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CALORIMETRY EXCHANGE PROGRAM

QUARTERLY DATA REPORT

2ND QUARTER CY93

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CALORIMETRY EXCHANGE PROGRAM

QUARTERLY DATA REPORT

2ND QUARTER CY93

Prepared by

Tina M. Barnett

Tina M. Barnett

EG&G Mound Applied Technologies

Reviewed By

Lawrence J. Satkowiak

Lawrence J. Satkowiak

EG&G Mound Applied Technologies

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The Calorimetry Sample Exchange Program

The goals of the Calorimetry Sample Exchange Program are:

1. Discuss measurement differences
2. Review and improve analytical measurements and methods
3. Discuss new measurement capabilities
4. Provide data to DOE on measurement capabilities to evaluate shipper-receiver differences
5. Provide characterized or standard materials as necessary for exchange participants
6. Provide a measurement control program for plutonium analysis

A sample of PuO_2 powder is available at each participating site for NDA measurement, including either or both calorimetry and high-resolution gamma-ray spectroscopy, the elements which are typically combined to provide a calorimetric assay of plutonium. The facilities measure the sample as frequently and to the level of precision which they desire, and then submit the data to the Exchange for analysis. The data report includes summary tables for each measurement and charts showing the performance of each laboratory. Comparisons are made to the accepted values for the exchange sample and to data previously reported by that laboratory. This information is presented, in the form of quarterly and annual reports, intended for use by Exchange participants in measurement control programs, or to indicate when bias corrections may be appropriate. No attempt, however, has been made to standardize methods or frequency of data collection, calibration, or operating procedures. Direct comparisons between laboratories may, therefore, be misleading since data have not been collected to the same precision or for the same time periods.

A meeting of the participants of the Calorimetry Exchange is held annually at EG&G Mound Applied Technologies. The purposes of this meeting are to discuss measurement differences, problems, and new measurement capabilities, and to determine the additional activities needed to fulfill the goals of the Exchange.

SUMMARY TABLE

% DIFFERENCE FROM ACCEPTED VALUES FOR THE CALORIMETRY EXCHANGE SAMPLE

2ND QUARTER CY93

	LIVERMORE	LOS ALAMOS	MOUND	HANFORD	ROCKY CSL	FLATS AL	SAVANNAH RIVER
POWER	0.63	0.22	0.04	-0.01	**	0.34	*
P-EFF	-0.21	0.14	0.01	0.10	**	-0.01	*
238/239 Pu	-2.59	6.24	1.91	5.08	**	5.37	*
240/239 Pu	-0.23	0.30	-0.90	1.06	**	0.17	*
241/239 Pu	-0.41	0.41	-1.17	0.08	**	0.70	*
Am/239 Pu	-1.51	0.10	0.74	-1.09	**	0.13	*
% 238 Pu	-2.58	6.14	2.00	5.03	**	5.39	*
% 239 Pu	0.01	-0.10	0.08	-0.06	**	0.02	*
% 240 Pu	-0.22	0.20	-0.82	1.01	**	0.19	*
% 241 Pu	-0.40	0.32	-1.09	0.03	**	0.72	*
% 241 Am	-1.50	0.00	0.82	-1.15	**	0.15	*

* No data submitted since third quarter of CY88.

** No data submitted for this measurement this quarter.

RESULTS OF ANALYSIS OF POWER DATA

Second Quarter 1993

REPORTING LABORATORY

	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (mW)	****	6.300	2.176	0.402	-0.077	3.394	****
Std. Dev. (mW)	****	10.802	2.788	1.193	3.004	1.446	****
Unc. in Mean (mW)	****	1.668	0.367	0.412	0.571	1.649	****
Mean Error (%)	****	0.63%	0.22%	0.04%	-0.01%	0.34%	****
Std. Dev. (%)	****	1.09%	0.28%	0.12%	0.30%	0.15%	****
Unc. in Mean (%)	****	0.17%	0.04%	0.04%	0.06%	0.16%	****

DIFFERENCE FROM LAST PERIOD

Diff. in Mean Error (mW)	****	-1.963	1.840	-0.412	1.104	0.502	****
Diff. in Std. Dev. (mW)	****	-0.791	1.137	-0.200	0.484	-0.419	****
Diff. in Mean Error (%)	****	-0.20%	0.19%	-0.04%	0.11%	0.05%	****
Diff. in Std. Dev. (%)	****	-0.08%	0.11%	-0.02%	0.05%	-0.04%	****
Number of Data Points	0	9	12	14	28	12	0

LAWRENCE LIVERMORE - POWER DATA 3RD QUARTER 1992 - 2ND QUARTER 1993

LOS ALAMOS - POWER DATA

3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - POWER DATA 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - POWER DATA 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. POWER DATA - 3RD QUARTER 1992- 2ND QUARTER 1993

**CALORIMETER DATA
SECOND QUARTER 1993**

ROCKY FLATS PLANT - CHEM STANDARDS LABORATORY

NO DATA REPORTED

LAWRENCE LIVERMORE NATIONAL LABORATORY

#	Date Measured	Instr. ID	Measured Watts	Uncert. 1 STD	Accepted Watts	Ratio M/A	mW Error	Percent Error
1	20-Apr-93	30	1.0073	0.50%	0.9940	1.013	13.296	1.34%
2	2-May-93	2	0.9951	0.50%	0.9941	1.001	0.974	0.10%
3	11-May-93	30	1.0111	0.50%	0.9942	1.017	16.883	1.70%
4	12-May-93	2	0.9968	0.50%	0.9942	1.003	2.573	0.26%
5	27-May-93	30	1.0138	0.50%	0.9944	1.020	19.421	1.95%
6	27-May-93	30	1.0130	0.50%	0.9944	1.019	18.621	1.87%
7	16-Jun-93	2	0.9868	0.50%	0.9946	0.992	-7.781	-0.78%
8	17-Jun-93	2	0.9887	0.50%	0.9946	0.994	-5.891	-0.59%
9	18-Jun-93	30	0.9932	0.50%	0.9946	0.999	-1.401	-0.14%

LOS ALAMOS NATIONAL LABORATORY

#	Date Measured	Instr. ID	Measured Watts	Uncert. 1 STD	Accepted Watts	Ratio M/A	mW Error	Percent Error
1	16-Apr-93	K7	0.9963	0.10%	0.9940	1.002	2.337	0.24%
2	15-Apr-93	K8	0.9939	0.10%	0.9940	1.000	-0.053	-0.01%
3	26-Apr-93	K8	0.9951	0.10%	0.9941	1.001	1.035	0.10%
4	21-May-93	K3	0.9995	0.15%	0.9943	1.005	5.162	0.52%
5	26-May-93	K3	0.9980	0.15%	0.9944	1.004	3.601	0.36%
6	17-May-93	K7	0.9947	0.10%	0.9943	1.000	0.422	0.04%
7	3-May-93	K8	0.9942	0.10%	0.9941	1.000	0.064	0.01%
8	19-May-93	K8	0.9971	0.10%	0.9943	1.003	2.802	0.28%
9	1-Jun-93	K3	0.9997	0.15%	0.9944	1.005	5.260	0.53%
10	22-Jun-93	K3	0.9908	0.15%	0.9946	0.996	-3.832	-0.39%
11	25-Jun-93	K3	0.9982	0.15%	0.9947	1.004	3.538	0.36%
12	29-Jun-93	K3	1.0005	0.15%	0.9947	1.006	5.768	0.58%

EG&G MOUND APPLIED TECHNOLOGIES

#	Date Measured	Instr. ID	Measured Watts	Uncert. 1 STD	Accepted Watts	Ratio M/A	mW Error	Percent Error
1	6-Apr-93	128	0.995050	0.15%	0.993861	1.001	1.189	0.12%
2	8-Apr-93	128	0.993337	0.15%	0.993881	0.999	-0.545	-0.05%
3	21-Apr-93	111	0.995600	0.17%	0.994014	1.002	1.586	0.16%
4	21-Apr-93	128	0.995969	0.15%	0.994014	1.002	1.956	0.20%
5	26-Apr-93	128	0.993159	0.15%	0.994065	0.999	-0.906	-0.09%
6	4-May-93	128	0.992377	0.15%	0.994146	0.998	-1.769	-0.18%
7	13-May-93	128	0.995677	0.15%	0.994237	1.001	1.440	0.14%
8	18-May-93	128	0.994774	0.15%	0.994288	1.000	0.486	0.05%
9	20-May-93	111	0.996077	0.17%	0.994308	1.002	1.769	0.18%
10	20-May-93	128	0.993578	0.15%	0.994308	0.999	-0.731	-0.07%
11	9-Jun-93	128	0.995923	0.15%	0.994510	1.001	1.413	0.14%
12	16-Jun-93	128	0.994684	0.15%	0.994581	1.000	0.103	0.01%
13	22-Jun-93	128	0.993863	0.15%	0.994642	0.999	-0.778	-0.08%
14	24-Jun-93	128	0.995069	0.15%	0.994662	1.000	0.407	0.04%

WESTINGHOUSE HANFORD COMPANY

#	Date Measured	Instr. ID	Measured Watts	Uncert. 1 STD	Accepted Watts	Ratio M/A	mW Error	Percent Error
1	2-Apr-93	3	0.9912	0.29%	0.9938	0.997	-2.620	-0.26%
2	6-Apr-93	1	0.9941	0.29%	0.9939	1.000	0.239	0.02%
3	7-Apr-93	5	0.9985	0.29%	0.9939	1.005	4.629	0.47%
4	8-Apr-93	2	0.9941	0.29%	0.9939	1.000	0.219	0.02%
5	9-Apr-93	4	0.9930	0.29%	0.9939	0.999	-0.892	-0.09%
6	14-Apr-93	5	0.9950	0.29%	0.9939	1.001	1.058	0.11%
7	15-Apr-93	3	0.9908	0.29%	0.9940	0.997	-3.153	-0.32%
8	16-Apr-93	1	0.9944	0.29%	0.9940	1.000	0.437	0.04%
9	21-Apr-93	4	0.9882	0.29%	0.9940	0.994	-5.814	-0.58%
10	22-Apr-93	2	0.9937	0.29%	0.9940	1.000	-0.324	-0.03%
11	29-Apr-93	2	0.9932	0.29%	0.9941	0.999	-0.895	-0.09%
12	30-Apr-93	4	0.9984	0.29%	0.9941	1.004	4.295	0.43%
13	4-May-93	1	0.9940	0.36%	0.9941	1.000	-0.146	-0.01%
14	5-May-93	5	0.9951	0.36%	0.9942	1.001	0.944	0.09%
15	7-May-93	2	0.9955	0.36%	0.9942	1.001	1.324	0.13%
16	14-May-93	5	1.0028	0.36%	0.9942	1.009	8.553	0.86%
17	17-May-93	1	0.9923	0.36%	0.9943	0.998	-1.978	-0.20%
18	21-May-93	4	0.9946	0.36%	0.9943	1.000	0.282	0.03%
19	27-May-93	2	0.9910	0.36%	0.9944	0.997	-3.379	-0.34%
20	28-May-93	5	0.9966	0.36%	0.9944	1.002	2.211	0.22%
21	3-Jun-93	2	0.9944	0.26%	0.9944	1.000	-0.050	-0.01%
22	8-Jun-93	3	0.9909	0.26%	0.9945	0.996	-3.600	-0.36%
23	11-Jun-93	1	0.9937	0.26%	0.9945	0.999	-0.831	-0.08%
24	15-Jun-93	4	0.9927	0.26%	0.9946	0.998	-1.871	-0.19%
25	17-Jun-93	5	0.9968	0.26%	0.9946	1.002	2.209	0.22%
26	18-Jun-93	2	0.9964	0.26%	0.9946	1.002	1.799	0.18%
27	22-Jun-93	3	0.9893	0.26%	0.9946	0.995	-5.342	-0.54%
28	23-Jun-93	1	0.9952	0.26%	0.9947	1.001	0.548	0.06%

ROCKY FLATS PLANT - ANALYTICAL LABORATORY

#	Date Measured	Instr. ID	Measured Watts	Uncert. 1 STD	Accepted Watts	Ratio M/A	mW Error	Percent Error
1	2-Apr-93	MO4	0.9968	0.43%	0.993820	1.003	2.980	0.30%
2	6-Apr-93	MO9	0.9951	0.79%	0.993861	1.001	1.239	0.12%
3	7-Apr-93	MO2	0.9981	0.42%	0.993871	1.004	4.229	0.43%
4	7-Apr-93	MO1	1.0002	0.41%	0.993871	1.006	6.329	0.64%
5	8-Apr-93	MO3	0.9975	0.40%	0.993881	1.004	3.619	0.36%
6	13-Apr-93	MO8	0.9978	0.79%	0.993932	1.004	3.868	0.39%
7	14-Apr-93	MO9	0.9976	0.79%	0.993942	1.004	3.658	0.37%
8	14-Apr-93	MO10	0.9954	0.76%	0.993942	1.001	1.458	0.15%
9	15-Apr-93	MO2	0.9982	0.42%	0.993953	1.004	4.247	0.43%
10	16-Apr-93	MO2	0.9974	0.42%	0.993963	1.003	3.437	0.35%
11	16-Apr-93	MO4	0.9981	0.43%	0.993963	1.004	4.137	0.42%
12	27-Apr-93	MO3	0.9956	0.40%	0.994075	1.002	1.525	0.15%

WESTINGHOUSE SAVANNAH RIVER SITE

NO DATA REPORTED

RESULTS OF ANALYSIS OF P-EFFECTIVE DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (mW/g)	****	-0.0053	0.0036	0.0003	0.0026	-0.0001	****
Std. Dev. (mW/g)	****	0.0036	0.0062	0.0040	0.0051	0.0171	****
Unc. in Mean (mW/g)	****	0.0006	0.0023	0.0015	0.0004	0.0033	****
Mean Error (%)	****	-0.21%	0.14%	0.01%	0.10%	-0.01%	****
Std. Dev. (%)	****	0.14%	0.25%	0.16%	0.20%	0.69%	****
Unc. in Mean (%)	****	0.02%	0.09%	0.06%	0.02%	0.13%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (mW/g)	****	0.0012	0.0014	-0.0028	0.0004	0.0316	****
Diff. in Std. Dev. (mW/g)	****	0.0013	-0.0001	-0.0002	0.0010	-0.0030	****
Diff. in Mean Error (%)	****	0.05%	0.05%	-0.11%	0.01%	1.26%	****
Diff. in Std. Dev. (%)	****	0.05%	0.00%	-0.01%	0.04%	-0.12%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - P-EFFECTIVE 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - P-EFFECTIVE

3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - P-EFFECTIVE 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - P-EFFECTIVE 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. P-EFFECTIVE - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

**P-EFFECTIVE DATA
2ND QUARTER 1993**

**RFP - CSL
NO DATA REPORTED**

LLNL

#	Date Measured	Instr. ID	P-eff (mw/g)	Uncert. 1 STD	Accepted P-eff	Ratio M/A	mW/g Error	Percent Error
1	8-Apr-93	1	2.4928	0.12%	2.4966	0.998	-0.0038	-0.15%
2	16-Apr-93	1	2.4923	0.09%	2.4968	0.998	-0.0045	-0.18%
3	22-Apr-93	1	2.4930	0.08%	2.4969	0.998	-0.0039	-0.16%
4	28-Apr-93	1	2.4935	0.10%	2.4971	0.999	-0.0036	-0.14%
5	6-May-93	1	2.4914	0.10%	2.4973	0.998	-0.0059	-0.24%
6	11-May-93	1	2.4923	0.09%	2.4974	0.998	-0.0051	-0.21%
7	13-May-93	2	2.4940	0.13%	2.4975	0.999	-0.0035	-0.14%
8	14-May-93	2	2.4830	0.17%	2.4975	0.994	-0.0145	-0.58%
9	14-May-93	1	2.4938	0.09%	2.4975	0.999	-0.0037	-0.15%
10	17-May-93	2	2.4860	0.15%	2.4976	0.995	-0.0116	-0.46%
11	17-May-93	2	2.4940	0.15%	2.4976	0.999	-0.0036	-0.14%
12	17-May-93	2	2.4950	0.15%	2.4976	0.999	-0.0026	-0.10%
13	18-May-93	2	2.4960	0.18%	2.4976	0.999	-0.0016	-0.06%
14	18-May-93	2	2.5000	0.16%	2.4976	1.001	0.0024	0.10%
15	18-May-93	2	2.4840	0.19%	2.4976	0.995	-0.0136	-0.55%
16	18-May-93	1	2.4942	0.10%	2.4976	0.999	-0.0034	-0.14%
17	21-May-93	1	2.4945	0.09%	2.4977	0.999	-0.0032	-0.13%
18	25-May-93	1	2.4911	0.09%	2.4978	0.997	-0.0067	-0.27%
19	25-May-93	2	2.4940	0.13%	2.4978	0.998	-0.0038	-0.15%
20	9-Jun-93	1	2.4921	0.10%	2.4982	0.998	-0.0061	-0.24%
21	15-Jun-93	1	2.4932	0.11%	2.4984	0.998	-0.0052	-0.21%
22	21-Jun-93	2	2.4910	0.12%	2.4985	0.997	-0.0075	-0.30%
23	24-Jun-93	1	2.4947	0.09%	2.4986	0.998	-0.0039	-0.16%
24	28-Jun-93	1	2.4928	0.10%	2.4987	0.998	-0.0059	-0.24%
25	30-Jun-93	2	2.4920	0.11%	2.4987	0.997	-0.0067	-0.27%

LANL

#	Date Measured	Instr. ID	P-eff (mw/g)	Uncert. 1 STD	Accepted P-eff	Ratio M/A	mW/g Error	Percent Error
1	6-Apr-93	F5	2.5094	0.39%	2.4965	1.005	0.0129	0.52%
2	6-Apr-93	F6	2.5093	0.31%	2.4965	1.005	0.0128	0.51%
3	12-Apr-93	F5	2.4889	0.36%	2.4967	0.997	-0.0078	-0.31%
4	14-Apr-93	F5	2.5001	0.35%	2.4967	1.001	0.0034	0.14%
5	14-Apr-93	F6	2.5079	0.32%	2.4967	1.004	0.0112	0.45%
6	22-Apr-93	F5	2.4926	0.34%	2.4969	0.998	-0.0044	-0.17%
7	22-Apr-93	F6	2.4961	0.32%	2.4969	1.000	-0.0009	-0.04%
8	29-Apr-93	F5	2.4986	0.35%	2.4971	1.001	0.0015	0.06%
9	29-Apr-93	F6	2.4998	0.31%	2.4971	1.001	0.0027	0.11%
10	14-May-93	F5	2.4975	0.35%	2.4975	1.000	0.0000	0.00%
11	14-May-93	F6	2.4999	0.32%	2.4975	1.001	0.0024	0.09%
12	24-May-93	F6	2.5036	0.33%	2.4978	1.002	0.0058	0.23%
13	1-Jun-93	F6	2.5065	0.33%	2.4980	1.003	0.0085	0.34%
14	8-Jun-93	F5	2.5007	0.35%	2.4982	1.001	0.0025	0.10%

**P-EFFECTIVE DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	P-eff (mw/g)	Uncert. 1 STD	Accepted P-eff	Ratio M/A	mW/g Error	Percent Error
1	27-Apr-93	GENIE2	2.4957	0.21%	2.4971	0.999	-0.0014	-0.06%
2	27-Apr-93	GENIE2	2.5035	0.20%	2.4971	1.003	0.0064	0.26%
3	28-Apr-93	GENIE2	2.4953	0.21%	2.4971	0.999	-0.0018	-0.07%
4	28-Apr-93	GENIE2	2.4995	0.21%	2.4971	1.001	0.0024	0.10%
5	28-Apr-93	GENIE2	2.4915	0.21%	2.4971	0.998	-0.0056	-0.23%
6	28-Apr-93	GENIE2	2.4996	0.24%	2.4971	1.001	0.0025	0.10%
7	28-Apr-93	GENIE2	2.4948	0.21%	2.4971	0.999	-0.0023	-0.09%
8	28-Apr-93	GENIE2	2.5008	0.23%	2.4971	1.001	0.0037	0.15%
9	29-Apr-93	GENIE2	2.5004	0.22%	2.4971	1.001	0.0033	0.13%
10	29-Apr-93	GENIE2	2.4937	0.20%	2.4971	0.999	-0.0035	-0.14%
11	25-May-93	GENIE2	2.5032	0.23%	2.4978	1.002	0.0054	0.22%
12	3-Jun-93	GENIE2	2.4922	0.22%	2.4980	0.998	-0.0059	-0.24%
13	21-Jun-93	GENIE2	2.4995	0.22%	2.4985	1.000	0.0010	0.04%

**P-EFFECTIVE DATA
2ND QUARTER 1993**

HANFORD

#	Date Measured	Instr. ID	P-eff (mw/g)	Uncert. 1 STD	Accepted P-eff	Ratio M/A	mW/g Error	Percent Error
1	1-Apr-93	2026	2.5055	0.12%	2.4970	1.003	0.0085	0.34%
2	1-Apr-93	1985	2.5043	0.11%	2.4970	1.003	0.0073	0.29%
3	5-Apr-93	2026	2.5064	0.10%	2.4971	1.004	0.0093	0.37%
4	5-Apr-93	2424	2.5011	0.11%	2.4971	1.002	0.0040	0.16%
5	6-Apr-93	1985	2.4953	0.11%	2.4971	0.999	-0.0018	-0.07%
6	12-Apr-93	1985	2.5050	0.11%	2.4973	1.003	0.0077	0.31%
7	12-Apr-93	1985	2.4992	0.11%	2.4973	1.001	0.0019	0.08%
8	12-Apr-93	2424	2.5000	0.11%	2.4973	1.001	0.0027	0.11%
9	13-Apr-93	1985	2.5018	0.11%	2.4973	1.002	0.0045	0.18%
10	19-Apr-93	2424	2.4932	0.11%	2.4975	0.998	-0.0043	-0.17%
11	19-Apr-93	1985	2.5114	0.11%	2.4975	1.006	0.0139	0.56%
12	26-Apr-93	2424	2.5023	0.10%	2.4977	1.002	0.0046	0.19%
13	26-Apr-93	1985	2.5036	0.11%	2.4977	1.002	0.0059	0.24%
14	28-Apr-93	2424	2.5031	0.11%	2.4977	1.002	0.0054	0.22%
15	28-Apr-93	1985	2.5056	0.12%	2.4977	1.003	0.0079	0.32%
16	3-May-93	1985	2.5021	0.11%	2.4979	1.002	0.0042	0.17%
17	3-May-93	2424	2.5020	0.10%	2.4979	1.002	0.0041	0.17%
18	4-May-93	2740	2.4933	0.14%	2.4979	0.998	-0.0046	-0.18%
19	10-May-93	1985	2.5072	0.12%	2.4980	1.004	0.0092	0.37%
20	12-May-93	2424	2.4989	0.10%	2.4981	1.000	0.0008	0.03%
21	13-May-93	1985	2.5048	0.11%	2.4981	1.003	0.0067	0.27%
22	13-May-93	2740	2.4945	0.14%	2.4981	0.999	-0.0036	-0.14%
23	18-May-93	1985	2.4980	0.11%	2.4983	1.000	-0.0003	-0.01%
24	18-May-93	2424	2.4972	0.10%	2.4983	1.000	-0.0011	-0.04%
25	19-May-93	2740	2.4948	0.14%	2.4983	0.999	-0.0035	-0.14%
26	24-May-93	2424	2.4909	0.11%	2.4984	0.997	-0.0075	-0.30%
27	24-May-93	2740	2.4941	0.14%	2.4984	0.998	-0.0043	-0.17%
28	25-May-93	1985	2.5045	0.11%	2.4984	1.002	0.0061	0.24%
29	25-May-93	2424	2.5047	0.11%	2.4984	1.003	0.0063	0.25%
30	26-May-93	2424	2.4993	0.10%	2.4985	1.000	0.0008	0.03%
31	1-Jun-93	2740	2.4942	0.14%	2.4986	0.998	-0.0044	-0.18%
32	2-Jun-93	2424	2.4961	0.11%	2.4986	0.999	-0.0025	-0.10%
33	2-Jun-93	1985	2.5023	0.11%	2.4986	1.001	0.0037	0.15%
34	3-Jun-93	1985	2.4994	0.11%	2.4987	1.000	0.0007	0.03%
35	7-Jun-93	1985	2.5110	0.10%	2.4988	1.005	0.0122	0.49%
36	7-Jun-93	2740	2.4961	0.12%	2.4988	0.999	-0.0027	-0.11%
37	8-Jun-93	2424	2.4991	0.10%	2.4988	1.000	0.0003	0.01%
38	14-Jun-93	1985	2.5066	0.11%	2.4990	1.003	0.0076	0.31%
39	14-Jun-93	2740	2.4950	0.13%	2.4990	0.998	-0.0040	-0.16%
40	15-Jun-93	2424	2.5034	0.14%	2.4990	1.002	0.0044	0.18%
41	21-Jun-93	1985	2.5067	0.10%	2.4991	1.003	0.0076	0.30%
42	21-Jun-93	2740	2.5008	0.13%	2.4991	1.001	0.0017	0.07%
43	22-Jun-93	2424	2.4991	0.09%	2.4992	1.000	-0.0001	0.00%
44	28-Jun-93	1985	2.5066	0.10%	2.4993	1.003	0.0073	0.29%
45	29-Jun-93	2424	2.4980	0.10%	2.4994	0.999	-0.0014	-0.05%
46	30-Jun-93	2740	2.4967	0.14%	2.4994	0.999	-0.0027	-0.11%

**P-EFFECTIVE DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	P-eff (mw/g)	Uncert. 1 STD	Accepted P-eff	Ratio M/A	mW/g Error	Percent Error
1	1-Apr-93	TR#2	2.4951	0.33%	2.4964	0.999	-0.0013	-0.05%
2	12-Apr-93	TR#2	2.4816	0.52%	2.4967	0.994	-0.0151	-0.60%
3	12-Apr-93	ND#1	2.5065	0.27%	2.4967	1.004	0.0098	0.39%
4	26-Apr-93	TR#2	2.4546	0.29%	2.4970	0.983	-0.0424	-1.70%
5	26-Apr-93	ND#1	2.5195	0.54%	2.4970	1.009	0.0225	0.90%
6	7-Jun-93	TR#2	2.5242	0.43%	2.4981	1.010	0.0261	1.04%
7	16-Jun-93	TR#2	2.5124	0.62%	2.4984	1.006	0.0140	0.56%
8	17-Jun-93	ND#1	2.4878	0.49%	2.4984	0.996	-0.0106	-0.42%
9	18-Jun-93	TR#2	2.5011	0.69%	2.4984	1.001	0.0027	0.11%
10	21-Jun-93	ND#1	2.5094	0.57%	2.4985	1.004	0.0109	0.44%
11	21-Jun-93	TR#2	2.4867	0.66%	2.4985	0.995	-0.0118	-0.47%
12	23-Jun-93	TR#2	2.4892	0.48%	2.4986	0.996	-0.0094	-0.37%
13	25-Jun-93	ND#1	2.4986	0.50%	2.4986	1.000	0.0000	0.00%
14	28-Jun-93	ND#1	2.4918	0.53%	2.4987	0.997	-0.0069	-0.28%
15	30-Jun-93	TR#2	2.5082	0.55%	2.4987	1.004	0.0095	0.38%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF 238-Pu/239-Pu DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (ppm)	****	-3	6	2	5	5	****
Std. Dev. (ppm)	****	5.36	7.04	7.07	5.87	19.50	****
Unc. in Mean (ppm)	****	0.84	1.86	1.81	0.59	5.20	****
Mean Error (%)	****	-2.59%	6.24%	1.91%	5.08%	5.37%	****
Std. Dev. (%)	****	5.49%	7.21%	7.24%	6.01%	19.98%	****
Unc. in Mean (%)	****	0.91%	1.80%	1.81%	0.58%	5.29%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (ppm)	****	-2	4	0	2	-12	****
Diff. in Std. Dev. (ppm)	****	1.92	3.37	1.10	1.32	-8.09	****
Diff. in Mean Error (%)	****	-1.69%	4.70%	-0.34%	1.89%	-12.52%	****
Diff. in Std. Dev. (%)	****	1.97%	3.46%	1.14%	1.36%	-8.25%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - 238-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - 238-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - 238-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - 238-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. 238-PU/239-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

238-Pu/239-Pu DATA
2ND QUARTER 1993

RFP - CSL
NO DATA REPORTED

LLNL

#	Date Measured	Instr. ID	238/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	8-Apr-93	1	100	3.83%	98	1.028	3	2.83%
2	16-Apr-93	1	96	3.04%	98	0.985	-1	-1.52%
3	22-Apr-93	1	98	2.54%	98	1.007	1	0.66%
4	28-Apr-93	1	98	3.36%	98	1.007	1	0.69%
5	6-May-93	1	94	3.38%	98	0.963	-4	-3.68%
6	11-May-93	1	96	2.89%	98	0.985	-1	-1.49%
7	13-May-93	2	94	5.09%	98	0.964	-4	-3.63%
8	14-May-93	2	84	6.96%	98	0.864	-13	-13.56%
9	14-May-93	1	102	2.99%	98	1.040	4	4.00%
10	17-May-93	2	87	6.01%	98	0.887	-11	-11.35%
11	17-May-93	2	95	5.73%	98	0.974	-2	-2.56%
12	17-May-93	2	96	5.60%	98	0.986	-1	-1.43%
13	18-May-93	2	96	6.43%	98	0.986	-1	-1.38%
14	18-May-93	2	105	5.30%	98	1.073	7	7.34%
15	18-May-93	2	81	8.08%	98	0.832	-16	-16.80%
16	18-May-93	1	97	3.17%	98	0.996	0	-0.36%
17	21-May-93	1	99	2.88%	98	1.018	2	1.83%
18	25-May-93	1	96	3.16%	98	0.985	-1	-1.48%
19	25-May-93	2	94	4.67%	98	0.964	-4	-3.60%
20	9-Jun-93	1	93	3.48%	98	0.953	-5	-4.70%
21	15-Jun-93	1	98	3.55%	98	1.008	1	0.76%
22	21-Jun-93	2	88	4.87%	98	0.899	-10	-10.12%
23	24-Jun-93	1	93	3.10%	98	0.954	-5	-4.62%
24	28-Jun-93	1	99	3.13%	98	1.019	2	1.85%
25	30-Jun-93	2	95	4.11%	98	0.975	-2	-2.48%

LANL

#	Date Measured	Instr. ID	238/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	6-Apr-93	F5	105	7.73%	98	1.071	7	7.10%
2	6-Apr-93	F6	109	5.92%	98	1.117	11	11.70%
3	12-Apr-93	F5	92	8.10%	98	0.937	-6	-6.26%
4	14-Apr-93	F5	112	6.42%	98	1.146	14	14.65%
5	14-Apr-93	F6	112	5.84%	98	1.143	14	14.26%
6	22-Apr-93	F5	106	6.69%	98	1.083	8	8.25%
7	22-Apr-93	F6	102	6.40%	98	1.043	4	4.31%
8	29-Apr-93	F5	93	7.72%	98	0.955	-4	-4.53%
9	29-Apr-93	F6	96	6.47%	98	0.981	-2	-1.87%
10	14-May-93	F5	106	6.84%	98	1.084	8	8.39%
11	14-May-93	F6	108	5.99%	98	1.102	10	10.19%
12	24-May-93	F6	103	6.58%	98	1.058	6	5.76%
13	1-Jun-93	F6	97	6.98%	98	0.994	-1	-0.63%
14	8-Jun-93	F5	113	6.32%	98	1.161	16	16.09%

238-Pu/239-Pu DATA
2ND QUARTER 1993

EG&G MOUND

#	Date Measured	Instr. ID	238/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	27-Apr-93	GENIE2	94	6.25%	98	0.961	-4	-3.88%
2	27-Apr-93	GENIE2	106	5.91%	98	1.089	9	8.91%
3	28-Apr-93	GENIE2	94	6.28%	98	0.961	-4	-3.88%
4	28-Apr-93	GENIE2	94	6.30%	98	0.965	-3	-3.47%
5	28-Apr-93	GENIE2	91	6.47%	98	0.933	-7	-6.75%
6	28-Apr-93	GENIE2	103	7.90%	98	1.053	5	5.33%
7	28-Apr-93	GENIE2	99	6.47%	98	1.008	1	0.83%
8	28-Apr-93	GENIE2	111	6.67%	98	1.140	14	14.03%
9	29-Apr-93	GENIE2	99	6.37%	98	1.015	2	1.55%
10	29-Apr-93	GENIE2	95	6.08%	98	0.967	-3	-3.26%
11	25-May-93	GENIE2	112	6.56%	98	1.150	15	15.02%
12	3-Jun-93	GENIE2	93	6.81%	98	0.955	-4	-4.52%
13	21-Jun-93	GENIE2	102	6.46%	98	1.049	5	4.94%

**238-Pu/239-Pu DATA
2ND QUARTER 1993**

HANFORD

#	Date Measured	Instr. ID	238/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	2026	111	3.75%	98	1.139	14	13.89%
2	1-Apr-93	1985	109	3.71%	98	1.117	11	11.67%
3	5-Apr-93	2026	110	3.34%	98	1.128	13	12.82%
4	5-Apr-93	2424	105	3.54%	98	1.072	7	7.24%
5	6-Apr-93	1985	99	3.84%	98	1.018	2	1.77%
6	12-Apr-93	1985	107	3.66%	98	1.096	9	9.56%
7	12-Apr-93	1985	104	3.80%	98	1.062	6	6.19%
8	12-Apr-93	2424	98	3.83%	98	1.007	1	0.73%
9	13-Apr-93	1985	108	3.63%	98	1.106	10	10.59%
10	19-Apr-93	2424	94	3.92%	98	0.963	-4	-3.69%
11	19-Apr-93	1985	111	3.34%	98	1.140	14	13.99%
12	26-Apr-93	2424	104	3.27%	98	1.062	6	6.23%
13	26-Apr-93	1985	109	3.44%	98	1.117	11	11.69%
14	28-Apr-93	2424	102	3.72%	98	1.041	4	4.08%
15	28-Apr-93	1985	110	3.83%	98	1.128	13	12.84%
16	3-May-93	1985	107	3.45%	98	1.095	9	9.53%
17	3-May-93	2424	102	3.39%	98	1.041	4	4.07%
18	4-May-93	2740	93	5.13%	98	0.953	-5	-4.73%
19	10-May-93	1985	107	3.86%	98	1.096	9	9.64%
20	12-May-93	2424	98	3.60%	98	1.008	1	0.76%
21	13-May-93	1985	108	3.48%	98	1.107	10	10.67%
22	13-May-93	2740	96	5.19%	98	0.986	-1	-1.43%
23	18-May-93	1985	99	3.85%	98	1.019	2	1.87%
24	18-May-93	2424	95	3.69%	98	0.975	-2	-2.51%
25	19-May-93	2740	95	4.97%	98	0.975	-2	-2.49%
26	24-May-93	2424	90	4.11%	98	0.920	-8	-8.02%
27	24-May-93	2740	94	5.26%	98	0.964	-4	-3.59%
28	25-May-93	1985	111	3.57%	98	1.139	14	13.95%
29	25-May-93	2424	104	3.70%	98	1.064	6	6.35%
30	26-May-93	2424	99	3.59%	98	1.019	2	1.90%
31	1-Jun-93	2740	98	5.11%	98	1.008	1	0.77%
32	2-Jun-93	2424	104	4.23%	98	1.062	6	6.18%
33	2-Jun-93	1985	102	3.68%	98	1.042	4	4.15%
34	3-Jun-93	1985	103	3.79%	98	1.052	5	5.20%
35	7-Jun-93	1985	112	3.19%	98	1.152	15	15.20%
36	7-Jun-93	2740	97	4.68%	98	0.997	0	-0.27%
37	8-Jun-93	2424	98	3.46%	98	1.008	1	0.82%
38	14-Jun-93	1985	110	3.59%	98	1.129	13	12.93%
39	14-Jun-93	2740	97	4.66%	98	0.997	0	-0.27%
40	15-Jun-93	2424	105	4.00%	98	1.074	7	7.44%
41	21-Jun-93	1985	107	3.39%	98	1.097	9	9.68%
42	21-Jun-93	2740	106	4.23%	98	1.085	8	8.53%
43	22-Jun-93	2424	99	3.28%	98	1.020	2	1.96%
44	28-Jun-93	1985	106	3.36%	98	1.086	8	8.61%
45	29-Jun-93	2424	96	3.59%	98	0.987	-1	-1.30%
46	30-Jun-93	2740	96	5.15%	98	0.987	-1	-1.32%

**238-Pu/239-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	238/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	TR#2	109	11.09%	98	1.115	11	11.51%
2	12-Apr-93	TR#2	109	8.74%	98	1.115	11	11.54%
3	12-Apr-93	ND#1	78	24.40%	98	0.798	-20	-20.18%
4	26-Apr-93	TR#2	111	8.50%	98	1.136	13	13.62%
5	26-Apr-93	ND#1	121	17.60%	98	1.239	23	23.86%
6	7-Jun-93	TR#2	137	13.10%	98	1.404	39	40.36%
7	16-Jun-93	TR#2	135	19.64%	98	1.383	37	38.34%
8	17-Jun-93	ND#1	71	30.36%	98	0.728	-27	-27.24%
9	18-Jun-93	TR#2	109	27.05%	98	1.117	11	11.70%
10	21-Jun-93	ND#1	103	18.60%	98	1.056	5	5.56%
11	21-Jun-93	TR#2	105	25.51%	98	1.076	7	7.61%
12	23-Jun-93	TR#2	81	24.23%	98	0.830	-17	-16.98%
13	25-Jun-93	ND#1	83	21.60%	98	0.851	-15	-14.93%
14	28-Jun-93	ND#1	94	18.71%	98	0.963	-4	-3.65%
15	30-Jun-93	TR#2	97	22.78%	98	0.994	-1	-0.57%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF 240-Pu/239-Pu DATA **Second Quarter 1993**

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (ppm)	****	-143	186	-558	660	108	****
Std. Dev. (ppm)	****	339.63	998.26	544.30	409.36	1723.09	****
Unc. in Mean (ppm)	****	64.85	305.99	249.37	51.35	416.72	****
Mean Error (%)	****	-0.23%	0.30%	-0.90%	1.06%	0.17%	****
Std. Dev. (%)	****	0.55%	1.61%	0.88%	0.66%	2.77%	****
Unc. in Mean (%)	****	0.10%	0.49%	0.40%	0.08%	0.67%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (ppm)	****	106	-45	-748	-12	-745	****
Diff. in Std. Dev. (ppm)	****	88.59	-50.65	-53.13	-54.06	-139.60	****
Diff. in Mean Error (%)	****	0.17%	-0.07%	-1.21%	-0.02%	-1.20%	****
Diff. in Std. Dev. (%)	****	0.15%	-0.08%	-0.08%	-0.09%	-0.23%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - 240-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Measured/Accepted

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - 240-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

EG&G MOUND - 240-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - 240-PU/239-PU

3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. 240-PU/239-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

**240-Pu/239-Pu DATA
2ND QUARTER 1993**

**RFP - CSL
NO DATA REPORTED**

LLNL

#	Date Measured	Instr. ID	240/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	8-Apr-93	1	61942	0.53%	62148	0.997	-206	-0.33%
2	16-Apr-93	1	62130	0.40%	62148	1.000	-17	-0.03%
3	22-Apr-93	1	61894	0.35%	62148	0.996	-253	-0.41%
4	28-Apr-93	1	61997	0.47%	62147	0.998	-150	-0.24%
5	6-May-93	1	61943	0.45%	62147	0.997	-205	-0.33%
6	11-May-93	1	61851	0.39%	62147	0.995	-296	-0.48%
7	13-May-93	2	62305	0.54%	62147	1.003	158	0.25%
8	14-May-93	2	61398	0.69%	62147	0.988	-749	-1.21%
9	14-May-93	1	61937	0.41%	62147	0.997	-211	-0.34%
10	17-May-93	2	61647	0.60%	62147	0.992	-501	-0.81%
11	17-May-93	2	61940	0.64%	62147	0.997	-207	-0.33%
12	17-May-93	2	62315	0.62%	62147	1.003	168	0.27%
13	18-May-93	2	62821	0.71%	62147	1.011	673	1.08%
14	18-May-93	2	62320	0.64%	62147	1.003	173	0.28%
15	18-May-93	2	61889	0.77%	62147	0.996	-258	-0.41%
16	18-May-93	1	62065	0.44%	62147	0.999	-82	-0.13%
17	21-May-93	1	61966	0.39%	62147	0.997	-181	-0.29%
18	25-May-93	1	61650	0.42%	62147	0.992	-498	-0.80%
19	25-May-93	2	62290	0.54%	62147	1.002	143	0.23%
20	9-Jun-93	1	61964	0.46%	62147	0.997	-183	-0.29%
21	15-Jun-93	1	61670	0.49%	62147	0.992	-477	-0.77%
22	21-Jun-93	2	62432	0.51%	62147	1.005	285	0.46%
23	24-Jun-93	1	62550	0.40%	62147	1.006	403	0.65%
24	28-Jun-93	1	61373	0.43%	62147	0.988	-773	-1.24%
25	30-Jun-93	2	61818	0.46%	62147	0.995	-329	-0.53%

LANL

#	Date Measured	Instr. ID	240/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	6-Apr-93	F5	64234	2.05%	62148	1.034	2086	3.36%
2	6-Apr-93	F6	63141	1.69%	62148	1.016	993	1.60%
3	12-Apr-93	F5	61720	1.96%	62148	0.993	-427	-0.69%
4	14-Apr-93	F5	61849	1.89%	62148	0.995	-298	-0.48%
5	14-Apr-93	F6	62286	1.74%	62148	1.002	139	0.22%
6	22-Apr-93	F5	61176	1.89%	62148	0.984	-972	-1.56%
7	22-Apr-93	F6	62489	1.74%	62148	1.005	341	0.55%
8	29-Apr-93	F5	63617	1.85%	62147	1.024	1470	2.36%
9	29-Apr-93	F6	62696	1.66%	62147	1.009	548	0.88%
10	14-May-93	F5	61969	1.90%	62147	0.997	-178	-0.29%
11	14-May-93	F6	61391	1.75%	62147	0.988	-756	-1.22%
12	24-May-93	F6	61900	1.83%	62147	0.996	-247	-0.40%
13	1-Jun-93	F6	63443	1.79%	62147	1.021	1296	2.09%
14	8-Jun-93	F5	60753	1.92%	62147	0.978	-1394	-2.24%

**240-Pu/239-Pu DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	240/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	27-Apr-93	GENIE2	61856	1.47%	62148	0.995	-292	-0.47%
2	27-Apr-93	GENIE2	62458	1.34%	62148	1.005	310	0.50%
3	28-Apr-93	GENIE2	61732	1.46%	62147	0.993	-415	-0.67%
4	28-Apr-93	GENIE2	62623	1.45%	62147	1.008	476	0.77%
5	28-Apr-93	GENIE2	61243	1.51%	62147	0.985	-904	-1.45%
6	28-Apr-93	GENIE2	61674	1.49%	62147	0.992	-473	-0.76%
7	28-Apr-93	GENIE2	60968	1.40%	62147	0.981	-1180	-1.90%
8	28-Apr-93	GENIE2	60935	1.42%	62147	0.980	-1212	-1.95%
9	29-Apr-93	GENIE2	62077	1.49%	62147	0.999	-71	-0.11%
10	29-Apr-93	GENIE2	61323	1.43%	62147	0.987	-824	-1.33%
11	25-May-93	GENIE2	61253	1.51%	62147	0.986	-894	-1.44%
12	3-Jun-93	GENIE2	61088	1.52%	62147	0.983	-1060	-1.70%
13	21-Jun-93	GENIE2	61429	1.48%	62147	0.988	-718	-1.16%

**240-Pu/239-Pu DATA
2ND QUARTER 1993**

HANFORD

#	Date Measured	Instr. ID	240/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	2026	63277	0.57%	62148	1.018	1130	1.82%
2	1-Apr-93	1985	62951	0.48%	62148	1.013	803	1.29%
3	5-Apr-93	2026	63487	0.47%	62148	1.022	1340	2.16%
4	5-Apr-93	2424	62462	0.52%	62148	1.005	314	0.51%
5	6-Apr-93	1985	62440	0.53%	62148	1.005	292	0.47%
6	12-Apr-93	1985	63538	0.54%	62148	1.022	1390	2.24%
7	12-Apr-93	1985	62679	0.54%	62148	1.009	531	0.86%
8	12-Apr-93	2424	62821	0.54%	62148	1.011	674	1.08%
9	13-Apr-93	1985	62924	0.54%	62148	1.012	776	1.25%
10	19-Apr-93	2424	62242	0.53%	62148	1.002	94	0.15%
11	19-Apr-93	1985	63751	0.52%	62148	1.026	1603	2.58%
12	26-Apr-93	2424	62793	0.48%	62148	1.010	645	1.04%
13	26-Apr-93	1985	62660	0.51%	62148	1.008	512	0.82%
14	28-Apr-93	2424	63142	0.53%	62147	1.016	994	1.60%
15	28-Apr-93	1985	63059	0.57%	62147	1.015	912	1.47%
16	3-May-93	1985	62809	0.51%	62147	1.011	661	1.06%
17	3-May-93	2424	62895	0.49%	62147	1.012	748	1.20%
18	4-May-93	2740	62569	0.67%	62147	1.007	421	0.68%
19	10-May-93	1985	63702	0.56%	62147	1.025	1555	2.50%
20	12-May-93	2424	62503	0.50%	62147	1.006	356	0.57%
21	13-May-93	1985	62942	0.51%	62147	1.013	795	1.28%
22	13-May-93	2740	62431	0.69%	62147	1.005	284	0.46%
23	18-May-93	1985	62494	0.53%	62147	1.006	346	0.56%
24	18-May-93	2424	62508	0.50%	62147	1.006	360	0.58%
25	19-May-93	2740	62703	0.66%	62147	1.009	556	0.89%
26	24-May-93	2424	62079	0.53%	62147	0.999	-68	-0.11%
27	24-May-93	2740	62356	0.69%	62147	1.003	209	0.34%
28	25-May-93	1985	62603	0.54%	62147	1.007	456	0.73%
29	25-May-93	2424	63337	0.54%	62147	1.019	1190	1.92%
30	26-May-93	2424	62682	0.51%	62147	1.009	535	0.86%
31	1-Jun-93	2740	62173	0.70%	62147	1.000	26	0.04%
32	2-Jun-93	2424	62398	0.56%	62147	1.004	251	0.40%
33	2-Jun-93	1985	63082	0.51%	62147	1.015	935	1.50%
34	3-Jun-93	1985	62584	0.54%	62147	1.007	437	0.70%
35	7-Jun-93	1985	63744	0.49%	62147	1.026	1597	2.57%
36	7-Jun-93	2740	62543	0.70%	62147	1.006	396	0.64%
37	8-Jun-93	2424	62566	0.51%	62147	1.007	419	0.67%
38	14-Jun-93	1985	62876	0.54%	62147	1.012	729	1.17%
39	14-Jun-93	2740	62469	0.63%	62147	1.005	322	0.52%
40	15-Jun-93	2424	62810	0.58%	62147	1.011	663	1.07%
41	21-Jun-93	1985	63144	0.50%	62147	1.016	997	1.60%
42	21-Jun-93	2740	62582	0.62%	62147	1.007	435	0.70%
43	22-Jun-93	2424	62638	0.47%	62147	1.008	491	0.79%
44	28-Jun-93	1985	63222	0.49%	62147	1.017	1076	1.73%
45	29-Jun-93	2424	62854	0.49%	62147	1.011	707	1.14%
46	30-Jun-93	2740	62616	0.68%	62147	1.008	469	0.75%

**240-Pu/239-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	240/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	TR#2	60417	1.88%	62148	0.972	-1731	-2.79%
2	12-Apr-93	TR#2	63008	1.63%	62148	1.014	860	1.38%
3	12-Apr-93	ND#1	62468	2.91%	62148	1.005	320	0.52%
4	26-Apr-93	TR#2	61323	1.74%	62148	0.987	-825	-1.33%
5	26-Apr-93	ND#1	64588	2.55%	62148	1.039	2440	3.93%
6	7-Jun-93	TR#2	63384	1.85%	62147	1.020	1237	1.99%
7	16-Jun-93	TR#2	60635	2.37%	62147	0.976	-1512	-2.43%
8	17-Jun-93	ND#1	63419	2.98%	62147	1.020	1272	2.05%
9	18-Jun-93	TR#2	61070	2.78%	62147	0.983	-1077	-1.73%
10	21-Jun-93	ND#1	63868	3.43%	62147	1.028	1721	2.77%
11	21-Jun-93	TR#2	58695	3.11%	62147	0.944	-3452	-5.55%
12	23-Jun-93	TR#2	62073	1.92%	62147	0.999	-74	-0.12%
13	25-Jun-93	ND#1	64243	2.81%	62147	1.034	2096	3.37%
14	28-Jun-93	ND#1	60687	3.32%	62147	0.977	-1460	-2.35%
15	30-Jun-93	TR#2	63954	2.62%	62147	1.029	1807	2.91%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF 241-Pu/239-Pu DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	
Mean Error (ppm)	****	-8	8	-23	2	14	****
Std. Dev. (ppm)	****	16.46	7.68	8.48	8.94	14.75	****
Unc. in Mean (ppm)	****	1.65	0.62	4.46	1.16	5.17	****
Mean Error (%)	****	-0.41%	0.41%	-1.17%	0.08%	0.70%	****
Std. Dev. (%)	****	0.82%	0.38%	0.42%	0.45%	0.74%	****
Unc. in Mean (%)	****	0.08%	0.03%	0.23%	0.06%	0.26%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (ppm)	****	9	2	3	7	6	****
Diff. in Std. Dev. (ppm)	****	9.36	4.36	-3.81	-0.68	2.01	****
Diff. in Mean Error (%)	****	0.40%	0.11%	0.11%	0.33%	0.31%	****
Diff. in Std. Dev. (%)	****	0.47%	0.22%	-0.19%	-0.03%	0.11%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - 241-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - 241-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - 241-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - 241-PU/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. 241-PU/239-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

**241-Pu/239-Pu DATA
2ND QUARTER 1993**

**RFP - CSL
NO DATA REPORTED**

LLNL

#	Date Measured	Instr. ID	241/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	8-Apr-93	1	1998	0.41%	2011	0.993	-13	-0.67%
2	16-Apr-93	1	1983	0.32%	2009	0.987	-26	-1.28%
3	22-Apr-93	1	1990	0.27%	2007	0.991	-17	-0.86%
4	28-Apr-93	1	1996	0.36%	2006	0.995	-10	-0.50%
5	6-May-93	1	1976	0.34%	2003	0.986	-27	-1.35%
6	11-May-93	1	1990	0.30%	2002	0.994	-12	-0.61%
7	13-May-93	2	1990	0.44%	2002	0.994	-12	-0.59%
8	14-May-93	2	1971	0.56%	2001	0.985	-30	-1.51%
9	14-May-93	1	1996	0.32%	2001	0.998	-5	-0.25%
10	17-May-93	2	1984	0.50%	2001	0.992	-16	-0.82%
11	17-May-93	2	2021	0.51%	2001	1.010	20	1.01%
12	17-May-93	2	2000	0.50%	2001	1.000	0	-0.01%
13	18-May-93	2	2011	0.57%	2000	1.005	11	0.53%
14	18-May-93	2	2040	0.51%	2000	1.020	39	1.96%
15	18-May-93	2	1984	0.62%	2000	0.992	-17	-0.83%
16	18-May-93	1	1997	0.33%	2000	0.998	-4	-0.18%
17	21-May-93	1	1986	0.31%	2000	0.993	-14	-0.68%
18	25-May-93	1	1985	0.32%	1998	0.993	-13	-0.66%
19	25-May-93	2	2023	0.42%	1998	1.012	24	1.20%
20	9-Jun-93	1	1977	0.35%	1995	0.991	-17	-0.85%
21	15-Jun-93	1	1972	0.37%	1993	0.989	-21	-1.07%
22	21-Jun-93	2	1992	0.40%	1991	1.000	1	0.04%
23	24-Jun-93	1	1974	0.31%	1991	0.992	-16	-0.82%
24	28-Jun-93	1	1974	0.33%	1990	0.992	-15	-0.77%
25	30-Jun-93	2	1975	0.38%	1989	0.993	-14	-0.70%

LANL

#	Date Measured	Instr. ID	241/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	6-Apr-93	F5	2017	0.13%	2011	1.003	5	0.26%
2	6-Apr-93	F6	2020	0.11%	2011	1.004	8	0.42%
3	12-Apr-93	F5	2016	0.12%	2010	1.003	6	0.31%
4	14-Apr-93	F5	2012	0.12%	2009	1.001	3	0.14%
5	14-Apr-93	F6	2016	0.11%	2009	1.003	7	0.34%
6	22-Apr-93	F5	2010	0.12%	2007	1.001	3	0.13%
7	22-Apr-93	F6	2034	0.11%	2007	1.013	27	1.34%
8	29-Apr-93	F5	2013	0.12%	2005	1.004	8	0.40%
9	29-Apr-93	F6	2011	0.10%	2005	1.003	5	0.26%
10	14-May-93	F5	2012	0.12%	2001	1.006	11	0.55%
11	14-May-93	F6	2005	0.11%	2001	1.002	4	0.18%
12	24-May-93	F6	2020	0.12%	1999	1.011	22	1.08%
13	1-Jun-93	F6	2007	0.12%	1997	1.005	10	0.51%
14	8-Jun-93	F5	1992	0.12%	1995	0.999	-3	-0.13%

241-Pu/239-Pu DATA**2ND QUARTER 1993****EG&G MOUND**

#	Date Measured	Instr. ID	241/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	27-Apr-93	GENIE2	1992	0.82%	2006	0.993	-14	-0.72%
2	27-Apr-93	GENIE2	1983	0.76%	2006	0.989	-22	-1.12%
3	28-Apr-93	GENIE2	1982	0.79%	2006	0.988	-24	-1.20%
4	28-Apr-93	GENIE2	1988	0.81%	2006	0.991	-17	-0.86%
5	28-Apr-93	GENIE2	1989	0.80%	2006	0.992	-16	-0.82%
6	28-Apr-93	GENIE2	1976	0.83%	2006	0.985	-30	-1.49%
7	28-Apr-93	GENIE2	1987	0.82%	2006	0.991	-19	-0.93%
8	28-Apr-93	GENIE2	1975	0.79%	2006	0.985	-31	-1.54%
9	29-Apr-93	GENIE2	1984	0.80%	2005	0.989	-21	-1.06%
10	29-Apr-93	GENIE2	1982	0.79%	2005	0.988	-24	-1.18%
11	25-May-93	GENIE2	1975	0.86%	1998	0.988	-24	-1.18%
12	3-Jun-93	GENIE2	1950	0.85%	1996	0.977	-46	-2.31%
13	21-Jun-93	GENIE2	1975	0.83%	1991	0.992	-16	-0.82%

**241-Pu/239-Pu DATA
2ND QUARTER 1993**

HANFORD

#	Date Measured	Instr. ID	241/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	2026	2003	0.42%	2013	0.995	-10	-0.48%
2	1-Apr-93	1985	2020	0.39%	2013	1.004	8	0.38%
3	5-Apr-93	2026	2000	0.34%	2012	0.994	-11	-0.57%
4	5-Apr-93	2424	2012	0.38%	2012	1.000	0	0.02%
5	6-Apr-93	1985	2012	0.37%	2011	1.000	1	0.03%
6	12-Apr-93	1985	2014	0.38%	2010	1.002	4	0.22%
7	12-Apr-93	1985	2005	0.38%	2010	0.998	-5	-0.23%
8	12-Apr-93	2424	2013	0.39%	2010	1.001	3	0.15%
9	13-Apr-93	1985	2007	0.38%	2010	0.999	-3	-0.14%
10	19-Apr-93	2424	1994	0.38%	2008	0.993	-14	-0.71%
11	19-Apr-93	1985	2021	0.37%	2008	1.006	13	0.65%
12	26-Apr-93	2424	2001	0.35%	2006	0.998	-5	-0.25%
13	26-Apr-93	1985	2016	0.36%	2006	1.005	10	0.48%
14	28-Apr-93	2424	2005	0.39%	2006	1.000	-1	-0.03%
15	28-Apr-93	1985	2014	0.41%	2006	1.004	9	0.44%
16	3-May-93	1985	2000	0.36%	2004	0.998	-4	-0.21%
17	3-May-93	2424	1999	0.36%	2004	0.997	-5	-0.25%
18	4-May-93	2740	2003	0.47%	2004	0.999	-1	-0.06%
19	10-May-93	1985	2011	0.40%	2002	1.004	9	0.44%
20	12-May-93	2424	2006	0.36%	2002	1.002	4	0.20%
21	13-May-93	1985	2006	0.37%	2002	1.002	4	0.20%
22	13-May-93	2740	2015	0.49%	2002	1.007	14	0.68%
23	18-May-93	1985	1999	0.37%	2000	1.000	-1	-0.04%
24	18-May-93	2424	1996	0.37%	2000	0.998	-4	-0.20%
25	19-May-93	2740	2003	0.47%	2000	1.002	3	0.15%
26	24-May-93	2424	1988	0.39%	1999	0.995	-11	-0.53%
27	24-May-93	2740	2010	0.48%	1999	1.006	12	0.58%
28	25-May-93	1985	2013	0.38%	1998	1.008	15	0.75%
29	25-May-93	2424	1994	0.40%	1998	0.998	-5	-0.24%
30	26-May-93	2424	1991	0.37%	1998	0.997	-7	-0.34%
31	1-Jun-93	2740	1998	0.49%	1997	1.001	1	0.06%
32	2-Jun-93	2424	1998	0.41%	1996	1.001	1	0.06%
33	2-Jun-93	1985	2012	0.36%	1996	1.008	16	0.80%
34	3-Jun-93	1985	1998	0.38%	1996	1.001	1	0.07%
35	7-Jun-93	1985	2002	0.35%	1995	1.003	7	0.34%
36	7-Jun-93	2740	2010	0.36%	1995	1.008	15	0.76%
37	8-Jun-93	2424	1984	0.38%	1995	0.994	-11	-0.55%
38	14-Jun-93	1985	2014	0.38%	1993	1.010	21	1.04%
39	14-Jun-93	2740	2008	0.44%	1993	1.007	15	0.74%
40	15-Jun-93	2424	1987	0.38%	1993	0.997	-6	-0.28%
41	21-Jun-93	1985	2002	0.35%	1991	1.005	10	0.53%
42	21-Jun-93	2740	1994	0.44%	1991	1.002	3	0.15%
43	22-Jun-93	2424	1976	0.34%	1991	0.993	-15	-0.73%
44	28-Jun-93	1985	1992	0.35%	1990	1.001	3	0.15%
45	29-Jun-93	2424	1975	0.36%	1989	0.993	-14	-0.73%
46	30-Jun-93	2740	1993	0.48%	1989	1.002	4	0.22%

**241-Pu/239-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	241/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	TR#2	2039	0.55%	2013	1.013	26	1.30%
2	12-Apr-93	TR#2	2008	0.46%	2010	0.999	-2	-0.09%
3	12-Apr-93	ND#1	2022	1.13%	2010	1.006	12	0.60%
4	26-Apr-93	TR#2	2005	0.56%	2006	0.999	-1	-0.06%
5	26-Apr-93	ND#1	2021	1.27%	2006	1.007	15	0.74%
6	7-Jun-93	TR#2	1996	0.65%	1995	1.000	1	0.05%
7	16-Jun-93	TR#2	2007	1.04%	1993	1.007	14	0.72%
8	17-Jun-93	ND#1	2000	1.26%	1992	1.004	8	0.38%
9	18-Jun-93	TR#2	2039	1.35%	1992	1.024	47	2.35%
10	21-Jun-93	ND#1	2005	1.08%	1991	1.007	14	0.69%
11	21-Jun-93	TR#2	2005	1.04%	1991	1.007	14	0.69%
12	23-Jun-93	TR#2	1990	0.77%	1991	1.000	-1	-0.04%
13	25-Jun-93	ND#1	2007	1.18%	1990	1.008	17	0.84%
14	28-Jun-93	ND#1	2032	1.12%	1990	1.021	42	2.14%
15	30-Jun-93	TR#2	1994	0.84%	1989	1.003	5	0.25%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF 241-Am/239-Pu DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (ppm)	****	-30	2	14	-22	3	****
Std. Dev. (ppm)	****	6.04	27.27	5.34	11.14	9.74	****
Unc. in Mean (ppm)	****	1.69	3.85	3.83	1.13	5.64	****
Mean Error (%)	****	-1.51%	0.10%	0.74%	-1.09%	0.13%	****
Std. Dev. (%)	****	0.31%	1.39%	0.27%	0.57%	0.49%	****
Unc. in Mean (%)	****	0.09%	0.20%	0.19%	0.06%	0.29%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (ppm)	****	2	-14	5	-5	-9	****
Diff. in Std. Dev. (ppm)	****	2.80	-1.74	0.07	1.90	-5.71	****
Diff. in Mean Error (%)	****	0.14%	0.92%	0.29%	-0.22%	-0.47%	****
Diff. in Std. Dev. (%)	****	0.14%	-0.10%	0.00%	0.09%	-0.30%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - 241-AM/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - 241-AM/239-PU

3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - 241-AM/239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

Measured/Accepted

Date

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - 241-AM/239-PU

3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB.
241-AM/239-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

**241-Am/239-Pu DATA
2ND QUARTER 1993**

**RFP - CSL
NO DATA REPORTED**

LLNL

#	Date Measured	Instr. ID	Am/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	8-Apr-93	1	1920	0.43%	1958	0.981	-37	-1.91%
2	16-Apr-93	1	1929	0.34%	1960	0.984	-31	-1.57%
3	22-Apr-93	1	1933	0.29%	1961	0.986	-28	-1.45%
4	28-Apr-93	1	1930	0.38%	1963	0.983	-33	-1.68%
5	6-May-93	1	1938	0.36%	1965	0.986	-27	-1.36%
6	11-May-93	1	1938	0.32%	1966	0.986	-28	-1.43%
7	13-May-93	2	1945	0.28%	1967	0.989	-21	-1.09%
8	14-May-93	2	1934	0.60%	1967	0.983	-33	-1.67%
9	14-May-93	1	1925	0.34%	1967	0.978	-42	-2.16%
10	17-May-93	2	1936	0.53%	1968	0.984	-32	-1.63%
11	17-May-93	2	1950	0.55%	1968	0.991	-18	-0.90%
12	17-May-93	2	1944	0.54%	1968	0.988	-23	-1.19%
13	18-May-93	2	1933	0.63%	1968	0.982	-35	-1.80%
14	18-May-93	2	1951	0.56%	1968	0.991	-17	-0.88%
15	18-May-93	2	1936	0.66%	1968	0.984	-32	-1.62%
16	18-May-93	1	1940	0.35%	1968	0.986	-28	-1.44%
17	21-May-93	1	1938	0.32%	1969	0.985	-30	-1.55%
18	25-May-93	1	1934	0.35%	1970	0.982	-36	-1.84%
19	25-May-93	2	1948	0.45%	1970	0.989	-22	-1.14%
20	9-Jun-93	1	1945	0.37%	1974	0.985	-29	-1.47%
21	15-Jun-93	1	1943	0.39%	1975	0.984	-32	-1.63%
22	21-Jun-93	2	1943	0.44%	1977	0.983	-33	-1.68%
23	24-Jun-93	1	1950	0.33%	1978	0.986	-28	-1.39%
24	28-Jun-93	1	1949	0.35%	1979	0.985	-30	-1.50%
25	30-Jun-93	2	1942	0.40%	1979	0.981	-37	-1.86%

LANL

#	Date Measured	Instr. ID	Am/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	6-Apr-93	F5	1959	0.86%	1957	1.001	2	0.10%
2	6-Apr-93	F6	1984	0.66%	1957	1.014	27	1.37%
3	12-Apr-93	F5	1935	0.81%	1959	0.988	-24	-1.23%
4	14-Apr-93	F5	1933	0.78%	1959	0.986	-27	-1.36%
5	14-Apr-93	F6	1989	0.67%	1959	1.015	30	1.51%
6	22-Apr-93	F5	1920	0.77%	1961	0.979	-41	-2.09%
7	22-Apr-93	F6	1956	0.69%	1961	0.997	-5	-0.27%
8	29-Apr-93	F5	1940	0.78%	1963	0.988	-23	-1.19%
9	29-Apr-93	F6	1975	0.65%	1963	1.006	12	0.61%
10	14-May-93	F5	1952	0.78%	1967	0.992	-15	-0.78%
11	14-May-93	F6	1970	0.68%	1967	1.002	3	0.17%
12	24-May-93	F6	2027	0.69%	1970	1.029	57	2.91%
13	1-Jun-93	F6	2001	0.69%	1972	1.015	30	1.50%
14	8-Jun-93	F5	1976	0.69%	1973	1.001	3	0.15%

241-Am/239-Pu DATA
2ND QUARTER 1993

EG&G MOUND

#	Date Measured	Instr. ID	Am/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	27-Apr-93	GENIE2	1978	0.68%	1963	1.008	15	0.77%
2	27-Apr-93	GENIE2	1966	0.65%	1963	1.001	3	0.14%
3	28-Apr-93	GENIE2	1980	0.69%	1963	1.009	17	0.87%
4	28-Apr-93	GENIE2	1982	0.69%	1963	1.010	19	0.96%
5	28-Apr-93	GENIE2	1977	0.73%	1963	1.007	14	0.72%
6	28-Apr-93	GENIE2	1978	0.68%	1963	1.008	15	0.75%
7	28-Apr-93	GENIE2	1983	0.65%	1963	1.010	20	1.02%
8	28-Apr-93	GENIE2	1976	0.69%	1963	1.007	13	0.68%
9	29-Apr-93	GENIE2	1988	0.72%	1963	1.012	24	1.24%
10	29-Apr-93	GENIE2	1978	0.73%	1963	1.007	15	0.75%
11	25-May-93	GENIE2	1982	0.70%	1970	1.006	12	0.60%
12	3-Jun-93	GENIE2	1980	0.75%	1972	1.004	8	0.40%
13	21-Jun-93	GENIE2	1990	0.69%	1977	1.007	13	0.65%

241-Am/239-Pu DATA
2ND QUARTER 1993

HANFORD

#	Date Measured	Instr. ID	Am/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	2026	1928	0.42%	1956	0.986	-28	-1.43%
2	1-Apr-93	1985	1940	0.40%	1956	0.992	-16	-0.81%
3	5-Apr-93	2026	1933	0.34%	1957	0.988	-24	-1.25%
4	5-Apr-93	2424	1951	0.38%	1957	0.997	-6	-0.32%
5	6-Apr-93	1985	1924	0.38%	1957	0.983	-33	-1.68%
6	12-Apr-93	1985	1934	0.39%	1959	0.987	-25	-1.28%
7	12-Apr-93	1985	1930	0.39%	1959	0.985	-29	-1.47%
8	12-Apr-93	2424	1958	0.39%	1959	0.999	-1	-0.05%
9	13-Apr-93	1985	1923	0.39%	1959	0.982	-36	-1.83%
10	19-Apr-93	2424	1940	0.38%	1961	0.989	-21	-1.06%
11	19-Apr-93	1985	1963	0.37%	1961	1.001	2	0.11%
12	26-Apr-93	2424	1955	0.35%	1962	0.996	-8	-0.40%
13	26-Apr-93	1985	1945	0.37%	1962	0.991	-18	-0.89%
14	28-Apr-93	2424	1958	0.39%	1963	0.998	-5	-0.23%
15	28-Apr-93	1985	1942	0.41%	1963	0.990	-20	-1.04%
16	3-May-93	1985	1936	0.37%	1964	0.985	-29	-1.46%
17	3-May-93	2424	1958	0.35%	1964	0.997	-6	-0.32%
18	4-May-93	2740	1932	0.47%	1965	0.983	-32	-1.65%
19	10-May-93	1985	1947	0.41%	1966	0.990	-19	-0.98%
20	12-May-93	2424	1960	0.36%	1967	0.997	-6	-0.31%
21	13-May-93	1985	1951	0.37%	1967	0.992	-16	-0.82%
22	13-May-93	2740	1933	0.49%	1967	0.983	-34	-1.73%
23	18-May-93	1985	1948	0.38%	1968	0.990	-20	-1.03%
24	18-May-93	2424	1960	0.36%	1968	0.996	-8	-0.39%
25	19-May-93	2740	1930	0.47%	1968	0.981	-38	-1.94%
26	24-May-93	2424	1946	0.38%	1970	0.988	-24	-1.21%
27	24-May-93	2740	1944	0.49%	1970	0.987	-26	-1.32%
28	25-May-93	1985	1946	0.39%	1970	0.988	-24	-1.22%
29	25-May-93	2424	1955	0.39%	1970	0.992	-15	-0.78%
30	26-May-93	2424	1952	0.37%	1970	0.991	-18	-0.91%
31	1-Jun-93	2740	1930	0.49%	1972	0.979	-41	-2.10%
32	2-Jun-93	2424	1951	0.41%	1972	0.989	-21	-1.06%
33	2-Jun-93	1985	1953	0.37%	1972	0.990	-19	-0.96%
34	3-Jun-93	1985	1942	0.39%	1972	0.984	-31	-1.55%
35	7-Jun-93	1985	1954	0.35%	1973	0.990	-19	-0.96%
36	7-Jun-93	2740	1938	0.47%	1973	0.982	-35	-1.77%
37	8-Jun-93	2424	1961	0.35%	1973	0.993	-13	-0.66%
38	14-Jun-93	1985	1959	0.39%	1975	0.992	-16	-0.81%
39	14-Jun-93	2740	1931	0.45%	1975	0.978	-44	-2.24%
40	15-Jun-93	2424	1959	0.35%	1975	0.992	-16	-0.83%
41	21-Jun-93	1985	1965	0.35%	1977	0.994	-12	-0.61%
42	21-Jun-93	2740	1938	0.44%	1977	0.981	-38	-1.94%
43	22-Jun-93	2424	1952	0.34%	1977	0.987	-25	-1.26%
44	28-Jun-93	1985	1966	0.35%	1979	0.994	-13	-0.64%
45	29-Jun-93	2424	1948	0.36%	1979	0.985	-30	-1.54%
46	30-Jun-93	2740	1946	0.49%	1979	0.983	-33	-1.68%

**241-Am/239-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	Am/239 (ppm)	Uncert. 1 STD	Accepted PPM	Ratio M/A	PPM Error	Percent Error
1	1-Apr-93	TR#2	1960	0.73%	1956	1.002	4	0.20%
2	12-Apr-93	TR#2	1962	0.67%	1959	1.002	3	0.16%
3	12-Apr-93	ND#1	1960	1.26%	1959	1.001	1	0.06%
4	26-Apr-93	TR#2	1969	0.70%	1962	1.003	7	0.33%
5	26-Apr-93	ND#1	1961	1.17%	1962	0.999	-1	-0.07%
6	7-Jun-93	TR#2	1974	0.68%	1973	1.000	1	0.04%
7	16-Jun-93	TR#2	1984	0.90%	1976	1.004	8	0.43%
8	17-Jun-93	ND#1	1958	1.35%	1976	0.991	-18	-0.90%
9	18-Jun-93	TR#2	1989	1.00%	1976	1.007	13	0.66%
10	21-Jun-93	ND#1	1984	1.51%	1977	1.004	7	0.36%
11	21-Jun-93	TR#2	1971	1.08%	1977	0.997	-6	-0.29%
12	23-Jun-93	TR#2	1976	1.34%	1977	0.999	-1	-0.07%
13	25-Jun-93	ND#1	1966	1.28%	1978	0.994	-12	-0.60%
14	28-Jun-93	ND#1	1992	1.46%	1979	1.007	13	0.68%
15	30-Jun-93	TR#2	1999	0.90%	1979	1.010	20	1.01%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF PERCENT 238-Pu DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (weight %)	****	-0.0002%	0.0006%	0.0002%	0.0005%	0.0005%	****
Std. Dev. (weight %)	****	0.0005%	0.0007%	0.0007%	0.0005%	0.0018%	****
Unc. in Mean (weight %)	****	0.0001%	0.0002%	0.0002%	0.0001%	0.0005%	****
Mean Error (%)	****	-2.58%	6.14%	2.00%	5.03%	5.39%	****
Std. Dev. (%)	****	5.48%	7.27%	7.26%	5.98%	20.00%	****
Unc. in Mean (%)	****	0.91%	1.80%	1.81%	0.58%	5.29%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (wt. %)	****	-0.0001%	0.0005%	0.0000%	0.0002%	-0.0011%	****
Diff. in Std. Dev. (wt. %)	****	0.0002%	0.0004%	0.0001%	0.0001%	-0.0008%	****
Diff. in Mean Error (%)	****	-1.70%	4.63%	-0.26%	1.90%	-12.42%	****
Diff. in Std. Dev. (%)	****	1.97%	3.57%	1.16%	1.36%	-8.12%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - PERCENT 238-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - PERCENT 238-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - PERCENT 238-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - PERCENT 238-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB.
 PERCENT 238-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WEIGHT PERCENT 238-Pu DATA 2ND QUARTER 1993

RFP - CSL
NO DATA REPORTED

LLNL

#	Date Measured	Instr. ID	238-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	8-Apr-93	1	0.0094%	3.83%	0.0091%	1.028	0.0003%	2.85%
2	16-Apr-93	1	0.0090%	3.04%	0.0091%	0.985	-0.0001%	-1.51%
3	22-Apr-93	1	0.0092%	2.54%	0.0091%	1.007	0.0001%	0.69%
4	28-Apr-93	1	0.0092%	3.36%	0.0091%	1.007	0.0001%	0.70%
5	6-May-93	1	0.0088%	3.38%	0.0091%	0.963	-0.0003%	-3.66%
6	11-May-93	1	0.0090%	2.89%	0.0091%	0.985	-0.0001%	-1.46%
7	13-May-93	2	0.0088%	5.09%	0.0091%	0.964	-0.0003%	-3.64%
8	14-May-93	2	0.0079%	6.96%	0.0091%	0.865	-0.0012%	-13.50%
9	14-May-93	1	0.0095%	2.99%	0.0091%	1.040	0.0004%	4.02%
10	17-May-93	2	0.0081%	6.01%	0.0091%	0.887	-0.0010%	-11.30%
11	17-May-93	2	0.0089%	5.73%	0.0091%	0.975	-0.0002%	-2.54%
12	17-May-93	2	0.0090%	5.60%	0.0091%	0.986	-0.0001%	-1.45%
13	18-May-93	2	0.0090%	6.43%	0.0091%	0.986	-0.0001%	-1.44%
14	18-May-93	2	0.0098%	5.30%	0.0091%	1.073	0.0007%	7.32%
15	18-May-93	2	0.0076%	8.08%	0.0091%	0.832	-0.0015%	-16.77%
16	18-May-93	1	0.0091%	3.17%	0.0091%	0.997	0.0000%	-0.35%
17	21-May-93	1	0.0093%	2.88%	0.0091%	1.018	0.0002%	1.85%
18	25-May-93	1	0.0090%	3.16%	0.0091%	0.986	-0.0001%	-1.43%
19	25-May-93	2	0.0088%	4.67%	0.0091%	0.964	-0.0003%	-3.62%
20	9-Jun-93	1	0.0087%	3.48%	0.0091%	0.953	-0.0004%	-4.68%
21	15-Jun-93	1	0.0092%	3.55%	0.0091%	1.008	0.0001%	0.81%
22	21-Jun-93	2	0.0082%	4.87%	0.0091%	0.899	-0.0009%	-10.14%
23	24-Jun-93	1	0.0087%	3.10%	0.0091%	0.953	-0.0004%	-4.65%
24	28-Jun-93	1	0.0093%	3.13%	0.0091%	1.019	0.0002%	1.93%
25	30-Jun-93	2	0.0089%	4.11%	0.0091%	0.976	-0.0002%	-2.45%

LANL

#	Date Measured	Instr. ID	238-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	6-Apr-93	F5	0.0098%	7.73%	0.0091%	1.069	0.0006%	6.89%
2	6-Apr-93	F6	0.0102%	5.92%	0.0091%	1.116	0.0011%	11.60%
3	12-Apr-93	F5	0.0086%	8.10%	0.0091%	0.938	-0.0006%	-6.22%
4	14-Apr-93	F5	0.0105%	6.42%	0.0091%	1.147	0.0013%	14.68%
5	14-Apr-93	F6	0.0104%	5.84%	0.0091%	1.142	0.0013%	14.24%
6	22-Apr-93	F5	0.0099%	6.69%	0.0091%	1.084	0.0008%	8.35%
7	22-Apr-93	F6	0.0095%	6.40%	0.0091%	1.035	0.0003%	3.54%
8	29-Apr-93	F5	0.0087%	7.72%	0.0091%	0.953	-0.0004%	-4.66%
9	29-Apr-93	F6	0.0090%	6.47%	0.0091%	0.981	-0.0002%	-1.92%
10	14-May-93	F5	0.0099%	6.84%	0.0091%	1.084	0.0008%	8.40%
11	14-May-93	F6	0.0101%	5.99%	0.0091%	1.103	0.0009%	10.26%
12	24-May-93	F6	0.0096%	6.58%	0.0091%	1.054	0.0005%	5.36%
13	1-Jun-93	F6	0.0091%	6.98%	0.0091%	0.992	-0.0001%	-0.76%
14	8-Jun-93	F5	0.0106%	6.32%	0.0091%	1.162	0.0015%	16.24%

**WEIGHT PERCENT 238-Pu DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	238-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	27-Apr-93	GENIE2	0.0088%	6.25%	0.0091%	0.962	-0.0003%	-3.83%
2	27-Apr-93	GENIE2	0.0100%	5.91%	0.0091%	1.089	0.0008%	8.91%
3	28-Apr-93	GENIE2	0.0088%	6.28%	0.0091%	0.962	-0.0003%	-3.81%
4	28-Apr-93	GENIE2	0.0088%	6.30%	0.0091%	0.965	-0.0003%	-3.48%
5	28-Apr-93	GENIE2	0.0085%	6.47%	0.0091%	0.934	-0.0006%	-6.64%
6	28-Apr-93	GENIE2	0.0096%	7.90%	0.0091%	1.054	0.0005%	5.41%
7	28-Apr-93	GENIE2	0.0092%	6.47%	0.0091%	1.010	0.0001%	0.97%
8	28-Apr-93	GENIE2	0.0104%	6.67%	0.0091%	1.142	0.0013%	14.20%
9	29-Apr-93	GENIE2	0.0093%	6.37%	0.0091%	1.016	0.0001%	1.59%
10	29-Apr-93	GENIE2	0.0088%	6.08%	0.0091%	0.968	-0.0003%	-3.16%
11	25-May-93	GENIE2	0.0105%	6.56%	0.0091%	1.152	0.0014%	15.15%
12	3-Jun-93	GENIE2	0.0087%	6.81%	0.0091%	0.956	-0.0004%	-4.39%
13	21-Jun-93	GENIE2	0.0096%	6.46%	0.0091%	1.050	0.0005%	5.05%

WEIGHT PERCENT 238-Pu DATA

2ND QUARTER 1993

HANFORD

#	Date Measured	Instr. ID	238-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	2026	0.0104%	3.75%	0.0091%	1.138	0.0013%	13.77%
2	1-Apr-93	1985	0.0102%	3.71%	0.0091%	1.116	0.0011%	11.59%
3	5-Apr-93	2026	0.0103%	3.34%	0.0091%	1.127	0.0012%	12.69%
4	5-Apr-93	2424	0.0098%	3.54%	0.0091%	1.072	0.0007%	7.22%
5	6-Apr-93	1985	0.0093%	3.84%	0.0091%	1.018	0.0002%	1.75%
6	12-Apr-93	1985	0.0100%	3.66%	0.0091%	1.094	0.0009%	9.42%
7	12-Apr-93	1985	0.0097%	3.80%	0.0091%	1.061	0.0006%	6.14%
8	12-Apr-93	2424	0.0092%	3.83%	0.0091%	1.007	0.0001%	0.67%
9	13-Apr-93	1985	0.0101%	3.63%	0.0091%	1.105	0.0010%	10.52%
10	19-Apr-93	2424	0.0088%	3.92%	0.0091%	0.963	-0.0003%	-3.69%
11	19-Apr-93	1985	0.0104%	3.34%	0.0091%	1.138	0.0013%	13.82%
12	26-Apr-93	2424	0.0097%	3.27%	0.0091%	1.062	0.0006%	6.17%
13	26-Apr-93	1985	0.0102%	3.44%	0.0091%	1.116	0.0011%	11.64%
14	28-Apr-93	2424	0.0095%	3.72%	0.0091%	1.040	0.0004%	3.99%
15	28-Apr-93	1985	0.0103%	3.83%	0.0091%	1.127	0.0012%	12.74%
16	3-May-93	1985	0.0100%	3.45%	0.0091%	1.095	0.0009%	9.47%
17	3-May-93	2424	0.0095%	3.39%	0.0091%	1.040	0.0004%	4.00%
18	4-May-93	2740	0.0087%	5.13%	0.0091%	0.952	-0.0004%	-4.76%
19	10-May-93	1985	0.0100%	3.86%	0.0091%	1.095	0.0009%	9.49%
20	12-May-93	2424	0.0092%	3.60%	0.0091%	1.007	0.0001%	0.73%
21	13-May-93	1985	0.0101%	3.48%	0.0091%	1.106	0.0010%	10.59%
22	13-May-93	2740	0.0090%	5.19%	0.0091%	0.985	-0.0001%	-1.45%
23	18-May-93	1985	0.0093%	3.85%	0.0091%	1.018	0.0002%	1.84%
24	18-May-93	2424	0.0089%	3.69%	0.0091%	0.975	-0.0002%	-2.54%
25	19-May-93	2740	0.0089%	4.97%	0.0091%	0.975	-0.0002%	-2.54%
26	24-May-93	2424	0.0084%	4.11%	0.0091%	0.920	-0.0007%	-8.00%
27	24-May-93	2740	0.0088%	5.26%	0.0091%	0.964	-0.0003%	-3.62%
28	25-May-93	1985	0.0104%	3.57%	0.0091%	1.139	0.0013%	13.90%
29	25-May-93	2424	0.0097%	3.70%	0.0091%	1.062	0.0006%	6.24%
30	26-May-93	2424	0.0093%	3.59%	0.0091%	1.019	0.0002%	1.86%
31	1-Jun-93	2740	0.0092%	5.11%	0.0091%	1.008	0.0001%	0.78%
32	2-Jun-93	2424	0.0097%	4.23%	0.0091%	1.063	0.0006%	6.26%
33	2-Jun-93	1985	0.0095%	3.68%	0.0091%	1.041	0.0004%	4.06%
34	3-Jun-93	1985	0.0096%	3.79%	0.0091%	1.052	0.0005%	5.16%
35	7-Jun-93	1985	0.0105%	3.19%	0.0091%	1.150	0.0014%	15.03%
36	7-Jun-93	2740	0.0091%	4.68%	0.0091%	0.997	0.0000%	-0.31%
37	8-Jun-93	2424	0.0092%	3.46%	0.0091%	1.008	0.0001%	0.79%
38	14-Jun-93	1985	0.0103%	3.59%	0.0091%	1.129	0.0012%	12.86%
39	14-Jun-93	2740	0.0091%	4.66%	0.0091%	0.997	0.0000%	-0.29%
40	15-Jun-93	2424	0.0098%	4.00%	0.0091%	1.074	0.0007%	7.38%
41	21-Jun-93	1985	0.0100%	3.39%	0.0091%	1.096	0.0009%	9.59%
42	21-Jun-93	2740	0.0099%	4.23%	0.0091%	1.085	0.0008%	8.49%
43	22-Jun-93	2424	0.0093%	3.28%	0.0091%	1.019	0.0002%	1.92%
44	28-Jun-93	1985	0.0099%	3.36%	0.0091%	1.085	0.0008%	8.51%
45	29-Jun-93	2424	0.0090%	3.59%	0.0091%	0.986	-0.0001%	-1.36%
46	30-Jun-93	2740	0.0090%	5.15%	0.0091%	0.986	-0.0001%	-1.35%

**WEIGHT PERCENT 238-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	238-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	TR#2	0.0102%	11.09%	0.0091%	1.117	0.0011%	11.72%
2	12-Apr-93	TR#2	0.0102%	8.74%	0.0091%	1.115	0.0010%	11.48%
3	12-Apr-93	ND#1	0.0073%	24.40%	0.0091%	0.798	-0.0018%	-20.18%
4	26-Apr-93	TR#2	0.0104%	8.50%	0.0091%	1.137	0.0013%	13.74%
5	26-Apr-93	ND#1	0.0113%	17.60%	0.0091%	1.236	0.0022%	23.60%
6	7-Jun-93	TR#2	0.0128%	13.10%	0.0091%	1.402	0.0037%	40.23%
7	16-Jun-93	TR#2	0.0126%	19.64%	0.0091%	1.386	0.0035%	38.57%
8	17-Jun-93	ND#1	0.0066%	30.36%	0.0091%	0.727	-0.0025%	-27.31%
9	18-Jun-93	TR#2	0.0102%	27.05%	0.0091%	1.118	0.0011%	11.84%
10	21-Jun-93	ND#1	0.0096%	18.60%	0.0091%	1.054	0.0005%	5.42%
11	21-Jun-93	TR#2	0.0099%	25.51%	0.0091%	1.080	0.0007%	7.99%
12	23-Jun-93	TR#2	0.0076%	24.23%	0.0091%	0.830	-0.0015%	-16.95%
13	25-Jun-93	ND#1	0.0077%	21.60%	0.0091%	0.849	-0.0014%	-15.07%
14	28-Jun-93	ND#1	0.0088%	18.71%	0.0091%	0.965	-0.0003%	-3.49%
15	30-Jun-93	TR#2	0.0091%	22.78%	0.0091%	0.993	-0.0001%	-0.71%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF PERCENT 239-Pu DATA

Second Quarter 1993

REPORTING LABORATORY

	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (weight %)	****	0.0137%	-0.0920%	0.0788%	-0.0518%	0.0163%	****
Std. Dev. (weight %)	****	0.0309%	0.2152%	0.0485%	0.0403%	0.1520%	****
Unc. in Mean (weight %)	****	0.0059%	0.0269%	0.0209%	0.0045%	0.0349%	****
Mean Error (%)	****	0.01%	-0.10%	0.08%	-0.06%	0.02%	****
Std. Dev. (%)	****	0.03%	0.23%	0.05%	0.04%	0.16%	****
Unc. in Mean (%)	****	0.01%	0.03%	0.02%	0.00%	0.04%	****

DIFFERENCE FROM LAST PERIOD

Diff. in Mean Error (wt. %)	****	-0.0100%	-0.0698%	0.0662%	0.0017%	0.0665%	****
Diff. in Std. Dev. (wt. %)	****	0.0089%	0.1216%	-0.0047%	-0.0015%	-0.0138%	****
Diff. in Mean Error (%)	****	-0.02%	-0.08%	0.07%	0.00%	0.07%	****
Diff. in Std. Dev. (%)	****	0.01%	0.13%	-0.01%	0.00%	-0.02%	****
Number of Data Points	0	25	14	13	46	15	0

NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - PERCENT 239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - PERCENT 239-PU **3RD QUARTER 1992 - 2ND QUARTER 1993**

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - PERCENT 239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - PERCENT 239-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. PERCENT 239-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WEIGHT PERCENT 239-Pu DATA 2ND QUARTER 1993

RFP - CSL
NO DATA REPORTED

LLNL

#	Date Measured	Instr. ID	239-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	8-Apr-93	1	93.9299%	0.03%	93.9105%	1.000	0.0194%	0.02%
2	16-Apr-93	1	93.9148%	0.02%	93.9107%	1.000	0.0041%	0.00%
3	22-Apr-93	1	93.9350%	0.02%	93.9109%	1.000	0.0241%	0.03%
4	28-Apr-93	1	93.9253%	0.03%	93.9110%	1.000	0.0143%	0.02%
5	6-May-93	1	93.9323%	0.03%	93.9112%	1.000	0.0211%	0.02%
6	11-May-93	1	93.9389%	0.02%	93.9114%	1.000	0.0275%	0.03%
7	13-May-93	2	93.8988%	0.03%	93.9114%	1.000	-0.0126%	-0.01%
8	14-May-93	2	93.9818%	0.04%	93.9114%	1.001	0.0704%	0.07%
9	14-May-93	1	93.9303%	0.02%	93.9114%	1.000	0.0189%	0.02%
10	17-May-93	2	93.9584%	0.04%	93.9115%	1.000	0.0469%	0.05%
11	17-May-93	2	93.9283%	0.04%	93.9115%	1.000	0.0168%	0.02%
12	17-May-93	2	93.8970%	0.04%	93.9115%	1.000	-0.0145%	-0.02%
13	18-May-93	2	93.8512%	0.04%	93.9115%	0.999	-0.0603%	-0.06%
14	18-May-93	2	93.8922%	0.04%	93.9115%	1.000	-0.0193%	-0.02%
15	18-May-93	2	93.9374%	0.05%	93.9115%	1.000	0.0259%	0.03%
16	18-May-93	1	93.9192%	0.03%	93.9115%	1.000	0.0077%	0.01%
17	21-May-93	1	93.9288%	0.02%	93.9116%	1.000	0.0172%	0.02%
18	25-May-93	1	93.9572%	0.02%	93.9117%	1.000	0.0455%	0.05%
19	25-May-93	2	93.8973%	0.03%	93.9117%	1.000	-0.0144%	-0.02%
20	9-Jun-93	1	93.9302%	0.03%	93.9121%	1.000	0.0181%	0.02%
21	15-Jun-93	1	93.9563%	0.03%	93.9122%	1.000	0.0441%	0.05%
22	21-Jun-93	2	93.8880%	0.03%	93.9124%	1.000	-0.0244%	-0.03%
23	24-Jun-93	1	93.8788%	0.02%	93.9125%	1.000	-0.0337%	-0.04%
24	28-Jun-93	1	93.9824%	0.03%	93.9126%	1.001	0.0698%	0.07%
25	30-Jun-93	2	93.9434%	0.03%	93.9126%	1.000	0.0308%	0.03%

LANL

#	Date Measured	Instr. ID	239-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	6-Apr-93	F5	93.7250%	0.12%	93.9105%	0.998	-0.1855%	-0.20%
2	6-Apr-93	F6	93.8210%	0.10%	93.9105%	0.999	-0.0895%	-0.10%
3	12-Apr-93	F5	93.9486%	0.11%	93.9106%	1.000	0.0380%	0.04%
4	14-Apr-93	F5	93.9357%	0.11%	93.9107%	1.000	0.0251%	0.03%
5	14-Apr-93	F6	93.8966%	0.10%	93.9107%	1.000	-0.0140%	-0.01%
6	22-Apr-93	F5	93.9962%	0.11%	93.9109%	1.001	0.0853%	0.09%
7	22-Apr-93	F6	93.2120%	0.10%	93.9109%	0.993	-0.6989%	-0.74%
8	29-Apr-93	F5	93.7809%	0.11%	93.9111%	0.999	-0.1302%	-0.14%
9	29-Apr-93	F6	93.8623%	0.10%	93.9111%	0.999	-0.0487%	-0.05%
10	14-May-93	F5	93.9256%	0.11%	93.9114%	1.000	0.0142%	0.02%
11	14-May-93	F6	93.9773%	0.10%	93.9114%	1.001	0.0659%	0.07%
12	24-May-93	F6	93.5548%	0.11%	93.9117%	0.996	-0.3569%	-0.38%
13	1-Jun-93	F6	93.7956%	0.11%	93.9119%	0.999	-0.1163%	-0.12%
14	8-Jun-93	F5	94.0360%	0.11%	93.9121%	1.001	0.1239%	0.13%

**WEIGHT PERCENT 239-Pu DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	239-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	27-Apr-93	GENIE2	93.9658%	0.08%	93.9110%	1.001	0.0548%	0.06%
2	27-Apr-93	GENIE2	93.9121%	0.07%	93.9110%	1.000	0.0011%	0.00%
3	28-Apr-93	GENIE2	93.9777%	0.08%	93.9110%	1.001	0.0666%	0.07%
4	28-Apr-93	GENIE2	93.8981%	0.08%	93.9110%	1.000	-0.0130%	-0.01%
5	28-Apr-93	GENIE2	94.0206%	0.08%	93.9110%	1.001	0.1096%	0.12%
6	28-Apr-93	GENIE2	93.9826%	0.08%	93.9110%	1.001	0.0715%	0.08%
7	28-Apr-93	GENIE2	94.0447%	0.08%	93.9110%	1.001	0.1336%	0.14%
8	28-Apr-93	GENIE2	94.0475%	0.08%	93.9110%	1.001	0.1364%	0.15%
9	29-Apr-93	GENIE2	93.9464%	0.08%	93.9111%	1.000	0.0354%	0.04%
10	29-Apr-93	GENIE2	94.0139%	0.08%	93.9111%	1.001	0.1029%	0.11%
11	25-May-93	GENIE2	94.0192%	0.08%	93.9117%	1.001	0.1075%	0.11%
12	3-Jun-93	GENIE2	94.0378%	0.08%	93.9119%	1.001	0.1258%	0.13%
13	21-Jun-93	GENIE2	94.0045%	0.08%	93.9124%	1.001	0.0921%	0.10%

**WEIGHT PERCENT 239-Pu DATA
2ND QUARTER 1993**

HANFORD

#	Date Measured	Instr. ID	239-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	2026	93.8158%	0.03%	93.9104%	0.999	-0.0946%	-0.10%
2	1-Apr-93	1985	93.8433%	0.03%	93.9104%	0.999	-0.0671%	-0.07%
3	5-Apr-93	2026	93.7974%	0.03%	93.9105%	0.999	-0.1131%	-0.12%
4	5-Apr-93	2424	93.8878%	0.03%	93.9105%	1.000	-0.0227%	-0.02%
5	6-Apr-93	1985	93.8904%	0.03%	93.9105%	1.000	-0.0201%	-0.02%
6	12-Apr-93	1985	93.7920%	0.03%	93.9106%	0.999	-0.1186%	-0.13%
7	12-Apr-93	1985	93.8693%	0.03%	93.9106%	1.000	-0.0413%	-0.04%
8	12-Apr-93	2424	93.8564%	0.03%	93.9106%	0.999	-0.0542%	-0.06%
9	13-Apr-93	1985	93.8471%	0.03%	93.9107%	0.999	-0.0636%	-0.07%
10	19-Apr-93	2424	93.9100%	0.03%	93.9108%	1.000	-0.0008%	0.00%
11	19-Apr-93	1985	93.7721%	0.03%	93.9108%	0.999	-0.1387%	-0.15%
12	26-Apr-93	2424	93.8595%	0.03%	93.9110%	0.999	-0.0515%	-0.05%
13	26-Apr-93	1985	93.8697%	0.03%	93.9110%	1.000	-0.0413%	-0.04%
14	28-Apr-93	2424	93.8284%	0.03%	93.9110%	0.999	-0.0826%	-0.09%
15	28-Apr-93	1985	93.8342%	0.03%	93.9110%	0.999	-0.0768%	-0.08%
16	3-May-93	1985	93.8580%	0.03%	93.9112%	0.999	-0.0532%	-0.06%
17	3-May-93	2424	93.8509%	0.03%	93.9112%	0.999	-0.0603%	-0.06%
18	4-May-93	2740	93.8803%	0.04%	93.9112%	1.000	-0.0309%	-0.03%
19	10-May-93	1985	93.7776%	0.03%	93.9113%	0.999	-0.1337%	-0.14%
20	12-May-93	2424	93.8853%	0.03%	93.9114%	1.000	-0.0261%	-0.03%
21	13-May-93	1985	93.8456%	0.03%	93.9114%	0.999	-0.0658%	-0.07%
22	13-May-93	2740	93.8912%	0.04%	93.9114%	1.000	-0.0202%	-0.02%
23	18-May-93	1985	93.8867%	0.03%	93.9115%	1.000	-0.0248%	-0.03%
24	18-May-93	2424	93.8861%	0.03%	93.9115%	1.000	-0.0254%	-0.03%
25	19-May-93	2740	93.8681%	0.04%	93.9116%	1.000	-0.0435%	-0.05%
26	24-May-93	2424	93.9254%	0.03%	93.9117%	1.000	0.0137%	0.01%
27	24-May-93	2740	93.8784%	0.04%	93.9117%	1.000	-0.0333%	-0.04%
28	25-May-93	1985	93.8747%	0.03%	93.9117%	1.000	-0.0370%	-0.04%
29	25-May-93	2424	93.8119%	0.03%	93.9117%	0.999	-0.0998%	-0.11%
30	26-May-93	2424	93.8706%	0.03%	93.9117%	1.000	-0.0411%	-0.04%
31	1-Jun-93	2740	93.9155%	0.04%	93.9119%	1.000	0.0036%	0.00%
32	2-Jun-93	2424	93.9791%	0.03%	93.9119%	1.001	0.0672%	0.07%
33	2-Jun-93	1985	93.8332%	0.03%	93.9119%	0.999	-0.0787%	-0.08%
34	3-Jun-93	1985	93.8785%	0.03%	93.9119%	1.000	-0.0334%	-0.04%
35	7-Jun-93	1985	93.7743%	0.03%	93.9120%	0.999	-0.1377%	-0.15%
36	7-Jun-93	2740	93.8816%	0.04%	93.9120%	1.000	-0.0304%	-0.03%
37	8-Jun-93	2424	93.8817%	0.03%	93.9121%	1.000	-0.0304%	-0.03%
38	14-Jun-93	1985	93.8506%	0.03%	93.9122%	0.999	-0.0616%	-0.07%
39	14-Jun-93	2740	93.8882%	0.04%	93.9122%	1.000	-0.0240%	-0.03%
40	15-Jun-93	2424	93.8592%	0.04%	93.9122%	0.999	-0.0530%	-0.06%
41	21-Jun-93	1985	93.8280%	0.03%	93.9124%	0.999	-0.0844%	-0.09%
42	21-Jun-93	2740	93.8788%	0.04%	93.9124%	1.000	-0.0336%	-0.04%
43	22-Jun-93	2424	93.8759%	0.03%	93.9124%	1.000	-0.0365%	-0.04%
44	28-Jun-93	1985	93.8220%	0.03%	93.9126%	0.999	-0.0906%	-0.10%
45	29-Jun-93	2424	93.8573%	0.03%	93.9126%	0.999	-0.0553%	-0.06%
46	30-Jun-93	2740	93.8767%	0.04%	93.9126%	1.000	-0.0359%	-0.04%

**WEIGHT PERCENT 239-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	239-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	TR#2	94.0880%	0.10%	93.9104%	1.002	0.1776%	0.19%
2	12-Apr-93	TR#2	93.8610%	0.09%	93.9106%	0.999	-0.0497%	-0.05%
3	12-Apr-93	ND#1	93.9103%	0.16%	93.9106%	1.000	-0.0004%	0.00%
4	26-Apr-93	TR#2	94.0104%	0.10%	93.9110%	1.001	0.0994%	0.11%
5	26-Apr-93	ND#1	93.7192%	0.15%	93.9110%	0.998	-0.1918%	-0.20%
6	7-Jun-93	TR#2	93.8263%	0.10%	93.9120%	0.999	-0.0857%	-0.09%
7	16-Jun-93	TR#2	94.0692%	0.13%	93.9123%	1.002	0.1569%	0.17%
8	17-Jun-93	ND#1	93.8287%	0.17%	93.9123%	0.999	-0.0836%	-0.09%
9	18-Jun-93	TR#2	94.0300%	0.15%	93.9123%	1.001	0.1177%	0.13%
10	21-Jun-93	ND#1	93.7858%	0.19%	93.9124%	0.999	-0.1266%	-0.13%
11	21-Jun-93	TR#2	94.2447%	0.16%	93.9124%	1.004	0.3323%	0.35%
12	23-Jun-93	TR#2	93.9478%	0.11%	93.9124%	1.000	0.0354%	0.04%
13	25-Jun-93	ND#1	93.7542%	0.16%	93.9125%	0.998	-0.1583%	-0.17%
14	28-Jun-93	ND#1	94.0660%	0.18%	93.9126%	1.002	0.1534%	0.16%
15	30-Jun-93	TR#2	93.7797%	0.15%	93.9126%	0.999	-0.1329%	-0.14%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF PERCENT 240-Pu DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (weight %)	****	-0.0126%	0.0117%	-0.0478%	0.0590%	0.0110%	****
Std. Dev. (weight %)	****	0.0301%	0.0897%	0.0484%	0.0362%	0.1531%	****
Unc. in Mean (weight %)	****	0.0058%	0.0271%	0.0236%	0.0046%	0.0394%	****
Mean Error (%)	****	-0.22%	0.20%	-0.82%	1.01%	0.19%	****
Std. Dev. (%)	****	0.51%	1.53%	0.83%	0.62%	2.61%	****
Unc. in Mean (%)	****	0.10%	0.46%	0.41%	0.08%	0.67%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (wt. %)	****	0.0094%	-0.0087%	-0.0665%	-0.0010%	-0.0660%	****
Diff. in Std. Dev. (wt. %)	****	0.0078%	-0.0034%	-0.0046%	-0.0048%	-0.0120%	****
Diff. in Mean Error (%)	****	0.16%	-0.15%	-1.14%	-0.01%	-1.12%	****
Diff. in Std. Dev. (%)	****	0.13%	-0.06%	-0.07%	-0.08%	-0.21%	****
Number of Data Points	0	25	14	13	46	15	0

NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - PERCENT 240-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - PERCENT 240-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

EG&G MOUND - PERCENT 240-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - PERCENT 240-PU 3RD QUARTER - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB.
PERCENT 240-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WEIGHT PERCENT 240-Pu DATA 2ND QUARTER 1993

RFP - CSL
NO DATA REPORTED

LLNL

#	Date Measured	Instr. ID	240-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	8-Apr-93	1	5.8426%	0.50%	5.8608%	0.997	-0.0182%	-0.31%
2	16-Apr-93	1	5.8594%	0.38%	5.8608%	1.000	-0.0014%	-0.02%
3	22-Apr-93	1	5.8384%	0.33%	5.8608%	0.996	-0.0224%	-0.38%
4	28-Apr-93	1	5.8475%	0.44%	5.8608%	0.998	-0.0133%	-0.23%
5	6-May-93	1	5.8428%	0.42%	5.8608%	0.997	-0.0180%	-0.31%
6	11-May-93	1	5.8346%	0.37%	5.8608%	0.996	-0.0262%	-0.45%
7	13-May-93	2	5.8749%	0.51%	5.8608%	1.002	0.0141%	0.24%
8	14-May-93	2	5.7945%	0.65%	5.8608%	0.989	-0.0663%	-1.13%
9	14-May-93	1	5.8421%	0.39%	5.8608%	0.997	-0.0187%	-0.32%
10	17-May-93	2	5.8165%	0.57%	5.8608%	0.992	-0.0443%	-0.76%
11	17-May-93	2	5.8423%	0.60%	5.8608%	0.997	-0.0185%	-0.32%
12	17-May-93	2	5.8757%	0.58%	5.8608%	1.003	0.0149%	0.25%
13	18-May-93	2	5.9205%	0.67%	5.8608%	1.010	0.0597%	1.02%
14	18-May-93	2	5.8759%	0.60%	5.8608%	1.003	0.0151%	0.26%
15	18-May-93	2	5.8381%	0.73%	5.8608%	0.996	-0.0227%	-0.39%
16	18-May-93	1	5.8535%	0.41%	5.8608%	0.999	-0.0073%	-0.12%
17	21-May-93	1	5.8448%	0.37%	5.8608%	0.997	-0.0160%	-0.27%
18	25-May-93	1	5.8167%	0.40%	5.8608%	0.992	-0.0441%	-0.75%
19	25-May-93	2	5.8734%	0.51%	5.8608%	1.002	0.0126%	0.22%
20	9-Jun-93	1	5.8447%	0.43%	5.8608%	0.997	-0.0161%	-0.27%
21	15-Jun-93	1	5.8186%	0.46%	5.8608%	0.993	-0.0422%	-0.72%
22	21-Jun-93	2	5.8862%	0.48%	5.8608%	1.004	0.0254%	0.43%
23	24-Jun-93	1	5.8967%	0.38%	5.8608%	1.006	0.0359%	0.61%
24	28-Jun-93	1	5.7922%	0.41%	5.8608%	0.988	-0.0686%	-1.17%
25	30-Jun-93	2	5.8317%	0.43%	5.8608%	0.995	-0.0291%	-0.50%

LANL

#	Date Measured	Instr. ID	240-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	6-Apr-93	F5	6.0456%	1.93%	5.8608%	1.032	0.1848%	3.15%
2	6-Apr-93	F6	5.9488%	1.59%	5.8608%	1.015	0.0880%	1.50%
3	12-Apr-93	F5	5.8228%	1.85%	5.8608%	0.994	-0.0380%	-0.65%
4	14-Apr-93	F5	5.8342%	1.78%	5.8608%	0.995	-0.0266%	-0.45%
5	14-Apr-93	F6	5.8730%	1.64%	5.8608%	1.002	0.0122%	0.21%
6	22-Apr-93	F5	5.7744%	1.78%	5.8608%	0.985	-0.0864%	-1.47%
7	22-Apr-93	F6	5.8491%	1.64%	5.8608%	0.998	-0.0117%	-0.20%
8	29-Apr-93	F5	5.9911%	1.74%	5.8608%	1.022	0.1303%	2.22%
9	29-Apr-93	F6	5.9094%	1.56%	5.8608%	1.008	0.0486%	0.83%
10	14-May-93	F5	5.8449%	1.79%	5.8608%	0.997	-0.0159%	-0.27%
11	14-May-93	F6	5.7936%	1.65%	5.8608%	0.989	-0.0672%	-1.15%
12	24-May-93	F6	5.8153%	1.72%	5.8608%	0.992	-0.0455%	-0.78%
13	1-Jun-93	F6	5.9756%	1.68%	5.8608%	1.020	0.1148%	1.96%
14	8-Jun-93	F5	5.7369%	1.81%	5.8608%	0.979	-0.1239%	-2.11%

**WEIGHT PERCENT 240-Pu DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	240-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	27-Apr-93	GENIE2	5.8367%	1.47%	5.8608%	0.996	-0.0241%	-0.41%
2	27-Apr-93	GENIE2	5.8901%	1.34%	5.8608%	1.005	0.0293%	0.50%
3	28-Apr-93	GENIE2	5.8257%	1.46%	5.8608%	0.994	-0.0351%	-0.60%
4	28-Apr-93	GENIE2	5.9049%	1.45%	5.8608%	1.008	0.0441%	0.75%
5	28-Apr-93	GENIE2	5.7823%	1.51%	5.8608%	0.987	-0.0785%	-1.34%
6	28-Apr-93	GENIE2	5.8206%	1.49%	5.8608%	0.993	-0.0402%	-0.69%
7	28-Apr-93	GENIE2	5.7577%	1.40%	5.8608%	0.982	-0.1031%	-1.76%
8	28-Apr-93	GENIE2	5.7548%	1.42%	5.8608%	0.982	-0.1060%	-1.81%
9	29-Apr-93	GENIE2	5.8563%	1.49%	5.8608%	0.999	-0.0045%	-0.08%
10	29-Apr-93	GENIE2	5.7894%	1.43%	5.8608%	0.988	-0.0714%	-1.22%
11	25-May-93	GENIE2	5.7831%	1.51%	5.8608%	0.987	-0.0777%	-1.33%
12	3-Jun-93	GENIE2	5.7686%	1.52%	5.8608%	0.984	-0.0922%	-1.57%
13	21-Jun-93	GENIE2	5.7987%	1.48%	5.8608%	0.989	-0.0621%	-1.06%

WEIGHT PERCENT 240-Pu DATA 2ND QUARTER 1993

HANFORD

#	Date Measured	Instr. ID	240-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	2026	5.9613%	0.54%	5.8608%	1.017	0.1005%	1.72%
2	1-Apr-93	1985	5.9323%	0.45%	5.8608%	1.012	0.0715%	1.22%
3	5-Apr-93	2026	5.9799%	0.44%	5.8608%	1.020	0.1191%	2.03%
4	5-Apr-93	2424	5.8890%	0.49%	5.8608%	1.005	0.0282%	0.48%
5	6-Apr-93	1985	5.8871%	0.50%	5.8608%	1.004	0.0263%	0.45%
6	12-Apr-93	1985	5.9843%	0.51%	5.8608%	1.021	0.1235%	2.11%
7	12-Apr-93	1985	5.9083%	0.51%	5.8608%	1.008	0.0475%	0.81%
8	12-Apr-93	2424	5.9209%	0.51%	5.8608%	1.010	0.0601%	1.03%
9	13-Apr-93	1985	5.9300%	0.51%	5.8608%	1.012	0.0692%	1.18%
10	19-Apr-93	2424	5.8696%	0.50%	5.8608%	1.002	0.0088%	0.15%
11	19-Apr-93	1985	6.0031%	0.49%	5.8608%	1.024	0.1423%	2.43%
12	26-Apr-93	2424	5.9184%	0.45%	5.8608%	1.010	0.0576%	0.98%
13	26-Apr-93	1985	5.9065%	0.48%	5.8608%	1.008	0.0457%	0.78%
14	28-Apr-93	2424	5.9493%	0.50%	5.8608%	1.015	0.0885%	1.51%
15	28-Apr-93	1985	5.9419%	0.54%	5.8608%	1.014	0.0811%	1.38%
16	3-May-93	1985	5.9198%	0.48%	5.8608%	1.010	0.0590%	1.01%
17	3-May-93	2424	5.9275%	0.46%	5.8608%	1.011	0.0667%	1.14%
18	4-May-93	2740	5.8986%	0.63%	5.8608%	1.006	0.0378%	0.65%
19	10-May-93	1985	5.9989%	0.53%	5.8608%	1.024	0.1381%	2.36%
20	12-May-93	2424	5.8927%	0.47%	5.8608%	1.005	0.0319%	0.54%
21	13-May-93	1985	5.9316%	0.48%	5.8608%	1.012	0.0708%	1.21%
22	13-May-93	2740	5.8863%	0.65%	5.8608%	1.004	0.0255%	0.44%
23	18-May-93	1985	5.8919%	0.50%	5.8608%	1.005	0.0311%	0.53%
24	18-May-93	2424	5.8932%	0.47%	5.8608%	1.006	0.0324%	0.55%
25	19-May-93	2740	5.9105%	0.62%	5.8608%	1.008	0.0497%	0.85%
26	24-May-93	2424	5.8552%	0.50%	5.8608%	0.999	-0.0056%	-0.10%
27	24-May-93	2740	5.8784%	0.65%	5.8608%	1.003	0.0176%	0.30%
28	25-May-93	1985	5.9015%	0.51%	5.8608%	1.007	0.0407%	0.69%
29	25-May-93	2424	5.9667%	0.51%	5.8608%	1.018	0.1059%	1.81%
30	26-May-93	2424	5.9087%	0.48%	5.8608%	1.008	0.0479%	0.82%
31	1-Jun-93	2740	5.8635%	0.66%	5.8608%	1.000	0.0027%	0.05%
32	2-Jun-93	2424	5.8887%	0.53%	5.8608%	1.005	0.0279%	0.48%
33	2-Jun-93	1985	5.9440%	0.48%	5.8608%	1.014	0.0832%	1.42%
34	3-Jun-93	1985	5.8999%	0.51%	5.8608%	1.007	0.0391%	0.67%
35	7-Jun-93	1985	6.0026%	0.46%	5.8608%	1.024	0.1418%	2.42%
36	7-Jun-93	2740	5.8962%	0.66%	5.8608%	1.006	0.0354%	0.60%
37	8-Jun-93	2424	5.8984%	0.48%	5.8608%	1.006	0.0376%	0.64%
38	14-Jun-93	1985	5.9257%	0.51%	5.8608%	1.011	0.0649%	1.11%
39	14-Jun-93	2740	5.8897%	0.59%	5.8608%	1.005	0.0289%	0.49%
40	15-Jun-93	2424	5.9200%	0.55%	5.8608%	1.010	0.0592%	1.01%
41	21-Jun-93	1985	5.9495%	0.47%	5.8608%	1.015	0.0887%	1.51%
42	21-Jun-93	2740	5.8997%	0.58%	5.8608%	1.007	0.0389%	0.66%
43	22-Jun-93	2424	5.9048%	0.44%	5.8608%	1.008	0.0440%	0.75%
44	28-Jun-93	1985	5.9565%	0.46%	5.8608%	1.016	0.0957%	1.63%
45	29-Jun-93	2424	5.9240%	0.46%	5.8608%	1.011	0.0632%	1.08%
46	30-Jun-93	2740	5.9028%	0.64%	5.8608%	1.007	0.0420%	0.72%

**WEIGHT PERCENT 240-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	240-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	TR#2	5.7083%	1.88%	5.8608%	0.974	-0.1524%	-2.60%
2	12-Apr-93	TR#2	5.9388%	1.63%	5.8608%	1.013	0.0780%	1.33%
3	12-Apr-93	ND#1	5.8910%	2.92%	5.8608%	1.005	0.0302%	0.51%
4	26-Apr-93	TR#2	5.7892%	1.74%	5.8608%	0.988	-0.0716%	-1.22%
5	26-Apr-93	ND#1	6.0785%	2.55%	5.8608%	1.037	0.2177%	3.71%
6	7-Jun-93	TR#2	5.9720%	1.85%	5.8608%	1.019	0.1112%	1.90%
7	16-Jun-93	TR#2	5.7278%	2.37%	5.8608%	0.977	-0.1330%	-2.27%
8	17-Jun-93	ND#1	5.9755%	2.99%	5.8608%	1.020	0.1146%	1.96%
9	18-Jun-93	TR#2	5.7665%	2.78%	5.8608%	0.984	-0.0943%	-1.61%
10	21-Jun-93	ND#1	6.0150%	3.44%	5.8608%	1.026	0.1542%	2.63%
11	21-Jun-93	TR#2	5.5549%	3.11%	5.8608%	0.948	-0.3059%	-5.22%
12	23-Jun-93	TR#2	5.8561%	1.92%	5.8608%	0.999	-0.0047%	-0.08%
13	25-Jun-93	ND#1	6.0483%	2.82%	5.8608%	1.032	0.1875%	3.20%
14	28-Jun-93	ND#1	5.7325%	3.33%	5.8608%	0.978	-0.1283%	-2.19%
15	30-Jun-93	TR#2	6.0227%	2.62%	5.8608%	1.028	0.1619%	2.76%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF PERCENT 241-Pu DATA

Second Quarter 1993

	REPORTING LABORATORY						
	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (weight %)	****	-0.0008%	0.0006%	-0.0021%	0.0000%	0.0014%	****
Std. Dev. (weight %)	****	0.0015%	0.0004%	0.0008%	0.0008%	0.0015%	****
Unc. in Mean (weight %)	****	0.0002%	0.0001%	0.0004%	0.0001%	0.0005%	****
Mean Error (%)	****	-0.40%	0.32%	-1.09%	0.03%	0.72%	****
Std. Dev. (%)	****	0.81%	0.20%	0.41%	0.44%	0.81%	****
Unc. in Mean (%)	****	0.08%	0.04%	0.23%	0.06%	0.26%	****
DIFFERENCE FROM LAST PERIOD							
Diff. in Mean Error (wt. %)	****	0.0007%	0.0001%	0.0003%	0.0006%	0.0008%	****
Diff. in Std. Dev. (wt. %)	****	0.0008%	0.0002%	-0.0003%	-0.0001%	0.0003%	****
Diff. in Mean Error (%)	****	0.39%	0.04%	0.18%	0.34%	0.38%	****
Diff. in Std. Dev. (%)	****	0.45%	0.09%	-0.18%	-0.01%	0.16%	****
Number of Data Points	0	25	14	13	46	15	0

* NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - PERCENT 241-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - PERCENT 241-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - PERCENT 241-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - PERCENT 241-PU 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB. PERCENT 241-PU - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

**WEIGHT PERCENT 241-Pu DATA
2ND QUARTER 1993**

**RFP - CSL
NO DATA REPORTED**

LLNL

#	Date Measured	Instr. ID	241-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	8-Apr-93	1	0.1892%	0.41%	0.1904%	0.994	-0.0012%	-0.65%
2	16-Apr-93	1	0.1878%	0.32%	0.1902%	0.987	-0.0024%	-1.28%
3	22-Apr-93	1	0.1885%	0.27%	0.1901%	0.992	-0.0016%	-0.83%
4	28-Apr-93	1	0.1890%	0.36%	0.1899%	0.995	-0.0009%	-0.49%
5	6-May-93	1	0.1872%	0.34%	0.1897%	0.987	-0.0025%	-1.33%
6	11-May-93	1	0.1885%	0.30%	0.1896%	0.994	-0.0011%	-0.58%
7	13-May-93	2	0.1884%	0.44%	0.1896%	0.994	-0.0012%	-0.61%
8	14-May-93	2	0.1868%	0.56%	0.1895%	0.986	-0.0027%	-1.44%
9	14-May-93	1	0.1891%	0.32%	0.1895%	0.998	-0.0004%	-0.23%
10	17-May-93	2	0.1880%	0.50%	0.1895%	0.992	-0.0015%	-0.77%
11	17-May-93	2	0.1914%	0.51%	0.1895%	1.010	0.0019%	1.03%
12	17-May-93	2	0.1894%	0.50%	0.1895%	1.000	-0.0001%	-0.03%
13	18-May-93	2	0.1903%	0.57%	0.1894%	1.005	0.0009%	0.46%
14	18-May-93	2	0.1931%	0.51%	0.1894%	1.019	0.0037%	1.94%
15	18-May-93	2	0.1879%	0.62%	0.1894%	0.992	-0.0015%	-0.81%
16	18-May-93	1	0.1891%	0.33%	0.1894%	0.998	-0.0003%	-0.17%
17	21-May-93	1	0.1881%	0.31%	0.1894%	0.993	-0.0013%	-0.66%
18	25-May-93	1	0.1881%	0.32%	0.1893%	0.994	-0.0012%	-0.61%
19	25-May-93	2	0.1915%	0.42%	0.1893%	1.012	0.0022%	1.19%
20	9-Jun-93	1	0.1873%	0.35%	0.1889%	0.992	-0.0016%	-0.84%
21	15-Jun-93	1	0.1868%	0.37%	0.1887%	0.990	-0.0019%	-1.02%
22	21-Jun-93	2	0.1886%	0.40%	0.1886%	1.000	0.0000%	0.01%
23	24-Jun-93	1	0.1869%	0.31%	0.1885%	0.991	-0.0016%	-0.85%
24	28-Jun-93	1	0.1871%	0.33%	0.1884%	0.993	-0.0013%	-0.69%
25	30-Jun-93	2	0.1871%	0.38%	0.1884%	0.993	-0.0013%	-0.67%

LANL

#	Date Measured	Instr. ID	241-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	6-Apr-93	F5	0.1906%	0.18%	0.1905%	1.001	0.0001%	0.06%
2	6-Apr-93	F6	0.1911%	0.15%	0.1905%	1.003	0.0006%	0.33%
3	12-Apr-93	F5	0.1910%	0.16%	0.1903%	1.004	0.0007%	0.35%
4	14-Apr-93	F5	0.1906%	0.16%	0.1903%	1.002	0.0003%	0.17%
5	14-Apr-93	F6	0.1909%	0.15%	0.1903%	1.003	0.0006%	0.33%
6	22-Apr-93	F5	0.1905%	0.16%	0.1901%	1.002	0.0004%	0.22%
7	22-Apr-93	F6	0.1912%	0.15%	0.1901%	1.006	0.0011%	0.59%
8	29-Apr-93	F5	0.1904%	0.16%	0.1899%	1.003	0.0005%	0.26%
9	29-Apr-93	F6	0.1903%	0.14%	0.1899%	1.002	0.0004%	0.21%
10	14-May-93	F5	0.1906%	0.16%	0.1895%	1.006	0.0011%	0.57%
11	14-May-93	F6	0.1900%	0.15%	0.1895%	1.002	0.0005%	0.25%
12	24-May-93	F6	0.1906%	0.16%	0.1893%	1.007	0.0013%	0.70%
13	1-Jun-93	F6	0.1898%	0.16%	0.1891%	1.004	0.0007%	0.38%
14	8-Jun-93	F5	0.1889%	0.16%	0.1889%	1.000	0.0000%	0.00%

**WEIGHT PERCENT 241-Pu DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	241-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	27-Apr-93	GENIE2	0.1887%	0.82%	0.1900%	0.993	-0.0013%	-0.66%
2	27-Apr-93	GENIE2	0.1878%	0.76%	0.1900%	0.989	-0.0021%	-1.12%
3	28-Apr-93	GENIE2	0.1878%	0.79%	0.1899%	0.989	-0.0021%	-1.13%
4	28-Apr-93	GENIE2	0.1883%	0.81%	0.1899%	0.991	-0.0017%	-0.88%
5	28-Apr-93	GENIE2	0.1886%	0.80%	0.1899%	0.993	-0.0013%	-0.70%
6	28-Apr-93	GENIE2	0.1872%	0.83%	0.1899%	0.986	-0.0027%	-1.42%
7	28-Apr-93	GENIE2	0.1884%	0.82%	0.1899%	0.992	-0.0015%	-0.79%
8	28-Apr-93	GENIE2	0.1873%	0.79%	0.1899%	0.986	-0.0026%	-1.39%
9	29-Apr-93	GENIE2	0.1880%	0.80%	0.1899%	0.990	-0.0020%	-1.03%
10	29-Apr-93	GENIE2	0.1879%	0.79%	0.1899%	0.989	-0.0020%	-1.08%
11	25-May-93	GENIE2	0.1872%	0.86%	0.1893%	0.989	-0.0020%	-1.07%
12	3-Jun-93	GENIE2	0.1849%	0.85%	0.1890%	0.978	-0.0041%	-2.18%
13	21-Jun-93	GENIE2	0.1872%	0.83%	0.1886%	0.993	-0.0014%	-0.72%

**WEIGHT PERCENT 241-Pu DATA
2ND QUARTER 1993**

HANFORD

#	Date Measured	Instr. ID	241-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	2026	0.1895%	0.42%	0.1906%	0.994	-0.0011%	-0.58%
2	1-Apr-93	1985	0.1912%	0.39%	0.1906%	1.003	0.0006%	0.31%
3	5-Apr-93	2026	0.1892%	0.34%	0.1905%	0.993	-0.0013%	-0.69%
4	5-Apr-93	2424	0.1905%	0.38%	0.1905%	1.000	0.0000%	0.00%
5	6-Apr-93	1985	0.1905%	0.37%	0.1905%	1.000	0.0000%	0.01%
6	12-Apr-93	1985	0.1905%	0.38%	0.1903%	1.001	0.0002%	0.09%
7	12-Apr-93	1985	0.1898%	0.38%	0.1903%	0.997	-0.0005%	-0.28%
8	12-Apr-93	2424	0.1905%	0.39%	0.1903%	1.001	0.0002%	0.09%
9	13-Apr-93	1985	0.1899%	0.38%	0.1903%	0.998	-0.0004%	-0.21%
10	19-Apr-93	2424	0.1888%	0.38%	0.1902%	0.993	-0.0014%	-0.71%
11	19-Apr-93	1985	0.1911%	0.37%	0.1902%	1.005	0.0009%	0.50%
12	26-Apr-93	2424	0.1894%	0.35%	0.1900%	0.997	-0.0006%	-0.30%
13	26-Apr-93	1985	0.1908%	0.36%	0.1900%	1.004	0.0008%	0.43%
14	28-Apr-93	2424	0.1897%	0.39%	0.1899%	0.999	-0.0002%	-0.12%
15	28-Apr-93	1985	0.1906%	0.41%	0.1899%	1.004	0.0007%	0.35%
16	3-May-93	1985	0.1893%	0.36%	0.1898%	0.997	-0.0005%	-0.26%
17	3-May-93	2424	0.1892%	0.36%	0.1898%	0.997	-0.0006%	-0.32%
18	4-May-93	2740	0.1896%	0.47%	0.1898%	0.999	-0.0002%	-0.09%
19	10-May-93	1985	0.1902%	0.40%	0.1896%	1.003	0.0006%	0.30%
20	12-May-93	2424	0.1899%	0.36%	0.1896%	1.002	0.0003%	0.17%
21	13-May-93	1985	0.1898%	0.37%	0.1896%	1.001	0.0002%	0.13%
22	13-May-93	2740	0.1908%	0.49%	0.1896%	1.007	0.0012%	0.66%
23	18-May-93	1985	0.1893%	0.37%	0.1894%	0.999	-0.0001%	-0.07%
24	18-May-93	2424	0.1890%	0.37%	0.1894%	0.998	-0.0004%	-0.23%
25	19-May-93	2740	0.1896%	0.47%	0.1894%	1.001	0.0002%	0.10%
26	24-May-93	2424	0.1883%	0.39%	0.1893%	0.995	-0.0010%	-0.52%
27	24-May-93	2740	0.1903%	0.48%	0.1893%	1.005	0.0010%	0.54%
28	25-May-93	1985	0.1906%	0.38%	0.1893%	1.007	0.0013%	0.71%
29	25-May-93	2424	0.1886%	0.40%	0.1893%	0.997	-0.0007%	-0.34%
30	26-May-93	2424	0.1885%	0.37%	0.1892%	0.996	-0.0007%	-0.38%
31	1-Jun-93	2740	0.1892%	0.49%	0.1891%	1.001	0.0001%	0.06%
32	2-Jun-93	2424	0.1893%	0.41%	0.1891%	1.001	0.0002%	0.13%
33	2-Jun-93	1985	0.1904%	0.36%	0.1891%	1.007	0.0013%	0.71%
34	3-Jun-93	1985	0.1891%	0.38%	0.1890%	1.000	0.0001%	0.04%
35	7-Jun-93	1985	0.1893%	0.35%	0.1889%	1.002	0.0004%	0.20%
36	7-Jun-93	2740	0.1903%	0.36%	0.1889%	1.007	0.0014%	0.73%
37	8-Jun-93	2424	0.1878%	0.38%	0.1889%	0.994	-0.0011%	-0.58%
38	14-Jun-93	1985	0.1906%	0.38%	0.1888%	1.010	0.0018%	0.98%
39	14-Jun-93	2740	0.1901%	0.44%	0.1888%	1.007	0.0013%	0.71%
40	15-Jun-93	2424	0.1881%	0.38%	0.1887%	0.997	-0.0006%	-0.33%
41	21-Jun-93	1985	0.1894%	0.35%	0.1886%	1.004	0.0008%	0.43%
42	21-Jun-93	2740	0.1888%	0.44%	0.1886%	1.001	0.0002%	0.12%
43	22-Jun-93	2424	0.1871%	0.34%	0.1886%	0.992	-0.0015%	-0.77%
44	28-Jun-93	1985	0.1885%	0.35%	0.1884%	1.000	0.0001%	0.05%
45	29-Jun-93	2424	0.1869%	0.36%	0.1884%	0.992	-0.0015%	-0.79%
46	30-Jun-93	2740	0.1887%	0.48%	0.1884%	1.002	0.0003%	0.18%

**WEIGHT PERCENT 241-Pu DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	241-Pu	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	TR#2	0.1935%	0.56%	0.1906%	1.015	0.0028%	1.49%
2	12-Apr-93	TR#2	0.1901%	0.47%	0.1903%	0.999	-0.0003%	-0.15%
3	12-Apr-93	ND#1	0.1915%	1.14%	0.1903%	1.006	0.0011%	0.60%
4	26-Apr-93	TR#2	0.1901%	0.57%	0.1900%	1.000	0.0001%	0.05%
5	26-Apr-93	ND#1	0.1910%	1.28%	0.1900%	1.005	0.0010%	0.54%
6	7-Jun-93	TR#2	0.1888%	0.66%	0.1889%	1.000	-0.0001%	-0.04%
7	16-Jun-93	TR#2	0.1904%	1.05%	0.1887%	1.009	0.0017%	0.89%
8	17-Jun-93	ND#1	0.1892%	1.27%	0.1887%	1.003	0.0006%	0.29%
9	18-Jun-93	TR#2	0.1933%	1.36%	0.1887%	1.025	0.0047%	2.48%
10	21-Jun-93	ND#1	0.1896%	1.10%	0.1886%	1.006	0.0010%	0.55%
11	21-Jun-93	TR#2	0.1905%	1.05%	0.1886%	1.010	0.0020%	1.04%
12	23-Jun-93	TR#2	0.1885%	0.78%	0.1885%	1.000	0.0000%	0.00%
13	25-Jun-93	ND#1	0.1897%	1.19%	0.1885%	1.007	0.0013%	0.67%
14	28-Jun-93	ND#1	0.1927%	1.14%	0.1884%	1.023	0.0043%	2.30%
15	30-Jun-93	TR#2	0.1886%	0.85%	0.1884%	1.001	0.0002%	0.11%

**SAVANNAH RIVER
NO DATA REPORTED**

RESULTS OF ANALYSIS OF PERCENT 241-Am DATA

Second Quarter 1993

REPORTING LABORATORY

	CSL	LLNL	LANL	MOUND	WHO	RFP	SRS
Mean Error (weight %)	****	-0.0028%	0.0000%	0.0015%	-0.0021%	0.0003%	****
Std. Dev. (weight %)	****	0.0006%	0.0025%	0.0005%	0.0010%	0.0010%	****
Unc. in Mean (weight %)	****	0.0002%	0.0004%	0.0004%	0.0001%	0.0005%	****
Mean Error (%)	****	-1.50%	0.00%	0.82%	-1.15%	0.15%	****
Std. Dev. (%)	****	0.30%	1.34%	0.28%	0.55%	0.54%	****
Unc. in Mean (%)	****	0.09%	0.20%	0.19%	0.06%	0.29%	****

DIFFERENCE FROM LAST PERIOD

Diff. in Mean Error (wt. %)	****	0.0002%	-0.0015%	0.0006%	-0.0004%	-0.0007%	****
Diff. in Std. Dev. (wt. %)	****	0.0003%	-0.0003%	-0.0001%	0.0001%	-0.0002%	****
Diff. in Mean Error (%)	****	0.12%	-0.80%	0.36%	-0.22%	-0.40%	****
Diff. in Std. Dev. (%)	****	0.12%	-0.18%	-0.02%	0.08%	-0.11%	****
Number of Data Points	0	25	14	13	46	15	0

NO DATA REPORTED FOR THIS MEASUREMENT IN THE PREVIOUS PERIOD

LAWRENCE LIVERMORE - PERCENT 241-AM 3RD QUARTER 1992 - 2ND QUARTER 1993

Date

All standard deviation and uncertainty limits are at two-sigma.

LOS ALAMOS - PERCENT 241-AM 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G MOUND - PERCENT 241-AM 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WESTINGHOUSE HANFORD - PERCENT 241-AM 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

EG&G ROCKY FLATS - ANALYTICAL LAB.
PERCENT 241-AM - 3RD QUARTER 1992 - 2ND QUARTER 1993

All standard deviation and uncertainty limits are at two-sigma.

WEIGHT PERCENT 241-Am DATA 2ND QUARTER 1993

RFP - CSL
NO DATA REPORTED

LLNL

#	Date Measured	Instr. ID	241-Am	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	8-Apr-93	1	0.1819%	0.43%	0.1854%	0.981	-0.0035%	-1.89%
2	16-Apr-93	1	0.1827%	0.34%	0.1856%	0.984	-0.0029%	-1.56%
3	22-Apr-93	1	0.1831%	0.29%	0.1857%	0.986	-0.0026%	-1.42%
4	28-Apr-93	1	0.1828%	0.38%	0.1859%	0.983	-0.0031%	-1.66%
5	6-May-93	1	0.1836%	0.36%	0.1861%	0.987	-0.0025%	-1.34%
6	11-May-93	1	0.1836%	0.32%	0.1862%	0.986	-0.0026%	-1.40%
7	13-May-93	2	0.1842%	0.28%	0.1863%	0.989	-0.0021%	-1.10%
8	14-May-93	2	0.1833%	0.60%	0.1863%	0.984	-0.0030%	-1.60%
9	14-May-93	1	0.1823%	0.34%	0.1863%	0.979	-0.0040%	-2.14%
10	17-May-93	2	0.1834%	0.53%	0.1864%	0.984	-0.0030%	-1.58%
11	17-May-93	2	0.1847%	0.55%	0.1864%	0.991	-0.0017%	-0.89%
12	17-May-93	2	0.1841%	0.54%	0.1864%	0.988	-0.0023%	-1.21%
13	18-May-93	2	0.1829%	0.63%	0.1864%	0.981	-0.0035%	-1.87%
14	18-May-93	2	0.1847%	0.56%	0.1864%	0.991	-0.0017%	-0.90%
15	18-May-93	2	0.1834%	0.66%	0.1864%	0.984	-0.0030%	-1.60%
16	18-May-93	1	0.1837%	0.35%	0.1864%	0.986	-0.0027%	-1.44%
17	21-May-93	1	0.1836%	0.32%	0.1865%	0.985	-0.0029%	-1.53%
18	25-May-93	1	0.1832%	0.35%	0.1865%	0.982	-0.0033%	-1.79%
19	25-May-93	2	0.1844%	0.45%	0.1865%	0.988	-0.0021%	-1.15%
20	9-Jun-93	1	0.1842%	0.37%	0.1869%	0.985	-0.0027%	-1.45%
21	15-Jun-93	1	0.1841%	0.39%	0.1871%	0.984	-0.0030%	-1.58%
22	21-Jun-93	2	0.1840%	0.44%	0.1872%	0.983	-0.0032%	-1.71%
23	24-Jun-93	1	0.1846%	0.33%	0.1873%	0.986	-0.0027%	-1.43%
24	28-Jun-93	1	0.1847%	0.35%	0.1874%	0.986	-0.0027%	-1.43%
25	30-Jun-93	2	0.1840%	0.40%	0.1874%	0.982	-0.0034%	-1.82%

LANL

#	Date Measured	Instr. ID	241-Am	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	6-Apr-93	F5	0.1852%	0.87%	0.1854%	0.999	-0.0002%	-0.09%
2	6-Apr-93	F6	0.1877%	0.67%	0.1854%	1.013	0.0024%	1.28%
3	12-Apr-93	F5	0.1833%	0.82%	0.1855%	0.988	-0.0022%	-1.19%
4	14-Apr-93	F5	0.1831%	0.79%	0.1855%	0.987	-0.0025%	-1.34%
5	14-Apr-93	F6	0.1883%	0.68%	0.1855%	1.015	0.0028%	1.49%
6	22-Apr-93	F5	0.1820%	0.78%	0.1857%	0.980	-0.0037%	-2.01%
7	22-Apr-93	F6	0.1839%	0.70%	0.1857%	0.990	-0.0019%	-1.01%
8	29-Apr-93	F5	0.1834%	0.79%	0.1859%	0.987	-0.0025%	-1.33%
9	29-Apr-93	F6	0.1870%	0.66%	0.1859%	1.006	0.0010%	0.56%
10	14-May-93	F5	0.1849%	0.79%	0.1863%	0.992	-0.0014%	-0.76%
11	14-May-93	F6	0.1867%	0.69%	0.1863%	1.002	0.0004%	0.24%
12	24-May-93	F6	0.1912%	0.70%	0.1865%	1.025	0.0047%	2.52%
13	1-Jun-93	F6	0.1893%	0.70%	0.1867%	1.014	0.0026%	1.37%
14	8-Jun-93	F5	0.1874%	0.70%	0.1869%	1.003	0.0005%	0.28%

**WEIGHT PERCENT 241-Am DATA
2ND QUARTER 1993**

EG&G MOUND

#	Date Measured	Instr. ID	241-Am	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	27-Apr-93	GENIE2	0.1874%	0.69%	0.1859%	1.008	0.0015%	0.83%
2	27-Apr-93	GENIE2	0.1861%	0.65%	0.1859%	1.001	0.0003%	0.14%
3	28-Apr-93	GENIE2	0.1876%	0.70%	0.1859%	1.009	0.0018%	0.94%
4	28-Apr-93	GENIE2	0.1876%	0.70%	0.1859%	1.009	0.0018%	0.95%
5	28-Apr-93	GENIE2	0.1875%	0.74%	0.1859%	1.008	0.0016%	0.84%
6	28-Apr-93	GENIE2	0.1874%	0.69%	0.1859%	1.008	0.0015%	0.83%
7	28-Apr-93	GENIE2	0.1880%	0.65%	0.1859%	1.012	0.0022%	1.16%
8	28-Apr-93	GENIE2	0.1874%	0.69%	0.1859%	1.008	0.0015%	0.83%
9	29-Apr-93	GENIE2	0.1883%	0.73%	0.1859%	1.013	0.0024%	1.27%
10	29-Apr-93	GENIE2	0.1875%	0.73%	0.1859%	1.009	0.0016%	0.86%
11	25-May-93	GENIE2	0.1879%	0.71%	0.1865%	1.007	0.0013%	0.72%
12	3-Jun-93	GENIE2	0.1878%	0.76%	0.1868%	1.005	0.0010%	0.54%
13	21-Jun-93	GENIE2	0.1886%	0.70%	0.1872%	1.008	0.0014%	0.75%

WEIGHT PERCENT 241-Am DATA

2ND QUARTER 1993

HANFORD

#	Date Measured	Instr. ID	241-Am	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	2026	0.1824%	0.42%	0.1852%	0.985	-0.0028%	-1.53%
2	1-Apr-93	1985	0.1836%	0.40%	0.1852%	0.991	-0.0016%	-0.88%
3	5-Apr-93	2026	0.1828%	0.34%	0.1853%	0.986	-0.0025%	-1.36%
4	5-Apr-93	2424	0.1847%	0.38%	0.1853%	0.997	-0.0006%	-0.34%
5	6-Apr-93	1985	0.1822%	0.38%	0.1854%	0.983	-0.0032%	-1.70%
6	12-Apr-93	1985	0.1829%	0.39%	0.1855%	0.986	-0.0026%	-1.40%
7	12-Apr-93	1985	0.1827%	0.39%	0.1855%	0.985	-0.0028%	-1.51%
8	12-Apr-93	2424	0.1853%	0.39%	0.1855%	0.999	-0.0002%	-0.11%
9	13-Apr-93	1985	0.1820%	0.39%	0.1855%	0.981	-0.0035%	-1.90%
10	19-Apr-93	2424	0.1837%	0.38%	0.1857%	0.989	-0.0020%	-1.06%
11	19-Apr-93	1985	0.1856%	0.37%	0.1857%	1.000	-0.0001%	-0.04%
12	26-Apr-93	2424	0.1850%	0.35%	0.1858%	0.995	-0.0008%	-0.45%
13	26-Apr-93	1985	0.1841%	0.37%	0.1858%	0.991	-0.0017%	-0.94%
14	28-Apr-93	2424	0.1853%	0.39%	0.1859%	0.997	-0.0006%	-0.32%
15	28-Apr-93	1985	0.1838%	0.41%	0.1859%	0.989	-0.0021%	-1.12%
16	3-May-93	1985	0.1832%	0.37%	0.1860%	0.985	-0.0028%	-1.51%
17	3-May-93	2424	0.1853%	0.35%	0.1860%	0.996	-0.0007%	-0.38%
18	4-May-93	2740	0.1829%	0.47%	0.1860%	0.983	-0.0031%	-1.69%
19	10-May-93	1985	0.1841%	0.41%	0.1862%	0.989	-0.0021%	-1.12%
20	12-May-93	2424	0.1856%	0.36%	0.1862%	0.997	-0.0006%	-0.34%
21	13-May-93	1985	0.1846%	0.37%	0.1863%	0.991	-0.0017%	-0.89%
22	13-May-93	2740	0.1830%	0.49%	0.1863%	0.983	-0.0033%	-1.75%
23	18-May-93	1985	0.1844%	0.38%	0.1864%	0.989	-0.0020%	-1.06%
24	18-May-93	2424	0.1856%	0.36%	0.1864%	0.996	-0.0008%	-0.42%
25	19-May-93	2740	0.1827%	0.47%	0.1864%	0.980	-0.0037%	-1.99%
26	24-May-93	2424	0.1843%	0.38%	0.1865%	0.988	-0.0022%	-1.19%
27	24-May-93	2740	0.1840%	0.49%	0.1865%	0.986	-0.0025%	-1.35%
28	25-May-93	1985	0.1842%	0.39%	0.1865%	0.987	-0.0023%	-1.26%
29	25-May-93	2424	0.1849%	0.39%	0.1865%	0.991	-0.0016%	-0.88%
30	26-May-93	2424	0.1848%	0.37%	0.1866%	0.991	-0.0018%	-0.95%
31	1-Jun-93	2740	0.1828%	0.49%	0.1867%	0.979	-0.0039%	-2.10%
32	2-Jun-93	2424	0.1849%	0.41%	0.1867%	0.990	-0.0018%	-0.99%
33	2-Jun-93	1985	0.1848%	0.37%	0.1867%	0.990	-0.0019%	-1.04%
34	3-Jun-93	1985	0.1838%	0.39%	0.1868%	0.984	-0.0030%	-1.59%
35	7-Jun-93	1985	0.1848%	0.35%	0.1869%	0.989	-0.0021%	-1.10%
36	7-Jun-93	2740	0.1835%	0.47%	0.1869%	0.982	-0.0034%	-1.80%
37	8-Jun-93	2424	0.1856%	0.35%	0.1869%	0.993	-0.0013%	-0.69%
38	14-Jun-93	1985	0.1854%	0.39%	0.1870%	0.991	-0.0016%	-0.87%
39	14-Jun-93	2740	0.1828%	0.45%	0.1870%	0.977	-0.0042%	-2.26%
40	15-Jun-93	2424	0.1854%	0.35%	0.1871%	0.991	-0.0017%	-0.89%
41	21-Jun-93	1985	0.1859%	0.35%	0.1872%	0.993	-0.0013%	-0.70%
42	21-Jun-93	2740	0.1835%	0.44%	0.1872%	0.980	-0.0037%	-1.98%
43	22-Jun-93	2424	0.1848%	0.34%	0.1872%	0.987	-0.0024%	-1.30%
44	28-Jun-93	1985	0.1860%	0.35%	0.1874%	0.993	-0.0014%	-0.73%
45	29-Jun-93	2424	0.1844%	0.36%	0.1874%	0.984	-0.0030%	-1.60%
46	30-Jun-93	2740	0.1842%	0.49%	0.1874%	0.983	-0.0032%	-1.72%

**WEIGHT PERCENT 241-Am DATA
2ND QUARTER 1993**

RFP - ANAL. LAB.

#	Date Measured	Instr. ID	241-Am	Uncert. 1 STD	Accepted Weight %	Ratio M/A	Weight % Error	Percent Error
1	1-Apr-93	TR#2	0.1860%	0.74%	0.1852%	1.004	0.0007%	0.39%
2	12-Apr-93	TR#2	0.1857%	0.68%	0.1855%	1.001	0.0002%	0.11%
3	12-Apr-93	ND#1	0.1856%	1.27%	0.1855%	1.001	0.0001%	0.06%
4	26-Apr-93	TR#2	0.1867%	0.71%	0.1858%	1.004	0.0008%	0.44%
5	26-Apr-93	ND#1	0.1853%	1.18%	0.1858%	0.997	-0.0005%	-0.28%
6	7-Jun-93	TR#2	0.1868%	0.69%	0.1869%	0.999	-0.0001%	-0.05%
7	16-Jun-93	TR#2	0.1882%	0.91%	0.1871%	1.006	0.0011%	0.60%
8	17-Jun-93	ND#1	0.1853%	1.36%	0.1871%	0.990	-0.0018%	-0.99%
9	18-Jun-93	TR#2	0.1886%	1.01%	0.1871%	1.008	0.0015%	0.78%
10	21-Jun-93	ND#1	0.1876%	1.52%	0.1872%	1.002	0.0004%	0.23%
11	21-Jun-93	TR#2	0.1873%	1.09%	0.1872%	1.001	0.0001%	0.06%
12	23-Jun-93	TR#2	0.1872%	1.34%	0.1873%	1.000	-0.0001%	-0.03%
13	25-Jun-93	ND#1	0.1859%	1.29%	0.1873%	0.992	-0.0014%	-0.76%
14	28-Jun-93	ND#1	0.1890%	1.47%	0.1874%	1.008	0.0016%	0.84%
15	30-Jun-93	TR#2	0.1890%	0.91%	0.1874%	1.009	0.0016%	0.86%

**SAVANNAH RIVER
NO DATA REPORTED**

CALORIMETRY EXCHANGE SAMPLE ON 01/01/89

Isotope	PPM Isotope / 239-Pu	% Isotope / Pu	% Uncertainty *
238-Pu	101	0.00944	0.6
239-Pu	1,000,000	93.8676	0.003
240-Pu	62,168	5.8600	0.06
241-Pu	2471	0.2338	0.57
242-Pu	306	0.0291	5.0
241-Am	1509	0.1429	0.4

Power = 0.9759 Watts +/- 0.07%

P-effective = 2.450 mW/g +/- 0.05%

* Uncertainties shown for Pu isotopes are one standard deviation, as found using the data reported by four labs which made the reference measurements on the sample in 1982.

CONSTANTS

Isotope	Decay Constant (day)**	Specific Power (W/g)
238-Pu	2.1630E-05	0.56757
239-Pu	7.8684E-08	1.9288E-03
240-Pu	2.8912E-07	7.0824E-03
241-Pu	1.3227E-04	3.4120E-03
242-Pu	5.0432E-09	1.1590E-04
241-Am	4.3768E-06	0.11420

** Reference: ANSI 15.22-1987 (Plutonium Bearing Solids - Calibration Techniques for Calorimetric Assay), page 22 (Table 4)

CALORIMETRY EXCHANGE PROGRAM MAILING LIST

John G. Fleissner
EG&G Rocky Flats
Bldg. 881
P. O. Box 464
Golden, CO 80402

Fred Lyons
EG&G Rocky Flats
Bldg. 750
P. O. Box 464
Golden, CO 80402

Jack McBride
EG&G Rocky Flats
Bldg. 750
P. O. Box 464
Golden, CO 80402

Jay Armstrong
Los Alamos National Laboratory
OS-2; MS E508
P. O. Box 1663
Los Alamos, NM 87545

Jon Hurd
Los Alamos National Laboratory
NMT-4; MS E513
P. O. Box 1663
Los Alamos, NM 87545

Sandy Hildner
Los Alamos National Laboratory
NMT-4; MS E513
P. O. Box 1663
Los Alamos, NM 87545

Larry Bruckner
Los Alamos National Laboratory
A-1; MS F600
P. O. Box 1663
Los Alamos, NM 87545

Carl Piechowski
U. S. Department of Energy
Office of Safeguards & Security
Planning & Technology Development
Branch NN-513.4/GTN
Washington, D.C. 20585

W. L. Louk
Westinghouse Hanford Company
MSIN T5-53
P. O. Box 1970
Richland, WA 99352

Patricia A. Hyman
EG&G Rocky Flats
Bldg. 750
P. O. Box 464
Golden, CO 80402

Jerald Zarret
EG&G Rocky Flats
T-371-D
P. O. Box 464
Golden, CO 80402

J. L. Valdez
EG&G Rocky Flats
T-771-K
P. O. Box 464
Golden, CO 80402

Dennis L. Brandt
Los Alamos National Laboratory
NMT-4; MS E513
P. O. Box 1663
Los Alamos, NM 87545

Faye Hsue
Los Alamos National Laboratory
NMT-4; MS E513
P. O. Box 1663
Los Alamos, NM 87545

Steven Long
Los Alamos National Laboratory
NMT-4; MS E513
P. O. Box 1663
Los Alamos, NM 87545

Kenneth Raschke
Lawrence Livermore National Lab.
L-231
P. O. Box 808
Livermore, CA 94550

David Crawford
U. S. Department of Energy
Office of Safeguards & Security
Material Control & Accountability Branch
NN-512.4/GTN
Washington, D.C. 20585

L. H. Taylor
Westinghouse Hanford Company
MSIN T6-16
P. O. Box 1970
Richland, WA 99352

Larry Navratil
EG&G Rocky Flats
Bldg. 125 Chem. Std. Lab.
P. O. Box 464
Golden, CO 80402

Ralph C. Nelson
EG&G Rocky Flats
T-771-F
P. O. Box 464
Golden, CO 80402

Louis Perez
Nuclear Safeguards Branch
Albuquerque Operations Office
P. O. Box 5400
Albuquerque, NM 87115

Thomas E. Sampson
Los Alamos National Laboratory
N-1; MS E540
P. O. Box 1663
Los Alamos, NM 87545

Teresa L. Cremers
Los Alamos National Laboratory
NMT-4; MS E513
P. O. Box 1663
Los Alamos, NM 87545

Mark Schanfein
Los Alamos National Laboratory
OS-2; MS E508
P. O. Box 1663
Los Alamos, NM 87545

Dave Parks
Lawrence Livermore National Lab.
L-347
P. O. Box 808
Livermore, CA 94550

Richard A. Hamilton
Westinghouse Hanford Company
MSIN T5-06
P. O. Box 1970
Richland, WA 99352

D. A. Puryear
Westinghouse Hanford Company
MSIN T4-40
P. O. Box 1970
Richland, WA 99352

CALORIMETRY EXCHANGE PROGRAM MAILING LIST

E. F. Riedel
Westinghouse Hanford Company
MSIN T6-50
P. O. Box 1970
Richland, WA 99352

Pat Santoliquido
New Brunswick Laboratory
Building 350
9800 Cass Avenue
Argonne, IL 60439

Linda B. Baker
Westinghouse Savannah River Corp.
772-3F
Aiken, SC 29801

Lori Chandler
Westinghouse Savannah River Corp.
232-H
Aiken, SC 29801

Gary P. Willis
Westinghouse Savannah River Corp.
245-F
Aiken, SC 29801

Tasker Beal
Martin Marietta Specialty Components,
M/S 032
P. O. Box 2908
Largo, FL 34649

W. C. Johnson
U. S. Department of Energy
Richland Operations Office/POB 551
Safeguards and Classification Branch
MSIN A6-35
Richland, WA 99352

Irene Spaletto
New Brunswick Laboratory
Building 350
9800 Cass Avenue
Argonne, IL 60439

Bill Boyce
Westinghouse Savannah River Corp.
232-H
Aiken, SC 29801

Jerry L. Meitin
Westinghouse Savannah River Corp.
245-F
Aiken, SC 29801

Ronnie Gunter
Westinghouse Savannah River Corp.
232-H
Aiken, SC 29801

Dr. C. D. Bingham
New Brunswick Laboratory
Bldg. 350
9800 Cass Avenue
Argonne, IL 60439

John Clark
Westinghouse Savannah River Corp.
703-10C
Aiken, SC 29801

Gerald Levi
Westinghouse Savannah River Corp.
232-H
Aiken, SC 29801

Chuck Harvel
Westinghouse Savannah River Corp.
245-F
Aiken, SC 29801

Steven Lee
Westinghouse Savannah River Corp.
772-3F
Aiken, SC 29801