

Lake Valley Mine Safeguard Project - Phase IV

The Lake Valley Mine Safeguard Project - Phase IV area is located in and around the ghost town of Lake Valley, seventeen miles south of the town of Hillsboro, in Sierra County, New Mexico. The project area (see Figures 1 and 2) is on private land in Sections 20, 21, and 33, of Township 18 South, Range 7 West.

This project involves the following work:

Backfilling of one mine opening using mine waste and other nearby material.

Construction of a bat gate inside a corrugated steel pipe culvert with a polyurethane foam (PUF) plug at one decline.

Construction of an airflow closure with corrugated steel pipe riser inside polyurethane foam (PUF) and concrete plugs and concrete encasement at one shaft.

Construction of horizontal bat compatible closures with corrugated steel pipe risers, precast concrete units, concrete collars, and PUF plugs at ten shafts.

Construction of bat cupolas at two shafts, one with a polyurethane foam plug, corrugated steel pipe riser, scoria fill, precast concrete units and concrete collar and one with a concrete footing placed on a cast-in-place concrete plug on a PUF plug.

Construction of a polyurethane foam plug closure with scoria fill and clay plug at one shaft and a PUF plug at another shaft (as an alternative).

Construction of large toroid tire plug closures, with small toroid mats and geotextile mesh and cloth, at one shaft (as an alternative), one decline and two stope openings.

Construction of steel mesh airflow closures with rock anchors at four shafts and an underground room. Closure of temporary construction access roads and obliteration of specified existing roads.

Seeding of all areas disturbed by construction, including temporary construction access roads and obliterated roads.

At least two bat species use many of the mine features for night roosting, hibernation and maternity activity.

These species include *Corynorhinus townsendii* and *Myotis ciliolabrum*.

Year Completed: 2011

Cost: \$433,840.05

Project Engineer: John Kretzmann, P.E.

Project Manager: Lloyd Moiola



Feature Rattle Snake Shaft



Structure 046-104.1 Underground Room



Feature 048-21 Open Cut



Feature 049-21 Decline Opening



Feature 048-35 Strieby Shaft



Feature 048-35 Strieby Shaft Looking down



Feature 049-87 Shaft



Feature 049-87 Shaft looking down



Feature 050-131 Decline



Feature 051-81 Shaft



Feature 052-89 Shaft



Feature 052-89 Shaft Cover

Mining & Minerals

505-476-3400