



38th

Alabama Coal Association



2014 Day 1 Problem Briefing



Beville State Community College

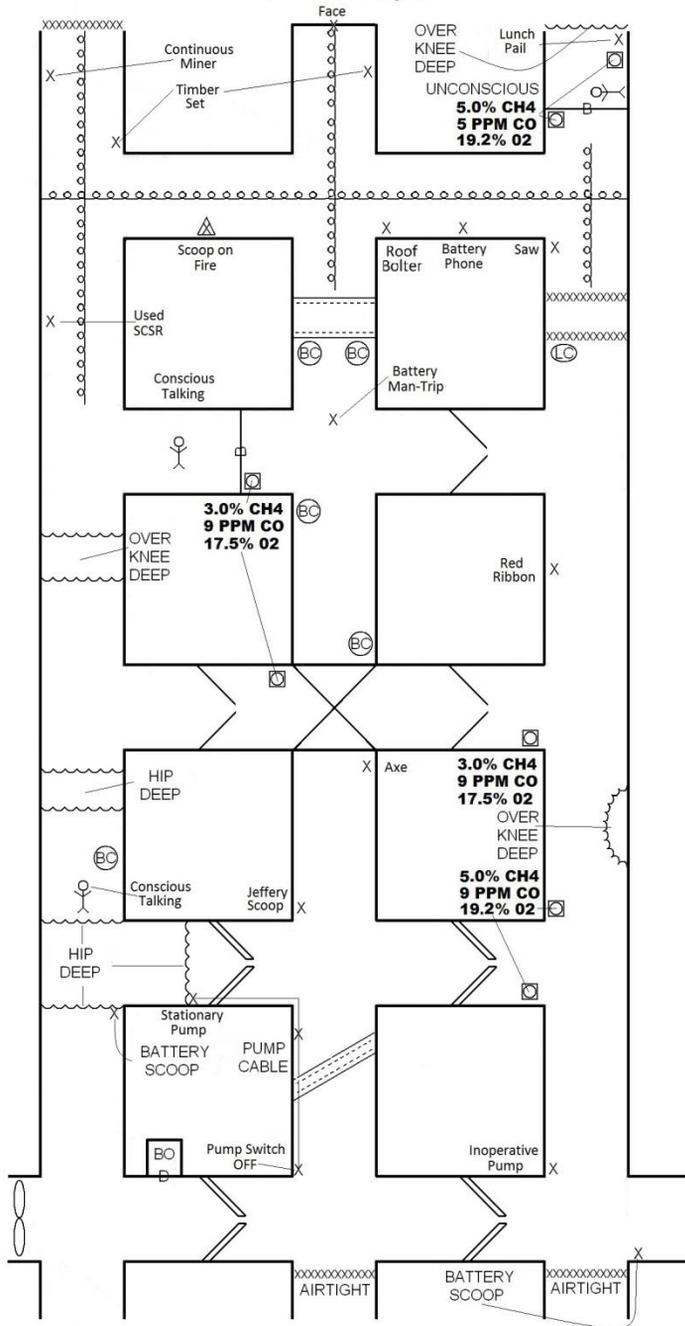
2014 ACA Contest Statement Day 1

Welcome to the Bear Walk # 1 Mine. Bear Walk has one miner section with three entries driving into virgin coal. Last night 2 rock dusters and a scoop man went to the section to prepare the unit for coal production. Seven hours into the shift, the scoop man on the section called the responsible person outside to report that his scoop had been on fire, but that he had pushed the fire suppression button and he was pretty sure the fire was out. He said that he was going back inby to check on the two rock dusters and would call back outside in a few minutes. This is the last contact we have had with the scoop man.

We have explored the entries going into the highwall mine and found water in no.1 and unsafe roof in no.2 entry. We also found dangerous amounts of methane coming from the no. 3 entry and decided to call a trained mine rescue team. You are located in the first crosscut just inside the mine. The mine is ventilated by a blowing fan in the offset from no.1 entry. The fan is off at this time, but can be started and stopped by asking the superintendent.

Mine maps were up to date as of yesterday morning. We have back up teams here to assist you and all power except for power going to a pump switch just inby the fresh air base is locked out and guarded. The area around the pump switch in no. 2 entry has been explored up to the unsafe roof and no methane has been detected. The pump switch is off. This is all we know at this time.

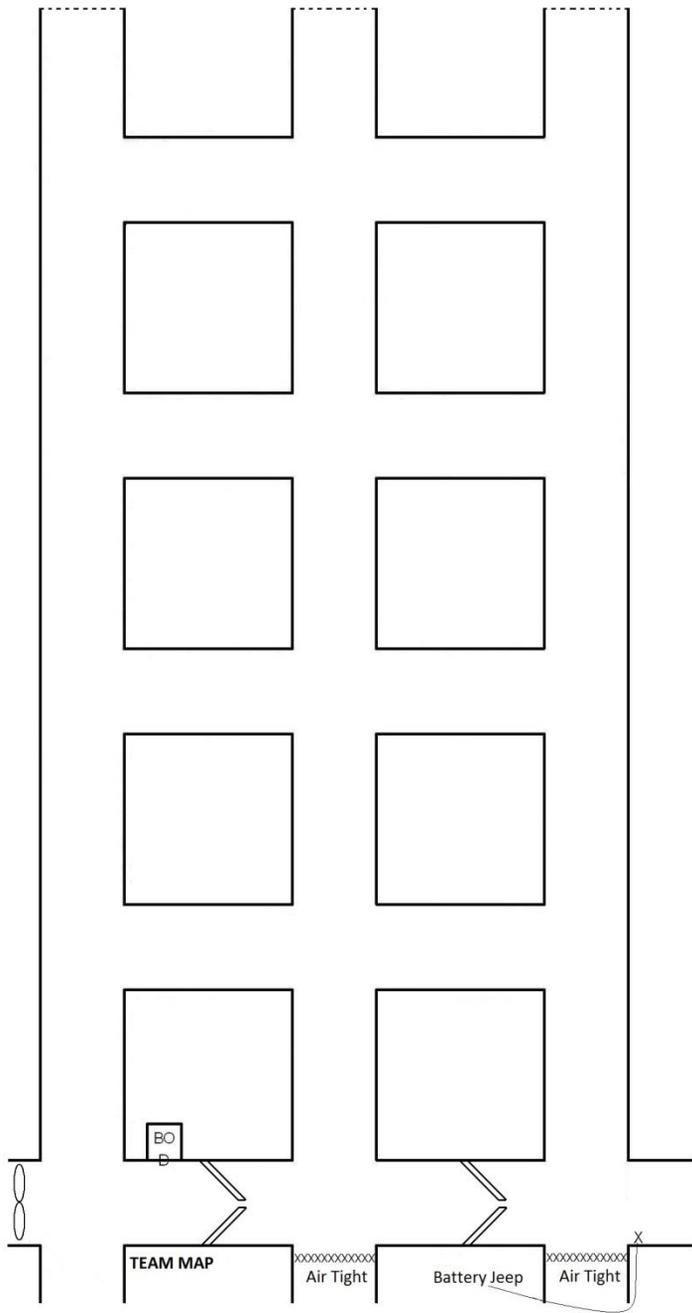
2014 ACA Day 1

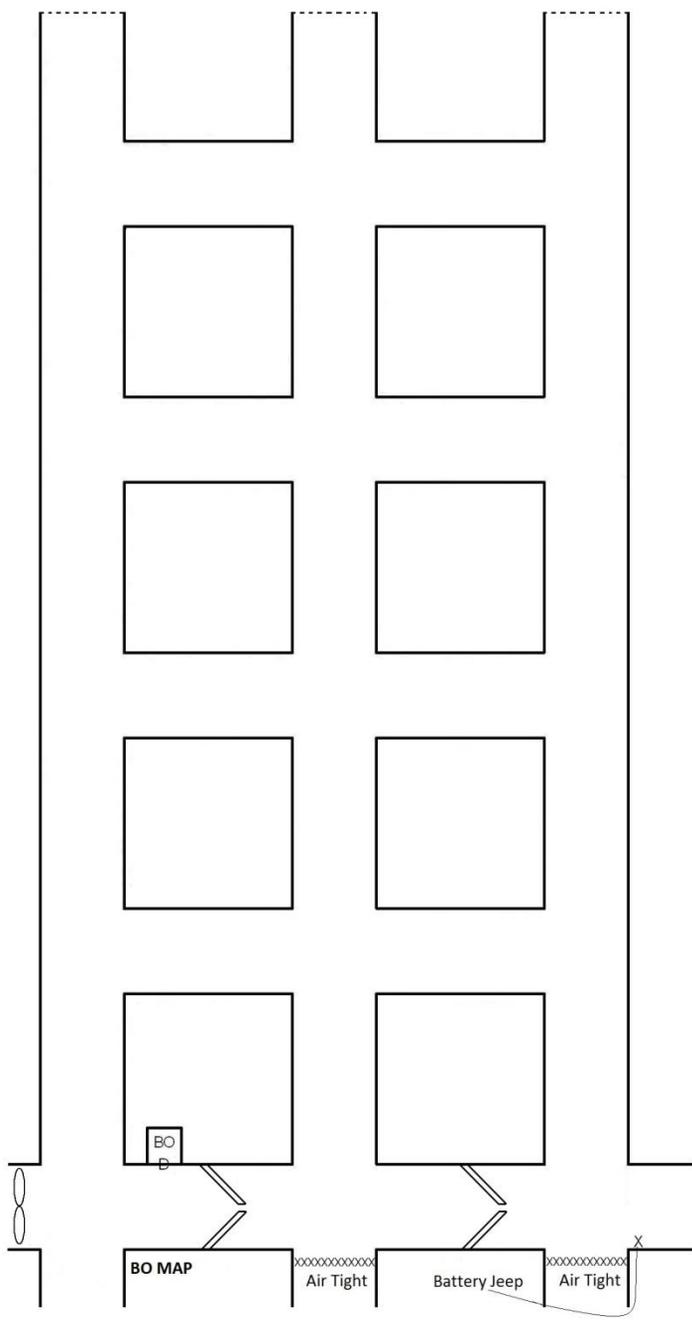


2014 ACA DAY 1

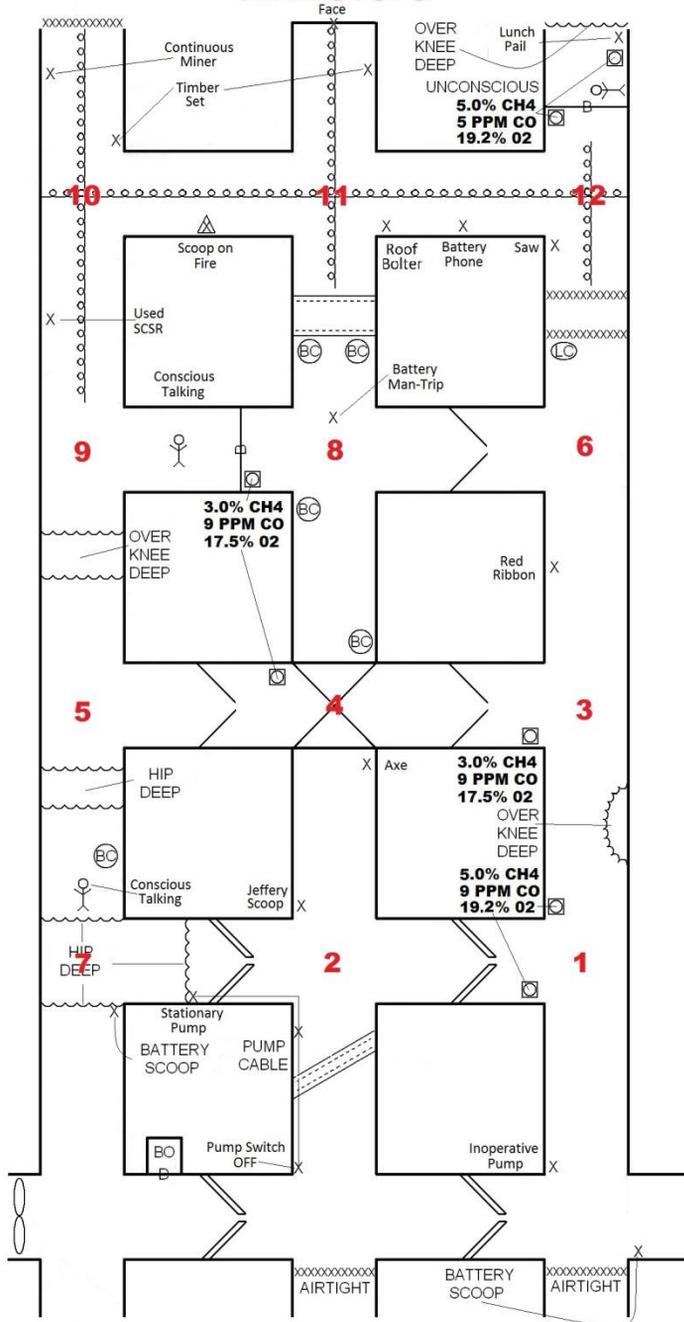
Written Instructions

- **ACCOUNT FOR THE MISSING MINERS**
- **BRING LIVE PERSONS TO FRESH AIR BASE**
- **THE BLOWING FAN CANNOT BE REVERSED**
- **POWER CANNOT BE TAKEN OFF THE PUMP SWITCH AND AFTER PUMP SWITCH IS TURNED ON, IT CANNOT BE TURNED OFF**
- **TEAMS CAN CARRY ONLY 2 BRATTICE CLOTHS WHEN TRAVELING**
- **BO IS IN A AIRTIGHT ENCLOSURE AND ISOLATED**
- **YOU HAVE 90 MINUTES TO WORK BEFORE BEING REPLACED BY ANOTHER TEAM**





TEAM STOPS



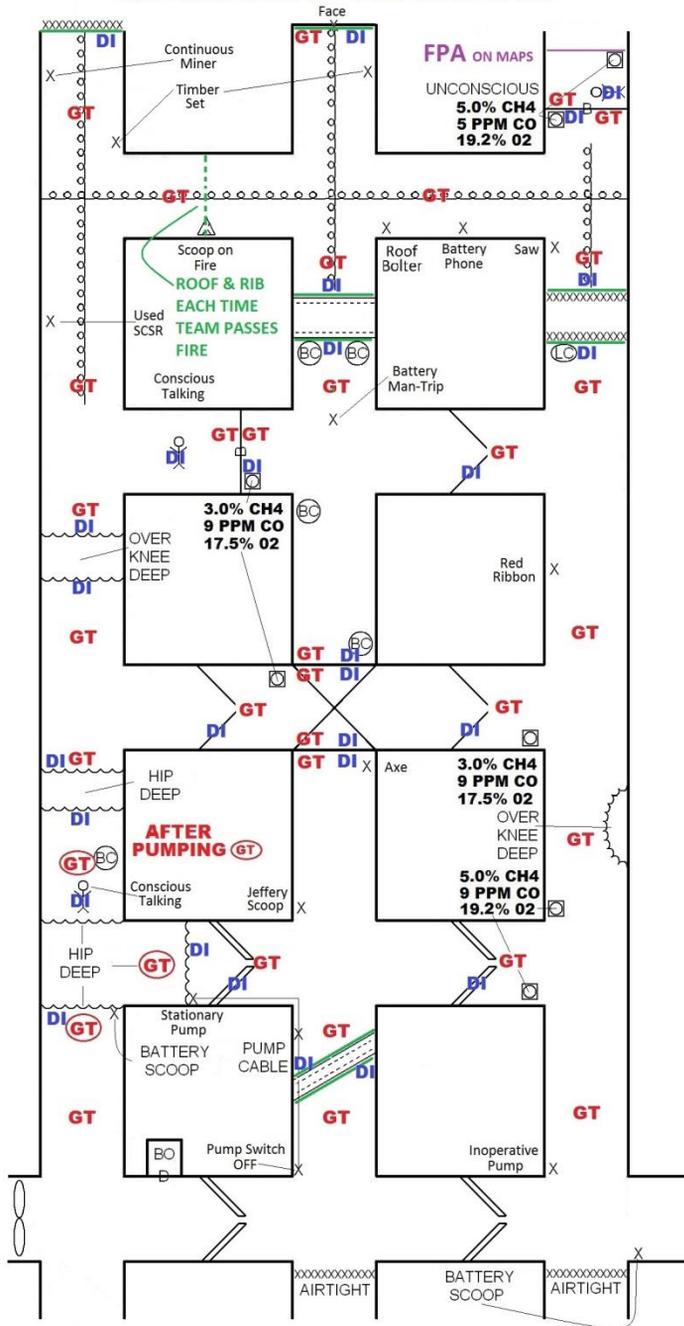
**PATIENT STATEMENT
AT ALL 3 SIDES OF HIP
DEEP WATER**

**HELP! GET ME OUT
OF HERE!**

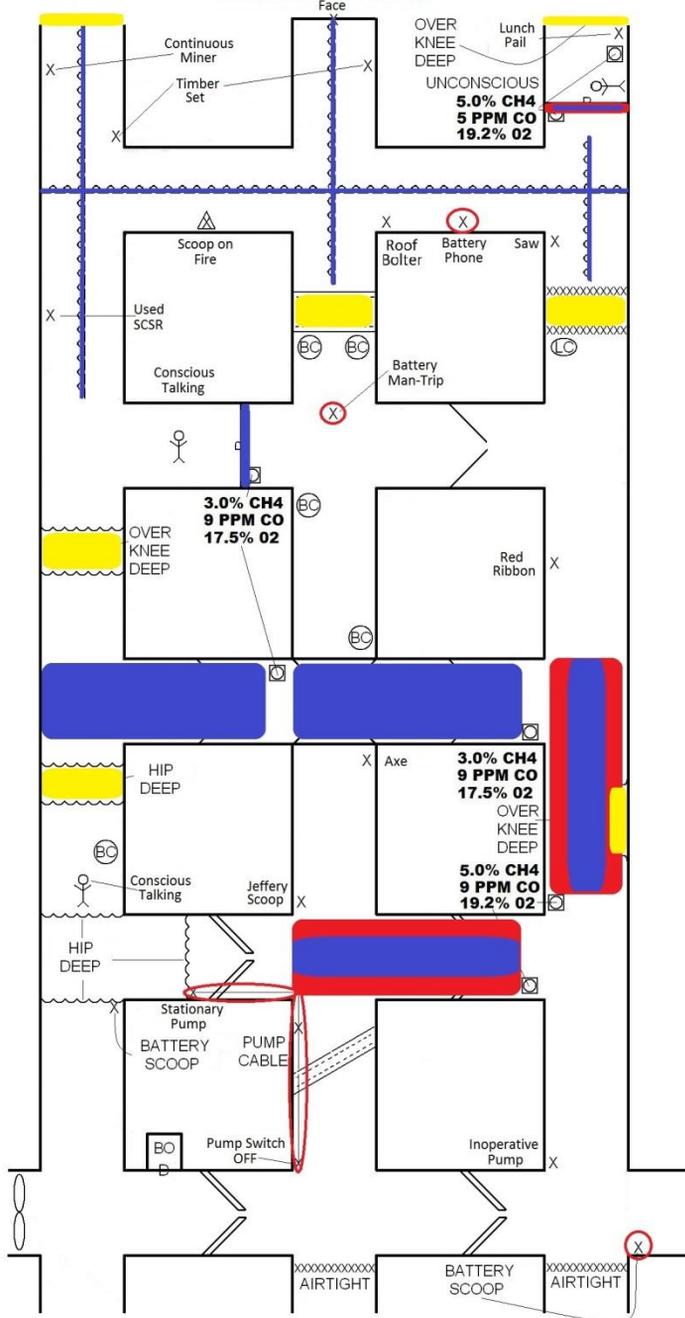
Patient Statement behind
Barricade between 1 and 2
entry

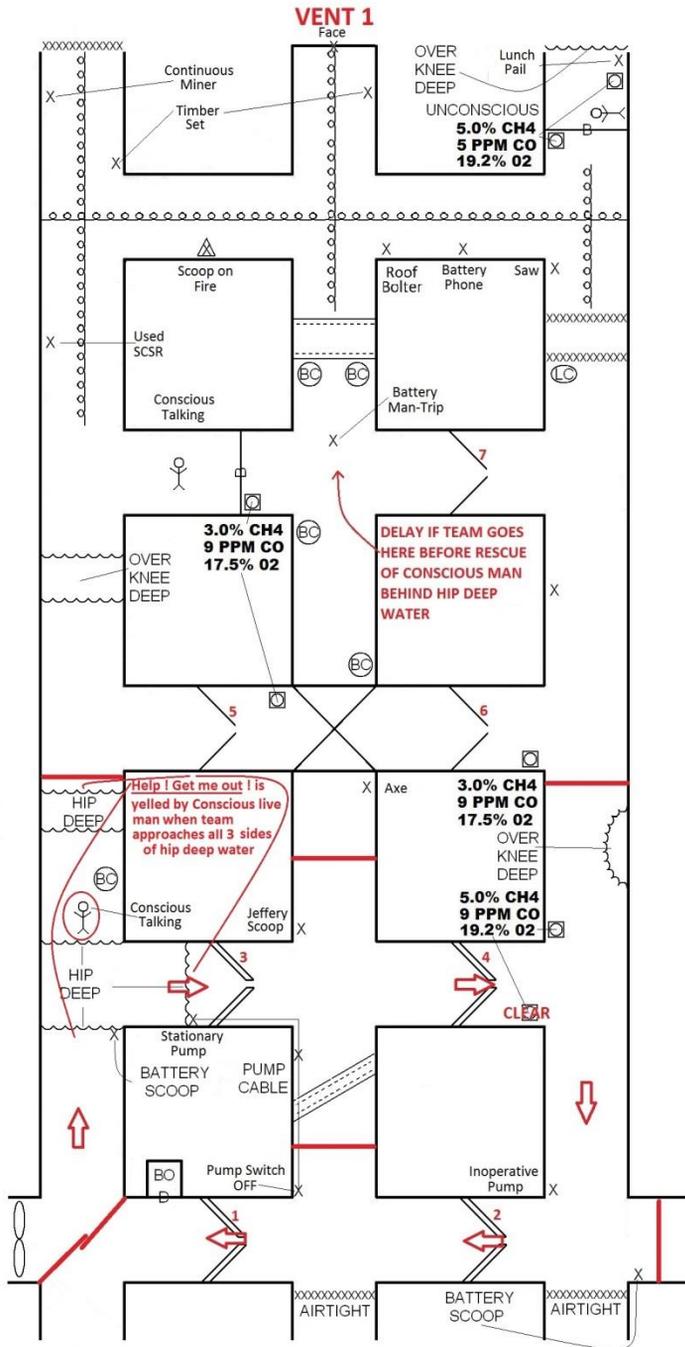
Help ! Get me out of here !

GAS TESTS DATE & INITIAL ROOF & RIB

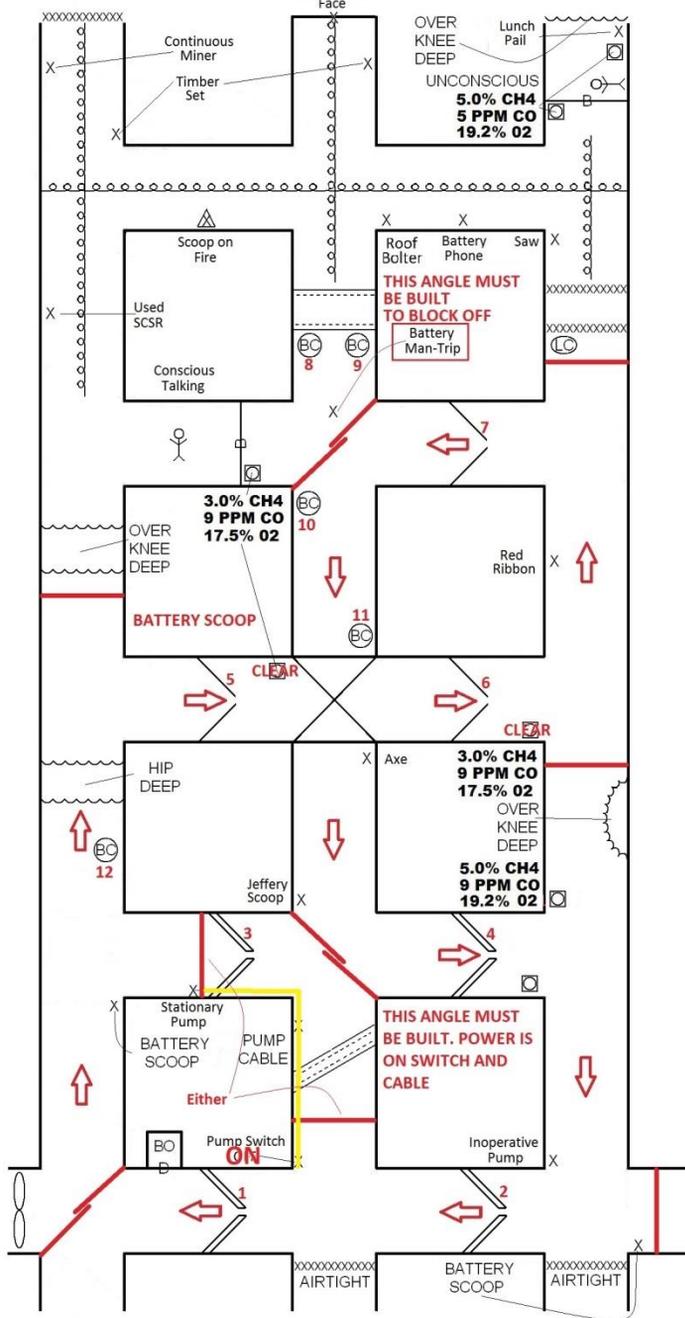


EXPLOSIVE IRRESPIRABLE UNEXPLORED
IGNITION SOURCE ○

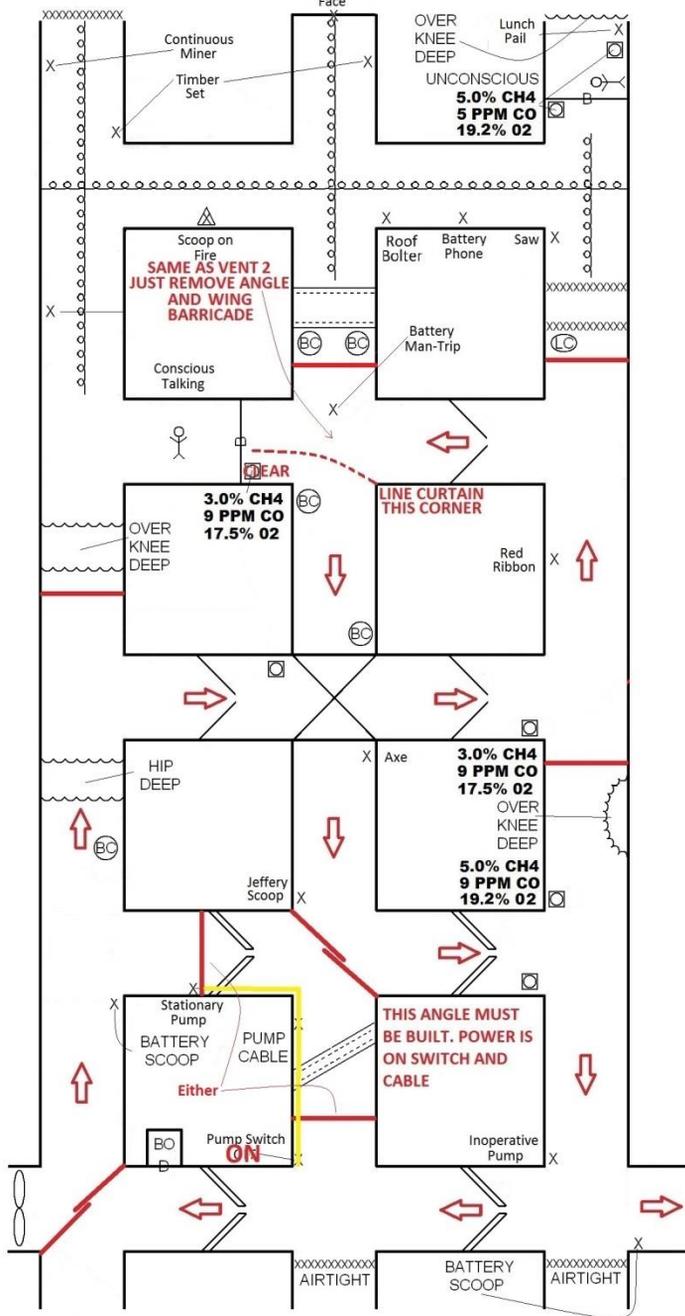




VENT 2



VENT 3



Continuous Miner
Timber Set

OVER KNEE DEEP
UNCONSCIOUS
5.0% CH4
5 PPM CO
19.2% O2

Scoop on Fire
SAME AS VENT 2 JUST REMOVE ANGLE AND WING BARRICADE
Conscious Talking

Roof Bolter
Battery Phone
Saw
Battery Man-Trip

3.0% CH4
9 PPM CO
17.5% O2
OVER KNEE DEEP

LINE CURTAIN THIS CORNER
Red Ribbon

HIP DEEP
JEFFERY SCOOP

Axe
3.0% CH4
9 PPM CO
17.5% O2
OVER KNEE DEEP
5.0% CH4
9 PPM CO
19.2% O2

Stationary Pump
BATTERY SCOOP
PUMP CABLE
Either
Pump Switch ON

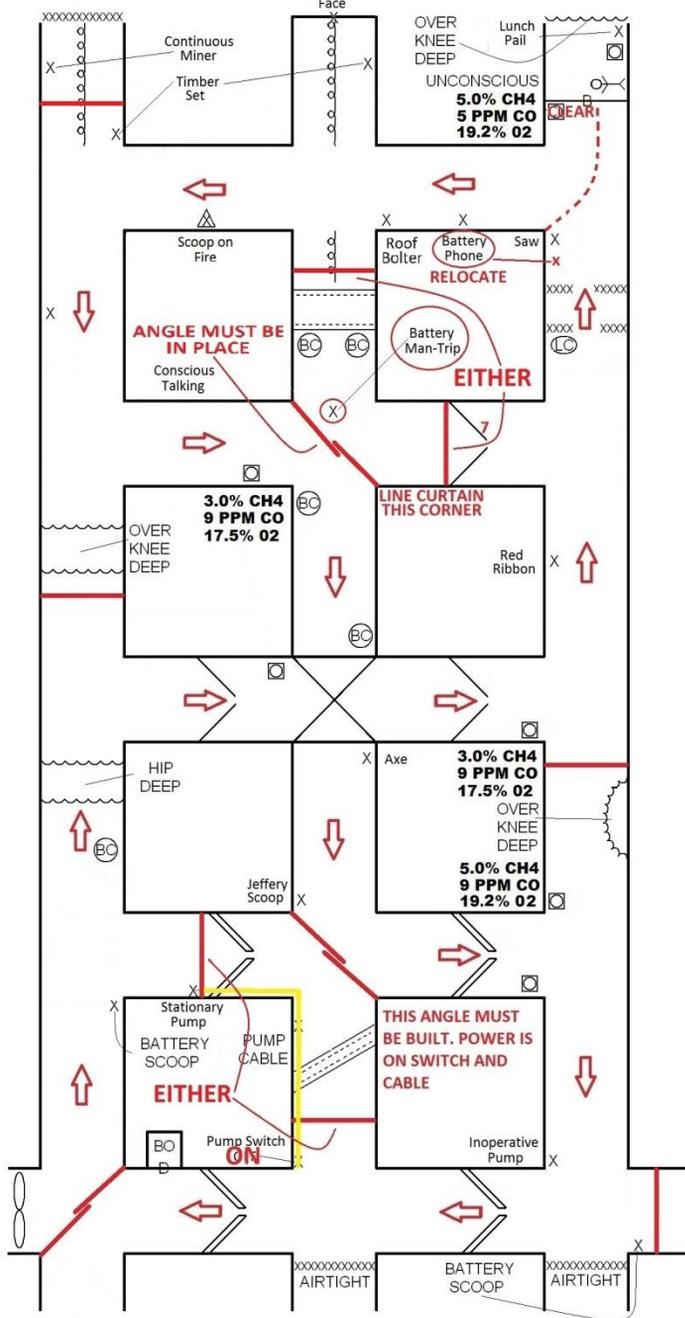
THIS ANGLE MUST BE BUILT. POWER IS ON SWITCH AND CABLE
Inoperative Pump

AIR TIGHT

BATTERY SCOOP

AIR TIGHT

VENT 4



Keys to Problem

- TEAM WILL BE TIED TO CONSCIOUS LIVE MAN AT ALL 3 SIDES OF HIP DEEP WATER
- TEAM MUST VENTILATE EXPLOSIVE MIXTURE OFF PUMP CABLE BEFORE TURNING PUMP ON
- BO CANNOT TURN PUMP SWITCH ON (INBY FAB)
- TEAM WILL NOT HAVE ENOUGH BRATTICE CLOTH FOR FIRST VENT UNTIL REACHING TEAM STOP 7 (SEE VENT 1 MAP)
- TEAM MUST NOT SEND EXPLOSIVE MIXTURE OVER BATTERY MAN-TRIP OR ENERGIZED PUMP CABLE ON 2ND VENT (SEE VENT 2)
- TEAM MUST WING BARRICADE ON VENT 3 FROM OUTBY CORNER (SEE VENT 3)
- TEAM MUST MOVE BATTERY PHONE BEFORE VENT 4
- TEAM MUST STILL PROTECT PUMP CABLE AND BATTERY MAN-TRIP FROM EXPLOSIVE MIXTURE DURING VENT 4
- TEAM MUST NOT EXPLORE PAST EXPLOSIVE MIXTURE INBY UNCONSCIOUS MAN BEHIND BARRICADE
- MAP NOT UP TO DATE AND SMOKE IN NO.1 AND EXPLOSIVE MIXTURE IN NO.3 BEHIND BARRICADE