

# Los Alamos National Laboratory

UNIVERSITY OF CALIFORNIA



Environmental Restoration Project  
MS M992  
Los Alamos, New Mexico 87545  
505-667-0808/FAX 505-665-4747

Date: May 18, 1999  
Refer to: EM/ER:99-130



Mr. James Bearzi  
NMED-HRMB  
P.O. Box 26110  
Santa Fe, NM 87502

*Kieling*

**SUBJECT: CANYON FOCUS AREA PHASE 2 DRILLING ACTIVITIES AT R-15 IN MORTANDAD CANYON**

Dear Mr. Bearzi:

Canyon Focus Area will begin Phase 2 drilling of the borehole for installation of a deep (1260 feet) regional groundwater characterization well, R-15, in Mortandad Canyon. Phase 2 activity is scheduled to begin on or about June 1, 1999. Phase I drilling was completed to a depth of approximately 420 feet in September of 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/ev

Enclosure: Phase 2 Drilling Activities at R-15, Mortandad Canyon

*tc*



Mr. James Bearzi  
EM/ER:99-130

2

May 18, 1999

Cy (w/enc.):

R. Bohn, EM/ER, MS M992  
D. Broxton, EES-1, MS D462  
M. Buksa, EM/ER, MS M992  
J. Keiling, NMED-HRMB  
J. Mose, LAAO, MS A316  
A. Pratt, EES-13, MS M992  
T. Taylor, LAAO, MS A316  
S. Yanicak, NMED-DOE OB, MS J993  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, EM/ER, MS M992  
M. Kirsch, EM/ER, MS M992  
M. Leavitt, NMED-GWQB  
J. Marin, EES-13, MS M327  
D. McInroy, EM/ER, MS M992  
S. Rae, ESH-18, MS K497  
EM/ER File, MS M992  
Tracker, RM 604, MS M992

## PHASE 2 DRILLING ACTIVITIES AT R-15

Location	Number of Samples	Sample Type	Analyses
Well R-15	37	Core (Contaminants and Geo-chemical)	Gross Radiological Screening Radionuclides $^3\text{H}$ , $^{90}\text{Sr}$ , $^{241}\text{Am}$ , $^{234}\text{U}$ , $^{235}\text{U}$ , $^{238}\text{U}$ , $^{238}\text{Pu}$ , and $^{239/240}\text{Pu}$ Inorganics (Full Suite plus additional) Anions VOCs (based on field screening) SVOCs (based on field screening) HE
Well R-15	TBD	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-15	TBD	Core (Hydrologic)	Stable Isotopes Unsaturated Flow Apparatus Low level tritium
Well R-15	TBD	Core (Geologic)	Mineralogy (as needed) Modal Petrography (as needed) XRF/XRD (as needed)
Well R-15	6	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 HE