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Date: October 11, 2005
Refer to: ER2005-0751

Mr. James Bearzi
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

SUBJECT: SUBMITTAL OF VALIDATED DATA FOR BOREHOLE 1 FOR THE INVESTIGATION REPORT FOR MATERIAL DISPOSAL AREA G, CONSOLIDATED UNIT 54-013(b)-99, AT TECHNICAL AREA 54

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the validated data for Borehole (BH) 1 (location 54-24360) for Material Disposal Area (MDA) G, Consolidated Unit 54-013(b)-99, at Technical Area 54. The preliminary data for this borehole were submitted in the MDA G investigation report on September 8, 2005.

Attached are validated detection tables for inorganic chemicals, organic chemicals, and radionuclides and the chain-of custody forms and data packages for BH 1. Based on a review of the validated data, the calculated human health or ecological risks reported in the investigation report do not change. In addition, the conclusions regarding the nature and extent of contamination and the recommendations presented in the report do not change.

If you have questions, please contact John Hopkins at (505) 667-9551 (johnhopkins@lanl.gov) or Frank Bosiljevac at (505) 855-5746 (fbosiljevac@doeal.gov).

Sincerely,

David McInroy, Deputy Program Director
Environmental Remediation & Surveillance
Los Alamos National Laboratory

Sincerely,

for

David Gregory, Federal Project Director
Department of Energy
Los Alamos Site Office

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JH/jk

Enclosures: 1) BH 1 detect tables
2) CD with chain-of-custody forms and data packages for BH 1

Cy: (w/enc)
J. Hopkins, ENV-ECR, MS M992
P. Reneau, ENV-ECR, MS M992
B. Lechel, NWIS-NA, MS J593
J. Narum, FM-WFM, MS J593
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Tritium Detects in Pore Gas from BH 1 (54-24360)

Sample ID	Depth (ft)	Analyte	Result	Units
MD54-05-63415	29–31	Tritium	5165	pCi/L
MD54-05-63413	155–157	Tritium	2182	pCi/L

VOCs Detected in Pore Gas from BH 1 (54-24360)

Sample ID	Depth (ft)	Analyte Name	Result (µg/m³)
MD54-05-63415	29–31	1,1,1-Trichloroethane	24000
		1,1-Dichloroethene	1800
		1,1-Dichloroethane	1200
		Tetrachloroethene	950
		Trichloroethene	390
		Toluene	150
		m,p-Xylene	91
MD54-05-63413	155–157	1,1,1-Trichloroethane	9700
		1,1-Dichloroethene	1900
		1,1-Dichloroethane	880
		Toluene	670
		Tetrachloroethene	450
		m,p-Xylene	300
		Benzene	280
		Trichloroethene	260
		Hexane	240
		o-Xylene	120
		cis-1,2-Dichloroethene	110
		Heptane	100
		Ethyl Benzene	80
		Chloroform	75
		Methylene Chloride	36

VOCs Detected in Subsurface Soil and Rock Samples from BH 1 (54-24360)

Sample ID	Depth (ft)	Media	Analyte	Result (mg/kg)
MD54-05-57871	60–65	Qbt 1v	Acetone	0.00815

Inorganic Chemicals above BVs in Subsurface Soil and Rock Samples from BH 1 (54-24360)

Sample ID	Depth (ft)	Media	Analyte	BV (mg/kg)	Result (mg/kg)
MD54-05-57871	60–65	Qbt 1v	Molybdenum	na*	0.5
			Nitrate	na	1.14
MD54-05-57872	135–138	Qct	Aluminum	3,560	4960
			Arsenic	0.56	0.708
			Boron	na	1.91
			Chromium	2.6	2.89
			Copper	3.96	4.07
			Molybdenum	na	0.335
			Nitrate	na	0.863
MD54-05-57873	195–200	Qbo	Magnesium	739	812
			Molybdenum	na	0.381
			Nitrate	na	0.856

*na = Not available.

Radionuclides above BVs in Subsurface Soil and Rock Samples from BH 1 (54-24360)

Sample ID	Depth (ft)	Media	Analyte	BV (pCi/g)	Result (pCi/g)
MD54-05-57871	60–65	Qbt 1v	Thorium-228	3.75	3.76
			Uranium-235	0.14	0.157
MD54-05-57872	135–138	Qct	Uranium-235	0.18	0.218
MD54-05-57873	195–200	Qbo	Uranium-235	0.18	0.232