Winnemucca 2019

DAY 1

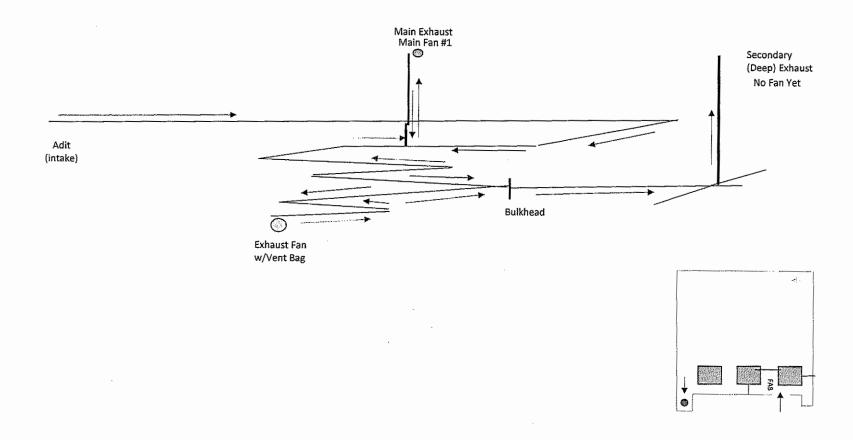


SPECTATOR PACKET

WELCOME TO THE 2019 CONTEST!

Mine Information

- · Name and ID: Rascally Rabbit Mine, MSHA ID number 11-01111
- Days/Hours/Shifts of Operation: 7 days per week, 24 hours per day. 3-8 hour shifts
- · Average Employment: 320, 245 underground, 50 in mill, 15 office.
- · Commodity: Iron Ore, Classified under 30 CFR as a Category IV mine.
- Mining Method: Room & Pillar. Average pillar width is 20' x 20' and travelways are 10 feet wide. We do not have under or overcasts in this mine. There are some areas where the drifts have squeezed and we've had to limit drifts affected like that
- · Explosives are used and stored in 30 CFR compliant storage areas.
- Ground control: In the older part of the mine timber is used (wooden caps, posts and Coeur D'Alene lagging). In newer sections of the mine we use friction stabilizers.
- Ventilation Ventilation in this mine is upcast through the ventilation shaft. The main fan is located near the shaft and can be reversed, but it will take
 some time to do it. The fan is currently off & the controls are lock-out & guarded. A smaller Booster fan is located in the lower part of the mine and
 exhausts (currently) through the main exhaust via hard ventilation tubing. Eventually the tubing will be rerouted through a bulkhead and out the
 secondary deep exhaust (it will be upcast too,, but we haven't found the right fan yet).
- Electrical Power power to the underground is off, locked-out and guarded. It can be re-energized anytime that you need it. There are power centers on each level of the mine. We haven't touched them.
- Ground Water This mine does have a small issue with water. Small submersible pumps are in place to pump it out.
- Mobile equipment We have some wheeled equipment underground in the development areas.



Basic Ventilation Diagram
 Not to scale, drawn by hand.

Mine Manager's Statement

Welcome to the Rascally Rabbit Mine

Thank you for responding so quickly. About 3 hours ago a fire was reported in the mine. It started in a timbered area while a repair crew was installing pipe hangers on a steel post. The fire spread so quickly that the crew wasn't able to put it out. We called for an evacuation, but when he took the headcount we found that four (4) miners were missing.

Our on-site mine rescue team arrived and we sent them underground to see what was going on and to search for survivors. They were able to isolate an area on the exhaust side of the mine and cleared the smoke and bad air. They had established positive ventilation to set up a fresh air base that you can work from. We believe that the missing miners are on this side of the mine.

We have the fan and power going underground shut off. We can restart either independently upon your request.

We have 2 mine rescue teams on the way in. Your back-up team is here. Our team is taking a break (they're tired), but can get back to work in an hour or so.

The authorities (MSHA and MSTATS) have been contacted and are on the way. Law enforcement is on site and are watching the main gate onto the site. EMS is geared up and will go underground to the FAB and receive survivors after you begin exploration.

Please find my miners!

Objectives: Find and retrieve any survivors. Seal or extinguish any fires. Successfully map the mine and report findings.

You will have 45 Minutes. You will not receive a 5 minute warning.

GOOD LUCK!!!

Additional Information

- Our first head count was wrong. At this time there are five (5) miners unaccounted for.
- We had a telephone call come in, we believe it came from the side of the mine where you've been assigned
 to explore. We couldn't tell who made the call or exactly which side of the mine it came from. There are
 two phones underground in this side of the mine. Unfortunately we haven't been able to call that extension
 back.
- Gas readings at the main exhaust initially showed 1.5% methane, but we haven't detected any in a while.

CO is 1250 ppm, O_2 is around 15%

Missing Miners:

Miles

Jim

Kevin

Charlie

John

Team Stops 1 through 5

Stop #1 – The team will advance inby up #1 entry to the stopping. Since they don't know the conditions past the stopping they will need to airlock in. The Captain must D&I the build and then open the inby stopping. The team will travel to the intersection of 1-B-XC. Gas tests must be taken across both directions of travel & the Captain may stretch toward #2 entry where he/she will encounter a stopping. The Captain should come back into the intersection and stretch toward C-XC, there the captain will find a closed door. The Captain must D&I the furthest point of advance (FPA). Most teams will try to advance toward #2 entry.

Stop #2 – Some teams may erect a stopping to advance in either direction. Since the air will not move through the first stopping they erected we will not discount them for not building a stopping. The Captain must D&I the build and open the temporary stopping. Once the inby stopping is down the team will encounter smoke. As the team travels past the stopping each member will need to count-off or signify going into smoke.

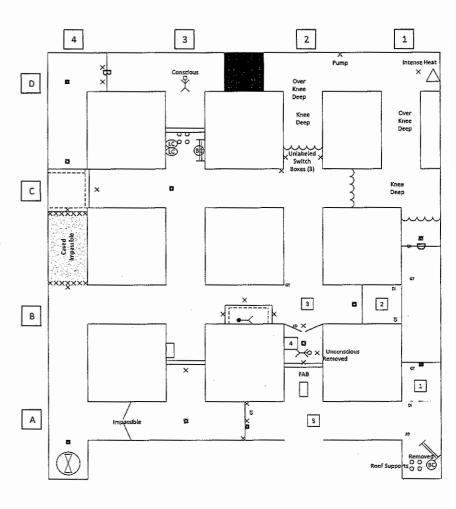
Stop #3 – The team reaches the #2-B-XC and performs gas tests across all directions of travel. To their left the Captain will encounter a temporary stopping not intact. The Captain should explore behind the stopping.

Stop #4 – Inside the damaged stopping the team will find a placard showing smoke, 600 ppm CO and 18.5% oxygen. Past the placard the team will encounter an unconscious miner wearing a W65 self rescuer. The team will perform a primary assessment and the #2 judge will flip the placard which will indicate that the miner has a pulse, is breathing, is unconscious and that the self-rescuer is used up. The team must provide breathing air to the victim. The #2 Judge must pay close attention to how they put the victim under air. A secondary assessment will be performed. The #2 Judge will tell the team that there are no other injuries to the miner. The team will package the victim for transportation to remove him from the mine.

The Captain must D&I the survivor and while the rest of the team is working on the survivor should check and D&I the face.

Stop #5 — The team will retreat out of the mine, ensuring that the stoppings are resealed and turn the survivor over to the authorities.

- Smoke, CO 1250 ppm, O2 15%, NO2 0 ppm, CH4 0
- Smoke, CO 600 ppm, O2 18,5%, NO2 0, CH4 0
- Clear Air



Team Stops 6 through 9

Stop #6 – Once the survivor is turned over to the authorities the team can continue to look for other miners. The team must construct an airlock in A-XC before going through the stopping. The Captain must D&I the build. The team will advance to #3-A-XC. As the team is entering into smoke they will need to signify that they are ok. Gas tests must be conducted at each direction of travel. The Captain can stretch to the right and will find a permanent stopping (D&I). Stretching out the Captain will find a door that is partially open, but impassible. He/she must D&I the door and furthest point of advance.

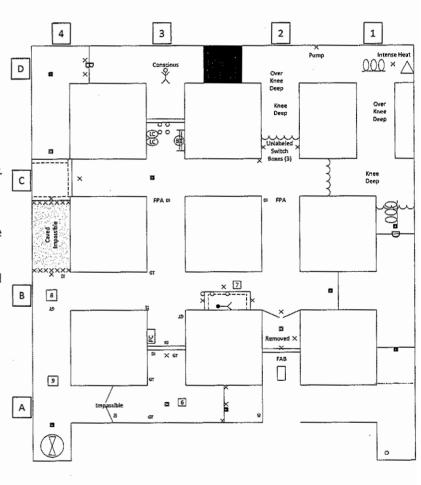
Stop #7 – The team will retreat back through the airlock they built and advance up #1. They will travel through B-XC, past #2 and discover an area of unsafe roof to the left. Inside of the unsafe roof they will see a body. The team will need to support the roof before they can get to the body to do an assessment. The diagrams on pages 39, 40 & 41 of the rule book should be consulted to determine if the team is doing it safely. Once the roof is controlled the team can perform a primary assessment. Once the assessment begins, the Judges can flip the placard over to let the team know that the miner is not showing any signs of life. The Captain must D&I the body.

Stop #8 – The team can continue in B-XC toward #3, performing gas tests in the direction of travel at each intersection. The Captain can stretch out in #3 going inby and before retreating should mark the FPA. The team can now continue to #4, performing gas tests in the direction of travel. When they enter into the intersection the captain will find an area caved & impassible to the right. The Captain must D&I the caved area.

Stop #9 – The team will travel down #4 toward A-XC. They will tie-in at the stuck air door. The team will also find the ventilation raise.

All accessible areas in A-XC and B-XC have been explored.

- Smoke, CO 1250 ppm, O2 15%, NO2 0 ppm, CH4 0
- Smoke, CO 600 ppm, O2 18.5%, NO2 0, CH4 0
- 🗷 Clear Air



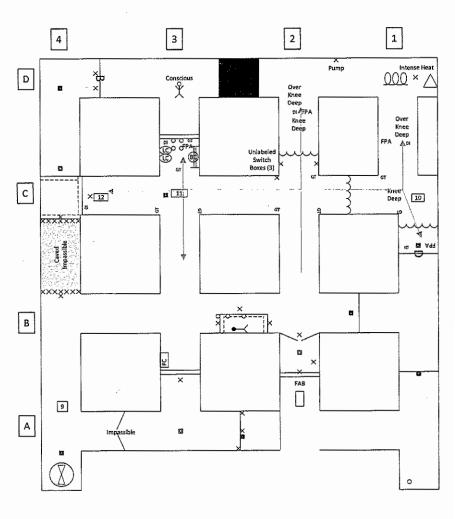
Team Stops 10 through 12

#10 – The team has two open entries that they can use to explore further inby (C-XC). Gas tests must be performed across all directions of travel at the intersections. Atmospheric conditions have not changed. To the north in #2 entry the captain will find 3 unlabeled switch boxes. All three of the boxes will be in the "off" position & further north (and east) the team will find water, knee deep. Further inby (toward D-XC) the captain will find a water over knee deep placard. This blocks travel in that direction. A DI must be made (FPA) before the captain leaves the area. In entry #1 the captain will check the back side of the door, DI the door and furthest point of travel north. Since travel north up #1 or #2 is blocked by water, the team should now travel west toward #3.

#11 – The team will turn west and advance to #3, C-XC. Gas tests should be made across all directions of travel in the intersection. The captain can stretch south toward B-XC to tie in. To the north, the team will find a cache of roof supports, stopping material and line curtain material. The permanent stopping is the furthest point of advance and must be DI. The team should collect supplies here and proceed westward.

#12 – The team travels west to #4 entry. At the intersection the team encounters a loose roof & rib placard. The unsafe condition encompasses the entire intersection and since all miners have not been found they must explore the area. Roof supports must be erected in the intersection in all directions that the team will travel. The team will have enough posts to accomplish this. (See the next slide)

- ☑ Smoke, CO 1250 ppm, OZ 15%, NO2 0 ppm, CH4 0
- Smoke, CO 600 ppm, O2 18.5%, NO2 0, CH4 0
- Z Clear Air



Team Stops 12 through 15

Stop #12 (continued) — The position of the roof supports is not exact. Roof supports will be put into place in accordance with the diagrams shown in the rule book on page (). Since the team cannot go through the caved impassible to the south, the captain will need to DI the FPA before going north in #4 entry. Gas tests will need to be performed at the intersections.

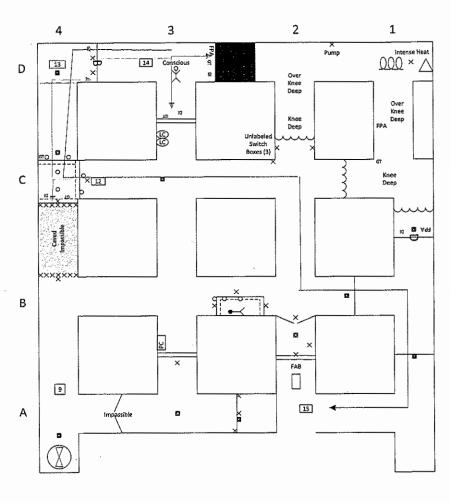
Stop #13 – Traveling inby the team will notice that the atmospheric conditions are improving & at the turn they will find a "clear air" placard. The team will find a barricade to the right. The placard will say "Barricade" and there is a note on the back side. This note will say "help, I'm in here", but there won't be any other information. Attempts to make verbal contact with the miner inside will NOT be answered. Since the team has potentially found a survivor they will need to enter through the barricade. The air conditions will allow this to take place, but since they don't know what conditions exist on the other side they must airlock. An airlock can be constructed inby #4 D-XC.

Stop #14 – Once they go through the barricade they will find a survivor. During the primary survey they will find that he is ambulatory and seems uninjured. Unfortunately, the team can't walk this miner out barefaced. He (or she) must be put under air, or if the team does not have enough equipment, the mine must be ventilated. If the team puts the miner under "air", they must follow the correct "donning procedure" for the apparatus they will use. While the team does this the captain can stretch out & DI the permanent stopping and the face.

Stop #15 – Once the miner is under air the team can take the miner out of the mine & turn him over to the FAB & waiting authorities.

Be on the watch and assess the appropriate discounts for not signifying going into smoke.

- E Smoke, CO 1250 ppm, O2 15%, NO2 0 ppm, CH4 0
- Smoke, CO 600 ppm, O2 18.5%, NO2 0, CH4 0
- M Clear Ale



Stops 16 - 19

Once the survivor is removed from the back of the mine the team can continue to explore. There are still miners missing, so they will need to explore are area where the water exists.

Stop #16 – The team will travel back into the mine to Entry #2, C-XC. To explore past the water they will need to pump. There are three unmarked switch boxes. All 3 shout be in the "off" position. Since the team doesn't know which one controls the pump, they will need to test each one. The two X shown in red will have no effect. The one X on the right rib in green will. As the team turns switches on and off, flip the placards. (DO NOT FLIP the PLACARDS without the team telling you to do so.) This is big, if a team fails to flip a placard to the off position and enters into the water they have encountered and endangerment scenario. Once the correct switch is on the water will immediately drop to knee deep & the team can continue to explore.

Stop #17 – The team will continue into DXC, perform the necessary gas tests & DI. As they get to the intersection they will find a placard indicating intense heat close to the fence. The team will need to seal or seal & regulate the intense heat to hinder the spread of the fire. The seal can be placed across the opening (at the outby corner (red line)), or two can be placed at the outby corners (blue lines)

Stop #18 — Once the intense heat is under control the team can clear the last unexplored area of the mine & tie-in #1 entry, C-XC.

Stop #19 – The team can come out of the mine to the FAB. All outby doors/stoppings keeping the air stationary must be closed to protect the FAB. The captain will brief the mine manager and stop the clock.

~Applause~

- 55 Smoke, CO 1250 ppm, O2 15%, NO2 0 ppm, CH4 0
- Smoke, CO 600 ppm, O2 18.5%, NO2 0, CH4 0
- **⊠** Clear Ai

