

BACKGROUND

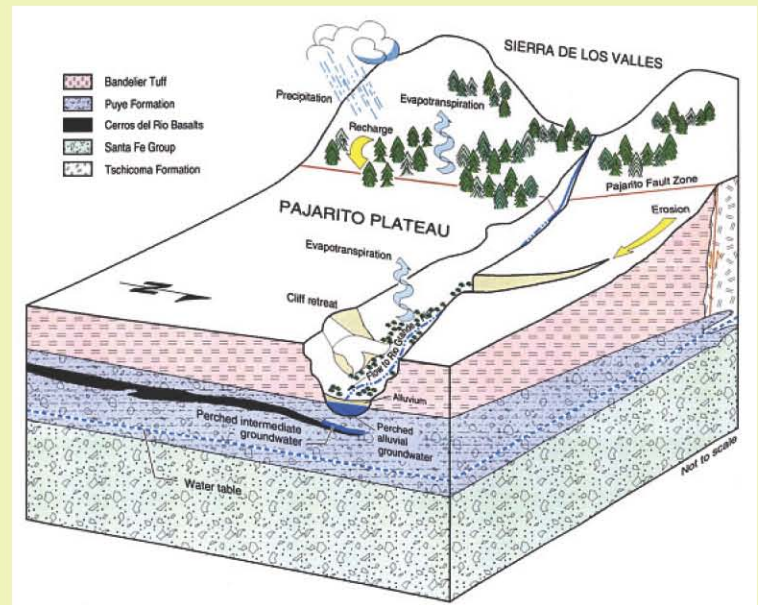
Los Alamos National Laboratory (LANL) is a multidisciplinary research and national security facility owned by the U.S. Department of Energy's (DOE's) National Nuclear Security Administration and managed by the University of California. LANL is located in north-central New Mexico and covers 37 square miles of the Pajarito Plateau in a series of finger like mesas separated by deep canyons with perennial and intermittent streams running from west to east. ❁

ENVIRONMENTAL REMEDIATION & SURVEILLANCE PROGRAM

DOE's environmental restoration efforts began in 1989. The Environmental Remediation and Surveillance Program is LANL's contribution to a nationwide DOE program. LANL investigates the presence of chemical and radioactive waste as a result of past LANL operations and cleans up and restores such sites to protect the environment. ❁

GROUNDWATER AT LANL

Over the last 60 years, LANL operations have released liquid wastes into the canyons. Current LANL operations are stringently controlled to minimize the amount of contamination introduced into the canyons. Groundwater monitoring began in 1948 to determine the quality of groundwater at LANL and to identify contamination issues that could impact human health or harm the ecosystem. Groundwater monitoring data are now being used to make decisions about cleaning up contamination. Currently, LANL performs groundwater monitoring at 79 alluvial wells, 25 intermediate wells, 39 regional groundwater wells, and 55 springs. In addition, LANL works with Los Alamos County, Santa Fe County, and San Ildefonso Pueblo to monitor



the drinking water for these communities. Groundwater monitoring is performed quarterly or semiannually for wells and annually for springs. These data are analyzed and reported annually in LANL's Environmental Surveillance Report, <http://www.airquality.lanl.gov/reports.htm#ES>. The data can be obtained online at <http://wqdbworld.lanl.gov/>.

Three zones of groundwater occur on the Pajarito Plateau: alluvial, perched intermediate, and the regional aquifer. Alluvial water is groundwater that occurs in canyon-floor sediments. Perched intermediate groundwater is water that has moved downward from the surface and becomes trapped above tight geologic formations such as basalts and clay-rich rocks. The regional groundwater is the deep reliable source of drinking water for residents of Los Alamos, Española, Santa Fe, and neighboring pueblos. ❁

Groundwater Monitoring at Los Alamos National Laboratory

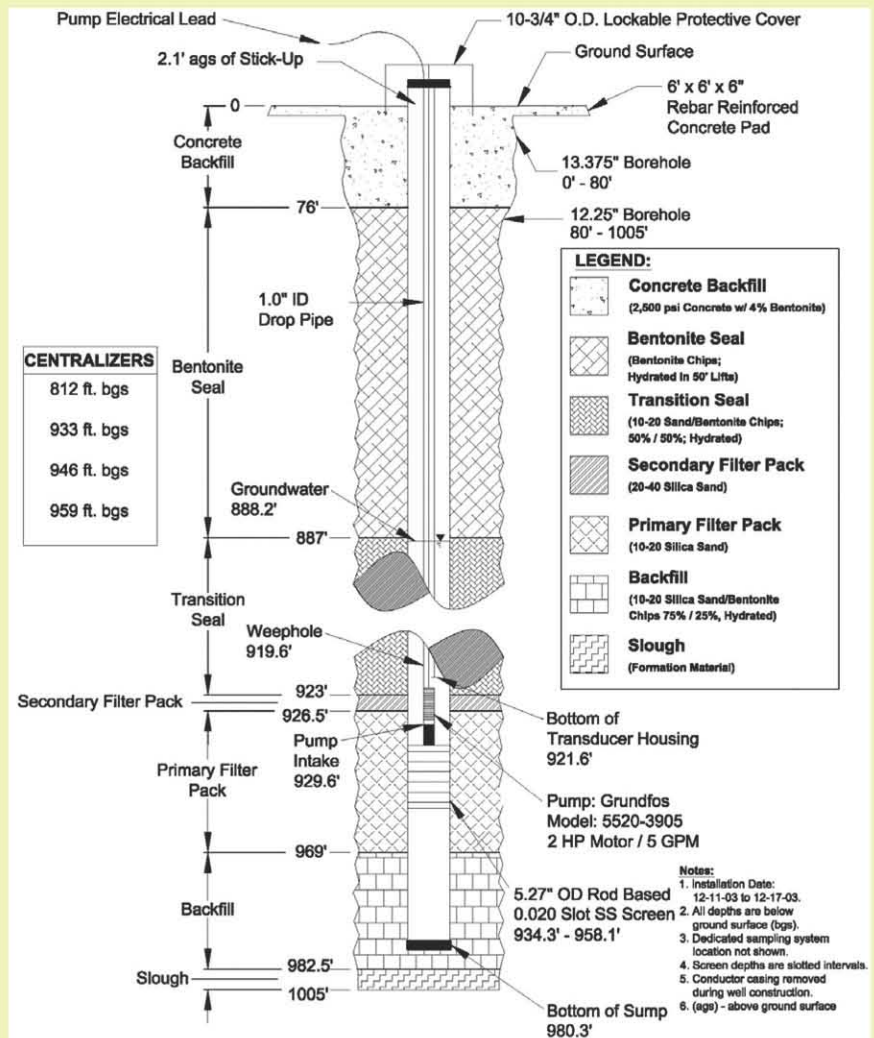
CURRENT STATUS

The results of LANL monitoring of community drinking water supplies indicates that concentrations of LANL-derived contaminants are too small to be detected; other elements are within naturally occurring background levels.

Results of groundwater monitoring show the presence of LANL-produced contamination above water quality standards in the alluvial groundwater and in some perched intermediate groundwater in Mortandad, Los Alamos, Cañon de Valle, DP, and possibly Pueblo Canyons. One location demonstrates contamination in the regional aquifer above water quality standards. In December 2005, concentrations of chromium(VI) were identified in one Mortandad Canyon location at over four times the Environmental Protection Agency's drinking water standard. ❁

COMMUNITY INVOLVEMENT, INFORMATION, AND ASSISTANCE

LANL is committed to gathering community input, involvement, and assistance in our groundwater monitoring program. Presentations and other communications venues on groundwater monitoring are available to interested persons. ❁



Schematic of a Monitoring Well

Opportunities
For Public
Involvement

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 Fax: (505) 665-8190
 Email: envoutreach@lanl.gov
 Web site: www.lanl.gov/community/environment