

## 2019 Price Utah Day 1 Written Statement

Thank you for responding to our mine emergency.

A Command Center has been established on the surface.

Last night, 3 miners were working in 1<sup>st</sup> South. We have had no contact with them. The 1<sup>st</sup> South entries are numbered from left to right 1, 2 and 3.

The BLOWING mine fan on the surface is running, is guarded and cannot be reversed. All power into the mine is locked out.

If power is required to energize any equipment in the mine, switches will be available at the command center.

The mine uses battery powered haulage equipment.

Your team is not to start up or move any mobil equipment or associated batteries found due to the methane present in our mine.

All officials and backup teams are present.

The mine map is up to date.

Price Utah 2019 Day 1  
Written Problem

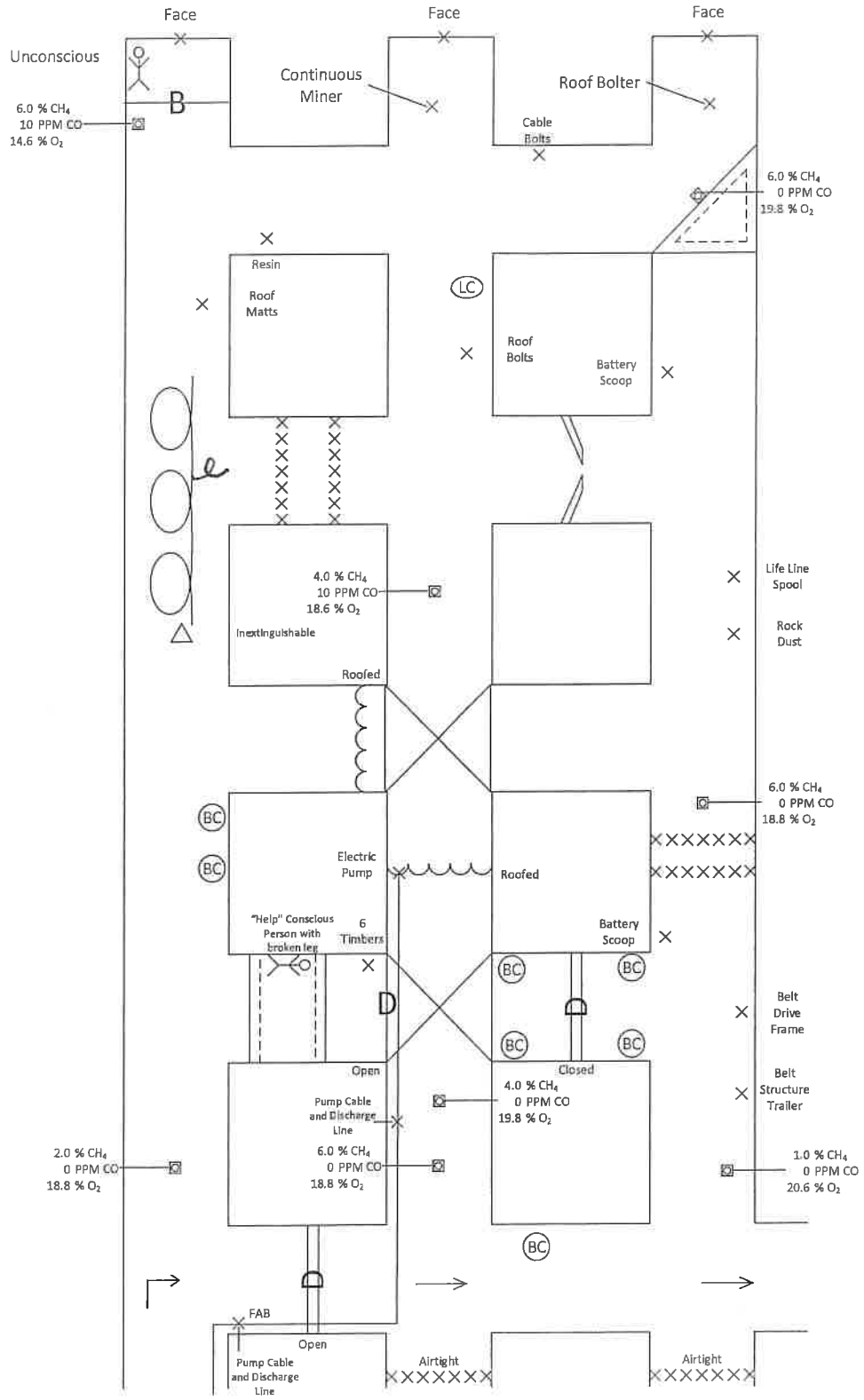
Explore all of the mine necessary to account for  
the missing miners if it can be done safely.

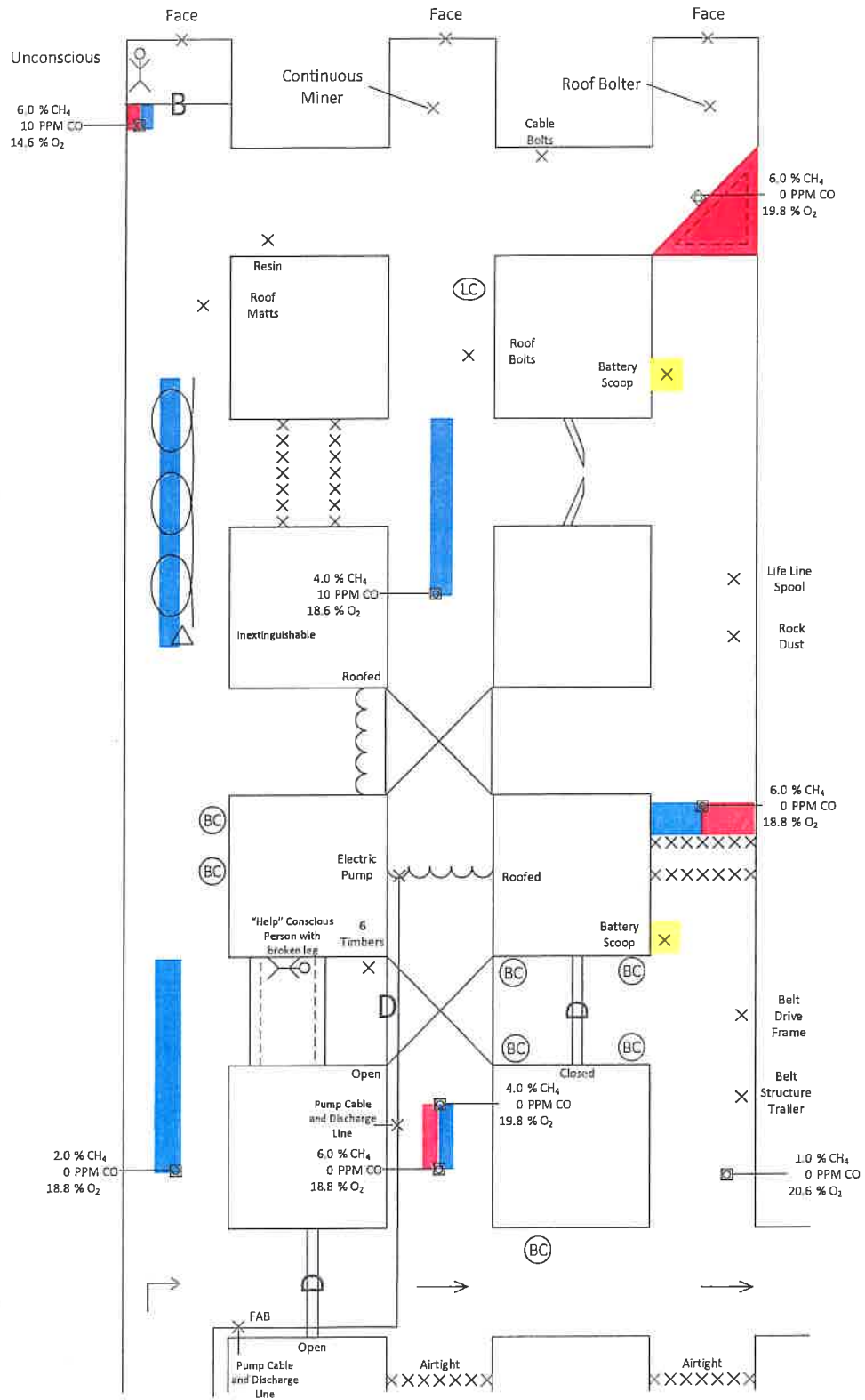
Account for the 3 missing miners.

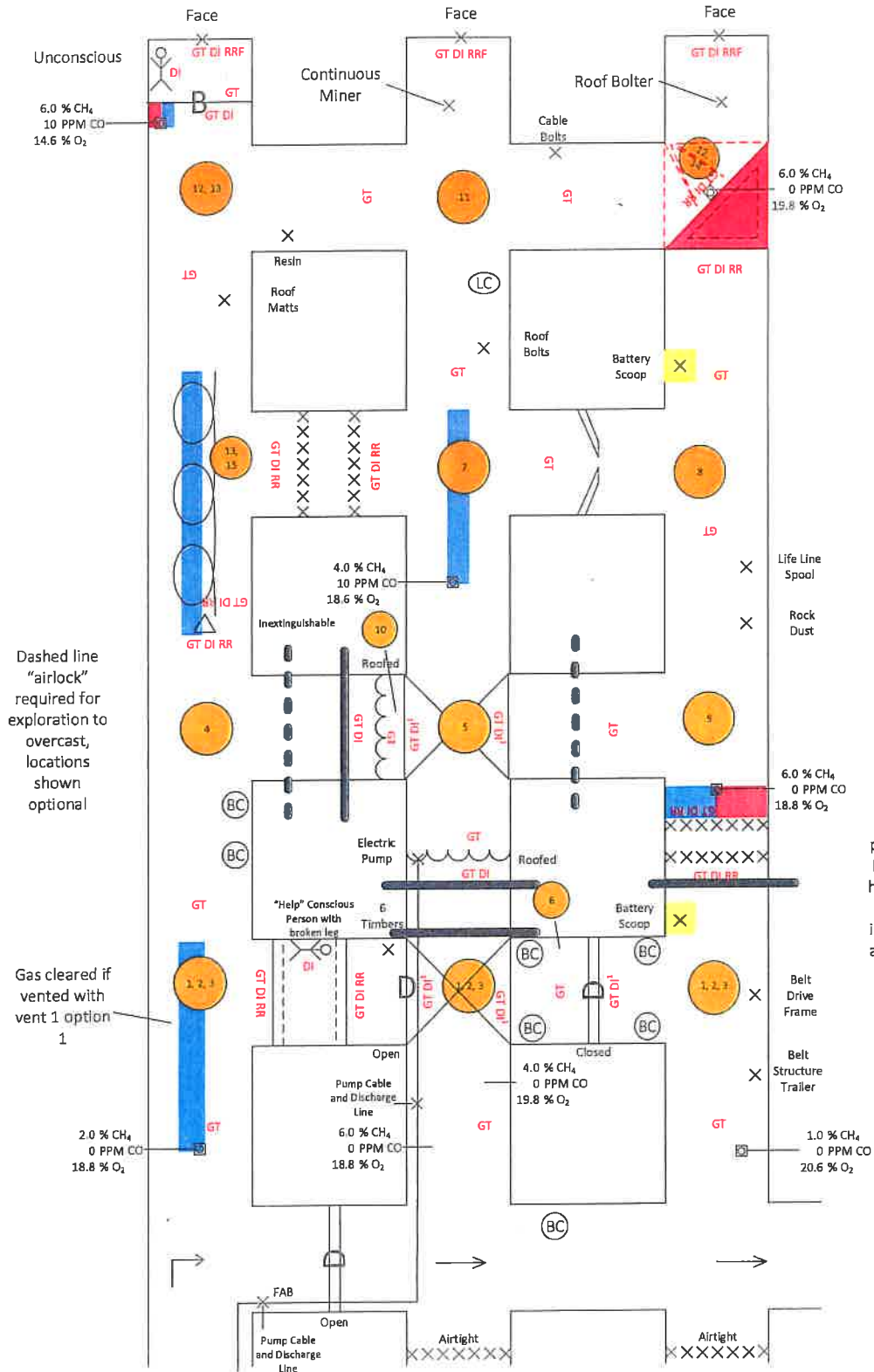
Bring any live miners to the FAB.

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

Your team has 90 minutes to complete this  
problem.





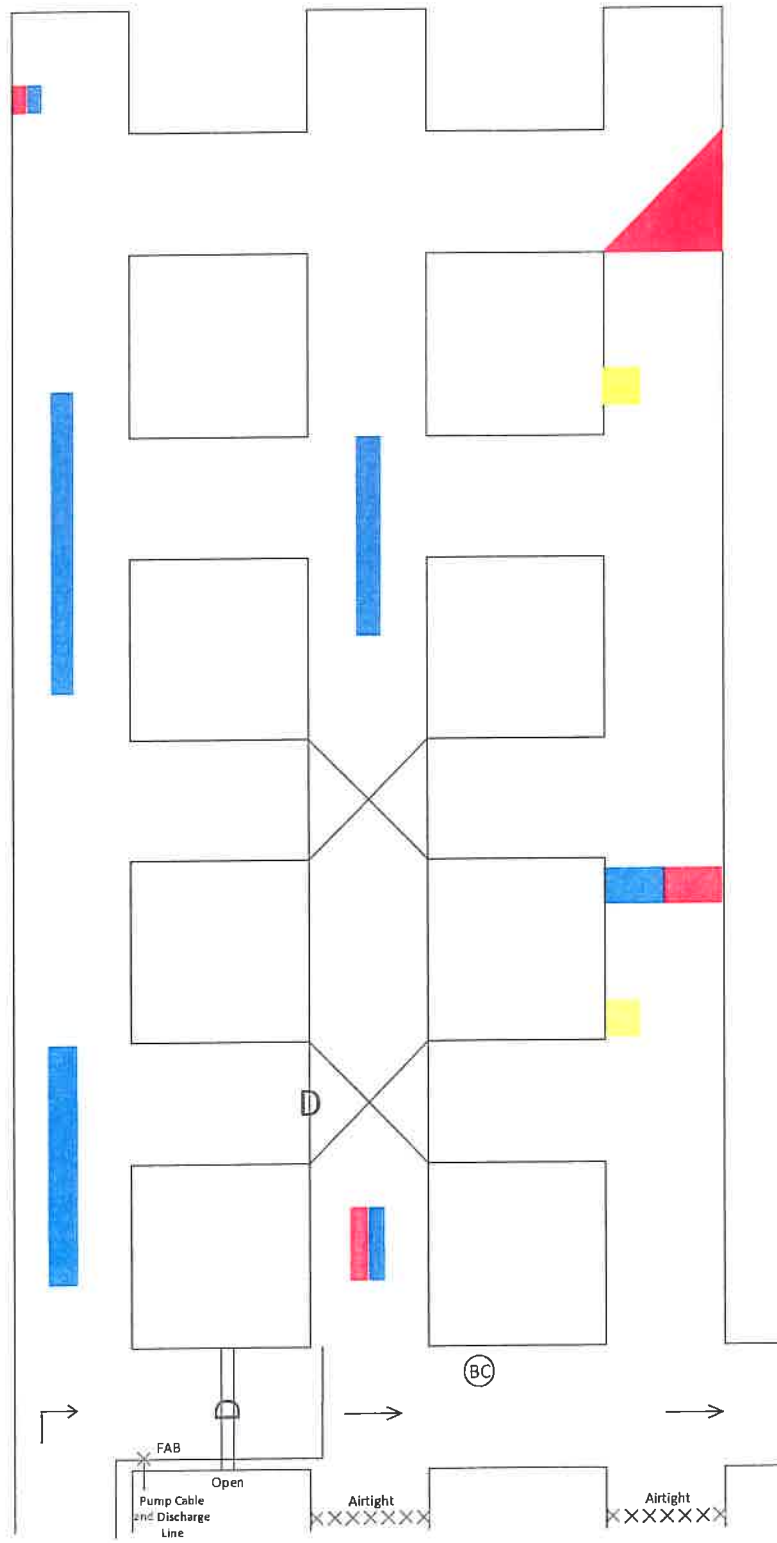


Dashed line "airlock" required for exploration to overcast, locations shown optional

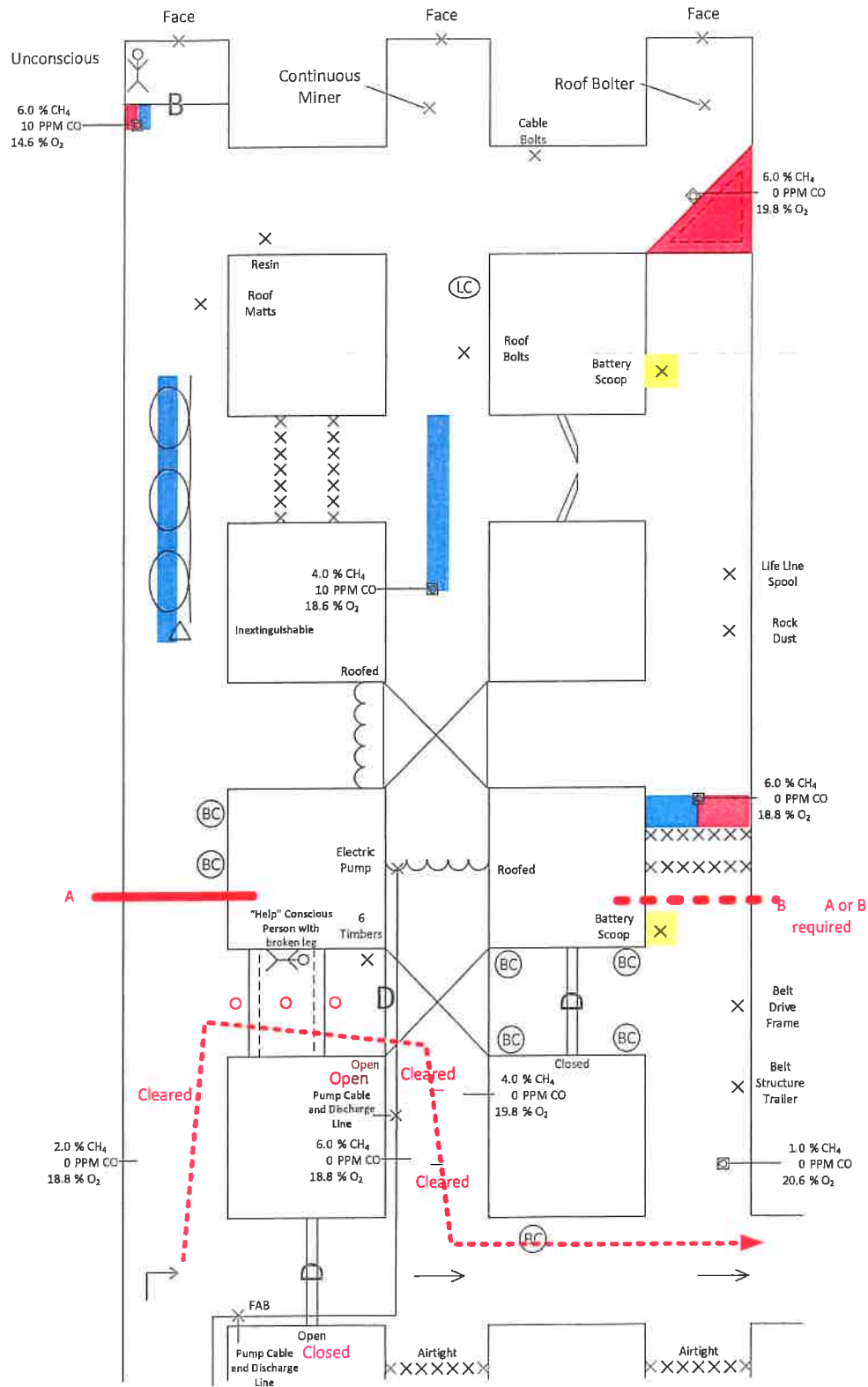
Rule 42: To pump teams Required to have 3 builds (4 way intersection) and 1 airlock (2 sides blocked)

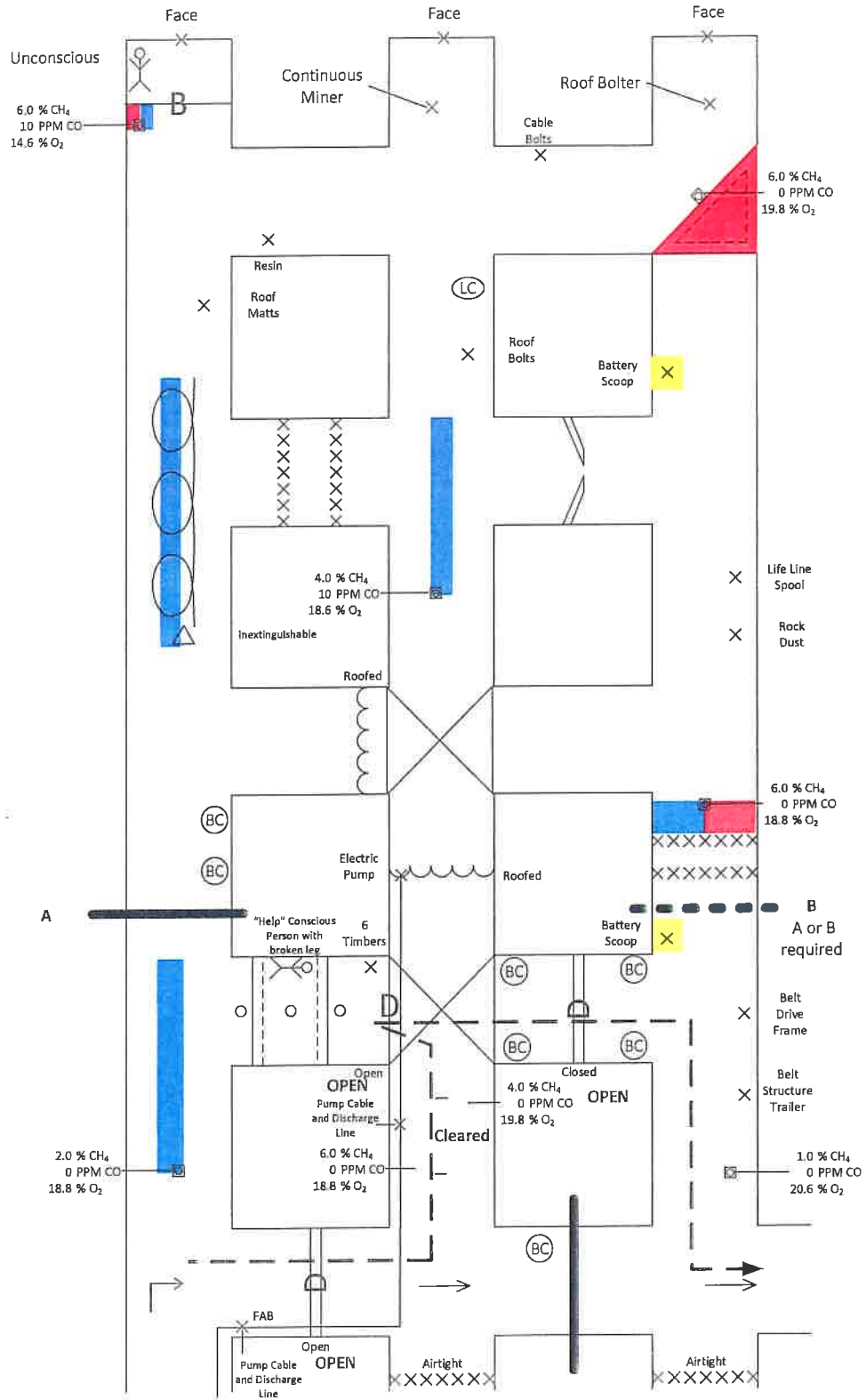
DI<sup>1</sup> = only 1 DI required on either side of wall/ stopping

Judges vent map



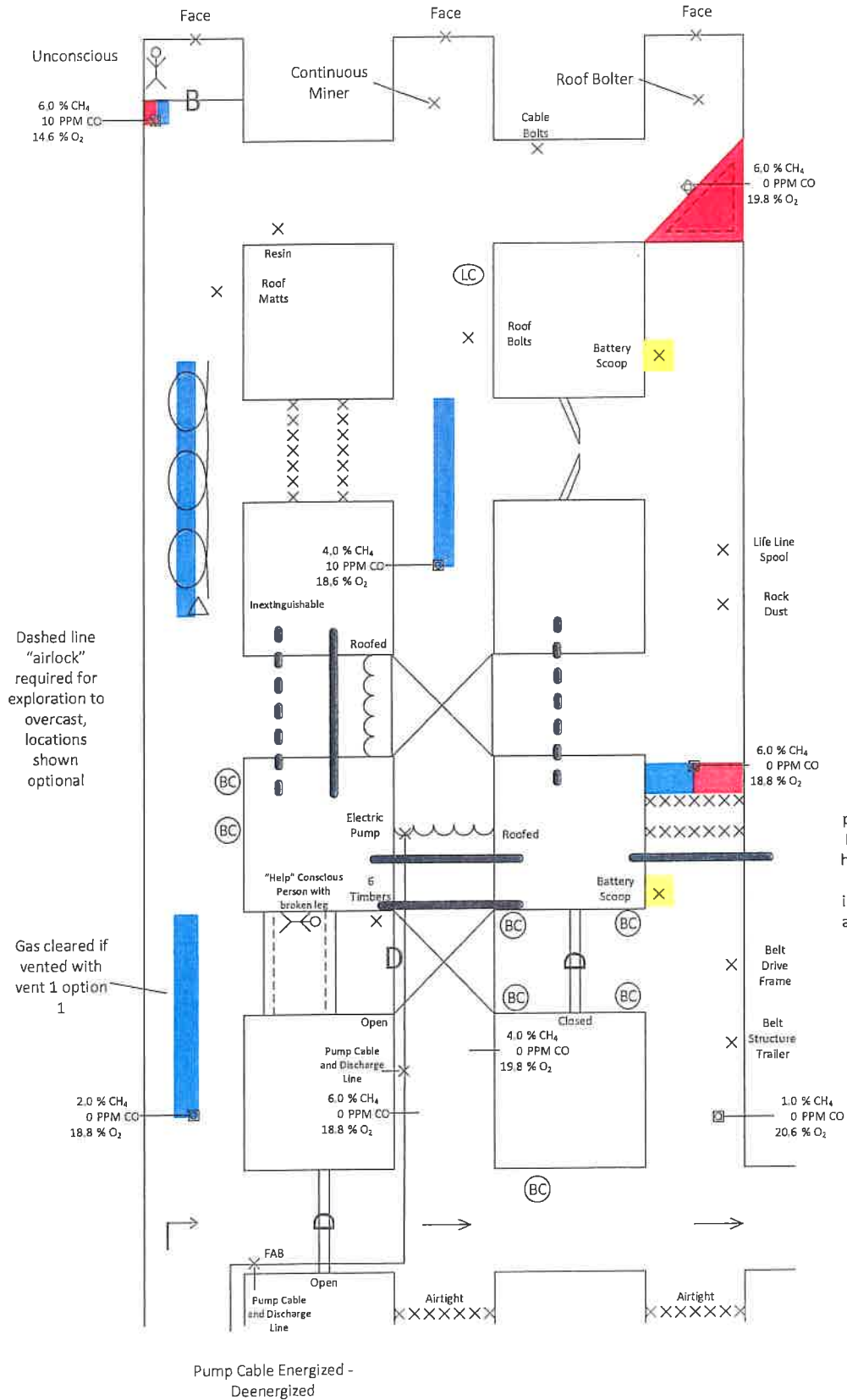
VENT 1  
Option 1

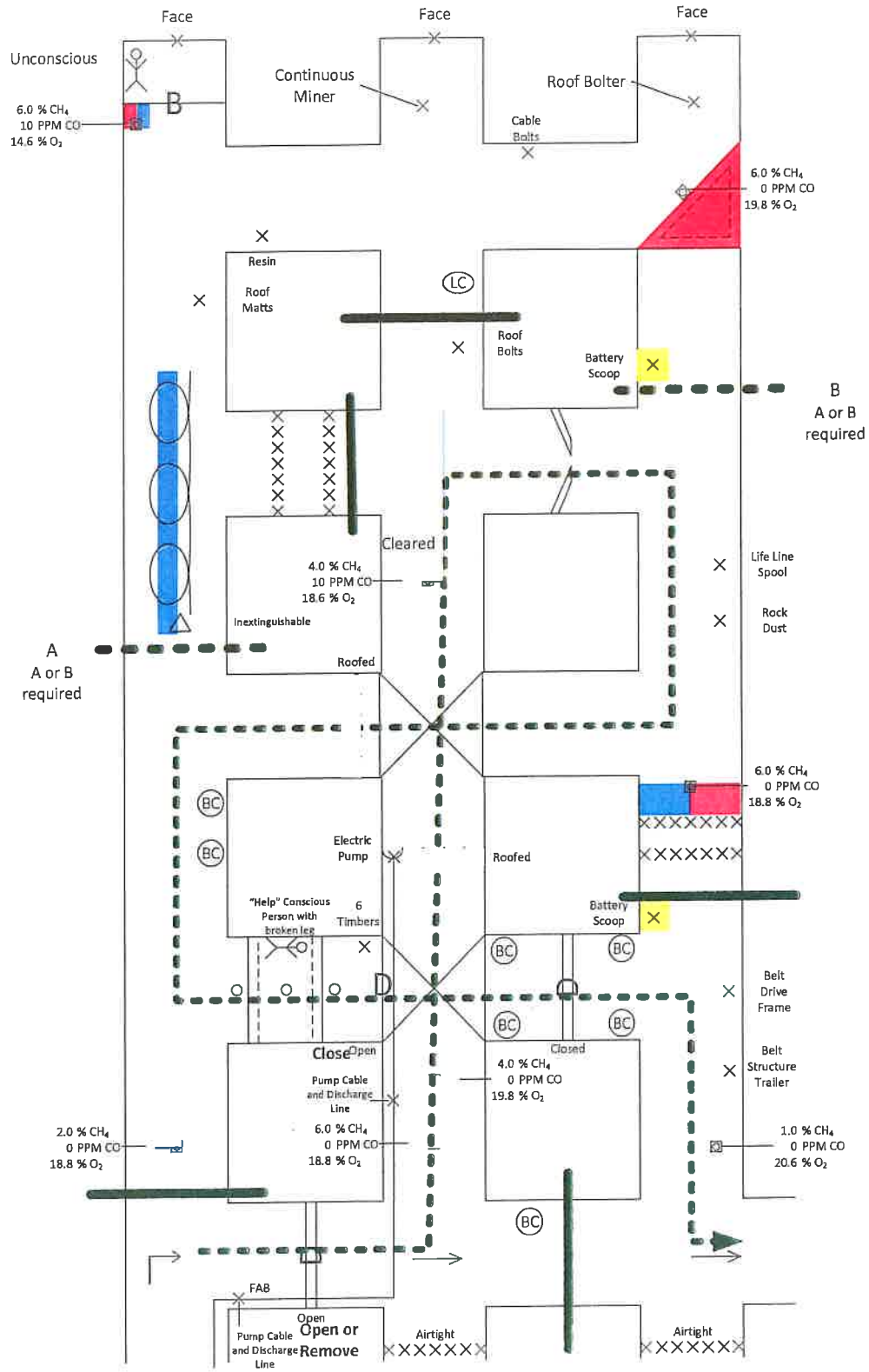


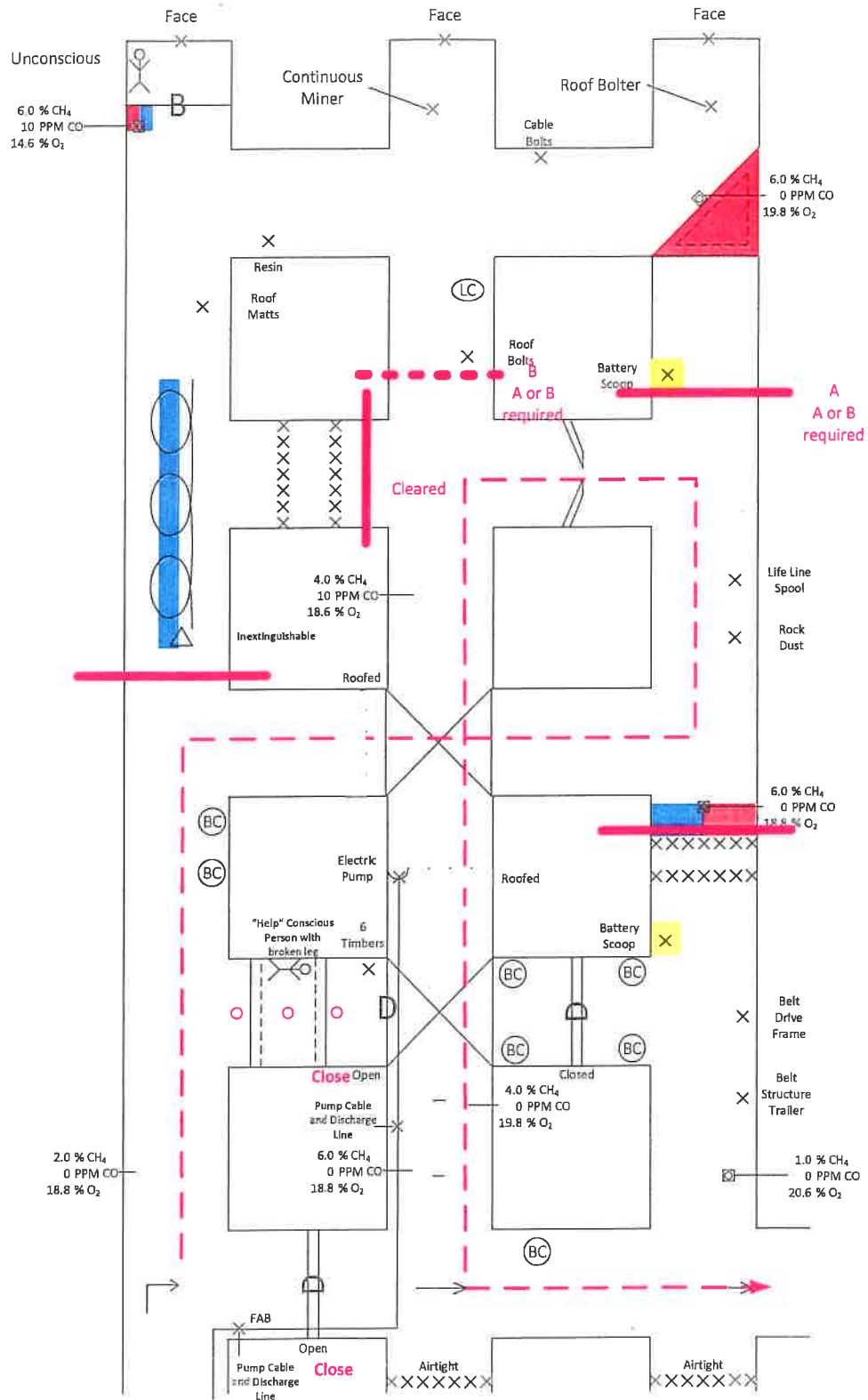




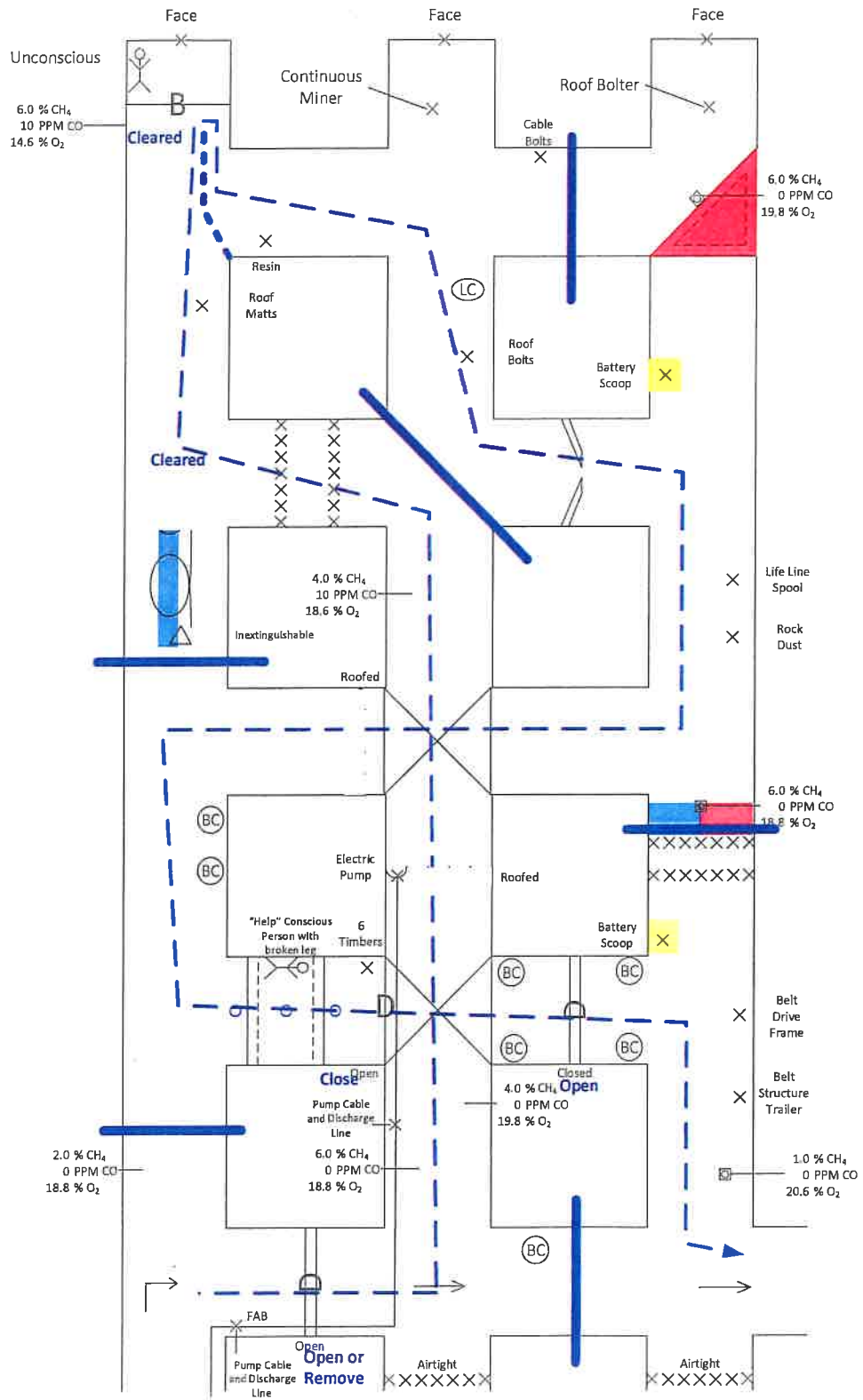
PUMP







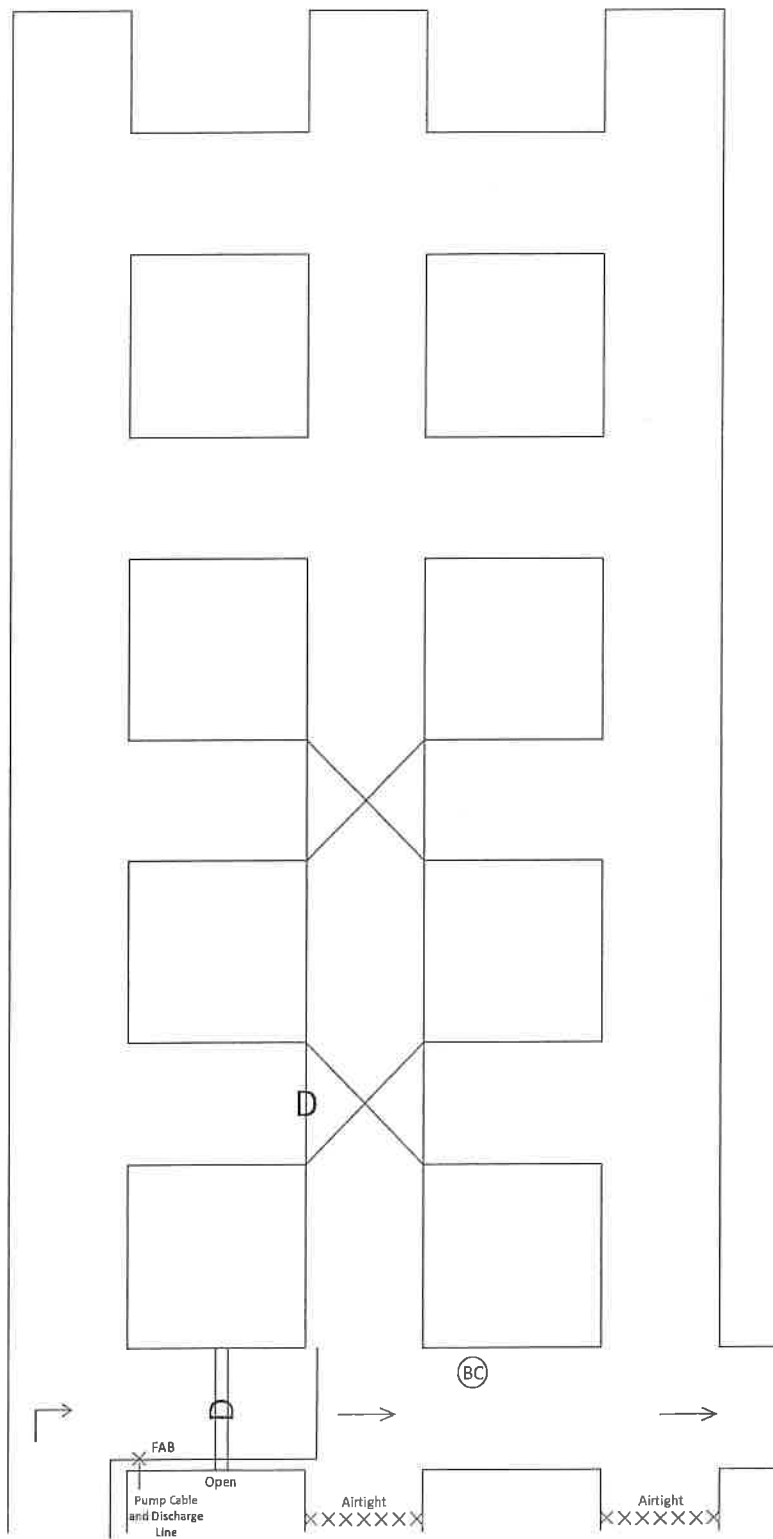
VENT 3



Final Vent Map

Judge:

Team Capt:



## Price Utah 2019 Day 1 Judges Instructions

1. Initial opening checks entries at FAB. (irrespirable found in 1 E, explosive found in 2 E).
  2. Teams can enter ANY entry - (apparatus check required at stop).
  3. Team stop 1, 2, 3 in 1E at XC 1 – unsafe roof found in crosscut 1 with verbal contact from missing person shouting “help”. No materials to get to missing person.
  4. Team stop 1, 2, 3 in 2E at XC 1 – overcast with door open to left, 6 timbers available, 3 required to be set to access and recover missing miner with broken leg. Respiratory protection required to be placed on miner to take out (on stretcher). Water roofed and electric pump found inby XC 1 in 2 E.
  5. Team stop 1, 2, 3 – in 3E – Permanent stopping with door closed in XC 1, ignition source and caved found inby XC 1 in 3E.
  6. Team stop 4 – in 1 entry at XC 2. Inextinguishable fire found in 1 E inby XC 2. Water roofed found in XC 2.
- Teams must ventilate explosive mixture in 2 E between XC 0 and XC 1 in order to energize the electric pump cable.  
See Vent 1 options 1 or 2

Teams can energize pump cable from switch in command center.  
See pump for required builds/ airlocks (rule 42)

7. Team stop 5 – in 2 entry at XC 2.
  8. Team stop 6 – in XC 1 between 2 and 3 E. Required to tie XC 1 in.
  9. Team stop 7 – in 2E XC 3. caved found in XC 3 between 1 and 2 E.
  10. Team Stop 8 – in 3 entry XC 3. Ignition source found inby XC 3 in 3 E, unsafe roof found just outby XC 4 in 3E.
  11. Team Stop 9 – in 3 E XC 2. Explosive mixture found outby in 3 E.
  12. Team Stop 10 – in XC 2 between 1E and 2E required to tie XC 2. Airlock required – see pump (rule 42)
  13. Team stop 11 – in XC 4 in 2 entry. 2E face made. Contaminants in 1E and 3E known.
  14. Team stop 12, 13 – in XC 4 in 1E. Barricade found inby in 1E with NO Response. Not enough information to vent.
- Note: If teams explore to Stop 12, 14 prior to Stop 12,13, no delay – but stop 12, 14 is not required to be able to vent barricade.
15. Team stop 13, 15 – in XC 3 in 1E. Teams have enough information to vent.
- Teams must vent irrespirable out of 2 E XC 3 in order to be able to vent barricade.

See vent 2 options 1 or 2.

Teams must vent irrespirable / explosive mixture from barricade to breach and remove unconscious miner (on stretcher), airlock required to breach barricade.

See vent 3

Teams can breach barricade in 1 entry with airlock, must assess Pt. and place on stretcher to remove to FAB. Face 1 made.

16. Team stop 12, 14 – (if not done after Stop 11) Zig-zag required in this intersection. 3E face made.

3<sup>rd</sup> missing miner not found.

End of Problem