

Not Sent
202-395-5894

dtc

From: Gregg Dempsey - 10/05/00 6:45 pm
To: Pat Hammack
cc: George Brozowski
Subject: Los Alamos Data

Here is the data on Los Alamos gross alpha/beta reruns and the plutonium radiochemistry, tabular form. It will be some time before a complete package is available (with 'raw' data, etc.). The information is arranged in tables that list the analytical data for each individual monitoring location (20 stations), along with their exact GPS locations, and elevations. Each station has three days worth of data, except for the last location, which has only 2 days (May 15-16, 2000). This pueblo (San Ildefonso) was closed to all outside personnel, and our monitoring equipment had to be removed after the second day.

Low volume air filter samplers were used for our monitoring at Los Alamos. Therefore, most volumes collected were in the range of 60-85 cubic meters, over a 24 hour period. These volumes were used in our activity determinations for all of the data that was generated, and one column in our tables has the minimum detectable concentration (MDC) values for all of the analyses that we list. Obviously, the greater the volume of air that is collected, the lower the MDC will be for the various analyses. Additionally, I am listing only the data that was generated in our fixed laboratory in Las Vegas. Any data that was generated by our mobile laboratory (MERL) while at Los Alamos will be placed into tables in a more comprehensive report that will be issued at a later date.

Of the plutonium values that are listed, only two samples exhibited activities above MDC. Sample #1415, at station #6, had a value significantly over MDC. This sample was recounted on a different alpha detector, and the value remained constant. It should be noted that the gross alpha determination for this sample was the highest gross alpha activity for any of the Cerro Grande samples. The other sample that provided a plutonium activity was #1462, at station #8. This sample activity was marginal, and a plutonium recount of this sample showed the activity to be slightly below MDC.

Our laboratory performed gamma determinations on all of the samples using high purity intrinsic gamma detectors. All activities were below MDC, and I chose not to list these in the tables that I am sending to you. However, typical MDCs for Co-60 and Cs-137 are in the 0.01-0.04 pCi/cubic meter range. Gamma data will also be listed in a further report that is issued by R&IE.

Additionally:

ORIA-HQ had some words of wisdom about the whole thing - George B. had that; please get it from him, I must have erased it.

I would advise that someone talk to Mr. Hjelm about the one over background sample collected on his property. George and I talked about the ramifications of that (essentially, none) but the media may ask Mr. Hjelm for a comment and it would be better if we or the state talked with him before the media did. I can also talk to Sandra Ely or Bob Weeks with NMED about the whole thing if you want.

I am on leave and then out of the office until October 23. Please call me on my cell if you need something. 702-494-7040. Don't respond to this email, I won't be able to read anything until I return.



13445

0505
General

United States Environmental Protection Agency
Gross Alpha, Gross Beta, and Plutonium Results Taken in Response to the Los Alamos Fire

STATION # 1						
Ski Hill Road @ Camp May Trail						
Los Alamos, NM						
Lat: N 35° 53.001' Long: W 106° 18.448' Elev: 7343 feet						
Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1411	May 15, 2000	Gross Alpha	3.5 E-03	3.2 E-03	4.1 E-03	May 31, 2000
		Gross Beta	7.2 E-02	9.3 E-03	9.3 E-03	May 31, 2000
		Pu238	1.6 E-05	2.1 E-04	5.4 E-04	September 11, 2000
		Pu239	2.9 E-04	3.0 E-04	4.8 E-04	September 11, 2000
1446	May 16, 2000	Gross Alpha	5.5 E-03	2.7 E-03	2.5 E-03	June 2, 2000
		Gross Beta	5.5 E-02	7.1 E-03	6.8 E-03	June 2, 2000
		Pu238	-1.3 E-04	8.6 E-05	4.5 E-04	September 14, 2000
		Pu239	4.2 E-05	1.3 E-04	3.1 E-04	September 14, 2000
1470	May 17, 2000	Gross Alpha	7.0 E-03	3.9 E-03	4.1 E-03	June 5, 2000
		Gross Beta	7.5 E-02	1.1 E-02	1.1 E-02	June 5, 2000
		Pu238	3.2 E-05	1.0 E-04	2.6 E-04	September 19, 2000
		Pu239	8.0 E-05	1.8 E-04	3.9 E-04	September 19, 2000

STATION # 2						
Los Alamos Hospital						
Los Alamos, NM						
Lat: N 35° 52.927' Long: W 106° 19.014' Elev: 7333 feet						
Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1417	May 15, 2000	Gross Alpha	7.3 E-03	3.3 E-03	3.5 E-03	May 31, 2000
		Gross Beta	5.9 E-02	7.8 E-03	7.9 E-03	May 31, 2000
		Pu238	0.0 E+00	0.0 E+00	9.2 E-05	September 11, 2000
		Pu239	0.0 E+00	0.0 E+00	9.2 E-05	September 11, 2000
1447	May 16, 2000	Gross Alpha	5.1 E-03	2.4 E-03	2.2 E-03	June 2, 2000
		Gross Beta	4.1 E-02	6.0 E-03	6.0 E-03	June 2, 2000
		Pu238	3.4 E-05	1.5 E-04	3.7 E-04	September 14, 2000
		Pu239	4.6 E-05	1.0 E-04	2.2 E-04	September 14, 2000
1471	May 17, 2000	Gross Alpha	3.5 E-03	2.4 E-03	2.7 E-03	June 5, 2000
		Gross Beta	6.0 E-02	7.4 E-03	6.9 E-03	June 5, 2000
		Pu238	-4.4 E-05	4.5 E-05	2.7 E-04	September 19, 2000
		Pu239	1.1 E-04	1.4 E-04	2.1 E-04	September 19, 2000

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STATION # 3

Los Alamos Aquatic Center

Los Alamos, NM

Lat: N 35° 53.001' Long: W 106° 18.450' Elev: 7334 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1413	May 15, 2000	Gross Alpha	1.0 E-02	3.5 E-03	3.2 E-03	May 31, 2000
		Gross Beta	5.9 E-02	7.4 E-03	7.3 E-03	May 31, 2000
		Pu238	1.2 E-05	7.8 E-05	2.3 E-04	September 11, 2000
		Pu239	-3.5 E-05	4.1 E-05	2.6 E-04	September 11, 2000
1448	May 16, 2000	Gross Alpha	6.4 E-03	2.6 E-03	2.3 E-03	June 2, 2000
		Gross Beta	5.8 E-02	6.9 E-03	6.2 E-03	June 2, 2000
		Pu238	6.0 E-05	1.1 E-04	2.2 E-04	September 14, 2000
		Pu239	9.9 E-06	6.6 E-05	1.9 E-04	September 14, 2000
1469	May 17, 2000	Gross Alpha	3.5 E-03	2.0 E-03	2.1 E-03	June 5, 2000
		Gross Beta	5.4 E-02	6.0 E-03	5.4 E-03	June 5, 2000
		Pu238	3.4 E-05	1.0 E-04	2.5 E-04	September 19, 2000
		Pu239	6.8 E-05	1.3 E-04	2.5 E-04	September 19, 2000

STATION # 4

TA-73 Los Alamos Airport

Los Alamos, NM

Lat: N 35° 52.927' Long: W 106° 16.553' Elev: 7243 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1414	May 15, 2000	Gross	9.1 E-03	3.3 E-03	3.1 E-03	May 31, 2000
		Gross Beta	6.0 E-02	7.3 E-03	7.1 E-03	May 31, 2000
		Pu238	-1.1 E-05	2.1 E-05	1.7 E-04	September 11, 2000
		Pu239	-2.1 E-05	7.9 E-05	2.7 E-04	September 11, 2000
1450	May 16, 2000	Gross Alpha	4.3 E-03	2.3 E-03	2.3 E-03	June 2, 2000
		Gross Beta	5.0 E-02	6.6 E-03	6.3 E-03	June 2, 2000
		Pu238	4.2 E-05	9.4 E-05	2.0 E-04	September 14, 2000
		Pu239	1.9 E-04	1.7 E-04	2.3 E-04	September 14, 2000
1468	May 17, 2000	Gross Alpha	2.2 E-03	1.8 E-03	2.1 E-03	June 5, 2000
		Gross Beta	5.4 E-02	6.1 E-03	5.4 E-03	June 5, 2000
		Pu238	-5.1 E-05	7.3 E-05	2.8 E-04	September 19, 2000
		Pu239	5.1 E-05	9.4 E-05	1.9 E-04	September 19, 2000

STATION # 5

TA-74 Sewage Treatment Plant

Los Alamos, NM

Lat: N 35° 52.973' Long: W 106° 14.383' Elev: 6565 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1412	May 15, 2000	Gross Alpha	1.2 E-02	3.5 E-03	3.0 E-03	May 31, 2000
		Gross Beta	6.1 E-02	7.2 E-03	6.9 E-03	May 31, 2000
		Pu238	3.6 E-05	1.4 E-04	3.3 E-04	September 12, 2000
		Pu239	1.2 E-05	7.9 E-05	2.3 E-04	September 12, 2000
1451	May 16, 2000	Gross Alpha	7.2 E-03	2.9 E-03	2.4 E-03	June 2, 2000
		Gross Beta	6.9 E-02	7.5 E-03	6.5 E-03	June 2, 2000
		Pu238	-1.2 E-05	2.3 E-05	1.9 E-04	September 14, 2000
		Pu239	-1.2 E-09	1.1 E-04	3.3 E-04	September 14, 2000
1456	May 17, 2000	Gross Alpha	4.6 E-03	2.2 E-03	2.1 E-03	June 5, 2000
		Gross Beta	5.5 E-02	6.1 E-03	5.4 E-03	June 5, 2000
		Pu238	5.0 E-05	1.4 E-04	3.3 E-04	September 18, 2000
		Pu239	-1.2 E-05	1.5 E-04	4.2 E-04	September 18, 2000

STATION # 6

Tsankawi National Monument Restrooms

Los Alamos, NM

Lat: N 35° 51.605' Long: W 106° 13.443' Elev: 6541 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1415	May 15, 2000	Gross Alpha	1.5 E-02	5.9 E-03	5.8 E-03	May 31, 2000
		Gross Beta	9.7 E-02	1.3 E-02	1.3 E-02	May 31, 2000
		Pu238	0.0 E+00	0.0 E+00	1.4 E-04	September 12, 2000
		Pu239	8.8 E-03	1.9 E-03	1.4 E-04	September 12, 2000
1452	May 16, 2000	Gross Alpha	3.4 E-03	2.2 E-03	2.4 E-03	June 2, 2000
		Gross Beta	4.5 E-02	6.6 E-03	6.6 E-03	June 2, 2000
		Pu238	-3.3 E-05	8.5 E-05	3.0 E-04	September 14, 2000
		Pu239	-2.2 E-05	3.1 E-05	2.1 E-04	September 14, 2000
1467	May 17, 2000	Gross Alpha	3.1 E-03	2.0 E-03	2.1 E-03	June 5, 2000
		Gross Beta	5.1 E-02	6.0 E-03	5.5 E-03	June 5, 2000

		Pu238	-1.9 E-05	6.9 E-05	2.4 E-04	September 19, 2000
		Pu239	2.8 E-05	8.5 E-05	2.0 E-04	September 19, 2000

STATION # 7

White Rock Fire Station #3

White Rock, NM

Lat: N 35° 49.688' Long: W 106° 12.343' Elev: 6443 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1409	May 15, 2000	Gross	4.4 E-03	2.8 E-03	3.4 E-03	May 31, 2000
		Gross Beta	5.0 E-02	7.2 E-03	7.6 E-03	May 31, 2000
		Pu238	1.1 E-05	7.0 E-05	2.1 E-04	September 12, 2000
		Pu239	3.2 E-05	9.7 E-05	2.3 E-04	September 12, 2000
1434	May 16, 2000	Gross Alpha	3.7 E-03	2.2 E-03	2.2 E-03	June 2, 2000
		Gross Beta	5.1 E-02	6.4 E-03	6.0 E-03	June 2, 2000
		Pu238	-3.1 E-05	1.1 E-04	3.3 E-04	September 13, 2000
		Pu239	1.0 E-05	6.8 E-05	2.0 E-04	September 13, 2000
1459	May 17, 2000	Gross Alpha	2.1 E-03	1.7 E-03	2.0 E-03	June 5, 2000
		Gross Beta	4.1 E-02	5.4 E-03	5.2 E-03	June 5, 2000
		Pu238	-3.6 E-05	4.2 E-05	2.7 E-04	September 18, 2000
		Pu239	-2.6 E-09	8.4 E-05	2.7 E-04	September 18, 2000

STATION # 8

Hjelm Residence, 415 Estante Way

White Rock, NM

Lat: N 35° 47.595' Long: W 106° 15.807' Elev: 6424 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1408	May 15, 2000	Gross Alpha	7.3 E-03	3.4 E-03	3.6 E-03	May 31, 2000
		Gross Beta	6.7 E-02	8.3 E-03	8.2 E-03	May 31, 2000
		Pu238	3.7 E-05	1.1 E-04	2.7 E-04	September 11, 2000
		Pu239	-2.5 E-05	3.5 E-05	2.4 E-04	September 11, 2000
1433	May 16, 2000	Gross Alpha	4.6 E-03	2.4 E-03	2.3 E-03	June 2, 2000
		Gross Beta	5.1 E-02	6.6 E-03	6.2 E-03	June 2, 2000
		Pu238	3.2 E-05	1.4 E-04	3.4 E-04	September 13, 2000
		Pu239	1.9 E-04	1.8 E-04	2.4 E-04	September 13, 2000
1462	May 17, 2000	Gross Alpha	1.1 E-03	1.5 E-03	2.0 E-03	June 5, 2000
		Gross Beta	3.9 E-02	5.3 E-03	5.2 E-03	June 5, 2000
		Pu238	0.0 E+00	0.0 E+00	7.5 E-05	September 18, 2000
		Pu239	2.8 E-04	1.8 E-04	7.5 E-05	September 18, 2000

STATION # 9

Ancho Canyon Floor

Los Alamos, NM

Lat: N 35° 47.367' Long: W 106° 15.805' Elev: 6424 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1416	May 15, 2000	Gross Alpha	4.6 E-03	2.8 E-03	3.2 E-03	May 31, 2000
		Gross Beta	6.6 E-02	7.7 E-03	7.3 E-03	May 31, 2000
		Pu238	-1.7 E-04	1.4 E-04	8.1 E-04	September 11, 2000
		Pu239	1.2 E-04	2.6 E-04	5.7 E-04	September 11, 2000
1432	May 16, 2000	Gross Alpha	4.1 E-03	2.2 E-03	2.2 E-03	June 2, 2000
		Gross Beta	4.9 E-02	6.4 E-03	6.1 E-03	June 2, 2000
		Pu238	-3.2 E-05	3.7 E-05	2.3 E-04	September 13, 2000
		Pu239	5.3 E-05	1.2 E-04	2.6 E-04	September 13, 2000
1460	May 17, 2000	Gross Alpha	3.8 E-03	2.0 E-03	2.0 E-03	June 5, 2000
		Gross Beta	4.8 E-02	5.7 E-03	5.3 E-03	June 5, 2000
		Pu238	1.9 E-05	5.9 E-05	1.5 E-04	September 18, 2000
		Pu239	1.9 E-05	8.7 E-05	2.3 E-04	September 18, 2000

STATION # 10

Bandelier National Monument, Front Gate

Los Alamos, NM

Lat: N 35° 47.700' Long: W 106° 16.560' Elev: 6648 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1410	May 15, 2000	Gross	4.8 E-03	2.8 E-03	3.2 E-03	May 31, 2000
		Gross Beta	4.4 E-02	6.7 E-03	7.2 E-03	May 31, 2000
		Pu238	5.5 E-05	9.5 E-05	1.8 E-04	September 12, 2000
		Pu239	-5.5 E-05	4.9 E-05	2.9 E-04	September 12, 2000
1436	May 16, 2000	Gross Alpha	3.1 E-03	2.0 E-03	2.2 E-03	June 2, 2000
		Gross Beta	4.5 E-02	6.2 E-03	6.0 E-03	June 2, 2000
		Pu238	-1.4 E-04	8.8 E-05	4.5 E-04	September 13, 2000
		Pu239	-1.0 E-04	7.4 E-05	4.0 E-04	September 13, 2000
1458	May 17, 2000	Gross Alpha	4.2 E-03	2.1 E-03	2.0 E-03	June 5, 2000
		Gross Beta	3.8 E-02	5.2 E-03	5.2 E-03	June 5, 2000
		Pu238	2.1 E-09	1.7 E-04	4.5 E-04	September 18, 2000
		Pu239	-4.2 E-05	4.9 E-05	3.1 E-04	September 18, 2000

STATION # 11 TA-49 LANL Front Gate Los Alamos, NM Lat: N 35° 50.723' Long: W 106° 21.323' Elev: 7739 feet						
Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1401	May 15, 2000	Gross Alpha	3.8 E-03	2.8 E-03	3.4 E-03	May 31, 2000
		Gross Beta	5.1 E-02	7.3 E-03	7.7 E-03	May 31, 2000
		Pu238	6.1 E-05	1.9 E-04	4.5 E-04	September 11, 2000
		Pu239	-2.0 E-05	1.5 E-04	4.9 E-04	September 11, 2000
1439	May 16, 2000	Gross Alpha	2.1 E-03	1.9 E-03	2.2 E-03	June 2, 2000
		Gross Beta	4.8 E-02	6.3 E-03	6.0 E-03	June 2, 2000
		Pu238	2.0 E-05	6.4 E-05	1.6 E-04	September 13, 2000
		Pu239	-2.0 E-05	7.6 E-05	2.6 E-04	September 13, 2000
1464	May 17, 2000	Gross Alpha	1.8 E-03	1.7 E-03	2.0 E-03	June 5, 2000
		Gross Beta	4.1 E-02	5.4 E-03	5.3 E-03	June 5, 2000
		Pu238	-6.6 E-05	4.8 E-05	2.6 E-04	September 19, 2000
		Pu239	2.5 E-05	7.6 E-05	1.8 E-04	September 19, 2000

STATION # 12 TA-16 LANL Cafeteria Los Alamos, NM Lat: N 35° 49.572' Long: W 106° 19.068' Elev: 7302 feet						
Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1404	May 15, 2000	Gross Alpha	5.4 E-03	3.7 E-03	4.4 E-03	May 31, 2000
		Gross Beta	6.2 E-02	9.4 E-03	1.0 E-02	May 31, 2000
		Pu238	-8.3 E-05	1.2 E-04	4.5 E-04	September 12, 2000
		Pu239	1.4 E-05	9.2 E-05	2.7 E-04	September 12, 2000
1437	May 16, 2000	Gross Alpha	3.0 E-03	2.1 E-03	2.3 E-03	June 2, 2000
		Gross Beta	5.2 E-02	6.6 E-03	6.2 E-03	June 2, 2000
		Pu238	1.4 E-04	1.5 E-04	2.1 E-04	September 13, 2000
		Pu239	-3.3 E-05	3.8 E-05	2.4 E-04	September 13, 2000
1463	May 17, 2000	Gross Alpha	1.9 E-03	1.7 E-03	2.1 E-03	June 5, 2000
		Gross Beta	4.8 E-02	5.8 E-03	5.4 E-03	June 5, 2000

		Pu238	-2.6 E-05	3.0 E-05	1.9 E-04	September 18, 2000
		Pu239	3.4 E-05	7.7 E-05	1.7 E-04	September 18, 2000

STATION # 13

TA-55 Building 50-184 (Nitric Acid Tank)

Los Alamos, NM

Lat: N 35° 51.670' Long: W 106° 18.020' Elev: 7295 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1406	May 15, 2000	Gross	7.7 E-03	3.4 E-03	3.5 E-03	May 31, 2000
		Gross Beta	6.2 E-02	7.9 E-03	7.9 E-03	May 31, 2000
		Pu238	-7.4 E-05	1.1 E-04	4.0 E-04	September 11, 2000
		Pu239	1.2 E-04	1.5 E-04	2.4 E-04	September 11, 2000
1441	May 16, 2000	Gross Alpha	1.2 E-03	1.6 E-03	2.2 E-03	June 2, 2000
		Gross Beta	5.1 E-02	6.4 E-03	6.0 E-03	June 2, 2000
		Pu238	6.3 E-05	8.9 E-05	8.5 E-05	September 13, 2000
		Pu239	6.3 E-05	8.9 E-05	8.5 E-05	September 13, 2000
1461	May 17, 2000	Gross Alpha	2.0 E-03	1.7 E-03	2.0 E-03	June 5, 2000
		Gross Beta	5.0 E-02	5.8 E-03	5.2 E-03	June 5, 2000
		Pu238	9.7 E-05	1.4 E-04	2.4 E-04	September 18, 2000
		Pu239	7.5 E-05	1.2 E-04	2.1 E-04	September 18, 2000

STATION # 14

TA-54 Water Tower

Los Alamos, NM

Lat: N 35° 50.750' Long: W 106° 16.030' Elev: 6940 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1402	May 15, 2000	Gross Alpha	8.6 E-03	3.5 E-03	3.4 E-03	May 31, 2000
		Gross Beta	6.5 E-02	7.9 E-03	7.7 E-03	May 31, 2000
		Pu238	1.3 E-04	5.7 E-04	1.4 E-03	September 11, 2000
		Pu239	1.3 E-04	3.9 E-04	9.4 E-04	September 11, 2000
1440	May 16, 2000	Gross Alpha	2.0 E-03	1.8 E-03	2.1 E-03	June 2, 2000
		Gross Beta	5.3 E-02	6.3 E-03	5.8 E-03	June 2, 2000
		Pu238	1.2 E-04	1.5 E-04	2.7 E-04	September 13, 2000
		Pu239	6.8 E-05	1.1 E-04	1.9 E-04	September 13, 2000
1466	May 17, 2000	Gross Alpha	3.9 E-03	2.4 E-03	2.5 E-03	June 5, 2000
		Gross Beta	5.6 E-02	6.9 E-03	6.5 E-03	June 5, 2000
		Pu238	4.2 E-05	1.2 E-04	2.7 E-04	September 19, 2000
		Pu239	-7.3 E-05	9.2 E-05	3.5 E-04	September 19, 2000

STATION # 15
 TA-18 LANL Gate
 Los Alamos, NM
 Lat: N 35° 50.330' Long: W 106° 15.800' Elev: 6757 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1403	May 15, 2000	Gross Alpha	4.4 E-03	3.0 E-03	3.6 E-03	May 31, 2000
		Gross Beta	1.0 E-02	5.6 E-03	8.1 E-03	May 31, 2000
		Pu238	1.2 E-04	2.1 E-04	4.3 E-04	September 12, 2000
		Pu239	-4.0 E-05	4.7 E-05	2.9 E-04	September 12, 2000
1442	May 16, 2000	Gross Alpha	4.4 E-03	2.4 E-03	2.3 E-03	June 2, 2000
		Gross Beta	4.8 E-02	6.5 E-03	6.2 E-03	June 2, 2000
		Pu238	3.8 E-05	7.6 E-05	1.0 E-04	September 13, 2000
		Pu239	0.0 E+00	0.0 E+00	1.0 E-04	September 13, 2000
1465	May 17, 2000	Gross Alpha	2.6 E-03	1.8 E-03	2.0 E-03	June 5, 2000
		Gross Beta	4.5 E-02	5.6 E-03	5.2 E-03	June 5, 2000
		Pu238	-3.7 E-05	3.7 E-05	2.2 E-04	September 19, 2000
		Pu239	-2.7 E-05	3.2 E-05	2.0 E-04	September 19, 2000

STATION # 16
 Espanola Army National Guard Armory
 Espanola, NM
 Lat: N 36° 00.088' Long: W 106° 06.070' Elev: 5920 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1400	May 15, 2000	Gross	5.1 E-03	3.4 E-03	4.1 E-03	May 31, 2000
		Gross Beta	7.4 E-02	9.4 E-03	9.3 E-03	May 31, 2000
		Pu238	4.3 E-05	1.3 E-04	3.2 E-04	September 12, 2000
		Pu239	2.9 E-05	1.4 E-04	3.5 E-04	September 12, 2000
1435	May 16, 2000	Gross Alpha	8.1 E-03	2.7 E-03	2.0 E-03	June 2, 2000
		Gross Beta	5.5 E-02	6.2 E-03	5.5 E-03	June 2, 2000
		Pu238	-3.1 E-05	3.6 E-05	2.2 E-04	September 13, 2000
		Pu239	1.0 E-04	1.3 E-04	2.0 E-04	September 13, 2000
1363	May 17, 2000	Gross Alpha	3.2 E-03	2.0 E-03	2.1 E-03	June 5, 2000
		Gross Beta	5.0 E-02	5.9 E-03	5.4 E-03	June 5, 2000
		Pu238	-4.5 E-05	7.5 E-05	2.8 E-04	September 18, 2000
		Pu239	2.7 E-05	8.3 E-05	2.0 E-04	September 18, 2000

STATION # 17

Bode's General Store

Abiquiu, NM

Lat: N 36° 12.610' Long: W 106° 19.218' Elev: 6049 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1407	May 15, 2000	Gross Alpha	1.6 E-03	2.4 E-03	3.5 E-03	May 31, 2000
		Gross Beta	5.8 E-02	7.7 E-03	7.8 E-03	May 31, 2000
		Pu238	-6.0 E-05	1.3 E-04	4.2 E-04	September 12, 2000
		Pu239	-6.0 E-05	9.9 E-05	3.7 E-04	September 12, 2000
1445	May 16, 2000	Gross Alpha	2.9 E-03	1.9 E-03	2.1 E-03	June 2, 2000
		Gross Beta	4.0 E-02	5.7 E-03	5.7 E-03	June 2, 2000
		Pu238	6.4 E-05	1.2 E-04	2.3 E-04	September 14, 2000
		Pu239	2.1 E-05	9.9 E-05	2.6 E-04	September 14, 2000
1455	May 17, 2000	Gross Alpha	4.3 E-03	2.1 E-03	2.1 E-03	June 5, 2000
		Gross Beta	4.6 E-02	5.8 E-03	5.4 E-03	June 5, 2000
		Pu238	7.5 E-05	1.2 E-04	2.3 E-04	September 18, 2000
		Pu239	2.8 E-05	8.6 E-05	2.1 E-04	September 18, 2000

STATION # 18

10 Sparrow Road

La Tierra, NM

Lat: N 35° 42.533' Long: W 106° 00.222' Elev: 6950 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1405	May 15, 2000	Gross Alpha	2.2 E-03	2.5 E-03	3.4 E-03	May 31, 2000
		Gross Beta	5.2 E-02	7.4 E-03	7.8 E-03	May 31, 2000
		Pu238	-3.3 E-05	3.9 E-05	2.5 E-04	September 12, 2000
		Pu239	4.5 E-05	1.0 E-04	2.2 E-04	September 12, 2000
1449	May 16, 2000	Gross Alpha	2.8 E-03	1.9 E-03	2.1 E-03	June 2, 2000
		Gross Beta	4.8 E-02	6.1 E-03	5.8 E-03	June 2, 2000
		Pu238	-6.3 E-05	3.9 E-04	1.1 E-03	September 14, 2000
		Pu239	-1.6 E-04	2.6 E-04	9.7 E-04	September 14, 2000
1457	May 17, 2000	Gross Alpha	1.7 E-03	1.7 E-03	2.1 E-03	June 5, 2000
		Gross Beta	4.6 E-02	5.7 E-03	5.4 E-03	June 5, 2000
		Pu238	-1.1 E-05	7.6 E-05	2.6 E-04	September 18, 2000
		Pu239	-4.2 E-05	4.3 E-05	2.6 E-04	September 18, 2000

STATION # 19

City Municipal Building

Santa Clara, NM

Lat: N 35° 53.627' Long: W 106° 07.250' Elev: 5600 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1443	May 15, 2000	Gross	3.7 E-03	2.7 E-03	3.3 E-03	May 31, 2000
		Gross Beta	6.6 E-02	7.8 E-03	7.5 E-03	May 31, 2000
		Pu238	0.0 E+00	0.0 E+00	8.5 E-05	September 12, 2000
		Pu239	6.3 E-05	8.9 E-05	8.5 E-05	September 12, 2000
1453	May 16, 2000	Gross Alpha	6.8 E-03	2.4 E-03	1.9 E-03	June 2, 2000
		Gross Beta	5.2 E-02	5.9 E-03	5.2 E-03	June 2, 2000
		Pu238	0.0 E+00	0.0 E+00	6.5 E-05	September 14, 2000
		Pu239	4.8 E-05	6.9 E-05	6.5 E-05	September 14, 2000
1472	May 17, 2000	Gross Alpha	3.0 E-03	2.0 E-03	2.2 E-03	June 5, 2000
		Gross Beta	4.3 E-02	5.8 E-03	5.7 E-03	June 5, 2000
		Pu238	2.8 E-05	5.6 E-05	7.6 E-05	September 19, 2000
		Pu239	0.0 E+00	0.0 E+00	7.6 E-05	September 19, 2000

STATION # 20

Tribal Governor's Office

San Ildefonso, NM

Lat: N 35° 58.285' Long: W 106° 05.308' Elev: 5670 feet

Sample #	Sample Collection Date	Analyte	Result (pCi/m ³)	2-Sigma Uncertainty (pCi/m ³)	MDC (pCi/m ³)	Sample Analysis Date
1444	May 15, 2000	Gross Alpha	2.1 E-03	2.0 E-03	2.7 E-03	May 31, 2000
		Gross Beta	4.6 E-02	6.0 E-03	6.0 E-03	May 31, 2000
		Pu238	0.0 E+00	0.0 E+00	7.6 E-05	September 11, 2000
		Pu239	5.6 E-05	7.9 E-05	7.6 E-05	September 11, 2000
1454	May 16, 2000	Gross Alpha	3.6 E-03	2.2 E-03	2.3 E-03	June 2, 2000
		Gross Beta	5.2 E-02	6.6 E-03	6.2 E-03	June 2, 2000
		Pu238	2.9 E-05	5.9 E-05	7.9 E-05	September 14, 2000
		Pu239	0.0 E+00	0.0 E+00	7.9 E-05	September 14, 2000