State of New Mexico
ENVIRONMENT DEPARTMENT
DOE OVERSIGHT BUREAU
P.O. Box 1663, MS/J-993
Los Alamos, New Mexico 87545

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JUL 1999
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HSWA LANL 1/1071/00 - 030(g)

July 19, 1999

Joe Vozella, DOE/AIP/POC
Department of Energy
Los Alamos Area Office
528 35th Street MS A316
Los Alamos, NM 87544

Re: **Data Transmittal of Augmentation Samples Collected at 0-030(g), Old Catholic Church Site**

Dear Mr. Vozella:

The New Mexico Environment Department (NMED) Department of Energy Oversight Bureau (DOE OB) collected augmentation data at 0-030(g), the Old Catholic Church site. Samples were collected in the drainage channel below the former outfall and at its confluence with Acid Canyon. DOE OB collected a total of eight sediment samples at locations that LANL technical staff determined to be representative of post-laboratory deposition. The samples will be used to help further define the extent of contamination in the drainage channel and, if present, in Acid Canyon.

All of the samples were analyzed for the 23 TAL metals, hexavalent chromium, PCBs, pesticides, americium-241 and isotopic plutonium and uranium. The data is summarized and compared to background data in the attached tables. These data are provided to DOE for review prior to release to interested members of the public. Please contact me at 672-0448 or Darlene Goering at 827-1536 if you have any questions about this data.

Sincerely,

Stephen Yanicak

Steve Yanicak, Program Manager/LANL Point of Contact
DOE Oversight Bureau

enclosure

SY:dxg

cc: John Parker, Chief, NMED DOE OB
John Kieling, LANL Project Leader, NMED HRMB
Warren Neff, LANL, CST-7, MS M992
Terry Rust, LANL, CST-7, MS M992 (w/enclosure)

c:\...\0-030(g).wpd (letter to DOE, 7-19-99)

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TL

Total Metals Analysis

		Analyte (mg/kg)									
		Arsenic	Chromium VI	Cobalt	Copper	Lead	Manganese	Mercury	Silver	Thallium	Zinc
Sample ID	BG[a] (mg/kg)	3.98	--	4.73	11.2	19.7	543	0.1	1	0.73	60.2
OB030g-1		ND	NA	1.3	9.1	19	130	0.032	0.14	ND[b]	**840**
OB030g-2		**28M[b]**	NA	2.4	**27**	**33**	270	**0.18**	0.6	**4.1[b]**	**64**
OB030g-3		ND	NA	1.8	7.2	**34**	180	**0.16**	0.38	ND[b]	39
OB030g-4		ND	NA	**6.4**	10	14	170	**0.15**	0.81	ND[b]	37
OB030g-5		**20M[b]**	NA	**5**	11	**55**	410	0.05	0.57	**7.3[b]**	**68**
OB030g-6		NDM[b]	NA	1.6	**21**	**44**	130	**0.53**	0.9	**6.7[b]**	**73**
OB030g-7		NDM[b]	0.14	0.38	**18**	**31**	69	**1.15**	0.51	ND[b]	41
OB030g-8		3.3	NA	**7.2**	**14**	**58**	**730**	**0.92**	**1.1**	ND[b]	**72**

Bold lettering indicates analytical values above the background value.

a - Background values for sediment obtained from "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory", September 22, 1998

ND - Not Detected

-- Not applicable

NA - Not Analyzed

M - Matrix interference is suspected. The interference may be positive or negative.

b - Method detection limit was greater than the background value.

Radionuclides

		Analyte (pCi/g)						
		Am-241	Pu-238	Pu-239	Pu-242	U-234	U-235	U-238
Sample ID	BG[a] (pCi/g)	0.04	0.006	0.068	--	2.59	0.2	2.29
OB030g-1		0.9B	0.2	4.6	0.2	0.7	ND	0.7
OB030g-2		0.7B	0.9	23.4	0.8	2.1	0.1	2.3
OB030g-3		0.6B	0.4	9.7	0.2	3	0.2	2
OB030g-4		0.4B	0.5	5.9	ND	2.4	0.1	1.8
OB030g-5		0.3B	0.2	0.2	ND	1.2	ND	1.1
OB030g-6		0.4B	0.6	5.1	0.1	2.2	0.2	1.9
OB030g-7		0.6B	0.3	24.4	0.4	28.3	2.1	15.7
OB030g-8		1B	0.8	32.6	1.2	13	0.8	6.6
a - Background values for sediment obtained from "Inorganic and Radionuclide Background Data for								
Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory", September 22, 1998								
B - Analyte found in method blank.								
-- Not applicable								
ND - Not Detected								

	4,4'-DDT
Sample ID	
OB030g-1	ND
OB030g-2	14
OB030g-3	9.1
OB030g-4	ND
OB030g-5	26
OB030g-6	ND
OB030g-7	18
OB030g-8	13
ND - Not Detected	