

*Corrected copy*  
*Fixed Preshift Record Page*



Virginia Mining Institute

VMI Promotes Safety!

# SAFETY DAY PROGRAM

Preshift Contest

August 5, 2021

Blacksburg Parks and Recreation Department - Community Center

615 Patrick Henry Drive, Blacksburg, Virginia



**2021**  
**Virginia Mining Institute**  
**Preshift Contest**

**Contestant Statement**

The Roll Tide Volunteer Coal Company #7 Mine mines coal with a continuous miner, shuttle cars, a dual head roof bolting machine, and battery powered scoops. The mine operates two shifts per day, five days per week on the MMU 001-0. This mine has a history of poor roof and rib conditions along with accumulations of water, methane and low oxygen. Travel time from the surface to the section is approximately 45 minutes.

You are to conduct a preshift examination of the 001-0 section for the upcoming shift.

The MMU 001-0 section consists of three entries.

The No. 1 Entry is the intake.

The No. 2 Entry is the belt.

The No. 3 Entry is the return.

The mining height averages 6 feet. The main fan is blowing and operational. Underground power is energized, and once turned off, the power cannot be turned back on.

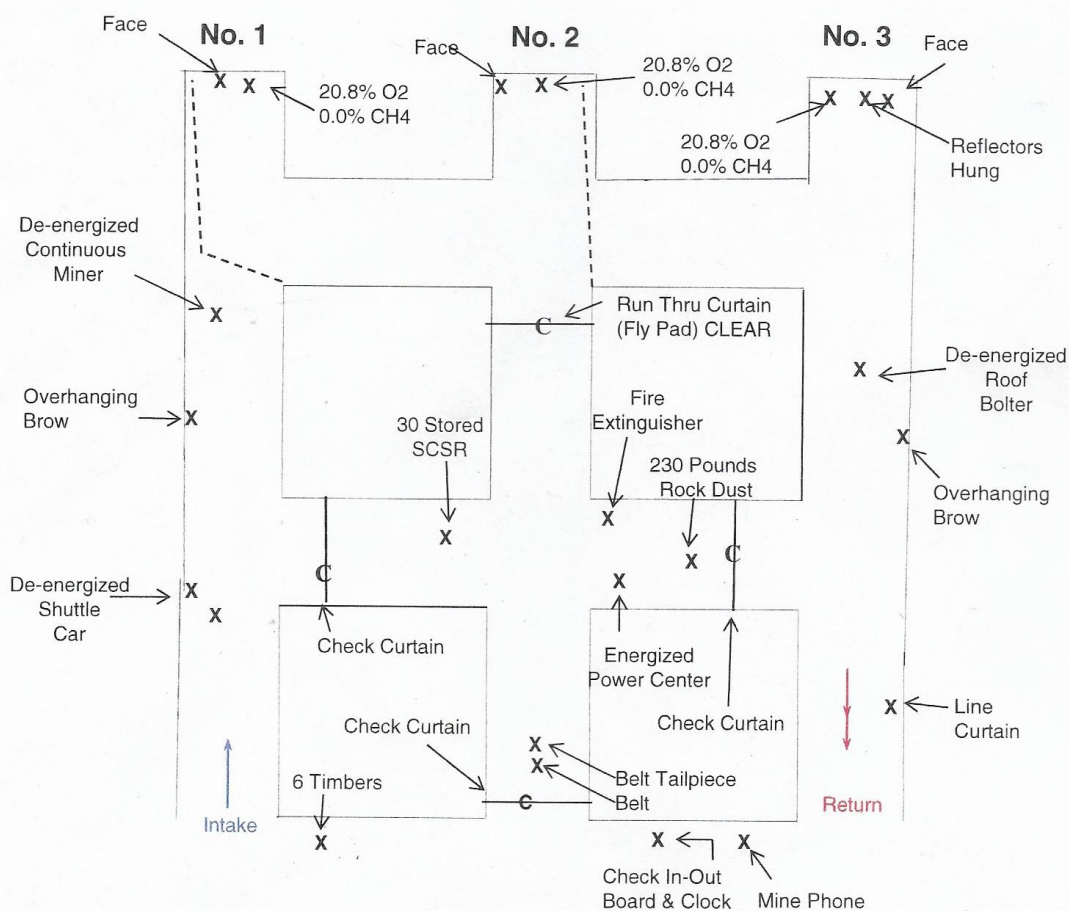
A copy of the approved roof control plan, the approved ventilation plan, and a blank mine map are all attached to this statement. If means are available, the section is to be left in compliance with the approved plans and all hazardous conditions corrected.

For the contest purposes, all violations of the Title 30 CFR will be considered hazards.

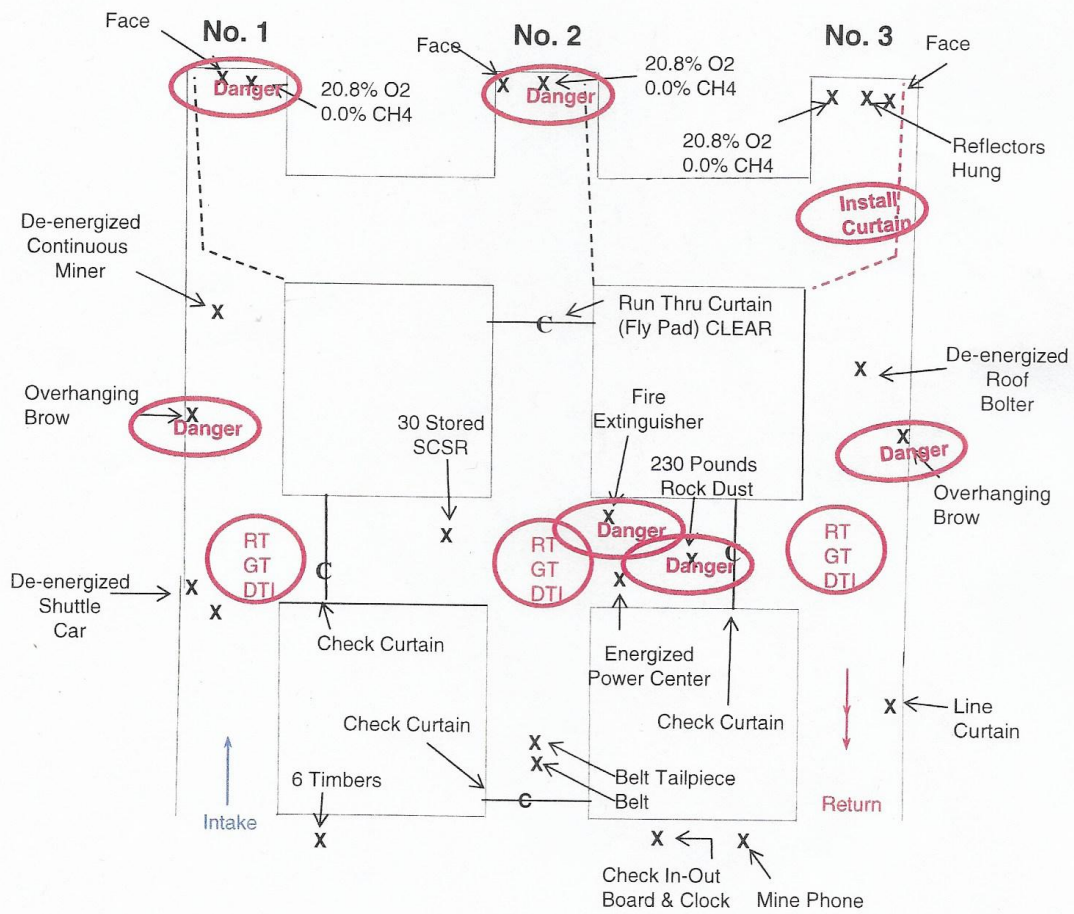
The 2020 Preshift Rules will be used for this contest.

You will have 30 minutes to complete the problem.

**2021**  
**Virginia Mining Institute**  
**Preshift Contest**  
**PROBLEM Map**



# 2021 Virginia Mining Institute Preshift Contest SCORING Map



2021  
Virginia Mining Institute  
Preshift contest  
August 5, 2021

**Judge's instructions P.1**

1. Show the contestant the time clock, mine phone, and the check in/out board.
2. A blank map, written statement (contestant statement), roof control plan, and ventilation plans will be provided, and **these have already been reviewed by the contestant in lock-up.** Upon receipt of these materials the contestant must start the clock within 2 minutes.
3. Contestant should take the air measurement in the last open crosscut between the # 2 and # 3 entries.

**Provide information in box to the contestant after taking the air reading in the last open crosscut (LOCC) between the #2 and #3 entries.**

Height:	<b>78 INCHES</b>
Width:	<b>240 INCHES</b>
Feet per minute:	106    correction factor: <b>+ 12</b>

**Do not give out the total CFM, 15340cfm.**

**Note: If the contestant takes an air measurement in the wrong location, and the check curtains have been installed, the information above should be provided to them but discounts assessed for wrong location. (Rule 9)**

**If the contestant takes the air measurement with the ventilation controls partially installed (not according to the vent plan schematic) give them these numbers.**

Height:	<b>78 INCHES</b>
Width:	<b>240 INCHES</b>
Feet per minute:	60    correction factor: <b>+ 8</b>

**Do not give out total CFM 8840cfm.**

**Digital anemometers can be held in either direction.**

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**Judges Instructions Page 2**

1. The Overhanging brows in # 1 and # 3 only need to be Dangered off. The contestant may use the available timbers, but it is not required by the Rules. (No dock if set timbers) (Rule 11).
2. There are no Readily Visible Warning devices present in the face of # 1 or # 2 as required by the Roof Control Plan. (Rule 17).
3. There is no line curtain hung in the face of # 3 as required by the Ventilation plan. (Rule 17)
4. There is only one (1) fire extinguisher on the section and two (2) are required. (Rule 19).
5. There is only 230 pounds of rock dust and 30 CFR requires 240 pounds. (Rule 19).
6. New Time- Field working time is 30 minutes, **WARNING at 5 minutes** (used to be 1 minute).

**Q&A From 2015**

If a contestant failed to identify, danger off, or correct a hazardous condition as stated in Rule 11 and received the discount; will they also be discounted for failing to correct the hazardous condition as stated in Rule 12? **Yes**, if hazardous condition is not found the contestant will receive discounts under Rules 11 and 12.

**Filling out the Preshift Record** (Same thing as above would apply when filling out the preshift record)

**Rule 3** Failure to record hazardous condition.

**Rule 4** Failure to record action taken to correct hazardous condition.

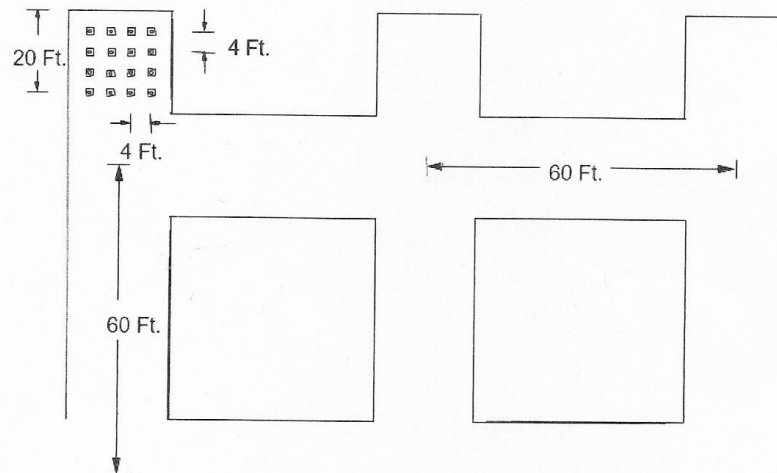
Personal notes: Date cannot be written on hand prior to arriving at the field, if the contestant wants to write on hand after clock starts that is ok.

**Times**

Written exam \_\_\_\_\_ 15 minutes  
Review plans in Staging area \_\_\_\_\_ 10 minutes  
On field start clock after giving materials \_\_\_\_\_ 2 minutes  
Work problem on field \_\_\_\_\_ 30 minutes (warn when 5 minutes left)  
Fill out record \_\_\_\_\_ 20 minutes  
After posting name time to appear \_\_\_\_\_ 60 minutes  
Review and prepare protests \_\_\_\_\_ 20 minutes

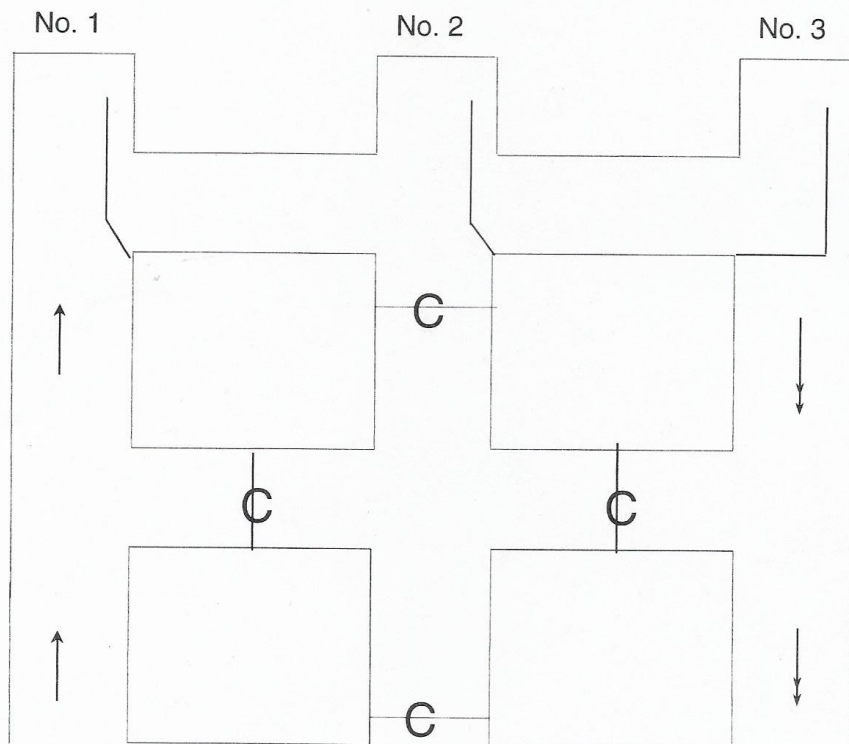


**2021**  
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**PRESHIFT CONTEST**  
**Roof Control Plan**



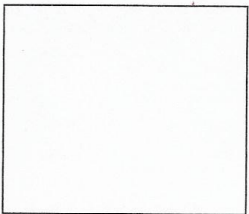
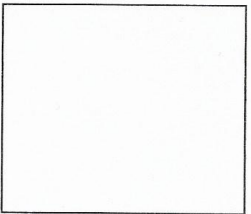
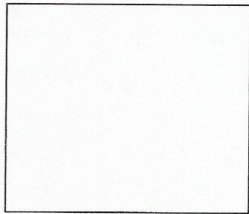
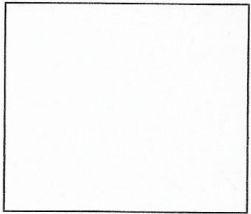
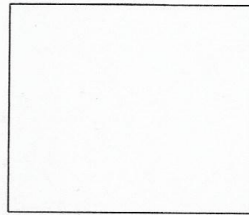
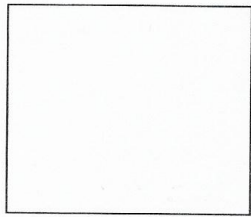
Permanent roof supports to be installed on not more than 4 ft. centers.  
Maximum cut depth is 20 ft. and bolt length is 48 inches.  
Maximum width of rooms, entries, and crosscuts is 20 ft.  
Developed on 60 ft. centers with minimum size pillars 40 ft. x 40 ft.  
Crosscuts shall be started only in areas that are supported with permanent roof supports. When headings and crosscuts are to be simultaneously developed, a minimum of three (3) rows of permanent roof supports shall be installed inby the proposed crosscut prior to starting the crosscut.  
No more than one (1) place will be left unbolted at the end of the shift.  
Supplemental support will be installed on 4 ft. centers.  
The end of permanent roof support shall be posted with a readily visible warning, danger sign or a physical barrier shall be installed to impede travel beyond permanent support.

**2021**  
**Virginia Mining Institute**  
**PRESHIFT CONTEST**  
**VENTILATION PLAN**



- Line curtain required where the continuous miner is cutting or loading coal.
- Line curtain required in face area where the roof bolting machine is located.
- Line curtain required to be maintained 10 ft. from the deepest point of penetration.
- A minimum of 12, 000 CFM required in the last open crosscut.
- Maximum cut depth not to exceed 20 ft.
- All face ventilation is exhausting.

2021  
Virginia Mining Institute  
Preshift Contest  
JUDGE'S MAP



No. 1

No. 2

No. 3

X - Check In/Out Board  
& Clock

## **Day 1 Statement**

**Thank you for answering our call for help. You are located in the FAB of the Mountaineer No. 1 Mine. The FAB was established by a previous team and all areas outby the FAB can be used for ventilation.**

**The mine is ventilated by an exhaust fan. Air normally intakes in the no. 2 entry and returns in the no. 1 and no. 3 entries. The Mine Fan is currently off, but can be started by contacting the Command Center. The mine has recently connected to an intake airshaft that will be shown on the mine map. Electrical power to the underground area of the mine has been de-energized and locked out on the surface, but can be energized by contacting the Command Center. Mining is in the northern direction.**

**Last night at 12:01 AM, four miners entered the mine to perform maintenance on the working section. At 2:00 AM, one of the miners contacted at the surface and reported a fire on the section. The outside person has since been unable to contact the section crew. Subsequent attempts to contact the miners have been unsuccessful. The mine has a history of methane, bad roof, and water. The mine maps are up to date. Both agencies have been notified and are present. A backup mine rescue team is present. Two blank maps and the team's written instructions will be provided when you are ready to begin working.**