

E M L ENVIRONMENTAL MEASUREMENTS LABORATORY

**Semi-Annual Report of the Department of Energy
Office of Environmental Management
Quality Assessment Program***

Colin G. Sanderson and Pamela Greenlaw

**Revised February, 1996*



MASTER

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**SEMI-ANNUAL REPORT OF THE DEPARTMENT OF ENERGY,
OFFICE OF ENVIRONMENTAL MANAGEMENT,
QUALITY ASSESSMENT PROGRAM***

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ABSTRACT

This report presents the results from the analysis of the 43rd set of environmental quality assessment samples (QAP XLIII) that were received on or before December 1, 1995.

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INTRODUCTION

This Quality Assessment Program (QAP) is designed to test the quality of the environmental measurements being reported to the Department of Energy by its contractors. Since 1976, real or synthetic environmental samples that have been prepared and thoroughly analyzed at the Environmental Measurements Laboratory (EML) have been distributed at first quarterly and then semi-annually to these contractors. Their results, which are returned to EML within 90 days, are compiled with EML's results and are reported back to the participating contractors 30 days later. A summary of the reported results is available to the participants 2 days after the reporting deadline via a modem-telephone connection to the EML computer.

This is the 47th report of this program. Preceding reports in this series are:

HASL-317	(February 1, 1977)	EML-431	(September 1, 1984)
HASL-319	(May 2, 1977)	EML-432	(November 1, 1984)
HASL-323	(August 1, 1977)	EML-438	(March 1, 1985)
HASL-331	(November 1, 1977)	EML-439	(March 1, 1984)
EML-336	(January 1, 1978)	EML-448	(October 1, 1985)
EML-337	(February 1, 1978)	EML-453	(March 1, 1986)
EML-340	(May 1, 1978)	EML-454	(March 1, 1986)
EML-343	(August 1, 1978)	EML-477	(October 1, 1986)
EML-346	(November 1, 1978)	EML-478	(March 1, 1987)
EML-350	(February 1, 1979)	EML-498	(September 1, 1987)
EML-351	(February 1, 1979)	EML-518	(January 2, 1989)
EML-354	(May 1, 1979)	EML-525*	(August 1, 1989)
EML-358	(August 1, 1979)	EML-526	(January 2, 1990)
EML-364	(November 1, 1979)	EML-530	(July 2, 1990)
EML-368	(February 1, 1980)	EML-535	(January 1, 1991)
EML-377	(August 1, 1979)	EML-539	(July 1, 1991)
EML-387	(February 1, 1981)	EML-543	(January 2, 1992)
EML-388	(February 1, 1981)	EML-546	(July 1, 1992)
EML-393	(August 3, 1981)	EML-551	(January 4, 1993)
EML-402	(February 1, 1982)	EML-556	(July 1, 1993)
EML-414	(April 1, 1983)	EML-559	(January 5, 1994)
EML-417	(September 1, 1983)	EML-561	(July 1, 1994)
EML-426	(March 1, 1984)	EML-565	(January 5, 1995)
PNL-5079	(April 1, 1984)	EML-569	(July 3, 1995)

*Please note this is a corrected report number.

RESULTS

The results from the analysis of QAP-XLIII samples received on or before December 1, 1995 are listed according to the TABLE OF CONTENTS. The data for the different kinds of samples are given in the following units:

Nuclear Species	
Air Filters	Bq filter ⁻¹
Soil	Bq kg ⁻¹
Tissue	Bq kg ⁻¹
Vegetation	Bq kg ⁻¹
Water	Bq L ⁻¹

The values for elemental uranium are reported in $\mu\text{g filter}^{-1}$, g, or mL. Some programs require the use of pCi as reporting units, the conversion can be found on page 3.

The 'EML value' listed in the tables to which the contractors' results are compared is the mean of replicate determinations for each nuclide. The EML uncertainty is the standard error of the mean. All other uncertainties are as reported by the participants.

With the issuance of this report, we are implementing a new evaluation system. The control limits were established from percentiles of historic data distributions (1982-1992). The evaluation of this historic data and the development of the control limits is presented in DOE report EML-564.

Participants' analytical performance is evaluated based on the historical analytical capabilities for individual analyte/matrix pairs. The criteria for acceptable performance, "a", has been chosen to be between the 15th and 85th percentile of the cumulative normalized distribution, which can be viewed as the middle 70% of all historic measurements. The acceptable with warning criteria, "W", is between the 5th and 15th percentile and between the 85th and 95th percentile. In other words, the middle 90% of all reported values are acceptable, while the outer 5th-15th (10%) and 85th-95th percentiles (10%) are in the warning area. The not acceptable criteria, "N", is established at less than the 5th percentile and greater than the 95th percentile, that is, the outer 10% of the historical data. These control limits for all 48 i/j pairs are listed in the Table of Control Limits & Performance Criteria (p. 4).

QAP is an external assessment of environmental radiological analyses. If your laboratory is performing other types of analyses (screening, high-level radiological), this evaluation system may not be appropriate, and you should continue to use an evaluation system appropriate to your data objectives.

TABLE OF CONTENTS

Summary Figure of QAP-XLIII Evaluations	1
Table of Statistical Summary	2
Table of Control Limits and Performance Criteria	4
Summary of Matrix Evaluations by Laboratory	6
Summary of Laboratory Evaluations by Matrix	29
Summary of Matrix Evaluations by Nuclide	38
Results Ordered by Laboratory	
AA (EML)	42
AC	44
AG	45
AI, AL	47, 48
AM	49
AN	50
AR	52
AU	54
AW	55
BA	56
BC	57
BE	58
BK	60
BL	61
BM	63
BN	65
BP	66
BQ	67
BR	68
BU	69
BX	70
CA	72
CH	73
CL	75
CP	77
CS	78
DC	79
EB	81
EE	82
EG	83
EI	84
EL	85
EP	86
ES	87
FG	89

FL	90
FM	91
FN	92
FS	93
GA	94
GE	95
GS	97
HA	98
HC	99
HI	100
HL	101
HS	102
ID	104
IE	105
IN	106
IS	107
IT	109
JP	111
KA	113
LA	114
LB	117
LH	118
LL	120
LM	121
LW	122
MA	123
ME	124
ML	125
NA	126
NC	128
NJ	129
NL	130
NR	131
NY	132
OD	133
OI	134
OL	135
OR	136
OT	137
PA	138
PB	139
PC	140
PI	143
RA	144
RD	145
RE	146
RF	148
RG	149
RI	150
RL	151
SA	152

SC	153
SK	154
SR	155
SS	156
SV	157
SW	158
TI	160
TM	162
TN	164
TO	166
UC	167
UK	168
UP	169
UY	170
WA	171
WC	173
WI	174
WN	175
WS	176
WV	177
YA	178

Results Ordered by Matrix/Nuclide

Air

²⁴¹ Am	180
¹⁴⁴ Ce	182
⁵⁷ Co	184
⁶⁰ Co	186
¹³⁴ Cs	188
¹³⁷ Cs	190
Gross Alpha (GA)	192
Gross Beta (GB)	194
⁵⁴ Mn	196
²³⁸ Pu	198
²³⁹ Pu	200
¹⁰⁶ Ru	202
¹²⁵ Sb	204
⁹⁰ Sr	206
²³⁴ U	207
²³⁵ U	208
²³⁸ U	209
U Bq	210
U μ g	211

Soil

²⁴¹ Am	212
¹³⁷ Cs	214
⁴⁰ K	217
²³⁸ Pu	219
²³⁹ Pu	221
⁹⁰ Sr	223
²³⁴ U	225
²³⁵ U	227
²³⁸ U	228
U Bq	230
U µg	231

Vegetation

²⁴¹ Am	232
²⁴⁴ Cm	233
⁶⁰ Co	234
¹³⁷ Cs	236
⁴⁰ K	238
²³⁹ Pu	240
⁹⁰ Sr	242

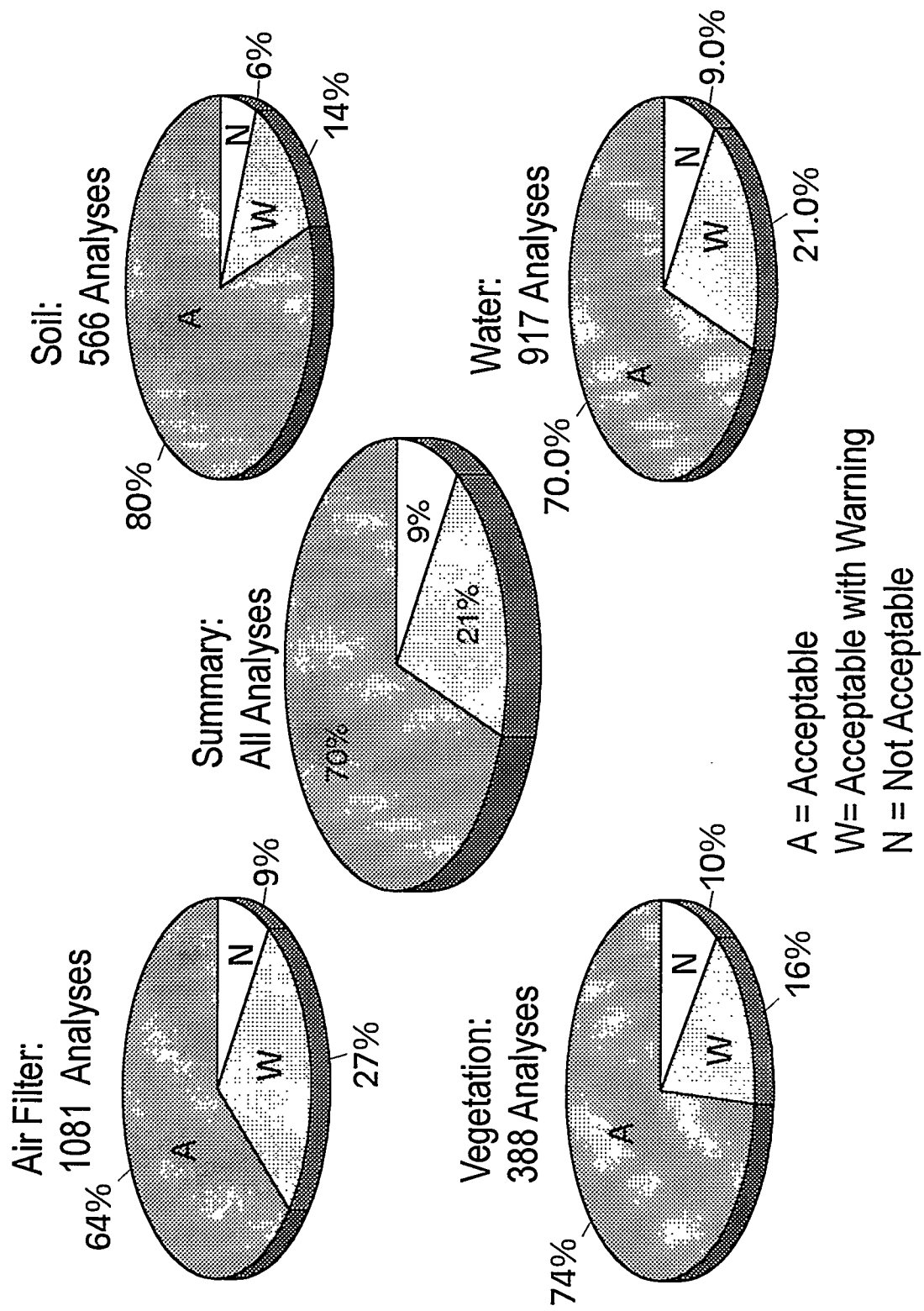
Water

²⁴¹ Am	243
⁶⁰ Co	245
¹³⁷ Cs	248
⁵⁵ Fe	251
Gross Alpha (GA)	252
Gross Beta (GB)	254
³ H	256
⁵⁴ Mn	258
²³⁸ Pu	261
²³⁹ Pu	263
⁹⁰ Sr	265
²³⁴ U	267
²³⁵ U	269
²³⁸ U	270
U Bq	272
U µg	273

List of Labcodes of Participating Laboratories for EML QAP XLIII

Laboratories Reporting Data	274
Laboratories Not Reporting Data	277

QAP 43 Summary of Evaluations of 2952 Reported Analyses



QAP43 Statistical Summary

Nuclide	EML Value	EML Error	Mean	Reported Values		No. of Reported Values
				EML Value	Std. Dev.	
				Median		
Matrix: AI						
AM241	0.189	0.006	1.01	0.98	0.18	48
CE144	52.100	5.000	0.78	0.70	0.16	73
CO 57	14.700	0.576	0.81	0.77	0.13	72
CO 60	32.600	0.977	0.90	0.87	0.11	76
CS134	17.900	0.479	0.90	0.90	0.11	78
CS137	7.250	0.500	0.86	0.86	0.11	74
GA	3.300	0.300	1.00	0.96	0.16	49
GB	1.120	0.100	1.35	1.34	0.35	48
MN 54	5.340	0.302	0.91	0.88	0.10	73
PU238	0.096	0.002	1.01	0.99	0.16	52
PU239	0.093	0.003	1.03	1.04	0.13	54
RU106	17.000	1.360	0.89	0.91	0.13	63
SB125	11.400	0.449	0.93	0.94	0.13	73
SR 90	1.060	0.037	1.05	1.04	0.21	37
U 234	0.052	0.001	1.16	1.16	0.18	35
U 235	0.002	0.000	1.10	1.03	0.28	4
U 238	0.053	0.002	1.16	1.09	0.24	37
U BQ	0.107	0.002	1.09	1.10	0.17	15
U UG	4.300	0.080	1.04	1.07	0.19	19

Matrix: SO

AM241	1.760	0.113	1.16	1.08	0.32	49
CS137	207.000	1.120	1.07	1.06	0.13	89
K 40	377.000	16.400	1.07	1.06	0.13	82
PU238	17.500	0.901	1.02	1.03	0.17	66
PU239	5.170	0.070	1.10	1.07	0.19	67
SR 90	7.810	0.280	1.08	1.00	0.32	36
U 234	29.500	2.320	0.91	0.95	0.15	43
U 235	1.460	0.197	0.93	0.98	0.20	12
U 238	30.400	2.080	0.88	0.89	0.16	49
U BQ	58.200	4.500	0.88	0.87	0.21	20
U UG	2.460	0.200	0.94	1.02	0.19	19

Matrix: VE

AM241	0.534	0.040	1.20	1.13	0.25	40
CM244	0.434	0.012	1.12	1.07	0.29	28
CO 60	9.170	0.257	0.89	0.87	0.14	50
CS137	97.200	1.930	1.13	1.12	0.16	73
K 40	352.000	8.160	1.07	1.06	0.15	67
PU239	0.980	0.115	1.03	0.96	0.24	50
SR 90	587.000	36.300	0.86	0.86	0.17	41

Statistical summary of "A" and "W" reported values

QAP43 Statistical Summary

Nuclide	EML Value	EML Error	Mean	Reported Values		No. of Reported Values
				EML Value	Std. Dev.	
				Median		
Matrix: WA						
AM241	1.950	0.084	0.95	0.95	0.14	60
CO 60	196.000	1.410	1.05	1.05	0.05	89
CS137	75.200	0.642	1.07	1.08	0.06	91
FE 55	101.000	4.000	1.18	1.19	0.29	14
GA	1310.000	100.000	0.92	0.92	0.17	54
GB	410.000	40.000	1.20	1.24	0.26	46
H 3	168.000	35.000	0.97	0.92	0.20	66
MN 54	44.900	0.726	1.09	1.10	0.07	85
PU238	1.410	0.096	1.00	0.99	0.11	63
PU239	0.272	0.033	1.03	1.02	0.11	62
SR 90	2.000	0.040	1.02	1.00	0.13	49
U 234	0.306	0.003	1.17	1.17	0.13	52
U 235	0.007	0.002	1.15	1.15	0.21	2
U 238	0.311	0.016	1.13	1.13	0.11	51
U BQ	0.624	0.016	1.09	1.12	0.22	19
U UG	0.025	0.002	1.10	1.12	0.11	28

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium in μg /filter, g or mL.

Conversion from Bq to pCi:

$$1 \text{ Bq} = 27 \text{ pCi}$$

Example: Convert 3 Bq to pCi

$$3 \text{ Bq} \times 27 \text{ pCi/Bq} = 81 \text{ pCi}$$

Statistical summary of "A" and "W" reported values

QAP43 Control Limits* by Matrix

Nuclide	Lower Limit	Lower Middle Limit	Upper Middle Limit	Upper Limit
Matrix: AI				
AM241	0.54	0.77	1.23	1.64
CE144	0.59	0.78	1.18	1.36
CO 57	0.64	0.79	1.16	1.45
CO 60	0.71	0.83	1.15	1.29
CS134	0.64	0.75	1.08	1.22
CS137	0.69	0.85	1.19	1.32
GA	0.50	0.80	1.20	1.50
GB	0.56	0.87	1.41	1.93
MN 54	0.74	0.85	1.20	1.36
PU238	0.48	0.69	1.14	1.75
PU239	0.57	0.79	1.15	1.60
RU106	0.59	0.66	1.25	1.76
SB125	0.57	0.81	1.13	1.38
SR 90	0.62	0.77	1.43	1.90
U 234	0.70	0.88	1.27	1.74
U 235	0.70	0.88	1.27	1.74
U 238	0.74	0.89	1.33	1.87
U BQ	0.79	0.87	1.50	1.77
U UG	0.28	0.75	1.27	1.77
Matrix: SO				
AM241	0.43	0.74	1.53	2.20
CS137	0.69	0.82	1.26	1.46
K 40	0.67	0.80	1.26	1.53
PU238	0.21	0.50	1.14	1.41
PU239	0.55	0.80	1.30	2.05
SR 90	0.50	0.73	1.51	2.19
U 234	0.46	0.70	1.10	1.29
U 235	0.46	0.70	1.19	1.73
U 238	0.45	0.70	1.19	1.73
U BQ	0.17	0.36	1.06	1.51
U UG	0.28	0.44	1.10	1.35
Matrix: VE				
AM241	0.52	0.77	1.60	2.23
CM244	0.35	0.81	1.75	2.46
CO 60	0.69	0.84	1.24	1.40
CS137	0.69	0.86	1.29	1.55
K 40	0.43	0.78	1.24	1.48
PU239	0.56	0.75	1.42	1.94
SR 90	0.44	0.68	1.12	1.39
Matrix: WA				
AM241	0.57	0.78	1.19	1.50
CO 60	0.79	0.89	1.10	1.18
CS137	0.82	0.93	1.15	1.29

*Control limits are reported as: the ratio of Reported Value vs. EML Value

QAP43 Control Limits* by Matrix

Nuclide	Lower Limit	Lower Middle Limit	Upper Middle Limit	Upper Limit
FE 55	0.30	0.72	1.27	1.59
GA	0.46	0.84	1.25	1.35
GB	0.75	0.98	1.47	1.64
H 3	0.64	0.83	1.28	1.85
MN 54	0.81	0.93	1.14	1.25
PU238	0.39	0.73	1.22	1.78
PU239	0.54	0.70	1.16	1.34
SR 90	0.57	0.84	1.16	1.43
U 234	0.76	0.89	1.19	1.53
U 235	0.76	0.89	1.19	1.53
U 238	0.77	0.88	1.11	1.45
U BQ	0.36	0.68	1.16	1.30
U UG	0.07	0.86	1.15	1.27

Control limits are established from historical QAP data.

Where historical data are insufficient, limits of $\pm 20\%$ and $\pm 50\%$ are applied.

The following are recommended performance criteria for analysis of environmental levels of analytes:

Acceptable: Lower Middle Limit $\leq A \leq$ Upper Middle Limit

Acceptable with Warning: Lower Limit $\leq W <$ Lower Middle Limit or Upper Middle Limit $< W \leq$ Upper Limit

Not Acceptable: $N <$ Lower Limit or $N >$ Upper Limit

*Control limits are reported as: the ratio of Reported Value vs. EML Value

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: AA							
AI	19	0	0	19	100	0	0
SO	11	0	0	11	100	0	0
VE	7	0	0	7	100	0	0
WA	16	0	0	16	100	0	0
Totals:	53	0	0	53	100%	0%	0%
Labcode: AC							
SO	2	0	0	2	100	0	0
WA	2	0	0	2	100	0	0
Totals:	4	0	0	4	100%	0%	0%
Labcode: AG							
AI	9	3	4	16	56	19	25
SO	10	0	0	10	100	0	0
VE	5	2	0	7	71	29	0
WA	9	3	0	12	75	25	0
Totals:	33	8	4	45	73%	18%	9%
Labcode: AI							
AI	4	4	3	11	36	36	27
SO	4	2	1	7	57	29	14
VE	3	1	0	4	75	25	0
WA	6	2	1	9	67	22	11
Totals:	17	9	5	31	55%	29%	16%
Labcode: AL							
AI	1	0	4	5	20	0	80
SO	1	0	0	1	100	0	0
VE	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	7	0	4	11	64%	0%	36%
Labcode: AM							
AI	3	8	1	12	25	67	8
SO	3	2	0	5	60	40	0
VE	2	0	1	3	67	0	33
WA	6	2	0	8	75	25	0
Totals:	14	12	2	28	50%	43%	7%
Labcode: AN							
AI	13	3	0	16	81	19	0
SO	8	0	0	8	100	0	0
VE	7	0	0	7	100	0	0
WA	12	0	0	12	100	0	0
Totals:	40	3	0	43	93%	7%	0%
Labcode: AR							
AI	11	3	3	17	65	18	18
SO	8	2	0	10	80	20	0
VE	2	4	1	7	29	57	14
WA	3	9	1	13	23	69	8
Totals:	24	18	5	47	51%	38%	11%
Labcode: AU							
AI	8	5	0	13	62	38	0
SO	3	3	1	7	43	43	14
VE	4	1	0	5	80	20	0
WA	10	1	0	11	91	9	0
Totals:	25	10	1	36	69%	28%	3%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: AW							
AI	7	1	0	8	88	13	0
WA	5	1	0	6	83	17	0
Totals:	12	2	0	14	86%	14%	0%
Labcode: BA							
AI	8	0	0	8	100	0	0
SO	1	0	0	1	100	0	0
VE	1	0	1	2	50	0	50
WA	7	1	0	8	88	13	0
Totals:	17	1	1	19	89%	5%	5%
Labcode: BC							
AI	5	3	1	9	56	33	11
SO	4	0	0	4	100	0	0
VE	3	1	0	4	75	25	0
WA	5	3	0	8	63	38	0
Totals:	17	7	1	25	68%	28%	4%
Labcode: BE							
AI	8	6	1	15	53	40	7
SO	10	0	0	10	100	0	0
VE	5	1	0	6	83	17	0
WA	10	1	2	13	77	8	15
Totals:	33	8	3	44	75%	18%	7%
Labcode: BK							
WA	3	0	0	3	100	0	0
Totals:	3	0	0	3	100%	0%	0%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: BL							
AI	14	5	1	20	70	25	5
SO	10	1	0	11	91	9	0
VE	7	1	0	8	88	13	0
WA	15	7	0	22	68	32	0
Totals:	46	14	1	61	75%	23%	2%
Labcode: BM							
AI	17	5	1	23	74	22	4
SO	4	3	0	7	57	43	0
VE	2	2	1	5	40	40	20
WA	5	0	0	5	100	0	0
Totals:	28	10	2	40	70%	25%	5%
Labcode: BN							
AI	9	1	0	10	90	10	0
SO	2	0	0	2	100	0	0
VE	2	0	1	3	67	0	33
WA	4	1	1	6	67	17	17
Totals:	17	2	2	21	81%	10%	10%
Labcode: BP							
AI	10	2	0	12	83	17	0
SO	7	0	0	7	100	0	0
VE	3	1	0	4	75	25	0
WA	8	1	0	9	89	11	0
Totals:	28	4	0	32	88%	13%	0%
Labcode: BD							
AI	3	5	0	8	38	63	0
SO	2	1	0	3	67	33	0
VE	1	1	1	3	33	33	33
WA	4	1	1	6	67	17	17

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	10	8	2	20	50%	40%	10%
Labcode: BR							
AI	4	4	0	8	50	50	0
SO	1	1	1	3	33	33	33
VE	0	1	2	3	0	33	67
WA	1	1	1	3	33	33	33
Totals:	6	7	4	17	35%	41%	24%
Labcode: BU							
AI	8	0	0	8	100	0	0
SO	2	0	0	2	100	0	0
VE	3	0	0	3	100	0	0
WA	4	1	0	5	80	20	0
Totals:	17	1	0	18	94%	6%	0%
Labcode: BX							
AI	8	6	1	15	53	40	7
SO	7	0	0	7	100	0	0
VE	4	1	1	6	67	17	17
WA	7	5	0	12	58	42	0
Totals:	26	12	2	40	65%	30%	5%
Labcode: CA							
AI	4	4	0	8	50	50	0
SO	1	0	0	1	100	0	0
WA	3	0	1	4	75	0	25
Totals:	8	4	1	13	62%	31%	8%
Labcode: CH							
AI	4	7	5	16	25	44	31

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
SO	6	2	0	8	75	25	0
VE	7	0	0	7	100	0	0
WA	10	2	0	12	83	17	0
Totals:	27	11	5	43	63%	26%	12%

Labcode: CL

AI	2	3	9	14	14	21	64
SO	7	1	1	9	78	11	11
VE	5	1	1	7	71	14	14
WA	4	4	3	11	36	36	27
Totals:	18	9	14	41	44%	22%	34%

Labcode: CP

AI	9	1	0	10	90	10	0
SO	2	0	0	2	100	0	0
VE	3	1	0	4	75	25	0
WA	4	1	1	6	67	17	17
Totals:	18	3	1	22	82%	14%	5%

Labcode: CS

AI	2	2	7	11	18	18	64
SO	4	0	0	4	100	0	0
VE	3	0	0	3	100	0	0
WA	3	1	0	4	75	25	0
Totals:	12	3	7	22	55%	14%	32%

Labcode: DC

AI	12	6	2	20	60	30	10
SO	9	1	0	10	90	10	0
VE	5	0	2	7	71	0	29
WA	8	2	4	14	57	14	29
Totals:	34	9	8	51	67%	18%	16%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: FB							
AI	0	0	12	12	0	0	100
SO	2	2	3	7	29	29	43
VE	2	0	4	6	33	0	67
WA	3	2	4	9	33	22	44
Totals:	7	4	23	34	21%	12%	68%
Labcode: FE							
AI	8	0	0	8	100	0	0
SO	2	0	0	2	100	0	0
VE	2	0	1	3	67	0	33
WA	6	1	0	7	86	14	0
Totals:	18	1	1	20	90%	5%	5%
Labcode: EG							
AI	5	4	1	10	50	40	10
SO	3	0	0	3	100	0	0
VE	3	1	0	4	75	25	0
WA	8	1	0	9	89	11	0
Totals:	19	6	1	26	73%	23%	4%
Labcode: FI							
SO	2	1	0	3	67	33	0
VE	4	0	0	4	100	0	0
WA	0	1	0	1	0	100	0
Totals:	6	2	0	8	75%	25%	0%
Labcode: FL							
AI	5	6	2	13	38	46	15
SO	6	0	1	7	86	0	14
VE	4	1	0	5	80	20	0
WA	4	2	2	8	50	25	25

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	19	9	5	33	58%	27%	15%
Labcode: EP							
AI	8	2	0	10	80	20	0
SO	2	0	0	2	100	0	0
VE	1	0	0	1	100	0	0
WA	6	1	2	9	67	11	22
Totals:	17	3	2	22	77%	14%	9%
Labcode: ES							
AI	11	8	0	19	58	42	0
SO	7	3	1	11	64	27	9
VE	7	1	0	8	88	13	0
WA	10	4	1	15	67	27	7
Totals:	35	16	2	53	66%	30%	4%
Labcode: FG							
AI	9	0	1	10	90	0	10
SO	2	2	0	4	50	50	0
WA	4	2	3	9	44	22	33
Totals:	15	4	4	23	65%	17%	17%
Labcode: FL							
AI	7	6	0	13	54	46	0
SO	6	0	0	6	100	0	0
VE	3	1	0	4	75	25	0
WA	7	1	1	9	78	11	11
Totals:	23	8	1	32	72%	25%	3%
Labcode: FM							
AI	6	2	0	8	75	25	0

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
WA	3	1	0	4	75	25	0
Totals:	9	3	0	12	75%	25%	0%

Labcode: FN

AI	5	3	0	8	63	38	0
SO	3	0	1	4	75	0	25
VE	2	0	1	3	67	0	33
WA	4	0	0	4	100	0	0
Totals:	14	3	2	19	74%	16%	11%

Labcode: FS

SO	7	0	0	7	100	0	0
Totals:	7	0	0	7	100%	0%	0%

Labcode: GA

AI	6	7	0	13	46	54	0
SO	8	0	0	8	100	0	0
VE	5	1	0	6	83	17	0
WA	9	0	0	9	100	0	0
Totals:	28	8	0	36	78%	22%	0%

Labcode: GE

AI	13	2	0	15	87	13	0
SO	7	1	1	9	78	11	11
VE	5	2	0	7	71	29	0
WA	12	2	0	14	86	14	0
Totals:	37	7	1	45	82%	16%	2%

Labcode: GS

WA	2	1	0	3	67	33	0
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QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	2	1	0	3	67%	33%	0%
Labcode: HA							
SO	4	4	1	9	44	44	11
WA	5	5	4	14	36	36	29
Totals:	9	9	5	23	39%	39%	22%
Labcode: HC							
AI	1	1	0	2	50	50	0
WA	2	1	0	3	67	33	0
Totals:	3	2	0	5	60%	40%	0%
Labcode: HI							
AI	6	3	1	10	60	30	10
SO	1	0	1	2	50	0	50
VE	1	0	1	2	50	0	50
WA	3	3	2	8	38	38	25
Totals:	11	6	5	22	50%	27%	23%
Labcode: HL							
SO	5	3	1	9	56	33	11
WA	4	7	1	12	33	58	8
Totals:	9	10	2	21	43%	48%	10%
Labcode: HS							
AI	8	4	1	13	62	31	8
SO	8	1	0	9	89	11	0
VE	6	0	0	6	100	0	0
WA	11	0	1	12	92	0	8

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	33	5	2	40	83%	13%	5%
Labcode: ID							
AI	7	5	1	13	54	38	8
SO	4	1	1	6	67	17	17
VE	3	1	1	5	60	20	20
WA	6	0	0	6	100	0	0
Totals:	20	7	3	30	67%	23%	10%
Labcode: IE							
AI	10	2	0	12	83	17	0
SO	6	1	0	7	86	14	0
VE	6	0	0	6	100	0	0
WA	10	1	0	11	91	9	0
Totals:	32	4	0	36	89%	11%	0%
Labcode: IN							
AI	4	4	0	8	50	50	0
SO	5	0	0	5	100	0	0
VE	3	0	0	3	100	0	0
WA	5	3	1	9	56	33	11
Totals:	17	7	1	25	68%	28%	4%
Labcode: IS							
AI	11	4	2	17	65	24	12
SO	6	2	1	9	67	22	11
VE	6	0	0	6	100	0	0
WA	5	6	2	13	38	46	15
Totals:	28	12	5	45	62%	27%	11%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: IT							
AI	9	4	2	15	60	27	13
SO	7	0	0	7	100	0	0
VE	5	1	0	6	83	17	0
WA	4	5	2	11	36	45	18
Totals:	25	10	4	39	64%	26%	10%
Labcode: JP							
AI	10	3	2	15	67	20	13
SO	6	2	1	9	67	22	11
VE	6	1	0	7	86	14	0
WA	8	3	2	13	62	23	15
Totals:	30	9	5	44	68%	20%	11%
Labcode: KA							
AI	2	0	0	2	100	0	0
SO	5	0	0	5	100	0	0
WA	10	1	0	11	91	9	0
Totals:	17	1	0	18	94%	6%	0%
Labcode: LA							
AI	17	4	0	21	81	19	0
SO	11	3	4	18	61	17	22
VE	6	9	3	18	33	50	17
WA	28	4	1	33	85	12	3
Totals:	62	20	8	90	69%	22%	9%
Labcode: LB							
AI	9	1	0	10	90	10	0
SO	3	0	0	3	100	0	0
VE	1	0	2	3	33	0	67
WA	3	2	1	6	50	33	17

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	16	3	3	22	73%	14%	14%
Labcode: LH							
AI	9	5	2	16	56	31	13
SO	8	0	0	8	100	0	0
VE	4	1	1	6	67	17	17
WA	8	4	1	13	62	31	8
Totals:	29	10	4	43	67%	23%	9%
Labcode: LL							
AI	11	2	0	13	85	15	0
SO	4	0	0	4	100	0	0
VE	3	1	0	4	75	25	0
WA	9	0	0	9	100	0	0
Totals:	27	3	0	30	90%	10%	0%
Labcode: LM							
AI	9	1	0	10	90	10	0
SO	0	0	2	2	0	0	100
WA	1	0	3	4	25	0	75
Totals:	10	1	5	16	63%	6%	31%
Labcode: LW							
SO	2	0	0	2	100	0	0
VE	3	0	1	4	75	0	25
WA	6	0	0	6	100	0	0
Totals:	11	0	1	12	92%	0%	8%
Labcode: MA							
SO	2	1	0	3	67	33	0
VE	2	0	0	2	100	0	0

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
Totals:	4	1	0	5	80%	20%	0%
Labcode: ME							
AI	8	2	1	11	73	18	9
SO	0	2	0	2	0	100	0
VE	1	1	1	3	33	33	33
WA	3	0	0	3	100	0	0
Totals:	12	5	2	19	63%	26%	11%
Labcode: ML							
AI	4	4	3	11	36	36	27
SO	5	4	0	9	56	44	0
VE	1	0	0	1	100	0	0
WA	3	0	4	7	43	0	57
Totals:	13	8	7	28	46%	29%	25%
Labcode: NA							
AI	8	5	2	15	53	33	13
SO	8	0	1	9	89	0	11
VE	6	0	0	6	100	0	0
WA	6	4	1	11	55	36	9
Totals:	28	9	4	41	68%	22%	10%
Labcode: NC							
AI	7	0	1	8	88	0	13
SO	1	0	0	1	100	0	0
VE	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0
Totals:	13	0	1	14	93%	0%	7%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: NJ							
AI	1	1	0	2	50	50	0
SO	5	0	0	5	100	0	0
VE	2	1	1	4	50	25	25
WA	6	2	0	8	75	25	0
Totals:	14	4	1	19	74%	21%	5%
Labcode: NL							
AI	11	0	0	11	100	0	0
SO	6	1	0	7	86	14	0
WA	4	1	0	5	80	20	0
Totals:	21	2	0	23	91%	9%	0%
Labcode: NR							
SO	2	0	0	2	100	0	0
VE	2	1	0	3	67	33	0
Totals:	4	1	0	5	80%	20%	0%
Labcode: NY							
WA	2	0	0	2	100	0	0
Totals:	2	0	0	2	100%	0%	0%
Labcode: OD							
AI	6	5	1	12	50	42	8
WA	13	2	1	16	81	13	6
Totals:	19	7	2	28	68%	25%	7%
Labcode: OI							
AI	0	1	1	2	0	50	50

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
SO	0	1	1	2	0	50	50
VE	0	0	1	1	0	0	100
WA	0	1	1	2	0	50	50
Totals:	0	3	4	7	0%	43%	57%

Labcode: OL

AI	4	4	0	8	50	50	0
SO	2	0	0	2	100	0	0
VE	2	1	0	3	67	33	0
WA	3	0	0	3	100	0	0
Totals:	11	5	0	16	69%	31%	0%

Labcode: OR

AI	13	0	0	13	100	0	0
SO	6	1	0	7	86	14	0
VE	7	0	0	7	100	0	0
WA	8	1	0	9	89	11	0
Totals:	34	2	0	36	94%	6%	0%

Labcode: OT

AI	10	1	2	13	77	8	15
SO	5	0	1	6	83	0	17
VE	3	3	1	7	43	43	14
WA	6	5	0	11	55	45	0
Totals:	24	9	4	37	65%	24%	11%

Labcode: PA

AI	2	3	0	5	40	60	0
SO	1	2	0	3	33	67	0
VE	1	0	0	1	100	0	0
WA	2	3	1	6	33	50	17
Totals:	6	8	1	15	40%	53%	7%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: PB							
AI	2	1	0	3	67	33	0
SO	3	0	0	3	100	0	0
VE	1	0	0	1	100	0	0
WA	5	1	0	6	83	17	0
Totals:	11	2	0	13	85%	15%	0%
Labcode: PC							
AI	32	0	0	32	100	0	0
SO	18	4	0	22	82	18	0
VE	16	2	0	18	89	11	0
WA	16	4	0	20	80	20	0
Totals:	82	10	0	92	89%	11%	0%
Labcode: PI							
AI	2	0	0	2	100	0	0
SO	2	0	0	2	100	0	0
WA	4	1	0	5	80	20	0
Totals:	8	1	0	9	89%	11%	0%
Labcode: RA							
AI	11	0	0	11	100	0	0
SO	9	0	0	9	100	0	0
VE	5	0	1	6	83	0	17
Totals:	25	0	1	26	96%	0%	4%
Labcode: RD							
AI	2	0	0	2	100	0	0
Totals:	2	0	0	2	100%	0%	0%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: RE							
AI	6	7	1	14	43	50	7
SO	6	1	0	7	86	14	0
VE	3	3	0	6	50	50	0
WA	9	2	0	11	82	18	0
Totals:	24	13	1	38	63%	34%	3%

Labcode: RF							
AI	8	0	0	8	100	0	0
SO	6	2	0	8	75	25	0
VE	4	0	0	4	100	0	0
WA	7	2	0	9	78	22	0
Totals:	25	4	0	29	86%	14%	0%

Labcode: RG							
SO	4	2	0	6	67	33	0
WA	5	4	0	9	56	44	0
Totals:	9	6	0	15	60%	40%	0%

Labcode: RI							
AI	7	5	1	13	54	38	8
SO	1	1	0	2	50	50	0
VE	1	0	0	1	100	0	0
WA	5	2	1	8	63	25	13
Totals:	14	8	2	24	58%	33%	8%

Labcode: RI							
AI	3	3	0	6	50	50	0
SO	0	0	1	1	0	0	100
VE	0	1	2	3	0	33	67
WA	3	0	0	3	100	0	0

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	6	4	3	13	46%	31%	23%
Labcode: SA							
AI	3	4	0	7	43	57	0
SO	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0
Totals:	8	4	0	12	67%	33%	0%
Labcode: SC							
AI	2	0	0	2	100	0	0
SO	2	0	0	2	100	0	0
WA	6	3	1	10	60	30	10
Totals:	10	3	1	14	71%	21%	7%
Labcode: SK							
AI	8	0	0	8	100	0	0
SO	4	0	0	4	100	0	0
VE	2	1	0	3	67	33	0
WA	9	1	0	10	90	10	0
Totals:	23	2	0	25	92%	8%	0%
Labcode: SR							
AI	8	6	1	15	53	40	7
SO	4	0	0	4	100	0	0
VE	4	1	0	5	80	20	0
WA	6	2	3	11	55	18	27
Totals:	22	9	4	35	63%	26%	11%
Labcode: SS							
AI	0	1	7	8	0	13	88
SO	2	0	0	2	100	0	0

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
VE	3	0	0	3	100	0	0
WA	2	0	1	3	67	0	33
Totals:	7	1	8	16	44%	6%	50%
Labcode: SV							
WA	4	0	2	6	67	0	33
Totals:	4	0	2	6	67%	0%	33%
Labcode: SW							
AI	6	7	2	15	40	47	13
SO	5	1	3	9	56	11	33
VE	2	0	4	6	33	0	67
WA	7	1	3	11	64	9	27
Totals:	20	9	12	41	49%	22%	29%
Labcode: TI							
AI	13	4	0	17	76	24	0
SO	8	1	0	9	89	11	0
VE	7	0	0	7	100	0	0
WA	11	3	0	14	79	21	0
Totals:	39	8	0	47	83%	17%	0%
Labcode: TM							
AI	15	3	0	18	83	17	0
SO	9	0	1	10	90	0	10
VE	6	1	0	7	86	14	0
WA	9	5	2	16	56	31	13
Totals:	39	9	3	51	76%	18%	6%
Labcode: TN							
AI	8	6	2	16	50	38	13

QAP43 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
SO	10	0	0	10	100	0	0
VE	6	0	1	7	86	0	14
WA	9	5	1	15	60	33	7
Totals:	33	11	4	48	69%	23%	8%

Labcode: TO

AI	5	4	1	10	50	40	10
SO	2	3	2	7	29	43	29
VE	3	3	0	6	50	50	0
WA	7	1	3	11	64	9	27
Totals:	17	11	6	34	50%	32%	18%

Labcode: UC

AI	3	1	0	4	75	25	0
SO	2	0	0	2	100	0	0
VE	2	1	0	3	67	33	0
WA	5	1	0	6	83	17	0
Totals:	12	3	0	15	80%	20%	0%

Labcode: UK

AI	3	8	1	12	25	67	8
SO	5	0	0	5	100	0	0
WA	5	1	3	9	56	11	33
Totals:	13	9	4	26	50%	35%	15%

Labcode: UP

AI	4	11	1	16	25	69	6
SO	6	0	0	6	100	0	0
WA	9	4	0	13	69	31	0
Totals:	19	15	1	35	54%	43%	3%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: UY							
AI	9	7	0	16	56	44	0
SO	6	3	0	9	67	33	0
WA	7	5	1	13	54	38	8
Totals:	22	15	1	38	58%	39%	3%
Labcode: WA							
AI	12	5	0	17	71	29	0
SO	9	0	0	9	100	0	0
VE	5	1	0	6	83	17	0
WA	7	3	3	13	54	23	23
Totals:	33	9	3	45	73%	20%	7%
Labcode: WC							
AI	9	6	0	15	60	40	0
SO	2	0	0	2	100	0	0
VE	2	1	0	3	67	33	0
WA	10	1	0	11	91	9	0
Totals:	23	8	0	31	74%	26%	0%
Labcode: WI							
AI	7	0	0	7	100	0	0
WA	0	2	1	3	0	67	33
Totals:	7	2	1	10	70%	20%	10%
Labcode: WN							
AI	12	4	0	16	75	25	0
SO	6	1	1	8	75	13	13
WA	11	2	0	13	85	15	0
Totals:	29	7	1	37	78%	19%	3%

QAP43 Summary of Matrix Evaluations by Laboratory

Evaluation Summary				Evaluation Percentages			
Matrix	A	W	N	Total Analyses	%A	%W	%N
Labcode: WS							
SO	2	1	0	3	67	33	0
Totals:	2	1	0	3	67%	33%	0%
Labcode: WV							
AI	1	1	0	2	50	50	0
WA	6	1	0	7	86	14	0
Totals:	7	2	0	9	78%	22%	0%
Labcode: YA							
AI	7	3	0	10	70	30	0
SO	6	0	0	6	100	0	0
VE	9	0	0	9	100	0	0
WA	12	3	0	15	80	20	0
Totals:	34	6	0	40	85%	15%	0%

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: AI

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AA	19	0	0	19	100	0	0
AG	9	3	4	16	56	19	25
AI	4	4	3	11	36	36	27
AL	1	0	4	5	20	0	80
AM	3	8	1	12	25	67	8
AN	13	3	0	16	81	19	0
AR	11	3	3	17	65	18	18
AU	8	5	0	13	62	38	0
AW	7	1	0	8	88	13	0
BA	8	0	0	8	100	0	0
BC	5	3	1	9	56	33	11
BE	8	6	1	15	53	40	7
BL	14	5	1	20	70	25	5
BM	17	5	1	23	74	22	4
BN	9	1	0	10	90	10	0
BP	10	2	0	12	83	17	0
BQ	3	5	0	8	38	63	0
BR	4	4	0	8	50	50	0
BU	8	0	0	8	100	0	0
BX	8	6	1	15	53	40	7
CA	4	4	0	8	50	50	0
CH	4	7	5	16	25	44	31
CL	2	3	9	14	14	21	64
CP	9	1	0	10	90	10	0
CS	2	2	7	11	18	18	64
DC	12	6	2	20	60	30	10
EB	0	0	12	12	0	0	100
EE	8	0	0	8	100	0	0
EG	5	4	1	10	50	40	10
EL	5	6	2	13	38	46	15
EP	8	2	0	10	80	20	0
ES	11	8	0	19	58	42	0
FG	9	0	1	10	90	0	10
FL	7	6	0	13	54	46	0
FM	6	2	0	8	75	25	0
FN	5	3	0	8	63	38	0
GA	6	7	0	13	46	54	0
GE	13	2	0	15	87	13	0
HC	1	1	0	2	50	50	0
HI	6	3	1	10	60	30	10
HS	8	4	1	13	62	31	8
ID	7	5	1	13	54	38	8
IE	10	2	0	12	83	17	0
IN	4	4	0	8	50	50	0
IS	11	4	2	17	65	24	12
IT	9	4	2	15	60	27	13
JP	10	3	2	15	67	20	13
KA	2	0	0	2	100	0	0
LA	17	4	0	21	81	19	0
LB	9	1	0	10	90	10	0
LH	9	5	2	16	56	31	13
LL	11	2	0	13	85	15	0
LM	9	1	0	10	90	10	0
ME	8	2	1	11	73	18	9

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: AI

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
ML	4	4	3	11	36	36	27
NA	8	5	2	15	53	33	13
NC	7	0	1	8	88	0	13
NJ	1	1	0	2	50	50	0
NL	11	0	0	11	100	0	0
OD	6	5	1	12	50	42	8
OI	0	1	1	2	0	50	50
OL	4	4	0	8	50	50	0
OR	13	0	0	13	100	0	0
OT	10	1	2	13	77	8	15
PA	2	3	0	5	40	60	0
PB	2	1	0	3	67	33	0
PC	32	0	0	32	100	0	0
PI	2	0	0	2	100	0	0
RA	11	0	0	11	100	0	0
RD	2	0	0	2	100	0	0
RE	6	7	1	14	43	50	7
RF	8	0	0	8	100	0	0
RI	7	5	1	13	54	38	8
RL	3	3	0	6	50	50	0
SA	3	4	0	7	43	57	0
SC	2	0	0	2	100	0	0
SK	8	0	0	8	100	0	0
SR	8	6	1	15	53	40	7
SS	0	1	7	8	0	13	88
SW	6	7	2	15	40	47	13
TI	13	4	0	17	76	24	0
TM	15	3	0	18	83	17	0
TN	8	6	2	16	50	38	13
TO	5	4	1	10	50	40	10
UC	3	1	0	4	75	25	0
UK	3	8	1	12	25	67	8
UP	4	11	1	16	25	69	6
UY	9	7	0	16	56	44	0
WA	12	5	0	17	71	29	0
WC	9	6	0	15	60	40	0
WI	7	0	0	7	100	0	0
WN	12	4	0	16	75	25	0
WV	1	1	0	2	50	50	0
YA	7	3	0	10	70	30	0
Totals							
94 Labs:	690	293	98	1081	64%	27%	9%

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: SO

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AA	11	0	0	11	100	0	0
AC	2	0	0	2	100	0	0
AG	10	0	0	10	100	0	0
AI	4	2	1	7	57	29	14
AL	1	0	0	1	100	0	0
AM	3	2	0	5	60	40	0
AN	8	0	0	8	100	0	0
AR	8	2	0	10	80	20	0
AU	3	3	1	7	43	43	14
BA	1	0	0	1	100	0	0
BC	4	0	0	4	100	0	0
BE	10	0	0	10	100	0	0
BL	10	1	0	11	91	9	0
BM	4	3	0	7	57	43	0
BN	2	0	0	2	100	0	0
BP	7	0	0	7	100	0	0
BQ	2	1	0	3	67	33	0
BR	1	1	1	3	33	33	33
BU	2	0	0	2	100	0	0
BX	7	0	0	7	100	0	0
CA	1	0	0	1	100	0	0
CH	6	2	0	8	75	25	0
CL	7	1	1	9	78	11	11
CP	2	0	0	2	100	0	0
CS	4	0	0	4	100	0	0
DC	9	1	0	10	90	10	0
EB	2	2	3	7	29	29	43
EE	2	0	0	2	100	0	0
EG	3	0	0	3	100	0	0
EI	2	1	0	3	67	33	0
EL	6	0	1	7	86	0	14
EP	2	0	0	2	100	0	0
ES	7	3	1	11	64	27	9
FG	2	2	0	4	50	50	0
FL	6	0	0	6	100	0	0
FN	3	0	1	4	75	0	25
FS	7	0	0	7	100	0	0
GA	8	0	0	8	100	0	0
GE	7	1	1	9	78	11	11
HA	4	4	1	9	44	44	11
HI	1	0	1	2	50	0	50
HL	5	3	1	9	56	33	11
HS	8	1	0	9	89	11	0
ID	4	1	1	6	67	17	17
IE	6	1	0	7	86	14	0
IN	5	0	0	5	100	0	0
IS	6	2	1	9	67	22	11
IT	7	0	0	7	100	0	0
JP	6	2	1	9	67	22	11
KA	5	0	0	5	100	0	0
LA	11	3	4	18	61	17	22
LB	3	0	0	3	100	0	0
LH	8	0	0	8	100	0	0
LL	4	0	0	4	100	0	0

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: SO

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
LM	0	0	2	2	0	0	100
LW	2	0	0	2	100	0	0
MA	2	1	0	3	67	33	0
ME	0	2	0	2	0	100	0
ML	5	4	0	9	56	44	0
NA	8	0	1	9	89	0	11
NC	1	0	0	1	100	0	0
NJ	5	0	0	5	100	0	0
NL	6	1	0	7	86	14	0
NR	2	0	0	2	100	0	0
OI	0	1	1	2	0	50	50
OL	2	0	0	2	100	0	0
OR	6	1	0	7	86	14	0
OT	5	0	1	6	83	0	17
PA	1	2	0	3	33	67	0
PB	3	0	0	3	100	0	0
PC	18	4	0	22	82	18	0
PI	2	0	0	2	100	0	0
RA	9	0	0	9	100	0	0
RE	6	1	0	7	86	14	0
RF	6	2	0	8	75	25	0
RG	4	2	0	6	67	33	0
RI	1	1	0	2	50	50	0
RL	0	0	1	1	0	0	100
SA	2	0	0	2	100	0	0
SC	2	0	0	2	100	0	0
SK	4	0	0	4	100	0	0
SR	4	0	0	4	100	0	0
SS	2	0	0	2	100	0	0
SW	5	1	3	9	56	11	33
TI	8	1	0	9	89	11	0
TM	9	0	1	10	90	0	10
TN	10	0	0	10	100	0	0
TO	2	3	2	7	29	43	29
UC	2	0	0	2	100	0	0
UK	5	0	0	5	100	0	0
UP	6	0	0	6	100	0	0
UY	6	3	0	9	67	33	0
WA	9	0	0	9	100	0	0
WC	2	0	0	2	100	0	0
WN	6	1	1	8	75	13	13
WS	2	1	0	3	67	33	0
YA	6	0	0	6	100	0	0

Totals							
97 Labs:	455	77	34	566	80%	14%	6%

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: VE

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AA	7	0	0	7	100	0	0
AG	5	2	0	7	71	29	0
AI	3	1	0	4	75	25	0
AL	2	0	0	2	100	0	0
AM	2	0	1	3	67	0	33
AN	7	0	0	7	100	0	0
AR	2	4	1	7	29	57	14
AU	4	1	0	5	80	20	0
BA	1	0	1	2	50	0	50
BC	3	1	0	4	75	25	0
BE	5	1	0	6	83	17	0
BL	7	1	0	8	88	13	0
BM	2	2	1	5	40	40	20
BN	2	0	1	3	67	0	33
BP	3	1	0	4	75	25	0
BQ	1	1	1	3	33	33	33
BR	0	1	2	3	0	33	67
BU	3	0	0	3	100	0	0
BX	4	1	1	6	67	17	17
CH	7	0	0	7	100	0	0
CL	5	1	1	7	71	14	14
CP	3	1	0	4	75	25	0
CS	3	0	0	3	100	0	0
DC	5	0	2	7	71	0	29
EB	2	0	4	6	33	0	67
EE	2	0	1	3	67	0	33
EG	3	1	0	4	75	25	0
EI	4	0	0	4	100	0	0
EL	4	1	0	5	80	20	0
EP	1	0	0	1	100	0	0
ES	7	1	0	8	88	13	0
FL	3	1	0	4	75	25	0
FN	2	0	1	3	67	0	33
GA	5	1	0	6	83	17	0
GE	5	2	0	7	71	29	0
HI	1	0	1	2	50	0	50
HS	6	0	0	6	100	0	0
ID	3	1	1	5	60	20	20
IE	6	0	0	6	100	0	0
IN	3	0	0	3	100	0	0
IS	6	0	0	6	100	0	0
IT	5	1	0	6	83	17	0
JP	6	1	0	7	86	14	0
LA	6	9	3	18	33	50	17
LB	1	0	2	3	33	0	67
LH	4	1	1	6	67	17	17
LL	3	1	0	4	75	25	0
LW	3	0	1	4	75	0	25
MA	2	0	0	2	100	0	0
ME	1	1	1	3	33	33	33
ML	1	0	0	1	100	0	0
NA	6	0	0	6	100	0	0
NC	2	0	0	2	100	0	0
NJ	2	1	1	4	50	25	25

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: VE

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
NR	2	1	0	3	67	33	0
OI	0	0	1	1	0	0	100
OL	2	1	0	3	67	33	0
OR	7	0	0	7	100	0	0
OT	3	3	1	7	43	43	14
PA	1	0	0	1	100	0	0
PB	1	0	0	1	100	0	0
PC	16	2	0	18	89	11	0
RA	5	0	1	6	83	0	17
RE	3	3	0	6	50	50	0
RF	4	0	0	4	100	0	0
RI	1	0	0	1	100	0	0
RL	0	1	2	3	0	33	67
SK	2	1	0	3	67	33	0
SR	4	1	0	5	80	20	0
SS	3	0	0	3	100	0	0
SW	2	0	4	6	33	0	67
TI	7	0	0	7	100	0	0
TM	6	1	0	7	86	14	0
TN	6	0	1	7	86	0	14
TO	3	3	0	6	50	50	0
UC	2	1	0	3	67	33	0
WA	5	1	0	6	83	17	0
WC	2	1	0	3	67	33	0
YA	9	0	0	9	100	0	0
Totals							
79 Labs:	287	62	39	388	74%	16%	10%

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: WA

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AA	16	0	0	16	100	0	0
AC	2	0	0	2	100	0	0
AG	9	3	0	12	75	25	0
AI	6	2	1	9	67	22	11
AL	3	0	0	3	100	0	0
AM	6	2	0	8	75	25	0
AN	12	0	0	12	100	0	0
AR	3	9	1	13	23	69	8
AU	10	1	0	11	91	9	0
AW	5	1	0	6	83	17	0
BA	7	1	0	8	88	13	0
BC	5	3	0	8	63	38	0
BE	10	1	2	13	77	8	15
BK	3	0	0	3	100	0	0
BL	15	7	0	22	68	32	0
BM	5	0	0	5	100	0	0
BN	4	1	1	6	67	17	17
BP	8	1	0	9	89	11	0
BQ	4	1	1	6	67	17	17
BR	1	1	1	3	33	33	33
BU	4	1	0	5	80	20	0
BX	7	5	0	12	58	42	0
CA	3	0	1	4	75	0	25
CH	10	2	0	12	83	17	0
CL	4	4	3	11	36	36	27
CP	4	1	1	6	67	17	17
CS	3	1	0	4	75	25	0
DC	8	2	4	14	57	14	29
EB	3	2	4	9	33	22	44
EE	6	1	0	7	86	14	0
EG	8	1	0	9	89	11	0
EI	0	1	0	1	0	100	0
EL	4	2	2	8	50	25	25
EP	6	1	2	9	67	11	22
ES	10	4	1	15	67	27	7
FG	4	2	3	9	44	22	33
FL	7	1	1	9	78	11	11
FM	3	1	0	4	75	25	0
FN	4	0	0	4	100	0	0
GA	9	0	0	9	100	0	0
GE	12	2	0	14	86	14	0
GS	2	1	0	3	67	33	0
HA	5	5	4	14	36	36	29
HC	2	1	0	3	67	33	0
HI	3	3	2	8	38	38	25
HL	4	7	1	12	33	58	8
HS	11	0	1	12	92	0	8
ID	6	0	0	6	100	0	0
IE	10	1	0	11	91	9	0
IN	5	3	1	9	56	33	11
IS	5	6	2	13	38	46	15
IT	4	5	2	11	36	45	18
JP	8	3	2	13	62	23	15
KA	10	1	0	11	91	9	0

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: WA

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
LA	28	4	1	33	85	12	3
LB	3	2	1	6	50	33	17
LH	8	4	1	13	62	31	8
LL	9	0	0	9	100	0	0
LM	1	0	3	4	25	0	75
LW	6	0	0	6	100	0	0
ME	3	0	0	3	100	0	0
ML	3	0	4	7	43	0	57
NA	6	4	1	11	55	36	9
NC	3	0	0	3	100	0	0
NJ	6	2	0	8	75	25	0
NL	4	1	0	5	80	20	0
NY	2	0	0	2	100	0	0
OD	13	2	1	16	81	13	6
OI	0	1	1	2	0	50	50
OL	3	0	0	3	100	0	0
OR	8	1	0	9	89	11	0
OT	6	5	0	11	55	45	0
PA	2	3	1	6	33	50	17
PB	5	1	0	6	83	17	0
PC	16	4	0	20	80	20	0
PI	4	1	0	5	80	20	0
RE	9	2	0	11	82	18	0
RF	7	2	0	9	78	22	0
RG	5	4	0	9	56	44	0
RI	5	2	1	8	63	25	13
RL	3	0	0	3	100	0	0
SA	3	0	0	3	100	0	0
SC	6	3	1	10	60	30	10
SK	9	1	0	10	90	10	0
SR	6	2	3	11	55	18	27
SS	2	0	1	3	67	0	33
SV	4	0	2	6	67	0	33
SW	7	1	3	11	64	9	27
TI	11	3	0	14	79	21	0
TM	9	5	2	16	56	31	13
TN	9	5	1	15	60	33	7
TO	7	1	3	11	64	9	27
UC	5	1	0	6	83	17	0
UK	5	1	3	9	56	11	33
UP	9	4	0	13	69	31	0
UY	7	5	1	13	54	38	8
WA	7	3	3	13	54	23	23
WC	10	1	0	11	91	9	0
WI	0	2	1	3	0	67	33
WN	11	2	0	13	85	15	0
WV	6	1	0	7	86	14	0
YA	12	3	0	15	80	20	0

QAP43 Summary of Laboratory Evaluations by Matrix

Matrix: WA

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals							
102 Labs:	641	193	83	917	70%	21%	9%

QAP43 Summary of Matrix Evaluations by Radionuclide

Matrix: AI

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AM241	41	7	10	58	71	12	17
CE144	26	47	7	80	33	59	9
CO 57	29	43	8	80	36	54	10
CO 60	56	20	6	82	68	24	7
CS134	67	11	4	82	82	13	5
CS137	38	36	7	81	47	44	9
GA 1	40	11	1	52	77	21	2
GB 2	23	26	3	52	44	50	6
MN 54	49	24	7	80	61	30	9
PU238	42	10	1	53	79	19	2
PU239	43	11	4	58	74	19	7
RU106	60	3	8	71	85	4	11
SB125	59	14	6	79	75	18	8
SR 90	32	5	5	42	76	12	12
U 234	27	8	6	41	66	20	15
U 235	2	2	5	9	22	22	56
U 238	28	9	5	42	67	21	12
U BQ	12	3	4	19	63	16	21
U UG	16	3	1	20	80	15	5
Totals:	690	293	98	1081	64%	27%	9%

QAP43 Summary of Matrix Evaluations by Radionuclide

Matrix: SO

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AM241	40	9	4	53	75	17	8
CS137	78	11	3	92	85	12	3
K 40	71	11	5	87	82	13	6
PU238	56	10	1	67	84	15	1
PU239	63	4	1	68	93	6	1
SR 90	26	10	10	46	57	22	22
U 234	37	6	2	45	82	13	4
U 235	10	2	5	17	59	12	29
U 238	40	9	2	51	78	18	4
U BQ	17	3	1	21	81	14	5
U UG	17	2	0	19	89	11	0
Totals:	455	77	34	566	80%	14%	6%

QAP43 Summary of Matrix Evaluations by Radionuclide

Matrix: VE

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AM241	36	4	3	43	84	9	7
CM244	27	1	0	28	96	4	0
CO 60	29	21	20	70	41	30	29
CS137	62	11	4	77	81	14	5
K 40	58	9	6	73	79	12	8
PU239	44	6	4	54	81	11	7
SR 90	31	10	2	43	72	23	5
Totals:	287	62	39	388	74%	16%	10%

QAP43 Summary of Matrix Evaluations by Radionuclide

Matrix: WA

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AM241	49	11	6	66	74	17	9
CO 60	79	10	6	95	83	11	6
CS137	83	9	4	96	86	9	4
FE 55	8	6	0	14	57	43	0
GA 1	38	17	4	59	64	29	7
GB 2	26	21	10	57	46	37	18
H 3	50	16	4	70	71	23	6
MN 54	68	17	9	94	72	18	10
PU238	61	2	1	64	95	3	2
PU239	54	8	8	70	77	11	11
SR 90	41	8	8	57	72	14	14
U 234	34	18	2	54	63	33	4
U 235	1	1	12	14	7	7	86
U 238	21	30	2	53	40	57	4
U BQ	10	9	4	23	43	39	17
U UG	18	10	3	31	58	32	10
Totals:	641	193	83	917	70%	21%	9%

QAP43 Results by Laboratory

Labcode: AA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.189	0.006	0.189	0.006	1.00	0.04	A
1	CE144	52.100	5.000	52.100	5.000	1.00	0.14	A
1	CO 57	14.700	0.576	14.700	0.576	1.00	0.06	A
1	CO 60	32.600	0.977	32.600	0.977	1.00	0.04	A
1	CS134	17.900	0.479	17.900	0.479	1.00	0.04	A
1	CS137	7.250	0.500	7.250	0.500	1.00	0.10	A
1	GA 1	3.300	0.300	3.300	0.300	1.00	0.13	A
1	GB 2	1.120	0.100	1.120	0.100	1.00	0.13	A
1	MN 54	5.340	0.302	5.340	0.302	1.00	0.08	A
1	PU238	0.096	0.002	0.096	0.002	1.00	0.03	A
1	PU239	0.093	0.003	0.093	0.003	1.00	0.04	A
1	RU106	17.000	1.360	17.000	1.360	1.00	0.11	A
1	SB125	11.400	0.449	11.400	0.449	1.00	0.06	A
1	SR 90	1.060	0.037	1.060	0.037	1.00	0.05	A
2	U 234	0.052	0.001	0.052	0.001	1.00	0.03	A
2	U 235	0.002	0.000	0.002	0.000	1.00	0.07	A
1	U 238	0.053	0.002	0.053	0.002	1.00	0.05	A
1	U BQ	0.107	0.002	0.107	0.002	1.00	0.03	A
1	U UG	4.300	0.080	4.300	0.080	1.00	0.03	A
Matrix: SO								
1	AM241	1.760	0.113	1.760	0.113	1.00	0.09	A
1	CS137	207.000	1.120	207.000	1.120	1.00	0.01	A
1	K 40	377.000	16.400	377.000	16.400	1.00	0.06	A
1	PU238	17.500	0.901	17.500	0.901	1.00	0.07	A
1	PU239	5.170	0.070	5.170	0.070	1.00	0.02	A
1	SR 90	7.810	0.280	7.810	0.280	1.00	0.05	A
1	U 234	29.500	2.320	29.500	2.320	1.00	0.11	A
1	U 235	1.460	0.197	1.460	0.197	1.00	0.19	A
1	U 238	30.400	2.080	30.400	2.080	1.00	0.10	A
1	U BQ	58.200	4.500	58.200	4.500	1.00	0.11	A
1	U UG	2.460	0.200	2.460	0.200	1.00	0.12	A
Matrix: VE								
1	AM241	0.534	0.040	0.534	0.040	1.00	0.11	A
1	CM244	0.434	0.012	0.434	0.012	1.00	0.04	A
1	CO 60	9.170	0.257	9.170	0.257	1.00	0.04	A
1	CS137	97.200	1.930	97.200	1.930	1.00	0.03	A
1	K 40	352.000	8.160	352.000	8.160	1.00	0.03	A
1	PU239	0.980	0.115	0.980	0.115	1.00	0.17	A
1	SR 90	587.000	36.300	587.000	36.300	1.00	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AA

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: WA								
1	AM241	1.950	0.084	1.950	0.084	1.00	0.06	A
1	CO 60	196.000	1.410	196.000	1.410	1.00	0.01	A
1	CS137	75.200	0.642	75.200	0.642	1.00	0.01	A
1	FE 55	101.000	4.000	101.000	4.000	1.00	0.06	A
1	GA 1	1310.000	100.000	1310.000	100.000	1.00	0.11	A
1	GB 2	410.000	40.000	410.000	40.000	1.00	0.14	A
1	H 3	168.000	35.000	168.000	35.000	1.00	0.30	A
1	MN 54	44.900	0.726	44.900	0.726	1.00	0.02	A
1	PU238	1.410	0.096	1.410	0.096	1.00	0.10	A
1	PU239	0.272	0.033	0.272	0.033	1.00	0.17	A
1	SR 90	2.000	0.040	2.000	0.040	1.00	0.03	A
1	U 234	0.306	0.003	0.306	0.003	1.00	0.01	A
1	U 235	0.007	0.002	0.007	0.002	1.00	0.40	A
1	U 238	0.311	0.016	0.311	0.016	1.00	0.07	A
1	U BQ	0.624	0.016	0.624	0.016	1.00	0.04	A
1	U UG	0.025	0.002	0.025	0.002	1.00	0.11	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	U 234	29.600	1.900	29.500	2.320	1.00	0.10	A
1	U 238	29.900	1.900	30.400	2.080	0.98	0.09	A
Matrix: WA								
1	U 234	0.293	0.029	0.306	0.003	0.96	0.10	A
1	U 238	0.292	0.037	0.311	0.016	0.94	0.13	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AG

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.174	0.023	0.189	0.006	0.92	0.13	A
1	CE144	30.000	2.300	52.100	5.000	0.58	0.07	N
1	CO 57	8.870	0.600	14.700	0.576	0.60	0.05	N
1	CO 60	23.100	1.500	32.600	0.977	0.71	0.05	W
1	CS134	13.600	0.900	17.900	0.479	0.76	0.05	A
1	CS137	4.980	0.420	7.250	0.500	0.69	0.07	W
1	GA 1	3.720	0.490	3.300	0.300	1.13	0.18	A
1	GB 2	1.060	0.130	1.120	0.100	0.95	0.14	A
1	MN 54	3.690	0.370	5.340	0.302	0.69	0.08	N
1	PU238	0.078	0.010	0.096	0.002	0.81	0.11	A
1	PU239	0.081	0.011	0.093	0.003	0.87	0.12	A
1	RU106	10.800	2.200	17.000	1.360	0.64	0.14	W
1	SB125	4.080	0.540	11.400	0.449	0.36	0.05	N
1	SR 90	1.130	0.210	1.060	0.037	1.07	0.20	A
1	U 234	0.063	0.009	0.052	0.001	1.21	0.17	A
1	U 238	0.054	0.007	0.053	0.002	1.02	0.14	A
Matrix: SO								
1	AM241	1.900	0.370	1.760	0.113	1.08	0.22	A
1	CS137	239.000	16.000	207.000	1.120	1.16	0.08	A
1	K 40	399.000	38.000	377.000	16.400	1.06	0.11	A
1	PU238	18.300	2.200	17.500	0.901	1.05	0.14	A
2		18.300	2.200	17.500	0.901	1.05	0.14	A
1	PU239	5.650	0.780	5.170	0.070	1.09	0.15	A
2		5.650	0.780	5.170	0.070	1.09	0.15	A
1	SR 90	8.500	1.600	7.810	0.280	1.09	0.21	A
1	U 234	23.700	2.000	29.500	2.320	0.80	0.09	A
1	U 238	22.600	1.900	30.400	2.080	0.74	0.08	A
Matrix: VE								
1	AM241	0.560	0.110	0.534	0.040	1.05	0.22	A
1	CM244	0.456	0.086	0.434	0.012	1.05	0.20	A
1	CO 60	6.900	1.100	9.170	0.257	0.75	0.12	W
1	CS137	113.000	7.700	97.200	1.930	1.16	0.08	A
1	K 40	371.000	40.000	352.000	8.160	1.05	0.12	A
1	PU239	0.940	0.140	0.980	0.115	0.96	0.18	A
1	SR 90	395.000	72.000	587.000	36.300	0.67	0.13	W
Matrix: WA								
1	AM241	1.820	0.220	1.950	0.084	0.93	0.12	A
1	CO 60	195.000	13.000	196.000	1.410	1.00	0.07	A
1	CS137	75.600	5.600	75.200	0.642	1.01	0.08	A
1	GA 1	1220.000	140.000	1310.000	100.000	0.93	0.13	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AG

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Ratio Error	Evaluation
1	GB 2	358.000	47.000	410.000	40.000	0.87	0.14	W
1	H 3	141.000	14.000	168.000	35.000	0.84	0.19	A
1	MN 54	45.400	4.000	44.900	0.726	1.01	0.09	A
1	PU238	1.390	0.170	1.410	0.096	0.99	0.14	A
1	PU239	0.283	0.037	0.272	0.033	1.04	0.19	A
1	SR 90	2.100	0.380	2.000	0.040	1.05	0.19	A
1	U 234	0.380	0.048	0.306	0.003	1.24	0.16	W
1	U 238	0.360	0.048	0.311	0.016	1.16	0.17	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AI

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.027	0.005	0.189	0.006	0.14	0.02	N
1	CE144	34.900	0.369	52.100	5.000	0.67	0.06	W
1	CO 57	9.620	0.059	14.700	0.576	0.65	0.03	W
1	CO 60	21.700	0.110	32.600	0.977	0.67	0.02	N
1	CS134	13.000	0.080	17.900	0.479	0.73	0.02	W
1	CS137	5.030	0.080	7.250	0.500	0.69	0.05	W
1	MN 54	3.650	0.083	5.340	0.302	0.68	0.04	N
1	PU238	0.095	0.006	0.096	0.002	0.99	0.06	A
1	PU239	0.087	0.006	0.093	0.003	0.93	0.07	A
1	RU106	12.300	0.633	17.000	1.360	0.72	0.07	A
1	SB125	9.660	0.154	11.400	0.449	0.85	0.04	A
Matrix: SO								
1	CS137	148.000	3.400	207.000	1.120	0.72	0.02	W
1	K 40	293.000	26.000	377.000	16.400	0.78	0.08	W
1	PU238	10.000	3.360	17.500	0.901	0.57	0.19	A
1	PU239	4.160	1.550	5.170	0.070	0.81	0.30	A
1	U 234	30.000	3.020	29.500	2.320	1.02	0.13	A
1	U 235	4.520	0.980	1.460	0.197	3.10	0.79	N
1	U 238	26.900	2.820	30.400	2.080	0.89	0.11	A
Matrix: VE								
1	CO 60	8.950	1.790	9.170	0.257	0.98	0.20	A
1	CS137	88.100	3.240	97.200	1.930	0.91	0.04	A
1	K 40	281.000	37.700	352.000	8.160	0.80	0.11	A
1	PU239	1.530	0.481	0.980	0.115	1.56	0.52	W
Matrix: WA								
1	AM241	1.810	0.075	1.950	0.084	0.93	0.06	A
1	CO 60	181.000	0.906	196.000	1.410	0.92	0.01	A
1	CS137	73.600	0.773	75.200	0.642	0.98	0.01	A
1	MN 54	42.500	0.751	44.900	0.726	0.95	0.02	A
1	PU238	1.330	0.462	1.410	0.096	0.94	0.33	A
1	PU239	0.255	0.016	0.272	0.033	0.94	0.13	A
1	U 234	0.409	0.038	0.306	0.003	1.34	0.13	W
1	U 235	0.020	0.007	0.007	0.002	2.79	1.24	N
1	U 238	0.367	0.024	0.311	0.016	1.18	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	76.200	1.380	52.100	5.000	1.46	0.14	N
1	CO 60	50.300	1.040	32.600	0.977	1.54	0.06	N
1	CS134	17.100	0.240	17.900	0.479	0.96	0.03	A
1	CS137	12.000	0.240	7.250	0.500	1.66	0.12	N
1	SB125	18.100	0.440	11.400	0.449	1.59	0.07	N
Matrix: SO								
1	CS137	214.000	3.020	207.000	1.120	1.03	0.02	A
Matrix: VE								
1	CO 60	7.700	0.880	9.170	0.257	0.84	0.10	A
1	CS137	106.000	3.040	97.200	1.930	1.09	0.04	A
Matrix: WA								
1	CO 60	184.000	4.000	196.000	1.410	0.94	0.02	A
1	CS137	71.400	0.880	75.200	0.642	0.95	0.01	A
1	MN 54	43.300	0.840	44.900	0.726	0.96	0.02	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AM

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.200	0.040	0.189	0.006	1.06	0.21	A
1	CE144	39.400	0.510	52.100	5.000	0.76	0.07	W
1	CO 57	9.650	0.080	14.700	0.576	0.66	0.03	W
1	CO 60	25.200	0.190	32.600	0.977	0.77	0.02	W
1	CS134	11.800	0.130	17.900	0.479	0.66	0.02	W
1	CS137	5.390	0.140	7.250	0.500	0.74	0.05	W
1	GA 1	2.720	0.060	3.300	0.300	0.82	0.08	A
1	GB 2	1.050	0.040	1.120	0.100	0.94	0.09	A
1	MN 54	3.950	0.140	5.340	0.302	0.74	0.05	W
1	RU106	10.600	0.370	17.000	1.360	0.62	0.05	W
1	SB125	6.690	0.290	11.400	0.449	0.59	0.03	W
1	U 238	0.680	0.260	0.053	0.002	12.80	4.89	N
Matrix: SO								
1	AM241	2.120	0.940	1.760	0.113	1.21	0.54	A
1	CS137	210.000	2.470	207.000	1.120	1.01	0.01	A
1	K 40	372.000	16.700	377.000	16.400	0.99	0.06	A
1	PU239	9.010	0.970	5.170	0.070	1.74	0.19	W
1	U 238	37.100	8.270	30.400	2.080	1.22	0.29	W
Matrix: VE								
1	CO 60	4.760	1.060	9.170	0.257	0.52	0.12	N
1	CS137	101.000	2.850	97.200	1.930	1.04	0.04	A
1	K 40	360.000	25.700	352.000	8.160	1.02	0.08	A
Matrix: WA								
1	AM241	2.230	0.580	1.950	0.084	1.14	0.30	A
1	CO 60	194.000	1.140	196.000	1.410	0.99	0.01	A
1	CS137	76.800	0.900	75.200	0.642	1.02	0.01	A
1	GA 1	715.000	20.100	1310.000	100.000	0.55	0.04	W
2		715.000	20.100	1310.000	100.000	0.55	0.04	W
1	GB 2	540.000	14.900	410.000	40.000	1.32	0.13	A
1	MN 54	46.100	0.970	44.900	0.726	1.03	0.03	A
1	U BQ	0.690	0.230	0.624	0.016	1.11	0.37	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.202	0.009	0.189	0.006	1.07	0.06	A
1	CE144	39.200	0.500	52.100	5.000	0.75	0.07	W
1	CO 57	11.300	0.200	14.700	0.576	0.77	0.03	W
1	CO 60	29.200	0.600	32.600	0.977	0.90	0.03	A
1	CS134	16.100	0.100	17.900	0.479	0.90	0.02	A
1	CS137	6.000	0.120	7.250	0.500	0.83	0.06	W
1	GA 1	3.200	0.200	3.300	0.300	0.97	0.11	A
1	GB 2	1.500	0.100	1.120	0.100	1.34	0.15	A
1	MN 54	4.620	0.140	5.340	0.302	0.87	0.06	A
1	PU238	0.094	0.008	0.096	0.002	0.98	0.09	A
1	PU239	0.105	0.006	0.093	0.003	1.13	0.07	A
1	RU106	14.300	0.900	17.000	1.360	0.84	0.09	A
1	SB125	10.200	0.400	11.400	0.449	0.90	0.05	A
1	SR 90	1.040	0.013	1.060	0.037	0.98	0.04	A
1	U 234	0.054	0.010	0.052	0.001	1.04	0.20	A
1	U 238	0.056	0.004	0.053	0.002	1.05	0.08	A
Matrix: SO								
1	AM241	2.000	0.304	1.760	0.113	1.14	0.19	A
1	CS137	234.000	2.300	207.000	1.120	1.13	0.01	A
1	K 40	418.000	8.000	377.000	16.400	1.11	0.05	A
1	PU238	18.400	0.580	17.500	0.901	1.05	0.06	A
1	PU239	5.660	0.193	5.170	0.070	1.10	0.04	A
1	SR 90	7.280	0.174	7.810	0.280	0.93	0.04	A
1	U 234	28.800	1.290	29.500	2.320	0.98	0.09	A
1	U 238	27.500	1.800	30.400	2.080	0.91	0.09	A
Matrix: VE								
1	AM241	0.641	0.102	0.534	0.040	1.20	0.21	A
1	CM244	0.478	0.026	0.434	0.012	1.10	0.07	A
1	CO 60	8.290	0.660	9.170	0.257	0.90	0.08	A
1	CS137	121.000	4.600	97.200	1.930	1.25	0.05	A
1	K 40	403.000	3.300	352.000	8.160	1.15	0.03	A
1	PU239	1.220	0.370	0.980	0.115	1.25	0.41	A
1	SR 90	563.000	3.000	587.000	36.300	0.96	0.06	A
Matrix: WA								
1	AM241	1.840	0.037	1.950	0.084	0.94	0.04	A
1	CO 60	211.000	10.200	196.000	1.410	1.08	0.05	A
1	CS137	79.700	2.000	75.200	0.642	1.06	0.03	A
1	GA 1	1350.000	70.000	1310.000	100.000	1.03	0.10	A
1	GB 2	506.000	25.000	410.000	40.000	1.23	0.14	A
1	H 3	150.000	2.500	168.000	35.000	0.89	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	MN 54	49.300	2.800	44.900	0.726	1.10	0.06	A
1	PU238	1.430	0.028	1.410	0.096	1.01	0.07	A
1	PU239	0.288	0.010	0.272	0.033	1.06	0.13	A
1	SR 90	2.000	0.018	2.000	0.040	1.00	0.02	A
1	U 234	0.336	0.013	0.306	0.003	1.10	0.04	A
1	U 238	0.346	0.010	0.311	0.016	1.11	0.07	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AR

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.200	0.020	0.189	0.006	1.06	0.11	A
1	CE144	84.300	8.200	52.100	5.000	1.62	0.22	N
1	CO 57	11.500	1.100	14.700	0.576	0.78	0.08	W
1	CO 60	29.200	2.200	32.600	0.977	0.90	0.07	A
1	CS134	15.500	2.400	17.900	0.479	0.87	0.14	A
1	CS137	6.500	0.600	7.250	0.500	0.90	0.10	A
1	GA 1	84.000	2.000	3.300	0.300	25.50	2.39	N
1	GB 2	24.000	1.000	1.120	0.100	21.40	2.11	N
1	MN 54	4.500	0.400	5.340	0.302	0.84	0.09	W
1	PU238	0.100	0.100	0.096	0.002	1.04	1.04	A
1	PU239	0.100	0.040	0.093	0.003	1.08	0.43	A
1	RU106	11.100	2.400	17.000	1.360	0.65	0.15	W
1	SB125	10.900	1.600	11.400	0.449	0.96	0.15	A
1	SR 90	1.100	0.400	1.060	0.037	1.04	0.38	A
1	U 234	0.060	0.020	0.052	0.001	1.16	0.39	A
1	U 238	0.050	0.020	0.053	0.002	0.94	0.38	A
1	U BQ	0.110	0.030	0.107	0.002	1.03	0.28	A
Matrix: SO								
1	AM241	1.700	0.600	1.760	0.113	0.97	0.35	A
1	CS137	236.000	6.700	207.000	1.120	1.14	0.03	A
1	K 40	339.000	20.700	377.000	16.400	0.90	0.07	A
1	PU238	18.600	4.000	17.500	0.901	1.06	0.24	A
1	PU239	5.700	2.200	5.170	0.070	1.10	0.43	A
1	SR 90	12.400	3.000	7.810	0.280	1.59	0.39	W
1	U 234	20.500	4.100	29.500	2.320	0.70	0.15	A
1	U 238	17.300	3.700	30.400	2.080	0.57	0.13	W
1	U BQ	39.300	5.600	58.200	4.500	0.68	0.11	A
1	U UG	1.560	0.030	2.460	0.200	0.63	0.05	A
Matrix: VE								
1	AM241	0.400	0.200	0.534	0.040	0.75	0.38	W
1	CM244	0.400	0.200	0.434	0.012	0.92	0.46	A
1	CO 60	5.500	0.600	9.170	0.257	0.60	0.07	N
1	CS137	92.500	3.100	97.200	1.930	0.95	0.04	A
1	K 40	267.000	14.600	352.000	8.160	0.76	0.05	W
1	PU239	0.710	0.120	0.980	0.115	0.72	0.15	W
1	SR 90	355.000	33.000	587.000	36.300	0.61	0.07	W
Matrix: WA								
1	AM241	1.500	0.200	1.950	0.084	0.77	0.11	W
1	CO 60	219.000	16.600	196.000	1.410	1.12	0.09	W
1	CS137	89.900	7.400	75.200	0.642	1.20	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AR

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	GA 1	1080.000	52.000	1310.000	100.000	0.82	0.07	W
1	GB 2	364.000	27.000	410.000	40.000	0.89	0.11	W
1	H 3	145.000	11.400	168.000	35.000	0.86	0.19	A
1	MN 54	52.200	4.400	44.900	0.726	1.16	0.10	W
1	PU238	1.400	0.200	1.410	0.096	0.99	0.16	A
1	PU239	0.400	0.100	0.272	0.033	1.47	0.41	N
1	SR 90	1.800	0.500	2.000	0.040	0.90	0.25	A
1	U 234	0.400	0.100	0.306	0.003	1.31	0.33	W
1	U 238	0.400	0.100	0.311	0.016	1.29	0.33	W
1	U BQ	0.800	0.100	0.624	0.016	1.28	0.16	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AU

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.150	0.020	0.189	0.006	0.79	0.11	A
1	CE144	36.100	0.590	52.100	5.000	0.69	0.07	W
1	CO 57	9.980	0.110	14.700	0.576	0.68	0.03	W
1	CO 60	28.500	0.500	32.600	0.977	0.87	0.03	A
1	CS134	14.100	0.260	17.900	0.479	0.79	0.03	A
1	GA 1	3.730	0.060	3.300	0.300	1.13	0.10	A
1	GB 2	1.750	0.040	1.120	0.100	1.56	0.14	W
1	MN 54	4.320	0.250	5.340	0.302	0.81	0.07	W
1	PU238	0.080	0.010	0.096	0.002	0.83	0.11	A
1	PU239	0.080	0.010	0.093	0.003	0.86	0.11	A
1	RU106	11.600	1.700	17.000	1.360	0.68	0.11	A
1	SB125	9.930	0.580	11.400	0.449	0.87	0.06	A
1	U BQ	0.090	0.010	0.107	0.002	0.84	0.10	W
Matrix: SO								
1	AM241	1.150	1.420	1.760	0.113	0.65	0.81	W
1	CS137	247.000	7.900	207.000	1.120	1.19	0.04	A
1	K 40	500.000	57.300	377.000	16.400	1.33	0.16	W
1	PU238	3.820	1.280	17.500	0.901	0.22	0.07	W
1	PU239	1.770	1.280	5.170	0.070	0.34	0.25	N
1	SR 90	9.360	2.480	7.810	0.280	1.20	0.32	A
1	U BQ	46.700	3.540	58.200	4.500	0.80	0.09	A
Matrix: VE								
1	AM241	0.570	0.280	0.534	0.040	1.07	0.53	A
1	CO 60	9.600	0.790	9.170	0.257	1.05	0.09	A
1	CS137	145.000	1.670	97.200	1.930	1.49	0.03	W
1	PU239	0.860	0.330	0.980	0.115	0.88	0.35	A
1	SR 90	502.000	13.000	587.000	36.300	0.86	0.06	A
Matrix: WA								
1	AM241	1.890	0.250	1.950	0.084	0.97	0.14	A
1	CO 60	209.000	2.090	196.000	1.410	1.07	0.01	A
1	CS137	81.800	1.190	75.200	0.642	1.09	0.02	A
1	GA 1	1130.000	24.400	1310.000	100.000	0.86	0.07	A
1	GB 2	623.000	3.990	410.000	40.000	1.52	0.15	W
1	H 3	154.000	19.000	168.000	35.000	0.92	0.22	A
1	MN 54	45.300	1.070	44.900	0.726	1.01	0.03	A
1	PU238	1.610	0.250	1.410	0.096	1.14	0.19	A
1	PU239	0.300	0.070	0.272	0.033	1.10	0.29	A
1	SR 90	1.910	0.200	2.000	0.040	0.96	0.10	A
1	U BQ	0.700	0.070	0.624	0.016	1.12	0.12	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: AW

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.130	0.050	0.189	0.006	0.69	0.27	W
1	CE144	55.200	8.300	52.100	5.000	1.06	0.19	A
1	CO 57	15.800	2.400	14.700	0.576	1.08	0.17	A
1	CO 60	33.800	5.000	32.600	0.977	1.04	0.16	A
1	CS134	18.100	3.000	17.900	0.479	1.01	0.17	A
1	CS137	7.400	1.000	7.250	0.500	1.02	0.16	A
1	MN 54	5.500	0.830	5.340	0.302	1.03	0.17	A
1	SB125	11.500	2.000	11.400	0.449	1.01	0.18	A
Matrix: WA								
1	CO 60	192.000	28.800	196.000	1.410	0.98	0.15	A
1	CS137	73.000	11.000	75.200	0.642	0.97	0.15	A
1	GA 1	1150.000	173.000	1310.000	100.000	0.88	0.15	A
1	GB 2	658.000	99.000	410.000	40.000	1.61	0.29	W
1	H 3	164.000	25.000	168.000	35.000	0.98	0.25	A
1	MN 54	44.200	6.600	44.900	0.726	0.98	0.15	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	45.100	3.300	52.100	5.000	0.87	0.10	A
1	CO 57	13.400	0.780	14.700	0.576	0.91	0.06	A
1	CO 60	32.500	0.710	32.600	0.977	1.00	0.04	A
1	CS134	17.400	0.800	17.900	0.479	0.97	0.05	A
1	CS137	7.300	0.550	7.250	0.500	1.01	0.10	A
1	MN 54	5.700	0.590	5.340	0.302	1.07	0.13	A
1	RU106	19.700	2.800	17.000	1.360	1.16	0.19	A
1	SB125	12.500	0.730	11.400	0.449	1.10	0.08	A
Matrix: SO								
1	CS137	204.000	15.000	207.000	1.120	0.99	0.07	A
Matrix: VE								
1	CO 60	6.050	1.600	9.170	0.257	0.66	0.18	N
1	CS137	102.000	7.400	97.200	1.930	1.05	0.08	A
Matrix: WA								
1	CO 60	216.000	5.800	196.000	1.410	1.10	0.03	A
1	CS137	77.700	5.800	75.200	0.642	1.03	0.08	A
1	MN 54	45.400	5.200	44.900	0.726	1.01	0.12	A
1	PU238	1.400	0.320	1.410	0.096	0.99	0.24	A
1	PU239	0.170	0.067	0.272	0.033	0.63	0.26	W
1	SR 90	2.000	0.310	2.000	0.040	1.00	0.16	A
1	U 234	0.317	0.081	0.306	0.003	1.04	0.27	A
1	U 238	0.301	0.078	0.311	0.016	0.97	0.26	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CO 60	27.500	0.622	32.600	0.977	0.84	0.03	A
1	CS134	15.800	1.450	17.900	0.479	0.88	0.08	A
1	CS137	5.890	0.642	7.250	0.500	0.81	0.11	W
1	GA 1	3.270	0.081	3.300	0.300	0.99	0.09	A
1	GB 2	2.030	0.059	1.120	0.100	1.81	0.17	W
1	MN 54	4.550	0.440	5.340	0.302	0.85	0.10	A
1	SR 90	0.602	0.174	1.060	0.037	0.57	0.17	N
1	U 234	0.054	0.009	0.052	0.001	1.05	0.17	A
1	U 238	0.073	0.011	0.053	0.002	1.37	0.21	W
Matrix: SO								
1	CS137	250.000	42.900	207.000	1.120	1.21	0.21	A
1	K 40	404.000	47.400	377.000	16.400	1.07	0.13	A
1	U 234	30.300	2.960	29.500	2.320	1.03	0.13	A
1	U 238	28.500	2.960	30.400	2.080	0.94	0.12	A
Matrix: VE								
1	CO 60	8.510	1.480	9.170	0.257	0.93	0.16	A
1	CS137	118.000	16.300	97.200	1.930	1.21	0.17	A
1	K 40	341.000	48.800	352.000	8.160	0.97	0.14	A
1	SR 90	367.000	48.800	587.000	36.300	0.63	0.09	W
Matrix: WA								
1	CO 60	204.000	19.200	196.000	1.410	1.04	0.10	A
1	CS137	83.700	11.800	75.200	0.642	1.11	0.16	A
1	GA 1	1170.000	42.900	1310.000	100.000	0.89	0.08	A
1	GB 2	653.000	24.400	410.000	40.000	1.59	0.17	W
1	MN 54	51.000	5.920	44.900	0.726	1.14	0.13	A
1	SR 90	2.090	0.668	2.000	0.040	1.04	0.34	A
1	U 234	0.424	0.050	0.306	0.003	1.39	0.16	W
1	U 238	0.437	0.050	0.311	0.016	1.41	0.18	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.186	0.013	0.189	0.006	0.98	0.07	A
1	CE144	28.400	3.120	52.100	5.000	0.55	0.08	N
1	CO 57	10.100	0.810	14.700	0.576	0.69	0.06	W
1	CO 60	25.600	2.200	32.600	0.977	0.79	0.07	W
1	CS134	12.500	1.070	17.900	0.479	0.70	0.06	W
1	CS137	5.820	0.560	7.250	0.500	0.80	0.10	W
1	MN 54	4.550	0.460	5.340	0.302	0.85	0.10	A
1	PU238	0.094	0.009	0.096	0.002	0.98	0.10	A
1	PU239	0.094	0.009	0.093	0.003	1.01	0.10	A
1	RU106	11.400	1.960	17.000	1.360	0.67	0.13	A
1	SB125	7.890	0.860	11.400	0.449	0.69	0.08	W
1	SR 90	0.992	0.107	1.060	0.037	0.94	0.11	A
1	U 234	0.056	0.010	0.052	0.001	1.08	0.20	A
1	U 238	0.056	0.010	0.053	0.002	1.05	0.19	A
1	U UG	2.370	0.000	4.300	0.080	0.55	0.01	W
Matrix: SO								
1	AM241	1.910	0.270	1.760	0.113	1.09	0.17	A
1	CS137	225.000	19.200	207.000	1.120	1.09	0.09	A
1	K 40	452.000	52.300	377.000	16.400	1.20	0.15	A
1	PU238	18.300	1.400	17.500	0.901	1.05	0.10	A
1	PU239	5.520	0.570	5.170	0.070	1.07	0.11	A
1	SR 90	8.000	2.630	7.810	0.280	1.02	0.34	A
1	U 234	30.600	3.450	29.500	2.320	1.04	0.14	A
1	U 235	1.390	0.700	1.460	0.197	0.95	0.50	A
1	U 238	30.800	3.470	30.400	2.080	1.01	0.13	A
1	U UG	2.500	0.000	2.460	0.200	1.02	0.08	A
Matrix: VE								
1	AM241	0.590	0.150	0.534	0.040	1.11	0.29	A
1	CM244	0.458	0.093	0.434	0.012	1.05	0.22	A
1	CS137	111.000	10.900	97.200	1.930	1.14	0.11	A
2	K 40	510.000	69.300	352.000	8.160	1.45	0.20	W
2	PU239	0.932	0.142	0.980	0.115	0.95	0.18	A
1	SR 90	566.000	52.000	587.000	36.300	0.96	0.11	A
Matrix: WA								
1	AM241	1.890	0.130	1.950	0.084	0.97	0.08	A
1	CO 60	211.000	17.400	196.000	1.410	1.08	0.09	A
1	CS137	85.400	7.300	75.200	0.642	1.14	0.10	A
1	GA 1	3.000	0.000	1310.000	100.000	0.00	0.00	N
1	GB 2	1.550	0.000	410.000	40.000	0.00	0.00	N
1	H 3	153.000	10.500	168.000	35.000	0.91	0.20	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	MN 54	52.400	4.300	44.900	0.726	1.17	0.10	W
1	PU238	1.450	0.120	1.410	0.096	1.03	0.11	A
1	PU239	0.290	0.040	0.272	0.033	1.07	0.20	A
1	SR 90	2.010	0.310	2.000	0.040	1.01	0.16	A
1	U 234	0.340	0.060	0.306	0.003	1.11	0.20	A
1	U 238	0.340	0.060	0.311	0.016	1.09	0.20	A
1	U UG	0.028	0.000	0.025	0.002	1.11	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BK

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Ratio Error	Evaluation
Matrix: WA								
1	CO 60	212.000	8.410	196.000	1.410	1.08	0.04	A
1	CS137	83.400	5.270	75.200	0.642	1.11	0.07	A
1	MN 54	48.900	4.040	44.900	0.726	1.09	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.230	0.020	0.189	0.006	1.22	0.11	A
1	CE144	42.400	1.500	52.100	5.000	0.81	0.08	A
1	CO 57	12.300	0.400	14.700	0.576	0.84	0.04	A
1	CO 60	30.300	0.800	32.600	0.977	0.93	0.04	A
1	CS134	16.800	0.500	17.900	0.479	0.94	0.04	A
1	CS137	6.210	0.230	7.250	0.500	0.86	0.07	A
1	MN 54	4.880	0.210	5.340	0.302	0.91	0.06	A
1	PU238	0.110	0.010	0.096	0.002	1.14	0.11	A
2		0.090	0.010	0.096	0.002	0.94	0.11	A
1	PU239	0.120	0.010	0.093	0.003	1.29	0.12	W
2		0.090	0.010	0.093	0.003	0.97	0.11	A
1	RU106	15.500	1.100	17.000	1.360	0.91	0.10	A
2		18.700	0.900	17.000	1.360	1.10	0.10	A
1	SB125	10.200	0.600	11.400	0.449	0.90	0.06	A
1	SR 90	1.130	0.210	1.060	0.037	1.07	0.20	A
1	U 234	0.081	0.001	0.052	0.001	1.57	0.04	W
2		0.099	0.000	0.052	0.001	1.92	0.04	N
1	U 238	0.081	0.001	0.053	0.002	1.52	0.05	W
2		0.099	0.000	0.053	0.002	1.86	0.06	W
1	U UG	6.570	0.070	4.300	0.080	1.53	0.03	W
Matrix: SO								
1	AM241	3.700	0.370	1.760	0.113	2.10	0.25	W
1	CS137	213.000	5.000	207.000	1.120	1.03	0.02	A
1	K 40	393.000	14.000	377.000	16.400	1.04	0.06	A
1	PU238	17.300	0.500	17.500	0.901	0.99	0.06	A
2		18.400	0.500	17.500	0.901	1.05	0.06	A
1	PU239	5.130	0.260	5.170	0.070	0.99	0.05	A
2		5.450	0.290	5.170	0.070	1.05	0.06	A
1	SR 90	11.000	4.500	7.810	0.280	1.41	0.58	A
1	U 234	24.600	0.530	29.500	2.320	0.83	0.07	A
1	U 238	24.600	0.530	30.400	2.080	0.81	0.06	A
1	U UG	1.990	0.043	2.460	0.200	0.81	0.07	A
Matrix: VE								
1	AM241	0.760	0.080	0.534	0.040	1.42	0.18	A
1	CM244	0.420	0.050	0.434	0.012	0.97	0.12	A
1	CO 60	7.400	1.000	9.170	0.257	0.81	0.11	W
1	CS137	109.000	3.000	97.200	1.930	1.12	0.04	A
1	K 40	393.000	18.000	352.000	8.160	1.12	0.06	A
1	PU239	0.890	0.070	0.980	0.115	0.91	0.13	A
2		1.050	0.080	0.980	0.115	1.07	0.15	A
1	SR 90	499.000	13.000	587.000	36.300	0.85	0.06	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: WA								
1	AM241	2.060	0.060	1.950	0.084	1.06	0.05	A
1	CO 60	209.000	5.000	196.000	1.410	1.07	0.03	A
1	CS137	77.500	2.400	75.200	0.642	1.03	0.03	A
1	FE 55	110.000	15.000	101.000	4.000	1.09	0.16	A
2		109.000	15.000	101.000	4.000	1.08	0.16	A
1	GA 1	1190.000	34.000	1310.000	100.000	0.91	0.07	A
1	GB 2	401.000	31.000	410.000	40.000	0.98	0.12	A
1	H 3	159.000	17.000	168.000	35.000	0.95	0.22	A
2		172.000	17.000	168.000	35.000	1.02	0.24	A
1	MN 54	48.700	1.700	44.900	0.726	1.09	0.04	A
1	PU238	1.470	0.060	1.410	0.096	1.04	0.08	A
2		1.430	0.060	1.410	0.096	1.01	0.08	A
1	PU239	0.260	0.020	0.272	0.033	0.96	0.14	A
2		0.270	0.030	0.272	0.033	0.99	0.16	A
1	SR 90	2.440	0.330	2.000	0.040	1.22	0.17	W
2		2.200	0.540	2.000	0.040	1.10	0.27	A
1	U 234	0.370	0.010	0.306	0.003	1.21	0.03	W
2		0.380	0.000	0.306	0.003	1.24	0.01	W
1	U 238	0.370	0.010	0.311	0.016	1.19	0.07	W
2		0.380	0.000	0.311	0.016	1.22	0.06	W
1	U UG	0.030	0.000	0.025	0.002	1.18	0.10	W
2		0.030	0.000	0.025	0.002	1.20	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BM

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.270	0.090	0.189	0.006	1.43	0.48	W
2		0.270	0.100	0.189	0.006	1.43	0.53	W
1	CE144	41.600	2.100	52.100	5.000	0.80	0.09	A
2		39.100	1.800	52.100	5.000	0.75	0.08	W
1	CO 57	12.100	0.600	14.700	0.576	0.82	0.05	A
2		11.300	0.600	14.700	0.576	0.77	0.05	W
1	CO 60	30.400	1.500	32.600	0.977	0.93	0.05	A
1	CS134	17.800	1.100	17.900	0.479	0.99	0.07	A
2		17.100	0.900	17.900	0.479	0.96	0.06	A
1	CS137	6.590	0.330	7.250	0.500	0.91	0.08	A
2		6.310	0.340	7.250	0.500	0.87	0.08	A
1	MN 54	4.880	0.240	5.340	0.302	0.91	0.07	A
2		4.640	0.280	5.340	0.302	0.87	0.07	A
1	PU238	0.092	0.016	0.096	0.002	0.96	0.17	A
1	PU239	0.092	0.016	0.093	0.003	0.99	0.18	A
1	RU106	17.200	1.100	17.000	1.360	1.01	0.10	A
2		16.500	1.200	17.000	1.360	0.97	0.11	A
1	SB125	10.600	0.500	11.400	0.449	0.93	0.06	A
2		10.300	0.500	11.400	0.449	0.90	0.06	A
1	SR 90	28.800	1.500	1.060	0.037	27.20	1.70	N
2		0.790	0.160	1.060	0.037	0.75	0.15	W
1	U-234	0.059	0.012	0.052	0.001	1.14	0.23	A
1	U-238	0.062	0.012	0.053	0.002	1.16	0.23	A
Matrix: SO								
1	AM241	1.320	0.660	1.760	0.113	0.75	0.38	A
1	CS137	172.000	21.000	207.000	1.120	0.83	0.10	A
1	K 40	283.000	37.000	377.000	16.400	0.75	0.10	W
1	PU238	18.400	3.400	17.500	0.901	1.05	0.20	A
1	PU239	6.000	1.300	5.170	0.070	1.16	0.25	A
1	U-234	18.900	3.400	29.500	2.320	0.64	0.13	W
1	U-238	17.500	3.300	30.400	2.080	0.58	0.12	W
Matrix: VE								
1	CO 60	5.830	2.040	9.170	0.257	0.64	0.22	N
1	CS137	82.700	8.300	97.200	1.930	0.85	0.09	W
1	K 40	262.000	50.000	352.000	8.160	0.74	0.14	W
1	PU239	0.930	0.180	0.980	0.115	0.95	0.22	A
1	SR 90	409.000	61.000	587.000	36.300	0.70	0.11	A
Matrix: WA								
1	AM241	1.580	0.550	1.950	0.084	0.81	0.28	A
1	CO 60	196.000	20.000	196.000	1.410	1.00	0.10	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BM

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	CS137	84.400	8.500	75.200	0.642	1.12	0.11	A
1	MN 54	49.500	5.000	44.900	0.726	1.10	0.11	A
1	SR 90	1.800	0.400	2.000	0.040	0.90	0.20	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μ g/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	46.600	5.190	52.100	5.000	0.89	0.13	A
1	CO 57	13.500	1.530	14.700	0.576	0.92	0.11	A
1	CO 60	29.200	3.920	32.600	0.977	0.90	0.12	A
1	CS134	15.600	0.470	17.900	0.479	0.87	0.04	A
1	CS137	7.050	0.840	7.250	0.500	0.97	0.13	A
1	GA 1	3.960	0.040	3.300	0.300	1.20	0.11	A
1	GB 2	2.090	0.060	1.120	0.100	1.87	0.18	W
1	MN 54	5.360	0.490	5.340	0.302	1.00	0.11	A
1	RU106	16.500	0.380	17.000	1.360	0.97	0.08	A
1	SB125	12.100	1.630	11.400	0.449	1.06	0.15	A
Matrix: SO								
1	CS137	200.000	13.700	207.000	1.120	0.97	0.07	A
1	K 40	305.000	22.500	377.000	16.400	0.81	0.07	A
Matrix: VE								
1	CO 60	5.500	0.400	9.170	0.257	0.60	0.05	N
1	CS137	93.600	5.110	97.200	1.930	0.96	0.06	A
1	K 40	286.000	10.800	352.000	8.160	0.81	0.04	A
Matrix: WA								
1	CO 60	200.000	2.110	196.000	1.410	1.02	0.01	A
1	CS137	84.500	4.000	75.200	0.642	1.12	0.05	A
1	GA 1	401.000	73.800	1310.000	100.000	0.31	0.06	N
1	GB 2	414.000	46.700	410.000	40.000	1.01	0.15	A
1	H 3	138.000	2.770	168.000	35.000	0.82	0.17	W
1	MN 54	49.800	2.010	44.900	0.726	1.11	0.05	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BP

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.190	0.006	0.189	0.006	1.01	0.04	A
1	CE144	36.300	1.500	52.100	5.000	0.70	0.07	W
1	CO 57	11.100	0.220	14.700	0.576	0.76	0.03	W
1	CO 60	29.000	0.230	32.600	0.977	0.89	0.03	A
1	CS134	16.100	0.240	17.900	0.479	0.90	0.03	A
1	CS137	6.280	0.220	7.250	0.500	0.87	0.07	A
1	MN 54	4.720	0.190	5.340	0.302	0.88	0.06	A
1	PU238	0.095	0.004	0.096	0.002	0.99	0.05	A
1	PU239	0.096	0.004	0.093	0.003	1.04	0.05	A
1	RU106	20.200	0.810	17.000	1.360	1.19	0.11	A
1	SB125	10.700	0.320	11.400	0.449	0.94	0.05	A
1	SR 90	1.010	0.070	1.060	0.037	0.95	0.07	A
Matrix: SO								
1	AM241	1.840	0.290	1.760	0.113	1.04	0.18	A
1	CS137	241.000	7.000	207.000	1.120	1.16	0.03	A
1	K 40	427.000	7.000	377.000	16.400	1.13	0.05	A
1	PU238	18.500	1.100	17.500	0.901	1.06	0.08	A
1	PU239	5.490	0.420	5.170	0.070	1.06	0.08	A
1	SR 90	7.190	1.000	7.810	0.280	0.92	0.13	A
1	U UG	2.540	0.090	2.460	0.200	1.03	0.09	A
Matrix: VE								
1	CO 60	8.740	0.750	9.170	0.257	0.95	0.09	A
1	CS137	126.000	1.700	97.200	1.930	1.30	0.03	W
1	K 40	434.000	22.000	352.000	8.160	1.23	0.07	A
1	SR 90	544.000	116.000	587.000	36.300	0.93	0.21	A
Matrix: WA								
1	AM241	1.850	0.030	1.950	0.084	0.95	0.04	A
1	CO 60	207.000	1.900	196.000	1.410	1.06	0.01	A
1	CS137	81.800	0.500	75.200	0.642	1.09	0.01	A
1	H 3	167.000	14.000	168.000	35.000	0.99	0.22	A
1	MN 54	50.100	0.650	44.900	0.726	1.12	0.02	A
1	PU238	1.440	0.023	1.410	0.096	1.02	0.07	A
1	PU239	0.317	0.058	0.272	0.033	1.17	0.26	W
1	SR 90	1.860	0.090	2.000	0.040	0.93	0.05	A
1	U UG	0.028	0.001	0.025	0.002	1.10	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BQ

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	32.700	0.300	52.100	5.000	0.63	0.06	W
1	CO 57	9.670	0.040	14.700	0.576	0.66	0.03	W
1	CO 60	30.700	0.200	32.600	0.977	0.94	0.03	A
1	CS134	16.000	0.200	17.900	0.479	0.89	0.03	A
1	CS137	5.250	0.080	7.250	0.500	0.72	0.05	W
1	MN 54	4.360	0.090	5.340	0.302	0.82	0.05	W
1	RU106	15.500	0.700	17.000	1.360	0.91	0.08	A
1	SB125	9.000	0.200	11.400	0.449	0.79	0.04	W
Matrix: SO								
1	CS137	142.000	3.000	207.000	1.120	0.69	0.02	W
1	K 40	384.000	18.000	377.000	16.400	1.02	0.07	A
1	U UG	2.600	0.100	2.460	0.200	1.06	0.10	A
Matrix: VE								
1	CO 60	12.000	2.000	9.170	0.257	1.31	0.22	W
1	CS137	57.000	3.000	97.200	1.930	0.59	0.03	N
1	K 40	409.000	13.000	352.000	8.160	1.16	0.05	A
Matrix: WA								
1	CO 60	208.000	1.000	196.000	1.410	1.06	0.01	A
1	CS137	81.800	0.800	75.200	0.642	1.09	0.01	A
1	H 3	194.000	37.000	168.000	35.000	1.16	0.33	A
1	MN 54	47.800	0.900	44.900	0.726	1.07	0.03	A
1	U UG	30.400	0.500	0.025	0.002	**. **	98.50	N
2		0.030	0.001	0.025	0.002	1.21	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BR

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	32.500	1.220	52.100	5.000	0.62	0.06	W
1	CO 57	10.100	0.200	14.700	0.576	0.69	0.03	W
1	CO 60	28.800	0.420	32.600	0.977	0.88	0.03	A
1	CS134	14.900	0.290	17.900	0.479	0.83	0.03	A
1	CS137	5.910	0.370	7.250	0.500	0.82	0.08	W
1	MN 54	4.310	0.580	5.340	0.302	0.81	0.12	W
1	RU106	17.100	1.120	17.000	1.360	1.01	0.10	A
1	SB125	10.800	0.920	11.400	0.449	0.95	0.09	A
Matrix: SO								
1	CS137	255.000	3.720	207.000	1.120	1.23	0.02	A
1	K 40	506.000	19.400	377.000	16.400	1.34	0.08	W
1	U 238	94.100	11.800	30.400	2.080	3.10	0.44	N
Matrix: VE								
1	CO 60	21.300	2.260	9.170	0.257	2.32	0.26	N
1	CS137	129.000	5.610	97.200	1.930	1.33	0.06	W
1	K 40	584.000	26.700	352.000	8.160	1.66	0.09	N
Matrix: WA								
1	CO 60	207.000	1.620	196.000	1.410	1.06	0.01	A
1	CS137	94.000	1.830	75.200	0.642	1.25	0.03	W
1	MN 54	56.900	1.690	44.900	0.726	1.27	0.04	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BU

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	44.000	9.000	52.100	5.000	0.85	0.19	A
1	CO 57	13.000	1.000	14.700	0.576	0.88	0.08	A
1	CO 60	31.000	3.000	32.600	0.977	0.95	0.10	A
1	CS134	19.000	3.000	17.900	0.479	1.06	0.17	A
1	CS137	6.500	0.800	7.250	0.500	0.90	0.13	A
1	GA 1	3.100	0.200	3.300	0.300	0.94	0.11	A
1	MN 54	5.000	0.700	5.340	0.302	0.94	0.14	A
1	SB125	12.000	2.000	11.400	0.449	1.05	0.18	A
Matrix: SO								
1	CS137	210.000	20.000	207.000	1.120	1.01	0.10	A
1	K 40	440.000	40.000	377.000	16.400	1.17	0.12	A
Matrix: VE								
1	CO 60	9.000	3.000	9.170	0.257	0.98	0.33	A
1	CS137	100.000	10.000	97.200	1.930	1.03	0.11	A
1	K 40	400.000	30.000	352.000	8.160	1.14	0.09	A
Matrix: WA								
1	CO 60	200.000	20.000	196.000	1.410	1.02	0.10	A
1	CS137	82.000	8.000	75.200	0.642	1.09	0.11	A
1	GA 1	1170.000	80.000	1310.000	100.000	0.89	0.09	A
1	H 3	123.000	6.000	168.000	35.000	0.73	0.16	W
1	MN 54	48.000	5.000	44.900	0.726	1.07	0.11	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BX

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.825	0.036	0.189	0.006	4.36	0.23	N
1	CE144	36.600	2.170	52.100	5.000	0.70	0.08	W
1	CO 57	11.000	0.657	14.700	0.576	0.75	0.05	W
1	CO 60	27.500	0.714	32.600	0.977	0.84	0.03	A
1	CS134	16.200	1.520	17.900	0.479	0.91	0.09	A
1	GA 1	3.160	0.079	3.300	0.300	0.96	0.09	A
1	GB 2	2.110	0.061	1.120	0.100	1.88	0.18	W
1	MN 54	4.630	0.500	5.340	0.302	0.87	0.11	A
1	PU238	0.111	0.009	0.096	0.002	1.15	0.10	W
1	PU239	0.109	0.009	0.093	0.003	1.18	0.11	W
1	RU106	17.400	3.130	17.000	1.360	1.02	0.20	A
1	SB125	10.700	1.250	11.400	0.449	0.94	0.12	A
1	SR 90	0.729	0.200	1.060	0.037	0.69	0.19	W
1	U 234	0.062	0.013	0.052	0.001	1.20	0.25	A
1	U 238	0.065	0.013	0.053	0.002	1.22	0.25	A
Matrix: SO								
1	AM241	1.920	0.333	1.760	0.113	1.09	0.20	A
1	CS137	211.000	31.600	207.000	1.120	1.02	0.15	A
1	K 40	354.000	40.300	377.000	16.400	0.94	0.11	A
1	PU238	11.600	1.040	17.500	0.901	0.66	0.07	A
1	PU239	4.110	0.588	5.170	0.070	0.80	0.11	A
1	U 234	29.000	2.520	29.500	2.320	0.98	0.12	A
1	U 238	29.300	2.590	30.400	2.080	0.96	0.11	A
Matrix: VE								
1	CO 60	8.070	1.860	9.170	0.257	0.88	0.20	A
1	CS137	117.000	16.700	97.200	1.930	1.20	0.17	A
2		6.110	0.696	97.200	1.930	0.06	0.01	N
1	K 40	363.000	42.800	352.000	8.160	1.03	0.12	A
1	PU239	0.988	0.311	0.980	0.115	1.01	0.34	A
1	SR 90	328.000	39.100	587.000	36.300	0.56	0.08	W
Matrix: WA								
1	AM241	2.470	0.066	1.950	0.084	1.27	0.06	W
1	CO 60	203.000	18.700	196.000	1.410	1.04	0.10	A
1	CS137	84.400	12.800	75.200	0.642	1.12	0.17	A
1	FE 55	153.000	12.700	101.000	4.000	1.52	0.14	W
1	GA 1	1300.000	45.100	1310.000	100.000	0.99	0.08	A
1	GB 2	673.000	24.400	410.000	40.000	1.64	0.17	W
1	H 3	127.000	27.000	168.000	35.000	0.76	0.23	W
1	MN 54	51.100	6.130	44.900	0.726	1.14	0.14	A
1	PU238	1.490	0.054	1.410	0.096	1.06	0.08	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: BX

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Ratio Error	Evaluation
1	PU239	0.297	0.019	0.272	0.033	1.09	0.15	A
1	U 234	0.357	0.061	0.306	0.003	1.17	0.20	A
1	U 238	0.389	0.065	0.311	0.016	1.25	0.22	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CO 57	9.900	0.040	14.700	0.576	0.67	0.03	W
1	CO 60	27.100	0.500	32.600	0.977	0.83	0.03	A
1	CS134	15.200	1.100	17.900	0.479	0.85	0.07	A
1	CS137	5.300	0.100	7.250	0.500	0.73	0.05	W
1	GA 1	3.060	0.050	3.300	0.300	0.93	0.09	A
1	GB 2	1.760	0.050	1.120	0.100	1.57	0.15	W
1	MN 54	4.100	0.200	5.340	0.302	0.77	0.06	W
1	SB125	9.600	0.400	11.400	0.449	0.84	0.05	A
Matrix: SO								
1	U UG	2.610	0.250	2.460	0.200	1.06	0.13	A
Matrix: WA								
1	CO 60	214.000	0.900	196.000	1.410	1.09	0.01	A
1	CS137	85.000	0.260	75.200	0.642	1.13	0.01	A
1	MN 54	51.200	0.800	44.900	0.726	1.14	0.03	A
1	U UG	0.033	0.002	0.025	0.002	1.32	0.13	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CH

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.234	0.040	0.189	0.006	1.24	0.22	W
1	CE144	30.600	0.785	52.100	5.000	0.59	0.06	W
1	CO 57	9.060	0.167	14.700	0.576	0.62	0.03	N
1	CO 60	23.400	0.396	32.600	0.977	0.72	0.02	W
1	CS134	12.900	0.230	17.900	0.479	0.72	0.02	W
1	CS137	4.790	0.215	7.250	0.500	0.66	0.05	N
1	GA 1	3.080	0.091	3.300	0.300	0.93	0.09	A
1	GB 2	1.290	0.058	1.120	0.100	1.15	0.12	A
1	MN 54	3.750	0.215	5.340	0.302	0.70	0.06	N
1	PU238	0.117	0.033	0.096	0.002	1.22	0.34	W
1	PU239	0.109	0.017	0.093	0.003	1.18	0.19	W
1	RU106	8.840	1.260	17.000	1.360	0.52	0.09	N
1	SB125	8.770	0.593	11.400	0.449	0.77	0.06	W
1	SR 90	1.230	0.138	1.060	0.037	1.16	0.14	A
1	U 234	0.050	0.035	0.052	0.001	0.98	0.68	A
1	U 238	0.034	0.023	0.053	0.002	0.64	0.44	N
Matrix: SO								
1	AM241	2.400	0.481	1.760	0.113	1.36	0.29	A
1	CS137	213.000	7.410	207.000	1.120	1.03	0.04	A
1	K 40	404.000	88.900	377.000	16.400	1.07	0.24	A
1	PU238	20.800	1.100	17.500	0.901	1.19	0.09	W
1	PU239	6.590	0.519	5.170	0.070	1.28	0.10	A
1	SR 90	13.600	4.780	7.810	0.280	1.74	0.62	W
1	U 234	28.900	4.890	29.500	2.320	0.98	0.18	A
1	U 238	28.000	4.750	30.400	2.080	0.92	0.17	A
Matrix: VE								
1	AM241	0.759	0.281	0.534	0.040	1.42	0.54	A
1	CM244	0.504	0.226	0.434	0.012	1.16	0.52	A
1	CO 60	8.110	1.670	9.170	0.257	0.88	0.18	A
1	CS137	104.000	2.960	97.200	1.930	1.07	0.04	A
1	K 40	396.000	29.600	352.000	8.160	1.13	0.09	A
1	PU239	1.190	0.170	0.980	0.115	1.21	0.22	A
1	SR 90	551.000	21.900	587.000	36.300	0.94	0.07	A
Matrix: WA								
1	AM241	2.200	0.171	1.950	0.084	1.13	0.10	A
1	CO 60	184.000	2.190	196.000	1.410	0.94	0.01	A
1	CS137	71.800	1.370	75.200	0.642	0.96	0.02	A
1	GA 1	1120.000	51.900	1310.000	100.000	0.86	0.08	A
1	GB 2	507.000	37.000	410.000	40.000	1.24	0.15	A
1	H 3	150.000	9.890	168.000	35.000	0.89	0.20	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CH

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	MN 54	43.100	1.260	44.900	0.726	0.96	0.03	A
1	PU238	1.560	0.203	1.410	0.096	1.11	0.16	A
1	PU239	0.333	0.088	0.272	0.033	1.22	0.36	W
1	SR 90	2.220	0.296	2.000	0.040	1.11	0.15	A
1	U 234	0.349	0.150	0.306	0.003	1.14	0.49	A
1	U 238	0.360	0.156	0.311	0.016	1.16	0.51	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μ g/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.300	0.100	0.189	0.006	1.59	0.53	W
1	CE144	61.300	6.100	52.100	5.000	1.18	0.16	A
1	CO 57	17.400	1.700	14.700	0.576	1.18	0.13	W
1	CO 60	46.800	4.700	32.600	0.977	1.44	0.15	N
1	CS134	26.400	2.600	17.900	0.479	1.48	0.15	N
1	CS137	11.700	1.200	7.250	0.500	1.61	0.20	N
1	MN 54	8.200	0.800	5.340	0.302	1.54	0.17	N
1	PU238	0.080	0.020	0.096	0.002	0.83	0.21	A
1	PU239	0.130	0.060	0.093	0.003	1.40	0.65	W
1	SB125	19.100	1.900	11.400	0.449	1.68	0.18	N
1	SR 90	2.200	0.300	1.060	0.037	2.08	0.29	N
1	U 234	0.150	0.050	0.052	0.001	2.90	0.97	N
1	U 238	0.100	0.040	0.053	0.002	1.88	0.75	N
1	U BQ	0.360	0.040	0.107	0.002	3.36	0.38	N
Matrix: SO								
1	AM241	8.600	1.800	1.760	0.113	4.89	1.07	N
1	CS137	202.000	20.200	207.000	1.120	0.98	0.10	A
1	K 40	346.000	51.900	377.000	16.400	0.92	0.14	A
1	PU238	17.600	6.000	17.500	0.901	1.01	0.35	A
1	PU239	6.200	1.000	5.170	0.070	1.20	0.19	A
1	SR 90	7.400	1.100	7.810	0.280	0.95	0.15	A
1	U 234	28.700	2.900	29.500	2.320	0.97	0.13	A
1	U 238	29.500	3.000	30.400	2.080	0.97	0.12	A
1	U BQ	62.400	6.200	58.200	4.500	1.07	0.14	W
Matrix: VE								
1	AM241	1.000	0.200	0.534	0.040	1.87	0.40	W
1	CM244	0.370	0.070	0.434	0.012	0.85	0.16	A
1	CO 60	8.400	0.800	9.170	0.257	0.92	0.09	A
1	CS137	92.000	9.200	97.200	1.930	0.95	0.10	A
1	K 40	414.000	41.400	352.000	8.160	1.18	0.12	A
1	PU239	2.300	0.100	0.980	0.115	2.35	0.29	N
1	SR 90	455.000	68.200	587.000	36.300	0.78	0.13	A
Matrix: WA								
1	AM241	2.450	0.300	1.950	0.084	1.26	0.16	W
1	CO 60	171.000	17.100	196.000	1.410	0.87	0.09	W
1	CS137	78.500	7.900	75.200	0.642	1.04	0.11	A
1	H 3	45.000	6.800	168.000	35.000	0.27	0.07	N
1	MN 54	41.600	4.200	44.900	0.726	0.93	0.09	A
1	PU238	1.300	0.200	1.410	0.096	0.92	0.16	A
1	PU239	0.370	0.100	0.272	0.033	1.36	0.40	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CL

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	SR 90	2.000	0.300	2.000	0.040	1.00	0.15	A
1	U 234	0.440	0.050	0.306	0.003	1.44	0.16	W
1	U 238	0.360	0.050	0.311	0.016	1.16	0.17	W
1	U BQ	0.830	0.100	0.624	0.016	1.33	0.16	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CP

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	45.100	6.000	52.100	5.000	0.87	0.14	A
1	CO 57	13.100	1.700	14.700	0.576	0.89	0.12	A
1	CO 60	30.900	3.000	32.600	0.977	0.95	0.10	A
1	CS134	16.500	2.600	17.900	0.479	0.92	0.15	A
1	CS137	6.780	1.090	7.250	0.500	0.94	0.16	A
1	GA 1	3.100	0.040	3.300	0.300	0.94	0.09	A
1	GB 2	1.660	0.020	1.120	0.100	1.48	0.13	W
1	MN 54	5.290	0.910	5.340	0.302	0.99	0.18	A
1	RU106	15.600	2.900	17.000	1.360	0.92	0.19	A
1	SB125	10.600	1.700	11.400	0.449	0.93	0.15	A
Matrix: SO								
1	CS137	223.000	23.000	207.000	1.120	1.08	0.11	A
1	K 40	435.000	95.000	377.000	16.400	1.15	0.26	A
Matrix: VE								
1	CO 60	9.500	3.500	9.170	0.257	1.04	0.38	A
1	CS137	111.000	15.000	97.200	1.930	1.14	0.16	A
1	K 40	236.000	142.000	352.000	8.160	0.67	0.40	W
1	SR 90	524.000	11.000	587.000	36.300	0.89	0.06	A
Matrix: WA								
1	AM241	3.070	0.270	1.950	0.084	1.57	0.15	N
1	CO 60	206.000	20.000	196.000	1.410	1.05	0.10	A
1	CS137	79.900	8.100	75.200	0.642	1.06	0.11	A
1	GA 1	977.000	22.000	1310.000	100.000	0.75	0.06	W
1	GB 2	584.000	12.000	410.000	40.000	1.42	0.14	A
1	MN 54	50.600	8.500	44.900	0.726	1.13	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: CS

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.180	0.010	0.189	0.006	0.95	0.06	A
1	CE144	24.700	1.060	52.100	5.000	0.47	0.05	N
1	CO 57	7.860	0.240	14.700	0.576	0.54	0.03	N
1	CO 60	22.200	0.680	32.600	0.977	0.68	0.03	N
1	CS134	11.300	0.240	17.900	0.479	0.63	0.02	N
1	CS137	4.320	0.190	7.250	0.500	0.60	0.05	N
1	GA 1	3.710	0.110	3.300	0.300	1.12	0.11	A
1	GB 2	3.430	0.090	1.120	0.100	3.06	0.29	N
1	MN 54	4.280	0.190	5.340	0.302	0.80	0.06	W
1	RU106	9.910	0.490	17.000	1.360	0.58	0.05	N
1	SB125	6.950	0.170	11.400	0.449	0.61	0.03	W
Matrix: SO								
1	AM241	2.130	0.250	1.760	0.113	1.21	0.16	A
1	CS137	212.000	9.210	207.000	1.120	1.02	0.04	A
1	K 40	388.000	17.500	377.000	16.400	1.03	0.06	A
1	U 238	26.500	4.140	30.400	2.080	0.87	0.15	A
Matrix: VE								
1	CO 60	8.110	0.330	9.170	0.257	0.88	0.04	A
1	CS137	99.700	4.420	97.200	1.930	1.03	0.05	A
1	K 40	381.000	17.500	352.000	8.160	1.08	0.06	A
Matrix: WA								
1	AM241	1.980	0.160	1.950	0.084	1.02	0.09	A
1	CO 60	209.000	6.400	196.000	1.410	1.07	0.03	A
1	CS137	82.000	3.550	75.200	0.642	1.09	0.05	A
1	MN 54	52.300	2.350	44.900	0.726	1.17	0.06	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: DC

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.208	0.047	0.189	0.006	1.10	0.25	A
1	CE144	35.600	9.780	52.100	5.000	0.68	0.20	W
1	CO 57	9.660	2.260	14.700	0.576	0.66	0.16	W
1	CO 60	28.400	7.730	32.600	0.977	0.87	0.24	A
1	CS134	18.500	4.030	17.900	0.479	1.03	0.23	A
1	CS137	6.830	1.740	7.250	0.500	0.94	0.25	A
1	GA 1	4.470	0.878	3.300	0.300	1.36	0.29	W
2		4.470	0.878	3.300	0.300	1.36	0.29	W
1	GB 2	1.380	0.271	1.120	0.100	1.23	0.27	A
2		1.380	0.210	1.120	0.100	1.23	0.22	A
1	MN 54	5.320	1.450	5.340	0.302	1.00	0.28	A
1	PU238	0.114	0.032	0.096	0.002	1.18	0.33	W
1	PU239	0.101	0.030	0.093	0.003	1.09	0.33	A
1	RU106	3.730	2.080	17.000	1.360	0.22	0.12	N
1	SB125	12.100	2.710	11.400	0.449	1.06	0.24	A
1	SR 90	1.090	0.163	1.060	0.037	1.03	0.16	A
1	U 234	0.079	0.028	0.052	0.001	1.53	0.54	W
1	U 235	0.005	0.011	0.002	0.000	2.48	5.50	N
1	U 238	0.057	0.025	0.053	0.002	1.06	0.47	A
1	U UG	4.260	0.430	4.300	0.080	0.99	0.10	A
Matrix: SO								
1	AM241	2.590	1.050	1.760	0.113	1.47	0.60	A
1	CS137	236.000	39.100	207.000	1.120	1.14	0.19	A
1	K 40	326.000	70.200	377.000	16.400	0.87	0.19	A
1	PU238	20.200	3.990	17.500	0.901	1.15	0.24	W
1	PU239	6.070	1.870	5.170	0.070	1.17	0.36	A
1	SR 90	6.760	1.640	7.810	0.280	0.87	0.21	A
1	U 234	27.900	4.880	29.500	2.320	0.95	0.18	A
1	U 235	1.710	1.080	1.460	0.197	1.17	0.76	A
1	U 238	29.300	5.020	30.400	2.080	0.96	0.18	A
1	U UG	1.700	0.170	2.460	0.200	0.69	0.09	A
Matrix: VE								
1	AM241	1.660	0.980	0.534	0.040	3.11	1.85	N
1	CM244	0.677	0.627	0.434	0.012	1.56	1.45	A
1	CO 60	5.760	2.080	9.170	0.257	0.63	0.23	N
1	CS137	117.000	27.400	97.200	1.930	1.20	0.28	A
1	K 40	319.000	84.000	352.000	8.160	0.91	0.24	A
1	PU239	1.320	0.970	0.980	0.115	1.35	1.00	A
1	SR 90	479.000	32.700	587.000	36.300	0.82	0.08	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: DC

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: WA								
1	AM241	1.970	0.370	1.950	0.084	1.01	0.20	A
1	CO 60	247.000	62.000	196.000	1.410	1.26	0.32	N
1	CS137	112.000	24.000	75.200	0.642	1.49	0.32	N
1	GA 1	1320.000	259.000	1310.000	100.000	1.01	0.21	A
1	GB 2	572.000	113.000	410.000	40.000	1.40	0.31	A
1	H 3	265.000	11.900	168.000	35.000	1.58	0.34	W
1	MN 54	67.100	16.000	44.900	0.726	1.49	0.36	N
1	PU238	1.380	0.270	1.410	0.096	0.98	0.20	A
1	PU239	0.312	0.096	0.272	0.033	1.15	0.38	A
1	SR 90	1.790	0.320	2.000	0.040	0.90	0.16	A
1	U 234	0.386	0.360	0.306	0.003	1.26	1.18	W
1	U 235	0.031	0.037	0.007	0.002	4.41	5.43	N
1	U 238	0.311	0.100	0.311	0.016	1.00	0.33	A
1	U UG	0.023	0.002	0.025	0.002	0.92	0.12	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: EB

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.327	0.015	0.189	0.006	1.73	0.09	N
1	CE144	81.600	0.224	52.100	5.000	1.57	0.15	N
1	CO 57	23.200	0.250	14.700	0.576	1.58	0.06	N
1	CO 60	67.000	0.500	32.600	0.977	2.06	0.06	N
1	CS134	32.000	0.529	17.900	0.479	1.79	0.06	N
1	CS137	20.000	0.288	7.250	0.500	2.76	0.19	N
1	MN 54	9.680	0.398	5.340	0.302	1.81	0.13	N
1	PU238	0.185	0.010	0.096	0.002	1.92	0.11	N
1	PU239	0.164	0.010	0.093	0.003	1.77	0.12	N
1	RU106	30.800	1.950	17.000	1.360	1.81	0.19	N
1	SB125	18.800	0.540	11.400	0.449	1.65	0.08	N
1	U BQ	0.679	0.128	0.107	0.002	6.35	1.20	N
Matrix: SO								
1	CS137	306.000	4.600	207.000	1.120	1.48	0.02	N
1	K 40	484.000	17.700	377.000	16.400	1.28	0.07	W
1	PU238	13.300	0.000	17.500	0.901	0.76	0.04	A
1	PU239	4.330	0.000	5.170	0.070	0.84	0.01	A
1	U 234	12.000	0.000	29.500	2.320	0.41	0.03	N
1	U 235	0.700	0.000	1.460	0.197	0.48	0.06	W
1	U 238	12.000	0.000	30.400	2.080	0.40	0.03	N
Matrix: VE								
1	AM241	0.493	0.001	0.534	0.040	0.92	0.07	A
1	CM244	0.430	0.000	0.434	0.012	0.99	0.03	A
1	CO 60	147.000	4.200	9.170	0.257	16.00	0.64	N
1	CS137	274.000	4.280	97.200	1.930	2.82	0.07	N
1	K 40	556.000	27.300	352.000	8.160	1.58	0.09	N
1	PU239	0.100	0.011	0.980	0.115	0.10	0.02	N
Matrix: WA								
1	AM241	1.350	0.057	1.950	0.084	0.69	0.04	W
1	CO 60	260.000	2.400	196.000	1.410	1.33	0.02	N
1	CS137	130.000	1.450	75.200	0.642	1.73	0.02	N
1	MN 54	56.500	1.360	44.900	0.726	1.26	0.04	N
1	PU238	1.240	0.018	1.410	0.096	0.88	0.06	A
1	PU239	0.252	0.048	0.272	0.033	0.93	0.21	A
1	U 234	0.319	0.029	0.306	0.003	1.04	0.10	A
1	U 235	0.022	0.005	0.007	0.002	3.14	1.15	N
1	U 238	0.350	0.029	0.311	0.016	1.13	0.11	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: EE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	48.800	0.052	52.100	5.000	0.94	0.09	A
1	CO 57	13.500	0.094	14.700	0.576	0.92	0.04	A
1	CO 60	30.600	0.685	32.600	0.977	0.94	0.04	A
1	CS134	16.400	0.100	17.900	0.479	0.92	0.03	A
1	CS137	6.400	0.100	7.250	0.500	0.88	0.06	A
1	MN 54	4.900	0.120	5.340	0.302	0.92	0.06	A
1	RU106	15.500	0.100	17.000	1.360	0.91	0.07	A
1	SB125	10.900	0.550	11.400	0.449	0.96	0.06	A
Matrix: SO								
1	CS137	216.000	41.000	207.000	1.120	1.04	0.20	A
1	K 40	383.000	62.000	377.000	16.400	1.02	0.17	A
Matrix: VE								
1	CO 60	5.700	1.560	9.170	0.257	0.62	0.17	N
1	CS137	83.300	15.900	97.200	1.930	0.86	0.16	A
1	K 40	297.000	47.000	352.000	8.160	0.84	0.14	A
Matrix: WA								
1	CO 60	206.000	29.000	196.000	1.410	1.05	0.15	A
1	CS137	81.300	14.400	75.200	0.642	1.08	0.19	A
1	MN 54	50.400	7.900	44.900	0.726	1.12	0.18	A
1	PU238	1.380	0.216	1.410	0.096	0.98	0.17	A
1	PU239	0.245	0.065	0.272	0.033	0.90	0.26	A
1	U 234	0.360	0.075	0.306	0.003	1.18	0.25	A
1	U 238	0.347	0.073	0.311	0.016	1.12	0.24	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: EG

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	36.000	3.000	52.100	5.000	0.69	0.09	W
1	CO 57	11.100	0.800	14.700	0.576	0.76	0.06	W
1	CO 60	28.000	2.000	32.600	0.977	0.86	0.07	A
1	CS134	16.400	1.200	17.900	0.479	0.92	0.07	A
1	CS137	5.700	0.400	7.250	0.500	0.79	0.08	W
1	GA 1	3.500	0.200	3.300	0.300	1.06	0.11	A
1	GB 2	2.300	0.600	1.120	0.100	2.05	0.57	N
1	MN 54	4.400	0.400	5.340	0.302	0.82	0.09	W
1	RU106	15.300	1.400	17.000	1.360	0.90	0.11	A
1	SB125	10.600	0.800	11.400	0.449	0.93	0.08	A
Matrix: SO								
1	CS137	215.000	17.000	207.000	1.120	1.04	0.08	A
1	K 40	416.000	50.000	377.000	16.400	1.10	0.14	A
1	SR 90	6.300	1.000	7.810	0.280	0.81	0.13	A
Matrix: VE								
1	CO 60	7.000	2.000	9.170	0.257	0.76	0.22	W
1	CS137	105.000	9.000	97.200	1.930	1.08	0.10	A
1	K 40	358.000	59.000	352.000	8.160	1.02	0.17	A
1	SR 90	580.000	14.000	587.000	36.300	0.99	0.07	A
Matrix: WA								
1	AM241	1.590	0.110	1.950	0.084	0.82	0.07	A
1	CO 60	204.000	15.000	196.000	1.410	1.04	0.08	A
1	CS137	81.000	6.000	75.200	0.642	1.08	0.08	A
1	MN 54	49.000	4.000	44.900	0.726	1.09	0.09	A
1	PU238	1.220	0.070	1.410	0.096	0.87	0.08	A
1	PU239	0.240	0.020	0.272	0.033	0.88	0.13	A
1	SR 90	1.700	0.090	2.000	0.040	0.85	0.05	A
1	U 234	0.340	0.040	0.306	0.003	1.11	0.13	A
1	U 238	0.350	0.030	0.311	0.016	1.13	0.11	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: EI

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	PU238	22.000	2.000	17.500	0.901	1.26	0.13	W
1	PU239	6.000	0.600	5.170	0.070	1.16	0.12	A
1	SR 90	11.000	2.000	7.810	0.280	1.41	0.26	A
Matrix: VE								
1	AM241	0.640	0.070	0.534	0.040	1.20	0.16	A
1	CM244	0.620	0.040	0.434	0.012	1.43	0.10	A
1	PU239	1.000	0.200	0.980	0.115	1.02	0.24	A
1	SR 90	600.000	28.000	587.000	36.300	1.02	0.08	A
Matrix: WA								
1	H 3	260.000	14.000	168.000	35.000	1.55	0.33	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: EL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.400	0.040	0.189	0.006	2.12	0.22	N
1	CE144	33.100	3.000	52.100	5.000	0.64	0.08	W
1	CO 57	11.000	1.000	14.700	0.576	0.75	0.07	W
1	CO 60	28.300	2.000	32.600	0.977	0.87	0.07	A
1	CS134	13.200	1.200	17.900	0.479	0.74	0.07	W
1	CS137	6.000	0.400	7.250	0.500	0.83	0.08	W
1	MN 54	3.800	0.400	5.340	0.302	0.71	0.09	N
1	RU106	15.900	1.000	17.000	1.360	0.94	0.10	A
1	SB125	9.100	0.100	11.400	0.449	0.80	0.03	W
1	SR 90	0.940	0.100	1.060	0.037	0.89	0.10	A
1	U 234	0.060	0.001	0.052	0.001	1.16	0.03	A
1	U 238	0.080	0.001	0.053	0.002	1.50	0.05	W
1	U BQ	0.140	0.010	0.107	0.002	1.31	0.10	A
Matrix: SO								
1	AM241	1.450	0.100	1.760	0.113	0.82	0.08	A
1	CS137	230.000	15.000	207.000	1.120	1.11	0.07	A
1	K 40	450.000	40.000	377.000	16.400	1.19	0.12	A
1	SR 90	20.700	2.100	7.810	0.280	2.65	0.29	N
1	U 234	27.800	2.200	29.500	2.320	0.94	0.11	A
1	U 238	33.100	2.680	30.400	2.080	1.09	0.12	A
1	U BQ	60.900	5.000	58.200	4.500	1.05	0.12	A
Matrix: VE								
1	AM241	0.450	0.400	0.534	0.040	0.84	0.75	A
1	CO 60	7.400	0.600	9.170	0.257	0.81	0.07	W
1	CS137	94.900	9.000	97.200	1.930	0.98	0.09	A
1	K 40	372.000	35.000	352.000	8.160	1.06	0.10	A
1	SR 90	496.000	40.000	587.000	36.300	0.85	0.09	A
Matrix: WA								
1	AM241	3.600	0.400	1.950	0.084	1.85	0.22	N
1	CO 60	196.000	15.000	196.000	1.410	1.00	0.08	A
1	CS137	77.100	7.000	75.200	0.642	1.03	0.09	A
1	MN 54	51.500	5.000	44.900	0.726	1.15	0.11	W
1	SR 90	1.800	0.200	2.000	0.040	0.90	0.10	A
1	U 234	0.330	0.040	0.306	0.003	1.08	0.13	A
1	U 238	0.460	0.050	0.311	0.016	1.48	0.18	N
1	U BQ	0.790	0.800	0.624	0.016	1.27	1.28	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: EP

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	49.400	0.760	52.100	5.000	0.95	0.09	A
1	CO 57	14.900	1.080	14.700	0.576	1.01	0.08	A
1	CO 60	35.500	1.340	32.600	0.977	1.09	0.05	A
1	CS134	20.100	1.700	17.900	0.479	1.12	0.10	W
1	CS137	7.130	0.660	7.250	0.500	0.98	0.11	A
1	MN 54	5.950	0.720	5.340	0.302	1.11	0.15	A
1	PU238	0.090	0.007	0.096	0.002	0.94	0.08	A
1	PU239	0.089	0.007	0.093	0.003	0.96	0.08	A
1	RU106	19.700	4.090	17.000	1.360	1.16	0.26	A
1	SB125	13.500	1.590	11.400	0.449	1.18	0.15	W
Matrix: SO								
1	PU238	17.400	1.990	17.500	0.901	0.99	0.13	A
1	PU239	5.390	0.630	5.170	0.070	1.04	0.12	A
Matrix: VE								
1	PU239	0.850	0.139	0.980	0.115	0.87	0.18	A
Matrix: WA								
1	GA 1	1340.000	28.000	1310.000	100.000	1.02	0.08	A
1	GB 2	690.000	16.000	410.000	40.000	1.68	0.17	N
1	H 3	160.000	10.600	168.000	35.000	0.95	0.21	A
1	PU238	1.360	0.109	1.410	0.096	0.97	0.10	A
1	PU239	0.267	0.033	0.272	0.033	0.98	0.17	A
1	SR 90	2.170	0.659	2.000	0.040	1.09	0.33	A
1	U 234	0.372	0.052	0.306	0.003	1.22	0.17	W
1	U 235	0.018	0.012	0.007	0.002	2.61	1.83	N
1	U 238	0.341	0.049	0.311	0.016	1.10	0.17	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: ES

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.158	0.031	0.189	0.006	0.84	0.17	A
1	CE144	36.600	2.040	52.100	5.000	0.70	0.08	W
1	CO 57	10.800	0.390	14.700	0.576	0.74	0.04	W
1	CO 60	26.500	0.920	32.600	0.977	0.81	0.04	W
1	CS134	15.000	0.560	17.900	0.479	0.84	0.04	A
1	CS137	5.910	0.570	7.250	0.500	0.82	0.10	W
1	GA 1	2.700	0.480	3.300	0.300	0.82	0.16	A
1	GB 2	1.300	0.230	1.120	0.100	1.16	0.23	A
1	MN 54	4.400	0.610	5.340	0.302	0.82	0.12	W
1	PU238	0.119	0.025	0.096	0.002	1.24	0.26	W
1	PU239	0.109	0.023	0.093	0.003	1.18	0.25	W
1	RU106	13.100	2.250	17.000	1.360	0.77	0.15	A
1	SB125	9.690	0.920	11.400	0.449	0.85	0.09	A
1	SR 90	1.520	0.500	1.060	0.037	1.43	0.47	A
1	U 234	0.052	0.016	0.052	0.001	1.01	0.31	A
1	U 235	0.003	0.003	0.002	0.000	1.50	1.50	W
1	U 238	0.056	0.016	0.053	0.002	1.05	0.30	A
1	U BQ	0.111	0.035	0.107	0.002	1.04	0.33	A
1	U UG	4.990	0.000	4.300	0.080	1.16	0.02	A
Matrix: SO								
1	AM241	1.170	0.280	1.760	0.113	0.67	0.17	W
1	CS137	201.000	4.980	207.000	1.120	0.97	0.02	A
1	K 40	361.000	27.800	377.000	16.400	0.96	0.08	A
1	PU238	21.500	3.910	17.500	0.901	1.23	0.23	W
1	PU239	6.540	1.300	5.170	0.070	1.27	0.25	A
1	SR 90	2.680	3.040	7.810	0.280	0.34	0.39	N
1	U 234	21.800	3.960	29.500	2.320	0.74	0.15	A
1	U 235	0.990	0.287	1.460	0.197	0.68	0.22	W
1	U 238	21.200	3.850	30.400	2.080	0.70	0.14	A
1	U BQ	44.000	8.090	58.200	4.500	0.76	0.15	A
1	U UG	2.560	0.000	2.460	0.200	1.04	0.08	A
Matrix: VE								
1	AM241	0.743	0.175	0.534	0.040	1.39	0.34	A
2		0.743	0.175	0.534	0.040	1.39	0.34	A
1	CM244	0.512	0.108	0.434	0.012	1.18	0.25	A
1	CO 60	7.010	2.510	9.170	0.257	0.76	0.28	W
1	CS137	107.000	6.820	97.200	1.930	1.10	0.07	A
1	K 40	407.000	54.900	352.000	8.160	1.16	0.16	A
1	PU239	0.773	0.184	0.980	0.115	0.79	0.21	A
1	SR 90	620.000	109.000	587.000	36.300	1.06	0.20	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: ES

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: WA								
1	AM241	1.860	0.333	1.950	0.084	0.95	0.18	A
1	CO 60	207.000	2.730	196.000	1.410	1.06	0.02	A
1	CS137	84.000	2.210	75.200	0.642	1.12	0.03	A
1	GA 1	793.000	113.000	1310.000	100.000	0.61	0.10	W
1	GB 2	440.000	94.000	410.000	40.000	1.07	0.25	A
1	H 3	234.000	73.000	168.000	35.000	1.39	0.52	W
1	MN 54	48.700	1.960	44.900	0.726	1.09	0.05	A
1	PU238	1.530	0.274	1.410	0.096	1.09	0.21	A
1	PU239	0.322	0.064	0.272	0.033	1.18	0.28	W
1	SR 90	1.920	0.110	2.000	0.040	0.96	0.06	A
1	U 234	0.354	0.069	0.306	0.003	1.16	0.23	A
1	U 235	0.017	0.008	0.007	0.002	2.43	1.34	N
1	U 238	0.324	0.065	0.311	0.016	1.04	0.22	A
1	U BQ	0.694	0.142	0.624	0.016	1.11	0.23	A
1	U UG	0.029	0.000	0.025	0.002	1.17	0.09	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: FG

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.205	0.050	0.189	0.006	1.09	0.27	A
1	CE144	48.900	3.200	52.100	5.000	0.94	0.11	A
1	CO 57	13.300	0.440	14.700	0.576	0.91	0.05	A
1	CO 60	30.200	0.310	32.600	0.977	0.93	0.03	A
1	CS134	16.400	0.880	17.900	0.479	0.92	0.05	A
1	CS137	6.390	0.280	7.250	0.500	0.88	0.07	A
1	MN 54	4.950	0.150	5.340	0.302	0.93	0.06	A
1	PU239	8.800	2.200	0.093	0.003	94.90	23.90	N
1	RU106	16.300	0.850	17.000	1.360	0.96	0.09	A
1	SB125	10.500	0.610	11.400	0.449	0.92	0.06	A
Matrix: SO								
1	AM241	2.800	0.700	1.760	0.113	1.59	0.41	W
1	CS137	295.000	12.000	207.000	1.120	1.43	0.06	W
1	K 40	380.000	37.000	377.000	16.400	1.01	0.11	A
1	U BQ	31.000	2.000	58.200	4.500	0.53	0.05	A
Matrix: WA								
1	AM241	2.200	0.240	1.950	0.084	1.13	0.13	A
1	CO 60	197.000	8.400	196.000	1.410	1.01	0.04	A
1	CS137	77.200	5.200	75.200	0.642	1.03	0.07	A
1	H 3	258.000	21.000	168.000	35.000	1.54	0.34	W
1	MN 54	48.600	3.100	44.900	0.726	1.08	0.07	A
1	PU238	4.990	0.320	1.410	0.096	3.54	0.33	N
1	PU239	0.450	0.090	0.272	0.033	1.65	0.39	N
1	SR 90	2.990	0.500	2.000	0.040	1.50	0.25	N
1	U BQ	0.350	0.200	0.624	0.016	0.56	0.32	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: FL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.211	0.043	0.189	0.006	1.12	0.23	A
1	CE144	34.900	0.600	52.100	5.000	0.67	0.07	W
1	CO 57	9.760	0.110	14.700	0.576	0.66	0.03	W
1	CO 60	25.800	0.210	32.600	0.977	0.79	0.02	W
1	CS134	14.400	0.170	17.900	0.479	0.80	0.02	A
1	CS137	5.920	0.100	7.250	0.500	0.82	0.06	W
1	GA 1	2.670	0.050	3.300	0.300	0.81	0.08	A
1	GB 2	2.030	0.030	1.120	0.100	1.81	0.16	W
1	MN 54	4.360	0.080	5.340	0.302	0.82	0.05	W
1	PU238	0.094	0.003	0.096	0.002	0.98	0.04	A
1	PU239	0.097	0.003	0.093	0.003	1.05	0.04	A
1	RU106	14.600	0.310	17.000	1.360	0.86	0.07	A
1	SB125	10.700	0.200	11.400	0.449	0.94	0.04	A
Matrix: SO								
1	AM241	1.800	0.600	1.760	0.113	1.02	0.35	A
1	CS137	219.000	1.000	207.000	1.120	1.06	0.01	A
1	K 40	375.000	5.000	377.000	16.400	1.00	0.05	A
1	PU238	18.500	0.960	17.500	0.901	1.06	0.08	A
1	PU239	6.210	0.590	5.170	0.070	1.20	0.12	A
1	U BQ	48.000	9.600	58.200	4.500	0.83	0.18	A
Matrix: VE								
1	AM241	0.855	0.545	0.534	0.040	1.60	1.03	A
1	CO 60	7.590	0.200	9.170	0.257	0.83	0.03	W
1	CS137	121.000	2.000	97.200	1.930	1.25	0.03	A
1	K 40	418.000	4.000	352.000	8.160	1.19	0.03	A
Matrix: WA								
1	AM241	1.830	0.270	1.950	0.084	0.94	0.14	A
1	CO 60	202.000	2.000	196.000	1.410	1.03	0.01	A
1	CS137	81.100	0.900	75.200	0.642	1.08	0.02	A
1	GA 1	1410.000	19.000	1310.000	100.000	1.08	0.08	A
1	GB 2	634.000	9.000	410.000	40.000	1.55	0.15	W
1	H 3	106.000	1.500	168.000	35.000	0.63	0.13	N
1	MN 54	48.700	0.400	44.900	0.726	1.09	0.02	A
1	PU238	1.410	0.027	1.410	0.096	1.00	0.07	A
1	PU239	0.263	0.007	0.272	0.033	0.97	0.12	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in µg/filter, g, or mL

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: FM

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	36.700	0.760	52.100	5.000	0.70	0.07	W
1	CO 57	10.700	0.180	14.700	0.576	0.73	0.03	W
1	CO 60	28.100	0.230	32.600	0.977	0.86	0.03	A
1	CS134	15.600	0.240	17.900	0.479	0.87	0.03	A
1	CS137	6.290	0.150	7.250	0.500	0.87	0.06	A
1	MN 54	4.830	0.130	5.340	0.302	0.90	0.06	A
1	RU106	14.600	0.340	17.000	1.360	0.86	0.07	A
1	SB125	10.700	0.220	11.400	0.449	0.94	0.04	A
Matrix: WA								
1	AM241	2.600	0.500	1.950	0.084	1.33	0.26	W
1	CO 60	204.000	2.000	196.000	1.410	1.04	0.01	A
1	CS137	81.200	1.100	75.200	0.642	1.08	0.02	A
1	MN 54	48.000	0.900	44.900	0.726	1.07	0.03	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: FN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	46.900	10.100	52.100	5.000	0.90	0.21	A
1	CO 57	11.200	0.700	14.700	0.576	0.76	0.06	W
1	CO 60	25.500	3.200	32.600	0.977	0.78	0.10	W
1	CS134	16.900	0.800	17.900	0.479	0.94	0.05	A
1	CS137	5.450	0.450	7.250	0.500	0.75	0.08	W
1	MN 54	4.600	0.380	5.340	0.302	0.86	0.09	A
1	RU106	15.500	1.400	17.000	1.360	0.91	0.11	A
1	SB125	11.000	1.300	11.400	0.449	0.97	0.12	A
Matrix: SO								
1	CS137	218.000	25.000	207.000	1.120	1.05	0.12	A
1	K 40	360.000	37.000	377.000	16.400	0.96	0.11	A
1	U 235	0.650	0.160	1.460	0.197	0.45	0.13	N
1	U 238	30.700	2.100	30.400	2.080	1.01	0.10	A
Matrix: VE								
1	CO 60	6.090	0.520	9.170	0.257	0.66	0.06	N
1	CS137	98.400	9.900	97.200	1.930	1.01	0.10	A
1	K 40	347.000	37.000	352.000	8.160	0.99	0.11	A
Matrix: WA								
1	CO 60	206.000	15.000	196.000	1.410	1.05	0.08	A
1	CS137	76.600	7.700	75.200	0.642	1.02	0.10	A
1	H 3	153.000	9.000	168.000	35.000	0.91	0.20	A
1	MN 54	44.800	4.500	44.900	0.726	1.00	0.10	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: FS

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Ratio Error	Evaluation
Matrix: SO								
1	AM241	1.760	0.140	1.760	0.113	1.00	0.10	A
1	CS137	205.000	11.000	207.000	1.120	0.99	0.05	A
1	K 40	360.000	14.000	377.000	16.400	0.96	0.06	A
1	PU238	17.400	0.700	17.500	0.901	0.99	0.07	A
1	PU239	5.500	1.100	5.170	0.070	1.06	0.21	A
1	U 234	31.200	1.500	29.500	2.320	1.06	0.10	A
1	U 238	30.900	3.100	30.400	2.080	1.02	0.12	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: GA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.208	0.000	0.189	0.006	1.10	0.03	A
1	CE144	32.300	0.000	52.100	5.000	0.62	0.06	W
1	CO 57	9.700	0.000	14.700	0.576	0.66	0.03	W
1	CO 60	25.800	0.000	32.600	0.977	0.79	0.02	W
1	CS134	13.500	0.000	17.900	0.479	0.75	0.02	A
1	CS137	5.300	0.000	7.250	0.500	0.73	0.05	W
1	MN 54	4.100	0.000	5.340	0.302	0.77	0.04	W
1	PU238	0.118	0.000	0.096	0.002	1.23	0.03	W
1	PU239	0.096	0.000	0.093	0.003	1.04	0.03	A
1	RU106	12.200	0.000	17.000	1.360	0.72	0.06	A
1	SB125	8.300	0.000	11.400	0.449	0.73	0.03	W
1	U 234	0.056	0.000	0.052	0.001	1.08	0.03	A
1	U 238	0.053	0.000	0.053	0.002	0.99	0.03	A
Matrix: SO								
1	AM241	2.330	0.000	1.760	0.113	1.32	0.09	A
1	CS137	216.000	0.000	207.000	1.120	1.04	0.01	A
1	K 40	394.000	0.000	377.000	16.400	1.04	0.05	A
1	PU238	16.600	0.000	17.500	0.901	0.95	0.05	A
1	PU239	5.370	0.000	5.170	0.070	1.04	0.01	A
1	U 234	28.400	0.000	29.500	2.320	0.96	0.08	A
1	U 238	28.900	0.000	30.400	2.080	0.95	0.07	A
1	U UG	2.600	0.000	2.460	0.200	1.06	0.09	A
Matrix: VE								
1	AM241	0.806	0.000	0.534	0.040	1.51	0.11	A
1	CM244	0.611	0.000	0.434	0.012	1.41	0.04	A
1	CO 60	11.000	0.000	9.170	0.257	1.20	0.03	A
1	CS137	112.000	0.000	97.200	1.930	1.15	0.02	A
1	K 40	440.000	0.000	352.000	8.160	1.25	0.03	W
1	PU239	0.844	0.000	0.980	0.115	0.86	0.10	A
Matrix: WA								
1	AM241	2.100	0.000	1.950	0.084	1.08	0.05	A
1	CO 60	201.000	0.000	196.000	1.410	1.03	0.01	A
1	CS137	79.000	0.000	75.200	0.642	1.05	0.01	A
1	MN 54	50.000	0.000	44.900	0.726	1.11	0.02	A
1	PU238	1.460	0.000	1.410	0.096	1.04	0.07	A
1	PU239	0.263	0.000	0.272	0.033	0.97	0.12	A
1	U 234	0.334	0.000	0.306	0.003	1.09	0.01	A
1	U 238	0.320	0.000	0.311	0.016	1.03	0.05	A
1	U UG	0.026	0.000	0.025	0.002	1.02	0.08	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: GE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.181	0.021	0.189	0.006	0.96	0.12	A
1	CE144	38.100	0.950	52.100	5.000	0.73	0.07	W
1	CO 57	11.400	0.210	14.700	0.576	0.78	0.03	W
1	CO 60	27.900	0.470	32.600	0.977	0.86	0.03	A
1	CS134	16.900	0.300	17.900	0.479	0.94	0.03	A
1	CS137	6.430	0.270	7.250	0.500	0.89	0.07	A
1	MN 54	4.850	0.270	5.340	0.302	0.91	0.07	A
1	PU238	0.071	0.016	0.096	0.002	0.74	0.16	A
1	PU239	0.081	0.017	0.093	0.003	0.87	0.18	A
1	RU106	13.100	1.630	17.000	1.360	0.77	0.11	A
1	SB125	9.990	0.550	11.400	0.449	0.88	0.06	A
1	SR 90	1.500	0.046	1.060	0.037	1.42	0.07	A
1	U 234	0.065	0.010	0.052	0.001	1.26	0.20	A
1	U 238	0.050	0.009	0.053	0.002	0.94	0.16	A
1	U BQ	0.118	0.013	0.107	0.002	1.10	0.12	A
Matrix: SO								
1	AM241	1.370	0.323	1.760	0.113	0.78	0.19	A
1	CS137	229.000	2.950	207.000	1.120	1.11	0.02	A
1	K 40	417.000	16.900	377.000	16.400	1.11	0.07	A
1	PU238	15.900	1.430	17.500	0.901	0.91	0.09	A
1	PU239	4.590	0.590	5.170	0.070	0.89	0.12	A
1	SR 90	22.200	4.440	7.810	0.280	2.84	0.58	N
1	U 234	30.800	3.400	29.500	2.320	1.04	0.14	A
1	U 238	30.200	3.300	30.400	2.080	0.99	0.13	A
1	U BQ	62.400	4.800	58.200	4.500	1.07	0.12	W
Matrix: VE								
1	AM241	0.770	0.420	0.534	0.040	1.44	0.79	A
1	CM244	0.700	0.430	0.434	0.012	1.61	0.99	A
1	CO 60	7.450	1.290	9.170	0.257	0.81	0.14	W
1	CS137	113.000	2.750	97.200	1.930	1.16	0.04	A
1	K 40	406.000	20.800	352.000	8.160	1.15	0.06	A
1	PU239	1.020	0.270	0.980	0.115	1.04	0.30	A
1	SR 90	750.000	9.990	587.000	36.300	1.28	0.08	W
Matrix: WA								
1	AM241	1.790	0.110	1.950	0.084	0.92	0.07	A
1	CO 60	204.000	3.770	196.000	1.410	1.04	0.02	A
1	CS137	81.700	2.360	75.200	0.642	1.09	0.03	A
1	FE 55	151.000	21.700	101.000	4.000	1.50	0.22	W
1	GA 1	1210.000	12.400	1310.000	100.000	0.92	0.07	A
1	GB 2	426.000	22.100	410.000	40.000	1.04	0.12	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: GE

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	H 3	170.000	7.400	168.000	35.000	1.01	0.22	A
1	MN 54	48.300	2.120	44.900	0.726	1.08	0.05	A
1	PU238	1.300	0.126	1.410	0.096	0.92	0.11	A
1	PU239	0.258	0.032	0.272	0.033	0.95	0.16	A
1	SR 90	2.820	0.140	2.000	0.040	1.41	0.08	W
1	U 234	0.345	0.025	0.306	0.003	1.13	0.08	A
1	U 238	0.339	0.024	0.311	0.016	1.09	0.10	A
1	U BQ	0.698	0.035	0.624	0.016	1.12	0.06	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: GS

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: WA								
1	GA 1	1180.000	46.000	1310.000	100.000	0.90	0.08	A
1	GB 2	668.000	25.000	410.000	40.000	1.63	0.17	W
1	U UG	0.022	0.001	0.025	0.002	0.88	0.08	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: HA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	AM241	1.850	0.703	1.760	0.113	1.05	0.41	A
1	CS137	281.000	30.000	207.000	1.120	1.36	0.15	W
1	K 40	518.000	74.000	377.000	16.400	1.37	0.21	W
1	PU238	15.900	1.850	17.500	0.901	0.91	0.12	A
1	PU239	4.440	0.740	5.170	0.070	0.86	0.14	A
1	SR 90	4.920	4.900	7.810	0.280	0.63	0.63	W
1	U 234	37.000	11.100	29.500	2.320	1.25	0.39	W
1	U 235	5.550	4.440	1.460	0.197	3.80	3.08	N
1	U 238	26.300	0.990	30.400	2.080	0.87	0.07	A

Matrix: WA								
1	AM241	0.070	0.059	1.950	0.084	0.04	0.03	N
1	CO 60	207.000	22.200	196.000	1.410	1.06	0.11	A
1	CS137	81.400	11.100	75.200	0.642	1.08	0.15	A
1	FE 55	140.000	15.000	101.000	4.000	1.39	0.16	W
1	GA 1	295.000	148.000	1310.000	100.000	0.23	0.11	N
1	GB 2	81.000	74.000	410.000	40.000	0.20	0.18	N
1	H 3	133.000	15.000	168.000	35.000	0.79	0.19	W
1	MN 54	48.100	5.180	44.900	0.726	1.07	0.12	A
1	PU238	1.480	0.220	1.410	0.096	1.05	0.17	A
1	PU239	0.348	0.085	0.272	0.033	1.28	0.35	W
1	SR 90	4.440	0.400	2.000	0.040	2.22	0.21	N
1	U 234	0.300	0.048	0.306	0.003	0.98	0.16	A
1	U 235	0.009	0.008	0.007	0.002	1.29	1.20	W
1	U 238	0.352	0.052	0.311	0.016	1.13	0.18	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: HC

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	GA 1	2.770	0.300	3.300	0.300	0.84	0.12	A
1	GB 2	1.630	0.200	1.120	0.100	1.46	0.22	W
Matrix: WA								
1	GA 1	853.000	85.000	1310.000	100.000	0.65	0.08	W
1	GB 2	513.000	50.000	410.000	40.000	1.25	0.17	A
1	H 3	148.000	10.000	168.000	35.000	0.88	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: HI

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	64.900	0.800	52.100	5.000	1.25	0.12	W
1	CO 57	13.600	0.960	14.700	0.576	0.93	0.07	A
1	CO 60	41.400	0.200	32.600	0.977	1.27	0.04	W
1	CS134	17.000	0.130	17.900	0.479	0.95	0.03	A
1	CS137	8.400	0.100	7.250	0.500	1.16	0.08	A
1	GA 1	2.820	0.090	3.300	0.300	0.86	0.08	A
1	GB 2	2.150	0.080	1.120	0.100	1.92	0.19	W
1	MN 54	6.170	0.120	5.340	0.302	1.16	0.07	A
1	RU106	14.000	0.810	17.000	1.360	0.82	0.08	A
1	SB125	22.000	0.440	11.400	0.449	1.93	0.09	N
Matrix: SO								
1	CS137	229.000	20.000	207.000	1.120	1.11	0.10	A
1	K 40	602.000	88.000	377.000	16.400	1.60	0.24	N
Matrix: VE								
1	CS137	109.000	12.000	97.200	1.930	1.12	0.13	A
1	K 40	693.000	120.000	352.000	8.160	1.97	0.34	N
Matrix: WA								
1	CO 60	224.000	24.000	196.000	1.410	1.14	0.12	W
1	CS137	87.000	11.000	75.200	0.642	1.16	0.15	W
1	GA 1	1620.000	82.000	1310.000	100.000	1.24	0.11	A
1	GB 2	538.000	36.000	410.000	40.000	1.31	0.16	A
1	H 3	195.000	10.000	168.000	35.000	1.16	0.25	A
1	MN 54	56.000	8.500	44.900	0.726	1.25	0.19	W
1	SR 90	3.540	0.290	2.000	0.040	1.77	0.15	N
1	U BQ	0.928	0.170	0.624	0.016	1.49	0.28	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: HL

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	AM241	2.840	1.760	1.760	0.113	1.61	1.01	W
1	CS137	180.000	20.500	207.000	1.120	0.87	0.10	A
1	K 40	446.000	113.000	377.000	16.400	1.18	0.30	A
1	PU238	27.900	5.870	17.500	0.901	1.59	0.35	N
1	PU239	7.540	2.210	5.170	0.070	1.46	0.43	W
1	SR 90	12.200	1.850	7.810	0.280	1.56	0.24	W
1	U 234	25.400	2.400	29.500	2.320	0.86	0.11	A
1	U 238	25.600	2.400	30.400	2.080	0.84	0.10	A
1	U BQ	51.100	4.900	58.200	4.500	0.88	0.11	A
Matrix: WA								
1	AM241	2.160	0.500	1.950	0.084	1.11	0.26	A
1	CO 60	224.000	17.000	196.000	1.410	1.14	0.09	W
1	CS137	88.000	8.900	75.200	0.642	1.17	0.12	W
1	FE 55	32.000	1.200	101.000	4.000	0.32	0.02	W
1	H 3	155.000	7.000	168.000	35.000	0.92	0.20	A
1	MN 54	53.900	5.200	44.900	0.726	1.20	0.12	W
1	PU238	1.670	0.180	1.410	0.096	1.18	0.15	A
1	PU239	0.340	0.050	0.272	0.033	1.25	0.24	W
1	SR 90	3.290	0.180	2.000	0.040	1.65	0.10	N
1	U 234	0.440	0.250	0.306	0.003	1.44	0.82	W
1	U 238	0.300	0.190	0.311	0.016	0.97	0.61	A
1	U BQ	0.740	0.440	0.624	0.016	1.19	0.71	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: HS

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.210	0.010	0.189	0.006	1.11	0.06	A
1	CE144	34.000	4.000	52.100	5.000	0.65	0.10	W
1	CO 57	10.300	0.600	14.700	0.576	0.70	0.05	W
1	CO 60	27.500	1.200	32.600	0.977	0.84	0.04	A
1	CS134	15.100	0.900	17.900	0.479	0.84	0.06	A
1	CS137	5.600	0.600	7.250	0.500	0.77	0.10	W
1	MN 54	4.200	0.700	5.340	0.302	0.79	0.14	W
1	RU106	14.000	5.000	17.000	1.360	0.82	0.30	A
1	SB125	11.000	2.000	11.400	0.449	0.97	0.18	A
1	SR 90	1.160	0.050	1.060	0.037	1.09	0.06	A
1	U 234	0.060	0.003	0.052	0.001	1.16	0.06	A
1	U 235	0.004	0.001	0.002	0.000	2.00	0.32	N
1	U 238	0.059	0.003	0.053	0.002	1.11	0.07	A
Matrix: SO								
1	AM241	1.730	0.150	1.760	0.113	0.98	0.11	A
1	CS137	232.000	10.000	207.000	1.120	1.12	0.05	A
1	K 40	393.000	35.000	377.000	16.400	1.04	0.10	A
1	PU238	18.200	0.800	17.500	0.901	1.04	0.07	A
1	PU239	5.300	0.300	5.170	0.070	1.03	0.06	A
1	SR 90	9.000	3.000	7.810	0.280	1.15	0.39	A
1	U 234	32.800	1.100	29.500	2.320	1.11	0.10	W
1	U 235	1.400	0.100	1.460	0.197	0.96	0.15	A
1	U 238	32.500	1.100	30.400	2.080	1.07	0.08	A
Matrix: VE								
1	AM241	0.540	0.060	0.534	0.040	1.01	0.14	A
1	CO 60	8.000	2.000	9.170	0.257	0.87	0.22	A
1	CS137	100.000	6.000	97.200	1.930	1.03	0.07	A
1	K 40	329.000	50.000	352.000	8.160	0.94	0.14	A
1	PU239	0.850	0.070	0.980	0.115	0.87	0.12	A
1	SR 90	568.000	15.000	587.000	36.300	0.97	0.07	A
Matrix: WA								
1	AM241	1.760	0.070	1.950	0.084	0.90	0.05	A
1	CO 60	207.000	7.000	196.000	1.410	1.06	0.04	A
1	CS137	80.000	4.000	75.200	0.642	1.06	0.05	A
1	FE 55	123.000	2.000	101.000	4.000	1.22	0.05	A
1	H 3	153.000	6.000	168.000	35.000	0.91	0.19	A
1	MN 54	51.000	3.000	44.900	0.726	1.14	0.07	A
1	PU238	1.370	0.060	1.410	0.096	0.97	0.08	A
1	PU239	0.280	0.020	0.272	0.033	1.03	0.15	A
1	SR 90	2.100	0.200	2.000	0.040	1.05	0.10	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: HS

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	U 234	0.340	0.020	0.306	0.003	1.11	0.07	A
1	U 235	0.030	0.010	0.007	0.002	4.29	1.88	N
1	U 238	0.320	0.020	0.311	0.016	1.03	0.08	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: ID

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	36.000	4.000	52.100	5.000	0.69	0.10	W
1	CO 57	13.000	1.000	14.700	0.576	0.88	0.08	A
1	CO 60	28.000	2.000	32.600	0.977	0.86	0.07	A
1	CS134	18.000	1.000	17.900	0.479	1.01	0.06	A
1	CS137	7.000	0.400	7.250	0.500	0.97	0.09	A
1	GA 1	2.400	0.100	3.300	0.300	0.73	0.07	W
1	GB 2	1.800	0.100	1.120	0.100	1.61	0.17	W
1	MN 54	5.000	0.300	5.340	0.302	0.94	0.08	A
1	PU238	0.140	0.020	0.096	0.002	1.46	0.21	W
1	PU239	0.110	0.010	0.093	0.003	1.19	0.11	W
1	RU106	17.000	1.000	17.000	1.360	1.00	0.10	A
1	SB125	12.000	1.000	11.400	0.449	1.05	0.10	A
1	U UG	0.110	0.060	4.300	0.080	0.03	0.01	N
Matrix: SO								
1	CS137	230.000	12.000	207.000	1.120	1.11	0.06	A
1	K 40	384.000	34.000	377.000	16.400	1.02	0.10	A
1	PU238	18.000	1.000	17.500	0.901	1.03	0.08	A
1	PU239	5.300	0.400	5.170	0.070	1.03	0.08	A
1	SR 90	13.000	1.000	7.810	0.280	1.67	0.14	W
1	U BQ	100.000	17.000	58.200	4.500	1.72	0.32	N
Matrix: VE								
1	CO 60	5.300	0.700	9.170	0.257	0.58	0.08	N
1	CS137	106.000	6.000	97.200	1.930	1.09	0.07	A
1	K 40	319.000	19.000	352.000	8.160	0.91	0.06	A
1	PU239	1.600	0.600	0.980	0.115	1.63	0.64	W
1	SR 90	511.000	29.000	587.000	36.300	0.87	0.07	A
Matrix: WA								
1	CO 60	216.000	11.000	196.000	1.410	1.10	0.06	A
1	CS137	86.000	5.000	75.200	0.642	1.14	0.07	A
1	H 3	200.000	13.000	168.000	35.000	1.19	0.26	A
1	MN 54	51.000	3.000	44.900	0.726	1.14	0.07	A
1	SR 90	1.700	0.100	2.000	0.040	0.85	0.05	A
1	U BQ	0.710	0.050	0.624	0.016	1.14	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: IE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.174	0.056	0.189	0.006	0.92	0.30	A
1	CE144	39.500	2.790	52.100	5.000	0.76	0.09	W
1	CO 57	12.200	0.610	14.700	0.576	0.83	0.05	A
1	CO 60	30.200	1.300	32.600	0.977	0.93	0.05	A
1	CS134	14.500	0.670	17.900	0.479	0.81	0.04	A
1	CS137	5.260	0.600	7.250	0.500	0.73	0.10	W
1	MN 54	4.800	0.710	5.340	0.302	0.90	0.14	A
1	PU238	0.091	0.031	0.096	0.002	0.95	0.32	A
1	PU239	0.102	0.030	0.093	0.003	1.10	0.33	A
1	RU106	13.700	4.280	17.000	1.360	0.81	0.26	A
1	U 234	0.063	0.021	0.052	0.001	1.22	0.41	A
1	U 238	0.063	0.021	0.053	0.002	1.18	0.40	A
Matrix: SO								
1	AM241	3.330	1.150	1.760	0.113	1.89	0.67	W
1	CS137	218.000	4.220	207.000	1.120	1.05	0.02	A
1	K 40	432.000	31.800	377.000	16.400	1.15	0.10	A
1	PU238	17.300	2.180	17.500	0.901	0.99	0.14	A
1	PU239	5.290	0.851	5.170	0.070	1.02	0.17	A
1	U 234	31.900	3.960	29.500	2.320	1.08	0.16	A
1	U 238	30.400	3.830	30.400	2.080	1.00	0.14	A
Matrix: VE								
1	AM241	0.648	0.222	0.534	0.040	1.21	0.43	A
1	CM244	0.357	0.163	0.434	0.012	0.82	0.38	A
1	CO 60	8.210	2.330	9.170	0.257	0.90	0.26	A
1	CS137	121.000	3.890	97.200	1.930	1.25	0.05	A
1	K 40	422.000	35.500	352.000	8.160	1.20	0.11	A
1	PU239	0.940	0.241	0.980	0.115	0.96	0.27	A
Matrix: WA								
1	AM241	1.790	0.370	1.950	0.084	0.92	0.19	A
1	CO 60	208.000	2.170	196.000	1.410	1.06	0.01	A
1	CS137	71.900	1.150	75.200	0.642	0.96	0.02	A
1	GA 1	1320.000	29.700	1310.000	100.000	1.01	0.08	A
1	GB 2	389.000	13.100	410.000	40.000	0.95	0.10	W
1	H 3	180.000	20.400	168.000	35.000	1.07	0.25	A
1	MN 54	49.100	1.220	44.900	0.726	1.09	0.03	A
1	PU238	1.390	0.220	1.410	0.096	0.99	0.17	A
1	PU239	0.259	0.072	0.272	0.033	0.95	0.29	A
1	U 234	0.326	0.081	0.306	0.003	1.07	0.27	A
1	U 238	0.303	0.081	0.311	0.016	0.97	0.27	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: IN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	34.300	3.700	52.100	5.000	0.66	0.10	W
1	CO 57	10.400	0.600	14.700	0.576	0.71	0.05	W
1	CO 60	27.100	0.600	32.600	0.977	0.83	0.03	A
1	CS134	15.800	0.500	17.900	0.479	0.88	0.04	A
1	CS137	5.200	0.400	7.250	0.500	0.72	0.07	W
1	MN 54	4.300	0.200	5.340	0.302	0.81	0.06	W
1	RU106	14.600	1.800	17.000	1.360	0.86	0.13	A
1	SB125	10.000	0.600	11.400	0.449	0.88	0.06	A
Matrix: SO								
1	AM241	1.700	0.340	1.760	0.113	0.97	0.20	A
1	CS137	233.000	1.000	207.000	1.120	1.13	0.01	A
1	K 40	433.000	15.800	377.000	16.400	1.15	0.07	A
1	PU238	18.900	2.200	17.500	0.901	1.08	0.14	A
1	PU239	5.700	1.000	5.170	0.070	1.10	0.19	A
Matrix: VE								
1	CO 60	8.900	2.000	9.170	0.257	0.97	0.22	A
1	CS137	106.000	0.600	97.200	1.930	1.09	0.02	A
1	K 40	353.000	1.700	352.000	8.160	1.00	0.02	A
Matrix: WA								
1	AM241	1.850	0.180	1.950	0.084	0.95	0.10	A
1	CO 60	219.000	2.900	196.000	1.410	1.12	0.02	W
1	CS137	82.300	0.700	75.200	0.642	1.09	0.01	A
1	GA 1	1460.000	205.000	1310.000	100.000	1.12	0.18	A
1	GB 2	784.000	102.000	410.000	40.000	1.91	0.31	N
1	MN 54	52.400	1.100	44.900	0.726	1.17	0.03	W
1	PU238	1.390	0.270	1.410	0.096	0.99	0.20	A
1	PU239	0.270	0.080	0.272	0.033	0.99	0.32	A
1	SR 90	1.660	0.400	2.000	0.040	0.83	0.20	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: IS

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.167	0.023	0.189	0.006	0.88	0.12	A
1	CE144	34.900	4.800	52.100	5.000	0.67	0.11	W
1	CO 57	11.000	1.500	14.700	0.576	0.75	0.11	W
1	CO 60	28.100	3.900	32.600	0.977	0.86	0.12	A
1	CS134	15.400	2.100	17.900	0.479	0.86	0.12	A
1	CS137	5.740	0.790	7.250	0.500	0.79	0.12	W
1	GA 1	3.440	0.470	3.300	0.300	1.04	0.17	A
1	GB 2	1.090	0.150	1.120	0.100	0.97	0.16	A
1	MN 54	4.720	0.640	5.340	0.302	0.88	0.13	A
1	PU238	0.099	0.014	0.096	0.002	1.03	0.14	A
1	PU239	0.111	0.015	0.093	0.003	1.20	0.17	W
1	RU106	14.300	2.000	17.000	1.360	0.84	0.14	A
1	SB125	10.400	1.400	11.400	0.449	0.91	0.13	A
1	SR 90	1.010	0.140	1.060	0.037	0.95	0.14	A
1	U 234	0.007	0.001	0.052	0.001	0.13	0.02	N
1	U 238	0.007	0.001	0.053	0.002	0.13	0.02	N
1	U BQ	0.138	0.019	0.107	0.002	1.29	0.18	A
Matrix: SO								
1	AM241	2.690	0.370	1.760	0.113	1.53	0.23	A
1	CS137	199.000	27.000	207.000	1.120	0.96	0.13	A
1	K 40	366.000	50.000	377.000	16.400	0.97	0.14	A
1	PU238	10.800	1.500	17.500	0.901	0.62	0.09	A
1	PU239	5.640	0.770	5.170	0.070	1.09	0.15	A
1	SR 90	17.200	2.400	7.810	0.280	2.20	0.32	N
1	U 234	20.400	2.800	29.500	2.320	0.69	0.11	W
1	U 238	20.400	2.800	30.400	2.080	0.67	0.10	W
1	U BQ	41.300	5.700	58.200	4.500	0.71	0.11	A
Matrix: VE								
1	AM241	0.459	0.063	0.534	0.040	0.86	0.13	A
1	CO 60	7.980	1.090	9.170	0.257	0.87	0.12	A
1	CS137	99.200	13.600	97.200	1.930	1.02	0.14	A
1	K 40	399.000	55.000	352.000	8.160	1.13	0.16	A
1	PU239	0.880	0.121	0.980	0.115	0.90	0.16	A
1	SR 90	424.000	58.000	587.000	36.300	0.72	0.11	A
Matrix: WA								
1	AM241	1.530	0.210	1.950	0.084	0.79	0.11	A
1	CO 60	216.000	30.000	196.000	1.410	1.10	0.15	A
1	CS137	87.300	11.900	75.200	0.642	1.16	0.16	W
1	GA 1	1360.000	187.000	1310.000	100.000	1.04	0.16	A
1	GB 2	382.000	52.000	410.000	40.000	0.93	0.16	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: IS

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	H 3	134.000	15.000	168.000	35.000	0.80	0.19	W
1	MN 54	52.400	7.200	44.900	0.726	1.17	0.16	W
1	PU238	1.140	0.160	1.410	0.096	0.81	0.13	A
1	PU239	0.440	0.060	0.272	0.033	1.62	0.30	N
1	SR 90	1.760	0.240	2.000	0.040	0.88	0.12	A
1	U 234	0.417	0.057	0.306	0.003	1.36	0.19	W
1	U 238	0.417	0.057	0.311	0.016	1.34	0.20	W
1	U BQ	0.833	0.114	0.624	0.016	1.34	0.19	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: IT

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.099	0.006	0.189	0.006	0.52	0.04	N
1	CE144	36.600	0.200	52.100	5.000	0.70	0.07	W
1	CO 57	10.800	0.300	14.700	0.576	0.74	0.04	W
1	CO 60	28.400	0.700	32.600	0.977	0.87	0.03	A
1	CS134	15.200	0.500	17.900	0.479	0.85	0.04	A
1	CS137	5.800	0.100	7.250	0.500	0.80	0.06	W
1	GA 1	3.320	0.030	3.300	0.300	1.01	0.09	A
1	GB 2	0.890	0.020	1.120	0.100	0.80	0.07	W
1	MN 54	4.680	0.100	5.340	0.302	0.88	0.05	A
1	PU238	0.092	0.006	0.096	0.002	0.96	0.07	A
1	PU239	0.083	0.006	0.093	0.003	0.90	0.07	A
1	RU106	14.800	0.800	17.000	1.360	0.87	0.08	A
1	SB125	11.100	0.400	11.400	0.449	0.97	0.05	A
1	SR 90	0.570	0.060	1.060	0.037	0.54	0.06	N
1	U UG	4.820	1.070	4.300	0.080	1.12	0.25	A
Matrix: SO								
1	AM241	2.300	0.400	1.760	0.113	1.31	0.24	A
1	CS137	246.000	6.000	207.000	1.120	1.19	0.03	A
1	K 40	440.000	11.000	377.000	16.400	1.17	0.06	A
1	PU238	17.400	0.300	17.500	0.901	0.99	0.05	A
1	PU239	5.300	0.100	5.170	0.070	1.03	0.02	A
1	SR 90	8.100	0.880	7.810	0.280	1.04	0.12	A
1	U UG	1.790	0.030	2.460	0.200	0.73	0.06	A
Matrix: VE								
1	AM241	0.510	0.070	0.534	0.040	0.96	0.15	A
1	CM244	0.370	0.010	0.434	0.012	0.85	0.03	A
1	CO 60	7.990	0.870	9.170	0.257	0.87	0.10	A
1	CS137	123.000	1.000	97.200	1.930	1.27	0.03	A
1	K 40	428.000	18.000	352.000	8.160	1.22	0.06	A
1	PU239	1.490	0.670	0.980	0.115	1.52	0.71	W
Matrix: WA								
1	AM241	1.680	0.120	1.950	0.084	0.86	0.07	A
1	CO 60	234.000	9.000	196.000	1.410	1.19	0.05	N
1	CS137	93.700	3.600	75.200	0.642	1.25	0.05	W
1	GA 1	1090.000	125.000	1310.000	100.000	0.83	0.12	W
1	GB 2	367.000	64.000	410.000	40.000	0.90	0.18	W
1	H 3	138.000	11.000	168.000	35.000	0.82	0.18	W
1	MN 54	60.000	0.600	44.900	0.726	1.34	0.03	N
1	PU238	1.340	0.097	1.410	0.096	0.95	0.09	A
1	PU239	0.310	0.036	0.272	0.033	1.14	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: IT

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	SR 90	1.940	0.450	2.000	0.040	0.97	0.23	A
1	U UG	0.030	0.001	0.025	0.002	1.20	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: JP

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.180	0.006	0.189	0.006	0.95	0.04	A
1	CE144	38.000	0.300	52.100	5.000	0.73	0.07	W
1	CO 57	12.000	0.050	14.700	0.576	0.82	0.03	A
1	CO 60	27.000	0.200	32.600	0.977	0.83	0.03	A
1	CS134	16.000	0.100	17.900	0.479	0.89	0.02	A
1	CS137	6.200	0.090	7.250	0.500	0.86	0.06	A
1	MN 54	4.500	0.120	5.340	0.302	0.84	0.05	W
1	PU238	0.099	0.005	0.096	0.002	1.03	0.05	A
1	PU239	0.100	0.005	0.093	0.003	1.08	0.06	A
1	RU106	16.000	0.500	17.000	1.360	0.94	0.08	A
1	SB125	11.000	0.200	11.400	0.449	0.97	0.04	A
1	SR 90	0.970	0.024	1.060	0.037	0.92	0.04	A
1	U 234	0.033	0.003	0.052	0.001	0.64	0.05	N
1	U 235	0.002	0.000	0.002	0.000	0.85	0.21	W
1	U 238	0.032	0.002	0.053	0.002	0.60	0.05	N
Matrix: SO								
1	AM241	1.600	0.110	1.760	0.113	0.91	0.09	A
1	CS137	220.000	1.000	207.000	1.120	1.06	0.01	A
1	K 40	380.000	7.000	377.000	16.400	1.01	0.05	A
1	PU238	18.000	0.800	17.500	0.901	1.03	0.07	A
1	PU239	5.500	0.280	5.170	0.070	1.06	0.06	A
1	SR 90	6.500	0.230	7.810	0.280	0.83	0.04	A
1	U 234	15.000	0.700	29.500	2.320	0.51	0.05	W
1	U 235	0.380	0.074	1.460	0.197	0.26	0.06	N
1	U 238	14.000	0.600	30.400	2.080	0.46	0.04	W
Matrix: VE								
1	AM241	0.560	0.036	0.534	0.040	1.05	0.10	A
1	CM244	0.350	0.026	0.434	0.012	0.81	0.06	A
1	CO 60	6.500	0.460	9.170	0.257	0.71	0.05	W
1	CS137	110.000	1.000	97.200	1.930	1.13	0.02	A
1	K 40	360.000	11.000	352.000	8.160	1.02	0.04	A
1	PU239	0.850	0.049	0.980	0.115	0.87	0.11	A
1	SR 90	540.000	6.000	587.000	36.300	0.92	0.06	A
Matrix: WA								
1	AM241	1.600	0.070	1.950	0.084	0.82	0.05	A
1	CO 60	210.000	2.000	196.000	1.410	1.07	0.01	A
1	CS137	85.000	1.600	75.200	0.642	1.13	0.02	A
1	GA 1	740.000	0.000	1310.000	100.000	0.57	0.04	W
1	GB 2	230.000	0.000	410.000	40.000	0.56	0.05	N
1	H 3	165.000	1.000	168.000	35.000	0.98	0.21	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: JP

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	MN 54	49.000	2.000	44.900	0.726	1.09	0.05	A
1	PU238	1.400	0.070	1.410	0.096	0.99	0.08	A
1	PU239	0.260	0.016	0.272	0.033	0.96	0.13	A
1	SR 90	1.900	0.110	2.000	0.040	0.95	0.06	A
1	U 234	0.380	0.018	0.306	0.003	1.24	0.06	W
1	U 235	0.017	0.002	0.007	0.002	2.43	0.75	N
1	U 238	0.370	0.017	0.311	0.016	1.19	0.08	W

Units for matrices: AI=Bq/filter SD=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: KA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	GA 1	3.160	0.100	3.300	0.300	0.96	0.09	A
1	GB 2	1.440	0.050	1.120	0.100	1.29	0.12	A
Matrix: SO								
1	CS137	245.000	14.000	207.000	1.120	1.18	0.07	A
1	K 40	413.000	38.000	377.000	16.400	1.10	0.11	A
1	PU238	18.000	3.860	17.500	0.901	1.03	0.23	A
1	PU239	5.790	0.291	5.170	0.070	1.12	0.06	A
1	SR 90	8.390	0.770	7.810	0.280	1.07	0.11	A
Matrix: WA								
1	CO 60	205.000	8.000	196.000	1.410	1.05	0.04	A
1	CS137	78.000	2.000	75.200	0.642	1.04	0.03	A
1	FE 55	121.000	6.000	101.000	4.000	1.20	0.08	A
1	GA 1	1040.000	108.000	1310.000	100.000	0.79	0.10	W
1	GB 2	570.000	62.000	410.000	40.000	1.39	0.20	A
1	H 3	159.000	10.900	168.000	35.000	0.95	0.21	A
1	MN 54	50.000	2.000	44.900	0.726	1.11	0.05	A
1	PU238	1.430	0.169	1.410	0.096	1.01	0.14	A
1	PU239	0.280	0.007	0.272	0.033	1.03	0.13	A
1	SR 90	1.840	0.240	2.000	0.040	0.92	0.12	A
1	U UG	0.028	0.000	0.025	0.002	1.12	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.176	0.021	0.189	0.006	0.93	0.11	A
2		0.186	0.021	0.189	0.006	0.98	0.12	A
3		0.182	0.021	0.189	0.006	0.96	0.12	A
2	GA 1	4.100	0.700	3.300	0.300	1.24	0.24	W
3		4.100	0.700	3.300	0.300	1.24	0.24	W
3		4.100	0.700	3.300	0.300	1.24	0.24	W
2	GB 2	1.300	0.200	1.120	0.100	1.16	0.21	A
3		1.400	0.200	1.120	0.100	1.25	0.21	A
3		1.400	0.200	1.120	0.100	1.25	0.21	A
1	PU238	0.102	0.013	0.096	0.002	1.06	0.14	A
2		0.111	0.013	0.096	0.002	1.15	0.14	W
3		0.093	0.011	0.096	0.002	0.97	0.12	A
1	PU239	0.102	0.013	0.093	0.003	1.10	0.14	A
2		0.102	0.013	0.093	0.003	1.10	0.14	A
3		0.105	0.013	0.093	0.003	1.13	0.15	A
1	SR 90	1.080	0.160	1.060	0.037	1.02	0.16	A
2		1.160	0.160	1.060	0.037	1.09	0.16	A
3		1.170	0.160	1.060	0.037	1.10	0.16	A
1	U UG	4.360	1.050	4.300	0.080	1.01	0.25	A
2		4.130	0.500	4.300	0.080	0.96	0.12	A
3		4.430	0.750	4.300	0.080	1.03	0.18	A

Matrix: SO

1	AM241	1.660	0.130	1.760	0.113	0.94	0.10	A
2		2.090	0.160	1.760	0.113	1.19	0.12	A
3		1.870	0.150	1.760	0.113	1.06	0.11	A
1	CS137	196.000	19.000	207.000	1.120	0.95	0.09	A
2		192.000	19.000	207.000	1.120	0.93	0.09	A
3		167.000	15.000	207.000	1.120	0.81	0.07	W
1	K 40	851.000	111.000	377.000	16.400	2.26	0.31	N
2		851.000	111.000	377.000	16.400	2.26	0.31	N
3		851.000	111.000	377.000	16.400	2.26	0.31	N
1	PU238	19.800	0.700	17.500	0.901	1.13	0.07	A
2		19.800	0.700	17.500	0.901	1.13	0.07	A
3		20.500	0.700	17.500	0.901	1.17	0.07	W
1	PU239	6.600	0.300	5.170	0.070	1.28	0.06	A
2		6.300	0.300	5.170	0.070	1.22	0.06	A
3		6.100	0.300	5.170	0.070	1.18	0.06	A
1	SR 90	22.200	7.400	7.810	0.280	2.84	0.95	N
2		7.400	7.400	7.810	0.280	0.95	0.95	A
3		14.800	7.400	7.810	0.280	1.90	0.95	W

Matrix: VE

1	AM241	0.550	0.040	0.534	0.040	1.03	0.11	A
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Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
2	AM241	0.550	0.040	0.534	0.040	1.03	0.11	A
3		0.510	0.030	0.534	0.040	0.96	0.09	A
1	CO 60	14.400	3.300	9.170	0.257	1.57	0.36	N
2		13.700	3.300	9.170	0.257	1.49	0.36	N
3		14.800	3.300	9.170	0.257	1.61	0.36	N
1	CS137	145.000	17.000	97.200	1.930	1.49	0.18	W
2		148.000	17.000	97.200	1.930	1.52	0.18	W
3		144.000	17.000	97.200	1.930	1.48	0.18	W
1	K 40	455.000	74.000	352.000	8.160	1.29	0.21	W
2		474.000	74.000	352.000	8.160	1.35	0.21	W
3		514.000	78.000	352.000	8.160	1.46	0.22	W
1	PU239	0.860	0.040	0.980	0.115	0.88	0.11	A
2		1.380	0.100	0.980	0.115	1.41	0.19	A
3		0.910	0.060	0.980	0.115	0.93	0.13	A
1	SR 90	360.000	18.000	587.000	36.300	0.61	0.05	W
2		376.000	19.000	587.000	36.300	0.64	0.05	W
3		341.000	17.000	587.000	36.300	0.58	0.05	W

Matrix: WA

1	AM241	1.740	0.070	1.950	0.084	0.89	0.05	A
2		1.680	0.070	1.950	0.084	0.86	0.05	A
2		1.910	0.070	1.950	0.084	0.98	0.06	A
1	CO 60	209.000	14.000	196.000	1.410	1.07	0.07	A
2		205.000	13.000	196.000	1.410	1.05	0.07	A
3		204.000	13.000	196.000	1.410	1.04	0.07	A
1	CS137	81.000	6.000	75.200	0.642	1.08	0.08	A
2		85.000	6.000	75.200	0.642	1.13	0.08	A
3		83.000	6.000	75.200	0.642	1.10	0.08	A
2	GA 1	1690.000	320.000	1310.000	100.000	1.29	0.26	W
3		1690.000	320.000	1310.000	100.000	1.29	0.26	W
3		1690.000	320.000	1310.000	100.000	1.29	0.26	W
2	GB 2	455.000	41.000	410.000	40.000	1.11	0.15	A
3		455.000	41.000	410.000	40.000	1.11	0.15	A
3		455.000	41.000	410.000	40.000	1.11	0.15	A
1	H 3	167.000	22.000	168.000	35.000	0.99	0.25	A
2		159.000	22.000	168.000	35.000	0.95	0.24	A
3		152.000	22.000	168.000	35.000	0.91	0.23	A
1	MN 54	47.000	4.000	44.900	0.726	1.05	0.09	A
2		50.000	4.000	44.900	0.726	1.11	0.09	A
3		48.000	4.000	44.900	0.726	1.07	0.09	A
1	PU238	1.450	0.060	1.410	0.096	1.03	0.08	A
2		1.430	0.060	1.410	0.096	1.01	0.08	A
3		1.530	0.060	1.410	0.096	1.09	0.09	A
1	PU239	0.300	0.020	0.272	0.033	1.10	0.15	A
2		0.310	0.020	0.272	0.033	1.14	0.16	A
3		0.260	0.020	0.272	0.033	0.96	0.14	A
1	SR 90	2.930	0.330	2.000	0.040	1.47	0.17	N
2		2.560	0.370	2.000	0.040	1.28	0.19	W
3		2.060	0.270	2.000	0.040	1.03	0.14	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LA

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	U UG	0.022	0.005	0.025	0.002	0.86	0.22	A
2		0.024	0.002	0.025	0.002	0.94	0.12	A
3		0.025	0.004	0.025	0.002	0.98	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LB

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.240	0.020	0.189	0.006	1.27	0.11	W
1	CE144	50.400	4.200	52.100	5.000	0.97	0.12	A
1	CO 57	12.500	0.400	14.700	0.576	0.85	0.04	A
1	CO 60	31.100	7.600	32.600	0.977	0.95	0.24	A
1	CS134	16.100	2.700	17.900	0.479	0.90	0.15	A
1	CS137	6.400	1.100	7.250	0.500	0.88	0.16	A
1	GA 1	3.250	0.330	3.300	0.300	0.99	0.13	A
1	GB 2	1.360	0.140	1.120	0.100	1.21	0.17	A
1	MN 54	5.090	0.980	5.340	0.302	0.95	0.19	A
1	SB125	10.900	1.700	11.400	0.449	0.96	0.15	A
Matrix: SO								
1	AM241	1.400	0.400	1.760	0.113	0.80	0.23	A
1	CS137	221.000	20.000	207.000	1.120	1.07	0.10	A
1	K 40	425.000	56.000	377.000	16.400	1.13	0.16	A
Matrix: VE								
1	CO 60	9.900	1.200	9.170	0.257	1.08	0.13	A
1	CS137	162.000	9.000	97.200	1.930	1.67	0.10	N
1	K 40	977.000	71.000	352.000	8.160	2.78	0.21	N
Matrix: WA								
1	AM241	0.800	0.100	1.950	0.084	0.41	0.05	N
1	CO 60	201.000	40.000	196.000	1.410	1.03	0.20	A
1	CS137	74.000	15.000	75.200	0.642	0.98	0.20	A
1	GA 1	998.000	101.000	1310.000	100.000	0.76	0.10	W
1	GB 2	368.000	39.000	410.000	40.000	0.90	0.13	W
1	MN 54	51.000	10.000	44.900	0.726	1.14	0.22	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LH

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.210	0.021	0.189	0.006	1.11	0.12	A
1	CE144	34.600	3.200	52.100	5.000	0.66	0.09	W
1	CO 57	10.000	1.000	14.700	0.576	0.68	0.07	W
1	CO 60	25.800	1.900	32.600	0.977	0.79	0.06	W
1	CS134	14.500	1.100	17.900	0.479	0.81	0.07	A
1	CS137	5.190	0.600	7.250	0.500	0.72	0.10	W
1	GA 1	4.300	0.200	3.300	0.300	1.30	0.13	W
1	GB 2	1.090	0.080	1.120	0.100	0.97	0.11	A
1	MN 54	4.880	0.570	5.340	0.302	0.91	0.12	A
1	PU238	0.107	0.016	0.096	0.002	1.11	0.17	A
1	PU239	0.104	0.016	0.093	0.003	1.12	0.18	A
1	RU106	13.200	2.000	17.000	1.360	0.78	0.13	A
1	SB125	5.200	0.600	11.400	0.449	0.46	0.06	N
1	SR 90	1.200	0.140	1.060	0.037	1.13	0.14	A
1	U 234	0.105	0.024	0.052	0.001	2.03	0.47	N
1	U 238	0.061	0.018	0.053	0.002	1.14	0.34	A
Matrix: SO								
1	AM241	1.900	0.500	1.760	0.113	1.08	0.29	A
1	CS137	220.000	32.000	207.000	1.120	1.06	0.16	A
1	K 40	351.000	65.000	377.000	16.400	0.93	0.18	A
1	PU238	17.400	1.800	17.500	0.901	0.99	0.12	A
1	PU239	5.900	0.800	5.170	0.070	1.14	0.16	A
1	SR 90	8.900	3.100	7.810	0.280	1.14	0.40	A
1	U 234	25.000	5.000	29.500	2.320	0.85	0.18	A
1	U 238	26.000	5.000	30.400	2.080	0.86	0.18	A
Matrix: VE								
1	AM241	0.570	0.100	0.534	0.040	1.07	0.20	A
1	CM244	0.400	0.080	0.434	0.012	0.92	0.19	A
1	CO 60	5.500	1.500	9.170	0.257	0.60	0.16	N
1	K 40	389.000	55.000	352.000	8.160	1.11	0.16	A
1	PU239	1.080	0.140	0.980	0.115	1.10	0.19	A
1	SR 90	710.000	39.000	587.000	36.300	1.21	0.10	W
Matrix: WA								
1	AM241	1.870	0.250	1.950	0.084	0.96	0.14	A
1	CO 60	190.000	20.000	196.000	1.410	0.97	0.10	A
1	CS137	81.000	13.000	75.200	0.642	1.08	0.17	A
1	FE 55	119.000	13.000	101.000	4.000	1.18	0.14	A
1	GA 1	957.000	48.000	1310.000	100.000	0.73	0.07	W
1	GB 2	373.000	38.000	410.000	40.000	0.91	0.13	W
1	H 3	159.000	27.000	168.000	35.000	0.95	0.25	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LH

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	MN 54	520.000	9.000	44.900	0.726	11.60	0.27	N
1	PU238	1.320	0.190	1.410	0.096	0.94	0.15	A
1	PU239	0.300	0.080	0.272	0.033	1.10	0.32	A
1	SR 90	1.900	0.400	2.000	0.040	0.95	0.20	A
1	U 234	0.400	0.130	0.306	0.003	1.31	0.43	W
1	U 238	0.380	0.120	0.311	0.016	1.22	0.39	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	39.500	1.570	52.100	5.000	0.76	0.08	W
1	CO 57	11.800	0.304	14.700	0.576	0.80	0.04	A
1	CO 60	30.100	0.426	32.600	0.977	0.92	0.03	A
1	CS134	18.500	0.326	17.900	0.479	1.03	0.03	A
1	CS137	6.330	0.215	7.250	0.500	0.87	0.07	A
1	GA 1	3.160	0.117	3.300	0.300	0.96	0.09	A
1	GB 2	1.920	0.078	1.120	0.100	1.71	0.17	W
1	MN 54	4.740	0.185	5.340	0.302	0.89	0.06	A
1	PU238	0.093	0.007	0.096	0.002	0.96	0.08	A
1	PU239	0.093	0.007	0.093	0.003	1.00	0.08	A
1	RU106	17.400	0.672	17.000	1.360	1.02	0.09	A
1	SB125	11.200	0.314	11.400	0.449	0.98	0.05	A
1	U UG	4.880	0.235	4.300	0.080	1.14	0.06	A
Matrix: SO								
1	CS137	221.000	4.340	207.000	1.120	1.07	0.02	A
1	K 40	369.000	23.500	377.000	16.400	0.98	0.08	A
1	PU238	17.800	1.570	17.500	0.901	1.02	0.10	A
1	PU239	5.430	0.609	5.170	0.070	1.05	0.12	A
Matrix: VE								
1	CO 60	6.740	1.200	9.170	0.257	0.74	0.13	W
1	CS137	115.000	3.420	97.200	1.930	1.18	0.04	A
1	K 40	354.000	29.000	352.000	8.160	1.01	0.09	A
1	PU239	0.853	0.233	0.980	0.115	0.87	0.26	A
Matrix: WA								
1	CO 60	193.000	3.420	196.000	1.410	0.99	0.02	A
1	CS137	82.100	2.920	75.200	0.642	1.09	0.04	A
1	GA 1	1330.000	83.700	1310.000	100.000	1.02	0.10	A
1	GB 2	597.000	43.200	410.000	40.000	1.46	0.18	A
1	H 3	151.000	5.280	168.000	35.000	0.90	0.19	A
1	MN 54	49.300	2.510	44.900	0.726	1.10	0.06	A
1	PU238	1.330	0.111	1.410	0.096	0.94	0.10	A
1	PU239	0.272	0.036	0.272	0.033	1.00	0.18	A
1	U UG	0.028	0.001	0.025	0.002	1.13	0.11	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LM

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	44.000	2.000	52.100	5.000	0.85	0.09	A
1	CO 57	13.000	1.000	14.700	0.576	0.88	0.08	A
1	CO 60	34.000	2.000	32.600	0.977	1.04	0.07	A
1	CS134	19.000	2.000	17.900	0.479	1.06	0.12	A
1	CS137	7.000	1.000	7.250	0.500	0.97	0.15	A
1	GA 1	3.000	1.000	3.300	0.300	0.91	0.31	A
1	GB 2	2.000	1.000	1.120	0.100	1.79	0.91	W
1	MN 54	5.000	1.000	5.340	0.302	0.94	0.20	A
1	RU106	16.000	1.000	17.000	1.360	0.94	0.10	A
1	SB125	12.000	1.000	11.400	0.449	1.05	0.10	A
Matrix: SO								
1	CS137	500.000	15.000	207.000	1.120	2.42	0.07	N
1	K 40	970.000	10.000	377.000	16.400	2.57	0.12	N
Matrix: WA								
1	CO 60	290.000	9.000	196.000	1.410	1.48	0.05	N
1	CS137	100.000	6.000	75.200	0.642	1.33	0.08	N
1	H 3	180.000	20.000	168.000	35.000	1.07	0.25	A
1	MN 54	64.000	6.000	44.900	0.726	1.43	0.14	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: LW

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	CS137	219.000	6.580	207.000	1.120	1.06	0.03	A
1	K 40	355.000	47.700	377.000	16.400	0.94	0.13	A
Matrix: VE								
1	CO 60	5.880	1.770	9.170	0.257	0.64	0.19	N
1	CS137	111.000	4.880	97.200	1.930	1.14	0.06	A
1	K 40	340.000	0.455	352.000	8.160	0.97	0.02	A
2		340.000	45.500	352.000	8.160	0.97	0.13	A
Matrix: WA								
1	CO 60	195.000	8.220	196.000	1.410	1.00	0.04	A
1	CS137	79.700	6.860	75.200	0.642	1.06	0.09	A
1	GA 1	1160.000	78.200	1310.000	100.000	0.89	0.09	A
1	GB 2	541.000	41.700	410.000	40.000	1.32	0.16	A
1	H 3	160.000	13.000	168.000	35.000	0.95	0.21	A
1	MN 54	44.700	5.720	44.900	0.726	1.00	0.13	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: MA

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	CS137	207.000	12.000	207.000	1.120	1.00	0.06	A
1	K 40	481.000	93.000	377.000	16.400	1.28	0.25	W
1	U 238	34.000	20.000	30.400	2.080	1.12	0.66	A
Matrix: VE								
1	CS137	100.000	5.900	97.200	1.930	1.03	0.06	A
1	K 40	355.000	52.000	352.000	8.160	1.01	0.15	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: ME

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.320	0.090	0.189	0.006	1.69	0.48	N
1	CE144	57.000	0.460	52.100	5.000	1.09	0.11	A
1	CO 57	13.500	0.060	14.700	0.576	0.92	0.04	A
1	CO 60	33.600	0.210	32.600	0.977	1.03	0.03	A
1	CS134	19.600	0.140	17.900	0.479	1.10	0.03	W
1	CS137	7.330	0.080	7.250	0.500	1.01	0.07	A
1	GA 1	4.060	0.080	3.300	0.300	1.23	0.11	W
1	GB 2	1.580	0.040	1.120	0.100	1.41	0.13	A
1	MN 54	5.880	0.100	5.340	0.302	1.10	0.07	A
1	RU106	15.000	0.610	17.000	1.360	0.88	0.08	A
1	SB125	10.500	0.160	11.400	0.449	0.92	0.04	A
Matrix: SO								
1	CS137	278.000	2.920	207.000	1.120	1.34	0.02	W
1	K 40	515.000	17.700	377.000	16.400	1.37	0.08	W
Matrix: VE								
1	CO 60	11.000	0.710	9.170	0.257	1.20	0.08	A
1	CS137	151.000	9.070	97.200	1.930	1.55	0.10	W
1	K 40	552.000	124.000	352.000	8.160	1.57	0.35	N
Matrix: WA								
1	CO 60	210.000	9.630	196.000	1.410	1.07	0.05	A
1	CS137	80.000	2.840	75.200	0.642	1.06	0.04	A
1	MN 54	49.100	2.220	44.900	0.726	1.09	0.05	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: ML

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.600	0.500	0.189	0.006	3.18	2.65	N
1	CE144	31.000	4.000	52.100	5.000	0.60	0.10	W
1	CO 57	9.200	0.200	14.700	0.576	0.63	0.03	N
1	CO 60	26.500	1.200	32.600	0.977	0.81	0.04	W
1	CS134	15.800	0.400	17.900	0.479	0.88	0.03	A
1	CS137	4.700	0.100	7.250	0.500	0.65	0.05	N
1	MN 54	4.300	0.700	5.340	0.302	0.81	0.14	W
1	PU238	0.090	0.004	0.096	0.002	0.94	0.05	A
1	PU239	0.090	0.004	0.093	0.003	0.97	0.05	A
1	SB125	8.600	0.400	11.400	0.449	0.75	0.05	W
1	U BQ	0.108	0.003	0.107	0.002	1.01	0.03	A
Matrix: SO								
1	AM241	2.400	0.700	1.760	0.113	1.36	0.41	A
2		2.000	0.100	1.760	0.113	1.14	0.09	A
1	CS137	279.000	62.000	207.000	1.120	1.35	0.30	W
2		262.000	2.000	207.000	1.120	1.27	0.01	W
1	K 40	493.000	101.000	377.000	16.400	1.31	0.27	W
2		480.000	8.000	377.000	16.400	1.27	0.06	W
1	PU238	16.500	0.540	17.500	0.901	0.94	0.06	A
1	PU239	5.040	0.300	5.170	0.070	0.98	0.06	A
1	U BQ	54.500	1.800	58.200	4.500	0.94	0.08	A
Matrix: VE								
1	PU239	0.890	0.070	0.980	0.115	0.91	0.13	A
Matrix: WA								
1	AM241	4.000	1.000	1.950	0.084	2.05	0.52	N
1	CO 60	282.000	57.000	196.000	1.410	1.44	0.29	N
1	CS137	115.000	24.000	75.200	0.642	1.53	0.32	N
1	MN 54	68.000	16.000	44.900	0.726	1.51	0.36	N
1	PU238	1.330	0.020	1.410	0.096	0.94	0.07	A
1	PU239	0.260	0.010	0.272	0.033	0.96	0.12	A
1	U BQ	0.670	0.020	0.624	0.016	1.07	0.04	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: NA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.161	0.014	0.189	0.006	0.85	0.08	A
1	CE144	36.100	0.278	52.100	5.000	0.69	0.07	W
1	CO 57	10.400	0.047	14.700	0.576	0.71	0.03	W
1	CO 60	26.200	0.115	32.600	0.977	0.80	0.02	W
1	CS134	14.400	0.075	17.900	0.479	0.80	0.02	A
1	CS137	6.080	0.076	7.250	0.500	0.84	0.06	W
1	MN 54	4.540	0.076	5.340	0.302	0.85	0.05	A
1	PU238	0.089	0.011	0.096	0.002	0.92	0.11	A
1	PU239	0.090	0.010	0.093	0.003	0.97	0.12	A
1	RU106	13.000	0.528	17.000	1.360	0.77	0.07	A
1	SB125	10.500	0.136	11.400	0.449	0.92	0.04	A
1	SR 90	0.909	0.073	1.060	0.037	0.86	0.07	A
1	U 234	0.132	0.014	0.052	0.001	2.55	0.27	N
1	U 235	0.007	0.003	0.002	0.000	3.35	1.61	N
1	U 238	0.089	0.011	0.053	0.002	1.68	0.22	W
Matrix: SO								
1	AM241	4.840	1.200	1.760	0.113	2.75	0.70	N
1	CS137	213.000	1.510	207.000	1.120	1.03	0.01	A
1	K 40	383.000	9.100	377.000	16.400	1.02	0.05	A
1	PU238	17.500	2.180	17.500	0.901	1.00	0.14	A
1	PU239	5.700	1.160	5.170	0.070	1.10	0.23	A
1	SR 90	10.800	11.800	7.810	0.280	1.38	1.51	A
1	U 234	30.700	2.690	29.500	2.320	1.04	0.12	A
1	U 235	1.500	0.566	1.460	0.197	1.03	0.41	A
1	U 238	25.100	2.400	30.400	2.080	0.83	0.10	A
Matrix: VE								
1	AM241	0.698	0.109	0.534	0.040	1.31	0.23	A
1	CO 60	7.980	0.484	9.170	0.257	0.87	0.06	A
1	CS137	119.000	1.500	97.200	1.930	1.22	0.03	A
1	K 40	418.000	12.400	352.000	8.160	1.19	0.04	A
1	PU239	0.989	0.128	0.980	0.115	1.01	0.18	A
1	SR 90	489.000	6.800	587.000	36.300	0.83	0.05	A
Matrix: WA								
1	AM241	1.660	0.095	1.950	0.084	0.85	0.06	A
1	CO 60	206.000	1.100	196.000	1.410	1.05	0.01	A
1	CS137	81.800	0.907	75.200	0.642	1.09	0.02	A
1	H 3	126.000	3.450	168.000	35.000	0.75	0.16	W
1	MN 54	48.000	0.786	44.900	0.726	1.07	0.02	A
1	PU238	1.380	0.102	1.410	0.096	0.98	0.10	A
1	PU239	0.245	0.033	0.272	0.033	0.90	0.16	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: NA

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	SR 90	1.640	0.170	2.000	0.040	0.82	0.09	W
1	U 234	0.453	0.055	0.306	0.003	1.48	0.18	W
1	U 235	0.018	0.010	0.007	0.002	2.56	1.62	N
1	U 238	0.416	0.052	0.311	0.016	1.34	0.18	W

Units for matrices: AI=Bq/filter SD=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: NC

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	44.000	1.640	52.100	5.000	0.85	0.09	A
1	CO 57	14.200	0.210	14.700	0.576	0.97	0.04	A
1	CO 60	30.000	0.510	32.600	0.977	0.92	0.03	A
1	CS134	16.000	0.380	17.900	0.479	0.89	0.03	A
1	CS137	6.640	0.270	7.250	0.500	0.92	0.07	A
1	MN 54	5.180	0.290	5.340	0.302	0.97	0.08	A
1	RU106	9.540	1.560	17.000	1.360	0.56	0.10	N
1	SB125	11.200	0.560	11.400	0.449	0.98	0.06	A
Matrix: SO								
1	CS137	203.000	1.600	207.000	1.120	0.98	0.01	A
Matrix: VE								
1	CO 60	10.900	1.100	9.170	0.257	1.19	0.12	A
1	CS137	108.000	2.200	97.200	1.930	1.11	0.03	A
Matrix: WA								
1	CO 60	202.000	2.000	196.000	1.410	1.03	0.01	A
1	CS137	74.700	1.340	75.200	0.642	0.99	0.02	A
1	MN 54	51.000	1.940	44.900	0.726	1.14	0.05	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: NJ

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	U 234	0.071	0.006	0.052	0.001	1.37	0.12	W
1	U 238	0.070	0.006	0.053	0.002	1.32	0.12	A
Matrix: SO								
1	AM241	1.890	0.670	1.760	0.113	1.07	0.39	A
1	CS137	229.000	8.000	207.000	1.120	1.11	0.04	A
1	K 40	377.000	15.000	377.000	16.400	1.00	0.06	A
1	U 234	29.900	1.500	29.500	2.320	1.01	0.09	A
1	U 238	27.900	1.600	30.400	2.080	0.92	0.08	A
Matrix: VE								
1	AM241	1.220	0.500	0.534	0.040	2.29	0.95	N
1	CO 60	7.220	1.480	9.170	0.257	0.79	0.16	W
1	CS137	107.000	11.000	97.200	1.930	1.10	0.12	A
1	K 40	348.000	48.000	352.000	8.160	0.99	0.14	A
Matrix: WA								
1	AM241	2.050	0.310	1.950	0.084	1.05	0.17	A
1	CO 60	204.000	2.000	196.000	1.410	1.04	0.01	A
1	CS137	78.500	2.700	75.200	0.642	1.04	0.04	A
1	H 3	139.000	4.000	168.000	35.000	0.83	0.17	A
3	MN 54	47.700	2.100	44.900	0.726	1.06	0.05	A
1	SR 90	2.090	0.150	2.000	0.040	1.04	0.08	A
1	U 234	0.367	0.032	0.306	0.003	1.20	0.11	W
1	U 238	0.368	0.033	0.311	0.016	1.18	0.12	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: NL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	49.900	0.600	52.100	5.000	0.96	0.09	A
1	CO 57	14.200	0.200	14.700	0.576	0.97	0.04	A
1	CO 60	32.200	0.500	32.600	0.977	0.99	0.03	A
1	CS134	16.200	0.200	17.900	0.479	0.91	0.03	A
1	CS137	6.600	0.200	7.250	0.500	0.91	0.07	A
1	MN 54	5.350	0.240	5.340	0.302	1.00	0.07	A
1	PU238	0.092	0.024	0.096	0.002	0.96	0.25	A
1	PU239	0.095	0.024	0.093	0.003	1.03	0.26	A
1	RU106	15.600	0.100	17.000	1.360	0.92	0.07	A
1	SB125	12.600	0.100	11.400	0.449	1.11	0.04	A
1	U UG	4.400	1.000	4.300	0.080	1.02	0.23	A
Matrix: SO								
1	CS137	235.000	7.000	207.000	1.120	1.14	0.03	A
1	K 40	503.000	25.000	377.000	16.400	1.33	0.09	W
1	PU238	17.400	2.100	17.500	0.901	0.99	0.13	A
1	PU239	5.960	1.800	5.170	0.070	1.15	0.35	A
1	U 234	27.200	6.700	29.500	2.320	0.92	0.24	A
1	U 235	1.340	0.670	1.460	0.197	0.92	0.48	A
1	U 238	26.200	6.300	30.400	2.080	0.86	0.22	A
Matrix: WA								
1	CO 60	214.000	1.000	196.000	1.410	1.09	0.01	A
1	CS137	79.500	1.400	75.200	0.642	1.06	0.02	A
1	MN 54	51.600	1.600	44.900	0.726	1.15	0.04	W
1	PU239	0.270	0.070	0.272	0.033	0.99	0.28	A
1	U UG	0.028	0.002	0.025	0.002	1.13	0.13	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: NR

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	CS137	214.000	43.000	207.000	1.120	1.03	0.21	A
1	K 40	374.000	74.000	377.000	16.400	0.99	0.20	A
Matrix: VE								
1	CO 60	6.800	1.400	9.170	0.257	0.74	0.15	W
1	CS137	98.000	20.000	97.200	1.930	1.01	0.21	A
1	K 40	359.000	72.000	352.000	8.160	1.02	0.21	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: 01

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	SR 90	1.700	0.100	1.060	0.037	1.60	0.11	W
1	U BQ	0.220	0.050	0.107	0.002	2.06	0.47	N
Matrix: SO								
1	SR 90	44.400	0.400	7.810	0.280	5.69	0.21	N
1	U BQ	79.900	5.000	58.200	4.500	1.37	0.14	W
Matrix: VE								
1	SR 90	1470.000	10.000	587.000	36.300	2.50	0.16	N
Matrix: WA								
1	SR 90	3.100	0.200	2.000	0.040	1.55	0.11	N
1	U BQ	0.770	0.130	0.624	0.016	1.23	0.21	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: OL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	36.300	1.930	52.100	5.000	0.70	0.08	W
1	CO 57	11.200	0.500	14.700	0.576	0.76	0.05	W
1	CO 60	27.700	1.000	32.600	0.977	0.85	0.04	A
1	CS134	13.200	0.700	17.900	0.479	0.74	0.04	W
1	CS137	5.890	0.280	7.250	0.500	0.81	0.07	W
1	MN 54	4.720	0.150	5.340	0.302	0.88	0.06	A
1	RU106	12.900	1.800	17.000	1.360	0.76	0.12	A
1	SB125	9.620	0.700	11.400	0.449	0.84	0.07	A
Matrix: SO								
1	CS137	228.000	9.680	207.000	1.120	1.10	0.05	A
1	K 40	430.000	23.500	377.000	16.400	1.14	0.08	A
Matrix: VE								
1	CO 60	6.600	0.640	9.170	0.257	0.72	0.07	W
1	CS137	112.000	3.890	97.200	1.930	1.15	0.05	A
1	K 40	425.000	22.400	352.000	8.160	1.21	0.07	A
Matrix: WA								
1	CO 60	209.000	5.740	196.000	1.410	1.07	0.03	A
1	CS137	81.600	2.000	75.200	0.642	1.09	0.03	A
1	MN 54	49.500	2.660	44.900	0.726	1.10	0.06	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: OR

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.190	0.020	0.189	0.006	1.01	0.11	A
1	CE144	44.000	1.000	52.100	5.000	0.85	0.08	A
1	CO 57	13.000	1.000	14.700	0.576	0.88	0.08	A
1	CO 60	33.000	1.000	32.600	0.977	1.01	0.04	A
1	CS134	17.000	1.000	17.900	0.479	0.95	0.06	A
1	CS137	7.300	0.300	7.250	0.500	1.01	0.08	A
1	MN 54	5.500	0.300	5.340	0.302	1.03	0.08	A
1	PU238	0.088	0.008	0.096	0.002	0.92	0.09	A
1	PU239	0.088	0.007	0.093	0.003	0.95	0.08	A
1	RU106	16.000	2.000	17.000	1.360	0.94	0.14	A
1	SB125	12.000	1.000	11.400	0.449	1.05	0.10	A
1	SR 90	0.950	0.150	1.060	0.037	0.90	0.15	A
1	U BQ	0.137	0.017	0.107	0.002	1.28	0.16	A
Matrix: SO								
1	AM241	1.900	1.000	1.760	0.113	1.08	0.57	A
1	CS137	210.000	10.000	207.000	1.120	1.01	0.05	A
1	K 40	360.000	60.000	377.000	16.400	0.96	0.16	A
1	PU238	16.000	1.000	17.500	0.901	0.91	0.07	A
1	PU239	4.800	0.300	5.170	0.070	0.93	0.06	A
1	SR 90	5.400	1.300	7.810	0.280	0.69	0.17	W
1	U BQ	46.000	4.000	58.200	4.500	0.79	0.09	A
Matrix: VE								
1	AM241	0.600	0.150	0.534	0.040	1.12	0.29	A
1	CM244	0.360	0.130	0.434	0.012	0.83	0.30	A
1	CO 60	8.600	3.500	9.170	0.257	0.94	0.38	A
1	CS137	110.000	10.000	97.200	1.930	1.13	0.11	A
1	K 40	400.000	60.000	352.000	8.160	1.14	0.17	A
1	PU239	0.870	0.190	0.980	0.115	0.89	0.22	A
1	SR 90	480.000	20.000	587.000	36.300	0.82	0.06	A
Matrix: WA								
1	AM241	1.900	0.100	1.950	0.084	0.97	0.07	A
1	CO 60	197.000	10.000	196.000	1.410	1.01	0.05	A
1	CS137	77.000	2.000	75.200	0.642	1.02	0.03	A
1	H 3	142.000	30.000	168.000	35.000	0.85	0.25	A
1	MN 54	47.000	2.000	44.900	0.726	1.05	0.05	A
1	PU238	1.300	0.200	1.410	0.096	0.92	0.16	A
1	PU239	0.300	0.050	0.272	0.033	1.10	0.23	A
1	SR 90	1.850	0.300	2.000	0.040	0.93	0.15	A
1	U BQ	0.814	0.124	0.624	0.016	1.30	0.20	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: OT

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.085	0.018	0.189	0.006	0.45	0.10	N
1	CE144	47.000	1.000	52.100	5.000	0.90	0.09	A
1	CO 57	14.000	1.000	14.700	0.576	0.95	0.08	A
2	CO 60	32.000	1.000	32.600	0.977	0.98	0.04	A
1	CS134	18.000	1.000	17.900	0.479	1.01	0.06	A
1	CS137	7.100	0.300	7.250	0.500	0.98	0.08	A
1	MN 54	5.600	0.200	5.340	0.302	1.05	0.07	A
1	PU238	0.070	0.042	0.096	0.002	0.73	0.44	A
1	PU239	0.075	0.042	0.093	0.003	0.81	0.45	A
1	RU106	18.000	2.000	17.000	1.360	1.06	0.15	A
1	SB125	11.000	1.000	11.400	0.449	0.97	0.10	A
1	SR 90	0.250	0.080	1.060	0.037	0.24	0.08	N
1	U BQ	0.086	0.014	0.107	0.002	0.80	0.13	W
Matrix: SO								
1	AM241	2.000	0.800	1.760	0.113	1.14	0.46	A
1	CS137	220.000	10.000	207.000	1.120	1.06	0.05	A
1	K 40	400.000	60.000	377.000	16.400	1.06	0.17	A
1	PU238	18.000	2.000	17.500	0.901	1.03	0.13	A
1	PU239	6.600	1.200	5.170	0.070	1.28	0.23	A
1	SR 90	3.500	3.100	7.810	0.280	0.45	0.40	N
Matrix: VE								
1	AM241	0.860	0.610	0.534	0.040	1.61	1.15	W
1	CM244	0.180	0.190	0.434	0.012	0.42	0.44	W
1	CO 60	7.200	2.500	9.170	0.257	0.79	0.27	W
1	CS137	110.000	10.000	97.200	1.930	1.13	0.11	A
1	K 40	340.000	40.000	352.000	8.160	0.97	0.12	A
1	PU239	0.540	0.410	0.980	0.115	0.55	0.42	N
1	SR 90	480.000	30.000	587.000	36.300	0.82	0.07	A
Matrix: WA								
1	AM241	1.600	0.300	1.950	0.084	0.82	0.16	A
1	CO 60	220.000	10.000	196.000	1.410	1.12	0.05	W
1	CS137	87.000	2.000	75.200	0.642	1.16	0.03	W
1	GA 1	1200.000	100.000	1310.000	100.000	0.92	0.10	A
1	GB 2	650.000	40.000	410.000	40.000	1.59	0.18	W
1	H 3	150.000	40.000	168.000	35.000	0.89	0.30	A
1	MN 54	52.000	2.000	44.900	0.726	1.16	0.05	W
1	PU238	1.400	0.100	1.410	0.096	0.99	0.10	A
1	PU239	0.340	0.040	0.272	0.033	1.25	0.21	W
1	SR 90	1.900	0.600	2.000	0.040	0.95	0.30	A
1	U BQ	0.700	0.120	0.624	0.016	1.12	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: PA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	GA 1	2.880	0.033	3.300	0.300	0.87	0.08	A
1	GB 2	1.950	0.027	1.120	0.100	1.74	0.16	W
1	PU239	0.110	0.050	0.093	0.003	1.19	0.54	W
1	U 234	0.080	0.030	0.052	0.001	1.55	0.58	W
1	U 238	0.070	0.030	0.053	0.002	1.31	0.56	A
Matrix: SO								
1	PU239	5.600	2.200	5.170	0.070	1.08	0.43	A
1	U 234	18.500	3.700	29.500	2.320	0.63	0.14	W
1	U 238	18.500	3.700	30.400	2.080	0.61	0.13	W
Matrix: VE								
1	PU239	0.740	0.370	0.980	0.115	0.76	0.39	A
Matrix: WA								
1	GA 1	1070.000	51.900	1310.000	100.000	0.82	0.07	W
1	GB 2	407.000	28.200	410.000	40.000	0.99	0.12	A
1	H 3	129.000	10.700	168.000	35.000	0.77	0.17	W
1	PU239	0.440	0.100	0.272	0.033	1.62	0.42	N
1	U 234	0.340	0.050	0.306	0.003	1.11	0.16	A
1	U 238	0.360	0.050	0.311	0.016	1.16	0.17	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: PB

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	PU239	0.090	0.020	0.093	0.003	0.97	0.22	A
1	U 234	0.070	0.020	0.052	0.001	1.35	0.39	W
1	U 238	0.070	0.020	0.053	0.002	1.31	0.38	A
Matrix: SO								
1	PU239	5.190	0.740	5.170	0.070	1.00	0.14	A
1	U 234	25.600	2.220	29.500	2.320	0.87	0.10	A
1	U 238	26.300	2.220	30.400	2.080	0.87	0.09	A
Matrix: VE								
1	PU239	1.110	0.010	0.980	0.115	1.13	0.13	A
Matrix: WA								
2	GA 1	1410.000	21.700	1310.000	100.000	1.08	0.08	A
2	GB 2	382.000	9.370	410.000	40.000	0.93	0.09	W
1	H 3	188.000	11.900	168.000	35.000	1.12	0.24	A
1	PU239	0.280	0.060	0.272	0.033	1.03	0.25	A
1	U 234	0.330	0.060	0.306	0.003	1.08	0.20	A
1	U 238	0.330	0.070	0.311	0.016	1.06	0.23	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: PC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.174	0.028	0.189	0.006	0.92	0.15	A
2		0.174	0.028	0.189	0.006	0.92	0.15	A
1	CE144	52.000	12.000	52.100	5.000	1.00	0.25	A
2		52.000	12.000	52.100	5.000	1.00	0.25	A
1	CO 57	15.100	2.100	14.700	0.576	1.03	0.15	A
2		15.100	2.100	14.700	0.576	1.03	0.15	A
1	CO 60	31.600	2.900	32.600	0.977	0.97	0.09	A
2		31.600	2.900	32.600	0.977	0.97	0.09	A
1	CS134	19.000	1.700	17.900	0.479	1.06	0.10	A
2		19.000	1.700	17.900	0.479	1.06	0.10	A
1	CS137	7.500	1.200	7.250	0.500	1.03	0.18	A
2		7.500	1.200	7.250	0.500	1.03	0.18	A
1	MN 54	5.540	0.880	5.340	0.302	1.04	0.18	A
2		5.540	0.880	5.340	0.302	1.04	0.18	A
1	PU238	0.086	0.013	0.096	0.002	0.89	0.14	A
2		0.086	0.013	0.096	0.002	0.89	0.14	A
1	PU239	0.092	0.037	0.093	0.003	0.99	0.40	A
2		0.092	0.037	0.093	0.003	0.99	0.40	A
1	RU106	16.400	4.600	17.000	1.360	0.97	0.28	A
2		16.400	4.600	17.000	1.360	0.97	0.28	A
1	SB125	11.800	4.600	11.400	0.449	1.04	0.41	A
2		11.800	4.600	11.400	0.449	1.04	0.41	A
1	SR 90	1.020	0.100	1.060	0.037	0.96	0.10	A
2		1.020	0.100	1.060	0.037	0.96	0.10	A
1	U 234	0.062	0.014	0.052	0.001	1.20	0.27	A
2		0.062	0.014	0.052	0.001	1.20	0.27	A
1	U 238	0.065	0.019	0.053	0.002	1.22	0.36	A
2		0.065	0.019	0.053	0.002	1.22	0.36	A
1	U BQ	0.130	0.032	0.107	0.002	1.22	0.30	A
2		0.130	0.032	0.107	0.002	1.22	0.30	A
1	U UG	4.610	0.380	4.300	0.080	1.07	0.09	A
2		4.610	0.380	4.300	0.080	1.07	0.09	A
Matrix: SO								
1	CS137	217.000	26.000	207.000	1.120	1.05	0.13	A
2		217.000	26.000	207.000	1.120	1.05	0.13	A
1	K 40	354.000	49.000	377.000	16.400	0.94	0.14	A
2		354.000	49.000	377.000	16.400	0.94	0.14	A
1	PU238	23.900	8.200	17.500	0.901	1.37	0.47	W
2		23.900	8.200	17.500	0.901	1.37	0.47	W
3		19.200	4.200	17.500	0.901	1.10	0.25	A
4		19.200	4.200	17.500	0.901	1.10	0.25	A
5		19.200	8.200	17.500	0.901	1.10	0.47	A
6		19.200	4.200	17.500	0.901	1.10	0.25	A
1	PU239	5.100	1.200	5.170	0.070	0.99	0.23	A
2		5.100	1.200	5.170	0.070	0.99	0.23	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: PC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	SR 90	5.500	1.800	7.810	0.280	0.70	0.23	W
2		5.500	1.800	7.810	0.280	0.70	0.23	W
1	U 234	24.200	5.800	29.500	2.320	0.82	0.21	A
2		24.200	5.800	29.500	2.320	0.82	0.21	A
1	U 238	24.700	4.900	30.400	2.080	0.81	0.17	A
2		24.700	4.900	30.400	2.080	0.81	0.17	A
1	U BQ	50.000	7.300	58.200	4.500	0.86	0.14	A
2		50.000	7.300	58.200	4.500	0.86	0.14	A
1	U UG	2.060	0.100	2.460	0.200	0.84	0.08	A
2		2.060	0.100	2.460	0.200	0.84	0.08	A

Matrix: VE

1	AM241	0.600	0.210	0.534	0.040	1.12	0.40	A
2		0.600	0.210	0.534	0.040	1.12	0.40	A
3		0.678	0.210	0.534	0.040	1.27	0.41	A
4	CM244	0.678	0.210	0.534	0.040	1.27	0.41	A
1		0.550	0.170	0.434	0.012	1.27	0.39	A
2		0.550	0.170	0.434	0.012	1.27	0.39	A
3	CO 60	0.609	0.170	0.434	0.012	1.40	0.39	A
4		0.609	0.170	0.434	0.012	1.40	0.39	A
1		6.600	1.000	9.170	0.257	0.72	0.11	W
2	CS137	6.600	1.000	9.170	0.257	0.72	0.11	W
1		112.000	14.000	97.200	1.930	1.15	0.15	A
2		112.000	14.000	97.200	1.930	1.15	0.15	A
1	K 40	365.000	52.000	352.000	8.160	1.04	0.15	A
2		365.000	52.000	352.000	8.160	1.04	0.15	A
1	PU239	0.960	0.260	0.980	0.115	0.98	0.29	A
2		0.960	0.260	0.980	0.115	0.98	0.29	A
1	SR 90	562.000	65.000	587.000	36.300	0.96	0.13	A
2		562.000	65.000	587.000	36.300	0.96	0.13	A

Matrix: WA

1	AM241	1.380	0.400	1.950	0.084	0.71	0.21	W
2		1.380	0.400	1.950	0.084	0.71	0.21	W
3		1.490	0.400	1.950	0.084	0.76	0.21	W
4		1.490	0.400	1.950	0.084	0.76	0.21	W
1	CO 60	200.000	15.000	196.000	1.410	1.02	0.08	A
2		200.000	15.000	196.000	1.410	1.02	0.08	A
1	CS137	75.000	10.000	75.200	0.642	1.00	0.13	A
2		75.000	10.000	75.200	0.642	1.00	0.13	A
1	H 3	166.000	14.000	168.000	35.000	0.99	0.22	A
2		166.000	14.000	168.000	35.000	0.99	0.22	A
1	MN 54	42.300	5.700	44.900	0.726	0.94	0.13	A
2		42.300	5.700	44.900	0.726	0.94	0.13	A
1	PU238	1.380	0.013	1.410	0.096	0.98	0.07	A
2		1.380	0.013	1.410	0.096	0.98	0.07	A
1	PU239	0.278	0.031	0.272	0.033	1.02	0.17	A
2		0.278	0.031	0.272	0.033	1.02	0.17	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: PC

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	SR 90	2.070	0.340	2.000	0.040	1.04	0.17	A
2		2.070	0.340	2.000	0.040	1.04	0.17	A
1	U UG	0.027	0.003	0.025	0.002	1.08	0.15	A
2		0.027	0.003	0.025	0.002	1.08	0.15	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: PI

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	PU238	0.097	0.009	0.096	0.002	1.01	0.10	A
1	PU239	0.095	0.009	0.093	0.003	1.03	0.10	A
Matrix: SO								
1	PU238	18.500	2.200	17.500	0.901	1.06	0.14	A
1	PU239	5.620	0.980	5.170	0.070	1.09	0.19	A
Matrix: WA								
1	H 3	142.000	11.000	168.000	35.000	0.85	0.19	A
1	PU238	1.490	0.150	1.410	0.096	1.06	0.13	A
1	PU239	0.260	0.050	0.272	0.033	0.96	0.22	A
1	U 234	0.340	0.060	0.306	0.003	1.11	0.20	A
1	U 238	0.370	0.060	0.311	0.016	1.19	0.20	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	42.000	2.100	52.100	5.000	0.81	0.09	A
1	CO 57	14.400	0.600	14.700	0.576	0.98	0.06	A
1	CO 60	33.400	1.400	32.600	0.977	1.03	0.05	A
1	CS134	18.200	0.900	17.900	0.479	1.02	0.06	A
1	CS137	7.580	0.300	7.250	0.500	1.05	0.08	A
1	MN 54	5.560	0.280	5.340	0.302	1.04	0.08	A
1	PU238	0.105	0.008	0.096	0.002	1.09	0.09	A
1	PU239	0.099	0.008	0.093	0.003	1.07	0.09	A
1	RU106	16.000	1.300	17.000	1.360	0.94	0.11	A
1	SB125	11.700	0.700	11.400	0.449	1.03	0.07	A
1	SR 90	1.100	0.300	1.060	0.037	1.04	0.29	A
Matrix: SO								
1	CS137	213.000	8.000	207.000	1.120	1.03	0.04	A
1	K 40	390.000	50.000	377.000	16.400	1.03	0.14	A
1	PU238	18.600	1.300	17.500	0.901	1.06	0.09	A
2		19.700	1.600	17.500	0.901	1.13	0.11	A
1	PU239	5.100	0.400	5.170	0.070	0.99	0.08	A
2		6.000	0.600	5.170	0.070	1.16	0.12	A
1	SR 90	6.000	1.300	7.810	0.280	0.77	0.17	A
2		7.700	2.300	7.810	0.280	0.99	0.30	A
3		7.000	2.000	7.810	0.280	0.90	0.26	A
Matrix: VE								
1	CO 60	3.300	0.800	9.170	0.257	0.36	0.09	N
1	CS137	95.800	3.800	97.200	1.930	0.99	0.04	A
1	K 40	370.000	60.000	352.000	8.160	1.05	0.17	A
1	PU239	0.900	0.100	0.980	0.115	0.92	0.15	A
2		1.200	0.100	0.980	0.115	1.22	0.18	A
1	SR 90	400.000	80.000	587.000	36.300	0.68	0.14	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RD

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	GA 1	3.020	8.950	3.300	0.300	0.92	2.71	A
1	GB 2	1.040	6.220	1.120	0.100	0.93	5.55	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.133	0.011	0.189	0.006	0.70	0.06	W
1	CE144	33.900	8.800	52.100	5.000	0.65	0.18	W
1	CO 57	9.860	0.030	14.700	0.576	0.67	0.03	W
1	CO 60	26.500	0.900	32.600	0.977	0.81	0.04	W
1	CS134	14.100	0.500	17.900	0.479	0.79	0.04	A
1	CS137	5.320	0.190	7.250	0.500	0.73	0.06	W
1	GB 2	1.670	0.500	1.120	0.100	1.49	0.47	W
1	MN 54	4.360	0.570	5.340	0.302	0.82	0.12	W
1	PU238	0.084	0.009	0.096	0.002	0.88	0.10	A
1	PU239	0.090	0.010	0.093	0.003	0.97	0.11	A
1	RU106	5.410	0.740	17.000	1.360	0.32	0.05	N
1	SB125	9.330	0.520	11.400	0.449	0.82	0.06	A
1	SR 90	1.120	0.050	1.060	0.037	1.06	0.06	A
1	U BQ	0.125	0.016	0.107	0.002	1.17	0.15	A
Matrix: SO								
1	AM241	1.600	0.270	1.760	0.113	0.91	0.16	A
1	CS137	164.000	6.000	207.000	1.120	0.79	0.03	W
1	K 40	314.000	18.000	377.000	16.400	0.83	0.06	A
1	PU238	15.000	2.100	17.500	0.901	0.86	0.13	A
1	PU239	4.980	0.810	5.170	0.070	0.96	0.16	A
1	SR 90	10.200	3.100	7.810	0.280	1.31	0.40	A
1	U BQ	51.000	4.800	58.200	4.500	0.88	0.11	A
Matrix: VE								
1	AM241	0.461	0.061	0.534	0.040	0.86	0.13	A
1	CO 60	6.510	0.640	9.170	0.257	0.71	0.07	W
1	CS137	66.800	3.900	97.200	1.930	0.69	0.04	W
1	K 40	283.000	29.000	352.000	8.160	0.80	0.08	A
1	PU239	0.696	0.280	0.980	0.115	0.71	0.30	W
1	SR 90	464.000	27.000	587.000	36.300	0.79	0.07	A
Matrix: WA								
1	AM241	1.470	0.350	1.950	0.084	0.75	0.18	W
1	CO 60	213.000	7.000	196.000	1.410	1.09	0.04	A
1	CS137	80.800	4.000	75.200	0.642	1.07	0.05	A
1	GA 1	1200.000	80.000	1310.000	100.000	0.92	0.09	A
1	GB 2	561.000	34.000	410.000	40.000	1.37	0.16	A
1	H 3	158.000	32.000	168.000	35.000	0.94	0.27	A
1	MN 54	52.800	3.000	44.900	0.726	1.18	0.07	W
1	PU238	1.300	0.260	1.410	0.096	0.92	0.20	A
1	PU239	0.299	0.080	0.272	0.033	1.10	0.32	A
1	SR 90	2.160	0.360	2.000	0.040	1.08	0.18	A

Units for matrices: AI=Bq/filter SD=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RE

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	U BQ	0.660	0.110	0.624	0.016	1.06	0.18	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RF

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.168	0.013	0.189	0.006	0.89	0.07	A
2		0.168	0.000	0.189	0.006	0.89	0.03	A
1	PU239	0.098	0.008	0.093	0.003	1.06	0.09	A
2		0.098	0.000	0.093	0.003	1.06	0.03	A
1	U 234	0.054	0.011	0.052	0.001	1.04	0.21	A
2		0.054	0.000	0.052	0.001	1.04	0.02	A
1	U 238	0.058	0.011	0.053	0.002	1.08	0.21	A
2		0.058	0.000	0.053	0.002	1.09	0.03	A
Matrix: SO								
1	AM241	3.090	0.240	1.760	0.113	1.76	0.18	W
2		3.090	0.000	1.760	0.113	1.76	0.11	W
1	PU239	5.540	0.447	5.170	0.070	1.07	0.09	A
2		5.550	0.000	5.170	0.070	1.07	0.01	A
1	U 234	27.400	2.840	29.500	2.320	0.93	0.12	A
2		27.400	0.000	29.500	2.320	0.93	0.07	A
1	U 238	26.300	2.740	30.400	2.080	0.87	0.11	A
2		26.300	0.000	30.400	2.080	0.87	0.06	A
Matrix: VE								
1	AM241	0.691	0.072	0.534	0.040	1.29	0.17	A
2		0.691	0.691	0.534	0.040	1.29	1.30	A
1	PU239	1.070	0.080	0.980	0.115	1.09	0.15	A
2		1.070	1.070	0.980	0.115	1.09	1.10	A
Matrix: WA								
1	AM241	2.140	0.109	1.950	0.084	1.10	0.07	A
2		2.140	0.000	1.950	0.084	1.10	0.05	A
1	PU239	0.290	0.018	0.272	0.033	1.07	0.14	A
2		0.290	0.290	0.272	0.033	1.07	1.07	A
1	U 234	0.359	0.000	0.306	0.003	1.17	0.01	A
2		0.359	0.000	0.306	0.003	1.17	0.01	A
3		0.359	0.027	0.306	0.003	1.17	0.09	A
1	U 238	0.355	0.026	0.311	0.016	1.14	0.10	W
2		0.355	0.000	0.311	0.016	1.14	0.06	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RG

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	AM241	2.170	0.720	1.760	0.113	1.23	0.42	A
1	PU238	20.600	2.000	17.500	0.901	1.18	0.13	W
1	PU239	10.100	1.200	5.170	0.070	1.95	0.23	W
1	U 234	31.000	2.000	29.500	2.320	1.05	0.11	A
1	U 238	27.500	1.800	30.400	2.080	0.91	0.09	A
1	U BQ	59.500	4.100	58.200	4.500	1.02	0.11	A
Matrix: WA								
1	AM241	2.040	0.118	1.950	0.084	1.05	0.08	A
1	GA 1	1300.000	48.000	1310.000	100.000	0.99	0.08	A
1	GB 2	337.000	14.000	410.000	40.000	0.82	0.09	W
1	H 3	149.000	4.800	168.000	35.000	0.89	0.19	A
1	PU238	1.380	0.054	1.410	0.096	0.98	0.08	A
1	PU239	0.271	0.015	0.272	0.033	1.00	0.13	A
1	U 234	0.368	0.023	0.306	0.003	1.20	0.08	W
1	U 238	0.357	0.022	0.311	0.016	1.15	0.09	W
1	U BQ	0.741	0.048	0.624	0.016	1.19	0.08	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RI

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.581	0.026	0.189	0.006	3.07	0.16	N
1	CE144	34.600	4.500	52.100	5.000	0.66	0.11	W
1	CO 57	10.000	0.790	14.700	0.576	0.68	0.06	W
1	CO 60	27.300	1.200	32.600	0.977	0.84	0.04	A
1	CS134	15.400	0.840	17.900	0.479	0.86	0.05	A
1	CS137	5.050	1.200	7.250	0.500	0.70	0.17	W
1	MN 54	5.440	1.100	5.340	0.302	1.02	0.21	A
1	PU238	0.135	0.009	0.096	0.002	1.40	0.10	W
1	PU239	0.120	0.009	0.093	0.003	1.29	0.11	W
1	RU106	15.800	5.700	17.000	1.360	0.93	0.34	A
1	SB125	11.500	2.100	11.400	0.449	1.01	0.19	A
1	SR 90	1.110	0.090	1.060	0.037	1.05	0.09	A
1	U UG	4.860	0.160	4.300	0.080	1.13	0.04	A
Matrix: SO								
1	CS137	271.000	20.000	207.000	1.120	1.31	0.10	W
1	K 40	442.000	160.000	377.000	16.400	1.17	0.43	A
Matrix: VE								
1	CS137	86.000	20.000	97.200	1.930	0.89	0.21	A
Matrix: WA								
1	AM241	3.600	0.220	1.950	0.084	1.85	0.14	N
1	CO 60	212.000	3.200	196.000	1.410	1.08	0.02	A
1	CS137	83.900	2.900	75.200	0.642	1.12	0.04	A
1	MN 54	52.400	2.600	44.900	0.726	1.17	0.06	W
1	PU238	1.620	0.097	1.410	0.096	1.15	0.10	A
1	PU239	0.230	0.026	0.272	0.033	0.85	0.14	A
1	SR 90	2.280	0.210	2.000	0.040	1.14	0.11	A
1	U UG	0.032	0.001	0.025	0.002	1.27	0.11	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: RL

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	35.400	2.200	52.100	5.000	0.68	0.08	W
1	CO 57	10.500	0.640	14.700	0.576	0.71	0.05	W
1	CO 60	32.500	2.600	32.600	0.977	1.00	0.09	A
1	CS134	16.200	1.700	17.900	0.479	0.91	0.10	A
1	CS137	5.920	0.500	7.250	0.500	0.82	0.09	W
1	SB125	9.650	1.500	11.400	0.449	0.85	0.14	A
Matrix: SO								
1	CS137	325.000	28.200	207.000	1.120	1.57	0.14	N
Matrix: VE								
1	CO 60	98.000	11.000	9.170	0.257	10.70	1.24	N
1	CS137	126.000	19.000	97.200	1.930	1.30	0.20	W
1	K 40	1150.000	93.000	352.000	8.160	3.27	0.28	N
Matrix: WA								
1	CO 60	198.000	10.000	196.000	1.410	1.01	0.05	A
1	CS137	77.300	3.900	75.200	0.642	1.03	0.05	A
1	MN 54	46.900	2.500	44.900	0.726	1.04	0.06	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	63.800	8.300	52.100	5.000	1.23	0.20	W
1	CO 57	17.900	0.700	14.700	0.576	1.22	0.07	W
1	CO 60	36.100	1.100	32.600	0.977	1.11	0.05	A
1	CS134	20.300	2.000	17.900	0.479	1.13	0.12	W
1	CS137	8.500	0.500	7.250	0.500	1.17	0.11	A
1	MN 54	6.300	0.300	5.340	0.302	1.18	0.09	A
1	SB125	14.000	0.600	11.400	0.449	1.23	0.07	W
Matrix: SO								
1	CS137	246.000	8.000	207.000	1.120	1.19	0.04	A
1	K 40	431.000	39.000	377.000	16.400	1.14	0.12	A
Matrix: WA								
1	CO 60	193.000	8.000	196.000	1.410	0.99	0.04	A
1	CS137	76.000	3.000	75.200	0.642	1.01	0.04	A
1	MN 54	46.000	3.000	44.900	0.726	1.02	0.07	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	GA 1	3.000	0.050	3.300	0.300	0.91	0.08	A
1	GB 2	1.000	0.020	1.120	0.100	0.89	0.08	A
Matrix: SO								
1	CS137	196.000	2.000	207.000	1.120	0.95	0.01	A
1	K 40	357.000	8.000	377.000	16.400	0.95	0.05	A
Matrix: WA								
1	CO 60	209.000	5.000	196.000	1.410	1.07	0.03	A
1	CS137	76.000	4.000	75.200	0.642	1.01	0.05	A
1	GA 1	1370.000	25.000	1310.000	100.000	1.05	0.08	A
1	GB 2	400.000	13.000	410.000	40.000	0.98	0.10	A
1	MN 54	49.500	3.000	44.900	0.726	1.10	0.07	A
1	PU238	2.210	0.040	1.410	0.096	1.57	0.11	W
1	PU239	0.396	0.020	0.272	0.033	1.46	0.19	N
1	U 234	0.363	0.020	0.306	0.003	1.19	0.07	A
1	U 238	0.364	0.020	0.311	0.016	1.17	0.09	W
1	U BQ	0.727	0.040	0.624	0.016	1.17	0.07	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SK

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	47.300	4.000	52.100	5.000	0.91	0.12	A
1	CO 57	13.600	1.200	14.700	0.576	0.93	0.09	A
1	CO 60	34.600	3.600	32.600	0.977	1.06	0.12	A
1	CS134	19.000	2.000	17.900	0.479	1.06	0.12	A
1	CS137	6.900	0.600	7.250	0.500	0.95	0.11	A
1	MN 54	5.200	0.500	5.340	0.302	0.97	0.11	A
1	RU106	15.100	1.400	17.000	1.360	0.89	0.11	A
1	SB125	12.300	1.300	11.400	0.449	1.08	0.12	A
Matrix: SO								
1	CS137	226.000	14.000	207.000	1.120	1.09	0.07	A
1	K 40	378.000	26.000	377.000	16.400	1.00	0.08	A
1	PU238	16.700	1.900	17.500	0.901	0.95	0.12	A
1	PU239	4.900	0.300	5.170	0.070	0.95	0.06	A
Matrix: VE								
1	CO 60	7.400	0.900	9.170	0.257	0.81	0.10	W
1	CS137	110.000	10.000	97.200	1.930	1.13	0.11	A
1	K 40	376.000	28.000	352.000	8.160	1.07	0.08	A
Matrix: WA								
1	AM241	2.060	0.120	1.950	0.084	1.06	0.08	A
1	CO 60	230.000	20.000	196.000	1.410	1.17	0.10	W
1	CS137	82.000	5.000	75.200	0.642	1.09	0.07	A
1	H 3	154.000	10.000	168.000	35.000	0.92	0.20	A
1	MN 54	48.100	3.000	44.900	0.726	1.07	0.07	A
1	PU238	1.340	0.080	1.410	0.096	0.95	0.09	A
1	PU239	0.260	0.030	0.272	0.033	0.96	0.16	A
1	U 234	0.340	0.030	0.306	0.003	1.11	0.10	A
1	U 238	0.340	0.020	0.311	0.016	1.09	0.09	A
1	U UG	0.026	0.001	0.025	0.002	1.04	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SR

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.160	0.010	0.189	0.006	0.85	0.06	A
1	CE144	35.000	3.000	52.100	5.000	0.67	0.09	W
1	CO 57	10.100	0.900	14.700	0.576	0.69	0.07	W
1	CO 60	26.000	1.000	32.600	0.977	0.80	0.04	W
1	CS134	15.000	1.000	17.900	0.479	0.84	0.06	A
1	CS137	5.500	0.900	7.250	0.500	0.76	0.14	W
1	GA 1	3.000	0.090	3.300	0.300	0.91	0.09	A
1	GB 2	1.630	0.060	1.120	0.100	1.46	0.14	W
1	MN 54	4.200	0.700	5.340	0.302	0.79	0.14	W
1	PU238	0.099	0.016	0.096	0.002	1.03	0.17	A
1	PU239	0.205	0.028	0.093	0.003	2.21	0.31	N
1	RU106	17.000	8.000	17.000	1.360	1.00	0.48	A
1	SB125	10.000	2.000	11.400	0.449	0.88	0.18	A
1	U 234	0.058	0.003	0.052	0.001	1.12	0.06	A
1	U 238	0.059	0.003	0.053	0.002	1.11	0.07	A
Matrix: SO								
1	CS137	202.000	16.000	207.000	1.120	0.98	0.08	A
1	K 40	406.000	33.000	377.000	16.400	1.08	0.10	A
1	PU238	19.300	2.090	17.500	0.901	1.10	0.13	A
1	PU239	5.830	0.700	5.170	0.070	1.13	0.14	A
Matrix: VE								
1	CO 60	9.000	2.000	9.170	0.257	0.98	0.22	A
1	CS137	107.000	10.000	97.200	1.930	1.10	0.11	A
1	K 40	407.000	22.000	352.000	8.160	1.16	0.07	A
1	PU239	0.850	0.180	0.980	0.115	0.87	0.21	A
1	SR 90	376.000	58.000	587.000	36.300	0.64	0.11	W
Matrix: WA								
1	CO 60	214.000	4.000	196.000	1.410	1.09	0.02	A
1	CS137	84.000	3.000	75.200	0.642	1.12	0.04	A
1	GA 1	1223.880	122.000	1310.000	100.000	0.93	0.02	A
1	GB 2	398.770	39.000	410.000	40.000	0.97	0.05	A
1	H 3	270.000	7.000	168.000	35.000	1.61	0.34	W
1	MN 54	52.000	3.000	44.900	0.726	1.16	0.07	W
1	PU238	1.460	0.018	1.410	0.096	1.04	0.07	A
1	PU239	0.290	0.006	0.272	0.033	1.07	0.13	A
1	SR 90	3.000	0.200	2.000	0.040	1.50	0.10	N
1	U 234	0.346	0.052	0.306	0.003	1.13	0.17	A
1	U 238	0.325	0.048	0.311	0.016	1.04	0.16	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SS

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	25.600	2.600	52.100	5.000	0.49	0.07	N
1	CO 57	7.900	0.600	14.700	0.576	0.54	0.05	N
1	CO 60	20.000	1.500	32.600	0.977	0.61	0.05	N
1	CS134	10.000	0.700	17.900	0.479	0.56	0.04	N
1	CS137	4.300	0.600	7.250	0.500	0.59	0.09	N
1	MN 54	2.400	0.500	5.340	0.302	0.45	0.10	N
1	RU106	8.600	3.100	17.000	1.360	0.51	0.19	N
1	SB125	6.900	0.900	11.400	0.449	0.61	0.08	W
Matrix: SO								
1	CS137	243.000	18.000	207.000	1.120	1.17	0.09	A
1	K 40	405.000	55.000	377.000	16.400	1.07	0.15	A
Matrix: VE								
1	CO 60	9.900	2.800	9.170	0.257	1.08	0.31	A
1	CS137	123.000	11.000	97.200	1.930	1.27	0.12	A
1	K 40	337.000	60.000	352.000	8.160	0.96	0.17	A
Matrix: WA								
1	CO 60	191.000	10.000	196.000	1.410	0.97	0.05	A
1	CS137	80.000	6.100	75.200	0.642	1.06	0.08	A
1	MN 54	32.400	3.200	44.900	0.726	0.72	0.07	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SV

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: WA								
1	GA 1	1370.000	74.000	1310.000	100.000	1.05	0.10	A
2		1370.000	74.200	1310.000	100.000	1.05	0.10	A
1	GB 2	685.000	37.000	410.000	40.000	1.67	0.19	N
2		685.000	37.800	410.000	40.000	1.67	0.19	N
1	H 3	146.000	9.100	168.000	35.000	0.87	0.19	A
2		146.000	0.000	168.000	35.000	0.87	0.18	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SW

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.146	0.022	0.189	0.006	0.77	0.12	A
1	CE144	36.300	0.800	52.100	5.000	0.70	0.07	W
1	CO 57	10.600	0.100	14.700	0.576	0.72	0.03	W
1	CO 60	26.800	0.300	32.600	0.977	0.82	0.03	W
1	CS134	14.400	0.200	17.900	0.479	0.80	0.02	A
1	CS137	5.920	0.300	7.250	0.500	0.82	0.07	W
1	MN 54	4.250	0.210	5.340	0.302	0.80	0.06	W
1	PU238	0.124	0.014	0.096	0.002	1.29	0.15	W
1	PU239	0.166	0.017	0.093	0.003	1.79	0.19	N
1	RU106	12.700	1.500	17.000	1.360	0.75	0.11	A
1	SB125	9.650	0.400	11.400	0.449	0.85	0.05	A
1	SR 90	1.650	0.180	1.060	0.037	1.56	0.18	W
1	U 234	0.063	0.013	0.052	0.001	1.22	0.26	A
1	U 235	0.013	0.006	0.002	0.000	6.30	3.02	N
1	U 238	0.057	0.012	0.053	0.002	1.08	0.23	A
Matrix: SO								
1	AM241	0.150	0.034	1.760	0.113	0.09	0.02	N
1	CS137	196.000	13.000	207.000	1.120	0.95	0.06	A
1	K 40	476.000	122.000	377.000	16.400	1.26	0.33	A
1	PU238	16.600	2.500	17.500	0.901	0.95	0.15	A
1	PU239	6.560	1.320	5.170	0.070	1.27	0.26	A
1	SR 90	36.400	10.600	7.810	0.280	4.66	1.37	N
1	U 234	21.000	2.400	29.500	2.320	0.71	0.10	A
1	U 235	5.560	0.840	1.460	0.197	3.81	0.77	N
1	U 238	20.900	2.400	30.400	2.080	0.69	0.09	W
Matrix: VE								
1	AM241	0.230	0.131	0.534	0.040	0.43	0.25	N
1	CO 60	17.200	5.400	9.170	0.257	1.88	0.59	N
1	CS137	103.000	9.000	97.200	1.930	1.06	0.10	A
1	K 40	368.000	105.000	352.000	8.160	1.04	0.30	A
1	PU239	3.850	2.200	0.980	0.115	3.93	2.29	N
1	SR 90	935.000	77.000	587.000	36.300	1.59	0.16	N
Matrix: WA								
1	AM241	1.200	0.100	1.950	0.084	0.62	0.06	W
1	CO 60	210.000	2.000	196.000	1.410	1.07	0.01	A
1	CS137	81.700	1.300	75.200	0.642	1.09	0.02	A
1	H 3	210.000	6.000	168.000	35.000	1.25	0.26	A
1	MN 54	51.200	1.200	44.900	0.726	1.14	0.03	A
1	PU238	1.210	0.090	1.410	0.096	0.86	0.09	A
1	PU239	0.593	0.067	0.272	0.033	2.18	0.36	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: SW

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Ratio Error	Evaluation
1	SR 90	3.180	0.360	2.000	0.040	1.59	0.18	N
1	U 234	0.357	0.061	0.306	0.003	1.17	0.20	A
1	U 235	0.039	0.019	0.007	0.002	5.57	3.15	N
1	U 238	0.316	0.055	0.311	0.016	1.02	0.19	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TI

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.200	0.020	0.189	0.006	1.06	0.11	A
1	CE144	35.000	4.000	52.100	5.000	0.67	0.10	W
1	CO 57	11.000	1.000	14.700	0.576	0.75	0.07	W
1	CO 60	27.000	3.000	32.600	0.977	0.83	0.10	A
1	CS134	14.000	1.000	17.900	0.479	0.78	0.06	A
1	CS137	6.200	0.600	7.250	0.500	0.86	0.10	A
1	GA 1	3.100	0.300	3.300	0.300	0.94	0.13	A
1	GB 2	1.100	0.100	1.120	0.100	0.98	0.13	A
1	MN 54	4.900	0.500	5.340	0.302	0.92	0.11	A
1	PU238	0.089	0.019	0.096	0.002	0.93	0.20	A
1	PU239	0.093	0.019	0.093	0.003	1.00	0.21	A
1	RU106	14.000	2.000	17.000	1.360	0.82	0.14	A
1	SB125	12.000	2.000	11.400	0.449	1.05	0.18	A
1	SR 90	1.000	0.100	1.060	0.037	0.94	0.10	A
1	U 234	0.044	0.012	0.052	0.001	0.85	0.23	W
1	U 238	0.045	0.012	0.053	0.002	0.84	0.23	W
1	U UG	3.900	0.600	4.300	0.080	0.91	0.14	A
Matrix: SO								
1	AM241	1.900	0.600	1.760	0.113	1.08	0.35	A
1	CS137	242.000	24.000	207.000	1.120	1.17	0.12	A
1	K 40	432.000	43.000	377.000	16.400	1.15	0.12	A
1	PU238	17.000	2.000	17.500	0.901	0.97	0.13	A
1	PU239	5.100	0.800	5.170	0.070	0.99	0.16	A
1	SR 90	7.000	3.000	7.810	0.280	0.90	0.39	A
1	U 234	23.000	6.000	29.500	2.320	0.78	0.21	A
1	U 238	27.000	7.000	30.400	2.080	0.89	0.24	A
1	U UG	3.000	0.500	2.460	0.200	1.22	0.23	W
Matrix: VE								
1	AM241	0.610	0.240	0.534	0.040	1.14	0.46	A
1	CM244	0.470	0.220	0.434	0.012	1.08	0.51	A
1	CO 60	8.400	1.200	9.170	0.257	0.92	0.13	A
1	CS137	118.000	12.000	97.200	1.930	1.21	0.13	A
1	K 40	423.000	42.000	352.000	8.160	1.20	0.12	A
1	PU239	0.740	0.290	0.980	0.115	0.76	0.31	A
1	SR 90	520.000	50.000	587.000	36.300	0.89	0.10	A
Matrix: WA								
1	AM241	1.900	0.200	1.950	0.084	0.97	0.11	A
1	CO 60	208.000	21.000	196.000	1.410	1.06	0.11	A
1	CS137	82.800	8.300	75.200	0.642	1.10	0.11	A
1	FE 55	130.000	20.000	101.000	4.000	1.29	0.20	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TI

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	GA 1	1300.000	100.000	1310.000	100.000	0.99	0.11	A
1	GB 2	370.000	40.000	410.000	40.000	0.90	0.13	W
1	H 3	150.000	10.000	168.000	35.000	0.89	0.20	A
1	MN 54	48.300	4.800	44.900	0.726	1.08	0.11	A
1	PU238	1.500	0.200	1.410	0.096	1.06	0.16	A
1	PU239	0.300	0.080	0.272	0.033	1.10	0.32	A
1	SR 90	1.900	0.300	2.000	0.040	0.95	0.15	A
1	U 234	0.280	0.100	0.306	0.003	0.92	0.33	A
1	U 238	0.300	0.100	0.311	0.016	0.97	0.33	A
1	U UG	0.029	0.004	0.025	0.002	1.16	0.18	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TM

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.186	0.008	0.189	0.006	0.98	0.05	A
1	CE144	39.100	1.330	52.100	5.000	0.75	0.08	W
1	CO 57	11.400	0.357	14.700	0.576	0.78	0.04	W
1	CO 60	28.900	0.917	32.600	0.977	0.89	0.04	A
1	CS134	16.400	0.525	17.900	0.479	0.92	0.04	A
1	CS137	5.940	0.298	7.250	0.500	0.82	0.07	W
1	GA 1	2.790	0.072	3.300	0.300	0.85	0.08	A
1	GB 2	1.290	0.039	1.120	0.100	1.15	0.11	A
1	MN 54	4.660	0.249	5.340	0.302	0.87	0.07	A
1	PU238	0.098	0.006	0.096	0.002	1.02	0.06	A
1	PU239	0.086	0.005	0.093	0.003	0.93	0.07	A
1	RU106	17.300	1.730	17.000	1.360	1.02	0.13	A
1	SB125	10.900	0.632	11.400	0.449	0.96	0.07	A
1	SR 90	1.050	0.090	1.060	0.037	0.99	0.09	A
1	U 234	0.053	0.003	0.052	0.001	1.03	0.07	A
1	U 235	0.002	0.001	0.002	0.000	1.05	0.31	A
1	U 238	0.058	0.003	0.053	0.002	1.09	0.07	A
1	U UG	4.580	0.055	4.300	0.080	1.07	0.02	A
Matrix: SO								
1	AM241	2.090	0.250	1.760	0.113	1.19	0.16	A
1	CS137	238.000	8.300	207.000	1.120	1.15	0.04	A
1	K 40	420.000	44.300	377.000	16.400	1.11	0.13	A
1	PU238	17.600	0.731	17.500	0.901	1.01	0.07	A
1	PU239	5.610	0.333	5.170	0.070	1.09	0.07	A
1	SR 90	22.700	5.610	7.810	0.280	2.91	0.73	N
1	U 234	28.000	0.749	29.500	2.320	0.95	0.08	A
1	U 235	1.090	0.111	1.460	0.197	0.75	0.13	A
1	U 238	27.500	0.740	30.400	2.080	0.91	0.07	A
1	U UG	2.260	0.226	2.460	0.200	0.92	0.12	A
Matrix: VE								
1	AM241	0.888	0.204	0.534	0.040	1.66	0.40	W
1	CM244	0.703	0.222	0.434	0.012	1.62	0.51	A
1	CO 60	7.950	1.720	9.170	0.257	0.87	0.19	A
1	CS137	113.000	4.170	97.200	1.930	1.16	0.05	A
1	K 40	395.000	34.000	352.000	8.160	1.12	0.10	A
1	PU239	1.090	0.120	0.980	0.115	1.11	0.18	A
1	SR 90	507.000	31.900	587.000	36.300	0.86	0.08	A
Matrix: WA								
1	AM241	1.860	0.081	1.950	0.084	0.95	0.06	A
1	CO 60	218.000	6.560	196.000	1.410	1.11	0.03	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TM

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	CS137	86.800	2.750	75.200	0.642	1.15	0.04	A
1	FE 55	117.000	24.700	101.000	4.000	1.16	0.25	A
1	GA 1	1370.000	159.000	1310.000	100.000	1.05	0.15	A
1	GB 2	308.000	29.600	410.000	40.000	0.75	0.10	W
1	H 3	141.000	8.350	168.000	35.000	0.84	0.18	A
1	MN 54	52.700	1.850	44.900	0.726	1.17	0.05	W
1	PU238	1.450	0.056	1.410	0.096	1.03	0.08	A
1	PU239	0.325	0.022	0.272	0.033	1.20	0.17	W
1	SR 90	2.290	0.198	2.000	0.040	1.15	0.10	A
1	U 234	0.312	0.023	0.306	0.003	1.02	0.08	A
1	U 235	0.017	0.005	0.007	0.002	2.39	1.00	N
1	U 238	0.350	0.024	0.311	0.016	1.13	0.10	W
1	U UG	28.600	0.348	0.025	0.002	**.**	91.80	N
2		0.029	0.000	0.025	0.002	1.14	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.184	0.011	0.189	0.006	0.97	0.06	A
1	CE144	31.600	0.630	52.100	5.000	0.61	0.06	W
1	CO 57	9.530	0.135	14.700	0.576	0.65	0.03	W
1	CO 60	25.200	0.330	32.600	0.977	0.77	0.03	W
1	CS134	16.400	0.710	17.900	0.479	0.92	0.05	A
1	CS137	5.080	0.180	7.250	0.500	0.70	0.05	W
1	MN 54	4.140	0.190	5.340	0.302	0.78	0.06	W
1	PU238	0.095	0.005	0.096	0.002	0.99	0.06	A
1	PU239	0.098	0.005	0.093	0.003	1.06	0.07	A
1	RU106	7.590	1.300	17.000	1.360	0.45	0.08	N
1	SB125	9.000	0.445	11.400	0.449	0.79	0.05	W
1	SR 90	1.190	0.042	1.060	0.037	1.12	0.06	A
1	U 234	0.064	0.005	0.052	0.001	1.24	0.10	A
1	U 235	0.004	0.001	0.002	0.000	1.91	0.65	N
1	U 238	0.060	0.005	0.053	0.002	1.13	0.10	A
1	U UG	4.690	0.705	4.300	0.080	1.09	0.17	A
Matrix: SO								
1	AM241	1.560	0.248	1.760	0.113	0.89	0.15	A
1	CS137	189.000	3.100	207.000	1.120	0.91	0.02	A
1	K 40	352.000	19.700	377.000	16.400	0.93	0.07	A
1	PU238	18.100	0.781	17.500	0.901	1.03	0.07	A
1	PU239	5.550	0.418	5.170	0.070	1.07	0.08	A
1	SR 90	6.370	2.490	7.810	0.280	0.82	0.32	A
1	U 234	24.500	1.280	29.500	2.320	0.83	0.08	A
1	U 235	1.520	0.288	1.460	0.197	1.04	0.24	A
1	U 238	23.300	1.230	30.400	2.080	0.77	0.07	A
1	U UG	1.380	0.205	2.460	0.200	0.56	0.10	A
Matrix: VE								
1	AM241	0.807	0.186	0.534	0.040	1.51	0.37	A
1	CM244	0.424	0.137	0.434	0.012	0.98	0.32	A
1	CO 60	4.900	2.700	9.170	0.257	0.53	0.30	N
1	CS137	86.700	4.060	97.200	1.930	0.89	0.05	A
1	K 40	328.000	36.200	352.000	8.160	0.93	0.11	A
1	PU239	1.180	0.268	0.980	0.115	1.20	0.31	A
1	SR 90	587.000	16.400	587.000	36.300	1.00	0.07	A
Matrix: WA								
1	AM241	1.750	0.345	1.950	0.084	0.90	0.18	A
1	CO 60	211.000	3.100	196.000	1.410	1.08	0.02	A
1	CS137	81.600	1.970	75.200	0.642	1.09	0.03	A
1	FE 55	118.000	2.600	101.000	4.000	1.17	0.05	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TN

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	GA 1	1090.000	118.000	1310.000	100.000	0.83	0.11	W
1	GB 2	379.000	45.100	410.000	40.000	0.92	0.14	W
1	H 3	155.000	26.600	168.000	35.000	0.92	0.25	A
1	MN 54	52.100	2.160	44.900	0.726	1.16	0.05	W
1	PU238	1.430	0.039	1.410	0.096	1.01	0.07	A
1	PU239	0.273	0.015	0.272	0.033	1.00	0.13	A
1	SR 90	2.110	0.077	2.000	0.040	1.05	0.04	A
1	U 234	0.347	0.020	0.306	0.003	1.13	0.07	A
1	U 235	0.020	0.004	0.007	0.002	2.83	1.02	N
1	U 238	0.349	0.020	0.311	0.016	1.12	0.09	W
1	U UG	0.030	0.006	0.025	0.002	1.21	0.27	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μ g/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: TO

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CO 57	23.300	9.860	14.700	0.576	1.59	0.67	N
1	CO 60	40.100	2.210	32.600	0.977	1.23	0.08	W
1	CS134	17.500	0.740	17.900	0.479	0.98	0.05	A
1	CS137	7.580	0.090	7.250	0.500	1.05	0.07	A
1	GA 1	2.600	1.500	3.300	0.300	0.79	0.46	W
1	GB 2	2.100	1.200	1.120	0.100	1.88	1.08	W
1	MN 54	5.210	0.580	5.340	0.302	0.98	0.12	A
1	RU106	14.900	1.630	17.000	1.360	0.88	0.12	A
1	SB125	13.200	0.710	11.400	0.449	1.16	0.08	W
1	U UG	5.230	0.000	4.300	0.080	1.22	0.02	A
Matrix: SO								
1	AM241	9.240	2.770	1.760	0.113	5.25	1.61	N
1	CS137	289.000	32.600	207.000	1.120	1.40	0.16	W
1	K 40	457.000	27.300	377.000	16.400	1.21	0.09	A
1	PU238	23.900	0.730	17.500	0.901	1.37	0.08	W
1	PU239	7.690	0.760	5.170	0.070	1.49	0.15	W
1	SR 90	21.000	1.480	7.810	0.280	2.69	0.21	N
1	U UG	2.700	0.000	2.460	0.200	1.10	0.09	A
Matrix: VE								
1	CM244	0.660	0.240	0.434	0.012	1.52	0.55	A
1	CO 60	9.190	0.680	9.170	0.257	1.00	0.08	A
1	CS137	142.000	3.540	97.200	1.930	1.46	0.05	W
1	K 40	471.000	15.700	352.000	8.160	1.34	0.05	W
1	PU239	1.860	1.460	0.980	0.115	1.90	1.51	W
1	SR 90	520.000	54.400	587.000	36.300	0.89	0.11	A
Matrix: WA								
1	AM241	2.110	0.070	1.950	0.084	1.08	0.06	A
1	CO 60	194.000	1.340	196.000	1.410	0.99	0.01	A
1	CS137	76.400	0.680	75.200	0.642	1.02	0.01	A
1	GA 1	1210.000	19.700	1310.000	100.000	0.92	0.07	A
1	GB 2	728.000	11.500	410.000	40.000	1.78	0.18	N
1	H 3	74.600	6.250	168.000	35.000	0.44	0.10	N
1	MN 54	46.800	0.570	44.900	0.726	1.04	0.02	A
1	PU238	1.810	0.120	1.410	0.096	1.28	0.12	W
1	PU239	0.500	0.050	0.272	0.033	1.84	0.29	N
1	SR 90	1.970	0.020	2.000	0.040	0.99	0.02	A
1	U UG	0.028	0.001	0.025	0.002	1.12	0.10	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: UC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CO 60	25.700	0.100	32.600	0.977	0.79	0.02	W
1	CS137	6.410	0.030	7.250	0.500	0.88	0.06	A
1	GA 1	3.290	0.120	3.300	0.300	1.00	0.10	A
1	GB 2	1.090	0.040	1.120	0.100	0.97	0.09	A
Matrix: SO								
1	CS137	203.000	1.690	207.000	1.120	0.98	0.01	A
1	K 40	426.000	10.600	377.000	16.400	1.13	0.06	A
Matrix: VE								
1	CO 60	6.580	0.530	9.170	0.257	0.72	0.06	W
1	CS137	102.000	1.230	97.200	1.930	1.05	0.02	A
1	K 40	416.000	10.500	352.000	8.160	1.18	0.04	A
Matrix: WA								
1	CO 60	186.000	1.370	196.000	1.410	0.95	0.01	A
1	CS137	68.600	0.740	75.200	0.642	0.91	0.01	W
1	GA 1	1160.000	66.000	1310.000	100.000	0.89	0.08	A
1	GB 2	422.000	32.000	410.000	40.000	1.03	0.13	A
1	PU239	0.299	0.056	0.272	0.033	1.10	0.25	A
1	U UG	0.027	0.003	0.025	0.002	1.08	0.14	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: UK

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.202	0.048	0.189	0.006	1.07	0.26	A
1	CE144	34.700	1.400	52.100	5.000	0.67	0.07	W
1	CO 57	10.300	0.220	14.700	0.576	0.70	0.03	W
1	CO 60	26.700	0.630	32.600	0.977	0.82	0.03	W
1	CS134	15.100	0.370	17.900	0.479	0.84	0.03	A
1	CS137	5.430	0.590	7.250	0.500	0.75	0.10	W
1	GA 1	4.330	0.095	3.300	0.300	1.31	0.12	W
1	GB 2	1.890	0.049	1.120	0.100	1.69	0.16	W
1	MN 54	4.230	0.390	5.340	0.302	0.79	0.09	W
1	PU238	0.108	0.033	0.096	0.002	1.12	0.34	A
1	PU239	0.062	0.025	0.093	0.003	0.67	0.27	W
1	U BQ	0.226	0.043	0.107	0.002	2.11	0.40	N
Matrix: SO								
1	CS137	218.000	2.800	207.000	1.120	1.05	0.01	A
1	K 40	401.000	18.000	377.000	16.400	1.06	0.07	A
1	PU238	17.100	2.400	17.500	0.901	0.98	0.15	A
1	PU239	4.890	1.300	5.170	0.070	0.95	0.25	A
1	U BQ	25.900	3.700	58.200	4.500	0.45	0.07	A
Matrix: WA								
1	AM241	1.980	0.220	1.950	0.084	1.02	0.12	A
1	CO 60	227.000	2.600	196.000	1.410	1.16	0.02	W
1	CS137	85.100	2.000	75.200	0.642	1.13	0.03	A
1	GA 1	1330.000	55.000	1310.000	100.000	1.02	0.09	A
1	GB 2	690.000	31.000	410.000	40.000	1.68	0.18	N
1	MN 54	56.900	2.000	44.900	0.726	1.27	0.05	N
1	PU238	1.360	0.200	1.410	0.096	0.97	0.16	A
1	PU239	0.205	0.076	0.272	0.033	0.75	0.29	A
1	U BQ	0.941	0.200	0.624	0.016	1.51	0.32	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: UP

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.155	0.037	0.189	0.006	0.82	0.20	A
1	CE144	32.200	4.400	52.100	5.000	0.62	0.10	W
1	CO 57	9.250	0.420	14.700	0.576	0.63	0.04	N
1	CO 60	25.200	0.540	32.600	0.977	0.77	0.03	W
1	CS134	13.000	0.950	17.900	0.479	0.73	0.06	W
1	CS137	5.260	0.460	7.250	0.500	0.73	0.08	W
1	GA 1	2.940	0.000	3.300	0.300	0.89	0.08	A
1	GB 2	1.490	0.000	1.120	0.100	1.33	0.12	A
1	MN 54	4.050	0.440	5.340	0.302	0.76	0.09	W
1	PU238	0.060	0.020	0.096	0.002	0.62	0.21	W
1	PU239	0.068	0.021	0.093	0.003	0.73	0.23	W
1	RU106	13.200	1.900	17.000	1.360	0.78	0.13	A
1	SB125	9.120	0.890	11.400	0.449	0.80	0.08	W
1	SR 90	0.686	0.135	1.060	0.037	0.65	0.13	W
1	U 234	0.071	0.017	0.052	0.001	1.38	0.33	W
1	U 238	0.045	0.012	0.053	0.002	0.84	0.23	W
Matrix: SO								
1	PU238	16.100	3.260	17.500	0.901	0.92	0.19	A
1	PU239	4.650	1.450	5.170	0.070	0.90	0.28	A
1	U 234	32.000	5.310	29.500	2.320	1.09	0.20	A
1	U 235	1.460	0.789	1.460	0.197	1.00	0.56	A
1	U 238	22.900	4.060	30.400	2.080	0.75	0.14	A
1	U UG	2.700	0.000	2.460	0.200	1.10	0.09	A
Matrix: WA								
1	AM241	2.050	0.414	1.950	0.084	1.05	0.22	A
1	CO 60	211.000	4.000	196.000	1.410	1.08	0.02	A
1	CS137	83.200	5.900	75.200	0.642	1.11	0.08	A
1	GA 1	810.000	71.000	1310.000	100.000	0.62	0.07	W
1	GB 2	622.000	55.000	410.000	40.000	1.52	0.20	W
1	H 3	149.000	21.500	168.000	35.000	0.89	0.23	A
1	MN 54	51.000	4.350	44.900	0.726	1.14	0.10	A
1	PU238	1.230	0.216	1.410	0.096	0.87	0.16	A
1	PU239	0.238	0.077	0.272	0.033	0.88	0.30	A
1	SR 90	1.840	0.580	2.000	0.040	0.92	0.29	A
1	U 234	0.412	0.141	0.306	0.003	1.35	0.46	W
1	U 238	0.312	0.115	0.311	0.016	1.00	0.37	A
1	U UG	0.029	0.000	0.025	0.002	1.16	0.09	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: UY

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.180	0.050	0.189	0.006	0.95	0.27	A
1	CE144	33.000	1.500	52.100	5.000	0.63	0.07	W
1	CO 57	9.800	0.350	14.700	0.576	0.67	0.04	W
1	CO 60	27.000	4.500	32.600	0.977	0.83	0.14	A
1	CS134	16.000	0.850	17.900	0.479	0.89	0.05	A
1	CS137	5.500	0.700	7.250	0.500	0.76	0.11	W
1	GA 1	3.000	0.340	3.300	0.300	0.91	0.13	A
1	GB 2	1.900	0.450	1.120	0.100	1.70	0.43	W
1	MN 54	4.500	0.850	5.340	0.302	0.84	0.17	W
1	PU238	0.092	0.030	0.096	0.002	0.96	0.31	A
1	PU239	0.096	0.020	0.093	0.003	1.04	0.22	A
1	RU106	16.000	3.200	17.000	1.360	0.94	0.20	A
1	SB125	9.300	0.800	11.400	0.449	0.82	0.08	A
1	U 234	0.060	0.020	0.052	0.001	1.16	0.39	A
1	U 238	0.085	0.020	0.053	0.002	1.60	0.38	W
1	U UG	3.200	0.000	4.300	0.080	0.74	0.01	W
Matrix: SO								
1	AM241	2.800	1.300	1.760	0.113	1.59	0.75	W
1	CS137	200.000	50.000	207.000	1.120	0.97	0.24	A
1	PU238	17.000	2.700	17.500	0.901	0.97	0.16	A
1	PU239	5.100	0.940	5.170	0.070	0.99	0.18	A
1	SR 90	5.600	2.300	7.810	0.280	0.72	0.30	W
1	U 234	24.000	4.000	29.500	2.320	0.81	0.15	A
1	U 235	1.700	0.950	1.460	0.197	1.16	0.67	A
1	U 238	23.000	3.800	30.400	2.080	0.76	0.14	A
1	U UG	2.900	0.000	2.460	0.200	1.18	0.10	W
Matrix: WA								
1	AM241	1.800	0.370	1.950	0.084	0.92	0.19	A
1	CO 60	220.000	10.000	196.000	1.410	1.12	0.05	W
1	CS137	80.000	5.300	75.200	0.642	1.06	0.07	A
1	GA 1	1450.000	180.000	1310.000	100.000	1.11	0.16	A
1	GB 2	570.000	85.000	410.000	40.000	1.39	0.25	A
1	H 3	150.000	26.000	168.000	35.000	0.89	0.24	A
1	MN 54	52.000	4.800	44.900	0.726	1.16	0.11	W
1	PU238	1.300	0.250	1.410	0.096	0.92	0.19	A
1	PU239	0.280	0.100	0.272	0.033	1.03	0.39	A
1	SR 90	2.700	0.800	2.000	0.040	1.35	0.40	W
1	U 234	0.470	0.180	0.306	0.003	1.54	0.59	N
1	U 238	0.440	0.170	0.311	0.016	1.42	0.55	W
1	U UG	0.030	0.000	0.025	0.002	1.20	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.172	0.023	0.189	0.006	0.91	0.13	A
1	CE144	41.000	1.100	52.100	5.000	0.79	0.08	A
1	CO 57	11.800	0.200	14.700	0.576	0.80	0.03	A
1	CO 60	29.500	0.500	32.600	0.977	0.91	0.03	A
1	CS134	14.900	0.300	17.900	0.479	0.83	0.03	A
1	CS137	6.570	0.300	7.250	0.500	0.91	0.08	A
1	GA 1	4.410	0.110	3.300	0.300	1.34	0.13	W
1	GB 2	1.950	0.070	1.120	0.100	1.74	0.17	W
1	MN 54	5.330	0.330	5.340	0.302	1.00	0.08	A
1	PU238	0.102	0.017	0.096	0.002	1.06	0.18	A
1	PU239	0.093	0.017	0.093	0.003	1.00	0.19	A
1	RU106	14.000	2.100	17.000	1.360	0.82	0.14	A
1	SB125	11.800	0.500	11.400	0.449	1.04	0.06	A
1	SR 90	1.330	0.210	1.060	0.037	1.26	0.20	A
1	U 234	0.041	0.007	0.052	0.001	0.79	0.14	W
1	U 238	0.040	0.007	0.053	0.002	0.75	0.13	W
1	U BQ	0.089	0.011	0.107	0.002	0.83	0.10	W
Matrix: SO								
1	AM241	1.520	0.190	1.760	0.113	0.86	0.12	A
1	CS137	233.000	16.000	207.000	1.120	1.13	0.08	A
1	K 40	418.000	30.000	377.000	16.400	1.11	0.09	A
1	PU238	17.200	0.800	17.500	0.901	0.98	0.07	A
1	PU239	5.780	0.480	5.170	0.070	1.12	0.09	A
1	SR 90	8.220	2.180	7.810	0.280	1.05	0.28	A
1	U 234	29.300	0.400	29.500	2.320	0.99	0.08	A
1	U 238	28.500	0.400	30.400	2.080	0.94	0.07	A
1	U BQ	60.000	2.200	58.200	4.500	1.03	0.09	A
Matrix: VE								
1	AM241	0.519	0.148	0.534	0.040	0.97	0.29	A
1	CO 60	7.370	1.300	9.170	0.257	0.80	0.14	W
1	CS137	104.000	8.000	97.200	1.930	1.07	0.09	A
1	K 40	389.000	33.000	352.000	8.160	1.11	0.10	A
1	PU239	0.857	0.198	0.980	0.115	0.87	0.23	A
1	SR 90	659.000	15.000	587.000	36.300	1.12	0.07	A
Matrix: WA								
1	AM241	1.650	0.090	1.950	0.084	0.85	0.06	A
1	CO 60	205.000	4.000	196.000	1.410	1.05	0.02	A
1	CS137	81.900	5.900	75.200	0.642	1.09	0.08	A
1	GA 1	1230.000	60.000	1310.000	100.000	0.94	0.09	A
1	GB 2	617.000	33.000	410.000	40.000	1.51	0.17	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	H 3	56.300	4.100	168.000	35.000	0.34	0.07	N
1	MN 54	50.500	4.800	44.900	0.726	1.13	0.11	A
1	PU238	1.300	0.100	1.410	0.096	0.92	0.09	A
1	PU239	0.300	0.052	0.272	0.033	1.10	0.23	A
1	SR 90	2.410	0.470	2.000	0.040	1.21	0.24	W
1	U 234	0.141	0.022	0.306	0.003	0.46	0.07	N
1	U 238	0.128	0.018	0.311	0.016	0.41	0.06	N
1	U BQ	0.285	0.029	0.624	0.016	0.46	0.05	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WC

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.230	0.040	0.189	0.006	1.22	0.22	A
1	CE144	33.600	5.100	52.100	5.000	0.65	0.12	W
1	CO 57	10.000	1.100	14.700	0.576	0.68	0.08	W
1	CO 60	27.100	2.800	32.600	0.977	0.83	0.09	A
1	CS134	13.000	1.000	17.900	0.479	0.73	0.06	W
1	CS137	5.730	0.960	7.250	0.500	0.79	0.14	W
1	GA 1	3.200	0.320	3.300	0.300	0.97	0.13	A
1	GB 2	1.600	0.160	1.120	0.100	1.43	0.19	W
1	MN 54	4.440	0.770	5.340	0.302	0.83	0.15	W
1	PU238	0.110	0.020	0.096	0.002	1.14	0.21	A
1	PU239	0.100	0.020	0.093	0.003	1.08	0.22	A
1	RU106	13.900	2.700	17.000	1.360	0.82	0.17	A
1	SB125	9.800	0.800	11.400	0.449	0.86	0.08	A
1	SR 90	1.320	0.160	1.060	0.037	1.25	0.16	A
1	U BQ	0.130	0.030	0.107	0.002	1.22	0.28	A
Matrix: SO								
1	CS137	234.000	25.600	207.000	1.120	1.13	0.12	A
1	K 40	418.000	59.600	377.000	16.400	1.11	0.17	A
Matrix: VE								
1	CO 60	7.500	1.100	9.170	0.257	0.82	0.12	W
1	CS137	115.000	12.600	97.200	1.930	1.18	0.13	A
1	K 40	403.000	59.600	352.000	8.160	1.15	0.17	A
Matrix: WA								
1	AM241	1.950	0.300	1.950	0.084	1.00	0.16	A
1	CO 60	212.000	16.000	196.000	1.410	1.08	0.08	A
1	CS137	85.100	11.000	75.200	0.642	1.13	0.15	A
1	GA 1	1390.000	41.000	1310.000	100.000	1.06	0.09	A
1	GB 2	511.000	30.000	410.000	40.000	1.25	0.14	A
1	H 3	130.000	26.000	168.000	35.000	0.77	0.22	W
1	MN 54	50.300	6.900	44.900	0.726	1.12	0.16	A
1	PU238	1.450	0.230	1.410	0.096	1.03	0.18	A
1	PU239	0.260	0.050	0.272	0.033	0.96	0.22	A
1	SR 90	2.200	0.300	2.000	0.040	1.10	0.15	A
1	U BQ	0.700	0.200	0.624	0.016	1.12	0.32	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WI

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	CE144	52.700	6.420	52.100	5.000	1.01	0.16	A
1	CO 57	14.900	1.450	14.700	0.576	1.01	0.11	A
1	CO 60	34.700	2.350	32.600	0.977	1.06	0.08	A
1	CS134	17.300	1.290	17.900	0.479	0.97	0.08	A
1	CS137	6.740	0.780	7.250	0.500	0.93	0.13	A
1	MN 54	5.270	0.730	5.340	0.302	0.99	0.15	A
1	SB125	11.400	1.000	11.400	0.449	1.00	0.10	A
Matrix: WA								
1	CO 60	234.000	16.500	196.000	1.410	1.19	0.08	N
1	CS137	88.900	9.470	75.200	0.642	1.18	0.13	W
1	MN 54	55.600	7.100	44.900	0.726	1.24	0.16	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WN

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	AM241	0.170	0.017	0.189	0.006	0.90	0.09	A
1	CE144	34.500	4.000	52.100	5.000	0.66	0.10	W
1	CO 57	10.500	0.700	14.700	0.576	0.71	0.06	W
1	CO 60	28.500	2.000	32.600	0.977	0.87	0.07	A
1	CS134	18.000	1.300	17.900	0.479	1.01	0.08	A
1	CS137	6.050	0.500	7.250	0.500	0.83	0.09	W
1	GA 1	3.000	1.000	3.300	0.300	0.91	0.31	A
1	GB 2	1.490	0.140	1.120	0.100	1.33	0.17	A
1	MN 54	4.450	0.500	5.340	0.302	0.83	0.11	W
1	PU238	0.089	0.012	0.096	0.002	0.93	0.13	A
1	PU239	0.087	0.012	0.093	0.003	0.94	0.13	A
1	RU106	18.000	2.000	17.000	1.360	1.06	0.15	A
1	SB125	11.000	1.000	11.400	0.449	0.97	0.10	A
1	SR 90	1.100	0.150	1.060	0.037	1.04	0.15	A
1	U 234	0.049	0.008	0.052	0.001	0.95	0.16	A
1	U 238	0.050	0.008	0.053	0.002	0.94	0.15	A
Matrix: SO								
1	AM241	1.800	0.300	1.760	0.113	1.02	0.18	A
1	CS137	235.000	20.000	207.000	1.120	1.14	0.10	A
1	K 40	425.000	60.000	377.000	16.400	1.13	0.17	A
1	PU238	19.000	2.000	17.500	0.901	1.09	0.13	A
1	PU239	5.900	0.700	5.170	0.070	1.14	0.14	A
1	SR 90	7.700	2.000	7.810	0.280	0.99	0.26	A
1	U 234	41.000	6.000	29.500	2.320	1.39	0.23	N
1	U 238	37.000	6.000	30.400	2.080	1.22	0.21	W
Matrix: WA								
1	AM241	1.650	0.230	1.950	0.084	0.85	0.12	A
1	CO 60	195.000	12.000	196.000	1.410	1.00	0.06	A
1	CS137	79.500	6.000	75.200	0.642	1.06	0.08	A
1	FE 55	137.000	25.000	101.000	4.000	1.36	0.25	W
1	GA 1	1180.000	362.000	1310.000	100.000	0.90	0.29	A
1	GB 2	570.000	60.000	410.000	40.000	1.39	0.20	A
1	H 3	155.000	16.000	168.000	35.000	0.92	0.22	A
1	MN 54	47.000	4.000	44.900	0.726	1.05	0.09	A
1	PU238	1.400	0.130	1.410	0.096	0.99	0.11	A
1	PU239	0.295	0.035	0.272	0.033	1.09	0.18	A
1	SR 90	1.850	0.300	2.000	0.040	0.93	0.15	A
1	U 234	0.365	0.060	0.306	0.003	1.19	0.20	A
1	U 238	0.365	0.060	0.311	0.016	1.17	0.20	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WS

No. Test	Radio- nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: SO								
1	CS137	191.000	3.700	207.000	1.120	0.92	0.02	A
1	K 40	355.000	7.400	377.000	16.400	0.94	0.05	A
1	U 238	18.500	3.700	30.400	2.080	0.61	0.13	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
 Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: WV

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
1	GA 1	3.200	0.060	3.300	0.300	0.97	0.09	A
1	GB 2	1.600	0.040	1.120	0.100	1.43	0.13	W
Matrix: WA								
1	CO 60	210.000	2.000	196.000	1.410	1.07	0.01	A
1	CS137	79.000	1.200	75.200	0.642	1.05	0.02	A
1	GA 1	1300.000	23.000	1310.000	100.000	0.99	0.08	A
1	GB 2	550.000	13.000	410.000	40.000	1.34	0.14	A
1	H 3	150.000	6.300	168.000	35.000	0.89	0.19	A
1	MN 54	50.000	1.300	44.900	0.726	1.11	0.03	A
1	SR 90	2.600	0.360	2.000	0.040	1.30	0.18	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: YA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
Matrix: AI								
2	GA 1	2.850	0.027	3.300	0.300	0.86	0.08	A
3		2.900	0.027	3.300	0.300	0.88	0.08	A
3		2.890	0.027	3.300	0.300	0.88	0.08	A
2	GB 2	0.949	0.018	1.120	0.100	0.85	0.08	W
3		0.915	0.018	1.120	0.100	0.82	0.07	W
3		0.870	0.018	1.120	0.100	0.78	0.07	W
1	U 234	0.057	0.002	0.052	0.001	1.11	0.05	A
2		0.059	0.003	0.052	0.001	1.15	0.06	A
1	U 238	0.058	0.002	0.053	0.002	1.09	0.06	A
2		0.057	0.003	0.053	0.002	1.08	0.06	A
Matrix: SO								
1	CS137	231.000	1.500	207.000	1.120	1.12	0.01	A
2		226.000	1.400	207.000	1.120	1.09	0.01	A
3		226.000	1.600	207.000	1.120	1.09	0.01	A
1	K 40	398.000	8.900	377.000	16.400	1.06	0.05	A
2		411.000	8.900	377.000	16.400	1.09	0.05	A
3		407.000	9.600	377.000	16.400	1.08	0.05	A
Matrix: VE								
1	CS137	106.000	1.200	97.200	1.930	1.09	0.02	A
2		107.000	1.200	97.200	1.930	1.10	0.03	A
3		106.000	1.100	97.200	1.930	1.09	0.02	A
1	K 40	394.000	10.000	352.000	8.160	1.12	0.04	A
2		365.000	10.000	352.000	8.160	1.04	0.04	A
3		382.000	9.300	352.000	8.160	1.09	0.04	A
1	PU239	0.766	0.052	0.980	0.115	0.78	0.11	A
2		0.947	0.056	0.980	0.115	0.97	0.13	A
3		0.932	0.052	0.980	0.115	0.95	0.12	A
Matrix: WA								
1	CO 60	189.000	0.960	196.000	1.410	0.96	0.01	A
2		196.000	1.100	196.000	1.410	1.00	0.01	A
3		194.000	1.100	196.000	1.410	0.99	0.01	A
1	CS137	75.200	0.740	75.200	0.642	1.00	0.01	A
2		74.500	0.850	75.200	0.642	0.99	0.01	A
3		74.200	0.850	75.200	0.642	0.99	0.01	A
1	MN 54	45.500	0.670	44.900	0.726	1.01	0.02	A
2		47.100	0.740	44.900	0.726	1.05	0.02	A
3		44.100	0.740	44.900	0.726	0.98	0.02	A
1	U 234	0.345	0.015	0.306	0.003	1.13	0.05	A
2		0.376	0.016	0.306	0.003	1.23	0.05	W
3		0.360	0.016	0.306	0.003	1.18	0.05	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Laboratory

Labcode: YA

No. Test	Radio-nuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Ratio Error	Evaluation
1	U 238	0.346	0.015	0.311	0.016	1.11	0.08	A
2		0.349	0.016	0.311	0.016	1.12	0.08	W
3		0.372	0.016	0.311	0.016	1.20	0.08	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: AM241

EML Value: 0.189
EML Error: 0.006

Labcode	Test #	Reported Value	Reported Error	Reported EMI	Ratio Error	Evaluation
AA	1	0.189	0.006	1.00	0.04	A
AG	1	0.174	0.023	0.92	0.13	A
AI	1	0.027	0.005	0.14	0.02	N
AM	1	0.200	0.040	1.06	0.21	A
AN	1	0.202	0.009	1.07	0.06	A
AR	1	0.200	0.020	1.06	0.11	A
AU	1	0.150	0.020	0.79	0.11	A
AW	1	0.130	0.050	0.69	0.27	W
BE	1	0.186	0.013	0.98	0.07	A
BL	1	0.230	0.020	1.22	0.11	A
BM	1	0.270	0.090	1.43	0.48	W
BM	2	0.270	0.100	1.43	0.53	W
BP	1	0.190	0.006	1.01	0.04	A
BX	1	0.825	0.036	4.36	0.23	N
CH	1	0.234	0.040	1.24	0.22	W
CL	1	0.300	0.100	1.59	0.53	W
CS	1	0.180	0.010	0.95	0.06	A
DC	1	0.208	0.047	1.10	0.25	A
EB	1	0.327	0.015	1.73	0.09	N
EL	1	0.400	0.040	2.12	0.22	N
ES	1	0.158	0.031	0.84	0.17	A
FG	1	0.205	0.050	1.09	0.27	A
FL	1	0.211	0.043	1.12	0.23	A
GA	1	0.208	0.000	1.10	0.03	A
GE	1	0.181	0.021	0.96	0.12	A
HS	1	0.210	0.010	1.11	0.06	A
IE	1	0.174	0.056	0.92	0.30	A
IS	1	0.167	0.023	0.88	0.12	A
IT	1	0.099	0.006	0.52	0.04	N
JP	1	0.180	0.006	0.95	0.04	A
LA	1	0.176	0.021	0.93	0.11	A
LA	2	0.186	0.021	0.98	0.12	A
LA	3	0.182	0.021	0.96	0.12	A
LB	1	0.240	0.020	1.27	0.11	W
LH	1	0.210	0.021	1.11	0.12	A
ME	1	0.320	0.090	1.69	0.48	N
ML	1	0.600	0.500	3.18	2.65	N
NA	1	0.161	0.014	0.85	0.08	A
OD	1	0.311	0.102	1.65	0.54	N
OR	1	0.190	0.020	1.01	0.11	A
OT	1	0.085	0.018	0.45	0.10	N
PC	1	0.174	0.028	0.92	0.15	A
PC	2	0.174	0.028	0.92	0.15	A
RE	1	0.133	0.011	0.70	0.06	W
RF	1	0.168	0.013	0.89	0.07	A
RF	2	0.168	0.000	0.89	0.03	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: AM241

EML Value: 0.189
EML Error: 0.006

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
RI	1	0.581	0.026	3.07	0.16	N
SR	1	0.160	0.010	0.85	0.06	A
SW	1	0.146	0.022	0.77	0.12	A
TI	1	0.200	0.020	1.06	0.11	A
TM	1	0.186	0.008	0.98	0.05	A
TN	1	0.184	0.011	0.97	0.06	A
UK	1	0.202	0.048	1.07	0.26	A
UP	1	0.155	0.037	0.82	0.20	A
UY	1	0.180	0.050	0.95	0.27	A
WA	1	0.172	0.023	0.91	0.13	A
WC	1	0.230	0.040	1.22	0.22	A
WN	1	0.170	0.017	0.90	0.09	A

Total Number Reported: 58

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CE144

EML Value: 52.100
EML Error: 5.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	52.100	5.000	1.00	0.14	A
AG	1	30.000	2.300	0.58	0.07	N
AI	1	34.900	0.369	0.67	0.06	W
AL	1	76.200	1.380	1.46	0.14	N
AM	1	39.400	0.510	0.76	0.07	W
AN	1	39.200	0.500	0.75	0.07	W
AR	1	84.300	8.200	1.62	0.22	N
AU	1	36.100	0.590	0.69	0.07	W
AW	1	55.200	8.300	1.06	0.19	A
BA	1	45.100	3.300	0.87	0.10	A
BE	1	28.400	3.120	0.55	0.08	N
BL	1	42.400	1.500	0.81	0.08	A
BM	1	41.600	2.100	0.80	0.09	A
BM	2	39.100	1.800	0.75	0.08	W
BN	1	46.600	5.190	0.89	0.13	A
BP	1	36.300	1.500	0.70	0.07	W
BQ	1	32.700	0.300	0.63	0.06	W
BR	1	32.500	1.220	0.62	0.06	W
BU	1	44.000	9.000	0.85	0.19	A
BX	1	36.600	2.170	0.70	0.08	W
CH	1	30.600	0.785	0.59	0.06	W
CL	1	61.300	6.100	1.18	0.16	A
CP	1	45.100	6.000	0.87	0.14	A
CS	1	24.700	1.060	0.47	0.05	N
DC	1	35.600	9.780	0.68	0.20	W
EB	1	81.600	0.224	1.57	0.15	N
EE	1	48.800	0.052	0.94	0.09	A
EG	1	36.000	3.000	0.69	0.09	W
EL	1	33.100	3.000	0.64	0.08	W
EP	1	49.400	0.760	0.95	0.09	A
ES	1	36.600	2.040	0.70	0.08	W
FG	1	48.900	3.200	0.94	0.11	A
FL	1	34.900	0.600	0.67	0.07	W
FM	1	36.700	0.760	0.70	0.07	W
FN	1	46.900	10.100	0.90	0.21	A
GA	1	32.300	0.000	0.62	0.06	W
GE	1	38.100	0.950	0.73	0.07	W
HI	1	64.900	0.800	1.25	0.12	W
HS	1	34.000	4.000	0.65	0.10	W
ID	1	36.000	4.000	0.69	0.10	W
IE	1	39.500	2.790	0.76	0.09	W
IN	1	34.300	3.700	0.66	0.10	W
IS	1	34.900	4.800	0.67	0.11	W
IT	1	36.600	0.200	0.70	0.07	W
JP	1	38.000	0.300	0.73	0.07	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CE144

EML Value: 52.100
EML Error: 5.000

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LB	1	50.400	4.200	0.97	0.12	A
LH	1	34.600	3.200	0.66	0.09	W
LL	1	39.500	1.570	0.76	0.08	W
LM	1	44.000	2.000	0.85	0.09	A
ME	1	57.000	0.460	1.09	0.11	A
ML	1	31.000	4.000	0.60	0.10	W
NA	1	36.100	0.278	0.69	0.07	W
NC	1	44.000	1.640	0.85	0.09	A
NL	1	49.900	0.600	0.96	0.09	A
OD	1	35.100	1.950	0.67	0.07	W
OD	2	35.100	1.950	0.67	0.07	W
OL	1	36.300	1.930	0.70	0.08	W
OR	1	44.000	1.000	0.85	0.08	A
OT	1	47.000	1.000	0.90	0.09	A
PC	1	52.000	12.000	1.00	0.25	A
PC	2	52.000	12.000	1.00	0.25	A
RA	1	42.000	2.100	0.81	0.09	A
RE	1	33.900	8.800	0.65	0.18	W
RI	1	34.600	4.500	0.66	0.11	W
RL	1	35.400	2.200	0.68	0.08	W
SA	1	63.800	8.300	1.23	0.20	W
SK	1	47.300	4.000	0.91	0.12	A
SR	1	35.000	3.000	0.67	0.09	W
SS	1	25.600	2.600	0.49	0.07	N
SW	1	36.300	0.800	0.70	0.07	W
TI	1	35.000	4.000	0.67	0.10	W
TM	1	39.100	1.330	0.75	0.08	W
TN	1	31.600	0.630	0.61	0.06	W
UK	1	34.700	1.400	0.67	0.07	W
UP	1	32.200	4.400	0.62	0.10	W
UY	1	33.000	1.500	0.63	0.07	W
WA	1	41.000	1.100	0.79	0.08	A
WC	1	33.600	5.100	0.65	0.12	W
WI	1	52.700	6.420	1.01	0.16	A
WN	1	34.500	4.000	0.66	0.10	W

Total Number Reported: 80

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CO 57

EML Value: 14.700
EML Error: 0.576

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	14.700	0.576	1.00	0.06	A
AG	1	8.870	0.600	0.60	0.05	N
AI	1	9.620	0.059	0.65	0.03	W
AM	1	9.650	0.080	0.66	0.03	W
AN	1	11.300	0.200	0.77	0.03	W
AR	1	11.500	1.100	0.78	0.08	W
AU	1	9.980	0.110	0.68	0.03	W
AW	1	15.800	2.400	1.08	0.17	A
BA	1	13.400	0.780	0.91	0.06	A
BE	1	10.100	0.810	0.69	0.06	W
BL	1	12.300	0.400	0.84	0.04	A
BM	1	12.100	0.600	0.82	0.05	A
BM	2	11.300	0.600	0.77	0.05	W
BN	1	13.500	1.530	0.92	0.11	A
BP	1	11.100	0.220	0.76	0.03	W
BQ	1	9.670	0.040	0.66	0.03	W
BR	1	10.100	0.200	0.69	0.03	W
BU	1	13.000	1.000	0.88	0.08	A
BX	1	11.000	0.657	0.75	0.05	W
CA	1	9.900	0.040	0.67	0.03	W
CH	1	9.060	0.167	0.62	0.03	N
CL	1	17.400	1.700	1.18	0.13	W
CP	1	13.100	1.700	0.89	0.12	A
CS	1	7.860	0.240	0.54	0.03	N
DC	1	9.660	2.260	0.66	0.16	W
EB	1	23.200	0.250	1.58	0.06	N
EE	1	13.500	0.094	0.92	0.04	A
EG	1	11.100	0.800	0.76	0.06	W
EL	1	11.000	1.000	0.75	0.07	W
EP	1	14.900	1.080	1.01	0.08	A
ES	1	10.800	0.390	0.74	0.04	W
FG	1	13.300	0.440	0.91	0.05	A
FL	1	9.760	0.110	0.66	0.03	W
FM	1	10.700	0.180	0.73	0.03	W
FN	1	11.200	0.700	0.76	0.06	W
GA	1	9.700	0.000	0.66	0.03	W
GE	1	11.400	0.210	0.78	0.03	W
HI	1	13.600	0.960	0.93	0.07	A
HS	1	10.300	0.600	0.70	0.05	W
ID	1	13.000	1.000	0.88	0.08	A
IE	1	12.200	0.610	0.83	0.05	A
IN	1	10.400	0.600	0.71	0.05	W
IS	1	11.000	1.500	0.75	0.11	W
IT	1	10.800	0.300	0.74	0.04	W
JP	1	12.000	0.050	0.82	0.03	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CO 57

EML Value: 14.700
EML Error: 0.576

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LB	1	12.500	0.400	0.85	0.04	A
LH	1	10.000	1.000	0.68	0.07	W
LL	1	11.800	0.304	0.80	0.04	A
LM	1	13.000	1.000	0.88	0.08	A
ME	1	13.500	0.060	0.92	0.04	A
ML	1	9.200	0.200	0.63	0.03	N
NA	1	10.400	0.047	0.71	0.03	W
NC	1	14.200	0.210	0.97	0.04	A
NL	1	14.200	0.200	0.97	0.04	A
OD	1	11.200	0.510	0.76	0.05	W
OL	1	11.200	0.500	0.76	0.05	W
OR	1	13.000	1.000	0.88	0.08	A
OT	1	14.000	1.000	0.95	0.08	A
PC	1	15.100	2.100	1.03	0.15	A
PC	2	15.100	2.100	1.03	0.15	A
RA	1	14.400	0.600	0.98	0.06	A
RE	1	9.860	0.030	0.67	0.03	W
RI	1	10.000	0.790	0.68	0.06	W
RL	1	10.500	0.640	0.71	0.05	W
SA	1	17.900	0.700	1.22	0.07	W
SK	1	13.600	1.200	0.93	0.09	A
SR	1	10.100	0.900	0.69	0.07	W
SS	1	7.900	0.600	0.54	0.05	N
SW	1	10.600	0.100	0.72	0.03	W
TI	1	11.000	1.000	0.75	0.07	W
TM	1	11.400	0.357	0.78	0.04	W
TN	1	9.530	0.135	0.65	0.03	W
TO	1	23.300	9.860	1.59	0.67	N
UK	1	10.300	0.220	0.70	0.03	W
UP	1	9.250	0.420	0.63	0.04	N
UY	1	9.800	0.350	0.67	0.04	W
WA	1	11.800	0.200	0.80	0.03	A
WC	1	10.000	1.100	0.68	0.08	W
WI	1	14.900	1.450	1.01	0.11	A
WN	1	10.500	0.700	0.71	0.06	W

Total Number Reported: 80

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CO 60

EML Value: 32.600
EML Error: 0.977

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	32.600	0.977	1.00	0.04	A
AG	1	23.100	1.500	0.71	0.05	W
AI	1	21.700	0.110	0.67	0.02	N
AL	1	50.300	1.040	1.54	0.06	N
AM	1	25.200	0.190	0.77	0.02	W
AN	1	29.200	0.600	0.90	0.03	A
AR	1	29.200	2.200	0.90	0.07	A
AU	1	28.500	0.500	0.87	0.03	A
AW	1	33.800	5.000	1.04	0.16	A
BA	1	32.500	0.710	1.00	0.04	A
BC	1	27.500	0.622	0.84	0.03	A
BE	1	25.600	2.200	0.79	0.07	W
BL	1	30.300	0.800	0.93	0.04	A
BM	1	30.400	1.500	0.93	0.05	A
BN	1	29.200	3.920	0.90	0.12	A
BP	1	29.000	0.230	0.89	0.03	A
BQ	1	30.700	0.200	0.94	0.03	A
BR	1	28.800	0.420	0.88	0.03	A
BU	1	31.000	3.000	0.95	0.10	A
BX	1	27.500	0.714	0.84	0.03	A
CA	1	27.100	0.500	0.83	0.03	A
CH	1	23.400	0.396	0.72	0.02	W
CL	1	46.800	4.700	1.44	0.15	N
CP	1	30.900	3.000	0.95	0.10	A
CS	1	22.200	0.680	0.68	0.03	N
DC	1	28.400	7.730	0.87	0.24	A
EB	1	67.000	0.500	2.06	0.06	N
EE	1	30.600	0.685	0.94	0.04	A
EG	1	28.000	2.000	0.86	0.07	A
EL	1	28.300	2.000	0.87	0.07	A
EP	1	35.500	1.340	1.09	0.05	A
ES	1	26.500	0.920	0.81	0.04	W
FG	1	30.200	0.310	0.93	0.03	A
FL	1	25.800	0.210	0.79	0.02	W
FM	1	28.100	0.230	0.86	0.03	A
FN	1	25.500	3.200	0.78	0.10	W
GA	1	25.800	0.000	0.79	0.02	W
GE	1	27.900	0.470	0.86	0.03	A
HI	1	41.400	0.200	1.27	0.04	W
HS	1	27.500	1.200	0.84	0.04	A
ID	1	28.000	2.000	0.86	0.07	A
IE	1	30.200	1.300	0.93	0.05	A
IN	1	27.100	0.600	0.83	0.03	A
IS	1	28.100	3.900	0.86	0.12	A
IT	1	28.400	0.700	0.87	0.03	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CO 60

EML Value: 32.600
EML Error: 0.977

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
JP	1	27.000	0.200	0.83	0.03	A
LB	1	31.100	7.600	0.95	0.24	A
LH	1	25.800	1.900	0.79	0.06	W
LL	1	30.100	0.426	0.92	0.03	A
LM	1	34.000	2.000	1.04	0.07	A
ME	1	33.600	0.210	1.03	0.03	A
ML	1	26.500	1.200	0.81	0.04	W
NA	1	26.200	0.115	0.80	0.02	W
NC	1	30.000	0.510	0.92	0.03	A
NL	1	32.200	0.500	0.99	0.03	A
OD	1	27.500	0.570	0.84	0.03	A
OL	1	27.700	1.000	0.85	0.04	A
OR	1	33.000	1.000	1.01	0.04	A
OT	2	32.000	1.000	0.98	0.04	A
PC	1	31.600	2.900	0.97	0.09	A
PC	2	31.600	2.900	0.97	0.09	A
RA	1	33.400	1.400	1.03	0.05	A
RE	1	26.500	0.900	0.81	0.04	W
RI	1	27.300	1.200	0.84	0.04	A
RL	1	32.500	2.600	1.00	0.09	A
SA	1	36.100	1.100	1.11	0.05	A
SK	1	34.600	3.600	1.06	0.12	A
SR	1	26.000	1.000	0.80	0.04	W
SS	1	20.000	1.500	0.61	0.05	N
SW	1	26.800	0.300	0.82	0.03	W
TI	1	27.000	3.000	0.83	0.10	A
TM	1	28.900	0.917	0.89	0.04	A
TN	1	25.200	0.330	0.77	0.03	W
TO	1	40.100	2.210	1.23	0.08	W
UC	1	25.700	0.100	0.79	0.02	W
UK	1	26.700	0.630	0.82	0.03	W
UP	1	25.200	0.540	0.77	0.03	W
UY	1	27.000	4.500	0.83	0.14	A
WA	1	29.500	0.500	0.91	0.03	A
WC	1	27.100	2.800	0.83	0.09	A
WI	1	34.700	2.350	1.06	0.08	A
WN	1	28.500	2.000	0.87	0.07	A

Total Number Reported: 82

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CS134

EML Value: 17.900
EML Error: 0.479

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	17.900	0.479	1.00	0.04	A
AG	1	13.600	0.900	0.76	0.05	A
AI	1	13.000	0.080	0.73	0.02	W
AL	1	17.100	0.240	0.96	0.03	A
AM	1	11.800	0.130	0.66	0.02	W
AN	1	16.100	0.100	0.90	0.02	A
AR	1	15.500	2.400	0.87	0.14	A
AU	1	14.100	0.260	0.79	0.03	A
AW	1	18.100	3.000	1.01	0.17	A
BA	1	17.400	0.800	0.97	0.05	A
BC	1	15.800	1.450	0.88	0.08	A
BE	1	12.500	1.070	0.70	0.06	W
BL	1	16.800	0.500	0.94	0.04	A
BM	1	17.800	1.100	0.99	0.07	A
BM	2	17.100	0.900	0.96	0.06	A
BN	1	15.600	0.470	0.87	0.04	A
BP	1	16.100	0.240	0.90	0.03	A
BQ	1	16.000	0.200	0.89	0.03	A
BR	1	14.900	0.290	0.83	0.03	A
BU	1	19.000	3.000	1.06	0.17	A
BX	1	16.200	1.520	0.91	0.09	A
CA	1	15.200	1.100	0.85	0.07	A
CH	1	12.900	0.230	0.72	0.02	W
CL	1	26.400	2.600	1.48	0.15	N
CP	1	16.500	2.600	0.92	0.15	A
CS	1	11.300	0.240	0.63	0.02	N
DC	1	18.500	4.030	1.03	0.23	A
EB	1	32.000	0.529	1.79	0.06	N
EE	1	16.400	0.100	0.92	0.03	A
EG	1	16.400	1.200	0.92	0.07	A
EL	1	13.200	1.200	0.74	0.07	W
EP	1	20.100	1.700	1.12	0.10	W
ES	1	15.000	0.560	0.84	0.04	A
FG	1	16.400	0.880	0.92	0.05	A
FL	1	14.400	0.170	0.80	0.02	A
FM	1	15.600	0.240	0.87	0.03	A
FN	1	16.900	0.800	0.94	0.05	A
GA	1	13.500	0.000	0.75	0.02	A
GE	1	16.900	0.300	0.94	0.03	A
HI	1	17.000	0.130	0.95	0.03	A
HS	1	15.100	0.900	0.84	0.06	A
ID	1	18.000	1.000	1.01	0.06	A
IE	1	14.500	0.670	0.81	0.04	A
IN	1	15.800	0.500	0.88	0.04	A
IS	1	15.400	2.100	0.86	0.12	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CS134

EML Value: 17.900
EML Error: 0.479

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
IT	1	15.200	0.500	0.85	0.04	A
JP	1	16.000	0.100	0.89	0.02	A
LB	1	16.100	2.700	0.90	0.15	A
LH	1	14.500	1.100	0.81	0.07	A
LL	1	18.500	0.326	1.03	0.03	A
LM	1	19.000	2.000	1.06	0.12	A
ME	1	19.600	0.140	1.10	0.03	W
ML	1	15.800	0.400	0.88	0.03	A
NA	1	14.400	0.075	0.80	0.02	A
NC	1	16.000	0.380	0.89	0.03	A
NL	1	16.200	0.200	0.91	0.03	A
OD	1	15.500	0.890	0.87	0.05	A
OL	1	13.200	0.700	0.74	0.04	W
OR	1	17.000	1.000	0.95	0.06	A
OT	1	18.000	1.000	1.01	0.06	A
PC	1	19.000	1.700	1.06	0.10	A
PC	2	19.000	1.700	1.06	0.10	A
RA	1	18.200	0.900	1.02	0.06	A
RE	1	14.100	0.500	0.79	0.04	A
RI	1	15.400	0.840	0.86	0.05	A
RL	1	16.200	1.700	0.91	0.10	A
SA	1	20.300	2.000	1.13	0.12	W
SK	1	19.000	2.000	1.06	0.12	A
SR	1	15.000	1.000	0.84	0.06	A
SS	1	10.000	0.700	0.56	0.04	N
SW	1	14.400	0.200	0.80	0.02	A
TI	1	14.000	1.000	0.78	0.06	A
TM	1	16.400	0.525	0.92	0.04	A
TN	1	16.400	0.710	0.92	0.05	A
TO	1	17.500	0.740	0.98	0.05	A
UK	1	15.100	0.370	0.84	0.03	A
UP	1	13.000	0.950	0.73	0.06	W
UY	1	16.000	0.850	0.89	0.05	A
WA	1	14.900	0.300	0.83	0.03	A
WC	1	13.000	1.000	0.73	0.06	W
WI	1	17.300	1.290	0.97	0.08	A
WN	1	18.000	1.300	1.01	0.08	A

Total Number Reported: 82

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CS137

EML Value: 7.250
EML Error: 0.500

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	7.250	0.500	1.00	0.10	A
AG	1	4.980	0.420	0.69	0.07	W
AI	1	5.030	0.080	0.69	0.05	W
AL	1	12.000	0.240	1.66	0.12	N
AM	1	5.390	0.140	0.74	0.05	W
AN	1	6.000	0.120	0.83	0.06	W
AR	1	6.500	0.600	0.90	0.10	A
AW	1	7.400	1.000	1.02	0.16	A
BA	1	7.300	0.550	1.01	0.10	A
BC	1	5.890	0.642	0.81	0.11	W
BE	1	5.820	0.560	0.80	0.10	W
BL	1	6.210	0.230	0.86	0.07	A
BM	1	6.590	0.330	0.91	0.08	A
BM	2	6.310	0.340	0.87	0.08	A
BN	1	7.050	0.840	0.97	0.13	A
BP	1	6.280	0.220	0.87	0.07	A
BQ	1	5.250	0.080	0.72	0.05	W
BR	1	5.910	0.370	0.82	0.08	W
BU	1	6.500	0.800	0.90	0.13	A
CA	1	5.300	0.100	0.73	0.05	W
CH	1	4.790	0.215	0.66	0.05	N
CL	1	11.700	1.200	1.61	0.20	N
CP	1	6.780	1.090	0.94	0.16	A
CS	1	4.320	0.190	0.60	0.05	N
DC	1	6.830	1.740	0.94	0.25	A
EB	1	20.000	0.288	2.76	0.19	N
EE	1	6.400	0.100	0.88	0.06	A
EG	1	5.700	0.400	0.79	0.08	W
EL	1	6.000	0.400	0.83	0.08	W
EP	1	7.130	0.660	0.98	0.11	A
ES	1	5.910	0.570	0.82	0.10	W
FG	1	6.390	0.280	0.88	0.07	A
FL	1	5.920	0.100	0.82	0.06	W
FM	1	6.290	0.150	0.87	0.06	A
FN	1	5.450	0.450	0.75	0.08	W
GA	1	5.300	0.000	0.73	0.05	W
GE	1	6.430	0.270	0.89	0.07	A
HI	1	8.400	0.100	1.16	0.08	A
HS	1	5.600	0.600	0.77	0.10	W
ID	1	7.000	0.400	0.97	0.09	A
IE	1	5.260	0.600	0.73	0.10	W
IN	1	5.200	0.400	0.72	0.07	W
IS	1	5.740	0.790	0.79	0.12	W
IT	1	5.800	0.100	0.80	0.06	W
JP	1	6.200	0.090	0.86	0.06	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: CS137

EML Value: 7.250
EML Error: 0.500

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LB	1	6.400	1.100	0.88	0.16	A
LH	1	5.190	0.600	0.72	0.10	W
LL	1	6.330	0.215	0.87	0.07	A
LM	1	7.000	1.000	0.97	0.15	A
ME	1	7.330	0.080	1.01	0.07	A
ML	1	4.700	0.100	0.65	0.05	N
NA	1	6.080	0.076	0.84	0.06	W
NC	1	6.640	0.270	0.92	0.07	A
NL	1	6.600	0.200	0.91	0.07	A
OD	1	6.020	0.708	0.83	0.11	W
OL	1	5.890	0.280	0.81	0.07	W
OR	1	7.300	0.300	1.01	0.08	A
OT	1	7.100	0.300	0.98	0.08	A
PC	1	7.500	1.200	1.03	0.18	A
PC	2	7.500	1.200	1.03	0.18	A
RA	1	7.580	0.300	1.05	0.08	A
RE	1	5.320	0.190	0.73	0.06	W
RI	1	5.050	1.200	0.70	0.17	W
RL	1	5.920	0.500	0.82	0.09	W
SA	1	8.500	0.500	1.17	0.11	A
SK	1	6.900	0.600	0.95	0.11	A
SR	1	5.500	0.900	0.76	0.14	W
SS	1	4.300	0.600	0.59	0.09	N
SW	1	5.920	0.300	0.82	0.07	W
TI	1	6.200	0.600	0.86	0.10	A
TM	1	5.940	0.298	0.82	0.07	W
TN	1	5.080	0.180	0.70	0.05	W
TO	1	7.580	0.090	1.05	0.07	A
UC	1	6.410	0.030	0.88	0.06	A
UK	1	5.430	0.590	0.75	0.10	W
UP	1	5.260	0.460	0.73	0.08	W
UY	1	5.500	0.700	0.76	0.11	W
WA	1	6.570	0.300	0.91	0.08	A
WC	1	5.730	0.960	0.79	0.14	W
WI	1	6.740	0.780	0.93	0.13	A
WN	1	6.050	0.500	0.83	0.09	W

Total Number Reported: 81

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: GA 1

EML Value: 3.300
EML Error: 0.300

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	3.300	0.300	1.00	0.13	A
AG	1	3.720	0.490	1.13	0.18	A
AM	1	2.720	0.060	0.82	0.08	A
AN	1	3.200	0.200	0.97	0.11	A
AR	1	84.000	2.000	25.50	2.39	N
AU	1	3.730	0.060	1.13	0.10	A
BC	1	3.270	0.081	0.99	0.09	A
BN	1	3.960	0.040	1.20	0.11	A
BU	1	3.100	0.200	0.94	0.11	A
BX	1	3.160	0.079	0.96	0.09	A
CA	1	3.060	0.050	0.93	0.09	A
CH	1	3.080	0.091	0.93	0.09	A
CP	1	3.100	0.040	0.94	0.09	A
CS	1	3.710	0.110	1.12	0.11	A
DC	1	4.470	0.878	1.36	0.29	W
DC	2	4.470	0.878	1.36	0.29	W
EG	1	3.500	0.200	1.06	0.11	A
ES	1	2.700	0.480	0.82	0.16	A
FL	1	2.670	0.050	0.81	0.08	A
HC	1	2.770	0.300	0.84	0.12	A
HI	1	2.820	0.090	0.86	0.08	A
ID	1	2.400	0.100	0.73	0.07	W
IS	1	3.440	0.470	1.04	0.17	A
IT	1	3.320	0.030	1.01	0.09	A
KA	1	3.160	0.100	0.96	0.09	A
LA	2	4.100	0.700	1.24	0.24	W
LA	3	4.100	0.700	1.24	0.24	W
LA	3	4.100	0.700	1.24	0.24	W
LB	1	3.250	0.330	0.99	0.13	A
LH	1	4.300	0.200	1.30	0.13	W
LL	1	3.160	0.117	0.96	0.09	A
LM	1	3.000	1.000	0.91	0.31	A
ME	1	4.060	0.080	1.23	0.11	W
OD	1	2.890	0.180	0.88	0.10	A
PA	1	2.880	0.033	0.87	0.08	A
RD	1	3.020	8.950	0.92	2.71	A
SC	1	3.000	0.050	0.91	0.08	A
SR	1	3.000	0.090	0.91	0.09	A
TI	1	3.100	0.300	0.94	0.13	A
TM	1	2.790	0.072	0.85	0.08	A
TO	1	2.600	1.500	0.79	0.46	W
UC	1	3.290	0.120	1.00	0.10	A
UK	1	4.330	0.095	1.31	0.12	W
UP	1	2.940	0.000	0.89	0.08	A
UY	1	3.000	0.340	0.91	0.13	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: GA 1

EML Value: 3.300
EML Error: 0.300

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
WA	1	4.410	0.110	1.34	0.13	W
WC	1	3.200	0.320	0.97	0.13	A
WN	1	3.000	1.000	0.91	0.31	A
WV	1	3.200	0.060	0.97	0.09	A
YA	2	2.850	0.027	0.86	0.08	A
YA	3	2.890	0.027	0.88	0.08	A
YA	3	2.900	0.027	0.88	0.08	A

Total Number Reported: 52

Units for matrices: AI=Bq/filter SD=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: GB 2

EML Value: 1.120
EML Error: 0.100

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1.120	0.100	1.00	0.13	A
AG	1	1.060	0.130	0.95	0.14	A
AM	1	1.050	0.040	0.94	0.09	A
AN	1	1.500	0.100	1.34	0.15	A
AR	1	24.000	1.000	21.40	2.11	N
AU	1	1.750	0.040	1.56	0.14	W
BC	1	2.030	0.059	1.81	0.17	W
BN	1	2.090	0.060	1.87	0.18	W
BX	1	2.110	0.061	1.88	0.18	W
CA	1	1.760	0.050	1.57	0.15	W
CH	1	1.290	0.058	1.15	0.12	A
CP	1	1.660	0.020	1.48	0.13	W
CS	1	3.430	0.090	3.06	0.29	N
DC	1	1.380	0.271	1.23	0.27	A
DC	2	1.380	0.210	1.23	0.22	A
EG	1	2.300	0.600	2.05	0.57	N
ES	1	1.300	0.230	1.16	0.23	A
FL	1	2.030	0.030	1.81	0.16	W
HC	1	1.630	0.200	1.46	0.22	W
HI	1	2.150	0.080	1.92	0.19	W
ID	1	1.800	0.100	1.61	0.17	W
IS	1	1.090	0.150	0.97	0.16	A
IT	1	0.890	0.020	0.80	0.07	W
KA	1	1.440	0.050	1.29	0.12	A
LA	2	1.300	0.200	1.16	0.21	A
LA	3	1.400	0.200	1.25	0.21	A
LA	3	1.400	0.200	1.25	0.21	A
LB	1	1.360	0.140	1.21	0.17	A
LH	1	1.090	0.080	0.97	0.11	A
LL	1	1.920	0.078	1.71	0.17	W
LM	1	2.000	1.000	1.79	0.91	W
ME	1	1.580	0.040	1.41	0.13	A
OD	1	1.900	0.130	1.70	0.19	W
PA	1	1.950	0.027	1.74	0.16	W
RD	1	1.040	6.220	0.93	5.55	A
RE	1	1.670	0.500	1.49	0.47	W
SC	1	1.000	0.020	0.89	0.08	A
SR	1	1.630	0.060	1.46	0.14	W
TI	1	1.100	0.100	0.98	0.13	A
TM	1	1.290	0.039	1.15	0.11	A
TO	1	2.100	1.200	1.88	1.08	W
UC	1	1.090	0.040	0.97	0.09	A
UK	1	1.890	0.049	1.69	0.16	W
UP	1	1.490	0.000	1.33	0.12	A
UY	1	1.900	0.450	1.70	0.43	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: GB 2

EML Value: 1.120
EML Error: 0.100

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
WA	1	1.950	0.070	1.74	0.17	W
WC	1	1.600	0.160	1.43	0.19	W
WN	1	1.490	0.140	1.33	0.17	A
WV	1	1.600	0.040	1.43	0.13	W
YA	2	0.949	0.018	0.85	0.08	W
YA	3	0.870	0.018	0.78	0.07	W
YA	3	0.915	0.018	0.82	0.07	W

Total Number Reported: 52

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μ g/filter, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: MN 54

EML Value: 5.340
EML Error: 0.302

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	5.340	0.302	1.00	0.08	A
AG	1	3.690	0.370	0.69	0.08	N
AI	1	3.650	0.083	0.68	0.04	N
AM	1	3.950	0.140	0.74	0.05	W
AN	1	4.620	0.140	0.87	0.06	A
AR	1	4.500	0.400	0.84	0.09	W
AU	1	4.320	0.250	0.81	0.07	W
AW	1	5.500	0.830	1.03	0.17	A
BA	1	5.700	0.590	1.07	0.13	A
BC	1	4.550	0.440	0.85	0.10	A
BE	1	4.550	0.460	0.85	0.10	A
BL	1	4.880	0.210	0.91	0.06	A
BM	1	4.880	0.240	0.91	0.07	A
BM	2	4.640	0.280	0.87	0.07	A
BN	1	5.360	0.490	1.00	0.11	A
BP	1	4.720	0.190	0.88	0.06	A
BQ	1	4.360	0.090	0.82	0.05	W
BR	1	4.310	0.580	0.81	0.12	W
BU	1	5.000	0.700	0.94	0.14	A
BX	1	4.630	0.500	0.87	0.11	A
CA	1	4.100	0.200	0.77	0.06	W
CH	1	3.750	0.215	0.70	0.06	N
CL	1	8.200	0.800	1.54	0.17	N
CP	1	5.290	0.910	0.99	0.18	A
CS	1	4.280	0.190	0.80	0.06	W
DC	1	5.320	1.450	1.00	0.28	A
EB	1	9.680	0.398	1.81	0.13	N
EE	1	4.900	0.120	0.92	0.06	A
EG	1	4.400	0.400	0.82	0.09	W
EL	1	3.800	0.400	0.71	0.09	N
EP	1	5.950	0.720	1.11	0.15	A
ES	1	4.400	0.610	0.82	0.12	W
FG	1	4.950	0.150	0.93	0.06	A
FL	1	4.360	0.080	0.82	0.05	W
FM	1	4.830	0.130	0.90	0.06	A
FN	1	4.600	0.380	0.86	0.09	A
GA	1	4.100	0.000	0.77	0.04	W
GE	1	4.850	0.270	0.91	0.07	A
HI	1	6.170	0.120	1.16	0.07	A
HS	1	4.200	0.700	0.79	0.14	W
ID	1	5.000	0.300	0.94	0.08	A
IE	1	4.800	0.710	0.90	0.14	A
IN	1	4.300	0.200	0.81	0.06	W
IS	1	4.720	0.640	0.88	0.13	A
IT	1	4.680	0.100	0.88	0.05	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: MN 54

EML Value: 5.340
EML Error: 0.302

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
JP	1	4.500	0.120	0.84	0.05	W
LB	1	5.090	0.980	0.95	0.19	A
LH	1	4.880	0.570	0.91	0.12	A
LL	1	4.740	0.185	0.89	0.06	A
LM	1	5.000	1.000	0.94	0.20	A
ME	1	5.880	0.100	1.10	0.07	A
ML	1	4.300	0.700	0.81	0.14	W
NA	1	4.540	0.076	0.85	0.05	A
NC	1	5.180	0.290	0.97	0.08	A
NL	1	5.350	0.240	1.00	0.07	A
OD	1	4.530	0.603	0.85	0.12	A
OL	1	4.720	0.150	0.88	0.06	A
OR	1	5.500	0.300	1.03	0.08	A
OT	1	5.600	0.200	1.05	0.07	A
PC	1	5.540	0.880	1.04	0.18	A
PC	2	5.540	0.880	1.04	0.18	A
RA	1	5.560	0.280	1.04	0.08	A
RE	1	4.360	0.570	0.82	0.12	W
RI	1	5.440	1.100	1.02	0.21	A
SA	1	6.300	0.300	1.18	0.09	A
SK	1	5.200	0.500	0.97	0.11	A
SR	1	4.200	0.700	0.79	0.14	W
SS	1	2.400	0.500	0.45	0.10	N
SW	1	4.250	0.210	0.80	0.06	W
TI	1	4.900	0.500	0.92	0.11	A
TM	1	4.660	0.249	0.87	0.07	A
TN	1	4.140	0.190	0.78	0.06	W
TO	1	5.210	0.580	0.98	0.12	A
UK	1	4.230	0.390	0.79	0.09	W
UP	1	4.050	0.440	0.76	0.09	W
UY	1	4.500	0.850	0.84	0.17	W
WA	1	5.330	0.330	1.00	0.08	A
WC	1	4.440	0.770	0.83	0.15	W
WI	1	5.270	0.730	0.99	0.15	A
WN	1	4.450	0.500	0.83	0.11	W

Total Number Reported: 80

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: PU238

EML Value: 0.096
EML Error: 0.002

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.096	0.002	1.00	0.03	A
AG	1	0.078	0.010	0.81	0.11	A
AI	1	0.095	0.006	0.99	0.06	A
AN	1	0.094	0.008	0.98	0.09	A
AR	1	0.100	0.100	1.04	1.04	A
AU	1	0.080	0.010	0.83	0.11	A
BE	1	0.094	0.009	0.98	0.10	A
BL	1	0.110	0.010	1.14	0.11	A
BL	2	0.090	0.010	0.94	0.11	A
BM	1	0.092	0.016	0.96	0.17	A
BP	1	0.095	0.004	0.99	0.05	A
BX	1	0.111	0.009	1.15	0.10	W
CH	1	0.117	0.033	1.22	0.34	W
CL	1	0.080	0.020	0.83	0.21	A
DC	1	0.114	0.032	1.18	0.33	W
EB	1	0.185	0.010	1.92	0.11	N
EP	1	0.090	0.007	0.94	0.08	A
ES	1	0.119	0.025	1.24	0.26	W
FL	1	0.094	0.003	0.98	0.04	A
GA	1	0.118	0.000	1.23	0.03	W
GE	1	0.071	0.016	0.74	0.16	A
ID	1	0.140	0.020	1.46	0.21	W
IE	1	0.091	0.031	0.95	0.32	A
IS	1	0.099	0.014	1.03	0.14	A
IT	1	0.092	0.006	0.96	0.07	A
JP	1	0.099	0.005	1.03	0.05	A
LA	1	0.102	0.013	1.06	0.14	A
LA	2	0.111	0.013	1.15	0.14	W
LA	3	0.093	0.011	0.97	0.12	A
LH	1	0.107	0.016	1.11	0.17	A
LL	1	0.093	0.007	0.96	0.08	A
ML	1	0.090	0.004	0.94	0.05	A
NA	1	0.089	0.011	0.92	0.11	A
NL	1	0.092	0.024	0.96	0.25	A
OR	1	0.088	0.008	0.92	0.09	A
OT	1	0.070	0.042	0.73	0.44	A
PC	1	0.086	0.013	0.89	0.14	A
PC	2	0.086	0.013	0.89	0.14	A
PI	1	0.097	0.009	1.01	0.10	A
RA	1	0.105	0.008	1.09	0.09	A
RE	1	0.084	0.009	0.88	0.10	A
RI	1	0.135	0.009	1.40	0.10	W
SR	1	0.099	0.016	1.03	0.17	A
SW	1	0.124	0.014	1.29	0.15	W
TI	1	0.089	0.019	0.93	0.20	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: PU238

EML Value: 0.096
EML Error: 0.002

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
TM	1	0.098	0.006	1.02	0.06	A
TN	1	0.095	0.005	0.99	0.06	A
UK	1	0.108	0.033	1.12	0.34	A
UP	1	0.060	0.020	0.62	0.21	W
UY	1	0.092	0.030	0.96	0.31	A
WA	1	0.102	0.017	1.06	0.18	A
WC	1	0.110	0.020	1.14	0.21	A
WN	1	0.089	0.012	0.93	0.13	A

Total Number Reported: 53

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: PU239

EML Value: 0.093
EML Error: 0.003

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.093	0.003	1.00	0.04	A
AG	1	0.081	0.011	0.87	0.12	A
AI	1	0.087	0.006	0.93	0.07	A
AN	1	0.105	0.006	1.13	0.07	A
AR	1	0.100	0.040	1.08	0.43	A
AU	1	0.080	0.010	0.86	0.11	A
BE	1	0.094	0.009	1.01	0.10	A
BL	1	0.120	0.010	1.29	0.12	W
BL	2	0.090	0.010	0.97	0.11	A
BM	1	0.092	0.016	0.99	0.18	A
BP	1	0.096	0.004	1.04	0.05	A
BX	1	0.109	0.009	1.18	0.11	W
CH	1	0.109	0.017	1.18	0.19	W
CL	1	0.130	0.060	1.40	0.65	W
DC	1	0.101	0.030	1.09	0.33	A
EB	1	0.164	0.010	1.77	0.12	N
EP	1	0.089	0.007	0.96	0.08	A
ES	1	0.109	0.023	1.18	0.25	W
FG	1	8.800	2.200	94.90	23.90	N
FL	1	0.097	0.003	1.05	0.04	A
GA	1	0.096	0.000	1.04	0.03	A
GE	1	0.081	0.017	0.87	0.18	A
ID	1	0.110	0.010	1.19	0.11	W
IE	1	0.102	0.030	1.10	0.33	A
IS	1	0.111	0.015	1.20	0.17	W
IT	1	0.083	0.006	0.90	0.07	A
JP	1	0.100	0.005	1.08	0.06	A
LA	1	0.102	0.013	1.10	0.14	A
LA	2	0.102	0.013	1.10	0.14	A
LA	3	0.105	0.013	1.13	0.15	A
LH	1	0.104	0.016	1.12	0.18	A
LL	1	0.093	0.007	1.00	0.08	A
ML	1	0.090	0.004	0.97	0.05	A
NA	1	0.090	0.010	0.97	0.12	A
NL	1	0.095	0.024	1.03	0.26	A
OR	1	0.088	0.007	0.95	0.08	A
OT	1	0.075	0.042	0.81	0.45	A
PA	1	0.110	0.050	1.19	0.54	W
PB	1	0.090	0.020	0.97	0.22	A
PC	1	0.092	0.037	0.99	0.40	A
PC	2	0.092	0.037	0.99	0.40	A
PI	1	0.095	0.009	1.03	0.10	A
RA	1	0.099	0.008	1.07	0.09	A
RE	1	0.090	0.010	0.97	0.11	A
RF	1	0.098	0.008	1.06	0.09	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: PU239

EML Value: 0.093
EML Error: 0.003

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
RF	2	0.098	0.000	1.06	0.03	A
RI	1	0.120	0.009	1.29	0.11	W
SR	1	0.205	0.028	2.21	0.31	N
SW	1	0.166	0.017	1.79	0.19	N
TI	1	0.093	0.019	1.00	0.21	A
TM	1	0.086	0.005	0.93	0.07	A
TN	1	0.098	0.005	1.06	0.07	A
UK	1	0.062	0.025	0.67	0.27	W
UP	1	0.068	0.021	0.73	0.23	W
UY	1	0.096	0.020	1.04	0.22	A
WA	1	0.093	0.017	1.00	0.19	A
WC	1	0.100	0.020	1.08	0.22	A
WN	1	0.087	0.012	0.94	0.13	A

Total Number Reported: 58

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: RU106

EML Value: 17.000
EML Error: 1.360

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	17.000	1.360	1.00	0.11	A
AG	1	10.800	2.200	0.64	0.14	W
AI	1	12.300	0.633	0.72	0.07	A
AM	1	10.600	0.370	0.62	0.05	W
AN	1	14.300	0.900	0.84	0.09	A
AR	1	11.100	2.400	0.65	0.15	W
AU	1	11.600	1.700	0.68	0.11	A
BA	1	19.700	2.800	1.16	0.19	A
BE	1	11.400	1.960	0.67	0.13	A
BL	1	15.500	1.100	0.91	0.10	A
BL	2	18.700	0.900	1.10	0.10	A
BM	1	17.200	1.100	1.01	0.10	A
BM	2	16.500	1.200	0.97	0.11	A
BN	1	16.500	0.380	0.97	0.08	A
BP	1	20.200	0.810	1.19	0.11	A
BQ	1	15.500	0.700	0.91	0.08	A
BR	1	17.100	1.120	1.01	0.10	A
BX	1	17.400	3.130	1.02	0.20	A
CH	1	8.840	1.260	0.52	0.09	N
CP	1	15.600	2.900	0.92	0.19	A
CS	1	9.910	0.490	0.58	0.05	N
DC	1	3.730	2.080	0.22	0.12	N
EB	1	30.800	1.950	1.81	0.19	N
EE	1	15.500	0.100	0.91	0.07	A
EG	1	15.300	1.400	0.90	0.11	A
EL	1	15.900	1.000	0.94	0.10	A
EP	1	19.700	4.090	1.16	0.26	A
ES	1	13.100	2.250	0.77	0.15	A
FG	1	16.300	0.850	0.96	0.09	A
FL	1	14.600	0.310	0.86	0.07	A
FM	1	14.600	0.340	0.86	0.07	A
FN	1	15.500	1.400	0.91	0.11	A
GA	1	12.200	0.000	0.72	0.06	A
GE	1	13.100	1.630	0.77	0.11	A
HI	1	14.000	0.810	0.82	0.08	A
HS	1	14.000	5.000	0.82	0.30	A
ID	1	17.000	1.000	1.00	0.10	A
IE	1	13.700	4.280	0.81	0.26	A
IN	1	14.600	1.800	0.86	0.13	A
IS	1	14.300	2.000	0.84	0.14	A
IT	1	14.800	0.800	0.87	0.08	A
JP	1	16.000	0.500	0.94	0.08	A
LH	1	13.200	2.000	0.78	0.13	A
LL	1	17.400	0.672	1.02	0.09	A
LM	1	16.000	1.000	0.94	0.10	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: RU106

EML Value: 17.000
EML Error: 1.360

Labcode	Test #	Reported Value	Reported Error	Reported EMI	Ratio Error	Evaluation
ME	1	15.000	0.610	0.88	0.08	A
NA	1	13.000	0.528	0.77	0.07	A
NC	1	9.540	1.560	0.56	0.10	N
NL	1	15.600	0.100	0.92	0.07	A
OD	1	15.300	1.540	0.90	0.12	A
OL	1	12.900	1.800	0.76	0.12	A
OR	1	16.000	2.000	0.94	0.14	A
OT	1	18.000	2.000	1.06	0.15	A
PC	1	16.400	4.600	0.97	0.28	A
PC	2	16.400	4.600	0.97	0.28	A
RA	1	16.000	1.300	0.94	0.11	A
RE	1	5.410	0.740	0.32	0.05	N
RI	1	15.800	5.700	0.93	0.34	A
SK	1	15.100	1.400	0.89	0.11	A
SR	1	17.000	8.000	1.00	0.48	A
SS	1	8.600	3.100	0.51	0.19	N
SW	1	12.700	1.500	0.75	0.11	A
TI	1	14.000	2.000	0.82	0.14	A
TM	1	17.300	1.730	1.02	0.13	A
TN	1	7.590	1.300	0.45	0.08	N
TO	1	14.900	1.630	0.88	0.12	A
UP	1	13.200	1.900	0.78	0.13	A
UY	1	16.000	3.200	0.94	0.20	A
WA	1	14.000	2.100	0.82	0.14	A
WC	1	13.900	2.700	0.82	0.17	A
WN	1	18.000	2.000	1.06	0.15	A

Total Number Reported: 71

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: SB125

EML Value: 11.400
EML Error: 0.449

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	11.400	0.449	1.00	0.06	A
AG	1	4.080	0.540	0.36	0.05	N
AI	1	9.660	0.154	0.85	0.04	A
AL	1	18.100	0.440	1.59	0.07	N
AM	1	6.690	0.290	0.59	0.03	W
AN	1	10.200	0.400	0.90	0.05	A
AR	1	10.900	1.600	0.96	0.15	A
AU	1	9.930	0.580	0.87	0.06	A
AW	1	11.500	2.000	1.01	0.18	A
BA	1	12.500	0.730	1.10	0.08	A
BE	1	7.890	0.860	0.69	0.08	W
BL	1	10.200	0.600	0.90	0.06	A
BM	1	10.600	0.500	0.93	0.06	A
BM	2	10.300	0.500	0.90	0.06	A
BN	1	12.100	1.630	1.06	0.15	A
BP	1	10.700	0.320	0.94	0.05	A
BQ	1	9.000	0.200	0.79	0.04	W
BR	1	10.800	0.920	0.95	0.09	A
BU	1	12.000	2.000	1.05	0.18	A
BX	1	10.700	1.250	0.94	0.12	A
CA	1	9.600	0.400	0.84	0.05	A
CH	1	8.770	0.593	0.77	0.06	W
CL	1	19.100	1.900	1.68	0.18	N
CP	1	10.600	1.700	0.93	0.15	A
CS	1	6.950	0.170	0.61	0.03	W
DC	1	12.100	2.710	1.06	0.24	A
EB	1	18.800	0.540	1.65	0.08	N
EE	1	10.900	0.550	0.96	0.06	A
EG	1	10.600	0.800	0.93	0.08	A
EL	1	9.100	0.100	0.80	0.03	W
EP	1	13.500	1.590	1.18	0.15	W
ES	1	9.690	0.920	0.85	0.09	A
FG	1	10.500	0.610	0.92	0.06	A
FL	1	10.700	0.200	0.94	0.04	A
FM	1	10.700	0.220	0.94	0.04	A
FN	1	11.000	1.300	0.97	0.12	A
GA	1	8.300	0.000	0.73	0.03	W
GE	1	9.990	0.550	0.88	0.06	A
HI	1	22.000	0.440	1.93	0.09	N
HS	1	11.000	2.000	0.97	0.18	A
ID	1	12.000	1.000	1.05	0.10	A
IN	1	10.000	0.600	0.88	0.06	A
IS	1	10.400	1.400	0.91	0.13	A
IT	1	11.100	0.400	0.97	0.05	A
JP	1	11.000	0.200	0.97	0.04	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: SB125

EML Value: 11.400
EML Error: 0.449

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LB	1	10.900	1.700	0.96	0.15	A
LH	1	5.200	0.600	0.46	0.06	N
LL	1	11.200	0.314	0.98	0.05	A
LM	1	12.000	1.000	1.05	0.10	A
ME	1	10.500	0.160	0.92	0.04	A
ML	1	8.600	0.400	0.75	0.05	W
NA	1	10.500	0.136	0.92	0.04	A
NC	1	11.200	0.560	0.98	0.06	A
NL	1	12.600	0.100	1.11	0.04	A
OD	1	10.200	0.750	0.90	0.07	A
OL	1	9.620	0.700	0.84	0.07	A
OR	1	12.000	1.000	1.05	0.10	A
OT	1	11.000	1.000	0.97	0.10	A
PC	1	11.800	4.600	1.04	0.41	A
PC	2	11.800	4.600	1.04	0.41	A
RA	1	11.700	0.700	1.03	0.07	A
RE	1	9.330	0.520	0.82	0.06	A
RI	1	11.500	2.100	1.01	0.19	A
RL	1	9.650	1.500	0.85	0.14	A
SA	1	14.000	0.600	1.23	0.07	W
SK	1	12.300	1.300	1.08	0.12	A
SR	1	10.000	2.000	0.88	0.18	A
SS	1	6.900	0.900	0.61	0.08	W
SW	1	9.650	0.400	0.85	0.05	A
TI	1	12.000	2.000	1.05	0.18	A
TM	1	10.900	0.632	0.96	0.07	A
TN	1	9.000	0.445	0.79	0.05	W
TO	1	13.200	0.710	1.16	0.08	W
UP	1	9.120	0.890	0.80	0.08	W
UY	1	9.300	0.800	0.82	0.08	A
WA	1	11.800	0.500	1.04	0.06	A
WC	1	9.800	0.800	0.86	0.08	A
WI	1	11.400	1.000	1.00	0.10	A
WN	1	11.000	1.000	0.97	0.10	A

Total Number Reported: 79

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: SR 90

EML Value: 1.060
EML Error: 0.037

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1.060	0.037	1.00	0.05	A
AG	1	1.130	0.210	1.07	0.20	A
AN	1	1.040	0.013	0.98	0.04	A
AR	1	1.100	0.400	1.04	0.38	A
BC	1	0.602	0.174	0.57	0.17	N
BE	1	0.992	0.107	0.94	0.11	A
BL	1	1.130	0.210	1.07	0.20	A
BM	1	28.800	1.500	27.20	1.70	N
BM	2	0.790	0.160	0.75	0.15	W
BP	1	1.010	0.070	0.95	0.07	A
BX	1	0.729	0.200	0.69	0.19	W
CH	1	1.230	0.138	1.16	0.14	A
CL	1	2.200	0.300	2.08	0.29	N
DC	1	1.090	0.163	1.03	0.16	A
EL	1	0.940	0.100	0.89	0.10	A
ES	1	1.520	0.500	1.43	0.47	A
GE	1	1.500	0.046	1.42	0.07	A
HS	1	1.160	0.050	1.09	0.06	A
IS	1	1.010	0.140	0.95	0.14	A
IT	1	0.570	0.060	0.54	0.06	N
JP	1	0.970	0.024	0.92	0.04	A
LA	1	1.080	0.160	1.02	0.16	A
LA	2	1.160	0.160	1.09	0.16	A
LA	3	1.170	0.160	1.10	0.16	A
LH	1	1.200	0.140	1.13	0.14	A
NA	1	0.909	0.073	0.86	0.07	A
OI	1	1.700	0.100	1.60	0.11	W
OR	1	0.950	0.150	0.90	0.15	A
OT	1	0.250	0.080	0.24	0.08	N
PC	1	1.020	0.100	0.96	0.10	A
PC	2	1.020	0.100	0.96	0.10	A
RA	1	1.100	0.300	1.04	0.29	A
RE	1	1.120	0.050	1.06	0.06	A
RI	1	1.110	0.090	1.05	0.09	A
SW	1	1.650	0.180	1.56	0.18	W
TI	1	1.000	0.100	0.94	0.10	A
TM	1	1.050	0.090	0.99	0.09	A
TN	1	1.190	0.042	1.12	0.06	A
UP	1	0.686	0.135	0.65	0.13	W
WA	1	1.330	0.210	1.26	0.20	A
WC	1	1.320	0.160	1.25	0.16	A
WN	1	1.100	0.150	1.04	0.15	A

Total Number Reported: 42

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: U 234

EML Value: 0.052
EML Error: 0.001

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	2	0.052	0.001	1.00	0.03	A
AG	1	0.063	0.009	1.21	0.17	A
AN	1	0.054	0.010	1.04	0.20	A
AR	1	0.060	0.020	1.16	0.39	A
BC	1	0.054	0.009	1.05	0.17	A
BE	1	0.056	0.010	1.08	0.20	A
BL	1	0.081	0.001	1.57	0.04	W
BL	2	0.099	0.000	1.92	0.04	N
BM	1	0.059	0.012	1.14	0.23	A
BX	1	0.062	0.013	1.20	0.25	A
CH	1	0.050	0.035	0.98	0.68	A
CL	1	0.150	0.050	2.90	0.97	N
DC	1	0.079	0.028	1.53	0.54	W
EL	1	0.060	0.001	1.16	0.03	A
ES	1	0.052	0.016	1.01	0.31	A
GA	1	0.056	0.000	1.08	0.03	A
GE	1	0.065	0.010	1.26	0.20	A
HS	1	0.060	0.003	1.16	0.06	A
IE	1	0.063	0.021	1.22	0.41	A
IS	1	0.007	0.001	0.13	0.02	N
JP	1	0.033	0.003	0.64	0.05	N
LH	1	0.105	0.024	2.03	0.47	N
NA	1	0.132	0.014	2.55	0.27	N
NJ	1	0.071	0.006	1.37	0.12	W
PA	1	0.080	0.030	1.55	0.58	W
PB	1	0.070	0.020	1.35	0.39	W
PC	1	0.062	0.014	1.20	0.27	A
PC	2	0.062	0.014	1.20	0.27	A
RF	1	0.054	0.011	1.04	0.21	A
RF	2	0.054	0.000	1.04	0.02	A
SR	1	0.058	0.003	1.12	0.06	A
SW	1	0.063	0.013	1.22	0.26	A
TI	1	0.044	0.012	0.85	0.23	W
TM	1	0.053	0.003	1.03	0.07	A
TN	1	0.064	0.005	1.24	0.10	A
UP	1	0.071	0.017	1.38	0.33	W
UY	1	0.060	0.020	1.16	0.39	A
WA	1	0.041	0.007	0.79	0.14	W
WN	1	0.049	0.008	0.95	0.16	A
YA	1	0.057	0.002	1.11	0.05	A
YA	2	0.059	0.003	1.15	0.06	A

Total Number Reported: 41

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: U 235

EML Value: 0.002
EML Error: 0.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	2	0.002	0.000	1.00	0.07	A
DC	1	0.005	0.011	2.48	5.50	N
ES	1	0.003	0.003	1.50	1.50	W
HS	1	0.004	0.001	2.00	0.32	N
JP	1	0.002	0.000	0.85	0.21	W
NA	1	0.007	0.003	3.35	1.61	N
SW	1	0.013	0.006	6.30	3.02	N
TM	1	0.002	0.001	1.05	0.31	A
TN	1	0.004	0.001	1.91	0.65	N

Total Number Reported: 9

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: U 238

EML Value: 0.053
EML Error: 0.002

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.053	0.002	1.00	0.05	A
AG	1	0.054	0.007	1.02	0.14	A
AM	1	0.680	0.260	12.80	4.89	N
AN	1	0.056	0.004	1.05	0.08	A
AR	1	0.050	0.020	0.94	0.38	A
BC	1	0.073	0.011	1.37	0.21	W
BE	1	0.056	0.010	1.05	0.19	A
BL	1	0.081	0.001	1.52	0.05	W
BL	2	0.099	0.000	1.86	0.06	W
BM	1	0.062	0.012	1.16	0.23	A
BX	1	0.065	0.013	1.22	0.25	A
CH	1	0.034	0.023	0.64	0.44	N
CL	1	0.100	0.040	1.88	0.75	N
DC	1	0.057	0.025	1.06	0.47	A
EL	1	0.080	0.001	1.50	0.05	W
ES	1	0.056	0.016	1.05	0.30	A
GA	1	0.053	0.000	0.99	0.03	A
GE	1	0.050	0.009	0.94	0.16	A
HS	1	0.059	0.003	1.11	0.07	A
IE	1	0.063	0.021	1.18	0.40	A
IS	1	0.007	0.001	0.13	0.02	N
JP	1	0.032	0.002	0.60	0.05	N
LH	1	0.061	0.018	1.14	0.34	A
NA	1	0.089	0.011	1.68	0.22	W
NJ	1	0.070	0.006	1.32	0.12	A
PA	1	0.070	0.030	1.31	0.56	A
PB	1	0.070	0.020	1.31	0.38	A
PC	1	0.065	0.019	1.22	0.36	A
PC	2	0.065	0.019	1.22	0.36	A
RF	1	0.058	0.011	1.08	0.21	A
RF	2	0.058	0.000	1.09	0.03	A
SR	1	0.059	0.003	1.11	0.07	A
SW	1	0.057	0.012	1.08	0.23	A
TI	1	0.045	0.012	0.84	0.23	W
TM	1	0.058	0.003	1.09	0.07	A
TN	1	0.060	0.005	1.13	0.10	A
UP	1	0.045	0.012	0.84	0.23	W
UY	1	0.085	0.020	1.60	0.38	W
WA	1	0.040	0.007	0.75	0.13	W
WN	1	0.050	0.008	0.94	0.15	A
YA	1	0.058	0.002	1.09	0.06	A
YA	2	0.057	0.003	1.08	0.06	A

Total Number Reported: 42

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: U BQ

EML Value: 0.107
EML Error: 0.002

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.107	0.002	1.00	0.03	A
AR	1	0.110	0.030	1.03	0.28	A
AU	1	0.090	0.010	0.84	0.10	W
CL	1	0.360	0.040	3.36	0.38	N
EB	1	0.679	0.128	6.35	1.20	N
EL	1	0.140	0.010	1.31	0.10	A
ES	1	0.111	0.035	1.04	0.33	A
GE	1	0.118	0.013	1.10	0.12	A
IS	1	0.138	0.019	1.29	0.18	A
ML	1	0.108	0.003	1.01	0.03	A
OI	1	0.220	0.050	2.06	0.47	N
OR	1	0.137	0.017	1.28	0.16	A
OT	1	0.086	0.014	0.80	0.13	W
PC	1	0.130	0.032	1.22	0.30	A
PC	2	0.130	0.032	1.22	0.30	A
RE	1	0.125	0.016	1.17	0.15	A
UK	1	0.226	0.043	2.11	0.40	N
WA	1	0.089	0.011	0.83	0.10	W
WC	1	0.130	0.030	1.22	0.28	A

Total Number Reported: 19

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: AI
Radionuclide: U UG

EML Value: 4.300
EML Error: 0.080

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	4.300	0.080	1.00	0.03	A
BE	1	2.370	0.000	0.55	0.01	W
BL	1	6.570	0.070	1.53	0.03	W
DC	1	4.260	0.430	0.99	0.10	A
ES	1	4.990	0.000	1.16	0.02	A
ID	1	0.110	0.060	0.03	0.01	N
IT	1	4.820	1.070	1.12	0.25	A
LA	1	4.360	1.050	1.01	0.25	A
LA	2	4.130	0.500	0.96	0.12	A
LA	3	4.430	0.750	1.03	0.18	A
LL	1	4.880	0.235	1.14	0.06	A
NL	1	4.400	1.000	1.02	0.23	A
PC	1	4.610	0.380	1.07	0.09	A
PC	2	4.610	0.380	1.07	0.09	A
RI	1	4.860	0.160	1.13	0.04	A
TI	1	3.900	0.600	0.91	0.14	A
TM	1	4.580	0.055	1.07	0.02	A
TN	1	4.690	0.705	1.09	0.17	A
TO	1	5.230	0.000	1.22	0.02	A
UY	1	3.200	0.000	0.74	0.01	W

Total Number Reported: 20

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: AM241

EML Value: 1.760
EML Error: 0.113

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1.760	0.113	1.00	0.09	A
AG	1	1.900	0.370	1.08	0.22	A
AM	1	2.120	0.940	1.21	0.54	A
AN	1	2.000	0.304	1.14	0.19	A
AR	1	1.700	0.600	0.97	0.35	A
AU	1	1.150	1.420	0.65	0.81	W
BE	1	1.910	0.270	1.09	0.17	A
BL	1	3.700	0.370	2.10	0.25	W
BM	1	1.320	0.660	0.75	0.38	A
BP	1	1.840	0.290	1.04	0.18	A
BX	1	1.920	0.333	1.09	0.20	A
CH	1	2.400	0.481	1.36	0.29	A
CL	1	8.600	1.800	4.89	1.07	N
CS	1	2.130	0.250	1.21	0.16	A
DC	1	2.590	1.050	1.47	0.60	A
EL	1	1.450	0.100	0.82	0.08	A
ES	1	1.170	0.280	0.67	0.17	W
FG	1	2.800	0.700	1.59	0.41	W
FL	1	1.800	0.600	1.02	0.35	A
FS	1	1.760	0.140	1.00	0.10	A
GA	1	2.330	0.000	1.32	0.09	A
GE	1	1.370	0.323	0.78	0.19	A
HA	1	1.850	0.703	1.05	0.41	A
HL	1	2.840	1.760	1.61	1.01	W
HS	1	1.730	0.150	0.98	0.11	A
IE	1	3.330	1.150	1.89	0.67	W
IN	1	1.700	0.340	0.97	0.20	A
IS	1	2.690	0.370	1.53	0.23	A
IT	1	2.300	0.400	1.31	0.24	A
JP	1	1.600	0.110	0.91	0.09	A
LA	1	1.660	0.130	0.94	0.10	A
LA	2	2.090	0.160	1.19	0.12	A
LA	3	1.870	0.150	1.06	0.11	A
LB	1	1.400	0.400	0.80	0.23	A
LH	1	1.900	0.500	1.08	0.29	A
ML	1	2.400	0.700	1.36	0.41	A
ML	2	2.000	0.100	1.14	0.09	A
NA	1	4.840	1.200	2.75	0.70	N
NJ	1	1.890	0.670	1.07	0.39	A
OR	1	1.900	1.000	1.08	0.57	A
OT	1	2.000	0.800	1.14	0.46	A
RE	1	1.600	0.270	0.91	0.16	A
RF	1	3.090	0.240	1.76	0.18	W
RF	2	3.090	0.000	1.76	0.11	W
RG	1	2.170	0.720	1.23	0.42	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: AM241

EML Value: 1.760
EML Error: 0.113

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
SW	1	0.150	0.034	0.09	0.02	N
TI	1	1.900	0.600	1.08	0.35	A
TM	1	2.090	0.250	1.19	0.16	A
TN	1	1.560	0.248	0.89	0.15	A
TO	1	9.240	2.770	5.25	1.61	N
UY	1	2.800	1.300	1.59	0.75	W
WA	1	1.520	0.190	0.86	0.12	A
WN	1	1.800	0.300	1.02	0.18	A

Total Number Reported: 53

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: CS137

EML Value: 207.000
EML Error: 1.120

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	207.000	1.120	1.00	0.01	A
AG	1	239.000	16.000	1.16	0.08	A
AI	1	148.000	3.400	0.72	0.02	W
AL	1	214.000	3.020	1.03	0.02	A
AM	1	210.000	2.470	1.01	0.01	A
AN	1	234.000	2.300	1.13	0.01	A
AR	1	236.000	6.700	1.14	0.03	A
AU	1	247.000	7.900	1.19	0.04	A
BA	1	204.000	15.000	0.99	0.07	A
BC	1	250.000	42.900	1.21	0.21	A
BE	1	225.000	19.200	1.09	0.09	A
BL	1	213.000	5.000	1.03	0.02	A
BM	1	172.000	21.000	0.83	0.10	A
BN	1	200.000	13.700	0.97	0.07	A
BP	1	241.000	7.000	1.16	0.03	A
BQ	1	142.000	3.000	0.69	0.02	W
BR	1	255.000	3.720	1.23	0.02	A
BU	1	210.000	20.000	1.01	0.10	A
BX	1	211.000	31.600	1.02	0.15	A
CH	1	213.000	7.410	1.03	0.04	A
CL	1	202.000	20.200	0.98	0.10	A
CP	1	223.000	23.000	1.08	0.11	A
CS	1	212.000	9.210	1.02	0.04	A
DC	1	236.000	39.100	1.14	0.19	A
EB	1	306.000	4.600	1.48	0.02	N
EE	1	216.000	41.000	1.04	0.20	A
EG	1	215.000	17.000	1.04	0.08	A
EL	1	230.000	15.000	1.11	0.07	A
ES	1	201.000	4.980	0.97	0.02	A
FG	1	295.000	12.000	1.43	0.06	W
FL	1	219.000	1.000	1.06	0.01	A
FN	1	218.000	25.000	1.05	0.12	A
FS	1	205.000	11.000	0.99	0.05	A
GA	1	216.000	0.000	1.04	0.01	A
GE	1	229.000	2.950	1.11	0.02	A
HA	1	281.000	30.000	1.36	0.15	W
HI	1	229.000	20.000	1.11	0.10	A
HL	1	180.000	20.500	0.87	0.10	A
HS	1	232.000	10.000	1.12	0.05	A
ID	1	230.000	12.000	1.11	0.06	A
IE	1	218.000	4.220	1.05	0.02	A
IN	1	233.000	1.000	1.13	0.01	A
IS	1	199.000	27.000	0.96	0.13	A
IT	1	246.000	6.000	1.19	0.03	A
JP	1	220.000	1.000	1.06	0.01	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: CS137

EML Value: 207.000
EML Error: 1.120

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
KA	1	245.000	14.000	1.18	0.07	A
LA	1	196.000	19.000	0.95	0.09	A
LA	2	192.000	19.000	0.93	0.09	A
LA	3	167.000	15.000	0.81	0.07	W
LB	1	221.000	20.000	1.07	0.10	A
LH	1	220.000	32.000	1.06	0.16	A
LL	1	221.000	4.340	1.07	0.02	A
LM	1	500.000	15.000	2.42	0.07	N
LW	1	219.000	6.580	1.06	0.03	A
MA	1	207.000	12.000	1.00	0.06	A
ME	1	278.000	2.920	1.34	0.02	W
ML	1	279.000	62.000	1.35	0.30	W
ML	2	262.000	2.000	1.27	0.01	W
NA	1	213.000	1.510	1.03	0.01	A
NC	1	203.000	1.600	0.98	0.01	A
NJ	1	229.000	8.000	1.11	0.04	A
NL	1	235.000	7.000	1.14	0.03	A
NR	1	214.000	43.000	1.03	0.21	A
OL	1	228.000	9.680	1.10	0.05	A
OR	1	210.000	10.000	1.01	0.05	A
OT	1	220.000	10.000	1.06	0.05	A
PC	1	217.000	26.000	1.05	0.13	A
PC	2	217.000	26.000	1.05	0.13	A
RA	1	213.000	8.000	1.03	0.04	A
RE	1	164.000	6.000	0.79	0.03	W
RI	1	271.000	20.000	1.31	0.10	W
RL	1	325.000	28.200	1.57	0.14	N
SA	1	246.000	8.000	1.19	0.04	A
SC	1	196.000	2.000	0.95	0.01	A
SK	1	226.000	14.000	1.09	0.07	A
SR	1	202.000	16.000	0.98	0.08	A
SS	1	243.000	18.000	1.17	0.09	A
SW	1	196.000	13.000	0.95	0.06	A
TI	1	242.000	24.000	1.17	0.12	A
TM	1	238.000	8.300	1.15	0.04	A
TN	1	189.000	3.100	0.91	0.02	A
TO	1	289.000	32.600	1.40	0.16	W
UC	1	203.000	1.690	0.98	0.01	A
UK	1	218.000	2.800	1.05	0.01	A
UY	1	200.000	50.000	0.97	0.24	A
WA	1	233.000	16.000	1.13	0.08	A
WC	1	234.000	25.600	1.13	0.12	A
WN	1	235.000	20.000	1.14	0.10	A
WS	1	191.000	3.700	0.92	0.02	A
YA	1	231.000	1.500	1.12	0.01	A
YA	2	226.000	1.400	1.09	0.01	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: CS137

EML Value: 207.000
EML Error: 1.120

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
YA	3	226.000	1.600	1.09	0.01	A

Total Number Reported: 92

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: K 40

EML Value: 377.000
EML Error: 16.400

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	377.000	16.400	1.00	0.06	A
AG	1	399.000	38.000	1.06	0.11	A
AI	1	293.000	26.000	0.78	0.08	W
AM	1	372.000	16.700	0.99	0.06	A
AN	1	418.000	8.000	1.11	0.05	A
AR	1	339.000	20.700	0.90	0.07	A
AU	1	500.000	57.300	1.33	0.16	W
BC	1	404.000	47.400	1.07	0.13	A
BE	1	452.000	52.300	1.20	0.15	A
BL	1	393.000	14.000	1.04	0.06	A
BM	1	283.000	37.000	0.75	0.10	W
BN	1	305.000	22.500	0.81	0.07	A
BP	1	427.000	7.000	1.13	0.05	A
BQ	1	384.000	18.000	1.02	0.07	A
BR	1	506.000	19.400	1.34	0.08	W
BU	1	440.000	40.000	1.17	0.12	A
BX	1	354.000	40.300	0.94	0.11	A
CH	1	404.000	88.900	1.07	0.24	A
CL	1	346.000	51.900	0.92	0.14	A
CP	1	435.000	95.000	1.15	0.26	A
CS	1	388.000	17.500	1.03	0.06	A
DC	1	326.000	70.200	0.87	0.19	A
EB	1	484.000	17.700	1.28	0.07	W
EE	1	383.000	62.000	1.02	0.17	A
EG	1	416.000	50.000	1.10	0.14	A
EL	1	450.000	40.000	1.19	0.12	A
ES	1	361.000	27.800	0.96	0.08	A
FG	1	380.000	37.000	1.01	0.11	A
FL	1	375.000	5.000	1.00	0.05	A
FN	1	360.000	37.000	0.96	0.11	A
FS	1	360.000	14.000	0.96	0.06	A
GA	1	394.000	0.000	1.04	0.05	A
GE	1	417.000	16.900	1.11	0.07	A
HA	1	518.000	74.000	1.37	0.21	W
HI	1	602.000	88.000	1.60	0.24	N
HL	1	446.000	113.000	1.18	0.30	A
HS	1	393.000	35.000	1.04	0.10	A
ID	1	384.000	34.000	1.02	0.10	A
IE	1	432.000	31.800	1.15	0.10	A
IN	1	433.000	15.800	1.15	0.07	A
IS	1	366.000	50.000	0.97	0.14	A
IT	1	440.000	11.000	1.17	0.06	A
JP	1	380.000	7.000	1.01	0.05	A
KA	1	413.000	38.000	1.10	0.11	A
LA	1	851.000	111.000	2.26	0.31	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: K 40

EML Value: 377.000
EML Error: 16.400

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LA	2	851.000	111.000	2.26	0.31	N
LA	3	851.000	111.000	2.26	0.31	N
LB	1	425.000	56.000	1.13	0.16	A
LH	1	351.000	65.000	0.93	0.18	A
LL	1	369.000	23.500	0.98	0.08	A
LM	1	970.000	10.000	2.57	0.12	N
LW	1	355.000	47.700	0.94	0.13	A
MA	1	481.000	93.000	1.28	0.25	W
ME	1	515.000	17.700	1.37	0.08	W
ML	1	493.000	101.000	1.31	0.27	W
ML	2	480.000	8.000	1.27	0.06	W
NA	1	383.000	9.100	1.02	0.05	A
NJ	1	377.000	15.000	1.00	0.06	A
NL	1	503.000	25.000	1.33	0.09	W
NR	1	374.000	74.000	0.99	0.20	A
OL	1	430.000	23.500	1.14	0.08	A
OR	1	360.000	60.000	0.96	0.16	A
OT	1	400.000	60.000	1.06	0.17	A
PC	1	354.000	49.000	0.94	0.14	A
PC	2	354.000	49.000	0.94	0.14	A
RA	1	390.000	50.000	1.03	0.14	A
RE	1	314.000	18.000	0.83	0.06	A
RI	1	442.000	160.000	1.17	0.43	A
SA	1	431.000	39.000	1.14	0.12	A
SC	1	357.000	8.000	0.95	0.05	A
SK	1	378.000	26.000	1.00	0.08	A
SR	1	406.000	33.000	1.08	0.10	A
SS	1	405.000	55.000	1.07	0.15	A
SW	1	476.000	122.000	1.26	0.33	A
TI	1	432.000	43.000	1.15	0.12	A
TM	1	420.000	44.300	1.11	0.13	A
TN	1	352.000	19.700	0.93	0.07	A
TO	1	457.000	27.300	1.21	0.09	A
UC	1	426.000	10.600	1.13	0.06	A
UK	1	401.000	18.000	1.06	0.07	A
WA	1	418.000	30.000	1.11	0.09	A
WC	1	418.000	59.600	1.11	0.17	A
WN	1	425.000	60.000	1.13	0.17	A
WS	1	355.000	7.400	0.94	0.05	A
YA	1	398.000	8.900	1.06	0.05	A
YA	2	411.000	8.900	1.09	0.05	A
YA	3	407.000	9.600	1.08	0.05	A

Total Number Reported: 87

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: PU238

EML Value: 17.500
EML Error: 0.901

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	17.500	0.901	1.00	0.07	A
AG	1	18.300	2.200	1.05	0.14	A
AG	2	18.300	2.200	1.05	0.14	A
AI	1	10.000	3.360	0.57	0.19	A
AN	1	18.400	0.580	1.05	0.06	A
AR	1	18.600	4.000	1.06	0.24	A
AU	1	3.820	1.280	0.22	0.07	W
BE	1	18.300	1.400	1.05	0.10	A
BL	1	17.300	0.500	0.99	0.06	A
BL	2	18.400	0.500	1.05	0.06	A
BM	1	18.400	3.400	1.05	0.20	A
BP	1	18.500	1.100	1.06	0.08	A
BX	1	11.600	1.040	0.66	0.07	A
CH	1	20.800	1.100	1.19	0.09	W
CL	1	17.600	6.000	1.01	0.35	A
DC	1	20.200	3.990	1.15	0.24	W
EB	1	13.300	0.000	0.76	0.04	A
EI	1	22.000	2.000	1.26	0.13	W
EP	1	17.400	1.990	0.99	0.13	A
ES	1	21.500	3.910	1.23	0.23	W
FL	1	18.500	0.960	1.06	0.08	A
FS	1	17.400	0.700	0.99	0.07	A
GA	1	16.600	0.000	0.95	0.05	A
GE	1	15.900	1.430	0.91	0.09	A
HA	1	15.900	1.850	0.91	0.12	A
HL	1	27.900	5.870	1.59	0.35	N
HS	1	18.200	0.800	1.04	0.07	A
ID	1	18.000	1.000	1.03	0.08	A
IE	1	17.300	2.180	0.99	0.14	A
IN	1	18.900	2.200	1.08	0.14	A
IS	1	10.800	1.500	0.62	0.09	A
IT	1	17.400	0.300	0.99	0.05	A
JP	1	18.000	0.800	1.03	0.07	A
KA	1	18.000	3.860	1.03	0.23	A
LA	1	19.800	0.700	1.13	0.07	A
LA	2	19.800	0.700	1.13	0.07	A
LA	3	20.500	0.700	1.17	0.07	W
LH	1	17.400	1.800	0.99	0.12	A
LL	1	17.800	1.570	1.02	0.10	A
ML	1	16.500	0.540	0.94	0.06	A
NA	1	17.500	2.180	1.00	0.14	A
NL	1	17.400	2.100	0.99	0.13	A
OR	1	16.000	1.000	0.91	0.07	A
OT	1	18.000	2.000	1.03	0.13	A
PC	1	23.900	8.200	1.37	0.47	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: PU238

EML Value: 17.500
EML Error: 0.901

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
PC	2	23.900	8.200	1.37	0.47	W
PC	3	19.200	4.200	1.10	0.25	A
PC	4	19.200	4.200	1.10	0.25	A
PC	5	19.200	8.200	1.10	0.47	A
PC	6	19.200	4.200	1.10	0.25	A
PI	1	18.500	2.200	1.06	0.14	A
RA	1	18.600	1.300	1.06	0.09	A
RA	2	19.700	1.600	1.13	0.11	A
RE	1	15.000	2.100	0.86	0.13	A
RG	1	20.600	2.000	1.18	0.13	W
SK	1	16.700	1.900	0.95	0.12	A
SR	1	19.300	2.090	1.10	0.13	A
SW	1	16.600	2.500	0.95	0.15	A
TI	1	17.000	2.000	0.97	0.13	A
TM	1	17.600	0.731	1.01	0.07	A
TN	1	18.100	0.781	1.03	0.07	A
TO	1	23.900	0.730	1.37	0.08	W
UK	1	17.100	2.400	0.98	0.15	A
UP	1	16.100	3.260	0.92	0.19	A
UY	1	17.000	2.700	0.97	0.16	A
WA	1	17.200	0.800	0.98	0.07	A
WN	1	19.000	2.000	1.09	0.13	A

Total Number Reported: 67

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: PU239

EML Value: 5.170
EML Error: 0.070

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	5.170	0.070	1.00	0.02	A
AG	1	5.650	0.780	1.09	0.15	A
AG	2	5.650	0.780	1.09	0.15	A
AI	1	4.160	1.550	0.81	0.30	A
AM	1	9.010	0.970	1.74	0.19	W
AN	1	5.660	0.193	1.10	0.04	A
AR	1	5.700	2.200	1.10	0.43	A
AU	1	1.770	1.280	0.34	0.25	N
BE	1	5.520	0.570	1.07	0.11	A
BL	1	5.130	0.260	0.99	0.05	A
BL	2	5.450	0.290	1.05	0.06	A
BM	1	6.000	1.300	1.16	0.25	A
BP	1	5.490	0.420	1.06	0.08	A
BX	1	4.110	0.588	0.80	0.11	A
CH	1	6.590	0.519	1.28	0.10	A
CL	1	6.200	1.000	1.20	0.19	A
DC	1	6.070	1.870	1.17	0.36	A
EB	1	4.330	0.000	0.84	0.01	A
EI	1	6.000	0.600	1.16	0.12	A
EP	1	5.390	0.630	1.04	0.12	A
ES	1	6.540	1.300	1.27	0.25	A
FL	1	6.210	0.590	1.20	0.12	A
FS	1	5.500	1.100	1.06	0.21	A
GA	1	5.370	0.000	1.04	0.01	A
GE	1	4.590	0.590	0.89	0.12	A
HA	1	4.440	0.740	0.86	0.14	A
HL	1	7.540	2.210	1.46	0.43	W
HS	1	5.300	0.300	1.03	0.06	A
ID	1	5.300	0.400	1.03	0.08	A
IE	1	5.290	0.851	1.02	0.17	A
IN	1	5.700	1.000	1.10	0.19	A
IS	1	5.640	0.770	1.09	0.15	A
IT	1	5.300	0.100	1.03	0.02	A
JP	1	5.500	0.280	1.06	0.06	A
KA	1	5.790	0.291	1.12	0.06	A
LA	1	6.600	0.300	1.28	0.06	A
LA	2	6.300	0.300	1.22	0.06	A
LA	3	6.100	0.300	1.18	0.06	A
LH	1	5.900	0.800	1.14	0.16	A
LL	1	5.430	0.609	1.05	0.12	A
ML	1	5.040	0.300	0.98	0.06	A
NA	1	5.700	1.160	1.10	0.23	A
NL	1	5.960	1.800	1.15	0.35	A
OR	1	4.800	0.300	0.93	0.06	A
OT	1	6.600	1.200	1.28	0.23	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: PU239

EML Value: 5.170
EML Error: 0.070

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
PA	1	5.600	2.200	1.08	0.43	A
PB	1	5.190	0.740	1.00	0.14	A
PC	1	5.100	1.200	0.99	0.23	A
PC	2	5.100	1.200	0.99	0.23	A
PI	1	5.620	0.980	1.09	0.19	A
RA	1	5.100	0.400	0.99	0.08	A
RA	2	6.000	0.600	1.16	0.12	A
RE	1	4.980	0.810	0.96	0.16	A
RF	1	5.540	0.447	1.07	0.09	A
RF	2	5.550	0.000	1.07	0.01	A
RG	1	10.100	1.200	1.95	0.23	W
SK	1	4.900	0.300	0.95	0.06	A
SR	1	5.830	0.700	1.13	0.14	A
SW	1	6.560	1.320	1.27	0.26	A
TI	1	5.100	0.800	0.99	0.16	A
TM	1	5.610	0.333	1.09	0.07	A
TN	1	5.550	0.418	1.07	0.08	A
TO	1	7.690	0.760	1.49	0.15	W
UK	1	4.890	1.300	0.95	0.25	A
UP	1	4.650	1.450	0.90	0.28	A
UY	1	5.100	0.940	0.99	0.18	A
WA	1	5.780	0.480	1.12	0.09	A
WN	1	5.900	0.700	1.14	0.14	A

Total Number Reported: 68

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: SR 90

EML Value: 7.810
EML Error: 0.280

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	7.810	.0280	1.00	0.05	A
AG	1	8.500	1.600	1.09	0.21	A
AN	1	7.280	0.174	0.93	0.04	A
AR	1	12.400	3.000	1.59	0.39	W
AU	1	9.360	2.480	1.20	0.32	A
BE	1	8.000	2.630	1.02	0.34	A
BL	1	11.000	4.500	1.41	0.58	A
BP	1	7.190	1.000	0.92	0.13	A
CH	1	13.600	4.780	1.74	0.62	W
CL	1	7.400	1.100	0.95	0.15	A
DC	1	6.760	1.640	0.87	0.21	A
EG	1	6.300	1.000	0.81	0.13	A
EI	1	11.000	2.000	1.41	0.26	A
EL	1	20.700	2.100	2.65	0.29	N
ES	1	2.680	3.040	0.34	0.39	N
GE	1	22.200	4.440	2.84	0.58	N
HA	1	4.920	4.900	0.63	0.63	W
HL	1	12.200	1.850	1.56	0.24	W
HS	1	9.000	3.000	1.15	0.39	A
ID	1	13.000	1.000	1.67	0.14	W
IS	1	17.200	2.400	2.20	0.32	N
IT	1	8.100	0.880	1.04	0.12	A
JP	1	6.500	0.230	0.83	0.04	A
KA	1	8.390	0.770	1.07	0.11	A
LA	1	22.200	7.400	2.84	0.95	N
LA	2	7.400	7.400	0.95	0.95	A
LA	3	14.800	7.400	1.90	0.95	W
LH	1	8.900	3.100	1.14	0.40	A
NA	1	10.800	11.800	1.38	1.51	A
OI	1	44.400	0.400	5.69	0.21	N
OR	1	5.400	1.300	0.69	0.17	W
OT	1	3.500	3.100	0.45	0.40	N
PC	1	5.500	1.800	0.70	0.23	W
PC	2	5.500	1.800	0.70	0.23	W
RA	1	6.000	1.300	0.77	0.17	A
RA	2	7.700	2.300	0.99	0.30	A
RA	3	7.000	2.000	0.90	0.26	A
RE	1	10.200	3.100	1.31	0.40	A
SW	1	36.400	10.600	4.66	1.37	N
TI	1	7.000	3.000	0.90	0.39	A
TM	1	22.700	5.610	2.91	0.73	N
TN	1	6.370	2.490	0.82	0.32	A
TO	1	21.000	1.480	2.69	0.21	N
UY	1	5.600	2.300	0.72	0.30	W
WA	1	8.220	2.180	1.05	0.28	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

OAP43 Results by Nuclide

Matrix: SO
Radionuclide: SR 90

EML Value: 7.810
EML Error: 0.280

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
WN	1	7.700	2.000	0.99	0.26	A

Total Number Reported: 46

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U 234

EML Value: 29.500
EML Error: 2.320

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	29.500	2.320	1.00	0.11	A
AC	1	29.600	1.900	1.00	0.10	A
AG	1	23.700	2.000	0.80	0.09	A
AI	1	30.000	3.020	1.02	0.13	A
AN	1	28.800	1.290	0.98	0.09	A
AR	1	20.500	4.100	0.70	0.15	A
BC	1	30.300	2.960	1.03	0.13	A
BE	1	30.600	3.450	1.04	0.14	A
BL	1	24.600	0.530	0.83	0.07	A
BM	1	18.900	3.400	0.64	0.13	W
BX	1	29.000	2.520	0.98	0.12	A
CH	1	28.900	4.890	0.98	0.18	A
CL	1	28.700	2.900	0.97	0.13	A
DC	1	27.900	4.880	0.95	0.18	A
EB	1	12.000	0.000	0.41	0.03	N
EL	1	27.800	2.200	0.94	0.11	A
ES	1	21.800	3.960	0.74	0.15	A
FS	1	31.200	1.500	1.06	0.10	A
GA	1	28.400	0.000	0.96	0.08	A
GE	1	30.800	3.400	1.04	0.14	A
HA	1	37.000	11.100	1.25	0.39	W
HL	1	25.400	2.400	0.86	0.11	A
HS	1	32.800	1.100	1.11	0.10	W
IE	1	31.900	3.960	1.08	0.16	A
IS	1	20.400	2.800	0.69	0.11	W
JP	1	15.000	0.700	0.51	0.05	W
LH	1	25.000	5.000	0.85	0.18	A
NA	1	30.700	2.690	1.04	0.12	A
NJ	1	29.900	1.500	1.01	0.09	A
NL	1	27.200	6.700	0.92	0.24	A
PA	1	18.500	3.700	0.63	0.14	W
PB	1	25.600	2.220	0.87	0.10	A
PC	1	24.200	5.800	0.82	0.21	A
PC	2	24.200	5.800	0.82	0.21	A
RF	1	27.400	2.840	0.93	0.12	A
RF	2	27.400	0.000	0.93	0.07	A
RG	1	31.000	2.000	1.05	0.11	A
SW	1	21.000	2.400	0.71	0.10	A
TI	1	23.000	6.000	0.78	0.21	A
TM	1	28.000	0.749	0.95	0.08	A
TN	1	24.500	1.280	0.83	0.08	A
UP	1	32.000	5.310	1.09	0.20	A
UY	1	24.000	4.000	0.81	0.15	A
WA	1	29.300	0.400	0.99	0.08	A
WN	1	41.000	6.000	1.39	0.23	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U 234

EML Value: 29.500
EML Error: 2.320

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
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Total Number Reported: 45

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in μg /filter, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U 235

EML Value: 1.460
EML Error: 0.197

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1.460	0.197	1.00	0.19	A
AI	1	4.520	0.980	3.10	0.79	N
BE	1	1.390	0.700	0.95	0.50	A
DC	1	1.710	1.080	1.17	0.76	A
EB	1	0.700	0.000	0.48	0.06	W
ES	1	0.990	0.287	0.68	0.22	W
FN	1	0.650	0.160	0.45	0.13	N
HA	1	5.550	4.440	3.80	3.08	N
HS	1	1.400	0.100	0.96	0.15	A
JP	1	0.380	0.074	0.26	0.06	N
NA	1	1.500	0.566	1.03	0.41	A
NL	1	1.340	0.670	0.92	0.48	A
SW	1	5.560	0.840	3.81	0.77	N
TM	1	1.090	0.111	0.75	0.13	A
TN	1	1.520	0.288	1.04	0.24	A
UP	1	1.460	0.789	1.00	0.56	A
UY	1	1.700	0.950	1.16	0.67	A

Total Number Reported: 17

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U 238

EML Value: 30.400
EML Error: 2.080

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	30.400	2.080	1.00	0.10	A
AC	1	29.900	1.900	0.98	0.09	A
AG	1	22.600	1.900	0.74	0.08	A
AI	1	26.900	2.820	0.89	0.11	A
AM	1	37.100	8.270	1.22	0.29	W
AN	1	27.500	1.800	0.91	0.09	A
AR	1	17.300	3.700	0.57	0.13	W
BC	1	28.500	2.960	0.94	0.12	A
BE	1	30.800	3.470	1.01	0.13	A
BL	1	24.600	0.530	0.81	0.06	A
BM	1	17.500	3.300	0.58	0.12	W
BR	1	94.100	11.800	3.10	0.44	N
BX	1	29.300	2.590	0.96	0.11	A
CH	1	28.000	4.750	0.92	0.17	A
CL	1	29.500	3.000	0.97	0.12	A
CS	1	26.500	4.140	0.87	0.15	A
DC	1	29.300	5.020	0.96	0.18	A
EB	1	12.000	0.000	0.40	0.03	N
EL	1	33.100	2.680	1.09	0.12	A
ES	1	21.200	3.850	0.70	0.14	A
FN	1	30.700	2.100	1.01	0.10	A
FS	1	30.900	3.100	1.02	0.12	A
GA	1	28.900	0.000	0.95	0.07	A
GE	1	30.200	3.300	0.99	0.13	A
HA	1	26.300	0.990	0.87	0.07	A
HL	1	25.600	2.400	0.84	0.10	A
HS	1	32.500	1.100	1.07	0.08	A
IE	1	30.400	3.830	1.00	0.14	A
IS	1	20.400	2.800	0.67	0.10	W
JP	1	14.000	0.600	0.46	0.04	W
LH	1	26.000	5.000	0.86	0.18	A
MA	1	34.000	20.000	1.12	0.66	A
NA	1	25.100	2.400	0.83	0.10	A
NJ	1	27.900	1.600	0.92	0.08	A
NL	1	26.200	6.300	0.86	0.22	A
PA	1	18.500	3.700	0.61	0.13	W
PB	1	26.300	2.220	0.87	0.09	A
PC	1	24.700	4.900	0.81	0.17	A
PC	2	24.700	4.900	0.81	0.17	A
RF	1	26.300	2.740	0.87	0.11	A
RF	2	26.300	0.000	0.87	0.06	A
RG	1	27.500	1.800	0.91	0.09	A
SW	1	20.900	2.400	0.69	0.09	W
TI	1	27.000	7.000	0.89	0.24	A
TM	1	27.500	0.740	0.91	0.07	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U 238

EML Value: 30.400
EML Error: 2.080

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
TN	1	23.300	1.230	0.77	0.07	A
UP	1	22.900	4.060	0.75	0.14	A
UY	1	23.000	3.800	0.76	0.14	A
WA	1	28.500	0.400	0.94	0.07	A
WN	1	37.000	6.000	1.22	0.21	W
WS	1	18.500	3.700	0.61	0.13	W

Total Number Reported: 51

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U BQ

EML Value: 58.200
EML Error: 4.500

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	58.200	4.500	1.00	0.11	A
AR	1	39.300	5.600	0.68	0.11	A
AU	1	46.700	3.540	0.80	0.09	A
CL	1	62.400	6.200	1.07	0.14	W
EL	1	60.900	5.000	1.05	0.12	A
ES	1	44.000	8.090	0.76	0.15	A
FG	1	31.000	2.000	0.53	0.05	A
FL	1	48.000	9.600	0.83	0.18	A
GE	1	62.400	4.800	1.07	0.12	W
HL	1	51.100	4.900	0.88	0.11	A
ID	1	100.000	17.000	1.72	0.32	N
IS	1	41.300	5.700	0.71	0.11	A
ML	1	54.500	1.800	0.94	0.08	A
OI	1	79.900	5.000	1.37	0.14	W
OR	1	46.000	4.000	0.79	0.09	A
PC	1	50.000	7.300	0.86	0.14	A
PC	2	50.000	7.300	0.86	0.14	A
RE	1	51.000	4.800	0.88	0.11	A
RG	1	59.500	4.100	1.02	0.11	A
UK	1	25.900	3.700	0.45	0.07	A
WA	1	60.000	2.200	1.03	0.09	A

Total Number Reported: 21

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: SO
Radionuclide: U UG

EML Value: 2.460
EML Error: 0.200

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	2.460	0.200	1.00	0.12	A
AR	1	1.560	0.030	0.63	0.05	A
BE	1	2.500	0.000	1.02	0.08	A
BL	1	1.990	0.043	0.81	0.07	A
BP	1	2.540	0.090	1.03	0.09	A
BQ	1	2.600	0.100	1.06	0.10	A
CA	1	2.610	0.250	1.06	0.13	A
DC	1	1.700	0.170	0.69	0.09	A
ES	1	2.560	0.000	1.04	0.08	A
GA	1	2.600	0.000	1.06	0.09	A
IT	1	1.790	0.030	0.73	0.06	A
PC	1	2.060	0.100	0.84	0.08	A
PC	2	2.060	0.100	0.84	0.08	A
TI	1	3.000	0.500	1.22	0.23	W
TM	1	2.260	0.226	0.92	0.12	A
TN	1	1.380	0.205	0.56	0.10	A
TO	1	2.700	0.000	1.10	0.09	A
UP	1	2.700	0.000	1.10	0.09	A
UY	1	2.900	0.000	1.18	0.10	W

Total Number Reported: 19

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: AM241

EML Value: 0.534
EML Error: 0.040

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.534	0.040	1.00	0.11	A
AG	1	0.560	0.110	1.05	0.22	A
AN	1	0.641	0.102	1.20	0.21	A
AR	1	0.400	0.200	0.75	0.38	W
AU	1	0.570	0.280	1.07	0.53	A
BE	1	0.590	0.150	1.11	0.29	A
BL	1	0.760	0.080	1.42	0.18	A
CH	1	0.759	0.281	1.42	0.54	A
CL	1	1.000	0.200	1.87	0.40	W
DC	1	1.660	0.980	3.11	1.85	N
EB	1	0.493	0.001	0.92	0.07	A
EI	1	0.640	0.070	1.20	0.16	A
EL	1	0.450	0.400	0.84	0.75	A
ES	1	0.743	0.175	1.39	0.34	A
ES	2	0.743	0.175	1.39	0.34	A
FL	1	0.855	0.545	1.60	1.03	A
GA	1	0.806	0.000	1.51	0.11	A
GE	1	0.770	0.420	1.44	0.79	A
HS	1	0.540	0.060	1.01	0.14	A
IE	1	0.648	0.222	1.21	0.43	A
IS	1	0.459	0.063	0.86	0.13	A
IT	1	0.510	0.070	0.96	0.15	A
JP	1	0.560	0.036	1.05	0.10	A
LA	1	0.550	0.040	1.03	0.11	A
LA	2	0.550	0.040	1.03	0.11	A
LA	3	0.510	0.030	0.96	0.09	A
LH	1	0.570	0.100	1.07	0.20	A
NA	1	0.698	0.109	1.31	0.23	A
NJ	1	1.220	0.500	2.29	0.95	N
OR	1	0.600	0.150	1.12	0.29	A
OT	1	0.860	0.610	1.61	1.15	W
PC	1	0.600	0.210	1.12	0.40	A
PC	2	0.600	0.210	1.12	0.40	A
PC	3	0.678	0.210	1.27	0.41	A
PC	4	0.678	0.210	1.27	0.41	A
RE	1	0.461	0.061	0.86	0.13	A
RF	1	0.691	0.072	1.29	0.17	A
RF	2	0.691	0.691	1.29	1.30	A
SW	1	0.230	0.131	0.43	0.25	N
TI	1	0.610	0.240	1.14	0.46	A
TM	1	0.888	0.204	1.66	0.40	W
TN	1	0.807	0.186	1.51	0.37	A
WA	1	0.519	0.148	0.97	0.29	A

Total Number Reported: 43

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: CM244

EML Value: 0.434
EML Error: 0.012

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.434	0.012	1.00	0.04	A
AG	1	0.456	0.086	1.05	0.20	A
AN	1	0.478	0.026	1.10	0.07	A
AR	1	0.400	0.200	0.92	0.46	A
BE	1	0.458	0.093	1.05	0.22	A
BL	1	0.420	0.050	0.97	0.12	A
CH	1	0.504	0.226	1.16	0.52	A
CL	1	0.370	0.070	0.85	0.16	A
DC	1	0.677	0.627	1.56	1.45	A
EB	1	0.430	0.000	0.99	0.03	A
EI	1	0.620	0.040	1.43	0.10	A
ES	1	0.512	0.108	1.18	0.25	A
GA	1	0.611	0.000	1.41	0.04	A
GE	1	0.700	0.430	1.61	0.99	A
IE	1	0.357	0.163	0.82	0.38	A
IT	1	0.370	0.010	0.85	0.03	A
JP	1	0.350	0.026	0.81	0.06	A
LH	1	0.400	0.080	0.92	0.19	A
OR	1	0.360	0.130	0.83	0.30	A
OT	1	0.180	0.190	0.42	0.44	W
PC	1	0.550	0.170	1.27	0.39	A
PC	2	0.550	0.170	1.27	0.39	A
PC	3	0.609	0.170	1.40	0.39	A
PC	4	0.609	0.170	1.40	0.39	A
TI	1	0.470	0.220	1.08	0.51	A
TM	1	0.703	0.222	1.62	0.51	A
TN	1	0.424	0.137	0.98	0.32	A
TO	1	0.660	0.240	1.52	0.55	A

Total Number Reported: 28

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: CO 60

EML Value: 9.170
EML Error: 0.257

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	9.170	0.257	1.00	0.04	A
AG	1	6.900	1.100	0.75	0.12	W
AI	1	8.950	1.790	0.98	0.20	A
AL	1	7.700	0.880	0.84	0.10	A
AM	1	4.760	1.060	0.52	0.12	N
AN	1	8.290	0.660	0.90	0.08	A
AR	1	5.500	0.600	0.60	0.07	N
AU	1	9.600	0.790	1.05	0.09	A
BA	1	6.050	1.600	0.66	0.18	N
BC	1	8.510	1.480	0.93	0.16	A
BL	1	7.400	1.000	0.81	0.11	W
BM	1	5.830	2.040	0.64	0.22	N
BN	1	5.500	0.400	0.60	0.05	N
BP	1	8.740	0.750	0.95	0.09	A
BQ	1	12.000	2.000	1.31	0.22	W
BR	1	21.300	2.260	2.32	0.26	N
BU	1	9.000	3.000	0.98	0.33	A
BX	1	8.070	1.860	0.88	0.20	A
CH	1	8.110	1.670	0.88	0.18	A
CL	1	8.400	0.800	0.92	0.09	A
CP	1	9.500	3.500	1.04	0.38	A
CS	1	8.110	0.330	0.88	0.04	A
DC	1	5.760	2.080	0.63	0.23	N
EB	1	147.000	4.200	16.00	0.64	N
EE	1	5.700	1.560	0.62	0.17	N
EG	1	7.000	2.000	0.76	0.22	W
EL	1	7.400	0.600	0.81	0.07	W
ES	1	7.010	2.510	0.76	0.28	W
FL	1	7.590	0.200	0.83	0.03	W
FN	1	6.090	0.520	0.66	0.06	N
GA	1	11.000	0.000	1.20	0.03	A
GE	1	7.450	1.290	0.81	0.14	W
HS	1	8.000	2.000	0.87	0.22	A
ID	1	5.300	0.700	0.58	0.08	N
IE	1	8.210	2.330	0.90	0.26	A
IN	1	8.900	2.000	0.97	0.22	A
IS	1	7.980	1.090	0.87	0.12	A
IT	1	7.990	0.870	0.87	0.10	A
JP	1	6.500	0.460	0.71	0.05	W
LA	1	14.400	3.300	1.57	0.36	N
LA	2	13.700	3.300	1.49	0.36	N
LA	3	14.800	3.300	1.61	0.36	N
LB	1	9.900	1.200	1.08	0.13	A
LH	1	5.500	1.500	0.60	0.16	N
LL	1	6.740	1.200	0.74	0.13	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: CO 60

EML Value: 9.170
EML Error: 0.257

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LW	1	5.880	1.770	0.64	0.19	N
ME	1	11.000	0.710	1.20	0.08	A
NA	1	7.980	0.484	0.87	0.06	A
NC	1	10.900	1.100	1.19	0.12	A
NJ	1	7.220	1.480	0.79	0.16	W
NR	1	6.800	1.400	0.74	0.15	W
OL	1	6.600	0.640	0.72	0.07	W
OR	1	8.600	3.500	0.94	0.38	A
OT	1	7.200	2.500	0.79	0.27	W
PC	1	6.600	1.000	0.72	0.11	W
PC	2	6.600	1.000	0.72	0.11	W
RA	1	3.300	0.800	0.36	0.09	N
RE	1	6.510	0.640	0.71	0.07	W
RL	1	98.000	11.000	10.70	1.24	N
SK	1	7.400	0.900	0.81	0.10	W
SR	1	9.000	2.000	0.98	0.22	A
SS	1	9.900	2.800	1.08	0.31	A
SW	1	17.200	5.400	1.88	0.59	N
TI	1	8.400	1.200	0.92	0.13	A
TM	1	7.950	1.720	0.87	0.19	A
TN	1	4.900	2.700	0.53	0.30	N
TO	1	9.180	0.680	1.00	0.08	A
UC	1	6.580	0.530	0.72	0.06	W
WA	1	7.370	1.300	0.80	0.14	W
WC	1	7.500	1.100	0.82	0.12	W

Total Number Reported: 70

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: CS137

EML Value: 97.200
EML Error: 1.930

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	97.200	1.930	1.00	0.03	A
AG	1	113.000	7.700	1.16	0.08	A
AI	1	88.100	3.240	0.91	0.04	A
AL	1	106.000	3.040	1.09	0.04	A
AM	1	101.000	2.850	1.04	0.04	A
AN	1	121.000	4.600	1.25	0.05	A
AR	1	92.500	3.100	0.95	0.04	A
AU	1	145.000	1.670	1.49	0.03	W
BA	1	102.000	7.400	1.05	0.08	A
BC	1	118.000	16.300	1.21	0.17	A
BE	1	111.000	10.900	1.14	0.11	A
BL	1	109.000	3.000	1.12	0.04	A
BM	1	82.700	8.300	0.85	0.09	W
BN	1	93.600	5.110	0.96	0.06	A
BP	1	126.000	1.700	1.30	0.03	W
BQ	1	57.000	3.000	0.59	0.03	N
BR	1	129.000	5.610	1.33	0.06	W
BU	1	100.000	10.000	1.03	0.11	A
BX	1	117.000	16.700	1.20	0.17	A
BX	2	6.110	0.696	0.06	0.01	N
CH	1	104.000	2.960	1.07	0.04	A
CL	1	92.000	9.200	0.95	0.10	A
CP	1	111.000	15.000	1.14	0.16	A
CS	1	99.700	4.420	1.03	0.05	A
DC	1	117.000	27.400	1.20	0.28	A
EB	1	274.000	4.280	2.82	0.07	N
EE	1	83.300	15.900	0.86	0.16	A
EG	1	105.000	9.000	1.08	0.10	A
EL	1	94.900	9.000	0.98	0.09	A
ES	1	107.000	6.820	1.10	0.07	A
FL	1	121.000	2.000	1.25	0.03	A
FN	1	98.400	9.900	1.01	0.10	A
GA	1	112.000	0.000	1.15	0.02	A
GE	1	113.000	2.750	1.16	0.04	A
HI	1	109.000	12.000	1.12	0.13	A
HS	1	100.000	6.000	1.03	0.07	A
ID	1	106.000	6.000	1.09	0.07	A
IE	1	121.000	3.890	1.25	0.05	A
IN	1	106.000	0.600	1.09	0.02	A
IS	1	99.200	13.600	1.02	0.14	A
IT	1	123.000	1.000	1.27	0.03	A
JP	1	110.000	1.000	1.13	0.02	A
LA	1	145.000	17.000	1.49	0.18	W
LA	2	148.000	17.000	1.52	0.18	W
LA	3	144.000	17.000	1.48	0.18	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: CS137

EML Value: 97.200
EML Error: 1.930

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LB	1	162.000	9.000	1.67	0.10	N
LL	1	115.000	3.420	1.18	0.04	A
LW	1	111.000	4.880	1.14	0.06	A
MA	1	100.000	5.900	1.03	0.06	A
ME	1	151.000	9.070	1.55	0.10	W
NA	1	119.000	1.500	1.22	0.03	A
NC	1	108.000	2.200	1.11	0.03	A
NJ	1	107.000	11.000	1.10	0.12	A
NR	1	98.000	20.000	1.01	0.21	A
OL	1	112.000	3.890	1.15	0.05	A
OR	1	110.000	10.000	1.13	0.11	A
OT	1	110.000	10.000	1.13	0.11	A
PC	1	112.000	14.000	1.15	0.15	A
PC	2	112.000	14.000	1.15	0.15	A
RA	1	95.800	3.800	0.99	0.04	A
RE	1	66.800	3.900	0.69	0.04	W
RI	1	86.000	20.000	0.89	0.21	A
RL	1	126.000	19.000	1.30	0.20	W
SK	1	110.000	10.000	1.13	0.11	A
SR	1	107.000	10.000	1.10	0.11	A
SS	1	123.000	11.000	1.27	0.12	A
SW	1	103.000	9.000	1.06	0.10	A
TI	1	118.000	12.000	1.21	0.13	A
TM	1	113.000	4.170	1.16	0.05	A
TN	1	86.700	4.060	0.89	0.05	A
TO	1	142.000	3.540	1.46	0.05	W
UC	1	102.000	1.230	1.05	0.02	A
WA	1	104.000	8.000	1.07	0.09	A
WC	1	115.000	12.600	1.18	0.13	A
YA	1	106.000	1.200	1.09	0.02	A
YA	2	107.000	1.200	1.10	0.03	A
YA	3	106.000	1.100	1.09	0.02	A

Total Number Reported: 77

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: K 40

EML Value: 352.000
EML Error: 8.160

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	352.000	8.160	1.00	0.03	A
AG	1	371.000	40.000	1.05	0.12	A
AI	1	281.000	37.700	0.80	0.11	A
AM	1	360.000	25.700	1.02	0.08	A
AN	1	403.000	3.300	1.15	0.03	A
AR	1	267.000	14.600	0.76	0.05	W
BC	1	341.000	48.800	0.97	0.14	A
BE	2	510.000	69.300	1.45	0.20	W
BL	1	393.000	18.000	1.12	0.06	A
BM	1	262.000	50.000	0.74	0.14	W
BN	1	286.000	10.800	0.81	0.04	A
BP	1	434.000	22.000	1.23	0.07	A
BQ	1	409.000	13.000	1.16	0.05	A
BR	1	584.000	26.700	1.66	0.09	N
BU	1	400.000	30.000	1.14	0.09	A
BX	1	363.000	42.800	1.03	0.12	A
CH	1	396.000	29.600	1.13	0.09	A
CL	1	414.000	41.400	1.18	0.12	A
CP	1	236.000	142.000	0.67	0.40	W
CS	1	381.000	17.500	1.08	0.06	A
DC	1	319.000	84.000	0.91	0.24	A
EB	1	556.000	27.300	1.58	0.09	N
EE	1	297.000	47.000	0.84	0.14	A
EG	1	358.000	59.000	1.02	0.17	A
EL	1	372.000	35.000	1.06	0.10	A
ES	1	407.000	54.900	1.16	0.16	A
FL	1	418.000	4.000	1.19	0.03	A
FN	1	347.000	37.000	0.99	0.11	A
GA	1	440.000	0.000	1.25	0.03	W
GE	1	406.000	20.800	1.15	0.06	A
HI	1	693.000	120.000	1.97	0.34	N
HS	1	329.000	50.000	0.94	0.14	A
ID	1	319.000	19.000	0.91	0.06	A
IE	1	422.000	35.500	1.20	0.11	A
IN	1	353.000	1.700	1.00	0.02	A
IS	1	399.000	55.000	1.13	0.16	A
IT	1	428.000	18.000	1.22	0.06	A
JP	1	360.000	11.000	1.02	0.04	A
LA	1	455.000	74.000	1.29	0.21	W
LA	2	474.000	74.000	1.35	0.21	W
LA	3	514.000	78.000	1.46	0.22	W
LB	1	977.000	71.000	2.78	0.21	N
LH	1	389.000	55.000	1.11	0.16	A
LL	1	354.000	29.000	1.01	0.09	A
LW	1	340.000	0.455	0.97	0.02	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: K 40

EML Value: 352.000
EML Error: 8.160

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
LW	2	340.000	45.500	0.97	0.13	A
MA	1	355.000	52.000	1.01	0.15	A
ME	1	552.000	124.000	1.57	0.35	N
NA	1	418.000	12.400	1.19	0.04	A
NJ	1	348.000	48.000	0.99	0.14	A
NR	1	359.000	72.000	1.02	0.21	A
OL	1	425.000	22.400	1.21	0.07	A
OR	1	400.000	60.000	1.14	0.17	A
OT	1	340.000	40.000	0.97	0.12	A
PC	1	365.000	52.000	1.04	0.15	A
PC	2	365.000	52.000	1.04	0.15	A
RA	1	370.000	60.000	1.05	0.17	A
RE	1	283.000	29.000	0.80	0.08	A
RL	1	1150.000	93.000	3.27	0.28	N
SK	1	376.000	28.000	1.07	0.08	A
SR	1	407.000	22.000	1.16	0.07	A
SS	1	337.000	60.000	0.96	0.17	A
SW	1	368.000	105.000	1.04	0.30	A
TI	1	423.000	42.000	1.20	0.12	A
TM	1	395.000	34.000	1.12	0.10	A
TN	1	328.000	36.200	0.93	0.11	A
TO	1	471.000	15.700	1.34	0.05	W
UC	1	416.000	10.500	1.18	0.04	A
WA	1	389.000	33.000	1.11	0.10	A
WC	1	403.000	59.600	1.15	0.17	A
YA	1	394.000	10.000	1.12	0.04	A
YA	2	365.000	10.000	1.04	0.04	A
YA	3	382.000	9.300	1.09	0.04	A

Total Number Reported: 73

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: PU239

EML Value: 0.980
EML Error: 0.115

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.980	0.115	1.00	0.17	A
AG	1	0.940	0.140	0.96	0.18	A
AI	1	1.530	0.481	1.56	0.52	W
AN	1	1.220	0.370	1.25	0.41	A
AR	1	0.710	0.120	0.72	0.15	W
AU	1	0.860	0.330	0.88	0.35	A
BE	2	0.932	0.142	0.95	0.18	A
BL	1	0.890	0.070	0.91	0.13	A
BL	2	1.050	0.080	1.07	0.15	A
BM	1	0.930	0.180	0.95	0.22	A
BX	1	0.988	0.311	1.01	0.34	A
CH	1	1.190	0.170	1.21	0.22	A
CL	1	2.300	0.100	2.35	0.29	N
DC	1	1.320	0.970	1.35	1.00	A
EB	1	0.100	0.011	0.10	0.02	N
EI	1	1.000	0.200	1.02	0.24	A
EP	1	0.850	0.139	0.87	0.18	A
ES	1	0.773	0.184	0.79	0.21	A
GA	1	0.844	0.000	0.86	0.10	A
GE	1	1.020	0.270	1.04	0.30	A
HS	1	0.850	0.070	0.87	0.12	A
ID	1	1.600	0.600	1.63	0.64	W
IE	1	0.940	0.241	0.96	0.27	A
IS	1	0.880	0.121	0.90	0.16	A
IT	1	1.490	0.670	1.52	0.71	W
JP	1	0.850	0.049	0.87	0.11	A
LA	1	0.860	0.040	0.88	0.11	A
LA	2	1.380	0.100	1.41	0.19	A
LA	3	0.910	0.060	0.93	0.13	A
LH	1	1.080	0.140	1.10	0.19	A
LL	1	0.853	0.233	0.87	0.26	A
ML	1	0.890	0.070	0.91	0.13	A
NA	1	0.989	0.128	1.01	0.18	A
OR	1	0.870	0.190	0.89	0.22	A
OT	1	0.540	0.410	0.55	0.42	N
PA	1	0.740	0.370	0.76	0.39	A
PB	1	1.110	0.010	1.13	0.13	A
PC	1	0.960	0.260	0.98	0.29	A
PC	2	0.960	0.260	0.98	0.29	A
RA	1	0.900	0.100	0.92	0.15	A
RA	2	1.200	0.100	1.22	0.18	A
RE	1	0.696	0.280	0.71	0.30	W
RF	1	1.070	0.080	1.09	0.15	A
RF	2	1.070	1.070	1.09	1.10	A
SR	1	0.850	0.180	0.87	0.21	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: PU239

EML Value: 0.980
EML Error: 0.115

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
SW	1	3.850	2.200	3.93	2.29	N
TI	1	0.740	0.290	0.76	0.31	A
TM	1	1.090	0.120	1.11	0.18	A
TN	1	1.180	0.268	1.20	0.31	A
TO	1	1.860	1.460	1.90	1.51	W
WA	1	0.857	0.198	0.87	0.23	A
YA	1	0.766	0.052	0.78	0.11	A
YA	2	0.947	0.056	0.97	0.13	A
YA	3	0.932	0.052	0.95	0.12	A

Total Number Reported: 54

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: VE
Radionuclide: SR 90

EML Value: 587.000
EML Error: 36.300

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	587.000	36.300	1.00	0.09	A
AG	1	395.000	72.000	0.67	0.13	W
AN	1	563.000	3.000	0.96	0.06	A
AR	1	355.000	33.000	0.61	0.07	W
AU	1	502.000	13.000	0.86	0.06	A
BC	1	367.000	48.800	0.63	0.09	W
BE	1	566.000	52.000	0.96	0.11	A
BL	1	499.000	13.000	0.85	0.06	A
BM	1	409.000	61.000	0.70	0.11	A
BP	1	544.000	116.000	0.93	0.21	A
BX	1	328.000	39.100	0.56	0.08	W
CH	1	551.000	21.900	0.94	0.07	A
CL	1	455.000	68.200	0.78	0.13	A
CP	1	524.000	11.000	0.89	0.06	A
DC	1	479.000	32.700	0.82	0.08	A
EG	1	580.000	14.000	0.99	0.07	A
EI	1	600.000	28.000	1.02	0.08	A
EL	1	496.000	40.000	0.85	0.09	A
ES	1	620.000	109.000	1.06	0.20	A
GE	1	750.000	9.990	1.28	0.08	W
HS	1	568.000	15.000	0.97	0.07	A
ID	1	511.000	29.000	0.87	0.07	A
IS	1	424.000	58.000	0.72	0.11	A
JP	1	540.000	6.000	0.92	0.06	A
LA	1	360.000	18.000	0.61	0.05	W
LA	2	376.000	19.000	0.64	0.05	W
LA	3	341.000	17.000	0.58	0.05	W
LH	1	710.000	39.000	1.21	0.10	W
NA	1	489.000	6.800	0.83	0.05	A
OI	1	1470.000	10.000	2.50	0.16	N
OR	1	480.000	20.000	0.82	0.06	A
OT	1	480.000	30.000	0.82	0.07	A
PC	1	562.000	65.000	0.96	0.13	A
PC	2	562.000	65.000	0.96	0.13	A
RA	1	400.000	80.000	0.68	0.14	A
RE	1	464.000	27.000	0.79	0.07	A
SR	1	376.000	58.000	0.64	0.11	W
SW	1	935.000	77.000	1.59	0.16	N
TI	1	520.000	50.000	0.89	0.10	A
TM	1	507.000	31.900	0.86	0.08	A
TN	1	587.000	16.400	1.00	0.07	A
TO	1	520.000	54.400	0.89	0.11	A
WA	1	659.000	15.000	1.12	0.07	A

Total Number Reported: 43

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: AM241

EML Value: 1.950
EML Error: 0.084

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1.950	0.084	1.00	0.06	A
AG	1	1.820	0.220	0.93	0.12	A
AI	1	1.810	0.075	0.93	0.06	A
AM	1	2.230	0.580	1.14	0.30	A
AN	1	1.840	0.037	0.94	0.04	A
AR	1	1.500	0.200	0.77	0.11	W
AU	1	1.890	0.250	0.97	0.14	A
BE	1	1.890	0.130	0.97	0.08	A
BL	1	2.060	0.060	1.06	0.05	A
BM	1	1.580	0.550	0.81	0.28	A
BP	1	1.850	0.030	0.95	0.04	A
BX	1	2.470	0.066	1.27	0.06	W
CH	1	2.200	0.171	1.13	0.10	A
CL	1	2.450	0.300	1.26	0.16	W
CP	1	3.070	0.270	1.57	0.15	N
CS	1	1.980	0.160	1.02	0.09	A
DC	1	1.970	0.370	1.01	0.20	A
EB	1	1.350	0.057	0.69	0.04	W
EG	1	1.590	0.110	0.82	0.07	A
EL	1	3.600	0.400	1.85	0.22	N
ES	1	1.860	0.333	0.95	0.18	A
FG	1	2.200	0.240	1.13	0.13	A
FL	1	1.830	0.270	0.94	0.14	A
FM	1	2.600	0.500	1.33	0.26	W
GA	1	2.100	0.000	1.08	0.05	A
GE	1	1.790	0.110	0.92	0.07	A
HA	1	0.070	0.059	0.04	0.03	N
HL	1	2.160	0.500	1.11	0.26	A
HS	1	1.760	0.070	0.90	0.05	A
IE	1	1.790	0.370	0.92	0.19	A
IN	1	1.850	0.180	0.95	0.10	A
IS	1	1.530	0.210	0.79	0.11	A
IT	1	1.680	0.120	0.86	0.07	A
JP	1	1.600	0.070	0.82	0.05	A
LA	1	1.740	0.070	0.89	0.05	A
LA	2	1.910	0.070	0.98	0.06	A
LA	2	1.680	0.070	0.86	0.05	A
LB	1	0.800	0.100	0.41	0.05	N
LH	1	1.870	0.250	0.96	0.14	A
ML	1	4.000	1.000	2.05	0.52	N
NA	1	1.660	0.095	0.85	0.06	A
NJ	1	2.050	0.310	1.05	0.17	A
OD	1	1.920	0.196	0.99	0.11	A
OR	1	1.900	0.100	0.97	0.07	A
OT	1	1.600	0.300	0.82	0.16	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

OAP43 Results by Nuclide

Matrix: WA
Radionuclide: AM241

EML Value: 1.950
EML Error: 0.084

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
PC	1	1.380	0.400	0.71	0.21	W
PC	2	1.380	0.400	0.71	0.21	W
PC	3	1.490	0.400	0.76	0.21	W
PC	4	1.490	0.400	0.76	0.21	W
RE	1	1.470	0.350	0.75	0.18	W
RF	1	2.140	0.109	1.10	0.07	A
RF	2	2.140	0.000	1.10	0.05	A
RG	1	2.040	0.118	1.05	0.08	A
RI	1	3.600	0.220	1.85	0.14	N
SK	1	2.060	0.120	1.06	0.08	A
SW	1	1.200	0.100	0.62	0.06	W
TI	1	1.900	0.200	0.97	0.11	A
TM	1	1.860	0.081	0.95	0.06	A
TN	1	1.750	0.345	0.90	0.18	A
TO	1	2.110	0.070	1.08	0.06	A
UK	1	1.980	0.220	1.02	0.12	A
UP	1	2.050	0.414	1.05	0.22	A
UY	1	1.800	0.370	0.92	0.19	A
WA	1	1.650	0.090	0.85	0.06	A
WC	1	1.950	0.300	1.00	0.16	A
WN	1	1.650	0.230	0.85	0.12	A

Total Number Reported: 66

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\mu\text{Ci} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: CO 60

EML Value: 196.000
EML Error: 1.410

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	196.000	1.410	1.00	0.01	A
AG	1	195.000	13.000	1.00	0.07	A
AI	1	181.000	0.906	0.92	0.01	A
AL	1	184.000	4.000	0.94	0.02	A
AM	1	194.000	1.140	0.99	0.01	A
AN	1	211.000	10.200	1.08	0.05	A
AR	1	219.000	16.600	1.12	0.09	W
AU	1	209.000	2.090	1.07	0.01	A
AW	1	192.000	28.800	0.98	0.15	A
BA	1	216.000	5.800	1.10	0.03	A
BC	1	204.000	19.200	1.04	0.10	A
BE	1	211.000	17.400	1.08	0.09	A
BK	1	212.000	8.410	1.08	0.04	A
BL	1	209.000	5.000	1.07	0.03	A
BM	1	196.000	20.000	1.00	0.10	A
BN	1	200.000	2.110	1.02	0.01	A
BP	1	207.000	1.900	1.06	0.01	A
BQ	1	208.000	1.000	1.06	0.01	A
BR	1	207.000	1.620	1.06	0.01	A
BU	1	200.000	20.000	1.02	0.10	A
BX	1	203.000	18.700	1.04	0.10	A
CA	1	214.000	0.900	1.09	0.01	A
CH	1	184.000	2.190	0.94	0.01	A
CL	1	171.000	17.100	0.87	0.09	W
CP	1	206.000	20.000	1.05	0.10	A
CS	1	209.000	6.400	1.07	0.03	A
DC	1	247.000	62.000	1.26	0.32	N
EB	1	260.000	2.400	1.33	0.02	N
EE	1	206.000	29.000	1.05	0.15	A
EG	1	204.000	15.000	1.04	0.08	A
EL	1	196.000	15.000	1.00	0.08	A
ES	1	207.000	2.730	1.06	0.02	A
FG	1	197.000	8.400	1.01	0.04	A
FL	1	202.000	2.000	1.03	0.01	A
FM	1	204.000	2.000	1.04	0.01	A
FN	1	206.000	15.000	1.05	0.08	A
GA	1	201.000	0.000	1.03	0.01	A
GE	1	204.000	3.770	1.04	0.02	A
HA	1	207.000	22.200	1.06	0.11	A
HI	1	224.000	24.000	1.14	0.12	W
HL	1	224.000	17.000	1.14	0.09	W
HS	1	207.000	7.000	1.06	0.04	A
ID	1	216.000	11.000	1.10	0.06	A
IE	1	208.000	2.170	1.06	0.01	A
IN	1	219.000	2.900	1.12	0.02	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: CO 60

EML Value: 196.000
EML Error: 1.410

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
IS	1	216.000	30.000	1.10	0.15	A
IT	1	234.000	9.000	1.19	0.05	N
JP	1	210.000	2.000	1.07	0.01	A
KA	1	205.000	8.000	1.05	0.04	A
LA	1	209.000	14.000	1.07	0.07	A
LA	2	205.000	13.000	1.05	0.07	A
LA	3	204.000	13.000	1.04	0.07	A
LB	1	201.000	40.000	1.03	0.20	A
LH	1	190.000	20.000	0.97	0.10	A
LL	1	193.000	3.420	0.99	0.02	A
LM	1	290.000	9.000	1.48	0.05	N
LW	1	195.000	8.220	1.00	0.04	A
ME	1	210.000	9.630	1.07	0.05	A
ML	1	282.000	57.000	1.44	0.29	N
NA	1	206.000	1.100	1.05	0.01	A
NC	1	202.000	2.000	1.03	0.01	A
NJ	1	204.000	2.000	1.04	0.01	A
NL	1	214.000	1.000	1.09	0.01	A
OD	1	215.000	4.440	1.10	0.02	A
OD	2	216.000	4.400	1.10	0.02	A
OL	1	209.000	5.740	1.07	0.03	A
OR	1	197.000	10.000	1.01	0.05	A
OT	1	220.000	10.000	1.12	0.05	W
PC	1	200.000	15.000	1.02	0.08	A
PC	2	200.000	15.000	1.02	0.08	A
RE	1	213.000	7.000	1.09	0.04	A
RI	1	212.000	3.200	1.08	0.02	A
RL	1	198.000	10.000	1.01	0.05	A
SA	1	193.000	8.000	0.99	0.04	A
SC	1	209.000	5.000	1.07	0.03	A
SK	1	230.000	20.000	1.17	0.10	W
SR	1	214.000	4.000	1.09	0.02	A
SS	1	191.000	10.000	0.97	0.05	A
SW	1	210.000	2.000	1.07	0.01	A
TJ	1	208.000	21.000	1.06	0.11	A
TM	1	218.000	6.560	1.11	0.03	W
TN	1	211.000	3.100	1.08	0.02	A
TO	1	194.000	1.340	0.99	0.01	A
UC	1	186.000	1.370	0.95	0.01	A
UK	1	227.000	2.600	1.16	0.02	W
UP	1	211.000	4.000	1.08	0.02	A
UY	1	220.000	10.000	1.12	0.05	W
WA	1	205.000	4.000	1.05	0.02	A
WC	1	212.000	16.000	1.08	0.08	A
WI	1	234.000	16.500	1.19	0.08	N
WN	1	195.000	12.000	1.00	0.06	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: CO 60

EML Value: 196.000
EML Error: 1.410

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
WV	1	210.000	2.000	1.07	0.01	A
YA	1	189.000	0.960	0.96	0.01	A
YA	2	196.000	1.100	1.00	0.01	A
YA	3	194.000	1.100	0.99	0.01	A

Total Number Reported: 95

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: CS137

EML Value: 75.200
EML Error: 0.642

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	75.200	0.642	1.00	0.01	A
AG	1	75.600	5.600	1.01	0.08	A
AI	1	73.600	0.773	0.98	0.01	A
AL	1	71.400	0.880	0.95	0.01	A
AM	1	76.800	0.900	1.02	0.01	A
AN	1	79.700	2.000	1.06	0.03	A
AR	1	89.900	7.400	1.20	0.10	W
AU	1	81.800	1.190	1.09	0.02	A
AW	1	73.000	11.000	0.97	0.15	A
BA	1	77.700	5.800	1.03	0.08	A
BC	1	83.700	11.800	1.11	0.16	A
BE	1	85.400	7.300	1.14	0.10	A
BK	1	83.400	5.270	1.11	0.07	A
BL	1	77.500	2.400	1.03	0.03	A
BM	1	84.400	8.500	1.12	0.11	A
BN	1	84.500	4.000	1.12	0.05	A
BP	1	81.800	0.500	1.09	0.01	A
BQ	1	81.800	0.800	1.09	0.01	A
BR	1	94.000	1.830	1.25	0.03	W
BU	1	82.000	8.000	1.09	0.11	A
BX	1	84.400	12.800	1.12	0.17	A
CA	1	85.000	0.260	1.13	0.01	A
CH	1	71.800	1.370	0.96	0.02	A
CL	1	78.500	7.900	1.04	0.11	A
CP	1	79.900	8.100	1.06	0.11	A
CS	1	82.000	3.550	1.09	0.05	A
DC	1	112.000	24.000	1.49	0.32	N
EB	1	130.000	1.450	1.73	0.02	N
EE	1	81.300	14.400	1.08	0.19	A
EG	1	81.000	6.000	1.08	0.08	A
EL	1	77.100	7.000	1.03	0.09	A
ES	1	84.000	2.210	1.12	0.03	A
FG	1	77.200	5.200	1.03	0.07	A
FL	1	81.100	0.900	1.08	0.02	A
FM	1	81.200	1.100	1.08	0.02	A
FN	1	76.600	7.700	1.02	0.10	A
GA	1	79.000	0.000	1.05	0.01	A
GE	1	81.700	2.360	1.09	0.03	A
HA	1	81.400	11.100	1.08	0.15	A
HI	1	87.000	11.000	1.16	0.15	W
HL	1	88.000	8.900	1.17	0.12	W
HS	1	80.000	4.000	1.06	0.05	A
ID	1	86.000	5.000	1.14	0.07	A
IE	1	71.900	1.150	0.96	0.02	A
IN	1	82.300	0.700	1.09	0.01	A

Units for matrices: AI=Bq/filter SD=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: CS137

EML Value: 75.200
EML Error: 0.642

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
IS	1	87.300	11.900	1.16	0.16	W
IT	1	93.700	3.600	1.25	0.05	W
JP	1	85.000	1.600	1.13	0.02	A
KA	1	78.000	2.000	1.04	0.03	A
LA	1	81.000	6.000	1.08	0.08	A
LA	2	85.000	6.000	1.13	0.08	A
LA	3	83.000	6.000	1.10	0.08	A
LB	1	74.000	15.000	0.98	0.20	A
LH	1	81.000	13.000	1.08	0.17	A
LL	1	82.100	2.920	1.09	0.04	A
LM	1	100.000	6.000	1.33	0.08	N
LW	1	79.700	6.860	1.06	0.09	A
ME	1	80.000	2.840	1.06	0.04	A
ML	1	115.000	24.000	1.53	0.32	N
NA	1	81.800	0.907	1.09	0.02	A
NC	1	74.700	1.340	0.99	0.02	A
NJ	1	78.500	2.700	1.04	0.04	A
NL	1	79.500	1.400	1.06	0.02	A
OD	1	81.600	4.310	1.09	0.06	A
OD	2	81.600	4.310	1.09	0.06	A
OD	2	81.600	4.300	1.09	0.06	A
OL	1	81.600	2.000	1.09	0.03	A
OR	1	77.000	2.000	1.02	0.03	A
OT	1	87.000	2.000	1.16	0.03	W
PC	1	75.000	10.000	1.00	0.13	A
PC	2	75.000	10.000	1.00	0.13	A
RE	1	80.800	4.000	1.07	0.05	A
RI	1	83.900	2.900	1.12	0.04	A
RL	1	77.300	3.900	1.03	0.05	A
SA	1	76.000	3.000	1.01	0.04	A
SC	1	76.000	4.000	1.01	0.05	A
SK	1	82.000	5.000	1.09	0.07	A
SR	1	84.000	3.000	1.12	0.04	A
SS	1	80.000	6.100	1.06	0.08	A
SW	1	81.700	1.300	1.09	0.02	A
TI	1	82.800	8.300	1.10	0.11	A
TM	1	86.800	2.750	1.15	0.04	A
TN	1	81.600	1.970	1.09	0.03	A
TO	1	76.400	0.680	1.02	0.01	A
UC	1	68.600	0.740	0.91	0.01	W
UK	1	85.100	2.000	1.13	0.03	A
UP	1	83.200	5.900	1.11	0.08	A
UY	1	80.000	5.300	1.06	0.07	A
WA	1	81.900	5.900	1.09	0.08	A
WC	1	85.100	11.000	1.13	0.15	A
WI	1	88.900	9.470	1.18	0.13	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: CS137

EML Value: 75.200
EML Error: 0.642

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
WN	1	79.500	6.000	1.06	0.08	A
WV	1	79.000	1.200	1.05	0.02	A
YA	1	75.200	0.740	1.00	0.01	A
YA	2	74.500	0.850	0.99	0.01	A
YA	3	74.200	0.850	0.99	0.01	A

Total Number Reported: 96

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: FE 55

EML Value: 101.000
EML Error: 4.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	101.000	4.000	1.00	0.06	A
BL	1	110.000	15.000	1.09	0.16	A
BL	2	109.000	15.000	1.08	0.16	A
BX	1	153.000	12.700	1.52	0.14	W
GE	1	151.000	21.700	1.50	0.22	W
HA	1	140.000	15.000	1.39	0.16	W
HL	1	32.000	1.200	0.32	0.02	W
HS	1	123.000	2.000	1.22	0.05	A
KA	1	121.000	6.000	1.20	0.08	A
LH	1	119.000	13.000	1.18	0.14	A
TI	1	130.000	20.000	1.29	0.20	W
TM	1	117.000	24.700	1.16	0.25	A
TN	1	118.000	2.600	1.17	0.05	A
WN	1	137.000	25.000	1.36	0.25	W

Total Number Reported: 14

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: GA 1

EML Value: 1310.000
EML Error: 100.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1310.000	100.000	1.00	0.11	A
AG	1	1220.000	140.000	0.93	0.13	A
AM	1	715.000	20.100	0.55	0.04	W
AM	2	715.000	20.100	0.55	0.04	W
AN	1	1350.000	70.000	1.03	0.10	A
AR	1	1080.000	52.000	0.82	0.07	W
AU	1	1130.000	24.400	0.86	0.07	A
AW	1	1150.000	173.000	0.88	0.15	A
BC	1	1170.000	42.900	0.89	0.08	A
BE	1	3.000	0.000	0.00	0.00	N
BL	1	1190.000	34.000	0.91	0.07	A
BN	1	401.000	73.800	0.31	0.06	N
BU	1	1170.000	80.000	0.89	0.09	A
BX	1	1300.000	45.100	0.99	0.08	A
CH	1	1120.000	51.900	0.86	0.08	A
CP	1	977.000	22.000	0.75	0.06	W
DC	1	1320.000	259.000	1.01	0.21	A
EP	1	1340.000	28.000	1.02	0.08	A
ES	1	793.000	113.000	0.61	0.10	W
FL	1	1410.000	19.000	1.08	0.08	A
GE	1	1210.000	12.400	0.92	0.07	A
GS	1	1180.000	46.000	0.90	0.08	A
HA	1	295.000	148.000	0.23	0.11	N
HC	1	853.000	85.000	0.65	0.08	W
HI	1	1620.000	82.000	1.24	0.11	A
IE	1	1320.000	29.700	1.01	0.08	A
IN	1	1460.000	205.000	1.12	0.18	A
IS	1	1360.000	187.000	1.04	0.16	A
IT	1	1090.000	125.000	0.83	0.12	W
JP	1	740.000	0.000	0.57	0.04	W
KA	1	1040.000	108.000	0.79	0.10	W
LA	2	1690.000	320.000	1.29	0.26	W
LA	3	1690.000	320.000	1.29	0.26	W
LA	3	1690.000	320.000	1.29	0.26	W
LB	1	998.000	101.000	0.76	0.10	W
LH	1	957.000	48.000	0.73	0.07	W
LL	1	1330.000	83.700	1.02	0.10	A
LW	1	1160.000	78.200	0.89	0.09	A
OT	1	1200.000	100.000	0.92	0.10	A
PA	1	1070.000	51.900	0.82	0.07	W
PB	2	1410.000	21.700	1.08	0.08	A
RE	1	1200.000	80.000	0.92	0.09	A
RG	1	1300.000	48.000	0.99	0.08	A
SC	1	1370.000	25.000	1.05	0.08	A
SR	1	295.000	21.000	0.23	0.02	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in µg/filter, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: GA 1

EML Value: 1310.000
EML Error: 100.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
SV	1	1370.000	74.000	1.05	0.10	A
SV	2	1370.000	74.200	1.05	0.10	A
TI	1	1300.000	100.000	0.99	0.11	A
TM	1	1370.000	159.000	1.05	0.15	A
TN	1	1090.000	118.000	0.83	0.11	W
TO	1	1210.000	19.700	0.92	0.07	A
UC	1	1160.000	66.000	0.89	0.08	A
UK	1	1330.000	55.000	1.02	0.09	A
UP	1	810.000	71.000	0.62	0.07	W
UY	1	1450.000	180.000	1.11	0.16	A
WA	1	1230.000	60.000	0.94	0.09	A
WC	1	1390.000	41.000	1.06	0.09	A
WN	1	1180.000	362.000	0.90	0.29	A
WV	1	1300.000	23.000	0.99	0.08	A

Total Number Reported: 59

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: GB 2

EML Value: 410.000
EML Error: 40.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	410.000	40.000	1.00	0.14	A
AG	1	358.000	47.000	0.87	0.14	W
AM	1	540.000	14.900	1.32	0.13	A
AN	1	506.000	25.000	1.23	0.14	A
AR	1	364.000	27.000	0.89	0.11	W
AU	1	623.000	3.990	1.52	0.15	W
AW	1	658.000	99.000	1.61	0.29	W
BC	1	653.000	24.400	1.59	0.17	W
BE	1	1.550	0.000	0.00	0.00	N
BL	1	401.000	31.000	0.98	0.12	A
BN	1	414.000	46.700	1.01	0.15	A
BX	1	673.000	24.400	1.64	0.17	W
CH	1	507.000	37.000	1.24	0.15	A
CP	1	584.000	12.000	1.42	0.14	A
DC	1	572.000	113.000	1.40	0.31	A
EP	1	690.000	16.000	1.68	0.17	N
ES	1	440.000	94.000	1.07	0.25	A
FL	1	634.000	9.000	1.55	0.15	W
GE	1	426.000	22.100	1.04	0.12	A
GS	1	668.000	25.000	1.63	0.17	W
HA	1	81.000	74.000	0.20	0.18	N
HC	1	513.000	50.000	1.25	0.17	A
HI	1	538.000	36.000	1.31	0.16	A
IE	1	389.000	13.100	0.95	0.10	W
IN	1	784.000	102.000	1.91	0.31	N
IS	1	382.000	52.000	0.93	0.16	W
IT	1	367.000	64.000	0.90	0.18	W
JP	1	230.000	0.000	0.56	0.05	N
KA	1	570.000	62.000	1.39	0.20	A
LA	2	455.000	41.000	1.11	0.15	A
LA	3	455.000	41.000	1.11	0.15	A
LA	3	455.000	41.000	1.11	0.15	A
LB	1	368.000	39.000	0.90	0.13	W
LH	1	373.000	38.000	0.91	0.13	W
LL	1	597.000	43.200	1.46	0.18	A
LW	1	541.000	41.700	1.32	0.16	A
OT	1	650.000	40.000	1.59	0.18	W
PA	1	407.000	28.200	0.99	0.12	A
PB	2	382.000	9.370	0.93	0.09	W
RE	1	561.000	34.000	1.37	0.16	A
RG	1	337.000	14.000	0.82	0.09	W
SC	1	400.000	13.000	0.98	0.10	A
SR	1	204.000	9.000	0.50	0.05	N
SV	1	685.000	37.000	1.67	0.19	N
SV	2	685.000	37.800	1.67	0.19	N

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: GB 2

EML Value: 410.000
EML Error: 40.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
TI	1	370.000	40.000	0.90	0.13	W
TM	1	308.000	29.600	0.75	0.10	W
TN	1	379.000	45.100	0.92	0.14	W
TO	1	728.000	11.500	1.78	0.18	N
UC	1	422.000	32.000	1.03	0.13	A
UK	1	690.000	31.000	1.68	0.18	N
UP	1	622.000	55.000	1.52	0.20	W
UY	1	570.000	85.000	1.39	0.25	A
WA	1	617.000	33.000	1.51	0.17	W
WC	1	511.000	30.000	1.25	0.14	A
WN	1	570.000	60.000	1.39	0.20	A
WV	1	550.000	13.000	1.34	0.14	A

Total Number Reported: 57

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: H 3

EML Value: 168.000
EML Error: 35.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	168.000	35.000	1.00	0.30	A
AG	1	141.000	14.000	0.84	0.19	A
AN	1	150.000	2.500	0.89	0.19	A
AR	1	145.000	11.400	0.86	0.19	A
AU	1	154.000	19.000	0.92	0.22	A
AW	1	164.000	25.000	0.98	0.25	A
BE	1	153.000	10.500	0.91	0.20	A
BL	1	159.000	17.000	0.95	0.22	A
BL	2	172.000	17.000	1.02	0.24	A
BN	1	138.000	2.770	0.82	0.17	W
BP	1	167.000	14.000	0.99	0.22	A
BQ	1	194.000	37.000	1.16	0.33	A
BU	1	123.000	6.000	0.73	0.16	W
BX	1	127.000	27.000	0.76	0.23	W
CH	1	150.000	9.890	0.89	0.20	A
CL	1	45.000	6.800	0.27	0.07	N
DC	1	265.000	11.900	1.58	0.34	W
EI	1	260.000	14.000	1.55	0.33	W
EP	1	160.000	10.600	0.95	0.21	A
ES	1	234.000	73.000	1.39	0.52	W
FG	1	258.000	21.000	1.54	0.34	W
FL	1	106.000	1.500	0.63	0.13	N
FN	1	153.000	9.000	0.91	0.20	A
GE	1	170.000	7.400	1.01	0.22	A
HA	1	133.000	15.000	0.79	0.19	W
HC	1	148.000	10.000	0.88	0.19	A
HI	1	195.000	10.000	1.16	0.25	A
HL	1	155.000	7.000	0.92	0.20	A
HS	1	153.000	6.000	0.91	0.19	A
ID	1	200.000	13.000	1.19	0.26	A
IE	1	180.000	20.400	1.07	0.25	A
IS	1	134.000	15.000	0.80	0.19	W
IT	1	138.000	11.000	0.82	0.18	W
JP	1	165.000	1.000	0.98	0.21	A
KA	1	159.000	10.900	0.95	0.21	A
LA	1	167.000	22.000	0.99	0.25	A
LA	2	159.000	22.000	0.95	0.24	A
LA	3	152.000	22.000	0.91	0.23	A
LH	1	159.000	27.000	0.95	0.25	A
LL	1	151.000	5.280	0.90	0.19	A
LM	1	180.000	20.000	1.07	0.25	A
LW	1	160.000	13.000	0.95	0.21	A
NA	1	126.000	3.450	0.75	0.16	W
NJ	1	139.000	4.000	0.83	0.17	A
OD	1	119.000	5.670	0.71	0.15	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: H 3

EML Value: 168.000
EML Error: 35.000

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
OD	2	119.000	5.670	0.71	0.15	W
OR	1	142.000	30.000	0.85	0.25	A
OT	1	150.000	40.000	0.89	-0.30	A
PA	1	129.000	10.700	0.77	0.17	W
PB	1	188.000	11.900	1.12	0.24	A
PC	1	166.000	14.000	0.99	0.22	A
PC	2	166.000	14.000	0.99	0.22	A
PI	1	142.000	11.000	0.85	0.19	A
RE	1	158.000	32.000	0.94	0.27	A
RG	1	149.000	4.800	0.89	0.19	A
SK	1	154.000	10.000	0.92	0.20	A
SR	1	270.000	7.000	1.61	0.34	W
SV	1	146.000	9.100	0.87	0.19	A
SV	2	146.000	0.000	0.87	0.18	A
SW	1	210.000	6.000	1.25	0.26	A
TI	1	150.000	10.000	0.89	0.20	A
TM	1	141.000	8.350	0.84	0.18	A
TN	1	155.000	26.600	0.92	0.25	A
TO	1	74.600	6.250	0.44	0.10	N
UP	1	149.000	21.500	0.89	0.23	A
UY	1	150.000	26.000	0.89	0.24	A
WA	1	56.300	4.100	0.34	0.07	N
WC	1	130.000	26.000	0.77	0.22	W
WN	1	155.000	16.000	0.92	0.22	A
WV	1	150.000	6.300	0.89	0.19	A

Total Number Reported: 70

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: MN 54

EML Value: 44.900
EML Error: 0.726

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	44.900	0.726	1.00	0.02	A
AG	1	45.400	4.000	1.01	0.09	A
AI	1	42.500	0.751	0.95	0.02	A
AL	1	43.300	0.840	0.96	0.02	A
AM	1	46.100	0.970	1.03	0.03	A
AN	1	49.300	2.800	1.10	0.06	A
AR	1	52.200	4.400	1.16	0.10	W
AU	1	45.300	1.070	1.01	0.03	A
AW	1	44.200	6.600	0.98	0.15	A
BA	1	45.400	5.200	1.01	0.12	A
BC	1	51.000	5.920	1.14	0.13	A
BE	1	52.400	4.300	1.17	0.10	W
BK	1	48.900	4.040	1.09	0.09	A
BL	1	48.700	1.700	1.09	0.04	A
BM	1	49.500	5.000	1.10	0.11	A
BN	1	49.800	2.010	1.11	0.05	A
BP	1	50.100	0.650	1.12	0.02	A
BQ	1	47.800	0.900	1.07	0.03	A
BR	1	56.900	1.690	1.27	0.04	N
BU	1	48.000	5.000	1.07	0.11	A
BX	1	51.100	6.130	1.14	0.14	A
CA	1	51.200	0.800	1.14	0.03	A
CH	1	43.100	1.260	0.96	0.03	A
CL	1	41.600	4.200	0.93	0.09	A
CP	1	50.600	8.500	1.13	0.19	A
CS	1	52.300	2.350	1.17	0.06	W
DC	1	67.100	16.000	1.49	0.36	N
EB	1	56.500	1.360	1.26	0.04	N
EE	1	50.400	7.900	1.12	0.18	A
EG	1	49.000	4.000	1.09	0.09	A
EL	1	51.500	5.000	1.15	0.11	W
ES	1	48.700	1.960	1.09	0.05	A
FG	1	48.600	3.100	1.08	0.07	A
FL	1	48.700	0.400	1.09	0.02	A
FM	1	48.000	0.900	1.07	0.03	A
FN	1	44.800	4.500	1.00	0.10	A
GA	1	50.000	0.000	1.11	0.02	A
GE	1	48.300	2.120	1.08	0.05	A
HA	1	48.100	5.180	1.07	0.12	A
HI	1	56.000	8.500	1.25	0.19	W
HL	1	53.900	5.200	1.20	0.12	W
HS	1	51.000	3.000	1.14	0.07	A
ID	1	51.000	3.000	1.14	0.07	A
IE	1	49.100	1.220	1.09	0.03	A
IN	1	52.400	1.100	1.17	0.03	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: MN 54

EML Value: 44.900
EML Error: 0.726

Lahcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
IS	1	52.400	7.200	1.17	0.16	W
IT	1	60.000	0.600	1.34	0.03	N
JP	1	49.000	2.000	1.09	0.05	A
KA	1	50.000	2.000	1.11	0.05	A
LA	1	47.000	4.000	1.05	0.09	A
LA	2	50.000	4.000	1.11	0.09	A
LA	3	48.000	4.000	1.07	0.09	A
LB	1	51.000	10.000	1.14	0.22	A
LH	1	520.000	9.000	11.60	0.27	N
LL	1	49.300	2.510	1.10	0.06	A
LM	1	64.000	6.000	1.43	0.14	N
LW	1	44.700	5.720	1.00	0.13	A
ME	1	49.100	2.220	1.09	0.05	A
ML	1	68.000	16.000	1.51	0.36	N
NA	1	48.000	0.786	1.07	0.02	A
NC	1	51.000	1.940	1.14	0.05	A
NJ	3	47.700	2.100	1.06	0.05	A
NL	1	51.600	1.600	1.15	0.04	W
OD	1	51.200	3.700	1.14	0.08	A
OD	2	51.200	3.700	1.14	0.08	A
OL	1	49.500	2.660	1.10	0.06	A
OR	1	47.000	2.000	1.05	0.05	A
OT	1	52.000	2.000	1.16	0.05	W
PC	1	42.300	5.700	0.94	0.13	A
PC	2	42.300	5.700	0.94	0.13	A
RE	1	52.800	3.000	1.18	0.07	W
RI	1	52.400	2.600	1.17	0.06	W
RL	1	46.900	2.500	1.04	0.06	A
SA	1	46.000	3.000	1.02	0.07	A
SC	1	49.500	3.000	1.10	0.07	A
SK	1	48.100	3.000	1.07	0.07	A
SR	1	52.000	3.000	1.16	0.07	W
SS	1	32.400	3.200	0.72	0.07	N
SW	1	51.200	1.200	1.14	0.03	A
TI	1	48.300	4.800	1.08	0.11	A
TM	1	52.700	1.850	1.17	0.05	W
TN	1	52.100	2.160	1.16	0.05	W
TO	1	46.800	0.570	1.04	0.02	A
UK	1	56.900	2.000	1.27	0.05	N
UP	1	51.000	4.350	1.14	0.10	A
UY	1	52.000	4.800	1.16	0.11	W
WA	1	50.500	4.800	1.13	0.11	A
WC	1	50.300	6.900	1.12	0.16	A
WI	1	55.600	7.100	1.24	0.16	W
WN	1	47.000	4.000	1.05	0.09	A
WV	1	50.000	1.300	1.11	0.03	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: MN 54

EML Value: 44.900
EML Error: 0.726

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
YA	1	45.500	0.670	1.01	0.02	A
YA	2	47.100	0.740	1.05	0.02	A
YA	3	44.100	0.740	0.98	0.02	A

Total Number Reported: 94

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: PU238

EML Value: 1.410
EML Error: 0.096

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	1.410	0.096	1.00	0.10	A
AG	1	1.390	0.170	0.99	0.14	A
AI	1	1.330	0.462	0.94	0.33	A
AN	1	1.430	0.028	1.01	0.07	A
AR	1	1.400	0.200	0.99	0.16	A
AU	1	1.610	0.250	1.14	0.19	A
BA	1	1.400	0.320	0.99	0.24	A
BE	1	1.450	0.120	1.03	0.11	A
BL	1	1.470	0.060	1.04	0.08	A
BL	2	1.430	0.060	1.01	0.08	A
BP	1	1.440	0.023	1.02	0.07	A
BX	1	1.490	0.054	1.06	0.08	A
CH	1	1.560	0.203	1.11	0.16	A
CL	1	1.300	0.200	0.92	0.16	A
DC	1	1.380	0.270	0.98	0.20	A
EB	1	1.240	0.018	0.88	0.06	A
EE	1	1.380	0.216	0.98	0.17	A
EG	1	1.220	0.070	0.87	0.08	A
EP	1	1.360	0.109	0.97	0.10	A
ES	1	1.530	0.274	1.09	0.21	A
FG	1	4.990	0.320	3.54	0.33	N
FL	1	1.410	0.027	1.00	0.07	A
GA	1	1.460	0.000	1.04	0.07	A
GE	1	1.300	0.126	0.92	0.11	A
HA	1	1.480	0.220	1.05	0.17	A
HL	1	1.670	0.180	1.18	0.15	A
HS	1	1.370	0.060	0.97	0.08	A
IE	1	1.390	0.220	0.99	0.17	A
IN	1	1.390	0.270	0.99	0.20	A
IS	1	1.140	0.160	0.81	0.13	A
IT	1	1.340	0.097	0.95	0.09	A
JP	1	1.400	0.070	0.99	0.08	A
KA	1	1.430	0.169	1.01	0.14	A
LA	1	1.450	0.060	1.03	0.08	A
LA	2	1.430	0.060	1.01	0.08	A
LA	3	1.530	0.060	1.09	0.09	A
LH	1	1.320	0.190	0.94	0.15	A
LL	1	1.330	0.111	0.94	0.10	A
ML	1	1.330	0.020	0.94	0.07	A
NA	1	1.380	0.102	0.98	0.10	A
NY	1	1.290	0.014	0.92	0.06	A
OD	1	1.400	0.150	0.99	0.13	A
OR	1	1.300	0.200	0.92	0.16	A
OT	1	1.400	0.100	0.99	0.10	A
PC	1	1.380	0.013	0.98	0.07	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: PU238

EML Value: 1.410
EML Error: 0.096

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
PC	2	1.380	0.013	0.98	0.07	A
PI	1	1.490	0.150	1.06	0.13	A
RE	1	1.300	0.260	0.92	0.20	A
RG	1	1.380	0.054	0.98	0.08	A
RI	1	1.620	0.097	1.15	0.10	A
SC	1	2.210	0.040	1.57	0.11	W
SK	1	1.340	0.080	0.95	0.09	A
SR	1	1.460	0.018	1.04	0.07	A
SW	1	1.210	0.090	0.86	0.09	A
TI	1	1.500	0.200	1.06	0.16	A
TM	1	1.450	0.056	1.03	0.08	A
TN	1	1.430	0.039	1.01	0.07	A
TO	1	1.810	0.120	1.28	0.12	W
UK	1	1.360	0.200	0.97	0.16	A
UP	1	1.230	0.216	0.87	0.16	A
UY	1	1.300	0.250	0.92	0.19	A
WA	1	1.300	0.100	0.92	0.09	A
WC	1	1.450	0.230	1.03	0.18	A
WN	1	1.400	0.130	0.99	0.11	A

Total Number Reported: 64

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: PU239

EML Value: 0.272
EML Error: 0.033

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.272	0.033	1.00	0.17	A
AG	1	0.283	0.037	1.04	0.19	A
AI	1	0.255	0.016	0.94	0.13	A
AN	1	0.288	0.010	1.06	0.13	A
AR	1	0.400	0.100	1.47	0.41	N
AU	1	0.300	0.070	1.10	0.29	A
BA	1	0.170	0.067	0.63	0.26	W
BE	1	0.290	0.040	1.07	0.20	A
BL	1	0.260	0.020	0.96	0.14	A
BL	2	0.270	0.030	0.99	0.16	A
BP	1	0.317	0.058	1.17	0.26	W
BX	1	0.297	0.019	1.09	0.15	A
CH	1	0.333	0.088	1.22	0.36	W
CL	1	0.370	0.100	1.36	0.40	N
DC	1	0.312	0.096	1.15	0.38	A
EB	1	0.252	0.048	0.93	0.21	A
EE	1	0.245	0.065	0.90	0.26	A
EG	1	0.240	0.020	0.88	0.13	A
EP	1	0.267	0.033	0.98	0.17	A
ES	1	0.322	0.064	1.18	0.28	W
FG	1	0.450	0.090	1.65	0.39	N
FL	1	0.263	0.007	0.97	0.12	A
GA	1	0.263	0.000	0.97	0.12	A
GE	1	0.258	0.032	0.95	0.16	A
HA	1	0.348	0.085	1.28	0.35	W
HL	1	0.340	0.050	1.25	0.24	W
HS	1	0.280	0.020	1.03	0.15	A
IE	1	0.259	0.072	0.95	0.29	A
IN	1	0.270	0.080	0.99	0.32	A
IS	1	0.440	0.060	1.62	0.30	N
IT	1	0.310	0.036	1.14	0.19	A
JP	1	0.260	0.016	0.96	0.13	A
KA	1	0.280	0.007	1.03	0.13	A
LA	1	0.300	0.020	1.10	0.15	A
LA	2	0.310	0.020	1.14	0.16	A
LA	3	0.260	0.020	0.96	0.14	A
LH	1	0.300	0.080	1.10	0.32	A
LL	1	0.272	0.036	1.00	0.18	A
ML	1	0.260	0.010	0.96	0.12	A
NA	1	0.245	0.033	0.90	0.16	A
NL	1	0.270	0.070	0.99	0.28	A
NY	1	0.260	0.004	0.96	0.12	A
OD	1	0.265	0.030	0.97	0.16	A
OR	1	0.300	0.050	1.10	0.23	A
OT	1	0.340	0.040	1.25	0.21	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: PU239

EML Value: 0.272
EML Error: 0.033

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
PA	1	0.440	0.100	1.62	0.42	N
PB	1	0.280	0.060	1.03	0.25	A
PC	1	0.278	0.031	1.02	0.17	A
PC	2	0.278	0.031	1.02	0.17	A
PI	1	0.260	0.050	0.96	0.22	A
RE	1	0.299	0.080	1.10	0.32	A
RF	1	0.290	0.018	1.07	0.14	A
RF	2	0.290	0.290	1.07	1.07	A
RG	1	0.271	0.015	1.00	0.13	A
RI	1	0.230	0.026	0.85	0.14	A
SC	1	0.396	0.020	1.46	0.19	N
SK	1	0.260	0.030	0.96	0.16	A
SR	1	0.290	0.006	1.07	0.13	A
SW	1	0.593	0.067	2.18	0.36	N
TI	1	0.300	0.080	1.10	0.32	A
TM	1	0.325	0.022	1.20	0.17	W
TN	1	0.273	0.015	1.00	0.13	A
TO	1	0.500	0.050	1.84	0.29	N
UC	1	0.299	0.056	1.10	0.25	A
UK	1	0.205	0.076	0.75	0.29	A
UP	1	0.238	0.077	0.88	0.30	A
UY	1	0.280	0.100	1.03	0.39	A
WA	1	0.300	0.052	1.10	0.23	A
WC	1	0.260	0.050	0.96	0.22	A
WN	1	0.295	0.035	1.09	0.18	A

Total Number Reported: 70

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: SR 90

EML Value: 2.000
EML Error: 0.040

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	2.000	0.040	1.00	0.03	A
AG	1	2.100	0.380	1.05	0.19	A
AN	1	2.000	0.018	1.00	0.02	A
AR	1	1.800	0.500	0.90	0.25	A
AU	1	1.910	0.200	0.96	0.10	A
BA	1	2.000	0.310	1.00	0.16	A
BC	1	2.090	0.668	1.04	0.34	A
BE	1	2.010	0.310	1.01	0.16	A
BL	1	2.440	0.330	1.22	0.17	W
BL	2	2.200	0.540	1.10	0.27	A
BM	1	1.800	0.400	0.90	0.20	A
BP	1	1.860	0.090	0.93	0.05	A
CH	1	2.220	0.296	1.11	0.15	A
CL	1	2.000	0.300	1.00	0.15	A
DC	1	1.790	0.320	0.90	0.16	A
EG	1	1.700	0.090	0.85	0.05	A
EL	1	1.800	0.200	0.90	0.10	A
EP	1	2.170	0.659	1.09	0.33	A
ES	1	1.920	0.110	0.96	0.06	A
FG	1	2.990	0.500	1.50	0.25	N
GE	1	2.820	0.140	1.41	0.08	W
HA	1	4.440	0.400	2.22	0.21	N
HI	1	3.540	0.290	1.77	0.15	N
HL	1	3.290	0.180	1.65	0.10	N
HS	1	2.100	0.200	1.05	0.10	A
ID	1	1.700	0.100	0.85	0.05	A
IN	1	1.660	0.400	0.83	0.20	W
IS	1	1.760	0.240	0.88	0.12	A
IT	1	1.940	0.450	0.97	0.23	A
JP	1	1.900	0.110	0.95	0.06	A
KA	1	1.840	0.240	0.92	0.12	A
LA	1	2.930	0.330	1.47	0.17	N
LA	2	2.560	0.370	1.28	0.19	W
LA	3	2.060	0.270	1.03	0.14	A
LH	1	1.900	0.400	0.95	0.20	A
NA	1	1.640	0.170	0.82	0.09	W
NJ	1	2.090	0.150	1.04	0.08	A
OD	1	1.870	0.194	0.94	0.10	A
OI	1	3.100	0.200	1.55	0.11	N
OR	1	1.850	0.300	0.93	0.15	A
OT	1	1.900	0.600	0.95	0.30	A
PC	1	2.070	0.340	1.04	0.17	A
PC	2	2.070	0.340	1.04	0.17	A
RE	1	2.160	0.360	1.08	0.18	A
RI	1	2.280	0.210	1.14	0.11	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: SR 90

EML Value: 2.000
EML Error: 0.040

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
SR	1	3.000	0.200	1.50	0.10	N
SW	1	3.180	0.360	1.59	0.18	N
TI	1	1.900	0.300	0.95	0.15	A
TM	1	2.290	0.198	1.15	0.10	A
TN	1	2.110	0.077	1.05	0.04	A
TO	1	1.970	0.020	0.99	0.02	A
UP	1	1.840	0.580	0.92	0.29	A
UY	1	2.700	0.800	1.35	0.40	W
WA	1	2.410	0.470	1.21	0.24	W
WC	1	2.200	0.300	1.10	0.15	A
WN	1	1.850	0.300	0.93	0.15	A
WV	1	2.600	0.360	1.30	0.18	W

Total Number Reported: 57

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U 234

EML Value: 0.306
EML Error: 0.003

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.306	0.003	1.00	0.01	A
AC	1	0.293	0.029	0.96	0.10	A
AG	1	0.380	0.048	1.24	0.16	W
AI	1	0.409	0.038	1.34	0.13	W
AN	1	0.336	0.013	1.10	0.04	A
AR	1	0.400	0.100	1.31	0.33	W
BA	1	0.317	0.081	1.04	0.27	A
BC	1	0.424	0.050	1.39	0.16	W
BE	1	0.340	0.060	1.11	0.20	A
BL	1	0.370	0.010	1.21	0.03	W
BL	2	0.380	0.000	1.24	0.01	W
BX	1	0.357	0.061	1.17	0.20	A
CH	1	0.349	0.150	1.14	0.49	A
CL	1	0.440	0.050	1.44	0.16	W
DC	1	0.386	0.360	1.26	1.18	W
EB	1	0.319	0.029	1.04	0.10	A
EE	1	0.360	0.075	1.18	0.25	A
EG	1	0.340	0.040	1.11	0.13	A
EL	1	0.330	0.040	1.08	0.13	A
EP	1	0.372	0.052	1.22	0.17	W
ES	1	0.354	0.069	1.16	0.23	A
GA	1	0.334	0.000	1.09	0.01	A
GE	1	0.345	0.025	1.13	0.08	A
HA	1	0.300	0.048	0.98	0.16	A
HL	1	0.440	0.250	1.44	0.82	W
HS	1	0.340	0.020	1.11	0.07	A
IE	1	0.326	0.081	1.07	0.27	A
IS	1	0.417	0.057	1.36	0.19	W
JP	1	0.380	0.018	1.24	0.06	W
LH	1	0.400	0.130	1.31	0.43	W
NA	1	0.453	0.055	1.48	0.18	W
NJ	1	0.367	0.032	1.20	0.11	W
OD	1	0.299	0.031	0.98	0.10	A
PA	1	0.340	0.050	1.11	0.16	A
PB	1	0.330	0.060	1.08	0.20	A
PI	1	0.340	0.060	1.11	0.20	A
RF	1	0.359	0.000	1.17	0.01	A
RF	2	0.359	0.000	1.17	0.01	A
RF	3	0.359	0.027	1.17	0.09	A
RG	1	0.368	0.023	1.20	0.08	W
SC	1	0.363	0.020	1.19	0.07	A
SK	1	0.340	0.030	1.11	0.10	A
SR	1	0.346	0.052	1.13	0.17	A
SW	1	0.357	0.061	1.17	0.20	A
TI	1	0.280	0.100	0.92	0.33	A

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U 234

EML Value: 0.306
EML Error: 0.003

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
TM	1	0.312	0.023	1.02	0.08	A
TN	1	0.347	0.020	1.13	0.07	A
UP	1	0.412	0.141	1.35	0.46	W
UY	1	0.470	0.180	1.54	0.59	N
WA	1	0.141	0.022	0.46	0.07	N
WN	1	0.365	0.060	1.19	0.20	A
YA	1	0.345	0.015	1.13	0.05	A
YA	2	0.376	0.016	1.23	0.05	W
YA	3	0.360	0.016	1.18	0.05	A

Total Number Reported: 54

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U 235

EML Value: 0.007
EML Error: 0.002

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.007	0.002	1.00	0.40	A
AI	1	0.020	0.007	2.79	1.24	N
DC	1	0.031	0.037	4.41	5.43	N
EB	1	0.022	0.005	3.14	1.15	N
EP	1	0.018	0.012	2.61	1.83	N
ES	1	0.017	0.008	2.43	1.34	N
HA	1	0.009	0.008	1.29	1.20	W
HS	1	0.030	0.010	4.29	1.88	N
JP	1	0.017	0.002	2.43	0.75	N
NA	1	0.018	0.010	2.56	1.62	N
OD	1	0.017	0.004	2.43	0.90	N
SW	1	0.039	0.019	5.57	3.15	N
TM	1	0.017	0.005	2.39	1.00	N
TN	1	0.020	0.004	2.83	1.02	N

Total Number Reported: 14

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. $\text{pCi} = \text{Bq} \times 27$

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U 238

EML Value: 0.311
EML Error: 0.016

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.311	0.016	1.00	0.07	A
AC	1	0.292	0.037	0.94	0.13	A
AG	1	0.360	0.048	1.16	0.17	W
AI	1	0.367	0.024	1.18	0.10	W
AN	1	0.346	0.010	1.11	0.07	A
AR	1	0.400	0.100	1.29	0.33	W
BA	1	0.301	0.078	0.97	0.26	A
BC	1	0.437	0.050	1.41	0.18	W
BE	1	0.340	0.060	1.09	0.20	A
BL	1	0.370	0.010	1.19	0.07	W
BL	2	0.380	0.000	1.22	0.06	W
BX	1	0.389	0.065	1.25	0.22	W
CH	1	0.360	0.156	1.16	0.51	W
CL	1	0.360	0.050	1.16	0.17	W
DC	1	0.311	0.100	1.00	0.33	A
EB	1	0.350	0.029	1.13	0.11	W
EE	1	0.347	0.073	1.12	0.24	W
EG	1	0.350	0.030	1.13	0.11	W
EL	1	0.460	0.050	1.48	0.18	N
EP	1	0.341	0.049	1.10	0.17	A
ES	1	0.324	0.065	1.04	0.22	A
GA	1	0.320	0.000	1.03	0.05	A
GE	1	0.339	0.024	1.09	0.10	A
HA	1	0.352	0.052	1.13	0.18	W
HL	1	0.300	0.190	0.97	0.61	A
HS	1	0.320	0.020	1.03	0.08	A
IE	1	0.303	0.081	0.97	0.27	A
IS	1	0.417	0.057	1.34	0.20	W
JP	1	0.370	0.017	1.19	0.08	W
LH	1	0.380	0.120	1.22	0.39	W
NA	1	0.416	0.052	1.34	0.18	W
NJ	1	0.368	0.033	1.18	0.12	W
OD	1	0.332	0.035	1.07	0.13	A
PA	1	0.360	0.050	1.16	0.17	W
PB	1	0.330	0.070	1.06	0.23	A
PI	1	0.370	0.060	1.19	0.20	W
RF	1	0.355	0.026	1.14	0.10	W
RF	2	0.355	0.000	1.14	0.06	W
RG	1	0.357	0.022	1.15	0.09	W
SC	1	0.364	0.020	1.17	0.09	W
SK	1	0.340	0.020	1.09	0.09	A
SR	1	0.325	0.048	1.04	0.16	A
SW	1	0.316	0.055	1.02	0.19	A
TI	1	0.300	0.100	0.97	0.33	A
TM	1	0.350	0.024	1.13	0.10	W

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.

Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable.

pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U 238

EML Value: 0.311
EML Error: 0.016

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
TN	1	0.349	0.020	1.12	0.09	W
UP	1	0.312	0.115	1.00	0.37	A
UY	1	0.440	0.170	1.42	0.55	W
WA	1	0.128	0.018	0.41	0.06	N
WN	1	0.365	0.060	1.17	0.20	W
YA	1	0.346	0.015	1.11	0.08	A
YA	2	0.349	0.016	1.12	0.08	W
YA	3	0.372	0.016	1.20	0.08	W

Total Number Reported: 53

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U BQ

EML Value: 0.624
EML Error: 0.016

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.624	0.016	1.00	0.04	A
AM	1	0.690	0.230	1.11	0.37	A
AR	1	0.800	0.100	1.28	0.16	W
AU	1	0.700	0.070	1.12	0.12	A
CL	1	0.830	0.100	1.33	0.16	N
EL	1	0.790	0.800	1.27	1.28	W
ES	1	0.694	0.142	1.11	0.23	A
FG	1	0.350	0.200	0.56	0.32	W
GE	1	0.698	0.035	1.12	0.06	A
HI	1	0.928	0.170	1.49	0.28	N
HL	1	0.740	0.440	1.19	0.71	W
ID	1	0.710	0.050	1.14	0.09	A
IS	1	0.833	0.114	1.34	0.19	N
ML	1	0.670	0.020	1.07	0.04	A
OI	1	0.770	0.130	1.23	0.21	W
OR	1	0.814	0.124	1.30	0.20	W
OT	1	0.700	0.120	1.12	0.19	A
RE	1	0.660	0.110	1.06	0.18	A
RG	1	0.741	0.048	1.19	0.08	W
SC	1	0.727	0.040	1.17	0.07	W
UK	1	0.941	0.200	1.51	0.32	N
WA	1	0.285	0.029	0.46	0.05	W
WC	1	0.700	0.200	1.12	0.32	A

Total Number Reported: 23

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

QAP43 Results by Nuclide

Matrix: WA
Radionuclide: U UG

EML Value: 0.025
EML Error: 0.002

Labcode	Test #	Reported Value	Reported Error	Reported EML	Ratio Error	Evaluation
AA	1	0.025	0.002	1.00	0.11	A
BE	1	0.028	0.000	1.11	0.09	A
BL	1	0.030	0.000	1.18	0.10	W
BL	2	0.030	0.000	1.20	0.10	W
BP	1	0.028	0.001	1.10	0.09	A
BQ	1	30.400	0.500	** **	98.50	N
BQ	2	0.030	0.001	1.21	0.10	W
CA	1	0.033	0.002	1.32	0.13	N
DC	1	0.023	0.002	0.92	0.12	A
ES	1	0.029	0.000	1.17	0.09	W
GA	1	0.026	0.000	1.02	0.08	A
GS	1	0.022	0.001	0.88	0.08	A
IT	1	0.030	0.001	1.20	0.10	W
KA	1	0.028	0.000	1.12	0.09	A
LA	1	0.022	0.005	0.86	0.22	A
LA	2	0.024	0.002	0.94	0.12	A
LA	3	0.025	0.004	0.98	0.19	A
LL	1	0.028	0.001	1.13	0.11	A
NL	1	0.028	0.002	1.13	0.13	A
PC	1	0.027	0.003	1.08	0.15	A
PC	2	0.027	0.003	1.08	0.15	A
RI	1	0.032	0.001	1.27	0.11	W
SK	1	0.026	0.001	1.04	0.09	A
TI	1	0.029	0.004	1.16	0.18	W
TM	1	28.600	0.348	** **	91.80	N
TM	2	0.029	0.000	1.14	0.09	A
TN	1	0.030	0.006	1.21	0.27	W
TO	1	0.028	0.001	1.12	0.10	A
UC	1	0.027	0.003	1.08	0.14	A
UP	1	0.029	0.000	1.16	0.09	W
UY	1	0.030	0.000	1.20	0.10	W

Total Number Reported: 31

Units for matrices: AI=Bq/filter SO=Bq/kg VE=Bq/kg WA=Bq/L. Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL.
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable. pCi = Bq x 27

Participating Laboratories in EML QAP43

Laboratories Reporting Data

Code	Laboratory Name
AC	Analytical Chemistry Laboratory Chemical Technology Div., Argonne, IL
AG	ANALYTICAL TECHNOLOGIES INC., FORT COLLINS, CO
AI	Nuclear Technology Services, Inc. Radiochemistry Lab, Roswell, GA
AL	Ames Laboratory Safety, Health & Env. G40TASF, Ames, IA
AM	American Radiation Services, Inc., Baton Rouge, LA
AN	Argonne Nat'l Laboratory ESH, Bldg 200, Rm. F109, Argonne, IL
AR	Accu-Labs Research Inc., Golden, CO
AU	ORISE EESD/ESSAP PO BOX 117, Oak Ridge, TN
AW	Argonne National Laboratory, Idaho Falls, ID
BA	Westinghouse Electric Corp. Bettis Atomic Power Lab, West Mifflin, PA
BC	Babcock & Wilcox MC #42 Naval Nuclear Fuel Division, Lynchburg, VA
BE	RUST Geotech, Grand Junction, CO
BK	Brookhaven Nat'l Laboratory Dept of Adv Tech., Upton, NY
BL	Barringer Laboratories Inc., Golden, CO
BM	Battelle Memorial Institute, Columbus, OH
BN	Brookhaven Nat'l Laboratory Bldg. #535 A, Upton, NY
BP	Battelle Pacific Northwest Lab Analytical Lab Oper., Richland, WA
BQ	Becquerel Laboratories Inc., Mississauga, Ontario, Canada
BR	US Army Research Laboratory Attn: AMSRL OP RA (Richard Mar, Aberdeen Proving Ground, MD
BU	Autoridad Regulatoria, Buenos Aires, Argentina
BX	B&W Nuclear Envir. Services Nuclear Envir. Lab, Lynchburg, VA
CA	Atomic Energy Control Board, Ottawa, Canada
CH	California State Dept. Health Serv. Sanitation & Radiation Laborat, Berkeley, CA
CL	Core Laboratories, Casper, WY
CP	Controls for Envir. Pollution, Santa Fe, NM
CS	Rockwell Internat'l Corp. Rad. Protection T100, Canoga Park, CA
DC	Datachem Laboratories, Salt Lake City, UT
EB	AEB Consultants, Ind., Pine Bluff, AR
EE	Rust Federal Services, Inc. Clemson Tech. Center Inc., Anderson, SC
EG	TRA-MTR604 LAB 124 ATTN: Jodie Doherty 208-533-41, Scoville, ID
EI	Argonne National Laboratory Building 5-SPM, Argonne, IL
EL	Energy Laboratories, Inc. Radiochemistry Department, Casper, WY
EP	US EPA-LV Mail Stop/ RSD, Las Vegas, NV
ES	Environmental Sci. & Engr., Inc. Inorganic Analyt.Chem., Gainesville, FL
FG	FGL Environmental, Santa Paula, CA
FL	Dept of Health & Rehab. Serv. Office of Rad. Control, Orlando, FL
FM	Office of Radiation Control Mobile Emergency Radiological, Orlando, FL
FN	Fermi Nat'l Accelerator Lab, Batavia, IL
FS	Florida State University Department of Oceanography, Tallahassee, FL
GA	Lockheed Martin Rm. 333 Bldg X710, Pikton, OH
GE	General Engineering Labs Environmental Physics, Inc., Charleston, SC
GS	USGS/NWQL, Arvada, CO
HA	NUS Laboratory, Pittsburgh, PA
HC	Lawrence Livermore Laboratory Hazards Control, L383, Livermore, CA
HI	Heritage Laboratories, Inc., Indianapolis, IN
HL	Heritage Laboratories, Inc., Romeoville, IL
HS	RESL - USDOE, Idaho Falls, ID
ID	DPRA - IRD/CNEN Av. Salvador Allende S/N, Jaca, Rio De Janeiro, RJBrasil
IE	IEA, Inc., Morrisville, NC
IN	WINCO MS 5202, Idaho Falls, ID
IS	Quanterra- St. Louis, Earth City, MO

Participating Laboratories in EML QAP43

Laboratories Reporting Data

Code	Laboratory Name
IT	Quanterra- Richland Laboratory , Richland, WA
JP	Japan Chemical Analysis Center 295-3 Sanno-Cho, Chiba 263, Japan
KA	Knolls Atomic Power Lab Bldg A-3 Rm 99, Schenectady, NY
LA	Los Alamos Nat'l Lab Health & Environ. Chem., HSE-9, Los Alamos, NM
LB	Lawrence Berkeley Lab UCB Bldg 75, Room 124, Berkeley, CA
LH	Lockheed Analytical Laboratory , Las Vegas, NV
LL	Lawrence Livermore Nat'l Lab Nuclear Chem. Div., Livermore, CA
LM	Los Alamos Nat'l Lab , Mercury, NV
LW	Lawrence Livermore Nat'l Lab Nuclear Chem. Div., Livermore, CA
MA	ORNL Health Sciences Research Div. BLDG 7710 MS 6639, Oak Ridge, TN
ME	Radiation Control Program , Jamaica Plain, MA
ML	EG&G Mound Applied Technologies , Miamisburg, OH
NA	USEPA NAREL , Montgomery, AL
NC	Nuclear Services Laboratory North Carolina State Universit, Raleigh, NC
NJ	New Jersey Dept. of Envir. Prot. Div. of Envir. Quality, Trenton, NJ
NL	FERMCO , Cincinnati, OH
NR	NRF Chemistry, S1W2 , Scoville, ID
NY	NYU Medical Center Nelson Inst. of Envir. Medicin, Tuxedo, NY
OD	ORNL, Radiobioassay Lab Bldg 4500-S Rm H-249 MS 6105, Oak Ridge, TN
OI	Oak Ridge Research Institute, Inc. , Oak Ridge, TN
OL	Oak Ridge National Laboratory Environmental Sciences Div., Oak Ridge, TN
OR	Oak Ridge National Lab Bldg 4500-N Rm G-5, Oak Ridge, TN
OT	ORNL Radioactive Material Analysis Lab BLDG 2026, Room 129, Oak Ridge, TN
PA	Mason & Hanger-Silas Mason Co., Inc. , Amarillo, TX
PB	Mason & Hanger-Silas Mason Co., Inc. , Amarillo, TX
PC	Pace Inc. , Golden, CO
PI	Lockheed Martin Specialty Components , Largo, FL
RA	V. G. Khlopin Radium Institute , ST. Petersburg, Russia
RD	Radiation Detection Company , Sunnyvale, CA
RE	Reynolds Electrical Eng. Co., Inc. MS 772, Las Vegas, NV
RF	EG&G Rocky Flats Plant Bldg 123, Golden, CO
RG	EG&G Rocky Flats Plant , Golden, CO
RI	Westinghouse Hanford Co. Analytical Labs, Dept. T6-16, Richland, WA
RL	ATTN:D. JORDAN/M. GRIFFIN 2440 STEVENS CENTER MSIN: H6-0, RICHLAND, WA
SA	Sandia Labs - Organization 7715 Radioactive Sample Diag. Prog., Albuquerque, NM
SC	S-3 Division Maxwell Labs , La Jolla, CA
SK	Savannah River Plant Bldg 735-7A Rm 110, Aiken, SC
SR	Savannah River Plant , Aiken, SC
SS	Savannah River Tech Center , Aiken, SC
SV	Savannah Lab & Env't Serv., Inc. , Tampa, FL
SW	Southwest Research Institute, Div. 01 P.O. Drawer 28510, San Antonio, TX
TI	Teledyne Brown Engineering Environmental Services, Westwood, NJ
TM	TMA/Eberline-Albuquerque Lab , Albuquerque, NM
TN	TMA/NORCAL , Richmond, CA
TO	TMA/Eberline Oak Ridge Laboratory, Oak Ridge, TN
UC	Lockheed Martin Rm60 Bldg C-710 , Paducah, KY
UK	Lockheed Martin , Oak Ridge, TN
UP	Lockheed Martin (For 9995 Production Support R, Oak Ridge, TN
UY	Lockheed Martin , Oak Ridge, TN
WA	Environmental Radiation Lab Off. of Public Health Labs., Seattle, WA
WC	Westinghouse Hanford Co. MSIN S3-28, Richland, WA

Participating Laboratories in EML QAP43

Laboratories Reporting Data

Code	Laboratory Name
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WI	Westinghouse Electric Corp. WIPP Site, Carlsbad, NM
WN	WINCO CPP-609, Scoville, ID
WS	Weldon Springs Site, St. Charles, MO
WV	West Valley Nuclear Services Co, Inc MS 307, West Valley, NY
YA	Yankee Atomic Electric Company, Westboro, MA

Total Reporting Labs: 107

Participating Laboratories in EML QAP43

Laboratories Not Reporting Data

Code	Laboratory Name
AE	Analytical Resources, Inc. , Seattle, WA
AP	ORAU Prof'l Training Programs, Oak Ridge, TN
BS	B&W Nuclear Envir. Services , Vandergraft, PA
CC	Compuchem Environmental Corp. , Research Triangle Park, NC
CZ	ACZ Laboratories, Inc. , Steamboat Springs, CO
ED	TCT - St. Louis , St. Louis, MO
EN	WINCO CCP-609 , Scoville, ID
ET	Ecotek Lab Services Inc. , Atlanta, GA
IR	Idaho National Engineering Laboratory , Scoville, ID
MI	Massachusetts Inst. of Tech. , Middleton, MA
OB	OBG Laboratories , East Syracuse, NY
OS	Oregon Health Division Radiation Controls Section, Portland, OR
PR	Princeton Plasma Physics Lab , Princeton, NJ
SE	Shealy Environmental Services Inc. Overlook Business Center, Cayce, SC
SL	Stanford Linear Accelerator Center Off. of Hlth Physics, MS 84, Menlow Park, CA
TE	TELEDYNE ISOTOPES MIDWEST LAB , NORTHBROOK, IL
TY	Scientific Production Assoc. Typhoon , Obinsk, Kaluga Region, Russia
WE	Westinghouse Electric Corp. Chemical & Materials Tech., Madison, PA
WP	Washington Public Power Supply System , Richland, WA
XZ	Pacific Northwest Laboratory Radiological Sciences Dept., Richland, WA
YP	US Army Proving Ground ATTN: STEYP-RS-LS-MP, Yuma, AZ

Total Non-Reporting Labs: 21

