## MNM Fatal 2009-12

Fall of Roof Accident
June 20, 2009 (Louisiana)
Underground Salt Mine
Equipment Oiler/Greaser
52 years old
25 years of experience

## Overview

The victim was cleaning equipment when the mine roof fell and fatally injured him. The fall was about 50 feet long by 20 feet wide and up to 3 feet thick. Another miner working nearby was not injured.

The accident occurred because the ground support system for the mine was not designed, installed and maintained to control the ground where persons worked or traveled. The roof rock broke below the anchorage zone of the roof bolts and pulled several of them out of the roof leaving the expansion shells in the bolt holes.



## **Root Cause**

**Root Cause:** Roof bolts were not properly installed in the area of the roof fall.

*Corrective Action:* The entry and crosscut leading into the fall area were scaled and additional roof bolts were provided as necessary. Miners were instructed to test the installed torque of the required number of roof bolts each shift. Management will monitor roof bolting operations to ensure that roof bolts are properly installed and torqued.

## **Best Practices**

- When ground conditions create a hazard to persons, install effective ground support before other work is permitted in the affected area.
- Design, install, and maintain a support system to control the ground in places where persons work or travel.
- Examine and test ground conditions in areas where work is to be performed prior to work commencing and as ground conditions warrant during the shift.
- Be alert to any change of ground conditions.
- Identify and scale loose ground from a location which will not expose persons to falling material.