

Judge's Instructions

1. Show the contestant the time clock and the check in/out board.
2. Provide contestant with the blank map, written statement, and ventilation and roof control plans. The contestant has 5 minutes to review the plans prior starting the clock and the underground portion of the contest.
3. Show the contestant the entries and which area he or she is to pre-shift. Entries are labeled left to right facing inby.

Contestant needs to take air reading #1 face and the #2 face to be able to calculate the total last open cross cut air reading. The pump in #1 entry needs to be energized to pump water in belt.

For taking the air reading on the section, give the contestant the following information:

Width =	20 feet	
Height =	8 feet	
Area =	160 - 5 (vent tube) 155 sq. ft	CORRECT LOCATION
Velocity =	92 fpm for LOX	
CFM =	14260 CFM	
Diameter of vent tubing is 30 inches area is 5 sq. ft		
#1 face vent tube =	1009 FPM	
#2 face vent tube =	616 FPM	
To get the LOX must add #1 and #2 face reading to LOX reading. $14260 + 8125=25085$		
If contestant moves check curtain for air reading or changes air flow give FPM for last open of 48.		

If contestant does not take an air reading in the proper location for the LOX (this includes readings at the ends of vent tubes in entry #1 and #2 plus reading in the cross cut; deduct if the contestant does not take air readings in the ends of vent tube in entry #1 and #2 and add to cross cut, deduct for improper location

Provide the contestant the following gas reading for the outby areas 0.0% CH₄ and 20.9% O₂.

Contestant must simulate taking the air reading for **60 seconds**.

Contestant can correct following hazards; removed pallet, rock dust bags and oil can to garbage trailer; remove ball on life line at stopping; install ball on life line at door; put warning at last row of supports; extend vent tube #2 face; turn belt pump on in water.

The contestant will have 30 minutes to work the problem. Notify the contestant when 1 minute remains.