Price Utah 2017 Day 1
Written Problem

Explore the entire mine.

Account for the missing miners.

Your team can only carry 1 (one) brattice cloth at any time.

Your team is not allowed to move any battery powered equipment or associated batteries.

Your team has 75 minutes to complete this problem.
2017 Price Utah Day 1 Written Statement

Thank you for responding to our mine emergency. A fresh air base and command center has been established on the surface. Last night 8 miners were working in the mine. They were working in several areas. We have had no contact with them in 12 hours. Low oxygen and unsafe roof conditions were encountered when we attempted to go into the mine to determine what is wrong. The exhausting mine fan in 1 entry is off currently, but can be started from the command center.

The fan is reversible. The fan is impassible.
All power into the mine is locked out.
The mine uses battery powered haulage equipment.
All officials and backup teams are present.
The mine map is not up to date.
If the box below is marked, this map is to be scored.

Conveyor Belt
Belt Head

Map
<table>
<thead>
<tr>
<th>Belt Head</th>
<th>Conveyor Belt</th>
</tr>
</thead>
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2017 Price UT Day 1
Final Vent
Team Name

Captain
Signature

Chief Judge
Name: Print
Price Utah 2017  Day 1 Judges Instructions

1. Initial opening checks of each entry. Contaminent found in 3 entry. (2 entry blocked by unsafe roof).
2. Team stop 1 - (apparatus check required) In 3 entry at XC 1(Rule 44) Contaminent in 3 ends. Team must continue travel in entry 3 after breaking all planes.
3. Team stop 2 – at xc 2 in 3 entry. 4. Team stop 3 – Contaminent found inby XC 2 in 3 e. Team must travel through XC 2 to 2 entry.
4. Team stop 3 – in 2 entry at XC 2. Teams will advance outby in 2 entry to XC 1.
5. Team stop 4 – in 2 entry at XC 1. zig zag required, Team can see unconscious miner in unsafe roof. Team has means to timber into LUM and assess and remove to FAB ( under apparatus).
6. Team stop 5 – in 1 entry at XC 1.
7. Team stop 6 – in 1 entry at XC 2. Teams must tie across 1 entry between 2 and 3 entries at XC 1 prior to advancing inby XC 2.
8. Team stop 7 –Teams can airlock through stopping from 3 th 2 entry at XC 1 or set additional timbers on 3 e side of unsafe roof to tie across.
9. Team Stop 8 – in XC 3 either in 2 or 3 entries.
10. Team Stop 9 – in XC 3 in 2 or 3 entries.
11. Team Stop 10 – in 1 entry in XC 3.
12. Team stop 11 – in XC 4 either in 2 or 3 entries. (if in 2 entry teams must tie across to 1 entry.) (if in 3 entry zig zag required at wrap around unsafe roof)
13. Team stop 11/13 – at xc 4 in 3 entry. Barricade found inby intersection. (with response). Teams can’t vent yet. Teams are tied to this missing person if this barricade was encountered prior to the barricade in 1 entry!
15. Team stop 12/13 – Barricade found outby 1 e XC 4 intersection, (no response) Teams must ventilate the barricade in 3 entry first. (verbal contact)
Vent 1, 2 and 3 - teams can vent barricade in 3 entry safely by doing 3 separate vent changes with fan blowing, then exhausting then blowing. Prior to vent 2, teams must set timbers through unsafe roof in 1 entry between XC 2 and 3. Teams are required to set timbers through wrap around unsafe roof in XC 4 entry 3 to be able to place line curtain to rib to wing barricade. Teams can breach barricade in 3 e without airlock and bring LCM to FAB.
Only 4 missing persons accounted for.
End of Problem
Live Person Unconscious

Missing Person / Body

Battery Ramcar

Battery Scoop

Conveyor Belt

Large Battery

Open

Closed

Conveyor Belt

Belt Head

4 Timbers

6.0 % CH₄
0 ppm CO
18.0 % O₂

0.9 % CH₄
0 ppm CO
19.0 % O₂

6.0 % CH₄
0 ppm CO
17.8 % O₂

5.9 % CH₄
0 ppm CO
15.1 % O₂

0.6 % CH₄
0 ppm CO
15.1 % O₂

6.0 % CH₄
0 ppm CO
18.0 % O₂

6.0 % CH₄
0 ppm CO
19.6 % O₂

Help, it's airtight behind me"