



2020 International Mines Rescue Contest  
September 13<sup>th</sup>-15<sup>th</sup> 2022  
Underground Mine Simulation Final Score Sheet

TEAM NAME:NEWMONT MUSSELWHITE MINE TEAM - CANADA

TEAM NUMBER: 3

DATE OF COMPETITION: 9/13/22

APPARATUS TESTING & REPORTING TASK: 9 (12 points available)

MINIMUM PERSONAL PROTECTIVE EQUIPMENT: 3 (3 points available)

CHECKING OF COMMUNICATION TASK: 1 (3 points available)

GAS TESTING & REPORTING TASK: 69 (99 points available)

HAZARDS TASK: 18 (18 points available)

ROOF TESTING TASK: 15 (21 points available)

VENTILATION & AIRLOCKING TASK: 21 (27 points available)

EXPLORATION PROCEDURES: 32 (33 points available)

MINE MAP/PLANS: 8 (12 points available)

MINUS ANY DEMERITS: 0

TOTAL MINE RESCUE SCORE: 179 (231 total points available)



International Mines Rescue Competition  
Since 1999







# IMRC USA 2022

Beaver, WV  
September 9-16, 2022

Team Name: NEWMONT MUSSELWHITE MINE TEAM - CANADA

Team number: 3

Team clock (working time) at completion of problem: 75:00

Timekeeper's watch time at completion of problem: 75:00

Was there a team clock failure or problem?  : YES  : NO

If answer is "yes" remarks:

Initial apparatus test completion time: 4:00

1<sup>st</sup> 20-minute test completion time: 18:50

2<sup>nd</sup> 20-minute test completion time: 35:08

3<sup>rd</sup> 20-minute test completion time: 52:36

4<sup>th</sup> 20-minute test completion time: 70:20

5<sup>th</sup> 20-minute test completion time:

6<sup>th</sup> 20-minute test completion time:

### Apparatus checks

- **Rule 3**
  - Team completes all 20-minute apparatus checks as required.
  - 3-Team met all requirements for the task
  - 3 Points earned

### Apparatus checks

- The team or groups conduct proper apparatus examinations.
- 3-Team met all requirements for the task
- 3 Points earned







Surface

- **Rule 1**
  - Team has on all required PPE.
  - 3-Team met all requirements for the task
  - 3 Points earned

Surface

- **Rule 5**
  - Team visually checks the communication/radios for safe operating condition & battery level before going underground.
  - 1-Team did not check all radios provided to them for safe operating conditions & battery level
  - 1 Points earned
- **Stretcher**
  - One of the groups takes the stretcher in by the Fresh Air Base and keeps it with them as the groups explore the mine.
  - 3-Team met all requirements for the task
  - 3 Points earned

Team stops and tasks

1. Mine opening-----(gas readings 0.0%Ch4, 500ppmCO, 20.0%O2, 0.00ppmNO2)
  - **Rule 7** Team checks gas concentrations at all openings to areas to be explored.
  - 0-Team skipped task,
  - 0 Points earned
2. Spad#103----- (gas readings 0.0%Ch4, 500ppmCO, 20.0%O2, 0.00ppmNO2)
  - **Rule 8** Team checks gas concentration at all intersections encountered.
  - 3-Team met all requirements for the task
  - 3 Points earned
3. Spad#102----- (gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2)
  - **Rule 8** Team checks gas concentration at all intersections encountered.
  - 3-Team met all requirements for the task
  - 3 Points earned





- **Rule 6** Team report IDLH atmosphere to the IC/BO or assistant 16.5%O2.  
3-team met all requirements for the task  
3 Points earned
- **Rule 2** Team dons' apparatuses if not already, first encounter of an IDLH atmosphere 16.5%O2.  
3-Team met all requirements for the task  
3 Points earned
- **Rule 4** Team conducts an apparatus check, first encounter with a respiratory contamination (IDLH) 16.5%O2.  
0-Team skipped task,  
0 Points earned
- 4. X-cut 101 to 102-----(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2)
  - **Rule 14** Team block/chock wheel of scoop prior to any team member passing scoop.  
3-Team met all requirements for the task  
3 Points earned
  - **Rule 9** Team checks gas concentration prior de-energizing scoop.  
3-Team met all requirements for the task  
3 Points earned
  - **Rule 15** Team de-energize scoop prior to any team member passing scoop.  
3-Team met all requirements for the task  
3 Points earned
- 5. Spad#101------(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2)
  - **Rule 8** Team checks gas concentration at all intersections encountered.  
3-Team met all requirements for the task  
3 Points earned





6. Spad#100-----(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
  - 3-Team met all requirements for the task
  - 3 Points earned
  - **Rule 26** The team will now explore the areas of the lower-level smoke free in 2, 2, and 2 groups.
  - 3-Team met all requirements for the task
  - 3 Points earned
  - **Rule 28** each group will now report to IC/BO their intentions to stop or advance.
  - 3-The team met all requirements for the task
  - 3 Points earned
  - **Rule 28** groups must stay within one crosscut of an adjacent group when exploring.
  - 3-Team met all requirements for the task
  - 3 Points earned
7. Spad#104-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
  - 3-Team met all requirements for the task
  - 3 Points earned
  - **Rule 14** Group block/chock wheel prior to any group member passing mini-trax.
  - 3-Team met all requirements for the task
  - 3 Points earned
8. Spad#105-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
  - 0-Team skipped gas check in intersection,
  - 0 Points earned





- **Rule 25** team must come together to fight the fire.

• 3-The team met all requirements for the task

• 3 Points earned

- **Rule 16** Team members cannot pass the location of the fire in entry encountered prior to extinguishing.

• 3-Team met all requirements for the task

• 3 Points earned

- **Rule 22** Team verbally indicates checking for loose roof/ground at the fire location prior to and after putting out, and each time returning through fire area.

• 0-Team skipped the required task,

• 0 Points earned

- **Rule 10** check gas concentration at fire prior to extinguishing and after fire is put out.

• 2-One or both required gas checks at the fire did not get reported by the team.

• 2 Points earned

- **Rule 27** after fire is extinguished the team must immediately return to groups of 2's for further explorations.

• 3-Team met all requirements for the task

• 3 Points earned

9. Spad#106-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)

- **Rule 8** Team checks gas concentration at all intersections encountered.

• 3-Team met all requirements for the task

• 3 Points earned

- **Rule 14** block/chock wheel prior to group passing mantrip.

• 3-Team met all requirements for the task

• 3 Points earned







10. Spad#107-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
- 3-Team met all requirements for the task
- 3  
Points earned
11. Spad#108-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
- 2-After completing the gas check the team did not report the air quality to the IC/BO,
- 2  
Points earned
12. Spad#109-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
- 3-Team met all requirements for the task
- 3  
Points earned
13. Spad#110-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
- 3-Team met all requirements for the task
- 3  
Points earned
- **Rule 24** team member must verbally indicate checking loose roof/ground at the location of caved/rock fall.
- 3-Team met all requirements for the task
- 3  
Points earned
14. Spad#111-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
- **Rule 8** Team checks gas concentration at all intersections encountered.
- 3-Team met all requirements for the task
- 3  
Points earned





- **Rule 24** team member must verbally indicate checking loose roof/ground at the location of caved/rock fall.

3-Team met all requirements for the task

3 Points earned

15. **Spad#112**-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)

- **Rule 8** Team checks gas concentration at all intersections encountered.

3-Team met all requirements for the task

3 Points earned

16. **Rescue chamber**--- (gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)

- **Rule 30** team must enter RC when reaching 111 & 112 intersections.

3-Team met all requirements for the task

3 Points earned

- **Rule 25** team must come together when entering the RC.

3-Team met all requirements for the task

3 Points earned

- **Rule 11** team member entering RC must check gas concentration inside airlock.

3-Team met all requirements for the task

3 Points earned

- **Rule 29** member entering RC must purge to clear the IDLH.

3-Team met all requirements for the task

3 Points earned





### Rescue chamber

- **Rule 12**  
1<sup>st</sup> gas check in airlock, gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2,  
2<sup>nd</sup> gas check in airlock after purging gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2,  
0.00ppmNO2,  
3<sup>rd</sup> gas test inside inner door (gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2,  
0.00ppmNO2)  
2-Team only done 2 of 3 gas checks inside the RC,  
2 Points earned
  - **Rule 31** the two persons found live in the RC must be properly protected from the IDLH atmosphere outside the RC. (Team must ventilate due to only having one CARE-vent).  
3-Team met all requirements for the task  
3 Points earned
  - **Rule 32** team must evacuate persons to the FAB that were found in the RC by utilizing shortest route to the surface through previous explored areas.  
3-Team met all requirements for the task  
3 Points earned
  - **Rule 25** the entire team must remain together when removing any persons from the mine.  
3-Team met all requirements for the task  
3 Points earned
17. Ventilating to clear IDLH atmospheres the teams has encountered on the lower level to properly remove, and rescue persons found in RC.
- **Rule 33** The team must build a temporary stopping on one side of the caved area located between 110 & 111 due to the caved area is an inaccessible area.  
3-Team met all requirements for task  
3 Points earned





- **Rule 23** prior to erecting a team built stopping a team member must verbally indicate checking for loose roof/ground.

3-Team met all requirements for the task

3 Points earned

- **Rule 36** to be consider airtight a temporary must have at least 8 of 9 clips across top clipped and 3 of 4 clips on each side clipped.

3-Team met all requirements for the task

3 Points earned

- **Rule 33** The team must ensure the upper level is not affected by a ventilation change by closing the door located at the bottom of the ramp leading to the upper level due to the upper level is consider as an unexplored area.

3-Team met all requirements for the task

3 Points earned

- **Rule 34** the stopping may be built, and the door may be closed by either a group of two or by the entire team but afterward prior to a vent change, the entire team must all be together prior to starting the fan.

3-Team met all requirements for the task

3 Points earned

#### Ventilating to clear IDLH atmospheres

- **Rule 35** prior to starting the fan the team must receive permission from the control group through a request from the IC/BO.

3-Team met all requirements for the task

3 Points earned

- **Rule 13** team must recheck gas concentrations after the ventilation change at their location (if in mine) and at all intersections traveled through immediately after the change occurred.

3-Team met all requirements for the task

3 Points earned







18. Advancing to upper level via ramp (gas readings bottom of ramp 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2) -- (gas readings top of ramp 0.0%Ch4, 1700ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)

- **Rule 11** when entering the ramp check gas concentrations on ramp leading up to upper level.

• 3-Team met all requirements for the task

• 3 Points earned

- **Rule 11** check gas concentrations at first appearance of smoke at top of ramp.

• 3-Team met all requirements for the task

• 3 Points earned

- **Rule 38** team must attach their lifeline in clear air prior to advancing.

• 3-Team met all requirements for task

• 3 Points earned

19. spad# 200-----(gas readings 0.0%Ch4, 1700ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)

- **Rule 8** Team checks gas concentration at all intersections encountered.

• 3-Team met all requirements for the task

• 3 Points earned

- **Rule 24** team member must verbally indicate checking loose roof/ground at the location of caved/rock fall and faces.

• 3-Team met all requirements for the task

• 3 Points earned

20. spad# 203---(gas readings 0.0%Ch4, 1900ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)

- **Rule 8** Team checks gas concentration at all intersections encountered.

• 3-Team met all requirements for the task

• 3 Points earned

- **Rule 24** team member must verbally indicate checking loose roof/ground at the location of caved/rock fall.

• 3-Team met all requirements for the task

• 3 Points earned





21. Spad#204--- (gas readings 0.0%Ch4, 1700ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)

- **Rule 8** Team checks gas concentration at all intersections encountered.

• 3-Team met all requirements for the task

• 3  
Points earned

- **Rule 11** check gas concentration at location of victim/casualties.

• 0-Team skipped gas check at victim/manikin,

• 0  
Points earned

- **Rule 11** check gas concentration at closed door/airtight structure.

• 0-Team skipped gas check at closed door,

• 0  
Points earned

- **Rule 32** team must evacuate person/manikin to the FAB that was found at this team stop by attempting to utilizing shortest route to the surface through previous explored areas but will find the route infeasible due to being blocked by a roof collapse.

• 2-Team did not attempt to retreat through the previous explored area first,

• 2  
Points earned

- **Rule 25** the entire team must remain together when removing any persons from the mine.

• 3-Team met all requirements for the task

• 3  
Points earned

22. Air locking to breach closed door

- **Rule 37** before breaching an airtight separation/closed door an airlock is required.

• 0-Team skipped the required task,

• 0  
Points earned

- **Rule 23** prior to erecting a team built stopping a team member must verbally indicate checking for loose roof/ground.

• 0-Team skipped the required task,

• 0  
Points earned





- **Rule 36** to be consider airtight a temporary must have at least 8 of 9 clips across top clipped and 3 of 4 clips on each side clipped.

0-Team skipped the required task,

0 Points earned

23. **Breaching door---**(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)

- **Rule 11** check gas concentration on back of side of door after breaching.

0-Team skipped gas check when breaching door,

0 Points earned

24. **Find next door closed.**

- **Rule 37** before breaching an airtight separation/closed door an airlock is required. The team may close outby door they just breached or if the airlock is still in place just outby the door then no additional airlock is needed by the team to breach this door.

3-Team met all requirements for the task

3 Points earned

- **Rule 11** check gas concentration at closed door/airtight structure.

0-Team skipped gas check at closed door,

0 Points earned

25. **Breaching door**

- **Rule 11** check gas concentration on back of side of door after breaching.

0-Team skipped gas check when breaching door,

0 Points earned

26. **Spad# 210-----**(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)

- **Rule 8** Team checks gas concentration at all intersections encountered.

0-Team skipped gas check in intersection,

0 Points earned

27. **Spad# 211-----**(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)

- **Rule 8** Team checks gas concentration at all intersections encountered.

0-Team skipped gas check in intersection,

0 Points earned





Mapping and note taking tasks.

Map rule 1:

The prepared map by the IC/BO must use proper map symbols that are shown in the 2020 IMRC rules.

- 1-team timed out before mapping all areas of the mine,

• 1 Points earned

Map rule 2:

The IC/BO prepared map must record accurately/verbatim all gas concentration readings and other information required to be reported by the team.

- 1-team timed out before mapping all areas of the mine,

• 1 Points earned

Map rule 3:

The IC/BO must record the time at the completion of each team apparatus test + the lowest gauge reading during each required apparatus test.

- 3-Team met all requirements for task

• 3 Points earned

Map rule 4:

There will be no visually comparing of maps during working of the problem by any team member located inside the designed command center/ FAB.

- 3-Team met all requirements for task

• 3 Points earned

Discounts for disturbing or destroying competition field components 0

- Total score from all tasks: 179

Final Score 179







BC

2022 IMRC FIRST AID  
SEPTEMBER 13<sup>TH</sup> THRU 15<sup>TH</sup> 2022  
TOTAL SCORESHEET

TEAM NAME: NEWMONT MUSSELWHITE MINE TEAM - CANADA

DATE OF COMPETITION: 09/14/2022

CASUALTY ONE MERITS: 89

CASUALTY ONE DEMERITS: 3

CASUALTY TWO MERITS: 99

CASUALTY TWO DEMERITS: 0

CASUALTY THREE MERITS: 104

CASUALTY THREE DEMERITS: 0

CASUALTY FOUR MERITS: 30

CASUALTY FOUR DEMERITS: 0

WORKING TIME: 22:51

TOTAL FIRST AID MERITS: 322

TOTAL CPR AED SCORE: 167 (Transfer total CPR AED score from scoresheet)

MINUS FIRST AID DEMERITS: 3

TOTAL FIRST AID SCORE: 486



**INTERNATIONAL  
2020 MINES RESCUE COMPETITION  
SEPTEMBER 13<sup>TH</sup> – 15<sup>TH</sup> 2022**

**FIRST AID COMPETITION**

**SCENARIO**

When the mine rescue team is at the Firefighting site they are told the following;

- An accident has happened at a surface site.
- The site is located at the Blue Falcon Mining Maintenance Shop.
- Their help is needed immediately.
- Emergency services have been notified.
- Emergency services estimate their response time will be forty-five minutes.
- A fully equipped first aid kit, AED and rescue basket is located at the Blue Falcon Mining Maintenance Shop.
- The team will arrive at the Maintenance Shop.
- The team will determine which one of the three patients that will require immediate transport.

When the team arrives at the Blue Falcon Mining Maintenance Shop they will;

- Gather their first aid kit and rescue basket.
- They will see smoke as they walk to the Maintenance Shop.

At the site the mine rescue team finds three injured workers and one obviously dead worker. It appears an explosion has taken place at an air compressor located in the shop.

In the confusion that follows:

- Worker #1 (Bob) he suffers a crushing injury to the LLE from a bulldozer blade.
- Worker #2 (Al) he has electrical burns to the R hand and L shoulder, develops V-fib from the shock, conscious for about three minutes then goes unconscious and requires CPR/AED.
- Worker #3 (Jane) Walking wounded. She has a nail in the eye/safety glasses, confused, trying to help the burn victim, wanting to pull the nail out to see better so she can help. she will also have a foreign body in their leg.
- Worker #4 (Tina) Obvious Deceased worker. Her head is amputated from her body with pool of bright red blood. It appears that a piece of metal became air born from the explosion of the air supply tank connected to the air compressor.

## Patients

1. Patient #1 (Bob) is lying on the ground with his left leg under a bulldozer blade. He is yelling in pain. Bright red blood is coming out from the leg.
2. Patient #2 (Al) was working at the breaker box when the air compressor exploded. The mine rescue team finds the patient lying beside the station box dazed, holding out his hands. He has electrical burns to the R hand and L shoulder, develops V-fib from the shock, conscious for about three minutes then goes unconscious and requires CPR/AED.
3. Patient #3 (Jane) (walking wounded) has a nail protruding from her safety glasses involving the eye. She also has a foreign body in their leg. She seems oblivious to either injury as she goes back and forth between the injured co-workers trying to aid. She has blood coming from both injuries.
4. Patient #4 (Tina) Obvious Deceased worker. Her head is amputated from her body with pool of bright red blood. It appears that pieces of metal became air borne from the explosion of the air supply tank connected to the air compressor

**INTERNATIONAL  
MINE RESCUE COMPETITION  
2020**

**FIRST AID COMPETITION**

**Judges Instructions**

**Merit Point Scoring:** 0 = not done  
+1 = poor attempt  
+2 = needs improvement  
+3 = excellent meets all requirements

1. Every line must be scored.
2. A score of 0, 1 or 2 **must be explained** by the judges.
3. When a score of 3 is applied, comments are encouraged
4. If a team runs out of time a score of 0 will apply to remaining actions

**Rough Handling**

1. Rough handling demerits will be deducted from the total score
2. Judges can deduct 1 to 5 points per incident of rough handling for each patient
4. Rough handling demerits will have a maximum of 10 points
3. Rough handling deductions must be explained by the judges

**Team Safety:**

**If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply**

**INTERNATIONAL  
MINE RESCUE COMPETITION  
2020**

**FIRST AID COMPETITION**

**TEAM:** NEWMONT MUSSELWHITE MINE TEAM - CANADA

Patient– #1 (Bob) is lying on the ground with his left leg under a bulldozer blade. He is yelling in pain. Bright red blood is coming out from the leg.

**Merits Points**

**SCENE SURVEY**

1. Assess Hazards 3  
Securing the environment. Assure the stability of the blade.

**Judge's Comments:**

2. **Use examination gloves**

Examination gloves must be used before contact with patient occurs 3

Gloves must be removed and disposed of properly 3

**Judge's Comments:**

**Page 1 Merits Sub Total** 9

**SCENARIO #1 CONTINUED**

3. The team members must identify themselves and ask the patient if they want help. 3

**Judge's Comments:**

**Assess Breathing**

1. The team must assess the airway. 3

To assess the airway the team should talk to the patient. The patient will be able to speak clearly indicating there is a good airway.

**Judge's Comments:**

**Assess Circulation**

1. The team must assess circulation

To assess circulation teams must check;

Pulse 3

Skin Condition 3

Skin (Cool, Clammy, Dry) 3

**Judge's Comments:**

Page 2 Merits Subtotal 15

**SCENARIO #1 CONTINUED**

**Rapid Body Survey**

**Teams must check;**

**1. The head and neck** 3

**Judge's Comments:**

**2. The chest** 3

**Judge's Comments:**

**3. The abdomen** 3

**Judge's Comments:**

**4. The pelvis and buttocks** 3

**Judge's Comments:**

**5. The legs** 2

**Judge's Comments:**

Team failed to check feet; left shoes on patient.

**Page 3 Merits Subtotal** 14

**SCENARIO #1 CONTINUED**

**6. The shoulders and arms.** **3**

**Judge's Comments:**

**Secondary Assessment**

**The team must obtain a complete history of the patient by using SAMPLE.**

**1. Signs and Symptoms** **3**

What the patient can tell you. What the rescuer can see.

**Judge's Comments:**

**2. Allergies** **3**

Is the patient allergic to any medications or anything else?

**Judge's Comments:**

**3. Medication** **3**

Is the patient taking any medications?

**Judge's Comments:**

**4. Pertinent Medical History** **3**

Does the patient have any medical history the teams should know about?

**Judge's Comments:**



**SCENARIO #1 CONTINUED**

**5. Last Oral Intake** 3  
What and when did the patient last eat?

**Judge's Comments:**

**6. Events leading to the Injury/Illness** 3  
What were the events that led to the incident?

**Judge's Comments:**

**7. To treat for shock teams must;**

Reassure patient 3

Keep patient warm 3

Keep patient at rest 3

**Judge's Comments:**

**Treatment of Injuries**

**1. Apply tourniquet to leg** 2  
Teams must apply tourniquet appropriately and label.

**Judge's Comments:**

Team failed to mark time / date for the tourniquet on patients forehead.

**SCENARIO #1 CONTINUED**

**2. Apply dressing to leg** 3  
Apply dressing to crushing injury of leg.

**Judge's Comments:**

**3. Appropriately package the patient for transport.** 1  
Load and secure the patient in the rescue basket.

**Judge's Comments:**

No splinting on fracture leg; No C-collar on the neck.

**4. Reassure until emergency services arrive** 3

**Judge's Comments:**

**6. Monitor until emergency services arrive** 3

**Judge's Comments:**

**7. Fill out casualty care report with the following information**

Date 0

Time 3

Team number (identity) 0

Location 0

Patient's Name 3

Vital Signs 3

**Page 6 Merits Subtotal** 19

**SCENARIO #1 CONTINUED**

Treatment 0

Injury Location on Body Outline 0

**Judge's Comments:**

Team failed to record info on triage card

**8. Rough Handling Deductions** Minus 3

**Judge's Comments:**

Team did a 2-man log roll causing a lot of movement of the head.

Page 7 **Scenario #1** Total Merits 89 less Total Demerits 3 Total Score 86

**Judge's Signature:** Curtis Hardison and James Hodges

**INTERNATIONAL  
MINE RESCUE COMPETITION  
2020**

**FIRST AID COMPETITION**

**TEAM:** NEWMONT MUSSELWHITE MINE TEAM - CANADA

**Scenario - Patient #2 (A1)** This patient was working at the breaker box when the air compressor exploded. The mine rescue team finds the patient lying beside the breaker box dazed, holding out his hands. He has electrical burns to the R hand and L shoulder. After three minutes (or the team completes all treatment, they are going to perform) the patient becomes unconscious and unresponsive, CPR is required. Will be required to do two sets of CPR and utilize the AED.

**Merits Points**

**SCENE SURVEY**

**1. Assess Hazards**

**3**

If the team looks for live wires, debris around area they will have demonstrated assessing and correcting hazards

**Judge's Comments:**

**2. Use examination gloves**

Examination gloves must be used before contact with patient occurs

**3**

Gloves must be removed and disposed of properly

**3**

**Judge's Comments:**

**Page 1 Merits Subtotal** 9

**SCENARIO #2 CONTINUED**

**3. Rescue**

0

The victim will be lying on the ground moaning. The team will avoid wires until assurance they are not live. The patient will not speak will only moan for the first three minutes.

**Judge's Comments:**

Did not score

**4. Identify Themselves as Emergency Responders**

3

The team members should identify themselves and ask the patient if he wants help.

**Judge's Comments:**

**1. Assess Breathing**

**The Level of Consciousness of Patient #2 changes 3 minutes after the scenario begins (or the team completes their treatment). Patient's Level of Consciousness changes from non-responsive to unconscious**

**To reassess breathing teams must:**

Look for the rise and fall of the chest

3

Feel for air movement

3

Listen for air movement

3

**Judge's Comments:**

**SCENARIO #2 CONTINUED**

**Assess Circulation**

**2. The team must assess circulation**

Pulse 3

Skin Condition 3

Skin (Cool, Clammy, Dry, Moist) 3

**Judge's Comments:**

**3. When the patient becomes unconscious teams must place patient in the supine position. 3**

Judge's Comments:

**4. Begin CPR 3**

Teams must run two sets of CPR and utilize the use of an AED.

**Judge's Comments:**

**Page 3 Merits Subtotal 15**

**SCENARIO #2 CONTINUED**

**Triage**  
**Rapid Body Survey**

**Teams must check;**

**1. The head and neck** **3**

**Judge's Comments:**

**2. The chest** **3**

**Judge's Comments:**

---

**3. The abdomen** **3**

**Judge's Comments:**

**4. The pelvis and buttocks** **3**

**Judge's Comments:**

**5. The legs** **3**

**Judge's Comments:**

**6. The shoulders and arms** **3**

**Judge's Comments:**

## SCENARIO #2 CONTINUED

### Secondary Assessment

The team must obtain a complete history of the patient by using SAMPLE.

#### 1. Signs and Symptoms

3

What the patient can tell you. What the rescuer can see.

**Judge's Comments:**

#### 2. Allergies

3

Is the patient allergic to any medications or anything else?

**Judge's Comments:**

#### 3. Medication

3

Is the patient taking any medications?

**Judge's Comments:**

#### 4. Pertinent Medical History

3

Does the patient have any medical history the teams should know about?

**Judge's Comments:**

#### 5. Last Oral Intake

3

What and when did the patient last eat?

**Judge's Comments:**



**SCENARIO #2 CONTINUED**

**6. Events leading to the Injury/Illness** **3**  
What were the events that led to the incident?

**Judge's Comments:**

**7. To treat for shock teams must;**

Reassure patient **3**

Keep patient warm **3**

Keep patient at rest **3**

**Judge's Comments:**

**8. Teams must transport patient #2 to the evacuation area first** **0**

**Judge's Comments:**

Did not score

**Page 6 Merits Subtotal**     12

**SCENARIO #2 CONTINUED**

**Patient Care Report**

**1. Teams to fill out casualty care report with the following information**

Date	3
Time	3
Team number (identity)	0
Location	3
Patient's Name	0
Vital Signs	3
Treatment	3
Injury Location on Body Outline	3

**Judge's Comments:**

No team number or patients name on card.

**2. Rough Handling Deductions**

**Minus**

**Judge's Comments:**

**Page 7 Scenario #2** Total Merits 99 less Total Demerits 0 Total Score 99

**Judge's Signature:** \_\_\_\_\_

**INTERNATIONAL  
MINE RESCUE COMPETITION  
2020**

**FIRST AID COMPETITION**

**TEAM:** NEWMONT MUSSELWHITE MINE TEAM - CANADA

**Scenario - #3** Patient #3 (Jane) This patient has a nail protruding from her safety glasses involving her eye. She also has a foreign body in her leg. She appears oblivious to either injury as she goes back and forth between injured co-workers trying to aid them. She has blood running from both injuries.

**SCENE SURVEY**

**1. Assess Hazards**

**3**

Asses for live wires, standing water, loose rubble.

**Judge's Comments:**

**2. Use examination gloves**

Examination gloves must be used before contact with patient occurs

**3**

Gloves must be removed and disposed properly

**3**

**Judge's Comments:**

Page 1 Merits Subtotal 9

**SCENARIO #3 CONTINUED**

**3. Identify Themselves as Emergency Responders** **3**

The team members should identify themselves and ask the patient if he wants help.

**Judge's Comments:**

**1. The team must assess the mental status of the patient.**

Ask about the incident 3

Ask if patient aware of day, time 3

**Judge's Comments:**

**2. Stabilization of foreign bodies.**

Applies dressing that stabilizes both foreign bodies 3

Controls the bleeding. 5

**Judge's Comments:**

**SCENARIO #3 CONTINUED**

**Assess Circulation**

**1. The team must assess circulation**

To assess circulation teams must check;

Pulse	3
Skin Condition	3
Skin (Cool, Clammy, Dry)	3

**Judge's Comments:**

**Rapid Body Survey**

**Teams must check;**

1. The head and neck	3
----------------------	---

**Judge's Comments:**

2. The chest	3
--------------	---

**Judge's Comments:**

3. The abdomen	3
----------------	---

**Judge's Comments:**

**SCENARIO #3 CONTINUED**

**4. The pelvis and buttocks** **3**  
**Judge's Comments:**

**5. The legs** **3**  
**Judge's Comments:**

**6. The shoulders and arms** **3**  
**Judge's Comments:**

**Secondary Assessment**

**The team must obtain a complete history of the patient by using SAMPLE.**

**1. Signs and Symptoms** **0**  
What the patient can tell you. What the rescuer can see.

**Judge's Comments:**  
Didn't do a SAMPLE history

**2. Allergies** **0**  
Is the patient allergic to any medications or anything else?

**Judge's Comments:**  
Didn't do a SAMPLE history

**Page 4 Merits Subtotal**     **9**

**SCENARIO #3 CONTINUED**

**3. Medication** 0  
Is the patient taking any medications?

**Judge's Comments:**  
Didn't do a SAMPLE history

---

**4. Pertinent Medical History** 0  
Does the patient have any medical history the teams should know about?

**Judge's Comments:**  
Didn't do a SAMPLE history

**5. Last Oral Intake** 0  
What and when did the patient last eat?

**Judge's Comments:**  
Didn't do a SAMPLE history

**6. Events leading to the Injury/Illness** 0  
What were the events that led to the incident?

**Judge's Comments:**  
Didn't do a SAMPLE history

**7. To treat for shock teams must;**

Reassure patient 3

Keep patient warm 3

Keep patient at rest 3

**Judge's Comments:**

## SCENARIO #3 CONTINUED

### Treatment of Injuries

#### 1. Treat both foreign body areas

If team tries to remove foreign body rough handling will apply

Fully expose injury without removing the foreign body	3
Maintain areas for position of comfort	3
Apply dressing(s)	3
Pad above and below wound	3
Apply a bandage	3
Apply bandage to support the foreign bodies	3
Cover both eyes	3

### Patient Care Report

1. Teams to fill out casualty care report with the following information

Date	3
Time	3
Team number (identity)	0
Location	3
Patient's Name	3
Vital Signs	3
Treatment	3
Injury Location on Body Outline	3

### Judge's Comments:

Did not ID team.



**SCENARIO #3 CONTINUED**

**2. Rough Handling Deductions**

**Minus**

**Judge's Comments:**

Page 7 Scenario #3 Total Merits 104 less Total Demerits 0 Total Score 104

**Judge's Signature:** Adam Sipes and Brandon Neal

**INTERNATIONAL  
MINE RESCUE COMPETITION  
2020**

**FIRST AID COMPETITION**

**TEAM:** NEWMONT MUSSELWHITE MINE TEAM - CANADA

**Scenario - #4** Patient #4 (Tina) Obvious Deceased worker. Her head is amputated from her body with pool of bright red blood. It appears that pieces of metal became air borne from the explosion of the air supply tank connected to the air compressor.

**SCENE SURVEY**

**1. Assess Hazards**

3

Securing the environment. Assure the stability of the blade.

**Judge's Comments:**

**2. Use examination gloves**

Examination gloves must be used before contact with patient occurs

3

Gloves must be removed and disposed of properly

3

**Judge's Comments:**

Page 1 Merits Sub Total 9

## SCENARIO #4 CONTINUED

### Assess Breathing

1. The team must assess the airway. 3

To assess the airway the team should talk to the patient. Obviously deceased amputated head.

**Judge's Comments:**

### Assess Circulation

1. The team must assess circulation

To assess circulation teams must check;

Pulse 3

**Judge's Comments:**

### **Patient Care Report**

1. Teams to fill out casualty care report with the following information

Date 3

Time 3

Team number (identity) 0

Location 0

Patient's Name 3

Vital Signs 3

Treatment 3

Injury Location on Body Outline 0

**Judge's Comments:**

Did not note Team number, location or injury location on card.

**Page 2 Merits**  
Sub Total 21

**SCENARIO #4 CONTINUED**

**Judge's Signature:** Adam Sipes and Brandon Neal

**Page 2 Scenario #4** Total Merits 30 less Total Demerits 0 Total Score 30



**INTERNATIONAL  
 MINES RESCUE COMPETITION  
 2020  
 FIRST AID COMPETITION  
 CPR AED**

**Judges Instructions**

**TEAM:**

Scoring: 0 = not done  
 1 = poor attempt  
 2 = needs improvement  
 3 = excellent meets all requirements

NEWMONT MUSSELWHITE MINE TEAM - CANADA

1. Every line must be scored.
2. A score of 0, 1 or 2 **must be explained** by the judges or the Chief Judge will remove the demerit.
3. When a score of 3 is applied, comments are encouraged
4. If a team runs out of time a score of 0 will apply to remaining actions

**Rough Handling**

1. Rough handling demerits will be deducted from the total score
2. Judges can deduct 1 to 5 points per each patient
4. Rough handling demerits will have a maximum of 10 points
3. Rough handling deductions must be explained by the judges

**Scenario**

The team will transport the patient with the highest priority from the accident scene to the receiving area (sea containers). Upon arrival at the receiving area the patient will be told the patient is vital signs absent.

The team will be required to begin CPR, provide ventilations with a pocket mask and use an AED. A CPR mannequin in a stretcher will be located in the receiving area. When five team members have completed CPR and ventilations the competition will be completed.

CPR/AED Total Merits 172 less Total Demerits 5 Total Score 167







**INTERNATIONAL  
 MINE RESCUE COMPETITION  
 2020  
FIRST AID COMPETITION  
CPR AED**

**TEAM:** NEWMONT MUSSELWHITE MINE TEAM - CANADA

**Team Approach**

1. Captain calls in and provides an update

Team must update control centre 3

**Judge's Comments:**

**2. Initial Response**

**A team member**

Assesses patient 3

Prepares to start CPR 3

**A team member**

Sets up personal pocket mask 3

**A team member**

Gets the AED 3

Sets up the AED 3

**Judge's Comments** \_\_\_\_\_

Page 1 Merits Subtotal 18









**3. Use examination gloves**

Examination gloves must be used before contact with patient occurs	3
Airway check	3
Breathing check	3
Circulation check	3

**Judge's Comments:**

**4. Rescuer #1 to start CPR Immediately (without delay)** 5

Proper hand placement, place the heel of one hand on the middle of the person's chest.	3
Place the other hand on top.	3
Do 30 compressions. (Compression depth 5cm (2 inches)	3
Allow the chest to recoil after each compression.	3
Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120	3

**Judge's Comments:**

**5. Rescue breather #1 with a Resuscitation Mask (pocket mask)**

Place the mask so that it covers the person's mouth and nose.	3
Position the lower rim of the mask between the person's lower lip and chin.	3
The opposite end of the mask should cover the nose	3

Page 2 Merits Subtotal 41







When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place.	3
Maintain an open airway using head tilt chin lift.	3
Give two breaths	3
Watch to see if chest is rising and falling.	3
Repeat 2 breaths every thirty compressions	3

**Judge's Comments:**

**6. AED arrives**

Open and turn on the AED	3
Remove any clothing or objects (including Jewelry) from the person that may come in contact with the pads.	3
Remove any medical patches, including nitroglycerin, nicotine, or hormone.	3
Ensure that the chest is dry and free of hair so the pads can stick.	3
Properly place the AED Pads (follow the diagrams on the pads)	3
Pads must be at least 2.5cm (1") between pads when placed on the chest.	3
Follow the AED's automated prompts	3

Judge's Comments: \_\_\_\_\_

Page 3 Merits Subtotal 36







**When the AED prompts you to give a shock the team should:**

- |  |   |
|--|---|
| Stand clear  | 3 |
| Say "I'm clear, you're clear, everybody's clear."  | 3 |
| Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. | 3 |

Judges' Comments:

**7. Two-Rescuer CPR**

Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR. 3

Feel for carotid pulse 3

No signs of circulation continue CPR 3

Judge's Comments:

**CPR Rescuer #2**

Proper hand placement, place the heel of one hand on the middle of the person's chest. 3

Place the other hand on top. 3

Do 30 compressions. (Compression depth 5cm (2 inches) 1

Page 4 Merits Subtotal 25







Allow the chest to recoil after each compression.	3
Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120	1

**Judge's Comments:**

72% on depth and 31% on rate; 2nd rescuer was not deep enough on compressions.

**Rescue Breather #2:**

Set up personal pocket mask	3
Place the mask so that it covers the person's mouth and nose.	3
Position the lower rim of the mask between the person's lower lip and chin.	3
The opposite end of the mask should cover the nose	3
When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place.	3
Maintain an open airway using head tilt chin lift.	3
Give two breaths	3
Watch to see if chest is rising and falling.	3
Repeat 2 breaths every thirty compressions	3

**Judge's Comments:**

Page 5 Merits Subtotal 31









Follow the AED's automated prompts 3

**When the AED prompts you to give a shock the team should:**

Stand clear 3

Say "I'm clear, you're clear, everybody's clear." 3

Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. 3

Judge's Comments:

**8. Two-Rescuer CPR**

Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR. 3

Feel for carotid pulse 3

No signs of circulation continue CPR 3

Judge's Comments:

**CPR Rescuer #3**

Proper hand placement, place the heel of one hand on the middle of the person's chest. 0

Place the other hand on top. 0

Do 30 compressions. (Compression depth 5cm (2 inches)) 0

Page 6 Merits Subtotal 21







Allow the chest to recoil after each compression. 0

Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120 0

**Judge's Comments:**

**Rescue Breather #3**

Set up personal pocket mask 0

Place the mask so that it covers the person's mouth and nose. 0

Position the lower rim of the mask between the person's lower lip and chin. 0  
 The opposite end of the mask should cover the nose 0

When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place. 0

Maintain an open airway using head tilt chin lift. 0

Give two breaths 0

Watch to see if chest is rising and falling. 0

Repeat 2 breaths every thirty compressions 0

**Judge's Comments:**

Page 7 Merits Subtotal 0







Follow the AED's automated prompts 0

**When the AED prompts you to give a shock the team should:**

Stand clear 0

Say "I'm clear, you're clear, everybody's clear." 0

Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. 0

Judge's Comments:

**9. Two-Rescuer CPR**

Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR. 0

Feel for carotid pulse 0

No signs of circulation continue CPR 0

Judge's Comments:

**CPR Rescuer #4**

Proper hand placement, place the heel of one hand on the middle of the person's chest. 0

Place the other hand on top. 0

Do 30 compressions. (Compression depth 5cm (2 inches)) 0

Page 8 Merits Subtotal 0







Allow the chest to recoil after each compression. 0

Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120 0

**Judge's Comments:**

**Rescue Breather #4**

Set up personal pocket mask 0

Place the mask so that it covers the person's mouth and nose. 0

Position the lower rim of the mask between the person's lower lip and chin. 0

The opposite end of the mask should cover the nose 0

When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place. 0

Maintain an open airway using head tilt chin lift. 0

Give two breaths 0

Watch to see if chest is rising and falling. 0

Repeat 2 breaths every thirty compressions 0

**Judge's Comments:**

Page 9 Merits Subtotal 0









Follow the AED's automated prompts 0

**When the AED prompts you to give a shock the team should:**

Stand clear 0

Say "I'm clear, you're clear, everybody's clear." 0

Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. 0

Judge's Comments:

**10. Two-Rescuer CPR**

Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR. 0

Feel for carotid pulse 0

No signs of circulation continue CPR 0

Judge's Comments:

**CPR Rescuer #5**

Proper hand placement, place the heel of one hand on the middle of the person's chest. 0

Place the other hand on top. 0

Do 30 compressions. (Compression depth 5cm (2 inches)) 0

Page 10 Merits Subtotal 0







Allow the chest to recoil after each compression.	0
Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120	0

**Judge's Comments:**

**Rescue Breather #5**

Set up personal pocket mask	0
Place the mask so that it covers the person's mouth and nose.	0
Position the lower rim of the mask between the person's lower lip and chin. The opposite end of the mask should cover the nose	0 0
When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place.	0
Maintain an open airway using head tilt chin lift.	0
Give two breaths	0
Watch to see if chest is rising and falling.	0
Repeat 2 breaths every thirty compressions	0

**Judge's Comments:**

Page 11 Merits Subtotal 0







Follow the AED's automated prompts 0

**When the AED prompts you to give a shock the team should:**

Stand clear 0

Say "I'm clear, you're clear, everybody's clear." 0

Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. 0

Judge's Comments:

Rough Handling Deductions 5

Judge's Comments:

Continued to give CPR to patient when they had a pulse, breathing and moaning.

Page 12 Merits Subtotal 0

CPR/AED Total Merits 172 less Total Demerits 5 Total Score 167

Judge's Name: Vicki Mullins and Michael Dillingham

Judge's Name: \_\_\_\_\_







2020 International Mines Rescue Contest  
September 13<sup>th</sup>-15<sup>th</sup> 2022  
Fire Fighting Final Score sheet

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2022 IMRC FIRE FIGHTING  
SEPTEMBER 13<sup>TH</sup> THRU 15<sup>TH</sup> 2022  
TOTAL SCORESHEET

TEAM NAME: NEWMONT MUSSELWHITE MINE TEAM - CANADA

DATE OF COMPETITION: 09/14/2022

FIRE HOSE HOOK UP SCORE:	<u>14</u> ✓
FIRE HOSE and NOZZLE MANAGEMENT SCORE:	<u>16</u> ✓
LIVE FIRE/REMOTE MONITOR SET UP SCORE:	<u>29</u> ✓
MINUS ANY DEMERITS:	<u>0</u>
TOTAL FIRE FIGHTING SCORE:	<u>59</u> ✓



International Mines Rescue Competition  
Since 1999







## 2020 International Mines Rescue Competition

### Fire Fighting Scenario Scoresheets

September 13<sup>th</sup> – 15<sup>th</sup> 2022

TEAM NAME: NEWMONT MUSSELWHITE MINE TEAM - CANADA

COMPETITION DATE: 09/14/2022

#### Judges Instructions

##### Merit Point Scoring:

0 = not done

+1 = poor attempt

+2 = needs improvement

+3 = excellent meets all requirements

1. Every line must be scored.
2. A score of 0, 1 or 2 **must be explained** by the judges.
3. When a score of 3 is applied, comments are encouraged

##### **Rough Handling**

1. Rough handling demerits will be deducted from the total score
2. Judges can deduct 1 to 5 points per incident of rough handling of equipment
4. Rough handling demerits will have a maximum of 10 points
3. Rough handling deductions must be explained by the judges

##### **Team Safety:**

**If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply**



## Fire Hose Hook Up

1. Did the team flush the fire hydrant? 3

**Judge's Remarks:**

2. Did a team member remain at the fire hydrant until all hoses were established? 3

**Judge's Remarks:**

### Fire Hose Lays

1. Was fire hose lay properly flushed? 2

**Judge's Remarks:**

Team turned on the hydrant before the hose was properly connected.

2. Was open end of fire hose secured during flushing process? 3

**Judge's Remarks:**

3. Were connections properly hand tightened? 3

**Judge's Remarks:**



## Fire Hose and Nozzle Management

1. Were teams split up equally on each hose lay? 3

**Judge's Remarks:**

2. Did team flush the fire nozzle? 2

**Judge's Remarks:**

Right side was in the wrong flush position at start.

3. Did fire hose team maintain an arm's length spacing at all times and keep the hose level and straight? 2

**Judge's Remarks:**

Team member went back to hydrant before goal was made while in dynamic.

4. Did the nozzle man open the flow to the nozzle slowly, and deliberately? 3

**Judge's Remarks:**



5. Did the nozzle man dictate terms of advancement and maintain control of stream? 3

**Judge's Remarks:**

6. Did the team complete the pattern in the time allotted? 3

**Judge's Remarks:**

### **Live Fire/Remote Monitor Set Up**

1. Did team members correctly don their apparatus? 3 ✓

**Judge's Remarks:**

2. Did fire team advance with full fog pattern to designated point? 3 ✓

**Judge's Remarks:**

3. Were team members positioned along the inside of the hose lays? 3 ✓

**Judge's Remarks:**





4. Did trailing persons retrieving equipment maintain contact with the hose line? 3 ✓

**Judge's Remarks:**

5. Was monitor properly set up? 3 ✓

**Judge's Remarks:**

6. Did the team utilize proper techniques in transitioning from the nozzle to the monitor?

2 ✓

**Judge's Remarks:**

During transition, the left side turned away from the fire.

7. Did the team flush the monitor after it was established?

3 ✓

**Judge's Remarks:**

8. Did the team adjust the monitor to a fire fighting pattern?

3 ✓

**Judge's Remarks:**



9. Did team members all maintain hand contact with hose on retreat to fresh air base?

3 ✓

**Judge's Remarks:**

10. Did team bring out nozzle and hose clamp?

3 ✓

**Judge's Remarks:**

Burn Pad Time 10:01

Burn Tunnel Time 13:21

Total Time 23:22 ✓

Total Merits: 59

Minus Demerits: 0

**Judge's Remarks:**

Total Score 59





INTERNATIONAL  
MINES RESCUE COMPETITION  
2020

September 13-15, 2022

BG 4 TECHNICIAN  
TOTAL SCORE and WORKING TIME

ma  
EW  
B

TEAM NAME: Newmont Musselwhite

TECHNICIAN NAME: Gabriel Roy

DATE: 09/15/2022

TOTAL MERITS: 38

TOTAL DEMERITS: 1

TOTAL POINTS: ~~38~~ 37

WORKING TIME (IN Minutes and Seconds) 30:00

**Merit Point Scoring:**

- 0 = not done
- +1 = poor attempt
- +2 = needs improvement
- +3 = excellent meets all requirements

1. Every line must be scored.
2. A score of 0, 1 or 2 **must be explained** by the judges.
3. When a score of 3 is applied, comments are encouraged
4. If the Technician runs out of time a score of 0 will apply to remaining actions

**Rough Handling or abuse of Equipment:**

1. Rough handling demerits will be deducted from the total score
2. Judges can deduct 1 to 5 points per incident of rough handling of equipment
4. Rough handling demerits will have a maximum of 10 points
3. Rough handling deductions must be explained by the judges





## SCENARIO

When the Technician arrives, they will find;

- A fully assembled BG 4 Breathing Apparatus.
- A kit of tools
- An isolation test kit
- An RZ 7000
- Liquid for Detection of Leaks
- All spare parts that are necessary to carry out the task

### Merits Points

#### Visual Inspection

**1. TECHNICIAN MUST VISUALLY CHECK THE FOLLOWING:**  
FACEPIECE, HOSES AND REFILLABLE CANISTER.

3

**Judge's Comments:**

#### **2. Insert O2 Cylinder**

Cylinder Pressure **Must** be greater than **2,600** psi  
Check the Hydrostat check date

3

**Judge's Comments:**





**3. Low Pressure Warning**

Zero Adjust (Automatic)  
Connect Hose Coupler  
Set to Positive Pressure Pumping (Low Pressure Warning should  
Activate at less than 1.4 mbar

3

**Judge's Comments:**

**4. Inhalation Valve**

Set to Positive Pressure Pumping (Tightly pinch exhalation hose  
And pump slowly until 10 mbar is indicated

3

**Judge's Comments:**

**5. Exhalation Valve**

Set to Negative Pressure Pumping (Tightly pinch inhalation hose  
And pump slowly until -10 mbar is indicated

3

**Judge's Comments:**





**6. Drain Valve:**

Set to Positive Pressure Pumping

Fit sealing cap over relief valve & pump until the Drain Valve Opens

The Drain Valve Should Open between 10 mbar and 18 mbar

3

**Judge's Comments:**

**7. Leak Test w/Positive Pressure**

**Set to Leak Test**

Press Button to Reduce Pressure to 7.5 mbar

Press OK Button to Activate Timer

Pressure Should **NOT** change by more than 1 mbar in 1 minute

**Vent Tester**

Remove Sealing Cap

2

**Judge's Comments:**

Performed test and passed; however the contestant had both inhalation and exhalation valves out of the unit. After the test, the contestant put valves back in the unit. The unit would then need a new low pressure leak test.

**8. Relief Valve**

**Set to Positive Pressure Pumping**

Pump until Relief Valve Opens. It should be between 2 & 5 mbar

3

**Judge's Comments:**







**9. High Pressure Leak Test**

**Set to Leak Test**

Open cylinder valve. (Cylinder pressure must be greater than 2,600 psi)  
Sentinel Displays the **CLOSE CYLINDER ICON**: Close Cylinder Valve  
Sentinel Displays the **OPEN CYLINDER ICON**: Open Cylinder Valve

**Vent Tester**

Breathing Bag will deflate

3

**Judge's Comments:**

**10. Constant Metering Valve**

**Set to Positive Pressure Pumping**

Fit Sealing Cap over Relief Valve & Pump until Breathing Bag is Inflated

**Dosage L/min**

Constant Dosage should lie between 1.5 and 1.9 L/min

3

**Judge's Comments:**

**11. Minimum Valve**

**Set to Negative Pressure Pumping**

Gently Pump & Remove Sealing Cap from Relief Valve

Pump slowly until hissing sound is heard

Minimum Valve should Open Between 0.1 % 2.5 mbar

0

**Judge's Comments:**

Did not complete. Ran out of time.





**12. Bypass Valve**

**Set to Leak Test**

Press red bypass button, oxygen must be heard flowing into the circuit  
Breathing Bag Inflates

0

**Judge's Comments:**

Did not complete. Ran out of time.

**13. Residual Pressure Warning**

**Set to Leak Test**

Close Cylinder Valve. Watch Sentinel Display Unit  
Warning should be generated at approximately 700 psi  
Unplug coupling from RZ 7000 & Replace Sealing Cap on Plug In  
Coupling when Pressure reaches 0 psi

0

**Judge's Comments:**

Did not complete. Ran out of time.

**14. Battery Test**

On Activation & Deactivation the Sentinel automatically checks &  
Displays Battery Capacity  
Battery Warning 1: When Benching REPLACE BATTERY  
Battery Warning 2: REPLACE BATTERY BEFORE ANY NEW OPERATION  
Turn off Unit by simultaneously pressing right & left buttons

0

Judge's Comments: \_\_\_\_\_

Did not complete. Ran out of time.





**15. BG 4 Fully Assembled and Ready for Use:**

Facepiece Defogged	
Facepiece Connected	0

Judge's Comments: \_\_\_\_\_

Did not complete. Ran out of time.

**16. BG 4 Problems:**

Wrong Nosecup	0
Damaged Drain Valve	3 ✓
Damaged Drain Valve Disk	3 ✓
Damaged Relief Valve	3 ✓
Readout Cover Missing	0

Judge's Comments:

Did not complete. Ran out of time.

Rough Handling Judge's Comments:

Failed to identify and correct both inner mask and external lens.

Total Merits 38

less Total Demerits 1

Total Score ~~38~~ 37

Working Time: 30:00

Judge's Name: John Helmick

Judge's Name: Marcus Benedict







DW  
AC

## THEORY ASSESSMENT TOTAL SCORESHEET

TEAM NAME: Canada Team 1 Newmont Mussellwhite

DATE OF COMPETITION: 09/15/2022

TOTAL SCORE: 72

TIME: 8.30

QUESTION NUMBER	NUMBER OF ATTEMPTS	SCORE
1.	1	3
2.	1	3
3.	1	3
4.	1	3
5.	1	3
6.	1	3
7.	1	3
8.	1	3





Theory Assessment Total Scoresheet  
IMRC 2020  
National Mine Health & Safety Academy  
Beaver, WV, U.S.A.

QUESTION NUMBER	NUMBER OF ATTEMPTS	SCORE
9.	1	3
10.	1	3
11.	1	3
12.	1	3
13.	1	3
14.	1	3
15.	1	3
16.	1	3
17.	1	3
18.	1	3
19.	1	3





Theory Assessment Total Scoresheet  
IMRC 2020  
National Mine Health & Safety Academy  
Beaver, WV, U.S.A.

QUESTION NUMBER	NUMBER OF ATTEMPTS	SCORE
20.	1	3
21.	1	3
22.	1	3
23.	1	3
24.	1	3



International Mines Rescue Competition  
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**INTERNATIONAL  
MINES RESCUE COMPETITION  
2020**  
September 13-15, 2022  
**High Angle Rope Rescue**

TEAM NAME: NEWMONT MUSSELWHITE MINE TEAM - CANADA

WORKING TIME: 35:56 ✓

TOTAL MERITS: 20

MINUS DEMERITS: 0

TOTAL SCORE: 20 ✓

1. CAPTAIN:

MERITS 3 ✓

Minus Demerits       

TOTAL 3 ✓

2. ANCHOR POINTS:

MERITS: 2

Minus Demerits:       

TOTAL: 2 ✓

3. LOWERING/HAULING SYSTEM:

MERITS: 3 ✓

Minus Demerits:       

TOTAL: 3





**4. BELAY/SAFETY:**

**MERITS:** 3

**Minus Demerits:** \_\_\_\_\_

**TOTAL:** 3

**5. KNOTS:**

**MERITS:** 3

**Minus Demerits:** \_\_\_\_\_

**TOTAL:** 3

**6. PATIENT PACKAGING:**

**MERITS:** 3

**Minus Demerits:** \_\_\_\_\_

**TOTAL:** 3

**7. SAFETY:**

**MERITS:** 1

**Minus Demerits:** \_\_\_\_\_

**TOTAL:** 1

**8: OTHER:**

**MERITS:** 2

**Minus Demerits:** \_\_\_\_\_

**TOTAL:** 2



**INTERNATIONAL  
MINES RESCUE COMPETITION  
2022**

September 13-15, 2022

**High Angle Rope Rescue**

**TEAM: NEWMONT MUSSELWHITE MINE TEAM - CANADA**

**SCENARIO**

When the Mine Rescue team arrives they will find;

- Rope rescue equipment and anchor points.
- Tripod
- Class III harnesses and various sized tubular webbing
- Access holes for ascending and descending
- A dummy with a simulated back injury

**Judges Instructions**

**Merit Point Scoring:** 0 = not done

+1 = poor attempt

+2 = needs improvement

+3 = excellent meets all requirements

1. Every line must be scored.
2. A score of 0, 1 or 2 **must be explained** by the judges.
3. When a score of 3 is applied, comments are encouraged
4. If a team runs out of time a score of 0 will apply to remaining actions

**Rough Handling**

1. Rough handling demerits will be deducted from the total score
2. Judges can deduct 1 to 5 points per incident of rough handling of equipment
3. Rough handling demerits will have a maximum of 10 points
4. Rough handling deductions must be explained by the judges

**Team Safety:**

**If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply**

**INTERNATIONAL  
MINES RESCUE COMPETITION**

**2022**

September 13-15, 2022

**High Angle Rope Rescue**

**TEAM:** NEWMONT MUSSELWHITE MINE TEAM - CANADA

**TIME:** 35 : 56

**CAPTAIN**

**SCORE: 3**

Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ensure Safety Checks are Complete
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ensure Main and Safety are Utilized
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ensure Proper PPE is Worn By All Team Members
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Gives Clear Direction to Team Members
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maintain Line of Sight with Rescuer/Patient While On Rope ( <i>can be designated</i> )
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ensures Smooth Edge Transitions ( <i>can be designated</i> )

**Judge's Comments:**

**ANCHOR POINTS**

**SCORE: 2**

Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Appropriate Anchor Points Selected
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proper Rope Protection Utilized From Anchor to Edge

**Judge's Comments:**

Edge protection was used however better positioning of hard protection would have been better.

### LOWERING/HAULING SYSTEM

**SCORE: 3**

Y	N	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Little To No Slack In System
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Good Communication Between Edge Attendant, Lowering/Hauling Team, and Belay
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Was The System Shock Loaded
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Appropriate Mechanical Advantage Chosen

**Judge's Comments:**

### BELAY/SAFETY

**SCORE: 3**

Y	N	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Little To No Slack In System
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Was The System Shock Loaded
<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Tripod Is Utilized, Will Belay Function Independently

**Judge's Comments:**

### KNOTS

**SCORE: 3**

Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Knots Tied Properly, Dressed, And With Safeties When Applicable
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Appropriate Knot For The Job
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Approved Rescue Knots

**Judge's Comments:**

## PATIENT PACKAGING

**SCORE: 3**

Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Consider Patients Medical Needs (NO TREATMENT)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Patient Packaged In Safe & Efficient Manner
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Protects Patient From Further Injury

**Judge's Comments:**

## SAFETY

**SCORE: 1**

Y	N	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Did Rescuer Perform In Unsafe Manner
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Was Equipment Treated With Care
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Means Of Retrieval Readily Available
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Was The Team Stopped Due To Unsafe Practices

**Judge's Comments:**

Tripod falling over due to poor technique.

## OTHER

**SCORE: 2**

Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Did the Captain Demonstrate Knowledge Of Rope Rescue
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Did The Team Demonstrate Knowledge Of Rope Rescue
<input type="checkbox"/>	<input checked="" type="checkbox"/>	During Lowering/Hauling Could The "Whistle Test" Be Performed Safely
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Were Hazards Mitigated Appropriately
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other (Please Describe Below)

**Judge's Comments:**

Did not do hands off whistle test  
Good use of prussic for quick access to tripod  
Rapid deployment to casualty

**Rough Handling Comments:**

**Judge's Name:** Andrew Burt Andrew Garland

**Judge's Name:** Adrian Gordan Jaime Calapaya

**Judge's Name:** Robert Andrew John Braun

**Judge's Name:** \_\_\_\_\_

