Missouri Mine Rescue Contest
Rolla, MO
September 25, 2014

MINE INFORMATION

BACKUP TEAM(S)	A second backup team has arrived on mine site.
EXPLOSIVES	Explosives are available and stored on the surface.
UG ELECTRICITY	A 4160 Volt power line enters the mine by way of a lined bore hole, which supplies power to the sump pump station.
GAS	The mine has a non-gassy mine classification (Category VI). However liberations of methane gas have been detected from a three foot coal seam encountered during the development of the downcast airshaft. The coal seam is located half way or approximately 100' from the surface. A water ring was installed near the coal seam to assist in water collection behind the shaft lining. An Atmospheric Monitoring System (AMS) has been installed to monitor methane at the surface of the airshaft, near the water ring inside the airshaft, and at the bottom of the airshaft.
GUARDS	Guards have been placed at each mine shaft and are monitoring the air quality at both locations.
GEOLOGY	The Cherry Hills 4 Mine is located in southeast Missouri. The Cherry Hills 4 Mine was developed along a 14-inch wide altered, metallic sulfide mineralization zone. The host rock is granite and metamorphosed granite within the Precambrian Pedlar Complex and the silver seems to be associated with arsenopyrite veins. These veins have been identified at this location that stretch westward for approximately three miles. Shallow coal beds cleats of saturated water have been discovered in various areas west of the mining zone.
MATERIALS	All materials to work the problem are located in the field problem and are identified by placards.
MINE MAPS	The mine map was last updated on September 9, 2014.
MINING METHOD	The mine was developed with the standard room and pillar method. New ownership will utilize a cut and fill method of mining when production begins.

MINING EQUIPMENT	The mine utilizes small diesel powered LHD's, Battery scoops, and a Haul truck at this time for muck extraction. All diesel powered equipment has been sent to surface for preventative maintenance as of earlier in the week.
NOTIFICATION	All federal, state, and local officials have been notified.
OPENINGS	The mine has 3 openings: • An adit acts as the main entrance to the mine for men and materials and intake airway. The adit is equipped with metal doors that service as a regulator for intake air. • A new 3' diameter downcast airshaft was installed to provide intake air for the newly projected development areas. The shaft also incorporates an auxiliary hoist with a one man bullet for the mines secondary escapes way. The diesel power generator is being inspected for service and condition is unknown at this time. The shaft also has control doors at the surface. • An 8' diameter exhaust shaft is located on the Far East side of the mine. The exhaust shaft is equipped with a surface fan and serves as the main return for the mine.
PHONES	There are Femco battery phones in 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 84-inch diameter Joy axi-vane permissible fan is used ventilate the mine, intaking air via the main portal adit. A newly developed airshaft on the west side of the mine can be set up as an intake source in lieu of the adit portal intake. • The fan is located at the top of the exhaust shaft. The fan exhausts about 10,000 cfm and in not reversible. The fan is currently running.
WATER	The mine pumps approximately 300 gallons of water daily. There is a main sump with a high pressure water pump (100 GPH) operating at the sump.