

*John K -*



# Los Alamos National Laboratory

UNIVERSITY OF CALIFORNIA

Environmental Restoration Project  
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Los Alamos, New Mexico 87545  
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Date: September 1, 1998  
Refer to: EM/ER:98-313

TA-03  
4/1049/M  
HWA CANC

Mr. Benito Garcia  
NMED-HRMB  
P.O. Box 26110  
Santa Fe, NM 87502

**SUBJECT: CANYON FOCUS AREA PHASE I DRILLING ACTIVITIES AT R-15 IN MORTANDAD CANYON**

Dear Mr. Garcia:

Canyon Focus Area will begin drilling one borehole for installation of a deep (1260 feet) regional groundwater characterization well, R-15, in Mortandad Canyon. Phase I activity is scheduled to begin on or about September 14, 1998, through September 30, 1998, and drill to approximately 430 feet. Phase II activities will begin on or about November 2, 1998, through approximately December 18, 1998. This well is being installed as part of the Laboratory's Hydrogeologic Work Plan. ✓

Samples will be collected as shown in the table enclosed. If you have any questions, please feel free to call me at 667-0819.

Sincerely,  
*David McInroy*

David McInroy  
Environmental Restoration Project

DM/RB/dm

Enclosure: Phase I Drilling Activities at R-15, Mortandad Canyon

TL



Mr. Benito Garcia  
EM/ER:98-313

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## PHASE I DRILLING ACTIVITIES AT R-15

Location	Number of Samples	Sample Type	Analyses
Well R-15	19	Core (Contaminants and Geo-chemical)	Gross Radiological Screening Radionuclides $^3\text{H}$ , $^{90}\text{Sr}$ , $^{241}\text{Am}$ , $^{234}\text{U}$ , $^{235}\text{U}$ , $^{236}\text{U}$ , $^{238}\text{U}$ , $^{238}\text{Pu}$ , and $^{239/240}\text{Pu}$ Inorganics (Full Suite plus additional) Anions VOCs (based on field screening) SVOCs (based on field screening)
Well R-15	18	Core (Geotechnical)	Selected core samples will be analyzed for some or all of the following: Particle size and texture (<2mm) In-Situ Water Content Porosity (<2mm) Particle Density (<2mm) Bulk Density Sat. Hydraulic Conductivity by Air and Water Water Retention Curve
Well R-25	10	Core (Hydrologic)	Stable Isotopes Unsaturated Flow Apparatus
Well R-15	16 (max.)	Core (Geologic)	Mineralogy (as needed) Modal Petrography (as needed) Chemistry (as needed)
Well R-15	5 (max.)	Groundwater	Major Cations and Anions (dissolved) Trace Elements and Metals (dissolved) Trace Elements and Metals (total) Nutrients-Nitrogen Species (dissolved) Radionuclides (dissolved) Radionuclides (total) Stable Isotopes Tritium Tritium (low level) Dissolved Organic Carbon Total Organic Carbon VOCs SVOCs Other Inorganics