



10th Annual Nevada Mine Rescue Contest
March 12 & 13, 2014
Winnemucca Events Center
Winnemucca, NV

On behalf of the MSHA Western District, the Nevada Mine Rescue Association, and the Winnemucca Convention and Visitors Authority, I welcome you to the 10th Annual Nevada Mine Rescue Contest.

There have been changes to the Contest Rules this year, so the contest is sure to be a little different. This is also a “National Contest Year.” Teams from across the country will travel to Kentucky to test their skills in August. The regional contests are a means for the teams to practice.

We hope that you enjoy the contest and thank you for coming to cheer the teams on!

Schedule of Events

Wednesday, March 12, 2014

6:00 am	<u>Lockup for mine rescue teams</u>	Winnemucca Events Complex Exhibit Hall
7:00 am	<u>First teams to be out on fields</u>	Winnemucca Event Center

Thursday, March 13, 2014

6:00 am	<u>Lockup for First Aid & Technician Team Contests</u> Winnemucca Events Complex Exhibit Hall	
7:00 am	<u>First Aid Contest begins</u>	Winnemucca Event Center
7:00 am	<u>Technician Team Contest begins</u>	Winnemucca Event Center
6:00 – 7:00 pm	<u>Social Hour</u>	
7:00 – 8:00 pm	<u>Banquet and Awards Presentation</u> Winnemucca Convention Center, West Hall	

Briefing Statement

Your team has arrived at the American Flag Mine, a small multiple level zinc/silver mine. This mine operates 24 hours a day, 7 days per week. Three underground crews work 8 hour shifts each day. Each crew consists of 1 shifter, 5 miners, 2 nippers, 1 mechanic and 2 equipment operators. The day shift crew was underground and 11 people had brassed in.

This morning at about 10 a.m., a loud boom was heard from the shop. A loader operator heard the boom and ran into the shop to find flames near the oil storage and smoke starting to fill the area. The loader operator tried to close the overhead fire door at XC-2/entry 2, but it wouldn't budge. He called and informed the dispatcher about the emergency and ran out of the mine. Stench was dumped and the mine rescue team was called out. Shortly thereafter heavy black smoke started coming out of the exhaust. The main fan was turned off from the surface.

At 10:15 a.m. the dispatcher received a call from the shifter informing him that he was with 2 others in refuge and that someone was hurt. The dispatcher heard what sounded like a scuffle and the Femco went dead. We haven't heard from anyone since then.

The Fresh Air Base is set up underground near the shop area. There are back-up teams on site, one is almost ready to go. If your team is ready we need you to explore the mine, extinguish any fires and bring any survivors to the surface. Bringing survivors out may require ventilating the mine. Good Luck!

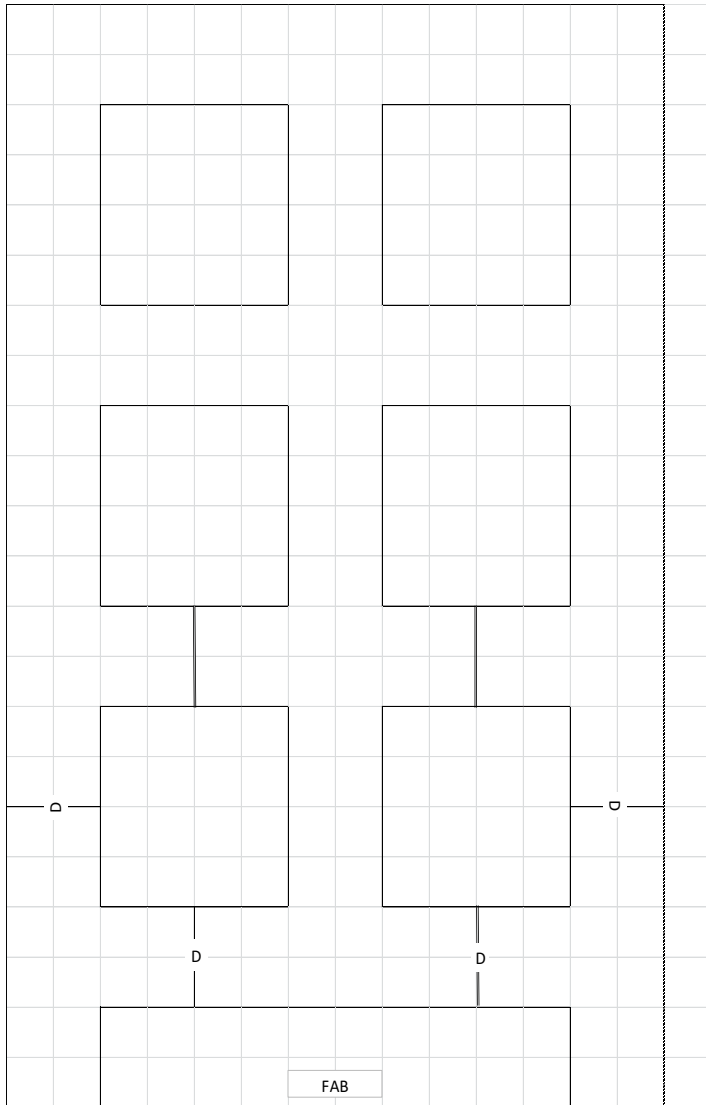
Mine Information

- American Flag Mine (02-00000)
- Classification of the mine – Category IV
- Frequency of explosive gas being found – Not applicable
- Accuracy of the mine map – A year old
- Possibility of the mine being cut into another mine - None
- Condition of the fan – Main fan was shut off, non-reversible, one small auxiliary fan brought out of the mine last night for repair.
- Have guards been posted – Yes, at fan controls & MCC
- Electric power cut off from the mine or affected parts of the mine – power is off
- Recovery work that has been accomplished - None
- Notification of the local, state, and federal agencies – Police are at the gate, MSHA is here (under a “K” Order) and the state is 15 minutes out, ambulances & FD are here.
- Reserve rescue teams – Are on site, one is gearing up to serve as back-up, others are on the way.

Mine Information II

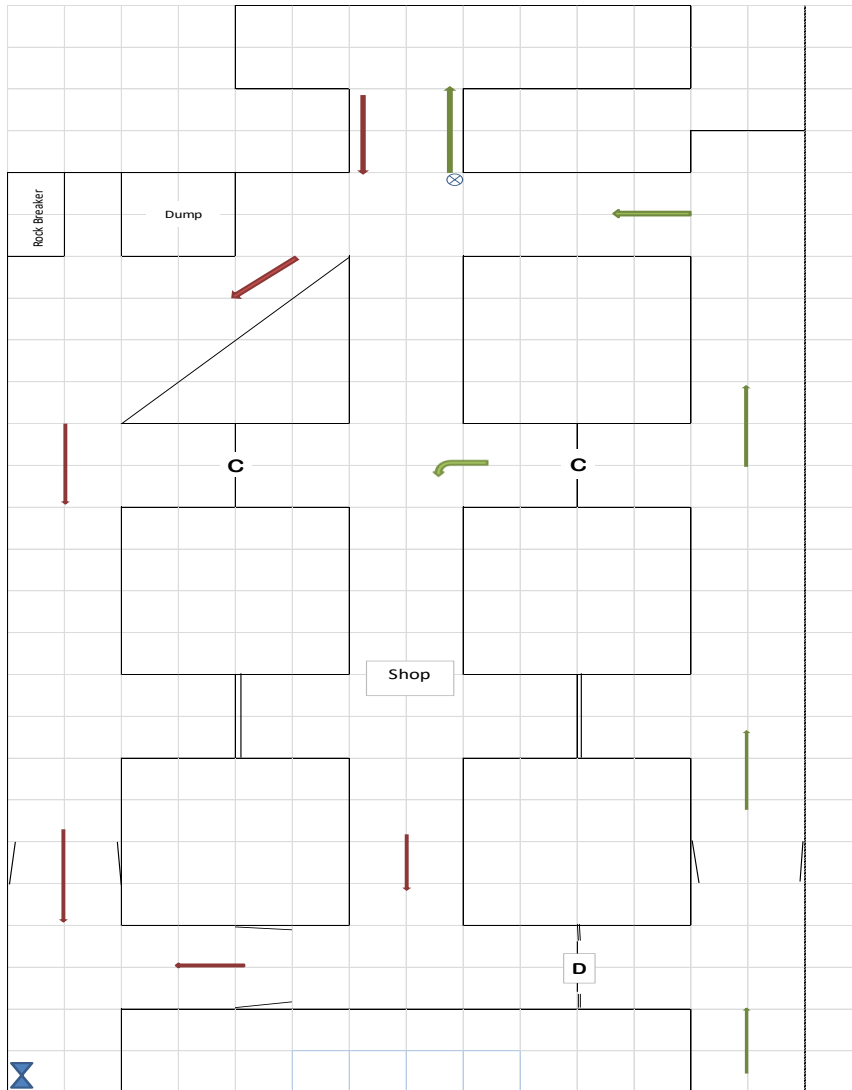
- Equipment, and materials that are available – Stopping materials and timber for cribbing/support are available.
- Explosives – Stored on the surface, shouldn't be any underground.
- Fuel or oil storage – Oil storage in the shop. They just delivered a pallet of oil to the shop. A fuel island is elsewhere in the mine, but tanks are empty (waiting on shipment) it is not affected.

Team/FAB/Alternate map

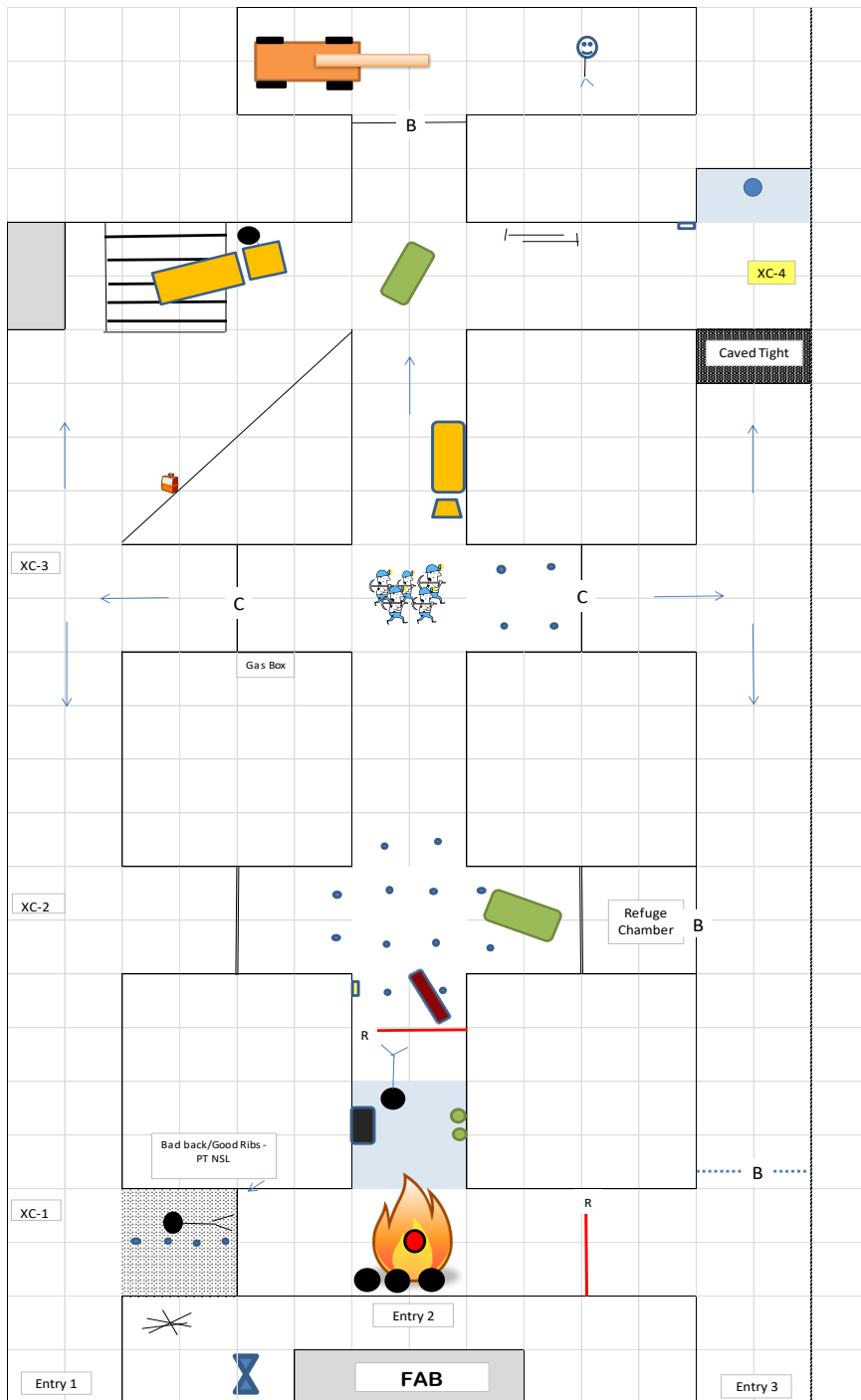


As you can see, there is going to be quite a bit of mapping that needs to be done. The map man will need to draw in the dump, split the left inby pillar, draw in the sump and the furthest inby entry and crosscut.

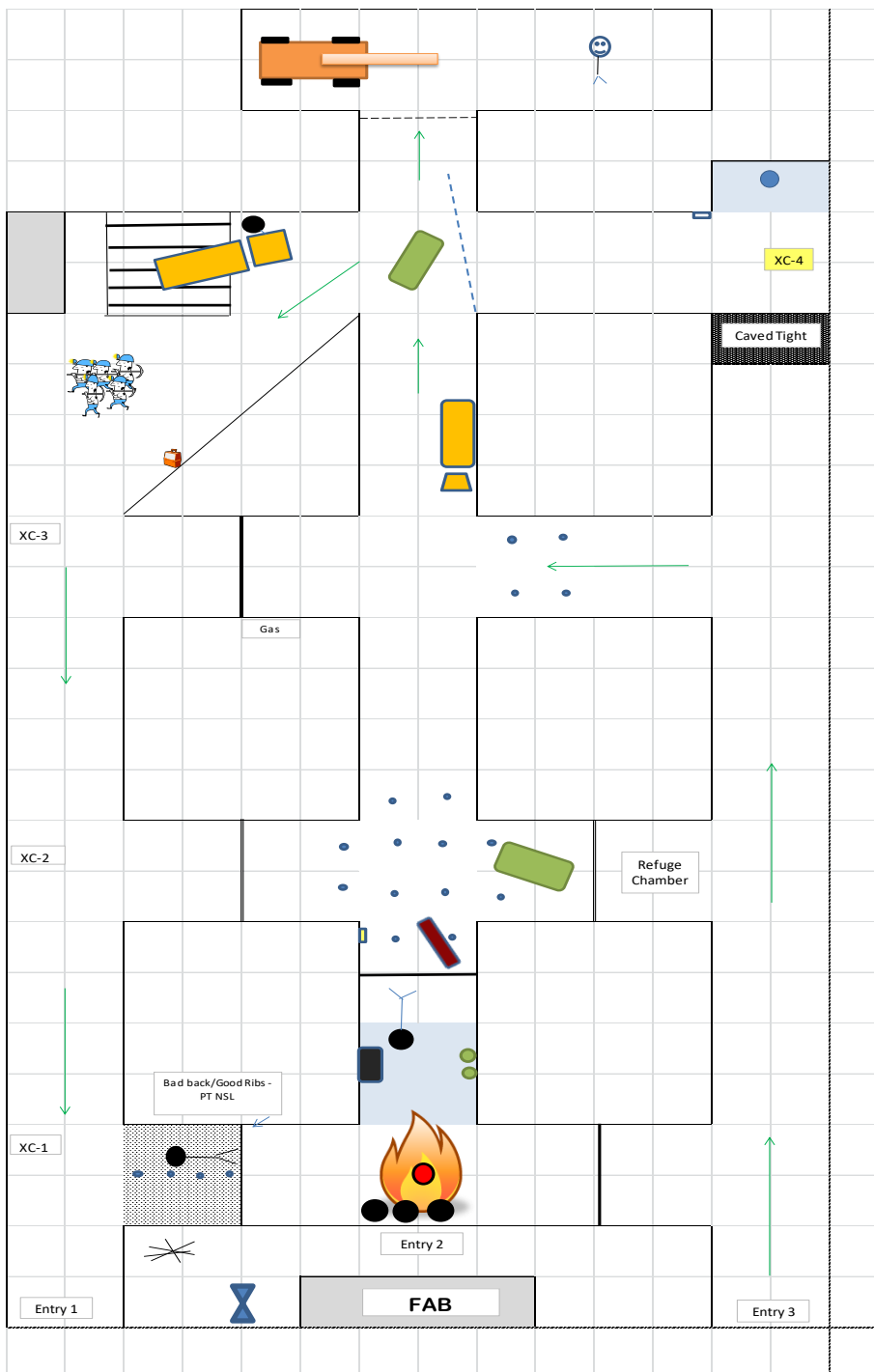
Normal ventilation schematic



Air is drawn up entry #3 and exhausted through entry #1 using a fan. To provide maximum air to the working areas inby, permanent stoppings have been erected in crosscut 1 and 2. The permanent stopping in crosscut #1 has a door that can be opened and closed, but is normally kept closed. Curtains are used in crosscut #3. Ventilation controls in crosscut #1 have been damaged or changed. The permanent stopping between entry 2 and 3 has been blown out and the doors are unusable. The doors between entry 1 & 2 have been converted to a temporary stopping (hot to the touch). Placards will be in place to show the changes.

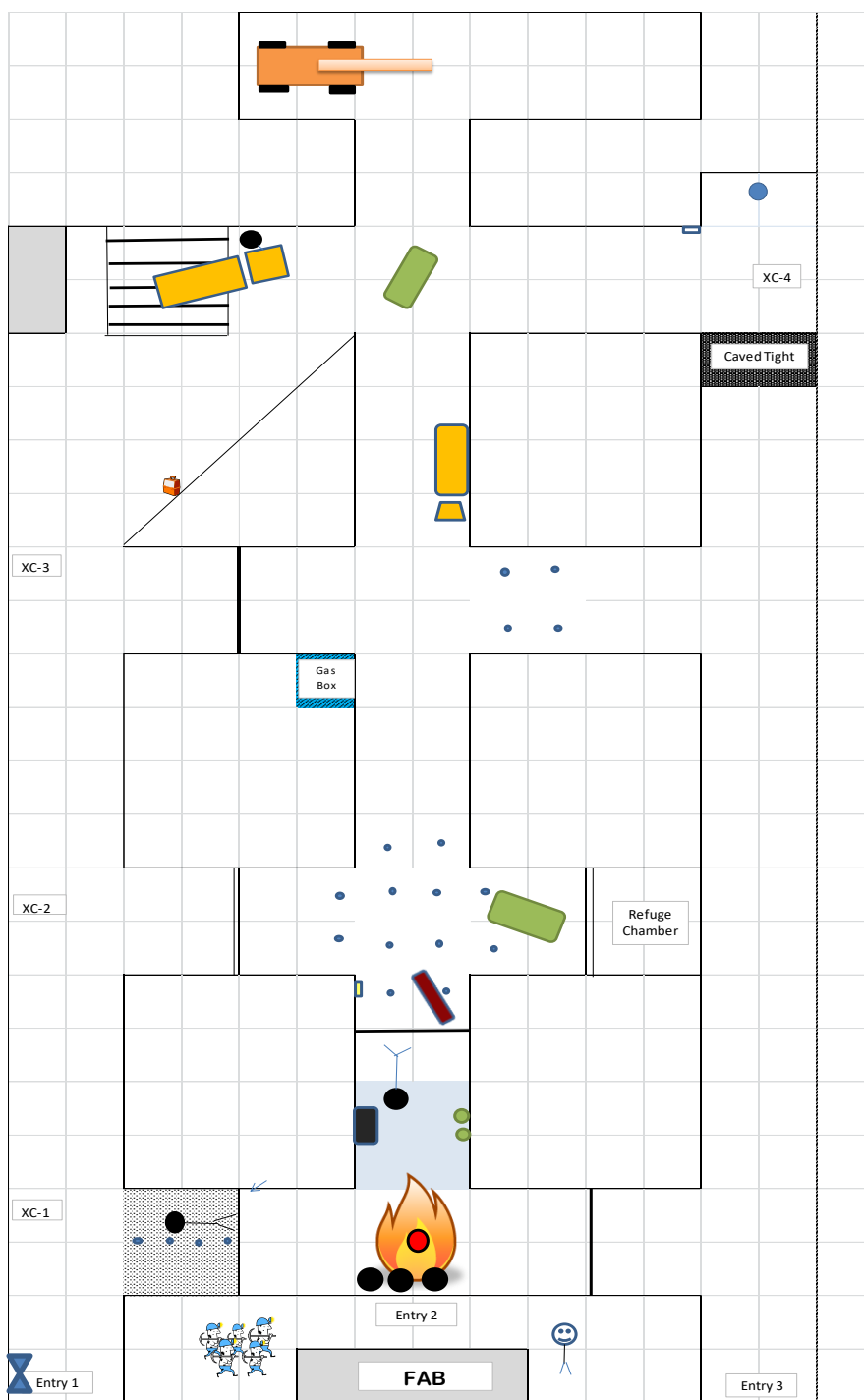


The team will have to complete exploring south of crosscut #3 before continuing on to crosscut #4. The team will need to explore all of crosscut #4. There the team will find Miner #7 laying near the front of a haul truck. Miner #7 is not showing any signs of life. Gas concentrations will not show any change. The team will check the temporary stopping in entry 2. When they knock they will find there is a miner behind the stopping. Since the CO is still high the team will need to ventilate the mine to enter and retrieve the trapped miner. Once the team has explored the mine, the team can call for and start making ventilation changes.



Ventilation changes to clear the mine of smoke and gas are fairly straight forward.

- The team will have to close the regulator in XC-1/entry 3
- remove the airlock in entry 3
- Open the check curtain in XC-3/entry 3
- Close the regulator in the stopping behind the fire in entry 2
- Convert the check curtain in XC-3/ entry 1
- Build a wing curtain from the northwest corner of third pillar inby the barricaded miner in entry 2
- Turn on the fan.



With the smoke & gas removed the team can enter the barricade and retrieve the miner. The miner inside will tell the team that there are solid ribs surrounding him, so the team won't need to airlock in. The team will enter into the drift, take gas readings and explore (don't forget the captain's D&I's). The miner inside is uninjured and thankful. The team can remove the miner from the mine. Since one miner is unaccounted for the team will need to check the sump area (if they haven't already done so). Once they have explored all areas the team can leave the mine and stop the clock.