

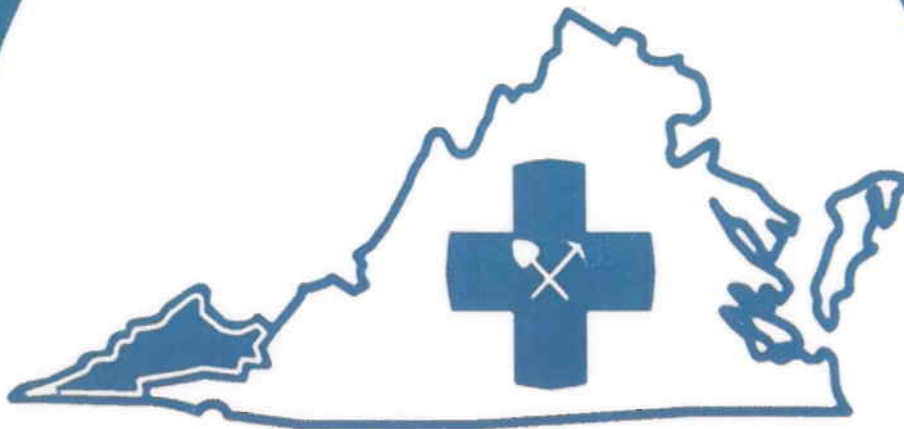
Welcome to the 50th Consecutive Virginia Mining Institute
Safety Day Contest
2016



"Mine Safety Through Education And Training"

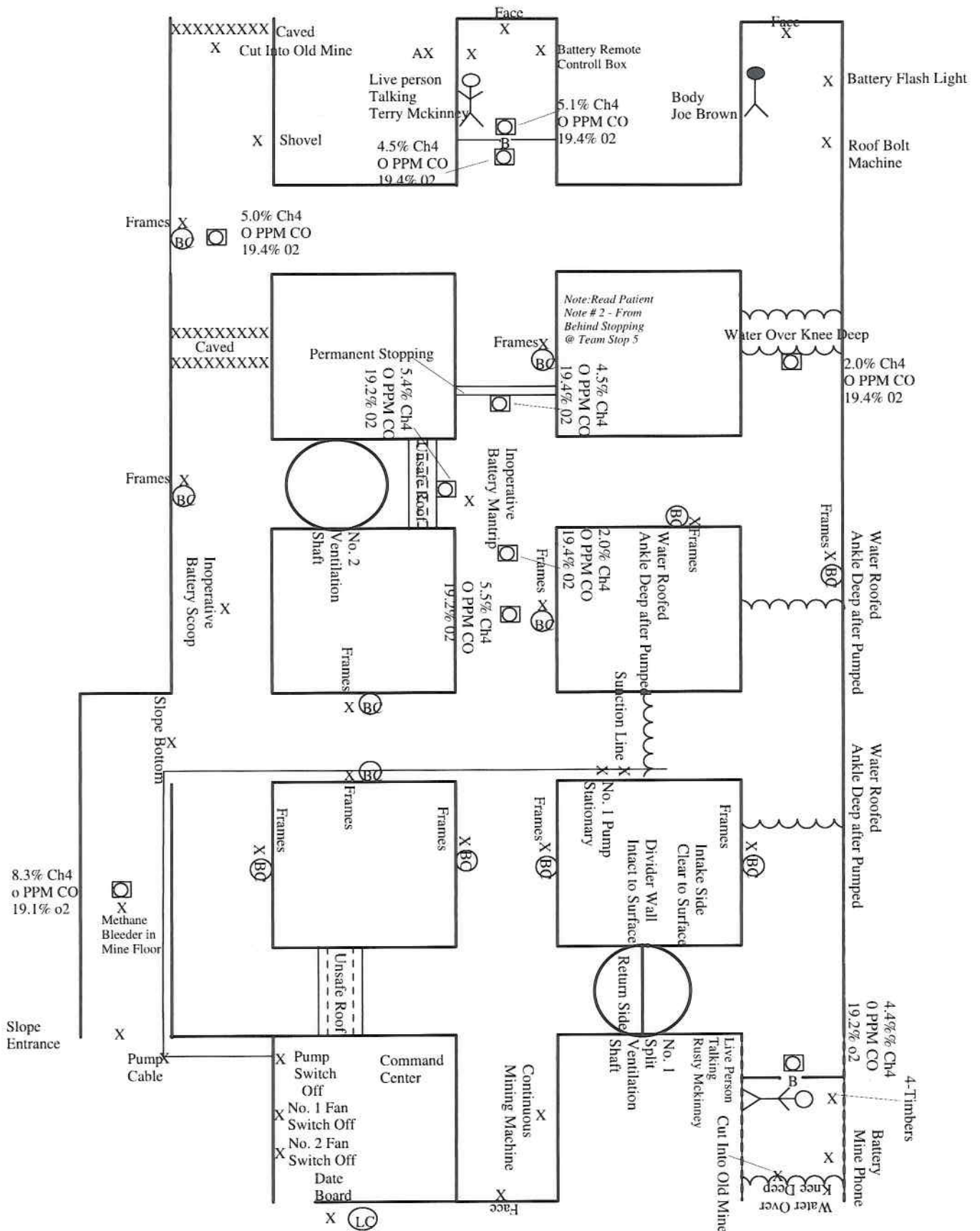
VIRGINIA MINING INSTITUTE

Day 2



SAFETY FIRST

V -2- 16



V – 2 – 16

Statement

Thanks you for answering the Virginia Mining Institute Coal Company's call for help. We have had a problem at the mine and your assistance is urgently needed. When you arrive at the mine site you will be located at the surface area of a slope entry. The bottom area of the slope and two ventilation shafts were recently cut together and development out into the mine reserves had just started.

Last night at 12:01am 4 men entered the mine to conduct cleanup and maintenance work around the slope bottom. At 5:00am one man exited the mine reporting that low oxygen had been detected near the bottom of the slope and the crew was feeling light headed. Several attempts to contact the missing miners have been unsuccessful.

During the shaft sinking process of the no. 1 ventilation shaft a temporary exhaust fan was used during the development of the shaft. This fan is still in place on the return side of the shaft. This exhaust fan will only produce 60,000 cfm when turned on. This fan is presently off and is operational if needed. When started it can not be turned off or reversed.

A temporary blowing fan is located at the top of the no. 2 ventilation shaft. The no. 2 fan is presently off and is operational if needed. The no. 2 fan will produce 50,000 cfm when operating. When started this fan cannot be turned off or reversed. When the no. 2 fan is off and the no. 1 fan is operating, intake air will enter the no. 2 ventilation shaft through the no. 2 fan. Automatic closing doors have not been installed on either fan.

When needed either fan can be started by turning the fan switch on in the command center.

An area of roofed water is located in by the slope bottom that requires a stationary pump to operate continuously. This water will roof immediately if the pump is not operating. All electrical power to the underground areas of the mine has been removed but is available to the fan(s) and pump switches located in the command center.

V – 2 – 16

Statement

The mine maps have not been updated.

A back-up mine rescue team is available.

We have a competent lifeline attendant available.

Two blank maps and the team's written instruction will be provided when you are ready to begin work.

V-2-16
Team Instructions
Problem

- Account for all missing miners.
- After the team starts the mine fan(s) they cannot stop or reverse the fan.
- The team must comply with any instruction given to them from the command center.
- The team cannot move any ventilation control that's anchored to the ground.
- Team must identify all missing persons by recording their name on the team map after captain examines the missing person.
- During the development of the slope entry, a methane bleeder was encountered in the mine floor. Attempts to grout the bleeder were unsuccessful. It has been determined that 60,000 cfm of ventilation must be maintained in the slope entry to keep the methane levels below an explosive mixture. If the ventilation quantity is not maintained at 60,000 cfm, the methane levels in the slope will immediately accumulate to an explosive mixture. When 60,000 cfm is established in the slope entry, the airflow cannot be decrease below 60,000 cfm.
- A time limit of 95 minutes has been established for this problem. The team will be advised 10 minutes prior to this time limit expiring

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Patient Note #1

**Patient “ Rusty Mckinney “Behind Barricade Top end
3 Right – Third Crosscut**

**“ Help, Help, get me out. I
Have water Over Knee
Deep Behind Me..... “**

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Patient Note # 2

When Team Arrives at Team Stop # 5 :

**Chairman Reads Note to Team From Behind
Stopping:**

“ Help, Help, get me out,

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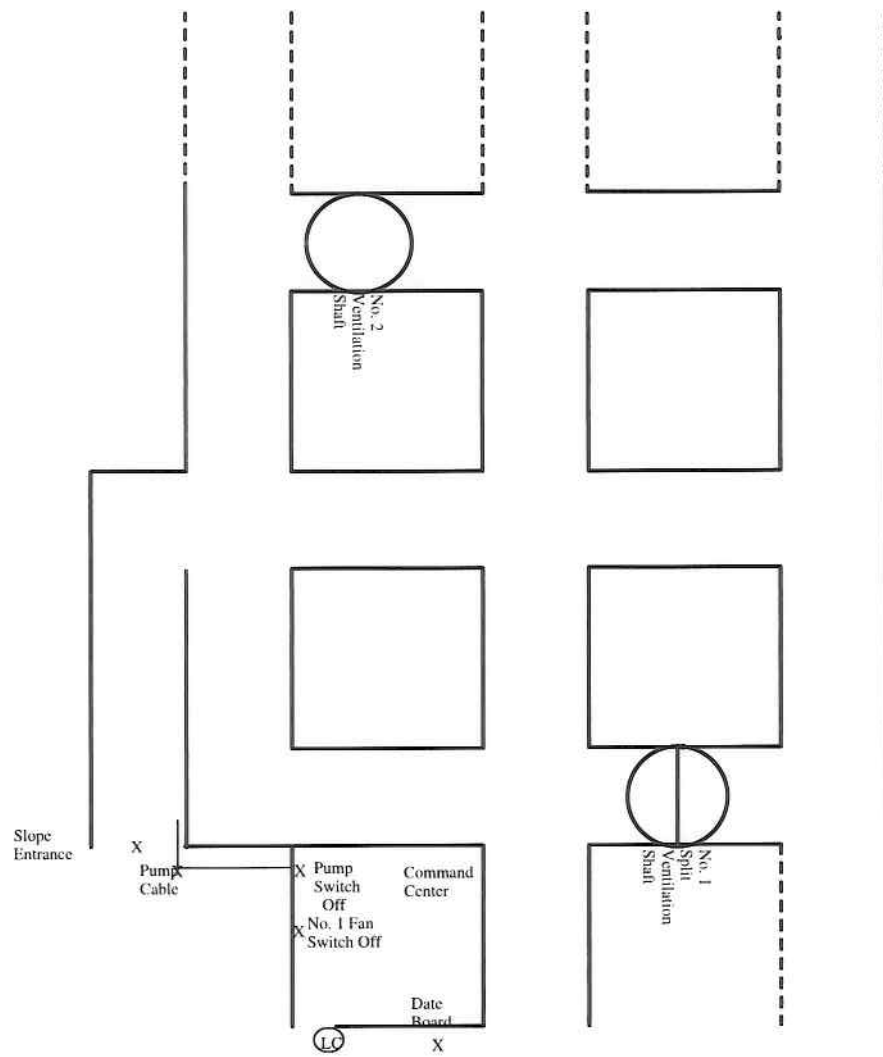
Patient Note # 3

**Patient “Terry Mckinney “Behind Barricade Top End No.
2 Entry**

**“ Help, Help, get me out, It is
Airtight Behind Me ”**

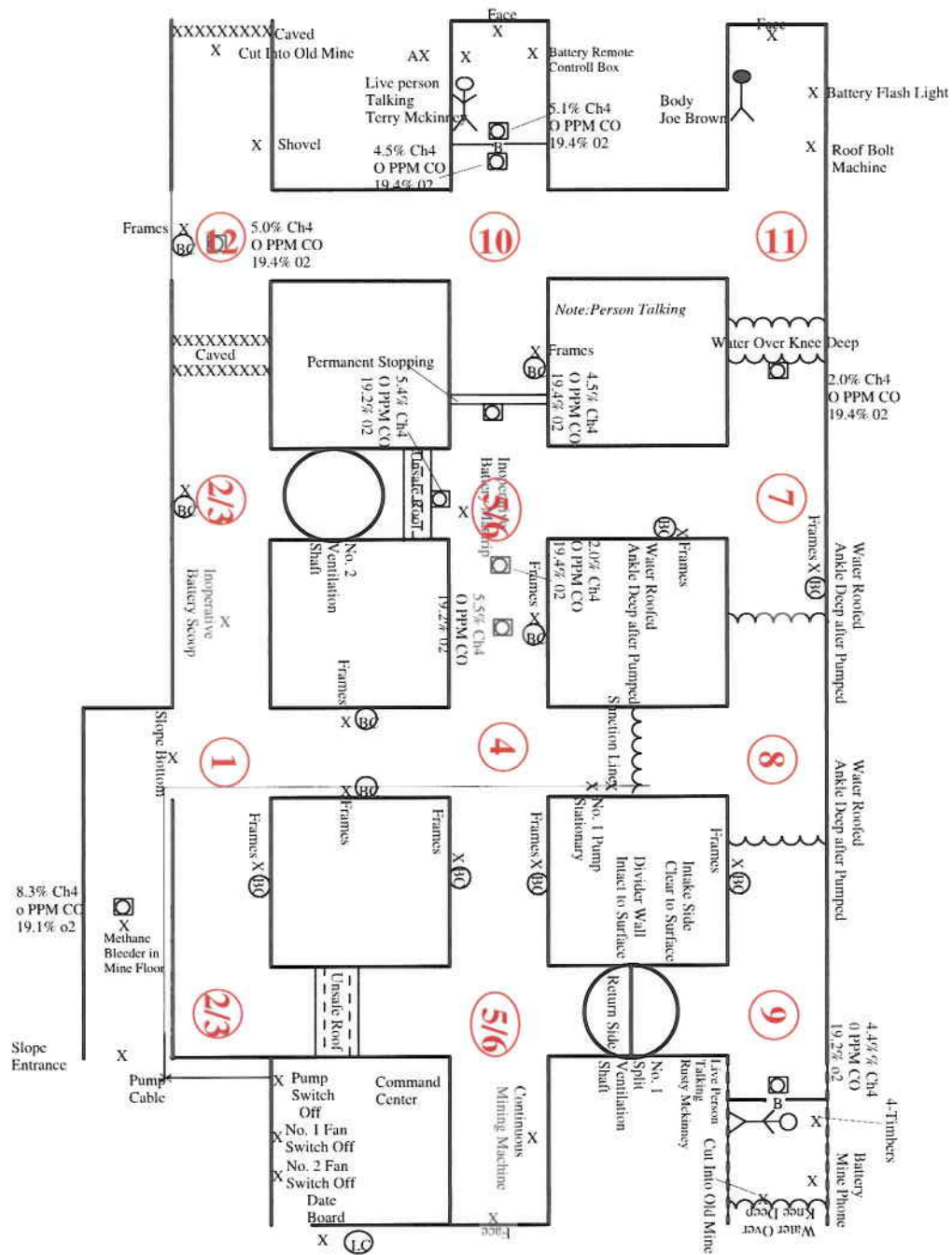
Team Map
Team No. _____

Virginina Mining Institute
August 4, 2015
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Scale: 1" = 10'

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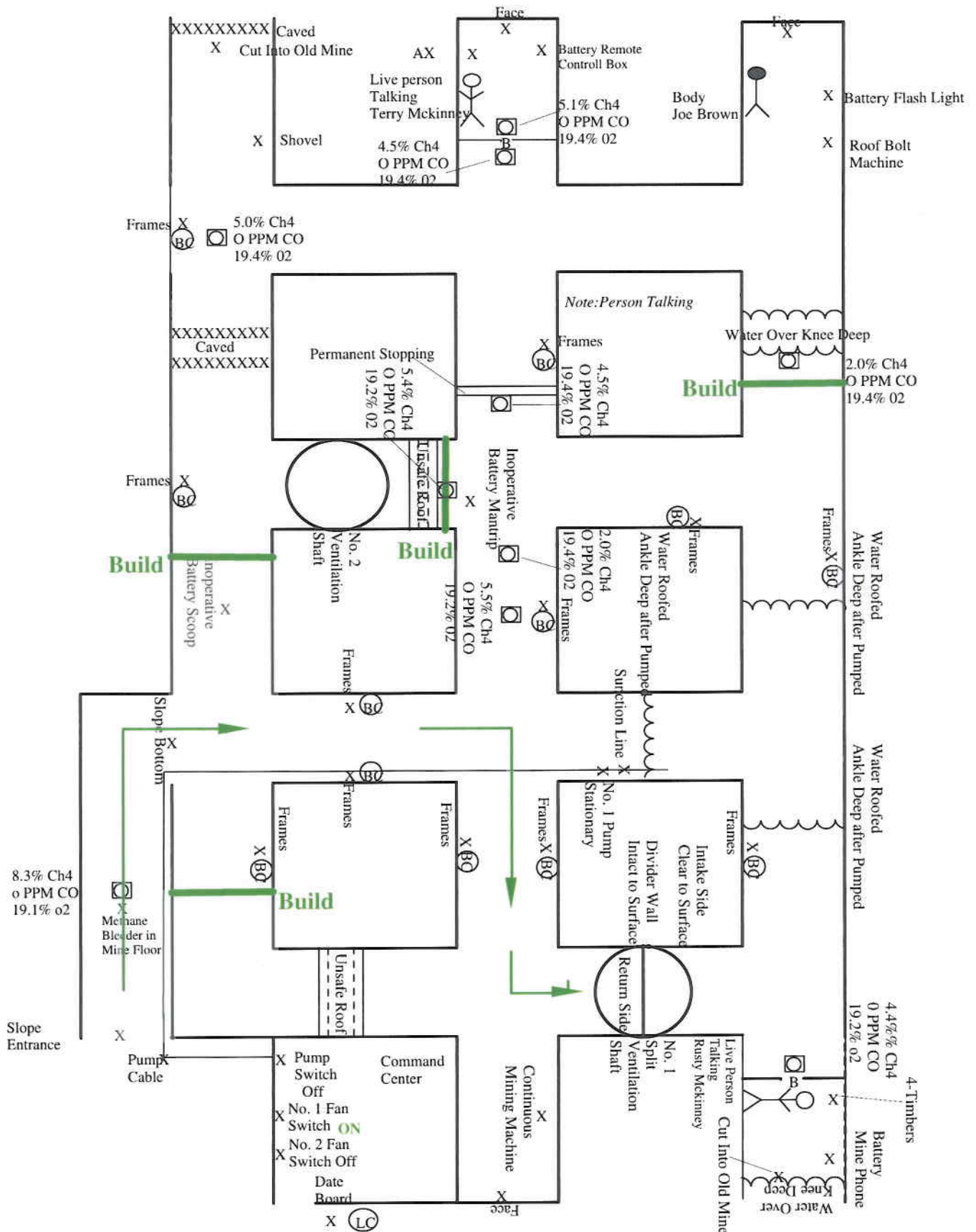


Virginia Mining Institute

August 4, 2016

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First Ventilation

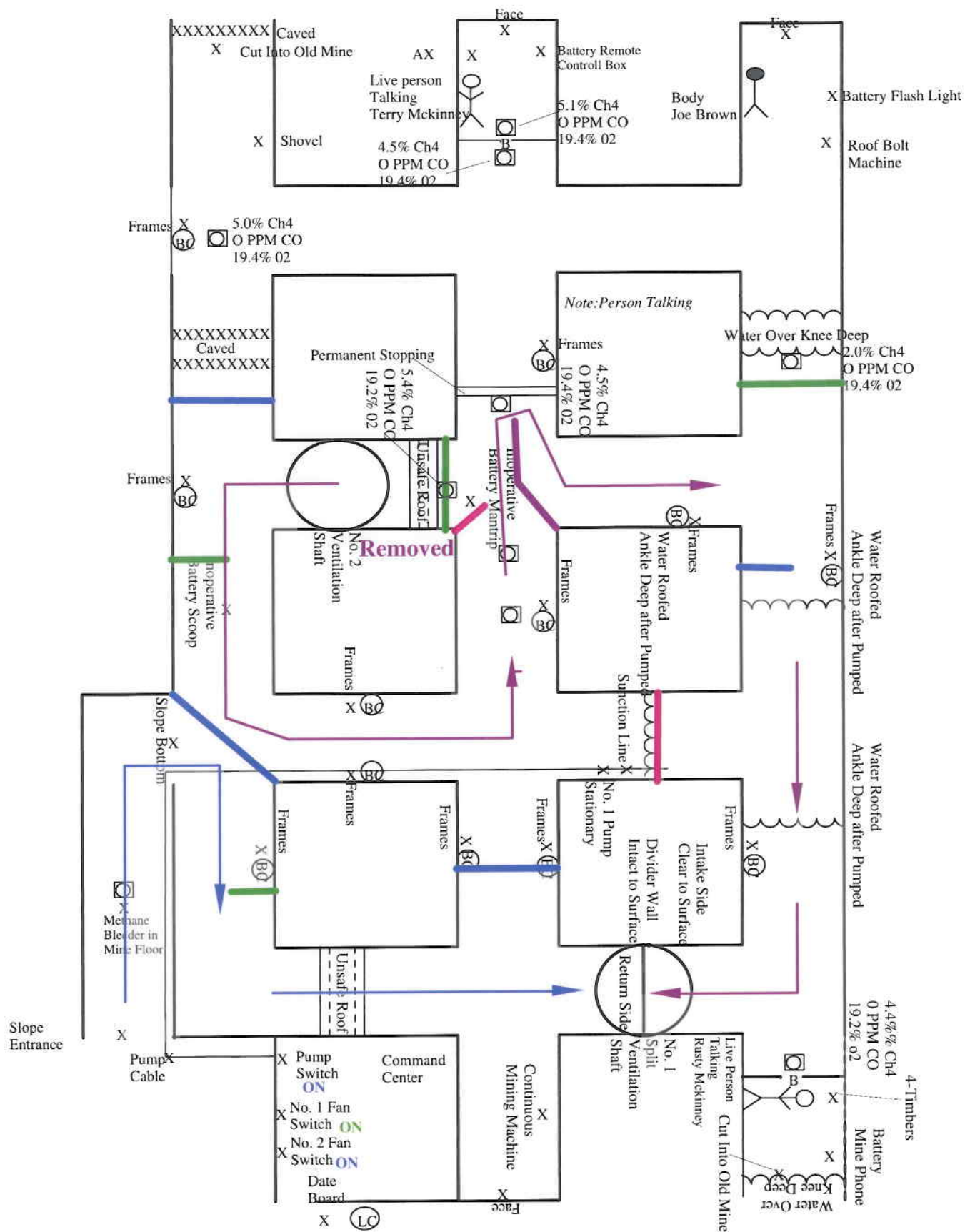


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[illegible]

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Fourth Ventilation



V -2- 16

[illegible]