

2023 Loveland, COAL Day 2 Written Statement

Thank you for responding to our mine emergency. You are located at the fresh air base on the South Mains Section. 4 miners failed to return to the surface this morning after working last night. We have not heard from them or been able to contact them using the pagers or radios.

The entries in this section are numbered from left to right, 1, 2 and 3.

The exhausting main mine fan on the surface is running, guarded and cannot be reversed or stopped.

At present, fresh air is moving across the fresh air base from 1 entry to 3 entry and out 3 entry.

Back up teams and all officials are on site.

The mine map we have for you is up to date.

2023 Loveland Day 2

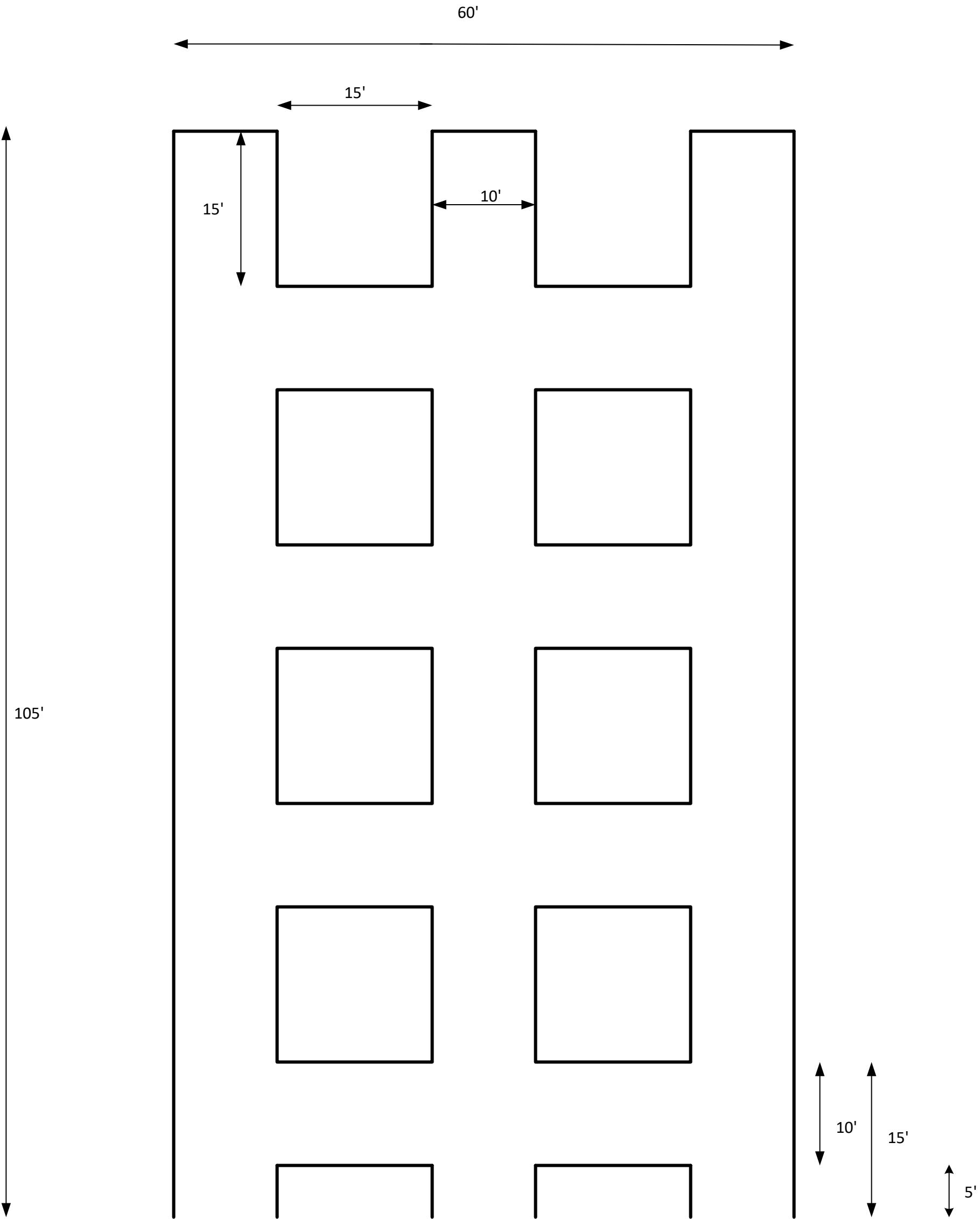
Written Problem

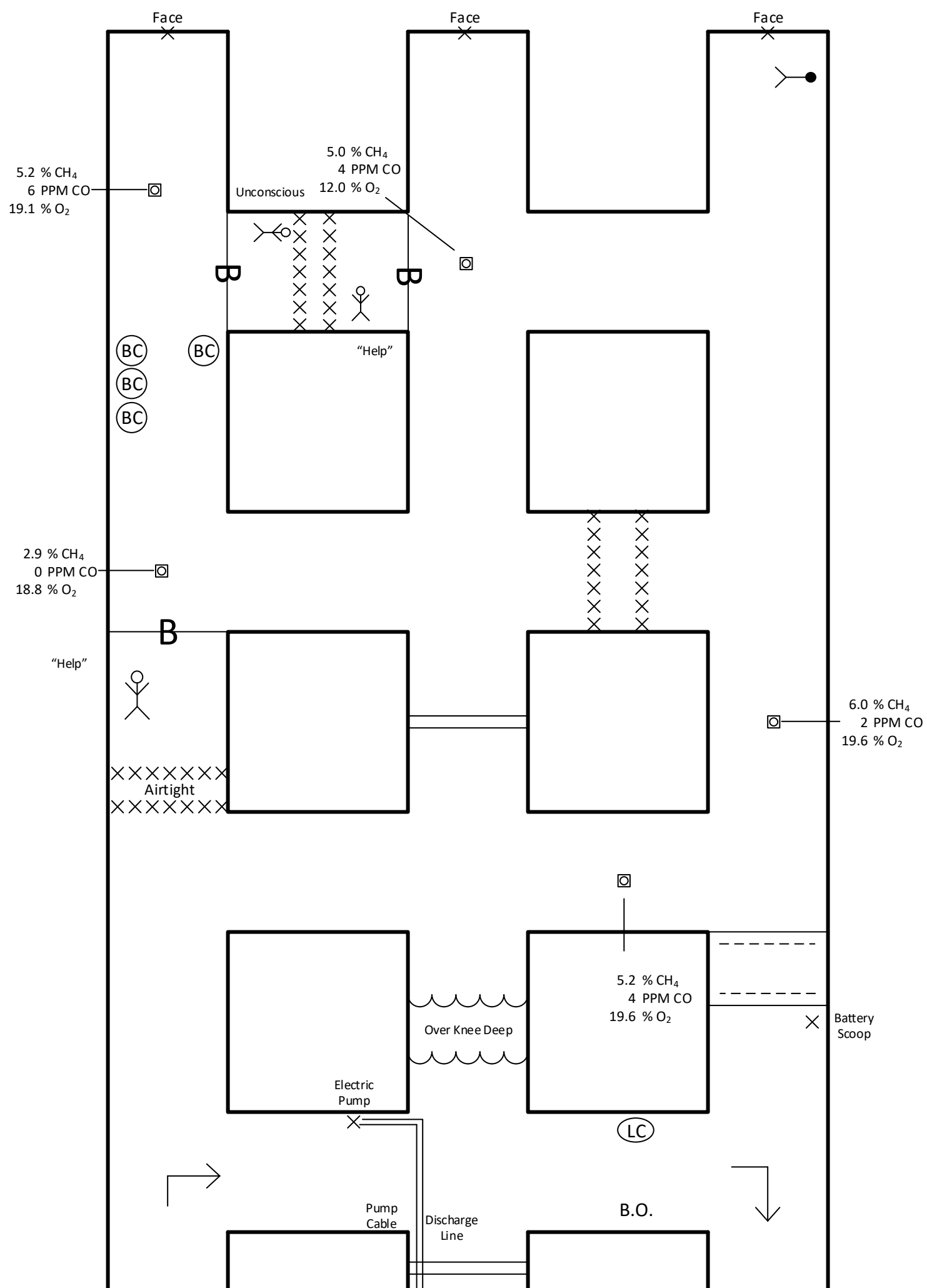
Account for the 4 missing miners and bring all live persons to the fresh-air-base.

Explore the entire section if it can be done safely.

- Materials
- BC:
- Elongated Objects:
- Roof/rib markers:
- Placards:
- Misc:
- 9
- 2 x 20' ¼" ropes
- Red-8 Blue-2
- 1 x 20' LC

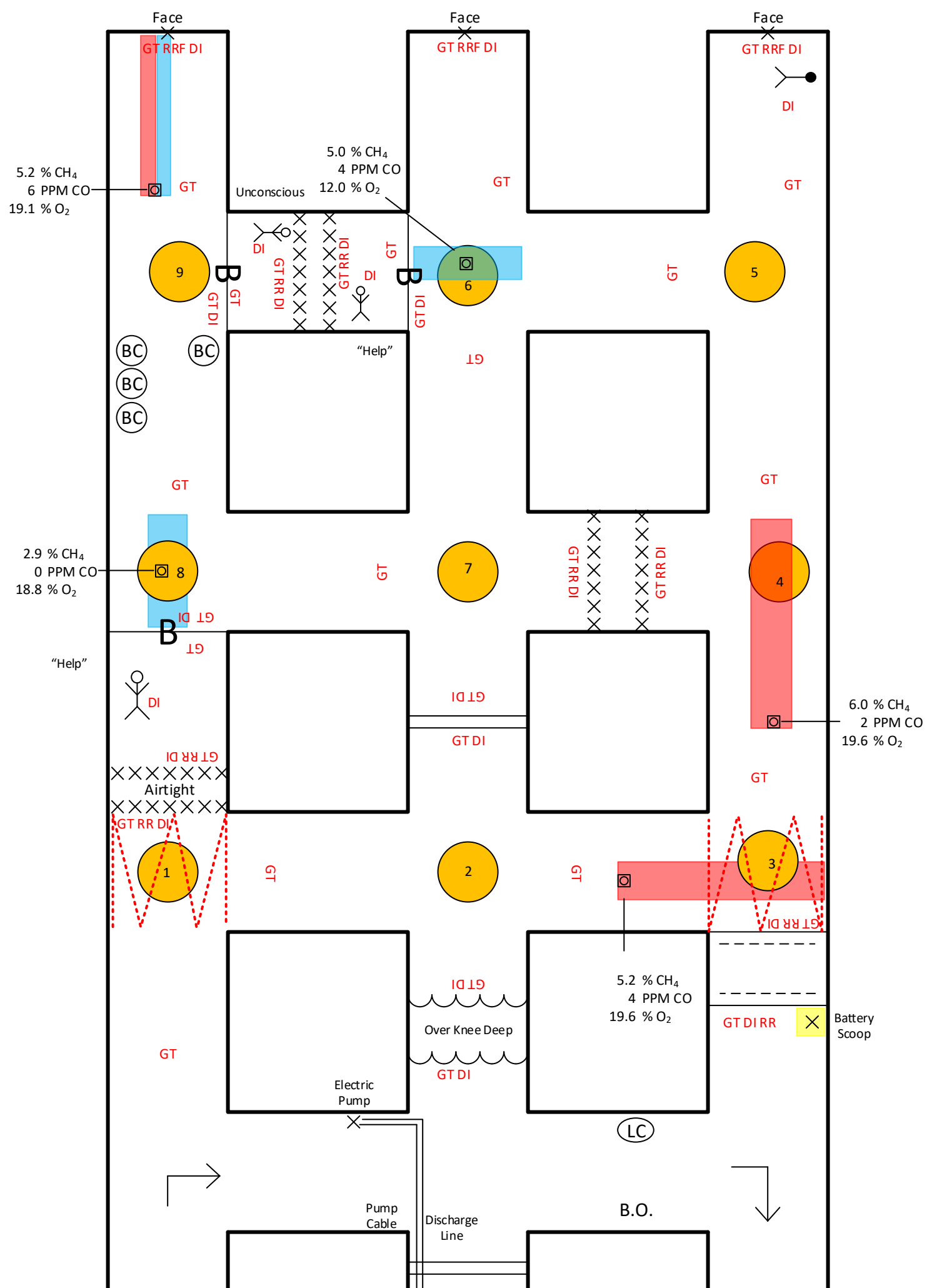
Layout



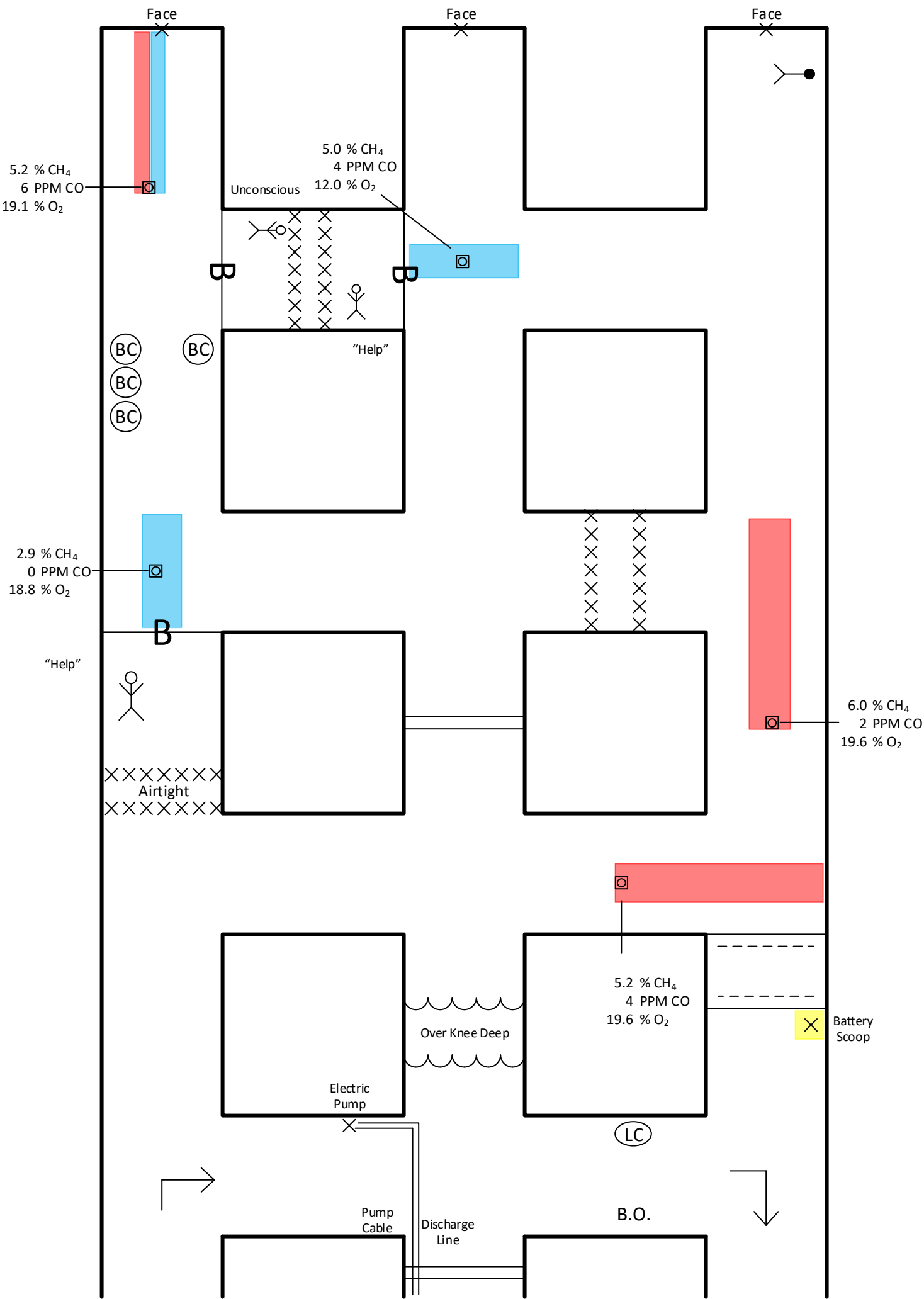


Loveland 2023 Day 2 Judges Instructions

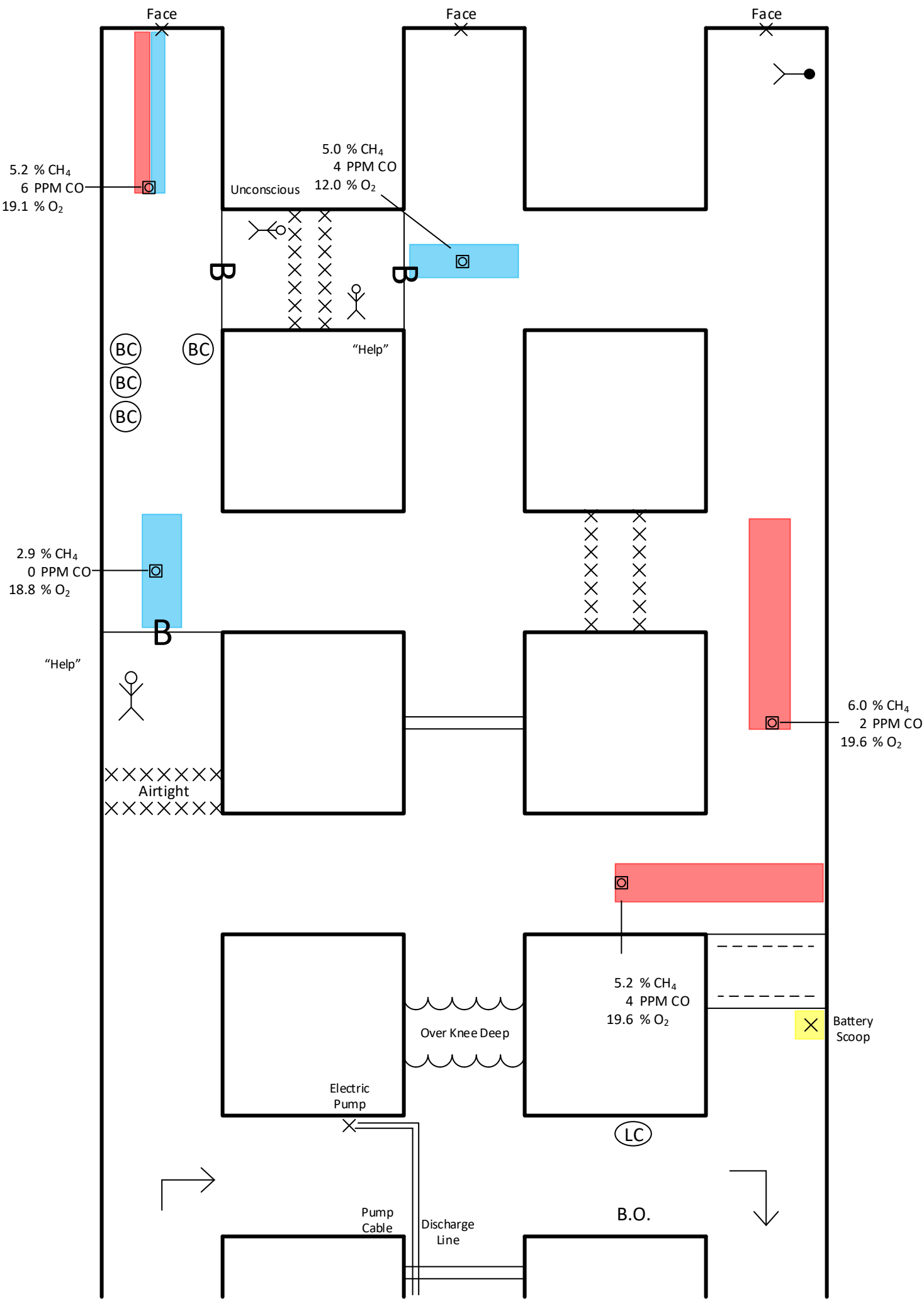
1. Initial opening checks of each entry. Water OKD found in 2 E. Unsafe roof found in 3 E and ignition source. Team must advance in 1 E.
2. Team **stop 1** - (50' apparatus check required) In 1 entry at XC 1. Airtight cave found inby intersection, ZZ required in intersection. Can tie across XC 1 to 2 E.
3. Team **stop 2** – in 2 entry at XC 1. inby side of water found, stopping found inby in 2 E, exp. Mix found in XC to right. Team must tie across XC 1 to 3 E.
Team **stop 3** – in 3 entry at XC 1. inby side of unsafe roof on outby intersection plane, ZZ roof test required in intersection. Exp mix found inby intersection in 3 E. Team must advance in 3 E.
- Team **Stop 4** - in 3 entry at XC 2. Caved found toward 2 E in XC 2.
Team must advance in 3 E to XC 3.
5. Team **stop 5** – in 3 entry at XC 3. Face of 3 E made. Body found outby face. Team must tie across XC 3 to 2 E.
6. Team **stop 6** – in 2 entry at XC 3. Face of 2 E made, Barricade with low O2 and response “help” in XC 3 towards 1 E. No materials to vent and breach barricade yet. Team must advance outby in 2 E.
7. Team **stop 7** – in 2 entry at XC 2. caved found in XC 2 towards 3 E, stopping found in 2 E outby intersection. Team must tie across XC 2 to 1 E.
8. Team **Stop 8** – in 1 entry at XC 2. Barricade with low O2 and response of “help” outby intersection. Several BC found inby. Not enough materials to vent and breach barricade off 2 E. BUT materials to pump and do Vent 1 (team must build in XC 2 between 1 & 2 E’s if Stop 9 not made) Team must advance in 1 E.
9. Team **Stop 9** – in 1 entry at XC 3. Barricade with no response found in XC towards 2 E. Exp. And Irr. mix found inby intersection. Face in 1 E made. Team can breach barricade in XC 3 from 1 E without venting (no contaminant present) but airlock required to enter (conditions not known). LUM found and can be removed to FAB with respiratory protection and on stretcher.
10. Pump. Water in 2 E must be pumped but no airlock required to be built.
See Vent 1- vent 1 removes the exp. mixtures from 3 E and XC 1.
Teams have enough materials to vent and breach barricade off 2 E.
See Vent 2 – vent 2 removes Low O2 in front of barricade off 2 E.
Airlock required prior to breaching barricade.
See Vent 3 – vent 3 removes low O2 in 1 E inby barricade. Airlock required to breach barricade.
Remaining Patients in each barricade don’t require respiratory protection and can both be walked to FAB.
End of Problem



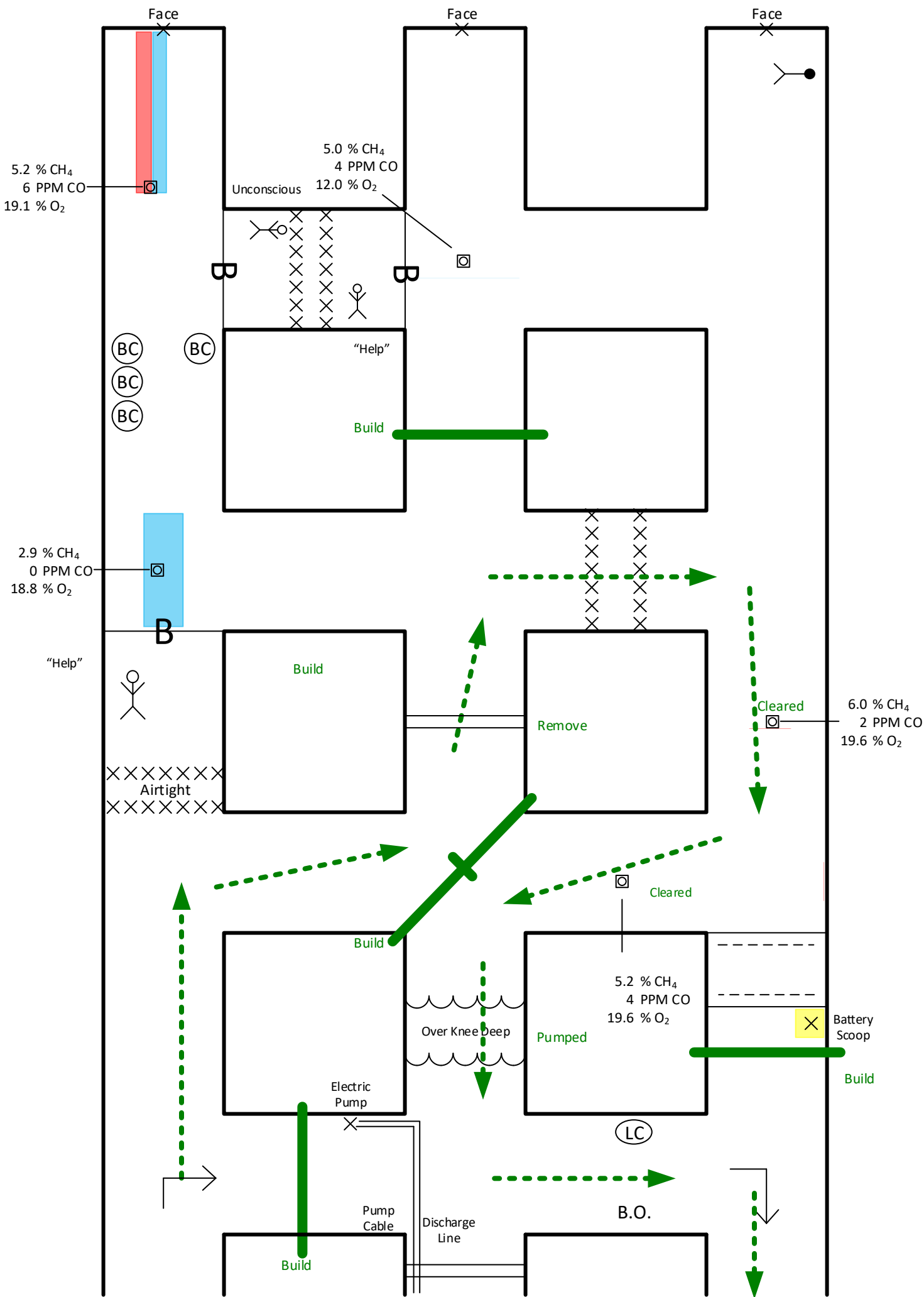
Gas Extents



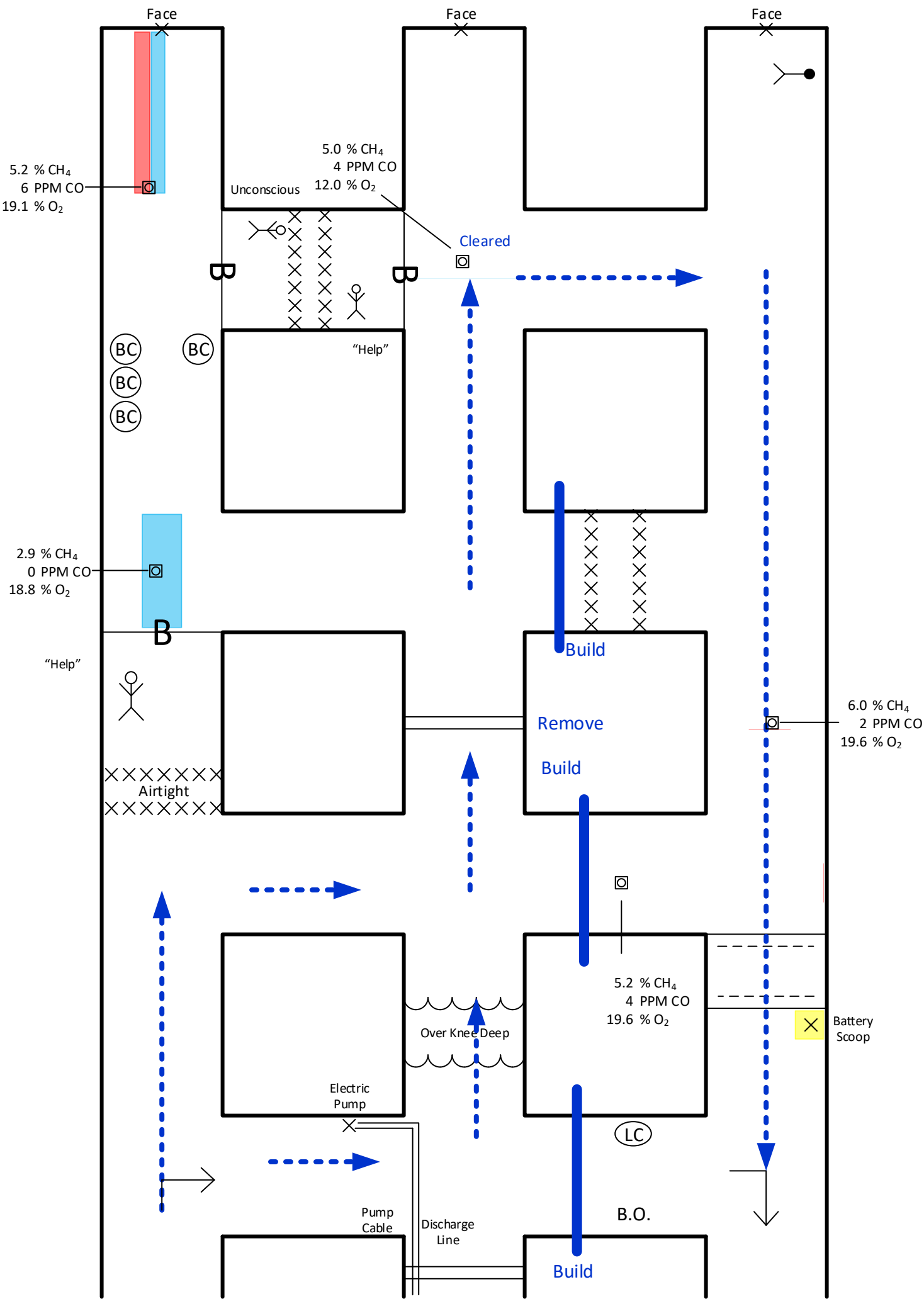
Judges vent map



VENT 1



VENT 2



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Final Vent
Team Name

Captain
Signature

Chief Judge
Name: Print

