

#507A LANL GIM/HWP/01



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PETER MAGGIORE
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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

December 14, 2001

Dr. John Browne, Director
Los Alamos National Laboratory
P.O. Box 1663, Mail Stop A100
Los Alamos, New Mexico 87545

Mr. David A. Gurule, Area Manager
Department of Energy-Los Alamos Area Office
528 35th Street, Mail Stop A316
Los Alamos, New Mexico 87544

SUBJECT: SUSPENSION OF FALLING-HEAD SLUG TESTS
LOS ALAMOS NATIONAL LABORATORY, NM0890010515

Dear Dr. Browne and Mr. Gurule:

Based on information provided to the New Mexico Environment Department (NMED) during meetings between Los Alamos National Laboratory (LANL), Department of Energy (DOE) and NMED staff, this agency is requiring LANL-DOE suspend "falling-head" slug tests on wells located on the Pajarito Plateau. Due to the uncertainty associated with the complete removal of the introduced water, NMED is requiring that a "displacement" or "rising-head" slug test be utilized if a slug test is performed. Introducing water to any well is problematic and not a preferred method of aquifer hydraulic testing as it may affect groundwater chemistry.

The use of slug tests to definitively characterize hydraulic properties of aquifers is limited. LANL should instead utilize constant discharge tests that provide higher quality hydraulic data because constant discharge tests influence the aquifer beyond the immediate vicinity of the well. Of course, the quality of the data is a direct function of drilling methodologies, well construction, well development and testing methods; therefore, every effort must be made to properly design and develop each newly installed well. Inappropriate well design, construction and testing may result in measurement of the filter pack and screen-size properties rather than the properties of the aquifer. In addition, a poorly developed well may mask the true aquifer properties during aquifer testing. Fines and drilling fluids need to be removed from the aquifer to the maximum extent possible.

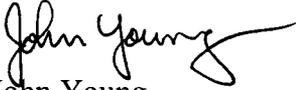


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Should you have any questions please feel free to contact me at (505) 428-2538.

Sincerely,



John Young
LANL Corrective Action Project Leader
Permits Management Program

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