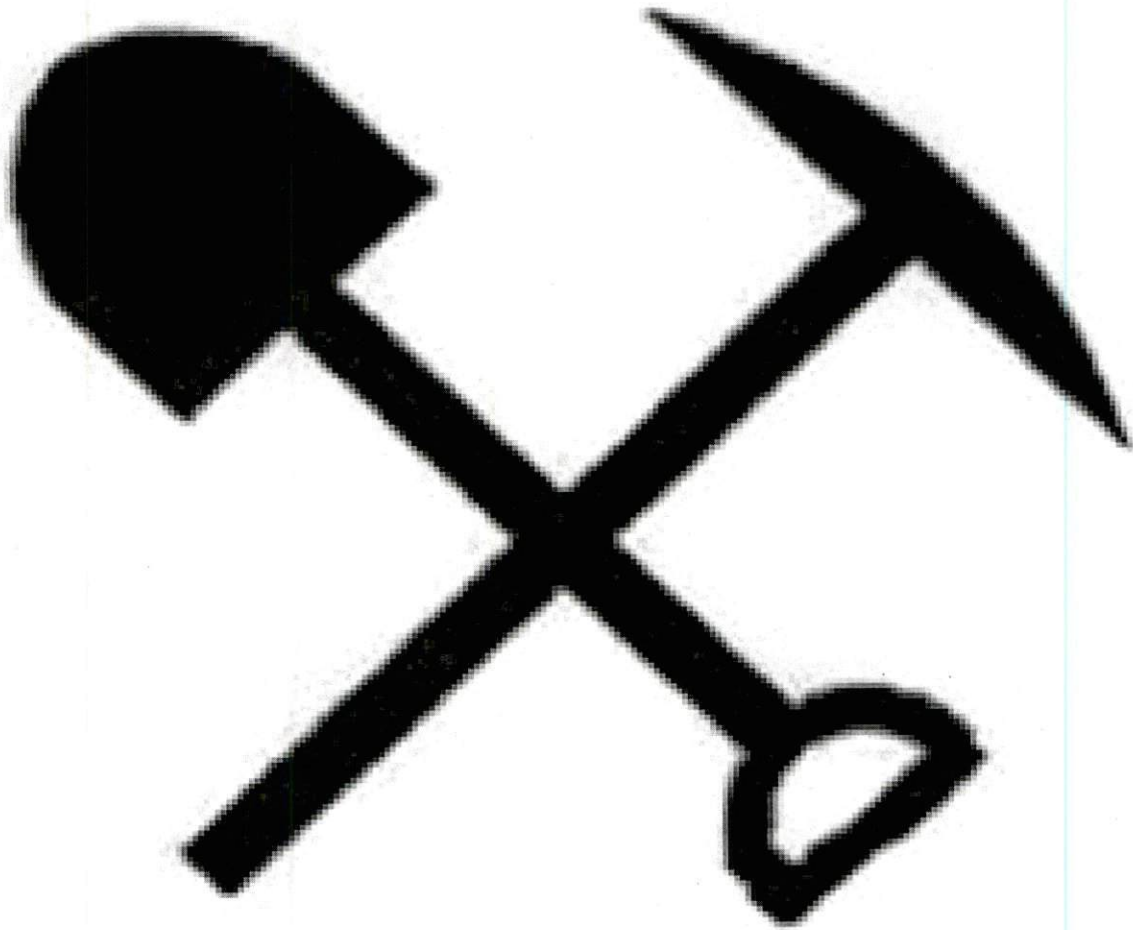


MH

**2019**  
**MINE RESCUE DAY 1**

**KENTUCKY RIVER**  
**MINE RESCUE, PRESHIFT, BENCH**  
**AND FIRST AID CONTEST**



**KENTUCKY RIVER MINE RESCUE CONTEST  
SUPERINTENDENT STATEMENT DAY 1  
JUNE 12, 2019**

Thank you for coming to help us. You are located at the fresh air base of the Haz-Co #1 mine. This is a very large mine with multiple working sections and interconnected fans and air courses.

A mine rescue team was able to explore to the area inby the area you will be exploring. They were stopped by water in the number 1 entry, and unsafe roof in the number 2 and number 3 entries. Another team was able to setup a safe return and intake inby that you can use to ventilate through.

The outby fan is blowing and ventilating the fresh air base.

The inby fan is off. Due to automatic closing doors the inby fan must be running in order to ventilate through the area you will be exploring.

The mine has a history of bad roof, water and methane. The mine maps are up to date. We have a competent life line person to give and take life line signals if necessary.

Please find the 4 missing miners that were in this area of the mine that you will be exploring. Thank you and good luck.

# **PROBLEM DAY 1**

**YOU HAVE 90 MINUTES TO COMPLETE THE PROBLEM.**

**BOTH FANS CAN BE STOPPED OR REVERSED. DO NOT STALL EITHER FAN, AS IT WILL CAUSE DAMAGE TO THEM.**

**IF THE OUTBY FAN IS RUNNING AND THE AREA IS NOT AIR LOCKED IT WILL MOVE AIR THROUGH THE AREA YOU ARE TO EXPLORE.**

**TO PREVENT STALLING ONE FAN HAS TO BE BLOWING AND THE OTHER EXHAUSTING WHEN USING BOTH FANS.**

**THE RETURN AND INTAKE OUTBY THE FAB AND INBY AREAS HAVE BEEN EXPLORED AND IS SAFE TO VENTILATE THROUGH.**

**ACCOUNT FOR ALL 4 MISSING MINERS THAT ARE IN THE AREA YOU ARE EXPLORING AND BRING SURVIVORS TO THE FAB.**

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

**WHEN THE TEAM IS TRAVELING THEY CAN ONLY CARRY 2 TIMBERS PER WORKING TEAM MEMBER AND THEY MUST CARRY THEIR OWN TIMBER IN THEIR HANDS. BRATTICE CLOTH AND LINE CURTAIN MUST BE EITHER CARRIED IN THE HAND OR ON THE STRETCHER. NO THROWING, KICKING, PITCHING ETC. OF THE TIMBERS, WATER PUMP, BRATTICE CLOTH OR LINE CURTAINS BY THE TEAM MEMBERS.**

# **PATIENT STATEMENT 1**

**HELP GET ME OUT OF HERE.**

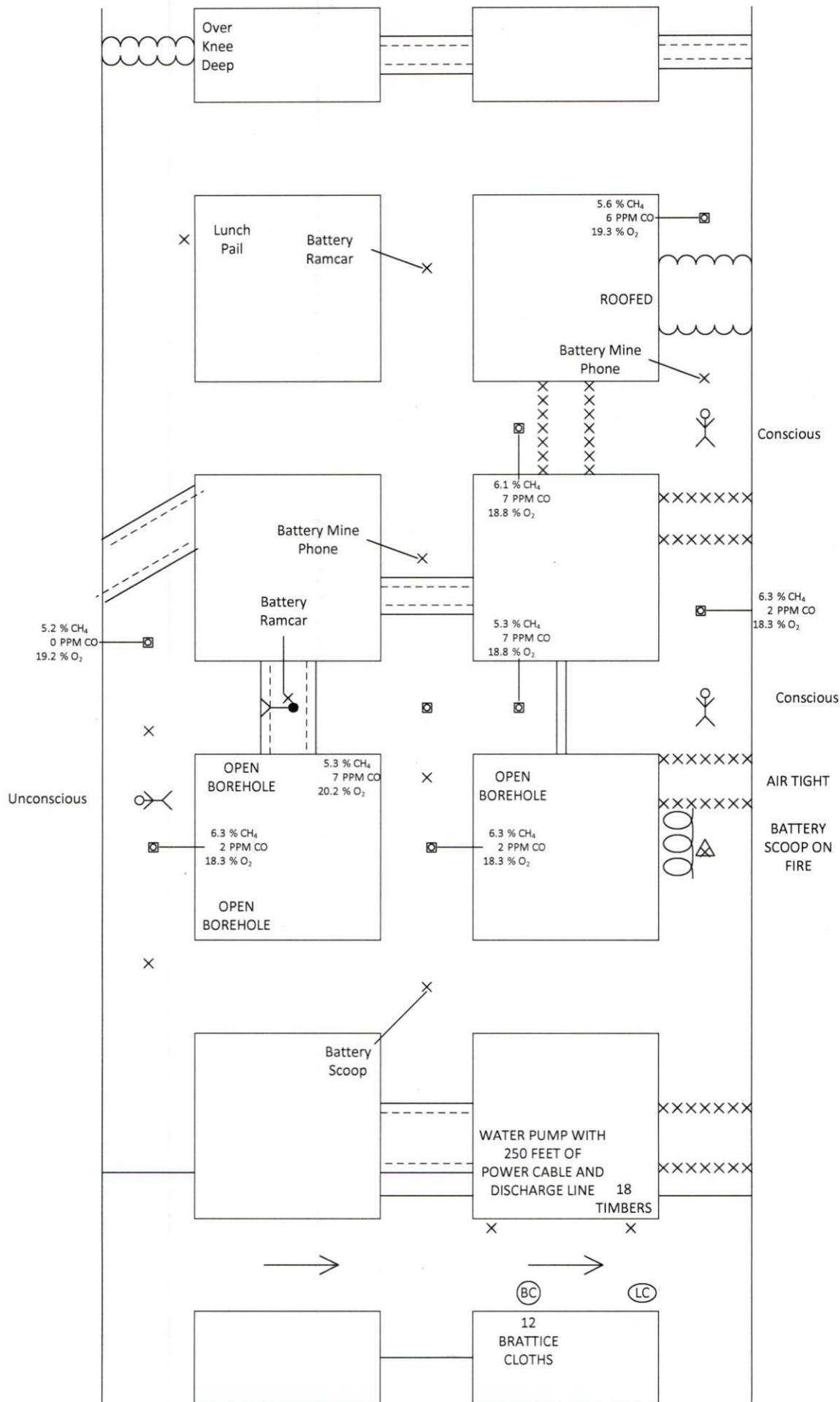
## **QUIT STATEMENT DAY 1**

**THANK YOU FOR FINDING THE WITH  
DRAWN CONDITION.**

**SINCE YOU FOUND IT THE AREA HAS  
BEEN INJECTED WITH NITROGEN AND  
SAMPLED THE EXPLOSIVE MIXTURES YOU  
REPORTED HAVE BEEN RETESTED AND ARE  
NOW NON-EXPLOSIVE.**

**RE-ENTER THE AREA AND RE-CHECK THE  
AREA WITH EXPLOSIVE MIXTURES AND  
CONFIRM THAT THEY ARE NOW NON-  
EXPLOSIVE AND CONTINUE EXPLORING THE  
MINE AND BRINGING SURVIVORS TO THE  
FRESH AIR BASE.**

KENTUCKY RIVER DAY 1 PROBLEM MAP



KENTUCKY RIVER MINE RESCUE CONTEST DAY 1  
JUDGES BRIEFING

Number 1 entry GT DI Airlock GT inby stopping.

Number 2 entry GT DI Airlock GT inby stopping GT DI RR  
at unsafe roof.

Number 3 entry GT DI Airlock GT inby stopping GT DI RR  
at caved.

Team Stop 1

Gt at Open Borehole

Crosscut between 1 & 2 GT

Inby GT Patient Touch Assess DI Take to FAB

Team Stop 2

Inby GT Open Borehole GT

Crosscut between 2 & 3 GT

Outby GT DI RR

Team Stop 3

Outby GT DI RR

Inby GT Find Smoke Quit Return FAB

Give team QUIT STATEMENT DAY 1 before they can stop  
clock.

Change placards in number 1 and number 2 entries to 4.3%  
CH<sub>4</sub>.

Team re-enters rechecks 1 and 2 entries and the gas is now  
non-explosive.

Continue Team Stop 3

Inby GT RR Extinguish fire RR GT DI

Team Stop 4

Patient 1 Reads Statement

Crosscut between 2 & 3 DI GT

Inby GT RR DI

Crosscut between 1& 2 RR GT DI

Team Stop 5

GT at Open Borehole

Inby GT RR DI

Crosscut between 1 & 2 RR GT DI

Team should now attempt to do ventilation. They will timber through unsafe roof find body Touch and DI. They will also find Battery Ramcar and determine they cannot ventilate at this time.

The team can now either set timbers and advance up number 1 or number 2 entry. We will use number 1 entry timber through and RR inby side.

Team Stop 6

Inby GT Examine Lunch Pail

Crosscut between 1 & 2 GT

Team Stop 7

Crosscut between 2 & 3 GT DI RR

Inby GT

Outby GT DI RR

Ventilation 1



Team Stop 8  
Entering barricade GT  
RR Zig Zag intersection  
Patient touch assess DI Take to FAB  
Outby GT DI  
Inby GT DI RR

Team Stop 9  
Crosscut between 1 & 2 GT  
Inby GT DI

Team Stop 10  
Inby GT DI RR  
Outby GT  
Crosscut between 2 & 3 GT

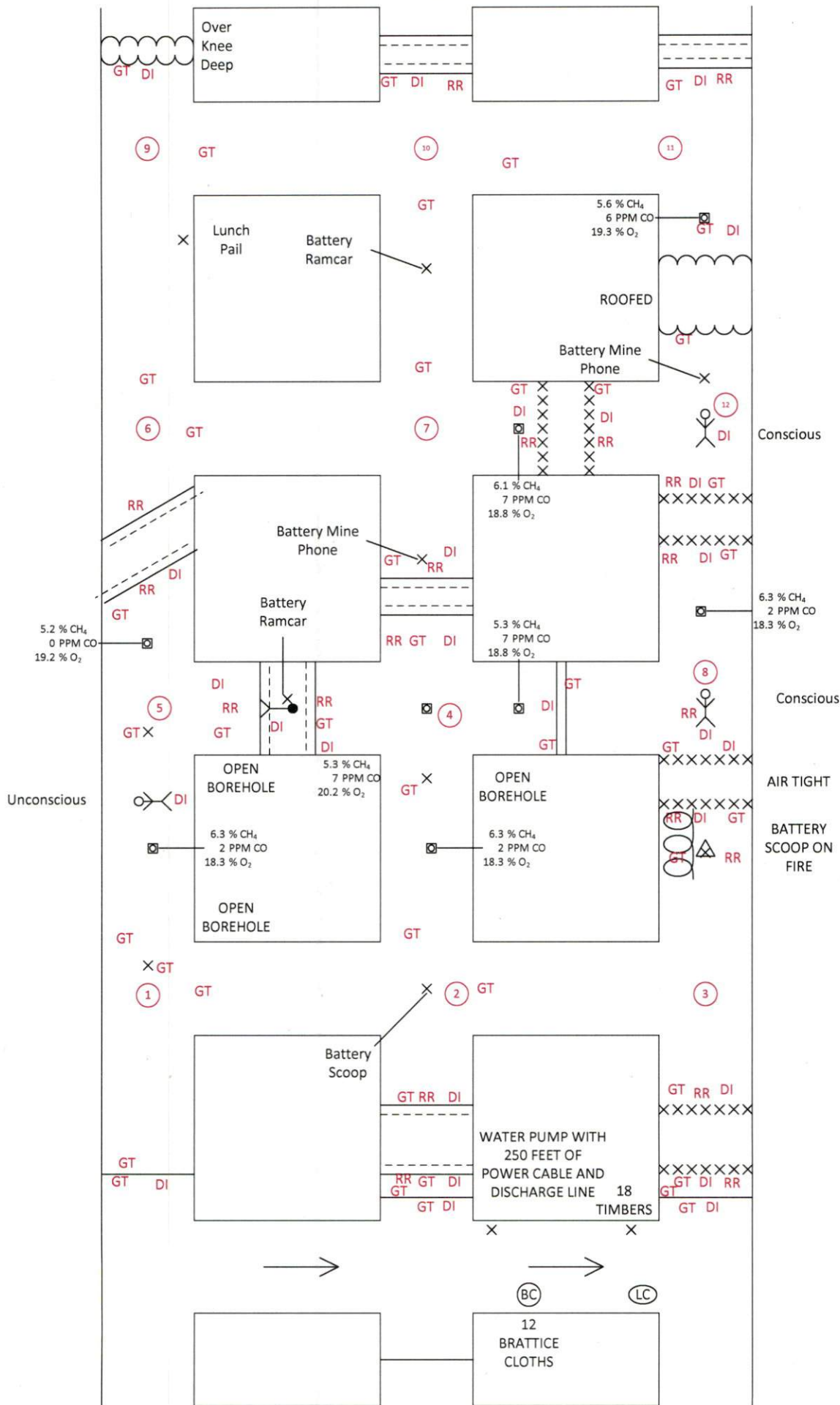
Team Stop 11  
Inby GT DI RR  
Outby GT DI

Ventilation 2  
Pump 1

Team Stop 12  
GT after pumping water  
Patient Touch Assess DI take to FAB  
Crosscut between 2 & 3 GT DI RR  
Outby GT RR DI

Stop Clock

KENTUCKY RIVER DAY 1 TEAM STOP MAP



Unconscious

Conscious

Conscious

AIR TIGHT

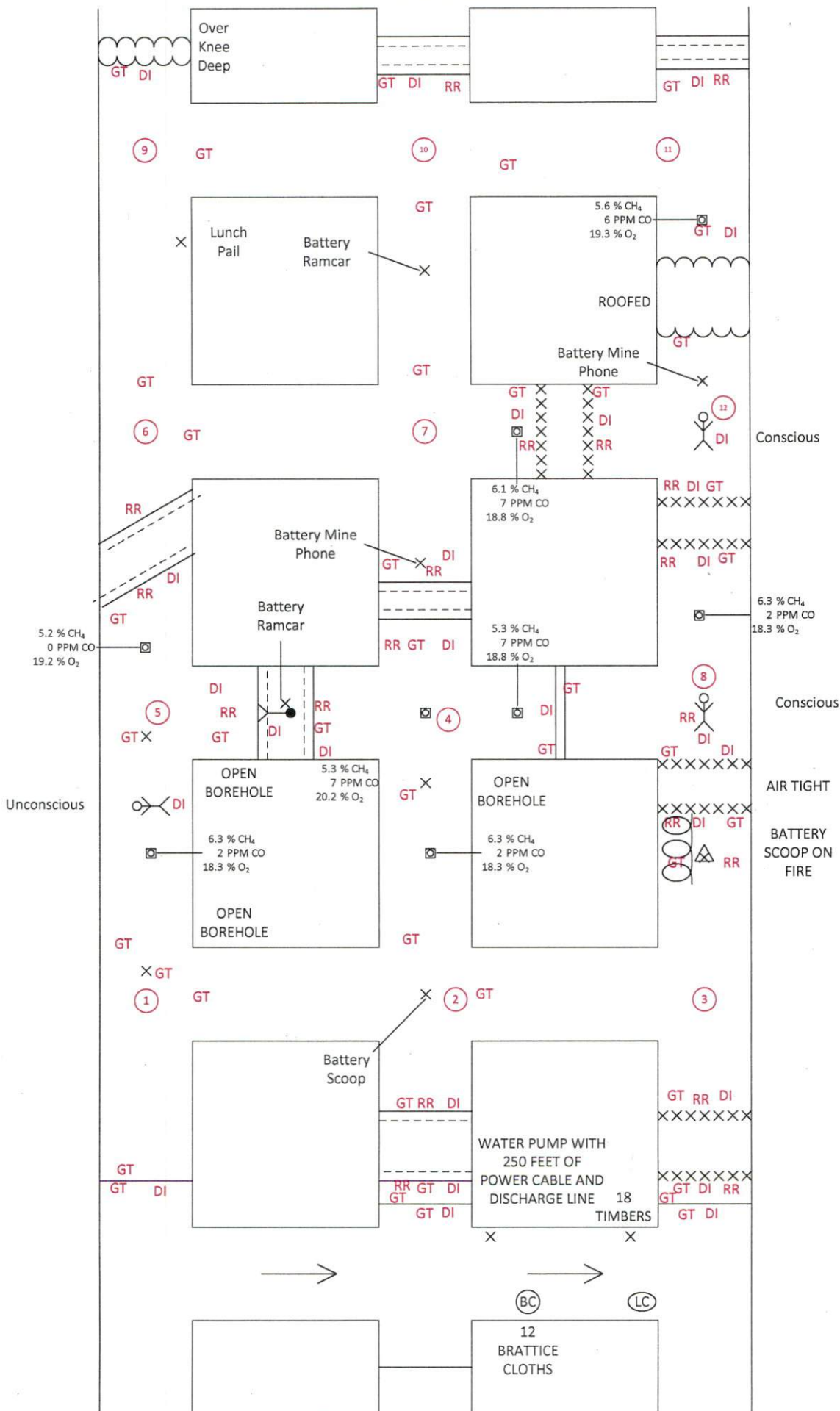
BATTERY SCOOP ON FIRE

BC

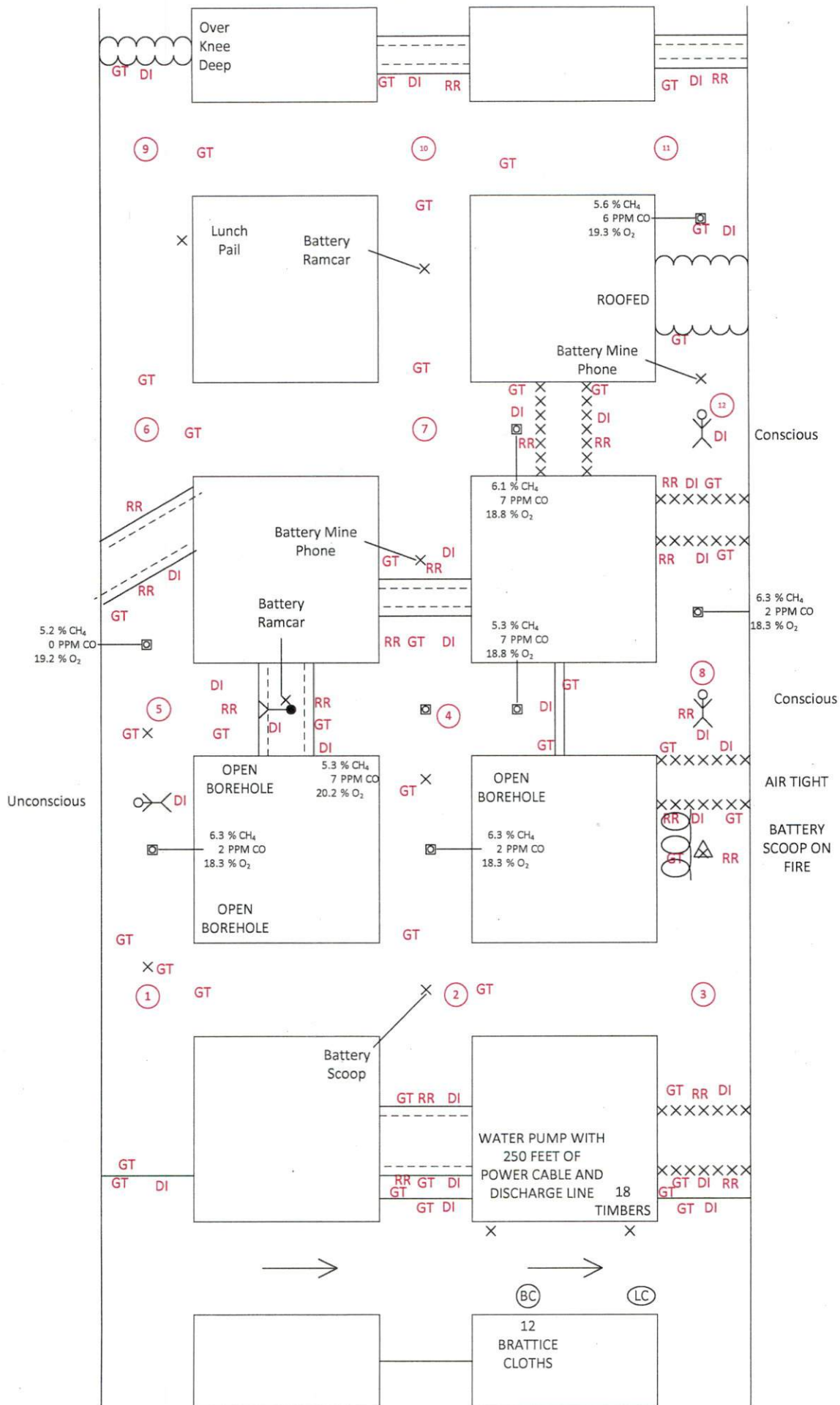
LC

12 BRATTICE CLOTHS

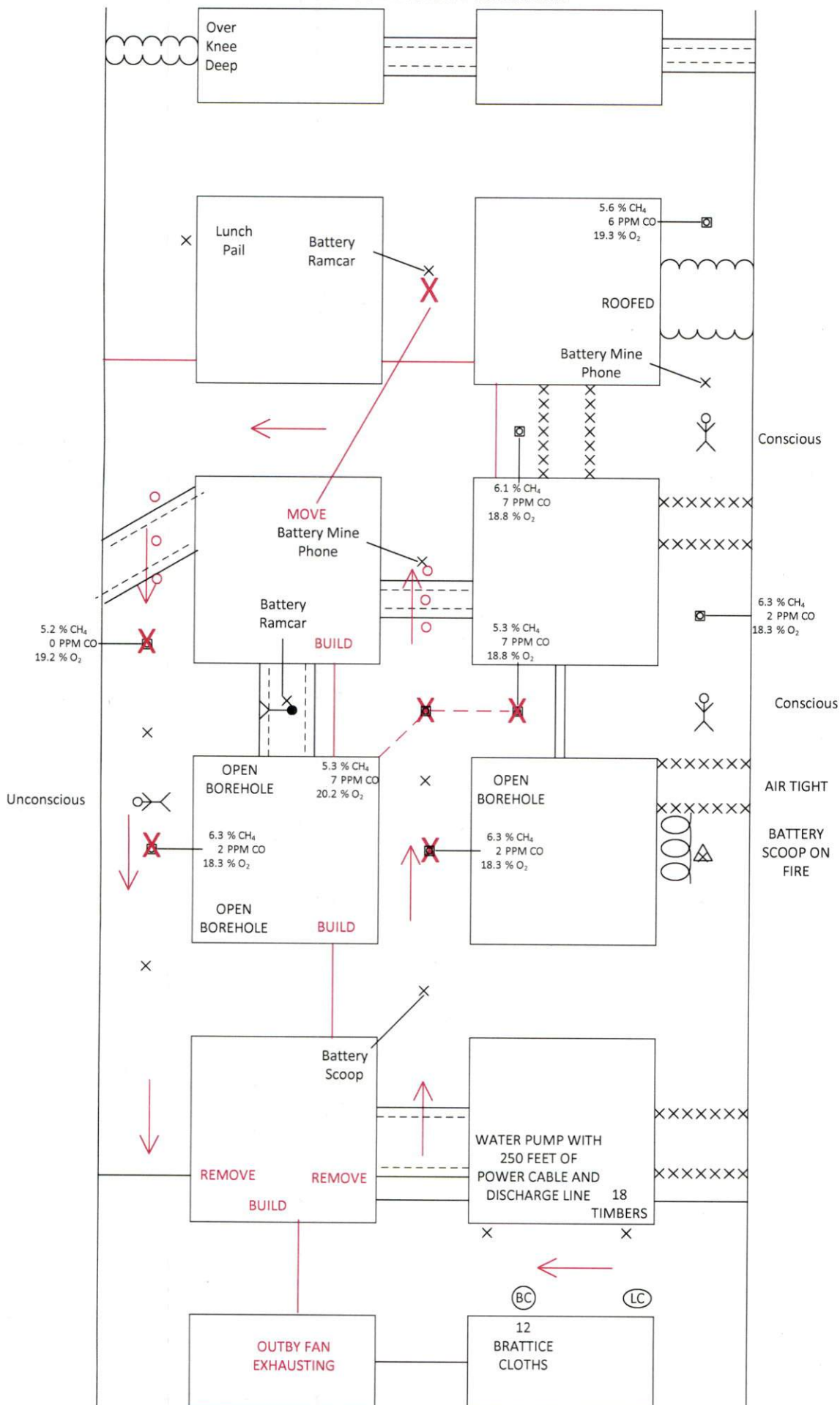
KENTUCKY RIVER DAY 1 TEAM STOP MAP



KENTUCKY RIVER DAY 1 TEAM STOP MAP



KENTUCKY RIVER DAY 1 VENTILATION 1



Over Knee Deep

Lunch Pail  
Battery Ramcar

5.6 % CH<sub>4</sub>  
6 PPM CO  
19.3 % O<sub>2</sub>  
ROOFED  
Battery Mine Phone

MOVE  
Battery Mine Phone  
Battery Ramcar  
BUILD

6.1 % CH<sub>4</sub>  
7 PPM CO  
18.8 % O<sub>2</sub>  
5.3 % CH<sub>4</sub>  
7 PPM CO  
18.8 % O<sub>2</sub>

OPEN BOREHOLE  
5.3 % CH<sub>4</sub>  
7 PPM CO  
20.2 % O<sub>2</sub>  
OPEN BOREHOLE  
6.3 % CH<sub>4</sub>  
2 PPM CO  
18.3 % O<sub>2</sub>  
OPEN BOREHOLE  
BUILD

OPEN BOREHOLE  
6.3 % CH<sub>4</sub>  
2 PPM CO  
18.3 % O<sub>2</sub>

Battery Scoop  
REMOVE  
BUILD  
REMOVE

WATER PUMP WITH  
250 FEET OF  
POWER CABLE AND  
DISCHARGE LINE 18  
TIMBERS

OUTBY FAN  
EXHAUSTING

12  
BRATTICE  
CLOTHS

Conscious

Conscious

AIR TIGHT

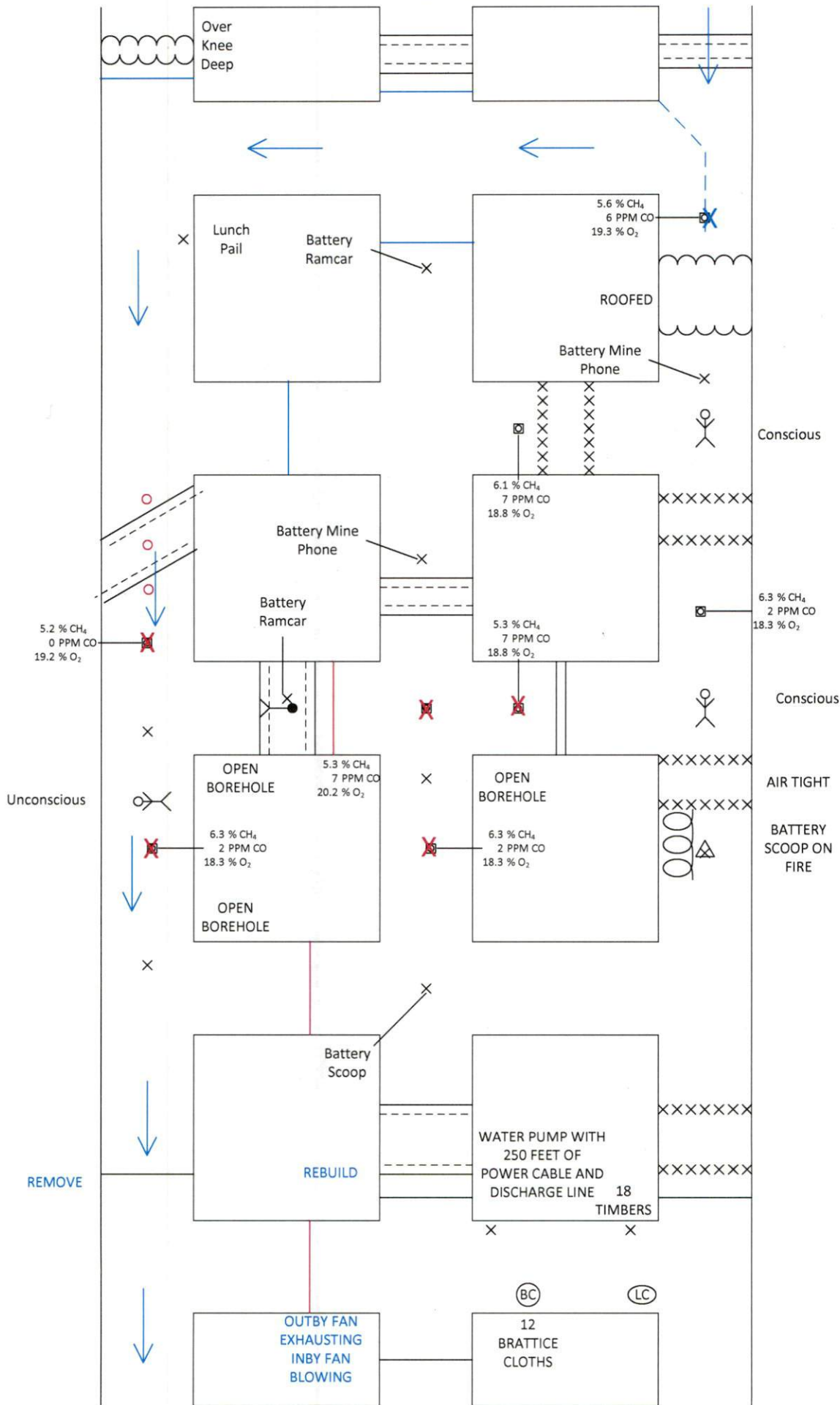
BATTERY SCOOP ON FIRE

Unconscious

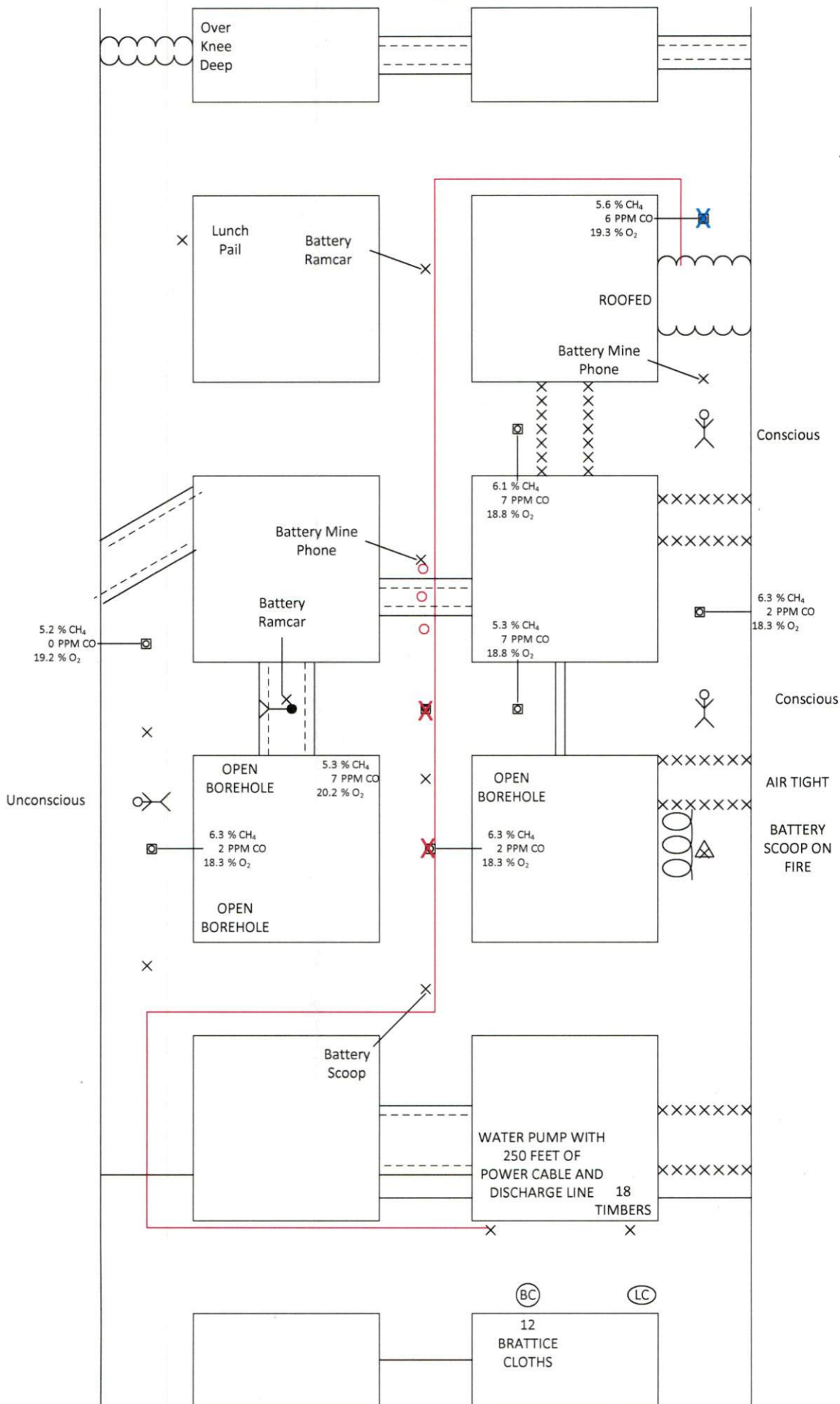
(BC)

(LC)

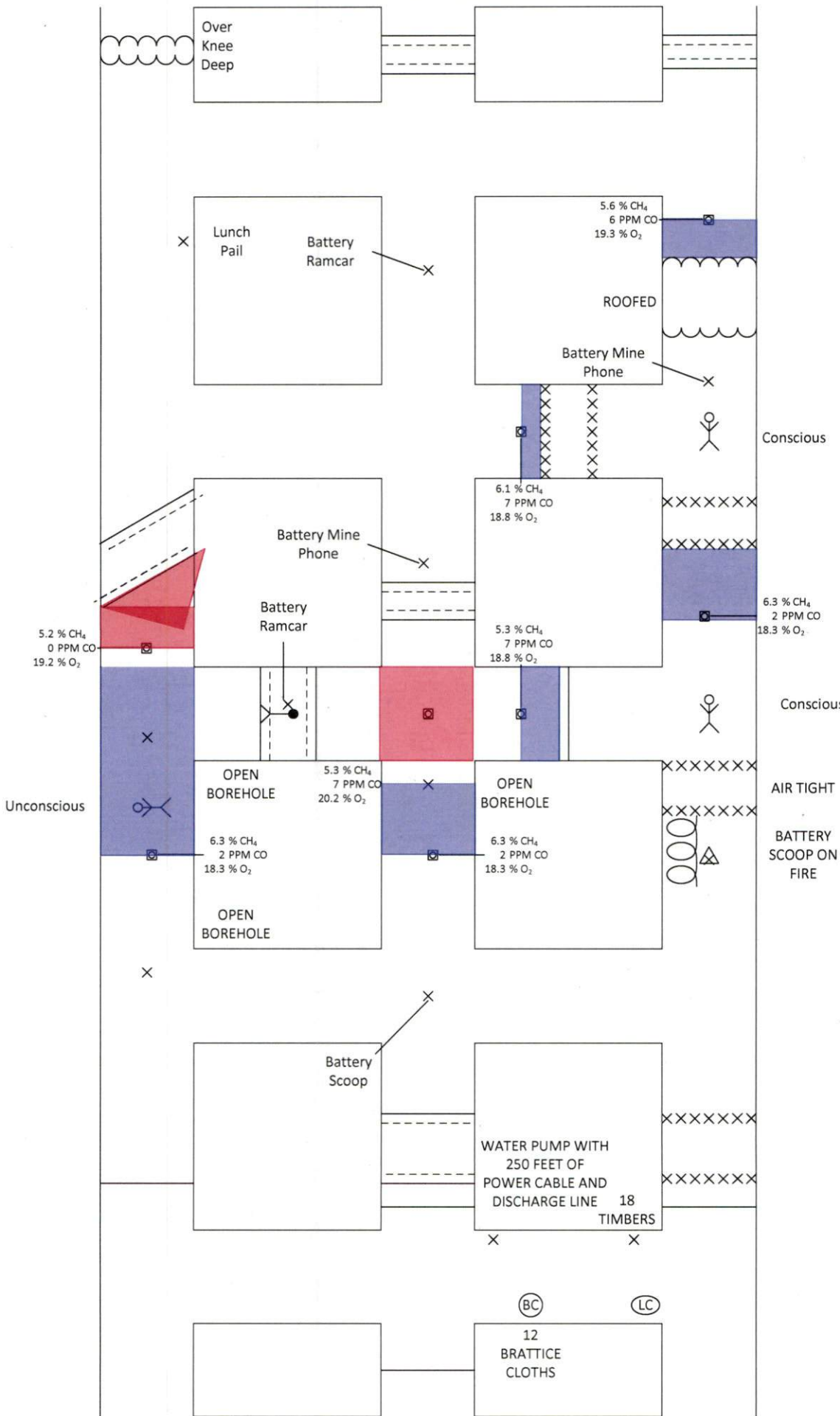
KENTUCKY RIVER DAY 1 VENTILATION 2 MAP



KENTUCKY RIVER DAY 1 PUMP 1 MAP



KENTUCKY RIVER DAY 1 EXTENT OF GASES MAP

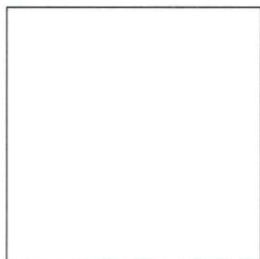




KENTUCKY RIVER DAY 1 FINAL MAP



5.6 % CH<sub>4</sub>  
 6 PPM CO   
 19.3 % O<sub>2</sub>  
 RETEST  
 Y \_\_\_ N \_\_\_



6.1 % CH<sub>4</sub>  
 7 PPM CO  
 18.8 % O<sub>2</sub>  
 RETEST  
 Y \_\_\_ N \_\_\_

5.3 % CH<sub>4</sub> RETEST  
 7 PPM CO Y \_\_\_ N \_\_\_  
 18.8 % O<sub>2</sub>

5.2 % CH<sub>4</sub>   
 0 PPM CO  
 19.2 % O<sub>2</sub>

RETEST  
 Y \_\_\_ N \_\_\_

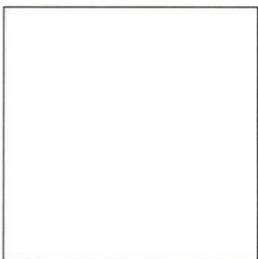
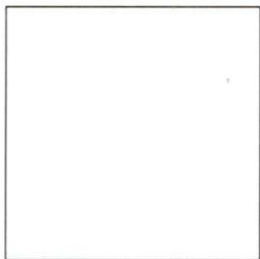
6.3 % CH<sub>4</sub>   
 2 PPM CO  
 18.3 % O<sub>2</sub>

RETEST  
 Y \_\_\_ N \_\_\_

5.3 % CH<sub>4</sub>  
 7 PPM CO  
 20.2 % O<sub>2</sub>  
 RETEST  
 Y \_\_\_ N \_\_\_

6.3 % CH<sub>4</sub>   
 2 PPM CO  
 18.3 % O<sub>2</sub>  
 RETEST  
 Y \_\_\_ N \_\_\_

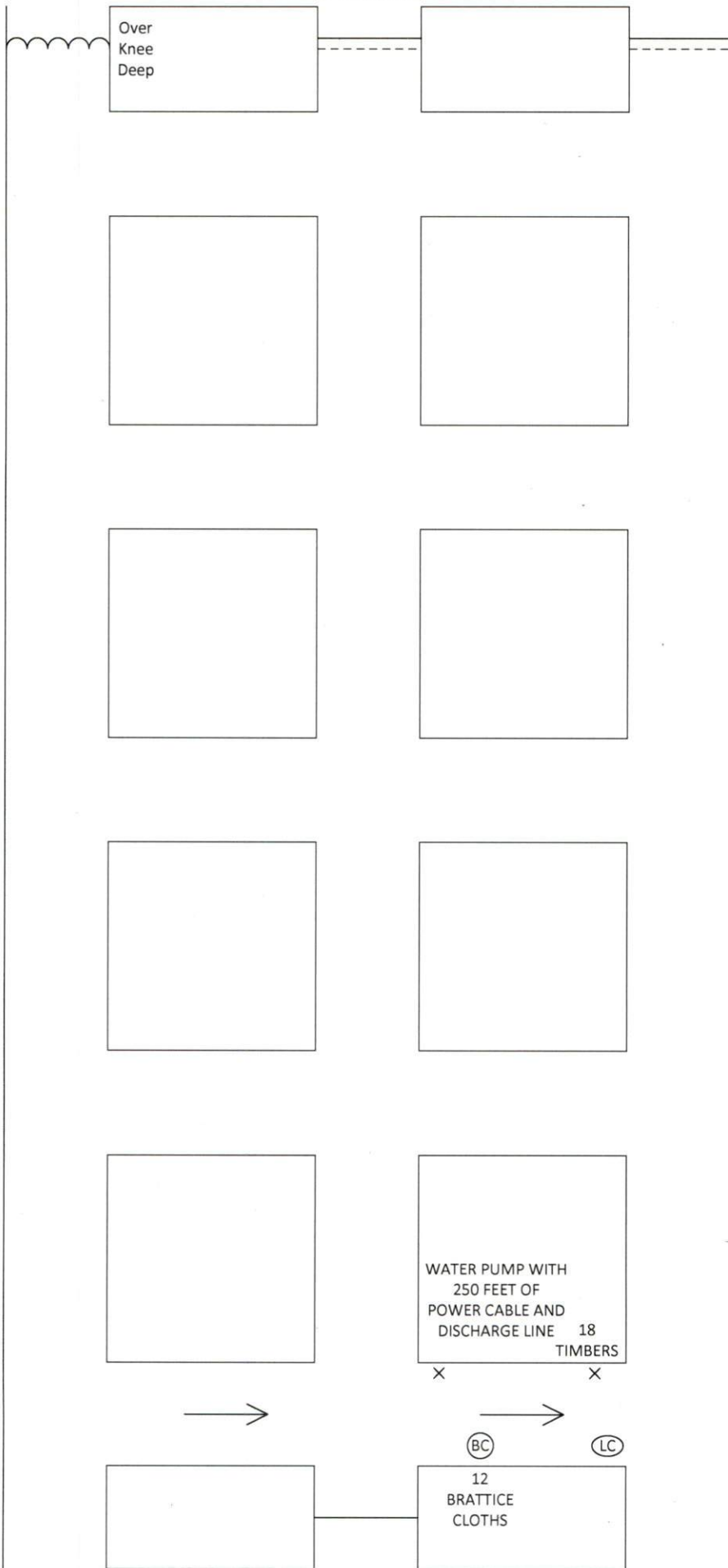
6.3 % CH<sub>4</sub>   
 2 PPM CO  
 18.3 % O<sub>2</sub>  
 RETEST  
 Y \_\_\_ N \_\_\_



OUTBY FAN  
 ON \_\_\_ OFF \_\_\_  
 BLOWING \_\_\_  
 EXHAUSTING \_\_\_

INBY FAN  
 ON \_\_\_ OFF \_\_\_  
 BLOWING \_\_\_  
 EXHAUSTING \_\_\_

KENTUCKY RIVER DAY 1 TEAM MAP



KENTUCKY RIVER DAY 1 BLANK MAP

