2019
SOUTHERN WEST VIRGINIA MINE RESCUE ASSOCIATION'S
62nd ANNUAL
MINE RESCUE, FIRST AID, BENCH & PRESHIFT CONTEST
AUGUST 27TH
MINE RESCUE PROBLEM DAY 1
2019 Southern West Virginia

Day #1 Statement

Thank you for coming to our call for help. You are located at the underground fresh-air base of the Academy #1 Mine. We had two employees working on the 1 Right section when we experienced an event that caused the mine fan to stop. All communication was lost to the section. Attempts to travel to the section have failed. Communication could not be re-established. Mine rescue teams were called, and you are the second team in. The team before you established this fresh-air base and is now acting as backup. The 1 Right section is ventilated by the main mine exhaust fan. This fan is off but can be started if needed. Once started air will travel up the #1 entry and out both #2 and #3 entries. There is also an intake air shaft located in by the first crosscut in the #2 entry (will be shown on the maps). This mine has a history of methane, water and bad roof conditions. Our maps were updated 24 hours ago and according to our projections we are not mining near any old works.

All state and federal agencies have been notified and are on site.

This is all the information I have at this time.
2019 Southern WV Contest

Written Instructions

- Explore the entire mine that can be done safely

- Once started the fan cannot be stopped, stalled or reversed
Southern WV Day #1
Extent Of Gases

Face

3.0% CH₄
0 PPM CO
19.1% O₂

Roof bolter

Continuous miner

Over Knee Deep

6.5% CH₄
0 PPM CO
19.3% O₂

Battery Ramcar

6.5% CH₄
0 PPM CO
19.4% O₂

Battery Scoop

6.0% CH₄
0 PPM CO
19.3% O₂

Intake Air Shaft

Open Borehole

Clear

Closed

Help me Out

4.0% CH₄
0 PPM CO
19.5% O₂

4.0% CH₄
0 PPM CO
19.3% O₂

4.0% CH₄
0 PPM CO
19.5% O₂

Exhaust Fan

Located on the surface

When turned on

Air will travel up #1 and out both #2 and #3

Start Fan
Southern WV Day #1
Layout Map

Face

3.0% CH₄
0 PPM CO
19.1% O₂

Roof bolter

Continuous miner

Over Knee Deep

6.5% CH₄
0 PPM CO
19.3% O₂

BC

Battery Ramcar

6.5% CH₄
0 PPM CO
19.4% O₂

6.0% CH₄
0 PPM CO
19.3% O₂

Intake Air Shaft

Open Borehole

Help get Me Out

Clear

Closed

4.0% CH₄
0 PPM CO
19.5% O₂

4.0% CH₄
0 PPM CO
19.3% O₂

4.0% CH₄
0 PPM CO
19.5% O₂

Fan Can’t be Turned Off

Short Circuit Air Across FAB

Exhaust Fan
Located On The Surface
When Turned On
Air will Travel Up #1 and Out Both #2 And #3
Team Name

DISCOUNT MAP

Intake Air Shaft

BC

BC

FAN
On
Off