2019

SIC SKILLS
2019 SIC Skills Mine Rescue

Statement

Thanks for responding to our situation and welcome to the “Red Oak #5 Mine”. You are located at the fresh air base which is in the #1 crosscut of the Main North.

This morning a four man crew was sent in 3 hours early to prepare for the day shift production shift. This four man crew went to the 3rd West headgate development section which is a 3 entry development section. The scoop man was outby the 3rd West section and was in the Main North loading roof bolts in his scoop when he smelled smoke exiting the 3rd West entries. The scoop man made his way out of the mine and heard no word from the other miners. All attempts to reach them have failed.

This 3rd West Headgate section has recently experienced poor roof conditions, water, and high accumulations of methane.

The fan is a blowing fan that is on and can be stopped or started by asking the command center. Mine maps are up to date. All authorities have been notified. Please be careful during your exploration. Thank you for your help.
2019 SIC Skills Mine Rescue Written Problem

- Explore the entire mine where it safe to do so
- Account for all missing persons and bring all live people to the fresh air base
- You may only carry two sets of building material
- Team must get approval from Superintendent before making air changes
- Clear all contaminants
- There is a 60 minute time limit
Keys to the Problem

1. 2 - man team advances up #1 entry to 1st crosscut. 2 - man and 1- man teams advance up #3 entry to 1st crosscut. Number 1 - man team advances across to open crosscut to the #2 entry. (Number 1- and 2-man teams may reverse roles at in entries 2 and 3).

2. 2 + 2 + 1 teams advance together up to the 2nd crosscut. #1 entry team ties across to the unsafe roof. #2 entry team ties across to the barricade and then to the unsafe roof in crosscut. #3 entry team remains in the intersection until #1 and 2 teams are done.

3. #3 entry team finds smoke. #1 and 2 entry teams must retreat out and go to the #3 entry and advance up and join #3 entry team. Together they advance through the smoke to the face crosscut. Water over knee deep must be addressed before team advances into crosscut or into the face area.

4. Teams tie across to the #2 entry where #2 entry team ties back outby. #1 entry team advances to the #1 entry and ties in #1 entry outby.

5. Team members join back together to ventilate.

6. First Vent – Teams can clear contaminates past persons in unsafe roof as they are respirable.

7. All persons are accounted for so low oxygen can pass through the caved, unsafe roof, and water.

8. Battery mine phone in unsafe roof prohibits any explosive mixtures from passing through this area. (No timbers are available until the barricade is breached).

9. Gas test at face area in #3 entry must reach inby the crosscut entry at water over knee deep.
2019 SIC Mine Rescue

Extent of Gas

R C
Continuous
Miner

Battery Mine
Phone

Diesel
Mantrip

1 Timber

Set
Prop

Battery
Phone

Set
Prop

Pallet of
Bolts

5.6 % CH₄
3.6 ppm CO
18.8 % O₂

Talking
CLM

6 Timbers

3.6 % CH₄
3.0 ppm CO
19.6 % O₂

Set
Prop

Lunch Bucket

Note
I'm in 2 crosscuts

4.0 % CH₄
3.0 ppm CO
19.5 % O₂

Battery
Cap Lamp

Pallet of
Blocks

Person
ULM

5.1 % CH₄
3.0 ppm CO
19.0 % O₂

Spare
Feeder

3.5 % CH₄
2.0 ppm CO
19.8 % O₂

BC

Over
Knee
Iap

Roof
Jack

8.0 % CH₄
3.0 ppm CO
18.5 % O₂

Roof Bolter
On Fire

Oxygen
and
Acetylene Tanks

Cutting
Torch

6.1 % CH₄
3.9 ppm CO
19.8 % O₂

Team Map

Briefing Officer Map
Patient Statement

Get me out of here