

**Missouri Mine Rescue Contest  
Rolla, MO  
October 3, 2012**

**MINE INFORMATION**

EXPLOSIVES	Explosives are available and stored on the surface.
ELECTRICITY	A 4160 Volt power line enters the mine by way of a lined borehole. The line feeds various non permissible power centers throughout the mine.
GAS	The mine has a non gassy mine classification. Occasionally, traces of methane are found.
GEOLOGY	The mine is located in a banded iron formation. The sedimentary rock contains more than 20% iron composed predominantly of thinly bedded iron materials and silica. Deposits of the iron formation are found in some out crops to the surface and range several hundred feet underground.
MATERIALS	All materials to work the problem are located underground or on the surface at the fresh air base and are identified by placards.
MINE MAPS	The mine map was last updated on October 1, 2012.
MINING METHOD	Mine development for the first level is standard room and pillar using conventional drilling and blasting methods. The first level will act as the infrastructure for mining the lower levels using sub level caving mining method. Currently the first level is the only area under development.
MINING EQUIPMENT	4 - Cat MD 1002 Electric shaft single boom Jumbo drills 4- Wagner ST1800 18 metric ton capacity diesel scoops 2- Wagner ST1000 10 metric ton capacity diesel scoops 4- Getman S300 diesel scalers Various transportation trucks for material and man haulage.
NOTIFICATION	All federal, state, and local officials have been notified.

## OTHER MINES

The “Old Squirrel” mine was mined into approximately 2 years ago. The mine was an old adit mine developed in the early 1950s. Poor ground conditions and water caused the mine to close having only minimal development. (See map). Currently this section of the mine is being rehabilitated to act as a storage area and an additional entrance into the mine. There are no other mines in the area.

## PHONES

There are mine phones are non-permissible and are located in the mine.

## REFUGE CHAMBERS

Available on all working sections throughout the mine.

## ROOF SUPPORT

Point-anchor resin bolts are used in varying lengths for primary roof support. Wooden posts are used for secondary support.

## VENTILATION

One 60-inch diameter Joy axi-vane fan, capable of exhausting 250,000 CFM is used to ventilate the mine. The fan installation meets the MSHA requirements for ventilating possible explosive mixtures. The fan is not reversible and is located and controlled from the surface. Non reversible blowing booster fans are located on all working sections as well. These fans are installed to assist in the dust control issues at the mine.

## WATER

The mine pumps approximately 200,000 gallons of water daily. There are 2 main sumps with high pressure water pumps (10,000 GPH) operating at each sump. Each pumping station has a backup pump as well.

Smaller pump stations with sumps are located throughout the mine as water is pumped to the main sumps and then out of the mine.