This presentation is for illustrative and general educational purposes only and is not intended to substitute for the official MSHA Investigation Report analysis nor is it intended to provide the sole foundation, if any, for any related enforcement actions.

#### **Coal Mine Fatal Accident 2006-16**



Victim's Location

Operator: Andalex Resources, Inc.

Mine: Aberdeen Mine

Accident Date: February 16, 2006

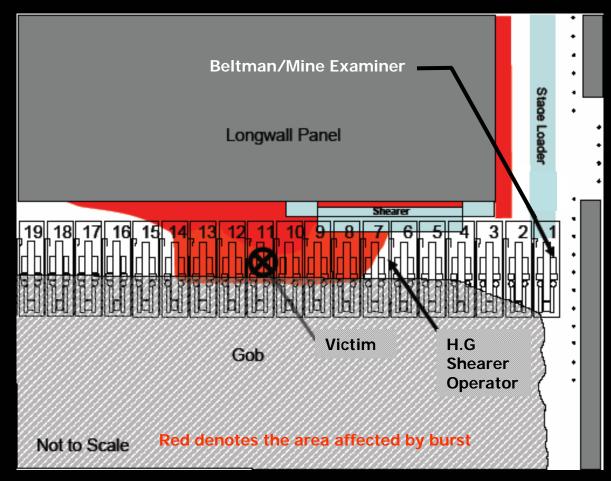
Classification: Fall of Face

Location: Dist. 9, Carbon County, Utah

Mine Type: Underground Coal Mine

Employment: 138

Production: 4,241 Tons/Day



On Sunday, January 29, 2006, at 11:00 p.m. The victim, age 37, a longwall propman who was operating the tailgate drum of the shearer, was fatally injured when a coal bounce/outburst occurred and pushed him into the No. 11 shield legs on the 12th East longwall face.



Prior to the accident, a cut was made from the tailgate to the headgate. When the cut was completed, the shearer was taken to about No. 40 shield to make a taper cut back to the headgate to catch up the lagging headgate end of the face. As the shearer entered the headgate area, The victim remained behind the operation at No. 11 shield. As the headgate drum operator was completing the cutout, a coal outburst from a bounce on the longwall face propelled coal over the face conveyor into the shield walkway area, striking the miner and causing fatal head injuries.

# **ROOT CAUSE ANALYSIS**

<u>Causal Factor</u>: Management did not have sufficient procedures in place to ensure that adequate barriers were installed and used in a manner to protect miners from hazards related to outbursts on the longwall face.

<u>Corrective Action</u>: Conveyor belt guards and metal guards were installed from shield Nos. 5 to 135 with the bottom of the conveyor belt guards attached to the face conveyor to limit movement into the longwall walkway. The belt guards were also restrained by two horizontal chains attached to the metal guards. Requirements restricting travel on the longwall section were implemented. Shearer operators were required to position themselves behind the elevated cutter drums, shearer lump breaker, or shearer sloughing plate (deflector plate) during the cutting sequence. In addition, headgate and tailgate entries were required to be mapped for geologic features and, where sandstone channels were found, the normal 30-inch cutting web at the face would be reduced to 15 to 18 inches.

### **ENFORCEMENT ACTIONS**

§104(a) Citation was issued to Andalex Resources, Inc. for for a violation of 30 CFR 75.202(a).

The barriers between the coal face and the walkway area were not adequately installed and used in a manner to protect miners from hazards related to coal outbursts on the longwall face. A bounce and coal outburst occurred on the 12th East longwall (Panel No. 7) on January 29, 2006, which fatally injured the tailgate shearer operator. Procedures for installing barriers between the coal face and the walkway where the miner was injured did not require them to be secured in a manner to withstand potential forces from coal outbursts in known high stress areas such as the headgate area of the longwall.

## **ENFORCEMENT ACTIONS, Cont'd.**

§104(a) Citation was issued to Andalex Resources, Inc. for a violation of §30 CFR 75.223(a)(1).

Revisions to the roof control plan were not proposed by the operator when conditions indicated that the plan was not suitable for controlling the effects of outbursts that were occurring on the longwall face. A bounce and coal outburst occurred on the 12th East longwall (Panel No. 7) on January 29, 2006, which fatally injured the tailgate shearer operator. Prior to this accident, bounces and coal outbursts occurred on the longwall face, which led management to implement "Bounce Procedure" guidelines on January 9, 2006. However, revisions of the roof control plan addressing these conditions were not proposed by the operator.

### BEST PRACTICES

- When appropriate, use personal protective equipment (PPE) to reduce the risk and/or severity of injury.
- Ensure that all machinery guards and other safety devices are adequate, properly installed, and well maintained before work commences.
- Shearer operators should position themselves behind the sloughage plate, elevated cutter drums, or lump breaker on the shearer when coal is being cut.