

Southwestern Regional Mine Rescue Contest
Taos, NM May 22, 2013

TEAM BRIEFING

You have arrived at the Rattlesnake Mine, an underground potash mine that is owned and operated by the Carlsbad Potash Company. The mine has three levels that are designated by the depth from the surface. Production is currently on the 1300 and 1400 levels but the 1500 level has been mined to the economic limits of the reserve. The 1500 level is ventilated and maintained but **does not have any equipment or electrical power.**

Access into the mine is provided by five shafts from the surface and one ramp between levels 1300 and 1400. Shaft #1 is an intake to the 1500 level that includes a 12-man cage but no fan. Shaft #2 is the return from the 1500 level and has an exhaust fan on the surface. Shaft #3 is the intake to the 1300 level and has a 20-man cage and a blowing fan on the surface. Shaft #4 is the return from the 1300 level and has a production skip in it. Shaft #5 is the return from the 1400 level and has no fan or conveyance. Intake air for the 1400 level comes down a ramp from the 1300 level and returns up shaft #5.

Production is currently two 8-hour shifts, which run from 7:00 a.m. to 3:00 p.m. and 3:00 p.m. to 11:00 p.m., five days per week. Maintenance and service work are performed by a small crew from 11:00 p.m. to 7:00 a.m. Mined potash is moved by conveyors to the production skip on the 1300 level and hoisted outside.

After initial development of the 1400 level in 2012, management decided to construct an underground shop on that level. The shop was offset by mining east of the 1400 level workings in order to connect a 30-inch-diameter ventilation hole (downcast) from the shop area into the 1500 level for direct ventilation into the return entries. Maintenance personnel began using the shop after the ventilation hole was completed in mid-February 2013. There is no other ventilation or travelway connection between the 1500 level and the rest of the mine.

About 3:00 a.m. today, maintenance supervisor Dan Cash called the #3 hoist operator to report smoke coming up the ventilation hole in the 1400 level shop. An evacuation of the mine was initiated and the company's two mine rescue teams were mobilized to find the source of the smoke and extinguish any fires that they found. Cash and the shop mechanic, Jim Swan, stayed inside to isolate the shop area but have not come out of the mine.

Mine rescue teams have explored the 1300 level, 1500 level and all areas of the 1400 level except for the shop. One team discovered a trailer full of trash and timbers that hadn't been removed from the 1500 level when it was abandoned. We have now learned that the shift foreman, Bob Wise, was inspecting the 1500 level and decided to take a smoke break on the trash trailer when the No. 2 shaft fan stopped running. He left in a hurry and his cigarette butt evidently ignited the trash.

The trash/timber fire has been extinguished but smoke is still rolling off it. The No. 2 shaft fan is still down and the shop isolated from the rest of the mine. It is now 6:00 a.m. and we don't know the whereabouts of the two missing miners.

If you are ready and willing, the services of your mine rescue team are greatly needed. Your team will be the first to enter the 1400 level shop from the fresh air base located in the 100 North Entry. We want you to map all accessible areas of the mine, account for the two missing miners, and bring any survivors to the fresh air base. The mine manager will be in charge.