

2018 Energy Expo Pre-Shift Contest



Ridgeview School
Clintwood, Virginia 24228
October 4, 2018



**2018
Energy Expo
Preshift contest
10/4/18**

Judge's instructions

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:	72 INCHES
Width:	240 INCHES
Feet per minute:	146 correction factor: + 15

Do not give out the total CFM, 19320.

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) then the air reading will be 9600 CFM in the LOCC.

Height:	72 INCHES
Width:	240 INCHES
Feet per minute:	60 correction factor: + 8

Do not give out total CFM 8160.

Digital anemometers can be held in either direction.

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Judge's instructions PAGE 2 (Idle air readings)**

IDLE AIR IN FACES:

LINE CURTAIN HUNG

LINE CURTAIN NOT HUNG

1 Face

Height: 6 FEET

Width: 3 FEET

Feet per minute: 118 Correction factor: + 2

Do not give out total= 2160

Height: 6 FEET

Width: 3 FEET

Feet per minute: 40 Correction factor +5

Do not give out total = 810

2 Face

Height: 5 FEET

Width: 3 FEET

Feet per minute: 145 Correction factor: + 1

Do not give out total= 2190

Height: 5 FEET

Width: 3 FEET

Feet per minute: 50 Correction factor +5

Do not give out total = 825

3 Face

Height: 6 FEET

Width: 3 FEET

Feet per minute: 108 Correction factor: + 2

Do not give out total= 1980

Height: 6 FEET

Width: 3 FEET

Feet per minute: 60 Correction factor +5

Do not give out total = 1170

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Judging Points

1. # 1 face, Danger Off - Roof Control Plan states that places cannot be left unbolted over 24 hours. (Rule 17- Contestant not following the written instructions for working the problem. 15 points (Each occurrence)
2. Loose rib in # 1 outby LOCC- use Slate bar to pull. (Rule 12 - Hazardous conditions must be corrected by the contestant during the examination when means or materials are available.) 10 points.
3. High spot in # 2 face area- use Extendable probe to take Gas check. (Rule 5 G) (Failure to make necessary gas tests where required. Immediately inby approaches to worked-out areas along intake air courses, and at high spots where methane is likely to accumulate, and equipment will be operated in the area during the shift.) 5 points.
4. High Spot in # 2 also needs to be documented in Preshift Record. (INTERPRETATION OF THE PRESIFT RECORD) (Rule # 7 Failure to record results of CH4 examinations.)
5. Water over knee deep in # 3 entry. Danger off both sides. If travel thru contestant has endangered self. (Rule 16 D) (Any act by the examiner, which may endanger himself/herself or others) 20 points (Each Occurrence)
6. If Check curtain is not hung across # 2 entry then dock under Rule 7 since it is required in Ventilation Plan. 10 points (Each occurrence).
7. Take idle air reading in each working place. Dock under Rule 7 since it is required in the Ventilation Plan. 10 points (Each occurrence).
8. **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

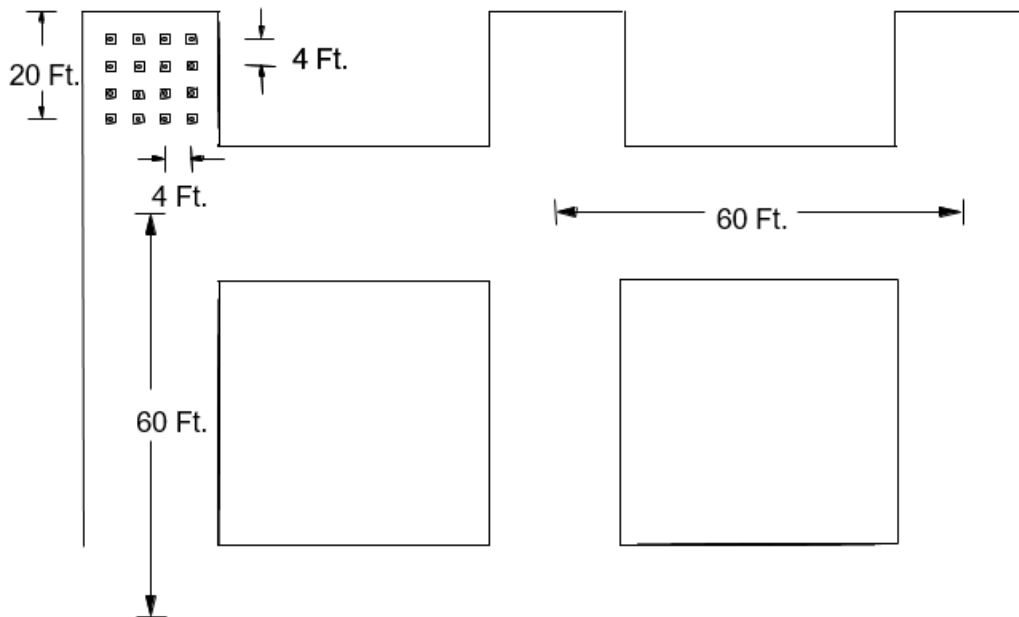
Written exam_____15 minutes
Review plans in Staging area_____10 minutes
On field start clock after giving materials____2 minutes
Work problem on field_____30 minutes (warn when 5 minutes left)
Fill out record_____20 minutes
After posting name time to appear_____60 minutes
Review and prepare protests_____20 minutes

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Preshift Contest
JUDGE'S MAP

No. 1	No. 2	No. 3

X – Check In/Out Board
& Clock

2018 Energy Expo 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.

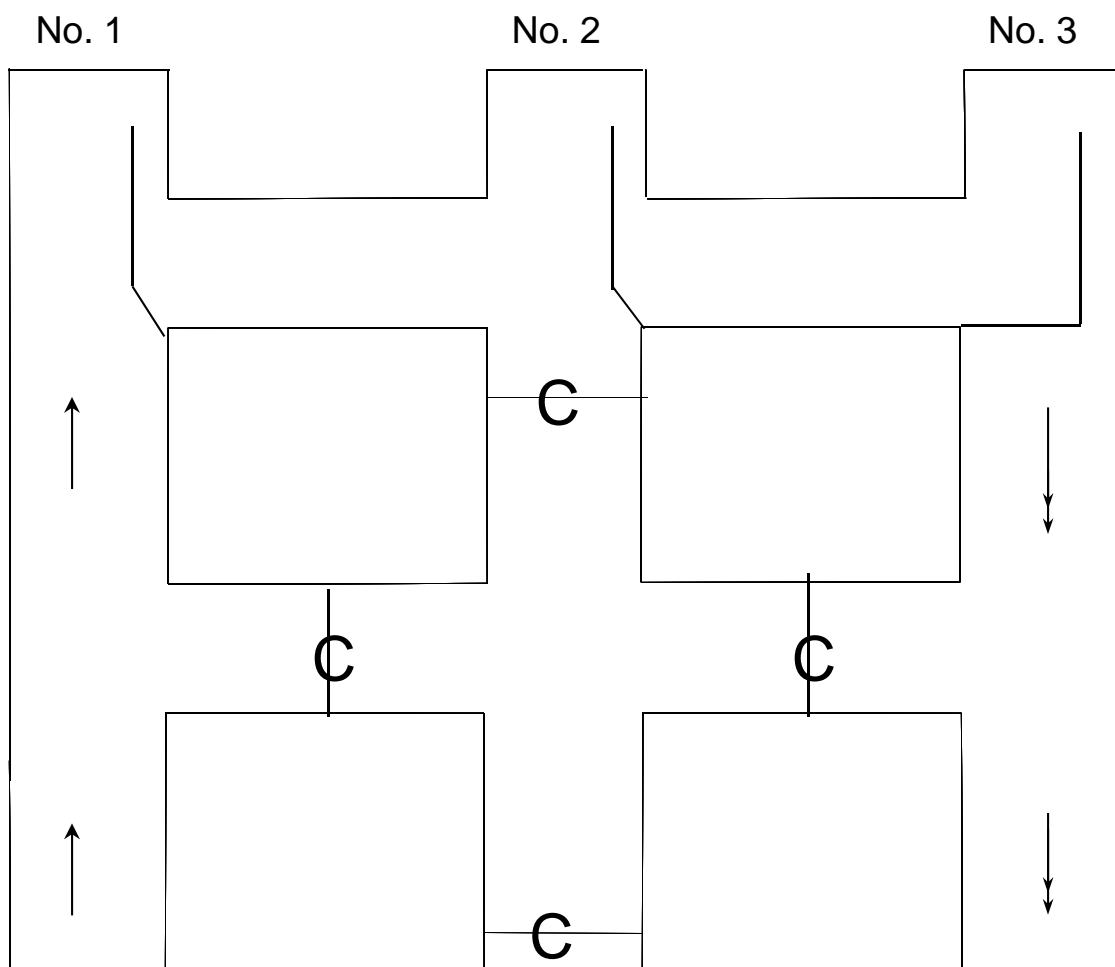
Crosscuts shall be started only in areas that are supported with permanent roof supports. When headings and crosscuts are to be simultaneously developed, a minimum of three (3) rows of permanent roof supports shall be installed in by the proposed crosscut prior to starting the crosscut.

No place will be left unbolted for more than 24 hours.

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.

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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.
Minimum quantity of 1,500 CFM required in each idle place.
Maximum cut depth not to exceed 20 ft.
All face ventilation is exhausting.

Report Shall be Signed When Made

Received By: _____ (INITIAL)

Certification Number

PRESHIFT CONTEST
STATEMENT OF FACTS TEST
Energy Expo October 4, 2018

1. Circuit breakers shall be _____ for identification.
 - a. Labeled
 - b. Marked
 - c. Engraved

2. The last open crosscut is the crosscut in the line of pillars containing the permanent _____ that separate the intake air courses and the return air courses.
 - a. Flypads
 - b. Stoppings
 - c. Controls

3. Main mine fans shall be equipped with an _____ device that gives a signal when the fan slows or stops.
 - a. Autonomic
 - b. Audible
 - c. Automatic

4. The operator must maintain a _____ foot diameter barrier around oil and gas wells, unless a lesser barrier consistent with State laws and regulations is approved.
 - a. 500
 - b. 300
 - c. 150

5. Ventilation controls are used underground to properly _____ air to all sections of the mine.
 - a. Disperse
 - b. Distribute
 - c. Direct

6. Carbon monoxide has no taste or _____.
 - a. Odor
 - b. Smell
 - c. Scent
7. About _____ percent of normal air is oxygen.
 - a. 20.8
 - b. 100
 - c. 21
8. Before implementing an approved revision to a roof control plan, all persons who are affected by the revision shall be _____ in its provisions.
 - a. Instructed
 - b. Trained
 - c. Educated
9. The mine emergency evacuation and firefighting program requires a review of the mine map, the escapeway system, and location of _____ alternatives.
 - a. Refuse
 - b. Strata Fresh air bay
 - c. Refuge
10. Temporary notations shall include _____ ventilation controls constructed or removed, such as seals, overcasts, undercasts, regulators, and permanent stoppings, and the direction of air currents.
 - a. Temporary
 - b. Permanent
 - c. All

PRESHIFT CONTEST
STATEMENT OF FACTS TEST KEY
Energy Expo 2018

1 b

2 b

3 c

4 b

5 b

6 a

7 c

8 a

9 c

10 b