Southern WV Mine Rescue Association 63rd Annual Mine Rescue, First Aid, Bench & Preshift Contest

August 27th - 30th 2018
Day 2

Problem Statement

Good morning and thank you for responding to the South Bend Black Gold Mine in such short notice. This morning around 7 A.M. we received a call from the foreman and he said they had encountered a heavy amount of water rushing in on the section from the face and that he and the two miners working with him were in the process of evacuating. That was the last we heard from them and they haven’t made it out.

The mine has a history of unstable roof conditions and methane. The mine has an exhausting fan with a split shaft in fresh air base in #3 entry. The left side of the shaft is the intake and the right side is the exhaust. There is a refuge alternative located one break inby the fresh air base. Backup teams are available and in place. Federal and state agencies have been notified.

Please hurry to help our miners get out safely. Be careful and good luck.
Day 2

Written Instructions

- Explore all areas of the mine that can be explored safely.
- The fan is currently off but can be turned on when requested by team.
- Any equipment requested by the team to be energized will remain energized throughout the remainder of the problem.
- Power to the pump in not available at this time. You will be made aware once power is restored.
- Once the fan is turned on it cannot be stopped, stalled, or reversed.
- Timbers can only be transported when use is required.
- Once all missing persons are found, clear all areas of the mine for bare faced exploration that can be done so safely.
- The mine map is not up to date.
- 70 minute time limit.
Day 2

Judges Information

- Once the team turns the stationary pump on, you will need to flip the roofed placards over in the #3 entry inby the #3 crosscut and in the #4 crosscut between #2 and #3 entries.
- Once the Captain flips the gas placard inby the last open break in #3 entry, hand him the note that states “Map man has been injured by a piece of rock and is unconscious. His apparatus remains fully functional”. The map man must then be transported out on the stretcher with his apparatus on.
- If the team ventilates any gases or smoke inby the #4 cross cut, they are not following written instructions.
- Make sure all placards that are in and inby the #4 crosscut are face down to begin the problem. The team will flip the placards when they discover them.
- 70 minute time limit.
- Give the team a 5 minute warning at 65 minutes.
Day 2 Key Map

Note: Judges will hand the captain the following note once he has flipped the gas placard. "Map man has been injured by a piece of rock and is unconscious. His apparatus remains fully functional."

Note: Judges must flip roofed placards over once the pump has been started.
Day 2 Team Stops
Day 2 2nd Vent

Cut into Old Works
Power to the pump is available

1.0 % CH₄
150 ppm CO
18.0 % O₂

Battery Mine
Phone

1.0 % CH₄
78 ppm CO
18.0 % O₂
Build

Live
Unconscious

Build

Build

1.0 % CH₄
5 ppm CO
18.0 % O₂

Build

Stationary Pump in Water

3.5 % CH₄
10 ppm CO
19.0 % O₂

Battery Scoop

Build

Battery Scoop

RA

Build

BO/CCA
Pump Switch Off

Fan ON

Intake Shaft

Exhaust Shaft Separation Wall

Airtight

Pump Cabinet

Closed