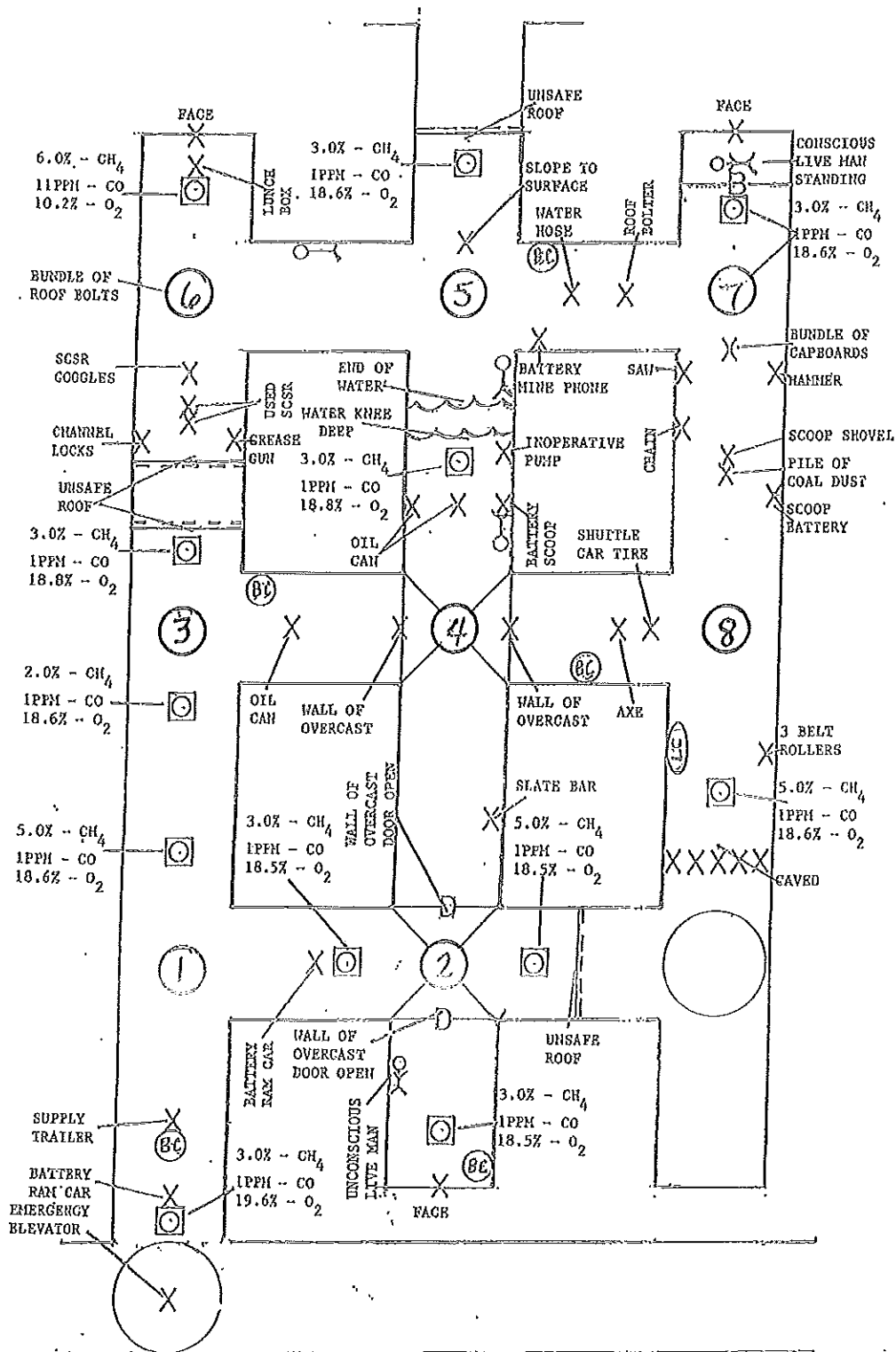
WORKING PROCEDURES:

The team is located on the surface, near the emergency elevator. To operate the elevator team will open the surface gate and get on the elevator. Once they close the surface gate they will be immediately transported to the bottom where they will open the bottom gate to the staging area. The bottom gate must be closed before the elevator will return to the surface. Once the entire team is underground (except the B.O. who is isolated on the surface) the bottom gate may be left down so the elevator is waiting on bottom for the team's return. The only portals are the elevator shaft and a slope which have already been examined on the surface side. Once the team is underground the captain will advance the team to **TEAM STOP #1**. An apparatus check must be made at the first team stop with all team members underground (within 50 feet of the shaft bottom. The team will examine up the straight finding an explosive, irrespirable mixture changing to an irrespirable mixture. To the right, the team will find another irrespirable mixture. Gas test are required in both openings before advancing to **TEAM STOP #2**. The team will be under the overcast with both doors open. The team will explore up the straight making a gas test in the area. The team will examine to the right finding an explosive mixture extending into unsafe roof. A roof and rib test and captain's d&i is required at the unsafe roof. A gas test must be made somewhere in the opening. The captain will make thru the outby open door and will find an unconscious live man who must be assessed, d&I and must be transported thru low oxygen, so he must have respiratory protection. The captain can examine to the face while the team prepares the patient for transport. The patient must be taken to the surface via the emergency elevator. Once the Team returns to bottom the team will advance to **TEAM STOP #3**. Stop 3 and 4 could be interchanged and still be systematic but we will assume the team will travel as indicated on the map. At Stop #3 the team will find the irrespirable mixture extending into the unsafe roof. A roof and rib test, a d&I and a gas test must be made. To the right the team will examine to the wall of the overcast, making a gas test and d&I at the wall. The team

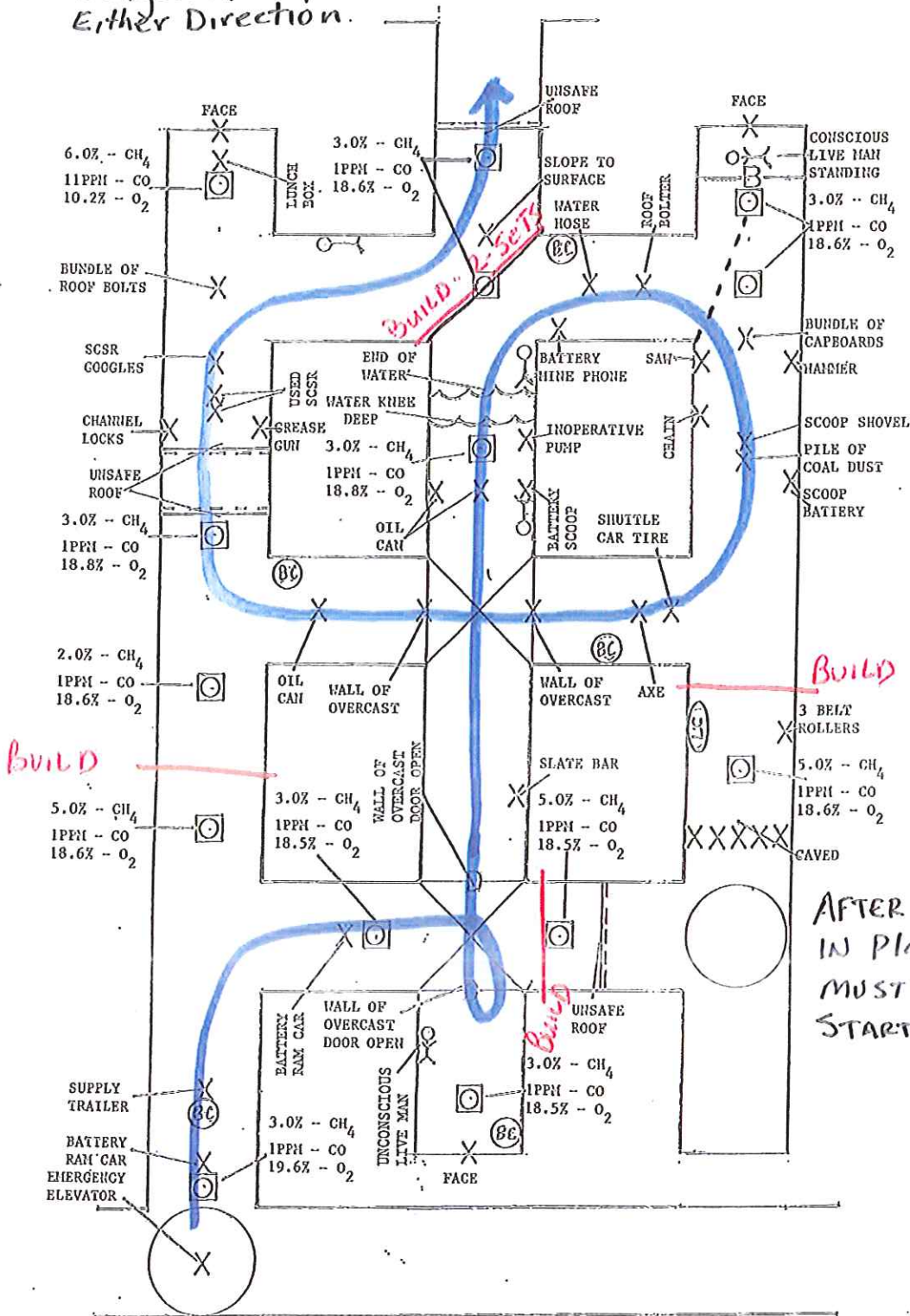


Kentucky State Mine
 Rescue Contest
 Day 2

will now travel to **TEAM STOP #4**. Here the team will be under the overcast and will make a gas test and d&i the overcast walls. Up the straight they will find a body that must be touched and d&i, and then travel thru the water knee deep finding another body that must be touched and d&i. A gas test must also be made somewhere in the opening . Since the opening are blocked the team will advance to **TEAM STOP #5**. Here the team will find the slope to the surface and will examine up to the unsafe roof making a gas test, a roof and rib test and d&i. In the opening to the left the team will find another body that must be touched and d&i. To the right the team must make a gas test in the opening before advancing to **TEAM STOP #6**. The team will find unsafe roof requiring a roof and rib test and a d&i. A gas test must be made in the opening. Up the straight the team will find a face and an irrespirable mixture (not explosive because of the low oxygen). The captain will then advance the team to **TEAM STOP #7**. The team will find a barricade with a conscious live man behind it. He tells the team that he is OK and that there is a airtight face behind him. A gas test is required in the opening and the captain must d&i the barricade. Since the team cannot ventilate the irrespirable mixture from in front of the barricade they must advance **TEAM STOP #8**. The team will find the wall of the overcast making a gas test and captain's d&i there and outby will find a caved area requiring a roof and rib test, and the captain's d&i. A gas test must be made in the opening. At this point all missing persons are accounted for. The team may ventilate the barricade and must proceed to do so. See Ventilation Map. After the barricade is cleared it will not be necessary to airlock into the barricade. Once breached the captain must make a gas test inside the barricade, and will find the conscious live man, He may pass him off d&I his location and go to the face doing a roof and rib, a d&I and make a gas test. The barricade does not have to be rebuilt on the way out but the team, depending on the way they built the angle may have to request a vent change from the B.O. before removing one of the angle curtains to exit the mine. When the team reaches the surface the problem is completed and the team will stop the clock.



Diagonal CAN Be Built in Either Direction.



AFTER Controls are IN Place, Team MUST ASK Supt. TO START FAN.

VENTILATION MAP

KY STATE CONTEST

DAY 2

CONSCIOUS LIVE MAN STATEMENT

HELP!! GET ME OUT OF HERE. I AM
SCARED TO DEATH AND I WANT OUT!!
ITS AIRTIGHT IN HERE WITH A SOLID
FACE BEHIND ME.

KMI
AUGUST 22, 2013

WRITTEN INSTRUCTIONS

IF IT CAN BE DONE SAFELY:

- EXPLORE THE ENTIRE MINE
- ACCOUNT FOR ALL MISSING MINERS.
- BRING ALL SURVIVORS TO THE SURFACE
- THE FAN MAY BE STARTED BY NOTIFYING THE SUPERINTENDANT, BUT ONCE STARTED THE FAN CANNOT BE STOPPED, REVERSED OR STALLED

PLEASE NOTE:

- YOU MAY ONLY CARRY TO BRATTICE CLOTHS AT A TIME
- LINE CURTAINS ARE YELLOW AND MUST NOT BE TWISTED TO BE EFFECTIVE.
- AIRTIGHT STRUCTURES MUST BE PROPERLY HOOKED ON BOTH SIDES.
- THE BRIEFING OFFICER WILL BE ISOLATED ON THE SURFACE.