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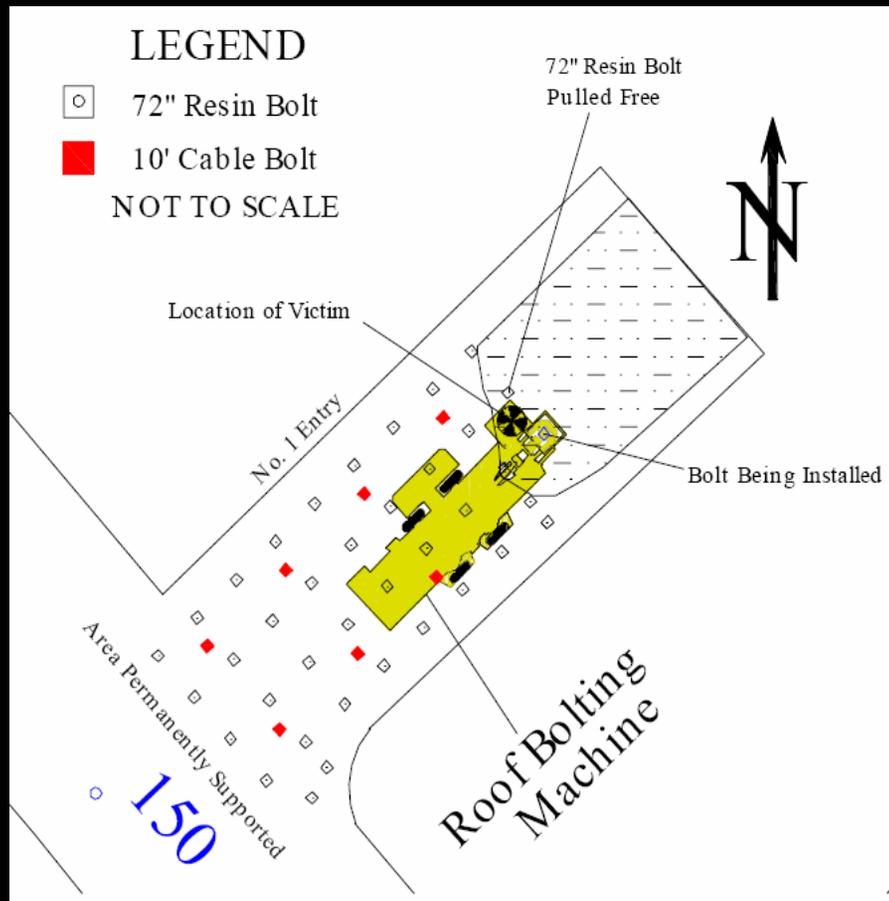
GENERAL INFORMATION

Coal Mine Fatal Accident 2006-13



Operator:	Maverick Mining Company, LLC
Mine:	Mine #1
Accident Date:	January 10, 2006
Classification:	Fall of Roof
Location:	Dist. 6, Pike County, Kentucky
Mine Type:	Underground Coal Mine
Employment:	9
Production:	140 Tons/Day

ACCIDENT DESCRIPTION



On January 10, 2006, a 44-year old roof bolting machine operator, was fatally injured in a roof fall accident on the 002-0 MMU Section.

The accident occurred as the roof bolter operator was drilling a hole in the roof to install the third roof bolt of a row in the normal roof bolting cycle in the No. 1 heading. A section of unsupported roof rock measuring approximately 14 feet by 20 feet by 3 feet thick fell against the Automated Temporary Roof Support (ATRS) and operator's canopy on the Model 320 Galis Roof Bolting Machine. The ATRS and canopy collapsed under the weight of the rock pinning the victim underneath resulting in fatal crushing injuries.

ROOT CAUSE ANALYSIS

Causal Factor: Mine management did not take additional measures to protect persons when an unusual roof hazard was encountered. A persistent bedding plane weakness was present at the 3-foot roof horizon throughout the mine. In addition, a drag fold was present that roughly paralleled the entry. Both of these factors weakened the immediate roof and made it susceptible to failure and were evident in the cut just outby the accident site. The standards, policies, and administrative controls in use at the mine did not ensure that additional measures were taken to identify and correct conditions associated with the occurrence of the draw rock.

Corrective Action: The roof control plan was revised to show 3 feet of draw rock taken during coal extraction, limit the depth of cuts to 12 feet, use 8" by 8" bearing plates, and use a dual boom roof bolting machine equipped with a t-bar type ATRS.

ROOT CAUSE ANALYSIS cont'd.

Causal Factor: The on-shift examination conducted in the working places of the 002 MMU working section failed to detect and subsequently correct the hazardous roof condition created by the presence of a drag fold and unconsolidated draw rock which separated from the overlying strata.

Corrective Action: The operator had all working places and work areas examined and all underground personnel were trained in workplace examination and recognizing roof cracks and separations.

ENFORCEMENT ACTIONS

§104(d)(1) Order, No. 7425414, was issued to Maverick Mining Company, LLC for a violation of 30 CFR 75.220(a)(1).

Obvious adverse roof conditions were encountered on the MMU 002 working section in the face of the No. 1 heading. Unconsolidated draw rock approximately 3 feet thick was present from the last row of permanent roof support to the face, a distance of approximately 20 feet in depth and 18 feet wide. This draw rock subsequently fell in the process of installing the third roof bolt in the normal roof bolting cycle causing fatal injuries to the operator of the roof bolting machine.

A 20 feet deep cut, 18 feet wide had been mined from the face of the No. 1 heading and approximately 3 feet of draw rock **had not been taken** as the cut was mined. The 3 feet of unconsolidated draw rock had fallen in the cut prior to the cut in which the fatal accident occurred. Mine management did not take additional measures to protect persons when the unusual hazard associated with the unconsolidated draw rock was encountered. Reasonable care was not taken to cut the draw rock during the extraction of coal or to reduce the depth of cut from 20 feet to a more suitable depth to control the hanging draw rock that was left as the cut was mined. The unconsolidated draw rock subsequently fell and struck the victim while he was installing the permanent supports, resulting in fatal injuries.

ENFORCEMENT ACTIONS, Cont'd.

§104(d)(1) Order, No. 7425414 continued

The section foreman was present in the working place for the entire duration of the extraction process of the mining cycle when he was operating the shuttle car as the cut was mined.

30 CFR 75.220(a)(1) stipulates that additional measures beyond the minimum requirements of the Approved Roof Control Plan be taken to protect persons when unusual hazards are encountered."

ENFORCEMENT ACTIONS, Cont'd.

§104(d)(1) Order, No. 7425415, was issued to Maverick Mining Company, LLC for a violation of 30 CFR 75.362.

The on-shift examination conducted on January 10, 2006, in the working places of the 002-0 MMU working section failed to detect and subsequently correct the hazardous roof condition created by the presence of unconsolidated draw rock. The condition was widespread and obvious and should have been detected by a reasonable prudent mine examiner. Previous mining activity in the immediate area revealed that this condition is unstable and could not be controlled with routine mining practices. The cut immediately outby had similar conditions and had fallen before permanent roof supports could be installed. Unconsolidated draw rock approximately 3 feet thick was present from the last row of permanent roof support to the face of the No. 1 heading, a distance of approximately 20 feet in depth and 18 feet wide. The draw rock subsequently fell and struck the victim as he was in the process of installing the third roof bolt in the normal roof bolting cycle.

ENFORCEMENT ACTIONS, Cont'd.

§104(d)(1) Order, No. 7425415, continued

Draw rock approximately 3 feet thick was not cut down while mining the cut nor was the cut depth shortened to control the draw rock. The mine examiner was engaged in other work activities including equipment repair and shuttle car operation while these hazardous conditions were developing. The unconsolidated draw rock subsequently fell and struck the victim while he was installing permanent supports, resulting in fatal injuries. Management was aware of the roof conditions immediately prior to the roof bolting machine operator being fatally injured

30 CFR 75.362, stipulates that at least once each shift, or more often if necessary for safety, a certified person designated by the operator shall conduct an on-shift examination of each section."

BEST PRACTICES

- Examine the roof, face and ribs, including sound and vibrations tests, during pre-shift examinations, immediately before any work is started, and periodically as conditions warrant.
- Ensure that the ATRS is functioning properly and set firmly against the mine roof before going in by permanent support.
- Remain alert for changing roof conditions.
- Take additional measures when hazards associated with draw rock are encountered, such as mining shorter cuts and decreasing roof bolt spacing.