Welcome back to the Mile High Coal Mine. We appreciate your team responding to our mine emergency and their efforts yesterday.

As you know, 3 miners are still unaccounted for in 7 East. The 7 East entries are numbered from left to right 1, 2 and 3. Overnight teams have established a new fresh air base at crosscut 40. We have had to place an electric pump there in order to maintain the water levels again coming from nearby abandoned mines. This pump is controlled by a switch in the command center but it needs to run to keep fresh air across crosscut 40.

The Exhausting mine fan on the surface is still running, is guarded and cannot be reversed or turned off or it might not start up again. Our command center remains at the mouth of 7 East.

All officials and backup teams are present. The mine map we have for you today is not up to date.
2019 Craig, CO  Day 2

Written Problem

Explore the rest of 7 East and account for the 3 missing miners, if it can be done safely.

Bring any live miners to the FAB.

Your team cannot move any battery powered equipment or associated batteries or turn off the main mine fan.
3 Entry Barricade Statement: "Help, Help! Get me out of here!" When teams acknowledge barricade.
Final Vent Map

Judge:

Team Capt:
2019 Craig CO Day 2  Judges Instructions

Initial opening checks entries at FAB. (irrespirable found in 3 E). Team must enter 3 entry.
1. Team Stop 1 at XC 1 in 3 E. No material to tie across. Unsafe roof found inby XC 1.
2. Team Stop 2 at XC 1 in 1 E. No material to tie across.
3. Team stop 3 in 1 E at XC 2 – zig zag RR required in intersection, cut into old works and explosive mixture found in notch to left of intersection, unsafe diagonal roof found inby XC 2. Optional Team Stop 5: Team has material to tie across in XC 1. Team Stop 5 can be made by traveling outby to crosscut 1 and airlocking into XC 2.
4. Team stop 4 in 2 E at XC 2 – zig zag RR required through intersection. Team required to tie outby.
5. Team stop 5 in 2 E at XC 1 – XC 1 is tied in.
6. Team stop 6 – in 3 E at XC 2 – XC 2 is tied in. Team can advance in 3 entry.
7. Team stop 7 – in 3 E at XC 3. LCM in barricade in 3 entry shouts “help, help” when team enters stop 7 intersection. Team is tied to this barricade/patient (verbal contact). Not enough information to ventilate yet.
8. Team stop 8 – in 2 E at XC 3. Not enough material to ventilate yet.
9. Team stop 9 – in 1 E at XC 3. zig-zag RR required in intersection, barricade with no response inby XC 3. Team has enough information and materials to vent irrespirable outby barricade in 3 entry. See vent 1
Team must airlock into barricade in 3 E.
10. Team Stop 10 – in 3 entry at XC 4. Team must place respiratory protection on LCM and remove to FAB. Team has enough material to vent explosive mix outby barricade in 1 E with 9 timbers found. See vent 2  Timbers required to be set as indicated in 3 entry in unsafe roof.
Team must airlock into barricade in 1 E.
11. Team Stop 11 – in 1 E XC 4. LUM found in irrespirable air – Team must place respiratory protection and pt. on stretcher and remove to FAB.
Smoke found in XC 4 to right of stop 11 → QUITTER – FPA required, nothing inby smoke can be mapped.
End of Problem