

Southwestern Regional Mine Rescue Contest
Carlsbad, New Mexico
April 22-24, 2014

MINE INFORMATION

AIR /WATER LINES	There are air lines underground but are out of service at this time. Utility water lines are also out of service at this time.
BACKUP TEAMS	Several backup teams have been notified. One team is on-site.
ELECTRICITY	A 4160-volt power cable runs down shaft #1 to the main power center located in the #2 entry between X-Cut #1 & X-Cut #2.
EXPLOSIVES	There are explosives used underground, but the explosives magazines are located on surface at this time.
GAS	Not classified as a gassy mine.
GEOLOGY	The Porcupine Mine sits in the center of the second ore bearing structure in the Go T vein, a fissure vein typical of many in the Alaska channel mining district. The ore body is located in the rivet formation, which is known to provide excellent host rock for a number of ore bodies in this district. This vein strikes southeasterly and dips steeply to the south with an average width of 6' to 7'.
GUARDS	Mine management is currently locating individuals to place at each shaft.
HOISTS	Shaft #1 is equipped with a 14-man cage and hoist. Shaft #2 does not have a conveyance at this time. There is a portable 5-man diesel powered auxiliary hoist next to the #2 shaft.
MATERIALS	All materials available to work the problem are underground.
MINE MAPS	The mine map was last updated on April 1, 2014.
MINING EQUIPMENT	The mining equipment consists of (5) Gardner-Denver Jackleg Drills, (1) Sandvik LH410 LHD, (1) Sandvik DS311 Single Boom Roof Bolter, (2) Man Trips and (1) Sandvik TH315 Haul truck.
OTHER EQUIPMENT	There are a minimum of two electric water pumps. One serves for the water sump and the other is a spare that's kept in the shop.

NOTIFICATION	All federal, state, and local officials have been notified.
OTHER MINES	There are no other underground mines in the immediate area.
PHONES	There is a mine phone at the #1 shaft, the main power center, and the shop.
ROOF SUPPORT	The mine utilizes 6' split set bolts, 10' Super Swellex bolts, 4'x8' sheets of #9 wire mesh, and are exploring using shotcrete for additional support.
STOPPINGS	There are four permanent stoppings in the active mine. Three of which separate the active mine from the old works. One acts as barrier wall for the water sump. They consist of two partitions that are constructed 24 inches apart. The gap between the two partitions is filled with concrete. The stoppings behind the two shafts are not accessible because of the structural steel in place for the cages.
SHOPS	There is an old shop located in the #3 X-Cut between entry #1 & #2. There is an electric shop in the #1 entry between X-Cut #1 & X-Cut #2.
OLD WORKINGS	Unknown exactly how far they extend westward, entries are 14' wide and 10' – 20' in height in some areas. Natural ventilation pressure (NVP) can cause air flow from the old working into the active mine.
SUPPLIES	The warehouse is on the surface, but there are currently no tools or supplies.
VENTILATION	A 48-inch exhaust fan is located on surface at the #2 shaft (Exhausting about 30,000 cfm). The fan is electric with a diesel powered backup motor and is not reversible. The fan controls are located on surface. Permanent stoppings consist of two partitions that are constructed 24 inches apart. The gap between the two partitions is filled with concrete. Temporary stoppings and check curtains are made from rolled brattice cloth.
WATER/WATER LINES	The previous GO-T Mine had small amounts of water while it was in operation. We broke thru an area of the old works and we accidentally tapped into an underground water source. A permanent stopping has been installed to control the flow but water continues to seeps through the floor from behind the stopping and into the active area. A temporary stopping is also located behind the permanent stopping to slow down the flow. This area is only

accessed to check water levels. The flow has increases recently during the spring time run off from the surrounding mountains. A bridge covering a culvert has been constructed in the #3 entry to allow water to free flow into the sump. The sump has a permanent pump that runs continuously pumping water to the surface. (Sump pump water lines are in service)