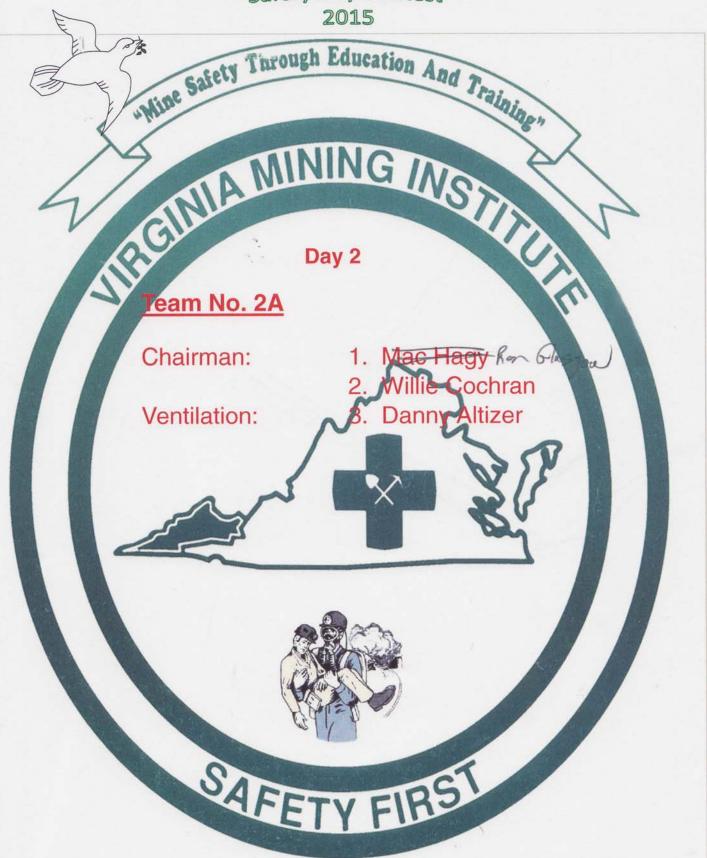
Welcome to the 49th Consecutive Virginia Mining Institute
Safety Day Contest



Virginia Mining Institute Safety Day 2015

GROUND RULES

- Nails are not to be used on the field. Frames anchored to the place on the field cannot be disassembled. When using these frames for ventilation control will require the connection of all straps. Four (4) straps on top and two (2) on each side must be completed.
- When removing curtain from the frames, each Velcro strap must be disconnected individually. Do not pull on the curtain to disconnect the Velcro strap. This may result in broken straps.
- 2-cone type frames and a curtain type ribbon with Velcro straps will be available for teams to use as ventilation structures. For an airtight structure, teams will be required to fasten both Velcro straps to (eyes) atop of each cone. When disassembling the structure, the curtain must be removed from both cones. For mapping purposes, the team will be required to use the symbol BC for the curtain and an X for the Frame.
- Working time for the problems will be stipulated each day. If teams do not complete problem in time allowed, they will be discounted as stipulated in rule 3 A card of the mine rescue rules.
- 2 set of frames (One wood and one Cone type) and ventilation curtain will be located in the lockup area so teams can become familiar with erecting ventilation controls before they work the problem

Thanks for participating in the Contest, Enjoy your time in Blacksburgs.

V-2-15 Statement

Thank you for answering Virginia Mining Institute Coal Company's call for help. We have had a problem at the mine and your assistance is urgently needed. This morning 5 miner entered the mine at 12:01am to conduct clean up and maintenance work on the section. At 6:00am one man exited the mine reporting that low oxygen had been detected on the section and the crew was feeling light headed. Several attempts to contact the missing miners have been unsuccessful. You are located on the surface near the mine portals. The mine is being ventilated by two exhaust fan's. The (no. 1 exhaust fan) is located on the surface in the no. 1 entry and will produce 75,000 cfm when operating. The (No. 2 exhaust fan) is a small fan located on the return side of the split ventilation shaft that will produce 45,000 cfm when operating. The No. 2 fan has self-closing doors that close when the fan is not operating. When the doors are closed no air will intake down the return side of the shaft. Both fans are presently off and can be started by turning the fan switch on in the command center. When started they cannot be turned off or reversed.

An area of roofed water is located in the no. 1 entry. A stationary no. 1 pump controls this water and is presently off. This water will roof immediately if the pump is not operating. The no.1 pump if needed can be started by turning the pump switch on in the command center.

V-2-15 Statement

All electrical power to the underground area of the mine has been de-energized and locked out, power is supplied to the fan and pump switches located on the surface in the command center.

The mine does liberate methane gas. Poor roof conditions have been encountered at times and some water accumulation has occurred from time to time.

The mine map is not up to date; when more information is obtained you will be notified.

Both agencies have been notified and are present.

A backup mine rescue team is present to act as your back up

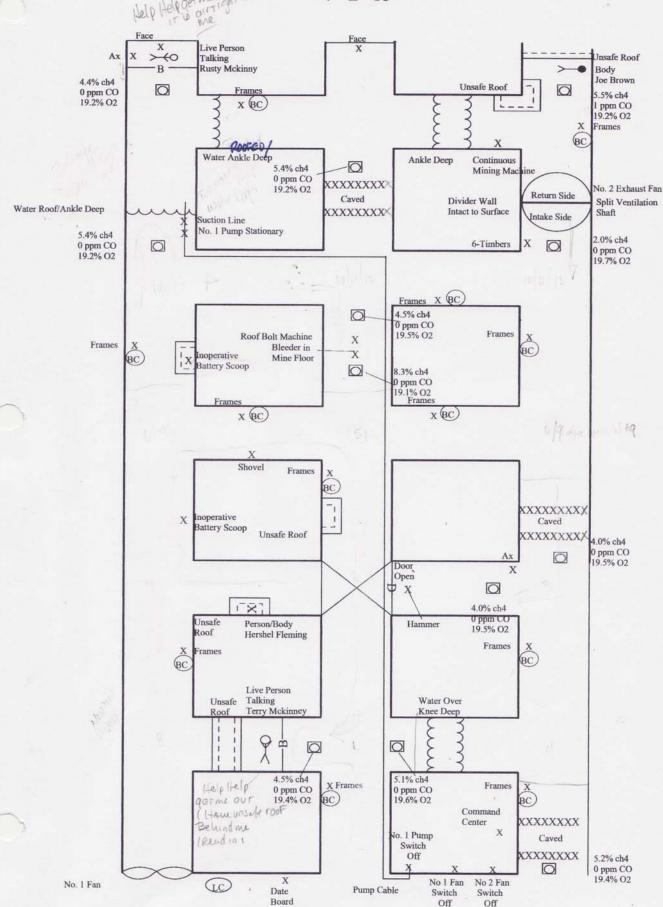
We have a competent life line judge available (point out). Two blank maps and the team's written instruction will be provided when you are ready to begin work.

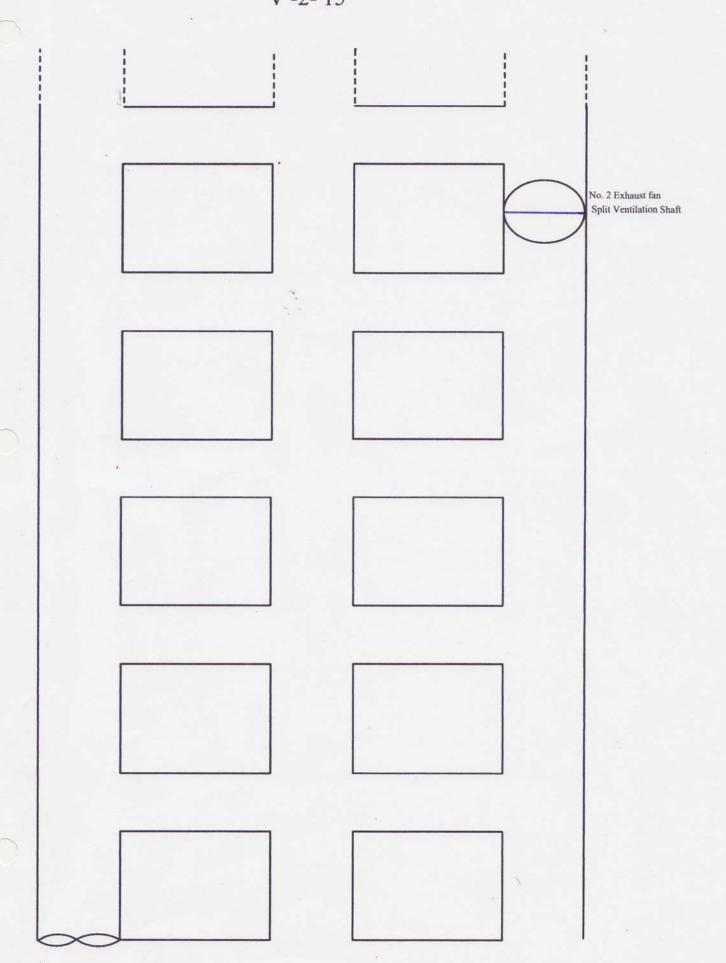
V-2-15 Team Instructions Problem

- Rescue all live persons and bring them to the surface.
- 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 examine the missing person.

 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

V -2- 15





Virginia Mining Institute V-2-15

Patient Note #1

Patient "Terry Mckinney "Behind Barricade Between No. 1 and No. 2 Entry – First Crosscut

"Help, Help, get me out. I Have Unsafe Roof Behind Me....."

Virginia Mining Institute V-2-15

Patient Note # 2

Patient "Rusty Mckinney "Behind Barricade Top End No.
1 Entry

"Help, Help, get me out. It is Air Tight Behind Me....."

Virginia Mining Institute V-2-15

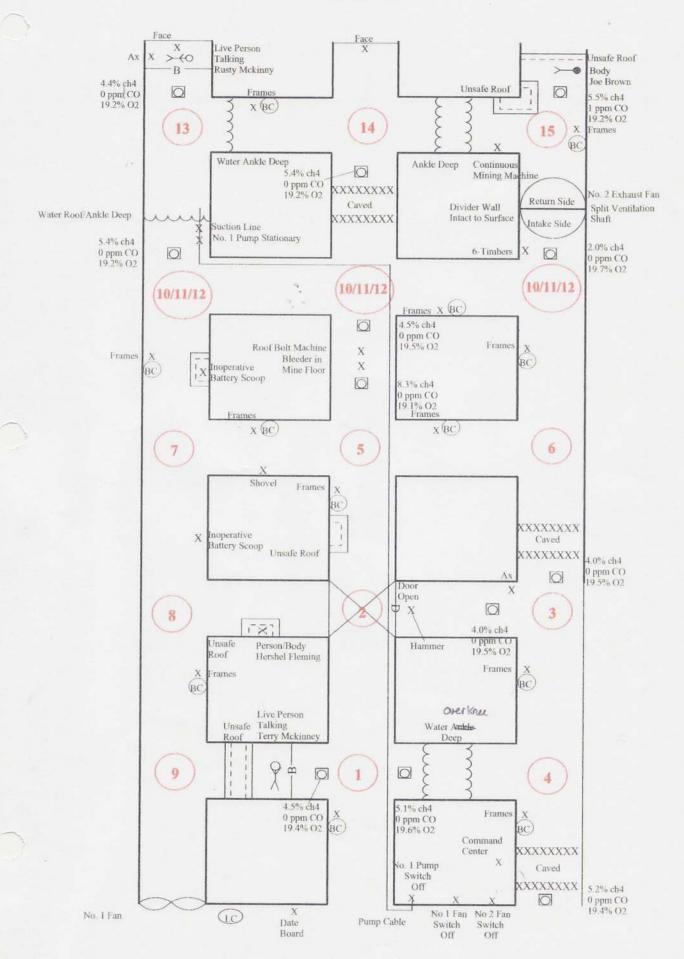
Team Note #1

(Give to Command Center When Team Acknowledges Methane Bleeder in Mine Floor in the No. 2 Entry)

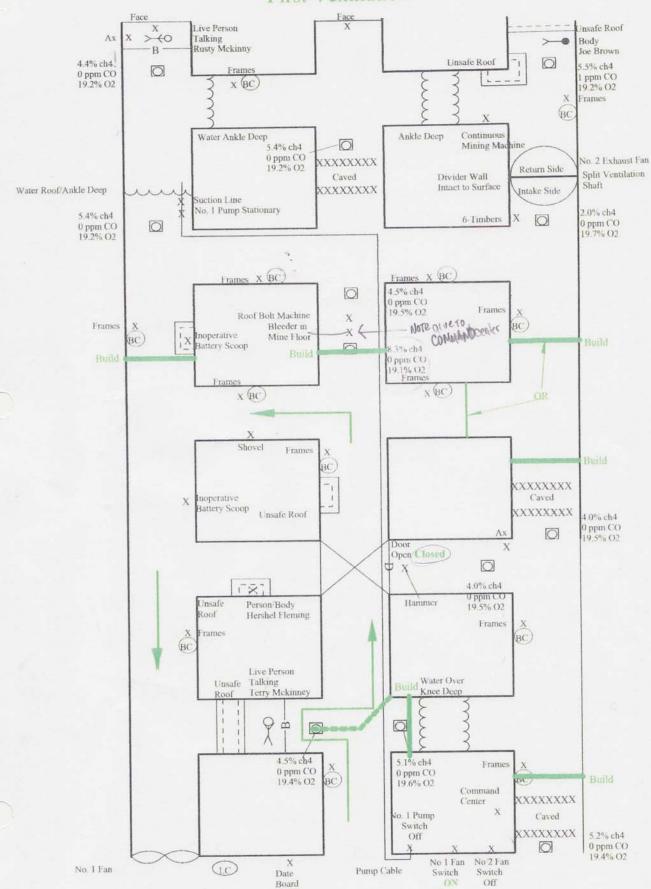
"If A Minimum of 75,000 cfm of Airflow is Not Maintained Across the Methane Bleeder in The Mine Floor in The No. 2 Entry. The Methane Will Accumulate to An Explosive Mixture Immediately"

Virginina Mining Institute August 5, 2015 Team Map Team No. _ V -2- 15 No. 2 Exhaust fan Split Ventilation Shaft Scale: 1" = 10' No. 1 Fan Switch Off

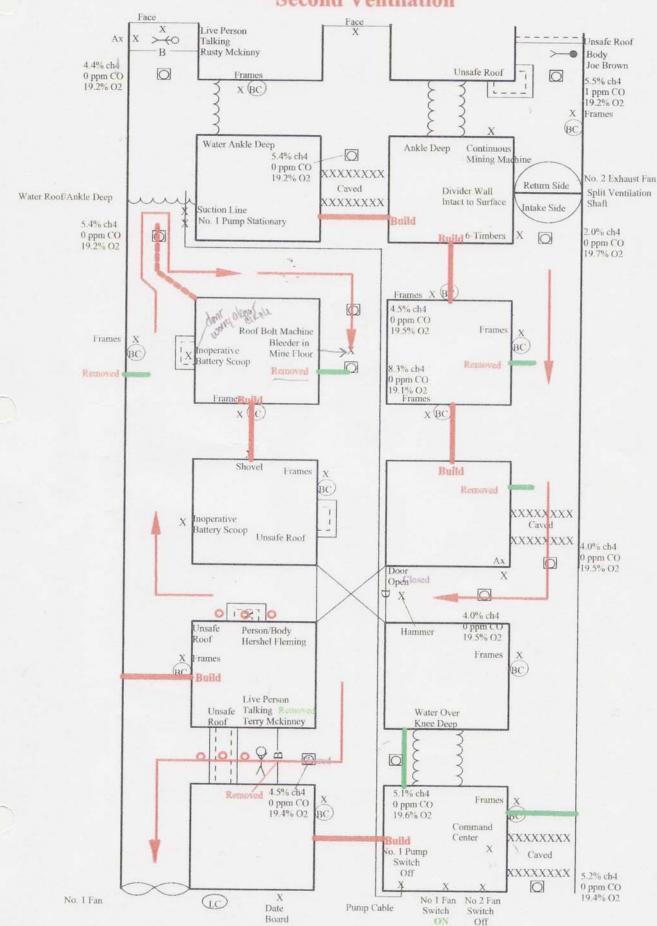
V -2-15



V -2- 15 First Ventilation



V -2- 15 Second Ventilation



V -2-15

Third Ventilation

