2009 Post 6 Mine Rescue Contest
Post 6 Mine Rescue Contest - 2009

Statement

I am __________________  ____________________, Superintendent of the Pine Knott #1 Mine. You are located underground at the fresh air base on the first right section. This fresh air base was established when conditions were encountered that prevented further exploration without a breathing apparatus.

The first right section has been idle for some time. We are presently preparing the first right section for future production. This section was driving very near an old abandoned mine that was left unsealed years ago.

At 6:00 AM this morning, Four(4) men entered the mine to roof bolt on the First Right Section. One of the miners called outside and reported that a possible explosion had occurred on the section shortly after the start of the shift. We have had no further contact from the four miners who were located on the section.

Methane and bad roof conditions have been a constant problem for the first right section. We have also encountered water problems on the section and a pump has been set just inby the fresh air base. The pump switch located in the Fresh Air Base (point out) is currently off. Power is supplied to the switch from the surface. The pump can be energized from this switch.

Temporary Stopping's have been erected across 1 and 2 entries of the section immediately inby the Fresh Air Base. The middle entry is blocked by water roofed. The main fan is operating as exhaust type system.

Back-up mine rescue teams are standing by and all required authorities have been notified and are present at the mine.

The mine map is not up-to-date.

This is all the information we have at this time.
Problem

• Account for all missing miners and bring survivors to the fresh air base
• The exhaust fan cannot be stopped, stalled or reversed
R&R Roof and Rib Test
GT CH4-CO-O2 Test
D&I Date and Initials

If team travel is to no. 3 entry first, then a D&I would be required on the backside of no. 1 entry temporary stopping
Extent of Gases and Smoke

- Explosive
- Irrespirable
- Unexplored Areas

- Caved into old unsealed mine
  - CH4 5.4%
  - O2 10%

- Conscious
- Help! It's air tight behind me
  - CH4 4.9%
  - O2 15%

- Conscious
  - Help! Get me out!
  - Patient goes unconscious after contact with team

- Roof Bolter
  - On Fire
  - Caved

- Completely Destroyed

- Lunch Box

- Completely Destroyed

- Pump with discharge line to outside
  - Pump Switch
    - Off
    - On

- Caved Air Tight

- If team pumps water at start of problem with 1 set of frames, it will pull explosive mixtures and irrespirables from old mine over unexplored main and BO

- Blown Down

- Pump down to over knee deep if turned on

- BO

- Caved
Ventilation for Problem

Caved into old unsealed mine
These builds must be in place before airlock is broken to fresh air base

Conscious
Help! It's airtight behind me

CH4 5.4%
O2 10%

Conscious
Help! Get me out!
Patient goes unconscious after contact with team

Roof Boiler
On Fire
This ventilation clears all smoke

Lunch Box

Completely Destroyed

Caved Air Tight

Completely Destroyed

Pump with discharge line to outside

Pump Switch
Off
On

Pumps down to over knee deep if turned on

Blew Down

Face A

HeM 4.9%
O2 3.8%

HeM 4.9%
O2 4.0%
Barricade in no. 1 entry
Patient Statement

Have patient read statement when captain breaks imaginary line going to barricade

Help! Get me Out!
Barricade in no. 3 entry
Patient statement

Have patient read statement when captain breaks imaginary line going to barricade

Help! It’s airtight behind me!
Keys to Problem

- Just enough frames to ventilate one correct way – 5 sets of frames to use
- Teams must maintain airlock until caved areas are built off
- If team pumps water at start of problem, the water pumps down to over knee deep and they do not have another set of frames to airlock out
- Cannot ventilate barricade until finding all missing miners and line curtain to sweep barricade
- At completely destroyed placards, no materials on the field
- The map is not up to date and the exhaust fan cannot be stopped, stalled or reversed