

**ROOF CONTROL – SAFETY ALERT!!** "BE CAREFUL FOR YOU AND YOUR FAMILY"





Roof falls and roof fall accidents can dramatically affect the livelihood of coal miners, their families and the viability of a coal mine. Many contributing factors can be identified <u>AFTER</u> a roof fall, but that which is more important is what was observed or detected <u>PRIOR</u> to the fall. A section foreman received fatal injuries and three other miners were temporarily entrapped by a roof fall - high angle slip. (see photos above)

**REMEMBER:** Everyone must work together to identify and control "potential" roof problems and failures before they occur.

## Mine operators/officials can identify potential areas of roof failure by:

- Reviewing roof fall tracking history to identify when, where and why previous seam and mine specific roof failures have occurred.
- Reviewing mine maps of overlying and underlying mine workings that could and usually do affect the roof in areas of present and future mining.
- Reviewing linear zone information and topographic maps that identify contours, hollows, linear zones and depth of cover and how each may potentially affect mine roof conditions.
- Reviewing core hole data to evaluate the structural formations of roof strata above the coal seam.
- Plotting areas of roof failure and potential concern on mine maps and communicating this information to all mining personnel.

## **Underground foremen and workers can identify potential areas of roof failure by:**

- Monitoring and evaluating all changes in mine roof conditions when approaching potential problem areas previously identified.
- Observing changes in mining conditions including pillar blocks, mine floor, ribs, water, elevation changes and/or other visual indicators previously related to adverse roof.
- Drilling additional length test holes to more fully evaluate the roof strata.
- Requesting Division of Mines stratascope evaluations that provide a visual verification of mine roof conditions.

## PLEASE POST "2003"

For additional information or assistance, contact the Division of Mines, Big Stone Gap (276) 523-8227 or Keen Mountain Field Office (276) 498-4533 ACCIDENT REDUCTION PROGRAM

