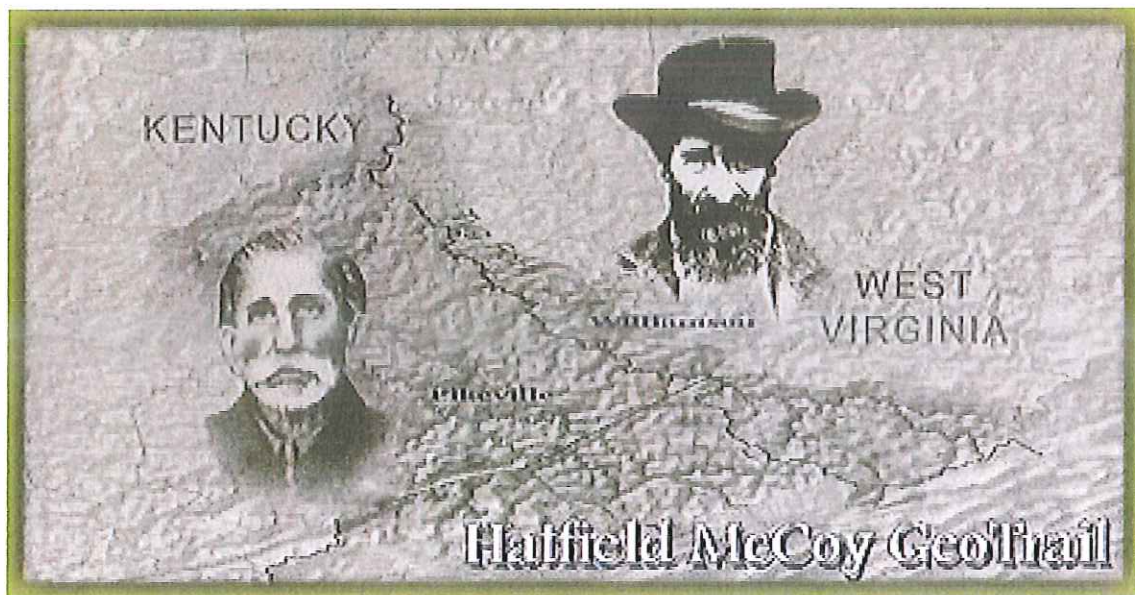


Hatfield & McCoy Mine Safety Competition - Preshift Contest

PRESHIFT PROBLEM



HATFIELD AND McCOY MINE SAFETY COMPETITION
PRESHIFT EXAMINER'S CONTEST
JULY 16, 2013

CONTESTANT STATEMENT

Welcome to the Hatfield and McCoy Coal Company, Mine No. 1, I am _____ and this is _____.

The Hatfield and McCoy Coal Company, Mine No. 1, mines coal with a continuous miner, shuttle cars, roof bolting machine and battery powered scoops. The mine operates two shifts per day, five days per week on MMU 001-0. This mine has a history of poor roof and rib conditions along with accumulations of methane.

You are to conduct a preshift examination of the 001 section for the upcoming shift. This section was idle the previous shift.

The MMU 001-0 section consists of three entries.

- No. 1 entry is the intake (indicate to contestant)
- No. 2 entry is the belt (indicate to contestant)
- No. 3 entry is the return (indicate to contestant)

The mining height averages 6 feet. The main fan is blowing and operational. Underground power is energized.

A copy of the approved roof control plan, the approved ventilation plan and a blank 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.

Note: No roof support is required to be installed by the examiner.

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

HATFIELD AND McCOY MINE SAFETY COMPETITION
PRESHIFT EXAMINER'S CONTEST
JULY 16, 2013

Roof Control Plan

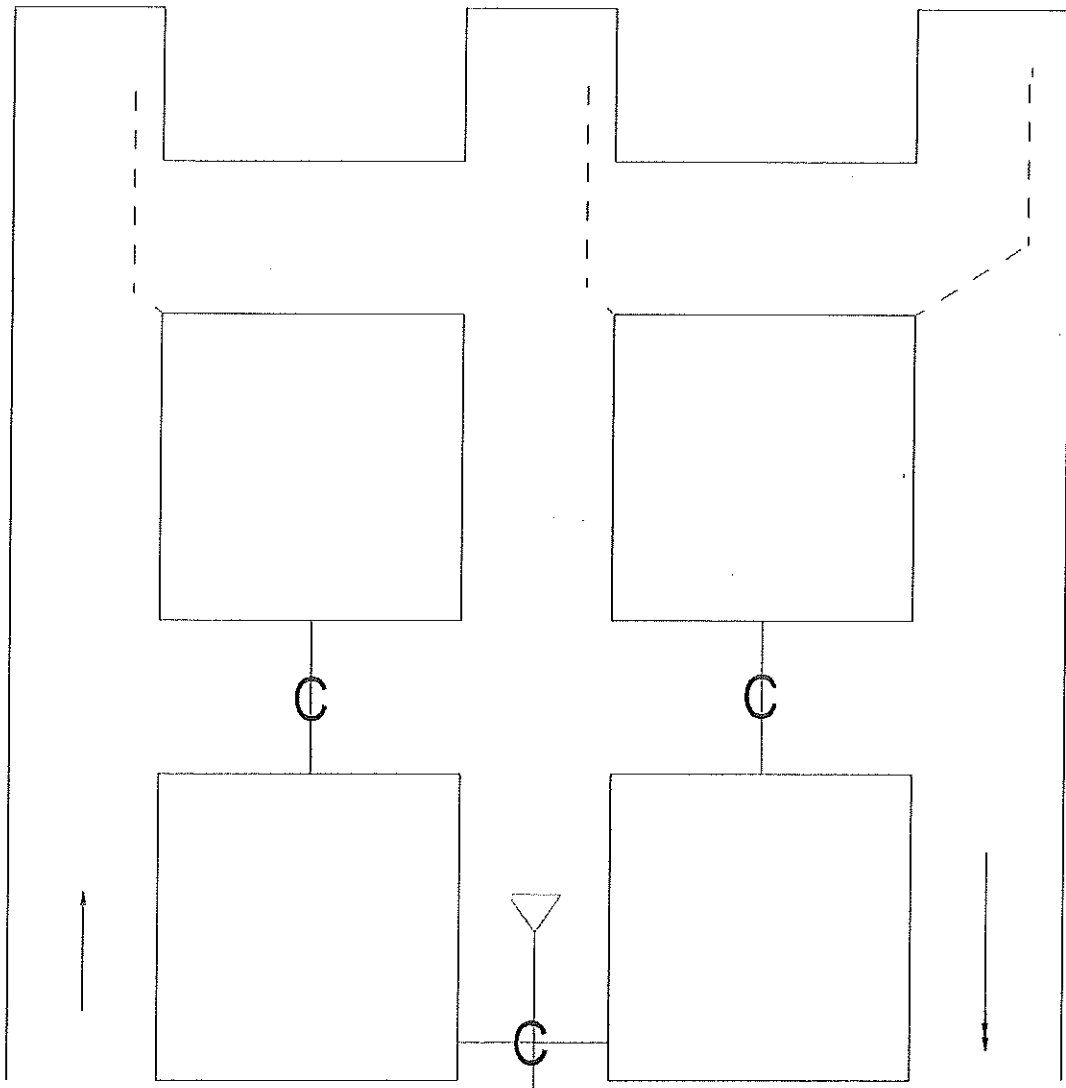
- Minimum bolt length - 48" resin grouted rebar bolt.
- The roof bolt installation pattern is 4 feet by 4 feet.
- 6 - 10 ft. cable bolts are required in all intersections.
- The maximum entry and crosscut widths are 20 feet.
- The maximum cut depth is 20 feet.
- Reflectors or Danger Signs shall be placed on last row of permanent supports at the approaches to all unsupported areas.

HATFIELD AND McCOY MINE SAFETY COMPETITION
PRESHIFT EXAMINER'S CONTEST
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Ventilation Plan

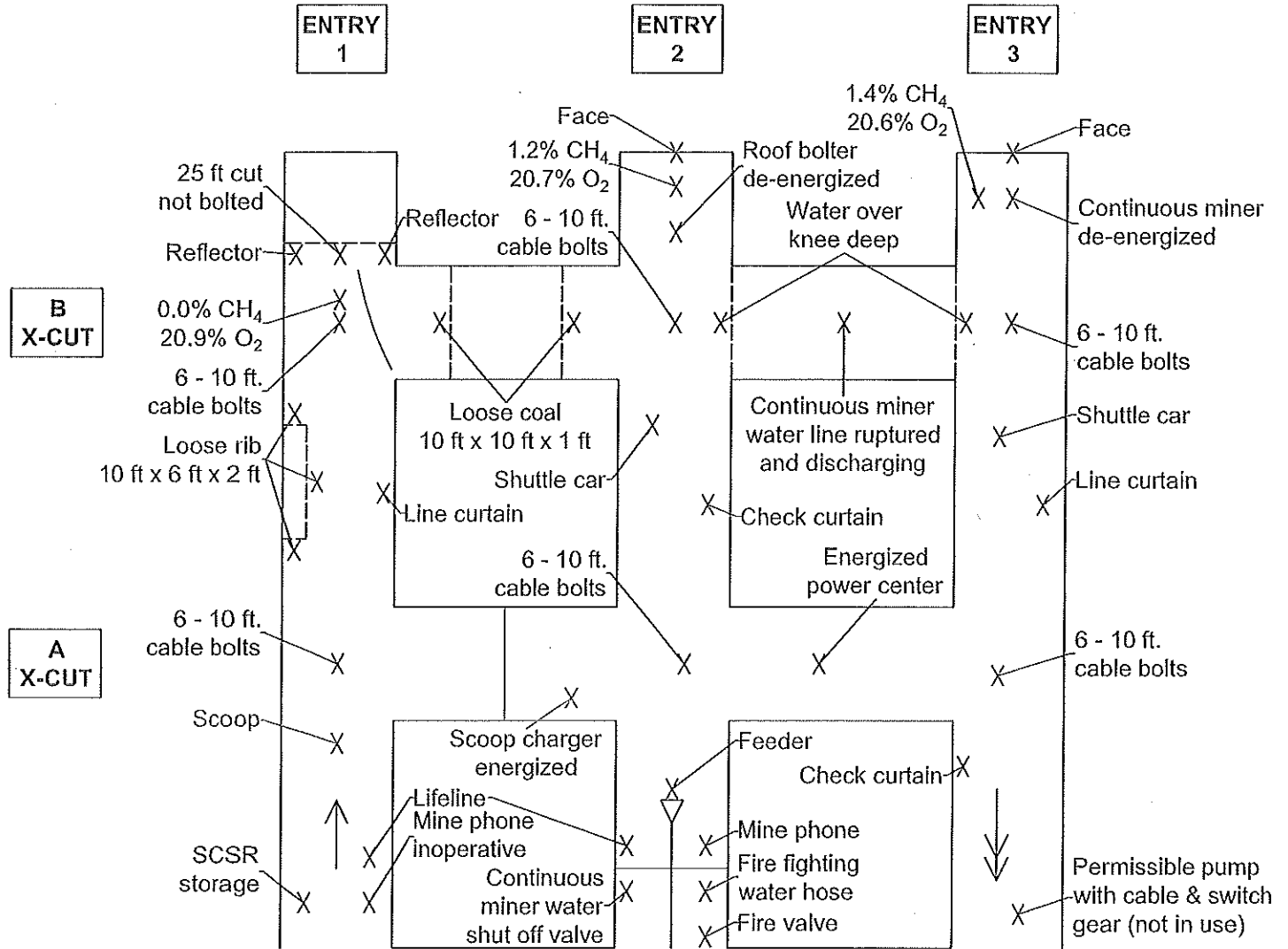
- 20,000 CFM will be provided in the last open crosscut.
- 7,500 CFM or 75 FPM mean air velocity (whichever is greater) will be provided in all working faces where coal is cut, mined, loaded or drilled for blasting.(Exhausting face ventilation only)
- A perceptible movement of air is required in all idle working places. Line curtain installed within 10 ft. of face for bolted places and next to the last row of permanent roof support for unbolted places.
- Belt air is regulated outby the section loading point.

Ventilation Plan

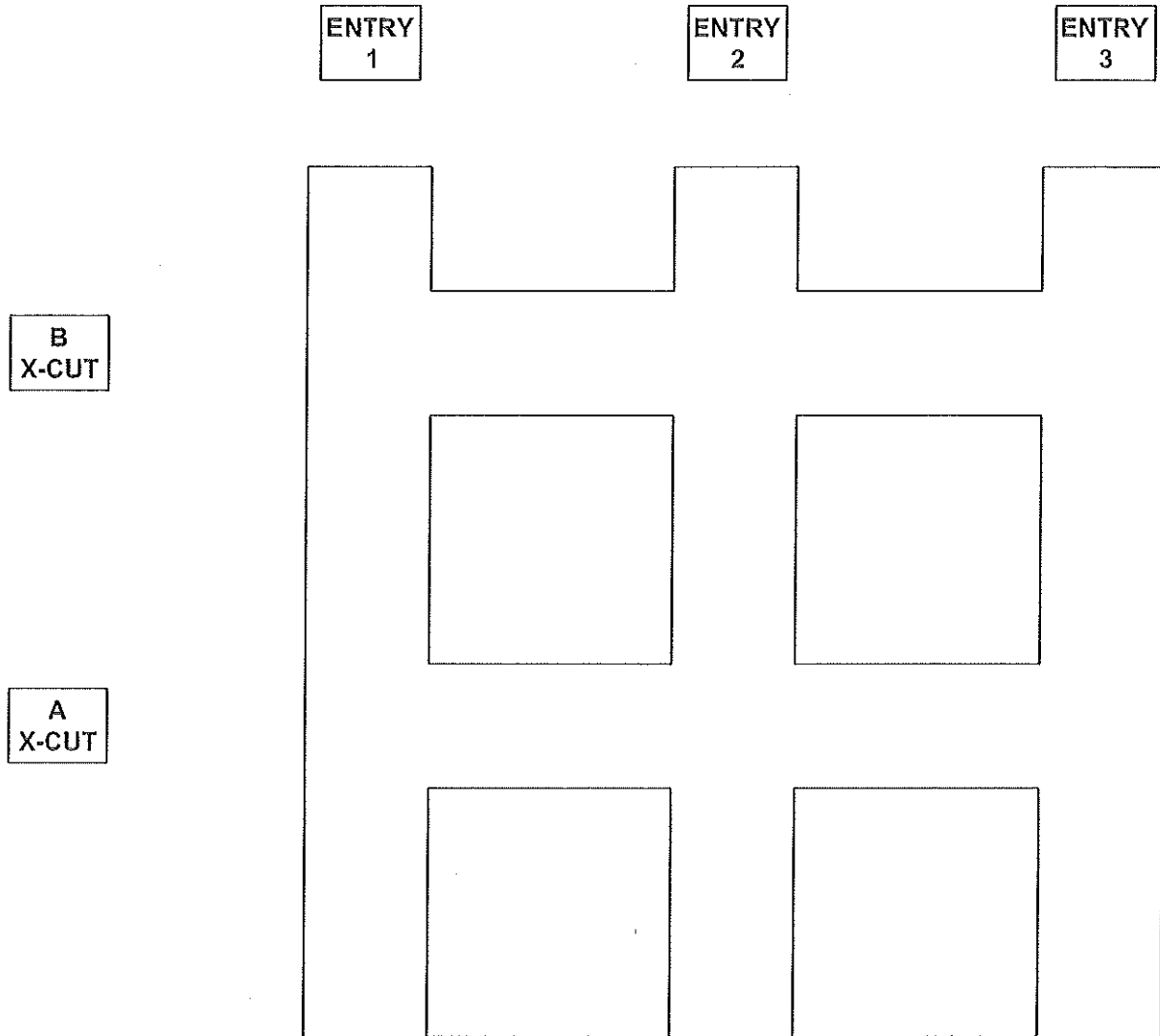


Typical Section/Face Ventilation

2013 Hatfield & McCoy Mine Safety Competition Preshift Contest



2013 Hatfield & McCoy Mine Safety Competition Preshift Contest - Contestant Map



LAST OPEN CROSSCUT AIR READINGS

ENTRY WIDTH → 20 FEET

ENTRY HEIGHT → 6 FEET

VENTILATION CONTROLS IN-PLACE

Velocity - 195 fpm

$$20 \times 6 \times 195 = 23,400 \text{ cfm}$$

WITHOUT VENT. CONTROLS IN-PLACE

Velocity - 60 fpm

$$20 \times 6 \times 60 = 7,200 \text{ cfm}$$

ANEMOMETER TURNED BACKWARDS

Velocity - 805 fpm

$$20 \times 6 \times 805 = 96,600 \text{ cfm}$$

**PRE-SHIFT EXAMINATION CONTEST
JUDGES DISCOUNT SHEET**

CONTESTANT _____ NO. _____ *DENOTES DISCOUNT

OUTSIDE

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT CHECK IN	___	___*	1
(2) DID CONTESTANT CHECK SCSR	___	___*	3
(3) DID CONTESTANT CHECK METHANE/OXYGEN DETECTOR	___	___*	19
(4) DID CONTESTANT HAVE ALL REQUIRED EQUIPMENT	___	___*	2
(5) WAS CONTESTANT EQUIPMENT MAINTAINED IN OPERABLE CONDITION	___	___*	14
(6) DID CONTESTANT CHECK OUT	___	___*	1

NO. 1 ENTRY

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT TAKE GAS TEST IN ENTRY	___	___*	5
(2) DID CONTESTANT TAKE A PROPER GAS TEST	___	___*	6
(3) DID CONTESTANT DTI ENTRY WHERE GAS TEST WAS MADE	___	___*	4
(4) DID CONTESTANT PLACE A DANGER SIGN AT MINE PHONE	___	___*	12
(5) DID CONTESTANT PLACE DANGER SIGNS AT LOOSE RIB	___	___*	12
(6) DID CONTESTANT IDENTIFY ROOF & RIB TEST IN ENTRY	___	___*	10
(7) DID CONTESTANT TAKE GAS TEST IN THE FACE AREA #1 ENTRY NEAR LAST PERMANENT ROOF SUPPORT (FACE NOT BOLTED)	___	___*	5
(8) DID CONTESTANT TAKE A PROPER GAS TEST	___	___*	6
(9) DID CONTESTANT DTI THE FACE AREA #1 ENTRY (NOT BOLTED)	___	___*	4
(10) DID CONTESTANT PLACE A DANGER SIGN AT 25 FT. CUT	___	___*	12
(11) DID CONTESTANT ENTER UNSUPPORTED AREA OF #1 FACE	___*	___	16

CROSS CUT "A" BETWEEN 1 AND 2 ENTRIES

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) NO HAZARDS TO IDENTIFY OR CORRECTIVE ACTIONS REQUIRED	N/A	N/A	N/A

LAST OPEN CROSSCUT "B" BETWEEN 1 & 2 ENTRIES

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT PLACE DANGER SIGNS AT LOOSE COAL	___	___*	12

**PRE-SHIFT EXAMINATION CONTEST
JUDGES DISCOUNT SHEET**

CONTESTANT _____ NO. _____ *DENOTES DISCOUNT

NO. 2 ENTRY

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT TAKE GAS TEST IN ENTRY	___	___*	5
(2) DID CONTESTANT DTI ENTRY WHERE GAS TEST WAS MADE	___	___*	4
(3) DID CONTESTANT TAKE A PROPER GAS TEST	___	___*	6
(4) DID CONTESTANT IDENTIFY ROOF & RIB TEST IN ENTRY	___	___*	10
(5) DID CONTESTANT TAKE GAS TEST IN THE FACE AREA #2 ENTRY	___	___*	5
(6) DID CONTESTANT TAKE A PROPER GAS TEST	___	___*	6
(7) DID CONTESTANT DTI THE FACE AREA #2 ENTRY	___	___*	4
(8) DID CONTESTANT VERBALLY IDENTIFY 1.2 PERCENT CH4 IN #2 FACE	___	___*	11
(9) DID CONTESTANT VERBALLY IDENTIFY LINE CURTAIN NOT INSTALLED	___	___*	11
(10) DID CONTESTANT INSTALL LINE CURTAIN IN #2 FACE	___	___*	12
(11) DID CONTESTANT RE-TEST FOR GAS AFTER VENTILATING FACE	___	___*	5

CROSS CUT "A" BETWEEN 2 AND 3 ENTRIES

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT VERBALLY INDENTIFY MISSING CHECK CURTAIN	___	___*	11
(2) DID CONTESTANT INSTALL CHECK CURTAIN ON RETURN SIDE OF POWER CENTER	___	___*	12
(3) DID CONTESTANT DTI AT POWER CENTER	___	___*	4
(4) DID CONTESTANT GAS TEST AT POWER CENTER	___	___*	5
(5) DID CONTESTANT TAKE PROPER GAS TEST	___	___*	6

LAST OPEN CROSSCUT "B" BETWEEN 2 & 3 ENTRIES

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT VERBALLY IDENTIFY WATER OVER KNEE DEEP	___	___*	11
(2) DID CONTESTANT PUMP WATER	___	___*	12
(3) DID CONTESTANT VERBALLY IDENTIFY RUPTURED WATER LINE	___	___*	11
(4) DID CONTESTANT TURN WATER OFF AT SHUT OFF VALVE	___	___*	12
(5) DID CONTESTANT DETERMINE CORRECT SECTION VENTILATION	___	___*	7
(6) DID CONTESTANT TAKE LAST OPEN CROSSCUT AIR READING IN PROPER LOCATION	___	___*	9
(7) DID CONTESTANT TAKE PROPER AIR READING	___	___*	8
(8) DID CONTESTANT ENTER WATER OVER KNEE DEEP PRIOR TO PUMPING	___*	___	16

**PRE-SHIFT EXAMINATION CONTEST
JUDGES DISCOUNT SHEET**

CONTESTANT _____ NO. _____ *DENOTES DISCOUNT

NO. 3 ENTRY

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT TAKE GAS TEST IN ENTRY	___	___*	5
(2) DID CONTESTANT DTI ENTRY WHERE GAS TEST WAS MADE	___	___*	4
(3) DID CONTESTANT TAKE A PROPER GAS TEST	___	___*	6
(4) DID CONTESTANT IDENTIFY ROOF & RIB TEST	___	___*	10
(5) DID CONTESTANT TAKE GAS TEST IN THE FACE AREA #3 ENTRY	___	___*	5
(6) DID CONTESTANT TAKE A PROPER GAS TEST	___	___*	6
(7) DID CONTESTANT DTI THE FACE AREA #3 ENTRY	___	___*	4
(8) DID CONTESTANT VERBALLY IDENTIFY 1.4 PERCENT CH4 IN #3 FACE	___	___*	11
(9) DID CONTESTANT VERBALLY IDENTIFY LINE CURTAIN NOT INSTALLED	___	___*	11
(10) DID CONTESTANT INSTALL LINE CURTAIN IN #3 FACE	___	___*	12
(11) DID CONTESTANT RE-TEST FOR GAS AFTER VENTILATING FACE	___	___*	5

GENERAL RULES

	<u>YES</u>	<u>NO</u>	<u>RULE</u>
(1) DID CONTESTANT RUN	___*		13
(2) DID CONTESTANT EXAM ALL ACCESSIBLE AREAS	___	___*	18
(3) DID CONTESTANT COMPLY WITH GENERAL RULES NOT COVERED IN THE DISCOUNT SHEET	___	___*	19

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	Mine Phone Inoperative	Dangered off
No. 1 Entry	Loose Rib 10ft .X 6ft X 2ft	Dangered off approaches
No. 1 Face	25 ft cut	Dangered off
B-Crosscut between 1 and 2 entries	Loose Coal 10 ft X 10 ft X 1 ft	Dangered off approaches
No. 2 Face	CH4 1.2% - No line curtain installed	Ventilated per plan - 0.0% CH4
No. 3 Face	CH4 1.4% - No line curtain installed	Ventilated per plan - 0.0% CH4
A-Crosscut between 2 and 3 entries	No check curtain installed	Installed check curtain
B-Crosscut between 2 and 3 entries	Water over knee deep	Pumped water
B-Crosscut between 2 and 3 entries	Continuous Miner Water Line Ruptured and discharging	Turned water valve off

Air Measurements

Location	CFM	Location	CFM
LOCC - "B" x-cut between 2 and 3 entries	23,400 cfm 7,200 cfm* 96,600 cfm**		

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

Signed by Pre-shift Certified Examiner

Date

Certification Number