

## 2018 Price Utah Written Statement

Thank you for responding to our mine emergency.

A Command Center has been established on the surface.

Last night, 4 miners were working in 1<sup>st</sup> South. We have had no contact with them. 1st South was recently developed off 2<sup>nd</sup> East. Your team will be located in the FAB set up at the end of 2<sup>nd</sup> East. The 1<sup>st</sup> South entries are numbered from left to right, 1 2 and 3.

When your team explores inby the fresh air base, other than the initial openings' checks, you are in 1<sup>st</sup> South.

Two caves were encountered when we attempted to go into the section to determine what was wrong. Currently backup teams are working on cleaning and supporting the caves because fresh air will be available to this 1<sup>st</sup> South area through crosscut 2 in 3 entry. Your team will be notified when the work has made ventilation available. When your team is ready for fresh air, notify the Command Center and the outby teams will construct the necessary stopping(s) to direct air into 1<sup>st</sup> South.

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

The mine uses battery powered haulage equipment. Your team is not to start up or move any mobile 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 2018  
Written Problem

Explore all of the mine if it can be done safely.

Account for the 4 missing miners.

Bring any live miners to the FAB in 2<sup>nd</sup> east.

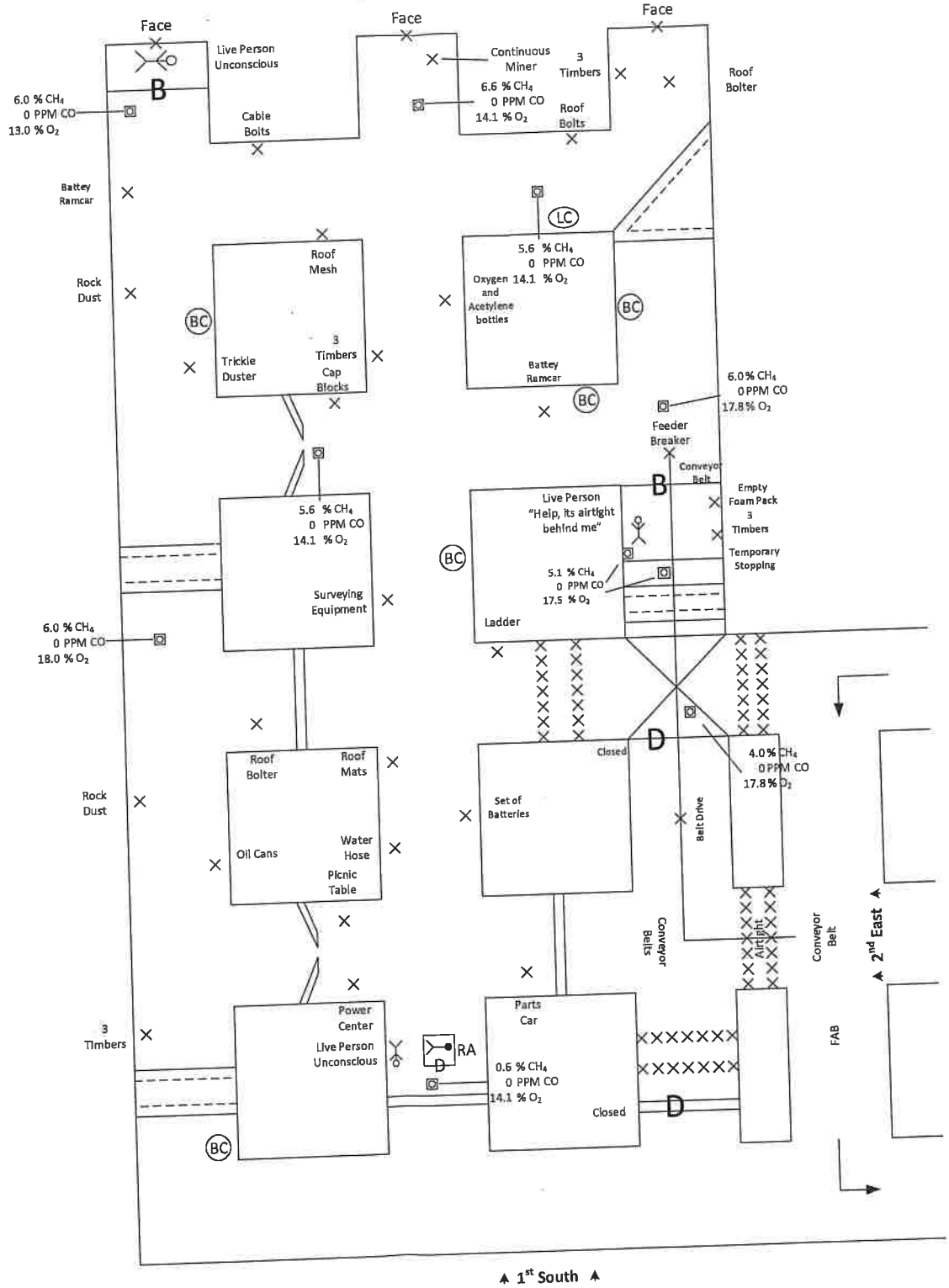
Your team is not allowed to move any battery powered equipment or associated batteries.

Ventilation is now available through crosscut 2 at 3 entry.

Contact the Command Center and outby teams will construct necessary ventilation controls to send fresh air into 1<sup>st</sup> South.

Your team is not required to map these changes.

Your team has 75 minutes to complete this problem.

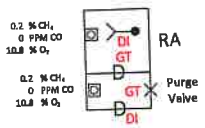
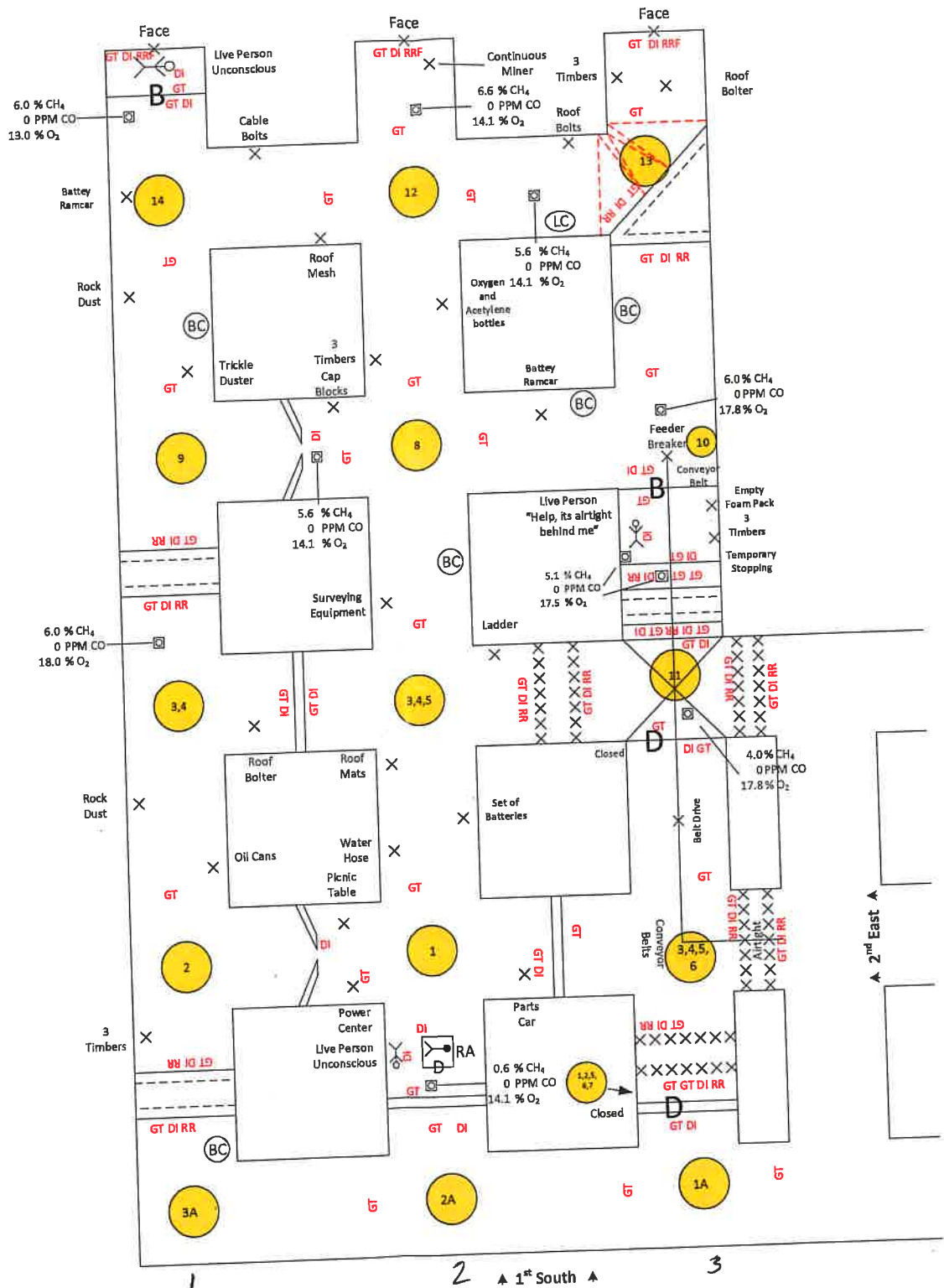


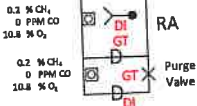
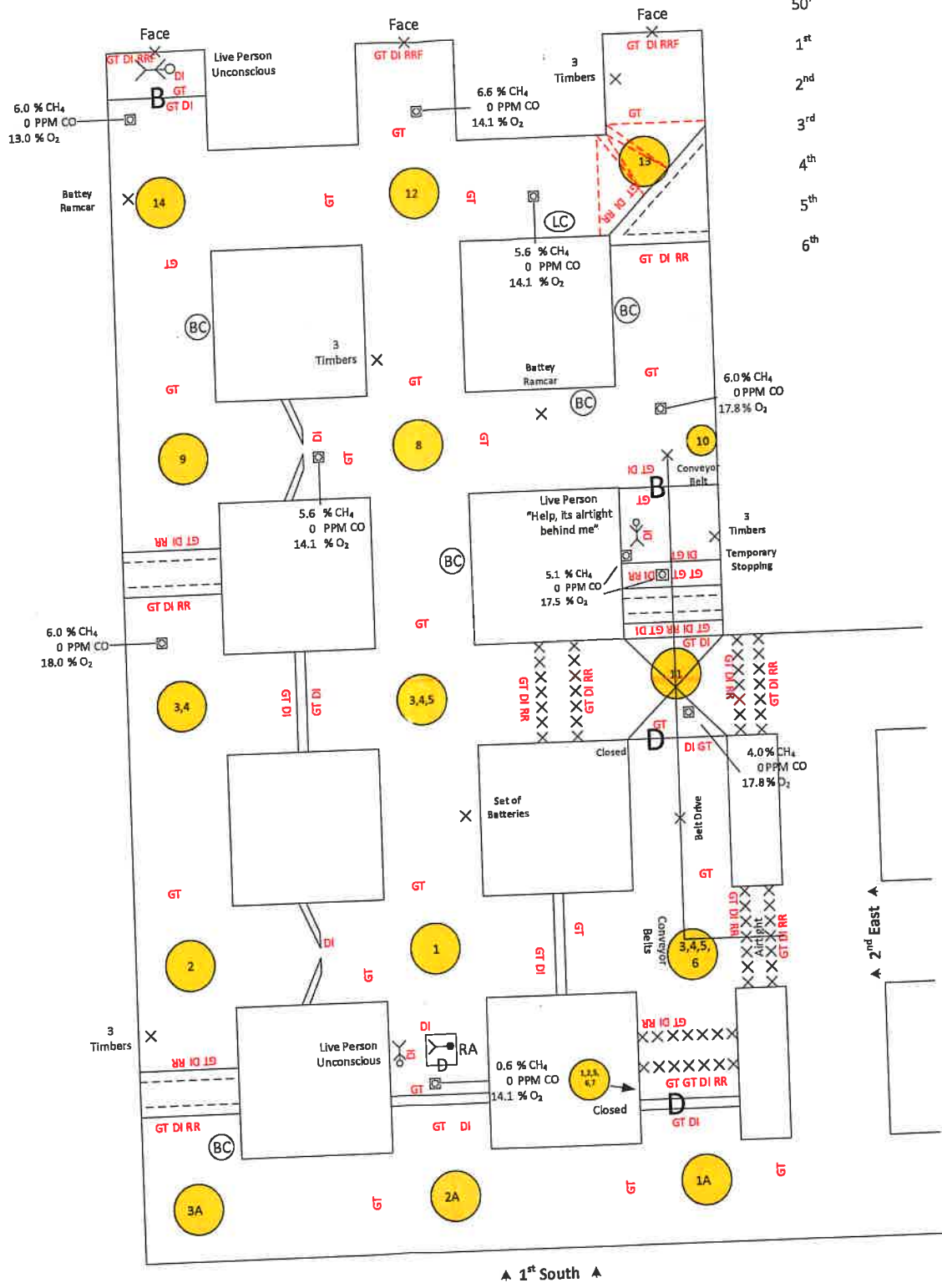
0.2 % CH<sub>4</sub>  
 0 PPM CO  
 10.8 % O<sub>2</sub>

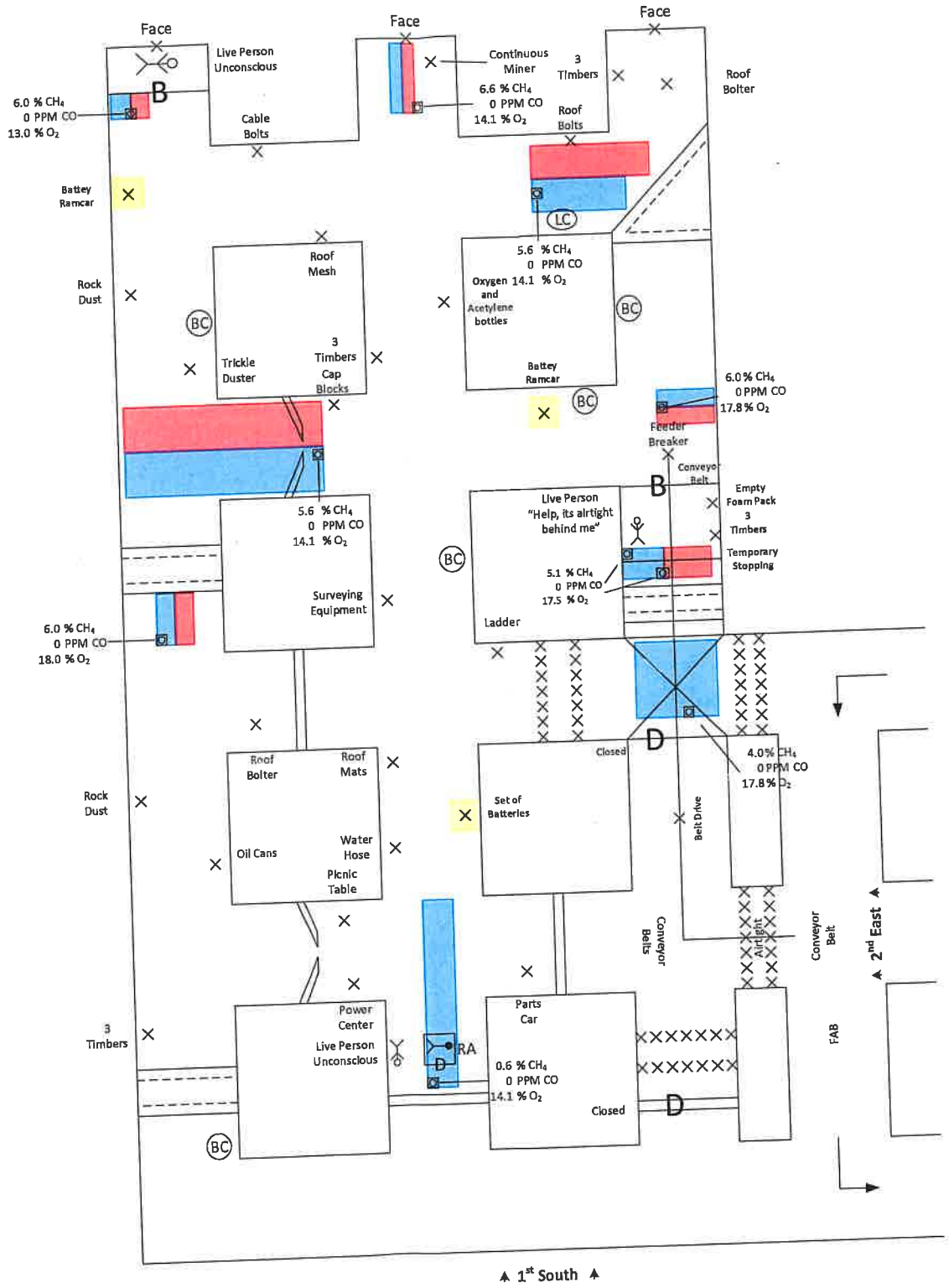
RA

0.2 % CH<sub>4</sub>  
 0 PPM CO  
 10.8 % O<sub>2</sub>

Purge Valve



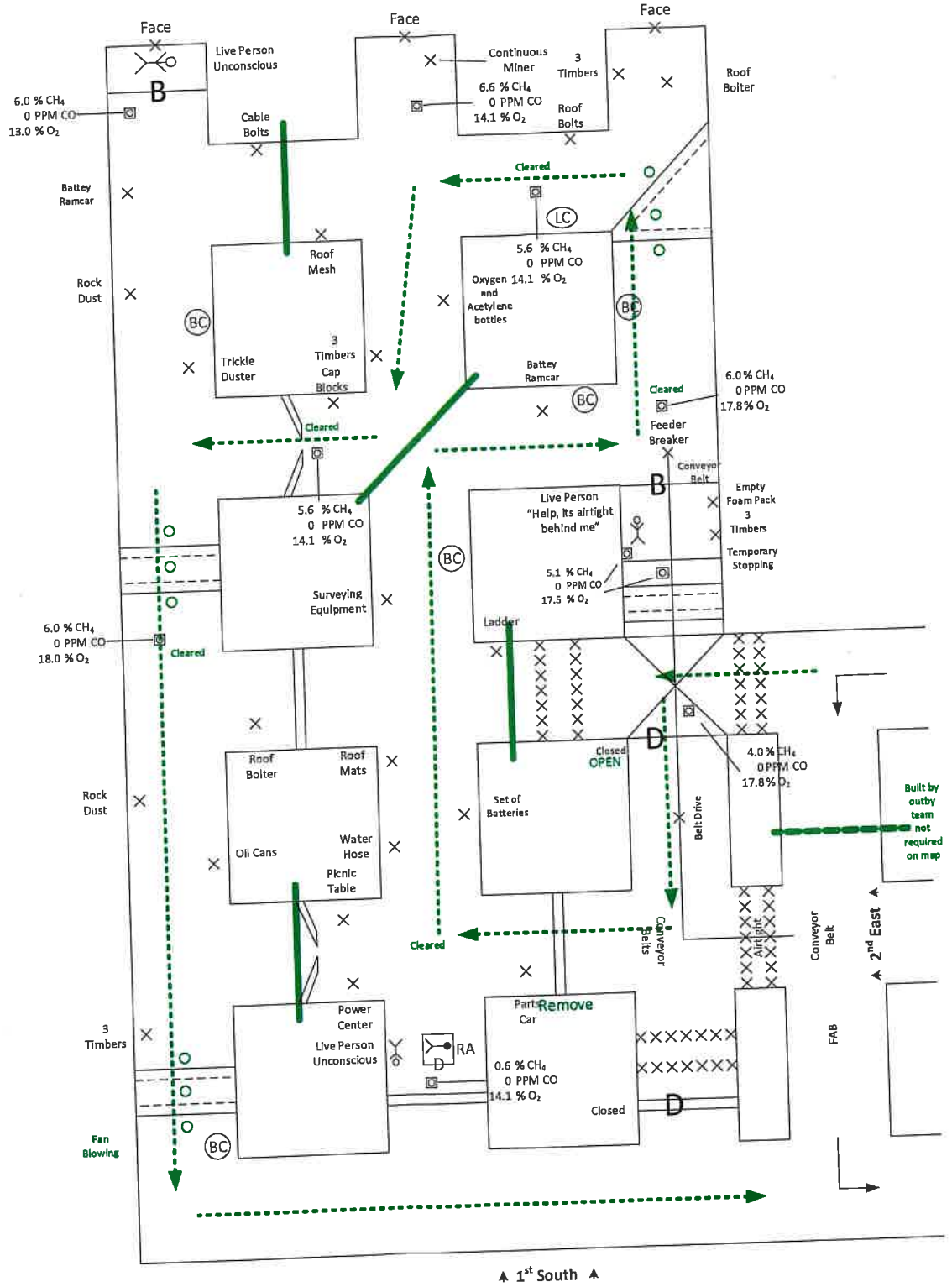


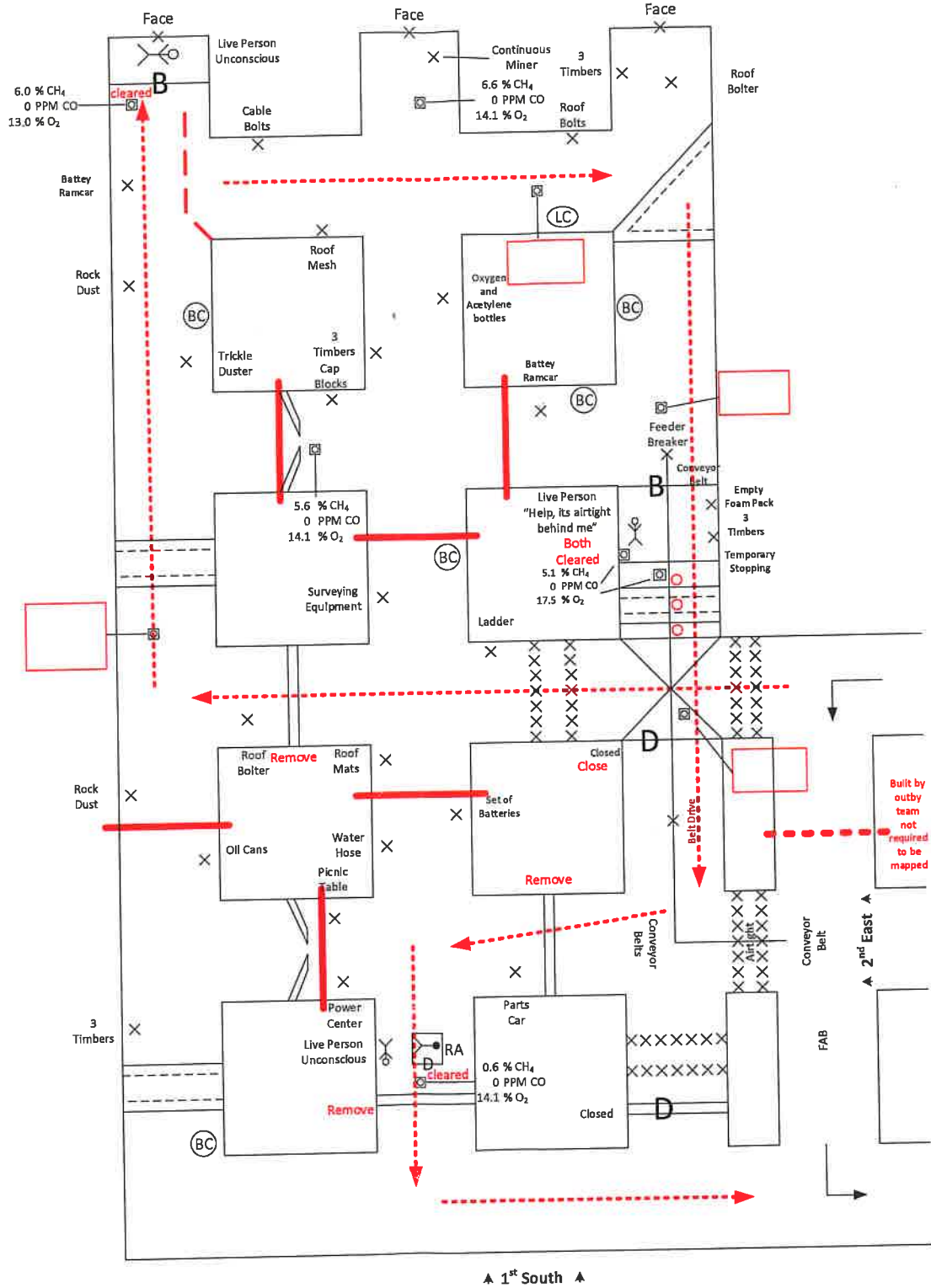


0.2 % CH<sub>4</sub>  
 0 PPM CO  
 10.8 % O<sub>2</sub>

0.2 % CH<sub>4</sub>  
 0 PPM CO  
 10.8 % O<sub>2</sub>

RA  
 Purge Valve







## Price Utah 2018 Judges Instructions

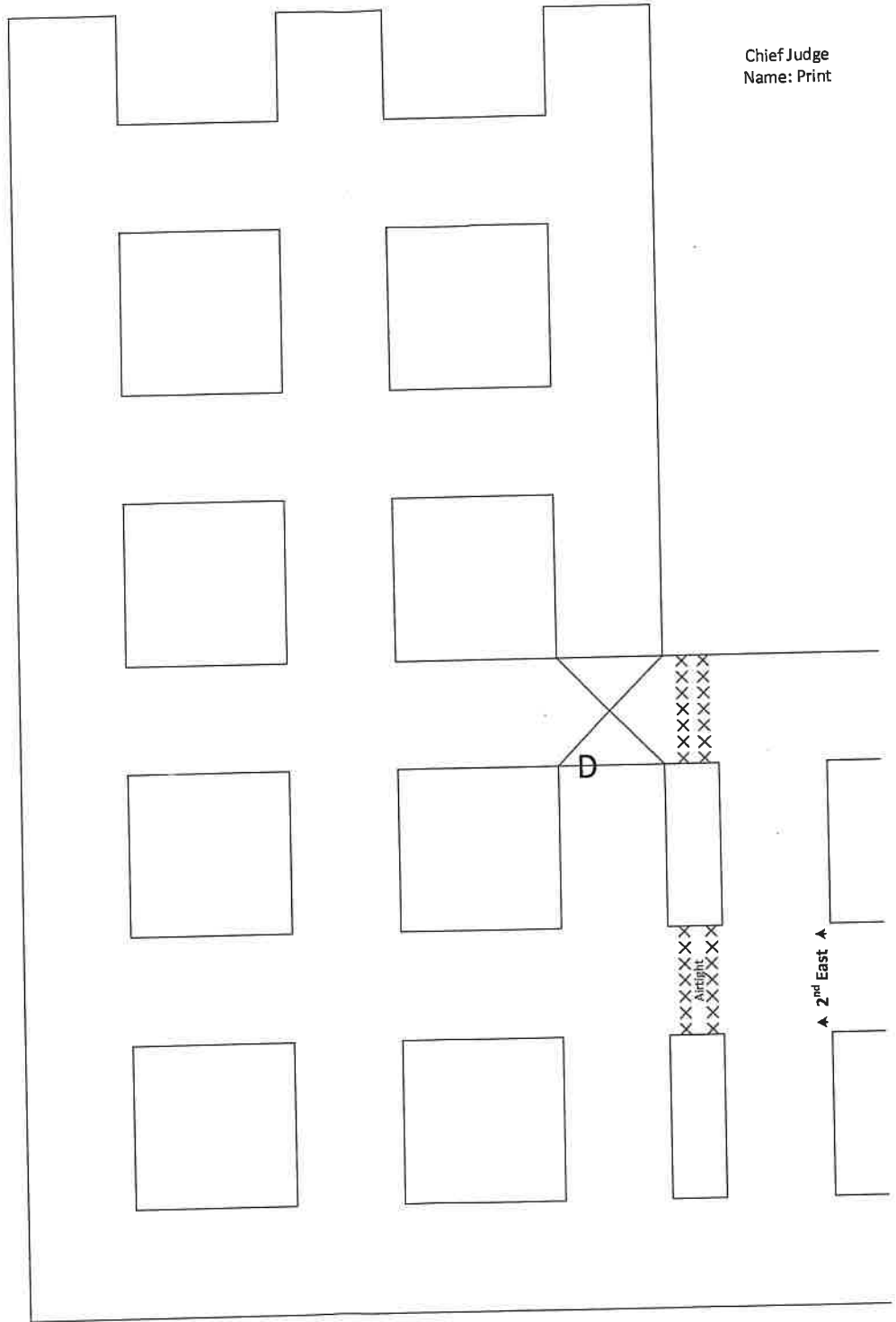
1. Initial opening checks of 2<sup>nd</sup> east entries at FAB. (2 & 3 entries blocked by caves).
2. Team stop 1A - (apparatus check required) In 3 entry XC 0 of 1<sup>st</sup> South. (No material to airlock into stopping in 3 entry).
3. Team stop 2A - at 2 entry XC 0. (No material to airlock into stopping in 2 entry).
4. Team stop 3A - in 1 entry at XC 0. (BC found, can now airlock into 2 or 3 entry)
5. Team stop 1 - in 2 entry inby airlock, LUM found and RA. Team can see unconscious miner, must assess and place on stretcher with apparatus). Team must also enter RA at this time (Rule 36).  
Capt. must gas test inside outer door and open purge valve and gas test inside inner door.  
Body found in RA. After Pt. brought to FAB team can return to complete team-stop 1. Team can advance through XC 1 to 1 entry
6. Team stop 2 - in 1 entry at XC 1. Teams can advance inby.
7. Team stop 3,4 - in 1 entry at XC 2.
8. Team stop 3.4.5 - teams can advance into XC 2 in 2 entry. Teams must tie across XC 1. Materials available to airlock into XC 1 between 2 and 3 entries.
9. Team stop 3,4,5,6 - When extending to XC 2 in 3 entry, cannot get into overcast intersection without airlocking. Outby side of overcast is tied but an accessible area remains in 3 entry between XC 0 and XC 1 - Teams cannot advance inby XC 2 before this area (Stop 1,2,5,6,7) is explored.
10. Team Stop 1,2,5,6,7 - in 3 entry between XC 0 and XC 1. Materials available to airlock into outby side of cave.
11. Team Stop 8 - in XC 3 in 2 entry. Teams must tie across to 1 entry.
12. Team Stop 9 - in 1 entry in XC 3.
13. Team stop 10 - in XC 3 in 3 entry. 1<sup>st</sup> barricade found with response. Not enough information to vent yet. Continue exploring but must now enter overcast intersection as inby side is known to be sealed (airlocked).
14. Team stop 11 - at xc 2 in 3 entry within overcast. Still not enough information to vent.
15. Team stop 12 - at XC 4 in 2 entry. 2 face made. Not enough information to vent yet.
16. Team stop 13 - Zig-zag required in this intersection. 3 face made.
17. Team stop 14 - 2<sup>nd</sup> barricade made with no response. Teams are tied to 1<sup>st</sup> barricade and can vent 1<sup>st</sup> barricade.  
Teams must ventilate the barricade in 3 entry first. (verbal contact).  
Teams must set timbers in unsafe roof in 1 entry (two areas) and in 3 entry at XC 4.  
See Vent 1. - teams can remove Pt. in 1<sup>st</sup> barricade to FAB however if retreating out 2 entry, must place respiratory protection on Pt. due to low O2 remaining between XC 0 and XC 1.  
Teams can breach barricade in 3 e without airlock and bring LCM to FAB.  
Teams must explore area outby barricade in 3 entry and set timbers in unsafe roof in 3 entry between XC 2 and 3.  
Teams can now vent 2<sup>nd</sup> barricade.  
See Vent 2  
Teams can breach barricade in 1 entry with airlock, must assess Pt. and place on stretcher to remove to FAB. Face 1 made.  
End of Problem

Final Vent

Team Name

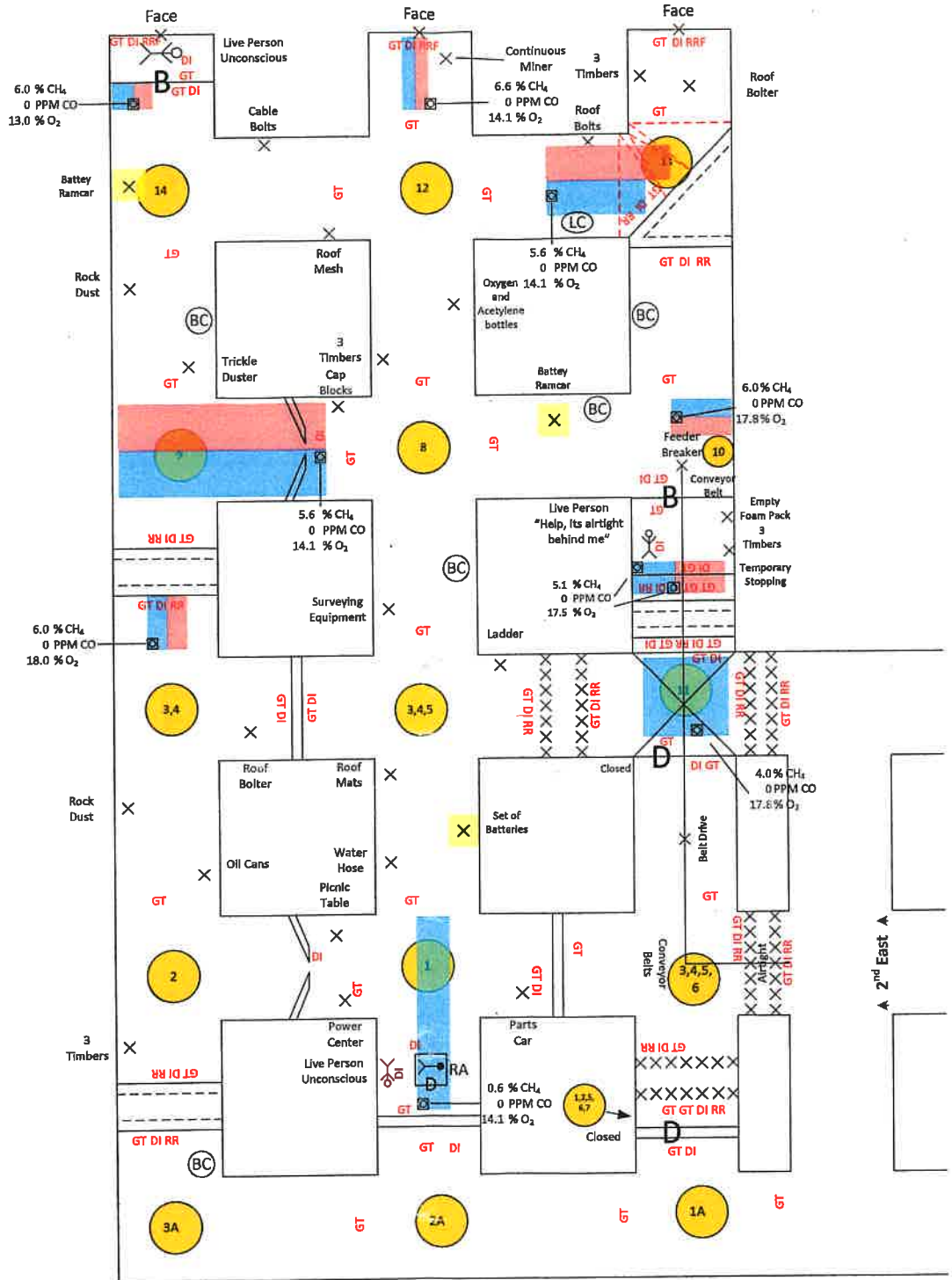
Captain  
Signature

Chief Judge  
Name: Print



▲ 1st South ▲

▲ 2nd East ▲



0.2 % CH<sub>4</sub>  
 0 PPM CO  
 10.8 % O<sub>2</sub>

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RA  
 Purge Valve