

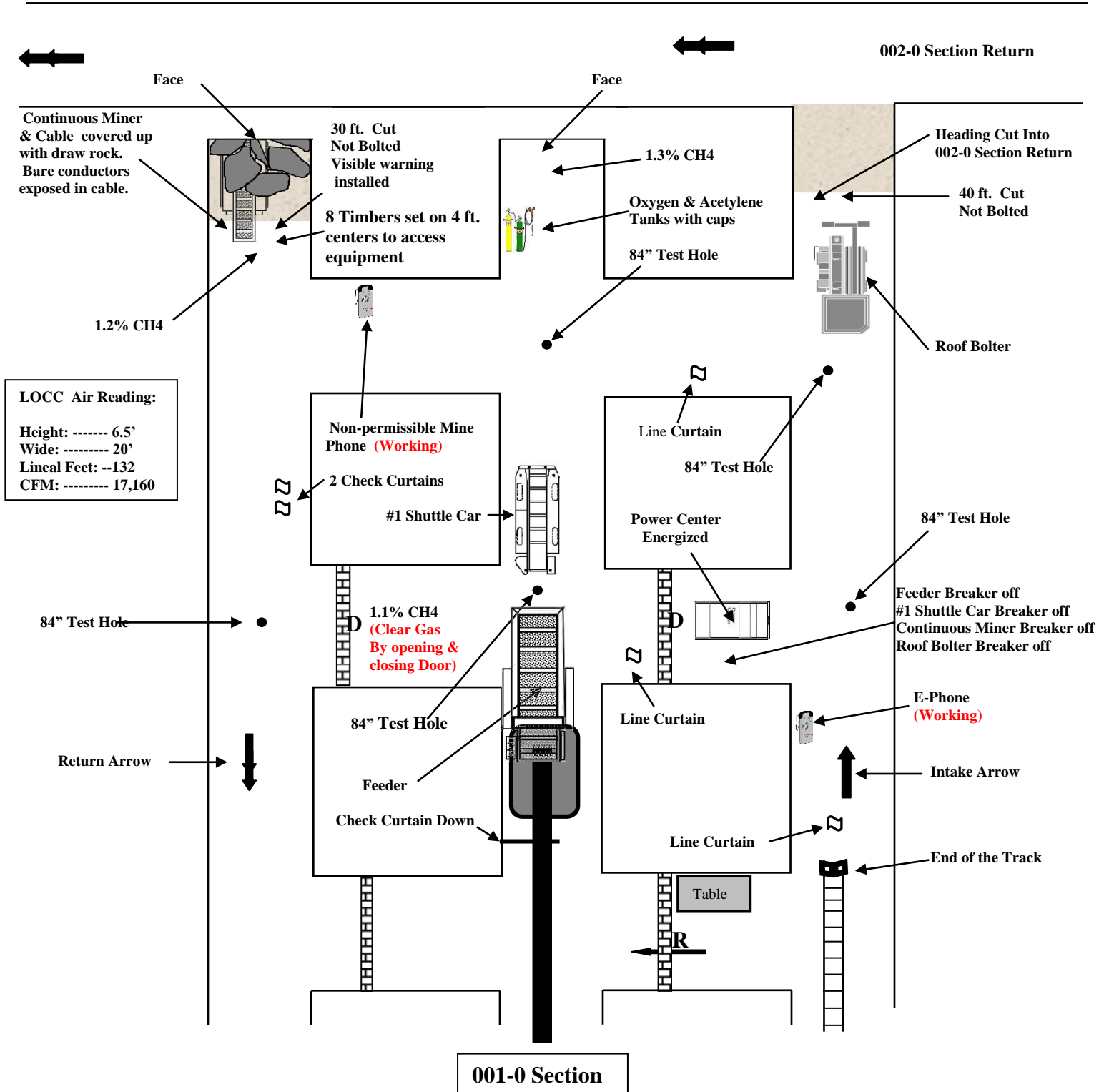
2014 Hatfield & McCoy Mine Safety Competition

Preshift Contest

#1

#2

#3



CONTESTANT STATEMENT

My name is _____ and this is _____.
We will be your judges for the contest.

You are one of the pre-shift examiners for Hatfield and McCoy Mining Company, Pikeville No. 1 Mine. The mine is a two section mine and has been idle over the weekend. Pump man, Bill Mills, has already started pre-shifting all outby areas, 30 minutes earlier. You are assigned to pre-shift the 001-0 section. An escort will be provided to transport you to the end of the track on the 001-0 section.

Your examination will begin at the end of the track and include all areas inby this point. The section crew will begin work one hour after your examination is complete. Maintenance Foreman and MET, Jim Brown, will be on duty while you are conducting your examination.

The 001-0 section is in the process of connecting with the 002-0 section return. The 002-0 section has been idled until the connection is completed.

A mine map, ventilation plan, and roof control plan is provided for your use. You will have 5 minutes to review this information prior to starting the clock. Good Luck.

PRE-SHIFT - CERTIFIED EXAMINER'S REPORT

Use Indelible Pencil or Ink

Report Shall Be Signed When Finished

Date of Examination: _____ Time From: _____ AM/PM To: _____ AM/PM

Section/Area: _____ Reported Outside? Yes ___ No ___ Time: _____ AM/PM

Reported By: _____ Received By: _____ (INITIAL)
(AUTHORIZED PERSON)

Pre-shift required within 3 hours prior to any 8 hour interval.

| Location | Hazardous Condition | Action Taken |
|-------------------------------------|---|---|
| No. 1 Entry or Face | Bare conductors exposed in continuous miner cable | Locked and Tagged Miner Cable |
| No. 1 Face | CH4 1.2% - No line curtain installed | Ventilated per plan - 0.0% CH4 |
| No. 1 Face | Timbers set on 4 ft. centers | Dangered off |
| No. 1 Entry (B cross-cut) | No test hole | Dangered off |
| A Cross-cut between 1 and 2 Entries | CH4 1.1% | Ventilated - 0.0% CH4 |
| B Cross-cut between 1 and 2 Entries | Non-permissible mine phone in LOCC | Moved |
| No. 2 Entry | Check curtain down at Feeder | Installed |
| No. 2 Face | CH4 1.3% - No line curtain installed | Ventilated per plan - 0.0% CH4 |
| No. 2 Entry | Oxygen & Acetylene Tanks in by LOCC | Moved or Dangered off |
| No. 3 Face | 40 ft. cut (exceeded roof control plan) | Dangered off |
| No. 3 Face | Cut into 002-0 return (out of sequence) ventilation plan not followed | Installed check curtain or endangered off |
| No. 3 Face | No visible warning device for not bolted area | Installed danger tag or warning device |

Air Measurements

| Location | CFM | Location | CFM |
|--|--|----------|-----|
| LOCC - "B" x-cut between 1 and 2 entries | 17,160 cfm 10,400 cfm* 112,840 cfm** | | |
| | | | |

Remarks: *Ventilation Controls not in place
**Anemometer turned backwards

Signed by Pre-shift Certified Examiner

Date

Certification Number

LAST OPEN CROSSCUT AIR READINGS

ENTRY WIDTH → 20 FEET

ENTRY HEIGHT → 6.5 FEET

VENTILATION CONTROLS IN-PLACE

Velocity - 132 fpm

$$20 \times 6.5 \times 132 = 17,160 \text{ cfm}$$

WITHOUT VENT. CONTROLS IN-PLACE

Velocity - 80 fpm

$$20 \times 6.5 \times 80 = 10,400 \text{ cfm}$$

ANEMOMETER TURNED BACKWARDS

Velocity - 868 fpm

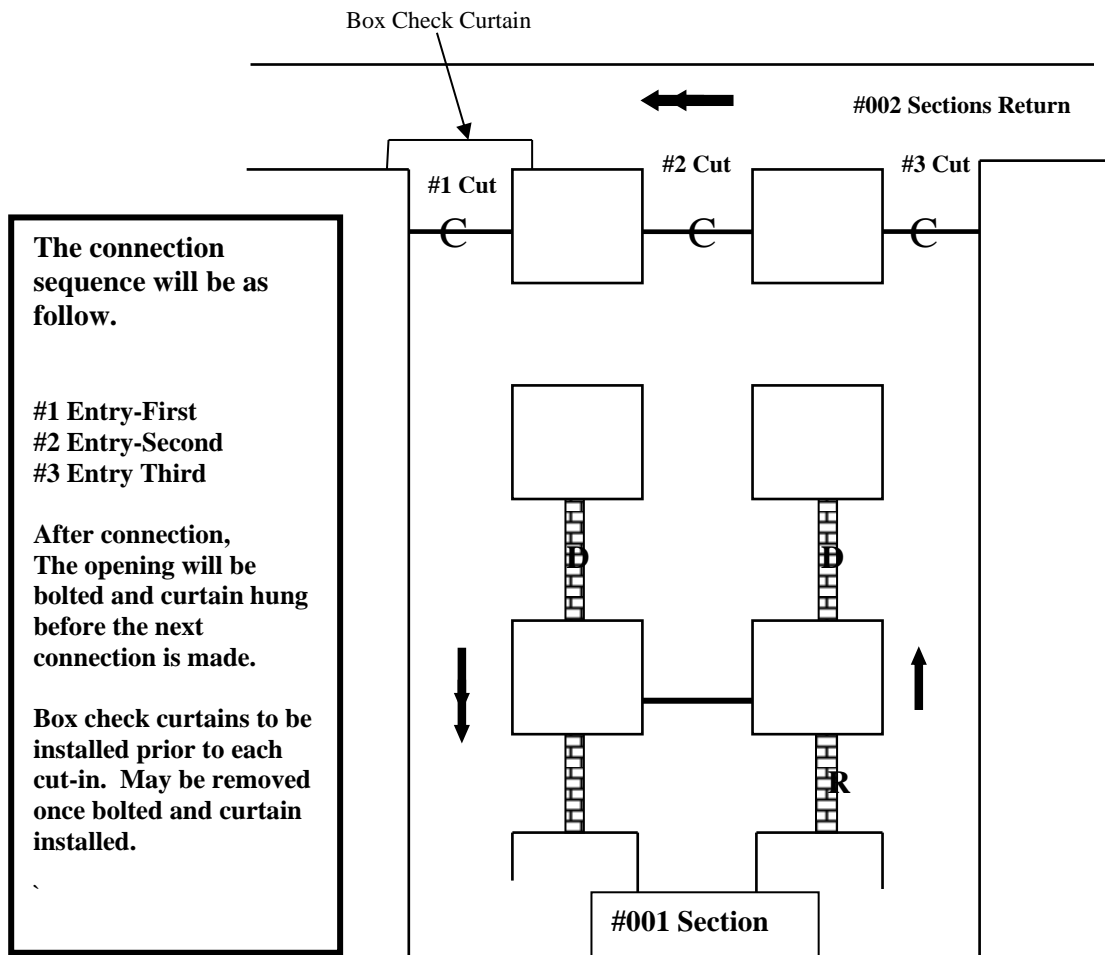
$$20 \times 6.5 \times 868 = 112,840 \text{ cfm}$$

HATFIELD AND McCOY MINE SAFETY COMPETITION
PRE-SHIFT EXAMINER'S CONTEST
JULY 15, 2014

Roof Control Plan

- Minimum bolt length - 60" resin grouted rebar bolt.
- The roof bolt installation pattern is 4 feet by 4 feet.
- The maximum entry and crosscut widths are 20 feet.
- The maximum cut depth is 30 feet.
- Test holes shall be drilled in all intersections at least 24" deeper than the length of roof bolts used.
- When an unbolted crosscut is present, the preshift examiner may travel inby the crosscut to examine the working places.
- In case of emergency timbers or steel jacks may be set on a maximum of 2' X 2' centers in unsupported roof in order to access equipment.

Ventilation Plan for Connection to 002-0 Section Return



1. The main mine fan is blowing.
2. 15,000 cfm minimum is required in the last open crosscut
3. Line Curtains are required to be installed where coal is being cut, mined or loaded
4. All headings driven in excess of 20' in depth without a crosscut being connected requires a line curtain to be installed