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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

January 23, 2003

Mat Johansen, Groundwater Project Manager
Department of Energy-OLASO
Mail Stop A316
Los Alamos, New Mexico 87544

Dr. John C. Browne, Director
Los Alamos National Laboratory
P.O. Box 1663, Mail Stop M100
Los Alamos, New Mexico 87545

RE: REVIEW OF WELL COMPLETION REPORTS
LOS ALAMOS NATIONAL LABORATORY, NM0890010515

Dear Mr. Johansen and Dr. Browne:

The New Mexico Environment Department (NMED) has reviewed several recent Well Completion Reports (WCR) produced by the Environmental Restoration Project for Regional Characterization Wells at Los Alamos National Laboratory (LANL). We have the following comments regarding the composition of these documents.

NMED believes that it is possible to streamline the Well Completion Reports so that they can be more efficiently developed and reviewed. The objective should be to produce consistent documents that are technically accurate and complete, yet straightforward and readable. The core of the Well Completion Reports should be comprised of concise descriptions of the activities completed, summaries of all data collected during drilling, and a cross-referenced table of planned work (from Field Implementation Plans, Sampling and Analysis Plans, etc.) versus actual work accomplished, noting any and all variations, including rationale for any changes made to the scope of work.

The data reporting sections of the Well Completion Reports should contain comprehensive summaries of all data collected during drilling, including, but not limited to, hydraulic property tests, water levels and all occurrences of groundwater, geophysical



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logs and interpretations, borehole logs, core analyses and groundwater chemistry. Uncertainties or percent error for all measurements, including slug and straddle-packer testing data, should be reported as well.

Recent Well Completion Reports (for example, the WCR for R-25 (LA-13909-MS)) present the geophysical logs, data, and interpretations in a readable and comprehensible format. The R-25 WCR contains a descriptive Borehole Geophysics section with concise interpretations of the pertinent features noted on the various geophysical logs that were run in the borehole. Inclusion of an integrated geophysical log montage (as presented in Appendix G of the R-31 Well Completion Report (LA-13910-MS), for example) is another effective way to present the geophysical data. In contrast, the WCR for R-19 (LA-UR-00-4085) contains detailed sections on each type of geophysical method and tool used, but includes a figure with only the natural gamma radiation survey in the main body of text and presents the remaining geophysical data in several tables. NMED found that the data was not as easy to comprehend or integrate when presented in a table format.

Brief descriptions of the stratigraphy and lithology encountered are acceptable. Comprehensive petrographic analyses are not necessary to achieve the intent of the Well Completion Reports. Detailed information that is relevant for determining fate and transport of contaminants, or for use in developing the 3-D conceptual model, is appropriate for inclusion in the WCRs. Additionally, NMED believes that the reports should note all well completion problems or irregularities that may be cause for concern in the future. Potential impacts to the integrity of the well and methods to assess such impacts should also be addressed. Information regarding the installation, or plans for future installation, of transducer(s) in the wells should also be included.

In lieu of separate appendices reporting the "Descriptions of Geologic Samples" and "Moisture and Matric-Potential Results," significant geologic samples, moisture contents and matric-potential data could be included in the descriptions on the Borehole Logs. NMED requests that LANL include the downhole video logs as part of the Well Completion Reports, as was done with the WCR for R-31. We do not require any detailed interpretations to be included in these documents, except in the Borehole Geophysics section, as described above.

NMED would like to reiterate the importance of timely reporting of data by LANL. Well Completion Reports are required to be submitted to NMED one hundred-twenty days (120) after well completion. As stated above, the intent of this letter is to encourage LANL to produce documents which are more efficiently developed and reviewed and, consequently, can be submitted within the allotted time. NMED would also like to remind LANL that Well Fact Sheets, which describe the construction details of each

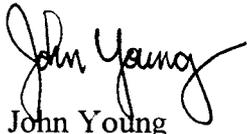
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characterization well, are required to be submitted within thirty (30) days of well completion. NMED has not received Fact Sheets for the wells that were drilled during the Fiscal Year 2002.

NMED and LANL staff briefly discussed the content of Well Completion Reports at the January 22, 2003 Quarterly Meeting of the Hydrogeologic Characterization Program. Charlie Nylander proposed that LANL provide a draft of one of the WCRs that is currently being prepared to NMED for a preliminary review. We suggest that LANL supply this draft report, providing NMED the chance to work with LANL on refining the final product.

If you have any questions, please contact Carolyn Cooper at (505) 428-2539.

Sincerely,



John Young
LANL Corrective Action Project Leader
Permits Management Program

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File: Reading and LANL HSWA General (HWP)