

**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 51st set of environmental quality assessment samples (QAP-LI) that were received on or before December 2, 1999.

ACKNOWLEDGEMENT

This report represents the efforts of the following EML staff: Karin Decker, Michele DeGennaro, Isabel M. Fisenne, Richard Godwin, Cristina Jaw, John Kada, Ada Kong, Pamela M. Perry, William Rivera, Arnold Boyd, Nancy Chieco, Kevin Clancy, Sylvia Kendall, and Camille Marinetti.

I NTRODUCTION

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 4 days after the reporting deadline via the Internet at www.eml.doe.gov.

This is the 57th report of this program. Preceding reports in this series are:

HASL-317	(February 1, 1977)	EML-448	(October 1, 1985)
HASL-319	(May 2, 1977)	EML-453	(March 1, 1986)
HASL-323	(August 1, 1977)	EML-454	(March 1, 1986)
HASL-331	(November 1, 1977)	EML-477	(October 1, 1986)
EML-336	(January 1, 1978)	EML-478	(March 1, 1987)
EML-337	(February 1, 1978)	EML-498	(September 1, 1987)
EML-340	(May 1, 1978)	EML-518	(January 2, 1989)
EML-343	(August 1, 1978)	EML-525*	(August 1, 1989)
EML-346	(November 1, 1978)	EML-526	(January 2, 1990)
EML-350	(February 1, 1979)	EML-530	(July 2, 1990)
EML-351	(February 1, 1979)	EML-535	(January 1, 1991)
EML-354	(May 1, 1979)	EML-539	(July 1, 1991)
EML-358	(August 1, 1979)	EML-543	(January 2, 1992)
EML-364	(November 1, 1979)	EML-546	(July 1, 1992)
EML-368	(February 1, 1980)	EML-551	(January 4, 1993)
EML-377	(August 1, 1980)	EML-556	(July 1, 1993)
EML-387	(February 1, 1981)	EML-559	(January 5, 1994)
EML-388	(February 1, 1981)	EML-561	(July 1, 1994)
EML-393	(August 3, 1981)	EML-565	(January 5, 1995)
EML-402	(February 1, 1982)	EML-569	(July 3, 1995)
EML-414	(April 1, 1983)	EML-576	(February 1, 1996, Revised)
EML-417	(September 1, 1983)	EML-581	(July 1, 1996)
EML-426	(March 1, 1984)	EML-587	(January 1997)
PNL-5079	(April 1, 1984)	EML-591	(July 1997)
EML-431	(September 1, 1984)	EML-594	(January 1998)
EML-432	(November 1, 1984)	EML-596	(July 1998)
EML-438	(March 1, 1985)	EML-600	(December 1998)
EML-439	(March 1, 1985)	EML-604	(June 1999)

*Please note this is a corrected report number.

RESULTS

The results from the analysis of QAP-LI samples (3600 results from 139 laboratories) received on or before December 2, 1999 are listed according to the TABLE OF CONTENTS. The data for the different kinds of samples are given in the following units:

Air Filters	Bq filter ⁻¹
Soil	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^{-1} , or mL^{-1} . 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 EML determinations for each nuclide. The EML uncertainty is the standard deviation of the mean. All other uncertainties are as reported by the participants.

The control limit concept was established from percentiles of historic data distributions (1982-1992). The evaluation of this historic data and the development of the control limits are presented in DOE report EML-564. The control limits for QAP-LI were developed from percentiles of data distributions for the years 1993-1999.

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 (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 quality objectives.

QAP 9909/Quality Assessment Program 51 Report

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Results Ordered by Matrix/Nuclide

Air

²⁴¹ Am	225
Bq U	227
⁵⁷ Co	228
⁶⁰ Co	232
¹³⁷ Cs	236
Gross Alpha (GA)	240
Gross Beta (GB) 243	
⁵⁴ Mn	246
²³⁸ Pu	250
²³⁹ Pu	252
¹⁰⁶ Ru	254
⁹⁰ Sr	257
²³⁴ U	259
²³⁸ U	261
ug U	263

Soil

²²⁸ Ac	264
²⁴¹ Am	267
²¹² Bi	269
²¹⁴ Bi	271
Bq U	274
¹³⁷ Cs	275
⁴⁰ K	279
²¹² Pb	283
²¹⁴ Pb	286
²³⁸ Pu	289
²³⁹ Pu	290
⁹⁰ Sr	292
²³⁴ Th	294
²³⁴ U	296
²³⁸ U	298
µg U	300

Vegetation	
²⁴¹ Am	301
²⁴⁴ Cm	303
⁶⁰ Co	304
¹³⁷ Cs	308
⁴⁰ K	312
²³⁸ Pu	315
²³⁹ Pu	316
⁹⁰ Sr	318
Water	
²⁴¹ Am	320
Bq U	322
⁶⁰ Co	323
¹³⁷ Cs	327
⁵⁵ Fe	331
Gross Alpha (GA)	332
Gross Beta (GB)	335
³ H	338
⁶³ Ni	341
²³⁸ Pu	342
²³⁹ Pu	344
⁹⁰ Sr	346
²³⁴ U	349
²³⁸ U	351
µg U	353

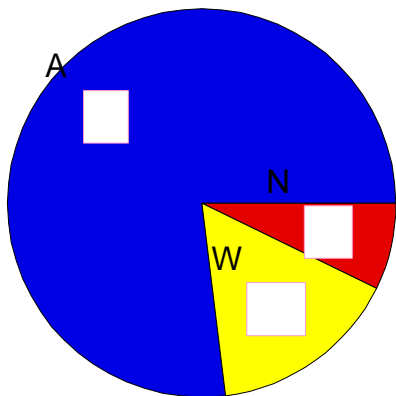
List of Lab codes and identifications of Participating* Laboratories for EML QAP LI

Laboratories Reporting Data	354
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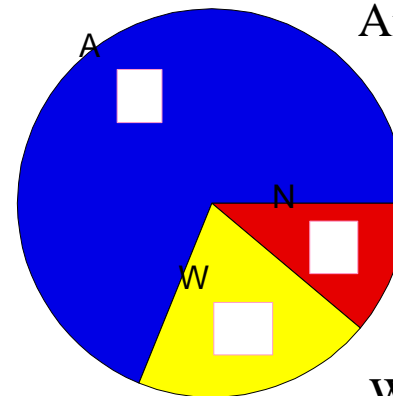
*Participating Laboratories are those labs that were sent samples.

QAP 51 Summary of Evaluations of 3591 Reported Analyses

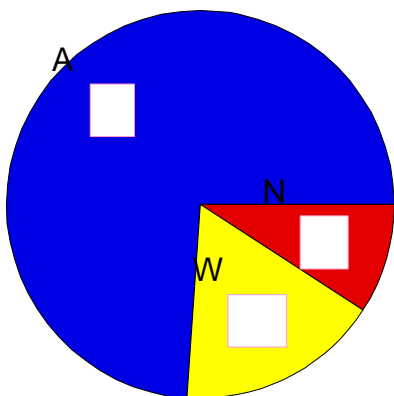
Air Filter:
1088 Analyses



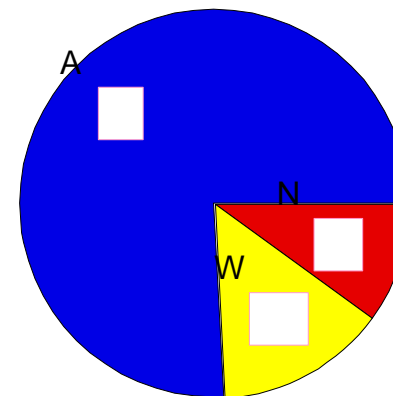
Soil: 1003
Analyses



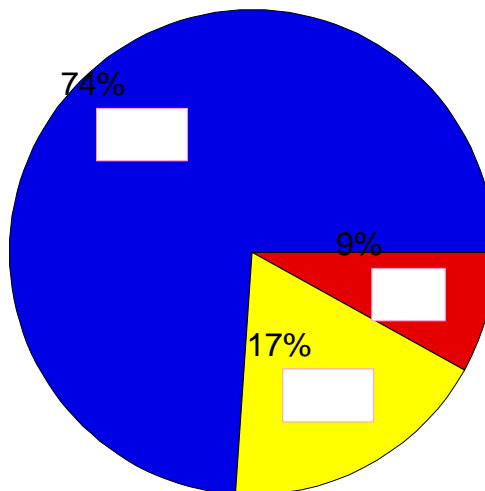
Vegetation:
527 Analyses



Water: 973
Analyses



Summary: All
Analyses



Acceptable

Warning

Not Acceptable

QAP 51 Statistical Summary

Nuclide	EML Value	EML Error	<u>Reported Values</u> EML Value			No.* of Reported Values
			Mean	Median	Std. Dev.	
Matrix: Air Filter						
AM241	0.127	0.010	0.997	0.961	0.161	63
Bq U	0.133	0.008	1.062	1.053	0.142	13
CO57	7.730	0.033	1.020	1.034	0.105	115
CO60	6.350	0.410	1.049	1.039	0.092	119
CS137	6.430	0.420	1.073	1.061	0.106	121
GROSS ALPHA	2.770	0.260	0.998	0.975	0.154	85
GROSS BETA	2.660	0.260	1.080	1.069	0.133	86
MN54	7.910	0.450	1.095	1.097	0.113	116
PU238	0.097	0.007	0.978	0.978	0.090	43
PU239	0.136	0.011	0.973	0.978	0.057	43
RU106	5.500	1.760	1.035	1.055	0.131	80
SR90	0.336	0.014	1.184	1.090	0.295	36
U234	0.066	0.003	1.092	1.064	0.167	36
U238	0.065	0.005	1.090	1.068	0.139	35
UG/G U	5.230	0.290	0.978	1.031	0.133	17

Matrix: Soil						
AC228	124.000	4.800	1.081	1.097	0.148	79
AM241	1.440	0.190	1.417	1.444	0.260	33
BI212	140.000	14.000	0.827	0.854	0.197	58
BI214	69.500	1.800	1.126	1.151	0.140	74
Bq U	401.000	8.700	1.023	1.015	0.140	21
CS137	204.000	5.000	1.082	1.088	0.102	117
K40	780.000	27.000	1.096	1.095	0.126	104
PB212	127.000	4.800	1.046	1.055	0.110	76
PB214	72.000	0.420	1.142	1.152	0.149	72
PU238	0.320	0.130	0.864	0.894	0.210	5
PU239	3.200	0.500	0.942	0.925	0.182	49
SR90	13.000	0.470	1.399	1.038	0.784	39
TH234	198.000	5.600	1.078	1.040	0.244	42
U234	190.000	5.200	1.011	1.021	0.099	43
U238	202.000	7.200	1.002	0.996	0.133	49
UG/G U	16.300	0.300	0.932	0.957	0.092	29

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

QAP 51 Statistical Summary

Nuclide	EML Value	EML Error	<u>Reported Values</u>			No.* of Reported Values
			Mean	Median	Std. Dev.	
Matrix: Vegetation						
AM241	2.880	0.220	1.207	1.140	0.320	62
CM244	1.610	0.360	1.169	1.168	0.227	30
CO60	17.600	1.000	1.069	1.080	0.150	102
CS137	440.000	20.000	1.073	1.075	0.111	107
K40	513.000	20.000	1.033	1.025	0.121	86
PU238	0.500	0.100	1.039	1.219	0.254	4
PU239	4.300	0.460	1.037	1.048	0.130	48
SR90	595.000	29.000	0.974	0.998	0.141	44

Matrix: Water						
AM241	0.850	0.100	1.094	1.079	0.116	62
Bq U	0.760	0.040	1.091	1.079	0.120	19
CO60	52.400	2.200	1.025	1.030	0.051	122
CS137	76.000	3.400	1.032	1.032	0.063	125
FE55	53.000	2.000	0.897	0.919	0.109	17
GROSS ALPHA	1580.000	20.000	0.942	0.938	0.137	73
GROSS BETA	740.000	40.000	1.197	1.233	0.188	78
H3	80.700	3.700	1.069	1.032	0.187	81
NI63	114.000	10.000	0.948	0.982	0.158	14
PU238	0.790	0.080	1.038	1.038	0.068	55
PU239	0.870	0.100	1.040	1.043	0.064	56
SR90	1.720	0.100	0.994	0.956	0.164	62
U234	0.370	0.020	1.086	1.076	0.122	44
U238	0.360	0.020	1.088	1.083	0.090	46
UG/G U	0.030	0.010	1.023	1.033	0.065	23

Units for matrices:

Air filter: AI=Bq/filter

Soil: SO=Bq/kg

Vegetation: VE=Bq/kg

Water: WA=Bq/L.

Values for elemental uranium in µg/filter, g or mL.

Conversion from Bq/kg or L to pCi/g or mL:

1 Bq/kg or L = 0.027 pCi/g or mL

Example: Convert 3 Bq/kg to pCi/g

3 Bq/kg x 27 pCi/Bq/1000 g/kg = 0.081 pCi/g

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

QAP 51 Control Limits* by Matrix

Nuclide	Lower Limit	Lower Middle Limit	Upper Middle Limit	Upper Limit
Matrix: Air Filter				
AM241	0.73	0.88	1.46	2.58
Bq U	0.80	0.90	1.53	3.35
CO57	0.65	0.72	1.13	1.39
CO60	0.75	0.83	1.10	1.32
CS137	0.73	0.82	1.14	1.37
GROSS ALPHA	0.50	0.81	1.32	1.55
GROSS BETA	0.72	0.89	1.39	1.67
MN54	0.76	0.84	1.18	1.42
PU238	0.74	0.89	1.15	1.40
PU239	0.76	0.90	1.19	1.44
RU106	0.59	0.76	1.15	1.30
SR90	0.61	0.83	1.33	1.93
U234	0.83	0.90	1.40	1.92
U238	0.84	0.90	1.31	2.61
UG/G U	0.72	0.90	1.29	1.93
Matrix: Soil				
AC228	0.79	0.87	1.31	1.75
AM241	0.63	0.79	1.48	2.31
BI212	0.42	0.52	1.12	1.22
BI214	0.75	0.83	1.18	1.42
Bq U	0.42	0.61	1.16	1.39
CS137	0.83	0.90	1.21	1.32
K40	0.78	0.90	1.25	1.53
PB212	0.74	0.91	1.21	1.33
PB214	0.65	0.89	1.25	1.45
PU238	0.52	0.74	1.37	2.84
PU239	0.69	0.89	1.24	1.74
SR90	0.60	0.77	1.64	3.66
TH234	0.59	0.82	1.48	1.85
U234	0.47	0.70	1.11	1.30
U238	0.44	0.69	1.10	1.42
UG/G U	0.46	0.67	1.10	1.22

*Control limits are established from historical QAP data and reported as:
the ratio of Reported Value vs. EML Value

QAP 51 Control Limits* by Matrix

Nuclide	Lower Limit	Lower Middle Limit	Upper Middle Limit	Upper Limit
Matrix: Vegetation				
AM241	0.68	0.89	1.60	2.70
CM244	0.47	0.81	1.35	1.74
CO60	0.69	0.86	1.24	1.46
CS137	0.80	0.90	1.25	1.40
K40	0.79	0.90	1.24	1.42
PU238	0.66	0.81	2.89	7.94
PU239	0.68	0.86	1.23	1.59
SR90	0.50	0.73	1.13	1.33

Matrix: Water				
AM241	0.75	0.90	1.24	1.49
Bq U	0.67	0.90	1.26	1.42
CO60	0.80	0.90	1.14	1.20
CS137	0.80	0.90	1.18	1.26
FE55	0.44	0.60	1.34	1.53
GROSS ALPHA	0.61	0.83	1.17	1.32
GROSS BETA	0.55	0.71	1.32	1.54
H3	0.71	0.82	1.22	1.79
NI63	0.25	0.50	1.50	1.75
PU238	0.78	0.90	1.11	1.25
PU239	0.80	0.90	1.15	1.39
SR90	0.75	0.89	1.21	1.50
U234	0.80	0.90	1.22	1.40
U238	0.80	0.90	1.17	1.26
UG/G U	0.80	0.90	1.18	1.34

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 established from historical QAP data and reported as:
the ratio of Reported Value vs. EML Value

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: AC Analytical Chemistry Laboratory, Argonne National Lab							
WA	1	1	0	2	50	50	0
Totals:	1	1	0	2	50%	50%	0%
Lab: AG Paragon Analytics, Inc, Fort Collins, CO							
VE	7	0	0	7	100	0	0
SO	6	6	2	14	43	43	14
WA	11	1	0	12	92	8	0
AI	17	0	0	17	100	0	0
Totals:	41	7	2	50	82%	14%	4%
Lab: AI Nuclear Technology Services, Inc., Roswell, GA							
VE	6	4	5	15	40	27	33
SO	9	6	12	27	33	22	44
WA	4	2	17	23	17	9	74
AI	8	2	6	16	50	13	38
Totals:	27	14	40	81	33%	17%	49%
Lab: AM American Radiation Services, Inc., Baton Rouge							
VE	5	1	1	7	71	14	14
SO	9	4	1	14	64	29	7
WA	4	1	7	12	33	8	58
AI	7	1	5	13	54	8	38
Totals:	25	7	14	46	54%	15%	30%
Lab: AN Argonne National Laboratory							
WA	9	0	0	9	100	0	0
AI	9	1	1	11	82	9	9
SO	6	1	0	7	86	14	0
Totals:	24	2	1	27	89%	7%	4%
Lab: AR Accu-Labs Research Inc., Golden, CO							
SO	10	3	5	18	56	17	28
WA	14	2	6	22	64	9	27
AI	12	2	1	15	80	13	7
VE	8	2	1	11	73	18	9
Totals:	44	9	13	66	67%	14%	20%
Lab: AS USACHPPM, Aberdeen Proving Ground, MD							
SO	6	2	1	9	67	22	11

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
WA	5	2	0	7	71	29	0
AI	7	0	1	8	88	0	13
Totals:	18	4	2	24	75%	17%	8%
Lab: AT ATL International inc., Germantown, MD							
VE	3	1	0	4	75	25	0
SO	5	0	0	5	100	0	0
WA	4	2	0	6	67	33	0
AI	7	0	0	7	100	0	0
Totals:	19	3	0	22	86%	14%	0%
Lab: AU ORISE RSAT/ESSAP, Oak Ridge							
SO	10	2	1	13	77	15	8
WA	9	2	0	11	82	18	0
VE	6	0	0	6	100	0	0
AI	10	1	0	11	91	9	0
Totals:	35	5	1	41	85%	12%	2%
Lab: BA Bettis Atomic Power Lab, West Mifflin, PA							
VE	2	0	0	2	100	0	0
SO	1	0	0	1	100	0	0
WA	4	2	0	6	67	33	0
AI	5	0	0	5	100	0	0
Totals:	12	2	0	14	86%	14%	0%
Lab: BC BWX Technologies, Inc, Naval Nuclear Fuel Division, Lynchburg, VA							
WA	4	3	1	8	50	38	13
AI	8	0	1	9	89	0	11
SO	0	2	3	5	0	40	60
VE	2	2	0	4	50	50	0
Totals:	14	7	5	26	54%	27%	19%
Lab: BE RUST Geotech, Grand Junction, CO							
SO	7	2	2	11	64	18	18
WA	13	0	1	14	93	0	7
AI	11	3	0	14	79	21	0
VE	5	2	0	7	71	29	0
Totals:	36	7	3	46	78%	15%	7%
Lab: BL Barringer Laboratories Inc., Golden, CO							
VE	6	0	0	6	100	0	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
AI	4	6	6	16	25	38	38
SO	9	4	2	15	60	27	13
WA	9	3	2	14	64	21	14
Totals:	28	13	10	51	55%	25%	20%
Lab: BM Battelle Memorial Institute, Columbus, OH							
VE	4	1	0	5	80	20	0
SO	4	1	0	5	80	20	0
WA	8	0	0	8	100	0	0
AI	8	0	0	8	100	0	0
Totals:	24	2	0	26	92%	8%	0%
Lab: BN Brookhaven National Laboratory, Upton, NY							
VE	6	3	0	9	67	33	0
SO	12	7	2	21	57	33	10
WA	15	1	2	18	83	6	11
AI	19	0	2	21	90	0	10
Totals:	52	11	6	69	75%	16%	9%
Lab: BP Battelle Pacific Northwest National Laboratory							
SO	6	5	0	11	55	45	0
WA	6	0	0	6	100	0	0
VE	0	3	0	3	0	100	0
AI	9	1	0	10	90	10	0
Totals:	21	9	0	30	70%	30%	0%
Lab: BQ Becquerel Laboratories Inc., Mississauga, Ontario, Canada							
VE	2	0	1	3	67	0	33
SO	6	1	2	9	67	11	22
WA	4	1	0	5	80	20	0
AI	6	2	0	8	75	25	0
Totals:	18	4	3	25	72%	16%	12%
Lab: BU Autoridad Regulatoria, Buenos Aires, Argentina							
WA	13	0	1	14	93	0	7
AI	13	0	2	15	87	0	13
SO	12	1	0	13	92	8	0
VE	5	2	0	7	71	29	0
Totals:	43	3	3	49	88%	6%	6%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: BX B&W Nuclear Envir. Services, Lynchburg, VA							
SO	4	6	3	13	31	46	23
WA	10	3	0	13	77	23	0
AI	10	2	1	13	77	15	8
VE	2	4	1	7	29	57	14
Totals:	26	15	5	46	57%	33%	11%
Lab: CA Atomic Energy Control Board, Ottawa, Canada							
VE	1	0	0	1	100	0	0
AI	6	0	0	6	100	0	0
SO	1	0	0	1	100	0	0
WA	4	0	2	6	67	0	33
Totals:	12	0	2	14	86%	0%	14%
Lab: CB Radiation Protection Bureau, Ontario, Canada							
WA	11	0	0	11	100	0	0
AI	12	18	0	30	40	60	0
Totals:	23	18	0	41	56%	44%	0%
Lab: CD Gentilly-2 Nuclear Power Plant, Quebec, Canada							
VE	3	0	0	3	100	0	0
SO	7	0	1	8	88	0	13
WA	3	1	0	4	75	25	0
AI	5	0	0	5	100	0	0
Totals:	18	1	1	20	90%	5%	5%
Lab: CF Freshwater Institute Radiochemistry Winnipeg, Manitoba, Canada							
VE	4	2	0	6	67	33	0
SO	7	2	0	9	78	22	0
WA	6	2	4	12	50	17	33
Totals:	17	6	4	27	63%	22%	15%
Lab: CH California State Dept. Health Serv., Sanitation & Radiation Laboratory							
WA	10	3	0	13	77	23	0
SO	13	2	0	15	87	13	0
VE	7	0	0	7	100	0	0
AI	10	5	0	15	67	33	0
Totals:	40	10	0	50	80%	20%	0%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: CL Core Laboratories, Casper, WY							
VE	3	3	1	7	43	43	14
SO	7	5	2	14	50	36	14
WA	10	2	2	14	71	14	14
AI	5	2	5	12	42	17	42
Totals:	25	12	10	47	53%	26%	21%
Lab: CM Metropolitan Water Reclamation District of Greater Chicago							
SO	6	0	0	6	100	0	0
WA	3	1	1	5	60	20	20
Totals:	9	1	1	11	82%	9%	9%
Lab: CN China Institute for Radiation Protection							
VE	3	0	1	4	75	0	25
SO	6	1	0	7	86	14	0
AI	5	0	1	6	83	0	17
Totals:	14	1	2	17	82%	6%	12%
Lab: CR Laboratorio de Fisica Nuclear Aplicada, Costa Rica							
AI	0	1	4	5	0	20	80
VE	3	0	0	3	100	0	0
SO	4	3	0	7	57	43	0
Totals:	7	4	4	15	47%	27%	27%
Lab: CS Rocketdyne Propulsion & Power, Canoga Park, CA							
AI	4	1	0	5	80	20	0
WA	2	0	0	2	100	0	0
VE	3	0	0	3	100	0	0
SO	2	0	0	2	100	0	0
Totals:	11	1	0	12	92%	8%	0%
Lab: CW Carlsbad Environmental Monitoring Research Center, NM							
VE	6	0	0	6	100	0	0
SO	3	2	0	5	60	40	0
WA	7	0	0	7	100	0	0
AI	9	0	1	10	90	0	10
Totals:	25	2	1	28	89%	7%	4%
Lab: DC Datachem Laboratories, Salt Lake City							
WA	2	0	0	2	100	0	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	2	0	0	2	100%	0%	0%
Lab: DH Duke Engineering Services Hanford							
AI	4	3	0	7	57	43	0
SO	2	0	0	2	100	0	0
WA	4	0	0	4	100	0	0
Totals:	10	3	0	13	77%	23%	0%
Lab: EC Envirocare of Utah							
AI	2	2	1	5	40	40	20
SO	5	2	1	8	63	25	13
WA	0	1	2	3	0	33	67
Totals:	7	5	4	16	44%	31%	25%
Lab: EG LMITCO/INEL, Scoville							
VE	6	1	1	8	75	13	13
SO	7	1	0	8	88	13	0
WA	10	3	0	13	77	23	0
AI	10	2	0	12	83	17	0
Totals:	33	7	1	41	80%	17%	2%
Lab: EM 3M, Empire Disks, St. Paul, MN							
WA	0	2	0	2	0	100	0
Totals:	0	2	0	2	0%	100%	0%
Lab: EP US EPA, Las Vegas							
AI	3	2	0	5	60	40	0
WA	3	0	0	3	100	0	0
Totals:	6	2	0	8	75%	25%	0%
Lab: FE Fernald WPRAP Field Office, Ohio							
WA	14	0	1	15	93	0	7
VE	8	0	0	8	100	0	0
SO	25	1	1	27	93	4	4
Totals:	47	1	2	50	94%	2%	4%
Lab: FG EGL Environmental, Santa Paula, CA							
AI	5	2	1	8	63	25	13

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
SO	9	3	2	14	64	21	14
WA	9	1	2	12	75	8	17
Totals:	23	6	5	34	68%	18%	15%
Lab: FL Florida Dept of Health & Rehab. Serv., Orlando							
AI	4	4	0	8	50	50	0
WA	4	3	0	7	57	43	0
VE	3	1	0	4	75	25	0
SO	6	1	1	8	75	13	13
Totals:	17	9	1	27	63%	33%	4%
Lab: FM Florida Mobile Emergency Radiological Laboratory, Orlando							
WA	3	0	0	3	100	0	0
AI	1	4	1	6	17	67	17
Totals:	4	4	1	9	44%	44%	11%
Lab: FN Fermi Lab, Batavia, IL							
VE	2	1	0	3	67	33	0
SO	4	0	0	4	100	0	0
WA	3	0	0	3	100	0	0
AI	6	0	0	6	100	0	0
Totals:	15	1	0	16	94%	6%	0%
Lab: FR CEA/DAM - SPR/B3							
WA	2	0	0	2	100	0	0
VE	3	0	0	3	100	0	0
SO	6	2	0	8	75	25	0
Totals:	11	2	0	13	85%	15%	0%
Lab: FS Florida State University, Tallahassee							
SO	5	1	0	6	83	17	0
Totals:	5	1	0	6	83%	17%	0%
Lab: GA Lockheed Martin, Pikton, OH							
SO	8	2	0	10	80	20	0
WA	8	1	0	9	89	11	0
AI	11	1	0	12	92	8	0
VE	2	4	0	6	33	67	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	29	8	0	37	78%	22%	0%
Lab: GC Georgia Power Company Environmental Lab							
VE	3	0	0	3	100	0	0
SO	3	0	0	3	100	0	0
WA	5	0	0	5	100	0	0
AI	6	1	0	7	86	14	0
Totals:	17	1	0	18	94%	6%	0%
Lab: GD GTS Duratek, Oak Ridge, TN							
VE	1	0	1	2	50	0	50
SO	2	0	0	2	100	0	0
WA	0	2	0	2	0	100	0
AI	3	0	2	5	60	0	40
Totals:	6	2	3	11	55%	18%	27%
Lab: GE General Engineering Labs, Charleston, SC							
VE	7	0	0	7	100	0	0
AI	11	3	0	14	79	21	0
SO	10	4	0	14	71	29	0
WA	14	0	0	14	100	0	0
Totals:	42	7	0	49	86%	14%	0%
Lab: GP GPU Nuclear, Inc., Harrisburg, PA							
VE	7	1	0	8	88	13	0
SO	7	0	0	7	100	0	0
WA	10	1	2	13	77	8	15
AI	11	2	1	14	79	14	7
Totals:	35	4	3	42	83%	10%	7%
Lab: GS USGS/NWQL, Arvada, CO							
WA	0	2	0	2	0	100	0
Totals:	0	2	0	2	0%	100%	0%
Lab: GT Georgia Institute of Technology							
VE	7	0	0	7	100	0	0
SO	5	1	0	6	83	17	0
WA	9	1	0	10	90	10	0
AI	9	2	0	11	82	18	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	30	4	0	34	88%	12%	0%
Lab: HC Lawrence Livermore Laboratory, California							
WA	3	0	0	3	100	0	0
AI	1	1	0	2	50	50	0
Totals:	4	1	0	5	80%	20%	0%
Lab: HT Technical University, Budapest, Hungary							
SO	4	1	1	6	67	17	17
WA	0	0	5	5	0	0	100
Totals:	4	1	6	11	36%	9%	55%
Lab: HU Water Resources Research Centre (VITUKI), Hungary							
VE	2	1	0	3	67	33	0
SO	5	1	0	6	83	17	0
AI	0	4	0	4	0	100	0
Totals:	7	6	0	13	54%	46%	0%
Lab: ID Institute of Radiation Protection and Dosimetry, IRD/ CNEN, Brazil							
WA	3	1	0	4	75	25	0
AI	3	6	2	11	27	55	18
SO	10	2	0	12	83	17	0
VE	3	1	0	4	75	25	0
Totals:	19	10	2	31	61%	32%	6%
Lab: IE Severn Trent Laboratories, Whippany, NI							
SO	1	2	7	10	10	20	70
WA	2	1	5	8	25	13	63
AI	6	3	1	10	60	30	10
VE	1	0	2	3	33	0	67
Totals:	10	6	15	31	32%	19%	48%
Lab: IL ISU Environmental Monitoring Program, Pocatello, ID							
VE	2	1	0	3	67	33	0
AI	7	0	0	7	100	0	0
SO	5	0	2	7	71	0	29
WA	3	1	0	4	75	25	0
Totals:	17	2	2	21	81%	10%	10%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: IN Lockheed Martin Idaho Technical Corp., Analytical Laboratory							
VE	3	0	0	3	100	0	0
SO	8	2	0	10	80	20	0
WA	6	1	0	7	86	14	0
AI	5	0	0	5	100	0	0
Totals:	22	3	0	25	88%	12%	0%
Lab: IS Quanterra- St. Louis							
VE	5	2	0	7	71	29	0
SO	9	1	3	13	69	8	23
WA	9	3	0	12	75	25	0
AI	11	2	1	14	79	14	7
Totals:	34	8	4	46	74%	17%	9%
Lab: IT Quanterra- Richland Laboratory							
SO	8	4	1	13	62	31	8
WA	13	0	0	13	100	0	0
AI	14	0	0	14	100	0	0
VE	7	0	0	7	100	0	0
Totals:	42	4	1	47	89%	9%	2%
Lab: KA Knolls Atomic Power Lab, Schenectady							
SO	4	0	0	4	100	0	0
WA	9	0	0	9	100	0	0
AI	2	0	0	2	100	0	0
Totals:	15	0	0	15	100%	0%	0%
Lab: KR Korea Atomic Energy Research Institute							
VE	18	0	1	19	95	0	5
SO	13	0	1	14	93	0	7
AI	19	0	0	19	100	0	0
Totals:	50	0	2	52	96%	0%	4%
Lab: LA Los Alamos National Laboratory, NM							
VE	17	1	0	18	94	6	0
SO	14	9	6	29	48	31	21
WA	23	4	0	27	85	15	0
Totals:	54	14	6	74	73%	19%	8%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: LB Lawrence Berkeley Lab UCB							
WA	5	0	0	5	100	0	0
AI	5	2	0	7	71	29	0
SO	1	2	0	3	33	67	0
VE	2	0	0	2	100	0	0
Totals:	13	4	0	17	76%	24%	0%
Lab: LL LLNL Chemistry and Material Science/Environmental							
SO	4	1	0	5	80	20	0
WA	4	0	2	6	67	0	33
AI	7	1	0	8	88	13	0
VE	3	3	1	7	43	43	14
Totals:	18	5	3	26	69%	19%	12%
Lab: LN Los Alamos National Lab, ES&H							
WA	2	0	1	3	67	0	33
AI	6	0	0	6	100	0	0
Totals:	8	0	1	9	89%	0%	11%
Lab: LV UNLV, Dept of Health Physics							
VE	3	1	0	4	75	25	0
SO	7	1	1	9	78	11	11
WA	4	1	1	6	67	17	17
AI	8	0	0	8	100	0	0
Totals:	22	3	2	27	81%	11%	7%
Lab: LW Lawrence Livermore National Lab, Waste							
WA	3	0	0	3	100	0	0
SO	3	1	1	5	60	20	20
Totals:	6	1	1	8	75%	13%	13%
Lab: MA ORNL Health Sciences Research Div							
VE	4	0	0	4	100	0	0
SO	8	0	0	8	100	0	0
AI	4	2	0	6	67	33	0
Totals:	16	2	0	18	89%	11%	0%
Lab: ME Radiation Control Program, Jamaica Plain, MA							
VE	5	4	3	12	42	33	25
SO	0	3	2	5	0	60	40

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
WA	8	4	0	12	67	33	0
AI	20	3	1	24	83	13	4
Totals:	33	14	6	53	62%	26%	11%
Lab: MH Maine Health & Environmental Testing Laboratory							
VE	4	0	0	4	100	0	0
SO	8	0	0	8	100	0	0
WA	5	3	0	8	63	38	0
AI	3	4	0	7	43	57	0
Totals:	20	7	0	27	74%	26%	0%
Lab: MJ Mississippi State Department of Health, Jackson							
WA	4	3	0	7	57	43	0
Totals:	4	3	0	7	57%	43%	0%
Lab: ML Babcock & Wilcox of Ohio, Mound, Miamisburg, Ohio							
WA	7	0	0	7	100	0	0
AI	5	0	3	8	63	0	38
SO	2	1	0	3	67	33	0
VE	1	0	0	1	100	0	0
Totals:	15	1	3	19	79%	5%	16%
Lab: NA US EPA NAREL, Montgomery, AL							
SO	5	3	0	8	63	38	0
WA	7	0	1	8	88	0	13
AI	7	1	1	9	78	11	11
VE	2	3	0	5	40	60	0
Totals:	21	7	2	30	70%	23%	7%
Lab: ND Dept. of Environmental Health and Safety, NC State University							
WA	2	0	0	2	100	0	0
AI	6	0	0	6	100	0	0
Totals:	8	0	0	8	100%	0%	0%
Lab: NF Nuclear Field Services, Erwin, TN							
VE	2	1	0	3	67	33	0
SO	1	1	0	2	50	50	0
WA	5	0	0	5	100	0	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	8	2	0	10	80%	20%	0%
Lab: NJ NI Department of Health and Senior Services							
AI	18	0	0	18	100	0	0
VE	12	0	0	12	100	0	0
SO	17	7	1	25	68	28	4
WA	18	6	0	24	75	25	0
Totals:	65	13	1	79	82%	16%	1%
Lab: NL Fluor Daniel Fernald, Inc., Ohio							
AI	9	1	0	10	90	10	0
WA	7	0	0	7	100	0	0
SO	9	2	0	11	82	18	0
Totals:	25	3	0	28	89%	11%	0%
Lab: NM Environmental Evaluation Group, Carlsbad, NM							
SO	8	2	0	10	80	20	0
AI	5	0	0	5	100	0	0
Totals:	13	2	0	15	87%	13%	0%
Lab: NP IAF Environmental Laboratory, New York Power Authority							
WA	2	1	1	4	50	25	25
AI	6	0	0	6	100	0	0
Totals:	8	1	1	10	80%	10%	10%
Lab: NQ New Mexico Department of Health, Albuquerque							
SO	11	0	1	12	92	0	8
WA	5	2	2	9	56	22	22
AI	6	1	0	7	86	14	0
Totals:	22	3	3	28	79%	11%	11%
Lab: NR Naval Reactors Facility Chemistry, Scoville, ID							
VE	2	0	0	2	100	0	0
SO	1	0	0	1	100	0	0
WA	2	0	0	2	100	0	0
AI	5	0	0	5	100	0	0
Totals:	10	0	0	10	100%	0%	0%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: NS State Lab of Public Health, North Carolina							
WA	4	1	0	5	80	20	0
AI	5	0	0	5	100	0	0
Totals:	9	1	0	10	90%	10%	0%
Lab: NZ National Radiation Laboratory, New Zealand							
SO	2	4	2	8	25	50	25
WA	10	2	2	14	71	14	14
AI	11	2	0	13	85	15	0
VE	6	0	2	8	75	0	25
Totals:	29	8	6	43	67%	19%	14%
Lab: OB OBG Laboratories, East Syracuse, NY							
VE	0	3	1	4	0	75	25
SO	8	1	2	11	73	9	18
WA	2	3	3	8	25	38	38
AI	9	0	1	10	90	0	10
Totals:	19	7	7	33	58%	21%	21%
Lab: OC Radiation Protection Service Laboratory, Ontario, Canada							
AI	6	1	0	7	86	14	0
VE	3	0	0	3	100	0	0
SO	6	1	1	8	75	13	13
WA	5	1	0	6	83	17	0
Totals:	20	3	1	24	83%	13%	4%
Lab: OD ORNL, Radiobioassay Lab							
WA	8	1	0	9	89	11	0
AI	7	0	0	7	100	0	0
Totals:	15	1	0	16	94%	6%	0%
Lab: OH Ohio Dept Of Health Laboratory, Columbus							
VE	2	1	0	3	67	33	0
SO	2	2	3	7	29	29	43
WA	5	1	0	6	83	17	0
AI	7	0	0	7	100	0	0
Totals:	16	4	3	23	70%	17%	13%
Lab: OK Southwest Laboratory of Oklahoma							
WA	1	0	0	1	100	0	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	1	0	0	1	100%	0%	0%
Lab: OL ORNL Environmental Sciences Div							
VE	3	0	0	3	100	0	0
SO	2	0	0	2	100	0	0
WA	2	0	0	2	100	0	0
AI	5	0	0	5	100	0	0
Totals:	12	0	0	12	100%	0%	0%
Lab: OS Oregon Health Division Radiation Controls Section, Portland							
WA	6	0	0	6	100	0	0
AI	10	0	0	10	100	0	0
Totals:	16	0	0	16	100%	0%	0%
Lab: OT ORNL Radioactive Material Analysis Lab							
WA	8	2	0	10	80	20	0
AI	10	2	0	12	83	17	0
SO	9	1	1	11	82	9	9
VE	6	1	0	7	86	14	0
Totals:	33	6	1	40	83%	15%	3%
Lab: OU Outreach Laboratory, Broken Arrow, OK							
SO	8	2	0	10	80	20	0
WA	5	4	1	10	50	40	10
AI	4	2	0	6	67	33	0
VE	2	1	0	3	67	33	0
Totals:	19	9	1	29	66%	31%	3%
Lab: PA Mason & Hanger-Silas Mason Co., Inc., Battelle Pantex, Amarillo, TX							
AI	8	2	0	10	80	20	0
Totals:	8	2	0	10	80%	20%	0%
Lab: PK Pakistan Institute of Nuclear Science & Technology							
VE	0	1	1	2	0	50	50
SO	3	4	0	7	43	57	0
AI	3	1	0	4	75	25	0
Totals:	6	6	1	13	46%	46%	8%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: PO Institute of Oceanology PAN, Poland							
VE	4	0	0	4	100	0	0
SO	6	0	0	6	100	0	0
AI	3	0	0	3	100	0	0
Totals:	13	0	0	13	100%	0%	0%
Lab: PR Princeton Plasma Physics Lab							
WA	1	0	0	1	100	0	0
Totals:	1	0	0	1	100%	0%	0%
Lab: RA V. G. Khlopin Radium Institute, St. Petersburg, Russia							
AI	4	6	4	14	29	43	29
SO	12	7	1	20	60	35	5
VE	5	4	0	9	56	44	0
Totals:	21	17	5	43	49%	40%	12%
Lab: RC US NRC Region I Laboratory, PA							
SO	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0
AI	6	0	1	7	86	0	14
Totals:	11	0	1	12	92%	0%	8%
Lab: RE Bechtel Nevada, Mercury, NV							
VE	7	0	0	7	100	0	0
SO	10	1	0	11	91	9	0
WA	10	1	0	11	91	9	0
AI	11	1	1	13	85	8	8
Totals:	38	3	1	42	90%	7%	2%
Lab: RG Thermo Nutech Rocky Flats Plant, Golden							
WA	2	0	0	2	100	0	0
Totals:	2	0	0	2	100%	0%	0%
Lab: RI Waste Management Services of Hanford, Inc., 222S Lab							
AI	8	0	0	8	100	0	0
VE	5	1	0	6	83	17	0
SO	1	0	1	2	50	0	50
WA	7	0	1	8	88	0	13

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	21	1	2	24	88%	4%	8%
Lab: RK Rock Island Arsenal, Illinois							
AI	1	1	0	2	50	50	0
Totals:	1	1	0	2	50%	50%	0%
Lab: RL Bechtel Hanford-Radiological Counting Facility							
WA	3	1	1	5	60	20	20
AI	2	0	0	2	100	0	0
SO	3	3	1	7	43	43	14
Totals:	8	4	2	14	57%	29%	14%
Lab: SA Sandia Labs Radioactive Sample Diag. Prog., NM							
SO	3	0	0	3	100	0	0
WA	7	1	0	8	88	13	0
AI	9	1	0	10	90	10	0
Totals:	19	2	0	21	90%	10%	0%
Lab: SB SC Dept. of Health and Environment Control Radiological Lab							
AI	2	3	0	5	40	60	0
VE	3	0	0	3	100	0	0
SO	2	1	0	3	67	33	0
WA	3	0	0	3	100	0	0
Totals:	10	4	0	14	71%	29%	0%
Lab: SE Defence Research Establishment of Sweden (FOA)							
AI	6	3	0	9	67	33	0
VE	6	1	1	8	75	13	13
SO	5	1	0	6	83	17	0
Totals:	17	5	1	23	74%	22%	4%
Lab: SI Jozef Stefan Institute, Slovenia							
VE	4	0	0	4	100	0	0
SO	6	1	2	9	67	11	22
WA	4	0	1	5	80	0	20
AI	6	0	0	6	100	0	0
Totals:	20	1	3	24	83%	4%	13%

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: SL Stanford Linear Accelerator Center							
WA	3	0	0	3	100	0	0
Totals:	3	0	0	3	100%	0%	0%
Lab: SN Sanford Cohen Associates, Inc., Montgomery, AL							
SO	8	1	0	9	89	11	0
WA	8	0	0	8	100	0	0
VE	2	4	0	6	33	67	0
AI	4	0	0	4	100	0	0
Totals:	22	5	0	27	81%	19%	0%
Lab: SR Savannah River Environmental Laboratory							
VE	6	1	0	7	86	14	0
SO	10	0	0	10	100	0	0
WA	10	1	0	11	91	9	0
AI	10	2	1	13	77	15	8
Totals:	36	4	1	41	88%	10%	2%
Lab: ST SC DHEC, Aiken, South Carolina							
WA	1	0	0	1	100	0	0
Totals:	1	0	0	1	100%	0%	0%
Lab: SY Syrian Arab Republic Atomic Energy Commission							
WA	4	3	0	7	57	43	0
VE	4	0	1	5	80	0	20
SO	8	1	0	9	89	11	0
Totals:	16	4	1	21	76%	19%	5%
Lab: TE Teledyne Isotopes Midwest Lab, Northbrook, IL							
VE	6	0	0	6	100	0	0
SO	7	3	2	12	58	25	17
WA	6	5	1	12	50	42	8
AI	10	1	2	13	77	8	15
Totals:	29	9	5	43	67%	21%	12%
Lab: TI Teledyne Brown Engineering Environmental Services, Westwood, NJ							
VE	3	1	3	7	43	14	43
SO	5	2	4	11	45	18	36
WA	8	1	3	12	67	8	25
AI	4	6	2	12	33	50	17

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	20	10	12	42	48%	24%	29%
Lab: TK Kevin Wright, Kingston, TN							
AI	0	0	4	4	0	0	100
Totals:	0	0	4	4	0%	0%	100%
Lab: TM Thermo Nutech Albuquerque Lab, NM							
VE	6	1	0	7	86	14	0
AI	3	5	6	14	21	36	43
SO	4	3	5	12	33	25	42
WA	8	2	1	11	73	18	9
Totals:	21	11	12	44	48%	25%	27%
Lab: TN Thermo NuTech, Richmond, CA							
VE	4	3	0	7	57	43	0
SO	8	2	0	10	80	20	0
WA	12	1	1	14	86	7	7
AI	13	1	0	14	93	7	0
Totals:	37	7	1	45	82%	16%	2%
Lab: TO Thermo NUtech Oak Ridge Laboratory							
WA	6	6	2	14	43	43	14
AI	7	1	3	11	64	9	27
SO	6	1	1	8	75	13	13
VE	4	2	1	7	57	29	14
Totals:	23	10	7	40	57%	25%	18%
Lab: TP Taiwan Power Company, Taipei, Taiwan							
AI	7	0	0	7	100	0	0
SO	8	0	0	8	100	0	0
WA	3	3	0	6	50	50	0
VE	4	0	0	4	100	0	0
Totals:	22	3	0	25	88%	12%	0%
Lab: TQ Institute of Nuclear Energy Research, Taiwan							
AI	6	0	0	6	100	0	0
WA	4	2	0	6	67	33	0
VE	4	0	0	4	100	0	0
SO	5	2	0	7	71	29	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	19	4	0	23	83%	17%	0%
Lab: TR University of Istanbul, Turkey							
VE	2	0	1	3	67	0	33
SO	1	0	1	2	50	0	50
AI	5	0	0	5	100	0	0
Totals:	8	0	2	10	80%	0%	20%
Lab: TW Taiwan Radiation Monitoring Center							
VE	3	0	0	3	100	0	0
SO	5	2	0	7	71	29	0
WA	5	0	0	5	100	0	0
AI	5	0	0	5	100	0	0
Totals:	18	2	0	20	90%	10%	0%
Lab: TX Texas Dept. of Health/Laboratories, Austin							
VE	6	0	0	6	100	0	0
AI	11	1	0	12	92	8	0
WA	10	0	1	11	91	0	9
SO	11	0	0	11	100	0	0
Totals:	38	1	1	40	95%	3%	3%
Lab: TY Scientific Production Association, Russia							
VE	0	0	1	1	0	0	100
SO	2	2	0	4	50	50	0
Totals:	2	2	1	5	40%	40%	20%
Lab: UC United States Enrichment Corporation, Paducah, KY							
VE	0	0	2	2	0	0	100
SO	2	0	0	2	100	0	0
WA	5	0	0	5	100	0	0
AI	3	0	0	3	100	0	0
Totals:	10	0	2	12	83%	0%	17%
Lab: UP Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge							
SO	5	3	0	8	63	38	0
WA	11	2	0	13	85	15	0
AI	14	0	0	14	100	0	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	30	5	0	35	86%	14%	0%
Lab: US Interstate Nuclear Services, Springfield, MO							
WA	2	0	0	2	100	0	0
Totals:	2	0	0	2	100%	0%	0%
Lab: UY Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge							
SO	9	4	0	13	69	31	0
WA	11	1	0	12	92	8	0
VE	4	2	1	7	57	29	14
AI	14	0	0	14	100	0	0
Totals:	38	7	1	46	83%	15%	2%
Lab: WA Environmental Radiation Lab, Off. of Public Health Labs, Seattle							
VE	6	1	0	7	86	14	0
SO	5	1	8	14	36	7	57
WA	11	1	1	13	85	8	8
AI	11	2	1	14	79	14	7
Totals:	33	5	10	48	69%	10%	21%
Lab: WC Waste Management Federal Services of Hanford							
VE	3	1	2	6	50	17	33
SO	4	1	2	7	57	14	29
WA	10	1	0	11	91	9	0
AI	6	5	1	12	50	42	8
Totals:	23	8	5	36	64%	22%	14%
Lab: WE Westinghouse Electric Corp., Madison, PA							
WA	5	2	1	8	63	25	13
AI	2	6	0	8	25	75	0
VE	4	1	0	5	80	20	0
SO	5	6	0	11	45	55	0
Totals:	16	15	1	32	50%	47%	3%
Lab: WN State Health Radiation Protection Section, Madison, WI							
VE	2	7	3	12	17	58	25
SO	13	2	3	18	72	11	17
WA	6	0	0	6	100	0	0
AI	15	2	1	18	83	11	6

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	36	11	7	54	67%	20%	13%
Lab: WO Wisconsin State Lab of Hygiene							
VE	5	1	0	6	83	17	0
SO	7	5	2	14	50	36	14
WA	10	0	4	14	71	0	29
AI	7	7	0	14	50	50	0
Totals:	29	13	6	48	60%	27%	13%
Lab: WP Washington Public Power Supply System, Richland							
AI	1	4	0	5	20	80	0
VE	3	0	0	3	100	0	0
SO	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0
Totals:	9	4	0	13	69%	31%	0%
Lab: WS Weldon Springs Site, St Charles, MO							
SO	2	1	0	3	67	33	0
AI	1	0	0	1	100	0	0
Totals:	3	1	0	4	75%	25%	0%
Lab: WT Waste Stream Technology, Buffalo, NY							
SO	1	0	0	1	100	0	0
WA	2	0	1	3	67	0	33
AI	2	1	0	3	67	33	0
Totals:	5	1	1	7	71%	14%	14%
Lab: WV West Valley Nuclear Services							
WA	4	2	0	6	67	33	0
AI	7	0	0	7	100	0	0
WA	4	2	0	6	67	33	0
AI	7	0	0	7	100	0	0
Totals:	22	4	0	26	85%	15%	0%
Lab: YA Duke Engineering & Sciences Environmental Lab, Westboro, MA							
AI	11	2	0	13	85	15	0
VE	2	1	4	7	29	14	57
SO	4	2	0	6	67	33	0
WA	12	3	0	15	80	20	0

QAP 51 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	29	8	4	41	71%	20%	10%

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AG	17	0	0	17	100	0	0
AI	8	2	6	16	50	13	38
AM	7	1	5	13	54	8	38
AN	9	1	1	11	82	9	9
AR	12	2	1	15	80	13	7
AS	7	0	1	8	88	0	13
AT	7	0	0	7	100	0	0
AU	10	1	0	11	91	9	0
BA	5	0	0	5	100	0	0
BC	8	0	1	9	89	0	11
BE	11	3	0	14	79	21	0
BL	4	6	6	16	25	38	38
BM	8	0	0	8	100	0	0
BN	19	0	2	21	90	0	10
BP	9	1	0	10	90	10	0
BQ	6	2	0	8	75	25	0
BU	13	0	2	15	87	0	13
BX	10	2	1	13	77	15	8
CA	6	0	0	6	100	0	0
CB	12	18	0	30	40	60	0
CD	5	0	0	5	100	0	0
CH	10	5	0	15	67	33	0
CL	5	2	5	12	42	17	42
CN	5	0	1	6	83	0	17
CR	0	1	4	5	0	20	80
CS	4	1	0	5	80	20	0
CW	9	0	1	10	90	0	10
DH	4	3	0	7	57	43	0
EC	2	2	1	5	40	40	20
EG	10	2	0	12	83	17	0
EP	3	2	0	5	60	40	0
FG	5	2	1	8	63	25	13
FL	4	4	0	8	50	50	0
FM	1	4	1	6	17	67	17
FN	6	0	0	6	100	0	0
GA	11	1	0	12	92	8	0
GC	6	1	0	7	86	14	0
GD	3	0	2	5	60	0	40
GE	11	3	0	14	79	21	0
GP	11	2	1	14	79	14	7
GT	9	2	0	11	82	18	0
HC	1	1	0	2	50	50	0
HU	0	4	0	4	0	100	0
ID	3	6	2	11	27	55	18
IE	6	3	1	10	60	30	10
IL	7	0	0	7	100	0	0
IN	5	0	0	5	100	0	0
IS	11	2	1	14	79	14	7
IT	14	0	0	14	100	0	0
KA	2	0	0	2	100	0	0
KR	19	0	0	19	100	0	0
LB	5	2	0	7	71	29	0
LL	7	1	0	8	88	13	0
LN	6	0	0	6	100	0	0

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
LV	8	0	0	8	100	0	0
MA	4	2	0	6	67	33	0
ME	20	3	1	24	83	13	4
MH	3	4	0	7	43	57	0
ML	5	0	3	8	63	0	38
NA	7	1	1	9	78	11	11
ND	6	0	0	6	100	0	0
NJ	18	0	0	18	100	0	0
NL	9	1	0	10	90	10	0
NM	5	0	0	5	100	0	0
NP	6	0	0	6	100	0	0
NQ	6	1	0	7	86	14	0
NR	5	0	0	5	100	0	0
NS	5	0	0	5	100	0	0
NZ	11	2	0	13	85	15	0
OB	9	0	1	10	90	0	10
OC	6	1	0	7	86	14	0
OD	7	0	0	7	100	0	0
OH	7	0	0	7	100	0	0
OL	5	0	0	5	100	0	0
OS	10	0	0	10	100	0	0
OT	10	2	0	12	83	17	0
OU	4	2	0	6	67	33	0
PA	8	2	0	10	80	20	0
PK	3	1	0	4	75	25	0
PO	3	0	0	3	100	0	0
RA	4	6	4	14	29	43	29
RC	6	0	1	7	86	0	14
RE	11	1	1	13	85	8	8
RI	8	0	0	8	100	0	0
RK	1	1	0	2	50	50	0
RL	2	0	0	2	100	0	0
SA	9	1	0	10	90	10	0
SB	2	3	0	5	40	60	0
SE	6	3	0	9	67	33	0
SI	6	0	0	6	100	0	0
SN	4	0	0	4	100	0	0
SR	10	2	1	13	77	15	8
TE	10	1	2	13	77	8	15
TI	4	6	2	12	33	50	17
TK	0	0	4	4	0	0	100
TM	3	5	6	14	21	36	43
TN	13	1	0	14	93	7	0
TO	7	1	3	11	64	9	27
TP	7	0	0	7	100	0	0
TQ	6	0	0	6	100	0	0
TR	5	0	0	5	100	0	0
TW	5	0	0	5	100	0	0
TX	11	1	0	12	92	8	0
UC	3	0	0	3	100	0	0
UP	14	0	0	14	100	0	0
UY	14	0	0	14	100	0	0
WA	11	2	1	14	79	14	7
WC	6	5	1	12	50	42	8

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
WE	2	6	0	8	25	75	0
WN	15	2	1	18	83	11	6
WO	7	7	0	14	50	50	0
WP	1	4	0	5	20	80	0
WS	1	0	0	1	100	0	0
WT	2	1	0	3	67	33	0
WV	7	0	0	7	100	0	0
WV	7	0	0	7	100	0	0
YA	11	2	0	13	85	15	0
Totals							
117 Labs:	829	178	80	1087	76%	16%	7%

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AG	6	6	2	14	43	43	14
AI	9	6	12	27	33	22	44
AM	9	4	1	14	64	29	7
AN	6	1	0	7	86	14	0
AR	10	3	5	18	56	17	28
AS	6	2	1	9	67	22	11
AT	5	0	0	5	100	0	0
AU	10	2	1	13	77	15	8
BA	1	0	0	1	100	0	0
BC	0	2	3	5	0	40	60
BE	7	2	2	11	64	18	18
BL	9	4	2	15	60	27	13
BM	4	1	0	5	80	20	0
BN	12	7	2	21	57	33	10
BP	6	5	0	11	55	45	0
BQ	6	1	2	9	67	11	22
BU	12	1	0	13	92	8	0
BX	4	6	3	13	31	46	23
CA	1	0	0	1	100	0	0
CD	7	0	1	8	88	0	13
CF	7	2	0	9	78	22	0
CH	13	2	0	15	87	13	0
CL	7	5	2	14	50	36	14
CM	6	0	0	6	100	0	0
CN	6	1	0	7	86	14	0
CR	4	3	0	7	57	43	0
CS	2	0	0	2	100	0	0
CW	3	2	0	5	60	40	0
DH	2	0	0	2	100	0	0
EC	5	2	1	8	63	25	13
EG	7	1	0	8	88	13	0
FE	25	1	1	27	93	4	4
FG	9	3	2	14	64	21	14
FL	6	1	1	8	75	13	13
FN	4	0	0	4	100	0	0
FR	6	2	0	8	75	25	0
FS	5	1	0	6	83	17	0
GA	8	2	0	10	80	20	0
GC	3	0	0	3	100	0	0
GD	2	0	0	2	100	0	0
GE	10	4	0	14	71	29	0
GP	7	0	0	7	100	0	0
GT	5	1	0	6	83	17	0
HT	4	1	1	6	67	17	17
HU	5	1	0	6	83	17	0
ID	10	2	0	12	83	17	0
IE	1	2	7	10	10	20	70
IL	5	0	2	7	71	0	29
IN	8	2	0	10	80	20	0
IS	9	1	3	13	69	8	23
IT	8	4	1	13	62	31	8
KA	4	0	0	4	100	0	0
KR	13	0	1	14	93	0	7
LA	14	9	6	29	48	31	21

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
LB	1	2	0	3	33	67	0
LL	4	1	0	5	80	20	0
LV	7	1	1	9	78	11	11
LW	3	1	1	5	60	20	20
MA	8	0	0	8	100	0	0
ME	0	3	2	5	0	60	40
MH	8	0	0	8	100	0	0
ML	2	1	0	3	67	33	0
NA	5	3	0	8	63	38	0
NF	1	1	0	2	50	50	0
NJ	17	7	1	25	68	28	4
NL	9	2	0	11	82	18	0
NM	8	2	0	10	80	20	0
NQ	11	0	1	12	92	0	8
NR	1	0	0	1	100	0	0
NZ	2	4	2	8	25	50	25
OB	8	1	2	11	73	9	18
OC	6	1	1	8	75	13	13
OH	2	2	3	7	29	29	43
OL	2	0	0	2	100	0	0
OT	9	1	1	11	82	9	9
OU	8	2	0	10	80	20	0
PK	3	4	0	7	43	57	0
PO	6	0	0	6	100	0	0
RA	12	7	1	20	60	35	5
RC	2	0	0	2	100	0	0
RE	10	1	0	11	91	9	0
RI	1	0	1	2	50	0	50
RL	3	3	1	7	43	43	14
SA	3	0	0	3	100	0	0
SB	2	1	0	3	67	33	0
SE	5	1	0	6	83	17	0
SI	6	1	2	9	67	11	22
SN	8	1	0	9	89	11	0
SR	10	0	0	10	100	0	0
SY	8	1	0	9	89	11	0
TE	7	3	2	12	58	25	17
TI	5	2	4	11	45	18	36
TM	4	3	5	12	33	25	42
TN	8	2	0	10	80	20	0
TO	6	1	1	8	75	13	13
TP	8	0	0	8	100	0	0
TQ	5	2	0	7	71	29	0
TR	1	0	1	2	50	0	50
TW	5	2	0	7	71	29	0
TX	11	0	0	11	100	0	0
TY	2	2	0	4	50	50	0
UC	2	0	0	2	100	0	0
UP	5	3	0	8	63	38	0
UY	9	4	0	13	69	31	0
WA	5	1	8	14	36	7	57
WC	4	1	2	7	57	14	29
WE	5	6	0	11	45	55	0
WN	13	2	3	18	72	11	17

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
WO	7	5	2	14	50	36	14
WP	2	0	0	2	100	0	0
WS	2	1	0	3	67	33	0
WT	1	0	0	1	100	0	0
YA	4	2	0	6	67	33	0
<hr/>							
Totals							
113 Labs:	685	205	113	1003	68%	20%	11%

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: VE Vegetation**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AG	7	0	0	7	100	0	0
AI	6	4	5	15	40	27	33
AM	5	1	1	7	71	14	14
AR	8	2	1	11	73	18	9
AT	3	1	0	4	75	25	0
AU	6	0	0	6	100	0	0
BA	2	0	0	2	100	0	0
BC	2	2	0	4	50	50	0
BE	5	2	0	7	71	29	0
BL	6	0	0	6	100	0	0
BM	4	1	0	5	80	20	0
BN	6	3	0	9	67	33	0
BP	0	3	0	3	0	100	0
BQ	2	0	1	3	67	0	33
BU	5	2	0	7	71	29	0
BX	2	4	1	7	29	57	14
CA	1	0	0	1	100	0	0
CD	3	0	0	3	100	0	0
CF	4	2	0	6	67	33	0
CH	7	0	0	7	100	0	0
CL	3	3	1	7	43	43	14
CN	3	0	1	4	75	0	25
CR	3	0	0	3	100	0	0
CS	3	0	0	3	100	0	0
CW	6	0	0	6	100	0	0
EG	6	1	1	8	75	13	13
FE	8	0	0	8	100	0	0
FL	3	1	0	4	75	25	0
FN	2	1	0	3	67	33	0
FR	3	0	0	3	100	0	0
GA	2	4	0	6	33	67	0
GC	3	0	0	3	100	0	0
GD	1	0	1	2	50	0	50
GE	7	0	0	7	100	0	0
GP	7	1	0	8	88	13	0
GT	7	0	0	7	100	0	0
HU	2	1	0	3	67	33	0
ID	3	1	0	4	75	25	0
IE	1	0	2	3	33	0	67
IL	2	1	0	3	67	33	0
IN	3	0	0	3	100	0	0
IS	5	2	0	7	71	29	0
IT	7	0	0	7	100	0	0
KR	18	0	1	19	95	0	5
LA	17	1	0	18	94	6	0
LB	2	0	0	2	100	0	0
LL	3	3	1	7	43	43	14
LV	3	1	0	4	75	25	0
MA	4	0	0	4	100	0	0
ME	5	4	3	12	42	33	25
MH	4	0	0	4	100	0	0
ML	1	0	0	1	100	0	0
NA	2	3	0	5	40	60	0
NF	2	1	0	3	67	33	0

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: VE Vegetation**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
NJ	12	0	0	12	100	0	0
NR	2	0	0	2	100	0	0
NZ	6	0	2	8	75	0	25
OB	0	3	1	4	0	75	25
OC	3	0	0	3	100	0	0
OH	2	1	0	3	67	33	0
OL	3	0	0	3	100	0	0
OT	6	1	0	7	86	14	0
OU	2	1	0	3	67	33	0
PK	0	1	1	2	0	50	50
PO	4	0	0	4	100	0	0
RA	5	4	0	9	56	44	0
RE	7	0	0	7	100	0	0
RI	5	1	0	6	83	17	0
SB	3	0	0	3	100	0	0
SE	6	1	1	8	75	13	13
SI	4	0	0	4	100	0	0
SN	2	4	0	6	33	67	0
SR	6	1	0	7	86	14	0
SY	4	0	1	5	80	0	20
TE	6	0	0	6	100	0	0
TI	3	1	3	7	43	14	43
TM	6	1	0	7	86	14	0
TN	4	3	0	7	57	43	0
TO	4	2	1	7	57	29	14
TP	4	0	0	4	100	0	0
TQ	4	0	0	4	100	0	0
TR	2	0	1	3	67	0	33
TW	3	0	0	3	100	0	0
TX	6	0	0	6	100	0	0
TY	0	0	1	1	0	0	100
UC	0	0	2	2	0	0	100
UY	4	2	1	7	57	29	14
WA	6	1	0	7	86	14	0
WC	3	1	2	6	50	17	33
WE	4	1	0	5	80	20	0
WN	2	7	3	12	17	58	25
WO	5	1	0	6	83	17	0
WP	3	0	0	3	100	0	0
YA	2	1	4	7	29	14	57
Totals							
94 Labs:	388	95	44	527	74%	18%	8%

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: WAWater**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AC	1	1	0	2	50	50	0
AG	11	1	0	12	92	8	0
AI	4	2	17	23	17	9	74
AM	4	1	7	12	33	8	58
AN	9	0	0	9	100	0	0
AR	14	2	6	22	64	9	27
AS	5	2	0	7	71	29	0
AT	4	2	0	6	67	33	0
AU	9	2	0	11	82	18	0
BA	4	2	0	6	67	33	0
BC	4	3	1	8	50	38	13
BE	13	0	1	14	93	0	7
BL	9	3	2	14	64	21	14
BM	8	0	0	8	100	0	0
BN	15	1	2	18	83	6	11
BP	6	0	0	6	100	0	0
BQ	4	1	0	5	80	20	0
BU	13	0	1	14	93	0	7
BX	10	3	0	13	77	23	0
CA	4	0	2	6	67	0	33
CB	11	0	0	11	100	0	0
CD	3	1	0	4	75	25	0
CF	6	2	4	12	50	17	33
CH	10	3	0	13	77	23	0
CL	10	2	2	14	71	14	14
CM	3	1	1	5	60	20	20
CS	2	0	0	2	100	0	0
CW	7	0	0	7	100	0	0
DC	2	0	0	2	100	0	0
DH	4	0	0	4	100	0	0
EC	0	1	2	3	0	33	67
EG	10	3	0	13	77	23	0
EM	0	2	0	2	0	100	0
EP	3	0	0	3	100	0	0
FE	14	0	1	15	93	0	7
FG	9	1	2	12	75	8	17
FL	4	3	0	7	57	43	0
FM	3	0	0	3	100	0	0
FN	3	0	0	3	100	0	0
FR	2	0	0	2	100	0	0
GA	8	1	0	9	89	11	0
GC	5	0	0	5	100	0	0
GD	0	2	0	2	0	100	0
GE	14	0	0	14	100	0	0
GP	10	1	2	13	77	8	15
GS	0	2	0	2	0	100	0
GT	9	1	0	10	90	10	0
HC	3	0	0	3	100	0	0
HT	0	0	5	5	0	0	100
ID	3	1	0	4	75	25	0
IE	2	1	5	8	25	13	63
IL	3	1	0	4	75	25	0
IN	6	1	0	7	86	14	0
IS	9	3	0	12	75	25	0

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: WAWater**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
IT	13	0	0	13	100	0	0
KA	9	0	0	9	100	0	0
LA	23	4	0	27	85	15	0
LB	5	0	0	5	100	0	0
LL	4	0	2	6	67	0	33
LN	2	0	1	3	67	0	33
LV	4	1	1	6	67	17	17
LW	3	0	0	3	100	0	0
ME	8	4	0	12	67	33	0
MH	5	3	0	8	63	38	0
MJ	4	3	0	7	57	43	0
ML	7	0	0	7	100	0	0
NA	7	0	1	8	88	0	13
ND	2	0	0	2	100	0	0
NF	5	0	0	5	100	0	0
NJ	18	6	0	24	75	25	0
NL	7	0	0	7	100	0	0
NP	2	1	1	4	50	25	25
NQ	5	2	2	9	56	22	22
NR	2	0	0	2	100	0	0
NS	4	1	0	5	80	20	0
NZ	10	2	2	14	71	14	14
OB	2	3	3	8	25	38	38
OC	5	1	0	6	83	17	0
OD	8	1	0	9	89	11	0
OH	5	1	0	6	83	17	0
OK	1	0	0	1	100	0	0
OL	2	0	0	2	100	0	0
OS	6	0	0	6	100	0	0
OT	8	2	0	10	80	20	0
OU	5	4	1	10	50	40	10
PR	1	0	0	1	100	0	0
RC	3	0	0	3	100	0	0
RE	10	1	0	11	91	9	0
RG	2	0	0	2	100	0	0
RI	7	0	1	8	88	0	13
RL	3	1	1	5	60	20	20
SA	7	1	0	8	88	13	0
SB	3	0	0	3	100	0	0
SI	4	0	1	5	80	0	20
SL	3	0	0	3	100	0	0
SN	8	0	0	8	100	0	0
SR	10	1	0	11	91	9	0
ST	1	0	0	1	100	0	0
SY	4	3	0	7	57	43	0
TE	6	5	1	12	50	42	8
TI	8	1	3	12	67	8	25
TM	8	2	1	11	73	18	9
TN	12	1	1	14	86	7	7
TO	6	6	2	14	43	43	14
TP	3	3	0	6	50	50	0
TQ	4	2	0	6	67	33	0
TW	5	0	0	5	100	0	0
TX	10	0	1	11	91	0	9

QAP 51 Summary of Laboratory Evaluations by Matrix**Matrix: WAWater**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
UC	5	0	0	5	100	0	0
UP	11	2	0	13	85	15	0
US	2	0	0	2	100	0	0
UY	11	1	0	12	92	8	0
WA	11	1	1	13	85	8	8
WC	10	1	0	11	91	9	0
WE	5	2	1	8	63	25	13
WN	6	0	0	6	100	0	0
WO	10	0	4	14	71	0	29
WP	3	0	0	3	100	0	0
WT	2	0	1	3	67	0	33
WV	4	2	0	6	67	33	0
WV	4	2	0	6	67	33	0
YA	12	3	0	15	80	20	0
Totals							
122 Labs:	744	139	96	979	76%	14%	10%

QAP 51 Summary of Matrix Evaluations by Radionuclide**Matrix:** Air Filter

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
SR90	27	9	8	44	61	20	18
RU106	63	17	11	91	69	19	12
CO57	101	14	5	120	84	12	4
CS137	93	28	6	127	73	22	5
PU238	36	7	9	52	69	13	17
PU239	38	5	8	51	75	10	16
AM241	47	16	7	70	67	23	10
U234	31	5	2	38	82	13	5
U238	33	2	4	39	85	5	10
Bq U	13	0	2	15	87	0	13
UG/G U	14	3	2	19	74	16	11
GROSS ALPHA	77	8	2	87	89	9	2
GROSS BETA	78	8	1	87	90	9	1
MN54	93	23	5	121	77	19	4
CO60	86	33	8	127	68	26	6
Totals:	830	178	80	1088	76%	16%	7%

QAP 51 Summary of Matrix Evaluations by Radionuclide**Matrix:** Soil

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Bq U	18	3	2	23	78	13	9
SR90	29	10	10	49	59	20	20
TH234	33	9	10	52	63	17	19
U234	37	6	3	46	80	13	7
AM241	22	11	16	49	45	22	33
PU239	23	26	14	63	37	41	22
PU238	4	1	4	9	44	11	44
U238	41	8	1	50	82	16	2
AC228	68	11	3	82	83	13	4
BI212	50	8	3	61	82	13	5
PB212	58	18	7	83	70	22	8
PB214	48	24	11	83	58	29	13
K40	84	20	9	113	74	18	8
UG/G U	28	1	1	30	93	3	3
CS137	100	17	9	126	79	13	7
BI214	42	32	10	84	50	38	12
Totals:	685	205	113	1003	68%	20%	11%

QAP 51 Summary of Matrix Evaluations by Radionuclide**Matrix:** Vegetation

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
CO60	75	27	5	107	70	25	5
CM244	20	10	3	33	61	30	9
AM241	52	10	1	63	83	16	2
PU239	41	7	8	56	73	13	14
PU238	3	1	3	7	43	14	43
SR90	39	5	5	49	80	10	10
CS137	91	16	4	111	82	14	4
K40	67	19	15	101	66	19	15
Totals:	388	95	44	527	74%	18%	8%

QAP 51 Summary of Matrix Evaluations by Radionuclide**Matrix:** Water

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
SR90	36	26	14	76	47	34	18
CS137	119	6	5	130	92	5	4
PU238	44	11	6	61	72	18	10
PU239	52	4	7	63	83	6	11
AM241	54	8	7	69	78	12	10
U234	35	9	7	51	69	18	14
U238	36	10	7	53	68	19	13
Bq U	18	1	2	21	86	5	10
UG/G U	22	1	5	28	79	4	18
GROSS ALPHA	53	20	10	83	64	24	12
GROSS BETA	54	24	6	84	64	29	7
NI63	14	0	1	15	93	0	7
H3	69	12	11	92	75	13	12
FE55	17	0	2	19	89	0	11
CO60	117	5	6	128	91	4	5
Totals:	740	137	96	973	76%	14%	10%

QAP 51 EML Results**Environmental Measurements Laboratory, New York, NY**

Matrix	Radionuclide	EML Value	EML Error	
Air Filter	ug U	5.230	0.290	ug/filter
	Gross Alpha	2.770	0.260	Bq/filter
	241Am	0.127	0.010	Bq/filter
	238Pu	0.097	0.007	Bq/filter
	Bq U	0.133	0.008	Bq/filter
	238U	0.065	0.005	Bq/filter
	234U	0.066	0.003	Bq/filter
	137Cs	6.430	0.420	Bq/filter
	106Ru	5.500	1.760	Bq/filter
	90Sr	0.336	0.014	Bq/filter
	57Co	7.730	0.033	Bq/filter
	Gross Beta	2.660	0.260	Bq/filter
	54Mn	7.910	0.450	Bq/filter
	239Pu	0.136	0.011	Bq/filter
	60Co	6.350	0.410	Bq/filter

pCi/g or mL = Bq x 0.027

QAP 51 EML Results**Environmental Measurements Laboratory, New York, NY**

Matrix	Radionuclide	EML Value	EML Error	
Soil	90Sr	13.000	0.470	Bq/kg
	241Am	1.440	0.190	Bq/kg
	238Pu	0.320	0.130	Bq/kg
	212Bi	140.000	14.000	Bq/kg
	ug U	16.300	0.300	ug/g
	Bq U	401.000	8.700	Bq/kg
	238U	202.000	7.200	Bq/kg
	137Cs	204.000	5.000	Bq/kg
	40K	780.000	27.000	Bq/kg
	234Th	198.000	5.600	Bq/kg
	239Pu	3.200	0.500	Bq/kg
	228Ac	124.000	4.800	Bq/kg
	212Pb	127.000	4.800	Bq/kg
	214Pb	72.000	0.420	Bq/kg
	214Bi	69.500	1.800	Bq/kg
	234U	190.000	5.200	Bq/kg

pCi/g or mL = Bq x 0.027

QAP 51 EML Results

Environmental Measurements Laboratory, New York, NY

Matrix	Radionuclide	EML Value	EML Error	
Vegetation	90Sr	595.000	29.000	Bq/kg
	137Cs	440.000	20.000	Bq/kg
	238Pu	0.500	0.100	Bq/kg
	239Pu	4.300	0.460	Bq/kg
	241Am	2.880	0.220	Bq/kg
	244Cm	1.610	0.360	Bq/kg
	60Co	17.600	1.000	Bq/kg
	40K	513.000	20.000	Bq/kg

pCi/g or mL = Bq x 0.027

QAP 51 EML Results**Environmental Measurements Laboratory, New York, NY**

Matrix	Radionuclide	EML Value	EML Error	
Water	90Sr	1.720	0.100	Bq/L
	63Ni	114.000	10.000	Bq/L
	241Am	0.850	0.100	Bq/L
	239Pu	0.870	0.100	Bq/L
	238Pu	0.790	0.080	Bq/L
	ug U	0.030	0.010	ug/mL
	Bq U	0.760	0.040	Bq/L
	238U	0.360	0.020	Bq/L
	137Cs	76.000	3.400	Bq/L
	60Co	52.400	2.200	Bq/L
	55Fe	53.000	2.000	Bq/L
	3H	80.700	3.700	Bq/L
	Gross Beta	740.000	40.000	Bq/L
	Gross Alpha	1580.000	20.000	Bq/L
	234U	0.370	0.020	Bq/L

pCi/g or mL = Bq x 0.027

QAP 51 Results by Laboratory**Lab:** AC Analytical Chemistry Laboratory, Argonne National Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	GROSS ALPHA	1336.000	56.000	1580.000	20.000	0.846	A	W
1	GROSS BETA	999.000	37.000	740.000	40.000	1.350	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AG Paragon Analytics, Inc, Fort Collins, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.112	0.020	0.127	0.010	0.882	A	A
1	Bq U	0.153	0.021	0.133	0.008	1.150	A	A
2	CO57	7.400	1.200	7.730	0.033	0.957	A	A
1	CO57	7.500	1.200	7.730	0.033	0.970	A	A
2	CO60	6.500	1.100	6.350	0.410	1.024	A	A
1	CO60	6.200	1.000	6.350	0.410	0.976	A	A
1	CS137	6.200	1.000	6.430	0.420	0.964	A	A
2	CS137	6.800	1.100	6.430	0.420	1.058	A	A
2	MN54	8.400	1.400	7.910	0.450	1.062	A	
1	MN54	7.800	1.300	7.910	0.450	0.986	A	
1	PU238	0.099	0.019	0.097	0.007	1.023	A	A
1	PU239	0.136	0.023	0.136	0.011	1.000	A	A
1	RU106	5.400	1.300	5.500	1.760	0.982	A	
2	RU106	5.500	1.600	5.500	1.760	1.000	A	
1	SR90	0.346	0.070	0.336	0.014	1.030	A	A
1	U234	0.079	0.015	0.066	0.003	1.201	A	A
1	U238	0.065	0.013	0.065	0.005	1.006	A	A

Matrix: SO Soil Bq / kg

1	AC228	159.000	27.000	124.000	4.800	1.282	A	A
1	AM241	2.460	0.720	1.440	0.190	1.708	W	A
1	BI212	158.000	31.000	140.000	14.000	1.129	W	
1	BI214	87.000	15.000	69.500	1.800	1.252	W	A
1	Bq U	424.000	35.000	401.000	8.700	1.057	A	A
1	CS137	271.000	45.000	204.000	5.000	1.328	N	A
1	K40	1000.000	170.000	780.000	27.000	1.282	W	A
1	PB212	173.000	29.000	127.000	4.800	1.362	N	A
1	PB214	99.000	17.000	72.000	0.420	1.375	W	A
1	PU239	3.500	0.760	3.200	0.500	1.094	A	A
1	SR90	13.500	3.900	13.000	0.470	1.038	A	A
1	TH234	318.000	79.000	198.000	5.600	1.606	W	A
1	U234	207.000	25.000	190.000	5.200	1.089	A	A
1	U238	209.000	25.000	202.000	7.200	1.035	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.380	0.630	2.880	0.220	1.174	A	A
1	CM244	1.850	0.350	1.610	0.360	1.149	A	W
1	CO60	18.400	3.400	17.600	1.000	1.045	A	A
1	CS137	478.000	79.000	440.000	20.000	1.086	A	A
1	K40	514.000	95.000	513.000	20.000	1.002	A	A
1	PU239	3.870	0.680	4.300	0.460	0.900	A	A
1	SR90	614.000	111.000	595.000	29.000	1.032	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AG Paragon Analytics, Inc, Fort Collins, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	AM241	0.980	0.130	0.850	0.100	1.153	A	A
1	Bq U	0.860	0.110	0.760	0.040	1.132	A	A
1	CO60	50.800	8.400	52.400	2.200	0.969	A	A
1	CS137	80.000	14.000	76.000	3.400	1.053	A	A
1	FE55	39.100	8.300	53.000	2.000	0.738	A	A
1	H3	78.000	11.000	80.700	3.700	0.967	A	A
1	NI63	113.000	16.100	114.000	10.000	0.991	A	A
1	PU238	0.830	0.120	0.790	0.080	1.051	A	A
1	PU239	0.930	0.130	0.870	0.100	1.069	A	A
1	SR90	1.710	0.310	1.720	0.100	0.994	A	W
1	U234	0.469	0.083	0.370	0.020	1.268	W	A
1	U238	0.377	0.071	0.360	0.020	1.047	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AI Nuclear Technology Services, Inc., Roswell, GA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.125	0.004	0.127	0.010	0.984	A	A
1	CO57	6.480	0.048	7.730	0.033	0.838	A	
1	CO60	3.220	0.747	6.350	0.410	0.507	N	A
1	CS137	3.210	0.084	6.430	0.420	0.499	N	A
2	GROSS ALPHA	2.569		2.770	0.260	0.927	A	
1	GROSS ALPHA	3.030		2.770	0.260	1.094	A	
3	GROSS ALPHA	2.799		2.770	0.260	1.010	A	
3	GROSS BETA	2.809		2.660	0.260	1.056	A	
2	GROSS BETA	2.727		2.660	0.260	1.025	A	
1	GROSS BETA	2.891		2.660	0.260	1.087	A	
1	MN54	3.690	0.091	7.910	0.450	0.466	N	
1	PU238	2.370	0.014	0.097	0.007	24.483	N	A
1	PU239	3.430	0.019	0.136	0.011	25.221	N	A
1	RU106	3.520	0.595	5.500	1.760	0.640	W	
1	SR90	0.471		0.336	0.014	1.401	W	
1	UG/G U	0.147		5.230	0.290	0.028	N	

Matrix: SO Soil Bq / kg

3	AC228	176.000	6.460	124.000	4.800	1.419	W	A
1	AC228	149.000	13.100	124.000	4.800	1.202	A	A
2	AC228	176.000	6.460	124.000	4.800	1.419	W	A
2	BI214	1090.000	13.850	69.500	1.800	15.683	N	A
1	BI214	81.200	15.500	69.500	1.800	1.168	A	A
3	BI214	80.700	12.200	69.500	1.800	1.161	A	A
1	Bq U	399.000	20.000	401.000	8.700	0.995	A	A
2	Bq U	465.000	23.200	401.000	8.700	1.160	A	A
3	Bq U	432.000	23.200	401.000	8.700	1.077	A	A
1	CS137	261.000	9.470	204.000	5.000	1.279	W	A
2	CS137	292.000	4.700	204.000	5.000	1.431	N	A
3	CS137	292.000	4.700	204.000	5.000	1.431	N	A
2	K40	1040.000	80.400	780.000	27.000	1.333	W	A
3	K40	1040.000	80.400	780.000	27.000	1.333	W	A
1	K40	863.000	120.000	780.000	27.000	1.106	A	A
1	PB212	160.000	8.590	127.000	4.800	1.260	W	A
3	PB212	181.000	5.060	127.000	4.800	1.425	N	A
2	PB212	78.100	10.600	127.000	4.800	0.615	N	A
3	PB214	78.500	9.530	72.000	0.420	1.090	A	A
1	PB214	72.100		72.000	0.420	1.001	A	A
2	PB214	13.400		72.000	0.420	0.186	N	A
1	PU239	89.000		3.200	0.500	27.813	N	A
2	PU239	77.300		3.200	0.500	24.156	N	A
3	PU239	83.200		3.200	0.500	26.000	N	A
2	SR90	53.726		13.000	0.470	4.133	N	
1	SR90	56.490		13.000	0.470	4.345	N	
3	SR90	55.108		13.000	0.470	4.239	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AI Nuclear Technology Services, Inc., Roswell, GA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
2	AM241	3.490	0.327	2.880	0.220	1.212	A	A
3	AM241	3.670	0.317	2.880	0.220	1.274	A	A
1	AM241	2.150	0.230	2.880	0.220	0.747	W	A
3	CM244	2.320	0.311	1.610	0.360	1.441	W	N
1	CM244	0.354	0.099	1.610	0.360	0.220	N	N
2	CM244	2.430	0.344	1.610	0.360	1.509	W	N
1	CO60	13.800	1.290	17.600	1.000	0.784	W	N
1	CS137	347.000	4.710	440.000	20.000	0.789	N	A
1	K40	475.000	0.261	513.000	20.000	0.926	A	W
2	PU239	4.880	0.491	4.300	0.460	1.135	A	W
3	PU239	4.850	0.430	4.300	0.460	1.128	A	W
1	PU239	5.040		4.300	0.460	1.172	A	W
3	SR90	27.272		595.000	29.000	0.046	N	
2	SR90	30.646		595.000	29.000	0.052	N	
1	SR90	23.848		595.000	29.000	0.040	N	

Matrix: WA Water Bq / L

2	AM241	0.480	0.010	0.850	0.100	0.565	N	N
3	AM241	0.474	0.010	0.850	0.100	0.558	N	N
1	AM241	0.468	0.010	0.850	0.100	0.551	N	N
1	CO60	23.300	0.370	52.400	2.200	0.445	N	A
1	CS137	34.800	0.522	76.000	3.400	0.458	N	N
2	GROSS ALPHA	1266.000		1580.000	20.000	0.801	W	A
1	GROSS ALPHA	1586.000		1580.000	20.000	1.004	A	A
3	GROSS ALPHA	1426.000		1580.000	20.000	0.903	A	A
1	GROSS BETA	720.000		740.000	40.000	0.973	A	A
3	GROSS BETA	883.000		740.000	40.000	1.193	A	A
2	GROSS BETA	1046.000		740.000	40.000	1.414	W	A
2	H3	224.440		80.700	3.700	2.781	N	N
1	H3	184.960		80.700	3.700	2.292	N	N
3	H3	204.700		80.700	3.700	2.537	N	N
1	PU238	9.040	0.466	0.790	0.080	11.443	N	N
3	PU238	8.210	0.351	0.790	0.080	10.392	N	N
2	PU238	7.370	0.351	0.790	0.080	9.329	N	N
3	PU239	9.280	0.403	0.870	0.100	10.667	N	N
1	PU239	9.770	0.496	0.870	0.100	11.230	N	N
2	PU239	8.790	0.403	0.870	0.100	10.103	N	N
3	SR90	0.456		1.720	0.100	0.265	N	
2	SR90	0.468		1.720	0.100	0.272	N	
1	SR90	0.443		1.720	0.100	0.258	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AM American Radiation Services, Inc., Baton Rouge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.110	0.010	0.127	0.010	0.866	W	N
1	Bq U	0.100	0.020	0.133	0.008	0.752	N	W
1	CO57	7.270	0.060	7.730	0.033	0.940	A	
1	CO60	6.110	0.140	6.350	0.410	0.962	A	N
1	CS137	6.710	0.100	6.430	0.420	1.044	A	N
1	GROSS ALPHA	2.770	0.020	2.770	0.260	1.000	A	A
1	GROSS BETA	2.910	0.020	2.660	0.260	1.094	A	A
1	MN54	8.460	0.110	7.910	0.450	1.070	A	
1	PU238	0.070	0.020	0.097	0.007	0.723	N	N
1	PU239	0.100	0.020	0.136	0.011	0.735	N	W
1	SR90	0.090	0.020	0.336	0.014	0.268	N	A
1	U234	0.060	0.030	0.066	0.003	0.912	A	W
1	U238	0.040	0.010	0.065	0.005	0.619	N	W

Matrix: SO Soil Bq / kg

1	AC228	118.360	10.000	124.000	4.800	0.955	A	A
1	AM241	1.440	0.010	1.440	0.190	1.000	A	A
1	BI212	92.170	9.230	140.000	14.000	0.658	A	
1	BI214	74.580	7.420	69.500	1.800	1.073	A	A
1	Bq U	472.810	66.620	401.000	8.700	1.179	W	A
1	CS137	216.420	2.980	204.000	5.000	1.061	A	A
1	K40	877.700	30.020	780.000	27.000	1.125	A	A
1	PB212	140.980	11.360	127.000	4.800	1.110	A	A
1	PB214	92.400	9.240	72.000	0.420	1.283	W	A
1	PU239	3.330	0.730	3.200	0.500	1.041	A	W
1	SR90	90.000	10.000	13.000	0.470	6.923	N	A
1	TH234	235.430	10.000	198.000	5.600	1.189	A	A
1	U234	231.590	35.150	190.000	5.200	1.219	W	W
1	U238	241.210	31.450	202.000	7.200	1.194	W	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.590	0.180	2.880	0.220	1.247	A	N
1	CM244	1.800	1.000	1.610	0.360	1.118	A	
1	CO60	18.320	2.400	17.600	1.000	1.041	A	A
1	CS137	468.050	4.650	440.000	20.000	1.064	A	A
1	K40	516.790	5.200	513.000	20.000	1.007	A	A
1	PU239	3.130	0.250	4.300	0.460	0.728	W	W
1	SR90	207.180	12.250	595.000	29.000	0.348	N	A

Matrix: WA Water Bq / L

1	AM241	0.980	0.420	0.850	0.100	1.153	A	A
1	Bq U	0.230	0.040	0.760	0.040	0.303	N	A
1	CO60	53.300	0.560	52.400	2.200	1.017	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AM American Radiation Services, Inc., Baton Rouge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CS137	80.750	0.800	76.000	3.400	1.063	A	A
1	GROSS ALPHA	1471.320	16.920	1580.000	20.000	0.931	A	W
1	GROSS BETA	1282.230	14.110	740.000	40.000	1.733	N	A
1	H3	140.730	1.020	80.700	3.700	1.744	W	N
1	PU238	0.190	0.030	0.790	0.080	0.241	N	A
1	PU239	0.200	0.030	0.870	0.100	0.230	N	A
1	SR90	0.350	0.020	1.720	0.100	0.203	N	N
1	U234	0.100	0.020	0.370	0.020	0.270	N	A
1	U238	0.130	0.030	0.360	0.020	0.361	N	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AN Argonne National Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.130	0.010	0.127	0.010	1.024	A	A
1	CO57	8.030	0.210	7.730	0.033	1.039	A	A
1	CO60	7.230	0.420	6.350	0.410	1.139	W	W
1	CS137	6.450	0.450	6.430	0.420	1.003	A	A
1	MN54	8.100	0.450	7.910	0.450	1.024	A	A
1	PU238	0.100	0.010	0.097	0.007	1.033	A	A
1	PU239	0.140	0.010	0.136	0.011	1.029	A	A
1	RU106	8.250	2.960	5.500	1.760	1.500	N	
1	SR90	0.330	0.010	0.336	0.014	0.982	A	A
1	U234	0.070	0.010	0.066	0.003	1.064	A	A
1	U238	0.070	0.010	0.065	0.005	1.084	A	A

Matrix: SO Soil Bq / kg

1	AM241	1.850	0.180	1.440	0.190	1.285	A	A
1	CS137	261.000	32.000	204.000	5.000	1.279	W	A
1	K40	821.000	22.000	780.000	27.000	1.053	A	A
1	PU239	2.940	0.170	3.200	0.500	0.919	A	A
1	SR90	14.600	0.400	13.000	0.470	1.123	A	A
1	U234	168.000	6.000	190.000	5.200	0.884	A	A
1	U238	173.000	6.000	202.000	7.200	0.856	A	A

Matrix: WA Water Bq / L

1	AM241	0.940	0.030	0.850	0.100	1.106	A	A
1	CO60	54.000	1.400	52.400	2.200	1.031	A	A
1	CS137	76.400	0.900	76.000	3.400	1.005	A	A
1	H3	82.400	1.800	80.700	3.700	1.021	A	A
1	PU238	0.800	0.040	0.790	0.080	1.013	A	A
1	PU239	0.890	0.030	0.870	0.100	1.023	A	A
1	SR90	1.640	0.040	1.720	0.100	0.953	A	A
1	U234	0.390	0.010	0.370	0.020	1.054	A	A
1	U238	0.380	0.010	0.360	0.020	1.056	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AR Accu-Labs Research Inc., Golden, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.093	0.020	0.127	0.010	0.732	N	A
2	AM241	0.113	0.023	0.127	0.010	0.890	A	A
1	CO57	7.970	1.670	7.730	0.033	1.031	A	
1	CO60	6.540	1.410	6.350	0.410	1.030	A	A
1	CS137	6.700	1.430	6.430	0.420	1.042	A	A
1	GROSS ALPHA	3.530	0.099	2.770	0.260	1.274	A	W
1	GROSS BETA	2.840	0.065	2.660	0.260	1.068	A	A
1	MN54	8.560	1.800	7.910	0.450	1.082	A	
1	PU238	0.087	0.025	0.097	0.007	0.899	A	A
2	PU238	0.097	0.026	0.097	0.007	1.002	A	A
1	PU239	0.133	0.033	0.136	0.011	0.978	A	A
2	PU239	0.122	0.031	0.136	0.011	0.897	W	A
1	RU106	5.120	4.070	5.500	1.760	0.931	A	
2	SR90	0.493	0.127	0.336	0.014	1.467	W	A
1	SR90	0.416	0.127	0.336	0.014	1.238	A	A

Matrix: SO Soil Bq / kg

1	AC228	125.000	27.500	124.000	4.800	1.008	A	A
3	AM241	51.200	8.470	1.440	0.190	35.556	N	A
1	AM241	48.200	7.770	1.440	0.190	33.472	N	A
2	AM241	62.500	10.100	1.440	0.190	43.403	N	A
1	BI212	167.000	13.100	140.000	14.000	1.193	W	
1	BI214	70.500	6.180	69.500	1.800	1.014	A	A
1	CS137	225.000	11.700	204.000	5.000	1.103	A	A
1	K40	894.000	60.800	780.000	27.000	1.146	A	A
1	PB212	150.000	30.700	127.000	4.800	1.181	A	A
1	PB214	77.600	6.620	72.000	0.420	1.078	A	A
2	PU239	1.700	1.810	3.200	0.500	0.531	N	A
1	PU239	2.180	1.700	3.200	0.500	0.681	N	A
3	SR90	38.200	22.600	13.000	0.470	2.938	W	W
1	SR90	17.400	13.200	13.000	0.470	1.338	A	W
2	SR90	34.900	21.700	13.000	0.470	2.685	W	W
1	UG/G U	13.720	1.636	16.300	0.300	0.842	A	
3	UG/G U	12.720	1.519	16.300	0.300	0.780	A	
2	UG/G U	13.080	1.560	16.300	0.300	0.802	A	

Matrix: VE Vegetation Bq / kg

3	AM241	3.590	1.110	2.880	0.220	1.247	A	W
2	AM241	4.140	1.220	2.880	0.220	1.437	A	W
1	AM241	4.510	1.260	2.880	0.220	1.566	A	W
1	CO60	20.800	3.910	17.600	1.000	1.182	A	W
1	CS137	550.000	27.800	440.000	20.000	1.250	A	W
1	K40	861.000	62.800	513.000	20.000	1.678	N	W
1	PU239	3.330	1.220	4.300	0.460	0.774	W	W
2	PU239	3.660	1.370	4.300	0.460	0.851	W	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AR Accu-Labs Research Inc., Golden, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
3	PU239	4.510	1.630	4.300	0.460	1.049	A	W
1	SR90	634.000	85.200	595.000	29.000	1.066	A	A
2	SR90	595.000	80.900	595.000	29.000	1.000	A	A
Matrix: WA Water Bq / L								
2	AM241	1.080	0.180	0.850	0.100	1.271	W	W
3	AM241	1.020	0.194	0.850	0.100	1.200	A	W
1	AM241	0.872	0.152	0.850	0.100	1.026	A	W
1	CO60	82.700	6.000	52.400	2.200	1.578	N	N
1	CS137	124.000	8.940	76.000	3.400	1.632	N	N
1	GROSS ALPHA	1526.000	46.100	1580.000	20.000	0.966	A	A
1	GROSS BETA	903.100	26.340	740.000	40.000	1.220	A	A
2	H3	44.100	19.600	80.700	3.700	0.546	N	N
3	H3	43.900	19.600	80.700	3.700	0.544	N	N
1	H3	47.300	20.700	80.700	3.700	0.586	N	N
1	PU238	0.726	0.162	0.790	0.080	0.919	A	A
2	PU238	0.813	0.183	0.790	0.080	1.029	A	A
3	PU238	0.909	0.285	0.790	0.080	1.151	W	A
2	PU239	0.861	0.190	0.870	0.100	0.990	A	W
3	PU239	0.966	0.298	0.870	0.100	1.110	A	W
1	PU239	0.669	0.154	0.870	0.100	0.769	N	W
1	SR90	2.080	0.532	1.720	0.100	1.209	A	A
3	SR90	1.770	0.474	1.720	0.100	1.029	A	A
2	SR90	1.530	0.477	1.720	0.100	0.890	A	A
2	UG/G U	0.032	0.004	0.030	0.010	1.077	A	
1	UG/G U	0.032	0.004	0.030	0.010	1.083	A	
3	UG/G U	0.032	0.004	0.030	0.010	1.063	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AS USACHPPM, Aberdeen Proving Ground, MD

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.150	0.107	0.127	0.010	1.181	A	A
1	CO57	7.896	0.148	7.730	0.033	1.021	A	A
1	CO60	6.786	0.434	6.350	0.410	1.069	A	A
1	CS137	6.608	0.333	6.430	0.420	1.028	A	A
1	GROSS ALPHA	2.952	0.042	2.770	0.260	1.066	A	A
1	GROSS BETA	3.166	0.041	2.660	0.260	1.190	A	A
1	MN54	7.918	0.364	7.910	0.450	1.001	A	
1	RU106	7.507	1.665	5.500	1.760	1.365	N	
Matrix: SO Soil Bq / kg								
1	AC228	119.103	6.775	124.000	4.800	0.961	A	A
1	AM241	0.212	1.248	1.440	0.190	0.147	N	A
1	BI212	86.728	11.839	140.000	14.000	0.619	A	
1	BI214	67.636	3.647	69.500	1.800	0.973	A	A
1	CS137	193.399	3.307	204.000	5.000	0.948	A	A
1	K40	684.315	28.574	780.000	27.000	0.877	W	A
1	PB212	114.866	2.445	127.000	4.800	0.904	W	A
1	PB214	66.952	3.655	72.000	0.420	0.930	A	A
1	TH234	203.944	21.019	198.000	5.600	1.030	A	A
Matrix: WA Water Bq / L								
1	AM241	0.895	0.640	0.850	0.100	1.053	A	A
1	CO60	57.276	2.025	52.400	2.200	1.093	A	W
1	CS137	79.994	1.931	76.000	3.400	1.053	A	A
1	GROSS ALPHA	1254.744	53.717	1580.000	20.000	0.794	W	A
1	GROSS BETA	619.343	44.359	740.000	40.000	0.837	A	A
1	H3	85.232	5.006	80.700	3.700	1.056	A	A
1	SR90	1.450	0.092	1.720	0.100	0.843	W	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AT ATL International inc., Germantown, MD

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.154	0.092	0.127	0.010	1.213	A	
1	CO57	8.211	0.656	7.730	0.033	1.062	A	
1	CO60	6.925	0.520	6.350	0.410	1.091	A	
1	CS137	6.816	0.731	6.430	0.420	1.060	A	
1	GROSS ALPHA	2.614	0.123	2.770	0.260	0.944	A	A
1	GROSS BETA	3.068	0.106	2.660	0.260	1.153	A	A
1	MN54	8.381	0.950	7.910	0.450	1.060	A	
Matrix: SO Soil Bq / kg								
1	AC228	130.900	30.533	124.000	4.800	1.056	A	
1	AM241	1.729	0.909	1.440	0.190	1.201	A	A
1	CS137	215.467	19.233	204.000	5.000	1.056	A	A
1	K40	862.300	93.367	780.000	27.000	1.106	A	A
1	PB212	121.333	30.800	127.000	4.800	0.955	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	2.541	1.201	2.880	0.220	0.882	W	W
1	CO60	19.010	1.957	17.600	1.000	1.080	A	A
1	CS137	462.600	41.200	440.000	20.000	1.051	A	A
1	K40	541.000	63.433	513.000	20.000	1.055	A	A
Matrix: WA Water Bq / L								
1	AM241	1.183	0.367	0.850	0.100	1.392	W	A
1	CO60	54.323	3.567	52.400	2.200	1.037	A	A
1	CS137	78.943	8.317	76.000	3.400	1.039	A	A
1	GROSS ALPHA	1252.500	95.925	1580.000	20.000	0.793	W	A
1	GROSS BETA	932.000	70.450	740.000	40.000	1.259	A	A
1	H3	81.978	5.762	80.700	3.700	1.016	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AU ORISE RSAT/ESSAP, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.123	0.010	0.127	0.010	0.969	A	A
1	CO57	7.850	0.150	7.730	0.033	1.016	A	W
1	CO60	6.820	0.190	6.350	0.410	1.074	A	W
1	CS137	6.790	0.260	6.430	0.420	1.056	A	W
1	GROSS ALPHA	3.640	0.140	2.770	0.260	1.314	A	A
1	GROSS BETA	3.220	0.180	2.660	0.260	1.211	A	A
1	MN54	8.870	0.300	7.910	0.450	1.121	A	A
1	PU238	0.099	0.010	0.097	0.007	1.023	A	A
1	PU239	0.142	0.013	0.136	0.011	1.044	A	A
1	U234	0.059	0.008	0.066	0.003	0.897	W	A
1	U238	0.060	0.008	0.065	0.005	0.929	A	A

Matrix: SO Soil Bq / kg

1	AC228	148.000	17.000	124.000	4.800	1.194	A	A
1	AM241	3.660	0.850	1.440	0.190	2.542	N	A
1	BI212	140.000	24.000	140.000	14.000	1.000	A	
1	BI214	83.300	7.800	69.500	1.800	1.199	W	A
1	CS137	229.000	12.000	204.000	5.000	1.123	A	A
1	K40	840.000	49.000	780.000	27.000	1.077	A	A
1	PB212	145.000	15.000	127.000	4.800	1.142	A	A
1	PB214	82.900	9.300	72.000	0.420	1.151	A	A
1	PU239	2.740	0.730	3.200	0.500	0.856	W	N
1	SR90	16.300	2.900	13.000	0.470	1.254	A	A
1	TH234	254.000	29.000	198.000	5.600	1.283	A	A
1	U234	197.000	23.000	190.000	5.200	1.037	A	A
1	U238	203.000	24.000	202.000	7.200	1.005	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.080	0.550	2.880	0.220	1.069	A	A
1	CO60	20.000	2.000	17.600	1.000	1.136	A	A
1	CS137	479.000	23.000	440.000	20.000	1.089	A	A
1	K40	515.000	33.000	513.000	20.000	1.004	A	A
1	PU239	4.460	0.810	4.300	0.460	1.037	A	A
1	SR90	645.000	19.000	595.000	29.000	1.084	A	A

Matrix: WA Water Bq / L

1	AM241	0.914	0.120	0.850	0.100	1.075	A	A
1	CO60	55.100	1.500	52.400	2.200	1.052	A	A
1	CS137	79.000	4.000	76.000	3.400	1.039	A	A
1	GROSS ALPHA	1473.000	457.000	1580.000	20.000	0.932	A	A
1	GROSS BETA	959.000	304.000	740.000	40.000	1.296	A	A
1	H3	72.900	12.100	80.700	3.700	0.903	A	A
1	PU238	0.931	0.152	0.790	0.080	1.178	W	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** AU ORISE RSAT/ESSAP, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	PU239	0.925	0.146	0.870	0.100	1.063	A	N
1	SR90	1.640	0.190	1.720	0.100	0.953	A	W
1	U234	0.347	0.084	0.370	0.020	0.938	A	A
1	U238	0.433	0.101	0.360	0.020	1.203	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BA Bettis Atomic Power Lab, West Mifflin, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.690	0.600	7.730	0.033	0.995	A	A
1	CO60	6.350	0.700	6.350	0.410	1.000	A	A
1	CS137	6.700	1.000	6.430	0.420	1.042	A	A
1	MN54	8.610	1.400	7.910	0.450	1.088	A	
1	RU106	5.350	3.600	5.500	1.760	0.973	A	
Matrix: SO Soil Bq / kg								
1	CS137	218.000	36.000	204.000	5.000	1.069	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	17.700	4.200	17.600	1.000	1.006	A	A
1	CS137	468.000	56.000	440.000	20.000	1.064	A	A
Matrix: WA Water Bq / L								
1	CO60	57.000	2.400	52.400	2.200	1.088	A	A
1	CS137	86.100	13.400	76.000	3.400	1.133	A	A
1	PU238	0.670	0.220	0.790	0.080	0.848	W	N
1	PU239	0.834	0.260	0.870	0.100	0.959	A	N
1	U234	0.392	0.080	0.370	0.020	1.059	A	A
1	U238	0.442	0.090	0.360	0.020	1.228	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BC BWX Technologies, Inc, Naval Nuclear Fuel Division, Lynchburg, VA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.440	0.140	7.730	0.033	0.962	A	A
1	CO60	6.510	0.170	6.350	0.410	1.025	A	A
1	CS137	6.810	0.160	6.430	0.420	1.059	A	A
1	GROSS ALPHA	2.820	0.130	2.770	0.260	1.018	A	A
1	GROSS BETA	3.490	0.140	2.660	0.260	1.312	A	A
1	MN54	7.920	0.250	7.910	0.450	1.001	A	A
1	SR90	0.160	0.020	0.336	0.014	0.476	N	A
1	U234	0.090	0.020	0.066	0.003	1.368	A	A
1	U238	0.080	0.020	0.065	0.005	1.238	A	A

Matrix: SO Soil Bq / kg

1	CS137	146.000	9.000	204.000	5.000	0.716	N	A
1	K40	1440.000	123.000	780.000	27.000	1.846	N	A
1	SR90	7.810	0.110	13.000	0.470	0.601	N	N
1	U234	227.000	20.000	190.000	5.200	1.195	W	A
1	U238	233.000	20.000	202.000	7.200	1.153	W	W

Matrix: VE Vegetation Bq / kg

1	CO60	24.100	1.600	17.600	1.000	1.369	W	A
1	CS137	551.000	32.000	440.000	20.000	1.252	W	A
1	K40	593.000	38.000	513.000	20.000	1.156	A	A
1	SR90	505.000	24.000	595.000	29.000	0.849	A	A

Matrix: WA Water Bq / L

1	CO60	56.200	1.000	52.400	2.200	1.073	A	A
1	CS137	80.000	1.200	76.000	3.400	1.053	A	A
1	GROSS ALPHA	1269.000	51.000	1580.000	20.000	0.803	W	A
1	GROSS BETA	723.000	28.000	740.000	40.000	0.977	A	A
1	NI63	75.800	12.600	114.000	10.000	0.665	A	A
1	SR90	1.310	0.140	1.720	0.100	0.762	W	W
1	U234	0.500	0.070	0.370	0.020	1.351	W	W
1	U238	0.490	0.070	0.360	0.020	1.361	N	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BE RUST Geotech, Grand Junction, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.110	0.010	0.127	0.010	0.866	W	A
1	CO57	8.600	1.200	7.730	0.033	1.113	A	A
1	CO60	6.700	0.600	6.350	0.410	1.055	A	A
1	CS137	7.200	1.800	6.430	0.420	1.120	A	A
1	GROSS ALPHA	2.570	0.160	2.770	0.260	0.928	A	A
1	GROSS BETA	2.310	0.110	2.660	0.260	0.868	W	W
1	MN54	9.500	2.600	7.910	0.450	1.201	W	
1	PU238	0.087	0.011	0.097	0.007	0.899	A	A
1	PU239	0.129	0.014	0.136	0.011	0.949	A	A
1	RU106	5.200	1.200	5.500	1.760	0.945	A	
1	SR90	0.338	0.048	0.336	0.014	1.006	A	A
1	U234	0.064	0.009	0.066	0.003	0.973	A	A
1	U238	0.067	0.009	0.065	0.005	1.037	A	A
1	UG/G U	5.632		5.230	0.290	1.077	A	

Matrix: SO Soil Bq / kg

1	AM241	1.630	0.480	1.440	0.190	1.132	A	A
1	BI214	104.000	10.000	69.500	1.800	1.496	N	A
1	CS137	254.000	44.000	204.000	5.000	1.245	W	A
1	K40	1076.000	118.000	780.000	27.000	1.379	W	A
1	PB212	144.000	14.000	127.000	4.800	1.134	A	A
1	PB214	105.000	10.000	72.000	0.420	1.458	N	A
1	PU239	3.110	0.520	3.200	0.500	0.972	A	A
1	SR90	11.980	2.990	13.000	0.470	0.922	A	A
1	U234	197.200	15.800	190.000	5.200	1.038	A	A
1	U238	201.600	16.100	202.000	7.200	0.998	A	A
1	UG/G U	13.650		16.300	0.300	0.837	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.070	0.480	2.880	0.220	1.066	A	A
1	CM244	2.250	0.370	1.610	0.360	1.398	W	A
1	CO60	22.000	2.000	17.600	1.000	1.250	W	A
1	CS137	534.000	94.000	440.000	20.000	1.214	A	A
1	K40	633.000	76.000	513.000	20.000	1.234	A	A
1	PU239	4.740	0.590	4.300	0.460	1.102	A	A
1	SR90	600.000	34.000	595.000	29.000	1.008	A	A

Matrix: WA Water Bq / L

1	AM241	0.930	0.110	0.850	0.100	1.094	A	A
1	CO60	65.000	16.000	52.400	2.200	1.240	N	A
1	CS137	73.000	12.000	76.000	3.400	0.961	A	A
1	FE55	50.500	1.380	53.000	2.000	0.953	A	A
1	GROSS ALPHA	1367.000	114.000	1580.000	20.000	0.865	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BE RUST Geotech, Grand Junction, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	GROSS BETA	825.000	65.000	740.000	40.000	1.115	A	A
1	H3	97.700	11.000	80.700	3.700	1.211	A	A
1	NI63	109.820	2.520	114.000	10.000	0.963	A	A
1	PU238	0.800	0.080	0.790	0.080	1.013	A	A
1	PU239	0.890	0.090	0.870	0.100	1.023	A	A
1	SR90	1.610	0.230	1.720	0.100	0.936	A	A
1	U234	0.370	0.040	0.370	0.020	1.000	A	A
1	U238	0.360	0.040	0.360	0.020	1.000	A	A
1	UG/G U	0.031		0.030	0.010	1.023	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BL Barringer Laboratories Inc., Golden, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	Bq U	0.636	0.013	0.133	0.008	4.782	N	A
1	CO57	10.600	0.800	7.730	0.033	1.371	W	W
1	CO60	7.610	0.530	6.350	0.410	1.198	W	W
1	CS137	8.400	0.590	6.430	0.420	1.306	W	W
1	GROSS ALPHA	2.609	0.097	2.770	0.260	0.942	A	A
1	GROSS BETA	2.711	0.112	2.660	0.260	1.019	A	W
1	MN54	10.300	0.700	7.910	0.450	1.302	W	
1	PU238	0.194	0.073	0.097	0.007	2.004	N	A
2	PU238	0.122	0.010	0.097	0.007	1.260	W	A
1	PU239	0.130	0.010	0.136	0.011	0.956	A	W
1	RU106	7.180	0.590	5.500	1.760	1.305	N	
1	SR90	0.287	0.315	0.336	0.014	0.854	A	W
2	SR90	0.451	1.221	0.336	0.014	1.342	W	W
1	U234	0.318	0.006	0.066	0.003	4.833	N	A
1	U238	0.318	0.006	0.065	0.005	4.923	N	A
1	UG/G U	25.410	0.514	5.230	0.290	4.859	N	

Matrix: SO Soil Bq / kg

1	AC228	135.500	11.500	124.000	4.800	1.093	A	A
1	BI212	142.000	13.000	140.000	14.000	1.014	A	
1	BI214	78.700	6.500	69.500	1.800	1.132	A	A
1	Bq U	541.000	11.000	401.000	8.700	1.349	W	A
1	CS137	229.000	16.000	204.000	5.000	1.123	A	A
1	K40	850.000	62.000	780.000	27.000	1.090	A	A
1	PB212	147.000	12.000	127.000	4.800	1.157	A	A
1	PB214	84.700	6.500	72.000	0.420	1.176	A	A
2	PU239	2.523	0.227	3.200	0.500	0.788	W	A
1	PU239	2.709	0.225	3.200	0.500	0.847	W	A
1	SR90	2.980	3.770	13.000	0.470	0.229	N	A
1	TH234	269.000	23.000	198.000	5.600	1.359	A	A
1	U234	271.000	6.000	190.000	5.200	1.426	N	A
1	U238	271.000	6.000	202.000	7.200	1.342	W	A
1	UG/G U	14.650	0.300	16.300	0.300	0.899	A	

Matrix: VE Vegetation Bq / kg

1	CO60	16.400	1.500	17.600	1.000	0.932	A	A
1	CS137	450.000	31.000	440.000	20.000	1.023	A	A
1	K40	484.000	37.000	513.000	20.000	0.943	A	A
2	PU239	4.688	0.224	4.300	0.460	1.090	A	A
1	PU239	4.325	0.236	4.300	0.460	1.006	A	A
1	SR90	577.000	15.000	595.000	29.000	0.970	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BL Barringer Laboratories Inc., Golden, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	Bq U	0.903	0.019	0.760	0.040	1.188	A	A
1	CO60	52.400	3.200	52.400	2.200	1.000	A	A
1	CS137	76.500	4.700	76.000	3.400	1.007	A	A
1	FE55	44.500	9.600	53.000	2.000	0.840	A	A
1	GROSS ALPHA	1306.000	38.000	1580.000	20.000	0.827	W	A
1	GROSS BETA	622.000	33.000	740.000	40.000	0.841	A	A
1	H3	91.300	8.500	80.700	3.700	1.131	A	W
1	NI63	66.500	6.400	114.000	10.000	0.583	A	A
1	PU238	0.906	0.068	0.790	0.080	1.147	W	A
1	PU239	0.877	0.066	0.870	0.100	1.008	A	A
1	SR90	1.290	0.680	1.720	0.100	0.750	N	A
1	U234	0.451	0.009	0.370	0.020	1.219	A	A
1	U238	0.451	0.009	0.360	0.020	1.253	W	A
1	UG/G U	24.400	0.500	0.030	0.010	813.333	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BM Battelle Memorial Institute, Columbus, OH

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.118	0.017	0.127	0.010	0.929	A	A
1	CO60	6.520	0.350	6.350	0.410	1.027	A	W
1	CS137	6.690	0.300	6.430	0.420	1.040	A	A
1	PU238	0.095	0.009	0.097	0.007	0.978	A	W
1	PU239	0.139	0.013	0.136	0.011	1.022	A	W
1	SR90	0.320	0.016	0.336	0.014	0.952	A	A
1	U234	0.066	0.009	0.066	0.003	1.005	A	A
1	U238	0.067	0.009	0.065	0.005	1.043	A	A

Matrix: SO Soil Bq / kg

1	CS137	205.000	3.020	204.000	5.000	1.005	A	A
1	PU239	2.700	0.320	3.200	0.500	0.844	W	A
1	SR90	10.930	1.200	13.000	0.470	0.841	A	A
1	U234	191.000	28.400	190.000	5.200	1.005	A	A
1	U238	191.400	28.400	202.000	7.200	0.948	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.540	0.740	2.880	0.220	1.229	A	W
1	CO60	18.100	1.400	17.600	1.000	1.028	A	A
1	CS137	442.000	5.800	440.000	20.000	1.005	A	A
1	PU239	4.870	0.550	4.300	0.460	1.133	A	A
1	SR90	775.000	22.800	595.000	29.000	1.303	W	A

Matrix: WA Water Bq / L

1	AM241	0.914	0.132	0.850	0.100	1.075	A	A
1	CO60	56.200	4.390	52.400	2.200	1.073	A	A
1	CS137	84.600	4.330	76.000	3.400	1.113	A	A
1	PU238	0.829	0.098	0.790	0.080	1.049	A	W
1	PU239	0.906	0.110	0.870	0.100	1.041	A	A
1	SR90	1.570	0.200	1.720	0.100	0.913	A	W
1	U234	0.410	0.066	0.370	0.020	1.108	A	A
1	U238	0.413	0.066	0.360	0.020	1.147	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BN Brookhaven National Laboratory, Upton, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
2	CO57	7.100	0.600	7.730	0.033	0.918	A	N
3	CO57	8.500	0.800	7.730	0.033	1.100	A	N
1	CO57	6.900	0.600	7.730	0.033	0.893	A	N
2	CO60	4.600	0.300	6.350	0.410	0.724	N	W
3	CO60	5.600	0.400	6.350	0.410	0.882	A	W
1	CO60	4.300	0.300	6.350	0.410	0.677	N	W
1	CS137	6.400	0.600	6.430	0.420	0.995	A	N
3	CS137	7.300	0.900	6.430	0.420	1.135	A	N
2	CS137	6.600	0.600	6.430	0.420	1.026	A	N
3	GROSS ALPHA	2.400	0.100	2.770	0.260	0.866	A	A
2	GROSS ALPHA	2.400	0.100	2.770	0.260	0.866	A	A
1	GROSS ALPHA	2.300	0.100	2.770	0.260	0.830	A	A
1	GROSS BETA	2.500	0.100	2.660	0.260	0.940	A	W
2	GROSS BETA	2.400	0.100	2.660	0.260	0.902	A	W
3	GROSS BETA	2.400	0.100	2.660	0.260	0.902	A	W
1	MN54	7.200	0.600	7.910	0.450	0.910	A	
3	MN54	9.300	0.800	7.910	0.450	1.176	A	
2	MN54	7.700	0.700	7.910	0.450	0.973	A	
2	RU106	4.500	0.700	5.500	1.760	0.818	A	
1	RU106	4.400	0.700	5.500	1.760	0.800	A	
3	RU106	5.000	0.900	5.500	1.760	0.909	A	

Matrix: SO Soil Bq / kg

1	AC228	95.500	3.800	124.000	4.800	0.770	N	A
3	AC228	101.400	3.600	124.000	4.800	0.818	W	A
2	AC228	96.600	3.900	124.000	4.800	0.779	N	A
3	BI212	72.900	5.400	140.000	14.000	0.521	A	
2	BI212	69.600	5.700	140.000	14.000	0.497	W	
1	BI212	69.200	5.900	140.000	14.000	0.494	W	
1	BI214	73.600	3.200	69.500	1.800	1.059	A	A
2	BI214	77.000	3.100	69.500	1.800	1.108	A	A
3	BI214	74.700	3.000	69.500	1.800	1.075	A	A
2	CS137	191.300	16.000	204.000	5.000	0.938	A	A
1	CS137	178.700	15.200	204.000	5.000	0.876	W	A
3	CS137	200.200	16.700	204.000	5.000	0.981	A	A
1	K40	643.800	51.600	780.000	27.000	0.825	W	W
2	K40	662.300	52.500	780.000	27.000	0.849	W	W
3	K40	703.000	55.700	780.000	27.000	0.901	A	W
2	PB212	118.400	7.300	127.000	4.800	0.932	A	A
3	PB212	125.100	7.600	127.000	4.800	0.985	A	A
1	PB212	111.000	7.300	127.000	4.800	0.874	W	A
2	PB214	80.300	6.300	72.000	0.420	1.115	A	A
1	PB214	73.300	5.900	72.000	0.420	1.018	A	A
3	PB214	85.500	6.600	72.000	0.420	1.188	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BN Brookhaven National Laboratory, Upton, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
1	CO60	15.500	1.300	17.600	1.000	0.881	A	A
2	CO60	15.200	1.000	17.600	1.000	0.864	A	A
3	CO60	16.400	1.400	17.600	1.000	0.932	A	A
2	CS137	440.300	37.600	440.000	20.000	1.001	A	A
3	CS137	469.900	52.700	440.000	20.000	1.068	A	A
1	CS137	421.800	50.400	440.000	20.000	0.959	A	A
1	K40	418.100	45.100	513.000	20.000	0.815	W	W
3	K40	436.600	46.300	513.000	20.000	0.851	W	W
2	K40	455.100	37.000	513.000	20.000	0.887	W	W

Matrix: WA Water Bq / L

1	CO60	53.700	2.100	52.400	2.200	1.025	A	A
2	CO60	53.300	2.100	52.400	2.200	1.017	A	A
3	CO60	54.800	2.100	52.400	2.200	1.046	A	A
1	CS137	75.900	4.100	76.000	3.400	0.999	A	A
3	CS137	78.800	4.200	76.000	3.400	1.037	A	A
2	CS137	78.100	4.400	76.000	3.400	1.028	A	A
3	GROSS ALPHA	1613.300	83.100	1580.000	20.000	1.021	A	A
2	GROSS ALPHA	1612.200	83.100	1580.000	20.000	1.020	A	A
1	GROSS ALPHA	1481.600	79.700	1580.000	20.000	0.938	A	A
3	GROSS BETA	700.300	48.300	740.000	40.000	0.946	A	A
2	GROSS BETA	690.600	48.000	740.000	40.000	0.933	A	A
1	GROSS BETA	716.700	48.800	740.000	40.000	0.969	A	A
3	H3	72.100	16.600	80.700	3.700	0.893	A	W
2	H3	92.000	18.600	80.700	3.700	1.140	A	W
1	H3	69.200	16.400	80.700	3.700	0.857	A	W
3	SR90	1.300	0.100	1.720	0.100	0.756	W	N
1	SR90	1.200	0.100	1.720	0.100	0.698	N	N
2	SR90	1.200	0.100	1.720	0.100	0.698	N	N

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BP Battelle Pacific Northwest National Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.112	0.005	0.127	0.010	0.882	A	
1	CO57	7.400	0.200	7.730	0.033	0.957	A	
1	CO60	6.500	0.200	6.350	0.410	1.024	A	
1	CS137	6.500	0.500	6.430	0.420	1.011	A	
1	GROSS ALPHA	2.840	0.210	2.770	0.260	1.025	A	
1	GROSS BETA	2.860	0.100	2.660	0.260	1.075	A	
1	MN54	8.100	0.400	7.910	0.450	1.024	A	
1	PU238	0.092	0.008	0.097	0.007	0.950	A	
1	PU239	0.130	0.020	0.136	0.011	0.956	A	
1	UG/G U	3.900	0.300	5.230	0.290	0.746	W	
Matrix: SO Soil Bq / kg								
1	AC228	112.000	5.000	124.000	4.800	0.903	A	
1	AM241	1.900	0.400	1.440	0.190	1.319	A	
1	BI212	130.000	5.000	140.000	14.000	0.929	A	
1	BI214	63.000	6.000	69.500	1.800	0.906	A	
1	CS137	179.000	8.000	204.000	5.000	0.877	W	
1	K40	738.000	64.000	780.000	27.000	0.946	A	
1	PB212	112.000	4.000	127.000	4.800	0.882	W	
1	PB214	63.000	4.000	72.000	0.420	0.875	W	
1	PU239	4.200	0.500	3.200	0.500	1.312	W	
1	TH234	156.000	19.000	198.000	5.600	0.788	W	
1	UG/G U	15.600	1.000	16.300	0.300	0.957	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	14.900	0.400	17.600	1.000	0.847	W	
1	CS137	377.000	8.000	440.000	20.000	0.857	W	
1	K40	438.000	12.000	513.000	20.000	0.854	W	
Matrix: WA Water Bq / L								
1	AM241	0.870	0.040	0.850	0.100	1.024	A	
1	CO60	52.000	1.000	52.400	2.200	0.992	A	
1	CS137	77.000	2.000	76.000	3.400	1.013	A	
1	PU238	0.800	0.080	0.790	0.080	1.013	A	
1	PU239	0.870	0.080	0.870	0.100	1.000	A	
1	UG/G U	0.028	0.003	0.030	0.010	0.933	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BQ Becquerel Laboratories Inc., Mississauga, Ontario, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.060	0.030	7.730	0.033	0.913	A	
1	CO60	6.600	0.100	6.350	0.410	1.039	A	A
1	CS137	7.470	0.080	6.430	0.420	1.162	W	A
1	GROSS ALPHA	2.900	0.040	2.770	0.260	1.047	A	A
1	GROSS BETA	2.980	0.030	2.660	0.260	1.120	A	W
1	MN54	8.040	0.090	7.910	0.450	1.016	A	
1	RU106	6.900	0.400	5.500	1.760	1.255	W	
1	UG/G U	4.700	0.100	5.230	0.290	0.899	A	

Matrix: SO Soil Bq / kg

1	AC228	171.000	15.000	124.000	4.800	1.379	W	A
1	BI212	150.000	36.000	140.000	14.000	1.071	A	
1	BI214	111.000	8.000	69.500	1.800	1.597	N	A
1	CS137	224.000	6.000	204.000	5.000	1.098	A	A
1	K40	960.000	100.000	780.000	27.000	1.231	A	A
1	PB212	132.000	4.000	127.000	4.800	1.039	A	A
1	PB214	124.000	9.000	72.000	0.420	1.722	N	A
1	TH234	180.000	27.000	198.000	5.600	0.909	A	A
1	UG/G U	14.500	0.300	16.300	0.300	0.890	A	W

Matrix: VE Vegetation Bq / kg

1	CO60	64.000	9.000	17.600	1.000	3.636	N	N
1	CS137	509.000	10.000	440.000	20.000	1.157	A	A
1	K40	580.000	120.000	513.000	20.000	1.131	A	W

Matrix: WA Water Bq / L

1	CO60	54.000	2.000	52.400	2.200	1.031	A	W
1	CS137	69.000	1.000	76.000	3.400	0.908	A	A
1	GROSS ALPHA	1300.000	33.000	1580.000	20.000	0.823	W	A
1	GROSS BETA	970.000	22.000	740.000	40.000	1.311	A	A
1	UG/G U	0.032	0.001	0.030	0.010	1.067	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BU Autoridad Regulatoria, Buenos Aires, Argentina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.118	0.006	0.127	0.010	0.929	A	A
1	Bq U	0.125	0.006	0.133	0.008	0.940	A	A
1	CO57	7.200	0.400	7.730	0.033	0.931	A	A
1	CO60	6.200	0.300	6.350	0.410	0.976	A	A
1	CS137	6.400	0.300	6.430	0.420	0.995	A	A
2	GROSS ALPHA	2.630	0.090	2.770	0.260	0.949	A	A
1	GROSS ALPHA	2.690	0.080	2.770	0.260	0.971	A	A
1	GROSS BETA	2.700	0.200	2.660	0.260	1.015	A	A
1	MN54	8.200	1.200	7.910	0.450	1.037	A	
1	PU238	0.044	0.004	0.097	0.007	0.455	N	W
1	PU239	0.077	0.004	0.136	0.011	0.566	N	A
1	RU106	4.400	0.600	5.500	1.760	0.800	A	
1	U234	0.060	0.003	0.066	0.003	0.912	A	A
1	U238	0.060	0.003	0.065	0.005	0.929	A	A
1	UG/G U	4.900	0.400	5.230	0.290	0.937	A	

Matrix: SO Soil Bq / kg

1	AC228	120.000	25.000	124.000	4.800	0.968	A	A
1	AM241	2.510	0.250	1.440	0.190	1.743	W	
1	BI212	120.000	10.000	140.000	14.000	0.857	A	
1	BI214	76.000	8.000	69.500	1.800	1.094	A	A
1	Bq U	374.000	19.000	401.000	8.700	0.933	A	A
1	CS137	190.000	10.000	204.000	5.000	0.931	A	W
1	K40	780.000	80.000	780.000	27.000	1.000	A	A
1	PB212	120.000	10.000	127.000	4.800	0.945	A	A
1	PB214	77.000	8.000	72.000	0.420	1.069	A	A
1	PU239	3.600	0.400	3.200	0.500	1.125	A	A
1	U234	176.000	11.000	190.000	5.200	0.926	A	A
1	U238	180.000	14.000	202.000	7.200	0.891	A	A
1	UG/G U	15.500	2.000	16.300	0.300	0.951	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.260	0.160	2.880	0.220	1.132	A	A
1	CM244	1.950	0.100	1.610	0.360	1.211	A	W
1	CO60	17.000	1.000	17.600	1.000	0.966	A	A
1	CS137	390.000	20.000	440.000	20.000	0.886	W	A
1	K40	460.000	50.000	513.000	20.000	0.897	W	A
1	PU239	4.500	0.500	4.300	0.460	1.047	A	W
1	SR90	623.000	62.000	595.000	29.000	1.047	A	W

Matrix: WA Water Bq / L

1	AM241	1.000	0.090	0.850	0.100	1.176	A	A
1	Bq U	0.890	0.050	0.760	0.040	1.171	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BU Autoridad Regulatoria, Buenos Aires, Argentina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CO60	55.000	3.000	52.400	2.200	1.050	A	A
1	CS137	73.000	7.000	76.000	3.400	0.961	A	A
1	FE55	48.000	4.000	53.000	2.000	0.906	A	A
1	GROSS ALPHA	1390.000	80.000	1580.000	20.000	0.880	A	A
2	GROSS ALPHA	1430.000	100.000	1580.000	20.000	0.905	A	A
1	GROSS BETA	840.000	80.000	740.000	40.000	1.135	A	A
1	H3	77.050	1.460	80.700	3.700	0.955	A	A
1	PU238	0.760	0.070	0.790	0.080	0.962	A	A
1	PU239	0.880	0.050	0.870	0.100	1.011	A	A
1	U234	0.420	0.030	0.370	0.020	1.135	A	A
1	U238	0.390	0.030	0.360	0.020	1.083	A	A
1	UG/G U	0.040	0.005	0.030	0.010	1.333	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BX B&W Nuclear Envir. Services, Lynchburg, VA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.190	0.050	0.127	0.010	1.496	W	A
1	CO57	7.620	0.190	7.730	0.033	0.986	A	A
1	CO60	6.810	0.280	6.350	0.410	1.072	A	A
1	CS137	6.880	0.370	6.430	0.420	1.070	A	A
1	GROSS ALPHA	2.830	0.130	2.770	0.260	1.022	A	A
1	GROSS BETA	3.390	0.140	2.660	0.260	1.274	A	A
1	MN54	7.810	0.640	7.910	0.450	0.987	A	A
1	PU238	0.080	0.020	0.097	0.007	0.826	W	A
1	PU239	0.130	0.020	0.136	0.011	0.956	A	A
1	RU106	5.620	1.440	5.500	1.760	1.022	A	A
1	SR90	0.120	0.010	0.336	0.014	0.357	N	A
1	U234	0.090	0.020	0.066	0.003	1.368	A	W
1	U238	0.070	0.020	0.065	0.005	1.084	A	A

Matrix: SO Soil Bq / kg

1	AC228	163.000	12.000	124.000	4.800	1.315	W	A
1	AM241	8.510	4.810	1.440	0.190	5.910	N	W
1	BI212	92.100		140.000	14.000	0.658	A	A
1	BI214	81.800	3.700	69.500	1.800	1.177	A	A
1	CS137	279.000	7.000	204.000	5.000	1.368	N	A
1	K40	1267.000	3.000	780.000	27.000	1.624	N	A
1	PB212	164.000	9.000	127.000	4.800	1.291	W	A
1	PB214	81.400	4.100	72.000	0.420	1.131	A	A
1	PU239	4.440	1.850	3.200	0.500	1.388	W	N
1	SR90	32.300	5.100	13.000	0.470	2.485	W	N
1	TH234	206.000	155.000	198.000	5.600	1.040	A	A
1	U234	217.000	13.000	190.000	5.200	1.142	W	A
1	U238	233.000	14.000	202.000	7.200	1.153	W	A

Matrix: VE Vegetation Bq / kg

1	AM241	4.440	2.960	2.880	0.220	1.542	A	N
1	CM244	3.330	2.220	1.610	0.360	2.068	N	N
1	CO60	22.400	1.600	17.600	1.000	1.273	W	A
1	CS137	581.000	30.000	440.000	20.000	1.320	W	A
1	K40	638.000	40.000	513.000	20.000	1.244	W	A
1	PU239	3.330	1.110	4.300	0.460	0.774	W	N
1	SR90	515.000	18.000	595.000	29.000	0.866	A	A

Matrix: WA Water Bq / L

1	AM241	1.100	0.230	0.850	0.100	1.294	W	A
1	CO60	55.500	1.800	52.400	2.200	1.059	A	A
1	CS137	77.700	1.200	76.000	3.400	1.022	A	A
1	FE55	49.600	8.500	53.000	2.000	0.936	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** BX B&W Nuclear Envir. Services, Lynchburg, VA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	GROSS ALPHA	1520.000	58.000	1580.000	20.000	0.962	A	A
1	GROSS BETA	836.000	31.000	740.000	40.000	1.130	A	A
1	H3	127.900	11.700	80.700	3.700	1.585	W	A
1	NI63	99.500	16.600	114.000	10.000	0.873	A	A
1	PU238	0.870	0.090	0.790	0.080	1.101	A	A
1	PU239	0.960	0.100	0.870	0.100	1.103	A	A
1	SR90	2.030	0.210	1.720	0.100	1.180	A	W
1	U234	0.330	0.070	0.370	0.020	0.892	W	A
1	U238	0.420	0.060	0.360	0.020	1.167	A	N

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CA Atomic Energy Control Board, Ottawa, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.200	0.800	7.730	0.033	1.061	A	A
1	CO60	6.900	0.700	6.350	0.410	1.087	A	A
1	CS137	6.600	0.700	6.430	0.420	1.026	A	A
1	GROSS ALPHA	2.600	0.300	2.770	0.260	0.939	A	A
1	GROSS BETA	3.400	0.300	2.660	0.260	1.278	A	A
1	MN54	8.800	0.900	7.910	0.450	1.113	A	
Matrix: SO Soil Bq / kg								
1	UG/G U	17.900	1.800	16.300	0.300	1.098	A	
Matrix: VE Vegetation Bq / kg								
1	CS137	464.000	46.000	440.000	20.000	1.055	A	
Matrix: WA Water Bq / L								
1	CO60	53.700	5.400	52.400	2.200	1.025	A	A
1	CS137	80.100	8.000	76.000	3.400	1.054	A	A
1	GROSS ALPHA	811.000	81.000	1580.000	20.000	0.513	N	N
1	GROSS BETA	588.000	59.000	740.000	40.000	0.795	A	N
1	H3	71.100	7.100	80.700	3.700	0.881	A	W
1	UG/G U	0.045	0.005	0.030	0.010	1.500	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CB Radiation Protection Bureau, Ontario, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
2	AM241	0.126	0.022	0.127	0.010	0.992	A	A
3	AM241	0.116	0.028	0.127	0.010	0.913	A	A
4	AM241	0.160	0.007	0.127	0.010	1.260	A	A
5	AM241	0.117	0.044	0.127	0.010	0.921	A	A
1	AM241	0.147	0.051	0.127	0.010	1.157	A	A
3	CO57	8.760	0.230	7.730	0.033	1.133	W	A
1	CO57	9.560	0.170	7.730	0.033	1.237	W	A
2	CO57	8.930	0.240	7.730	0.033	1.155	W	A
5	CO57	9.640	0.260	7.730	0.033	1.247	W	A
4	CO57	8.360	0.230	7.730	0.033	1.082	A	A
2	CO60	5.860	0.170	6.350	0.410	0.923	A	A
1	CO60	7.550	0.100	6.350	0.410	1.189	W	A
5	CO60	8.030	0.190	6.350	0.410	1.265	W	A
3	CO60	7.120	0.190	6.350	0.410	1.121	W	A
4	CO60	7.190	0.190	6.350	0.410	1.132	W	A
4	CS137	7.330	0.240	6.430	0.420	1.140	W	A
3	CS137	7.520	0.240	6.430	0.420	1.170	W	A
5	CS137	8.440	0.240	6.430	0.420	1.313	W	A
2	CS137	7.460	0.270	6.430	0.420	1.160	W	A
1	CS137	8.160	0.240	6.430	0.420	1.269	W	A
5	MN54	10.880	0.300	7.910	0.450	1.375	W	
3	MN54	9.310	0.280	7.910	0.450	1.177	A	
2	MN54	9.840	0.310	7.910	0.450	1.244	W	
1	MN54	10.240	0.220	7.910	0.450	1.295	W	
4	MN54	9.320	0.280	7.910	0.450	1.178	A	
4	RU106	6.910	1.080	5.500	1.760	1.256	W	
3	RU106	5.550	0.870	5.500	1.760	1.009	A	
5	RU106	6.050	0.710	5.500	1.760	1.100	A	
1	RU106	6.450	0.400	5.500	1.760	1.173	W	
2	RU106	5.950	0.740	5.500	1.760	1.082	A	

Matrix: WA Water Bq / L

2	AM241	1.014	0.465	0.850	0.100	1.193	A	A
1	AM241	0.968	0.121	0.850	0.100	1.139	A	A
3	AM241	0.854	0.112	0.850	0.100	1.005	A	A
1	CO60	50.830	2.020	52.400	2.200	0.970	A	A
2	CO60	52.820	2.110	52.400	2.200	1.008	A	A
3	CO60	51.990	2.060	52.400	2.200	0.992	A	A
3	CS137	78.760	4.790	76.000	3.400	1.036	A	A
2	CS137	79.160	4.710	76.000	3.400	1.042	A	A
1	CS137	74.740	4.300	76.000	3.400	0.983	A	A
1	SR90	1.940	0.260	1.720	0.100	1.128	A	A
2	SR90	1.670	0.250	1.720	0.100	0.971	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CD Gently-2 Nuclear Power Plant, Quebec Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.000	0.500	7.730	0.033	1.035	A	A
1	CO60	6.500	0.500	6.350	0.410	1.024	A	A
1	CS137	6.500	0.700	6.430	0.420	1.011	A	A
1	GROSS BETA	3.200	0.500	2.660	0.260	1.203	A	A
1	MN54	9.000	1.000	7.910	0.450	1.138	A	
Matrix: SO Soil Bq / kg								
1	AC228	140.000	20.000	124.000	4.800	1.129	A	A
1	BI212	140.000	20.000	140.000	14.000	1.000	A	
1	BI214	80.000	10.000	69.500	1.800	1.151	A	A
1	CS137	230.000	30.000	204.000	5.000	1.127	A	A
1	K40	910.000	50.000	780.000	27.000	1.167	A	A
1	PB212	140.000	20.000	127.000	4.800	1.102	A	A
1	PB214	80.000	10.000	72.000	0.420	1.111	A	A
1	U234	80.000	20.000	190.000	5.200	0.421	N	
Matrix: VE Vegetation Bq / kg								
1	CO60	20.000	2.000	17.600	1.000	1.136	A	A
1	CS137	490.000	20.000	440.000	20.000	1.114	A	A
1	K40	540.000	30.000	513.000	20.000	1.053	A	A
Matrix: WA Water Bq / L								
1	CO60	48.000	5.000	52.400	2.200	0.916	A	A
1	CS137	70.000	7.000	76.000	3.400	0.921	A	A
1	GROSS BETA	1000.000	100.000	740.000	40.000	1.351	W	A
1	H3	70.000	10.000	80.700	3.700	0.867	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CF Freshwater Institute Radiochemistry Winnipeg, Manitoba, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
3	CS137	221.000	4.000	204.000	5.000	1.083	A	
2	CS137	216.000	7.000	204.000	5.000	1.059	A	
1	CS137	218.000	4.000	204.000	5.000	1.069	A	
1	U234	210.000	13.000	190.000	5.200	1.105	A	
2	U234	208.000	14.000	190.000	5.200	1.095	A	
3	U234	216.000	13.000	190.000	5.200	1.137	W	
2	U238	207.000	14.000	202.000	7.200	1.025	A	
1	U238	216.000	14.000	202.000	7.200	1.069	A	
3	U238	226.000	14.000	202.000	7.200	1.119	W	

Matrix: VE Vegetation Bq / kg

3	CO60	23.200	3.000	17.600	1.000	1.318	W	
1	CO60	25.500	2.800	17.600	1.000	1.449	W	
2	CO60	20.200	4.000	17.600	1.000	1.148	A	
2	CS137	495.000	5.000	440.000	20.000	1.125	A	
1	CS137	489.000	5.000	440.000	20.000	1.111	A	
3	CS137	506.000	5.000	440.000	20.000	1.150	A	

Matrix: WA Water Bq / L

1	CO60	50.300	0.900	52.400	2.200	0.960	A	
2	CO60	50.200	0.700	52.400	2.200	0.958	A	
3	CO60	49.200	0.900	52.400	2.200	0.939	A	
3	CS137	74.000	0.800	76.000	3.400	0.974	A	
2	CS137	73.600	0.700	76.000	3.400	0.968	A	
1	CS137	74.100	0.800	76.000	3.400	0.975	A	
3	U234	0.527	0.050	0.370	0.020	1.424	N	
2	U234	0.514	0.040	0.370	0.020	1.389	W	
1	U234	0.521	0.060	0.370	0.020	1.408	N	
1	U238	0.431	0.050	0.360	0.020	1.197	W	
3	U238	0.510	0.050	0.360	0.020	1.417	N	
2	U238	0.463	0.040	0.360	0.020	1.286	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CH California State Dept. Health Serv., Sanitation & Radiation Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.119	0.010	0.127	0.010	0.937	A	A
1	Bq U	0.146	0.011	0.133	0.008	1.098	A	A
1	CO57	9.260	0.039	7.730	0.033	1.198	W	W
1	CO60	7.940	0.084	6.350	0.410	1.250	W	W
1	CS137	8.110	0.069	6.430	0.420	1.261	W	W
1	GROSS ALPHA	2.850	0.037	2.770	0.260	1.029	A	A
1	GROSS BETA	2.840	0.032	2.660	0.260	1.068	A	A
1	MN54	10.400	0.082	7.910	0.450	1.315	W	
1	PU238	0.098	0.008	0.097	0.007	1.012	A	A
1	PU239	0.141	0.010	0.136	0.011	1.037	A	A
1	RU106	6.430	0.350	5.500	1.760	1.169	W	
1	SR90	0.367	0.035	0.336	0.014	1.092	A	A
1	U234	0.071	0.005	0.066	0.003	1.079	A	A
1	U238	0.067	0.005	0.065	0.005	1.037	A	A
1	UG/G U	5.250	0.520	5.230	0.290	1.004	A	

Matrix: SO Soil Bq / kg

1	AC228	138.000	3.500	124.000	4.800	1.113	A	A
1	AM241	2.370	0.290	1.440	0.190	1.646	W	A
1	BI212	160.000	9.400	140.000	14.000	1.143	W	
1	BI214	73.100	1.800	69.500	1.800	1.052	A	A
1	Bq U	385.000	13.000	401.000	8.700	0.960	A	A
1	CS137	240.000	1.800	204.000	5.000	1.176	A	W
1	K40	934.000	14.000	780.000	27.000	1.197	A	A
1	PB212	144.000	1.400	127.000	4.800	1.134	A	A
1	PB214	81.500	1.900	72.000	0.420	1.132	A	A
1	PU239	3.100	0.250	3.200	0.500	0.969	A	A
1	SR90	16.500	3.200	13.000	0.470	1.269	A	A
1	TH234	278.000	41.000	198.000	5.600	1.404	A	A
1	U234	186.000	6.200	190.000	5.200	0.979	A	A
1	U238	190.000	6.300	202.000	7.200	0.941	A	A
1	UG/G U	15.000	1.500	16.300	0.300	0.920	A	

Matrix: VE Vegetation Bq / kg

1	AM241	2.840	0.160	2.880	0.220	0.986	A	W
1	CM244	1.820	0.120	1.610	0.360	1.130	A	A
1	CO60	21.300	0.950	17.600	1.000	1.210	A	A
1	CS137	504.000	2.800	440.000	20.000	1.145	A	A
1	K40	592.000	15.000	513.000	20.000	1.154	A	W
1	PU239	4.570	0.180	4.300	0.460	1.063	A	A
1	SR90	591.000	7.100	595.000	29.000	0.993	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CH California State Dept. Health Serv., Sanitation & Radiation Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	AM241	0.871	0.062	0.850	0.100	1.025	A	A
1	Bq U	0.759	0.068	0.760	0.040	0.999	A	A
1	CO60	54.700	0.770	52.400	2.200	1.044	A	A
1	CS137	78.400	0.760	76.000	3.400	1.032	A	A
1	GROSS ALPHA	1898.000	35.000	1580.000	20.000	1.201	W	A
1	GROSS BETA	850.000	16.000	740.000	40.000	1.149	A	A
1	H3	71.200	3.800	80.700	3.700	0.882	A	A
1	PU238	0.887	0.058	0.790	0.080	1.123	W	A
1	PU239	0.961	0.065	0.870	0.100	1.105	A	A
1	SR90	2.240	0.400	1.720	0.100	1.302	W	W
1	U234	0.378	0.031	0.370	0.020	1.022	A	A
1	U238	0.361	0.030	0.360	0.020	1.003	A	A
1	UG/G U	0.028	0.003	0.030	0.010	0.927	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CL Core Laboratories, Casper, WY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.430	0.020	0.127	0.010	3.386	N	W
1	Bq U	0.197	0.020	0.133	0.008	1.481	A	W
1	CO57	7.860	0.390	7.730	0.033	1.017	A	A
1	CO60	6.840	0.340	6.350	0.410	1.077	A	A
1	CS137	7.060	0.350	6.430	0.420	1.098	A	A
1	MN54	8.650	0.430	7.910	0.450	1.094	A	
1	PU238	0.200	0.010	0.097	0.007	2.066	N	A
1	PU239	0.390	0.010	0.136	0.011	2.868	N	W
1	RU106	13.100	0.660	5.500	1.760	2.382	N	
1	SR90	0.870	0.020	0.336	0.014	2.589	N	W
1	U234	0.100	0.010	0.066	0.003	1.520	W	W
1	U238	0.090	0.010	0.065	0.005	1.393	W	W

Matrix: SO Soil Bq / kg

1	AC228	127.000	6.500	124.000	4.800	1.024	A	A
1	AM241	2.690	0.900	1.440	0.190	1.868	W	A
1	BI212	188.000	9.400	140.000	14.000	1.343	N	
1	BI214	85.600	4.300	69.500	1.800	1.232	W	A
1	Bq U	353.000	70.600	401.000	8.700	0.880	A	A
1	CS137	177.000	8.800	204.000	5.000	0.868	W	A
1	K40	584.000	29.200	780.000	27.000	0.749	N	W
1	PB212	122.000	6.100	127.000	4.800	0.961	A	A
1	PB214	92.600	4.600	72.000	0.420	1.286	W	A
1	PU239	5.120	2.200	3.200	0.500	1.600	W	A
1	SR90	18.900	5.200	13.000	0.470	1.454	A	W
1	TH234	253.000	51.000	198.000	5.600	1.278	A	A
1	U234	177.000	16.000	190.000	5.200	0.932	A	A
1	U238	189.000	18.000	202.000	7.200	0.936	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	7.170	2.600	2.880	0.220	2.490	W	W
1	CM244	1.130	0.700	1.610	0.360	0.702	W	W
1	CO60	17.500	1.100	17.600	1.000	0.994	A	N
1	CS137	417.000	25.000	440.000	20.000	0.948	A	A
1	K40	403.000	20.300	513.000	20.000	0.786	N	N
1	PU239	4.700	2.700	4.300	0.460	1.093	A	N
1	SR90	397.000	52.000	595.000	29.000	0.667	W	W

Matrix: WA Water Bq / L

1	AM241	0.930	0.100	0.850	0.100	1.094	A	W
1	Bq U	0.960	0.200	0.760	0.040	1.263	A	A
1	CO60	50.500	2.500	52.400	2.200	0.964	A	A
1	CS137	75.800	3.800	76.000	3.400	0.997	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CL Core Laboratories, Casper, WY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	FE55	58.300	17.200	53.000	2.000	1.100	A	A
1	GROSS ALPHA	213.000	21.300	1580.000	20.000	0.135	N	
1	GROSS BETA	56.000	3.500	740.000	40.000	0.076	N	
1	H3	74.300	23.400	80.700	3.700	0.921	A	N
1	NI63	134.000	33.200	114.000	10.000	1.175	A	A
1	PU238	0.750	0.200	0.790	0.080	0.949	A	A
1	PU239	0.970	0.200	0.870	0.100	1.115	A	A
1	SR90	1.660	0.500	1.720	0.100	0.965	A	A
1	U234	0.460	0.100	0.370	0.020	1.243	W	A
1	U238	0.440	0.100	0.360	0.020	1.222	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CM Metropolitan Water Reclamation District of Greater Chicago

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq/kg								
1	BI212	76.000	6.000	140.000	14.000	0.543	A	
1	BI214	70.400	3.500	69.500	1.800	1.013	A	
1	CS137	205.300	3.300	204.000	5.000	1.006	A	
1	K40	765.000	3.900	780.000	27.000	0.981	A	
1	PB212	130.500	3.400	127.000	4.800	1.028	A	
1	PB214	84.800	3.500	72.000	0.420	1.178	A	

Matrix: WA Water Bq/L

1	CO60	47.100	3.300	52.400	2.200	0.899	W	
1	CS137	68.800	3.300	76.000	3.400	0.905	A	
1	GROSS ALPHA	880.500	21.300	1580.000	20.000	0.557	N	
1	GROSS BETA	934.800	21.600	740.000	40.000	1.263	A	
1	H3	71.700	3.600	80.700	3.700	0.888	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CN China Institute for Radiation Protection

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.840	0.100	0.127	0.010	6.614	N	W
1	CO57	8.400	0.660	7.730	0.033	1.087	A	W
1	CO60	6.570	0.430	6.350	0.410	1.035	A	W
1	CS137	6.880	0.450	6.430	0.420	1.070	A	W
1	MN54	8.750	0.640	7.910	0.450	1.106	A	
1	RU106	5.970	0.500	5.500	1.760	1.085	A	
Matrix: SO Soil Bq / kg								
1	AC228	114.800	9.360	124.000	4.800	0.926	A	A
1	BI214	77.900	5.760	69.500	1.800	1.121	A	A
1	CS137	218.900	14.300	204.000	5.000	1.073	A	A
1	K40	819.800	51.600	780.000	27.000	1.051	A	A
1	PB212	112.900	8.130	127.000	4.800	0.889	W	
1	PB214	78.480	5.260	72.000	0.420	1.090	A	A
1	TH234	201.600	11.690	198.000	5.600	1.018	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	4.360	0.620	2.880	0.220	1.514	A	A
1	CO60	25.960	1.930	17.600	1.000	1.475	N	A
1	CS137	483.500	31.100	440.000	20.000	1.099	A	A
1	K40	503.000	34.000	513.000	20.000	0.981	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CR Laboratorio de Fisica Nuclear Aplicada, Costa Rica

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	4.790	0.340	7.730	0.033	0.620	N	
1	CO60	4.330	0.130	6.350	0.410	0.682	N	N
1	CS137	4.580	0.350	6.430	0.420	0.712	N	W
1	MN54	5.720	0.350	7.910	0.450	0.723	N	
1	RU106	3.920	0.340	5.500	1.760	0.713	W	
Matrix: SO Soil Bq / kg								
1	AC228	140.100	5.500	124.000	4.800	1.130	A	A
1	BI212	102.300	9.600	140.000	14.000	0.731	A	
1	BI214	89.200	5.200	69.500	1.800	1.283	W	A
1	CS137	260.400	19.500	204.000	5.000	1.276	W	A
1	K40	903.600	85.300	780.000	27.000	1.158	A	W
1	PB212	109.300	13.800	127.000	4.800	0.861	W	A
1	PB214	73.700	6.100	72.000	0.420	1.024	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	20.300	1.300	17.600	1.000	1.153	A	A
1	CS137	527.300	40.500	440.000	20.000	1.198	A	A
1	K40	513.900	79.300	513.000	20.000	1.002	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CS Rocketdyne Propulsion & Power, Canoga Park, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	6.540	0.420	7.730	0.033	0.846	A	
1	CO60	5.400	0.300	6.350	0.410	0.850	A	A
1	CS137	5.290	0.280	6.430	0.420	0.823	A	A
1	MN54	6.500	0.340	7.910	0.450	0.822	W	
1	RU106	4.880	0.710	5.500	1.760	0.887	A	
Matrix: SO Soil Bq / kg								
1	CS137	237.470	41.140	204.000	5.000	1.164	A	A
1	K40	922.650	161.440	780.000	27.000	1.183	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	20.170	6.820	17.600	1.000	1.146	A	A
1	CS137	497.420	166.980	440.000	20.000	1.131	A	A
1	K40	580.470	195.590	513.000	20.000	1.132	A	A
Matrix: WA Water Bq / L								
1	CO60	55.290	4.410	52.400	2.200	1.055	A	A
1	CS137	83.010	6.750	76.000	3.400	1.092	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** CW Carlsbad Environmental Monitoring Research Center, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.118	0.002	0.127	0.010	0.929	A	A
1	CO57	7.480	0.130	7.730	0.033	0.968	A	A
1	CO60	6.320	0.050	6.350	0.410	0.995	A	A
1	CS137	6.070	0.070	6.430	0.420	0.944	A	A
1	MN54	8.230	0.090	7.910	0.450	1.040	A	A
1	PU238	0.093	0.002	0.097	0.007	0.958	A	A
1	PU239	0.134	0.003	0.136	0.011	0.985	A	A
1	RU106	1.820	0.230	5.500	1.760	0.331	N	
1	U234	0.065	0.002	0.066	0.003	0.992	A	A
1	U238	0.068	0.002	0.065	0.005	1.057	A	A
Matrix: SO Soil Bq / kg								
1	PU238	0.286	0.031	0.320	0.130	0.894	A	A
1	PU239	2.850	0.090	3.200	0.500	0.891	W	A
1	U234	204.000	5.000	190.000	5.200	1.074	A	A
1	U238	211.000	6.000	202.000	7.200	1.045	A	A
1	UG/G U	18.700	0.200	16.300	0.300	1.147	W	
Matrix: VE Vegetation Bq / kg								
1	AM241	2.910	0.100	2.880	0.220	1.010	A	A
1	CM244	1.860	0.100	1.610	0.360	1.155	A	A
1	CO60	19.500	0.300	17.600	1.000	1.108	A	
1	CS137	480.000	4.000	440.000	20.000	1.091	A	
1	K40	578.000	10.000	513.000	20.000	1.127	A	
1	PU239	4.460	0.080	4.300	0.460	1.037	A	A
Matrix: WA Water Bq / L								
1	AM241	0.946	0.014	0.850	0.100	1.113	A	A
1	CO60	53.110	0.290	52.400	2.200	1.014	A	A
1	CS137	76.410	0.530	76.000	3.400	1.005	A	A
1	PU238	0.820	0.016	0.790	0.080	1.038	A	A
1	PU239	0.895	0.017	0.870	0.100	1.029	A	A
1	U234	0.395	0.008	0.370	0.020	1.068	A	A
1	U238	0.404	0.008	0.360	0.020	1.122	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** DC Datachem Laboratories, Salt Lake City

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	GROSS ALPHA	1332.400	440.000	1580.000	20.000	0.843	A	
1	GROSS BETA	543.900	210.000	740.000	40.000	0.735	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** DH Duke Engineering Services Hanford

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	5.820	0.280	7.730	0.033	0.753	A	A
1	CO60	5.210	0.190	6.350	0.410	0.820	W	A
1	CS137	5.200	0.290	6.430	0.420	0.809	W	A
1	GROSS ALPHA	2.510	0.030	2.770	0.260	0.906	A	A
1	GROSS BETA	2.370	0.040	2.660	0.260	0.891	A	A
1	MN54	6.570	0.570	7.910	0.450	0.831	W	
1	RU106	4.910	0.660	5.500	1.760	0.893	A	
Matrix: SO Soil Bq / kg								
1	CS137	196.700	1.060	204.000	5.000	0.964	A	A
1	K40	774.900	15.900	780.000	27.000	0.993	A	A
Matrix: WA Water Bq / L								
1	CO60	51.480	0.880	52.400	2.200	0.982	A	A
1	CS137	73.930	2.130	76.000	3.400	0.973	A	A
1	GROSS ALPHA	1397.000	19.000	1580.000	20.000	0.884	A	N
1	GROSS BETA	949.000	8.800	740.000	40.000	1.282	A	N

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** EC Envirocare of Utah

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.036	0.183	0.127	0.010	0.283	N	
1	CO57	8.720	0.449	7.730	0.033	1.128	A	
1	CO60	7.310	0.477	6.350	0.410	1.151	W	
1	CS137	7.300	0.538	6.430	0.420	1.135	A	
1	MN54	9.930	0.741	7.910	0.450	1.255	W	
Matrix: SO Soil Bq / kg								
1	AC228	140.600	2.960	124.000	4.800	1.134	A	A
1	BI212	159.100	11.100	140.000	14.000	1.136	W	
1	BI214	66.600	2.590	69.500	1.800	0.958	A	A
1	CS137	255.300	11.100	204.000	5.000	1.251	W	A
1	K40	928.700	48.100	780.000	27.000	1.191	A	A
1	PB212	192.400	11.100	127.000	4.800	1.515	N	A
1	PB214	85.100	4.070	72.000	0.420	1.182	A	A
1	TH234	292.300	140.600	198.000	5.600	1.476	A	A
Matrix: WA Water Bq / L								
1	AM241	0.592	0.396	0.850	0.100	0.696	N	
1	CO60	63.048	1.680	52.400	2.200	1.203	N	A
1	CS137	90.428	2.875	76.000	3.400	1.190	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** EG LMITCO/INEL, Scoville

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.103	0.009	0.127	0.010	0.811	W	A
2	AM241	0.110	0.030	0.127	0.010	0.866	W	A
1	CO57	7.700	0.600	7.730	0.033	0.996	A	A
1	CO60	6.600	0.500	6.350	0.410	1.039	A	A
1	CS137	6.700	0.500	6.430	0.420	1.042	A	A
1	MN54	8.600	0.600	7.910	0.450	1.087	A	
1	PU238	0.087	0.004	0.097	0.007	0.899	A	A
1	PU239	0.129	0.006	0.136	0.011	0.949	A	A
1	RU106	5.500	0.500	5.500	1.760	1.000	A	
1	SR90	0.360	0.020	0.336	0.014	1.071	A	A
1	U234	0.071	0.010	0.066	0.003	1.079	A	A
1	U238	0.067	0.011	0.065	0.005	1.037	A	A

Matrix: SO Soil Bq / kg

1	AM241	1.560	0.150	1.440	0.190	1.083	A	A
1	CS137	226.000	17.000	204.000	5.000	1.108	A	A
1	K40	787.000	67.000	780.000	27.000	1.009	A	A
1	PU238	0.275	0.040	0.320	0.130	0.859	A	A
1	PU239	2.800	0.140	3.200	0.500	0.875	W	A
1	SR90	13.000	1.700	13.000	0.470	1.000	A	A
1	U234	196.000	16.000	190.000	5.200	1.032	A	A
1	U238	204.000	16.000	202.000	7.200	1.010	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.030	0.300	2.880	0.220	1.052	A	A
1	CM244	1.920	0.190	1.610	0.360	1.193	A	A
1	CO60	14.000	2.000	17.600	1.000	0.795	W	A
1	CS137	434.000	30.000	440.000	20.000	0.986	A	A
1	K40	465.000	80.000	513.000	20.000	0.906	A	A
1	PU238	0.273	0.027	0.500	0.100	0.546	N	W
1	PU239	4.260	0.210	4.300	0.460	0.991	A	A
1	SR90	665.000	46.000	595.000	29.000	1.118	A	A

Matrix: WA Water Bq / L

1	AM241	0.932	0.038	0.850	0.100	1.096	A	A
1	CO60	54.000	4.000	52.400	2.200	1.031	A	A
1	CS137	80.000	6.000	76.000	3.400	1.053	A	A
1	FE55	33.300	1.900	53.000	2.000	0.628	A	A
1	GROSS ALPHA	1364.000	74.000	1580.000	20.000	0.863	A	W
1	GROSS BETA	1090.000	70.000	740.000	40.000	1.473	W	A
1	H3	76.400	5.300	80.700	3.700	0.947	A	
1	NI63	110.000	6.000	114.000	10.000	0.965	A	A
1	PU238	0.800	0.032	0.790	0.080	1.013	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** EG LMITCO/INEL, Scoville

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	PU239	0.887	0.035	0.870	0.100	1.020	A	A
1	SR90	1.560	0.190	1.720	0.100	0.907	A	A
1	U234	0.455	0.046	0.370	0.020	1.230	W	A
1	U238	0.441	0.046	0.360	0.020	1.225	W	W

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** EM 3M, Empore Disks, St. Paul, MN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	CS137	68.321		76.000	3.400	0.899	W	A
1	SR90	2.571		1.720	0.100	1.495	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or $\text{mL}=\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** EP US EPA, Las Vegas

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.190	0.540	7.730	0.033	1.060	A	A
1	CO60	7.210	0.520	6.350	0.410	1.135	W	A
1	CS137	7.240	0.560	6.430	0.420	1.126	A	A
1	MN54	8.780	0.650	7.910	0.450	1.110	A	
1	RU106	6.860	1.690	5.500	1.760	1.247	W	

Matrix: WA Water Bq / L

1	CO60	55.470	3.680	52.400	2.200	1.059	A	A
1	CS137	79.290	5.670	76.000	3.400	1.043	A	A
1	H3	79.390	5.990	80.700	3.700	0.984	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FE Fernald WPRAP Field Office, Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
1	AC228	146.000	12.600	124.000	4.800	1.177	A	
3	AC228	130.900	11.000	124.000	4.800	1.056	A	
2	AC228	138.500	12.400	124.000	4.800	1.117	A	
1	AM241	1.766	0.400	1.440	0.190	1.226	A	
2	AM241	1.893	0.500	1.440	0.190	1.315	A	
3	AM241	3.806	0.600	1.440	0.190	2.643	N	
1	BI212	90.470	10.100	140.000	14.000	0.646	A	
2	BI212	96.810	11.500	140.000	14.000	0.692	A	
3	BI212	86.160	7.900	140.000	14.000	0.615	A	
2	BI214	83.250	6.900	69.500	1.800	1.198	W	
3	BI214	72.490	5.600	69.500	1.800	1.043	A	
1	BI214	76.410	6.200	69.500	1.800	1.099	A	
1	CS137	229.700	17.900	204.000	5.000	1.126	A	
3	CS137	220.100	16.500	204.000	5.000	1.079	A	
2	CS137	230.800	18.000	204.000	5.000	1.131	A	
1	K40	934.700	71.000	780.000	27.000	1.198	A	
2	K40	935.900	73.000	780.000	27.000	1.200	A	
3	K40	844.900	63.100	780.000	27.000	1.083	A	
2	PB212	142.000	11.500	127.000	4.800	1.118	A	
3	PB212	133.200	10.800	127.000	4.800	1.049	A	
1	PB212	139.000	11.200	127.000	4.800	1.094	A	
1	PB214	81.470	6.300	72.000	0.420	1.132	A	
2	PB214	85.380	6.700	72.000	0.420	1.186	A	
3	PB214	80.370	6.200	72.000	0.420	1.116	A	
2	TH234	235.800	20.500	198.000	5.600	1.191	A	
3	TH234	208.900	17.800	198.000	5.600	1.055	A	
1	TH234	208.500	17.700	198.000	5.600	1.053	A	

Matrix: VE Vegetation Bq / kg

2	AM241	3.262	0.600	2.880	0.220	1.133	A	
1	AM241	4.051	0.500	2.880	0.220	1.407	A	
2	CO60	21.700	2.100	17.600	1.000	1.233	A	
1	CO60	21.400	1.870	17.600	1.000	1.216	A	
2	CS137	503.500	37.900	440.000	20.000	1.144	A	
1	CS137	535.500	41.500	440.000	20.000	1.217	A	
2	K40	571.600	46.000	513.000	20.000	1.114	A	
1	K40	597.600	45.800	513.000	20.000	1.165	A	

Matrix: WA Water Bq / L

4	AM241	0.887	0.210	0.850	0.100	1.044	A	
2	AM241	0.988	0.170	0.850	0.100	1.163	A	
1	AM241	0.990	0.170	0.850	0.100	1.165	A	
3	AM241	0.994	0.230	0.850	0.100	1.169	A	
5	AM241	0.594	0.180	0.850	0.100	0.698	N	
1	CO60	53.940	4.100	52.400	2.200	1.029	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FE Fernald WPRAP Field Office, Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
3	CO60	53.950	4.000	52.400	2.200	1.030	A	
2	CO60	55.570	4.200	52.400	2.200	1.060	A	
4	CO60	52.670	4.000	52.400	2.200	1.005	A	
5	CO60	54.000	4.100	52.400	2.200	1.031	A	
4	CS137	76.040	5.700	76.000	3.400	1.001	A	
3	CS137	75.860	5.600	76.000	3.400	0.998	A	
5	CS137	75.920	5.700	76.000	3.400	0.999	A	
2	CS137	79.210	6.200	76.000	3.400	1.042	A	
1	CS137	78.570	6.100	76.000	3.400	1.034	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FG FGL Environmental, Santa Paula, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.156	0.086	0.127	0.010	1.228	A	A
1	CO57	13.660	2.110	7.730	0.033	1.767	N	N
1	CO60	7.590	3.280	6.350	0.410	1.195	W	A
1	CS137	7.420	2.480	6.430	0.420	1.154	W	A
1	GROSS ALPHA	2.866	0.100	2.770	0.260	1.035	A	A
1	GROSS BETA	2.925	0.100	2.660	0.260	1.100	A	W
1	MN54	9.137	3.340	7.910	0.450	1.155	A	
1	RU106	5.430	1.930	5.500	1.760	0.987	A	

Matrix: SO Soil Bq / kg

1	AC228	116.500	20.000	124.000	4.800	0.940	A	A
1	AM241	9.515	0.095	1.440	0.190	6.608	N	
1	BI212	122.290	47.000	140.000	14.000	0.873	A	
1	BI214	90.170	12.000	69.500	1.800	1.297	W	A
1	Bq U	401.300	30.000	401.000	8.700	1.001	A	
1	CS137	215.530	30.000	204.000	5.000	1.057	A	A
1	K40	784.180	150.000	780.000	27.000	1.005	A	A
1	PB212	132.690	15.000	127.000	4.800	1.045	A	A
1	PB214	75.390	10.000	72.000	0.420	1.047	A	A
1	PU238	0.378	0.070	0.320	0.130	1.181	A	
1	PU239	4.440	0.070	3.200	0.500	1.388	W	
1	SR90	270.800	2.500	13.000	0.470	20.831	N	
1	U234	161.400	18.000	190.000	5.200	0.849	A	
1	U238	257.200	31.000	202.000	7.200	1.273	W	

Matrix: WA Water Bq / L

1	AM241	1.048	0.010	0.850	0.100	1.233	A	
1	Bq U	0.960	0.070	0.760	0.040	1.263	A	A
1	CO60	55.290	4.700	52.400	2.200	1.055	A	A
1	CS137	76.520	4.900	76.000	3.400	1.007	A	A
1	GROSS ALPHA	1565.000	59.000	1580.000	20.000	0.991	A	A
1	GROSS BETA	754.800	55.500	740.000	40.000	1.020	A	A
1	H3	161.300	10.000	80.700	3.700	1.999	N	W
1	PU238	0.779	0.010	0.790	0.080	0.985	A	
1	PU239	0.931	0.010	0.870	0.100	1.070	A	
1	SR90	2.660	0.030	1.720	0.100	1.547	N	
1	U234	0.311	0.010	0.370	0.020	0.841	W	N
1	U238	0.346	0.010	0.360	0.020	0.961	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FL Florida Dept of Health & Rehab. Serv., Orlando

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.160	0.020	0.127	0.010	1.260	A	A
1	CO57	8.740	0.040	7.730	0.033	1.131	W	A
1	CO60	7.330	0.060	6.350	0.410	1.154	W	A
1	CS137	8.400	0.080	6.430	0.420	1.306	W	W
1	GROSS ALPHA	2.570	0.090	2.770	0.260	0.928	A	A
1	GROSS BETA	3.200	0.080	2.660	0.260	1.203	A	A
1	MN54	10.390	0.090	7.910	0.450	1.314	W	
1	RU106	5.400	0.400	5.500	1.760	0.982	A	

Matrix: SO Soil Bq / kg

1	AC228	118.000	2.000	124.000	4.800	0.952	A	
1	AM241	1.800	0.600	1.440	0.190	1.250	A	A
1	BI214	71.000	1.000	69.500	1.800	1.022	A	
1	CS137	188.000	1.000	204.000	5.000	0.922	A	A
1	K40	748.000	10.000	780.000	27.000	0.959	A	A
1	PB212	113.700	2.200	127.000	4.800	0.895	W	
1	PB214	222.000	3.000	72.000	0.420	3.083	N	
1	U238	142.000	7.000	202.000	7.200	0.703	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	6.000	0.800	2.880	0.220	2.083	W	A
1	CO60	21.100	0.600	17.600	1.000	1.199	A	A
1	CS137	533.000	3.000	440.000	20.000	1.211	A	A
1	K40	615.000	10.000	513.000	20.000	1.199	A	A

Matrix: WA Water Bq / L

1	AM241	1.200	0.400	0.850	0.100	1.412	W	W
1	CO60	54.200	0.400	52.400	2.200	1.034	A	A
1	CS137	78.400	0.600	76.000	3.400	1.032	A	A
1	GROSS ALPHA	1655.400	8.300	1580.000	20.000	1.048	A	A
1	GROSS BETA	1008.400	4.500	740.000	40.000	1.363	W	A
1	H3	92.740	3.240	80.700	3.700	1.149	A	A
1	SR90	1.340	0.020	1.720	0.100	0.779	W	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FM Florida Mobile Emergency Radiological Laboratory, Orlando

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.140	0.040	0.127	0.010	1.102	A	A
1	CO57	9.200	0.100	7.730	0.033	1.190	W	A
1	CO60	7.800	0.100	6.350	0.410	1.228	W	A
1	CS137	8.200	0.100	6.430	0.420	1.275	W	W
1	MN54	10.120	0.100	7.910	0.450	1.279	W	
1	RU106	8.000	0.200	5.500	1.760	1.455	N	

Matrix: WA Water Bq / L

1	AM241	0.900	0.100	0.850	0.100	1.059	A	A
1	CO60	51.900	0.500	52.400	2.200	0.990	A	A
1	CS137	77.500	1.000	76.000	3.400	1.020	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FN Fermi Lab, Batavia, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.000	0.500	7.730	0.033	1.035	A	A
1	CO60	6.620	0.510	6.350	0.410	1.043	A	A
1	CS137	7.030	0.600	6.430	0.420	1.093	A	A
1	GROSS ALPHA	2.670	0.400	2.770	0.260	0.964	A	
1	GROSS BETA	3.000	0.450	2.660	0.260	1.128	A	
1	MN54	8.190	0.690	7.910	0.450	1.035	A	
Matrix: SO Soil Bq / kg								
1	AC228	115.000	7.000	124.000	4.800	0.927	A	
1	CS137	201.000	20.000	204.000	5.000	0.985	A	A
1	K40	768.000	79.000	780.000	27.000	0.985	A	A
1	TH234	206.000	26.000	198.000	5.600	1.040	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	17.700	1.500	17.600	1.000	1.006	A	A
1	CS137	427.000	43.000	440.000	20.000	0.970	A	A
1	K40	447.000	47.000	513.000	20.000	0.871	W	A
Matrix: WA Water Bq / L								
1	CO60	51.400	3.700	52.400	2.200	0.981	A	A
1	CS137	74.800	7.600	76.000	3.400	0.984	A	A
1	H3	84.100	9.100	80.700	3.700	1.042	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FR CEA/DAM - SPR/B3

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
1	AC228	130.000	26.000	124.000	4.800	1.048	A	
1	BI212	130.000	26.000	140.000	14.000	0.929	A	
1	BI214	88.000	18.000	69.500	1.800	1.266	W	
1	CS137	200.000	30.000	204.000	5.000	0.980	A	
1	K40	840.000	170.000	780.000	27.000	1.077	A	
1	PB212	140.000	28.000	127.000	4.800	1.102	A	
1	PB214	100.000	20.000	72.000	0.420	1.389	W	
1	TH234	200.000	140.000	198.000	5.600	1.010	A	

Matrix: VE Vegetation Bq / kg

1	CO60	19.000	5.000	17.600	1.000	1.080	A	
1	CS137	460.000	69.000	440.000	20.000	1.045	A	
1	K40	550.000	110.000	513.000	20.000	1.072	A	

Matrix: WA Water Bq / L

1	CO60	54.000	6.000	52.400	2.200	1.031	A	
1	CS137	75.000	8.000	76.000	3.400	0.987	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** FS Florida State University, Tallahassee

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
1	AC228	111.700	1.200	124.000	4.800	0.901	A	A
1	BI214	98.600	1.300	69.500	1.800	1.419	W	A
1	CS137	211.100	1.700	204.000	5.000	1.035	A	A
1	K40	807.400	13.300	780.000	27.000	1.035	A	A
1	PB214	89.500	2.100	72.000	0.420	1.243	A	A
1	TH234	198.800	5.100	198.000	5.600	1.004	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GA Lockheed Martin, Pikton, OH

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.130	0.013	0.127	0.010	1.024	A	A
1	CO57	7.820	0.460	7.730	0.033	1.012	A	
1	CO60	6.520	0.410	6.350	0.410	1.027	A	A
1	CS137	6.540	0.530	6.430	0.420	1.017	A	A
1	MN54	8.630	1.110	7.910	0.450	1.091	A	
1	PU238	0.100	0.013	0.097	0.007	1.033	A	W
1	PU239	0.150	0.028	0.136	0.011	1.103	A	A
1	RU106	6.010	2.310	5.500	1.760	1.093	A	
1	SR90	0.380	0.061	0.336	0.014	1.131	A	A
1	U234	0.100	0.022	0.066	0.003	1.520	W	A
1	U238	0.074	0.005	0.065	0.005	1.146	A	A
1	UG/G U	6.000	0.450	5.230	0.290	1.147	A	
Matrix: SO Soil Bq / kg								
1	AM241	2.100	0.200	1.440	0.190	1.458	A	A
1	BI212	112.000	72.800	140.000	14.000	0.800	A	
1	BI214	91.500	23.100	69.500	1.800	1.317	W	
1	CS137	226.000	21.700	204.000	5.000	1.108	A	A
1	K40	677.000	174.000	780.000	27.000	0.868	W	
1	PB212	143.000	22.900	127.000	4.800	1.126	A	
1	PU239	3.000	1.600	3.200	0.500	0.938	A	W
1	U234	193.000	16.000	190.000	5.200	1.016	A	A
1	U238	200.000	9.100	202.000	7.200	0.990	A	A
1	UG/G U	16.000	0.780	16.300	0.300	0.982	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	4.400	1.500	2.880	0.220	1.528	A	A
1	CM244	2.600	1.200	1.610	0.360	1.615	W	A
1	CO60	25.200	9.000	17.600	1.000	1.432	W	A
1	CS137	475.000	35.000	440.000	20.000	1.080	A	A
1	K40	459.000	166.000	513.000	20.000	0.895	W	W
1	PU239	5.900	0.420	4.300	0.460	1.372	W	A
Matrix: WA Water Bq / L								
1	AM241	0.960	0.070	0.850	0.100	1.129	A	A
1	CO60	54.900	7.400	52.400	2.200	1.048	A	A
1	CS137	82.900	12.300	76.000	3.400	1.091	A	A
1	PU238	0.750	0.120	0.790	0.080	0.949	A	A
1	PU239	0.910	0.210	0.870	0.100	1.046	A	A
1	SR90	1.500	0.120	1.720	0.100	0.872	W	N
1	U234	0.410	0.031	0.370	0.020	1.108	A	A
1	U238	0.390	0.053	0.360	0.020	1.083	A	W
1	UG/G U	0.031	0.004	0.030	0.010	1.033	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GC Georgia Power Company Environmental Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.240		7.730	0.033	0.937	A	
1	CO60	6.190		6.350	0.410	0.975	A	A
1	CS137	6.590		6.430	0.420	1.025	A	A
1	GROSS ALPHA	2.580		2.770	0.260	0.931	A	
1	GROSS BETA	2.180		2.660	0.260	0.820	W	
1	MN54	8.000		7.910	0.450	1.011	A	
1	RU106	5.990		5.500	1.760	1.089	A	

Matrix: SO Soil Bq / kg

1	AC228	124.200		124.000	4.800	1.002	A	A
1	CS137	221.000		204.000	5.000	1.083	A	A
1	K40	900.000		780.000	27.000	1.154	A	A

Matrix: VE Vegetation Bq / kg

1	CO60	18.920		17.600	1.000	1.075	A	A
1	CS137	444.000		440.000	20.000	1.009	A	A
1	K40	528.900		513.000	20.000	1.031	A	A

Matrix: WA Water Bq / L

1	CO60	54.500		52.400	2.200	1.040	A	A
1	CS137	78.000		76.000	3.400	1.026	A	A
1	FE55	45.700		53.000	2.000	0.862	A	A
1	H3	87.300		80.700	3.700	1.082	A	A
1	SR90	1.720		1.720	0.100	1.000	A	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GD GTS Duratek, Oak Ridge, TN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	<u>QAP 49 Evaluation</u>
Matrix: AI Air Filter Bq / filter								
1	CO57	7.300	0.310	7.730	0.033	0.944	A	
1	CO60	6.200	0.570	6.350	0.410	0.976	A	
1	CS137	4.600	0.550	6.430	0.420	0.715	N	
1	MN54	7.700	0.660	7.910	0.450	0.973	A	
1	RU106	9.200	3.000	5.500	1.760	1.673	N	
Matrix: SO Soil Bq / kg								
1	CS137	221.000	46.000	204.000	5.000	1.083	A	
1	K40	846.000	321.000	780.000	27.000	1.085	A	
Matrix: VE Vegetation Bq / kg								
1	CS137	414.000	50.000	440.000	20.000	0.941	A	
1	K40	291.000	230.000	513.000	20.000	0.567	N	
Matrix: WA Water Bq / L								
1	CO60	46.600	3.170	52.400	2.200	0.889	W	
1	CS137	67.400	3.370	76.000	3.400	0.887	W	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GE General Engineering Labs, Charleston, SC

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.105	0.021	0.127	0.010	0.827	W	A
1	CO57	7.790	0.802	7.730	0.033	1.008	A	
1	CO60	6.810	0.862	6.350	0.410	1.072	A	A
1	CS137	7.060	0.803	6.430	0.420	1.098	A	A
1	GROSS ALPHA	2.720	0.032	2.770	0.260	0.982	A	A
1	GROSS BETA	2.710	0.027	2.660	0.260	1.019	A	A
1	MN54	8.810	1.130	7.910	0.450	1.114	A	
1	PU238	0.082	0.014	0.097	0.007	0.847	W	A
1	PU239	0.145	0.021	0.136	0.011	1.066	A	A
1	RU106	7.010	3.150	5.500	1.760	1.275	W	
1	SR90	0.338	0.037	0.336	0.014	1.006	A	A
1	U234	0.069	0.012	0.066	0.003	1.049	A	A
1	U238	0.075	0.012	0.065	0.005	1.161	A	A
1	UG/G U	5.840	0.062	5.230	0.290	1.117	A	

Matrix: SO Soil Bq / kg

1	AC228	131.000	20.400	124.000	4.800	1.056	A	A
1	AM241	1.690	0.311	1.440	0.190	1.174	A	A
1	BI212	82.900	14.200	140.000	14.000	0.592	A	
1	BI214	88.500	11.300	69.500	1.800	1.273	W	A
1	CS137	217.000	24.200	204.000	5.000	1.064	A	A
1	K40	914.000	97.300	780.000	27.000	1.172	A	A
1	PB212	142.000	16.100	127.000	4.800	1.118	A	A
1	PB214	102.000	12.600	72.000	0.420	1.417	W	A
1	PU239	2.750	0.419	3.200	0.500	0.859	W	A
1	SR90	9.800	1.070	13.000	0.470	0.754	W	A
1	TH234	188.000	45.000	198.000	5.600	0.949	A	A
1	U234	183.000	23.500	190.000	5.200	0.963	A	A
1	U238	197.000	25.100	202.000	7.200	0.975	A	A
1	UG/G U	15.100	0.160	16.300	0.300	0.926	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.130	0.488	2.880	0.220	1.087	A	A
1	CM244	1.850	0.361	1.610	0.360	1.149	A	W
1	CO60	18.400	2.490	17.600	1.000	1.045	A	A
1	CS137	459.000	52.600	440.000	20.000	1.043	A	A
1	K40	579.000	64.000	513.000	20.000	1.129	A	A
1	PU239	4.480	0.675	4.300	0.460	1.042	A	A
1	SR90	586.000	5.450	595.000	29.000	0.985	A	A

Matrix: WA Water Bq / L

1	AM241	0.984	0.139	0.850	0.100	1.158	A	A
1	CO60	54.800	5.910	52.400	2.200	1.046	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GE General Engineering Labs, Charleston, SC

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CS137	77.600	8.240	76.000	3.400	1.021	A	A
1	FE55	45.800	10.600	53.000	2.000	0.864	A	A
1	GROSS ALPHA	1790.000	43.900	1580.000	20.000	1.133	A	A
1	GROSS BETA	969.000	24.700	740.000	40.000	1.309	A	A
1	H3	84.200	9.300	80.700	3.700	1.043	A	A
1	NI63	115.000	2.650	114.000	10.000	1.009	A	A
1	PU238	0.857	0.144	0.790	0.080	1.085	A	A
1	PU239	0.934	0.155	0.870	0.100	1.074	A	A
1	SR90	1.770	0.066	1.720	0.100	1.029	A	W
1	U234	0.386	0.063	0.370	0.020	1.043	A	A
1	U238	0.390	0.063	0.360	0.020	1.083	A	A
1	UG/G U	0.032	0.001	0.030	0.010	1.067	A	N

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GP GPU Nuclear, Inc., Harrisburg, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.120	0.010	0.127	0.010	0.945	A	A
1	Bq U	0.130		0.133	0.008	0.977	A	A
1	CO57	7.200	0.700	7.730	0.033	0.931	A	A
1	CO60	6.300	0.600	6.350	0.410	0.992	A	A
1	CS137	6.200	0.600	6.430	0.420	0.964	A	A
1	GROSS ALPHA	2.900	0.300	2.770	0.260	1.047	A	A
1	GROSS BETA	2.700	0.300	2.660	0.260	1.015	A	A
1	MN54	7.500	0.800	7.910	0.450	0.948	A	
1	PU238	0.077	0.012	0.097	0.007	0.795	W	A
1	PU239	0.120	0.010	0.136	0.011	0.882	W	A
1	RU106	5.000	2.200	5.500	1.760	0.909	A	
1	SR90	12.000	1.000	0.336	0.014	35.714	N	N
1	U234	0.066	0.013	0.066	0.003	1.003	A	A
1	U238	0.062	0.013	0.065	0.005	0.960	A	A

Matrix: SO Soil Bq / kg

1	AM241	1.800	0.700	1.440	0.190	1.250	A	A
1	Bq U	407.000		401.000	8.700	1.015	A	A
1	CS137	210.000	20.000	204.000	5.000	1.029	A	A
1	K40	845.000	85.000	780.000	27.000	1.083	A	A
1	PU239	3.000	0.800	3.200	0.500	0.938	A	A
1	U234	197.000	20.000	190.000	5.200	1.037	A	A
1	U238	203.000	20.000	202.000	7.200	1.005	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.000	0.400	2.880	0.220	1.042	A	A
1	CM244	1.900	0.200	1.610	0.360	1.180	A	A
1	CO60	17.000	2.000	17.600	1.000	0.966	A	A
1	CS137	440.000	40.000	440.000	20.000	1.000	A	A
1	K40	515.000	50.000	513.000	20.000	1.004	A	A
1	PU238	0.390	0.080	0.500	0.100	0.780	W	
1	PU239	4.400	0.500	4.300	0.460	1.023	A	A
1	SR90	650.000	70.000	595.000	29.000	1.092	A	A

Matrix: WA Water Bq / L

1	AM241	0.870	0.100	0.850	0.100	1.024	A	A
1	Bq U	0.820		0.760	0.040	1.079	A	A
1	CO60	54.000	5.000	52.400	2.200	1.031	A	A
1	CS137	215.000	20.000	76.000	3.400	2.829	N	A
1	FE55	44.000	4.000	53.000	2.000	0.830	A	A
1	GROSS ALPHA	1400.000	100.000	1580.000	20.000	0.886	A	A
1	GROSS BETA	910.000	90.000	740.000	40.000	1.230	A	A
1	H3	150.000	10.000	80.700	3.700	1.859	N	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GP GPU Nuclear, Inc., Harrisburg, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	PU238	0.800	0.080	0.790	0.080	1.013	A	A
1	PU239	0.890	0.090	0.870	0.100	1.023	A	A
1	SR90	1.500	0.600	1.720	0.100	0.872	W	N
1	U234	0.400	0.050	0.370	0.020	1.081	A	A
1	U238	0.410	0.060	0.360	0.020	1.139	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GS USGS/NWQL, Arvada, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	GROSS ALPHA	2014.780	80.580	1580.000	20.000	1.275	W	
1	GROSS BETA	1071.250	42.250	740.000	40.000	1.448	W	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** GT Georgia Institute of Technology

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.110	0.020	0.127	0.010	0.866	W	A
1	CO57	8.500	0.900	7.730	0.033	1.100	A	
1	CO60	6.700	0.600	6.350	0.410	1.055	A	A
1	CS137	7.400	1.000	6.430	0.420	1.151	W	A
1	GROSS ALPHA	2.900	0.100	2.770	0.260	1.047	A	A
1	GROSS BETA	2.700	0.100	2.660	0.260	1.015	A	A
1	PU238	0.100	0.060	0.097	0.007	1.033	A	A
1	PU239	0.140	0.030	0.136	0.011	1.029	A	W
1	RU106	5.800	1.500	5.500	1.760	1.055	A	
1	SR90	0.300	0.060	0.336	0.014	0.893	A	W
1	U238	0.070	0.010	0.065	0.005	1.084	A	A
Matrix: SO Soil Bq / kg								
1	AM241	1.700	1.300	1.440	0.190	1.181	A	A
1	CS137	240.000	78.000	204.000	5.000	1.176	A	A
1	K40	920.000	52.000	780.000	27.000	1.179	A	A
1	PU239	3.200	0.400	3.200	0.500	1.000	A	A
1	SR90	9.700	3.000	13.000	0.470	0.746	W	A
1	U238	190.000	37.000	202.000	7.200	0.941	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	2.900	0.700	2.880	0.220	1.007	A	A
1	CM244	1.700	0.500	1.610	0.360	1.056	A	
1	CO60	19.000	2.400	17.600	1.000	1.080	A	A
1	CS137	490.000	47.000	440.000	20.000	1.114	A	A
1	K40	550.000	74.000	513.000	20.000	1.072	A	A
1	PU239	4.600	1.100	4.300	0.460	1.070	A	A
1	SR90	490.000	25.000	595.000	29.000	0.824	A	A
Matrix: WA Water Bq / L								
1	AM241	0.840	0.300	0.850	0.100	0.988	A	A
1	CO60	53.000	6.000	52.400	2.200	1.011	A	A
1	CS137	78.000	12.000	76.000	3.400	1.026	A	A
1	GROSS ALPHA	1500.000	74.000	1580.000	20.000	0.949	A	A
1	GROSS BETA	970.000	74.000	740.000	40.000	1.311	A	A
1	H3	75.000	7.000	80.700	3.700	0.929	A	A
1	PU238	0.820	0.200	0.790	0.080	1.038	A	A
1	PU239	0.880	0.200	0.870	0.100	1.011	A	A
1	SR90	1.500	0.300	1.720	0.100	0.872	W	N
1	U238	0.390	0.100	0.360	0.020	1.083	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** HC Lawrence Livermore Laboratory, California

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
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Matrix: AI Air Filter Bq / filter

1	GROSS ALPHA	2.440	0.070	2.770	0.260	0.881	A	A
1	GROSS BETA	2.260	0.070	2.660	0.260	0.850	W	W

Matrix: WA Water Bq / L

1	GROSS ALPHA	1495.000	60.000	1580.000	20.000	0.946	A	A
1	GROSS BETA	951.000	38.000	740.000	40.000	1.285	A	A
1	H3	82.300	8.200	80.700	3.700	1.020	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or $\text{mL}=\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** HT Technical University, Budapest, Hungary

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq/kg								
1	AM241	7.680	0.700	1.440	0.190	5.333	N	N
1	Bq U	328.000	21.000	401.000	8.700	0.818	A	A
1	PU239	2.340	0.200	3.200	0.500	0.731	W	N
1	U234	162.700	15.000	190.000	5.200	0.856	A	A
1	U238	157.800	14.000	202.000	7.200	0.781	A	A
1	UG/G U	12.800	1.100	16.300	0.300	0.785	A	
Matrix: WA Water Bq/L								
1	Bq U	0.459	0.040	0.760	0.040	0.604	N	W
1	FE55	163.000	15.000	53.000	2.000	3.075	N	N
1	U234	0.227	0.020	0.370	0.020	0.614	N	W
1	U238	0.221	0.020	0.360	0.020	0.614	N	A
1	UG/G U	0.018	0.002	0.030	0.010	0.597	N	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** HU Water Resources Research Centre (VITUKI), Hungary

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.900	0.400	7.730	0.033	1.151	W	A
1	CO60	7.600	0.200	6.350	0.410	1.197	W	W
1	CS137	8.100	0.200	6.430	0.420	1.260	W	A
1	MN54	10.300	0.200	7.910	0.450	1.302	W	
Matrix: SO Soil Bq / kg								
1	AC228	138.000	5.000	124.000	4.800	1.113	A	A
1	BI214	71.000	5.000	69.500	1.800	1.022	A	A
1	CS137	227.000	7.600	204.000	5.000	1.113	A	A
1	K40	890.000	83.000	780.000	27.000	1.141	A	W
1	PB212	133.500	4.500	127.000	4.800	1.051	A	A
1	PB214	90.400	3.600	72.000	0.420	1.256	W	A
Matrix: VE Vegetation Bq / kg								
1	CO60	22.100	1.200	17.600	1.000	1.256	W	A
1	CS137	476.000	13.400	440.000	20.000	1.082	A	A
1	K40	630.000	48.000	513.000	20.000	1.228	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** ID Institute of Radiation Protection and Dosimetry, IRD/ CNEN, Brazil

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	10.900	0.554	7.730	0.033	1.410	N	A
1	CO60	8.167	0.412	6.350	0.410	1.286	W	A
1	CS137	8.433	0.449	6.430	0.420	1.312	W	A
1	GROSS ALPHA	2.000	0.141	2.770	0.260	0.722	W	A
1	GROSS BETA	3.267	0.173	2.660	0.260	1.228	A	A
1	MN54	10.800	0.549	7.910	0.450	1.365	W	
1	RU106	6.800	0.381	5.500	1.760	1.236	W	
1	SR90	0.402	0.024	0.336	0.014	1.196	A	
1	U234	0.130	0.031	0.066	0.003	1.976	N	
1	U238	0.103	0.015	0.065	0.005	1.594	W	
1	UG/G U	5.393	0.276	5.230	0.290	1.031	A	

Matrix: SO Soil Bq / kg

1	AC228	142.167	9.027	124.000	4.800	1.147	A	A
1	BI212	62.633	10.399	140.000	14.000	0.447	W	
1	BI214	73.400	4.567	69.500	1.800	1.056	A	A
1	CS137	228.300	11.747	204.000	5.000	1.119	A	A
1	K40	1010.200	51.587	780.000	27.000	1.295	W	W
1	PB212	140.633	7.723	127.000	4.800	1.107	A	A
1	PB214	74.933	10.737	72.000	0.420	1.041	A	A
1	SR90	12.157	0.757	13.000	0.470	0.935	A	A
1	TH234	269.567	16.678	198.000	5.600	1.361	A	A
1	U234	206.767	11.465	190.000	5.200	1.088	A	A
1	U238	208.600	10.816	202.000	7.200	1.033	A	A
1	UG/G U	13.167	3.158	16.300	0.300	0.808	A	

Matrix: VE Vegetation Bq / kg

1	CO60	20.133	1.256	17.600	1.000	1.144	A	A
1	CS137	483.400	24.327	440.000	20.000	1.099	A	N
1	K40	674.933	128.715	513.000	20.000	1.316	W	W
1	SR90	543.607	28.818	595.000	29.000	0.914	A	A

Matrix: WA Water Bq / L

1	CO60	53.167	2.755	52.400	2.200	1.015	A	A
1	CS137	77.200	3.927	76.000	3.400	1.016	A	A
1	SR90	1.470	0.145	1.720	0.100	0.855	W	A
1	UG/G U	0.033	0.002	0.030	0.010	1.100	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IE Severn Trent Laboratories, Whippany, NJ

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.190	0.900	7.730	0.033	1.060	A	
1	CO60	7.230	0.750	6.350	0.410	1.139	W	A
1	CS137	7.030	1.010	6.430	0.420	1.093	A	A
1	GROSS ALPHA	3.770	0.050	2.770	0.260	1.361	W	W
1	GROSS BETA	2.160	0.030	2.660	0.260	0.812	W	A
1	MN54	8.450	1.250	7.910	0.450	1.068	A	
1	PU238	0.108	0.031	0.097	0.007	1.116	A	
1	PU239	0.102	0.030	0.136	0.011	0.750	N	
1	U234	0.082	0.020	0.066	0.003	1.246	A	
1	U238	0.084	0.020	0.065	0.005	1.300	A	
Matrix: SO Soil Bq / kg								
1	AC228	147.700	16.400	124.000	4.800	1.191	A	A
1	BI212	181.600	38.800	140.000	14.000	1.297	N	
1	BI214	82.400	14.200	69.500	1.800	1.186	W	A
1	Bq U	127.560	23.800	401.000	8.700	0.318	N	
1	PB212	168.000	20.400	127.000	4.800	1.323	W	A
1	PB214	111.000	11.900	72.000	0.420	1.542	N	A
1	PU238	0.151	0.156	0.320	0.130	0.472	N	
1	PU239	0.377	0.204	3.200	0.500	0.118	N	A
1	U234	61.530	11.360	190.000	5.200	0.324	N	
1	U238	62.630	11.560	202.000	7.200	0.310	N	
Matrix: VE Vegetation Bq / kg								
1	CS137	493.300	71.900	440.000	20.000	1.121	A	N
1	K40	263.300	196.700	513.000	20.000	0.513	N	N
1	PU239	7.210	2.450	4.300	0.460	1.677	N	A
Matrix: WA Water Bq / L								
1	CO60	63.780	6.270	52.400	2.200	1.217	N	N
1	CS137	95.620	14.630	76.000	3.400	1.258	W	N
1	GROSS ALPHA	29.350	0.330	1580.000	20.000	0.019	N	A
1	GROSS BETA	12.800	0.110	740.000	40.000	0.017	N	A
1	PU238	0.150	0.082	0.790	0.080	0.190	N	A
1	PU239	1.388	0.330	0.870	0.100	1.595	N	A
1	U234	0.373	0.073	0.370	0.020	1.008	A	A
1	U238	0.383	0.075	0.360	0.020	1.064	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IL ISU Environmental Monitoring Program, Pocatello, ID

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.000	0.100	7.730	0.033	1.035	A	A
1	CO60	6.800	0.100	6.350	0.410	1.071	A	A
1	CS137	7.200	0.100	6.430	0.420	1.120	A	A
1	GROSS ALPHA	2.460	0.030	2.770	0.260	0.888	A	A
1	GROSS BETA	2.510	0.030	2.660	0.260	0.944	A	N
1	MN54	8.700	0.200	7.910	0.450	1.100	A	A
1	RU106	6.300	0.400	5.500	1.760	1.145	A	A
Matrix: SO Soil Bq / kg								
1	AC228	148.700	3.600	124.000	4.800	1.199	A	A
1	BI212	110.200	9.400	140.000	14.000	0.787	A	A
1	BI214	133.400	4.900	69.500	1.800	1.919	N	A
1	CS137	204.200	3.800	204.000	5.000	1.001	A	A
1	K40	795.600	49.000	780.000	27.000	1.020	A	A
1	PB212	121.000	1.800	127.000	4.800	0.953	A	A
1	PB214	133.400	4.900	72.000	0.420	1.853	N	A
Matrix: VE Vegetation Bq / kg								
1	CO60	14.100	0.800	17.600	1.000	0.801	W	A
1	CS137	429.900	5.300	440.000	20.000	0.977	A	A
1	K40	507.200	46.100	513.000	20.000	0.989	A	A
Matrix: WA Water Bq / L								
1	CO60	53.900	0.500	52.400	2.200	1.029	A	A
1	CS137	78.800	1.100	76.000	3.400	1.037	A	A
1	GROSS ALPHA	1199.800	13.900	1580.000	20.000	0.759	W	A
1	GROSS BETA	610.200	8.900	740.000	40.000	0.825	A	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IN Lockheed Martin Idaho Technical Corp., Analytical Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.400	0.500	7.730	0.033	0.957	A	
1	CO60	6.300	0.300	6.350	0.410	0.992	A	A
1	CS137	6.700	0.400	6.430	0.420	1.042	A	A
1	MN54	8.000	0.500	7.910	0.450	1.011	A	
1	RU106	6.100	0.300	5.500	1.760	1.109	A	
Matrix: SO Soil Bq / kg								
1	AC228	109.000	9.900	124.000	4.800	0.879	A	A
1	AM241	1.550	0.350	1.440	0.190	1.076	A	A
1	BI212	78.600	9.200	140.000	14.000	0.561	A	
1	BI214	85.500	7.000	69.500	1.800	1.230	W	A
1	CS137	217.800	7.400	204.000	5.000	1.068	A	A
1	K40	853.600	77.100	780.000	27.000	1.094	A	A
1	PB212	139.000	10.000	127.000	4.800	1.094	A	A
1	PB214	78.300	5.700	72.000	0.420	1.088	A	A
1	PU239	2.670	0.780	3.200	0.500	0.834	W	A
1	TH234	270.000	41.600	198.000	5.600	1.364	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	17.200	2.800	17.600	1.000	0.977	A	A
1	CS137	451.000	2.000	440.000	20.000	1.025	A	A
1	K40	509.400	1.100	513.000	20.000	0.993	A	A
Matrix: WA Water Bq / L								
1	AM241	0.900	0.087	0.850	0.100	1.059	A	A
1	CO60	50.700	1.000	52.400	2.200	0.968	A	A
1	CS137	75.100	1.400	76.000	3.400	0.988	A	A
1	H3	76.300	26.000	80.700	3.700	0.945	A	
1	PU238	0.930	0.094	0.790	0.080	1.177	W	A
1	PU239	0.830	0.089	0.870	0.100	0.954	A	A
1	SR90	1.600	0.250	1.720	0.100	0.930	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IS Quanterra- St. Louis

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.121	0.038	0.127	0.010	0.953	A	N
1	CO57	8.040	0.860	7.730	0.033	1.040	A	A
1	CO60	6.550	1.080	6.350	0.410	1.031	A	A
1	CS137	6.800	0.640	6.430	0.420	1.058	A	A
1	GROSS ALPHA	3.750	0.520	2.770	0.260	1.354	W	A
1	GROSS BETA	2.890	0.220	2.660	0.260	1.086	A	A
1	MN54	8.620	1.400	7.910	0.450	1.090	A	
1	PU238	0.106	0.017	0.097	0.007	1.095	A	N
1	PU239	0.137	0.013	0.136	0.011	1.007	A	N
1	RU106	7.290	1.240	5.500	1.760	1.325	N	
1	SR90	0.560	0.060	0.336	0.014	1.667	W	N
1	U234	0.060	0.012	0.066	0.003	0.912	A	
1	U238	0.068	0.015	0.065	0.005	1.053	A	
1	UG/G U	5.140	1.420	5.230	0.290	0.983	A	

Matrix: SO Soil Bq / kg

1	AC228	105.000	4.000	124.000	4.800	0.847	W	A
1	AM241	0.112	0.062	1.440	0.190	0.078	N	
1	BI212	136.000	54.000	140.000	14.000	0.971	A	
1	BI214	63.600	12.800	69.500	1.800	0.915	A	A
1	CS137	217.000	20.000	204.000	5.000	1.064	A	A
1	K40	829.000	102.000	780.000	27.000	1.063	A	A
1	PB212	125.000	4.000	127.000	4.800	0.984	A	A
1	PB214	69.500	20.600	72.000	0.420	0.965	A	A
1	PU239	0.110	0.053	3.200	0.500	0.034	N	A
1	SR90	13.400	1.700	13.000	0.470	1.031	A	N
1	TH234	85.900	30.600	198.000	5.600	0.434	N	A
1	U234	160.000	14.000	190.000	5.200	0.842	A	
1	U238	167.000	8.000	202.000	7.200	0.827	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.390	0.420	2.880	0.220	1.177	A	A
1	CM244	1.770	0.600	1.610	0.360	1.099	A	N
1	CO60	14.800	2.500	17.600	1.000	0.841	W	A
1	CS137	481.000	55.000	440.000	20.000	1.093	A	A
1	K40	539.000	44.000	513.000	20.000	1.051	A	A
1	PU239	4.940	0.720	4.300	0.460	1.149	A	A
1	SR90	693.000	10.000	595.000	29.000	1.165	W	A

Matrix: WA Water Bq / L

1	AM241	0.895	0.104	0.850	0.100	1.053	A	A
1	CO60	57.400	2.700	52.400	2.200	1.095	A	W
1	CS137	82.700	7.100	76.000	3.400	1.088	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IS Quanterra- St. Louis

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	GROSS ALPHA	1770.000	138.000	1580.000	20.000	1.120	A	W
1	GROSS BETA	989.000	23.000	740.000	40.000	1.336	W	A
1	H3	65.600	12.300	80.700	3.700	0.813	W	A
1	PU238	0.817	0.045	0.790	0.080	1.034	A	W
1	PU239	0.911	0.062	0.870	0.100	1.047	A	A
1	SR90	2.360	0.240	1.720	0.100	1.372	W	A
1	U234	0.339	0.003	0.370	0.020	0.916	A	
1	U238	0.366	0.039	0.360	0.020	1.017	A	
1	UG/G U	0.030	0.001	0.030	0.010	1.000	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IT Quanterra- Richland Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.115	0.013	0.127	0.010	0.906	A	A
1	CO57	8.100	0.540	7.730	0.033	1.048	A	W
1	CO60	6.700	0.360	6.350	0.410	1.055	A	A
1	CS137	6.600	0.350	6.430	0.420	1.026	A	A
1	GROSS ALPHA	3.290	0.330	2.770	0.260	1.188	A	A
1	GROSS BETA	3.020	0.240	2.660	0.260	1.135	A	A
1	MN54	8.600	0.450	7.910	0.450	1.087	A	A
1	PU238	0.096	0.012	0.097	0.007	0.992	A	A
1	PU239	0.137	0.015	0.136	0.011	1.007	A	A
1	RU106	5.900	0.760	5.500	1.760	1.073	A	A
1	SR90	0.380	0.060	0.336	0.014	1.131	A	A
1	U234	0.068	0.008	0.066	0.003	1.033	A	A
1	U238	0.063	0.007	0.065	0.005	0.975	A	A
1	UG/G U	5.690	0.390	5.230	0.290	1.088	A	A

Matrix: SO Soil Bq / kg

1	AC228	160.000	10.000	124.000	4.800	1.290	A	A
1	AM241	2.130	0.230	1.440	0.190	1.479	A	A
1	BI214	83.000	5.000	69.500	1.800	1.194	W	A
1	CS137	250.000	13.000	204.000	5.000	1.225	W	A
1	K40	954.000	52.000	780.000	27.000	1.223	A	A
1	PB212	166.000	9.000	127.000	4.800	1.307	W	A
1	PB214	89.000	5.000	72.000	0.420	1.236	A	A
1	PU239	2.470	0.300	3.200	0.500	0.772	W	A
1	SR90	11.500	1.600	13.000	0.470	0.885	A	A
1	TH234	372.000	99.000	198.000	5.600	1.879	N	A
1	U234	151.000	12.000	190.000	5.200	0.795	A	A
1	U238	159.000	12.000	202.000	7.200	0.787	A	A
1	UG/G U	15.700	1.700	16.300	0.300	0.963	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.850	0.240	2.880	0.220	0.990	A	W
1	CM244	1.620	0.140	1.610	0.360	1.006	A	A
1	CO60	18.300	2.300	17.600	1.000	1.040	A	A
1	CS137	494.000	25.000	440.000	20.000	1.123	A	A
1	K40	570.000	37.000	513.000	20.000	1.111	A	A
1	PU239	4.650	0.390	4.300	0.460	1.081	A	A
1	SR90	571.000	77.000	595.000	29.000	0.960	A	A

Matrix: WA Water Bq / L

1	AM241	0.822	0.076	0.850	0.100	0.967	A	W
1	CO60	55.200	3.200	52.400	2.200	1.053	A	W
1	CS137	79.500	4.300	76.000	3.400	1.046	A	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** IT Quanterra- Richland Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	GROSS ALPHA	1440.000	147.000	1580.000	20.000	0.911	A	W
1	GROSS BETA	716.000	52.000	740.000	40.000	0.968	A	W
1	H3	76.300	2.770	80.700	3.700	0.945	A	A
1	NI63	120.000	5.000	114.000	10.000	1.053	A	A
1	PU238	0.787	0.074	0.790	0.080	0.996	A	A
1	PU239	0.906	0.083	0.870	0.100	1.041	A	A
1	SR90	1.560	0.250	1.720	0.100	0.907	A	A
1	U234	0.335	0.038	0.370	0.020	0.905	A	A
1	U238	0.395	0.043	0.360	0.020	1.097	A	N
1	UG/G U	0.034	0.004	0.030	0.010	1.117	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** KA Knolls Atomic Power Lab, Schenectady

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	GROSS ALPHA	3.120	0.180	2.770	0.260	1.126	A	A
1	GROSS BETA	2.610	0.100	2.660	0.260	0.981	A	A
Matrix: SO Soil Bq / kg								
1	CS137	203.670	20.780	204.000	5.000	0.998	A	A
1	K40	841.000	106.000	780.000	27.000	1.078	A	A
1	PU239	3.010	0.060	3.200	0.500	0.941	A	A
1	SR90	12.470	2.260	13.000	0.470	0.959	A	A
Matrix: WA Water Bq / L								
1	CO60	52.730	4.500	52.400	2.200	1.006	A	A
1	CS137	78.330	4.840	76.000	3.400	1.031	A	A
1	FE55	49.630	3.820	53.000	2.000	0.936	A	A
1	GROSS ALPHA	1536.700	138.500	1580.000	20.000	0.973	A	A
1	GROSS BETA	876.000	100.000	740.000	40.000	1.184	A	A
1	H3	90.670	17.320	80.700	3.700	1.124	A	A
1	PU239	0.960	0.020	0.870	0.100	1.103	A	A
1	SR90	1.630	0.320	1.720	0.100	0.948	A	W
1	UG/G U	0.030	0.002	0.030	0.010	1.000	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** KR Korea Atomic Energy Research Institute

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter							
3	CO57	8.200	0.500	7.730	0.033	1.061	A
2	CO57	8.400	0.200	7.730	0.033	1.087	A
1	CO57	8.400	0.300	7.730	0.033	1.087	A
4	CO57	8.200	0.500	7.730	0.033	1.061	A
2	CO60	6.700	0.100	6.350	0.410	1.055	A
1	CO60	6.900	0.300	6.350	0.410	1.087	A
4	CO60	6.800	0.500	6.350	0.410	1.071	A
3	CO60	6.700	0.500	6.350	0.410	1.055	A
4	CS137	7.100	0.500	6.430	0.420	1.104	A
2	CS137	7.000	0.200	6.430	0.420	1.089	A
1	CS137	7.200	0.300	6.430	0.420	1.120	A
3	CS137	6.900	0.500	6.430	0.420	1.073	A
1	GROSS ALPHA	2.890	0.040	2.770	0.260	1.043	A
1	GROSS BETA	2.720	0.030	2.660	0.260	1.023	A
4	MN54	9.000	0.600	7.910	0.450	1.138	A
3	MN54	8.800	0.500	7.910	0.450	1.113	A
1	MN54	8.500	0.400	7.910	0.450	1.075	A
2	MN54	8.700	0.200	7.910	0.450	1.100	A
1	SR90	0.350	1.040	0.336	0.014	1.042	A

Matrix: SO Soil Bq / kg

1	CS137	229.300	9.900	204.000	5.000	1.124	A
5	CS137	222.000	9.000	204.000	5.000	1.088	A
4	CS137	235.700	16.800	204.000	5.000	1.155	A
3	CS137	234.900	16.400	204.000	5.000	1.151	A
2	CS137	241.100	10.200	204.000	5.000	1.182	A
5	K40	823.500	37.400	780.000	27.000	1.056	A
4	K40	897.400	68.900	780.000	27.000	1.151	A
3	K40	882.700	64.200	780.000	27.000	1.132	A
2	K40	899.400	47.100	780.000	27.000	1.153	A
1	K40	847.100	46.900	780.000	27.000	1.086	A
1	PU238	0.135	0.090	0.320	0.130	0.422	N
1	PU239	3.010	0.630	3.200	0.500	0.941	A
2	SR90	12.140	0.350	13.000	0.470	0.934	A
1	SR90	13.060	0.370	13.000	0.470	1.005	A

Matrix: VE Vegetation Bq / kg

1	CO60	18.600	1.300	17.600	1.000	1.057	A
4	CO60	20.400	1.800	17.600	1.000	1.159	A
5	CO60	19.500	2.300	17.600	1.000	1.108	A
3	CO60	16.900	1.800	17.600	1.000	0.960	A
2	CO60	20.400	1.700	17.600	1.000	1.159	A
5	CS137	488.000	32.500	440.000	20.000	1.109	A
4	CS137	472.300	33.300	440.000	20.000	1.073	A
3	CS137	465.700	32.600	440.000	20.000	1.058	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** KR Korea Atomic Energy Research Institute

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
2	CS137	498.500	35.600	440.000	20.000	1.133	A	
1	CS137	480.400	19.200	440.000	20.000	1.092	A	
3	K40	479.500	41.600	513.000	20.000	0.935	A	
5	K40	511.100	46.000	513.000	20.000	0.996	A	
2	K40	503.000	32.500	513.000	20.000	0.981	A	
1	K40	510.500	26.800	513.000	20.000	0.995	A	
4	K40	511.100	42.400	513.000	20.000	0.996	A	
1	PU238	0.150	0.060	0.500	0.100	0.300	N	
1	PU239	4.350	0.520	4.300	0.460	1.012	A	
2	SR90	456.150	3.320	595.000	29.000	0.767	A	
1	SR90	441.750	3.370	595.000	29.000	0.742	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or $\text{mL}=\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LA Los Alamos National Laboratory, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
3	AC228	151.000	17.000	124.000	4.800	1.218	A	A
1	AC228	174.000	19.000	124.000	4.800	1.403	W	A
2	AC228	144.000	16.000	124.000	4.800	1.161	A	A
1	AM241	3.130	0.370	1.440	0.190	2.174	W	A
2	AM241	1.880	0.370	1.440	0.190	1.306	A	A
3	AM241	2.260	0.370	1.440	0.190	1.569	W	A
1	BI212	119.000	15.000	140.000	14.000	0.850	A	
3	BI212	107.000	14.000	140.000	14.000	0.764	A	
2	BI212	107.000	13.000	140.000	14.000	0.764	A	
3	BI214	99.000	11.000	69.500	1.800	1.424	N	A
2	BI214	117.000	13.000	69.500	1.800	1.683	N	A
1	BI214	92.000	10.000	69.500	1.800	1.324	W	A
1	CS137	268.000	28.000	204.000	5.000	1.314	W	W
3	CS137	262.000	28.000	204.000	5.000	1.284	W	W
2	CS137	236.000	25.000	204.000	5.000	1.157	A	W
2	PB212	138.000	15.000	127.000	4.800	1.087	A	A
1	PB212	156.000	17.000	127.000	4.800	1.228	W	A
3	PB212	147.000	16.000	127.000	4.800	1.157	A	A
3	PB214	85.000	9.000	72.000	0.420	1.181	A	A
2	PB214	93.000	10.000	72.000	0.420	1.292	W	A
1	PB214	87.000	10.000	72.000	0.420	1.208	A	A
3	PU239	13.410	0.610	3.200	0.500	4.191	N	A
2	PU239	9.590	0.490	3.200	0.500	2.997	N	A
1	TH234	338.000	39.000	198.000	5.600	1.707	W	A
2	TH234	562.000	70.000	198.000	5.600	2.838	N	A
3	TH234	423.000	48.000	198.000	5.600	2.136	N	A
2	UG/G U	16.010	1.600	16.300	0.300	0.982	A	
1	UG/G U	16.460	1.650	16.300	0.300	1.010	A	
3	UG/G U	15.720	1.570	16.300	0.300	0.964	A	

Matrix: VE Vegetation Bq / kg

3	AM241	2.760	0.100	2.880	0.220	0.958	A	
2	AM241	2.840	0.090	2.880	0.220	0.986	A	
1	AM241	2.910	0.100	2.880	0.220	1.010	A	
2	CO60	17.600	2.000	17.600	1.000	1.000	A	N
3	CO60	18.200	2.000	17.600	1.000	1.034	A	N
1	CO60	17.200	2.000	17.600	1.000	0.977	A	N
1	CS137	443.000	47.000	440.000	20.000	1.007	A	W
3	CS137	448.000	47.000	440.000	20.000	1.018	A	W
2	CS137	451.000	48.000	440.000	20.000	1.025	A	W
1	K40	499.000	55.000	513.000	20.000	0.973	A	N
3	K40	460.000	51.000	513.000	20.000	0.897	W	N
2	K40	489.000	53.000	513.000	20.000	0.953	A	N
2	PU239	3.980	0.130	4.300	0.460	0.926	A	
1	PU239	4.020	0.130	4.300	0.460	0.935	A	
3	PU239	4.040	0.140	4.300	0.460	0.940	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LA Los Alamos National Laboratory, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
2	SR90	558.000	32.000	595.000	29.000	0.938	A	
1	SR90	599.000	34.000	595.000	29.000	1.007	A	
3	SR90	639.000	37.000	595.000	29.000	1.074	A	
Matrix: WA Water Bq / L								
3	AM241	0.856	0.024	0.850	0.100	1.007	A	A
1	AM241	0.845	0.024	0.850	0.100	0.994	A	A
2	AM241	0.903	0.026	0.850	0.100	1.062	A	A
1	CO60	59.100	6.300	52.400	2.200	1.128	A	A
2	CO60	57.600	6.200	52.400	2.200	1.099	A	A
3	CO60	58.000	6.200	52.400	2.200	1.107	A	A
3	CS137	87.600	9.300	76.000	3.400	1.153	A	A
2	CS137	85.900	9.100	76.000	3.400	1.130	A	A
1	CS137	90.700	9.600	76.000	3.400	1.193	W	A
2	GROSS ALPHA	1713.000	353.000	1580.000	20.000	1.084	A	W
3	GROSS ALPHA	1676.000	346.000	1580.000	20.000	1.061	A	W
1	GROSS ALPHA	1772.000	364.000	1580.000	20.000	1.122	A	W
3	GROSS BETA	1021.000	223.000	740.000	40.000	1.380	W	A
2	GROSS BETA	1006.000	221.000	740.000	40.000	1.359	W	A
1	GROSS BETA	1043.000	227.000	740.000	40.000	1.409	W	A
3	H3	80.000	27.400	80.700	3.700	0.991	A	A
2	H3	76.600	27.400	80.700	3.700	0.949	A	A
1	H3	68.100	26.600	80.700	3.700	0.844	A	A
1	PU238	0.788	0.022	0.790	0.080	0.997	A	A
2	PU238	0.766	0.019	0.790	0.080	0.970	A	A
3	PU238	0.794	0.020	0.790	0.080	1.005	A	A
1	PU239	0.866	0.024	0.870	0.100	0.995	A	A
2	PU239	0.830	0.020	0.870	0.100	0.954	A	A
3	PU239	0.845	0.021	0.870	0.100	0.971	A	A
2	SR90	1.780	0.210	1.720	0.100	1.035	A	A
1	SR90	1.650	0.180	1.720	0.100	0.959	A	A
3	SR90	1.950	0.220	1.720	0.100	1.134	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LB Lawrence Berkeley Lab UCB

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.300	0.500	7.730	0.033	1.074	A	A
1	CO60	6.700	0.900	6.350	0.410	1.055	A	A
1	CS137	6.800	0.900	6.430	0.420	1.058	A	A
1	GROSS ALPHA	2.550	0.240	2.770	0.260	0.921	A	A
1	GROSS BETA	2.790	0.210	2.660	0.260	1.049	A	A
1	MN54	9.600	1.400	7.910	0.450	1.214	W	
1	RU106	6.500	1.200	5.500	1.760	1.182	W	
Matrix: SO Soil Bq / kg								
1	AC228	102.000	14.000	124.000	4.800	0.823	W	
1	CS137	203.000	20.000	204.000	5.000	0.995	A	A
1	PB212	115.000	14.000	127.000	4.800	0.906	W	
Matrix: VE Vegetation Bq / kg								
1	CO60	19.000	3.000	17.600	1.000	1.080	A	A
1	CS137	451.000	45.000	440.000	20.000	1.025	A	A
Matrix: WA Water Bq / L								
1	CO60	54.000	12.000	52.400	2.200	1.031	A	A
1	CS137	77.000	14.000	76.000	3.400	1.013	A	A
1	GROSS ALPHA	1386.000	95.000	1580.000	20.000	0.877	A	N
1	GROSS BETA	972.000	31.000	740.000	40.000	1.314	A	W
1	H3	90.000	6.000	80.700	3.700	1.115	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LL LLNL Chemistry and Material Science/Environmental

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.124	0.008	0.127	0.010	0.976	A	A
1	Bq U	0.127	0.004	0.133	0.008	0.955	A	
1	CO57	8.560	0.430	7.730	0.033	1.107	A	A
1	CO60	6.830	0.340	6.350	0.410	1.076	A	A
1	CS137	7.360	0.650	6.430	0.420	1.145	W	A
1	MN54	8.700	1.030	7.910	0.450	1.100	A	
1	PU238	0.108	0.007	0.097	0.007	1.116	A	A
1	PU239	0.129	0.009	0.136	0.011	0.949	A	A

Matrix: SO Soil Bq / kg

1	Bq U	383.000	12.000	401.000	8.700	0.955	A	
1	CS137	187.000	84.700	204.000	5.000	0.917	A	A
1	K40	715.000	256.000	780.000	27.000	0.917	A	A
1	PU238	0.193	0.135	0.320	0.130	0.603	W	
1	PU239	2.900	0.537	3.200	0.500	0.906	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	4.240	1.510	2.880	0.220	1.472	A	A
1	CM244	2.340	1.130	1.610	0.360	1.453	W	
1	CO60	15.600	4.700	17.600	1.000	0.886	A	A
1	CS137	378.000	40.000	440.000	20.000	0.859	W	A
1	K40	439.000	169.000	513.000	20.000	0.856	W	A
1	PU238	0.313	0.173	0.500	0.100	0.626	N	
1	PU239	4.660	0.700	4.300	0.460	1.084	A	A

Matrix: WA Water Bq / L

1	Bq U	0.756	0.070	0.760	0.040	0.995	A	
1	CO60	109.000	15.000	52.400	2.200	2.080	N	A
1	CS137	163.000	22.000	76.000	3.400	2.145	N	A
1	H3	98.400	5.300	80.700	3.700	1.219	A	A
1	PU238	0.800	0.111	0.790	0.080	1.013	A	A
1	PU239	0.934	0.121	0.870	0.100	1.074	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LN Los Alamos National Lab, ES&H

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	6.820	0.960	7.730	0.033	0.882	A	
1	CO60	6.580	0.800	6.350	0.410	1.036	A	W
1	CS137	6.450	0.740	6.430	0.420	1.003	A	A
1	GROSS ALPHA	2.970	0.150	2.770	0.260	1.072	A	A
1	GROSS BETA	2.870	0.120	2.660	0.260	1.079	A	W
1	MN54	8.560	0.430	7.910	0.450	1.082	A	

Matrix: WA Water Bq / L

1	CO60	55.000	6.140	52.400	2.200	1.050	A	W
1	CS137	81.200	7.500	76.000	3.400	1.068	A	N
1	H3	433.000	48.000	80.700	3.700	5.366	N	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LV UNLV, Dept of Health Physics

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.132	0.010	0.127	0.010	1.039	A	N
1	CO57	7.110	0.310	7.730	0.033	0.920	A	A
1	CO60	6.340	0.120	6.350	0.410	0.998	A	A
1	CS137	6.550	0.220	6.430	0.420	1.019	A	A
1	GROSS ALPHA	2.750	0.250	2.770	0.260	0.993	A	
1	GROSS BETA	2.750	0.090	2.660	0.260	1.034	A	
1	MN54	8.140	0.230	7.910	0.450	1.029	A	
1	RU106	5.210	0.390	5.500	1.760	0.947	A	

Matrix: SO Soil Bq / kg

1	AC228	137.000	4.000	124.000	4.800	1.105	A	A
1	AM241	2.080	0.580	1.440	0.190	1.444	A	W
1	BI212	85.600	3.500	140.000	14.000	0.611	A	
1	BI214	85.300	1.800	69.500	1.800	1.227	W	A
1	CS137	231.000	8.000	204.000	5.000	1.132	A	A
1	K40	884.000	34.000	780.000	27.000	1.133	A	A
1	PB212	134.000	7.000	127.000	4.800	1.055	A	A
1	PB214	88.900	3.900	72.000	0.420	1.235	A	A
1	TH234	428.000	61.000	198.000	5.600	2.162	N	A

Matrix: VE Vegetation Bq / kg

1	AM241	5.610	1.000	2.880	0.220	1.948	W	W
1	CO60	19.200	1.300	17.600	1.000	1.091	A	A
1	CS137	480.000	17.000	440.000	20.000	1.091	A	A
1	K40	511.000	34.000	513.000	20.000	0.996	A	A

Matrix: WA Water Bq / L

1	AM241	0.480	0.320	0.850	0.100	0.565	N	A
1	CO60	53.300	1.000	52.400	2.200	1.017	A	A
1	CS137	76.800	2.600	76.000	3.400	1.011	A	A
1	GROSS ALPHA	2040.000	220.000	1580.000	20.000	1.291	W	A
1	GROSS BETA	901.000	65.000	740.000	40.000	1.218	A	W
1	H3	80.000	6.600	80.700	3.700	0.991	A	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** LW Lawrence Livermore National Lab, Waste

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq/kg								
1	AM241	0.700	0.900	1.440	0.190	0.486	N	W
1	PU238	0.250	0.140	0.320	0.130	0.781	A	
1	PU239	2.760	0.490	3.200	0.500	0.863	W	A
1	U234	190.000	20.000	190.000	5.200	1.000	A	A
1	U238	198.000	26.000	202.000	7.200	0.980	A	A

Matrix: WA Water Bq/L

1	GROSS ALPHA	1414.000	44.000	1580.000	20.000	0.895	A	
1	GROSS BETA	882.000	21.000	740.000	40.000	1.192	A	
1	H3	84.000	11.000	80.700	3.700	1.041	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** MA ORNL Health Sciences Research Div.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.160	0.130	0.127	0.010	1.260	A	
1	CO57	9.000	1.200	7.730	0.033	1.164	W	A
1	CO60	6.300	0.610	6.350	0.410	0.992	A	W
1	CS137	7.600	1.700	6.430	0.420	1.182	W	A
1	MN54	8.700	2.600	7.910	0.450	1.100	A	
1	RU106	6.300	3.700	5.500	1.760	1.145	A	
Matrix: SO Soil Bq / kg								
1	AC228	122.000	23.000	124.000	4.800	0.984	A	A
1	BI212	111.000	38.000	140.000	14.000	0.793	A	
1	BI214	68.000	7.000	69.500	1.800	0.978	A	A
1	CS137	202.000	44.000	204.000	5.000	0.990	A	A
1	K40	729.000	82.000	780.000	27.000	0.935	A	A
1	PB212	125.000	54.000	127.000	4.800	0.984	A	
1	PB214	70.000	14.000	72.000	0.420	0.972	A	A
1	TH234	170.000	68.000	198.000	5.600	0.859	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.600	2.400	2.880	0.220	1.250	A	N
1	CO60	17.000	1.600	17.600	1.000	0.966	A	W
1	CS137	447.000	93.000	440.000	20.000	1.016	A	N
1	K40	488.000	47.000	513.000	20.000	0.951	A	W

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** ME Radiation Control Program, Jamaica Plain, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
3	AM241	0.130	0.020	0.127	0.010	1.024	A	A
2	AM241	0.130	0.030	0.127	0.010	1.024	A	A
1	AM241	0.090	0.010	0.127	0.010	0.709	N	A
1	CO57	7.990	0.280	7.730	0.033	1.034	A	
2	CO57	8.290	0.300	7.730	0.033	1.072	A	
3	CO57	7.990	0.280	7.730	0.033	1.034	A	
2	CO60	6.220	0.160	6.350	0.410	0.980	A	A
3	CO60	7.180	0.180	6.350	0.410	1.131	W	A
1	CO60	7.070	0.180	6.350	0.410	1.113	W	A
3	CS137	6.840	0.330	6.430	0.420	1.064	A	A
2	CS137	6.220	0.310	6.430	0.420	0.967	A	A
1	CS137	6.880	0.330	6.430	0.420	1.070	A	A
3	GROSS ALPHA	3.500	0.100	2.770	0.260	1.264	A	W
2	GROSS ALPHA	3.500	0.100	2.770	0.260	1.264	A	W
1	GROSS ALPHA	3.700	0.100	2.770	0.260	1.336	W	W
1	GROSS BETA	2.800	0.080	2.660	0.260	1.053	A	A
3	GROSS BETA	2.900	0.090	2.660	0.260	1.090	A	A
2	GROSS BETA	3.000	0.090	2.660	0.260	1.128	A	A
2	MN54	7.990	0.310	7.910	0.450	1.010	A	
3	MN54	8.950	0.340	7.910	0.450	1.131	A	
1	MN54	8.990	0.340	7.910	0.450	1.137	A	
1	RU106	5.180	0.440	5.500	1.760	0.942	A	
3	RU106	5.110	0.450	5.500	1.760	0.929	A	
2	RU106	4.590	0.430	5.500	1.760	0.835	A	

Matrix: SO Soil Bq / kg

1	AC228	172.000	2.540	124.000	4.800	1.387	W	A
1	AM241	3.920	1.070	1.440	0.190	2.722	N	W
1	CS137	157.000	7.200	204.000	5.000	0.770	N	N
1	K40	673.000	32.000	780.000	27.000	0.863	W	N
1	PB214	51.000	1.900	72.000	0.420	0.708	W	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.120	0.540	2.880	0.220	1.083	A	N
3	AM241	2.540	0.520	2.880	0.220	0.882	W	N
2	AM241	3.390	1.260	2.880	0.220	1.177	A	N
3	CO60	26.600	1.000	17.600	1.000	1.511	N	W
2	CO60	23.600	0.800	17.600	1.000	1.341	W	W
1	CO60	15.500	0.660	17.600	1.000	0.881	A	W
2	CS137	585.000	25.900	440.000	20.000	1.330	W	N
3	CS137	331.000	16.400	440.000	20.000	0.752	N	N
1	CS137	400.000	19.200	440.000	20.000	0.909	A	N
2	K40	644.000	29.000	513.000	20.000	1.255	W	W
1	K40	370.000	24.300	513.000	20.000	0.721	N	W
3	K40	566.000	28.600	513.000	20.000	1.103	A	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** ME Radiation Control Program, Jamaica Plain, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
3	AM241	0.670	0.100	0.850	0.100	0.788	W	A
2	AM241	0.810	0.200	0.850	0.100	0.953	A	A
1	AM241	0.730	0.130	0.850	0.100	0.859	W	A
3	CO60	53.200	1.370	52.400	2.200	1.015	A	A
2	CO60	57.700	1.490	52.400	2.200	1.101	A	A
1	CO60	46.800	1.200	52.400	2.200	0.893	W	A
3	CS137	78.100	3.770	76.000	3.400	1.028	A	W
2	CS137	85.500	4.140	76.000	3.400	1.125	A	W
1	CS137	66.600	3.300	76.000	3.400	0.876	W	W
2	H3	96.700	4.540	80.700	3.700	1.198	A	W
3	H3	97.300	4.400	80.700	3.700	1.206	A	W
1	H3	98.200	4.600	80.700	3.700	1.217	A	W

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** MH Maine Health & Environmental Testing Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.910	0.270	7.730	0.033	1.023	A	A
1	CO60	7.000	0.180	6.350	0.410	1.102	W	A
1	CS137	8.180	0.300	6.430	0.420	1.272	W	W
1	GROSS ALPHA	2.990	0.030	2.770	0.260	1.079	A	A
1	GROSS BETA	2.970	0.020	2.660	0.260	1.117	A	A
1	MN54	9.980	0.370	7.910	0.450	1.262	W	
1	RU106	6.540	0.300	5.500	1.760	1.189	W	
Matrix: SO Soil Bq / kg								
1	AC228	136.400	10.300	124.000	4.800	1.100	A	A
1	BI212	80.800	5.700	140.000	14.000	0.577	A	
1	BI214	74.500	2.400	69.500	1.800	1.072	A	A
1	CS137	236.600	11.600	204.000	5.000	1.160	A	A
1	K40	951.100	43.900	780.000	27.000	1.219	A	A
1	PB212	137.800	9.600	127.000	4.800	1.085	A	A
1	PB214	84.200	2.800	72.000	0.420	1.169	A	A
1	TH234	246.700	12.800	198.000	5.600	1.246	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	2.730	0.430	2.880	0.220	0.948	A	W
1	CO60	18.800	0.600	17.600	1.000	1.068	A	A
1	CS137	493.000	24.100	440.000	20.000	1.120	A	A
1	K40	585.700	27.400	513.000	20.000	1.142	A	W
Matrix: WA Water Bq / L								
1	CO60	51.500	1.600	52.400	2.200	0.983	A	A
1	CS137	75.700	3.700	76.000	3.400	0.996	A	A
1	GROSS ALPHA	1866.800	14.300	1580.000	20.000	1.182	W	W
1	GROSS BETA	1006.600	6.600	740.000	40.000	1.360	W	A
1	H3	83.880	5.400	80.700	3.700	1.039	A	W
1	SR90	1.467	0.207	1.720	0.100	0.853	W	A
1	U234	0.384	0.054	0.370	0.020	1.038	A	A
1	U238	0.377	0.053	0.360	0.020	1.047	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** MJ Mississippi State Department of Health, Jackson

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	Bq U	0.750	0.166	0.760	0.040	0.987	A	
1	CO60	53.700	2.500	52.400	2.200	1.025	A	
1	CS137	80.650	3.670	76.000	3.400	1.061	A	
1	GROSS ALPHA	1948.000	55.000	1580.000	20.000	1.233	W	
1	GROSS BETA	995.000	25.000	740.000	40.000	1.345	W	
1	H3	85.480	1.910	80.700	3.700	1.059	A	
1	SR90	1.500	0.096	1.720	0.100	0.872	W	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** ML Babcock & Wilcox of Ohio, Mound, Miamisburg, Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	60.100	6.010	7.730	0.033	7.775	N	
1	CO60	8.890	0.890	6.350	0.410	1.400	N	
1	CS137	6.970	0.700	6.430	0.420	1.084	A	
1	MN54	45.990	4.600	7.910	0.450	5.814	N	
1	PU238	0.093	0.006	0.097	0.007	0.961	A	A
1	PU239	0.130	0.008	0.136	0.011	0.956	A	A
1	U234	0.066	0.005	0.066	0.003	1.003	A	A
1	U238	0.063	0.005	0.065	0.005	0.975	A	A

Matrix: SO Soil Bq / kg

1	PU239	2.670	0.260	3.200	0.500	0.834	W	W
1	U234	188.670	15.020	190.000	5.200	0.993	A	A
1	U238	198.930	15.690	202.000	7.200	0.985	A	A

Matrix: VE Vegetation Bq / kg

1	PU239	4.130	0.340	4.300	0.460	0.960	A	A
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Matrix: WA Water Bq / L

1	CO60	49.020	4.900	52.400	2.200	0.935	A	
1	CS137	70.240	7.020	76.000	3.400	0.924	A	
1	H3	77.790	4.210	80.700	3.700	0.964	A	A
1	PU238	0.740	0.050	0.790	0.080	0.937	A	A
1	PU239	0.830	0.060	0.870	0.100	0.954	A	A
1	U234	0.380	0.030	0.370	0.020	1.027	A	A
1	U238	0.370	0.030	0.360	0.020	1.028	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NA US EPA NAREL, Montgomery, AL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	6.960	0.080	7.730	0.033	0.900	A	
1	CO60	6.000	0.120	6.350	0.410	0.945	A	A
1	CS137	6.500	0.150	6.430	0.420	1.011	A	A
1	MN54	7.980	0.170	7.910	0.450	1.009	A	
1	PU238	0.880	0.011	0.097	0.007	9.091	N	
1	PU239	0.128	0.013	0.136	0.011	0.941	A	
1	SR90	0.620	0.140	0.336	0.014	1.845	W	A
1	U234	0.068	0.016	0.066	0.003	1.033	A	W
1	U238	0.084	0.013	0.065	0.005	1.300	A	A

Matrix: SO Soil Bq / kg

1	BI214	83.800	2.400	69.500	1.800	1.206	W	A
1	CS137	227.000	2.700	204.000	5.000	1.113	A	A
1	K40	854.000	23.000	780.000	27.000	1.095	A	A
1	PB212	142.200	2.200	127.000	4.800	1.120	A	A
1	PB214	93.100	2.200	72.000	0.420	1.293	W	A
1	PU239	2.300	1.200	3.200	0.500	0.719	W	W
1	U234	194.000	11.000	190.000	5.200	1.021	A	A
1	U238	193.000	11.000	202.000	7.200	0.955	A	A

Matrix: VE Vegetation Bq / kg

1	CO60	22.500	0.900	17.600	1.000	1.278	W	A
1	CS137	585.800	4.000	440.000	20.000	1.331	W	W
1	K40	646.000	19.000	513.000	20.000	1.259	W	A
1	PU239	4.600	0.400	4.300	0.460	1.070	A	A
1	SR90	608.000	10.000	595.000	29.000	1.022	A	A

Matrix: WA Water Bq / L

1	CO60	53.400	0.600	52.400	2.200	1.019	A	A
1	CS137	79.500	0.800	76.000	3.400	1.046	A	A
1	H3	87.300	3.100	80.700	3.700	1.082	A	A
1	PU238	0.810	0.080	0.790	0.080	1.025	A	A
1	PU239	0.870	0.080	0.870	0.100	1.000	A	A
1	SR90	2.600	0.600	1.720	0.100	1.512	N	N
1	U234	0.425	0.050	0.370	0.020	1.149	A	W
1	U238	0.407	0.047	0.360	0.020	1.131	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** ND Dept. of Environmental Health and Safety, NC State University

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.236	0.284	7.730	0.033	1.065	A	
1	CO60	6.508	0.148	6.350	0.410	1.025	A	
1	CS137	7.025	0.279	6.430	0.420	1.093	A	
1	GROSS ALPHA	2.375	0.253	2.770	0.260	0.857	A	
1	GROSS BETA	2.853	0.142	2.660	0.260	1.073	A	
1	MN54	9.054	0.414	7.910	0.450	1.145	A	
Matrix: WA Water Bq / L								
1	CO60	51.081	1.606	52.400	2.200	0.975	A	
1	CS137	71.409	3.683	76.000	3.400	0.940	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NF Nuclear Fuel Services, Erwin, TN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
1	U234	211.169	14.966	190.000	5.200	1.111	W	
1	U238	207.121	14.770	202.000	7.200	1.025	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	3.050	0.376	2.880	0.220	1.059	A	
1	CM244	1.838	0.282	1.610	0.360	1.142	A	
1	PU239	5.943	0.857	4.300	0.460	1.382	W	
Matrix: WA Water Bq / L								
1	AM241	0.805	0.029	0.850	0.100	0.947	A	
1	PU238	0.838	0.031	0.790	0.080	1.061	A	
1	PU239	0.870	0.032	0.870	0.100	1.000	A	
1	U234	0.434	0.021	0.370	0.020	1.173	A	
1	U238	0.415	0.020	0.360	0.020	1.153	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NJ NJ Department of Health and Senior Services

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.130	0.040	0.127	0.010	1.024	A	A
3	AM241	0.130	0.050	0.127	0.010	1.024	A	A
2	AM241	0.140	0.090	0.127	0.010	1.102	A	A
2	CO57	7.700	0.600	7.730	0.033	0.996	A	A
1	CO57	7.400	0.600	7.730	0.033	0.957	A	A
3	CO57	7.300	0.800	7.730	0.033	0.944	A	A
1	CO60	6.200	0.400	6.350	0.410	0.976	A	A
2	CO60	6.200	0.400	6.350	0.410	0.976	A	A
3	CO60	6.100	0.400	6.350	0.410	0.961	A	A
1	CS137	6.200	0.600	6.430	0.420	0.964	A	A
2	CS137	6.100	0.500	6.430	0.420	0.949	A	A
3	CS137	6.000	0.500	6.430	0.420	0.933	A	A
2	MN54	7.600	1.700	7.910	0.450	0.961	A	
1	MN54	7.500	2.300	7.910	0.450	0.948	A	
3	MN54	7.500	2.300	7.910	0.450	0.948	A	
1	RU106	5.800	0.800	5.500	1.760	1.055	A	
3	RU106	5.500	0.600	5.500	1.760	1.000	A	
2	RU106	5.800	0.800	5.500	1.760	1.055	A	

Matrix: SO Soil Bq / kg

2	AC228	133.000	4.000	124.000	4.800	1.073	A	
1	AC228	131.000	11.000	124.000	4.800	1.056	A	
3	AC228	138.000	4.000	124.000	4.800	1.113	A	
1	AM241	0.890	0.780	1.440	0.190	0.618	N	
2	BI212	146.000	16.000	140.000	14.000	1.043	A	
3	BI212	140.000	5.000	140.000	14.000	1.000	A	
1	BI212	144.000	27.000	140.000	14.000	1.029	A	
2	BI214	84.000	5.200	69.500	1.800	1.209	W	
3	BI214	85.800	4.100	69.500	1.800	1.235	W	
1	BI214	82.500	5.200	69.500	1.800	1.187	W	
3	CS137	232.000	11.000	204.000	5.000	1.137	A	
2	CS137	227.000	11.000	204.000	5.000	1.113	A	
1	CS137	231.000	13.000	204.000	5.000	1.132	A	
1	K40	862.000	44.000	780.000	27.000	1.105	A	
3	K40	847.000	96.000	780.000	27.000	1.086	A	
2	K40	877.000	33.000	780.000	27.000	1.124	A	
3	PB212	137.000	4.000	127.000	4.800	1.079	A	
2	PB212	137.000	6.000	127.000	4.800	1.079	A	
1	PB212	136.000	5.000	127.000	4.800	1.071	A	
2	PB214	91.800	3.300	72.000	0.420	1.275	W	
3	PB214	91.000	4.100	72.000	0.420	1.264	W	
1	PB214	92.900	5.200	72.000	0.420	1.290	W	
3	TH234	191.000	14.000	198.000	5.600	0.965	A	
2	TH234	163.000	24.000	198.000	5.600	0.823	A	
1	TH234	155.000	16.000	198.000	5.600	0.783	W	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NJ NJ Department of Health and Senior Services

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
1	AM241	3.660	1.260	2.880	0.220	1.271	A	
2	AM241	3.440	0.920	2.880	0.220	1.194	A	
3	AM241	3.180	0.890	2.880	0.220	1.104	A	
3	CO60	20.000	1.100	17.600	1.000	1.136	A	
2	CO60	19.200	1.500	17.600	1.000	1.091	A	
1	CO60	19.600	1.500	17.600	1.000	1.114	A	
3	CS137	488.000	22.000	440.000	20.000	1.109	A	
2	CS137	477.000	41.000	440.000	20.000	1.084	A	
1	CS137	485.000	26.000	440.000	20.000	1.102	A	
1	K40	533.000	33.000	513.000	20.000	1.039	A	
3	K40	525.000	59.000	513.000	20.000	1.023	A	
2	K40	529.000	26.000	513.000	20.000	1.031	A	

Matrix: WA Water Bq / L

1	CO60	53.000	1.000	52.400	2.200	1.011	A	A
3	CO60	53.000	2.000	52.400	2.200	1.011	A	A
2	CO60	53.000	2.000	52.400	2.200	1.011	A	A
1	CS137	76.000	4.000	76.000	3.400	1.000	A	A
2	CS137	75.000	4.000	76.000	3.400	0.987	A	A
3	CS137	77.000	4.000	76.000	3.400	1.013	A	A
3	GROSS ALPHA	1580.000	80.000	1580.000	20.000	1.000	A	A
1	GROSS ALPHA	1510.000	80.000	1580.000	20.000	0.956	A	A
2	GROSS ALPHA	1510.000	80.000	1580.000	20.000	0.956	A	A
3	GROSS BETA	1110.000	60.000	740.000	40.000	1.500	W	A
1	GROSS BETA	1100.000	60.000	740.000	40.000	1.486	W	A
2	GROSS BETA	1060.000	60.000	740.000	40.000	1.432	W	A
2	H3	93.000	7.000	80.700	3.700	1.152	A	A
3	H3	94.000	7.000	80.700	3.700	1.165	A	A
1	H3	100.000	7.000	80.700	3.700	1.239	W	A
1	SR90	1.500	0.200	1.720	0.100	0.872	W	A
2	SR90	1.400	0.200	1.720	0.100	0.814	W	A
3	SR90	1.700	0.200	1.720	0.100	0.988	A	A
3	U234	0.440	0.030	0.370	0.020	1.189	A	A
1	U234	0.440	0.030	0.370	0.020	1.189	A	A
2	U234	0.400	0.030	0.370	0.020	1.081	A	A
1	U238	0.400	0.030	0.360	0.020	1.111	A	A
2	U238	0.370	0.030	0.360	0.020	1.028	A	A
3	U238	0.410	0.030	0.360	0.020	1.139	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NL Fluor Daniel Fernald, Inc., Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.870	0.780	7.730	0.033	1.018	A	A
1	CO60	6.620	0.470	6.350	0.410	1.043	A	A
1	CS137	6.870	0.680	6.430	0.420	1.068	A	A
1	MN54	8.900	0.890	7.910	0.450	1.125	A	
1	PU238	0.088	0.022	0.097	0.007	0.911	A	A
1	PU239	0.137	0.033	0.136	0.011	1.007	A	A
1	RU106	6.410	0.940	5.500	1.760	1.165	W	
1	U234	0.078	0.019	0.066	0.003	1.188	A	A
1	U238	0.072	0.018	0.065	0.005	1.116	A	A
1	UG/G U	5.850	1.420	5.230	0.290	1.119	A	
Matrix: SO Soil Bq / kg								
1	AC228	139.000	11.400	124.000	4.800	1.121	A	A
1	BI212	128.000	12.700	140.000	14.000	0.914	A	
1	BI214	96.300	8.000	69.500	1.800	1.386	W	A
1	CS137	226.000	22.300	204.000	5.000	1.108	A	A
1	K40	900.000	91.000	780.000	27.000	1.154	A	A
1	PB212	128.000	12.700	127.000	4.800	1.008	A	A
1	PB214	99.500	7.840	72.000	0.420	1.382	W	A
1	TH234	186.000	27.300	198.000	5.600	0.939	A	A
1	U234	203.000	46.000	190.000	5.200	1.068	A	A
1	U238	196.000	45.000	202.000	7.200	0.970	A	A
1	UG/G U	15.900	3.700	16.300	0.300	0.975	A	
Matrix: WA Water Bq / L								
1	CO60	54.000	3.940	52.400	2.200	1.031	A	A
1	CS137	81.100	8.120	76.000	3.400	1.067	A	A
1	PU238	0.816	0.190	0.790	0.080	1.033	A	A
1	PU239	0.908	0.210	0.870	0.100	1.044	A	A
1	U234	0.389	0.091	0.370	0.020	1.051	A	A
1	U238	0.397	0.092	0.360	0.020	1.103	A	A
1	UG/G U	0.032	0.007	0.030	0.010	1.073	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NM Environmental Evaluation Group, Carlsbad, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.122	0.006	0.127	0.010	0.961	A	A
1	CS137	7.000	0.450	6.430	0.420	1.089	A	W
1	PU238	0.092	0.003	0.097	0.007	0.948	A	A
1	PU239	0.127	0.004	0.136	0.011	0.934	A	A
1	SR90	0.311	0.027	0.336	0.014	0.926	A	A

Matrix: SO Soil Bq / kg

1	AM241	1.620	0.170	1.440	0.190	1.125	A	A
2	AM241	2.000	0.190	1.440	0.190	1.389	A	A
3	AM241	2.120	0.170	1.440	0.190	1.472	A	A
1	CS137	219.000	11.000	204.000	5.000	1.074	A	A
2	PU239	2.280	0.160	3.200	0.500	0.712	W	W
3	PU239	2.860	0.220	3.200	0.500	0.894	A	W
1	PU239	2.360	0.160	3.200	0.500	0.737	W	W
2	SR90	12.500	1.800	13.000	0.470	0.962	A	A
3	SR90	14.700	2.300	13.000	0.470	1.131	A	A
1	SR90	13.500	2.000	13.000	0.470	1.038	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NP JAF Environmental Laboratory, New York Power Authority

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.170	0.080	7.730	0.033	1.057	A	A
1	CO60	6.750	0.120	6.350	0.410	1.063	A	A
1	CS137	6.720	0.130	6.430	0.420	1.045	A	A
1	GROSS BETA	2.820	0.050	2.660	0.260	1.060	A	A
1	MN54	8.970	0.130	7.910	0.450	1.134	A	
1	RU106	5.980	0.600	5.500	1.760	1.087	A	

Matrix: WA Water Bq / L

1	CO60	61.300	0.800	52.400	2.200	1.170	W	A
1	CS137	85.600	1.100	76.000	3.400	1.126	A	A
1	GROSS BETA	847.500	12.100	740.000	40.000	1.145	A	A
1	H3	155.400	40.700	80.700	3.700	1.926	N	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NQ New Mexico Department of Health, Albuquerque

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.100	0.007	0.127	0.010	0.791	W	A
1	GROSS ALPHA	2.670	0.400	2.770	0.260	0.964	A	A
1	GROSS BETA	3.030	0.460	2.660	0.260	1.139	A	A
1	PU238	0.089	0.006	0.097	0.007	0.914	A	W
1	PU239	0.130	0.008	0.136	0.011	0.959	A	W
1	U234	0.069	0.004	0.066	0.003	1.047	A	A
1	U238	0.065	0.004	0.065	0.005	1.009	A	A
Matrix: SO Soil Bq / kg								
1	AC228	139.300	15.200	124.000	4.800	1.123	A	A
1	AM241	5.460	0.720	1.440	0.190	3.792	N	A
1	BI212	143.700	19.600	140.000	14.000	1.026	A	A
1	BI214	75.200	8.500	69.500	1.800	1.082	A	A
1	CS137	236.000	28.000	204.000	5.000	1.157	A	A
1	K40	929.000	110.000	780.000	27.000	1.191	A	A
1	PB212	140.700	17.000	127.000	4.800	1.108	A	A
1	PB214	78.500	9.600	72.000	0.420	1.090	A	A
1	PU239	3.780	0.460	3.200	0.500	1.181	A	W
1	TH234	217.400	26.700	198.000	5.600	1.098	A	A
1	U234	195.000	11.300	190.000	5.200	1.026	A	A
1	U238	201.100	11.700	202.000	7.200	0.996	A	A
Matrix: WA Water Bq / L								
1	AM241	0.806	0.061	0.850	0.100	0.948	A	A
1	CO60	55.600	6.100	52.400	2.200	1.061	A	A
1	CS137	81.800	9.300	76.000	3.400	1.076	A	A
1	GROSS ALPHA	58.600	3.600	1580.000	20.000	0.037	N	A
1	GROSS BETA	35.500	4.400	740.000	40.000	0.048	N	A
1	PU238	0.887	0.059	0.790	0.080	1.123	W	W
1	PU239	1.022	0.067	0.870	0.100	1.175	W	W
1	U234	0.405	0.026	0.370	0.020	1.095	A	A
1	U238	0.400	0.026	0.360	0.020	1.111	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NR Naval Reactors Facility Chemistry, Scoville, ID

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	6.820	1.360	7.730	0.033	0.882	A	A
1	CO60	6.070	1.210	6.350	0.410	0.956	A	A
1	CS137	6.440	1.290	6.430	0.420	1.002	A	A
1	MN54	7.910	1.580	7.910	0.450	1.000	A	
1	RU106	5.620	1.120	5.500	1.760	1.022	A	
Matrix: SO Soil Bq / kg								
1	CS137	198.000	40.000	204.000	5.000	0.971	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	16.800	3.360	17.600	1.000	0.955	A	A
1	CS137	410.000	82.000	440.000	20.000	0.932	A	A
Matrix: WA Water Bq / L								
1	CO60	53.600	10.700	52.400	2.200	1.023	A	A
1	CS137	79.100	15.800	76.000	3.400	1.041	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NS State Lab of Public Health, North Carolina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.242	0.020	7.730	0.033	0.937	A	A
1	CO60	6.307	0.051	6.350	0.410	0.993	A	A
1	CS137	6.447	0.039	6.430	0.420	1.003	A	A
1	MN54	8.475	0.051	7.910	0.450	1.071	A	
1	RU106	5.131	0.202	5.500	1.760	0.933	A	

Matrix: WA Water Bq / L

1	Bq U	0.640	0.010	0.760	0.040	0.842	W	W
1	GROSS ALPHA	1607.108	22.018	1580.000	20.000	1.017	A	A
1	GROSS BETA	953.944	12.268	740.000	40.000	1.289	A	A
1	H3	79.764	6.336	80.700	3.700	0.988	A	
1	SR90	1.530	0.090	1.720	0.100	0.890	A	N

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NZ National Radiation Laboratory, New Zealand

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.600	0.400	7.730	0.033	0.983	A	
1	CO60	7.000	0.400	6.350	0.410	1.102	W	
1	CS137	7.100	0.400	6.430	0.420	1.104	A	
2	GROSS ALPHA	2.590	0.070	2.770	0.260	0.935	A	
1	GROSS ALPHA	2.580	0.070	2.770	0.260	0.931	A	
1	GROSS BETA	2.840	0.060	2.660	0.260	1.068	A	
2	GROSS BETA	2.810	0.060	2.660	0.260	1.056	A	
1	MN54	9.200	0.500	7.910	0.450	1.163	A	
1	PU238	0.100	0.006	0.097	0.007	1.033	A	
2	PU238	0.097	0.005	0.097	0.007	1.002	A	
2	PU239	0.136	0.006	0.136	0.011	1.000	A	
1	PU239	0.144	0.007	0.136	0.011	1.059	A	
1	SR90	0.590	0.020	0.336	0.014	1.756	W	

Matrix: SO Soil Bq / kg

2	CS137	224.000	12.000	204.000	5.000	1.098	A	
1	CS137	238.000	13.000	204.000	5.000	1.167	A	
2	K40	1060.000	70.000	780.000	27.000	1.359	W	
1	K40	1080.000	70.000	780.000	27.000	1.385	W	
2	PU239	52.000	3.000	3.200	0.500	16.250	N	
1	PU239	51.000	3.000	3.200	0.500	15.938	N	
2	SR90	44.000	3.000	13.000	0.470	3.385	W	
1	SR90	43.000	4.000	13.000	0.470	3.308	W	

Matrix: VE Vegetation Bq / kg

1	CO60	18.600	1.200	17.600	1.000	1.057	A	
2	CO60	20.500	1.200	17.600	1.000	1.165	A	
2	CS137	460.000	20.000	440.000	20.000	1.045	A	
1	CS137	480.000	20.000	440.000	20.000	1.091	A	
1	K40	810.000	60.000	513.000	20.000	1.579	N	
2	K40	760.000	50.000	513.000	20.000	1.481	N	
2	PU239	4.800	0.200	4.300	0.460	1.116	A	
1	PU239	4.600	0.200	4.300	0.460	1.070	A	

Matrix: WA Water Bq / L

2	CO60	52.000	3.000	52.400	2.200	0.992	A	
1	CO60	55.000	3.000	52.400	2.200	1.050	A	
1	CS137	81.000	4.000	76.000	3.400	1.066	A	
2	CS137	78.000	4.000	76.000	3.400	1.026	A	
2	GROSS ALPHA	1130.000	40.000	1580.000	20.000	0.715	W	
1	GROSS ALPHA	1160.000	40.000	1580.000	20.000	0.734	W	
1	GROSS BETA	840.000	30.000	740.000	40.000	1.135	A	
2	GROSS BETA	850.000	30.000	740.000	40.000	1.149	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** NZ National Radiation Laboratory, New Zealand

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	PU238	0.840	0.040	0.790	0.080	1.063	A	
2	PU238	0.770	0.040	0.790	0.080	0.975	A	
2	PU239	0.910	0.050	0.870	0.100	1.046	A	
1	PU239	0.860	0.040	0.870	0.100	0.989	A	
2	SR90	3.140	0.110	1.720	0.100	1.826	N	
1	SR90	3.040	0.110	1.720	0.100	1.767	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OB OBG Laboratories, East Syracuse, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	6.780	1.530	7.730	0.033	0.877	A	
1	CO60	5.640	1.310	6.350	0.410	0.888	A	A
1	CS137	5.750	1.650	6.430	0.420	0.894	A	A
1	GROSS ALPHA	3.530	0.377	2.770	0.260	1.274	A	A
1	GROSS BETA	2.750	0.300	2.660	0.260	1.034	A	A
1	MN54	7.880	2.010	7.910	0.450	0.996	A	
1	PU238	0.099	0.020	0.097	0.007	1.025	A	
1	PU239	0.125	0.023	0.136	0.011	0.919	A	
1	U234	0.085	0.032	0.066	0.003	1.287	A	
1	U238	0.017	0.022	0.065	0.005	0.257	N	
Matrix: SO Soil Bq / kg								
1	AC228	121.000	21.100	124.000	4.800	0.976	A	A
1	BI212	146.000	44.500	140.000	14.000	1.043	A	
1	BI214	61.300	12.900	69.500	1.800	0.882	A	
1	CS137	186.000	34.400	204.000	5.000	0.912	A	W
1	K40	809.000	158.000	780.000	27.000	1.037	A	W
1	PB212	123.000	21.100	127.000	4.800	0.969	A	A
1	PB214	6.790	8.360	72.000	0.420	0.094	N	A
1	PU239	1.110	0.559	3.200	0.500	0.347	N	
1	TH234	160.000	36.100	198.000	5.600	0.808	W	
1	U234	168.000	31.600	190.000	5.200	0.884	A	A
1	U238	186.000	34.200	202.000	7.200	0.921	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	13.800	2.790	17.600	1.000	0.784	W	A
1	CS137	358.000	66.900	440.000	20.000	0.814	W	A
1	K40	420.000	82.100	513.000	20.000	0.819	W	A
1	PU239	8.700	2.400	4.300	0.460	2.023	N	
Matrix: WA Water Bq / L								
1	CO60	60.200	10.700	52.400	2.200	1.149	W	N
1	CS137	102.000	19.500	76.000	3.400	1.342	N	N
1	GROSS ALPHA	2340.000	190.000	1580.000	20.000	1.481	N	N
1	GROSS BETA	984.000	105.000	740.000	40.000	1.330	W	A
1	PU238	0.799	0.145	0.790	0.080	1.011	A	
1	PU239	0.921	0.164	0.870	0.100	1.059	A	
1	U234	0.242	0.103	0.370	0.020	0.654	N	A
1	U238	0.322	0.103	0.360	0.020	0.894	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OC Radiation Protection Service Laboratory, Ontario, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.000	0.400	7.730	0.033	1.035	A	W
1	CO60	7.000	0.400	6.350	0.410	1.102	W	A
1	CS137	7.000	0.400	6.430	0.420	1.089	A	A
1	GROSS ALPHA	2.400	0.100	2.770	0.260	0.866	A	A
1	GROSS BETA	2.500	0.100	2.660	0.260	0.940	A	A
1	MN54	9.000	0.500	7.910	0.450	1.138	A	
1	RU106	6.000	1.200	5.500	1.760	1.091	A	

Matrix: SO Soil Bq / kg

1	AC228	110.000	14.000	124.000	4.800	0.887	A	A
1	BI212	100.000	22.000	140.000	14.000	0.714	A	
1	BI214	91.000	8.000	69.500	1.800	1.309	W	A
1	CS137	210.000	16.000	204.000	5.000	1.029	A	A
1	K40	770.000	120.000	780.000	27.000	0.987	A	A
1	PB212	120.000	12.000	127.000	4.800	0.945	A	A
1	PB214	110.000	12.000	72.000	0.420	1.528	N	A
1	TH234	200.000	22.000	198.000	5.600	1.010	A	

Matrix: VE Vegetation Bq / kg

1	CO60	17.000	4.000	17.600	1.000	0.966	A	W
1	CS137	420.000	38.000	440.000	20.000	0.955	A	W
1	K40	480.000	60.000	513.000	20.000	0.936	A	A

Matrix: WA Water Bq / L

1	CO60	52.000	3.000	52.400	2.200	0.992	A	A
1	CS137	76.000	4.000	76.000	3.400	1.000	A	A
1	GROSS ALPHA	1200.000	60.000	1580.000	20.000	0.759	W	A
1	GROSS BETA	780.000	40.000	740.000	40.000	1.054	A	A
1	H3	77.000	4.000	80.700	3.700	0.954	A	
1	SR90	2.000	0.200	1.720	0.100	1.163	A	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OD ORNL, Radiobioassay Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.390	0.210	7.730	0.033	1.085	A	A
1	CO60	6.850	0.100	6.350	0.410	1.079	A	A
1	CS137	6.810	0.250	6.430	0.420	1.059	A	A
1	GROSS ALPHA	2.440	0.060	2.770	0.260	0.881	A	A
1	GROSS BETA	3.320	0.080	2.660	0.260	1.248	A	A
1	MN54	8.540	0.410	7.910	0.450	1.080	A	
1	RU106	6.250	0.380	5.500	1.760	1.136	A	

Matrix: WA Water Bq / L

1	AM241	0.799	0.095	0.850	0.100	0.940	A	A
1	CO60	52.630	2.560	52.400	2.200	1.004	A	A
1	CS137	74.060	5.080	76.000	3.400	0.974	A	A
1	H3	57.400	1.720	80.700	3.700	0.711	W	W
1	PU238	0.828	0.088	0.790	0.080	1.048	A	W
1	PU239	0.901	0.095	0.870	0.100	1.036	A	A
1	SR90	1.780	0.270	1.720	0.100	1.035	A	A
1	U234	0.384	0.035	0.370	0.020	1.038	A	A
1	U238	0.376	0.034	0.360	0.020	1.044	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OH Ohio Dept Of Health Laboratory, Columbus

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.590		7.730	0.033	0.982	A	
1	CO60	6.290		6.350	0.410	0.991	A	
1	CS137	6.590		6.430	0.420	1.025	A	
1	GROSS ALPHA	2.700		2.770	0.260	0.975	A	
1	GROSS BETA	3.000		2.660	0.260	1.128	A	
1	MN54	8.030		7.910	0.450	1.015	A	
1	RU106	5.850		5.500	1.760	1.064	A	
Matrix: SO Soil Bq / kg								
1	AC228	106.000		124.000	4.800	0.855	W	
1	BI212	120.400		140.000	14.000	0.860	A	
1	BI214	57.800		69.500	1.800	0.832	A	
1	CS137	152.000		204.000	5.000	0.745	N	
1	K40	580.000		780.000	27.000	0.744	N	
1	PB212	93.900		127.000	4.800	0.739	N	
1	PB214	56.800		72.000	0.420	0.789	W	
Matrix: VE Vegetation Bq / kg								
1	CO60	14.800		17.600	1.000	0.841	W	
1	CS137	451.400		440.000	20.000	1.026	A	
1	K40	488.400		513.000	20.000	0.952	A	
Matrix: WA Water Bq / L								
1	CO60	54.100		52.400	2.200	1.032	A	
1	CS137	77.200		76.000	3.400	1.016	A	
1	GROSS ALPHA	1662.000		1580.000	20.000	1.052	A	
1	GROSS BETA	972.000		740.000	40.000	1.314	A	
1	H3	62.000		80.700	3.700	0.768	W	
1	SR90	1.700		1.720	0.100	0.988	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OK Southwest Laboratory of Oklahoma

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	H3	80.000	9.700	80.700	3.700	0.991	A	W
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Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OL ORNL Environmental Sciences Div.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.320	0.770	7.730	0.033	1.076	A	A
1	CO60	6.740	0.620	6.350	0.410	1.061	A	A
1	CS137	7.100	0.780	6.430	0.420	1.104	A	A
1	MN54	8.910	0.940	7.910	0.450	1.126	A	
1	RU106	6.070	1.310	5.500	1.760	1.104	A	
Matrix: SO Soil Bq / kg								
1	CS137	220.200	4.900	204.000	5.000	1.079	A	A
1	K40	903.900	46.000	780.000	27.000	1.159	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	19.200	0.130	17.600	1.000	1.091	A	A
1	CS137	536.600	13.700	440.000	20.000	1.220	A	A
1	K40	589.800	20.400	513.000	20.000	1.150	A	A
Matrix: WA Water Bq / L								
1	CO60	50.900	0.740	52.400	2.200	0.971	A	A
1	CS137	71.900	1.100	76.000	3.400	0.946	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OS Oregon Health Division Radiation Controls Section, Portland

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.410	0.670	7.730	0.033	1.088	A	A
2	CO57	8.630	0.670	7.730	0.033	1.116	A	A
2	CO60	6.410	0.210	6.350	0.410	1.009	A	A
1	CO60	6.110	0.220	6.350	0.410	0.962	A	A
1	CS137	6.480	0.370	6.430	0.420	1.008	A	A
2	CS137	6.560	0.360	6.430	0.420	1.020	A	A
2	MN54	8.200	0.400	7.910	0.450	1.037	A	
1	MN54	8.150	0.310	7.910	0.450	1.030	A	
1	RU106	4.810	1.040	5.500	1.760	0.875	A	
2	RU106	5.780	1.060	5.500	1.760	1.051	A	

Matrix: WA Water Bq / L

1	CO60	59.600	1.200	52.400	2.200	1.137	A	W
2	CO60	54.800	0.900	52.400	2.200	1.046	A	W
3	CO60	59.600	1.200	52.400	2.200	1.137	A	W
1	CS137	85.900	4.400	76.000	3.400	1.130	A	A
3	CS137	86.670	4.480	76.000	3.400	1.140	A	A
2	CS137	87.000	4.300	76.000	3.400	1.145	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OT ORNL Radioactive Material Analysis Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.110	0.010	0.127	0.010	0.866	W	N
1	Bq U	0.130	0.020	0.133	0.008	0.977	A	A
1	CO57	8.200	0.100	7.730	0.033	1.061	A	
1	CO60	6.600	0.300	6.350	0.410	1.039	A	A
1	CS137	6.800	0.200	6.430	0.420	1.058	A	A
1	GROSS ALPHA	2.700	0.100	2.770	0.260	0.975	A	A
1	GROSS BETA	2.900	0.100	2.660	0.260	1.090	A	A
1	MN54	8.700	0.300	7.910	0.450	1.100	A	
1	PU238	0.089	0.010	0.097	0.007	0.919	A	W
1	PU239	0.120	0.010	0.136	0.011	0.882	W	W
1	RU106	5.400	1.200	5.500	1.760	0.982	A	
1	SR90	0.300	0.060	0.336	0.014	0.893	A	N

Matrix: SO Soil Bq / kg

1	AC228	110.000	10.000	124.000	4.800	0.887	A	A
1	AM241	17.000	1.000	1.440	0.190	11.806	N	A
1	BI212	130.000	20.000	140.000	14.000	0.929	A	
1	BI214	72.000	14.000	69.500	1.800	1.036	A	A
1	Bq U	370.000	20.000	401.000	8.700	0.923	A	A
1	CS137	190.000	10.000	204.000	5.000	0.931	A	A
1	K40	770.000	50.000	780.000	27.000	0.987	A	A
1	PB212	130.000	20.000	127.000	4.800	1.024	A	A
1	PB214	72.000	14.000	72.000	0.420	1.000	A	A
1	PU239	2.800	0.500	3.200	0.500	0.875	W	A
1	SR90	12.000	2.000	13.000	0.470	0.923	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.400	0.300	2.880	0.220	1.181	A	A
1	CM244	2.000	0.300	1.610	0.360	1.242	A	W
1	CO60	18.000	3.000	17.600	1.000	1.023	A	A
1	CS137	410.000	10.000	440.000	20.000	0.932	A	A
1	K40	460.000	40.000	513.000	20.000	0.897	W	A
1	PU239	4.300	0.500	4.300	0.460	1.000	A	A
1	SR90	590.000	20.000	595.000	29.000	0.992	A	W

Matrix: WA Water Bq / L

1	AM241	0.910	0.070	0.850	0.100	1.071	A	A
1	Bq U	0.790	0.080	0.760	0.040	1.039	A	A
1	CO60	53.000	2.000	52.400	2.200	1.011	A	A
1	CS137	79.000	2.000	76.000	3.400	1.039	A	A
1	GROSS ALPHA	1375.000	100.000	1580.000	20.000	0.870	A	A
1	GROSS BETA	905.000	35.000	740.000	40.000	1.223	A	A
1	H3	99.000	9.000	80.700	3.700	1.227	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OT ORNL Radioactive Material Analysis Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	PU238	0.800	0.050	0.790	0.080	1.013	A	A
1	PU239	0.920	0.060	0.870	0.100	1.057	A	A
1	SR90	1.500	0.200	1.720	0.100	0.872	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** OU Outreach Laboratory, Broken Arrow, OK

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.880	0.460	7.730	0.033	1.149	W	
1	CO60	6.990	0.350	6.350	0.410	1.101	W	N
1	CS137	7.180	0.460	6.430	0.420	1.117	A	A
1	GROSS ALPHA	2.300	0.150	2.770	0.260	0.830	A	
1	GROSS BETA	2.370	0.160	2.660	0.260	0.891	A	
1	MN54	8.760	0.600	7.910	0.450	1.107	A	
Matrix: SO Soil Bq / kg								
1	AC228	111.000	6.600	124.000	4.800	0.895	A	A
1	BI214	64.400	4.700	69.500	1.800	0.927	A	A
1	CS137	191.000	9.500	204.000	5.000	0.936	A	N
1	K40	684.000	64.400	780.000	27.000	0.877	W	W
1	PB212	115.000	2.700	127.000	4.800	0.906	W	A
1	PB214	73.500	3.700	72.000	0.420	1.021	A	A
1	TH234	167.000	9.200	198.000	5.600	0.843	A	A
1	U234	186.000	2.300	190.000	5.200	0.979	A	
1	U238	186.000	2.300	202.000	7.200	0.921	A	
1	UG/G U	15.300	0.185	16.300	0.300	0.939	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	13.200	2.600	17.600	1.000	0.750	W	
1	CS137	427.000	23.000	440.000	20.000	0.970	A	
1	K40	508.000	73.300	513.000	20.000	0.990	A	
Matrix: WA Water Bq / L								
1	CS137	88.000	6.300	76.000	3.400	1.158	A	W
1	GROSS ALPHA	1374.000	188.000	1580.000	20.000	0.870	A	
1	GROSS BETA	983.000	161.000	740.000	40.000	1.328	W	
1	H3	115.000	6.520	80.700	3.700	1.425	W	
1	PU238	0.837	0.107	0.790	0.080	1.059	A	
1	PU239	0.712	0.099	0.870	0.100	0.818	W	
1	SR90	3.840	0.682	1.720	0.100	2.233	N	
1	U234	0.332	0.033	0.370	0.020	0.897	W	N
1	U238	0.345	0.033	0.360	0.020	0.958	A	N
1	UG/G U	0.032	0.000	0.030	0.010	1.067	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** PA Mason & Hanger-Silas Mason Co., Inc., Battelle Pantex, Amarillo, TX

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
3	GROSS ALPHA	2.540	0.210	2.770	0.260	0.917	A	A
1	GROSS ALPHA	2.740	0.230	2.770	0.260	0.989	A	A
2	GROSS ALPHA	2.700	0.170	2.770	0.260	0.975	A	A
5	GROSS ALPHA	2.620	0.130	2.770	0.260	0.946	A	A
4	GROSS ALPHA	2.720	0.160	2.770	0.260	0.982	A	A
3	GROSS BETA	2.840	0.200	2.660	0.260	1.068	A	A
5	GROSS BETA	3.770	0.270	2.660	0.260	1.417	W	A
4	GROSS BETA	3.960	0.180	2.660	0.260	1.489	W	A
1	GROSS BETA	3.430	0.240	2.660	0.260	1.289	A	A
2	GROSS BETA	3.420	0.200	2.660	0.260	1.286	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** PK Pakistan Institute of Nuclear Science & Technology

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
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Matrix: AI Air Filter Bq / filter

1	CO57	6.420	0.430	7.730	0.033	0.831	A	N
1	CO60	7.470	1.410	6.350	0.410	1.176	W	W
1	CS137	7.220	0.550	6.430	0.420	1.123	A	A
1	MN54	8.720	0.470	7.910	0.450	1.102	A	

Matrix: SO Soil Bq / kg

1	AC228	116.300	32.500	124.000	4.800	0.938	A	
1	BI212	145.000	23.200	140.000	14.000	1.036	A	
1	BI214	54.990	3.750	69.500	1.800	0.791	W	
1	CS137	237.670	9.700	204.000	5.000	1.165	A	A
1	K40	993.100	73.100	780.000	27.000	1.273	W	A
1	PB212	109.300	31.700	127.000	4.800	0.861	W	
1	PB214	61.360	17.200	72.000	0.420	0.852	W	

Matrix: VE Vegetation Bq / kg

1	CS137	394.000	4.800	440.000	20.000	0.895	W	A
1	K40	275.500	38.800	513.000	20.000	0.537	N	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** PO Institute of Oceanology PAN, Poland

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.130	0.020	0.127	0.010	1.024	A	W
1	CO60	6.200	0.400	6.350	0.410	0.976	A	A
1	CS137	6.500	0.400	6.430	0.420	1.011	A	A
Matrix: SO Soil Bq / kg								
1	AC228	138.000	5.000	124.000	4.800	1.113	A	A
1	BI214	80.000	3.000	69.500	1.800	1.151	A	A
1	CS137	210.000	16.000	204.000	5.000	1.029	A	A
1	K40	833.000	12.000	780.000	27.000	1.068	A	A
1	PB214	81.000	6.000	72.000	0.420	1.125	A	A
1	TH234	200.000	30.000	198.000	5.600	1.010	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	3.400	0.600	2.880	0.220	1.181	A	A
1	CO60	16.400	0.800	17.600	1.000	0.932	A	A
1	CS137	450.000	50.000	440.000	20.000	1.023	A	A
1	K40	520.000	13.000	513.000	20.000	1.014	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** PR Princeton Plasma Physics Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	H3	78.940	1.070	80.700	3.700	0.978	A	A
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Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RA V. G. Khlopin Radium Institute, St. Petersburg, Russia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	10.600	0.300	7.730	0.033	1.371	W	
2	CO57	11.400	0.400	7.730	0.033	1.475	N	
2	CO60	8.620	0.250	6.350	0.410	1.357	N	A
1	CO60	7.960	0.300	6.350	0.410	1.254	W	A
2	CS137	9.740	0.350	6.430	0.420	1.515	N	A
1	CS137	8.700	0.380	6.430	0.420	1.353	W	A
1	MN54	10.800	0.400	7.910	0.450	1.365	W	
2	MN54	11.900	0.400	7.910	0.450	1.504	N	
1	PU238	0.110	0.030	0.097	0.007	1.136	A	
1	PU239	0.130	0.030	0.136	0.011	0.956	A	
1	RU106	7.020	0.550	5.500	1.760	1.276	W	
2	RU106	6.990	0.400	5.500	1.760	1.271	W	
1	SR90	0.360	0.070	0.336	0.014	1.071	A	
1	UG/G U	5.600	0.300	5.230	0.290	1.071	A	

Matrix: SO Soil Bq / kg

1	AC228	114.000	8.000	124.000	4.800	0.919	A	A
2	AC228	112.000	5.000	124.000	4.800	0.903	A	A
1	BI212	115.000	5.000	140.000	14.000	0.821	A	
2	BI212	115.000	5.000	140.000	14.000	0.821	A	
1	BI214	62.600	7.000	69.500	1.800	0.901	A	A
2	BI214	64.300	2.700	69.500	1.800	0.925	A	A
2	CS137	199.000	8.000	204.000	5.000	0.975	A	A
1	CS137	200.000	8.000	204.000	5.000	0.980	A	A
2	K40	722.000	59.000	780.000	27.000	0.926	A	A
1	K40	670.000	57.000	780.000	27.000	0.859	W	A
1	PB212	115.000	6.000	127.000	4.800	0.906	W	A
2	PB212	111.000	5.000	127.000	4.800	0.874	W	A
1	PB214	64.000	3.600	72.000	0.420	0.889	W	A
2	PB214	67.000	3.100	72.000	0.420	0.931	A	A
1	PU238	1.100	0.300	0.320	0.130	3.438	N	
1	PU239	2.600	0.500	3.200	0.500	0.812	W	A
1	SR90	18.000	4.000	13.000	0.470	1.385	A	A
1	TH234	150.000	21.000	198.000	5.600	0.758	W	
2	TH234	140.000	26.000	198.000	5.600	0.707	W	
1	UG/G U	16.300	0.600	16.300	0.300	1.000	A	

Matrix: VE Vegetation Bq / kg

2	CO60	14.100	0.700	17.600	1.000	0.801	W	A
1	CO60	14.900	0.900	17.600	1.000	0.847	W	A
1	CS137	430.000	15.000	440.000	20.000	0.977	A	A
2	CS137	429.000	19.000	440.000	20.000	0.975	A	A
2	K40	410.000	71.000	513.000	20.000	0.799	W	A
1	K40	410.000	67.000	513.000	20.000	0.799	W	A
1	PU238	0.470	0.120	0.500	0.100	0.940	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RA V. G. Khlopin Radium Institute, St. Petersburg, Russia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
1	PU239	4.500	0.900	4.300	0.460	1.047	A	A
1	SR90	500.000	100.000	595.000	29.000	0.840	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RC US NRC Region I Laboratory, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.370	0.740	7.730	0.033	0.953	A	A
1	CO60	6.220	0.440	6.350	0.410	0.980	A	A
1	CS137	6.510	0.980	6.430	0.420	1.012	A	A
1	GROSS ALPHA	3.410	0.340	2.770	0.260	1.231	A	A
1	GROSS BETA	2.840	0.200	2.660	0.260	1.068	A	A
1	MN54	7.640	0.610	7.910	0.450	0.966	A	
1	RU106	7.580	1.900	5.500	1.760	1.378	N	
Matrix: SO Soil Bq / kg								
1	CS137	216.000	17.000	204.000	5.000	1.059	A	A
1	K40	926.000	92.000	780.000	27.000	1.187	A	A
Matrix: WA Water Bq / L								
1	CO60	51.000	3.000	52.400	2.200	0.973	A	A
1	CS137	74.000	4.000	76.000	3.400	0.974	A	A
1	H3	78.800	8.000	80.700	3.700	0.976	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or $\text{mL}=\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RE Bechtel Nevada, Mercury, NV

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.119	0.012	0.127	0.010	0.937	A	W
1	CO57	7.330	0.690	7.730	0.033	0.948	A	A
1	CO60	6.170	0.670	6.350	0.410	0.972	A	A
1	CS137	6.230	0.640	6.430	0.420	0.969	A	A
1	GROSS ALPHA	2.610	0.310	2.770	0.260	0.942	A	A
1	GROSS BETA	2.860	0.340	2.660	0.260	1.075	A	A
1	MN54	8.320	0.830	7.910	0.450	1.052	A	A
1	PU238	0.085	0.010	0.097	0.007	0.881	W	W
1	PU239	0.128	0.014	0.136	0.011	0.941	A	W
1	RU106	2.960	0.930	5.500	1.760	0.538	N	
1	SR90	0.350	0.033	0.336	0.014	1.042	A	W
1	U234	0.072	0.009	0.066	0.003	1.094	A	A
1	U238	0.073	0.009	0.065	0.005	1.125	A	N

Matrix: SO Soil Bq / kg

1	AC228	123.000	11.000	124.000	4.800	0.992	A	A
1	BI212	129.000	16.000	140.000	14.000	0.921	A	A
1	BI214	65.900	6.100	69.500	1.800	0.948	A	A
1	CS137	201.000	16.000	204.000	5.000	0.985	A	A
1	K40	807.000	69.000	780.000	27.000	1.035	A	A
1	PB212	142.000	12.000	127.000	4.800	1.118	A	A
1	PB214	77.400	7.000	72.000	0.420	1.075	A	A
1	PU239	2.820	0.730	3.200	0.500	0.881	W	A
1	SR90	13.400	2.200	13.000	0.470	1.031	A	A
1	U234	207.000	24.000	190.000	5.200	1.089	A	A
1	U238	219.000	26.000	202.000	7.200	1.084	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.140	0.340	2.880	0.220	1.090	A	A
1	CM244	2.050	0.220	1.610	0.360	1.273	A	W
1	CO60	17.500	2.600	17.600	1.000	0.994	A	A
1	CS137	413.000	34.000	440.000	20.000	0.939	A	A
1	K40	619.000	67.000	513.000	20.000	1.207	A	W
1	PU239	4.110	0.420	4.300	0.460	0.956	A	W
1	SR90	616.000	31.000	595.000	29.000	1.035	A	A

Matrix: WA Water Bq / L

1	AM241	1.000	0.120	0.850	0.100	1.176	A	A
1	CO60	54.000	5.400	52.400	2.200	1.031	A	A
1	CS137	78.900	7.300	76.000	3.400	1.038	A	A
1	GROSS ALPHA	1460.000	73.000	1580.000	20.000	0.924	A	A
1	GROSS BETA	943.000	47.000	740.000	40.000	1.274	A	A
1	H3	80.000	22.000	80.700	3.700	0.991	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RE Bechtel Nevada, Mercury, NV

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	PU238	0.777	0.089	0.790	0.080	0.984	A	A
1	PU239	0.856	0.096	0.870	0.100	0.984	A	A
1	SR90	1.620	0.190	1.720	0.100	0.942	A	W
1	U234	0.417	0.058	0.370	0.020	1.127	A	A
1	U238	0.428	0.057	0.360	0.020	1.189	W	W

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RG Thermo Nutech Rocky Flats Plant, Golden

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	GROSS ALPHA	1482.500	54.100	1580.000	20.000	0.938	A	A
1	GROSS BETA	734.600	27.500	740.000	40.000	0.993	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RI Waste Management Services of Hanford, Inc., 222S Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.121	0.011	0.127	0.010	0.953	A	
1	CO57	6.940	0.510	7.730	0.033	0.898	A	A
1	CO60	6.180	0.598	6.350	0.410	0.973	A	A
1	CS137	5.950	0.990	6.430	0.420	0.925	A	A
1	MN54	7.340	0.871	7.910	0.450	0.928	A	
1	PU238	0.104	0.009	0.097	0.007	1.074	A	A
1	PU239	0.144	0.010	0.136	0.011	1.059	A	A
1	SR90	0.292	0.044	0.336	0.014	0.869	A	A
Matrix: SO Soil Bq / kg								
1	CS137	294.000	33.500	204.000	5.000	1.441	N	W
1	UG/G U	13.900	0.350	16.300	0.300	0.853	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	2.950	0.224	2.880	0.220	1.024	A	
1	CM244	2.090	0.182	1.610	0.360	1.298	A	
1	CO60	22.200	6.230	17.600	1.000	1.261	W	N
1	CS137	515.000	24.700	440.000	20.000	1.170	A	W
1	PU239	4.270	0.256	4.300	0.460	0.993	A	A
1	SR90	592.000	18.400	595.000	29.000	0.995	A	A
Matrix: WA Water Bq / L								
1	AM241	0.984	0.055	0.850	0.100	1.158	A	N
1	CO60	56.800	1.550	52.400	2.200	1.084	A	A
1	CS137	82.200	2.320	76.000	3.400	1.082	A	A
1	H3	183.000	15.600	80.700	3.700	2.268	N	A
1	PU238	0.833	0.043	0.790	0.080	1.054	A	N
1	PU239	0.890	0.045	0.870	0.100	1.023	A	N
1	SR90	1.750	0.153	1.720	0.100	1.017	A	A
1	UG/G U	0.028	0.005	0.030	0.010	0.933	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RK Rock Island Arsenal, Illinois

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	GROSS ALPHA	1.820	0.170	2.770	0.260	0.657	W	W
1	GROSS BETA	2.650	0.150	2.660	0.260	0.996	A	W

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. $\text{pCi/g or mL} = \text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** RL Bechtel Hanford-Radiological Counting Facility

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	GROSS ALPHA	2.460	0.400	2.770	0.260	0.888	A	A
1	GROSS BETA	2.690	0.400	2.660	0.260	1.011	A	A
Matrix: SO Soil Bq / kg								
1	AC228	139.500	12.000	124.000	4.800	1.125	A	A
1	BI214	100.700	10.000	69.500	1.800	1.449	N	A
1	CS137	253.100	16.000	204.000	5.000	1.241	W	N
1	K40	975.700	31.000	780.000	27.000	1.251	W	N
1	PB212	143.600	12.000	127.000	4.800	1.131	A	A
1	PB214	103.000	10.000	72.000	0.420	1.431	W	A
1	TH234	282.400	34.000	198.000	5.600	1.426	A	A
Matrix: WA Water Bq / L								
1	AM241	1.070	0.250	0.850	0.100	1.259	W	
1	CO60	51.880	7.200	52.400	2.200	0.990	A	A
1	CS137	76.140	8.800	76.000	3.400	1.002	A	A
1	GROSS ALPHA	855.000	65.000	1580.000	20.000	0.541	N	A
1	GROSS BETA	662.000	34.000	740.000	40.000	0.895	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SA Sandia Labs Radioactive Sample Diag. Prog., NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.890	0.450	7.730	0.033	1.021	A	A
1	CO60	6.400	0.420	6.350	0.410	1.008	A	A
1	CS137	6.980	0.220	6.430	0.420	1.086	A	A
1	GROSS ALPHA	3.170	0.220	2.770	0.260	1.144	A	A
2	GROSS ALPHA	2.810	0.120	2.770	0.260	1.014	A	A
2	GROSS BETA	2.280	0.110	2.660	0.260	0.857	W	A
1	GROSS BETA	2.850	0.380	2.660	0.260	1.071	A	A
1	MN54	9.070	0.390	7.910	0.450	1.147	A	
1	RU106	5.170	1.500	5.500	1.760	0.940	A	
1	UG/G U	5.430	0.230	5.230	0.290	1.038	A	

Matrix: SO Soil Bq / kg

1	CS137	211.000	4.000	204.000	5.000	1.034	A	A
1	K40	836.000	25.000	780.000	27.000	1.072	A	A
1	UG/G U	15.900	1.400	16.300	0.300	0.975	A	

Matrix: WA Water Bq / L

1	CO60	56.100	2.600	52.400	2.200	1.071	A	A
1	CS137	80.900	4.500	76.000	3.400	1.064	A	A
2	GROSS ALPHA	1519.000	147.000	1580.000	20.000	0.961	A	
1	GROSS ALPHA	1453.000	398.000	1580.000	20.000	0.920	A	
1	GROSS BETA	990.000	376.000	740.000	40.000	1.338	W	
2	GROSS BETA	907.000	187.000	740.000	40.000	1.226	A	
1	H3	98.000	15.000	80.700	3.700	1.214	A	A
1	UG/G U	0.031	0.002	0.030	0.010	1.033	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SB SC Dept. of Health and Environment Control Radiological Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO60	7.024	0.496	6.350	0.410	1.106	W	W
1	CS137	7.433	0.946	6.430	0.420	1.156	W	W
1	GROSS ALPHA	2.884	0.114	2.770	0.260	1.041	A	
1	GROSS BETA	2.654	0.098	2.660	0.260	0.998	A	
1	MN54	9.377	1.250	7.910	0.450	1.185	W	
Matrix: SO Soil Bq / kg								
1	AC228	153.000	11.000	124.000	4.800	1.234	A	A
1	CS137	248.000	26.000	204.000	5.000	1.216	W	W
1	K40	956.000	96.000	780.000	27.000	1.226	A	W
Matrix: VE Vegetation Bq / kg								
1	CO60	19.000	2.000	17.600	1.000	1.080	A	N
1	CS137	491.000	53.000	440.000	20.000	1.116	A	N
1	K40	545.000	62.000	513.000	20.000	1.062	A	N
Matrix: WA Water Bq / L								
1	CO60	54.900	3.700	52.400	2.200	1.048	A	A
1	CS137	79.900	8.700	76.000	3.400	1.051	A	A
1	H3	92.000	8.400	80.700	3.700	1.140	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SE Defence Research Establishment of Sweden (FOA)

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter							
1	AM241	0.119	0.007	0.127	0.010	0.937	A
1	CO60	5.270	0.080	6.350	0.410	0.830	A
1	CS137	5.830	0.070	6.430	0.420	0.907	A
1	MN54	6.520	0.070	7.910	0.450	0.824	W
1	PU238	0.081	0.007	0.097	0.007	0.837	W
1	PU239	0.119	0.004	0.136	0.011	0.875	W
1	SR90	0.301	0.008	0.336	0.014	0.896	A
1	U234	0.071	0.003	0.066	0.003	1.079	A
1	U238	0.063	0.002	0.065	0.005	0.975	A

Matrix: SO Soil Bq / kg

1	CS137	207.000	1.000	204.000	5.000	1.015	A
1	K40	662.000	14.000	780.000	27.000	0.849	W
1	PU239	3.080	0.170	3.200	0.500	0.962	A
1	SR90	14.600	1.200	13.000	0.470	1.123	A
1	U234	193.000	24.000	190.000	5.200	1.016	A
1	U238	198.000	25.000	202.000	7.200	0.980	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.340	0.210	2.880	0.220	1.160	A
1	CM244	2.200	0.150	1.610	0.360	1.366	W
1	CO60	18.100	1.000	17.600	1.000	1.028	A
1	CS137	464.000	2.000	440.000	20.000	1.055	A
1	K40	293.000	19.000	513.000	20.000	0.571	N
1	PU238	0.529	0.071	0.500	0.100	1.058	A
1	PU239	5.110	0.250	4.300	0.460	1.188	A
1	SR90	631.000	8.000	595.000	29.000	1.061	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SI Jozef Stefan Institute, Slovenia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.140	0.020	0.127	0.010	1.102	A	
1	CO57	8.200	0.300	7.730	0.033	1.061	A	
1	CO60	6.900	0.400	6.350	0.410	1.087	A	
1	CS137	6.900	0.300	6.430	0.420	1.073	A	
1	MN54	8.500	0.400	7.910	0.450	1.075	A	
1	RU106	6.100	0.300	5.500	1.760	1.109	A	

Matrix: SO Soil Bq / kg

1	AC228	121.000	4.000	124.000	4.800	0.976	A	
1	AM241	2.400	0.400	1.440	0.190	1.667	W	
1	BI212	127.000	4.000	140.000	14.000	0.907	A	
1	BI214	106.000	12.000	69.500	1.800	1.525	N	
1	CS137	209.000	8.000	204.000	5.000	1.025	A	
1	K40	789.000	30.000	780.000	27.000	1.012	A	
1	PB212	135.000	4.000	127.000	4.800	1.063	A	
1	PB214	107.000	7.000	72.000	0.420	1.486	N	
1	U238	216.000	40.000	202.000	7.200	1.069	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.100	0.400	2.880	0.220	1.076	A	
1	CO60	19.000	0.400	17.600	1.000	1.080	A	
1	CS137	460.000	10.000	440.000	20.000	1.045	A	
1	K40	496.000	16.000	513.000	20.000	0.967	A	

Matrix: WA Water Bq / L

1	AM241	1.000	0.150	0.850	0.100	1.176	A	
1	CO60	51.000	1.000	52.400	2.200	0.973	A	
1	CS137	73.000	2.000	76.000	3.400	0.961	A	
1	FE55	56.000	4.000	53.000	2.000	1.057	A	
1	U238	8.000	4.000	0.360	0.020	22.222	N	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SL Stanford Linear Accelerator Center

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	CO60	55.000	4.000	52.400	2.200	1.050	A	A
1	CS137	80.000	4.000	76.000	3.400	1.053	A	A
1	H3	76.000	4.000	80.700	3.700	0.942	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SN Sanford Cohen Associates, Inc., Montgomery, AL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.122	0.021	0.127	0.010	0.961	A	A
1	Bq U	0.135	0.025	0.133	0.008	1.015	A	A
1	PU238	0.090	0.015	0.097	0.007	0.930	A	W
1	PU239	0.135	0.021	0.136	0.011	0.993	A	W
Matrix: SO Soil Bq / kg								
1	AC228	147.000	37.000	124.000	4.800	1.185	A	
1	BI212	88.500	36.300	140.000	14.000	0.632	A	
1	BI214	68.100	12.700	69.500	1.800	0.980	A	
1	Bq U	415.500	67.130	401.000	8.700	1.036	A	A
1	CS137	209.000	20.300	204.000	5.000	1.025	A	
1	K40	991.000	129.000	780.000	27.000	1.271	W	
1	PB212	128.000	18.800	127.000	4.800	1.008	A	
1	PB214	70.100	15.500	72.000	0.420	0.974	A	
1	PU239	3.161	1.843	3.200	0.500	0.988	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	2.536	1.115	2.880	0.220	0.881	W	A
1	CM244	1.806	0.932	1.610	0.360	1.122	A	A
1	CO60	22.900	3.010	17.600	1.000	1.301	W	
1	CS137	563.000	56.600	440.000	20.000	1.280	W	
1	K40	681.000	69.100	513.000	20.000	1.327	W	
1	PU239	4.983	1.479	4.300	0.460	1.159	A	A
Matrix: WA Water Bq / L								
1	AM241	0.927	0.171	0.850	0.100	1.091	A	A
1	Bq U	0.803	0.164	0.760	0.040	1.057	A	A
1	CO60	50.900	4.600	52.400	2.200	0.971	A	
1	CS137	71.000	6.310	76.000	3.400	0.934	A	
1	GROSS ALPHA	1616.000	88.240	1580.000	20.000	1.023	A	
1	GROSS BETA	974.000	102.000	740.000	40.000	1.316	A	
1	PU238	0.821	0.134	0.790	0.080	1.039	A	A
1	PU239	0.931	0.147	0.870	0.100	1.070	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SR Savannah River Environmental Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.121	0.012	0.127	0.010	0.953	A	A
1	CO57	8.660	0.610	7.730	0.033	1.120	A	
1	CO60	6.990	0.470	6.350	0.410	1.101	W	A
1	CS137	7.080	0.790	6.430	0.420	1.101	A	A
1	GROSS ALPHA	2.260	0.150	2.770	0.260	0.816	A	A
1	GROSS BETA	2.960	0.180	2.660	0.260	1.113	A	A
1	MN54	8.800	0.910	7.910	0.450	1.113	A	
1	PU238	0.097	0.011	0.097	0.007	1.002	A	A
1	PU239	0.136	0.016	0.136	0.011	1.000	A	A
1	RU106	7.350	1.840	5.500	1.760	1.336	N	
1	SR90	0.380	0.090	0.336	0.014	1.131	A	A
1	U234	0.059	0.008	0.066	0.003	0.897	W	A
1	U238	0.059	0.008	0.065	0.005	0.913	A	A

Matrix: SO Soil Bq / kg

1	AC228	137.000	7.000	124.000	4.800	1.105	A	A
1	BI212	90.300	13.900	140.000	14.000	0.645	A	
1	BI214	78.700	6.200	69.500	1.800	1.132	A	A
1	CS137	232.000	24.000	204.000	5.000	1.137	A	A
1	K40	938.000	91.000	780.000	27.000	1.203	A	W
1	PB212	122.000	8.000	127.000	4.800	0.961	A	A
1	PB214	75.900	5.800	72.000	0.420	1.054	A	A
1	PU239	2.970	0.680	3.200	0.500	0.928	A	W
1	SR90	21.000	12.000	13.000	0.470	1.615	A	A
1	TH234	185.000	28.000	198.000	5.600	0.934	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.610	0.510	2.880	0.220	1.253	A	A
1	CM244	1.650	0.280	1.610	0.360	1.025	A	A
1	CO60	20.400	1.200	17.600	1.000	1.159	A	A
1	CS137	484.000	20.000	440.000	20.000	1.100	A	A
1	K40	550.000	32.000	513.000	20.000	1.072	A	A
1	PU239	5.230	0.730	4.300	0.460	1.216	A	A
1	SR90	693.000	51.000	595.000	29.000	1.165	W	A

Matrix: WA Water Bq / L

1	AM241	0.950	0.033	0.850	0.100	1.118	A	A
1	CO60	56.500	4.300	52.400	2.200	1.078	A	A
1	CS137	78.700	8.200	76.000	3.400	1.036	A	A
1	GROSS ALPHA	1500.000	152.000	1580.000	20.000	0.949	A	A
1	GROSS BETA	863.000	100.000	740.000	40.000	1.166	A	A
1	H3	86.100	10.100	80.700	3.700	1.067	A	A
1	PU238	0.879	0.335	0.790	0.080	1.113	W	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SR Savannah River Environmental Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	PU239	0.962	0.036	0.870	0.100	1.106	A	A
1	SR90	1.600	0.600	1.720	0.100	0.930	A	N
1	U234	0.362	0.019	0.370	0.020	0.978	A	A
1	U238	0.377	0.019	0.360	0.020	1.047	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** ST SC DHEC, Aiken, South Carolina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	H3	77.530	5.700	80.700	3.700	0.961	A	A
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Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** SY Syrian Arab Republic Atomic Energy Commission

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
1	BI212	98.000	24.000	140.000	14.000	0.700	A	
1	BI214	90.000	18.000	69.500	1.800	1.295	W	
1	CS137	211.000	8.200	204.000	5.000	1.034	A	
1	K40	874.000	68.000	780.000	27.000	1.121	A	
1	PB212	119.000	6.500	127.000	4.800	0.937	A	
1	PB214	87.000	11.300	72.000	0.420	1.208	A	
1	PU239	2.960	0.100	3.200	0.500	0.925	A	
1	TH234	215.000	48.000	198.000	5.600	1.086	A	
1	UG/G U	13.700	2.410	16.300	0.300	0.840	A	

Matrix: VE Vegetation Bq / kg

1	CO60	19.300	1.500	17.600	1.000	1.097	A	
1	CS137	418.000	18.000	440.000	20.000	0.950	A	
1	K40	520.000	45.000	513.000	20.000	1.014	A	
1	PU239	10.000	0.400	4.300	0.460	2.326	N	
1	SR90	497.000	13.000	595.000	29.000	0.835	A	

Matrix: WA Water Bq / L

1	AM241	0.860	0.120	0.850	0.100	1.012	A	
1	CO60	52.000	3.600	52.400	2.200	0.992	A	
1	CS137	79.350	5.300	76.000	3.400	1.044	A	
1	H3	128.000	10.000	80.700	3.700	1.586	W	
1	PU238	0.940	0.080	0.790	0.080	1.190	W	
1	PU239	1.050	0.080	0.870	0.100	1.207	W	
1	UG/G U	0.030	0.005	0.030	0.010	1.000	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TE Teledyne Isotopes Midwest Lab, Northbrook, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.140	0.050	0.127	0.010	1.102	A	A
1	CO57	8.100	0.100	7.730	0.033	1.048	A	A
1	CO60	6.700	0.100	6.350	0.410	1.055	A	A
1	CS137	7.100	0.200	6.430	0.420	1.104	A	W
1	GROSS ALPHA	3.180	0.060	2.770	0.260	1.148	A	W
1	GROSS BETA	3.650	0.060	2.660	0.260	1.372	A	A
1	MN54	8.800	0.200	7.910	0.450	1.113	A	A
1	PU238	0.052	0.035	0.097	0.007	0.537	N	A
1	PU239	0.072	0.022	0.136	0.011	0.529	N	A
1	RU106	5.900	0.800	5.500	1.760	1.073	A	A
1	SR90	0.600	0.200	0.336	0.014	1.786	W	A
1	U234	0.086	0.031	0.066	0.003	1.307	A	A
1	U238	0.073	0.033	0.065	0.005	1.130	A	A

Matrix: SO Soil Bq / kg

1	AC228	127.300	7.500	124.000	4.800	1.027	A	A
1	BI212	107.400	2.600	140.000	14.000	0.767	A	A
1	BI214	90.100	4.200	69.500	1.800	1.296	W	A
1	CS137	195.900	4.000	204.000	5.000	0.960	A	A
1	K40	744.700	37.700	780.000	27.000	0.955	A	A
1	PB212	123.400	3.700	127.000	4.800	0.972	A	A
1	PB214	96.500	5.000	72.000	0.420	1.340	W	A
1	PU239	2.310	0.520	3.200	0.500	0.722	W	A
1	SR90	55.100	3.600	13.000	0.470	4.238	N	A
1	TH234	907.000	22.200	198.000	5.600	4.581	N	A
1	U234	184.400	8.500	190.000	5.200	0.971	A	A
1	U238	184.800	8.500	202.000	7.200	0.915	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.300	0.880	2.880	0.220	1.146	A	A
1	CM244	2.120	0.860	1.610	0.360	1.317	A	N
1	CO60	17.600	1.900	17.600	1.000	1.000	A	A
1	CS137	414.600	5.700	440.000	20.000	0.942	A	A
1	K40	502.800	34.700	513.000	20.000	0.980	A	A
1	PU239	4.130	1.000	4.300	0.460	0.960	A	A

Matrix: WA Water Bq / L

1	AM241	1.130	0.240	0.850	0.100	1.329	W	A
1	CO60	54.100	1.100	52.400	2.200	1.032	A	A
1	CS137	77.100	1.400	76.000	3.400	1.014	A	A
1	FE55	48.600	6.800	53.000	2.000	0.917	A	A
1	GROSS ALPHA	1543.000	44.000	1580.000	20.000	0.977	A	A
1	GROSS BETA	1053.000	31.000	740.000	40.000	1.423	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TE Teledyne Isotopes Midwest Lab, Northbrook, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	H3	136.000	25.000	80.700	3.700	1.685	W	W
1	PU238	0.780	0.050	0.790	0.080	0.987	A	A
1	PU239	0.840	0.070	0.870	0.100	0.966	A	A
1	SR90	2.200	1.000	1.720	0.100	1.279	W	W
1	U234	0.500	0.090	0.370	0.020	1.351	W	W
1	U238	0.460	0.090	0.360	0.020	1.278	N	W

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TI Teledyne Brown Engineering Environmental Services, Westwood, NJ

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.091	0.033	0.127	0.010	0.717	N	
1	CO57	8.380	0.840	7.730	0.033	1.084	A	
1	CO60	7.160	0.720	6.350	0.410	1.128	W	
1	CS137	7.720	0.770	6.430	0.420	1.201	W	
1	GROSS ALPHA	4.300	0.200	2.770	0.260	1.552	N	
1	GROSS BETA	2.300	0.100	2.660	0.260	0.865	W	
1	MN54	9.390	0.940	7.910	0.450	1.187	W	
1	PU238	0.085	0.027	0.097	0.007	0.878	W	
1	PU239	0.130	0.030	0.136	0.011	0.956	A	
1	RU106	5.730	1.290	5.500	1.760	1.042	A	
1	SR90	0.420	0.110	0.336	0.014	1.250	A	
1	UG/G U	3.990	0.600	5.230	0.290	0.763	W	

Matrix: SO Soil Bq / kg

1	AC228	128.000	13.000	124.000	4.800	1.032	A	
1	BI214	84.300	8.400	69.500	1.800	1.213	W	
1	CS137	228.000	23.000	204.000	5.000	1.118	A	
1	K40	871.000	87.000	780.000	27.000	1.117	A	
1	PB212	131.000	13.000	127.000	4.800	1.031	A	
1	PB214	94.100	9.400	72.000	0.420	1.307	W	
1	PU238	3.500	1.300	0.320	0.130	10.938	N	
1	PU239	86.000	11.000	3.200	0.500	26.875	N	
1	SR90	10.000	3.000	13.000	0.470	0.769	A	
1	TH234	370.000	37.000	198.000	5.600	1.869	N	
1	UG/G U	22.100	3.300	16.300	0.300	1.356	N	

Matrix: VE Vegetation Bq / kg

1	AM241	2.800	0.700	2.880	0.220	0.972	A	
1	CM244	2.200	0.600	1.610	0.360	1.366	W	
1	CO60	27.000	2.700	17.600	1.000	1.534	N	
1	CS137	682.000	68.000	440.000	20.000	1.550	N	
1	K40	734.000	74.000	513.000	20.000	1.431	N	
1	PU239	3.900	0.800	4.300	0.460	0.907	A	
1	SR90	670.000	100.000	595.000	29.000	1.126	A	

Matrix: WA Water Bq / L

1	AM241	0.920	0.170	0.850	0.100	1.082	A	
1	CO60	49.200	4.900	52.400	2.200	0.939	A	
1	CS137	72.600	7.300	76.000	3.400	0.955	A	
1	FE55	45.000	14.000	53.000	2.000	0.849	A	
1	GROSS ALPHA	1000.000	100.000	1580.000	20.000	0.633	W	
1	GROSS BETA	1600.000	100.000	740.000	40.000	2.162	N	
1	H3	74.000	40.000	80.700	3.700	0.917	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TI Teledyne Brown Engineering Environmental Services, Westwood, NJ

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	NI63	110.000	10.000	114.000	10.000	0.965	A	
1	PU238	2.100	0.400	0.790	0.080	2.658	N	
1	PU239	3.600	0.600	0.870	0.100	4.138	N	
1	SR90	1.600	0.400	1.720	0.100	0.930	A	
1	UG/G U	0.029	0.004	0.030	0.010	0.967	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TK Kevin Wright, Kingston, TN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO60	52.560	1.900	6.350	0.410	8.277	N	
2	CO60	48.880	9.300	6.350	0.410	7.698	N	
1	CS137	82.550	3.460	6.430	0.420	12.838	N	
2	CS137	82.880	12.700	6.430	0.420	12.890	N	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TM Thermo Nutech Albuquerque Lab, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.104	0.016	0.127	0.010	0.819	W	A
1	CO57	5.310	0.100	7.730	0.033	0.687	W	A
1	CO60	4.910	0.200	6.350	0.410	0.773	W	W
1	CS137	4.900	0.190	6.430	0.420	0.762	W	W
1	GROSS ALPHA	1.260	0.350	2.770	0.260	0.455	N	N
1	GROSS BETA	1.010	0.220	2.660	0.260	0.380	N	N
1	MN54	5.830	0.210	7.910	0.450	0.737	N	
1	PU238	0.093	0.015	0.097	0.007	0.961	A	A
1	PU239	0.091	0.012	0.136	0.011	0.669	N	A
1	RU106	5.810	1.300	5.500	1.760	1.056	A	
1	SR90	2.790	0.850	0.336	0.014	8.304	N	A
1	U234	0.059	0.011	0.066	0.003	0.897	W	
1	U238	0.053	0.010	0.065	0.005	0.820	N	
1	UG/G U	5.190	0.530	5.230	0.290	0.992	A	

Matrix: SO Soil Bq / kg

1	AC228	173.120	16.000	124.000	4.800	1.396	W	A
1	AM241	2.520	1.040	1.440	0.190	1.750	W	A
1	BI214	99.400	8.300	69.500	1.800	1.430	N	A
1	CS137	250.180	5.500	204.000	5.000	1.226	W	A
1	K40	931.660	61.200	780.000	27.000	1.194	A	A
1	PB212	174.790	5.500	127.000	4.800	1.376	N	A
1	PB214	107.360	8.300	72.000	0.420	1.491	N	A
1	PU239	1.960	1.040	3.200	0.500	0.613	N	A
1	TH234	379.030	32.200	198.000	5.600	1.914	N	A
1	U234	192.070	19.900	190.000	5.200	1.011	A	
1	U238	195.380	20.200	202.000	7.200	0.967	A	
1	UG/G U	17.600	2.430	16.300	0.300	1.080	A	

Matrix: VE Vegetation Bq / kg

1	AM241	2.740	0.480	2.880	0.220	0.951	A	A
1	CM244	1.000	0.260	1.610	0.360	0.621	W	W
1	CO60	18.830	2.760	17.600	1.000	1.070	A	A
1	CS137	496.170	5.400	440.000	20.000	1.128	A	A
1	K40	512.800	37.100	513.000	20.000	1.000	A	A
1	PU239	4.660	0.670	4.300	0.460	1.084	A	A
1	SR90	573.240	64.800	595.000	29.000	0.963	A	A

Matrix: WA Water Bq / L

1	AM241	0.910	0.120	0.850	0.100	1.071	A	A
1	CO60	56.480	0.740	52.400	2.200	1.078	A	A
1	CS137	85.400	0.770	76.000	3.400	1.124	A	A
1	GROSS ALPHA	1703.000	191.000	1580.000	20.000	1.078	A	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TM Thermo Nutech Albuquerque Lab, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	GROSS BETA	605.000	48.000	740.000	40.000	0.818	A	A
1	PU238	0.820	0.130	0.790	0.080	1.038	A	A
1	PU239	0.830	0.130	0.870	0.100	0.954	A	A
1	SR90	1.330	0.340	1.720	0.100	0.773	W	W
1	U234	0.280	0.050	0.370	0.020	0.757	N	
1	U238	0.300	0.050	0.360	0.020	0.833	W	
1	UG/G U	0.033	0.000	0.030	0.010	1.100	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or $\text{mL}=\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TN Thermo NuTech, Richmond, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.112	0.009	0.127	0.010	0.882	A	A
1	CO57	6.702	0.268	7.730	0.033	0.867	A	
1	CO60	5.749	0.287	6.350	0.410	0.905	A	N
1	CS137	5.803	0.145	6.430	0.420	0.902	A	N
1	GROSS ALPHA	2.410	0.070	2.770	0.260	0.870	A	A
1	GROSS BETA	2.480	0.080	2.660	0.260	0.932	A	W
1	MN54	7.413	0.246	7.910	0.450	0.937	A	
1	PU238	0.101	0.009	0.097	0.007	1.043	A	A
1	PU239	0.134	0.011	0.136	0.011	0.985	A	A
1	RU106	5.404	0.378	5.500	1.760	0.983	A	
1	SR90	0.326	0.054	0.336	0.014	0.970	A	A
1	U234	0.070	0.009	0.066	0.003	1.064	A	A
1	U238	0.072	0.009	0.065	0.005	1.115	A	A
1	UG/G U	4.630	0.560	5.230	0.290	0.885	W	

Matrix: SO Soil Bq / kg

1	AM241	2.307	1.487	1.440	0.190	1.602	W	A
1	BI214	63.960	6.150	69.500	1.800	0.920	A	A
1	CS137	187.700	5.900	204.000	5.000	0.920	A	W
1	K40	715.350	54.370	780.000	27.000	0.917	A	A
1	PB212	124.500	4.100	127.000	4.800	0.980	A	A
1	PU239	2.319	0.780	3.200	0.500	0.725	W	A
1	SR90	11.075	5.946	13.000	0.470	0.852	A	A
1	U234	186.400	9.100	190.000	5.200	0.981	A	A
1	U238	194.650	9.430	202.000	7.200	0.964	A	A
1	UG/G U	14.350	1.740	16.300	0.300	0.880	A	

Matrix: VE Vegetation Bq / kg

1	AM241	2.937	0.861	2.880	0.220	1.020	A	A
1	CM244	1.578	1.214	1.610	0.360	0.980	A	A
1	CO60	14.090	3.130	17.600	1.000	0.801	W	A
1	CS137	372.150	7.440	440.000	20.000	0.846	W	A
1	K40	423.600	42.360	513.000	20.000	0.826	W	W
1	PU239	4.597	1.015	4.300	0.460	1.069	A	A
1	SR90	636.270	26.110	595.000	29.000	1.069	A	A

Matrix: WA Water Bq / L

1	AM241	0.890	0.043	0.850	0.100	1.047	A	A
1	CO60	55.130	1.310	52.400	2.200	1.052	A	
1	CS137	82.590	1.340	76.000	3.400	1.087	A	
1	FE55	51.230	2.540	53.000	2.000	0.967	A	
1	GROSS ALPHA	1062.000	11.000	1580.000	20.000	0.672	W	
1	GROSS BETA	809.100	8.100	740.000	40.000	1.093	A	

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TN Thermo NuTech, Richmond, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	H3	82.780	10.590	80.700	3.700	1.026	A	
1	NI63	110.980	2.300	114.000	10.000	0.974	A	
1	PU238	0.834	0.062	0.790	0.080	1.056	A	
1	PU239	0.915	0.065	0.870	0.100	1.052	A	
1	SR90	1.710	0.110	1.720	0.100	0.994	A	A
1	U234	0.375	0.031	0.370	0.020	1.014	A	
1	U238	0.372	0.031	0.360	0.020	1.033	A	
1	UG/G U	0.023	0.003	0.030	0.010	0.753	N	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TO Thermo NUtech Oak Ridge Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	6.830	0.450	7.730	0.033	0.884	A	
1	CO60	6.100	0.660	6.350	0.410	0.961	A	N
1	CS137	6.550	1.010	6.430	0.420	1.019	A	N
1	GROSS ALPHA	4.070	0.060	2.770	0.260	1.469	W	N
1	GROSS BETA	3.640	0.050	2.660	0.260	1.368	A	A
1	MN54	7.950	1.280	7.910	0.450	1.005	A	
1	PU238	0.060	0.030	0.097	0.007	0.620	N	N
1	PU239	0.100	0.040	0.136	0.011	0.735	N	W
1	RU106	5.630	2.540	5.500	1.760	1.024	A	
1	SR90	0.750	0.090	0.336	0.014	2.232	N	W
1	UG/G U	3.830	0.290	5.230	0.290	0.732	A	

Matrix: SO Soil Bq / kg

1	AM241	2.170	2.460	1.440	0.190	1.507	W	A
1	CS137	223.550	37.220	204.000	5.000	1.096	A	N
1	K40	939.920	269.810	780.000	27.000	1.205	A	N
1	PU239	3.190	0.990	3.200	0.500	0.997	A	W
1	SR90	64.110	7.030	13.000	0.470	4.932	N	A
1	U234	206.790	94.600	190.000	5.200	1.088	A	A
1	U238	208.250	87.990	202.000	7.200	1.031	A	A
1	UG/G U	15.790	1.300	16.300	0.300	0.969	A	

Matrix: VE Vegetation Bq / kg

1	AM241	4.540	2.430	2.880	0.220	1.576	A	A
1	CO60	22.220	9.650	17.600	1.000	1.262	W	W
1	CS137	525.250	67.730	440.000	20.000	1.194	A	W
1	K40	608.710	204.040	513.000	20.000	1.187	A	N
1	PU238	0.690	0.960	0.500	0.100	1.380	A	
1	PU239	0.120	0.060	4.300	0.460	0.028	N	W
1	SR90	318.290	9.290	595.000	29.000	0.535	W	W

Matrix: WA Water Bq / L

1	AM241	1.650	0.440	0.850	0.100	1.941	N	W
1	CO60	57.840	4.260	52.400	2.200	1.104	A	A
1	CS137	86.170	10.740	76.000	3.400	1.134	A	A
1	FE55	50.060	17.870	53.000	2.000	0.945	A	A
1	GROSS ALPHA	1888.370	42.180	1580.000	20.000	1.195	W	A
1	GROSS BETA	1020.660	23.190	740.000	40.000	1.379	W	A
1	H3	103.700	21.920	80.700	3.700	1.285	W	A
1	NI63	102.110	6.410	114.000	10.000	0.896	A	A
1	PU238	0.897	0.184	0.790	0.080	1.135	W	A
1	PU239	1.020	0.203	0.870	0.100	1.172	W	A
1	SR90	1.670	0.240	1.720	0.100	0.971	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TO Thermo NUtech Oak Ridge Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	U234	0.530	0.130	0.370	0.020	1.432	N	A
1	U238	0.440	0.110	0.360	0.020	1.222	W	A
1	UG/G U	0.029	0.002	0.030	0.010	0.967	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TP Taiwan Power Company, Taipei, Taiwan

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.630	0.070	7.730	0.033	0.987	A	
1	CO60	6.500	0.150	6.350	0.410	1.024	A	A
1	CS137	6.710	0.260	6.430	0.420	1.044	A	A
1	GROSS ALPHA	2.324	0.064	2.770	0.260	0.839	A	A
1	GROSS BETA	2.960	0.014	2.660	0.260	1.113	A	A
1	MN54	7.610	0.220	7.910	0.450	0.962	A	
1	SR90	0.433	0.021	0.336	0.014	1.289	A	W

Matrix: SO Soil Bq / kg

1	AC228	123.990	6.220	124.000	4.800	1.000	A	
1	BI212	134.090	6.520	140.000	14.000	0.958	A	
1	BI214	79.580	5.880	69.500	1.800	1.145	A	
1	CS137	205.330	2.440	204.000	5.000	1.007	A	A
1	K40	803.790	10.830	780.000	27.000	1.030	A	A
1	PB212	127.590	1.220	127.000	4.800	1.005	A	
1	PB214	79.860	0.800	72.000	0.420	1.109	A	
1	SR90	20.945	2.979	13.000	0.470	1.611	A	A

Matrix: VE Vegetation Bq / kg

1	CO60	18.220	0.850	17.600	1.000	1.035	A	A
1	CS137	436.750	8.520	440.000	20.000	0.993	A	A
1	K40	526.530	18.450	513.000	20.000	1.026	A	A
1	SR90	654.635	12.691	595.000	29.000	1.100	A	A

Matrix: WA Water Bq / L

1	CO60	50.470	1.130	52.400	2.200	0.963	A	A
1	CS137	73.380	1.070	76.000	3.400	0.966	A	A
1	GROSS ALPHA	1163.950	47.164	1580.000	20.000	0.737	W	A
1	GROSS BETA	914.398	63.300	740.000	40.000	1.236	A	A
1	H3	111.910	4.920	80.700	3.700	1.387	W	W
1	SR90	2.306	0.077	1.720	0.100	1.341	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TQ Institute of Nuclear Energy Research, Taiwan

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.180	0.350	7.730	0.033	0.929	A	
1	CO60	6.490	0.400	6.350	0.410	1.022	A	
1	CS137	6.820	0.450	6.430	0.420	1.061	A	
1	GROSS ALPHA	2.580	0.070	2.770	0.260	0.931	A	
1	GROSS BETA	2.810	0.050	2.660	0.260	1.056	A	
1	MN54	7.270	0.480	7.910	0.450	0.919	A	
Matrix: SO Soil Bq / kg								
1	AC228	132.000	2.600	124.000	4.800	1.065	A	
1	BI212	89.800	5.500	140.000	14.000	0.641	A	
1	BI214	66.700	2.400	69.500	1.800	0.960	A	
1	CS137	225.000	4.400	204.000	5.000	1.103	A	A
1	K40	854.000	26.000	780.000	27.000	1.095	A	A
1	PB212	167.000	3.700	127.000	4.800	1.315	W	
1	PB214	94.100	2.300	72.000	0.420	1.307	W	
Matrix: VE Vegetation Bq / kg								
1	CO60	19.400	0.830	17.600	1.000	1.102	A	W
1	CS137	463.000	8.300	440.000	20.000	1.052	A	A
1	K40	520.000	21.000	513.000	20.000	1.014	A	A
1	SR90	557.000	62.000	595.000	29.000	0.936	A	A
Matrix: WA Water Bq / L								
1	CO60	52.800	1.300	52.400	2.200	1.008	A	A
1	CS137	79.500	1.900	76.000	3.400	1.046	A	A
1	GROSS ALPHA	1100.000	88.000	1580.000	20.000	0.696	W	W
1	GROSS BETA	757.000	48.000	740.000	40.000	1.023	A	A
1	H3	97.900	3.300	80.700	3.700	1.213	A	A
1	SR90	1.490	0.063	1.720	0.100	0.866	W	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TR University of Istanbul, Turkey

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.143	0.052	0.127	0.010	1.126	A	W
1	CO57	7.318	0.123	7.730	0.033	0.947	A	W
1	CO60	5.866	0.097	6.350	0.410	0.924	A	N
1	CS137	6.018	0.093	6.430	0.420	0.936	A	N
1	MN54	7.765	0.134	7.910	0.450	0.982	A	
Matrix: SO Soil Bq / kg								
1	CS137	226.730	9.448	204.000	5.000	1.111	A	A
1	K40	497.590	15.780	780.000	27.000	0.638	N	W
Matrix: VE Vegetation Bq / kg								
1	CO60	20.289	2.172	17.600	1.000	1.153	A	N
1	CS137	454.370	13.630	440.000	20.000	1.033	A	N
1	K40	835.010	26.480	513.000	20.000	1.628	N	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TW Taiwan Radiation Monitoring Center

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.440	0.120	7.730	0.033	0.962	A	
1	CO60	6.560	0.060	6.350	0.410	1.033	A	A
1	CS137	6.680	0.070	6.430	0.420	1.039	A	A
1	MN54	8.340	0.080	7.910	0.450	1.054	A	
1	RU106	4.920	0.510	5.500	1.760	0.895	A	
Matrix: SO Soil Bq / kg								
1	AC228	122.000	4.000	124.000	4.800	0.984	A	A
1	BI212	142.000	9.000	140.000	14.000	1.014	A	
1	BI214	82.500	2.200	69.500	1.800	1.187	W	A
1	CS137	217.000	2.000	204.000	5.000	1.064	A	A
1	K40	819.000	19.000	780.000	27.000	1.050	A	A
1	PB212	134.000	3.000	127.000	4.800	1.055	A	A
1	PB214	93.400	2.800	72.000	0.420	1.297	W	A
Matrix: VE Vegetation Bq / kg								
1	CO60	19.000	0.700	17.600	1.000	1.080	A	A
1	CS137	473.000	4.000	440.000	20.000	1.075	A	A
1	K40	539.000	20.000	513.000	20.000	1.051	A	A
Matrix: WA Water Bq / L								
1	CO60	53.800	0.900	52.400	2.200	1.027	A	A
1	CS137	79.600	1.400	76.000	3.400	1.047	A	A
1	SR90	1.700	0.060	1.720	0.100	0.988	A	W
1	U234	0.386	0.009	0.370	0.020	1.043	A	W
1	U238	0.383	0.009	0.360	0.020	1.064	A	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TX Texas Dept. of Health/Laboratories, Austin

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.098	0.005	0.127	0.010	0.772	W	A
1	CO57	7.660	0.040	7.730	0.033	0.991	A	A
1	CO60	6.520	0.070	6.350	0.410	1.027	A	A
1	CS137	6.590	0.080	6.430	0.420	1.025	A	A
1	GROSS ALPHA	3.230	0.070	2.770	0.260	1.166	A	A
1	GROSS BETA	2.650	0.070	2.660	0.260	0.996	A	A
1	MN54	8.880	0.100	7.910	0.450	1.123	A	A
1	PU238	0.093	0.004	0.097	0.007	0.961	A	A
1	PU239	0.127	0.004	0.136	0.011	0.934	A	A
1	RU106	5.820	0.230	5.500	1.760	1.058	A	A
1	U234	0.065	0.004	0.066	0.003	0.988	A	A
1	U238	0.068	0.003	0.065	0.005	1.053	A	A

Matrix: SO Soil Bq / kg

1	AC228	136.000	3.000	124.000	4.800	1.097	A	A
1	BI214	70.800	1.800	69.500	1.800	1.019	A	A
1	CS137	225.000	2.000	204.000	5.000	1.103	A	A
1	K40	877.000	16.000	780.000	27.000	1.124	A	A
1	PB212	131.000	2.000	127.000	4.800	1.031	A	A
1	PB214	78.700	1.800	72.000	0.420	1.093	A	A
1	PU239	2.990	0.300	3.200	0.500	0.934	A	A
1	SR90	19.000	7.800	13.000	0.470	1.462	A	A
1	TH234	244.000	25.000	198.000	5.600	1.232	A	A
1	U234	199.840	3.000	190.000	5.200	1.052	A	A
1	U238	208.050	3.110	202.000	7.200	1.030	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.670	0.220	2.880	0.220	0.927	A	A
1	CO60	19.600	0.900	17.600	1.000	1.114	A	A
1	CS137	482.000	3.000	440.000	20.000	1.095	A	A
1	K40	541.000	16.000	513.000	20.000	1.055	A	A
1	PU239	4.450	0.310	4.300	0.460	1.035	A	A
1	SR90	572.000	25.000	595.000	29.000	0.961	A	A

Matrix: WA Water Bq / L

1	AM241	0.878	0.053	0.850	0.100	1.033	A	A
1	CO60	54.700	0.400	52.400	2.200	1.044	A	A
1	CS137	79.000	0.500	76.000	3.400	1.039	A	A
1	GROSS ALPHA	1404.000	35.000	1580.000	20.000	0.889	A	A
1	GROSS BETA	27.000	16.000	740.000	40.000	0.036	N	A
1	H3	91.300	6.400	80.700	3.700	1.131	A	A
1	PU238	0.838	0.029	0.790	0.080	1.061	A	A
1	PU239	0.911	0.027	0.870	0.100	1.047	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TX Texas Dept. of Health/Laboratories, Austin

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
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Matrix: WA Water Bq/L

1	SR90	1.880	0.540	1.720	0.100	1.093	A	A
1	U234	0.396	0.016	0.370	0.020	1.070	A	A
1	U238	0.390	0.018	0.360	0.020	1.083	A	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** TY Scientific Production Association, Russia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq / kg								
1	BI214	86.000	4.000	69.500	1.800	1.237	W	
1	CS137	239.000	4.000	204.000	5.000	1.172	A	
1	K40	969.000	28.000	780.000	27.000	1.242	A	
1	PB214	92.000	9.000	72.000	0.420	1.278	W	

Matrix: VE Vegetation Bq / kg

1	PU239	2.900	0.200	4.300	0.460	0.674	N	
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Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** UC United States Enrichment Corporation, Paducah, KY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO60	6.550	0.170	6.350	0.410	1.031	A	A
1	GROSS ALPHA	2.740	0.110	2.770	0.260	0.989	A	A
1	GROSS BETA	2.970	0.090	2.660	0.260	1.117	A	A
Matrix: SO Soil Bq / kg								
1	CS137	245.000	1.510	204.000	5.000	1.201	A	A
1	K40	911.000	13.410	780.000	27.000	1.168	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	1.960	0.060	17.600	1.000	0.111	N	A
1	CS137	49.700	0.240	440.000	20.000	0.113	N	A
Matrix: WA Water Bq / L								
1	CO60	54.400	0.480	52.400	2.200	1.038	A	A
1	CS137	80.200	0.700	76.000	3.400	1.055	A	A
1	GROSS ALPHA	1473.970	79.370	1580.000	20.000	0.933	A	A
1	GROSS BETA	738.800	35.380	740.000	40.000	0.998	A	A
1	PU239	0.900	0.060	0.870	0.100	1.034	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** UP Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.127	0.019	0.127	0.010	1.000	A	A
1	Bq U	0.147	0.019	0.133	0.008	1.105	A	A
1	CO57	7.480	0.856	7.730	0.033	0.968	A	A
1	CO60	6.330	0.663	6.350	0.410	0.997	A	A
1	CS137	6.430	0.719	6.430	0.420	1.000	A	A
1	GROSS ALPHA	2.650	0.124	2.770	0.260	0.957	A	A
1	GROSS BETA	2.820	0.106	2.660	0.260	1.060	A	A
1	MN54	8.020	1.020	7.910	0.450	1.014	A	
1	PU238	0.092	0.018	0.097	0.007	0.951	A	W
1	PU239	0.125	0.022	0.136	0.011	0.919	A	A
1	RU106	6.000	1.360	5.500	1.760	1.091	A	
1	SR90	0.366	0.083	0.336	0.014	1.089	A	W
1	U234	0.075	0.014	0.066	0.003	1.146	A	A
1	U238	0.072	0.014	0.065	0.005	1.115	A	A

Matrix: SO Soil Bq / kg

1	AM241	2.240	0.729	1.440	0.190	1.556	W	A
1	Bq U	444.000	32.200	401.000	8.700	1.107	A	A
1	CS137	255.000	40.800	204.000	5.000	1.250	W	A
1	PU239	3.300	0.966	3.200	0.500	1.031	A	A
1	SR90	13.000	9.600	13.000	0.470	1.000	A	A
1	U234	216.000	22.800	190.000	5.200	1.137	W	A
1	U238	216.000	22.700	202.000	7.200	1.069	A	A
1	UG/G U	15.910	2.000	16.300	0.300	0.976	A	

Matrix: WA Water Bq / L

1	AM241	1.050	0.118	0.850	0.100	1.235	A	A
1	Bq U	0.816	0.093	0.760	0.040	1.074	A	
1	CO60	53.200	5.480	52.400	2.200	1.015	A	A
1	CS137	77.600	8.550	76.000	3.400	1.021	A	
1	GROSS ALPHA	1610.000	111.000	1580.000	20.000	1.019	A	A
1	GROSS BETA	1038.000	74.400	740.000	40.000	1.403	W	A
1	H3	83.800	22.200	80.700	3.700	1.038	A	A
1	PU238	0.856	0.122	0.790	0.080	1.084	A	W
1	PU239	0.956	0.133	0.870	0.100	1.099	A	A
1	SR90	1.520	0.281	1.720	0.100	0.884	W	W
1	U234	0.408	0.066	0.370	0.020	1.103	A	
1	U238	0.408	0.066	0.360	0.020	1.133	A	W
1	UG/G U	0.031	0.003	0.030	0.010	1.033	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** US Interstate Nuclear Services, Springfield, MO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CO60	54.000	5.711	52.400	2.200	1.031	A	
1	CS137	74.940	4.698	76.000	3.400	0.986	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** UY Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.118	0.014	0.127	0.010	0.929	A	A
1	Bq U	0.140	0.016	0.133	0.008	1.053	A	A
1	CO57	6.700	0.170	7.730	0.033	0.867	A	A
1	CO60	6.300	0.430	6.350	0.410	0.992	A	A
1	CS137	6.500	0.380	6.430	0.420	1.011	A	A
1	GROSS ALPHA	2.640	0.150	2.770	0.260	0.953	A	A
1	GROSS BETA	3.090	0.150	2.660	0.260	1.162	A	A
1	MN54	8.000	0.540	7.910	0.450	1.011	A	A
1	PU238	0.092	0.011	0.097	0.007	0.950	A	A
1	PU239	0.133	0.014	0.136	0.011	0.978	A	A
1	RU106	5.800	1.300	5.500	1.760	1.055	A	A
1	SR90	0.300	0.040	0.336	0.014	0.893	A	A
1	U234	0.070	0.008	0.066	0.003	1.064	A	A
1	U238	0.069	0.008	0.065	0.005	1.068	A	A

Matrix: SO Soil Bq / kg

1	AC228	144.000	15.000	124.000	4.800	1.161	A	A
1	BI212	126.000	10.000	140.000	14.000	0.900	A	A
1	BI214	84.000	10.000	69.500	1.800	1.209	W	A
1	Bq U	325.000	38.000	401.000	8.700	0.810	A	A
1	CS137	229.000	17.000	204.000	5.000	1.123	A	A
1	K40	830.000	97.000	780.000	27.000	1.064	A	A
1	PB212	136.000	10.000	127.000	4.800	1.071	A	A
1	PB214	85.000	10.000	72.000	0.420	1.181	A	A
1	PU239	2.630	0.420	3.200	0.500	0.822	W	W
1	SR90	9.400	5.000	13.000	0.470	0.723	W	W
1	TH234	159.000	18.000	198.000	5.600	0.803	W	A
1	U234	158.000	17.000	190.000	5.200	0.832	A	A
1	U238	159.000	18.000	202.000	7.200	0.787	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.040	0.400	2.880	0.220	0.708	W	W
1	CM244	1.180	0.300	1.610	0.360	0.733	W	A
1	CO60	20.800	4.800	17.600	1.000	1.182	A	W
1	CS137	490.000	34.000	440.000	20.000	1.114	A	A
1	K40	540.000	104.000	513.000	20.000	1.053	A	A
1	PU239	1.780	0.320	4.300	0.460	0.414	N	A
1	SR90	480.000	20.000	595.000	29.000	0.807	A	A

Matrix: WA Water Bq / L

1	AM241	0.890	0.100	0.850	0.100	1.047	A	A
1	Bq U	0.790	0.100	0.760	0.040	1.039	A	A
1	CO60	52.000	3.900	52.400	2.200	0.992	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** UY Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CS137	78.000	11.000	76.000	3.400	1.026	A	A
1	GROSS ALPHA	1584.000	70.000	1580.000	20.000	1.003	A	A
1	GROSS BETA	1062.000	43.000	740.000	40.000	1.435	W	A
1	H3	78.000	9.000	80.700	3.700	0.967	A	A
1	PU238	0.810	0.086	0.790	0.080	1.025	A	A
1	PU239	0.900	0.089	0.870	0.100	1.034	A	A
1	SR90	1.600	0.180	1.720	0.100	0.930	A	W
1	U234	0.380	0.005	0.370	0.020	1.027	A	A
1	U238	0.390	0.005	0.360	0.020	1.083	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WA Environmental Radiation Lab, Off. of Public Health Labs. Seattle

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.099	0.015	0.127	0.010	0.780	W	A
1	Bq U	0.127	0.027	0.133	0.008	0.955	A	A
1	CO57	7.900	1.200	7.730	0.033	1.022	A	A
1	CO60	6.800	0.800	6.350	0.410	1.071	A	A
1	CS137	7.000	0.800	6.430	0.420	1.089	A	W
1	GROSS ALPHA	3.300	0.100	2.770	0.260	1.191	A	A
1	GROSS BETA	3.200	0.100	2.660	0.260	1.203	A	A
1	MN54	9.200	1.300	7.910	0.450	1.163	A	A
1	PU238	0.068	0.023	0.097	0.007	0.702	N	A
1	PU239	0.110	0.020	0.136	0.011	0.809	W	A
1	RU106	5.600	1.300	5.500	1.760	1.018	A	A
1	SR90	0.339	0.176	0.336	0.014	1.009	A	A
1	U234	0.060	0.019	0.066	0.003	0.912	A	A
1	U238	0.063	0.018	0.065	0.005	0.975	A	A

Matrix: SO Soil Bq / kg

1	AC228	1300.000	50.000	124.000	4.800	10.484	N	A
1	AM241	2.080	0.490	1.440	0.190	1.444	A	A
1	BI212	1270.000	150.000	140.000	14.000	9.071	N	A
1	BI214	731.000	54.000	69.500	1.800	10.518	N	A
1	Bq U	361.000	11.000	401.000	8.700	0.900	A	A
1	CS137	2070.000	60.000	204.000	5.000	10.147	N	A
1	K40	8630.000	300.000	780.000	27.000	11.064	N	A
1	PB212	1230.000	50.000	127.000	4.800	9.685	N	A
1	PB214	747.000	36.000	72.000	0.420	10.375	N	A
1	PU239	2.610	0.420	3.200	0.500	0.816	W	W
1	SR90	13.200	2.100	13.000	0.470	1.015	A	A
1	TH234	1800.000	330.000	198.000	5.600	9.091	N	A
1	U234	174.000	8.000	190.000	5.200	0.916	A	A
1	U238	177.000	8.000	202.000	7.200	0.876	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.680	0.380	2.880	0.220	0.931	A	A
1	CM244	1.650	0.300	1.610	0.360	1.025	A	W
1	CO60	18.000	1.000	17.600	1.000	1.023	A	A
1	CS137	440.000	14.000	440.000	20.000	1.000	A	A
1	K40	549.000	21.000	513.000	20.000	1.070	A	W
1	PU239	3.590	0.440	4.300	0.460	0.835	W	N
1	SR90	649.000	20.000	595.000	29.000	1.091	A	W

Matrix: WA Water Bq / L

1	AM241	0.790	0.090	0.850	0.100	0.929	A	A
1	Bq U	0.750	0.110	0.760	0.040	0.987	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WA Environmental Radiation Lab, Off. of Public Health Labs. Seattle

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CO60	59.000	1.000	52.400	2.200	1.126	A	A
1	CS137	82.000	3.000	76.000	3.400	1.079	A	A
1	GROSS ALPHA	1480.000	70.000	1580.000	20.000	0.937	A	W
1	GROSS BETA	989.000	44.000	740.000	40.000	1.336	W	A
1	H3	81.000	4.000	80.700	3.700	1.004	A	A
1	NI63	238.000	25.000	114.000	10.000	2.088	N	A
1	PU238	0.750	0.100	0.790	0.080	0.949	A	A
1	PU239	0.970	0.100	0.870	0.100	1.115	A	A
1	SR90	1.700	0.400	1.720	0.100	0.988	A	A
1	U234	0.380	0.080	0.370	0.020	1.027	A	A
1	U238	0.350	0.070	0.360	0.020	0.972	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WC Waste Management Federal Services of Hanford

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.111	0.041	0.127	0.010	0.874	W	A
1	CO57	8.970	0.826	7.730	0.033	1.160	W	
1	CO60	7.440	0.893	6.350	0.410	1.172	W	A
1	CS137	7.940	1.230	6.430	0.420	1.235	W	A
1	GROSS ALPHA	2.660	0.270	2.770	0.260	0.960	A	A
1	GROSS BETA	3.230	0.326	2.660	0.260	1.214	A	A
1	MN54	10.100	1.810	7.910	0.450	1.277	W	
1	PU238	0.093	0.063	0.097	0.007	0.957	A	A
1	PU239	0.133	0.089	0.136	0.011	0.978	A	A
1	SR90	0.656	0.147	0.336	0.014	1.952	N	A
1	U234	0.074	0.026	0.066	0.003	1.126	A	N
1	U238	0.068	0.024	0.065	0.005	1.054	A	W
Matrix: SO Soil Bq / kg								
1	AM241	3.470	1.830	1.440	0.190	2.410	N	A
1	CS137	222.000	33.300	204.000	5.000	1.088	A	A
1	K40	985.000	117.000	780.000	27.000	1.263	W	W
1	PU239	3.200	1.410	3.200	0.500	1.000	A	A
1	SR90	77.800	23.000	13.000	0.470	5.985	N	W
1	U234	182.000	56.100	190.000	5.200	0.958	A	
1	U238	193.000	59.500	202.000	7.200	0.955	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	5.550	2.400	2.880	0.220	1.927	W	A
1	CO60	18.900	1.890	17.600	1.000	1.074	A	W
1	CS137	473.000	70.400	440.000	20.000	1.075	A	A
1	K40	267.000	38.300	513.000	20.000	0.520	N	W
1	PU239	7.070	2.740	4.300	0.460	1.644	N	A
1	SR90	500.000	98.300	595.000	29.000	0.840	A	W
Matrix: WA Water Bq / L								
1	AM241	0.911	0.285	0.850	0.100	1.072	A	A
1	CO60	54.500	4.240	52.400	2.200	1.040	A	A
1	CS137	81.900	11.000	76.000	3.400	1.078	A	A
1	GROSS ALPHA	1390.000	143.000	1580.000	20.000	0.880	A	A
1	GROSS BETA	896.000	91.400	740.000	40.000	1.211	A	N
1	H3	90.000	19.700	80.700	3.700	1.115	A	A
1	PU238	0.833	0.259	0.790	0.080	1.054	A	A
1	PU239	0.922	0.289	0.870	0.100	1.060	A	A
1	SR90	2.280	0.415	1.720	0.100	1.326	W	W
1	U234	0.407	0.130	0.370	0.020	1.100	A	N
1	U238	0.359	0.119	0.360	0.020	0.997	A	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027
Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WE Westinghouse Electric Corp., Madison, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.203	0.101	0.127	0.010	1.598	W	W
1	CO57	8.260	0.227	7.730	0.033	1.069	A	
1	CO60	7.350	0.144	6.350	0.410	1.157	W	A
1	CS137	7.330	0.231	6.430	0.420	1.140	W	A
1	MN54	9.240	0.332	7.910	0.450	1.168	A	
1	RU106	6.540	0.800	5.500	1.760	1.189	W	
1	SR90	0.604	0.230	0.336	0.014	1.798	W	A
2	SR90	0.543	0.230	0.336	0.014	1.616	W	A

Matrix: SO Soil Bq / kg

1	AC228	121.000	7.800	124.000	4.800	0.976	A	A
1	BI212	163.000	18.100	140.000	14.000	1.164	W	
1	BI214	75.100	3.430	69.500	1.800	1.081	A	A
1	CS137	260.000	13.000	204.000	5.000	1.275	W	W
1	K40	832.000	38.800	780.000	27.000	1.067	A	W
1	PB212	132.000	11.700	127.000	4.800	1.039	A	A
1	PB214	72.900	5.270	72.000	0.420	1.013	A	A
2	SR90	26.500	10.000	13.000	0.470	2.038	W	A
1	SR90	46.700	13.000	13.000	0.470	3.592	W	A
1	TH234	143.000	98.300	198.000	5.600	0.722	W	A
1	U238	279.000	177.000	202.000	7.200	1.381	W	N

Matrix: VE Vegetation Bq / kg

1	CO60	21.000	2.060	17.600	1.000	1.193	A	A
1	CS137	572.000	26.600	440.000	20.000	1.300	W	A
1	K40	616.000	43.800	513.000	20.000	1.201	A	W
2	SR90	599.000	54.000	595.000	29.000	1.007	A	A
1	SR90	588.000	54.000	595.000	29.000	0.988	A	A

Matrix: WA Water Bq / L

1	CO60	56.100	1.300	52.400	2.200	1.071	A	A
1	CS137	83.600	3.900	76.000	3.400	1.100	A	A
1	FE55	124.000	32.000	53.000	2.000	2.340	N	
2	H3	93.900	11.000	80.700	3.700	1.164	A	W
1	H3	79.200	11.000	80.700	3.700	0.981	A	W
1	NI63	121.000	10.000	114.000	10.000	1.061	A	
1	SR90	1.470	0.720	1.720	0.100	0.855	W	N
2	SR90	2.250	0.760	1.720	0.100	1.308	W	N

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WN State Health Radiation Protection Section, Madison, WI

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
2	AM241	0.110	0.050	0.127	0.010	0.866	W	A
3	AM241	0.160	0.100	0.127	0.010	1.260	A	A
1	AM241	0.080	0.050	0.127	0.010	0.630	N	A
3	CO57	8.200	0.300	7.730	0.033	1.061	A	A
2	CO57	8.000	0.200	7.730	0.033	1.035	A	A
1	CO57	8.300	0.200	7.730	0.033	1.074	A	A
2	CO60	6.600	0.150	6.350	0.410	1.039	A	A
3	CO60	6.760	0.200	6.350	0.410	1.065	A	A
1	CO60	6.820	0.170	6.350	0.410	1.074	A	A
1	CS137	7.200	0.300	6.430	0.420	1.120	A	A
3	CS137	7.400	0.300	6.430	0.420	1.151	W	A
2	CS137	6.900	0.200	6.430	0.420	1.073	A	A
1	MN54	9.100	0.300	7.910	0.450	1.150	A	
3	MN54	9.000	0.300	7.910	0.450	1.138	A	
2	MN54	8.800	0.300	7.910	0.450	1.113	A	
3	RU106	6.000	0.800	5.500	1.760	1.091	A	
1	RU106	5.500	0.600	5.500	1.760	1.000	A	
2	RU106	4.700	0.400	5.500	1.760	0.855	A	

Matrix: SO Soil Bq / kg

3	AC228	136.000	3.000	124.000	4.800	1.097	A	A
2	AC228	154.000	5.000	124.000	4.800	1.242	A	A
1	AC228	149.000	5.000	124.000	4.800	1.202	A	A
1	BI214	91.000	4.000	69.500	1.800	1.309	W	A
3	BI214	88.000	3.000	69.500	1.800	1.266	W	A
2	BI214	81.000	4.000	69.500	1.800	1.165	A	A
2	CS137	234.000	6.000	204.000	5.000	1.147	A	A
3	CS137	239.000	4.000	204.000	5.000	1.172	A	A
1	CS137	231.000	6.000	204.000	5.000	1.132	A	A
2	K40	1438.000	50.000	780.000	27.000	1.844	N	A
3	K40	1399.000	33.000	780.000	27.000	1.794	N	A
1	K40	1300.000	47.000	780.000	27.000	1.667	N	A
1	PB212	137.000	3.000	127.000	4.800	1.079	A	A
3	PB212	135.000	2.000	127.000	4.800	1.063	A	A
2	PB212	139.000	3.000	127.000	4.800	1.094	A	A
3	PB214	80.000	2.000	72.000	0.420	1.111	A	A
2	PB214	83.000	4.000	72.000	0.420	1.153	A	A
1	PB214	86.000	4.000	72.000	0.420	1.194	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	4.800	1.700	2.880	0.220	1.667	W	A
3	AM241	4.100	1.700	2.880	0.220	1.424	A	A
2	AM241	3.100	0.700	2.880	0.220	1.076	A	A
2	CO60	22.200	0.900	17.600	1.000	1.261	W	W
3	CO60	22.100	0.900	17.600	1.000	1.256	W	W

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation: A=Acceptable, W=Acceptable with Warning, N=Not Acceptable**

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WN State Health Radiation Protection Section, Madison, WI

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: VE Vegetation Bq / kg								
1	CO60	22.400	0.800	17.600	1.000	1.273	W	W
1	CS137	559.000	9.000	440.000	20.000	1.270	W	W
2	CS137	552.000	8.000	440.000	20.000	1.255	W	W
3	CS137	562.000	8.000	440.000	20.000	1.277	W	W
3	K40	1286.000	26.000	513.000	20.000	2.507	N	A
1	K40	1260.000	26.000	513.000	20.000	2.456	N	A
2	K40	1294.000	26.000	513.000	20.000	2.522	N	A

Matrix: WA Water Bq / L

2	CO60	51.200	1.200	52.400	2.200	0.977	A	A
1	CO60	52.200	1.000	52.400	2.200	0.996	A	A
3	CO60	52.200	1.200	52.400	2.200	0.996	A	A
3	CS137	78.400	1.900	76.000	3.400	1.032	A	A
2	CS137	81.500	1.900	76.000	3.400	1.072	A	A
1	CS137	80.500	1.700	76.000	3.400	1.059	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WO Wisconsin State Lab of Hygiene

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.004	1.039	7.730	0.033	1.035	A	A
2	CO57	8.066	1.306	7.730	0.033	1.043	A	A
2	CO60	7.951	2.067	6.350	0.410	1.252	W	W
1	CO60	7.784	1.580	6.350	0.410	1.226	W	W
1	CS137	8.051	1.307	6.430	0.420	1.252	W	W
2	CS137	8.084	1.664	6.430	0.420	1.257	W	W
1	GROSS ALPHA	2.220	0.080	2.770	0.260	0.801	W	N
2	GROSS ALPHA	2.320	0.080	2.770	0.260	0.838	A	N
1	GROSS BETA	2.780	0.070	2.660	0.260	1.045	A	A
2	GROSS BETA	2.850	0.080	2.660	0.260	1.071	A	A
1	MN54	10.140	1.810	7.910	0.450	1.282	W	
2	MN54	10.380	2.310	7.910	0.450	1.312	W	
1	RU106	6.048	1.261	5.500	1.760	1.100	A	
2	RU106	5.676	1.417	5.500	1.760	1.032	A	

Matrix: SO Soil Bq / kg

2	BI214	92.500	14.800	69.500	1.800	1.331	W	A
1	BI214	85.100	18.500	69.500	1.800	1.224	W	A
2	Bq U	518.000	74.000	401.000	8.700	1.292	W	A
1	Bq U	592.000	74.000	401.000	8.700	1.476	N	A
3	CS137	192.400	29.600	204.000	5.000	0.943	A	A
4	CS137	188.700	18.500	204.000	5.000	0.925	A	A
4	K40	814.000	111.000	780.000	27.000	1.044	A	A
3	K40	814.000	185.000	780.000	27.000	1.044	A	A
2	PB212	111.000	7.400	127.000	4.800	0.874	W	A
1	PB212	140.600	18.500	127.000	4.800	1.107	A	A
2	PB214	92.500	7.400	72.000	0.420	1.285	W	A
1	PB214	88.800	14.800	72.000	0.420	1.233	A	A
2	TH234	222.000	111.000	198.000	5.600	1.121	A	A
1	TH234	22.200	51.800	198.000	5.600	0.112	N	A

Matrix: VE Vegetation Bq / kg

1	CO60	15.000	4.000	17.600	1.000	0.852	W	A
2	CO60	17.000	3.000	17.600	1.000	0.966	A	A
1	CS137	410.000	60.000	440.000	20.000	0.932	A	A
2	CS137	430.000	40.000	440.000	20.000	0.977	A	A
2	K40	540.000	80.000	513.000	20.000	1.053	A	A
1	K40	530.000	120.000	513.000	20.000	1.033	A	A

Matrix: WA Water Bq / L

1	Bq U	0.960	0.150	0.760	0.040	1.263	A	W
2	Bq U	0.960	0.150	0.760	0.040	1.263	A	W
2	CO60	57.000	10.000	52.400	2.200	1.088	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WO Wisconsin State Lab of Hygiene

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CO60	56.000	4.000	52.400	2.200	1.069	A	A
1	CS137	79.000	5.300	76.000	3.400	1.039	A	A
2	CS137	80.000	10.800	76.000	3.400	1.053	A	A
1	GROSS ALPHA	885.000	40.000	1580.000	20.000	0.560	N	W
2	GROSS ALPHA	893.000	67.000	1580.000	20.000	0.565	N	W
2	GROSS BETA	822.000	44.000	740.000	40.000	1.111	A	A
1	GROSS BETA	887.000	27.000	740.000	40.000	1.199	A	A
1	H3	77.700	7.300	80.700	3.700	0.963	A	A
2	H3	79.500	7.300	80.700	3.700	0.985	A	A
1	SR90	1.110	0.250	1.720	0.100	0.645	N	A
2	SR90	1.240	0.270	1.720	0.100	0.721	N	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WP Washington Public Power Supply System, Richland

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	8.210	0.810	7.730	0.033	1.062	A	
1	CO60	7.070	0.700	6.350	0.410	1.113	W	
1	CS137	8.070	0.810	6.430	0.420	1.255	W	
1	MN54	10.100	1.000	7.910	0.450	1.277	W	
1	RU106	6.510	0.960	5.500	1.760	1.184	W	
Matrix: SO Soil Bq / kg								
1	CS137	224.000	23.000	204.000	5.000	1.098	A	
1	K40	847.000	85.000	780.000	27.000	1.086	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	20.300	2.000	17.600	1.000	1.153	A	
1	CS137	514.000	52.000	440.000	20.000	1.168	A	
1	K40	559.000	56.000	513.000	20.000	1.090	A	
Matrix: WA Water Bq / L								
1	CO60	50.300	1.700	52.400	2.200	0.960	A	
1	CS137	75.400	1.700	76.000	3.400	0.992	A	
1	H3	93.000	7.400	80.700	3.700	1.152	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WS Weldon Springs Site, St Charles, MO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	GROSS ALPHA	2.857	0.050	2.770	0.260	1.031	A	A
Matrix: SO Soil Bq / kg								
1	CS137	187.220	12.210	204.000	5.000	0.918	A	A
1	K40	749.900	56.150	780.000	27.000	0.961	A	A
1	U238	242.350	51.060	202.000	7.200	1.200	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WT Waste Stream Technology, Buffalo, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported EML</u>	Evaluation	<u>QAP 49 Evaluation</u>
Matrix: AI Air Filter Bq / filter								
1	Bq U	0.140	0.050	0.133	0.008	1.053	A	
1	GROSS ALPHA	1.840	0.120	2.770	0.260	0.664	W	
1	GROSS BETA	2.650	0.140	2.660	0.260	0.996	A	
Matrix: SO Soil Bq / kg								
1	Bq U	383.000	52.400	401.000	8.700	0.955	A	
Matrix: WA Water Bq / L								
1	Bq U	0.740	0.040	0.760	0.040	0.974	A	
1	GROSS ALPHA	567.000	52.000	1580.000	20.000	0.359	N	
1	GROSS BETA	763.000	54.000	740.000	40.000	1.031	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or $\text{mL}=\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WV West Valley Nuclear Services

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	CO57	7.250	0.066	7.730	0.033	0.938	A	A
1	CO60	6.510	0.181	6.350	0.410	1.025	A	A
1	CS137	6.160	0.137	6.430	0.420	0.958	A	A
1	GROSS ALPHA	2.450	0.068	2.770	0.260	0.884	A	A
1	GROSS BETA	3.100	0.066	2.660	0.260	1.165	A	A
1	MN54	8.910	0.189	7.910	0.450	1.126	A	
1	RU106	5.300	0.727	5.500	1.760	0.964	A	

Matrix: WA Water Bq / L

1	CO60	53.600	1.140	52.400	2.200	1.023	A	A
1	CS137	76.600	1.050	76.000	3.400	1.008	A	A
1	GROSS ALPHA	1531.000	93.500	1580.000	20.000	0.969	A	W
1	GROSS BETA	1010.000	56.900	740.000	40.000	1.365	W	A
1	H3	83.300	4.670	80.700	3.700	1.032	A	A
1	SR90	1.480	0.164	1.720	0.100	0.860	W	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** WW West Valley Radiation Protection

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.130	0.040	0.127	0.010	1.024	A	
1	CO57	7.500	0.300	7.730	0.033	0.970	A	
1	CO60	6.200	0.300	6.350	0.410	0.976	A	
1	CS137	6.300	0.400	6.430	0.420	0.980	A	
1	GROSS ALPHA	2.580	0.050	2.770	0.260	0.931	A	
1	GROSS BETA	2.790	0.040	2.660	0.260	1.049	A	
1	MN54	8.400	0.700	7.910	0.450	1.062	A	
1	RU106	4.800	0.700	5.500	1.760	0.873	A	

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** YA Duke Engineering & Sciences Environmental Lab, Westboro, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	AM241	0.106	0.002	0.127	0.010	0.835	W	A
1	Bq U	0.140	0.008	0.133	0.008	1.053	A	A
1	CO57	7.700	0.410	7.730	0.033	0.996	A	
1	CO60	6.510	0.350	6.350	0.410	1.025	A	A
1	CS137	6.460	0.360	6.430	0.420	1.005	A	A
1	GROSS ALPHA	2.290	0.021	2.770	0.260	0.827	A	A
1	GROSS BETA	2.520	0.022	2.660	0.260	0.947	A	W
1	MN54	8.180	0.440	7.910	0.450	1.034	A	
1	PU238	0.095	0.003	0.097	0.007	0.981	A	A
1	PU239	0.135	0.004	0.136	0.011	0.993	A	A
1	RU106	6.620	0.930	5.500	1.760	1.204	W	
1	U234	0.068	0.004	0.066	0.003	1.033	A	A
1	U238	0.069	0.004	0.065	0.005	1.068	A	A

Matrix: SO Soil Bq / kg

1	AC228	150.420	2.200	124.000	4.800	1.213	A	
1	AM241	1.970	0.190	1.440	0.190	1.368	A	A
1	Bq U	431.060	23.330	401.000	8.700	1.075	A	A
1	CS137	263.570	2.090	204.000	5.000	1.292	W	W
1	K40	995.120	16.100	780.000	27.000	1.276	W	A
1	PU239	3.360	0.210	3.200	0.500	1.050	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	0.117	0.002	2.880	0.220	0.041	N	A
1	CM244	0.072	0.002	1.610	0.360	0.045	N	A
1	CO60	20.480	0.520	17.600	1.000	1.164	A	A
1	CS137	556.480	2.720	440.000	20.000	1.265	W	A
1	K40	616.790	11.660	513.000	20.000	1.202	A	A
1	PU239	0.168	0.005	4.300	0.460	0.039	N	A
1	SR90	21.450	0.560	595.000	29.000	0.036	N	A

Matrix: WA Water Bq / L

1	AM241	0.880	0.020	0.850	0.100	1.035	A	A
1	Bq U	0.850	0.056	0.760	0.040	1.118	A	A
1	CO60	51.840	0.640	52.400	2.200	0.989	A	A
1	CS137	77.760	0.930	76.000	3.400	1.023	A	A
1	FE55	48.720	4.770	53.000	2.000	0.919	A	A
1	GROSS ALPHA	1556.100	27.750	1580.000	20.000	0.985	A	
1	GROSS BETA	693.130	15.300	740.000	40.000	0.937	A	
1	H3	95.580	5.180	80.700	3.700	1.184	A	A
1	NI63	124.940	10.240	114.000	10.000	1.096	A	A
1	PU238	0.890	0.040	0.790	0.080	1.127	W	A
1	PU239	0.950	0.042	0.870	0.100	1.092	A	A

Values for elemental uranium are reported in µg/filter, g, or mL. pCi/g or mL=Bq x 0.027**Evaluation:** A=Acceptable, W=Acceptable with Warning, N=Not Acceptable

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Laboratory**Lab:** YA Duke Engineering & Sciences Environmental Lab, Westboro, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	SR90	2.120	0.240	1.720	0.100	1.233	W	A
1	U234	0.420	0.026	0.370	0.020	1.135	A	A
1	U238	0.412	0.026	0.360	0.020	1.144	A	W
1	UG/G U	0.026	0.001	0.030	0.010	0.873	W	A

Values for elemental uranium are reported in $\mu\text{g}/\text{filter}$, g, or mL. pCi/g or mL=Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: AM241

EML Value: 0.1270
EML Error: 0.0099

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.1120	0.0200	0.88	A	A
AI	1	0.1250	0.0045	0.98	A	A
AM	1	0.1100	0.0100	0.87	N	W
AN	1	0.1300	0.0100	1.02	A	A
AR	2	0.1130	0.0230	0.89	A	A
AR	1	0.0930	0.0200	0.73	A	N
AS	1	0.1500	0.1070	1.18	A	A
AT	1	0.1540	0.0920	1.21		A
AU	1	0.1230	0.0100	0.97	A	A
BE	1	0.1100	0.0100	0.87	A	W
BM	1	0.1180	0.0170	0.93	A	A
BP	1	0.1120	0.0050	0.88		A
BU	1	0.1180	0.0060	0.93	A	A
BX	1	0.1900	0.0500	1.50	A	W
CB	3	0.1160	0.0280	0.91	A	A
CB	2	0.1260	0.0220	0.99	A	A
CB	1	0.1470	0.0510	1.16	A	A
CB	4	0.1600	0.0070	1.26	A	A
CB	5	0.1170	0.0440	0.92	A	A
CH	1	0.1190	0.0100	0.94	A	A
CL	1	0.4300	0.0200	3.39	W	N
CN	1	0.8400	0.1000	6.61	W	N
CW	1	0.1180	0.0022	0.93	A	A
EC	1	0.0360	0.1830	0.28		N
EG	1	0.1030	0.0090	0.81	A	W
EG	2	0.1100	0.0300	0.87	A	W
FG	1	0.1560	0.0860	1.23	A	A
FL	1	0.1600	0.0200	1.26	A	A
FM	1	0.1400	0.0400	1.10	A	A
GA	1	0.1300	0.0130	1.02	A	A
GE	1	0.1050	0.0210	0.83	A	W
GP	1	0.1200	0.0100	0.94	A	A
GT	1	0.1100	0.0200	0.87	A	W
IS	1	0.1210	0.0380	0.95	N	A
IT	1	0.1150	0.0130	0.91	A	A
LL	1	0.1240	0.0080	0.98	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: AM241

EML Value: 0.1270
EML Error: 0.0099

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LV	1	0.1320	0.0100	1.04	N	A
MA	1	0.1600	0.1300	1.26		A
ME	3	0.1300	0.0200	1.02	A	A
ME	1	0.0900	0.0100	0.71	A	N
ME	2	0.1300	0.0300	1.02	A	A
NJ	1	0.1300	0.0400	1.02	A	A
NJ	3	0.1300	0.0500	1.02	A	A
NJ	2	0.1400	0.0900	1.10	A	A
NM	1	0.1220	0.0060	0.96	A	A
NQ	1	0.1004	0.0074	0.79	A	W
OT	1	0.1100	0.0100	0.87	N	W
PO	1	0.1300	0.0200	1.02	W	A
RE	1	0.1190	0.0120	0.94	W	A
RI	1	0.1210	0.0109	0.95		A
SE	1	0.1190	0.0070	0.94		A
SI	1	0.1400	0.0200	1.10		A
SN	1	0.1220	0.0210	0.96	A	A
SR	1	0.1210	0.0120	0.95	A	A
TE	1	0.1400	0.0500	1.10	A	A
TI	1	0.0910	0.0330	0.72		N
TM	1	0.1040	0.0160	0.82	A	W
TN	1	0.1120	0.0090	0.88	A	A
TR	1	0.1430	0.0520	1.13	W	A
TX	1	0.0980	0.0050	0.77	A	W
UP	1	0.1270	0.0190	1.00	A	A
UY	1	0.1180	0.0140	0.93	A	A
WA	1	0.0990	0.0150	0.78	A	W
WC	1	0.1110	0.0407	0.87	A	W
WE	1	0.2030	0.1010	1.60	W	W
WN	1	0.0800	0.0500	0.63	A	N
WN	3	0.1600	0.1000	1.26	A	A
WN	2	0.1100	0.0500	0.87	A	W
WW	1	0.1300	0.0400	1.02		A
YA	1	0.1060	0.0020	0.83	A	W

Total Number Reported: 70

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: Bq U

EML Value: 0.1330
EML Error: 0.0081

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.1530	0.0210	1.15	A	A
AM	1	0.1000	0.0200	0.75	W	N
BL	1	0.6360	0.0130	4.78	A	N
BU	1	0.1250	0.0060	0.94	A	A
CH	1	0.1460	0.0110	1.10	A	A
CL	1	0.1970	0.0200	1.48	W	A
GP	1	0.1300		0.98	A	A
LL	1	0.1270	0.0040	0.95		A
OT	1	0.1300	0.0200	0.98	A	A
SN	1	0.1350	0.0250	1.01	A	A
UP	1	0.1470	0.0194	1.11	A	A
UY	1	0.1400	0.0160	1.05	A	A
WA	1	0.1270	0.0270	0.95	A	A
WT	1	0.1400	0.0500	1.05		A
YA	1	0.1400	0.0080	1.05	A	A

Total Number Reported: 15

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 7.7300
EML Error: 0.0330

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	2	7.4000	1.2000	0.96	A	A
AG	1	7.5000	1.2000	0.97	A	A
AI	1	6.4800	0.0479	0.84		A
AM	1	7.2700	0.0600	0.94		A
AN	1	8.0300	0.2100	1.04	A	A
AR	1	7.9700	1.6700	1.03		A
AS	1	7.8960	0.1480	1.02	A	A
AT	1	8.2110	0.6560	1.06		A
AU	1	7.8500	0.1500	1.02	W	A
BA	1	7.6900	0.6000	1.00	A	A
BC	1	7.4400	0.1400	0.96	A	A
BE	1	8.6000	1.2000	1.11	A	A
BL	1	10.6000	0.8000	1.37	W	W
BN	3	8.5000	0.8000	1.10	N	A
BN	2	7.1000	0.6000	0.92	N	A
BN	1	6.9000	0.6000	0.89	N	A
BP	1	7.4000	0.2000	0.96		A
BQ	1	7.0600	0.0300	0.91		A
BU	1	7.2000	0.4000	0.93	A	A
BX	1	7.6200	0.1900	0.99	A	A
CA	1	8.2000	0.8000	1.06	A	A
CB	5	9.6400	0.2600	1.25	A	W
CB	4	8.3600	0.2300	1.08	A	A
CB	3	8.7600	0.2300	1.13	A	W
CB	1	9.5600	0.1700	1.24	A	W
CB	2	8.9300	0.2400	1.15	A	W
CD	1	8.0000	0.5000	1.03	A	A
CH	1	9.2600	0.0390	1.20	W	W
CL	1	7.8600	0.3900	1.02	A	A
CN	1	8.4000	0.6600	1.09	W	A
CR	1	4.7900	0.3400	0.62		N
CS	1	6.5400	0.4200	0.85		A
CW	1	7.4800	0.1300	0.97	A	A
DH	1	5.8200	0.2800	0.75	A	A
EC	1	8.7200	0.4490	1.13		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 7.7300
EML Error: 0.0330

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EG	1	7.7000	0.6000	1.00	A	A
EP	1	8.1900	0.5400	1.06	A	A
FG	1	13.6600	2.1100	1.77	N	N
FL	1	8.7400	0.0400	1.13	A	W
FM	1	9.2000	0.1000	1.19	A	W
FN	1	8.0000	0.5000	1.03	A	A
GA	1	7.8200	0.4600	1.01		A
GC	1	7.2400		0.94		A
GD	1	7.3000	0.3100	0.94		A
GE	1	7.7900	0.8020	1.01		A
GP	1	7.2000	0.7000	0.93	A	A
GT	1	8.5000	0.9000	1.10		A
HU	1	8.9000	0.4000	1.15	A	W
ID	1	10.9000	0.5540	1.41	A	N
IE	1	8.1900	0.9000	1.06		A
IL	1	8.0000	0.1000	1.03	A	A
IN	1	7.4000	0.5000	0.96		A
IS	1	8.0400	0.8600	1.04	A	A
IT	1	8.1000	0.5400	1.05	W	A
KR	3	8.2000	0.5000	1.06		A
KR	4	8.2000	0.5000	1.06		A
KR	1	8.4000	0.3000	1.09		A
KR	2	8.4000	0.2000	1.09		A
LB	1	8.3000	0.5000	1.07	A	A
LL	1	8.5600	0.4300	1.11	A	A
LN	1	6.8200	0.9600	0.88		A
LV	1	7.1100	0.3100	0.92	A	A
MA	1	9.0000	1.2000	1.16	A	W
ME	2	8.2900	0.3000	1.07		A
ME	3	7.9900	0.2800	1.03		A
ME	1	7.9900	0.2800	1.03		A
MH	1	7.9100	0.2700	1.02	A	A
ML	1	60.1000	6.0100	7.78		N
NA	1	6.9600	0.0800	0.90		A
ND	1	8.2360	0.2840	1.07		A
NJ	3	7.3000	0.8000	0.94	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 7.7300
EML Error: 0.0330

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NJ	1	7.4000	0.6000	0.96	A	A
NJ	2	7.7000	0.6000	1.00	A	A
NL	1	7.8700	0.7800	1.02	A	A
NP	1	8.1700	0.0800	1.06	A	A
NR	1	6.8200	1.3600	0.88	A	A
NS	1	7.2420	0.0200	0.94	A	A
NZ	1	7.6000	0.4000	0.98		A
OB	1	6.7800	1.5300	0.88		A
OC	1	8.0000	0.4000	1.03	W	A
OD	1	8.3900	0.2100	1.09	A	A
OH	1	7.5900		0.98		A
OL	1	8.3200	0.7700	1.08	A	A
OS	2	8.6300	0.6700	1.12	A	A
OS	1	8.4100	0.6700	1.09	A	A
OT	1	8.2000	0.1000	1.06		A
OU	1	8.8800	0.4600	1.15		W
PK	1	6.4200	0.4300	0.83	N	A
RA	2	11.4000	0.4000	1.48		N
RA	1	10.6000	0.3000	1.37		W
RC	1	7.3700	0.7400	0.95	A	A
RE	1	7.3300	0.6900	0.95	A	A
RI	1	6.9400	0.5100	0.90	A	A
SA	1	7.8900	0.4500	1.02	A	A
SI	1	8.2000	0.3000	1.06		A
SR	1	8.6600	0.6100	1.12		A
TE	1	8.1000	0.1000	1.05	A	A
TI	1	8.3800	0.8400	1.08		A
TM	1	5.3100	0.1000	0.69	A	W
TN	1	6.7020	0.2680	0.87		A
TO	1	6.8300	0.4500	0.88		A
TP	1	7.6300	0.0700	0.99		A
TQ	1	7.1800	0.3500	0.93		A
TR	1	7.3180	0.1230	0.95	W	A
TW	1	7.4400	0.1200	0.96		A
TX	1	7.6600	0.0400	0.99	A	A
UP	1	7.4800	0.8560	0.97	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 7.7300
EML Error: 0.0330

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
UY	1	6.7000	0.1700	0.87	A	A
WA	1	7.9000	1.2000	1.02	A	A
WC	1	8.9700	0.8260	1.16		W
WE	1	8.2600	0.2270	1.07		A
WN	3	8.2000	0.3000	1.06	A	A
WN	1	8.3000	0.2000	1.07	A	A
WN	2	8.0000	0.2000	1.03	A	A
WO	1	8.0040	1.0390	1.03	A	A
WO	2	8.0660	1.3060	1.04	A	A
WP	1	8.2100	0.8100	1.06		A
WV	1	7.2500	0.0662	0.94	A	A
WW	1	7.5000	0.3000	0.97		A
YA	1	7.7000	0.4100	1.00		A

Total Number Reported: 120

Values for elemental Uranium are reported in $\mu\text{g}/\text{filter}$, g or mL. pCi/g or mL = $\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 6.3500
EML Error: 0.4100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	2	6.5000	1.1000	1.02	A	A
AG	1	6.2000	1.0000	0.98	A	A
AI	1	3.2200	0.7470	0.51	A	N
AM	1	6.1100	0.1400	0.96	N	A
AN	1	7.2300	0.4200	1.14	W	W
AR	1	6.5400	1.4100	1.03	A	A
AS	1	6.7860	0.4340	1.07	A	A
AT	1	6.9250	0.5200	1.09		A
AU	1	6.8200	0.1900	1.07	W	A
BA	1	6.3500	0.7000	1.00	A	A
BC	1	6.5100	0.1700	1.02	A	A
BE	1	6.7000	0.6000	1.05	A	A
BL	1	7.6100	0.5300	1.20	W	W
BM	1	6.5200	0.3500	1.03	W	A
BN	3	5.6000	0.4000	0.88	W	A
BN	1	4.3000	0.3000	0.68	W	N
BN	2	4.6000	0.3000	0.72	W	N
BP	1	6.5000	0.2000	1.02		A
BQ	1	6.6000	0.1000	1.04	A	A
BU	1	6.2000	0.3000	0.98	A	A
BX	1	6.8100	0.2800	1.07	A	A
CA	1	6.9000	0.7000	1.09	A	A
CB	3	7.1200	0.1900	1.12	A	W
CB	5	8.0300	0.1900	1.26	A	W
CB	4	7.1900	0.1900	1.13	A	W
CB	2	5.8600	0.1700	0.92	A	A
CB	1	7.5500	0.1000	1.19	A	W
CD	1	6.5000	0.5000	1.02	A	A
CH	1	7.9400	0.0840	1.25	W	W
CL	1	6.8400	0.3400	1.08	A	A
CN	1	6.5700	0.4300	1.03	W	A
CR	1	4.3300	0.1300	0.68	N	N
CS	1	5.4000	0.3000	0.85	A	A
CW	1	6.3200	0.0500	1.00	A	A
DH	1	5.2100	0.1900	0.82	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 6.3500
EML Error: 0.4100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EC	1	7.3100	0.4770	1.15		W
EG	1	6.6000	0.5000	1.04	A	A
EP	1	7.2100	0.5200	1.13	A	W
FG	1	7.5900	3.2800	1.20	A	W
FL	1	7.3300	0.0600	1.15	A	W
FM	1	7.8000	0.1000	1.23	A	W
FN	1	6.6200	0.5100	1.04	A	A
GA	1	6.5200	0.4100	1.03	A	A
GC	1	6.1900		0.98	A	A
GD	1	6.2000	0.5700	0.98		A
GE	1	6.8100	0.8620	1.07	A	A
GP	1	6.3000	0.6000	0.99	A	A
GT	1	6.7000	0.6000	1.05	A	A
HU	1	7.6000	0.2000	1.20	W	W
ID	1	8.1670	0.4120	1.29	A	W
IE	1	7.2300	0.7500	1.14	A	W
IL	1	6.8000	0.1000	1.07	A	A
IN	1	6.3000	0.3000	0.99	A	A
IS	1	6.5500	1.0800	1.03	A	A
IT	1	6.7000	0.3600	1.05	A	A
KR	4	6.8000	0.5000	1.07		A
KR	1	6.9000	0.3000	1.09		A
KR	2	6.7000	0.1000	1.05		A
KR	3	6.7000	0.5000	1.05		A
LB	1	6.7000	0.9000	1.05	A	A
LL	1	6.8300	0.3400	1.08	A	A
LN	1	6.5800	0.8000	1.04	W	A
LV	1	6.3400	0.1200	1.00	A	A
MA	1	6.3000	0.6100	0.99	W	A
ME	3	7.1800	0.1800	1.13	A	W
ME	2	6.2200	0.1600	0.98	A	A
ME	1	7.0700	0.1800	1.11	A	W
MH	1	7.0000	0.1800	1.10	A	W
ML	1	8.8900	0.8900	1.40		N
NA	1	6.0000	0.1200	0.94	A	A
ND	1	6.5080	0.1480	1.02		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 6.3500
EML Error: 0.4100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NJ	1	6.2000	0.4000	0.98	A	A
NJ	2	6.2000	0.4000	0.98	A	A
NJ	3	6.1000	0.4000	0.96	A	A
NL	1	6.6200	0.4700	1.04	A	A
NP	1	6.7500	0.1200	1.06	A	A
NR	1	6.0700	1.2100	0.96	A	A
NS	1	6.3070	0.0510	0.99	A	A
NZ	1	7.0000	0.4000	1.10		W
OB	1	5.6400	1.3100	0.89	A	A
OC	1	7.0000	0.4000	1.10	A	W
OD	1	6.8500	0.1000	1.08	A	A
OH	1	6.2900		0.99		A
OL	1	6.7400	0.6200	1.06	A	A
OS	1	6.1100	0.2200	0.96	A	A
OS	2	6.4100	0.2100	1.01	A	A
OT	1	6.6000	0.3000	1.04	A	A
OU	1	6.9900	0.3500	1.10	N	W
PK	1	7.4700	1.4100	1.18	W	W
PO	1	6.2000	0.4000	0.98	A	A
RA	2	8.6200	0.2500	1.36	A	N
RA	1	7.9600	0.3000	1.25	A	W
RC	1	6.2200	0.4400	0.98	A	A
RE	1	6.1700	0.6700	0.97	A	A
RI	1	6.1800	0.5980	0.97	A	A
SA	1	6.4000	0.4200	1.01	A	A
SB	1	7.0240	0.4960	1.11	W	W
SE	1	5.2700	0.0800	0.83		A
SI	1	6.9000	0.4000	1.09		A
SR	1	6.9900	0.4700	1.10	A	W
TE	1	6.7000	0.1000	1.05	A	A
TI	1	7.1600	0.7200	1.13		W
TK	2	48.8800	9.3000	7.70		N
TK	1	52.5600	1.9000	8.28		N
TM	1	4.9100	0.2000	0.77	W	W
TN	1	5.7490	0.2870	0.90	N	A
TO	1	6.1000	0.6600	0.96	N	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 6.3500
EML Error: 0.4100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TP	1	6.5000	0.1500	1.02	A	A
TQ	1	6.4900	0.4000	1.02		A
TR	1	5.8660	0.0970	0.92	N	A
TW	1	6.5600	0.0600	1.03	A	A
TX	1	6.5200	0.0700	1.03	A	A
UC	1	6.5500	0.1700	1.03	A	A
UP	1	6.3300	0.6630	1.00	A	A
UY	1	6.3000	0.4300	0.99	A	A
WA	1	6.8000	0.8000	1.07	A	A
WC	1	7.4400	0.8930	1.17	A	W
WE	1	7.3500	0.1440	1.16	A	W
WN	3	6.7600	0.2000	1.07	A	A
WN	1	6.8200	0.1700	1.07	A	A
WN	2	6.6000	0.1500	1.04	A	A
WO	1	7.7840	1.5800	1.23	W	W
WO	2	7.9510	2.0670	1.25	W	W
WP	1	7.0700	0.7000	1.11		W
WV	1	6.5100	0.1810	1.02	A	A
WW	1	6.2000	0.3000	0.98		A
YA	1	6.5100	0.3500	1.02	A	A

Total Number Reported: 127

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.4300
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	6.2000	1.0000	0.96	A	A
AG	2	6.8000	1.1000	1.06	A	A
AI	1	3.2100	0.0842	0.50	A	N
AM	1	6.7100	0.1000	1.04	N	A
AN	1	6.4500	0.4500	1.00	A	A
AR	1	6.7000	1.4300	1.04	A	A
AS	1	6.6080	0.3330	1.03	A	A
AT	1	6.8160	0.7310	1.06		A
AU	1	6.7900	0.2600	1.06	W	A
BA	1	6.7000	1.0000	1.04	A	A
BC	1	6.8100	0.1600	1.06	A	A
BE	1	7.2000	1.8000	1.12	A	A
BL	1	8.4000	0.5900	1.31	W	W
BM	1	6.6900	0.3000	1.04	A	A
BN	3	7.3000	0.9000	1.13	N	A
BN	1	6.4000	0.6000	1.00	N	A
BN	2	6.6000	0.6000	1.03	N	A
BP	1	6.5000	0.5000	1.01		A
BQ	1	7.4700	0.0800	1.16	A	W
BU	1	6.4000	0.3000	1.00	A	A
BX	1	6.8800	0.3700	1.07	A	A
CA	1	6.6000	0.7000	1.03	A	A
CB	1	8.1600	0.2400	1.27	A	W
CB	4	7.3300	0.2400	1.14	A	W
CB	2	7.4600	0.2700	1.16	A	W
CB	3	7.5200	0.2400	1.17	A	W
CB	5	8.4400	0.2400	1.31	A	W
CD	1	6.5000	0.7000	1.01	A	A
CH	1	8.1100	0.0690	1.26	W	W
CL	1	7.0600	0.3500	1.10	A	A
CN	1	6.8800	0.4500	1.07	W	A
CR	1	4.5800	0.3500	0.71	W	N
CS	1	5.2900	0.2800	0.82	A	A
CW	1	6.0700	0.0700	0.94	A	A
DH	1	5.2000	0.2900	0.81	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.4300
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EC	1	7.3000	0.5380	1.13		A
EG	1	6.7000	0.5000	1.04	A	A
EP	1	7.2400	0.5600	1.13	A	A
FG	1	7.4200	2.4800	1.15	A	W
FL	1	8.4000	0.0800	1.31	W	W
FM	1	8.2000	0.1000	1.27	W	W
FN	1	7.0300	0.6000	1.09	A	A
GA	1	6.5400	0.5300	1.02	A	A
GC	1	6.5900		1.02	A	A
GD	1	4.6000	0.5500	0.71		N
GE	1	7.0600	0.8030	1.10	A	A
GP	1	6.2000	0.6000	0.96	A	A
GT	1	7.4000	1.0000	1.15	A	W
HU	1	8.1000	0.2000	1.26	A	W
ID	1	8.4330	0.4490	1.31	A	W
IE	1	7.0300	1.0100	1.09	A	A
IL	1	7.2000	0.1000	1.12	A	A
IN	1	6.7000	0.4000	1.04	A	A
IS	1	6.8000	0.6400	1.06	A	A
IT	1	6.6000	0.3500	1.03	A	A
KR	3	6.9000	0.5000	1.07		A
KR	2	7.0000	0.2000	1.09		A
KR	4	7.1000	0.5000	1.10		A
KR	1	7.2000	0.3000	1.12		A
LB	1	6.8000	0.9000	1.06	A	A
LL	1	7.3600	0.6500	1.14	A	W
LN	1	6.4500	0.7400	1.00	A	A
LV	1	6.5500	0.2200	1.02	A	A
MA	1	7.6000	1.7000	1.18	A	W
ME	3	6.8400	0.3300	1.06	A	A
ME	1	6.8800	0.3300	1.07	A	A
ME	2	6.2200	0.3100	0.97	A	A
MH	1	8.1800	0.3000	1.27	W	W
ML	1	6.9700	0.7000	1.08		A
NA	1	6.5000	0.1500	1.01	A	A
ND	1	7.0250	0.2790	1.09		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.4300
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NJ	2	6.1000	0.5000	0.95	A	A
NJ	1	6.2000	0.6000	0.96	A	A
NJ	3	6.0000	0.5000	0.93	A	A
NL	1	6.8700	0.6800	1.07	A	A
NM	1	7.0000	0.4500	1.09	W	A
NP	1	6.7200	0.1300	1.04	A	A
NR	1	6.4400	1.2900	1.00	A	A
NS	1	6.4470	0.0390	1.00	A	A
NZ	1	7.1000	0.4000	1.10		A
OB	1	5.7500	1.6500	0.89	A	A
OC	1	7.0000	0.4000	1.09	A	A
OD	1	6.8100	0.2500	1.06	A	A
OH	1	6.5900		1.02		A
OL	1	7.1000	0.7800	1.10	A	A
OS	1	6.4800	0.3700	1.01	A	A
OS	2	6.5600	0.3600	1.02	A	A
OT	1	6.8000	0.2000	1.06	A	A
OU	1	7.1800	0.4600	1.12	A	A
PK	1	7.2200	0.5500	1.12	A	A
PO	1	6.5000	0.4000	1.01	A	A
RA	2	9.7400	0.3500	1.51	A	N
RA	1	8.7000	0.3800	1.35	A	W
RC	1	6.5100	0.9800	1.01	A	A
RE	1	6.2300	0.6400	0.97	A	A
RI	1	5.9500	0.9900	0.93	A	A
SA	1	6.9800	0.2200	1.09	A	A
SB	1	7.4330	0.9460	1.16	W	W
SE	1	5.8300	0.0700	0.91		A
SI	1	6.9000	0.3000	1.07		A
SR	1	7.0800	0.7900	1.10	A	A
TE	1	7.1000	0.2000	1.10	W	A
TI	1	7.7200	0.7700	1.20		W
TK	2	82.8800	12.7000	12.89		N
TK	1	82.5500	3.4600	12.84		N
TM	1	4.9000	0.1900	0.76	W	W
TN	1	5.8030	0.1450	0.90	N	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.4300
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TO	1	6.5500	1.0100	1.02	N	A
TP	1	6.7100	0.2600	1.04	A	A
TQ	1	6.8200	0.4500	1.06		A
TR	1	6.0180	0.0930	0.94	N	A
TW	1	6.6800	0.0700	1.04	A	A
TX	1	6.5900	0.0800	1.02	A	A
UP	1	6.4300	0.7190	1.00	A	A
UY	1	6.5000	0.3800	1.01	A	A
WA	1	7.0000	0.8000	1.09	W	A
WC	1	7.9400	1.2300	1.24	A	W
WE	1	7.3300	0.2310	1.14	A	W
WN	1	7.2000	0.3000	1.12	A	A
WN	2	6.9000	0.2000	1.07	A	A
WN	3	7.4000	0.3000	1.15	A	W
WO	2	8.0840	1.6640	1.26	W	W
WO	1	8.0510	1.3070	1.25	W	W
WP	1	8.0700	0.8100	1.25		W
WV	1	6.1600	0.1370	0.96	A	A
WW	1	6.3000	0.4000	0.98		A
YA	1	6.4600	0.3600	1.00	A	A

Total Number Reported: 127

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS ALPHA

EML Value: 2.7700
EML Error: 0.2600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AI	1	3.0300		1.09		A
AI	3	2.7990		1.01		A
AI	2	2.5690		0.93		A
AM	1	2.7700	0.0200	1.00	A	A
AR	1	3.5300	0.0990	1.27	W	A
AS	1	2.9520	0.0420	1.07	A	A
AT	1	2.6140	0.1230	0.94	A	A
AU	1	3.6400	0.1400	1.31	A	A
BC	1	2.8200	0.1300	1.02	A	A
BE	1	2.5700	0.1600	0.93	A	A
BL	1	2.6090	0.0970	0.94	A	A
BN	1	2.3000	0.1000	0.83	A	A
BN	3	2.4000	0.1000	0.87	A	A
BN	2	2.4000	0.1000	0.87	A	A
BP	1	2.8400	0.2100	1.02		A
BQ	1	2.9000	0.0400	1.05	A	A
BU	2	2.6300	0.0900	0.95	A	A
BU	1	2.6900	0.0800	0.97	A	A
BX	1	2.8300	0.1300	1.02	A	A
CA	1	2.6000	0.3000	0.94	A	A
CH	1	2.8500	0.0370	1.03	A	A
DH	1	2.5100	0.0300	0.91	A	A
FG	1	2.8660	0.1000	1.03	A	A
FL	1	2.5700	0.0900	0.93	A	A
FN	1	2.6700	0.4000	0.96		A
GC	1	2.5800		0.93		A
GE	1	2.7200	0.0320	0.98	A	A
GP	1	2.9000	0.3000	1.05	A	A
GT	1	2.9000	0.1000	1.05	A	A
HC	1	2.4400	0.0700	0.88	A	A
ID	1	2.0000	0.1410	0.72	A	W
IE	1	3.7700	0.0500	1.36	W	W
IL	1	2.4600	0.0300	0.89	A	A
IS	1	3.7500	0.5200	1.35	A	W
IT	1	3.2900	0.3300	1.19	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS ALPHA

EML Value: 2.7700
EML Error: 0.2600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
KA	1	3.1200	0.1800	1.13	A	A
KR	1	2.8900	0.0400	1.04		A
LB	1	2.5500	0.2400	0.92	A	A
LN	1	2.9700	0.1500	1.07	A	A
LV	1	2.7500	0.2500	0.99		A
ME	2	3.5000	0.1000	1.26	W	A
ME	3	3.5000	0.1000	1.26	W	A
ME	1	3.7000	0.1000	1.34	W	W
MH	1	2.9900	0.0300	1.08	A	A
ND	1	2.3750	0.2530	0.86		A
NQ	1	2.6700	0.4000	0.96	A	A
NZ	2	2.5900	0.0700	0.94		A
NZ	1	2.5800	0.0700	0.93		A
OB	1	3.5300	0.3770	1.27	A	A
OC	1	2.4000	0.1000	0.87	A	A
OD	1	2.4400	0.0600	0.88	A	A
OH	1	2.7000		0.98		A
OT	1	2.7000	0.1000	0.98	A	A
OU	1	2.3000	0.1500	0.83		A
PA	2	2.7000	0.1700	0.98	A	A
PA	3	2.5400	0.2100	0.92	A	A
PA	4	2.7200	0.1600	0.98	A	A
PA	5	2.6200	0.1300	0.95	A	A
PA	1	2.7400	0.2300	0.99	A	A
RC	1	3.4100	0.3400	1.23	A	A
RE	1	2.6100	0.3100	0.94	A	A
RK	1	1.8200	0.1700	0.66	W	W
RL	1	2.4600	0.4000	0.89	A	A
SA	1	3.1700	0.2200	1.14	A	A
SA	2	2.8100	0.1200	1.01	A	A
SB	1	2.8840	0.1140	1.04		A
SR	1	2.2600	0.1500	0.82	A	A
TE	1	3.1800	0.0600	1.15	W	A
TI	1	4.3000	0.2000	1.55		N
TM	1	1.2600	0.3500	0.46	N	N
TN	1	2.4100	0.0700	0.87	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS ALPHA

EML Value: 2.7700
EML Error: 0.2600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TO	1	4.0700	0.0600	1.47	N	W
TP	1	2.3240	0.0640	0.84	A	A
TQ	1	2.5800	0.0700	0.93		A
TX	1	3.2300	0.0700	1.17	A	A
UC	1	2.7400	0.1100	0.99	A	A
UP	1	2.6500	0.1240	0.96	A	A
UY	1	2.6400	0.1500	0.95	A	A
WA	1	3.3000	0.1000	1.19	A	A
WC	1	2.6600	0.2700	0.96	A	A
WO	1	2.2200	0.0800	0.80	N	W
WO	2	2.3200	0.0800	0.84	N	A
WS	1	2.8570	0.0500	1.03	A	A
WT	1	1.8400	0.1200	0.66		W
WV	1	2.4500	0.0677	0.88	A	A
WW	1	2.5800	0.0500	0.93		A
YA	1	2.2900	0.0210	0.83	A	A

Total Number Reported: 87

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS BETA

EML Value: 2.6600
EML Error: 0.2600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AI	3	2.8090		1.06		A
AI	2	2.7270		1.02		A
AI	1	2.8910		1.09		A
AM	1	2.9100	0.0200	1.09	A	A
AR	1	2.8400	0.0650	1.07	A	A
AS	1	3.1660	0.0410	1.19	A	A
AT	1	3.0680	0.1060	1.15	A	A
AU	1	3.2200	0.1800	1.21	A	A
BC	1	3.4900	0.1400	1.31	A	A
BE	1	2.3100	0.1100	0.87	W	W
BL	1	2.7110	0.1120	1.02	W	A
BN	2	2.4000	0.1000	0.90	W	A
BN	3	2.4000	0.1000	0.90	W	A
BN	1	2.5000	0.1000	0.94	W	A
BP	1	2.8600	0.1000	1.08		A
BQ	1	2.9800	0.0300	1.12	W	A
BU	1	2.7000	0.2000	1.01	A	A
BX	1	3.3900	0.1400	1.27	A	A
CA	1	3.4000	0.3000	1.28	A	A
CD	1	3.2000	0.5000	1.20	A	A
CH	1	2.8400	0.0320	1.07	A	A
DH	1	2.3700	0.0400	0.89	A	A
FG	1	2.9250	0.1000	1.10	W	A
FL	1	3.2000	0.0800	1.20	A	A
FN	1	3.0000	0.4500	1.13		A
GC	1	2.1800		0.82		W
GE	1	2.7100	0.0270	1.02	A	A
GP	1	2.7000	0.3000	1.01	A	A
GT	1	2.7000	0.1000	1.01	A	A
HC	1	2.2600	0.0700	0.85	W	W
ID	1	3.2670	0.1730	1.23	A	A
IE	1	2.1600	0.0300	0.81	A	W
IL	1	2.5100	0.0300	0.94	N	A
IS	1	2.8900	0.2200	1.09	A	A
IT	1	3.0200	0.2400	1.13	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS BETA

EML Value: 2.6600
EML Error: 0.2600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
KA	1	2.6100	0.1000	0.98	A	A
KR	1	2.7200	0.0300	1.02		A
LB	1	2.7900	0.2100	1.05	A	A
LN	1	2.8700	0.1200	1.08	W	A
LV	1	2.7500	0.0900	1.03		A
ME	1	2.8000	0.0800	1.05	A	A
ME	3	2.9000	0.0900	1.09	A	A
ME	2	3.0000	0.0900	1.13	A	A
MH	1	2.9700	0.0200	1.12	A	A
ND	1	2.8530	0.1420	1.07		A
NP	1	2.8200	0.0500	1.06	A	A
NQ	1	3.0300	0.4600	1.14	A	A
NZ	2	2.8100	0.0600	1.06		A
NZ	1	2.8400	0.0600	1.07		A
OB	1	2.7500	0.3000	1.03	A	A
OC	1	2.5000	0.1000	0.94	A	A
OD	1	3.3200	0.0800	1.25	A	A
OH	1	3.0000		1.13		A
OT	1	2.9000	0.1000	1.09	A	A
OU	1	2.3700	0.1600	0.89		A
PA	5	3.7700	0.2700	1.42	A	W
PA	2	3.4200	0.2000	1.29	A	A
PA	1	3.4300	0.2400	1.29	A	A
PA	4	3.9600	0.1800	1.49	A	W
PA	3	2.8400	0.2000	1.07	A	A
RC	1	2.8400	0.2000	1.07	A	A
RE	1	2.8600	0.3400	1.08	A	A
RK	1	2.6500	0.1500	1.00	W	A
RL	1	2.6900	0.4000	1.01	A	A
SA	1	2.8500	0.3800	1.07	A	A
SA	2	2.2800	0.1100	0.86	A	W
SB	1	2.6540	0.0976	1.00		A
SR	1	2.9600	0.1800	1.11	A	A
TE	1	3.6500	0.0600	1.37	A	A
TI	1	2.3000	0.1000	0.87		W
TM	1	1.0100	0.2200	0.38	N	N

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS BETA

EML Value: 2.6600
EML Error: 0.2600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TN	1	2.4800	0.0800	0.93	W	A
TO	1	3.6400	0.0500	1.37	A	A
TP	1	2.9600	0.0140	1.11	A	A
TQ	1	2.8100	0.0500	1.06		A
TX	1	2.6500	0.0700	1.00	A	A
UC	1	2.9700	0.0900	1.12	A	A
UP	1	2.8200	0.1060	1.06	A	A
UY	1	3.0900	0.1500	1.16	A	A
WA	1	3.2000	0.1000	1.20	A	A
WC	1	3.2300	0.3260	1.21	A	A
WO	1	2.7800	0.0700	1.04	A	A
WO	2	2.8500	0.0800	1.07	A	A
WT	1	2.6500	0.1400	1.00		A
WV	1	3.1000	0.0662	1.16	A	A
WW	1	2.7900	0.0400	1.05		A
YA	1	2.5200	0.0220	0.95	W	A

Total Number Reported: 87

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: MN54

EML Value: 7.9100
EML Error: 0.4500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	2	8.4000	1.4000	1.06		A
AG	1	7.8000	1.3000	0.99		A
AI	1	3.6900	0.0914	0.47		N
AM	1	8.4600	0.1100	1.07		A
AN	1	8.1000	0.4500	1.02		A
AR	1	8.5600	1.8000	1.08		A
AS	1	7.9180	0.3640	1.00		A
AT	1	8.3810	0.9500	1.06		A
AU	1	8.8700	0.3000	1.12		A
BA	1	8.6100	1.4000	1.09		A
BC	1	7.9200	0.2500	1.00		A
BE	1	9.5000	2.6000	1.20		W
BL	1	10.3000	0.7000	1.30		W
BN	3	9.3000	0.8000	1.18		A
BN	1	7.2000	0.6000	0.91		A
BN	2	7.7000	0.7000	0.97		A
BP	1	8.1000	0.4000	1.02		A
BQ	1	8.0400	0.0900	1.02		A
BU	1	8.2000	1.2000	1.04		A
BX	1	7.8100	0.6400	0.99		A
CA	1	8.8000	0.9000	1.11		A
CB	3	9.3100	0.2800	1.18		A
CB	5	10.8800	0.3000	1.38		W
CB	4	9.3200	0.2800	1.18		A
CB	2	9.8400	0.3100	1.24		W
CB	1	10.2400	0.2200	1.29		W
CD	1	9.0000	1.0000	1.14		A
CH	1	10.4000	0.0820	1.32		W
CL	1	8.6500	0.4300	1.09		A
CN	1	8.7500	0.6400	1.11		A
CR	1	5.7200	0.3500	0.72		N
CS	1	6.5000	0.3400	0.82		W
CW	1	8.2300	0.0900	1.04		A
DH	1	6.5700	0.5700	0.83		W
EC	1	9.9300	0.7410	1.25		W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: MN54

EML Value: 7.9100
EML Error: 0.4500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EG	1	8.6000	0.6000	1.09		A
EP	1	8.7800	0.6500	1.11		A
FG	1	9.1370	3.3400	1.15		A
FL	1	10.3900	0.0900	1.31		W
FM	1	10.1200	0.1000	1.28		W
FN	1	8.1900	0.6900	1.03		A
GA	1	8.6300	1.1100	1.09		A
GC	1	8.0000		1.01		A
GD	1	7.7000	0.6600	0.97		A
GE	1	8.8100	1.1300	1.11		A
GP	1	7.5000	0.8000	0.95		A
HU	1	10.3000	0.2000	1.30		W
ID	1	10.8000	0.5490	1.37		W
IE	1	8.4500	1.2500	1.07		A
IL	1	8.7000	0.2000	1.10		A
IN	1	8.0000	0.5000	1.01		A
IS	1	8.6200	1.4000	1.09		A
IT	1	8.6000	0.4500	1.09		A
KR	4	9.0000	0.6000	1.14		A
KR	3	8.8000	0.5000	1.11		A
KR	1	8.5000	0.4000	1.08		A
KR	2	8.7000	0.2000	1.10		A
LB	1	9.6000	1.4000	1.21		W
LL	1	8.7000	1.0300	1.10		A
LN	1	8.5600	0.4300	1.08		A
LV	1	8.1400	0.2300	1.03		A
MA	1	8.7000	2.6000	1.10		A
ME	1	8.9900	0.3400	1.14		A
ME	2	7.9900	0.3100	1.01		A
ME	3	8.9500	0.3400	1.13		A
MH	1	9.9800	0.3700	1.26		W
ML	1	45.9900	4.6000	5.81		N
NA	1	7.9800	0.1700	1.01		A
ND	1	9.0540	0.4140	1.14		A
NJ	3	7.5000	2.3000	0.95		A
NJ	2	7.6000	1.7000	0.96		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: MN54

EML Value: 7.9100
EML Error: 0.4500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NJ	1	7.5000	2.3000	0.95		A
NL	1	8.9000	0.8900	1.13		A
NP	1	8.9700	0.1300	1.13		A
NR	1	7.9100	1.5800	1.00		A
NS	1	8.4750	0.0510	1.07		A
NZ	1	9.2000	0.5000	1.16		A
OB	1	7.8800	2.0100	1.00		A
OC	1	9.0000	0.5000	1.14		A
OD	1	8.5400	0.4100	1.08		A
OH	1	8.0300		1.01		A
OL	1	8.9100	0.9400	1.13		A
OS	2	8.2000	0.4000	1.04		A
OS	1	8.1500	0.3100	1.03		A
OT	1	8.7000	0.3000	1.10		A
OU	1	8.7600	0.6000	1.11		A
PK	1	8.7200	0.4700	1.10		A
RA	2	11.9000	0.4000	1.50		N
RA	1	10.8000	0.4000	1.37		W
RC	1	7.6400	0.6100	0.97		A
RE	1	8.3200	0.8300	1.05		A
RI	1	7.3400	0.8710	0.93		A
SA	1	9.0700	0.3900	1.15		A
SB	1	9.3770	1.2500	1.18		W
SE	1	6.5200	0.0700	0.82		W
SI	1	8.5000	0.4000	1.08		A
SR	1	8.8000	0.9100	1.11		A
TE	1	8.8000	0.2000	1.11		A
TI	1	9.3900	0.9400	1.19		W
TM	1	5.8300	0.2100	0.74		N
TN	1	7.4130	0.2460	0.94		A
TO	1	7.9500	1.2800	1.00		A
TP	1	7.6100	0.2200	0.96		A
TQ	1	7.2700	0.4800	0.92		A
TR	1	7.7650	0.1340	0.98		A
TW	1	8.3400	0.0800	1.05		A
TX	1	8.8800	0.1000	1.12		A

Values for elemental Uranium are reported in $\mu\text{g}/\text{filter}$, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: MN54

EML Value: 7.9100
EML Error: 0.4500

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
UP	1	8.0200	1.0200	1.01		A
UY	1	8.0000	0.5400	1.01		A
WA	1	9.2000	1.3000	1.16		A
WC	1	10.1000	1.8100	1.28		W
WE	1	9.2400	0.3320	1.17		A
WN	1	9.1000	0.3000	1.15		A
WN	3	9.0000	0.3000	1.14		A
WN	2	8.8000	0.3000	1.11		A
WO	2	10.3800	2.3100	1.31		W
WO	1	10.1400	1.8100	1.28		W
WP	1	10.1000	1.0000	1.28		W
WV	1	8.9100	0.1890	1.13		A
WW	1	8.4000	0.7000	1.06		A
YA	1	8.1800	0.4400	1.03		A

Total Number Reported: 121

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU238

EML Value: 0.0968
EML Error: 0.0065

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.0990	0.0190	1.02	A	A
AI	1	2.3700	0.0145	24.48	A	N
AM	1	0.0700	0.0200	0.72	N	N
AN	1	0.1000	0.0100	1.03	A	A
AR	2	0.0970	0.0260	1.00	A	A
AR	1	0.0870	0.0250	0.90	A	A
AU	1	0.0990	0.0100	1.02	A	A
BE	1	0.0870	0.0110	0.90	A	A
BL	2	0.1220	0.0100	1.26	A	W
BL	1	0.1940	0.0730	2.00	A	N
BM	1	0.0947	0.0090	0.98	W	A
BP	1	0.0920	0.0080	0.95		A
BU	1	0.0440	0.0040	0.46	W	N
BX	1	0.0800	0.0200	0.83	A	W
CH	1	0.0980	0.0080	1.01	A	A
CL	1	0.2000	0.0100	2.07	A	N
CW	1	0.0927	0.0021	0.96	A	A
EG	1	0.0870	0.0040	0.90	A	A
GA	1	0.1000	0.0130	1.03	W	A
GE	1	0.0820	0.0140	0.85	A	W
GP	1	0.0770	0.0120	0.80	A	W
GT	1	0.1000	0.0600	1.03	A	A
IE	1	0.1080	0.0310	1.12		A
IS	1	0.1060	0.0170	1.10	N	A
IT	1	0.0960	0.0120	0.99	A	A
LL	1	0.1080	0.0070	1.12	A	A
ML	1	0.0930	0.0060	0.96	A	A
NA	1	0.8800	0.0110	9.09		N
NL	1	0.0882	0.0220	0.91	A	A
NM	1	0.0918	0.0029	0.95	A	A
NQ	1	0.0885	0.0056	0.91	W	A
NZ	2	0.0970	0.0050	1.00		A
NZ	1	0.1000	0.0060	1.03		A
OB	1	0.0992	0.0196	1.02		A
OT	1	0.0890	0.0100	0.92	W	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU238

EML Value: 0.0968
EML Error: 0.0065

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RA	1	0.1100	0.0300	1.14		A
RE	1	0.0853	0.0101	0.88	W	W
RI	1	0.1040	0.0088	1.07	A	A
SE	1	0.0810	0.0070	0.84		W
SN	1	0.0900	0.0150	0.93	W	A
SR	1	0.0970	0.0110	1.00	A	A
TE	1	0.0520	0.0350	0.54	A	N
TI	1	0.0850	0.0270	0.88		W
TM	1	0.0930	0.0150	0.96	A	A
TN	1	0.1010	0.0090	1.04	A	A
TO	1	0.0600	0.0300	0.62	N	N
TX	1	0.0930	0.0040	0.96	A	A
UP	1	0.0921	0.0180	0.95	W	A
UY	1	0.0920	0.0110	0.95	A	A
WA	1	0.0680	0.0230	0.70	A	N
WC	1	0.0926	0.0630	0.96	A	A
YA	1	0.0950	0.0030	0.98	A	A

Total Number Reported: 52

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU239

EML Value: 0.1360
EML Error: 0.0110

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.1360	0.0230	1.00	A	A
AI	1	3.4300	0.0190	25.22	A	N
AM	1	0.1000	0.0200	0.74	W	N
AN	1	0.1400	0.0100	1.03	A	A
AR	2	0.1220	0.0310	0.90	A	W
AR	1	0.1330	0.0330	0.98	A	A
AU	1	0.1420	0.0130	1.04	A	A
BE	1	0.1290	0.0140	0.95	A	A
BL	1	0.1300	0.0100	0.96	W	A
BM	1	0.1390	0.0130	1.02	W	A
BP	1	0.1300	0.0200	0.96		A
BU	1	0.0770	0.0040	0.57	A	N
BX	1	0.1300	0.0200	0.96	A	A
CH	1	0.1410	0.0100	1.04	A	A
CL	1	0.3900	0.0100	2.87	W	N
CW	1	0.1340	0.0027	0.99	A	A
EG	1	0.1290	0.0060	0.95	A	A
GA	1	0.1500	0.0280	1.10	A	A
GE	1	0.1450	0.0210	1.07	A	A
GP	1	0.1200	0.0100	0.88	A	W
GT	1	0.1400	0.0300	1.03	W	A
IE	1	0.1020	0.0300	0.75		N
IS	1	0.1370	0.0130	1.01	N	A
IT	1	0.1370	0.0150	1.01	A	A
LL	1	0.1290	0.0090	0.95	A	A
ML	1	0.1300	0.0080	0.96	A	A
NA	1	0.1280	0.0130	0.94		A
NL	1	0.1370	0.0330	1.01	A	A
NM	1	0.1270	0.0040	0.93	A	A
NQ	1	0.1304	0.0078	0.96	W	A
NZ	2	0.1360	0.0060	1.00		A
NZ	1	0.1440	0.0070	1.06		A
OB	1	0.1250	0.0230	0.92		A
OT	1	0.1200	0.0100	0.88	W	W
RA	1	0.1300	0.0300	0.96		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU239

EML Value: 0.1360
EML Error: 0.0110

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RE	1	0.1280	0.0140	0.94	W	A
RI	1	0.1440	0.0105	1.06	A	A
SE	1	0.1190	0.0040	0.88		W
SN	1	0.1350	0.0210	0.99	W	A
SR	1	0.1360	0.0160	1.00	A	A
TE	1	0.0720	0.0220	0.53	A	N
TI	1	0.1300	0.0300	0.96		A
TM	1	0.0910	0.0120	0.67	A	N
TN	1	0.1340	0.0110	0.99	A	A
TO	1	0.1000	0.0400	0.74	W	N
TX	1	0.1270	0.0040	0.93	A	A
UP	1	0.1250	0.0218	0.92	A	A
UY	1	0.1330	0.0140	0.98	A	A
WA	1	0.1100	0.0200	0.81	A	W
WC	1	0.1330	0.0889	0.98	A	A
YA	1	0.1350	0.0040	0.99	A	A

Total Number Reported: 51

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: RU106

EML Value: 5.5000
EML Error: 1.7600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	2	5.5000	1.6000	1.00		A
AG	1	5.4000	1.3000	0.98		A
AI	1	3.5200	0.5950	0.64		W
AN	1	8.2500	2.9600	1.50		N
AR	1	5.1200	4.0700	0.93		A
AS	1	7.5070	1.6650	1.37		N
BA	1	5.3500	3.6000	0.97		A
BE	1	5.2000	1.2000	0.94		A
BL	1	7.1800	0.5900	1.30		N
BN	3	5.0000	0.9000	0.91		A
BN	1	4.4000	0.7000	0.80		A
BN	2	4.5000	0.7000	0.82		A
BQ	1	6.9000	0.4000	1.25		W
BU	1	4.4000	0.6000	0.80		A
BX	1	5.6200	1.4400	1.02		A
CB	4	6.9100	1.0800	1.26		W
CB	1	6.4500	0.4000	1.17		W
CB	5	6.0500	0.7100	1.10		A
CB	2	5.9500	0.7400	1.08		A
CB	3	5.5500	0.8700	1.01		A
CH	1	6.4300	0.3500	1.17		W
CL	1	13.1000	0.6600	2.38		N
CN	1	5.9700	0.5000	1.09		A
CR	1	3.9200	0.3400	0.71		W
CS	1	4.8800	0.7100	0.89		A
CW	1	1.8200	0.2300	0.33		N
DH	1	4.9100	0.6600	0.89		A
EG	1	5.5000	0.5000	1.00		A
EP	1	6.8600	1.6900	1.25		W
FG	1	5.4300	1.9300	0.99		A
FL	1	5.4000	0.4000	0.98		A
FM	1	8.0000	0.2000	1.46		N
GA	1	6.0100	2.3100	1.09		A
GC	1	5.9900		1.09		A
GD	1	9.2000	3.0000	1.67		N

Values for elemental Uranium are reported in $\mu\text{g}/\text{filter}$, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: RU106

EML Value: 5.5000
EML Error: 1.7600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GE	1	7.0100	3.1500	1.27		W
GP	1	5.0000	2.2000	0.91		A
GT	1	5.8000	1.5000	1.05		A
ID	1	6.8000	0.3810	1.24		W
IL	1	6.3000	0.4000	1.14		A
IN	1	6.1000	0.3000	1.11		A
IS	1	7.2900	1.2400	1.33		N
IT	1	5.9000	0.7600	1.07		A
LB	1	6.5000	1.2000	1.18		W
LV	1	5.2100	0.3900	0.95		A
MA	1	6.3000	3.7000	1.14		A
ME	2	4.5900	0.4300	0.83		A
ME	1	5.1800	0.4400	0.94		A
ME	3	5.1100	0.4500	0.93		A
MH	1	6.5400	0.3000	1.19		W
NJ	1	5.8000	0.8000	1.05		A
NJ	3	5.5000	0.6000	1.00		A
NJ	2	5.8000	0.8000	1.05		A
NL	1	6.4100	0.9400	1.16		W
NP	1	5.9800	0.6000	1.09		A
NR	1	5.6200	1.1200	1.02		A
NS	1	5.1310	0.2020	0.93		A
OC	1	6.0000	1.2000	1.09		A
OD	1	6.2500	0.3800	1.14		A
OH	1	5.8500		1.06		A
OL	1	6.0700	1.3100	1.10		A
OS	2	5.7800	1.0600	1.05		A
OS	1	4.8100	1.0400	0.88		A
OT	1	5.4000	1.2000	0.98		A
RA	1	7.0200	0.5500	1.28		W
RA	2	6.9900	0.4000	1.27		W
RC	1	7.5800	1.9000	1.38		N
RE	1	2.9600	0.9300	0.54		N
SA	1	5.1700	1.5000	0.94		A
SI	1	6.1000	0.3000	1.11		A
SR	1	7.3500	1.8400	1.34		N

Values for elemental Uranium are reported in $\mu\text{g}/\text{filter}$, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: RU106

EML Value: 5.5000
EML Error: 1.7600

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TE	1	5.9000	0.8000	1.07		A
TI	1	5.7300	1.2900	1.04		A
TM	1	5.8100	1.3000	1.06		A
TN	1	5.4040	0.3780	0.98		A
TO	1	5.6300	2.5400	1.02		A
TW	1	4.9200	0.5100	0.89		A
TX	1	5.8200	0.2300	1.06		A
UP	1	6.0000	1.3600	1.09		A
UY	1	5.8000	1.3000	1.05		A
WA	1	5.6000	1.3000	1.02		A
WE	1	6.5400	0.8000	1.19		W
WN	1	5.5000	0.6000	1.00		A
WN	3	6.0000	0.8000	1.09		A
WN	2	4.7000	0.4000	0.86		A
WO	1	6.0480	1.2610	1.10		A
WO	2	5.6760	1.4170	1.03		A
WP	1	6.5100	0.9600	1.18		W
WV	1	5.3000	0.7270	0.96		A
WW	1	4.8000	0.7000	0.87		A
YA	1	6.6200	0.9300	1.20		W

Total Number Reported: 91

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SR90

EML Value: 0.3360
EML Error: 0.0141

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.3460	0.0700	1.03	A	A
AI	1	0.4706		1.40		W
AM	1	0.0900	0.0200	0.27	A	N
AN	1	0.3300	0.0100	0.98	A	A
AR	2	0.4930	0.1270	1.47	A	W
AR	1	0.4160	0.1270	1.24	A	A
BC	1	0.1600	0.0200	0.48	A	N
BE	1	0.3380	0.0480	1.01	A	A
BL	2	0.4510	1.2210	1.34	W	W
BL	1	0.2870	0.3150	0.85	W	A
BM	1	0.3200	0.0160	0.95	A	A
BX	1	0.1200	0.0100	0.36	A	N
CH	1	0.3670	0.0350	1.09	A	A
CL	1	0.8700	0.0200	2.59	W	N
EG	1	0.3600	0.0200	1.07	A	A
GA	1	0.3800	0.0610	1.13	A	A
GE	1	0.3380	0.0370	1.01	A	A
GP	1	12.0000	1.0000	35.71	N	N
GT	1	0.3000	0.0600	0.89	W	A
ID	1	0.4020	0.0240	1.20		A
IS	1	0.5600	0.0600	1.67	N	W
IT	1	0.3800	0.0600	1.13	A	A
KR	1	0.3500	1.0400	1.04		A
NA	1	0.6200	0.1400	1.85	A	W
NM	1	0.3110	0.0270	0.93	A	A
NZ	1	0.5900	0.0200	1.76		W
OT	1	0.3000	0.0600	0.89	N	A
RA	1	0.3600	0.0700	1.07		A
RE	1	0.3500	0.0330	1.04	W	A
RI	1	0.2920	0.0443	0.87	A	A
SE	1	0.3010	0.0080	0.90		A
SR	1	0.3800	0.0900	1.13	A	A
TE	1	0.6000	0.2000	1.79	A	W
TI	1	0.4200	0.1100	1.25		A
TM	1	2.7900	0.8500	8.30	A	N

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SR90

EML Value: 0.3360
EML Error: 0.0141

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TN	1	0.3260	0.0540	0.97	A	A
TO	1	0.7500	0.0900	2.23	W	N
TP	1	0.4332	0.0209	1.29	W	A
UP	1	0.3660	0.0830	1.09	W	A
UY	1	0.3000	0.0400	0.89	A	A
WA	1	0.3390	0.1760	1.01	A	A
WC	1	0.6560	0.1470	1.95	A	N
WE	2	0.5430	0.2300	1.62	A	W
WE	1	0.6040	0.2300	1.80	A	W

Total Number Reported: 44

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U234

EML Value: 0.0658
EML Error: 0.0034

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.0790	0.0150	1.20	A	A
AM	1	0.0600	0.0300	0.91	W	A
AN	1	0.0700	0.0100	1.06	A	A
AU	1	0.0590	0.0080	0.90	A	W
BC	1	0.0900	0.0200	1.37	A	A
BE	1	0.0640	0.0090	0.97	A	A
BL	1	0.3180	0.0060	4.83	A	N
BM	1	0.0661	0.0089	1.00	A	A
BU	1	0.0600	0.0030	0.91	A	A
BX	1	0.0900	0.0200	1.37	W	A
CH	1	0.0710	0.0050	1.08	A	A
CL	1	0.1000	0.0100	1.52	W	W
CW	1	0.0653	0.0019	0.99	A	A
EG	1	0.0710	0.0100	1.08	A	A
GA	1	0.1000	0.0220	1.52	A	W
GE	1	0.0690	0.0120	1.05	A	A
GP	1	0.0660	0.0130	1.00	A	A
ID	1	0.1300	0.0310	1.98		N
IE	1	0.0820	0.0200	1.25		A
IS	1	0.0600	0.0120	0.91		A
IT	1	0.0680	0.0080	1.03	A	A
ML	1	0.0660	0.0050	1.00	A	A
NA	1	0.0680	0.0160	1.03	W	A
NL	1	0.0782	0.0190	1.19	A	A
NQ	1	0.0689	0.0041	1.05	A	A
OB	1	0.0847	0.0322	1.29		A
RE	1	0.0720	0.0089	1.09	A	A
SE	1	0.0710	0.0030	1.08		A
SR	1	0.0590	0.0080	0.90	A	W
TE	1	0.0860	0.0310	1.31	A	A
TM	1	0.0590	0.0110	0.90		W
TN	1	0.0700	0.0090	1.06	A	A
TX	1	0.0650	0.0040	0.99	A	A
UP	1	0.0754	0.0139	1.15	A	A
UY	1	0.0700	0.0081	1.06	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U234

EML Value: 0.0658
EML Error: 0.0034

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
WA	1	0.0600	0.0190	0.91	A	A
WC	1	0.0741	0.0259	1.13	N	A
YA	1	0.0680	0.0040	1.03	A	A

Total Number Reported: 38

Values for elemental Uranium are reported in $\mu\text{g}/\text{filter}$, g or mL. pCi/g or mL = $\text{Bq} \times 0.027$

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U238

EML Value: 0.0646
EML Error: 0.0048

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.0650	0.0130	1.01	A	A
AM	1	0.0400	0.0100	0.62	W	N
AN	1	0.0700	0.0100	1.08	A	A
AU	1	0.0600	0.0080	0.93	A	A
BC	1	0.0800	0.0200	1.24	A	A
BE	1	0.0670	0.0090	1.04	A	A
BL	1	0.3180	0.0060	4.92	A	N
BM	1	0.0674	0.0092	1.04	A	A
BU	1	0.0600	0.0030	0.93	A	A
BX	1	0.0700	0.0200	1.08	A	A
CH	1	0.0670	0.0050	1.04	A	A
CL	1	0.0900	0.0100	1.39	W	W
CW	1	0.0683	0.0020	1.06	A	A
EG	1	0.0670	0.0110	1.04	A	A
GA	1	0.0740	0.0050	1.15	A	A
GE	1	0.0750	0.0120	1.16	A	A
GP	1	0.0620	0.0130	0.96	A	A
GT	1	0.0700	0.0100	1.08	A	A
ID	1	0.1030	0.0150	1.59		W
IE	1	0.0840	0.0200	1.30		A
IS	1	0.0680	0.0150	1.05		A
IT	1	0.0630	0.0070	0.98	A	A
ML	1	0.0630	0.0050	0.98	A	A
NA	1	0.0840	0.0130	1.30	A	A
NL	1	0.0721	0.0180	1.12	A	A
NQ	1	0.0652	0.0037	1.01	A	A
OB	1	0.0166	0.0216	0.26		N
RE	1	0.0727	0.0090	1.13	N	A
SE	1	0.0630	0.0020	0.98		A
SR	1	0.0590	0.0080	0.91	A	A
TE	1	0.0730	0.0330	1.13	A	A
TM	1	0.0530	0.0100	0.82		N
TN	1	0.0720	0.0090	1.12	A	A
TX	1	0.0680	0.0030	1.05	A	A
UP	1	0.0720	0.0135	1.12	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U238

EML Value: 0.0646
EML Error: 0.0048

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
UY	1	0.0690	0.0082	1.07	A	A
WA	1	0.0630	0.0180	0.98	A	A
WC	1	0.0681	0.0237	1.05	W	A
YA	1	0.0690	0.0040	1.07	A	A

Total Number Reported: 39

Values for elemental Uranium are reported in $\mu\text{g}/\text{filter}$, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: UG/G U

EML Value: 5.2300
EML Error: 0.2900

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AI	1	0.1470		0.03		N
BE	1	5.6320		1.08		A
BL	1	25.4100	0.5140	4.86		N
BP	1	3.9000	0.3000	0.75		W
BQ	1	4.7000	0.1000	0.90		A
BU	1	4.9000	0.4000	0.94		A
CH	1	5.2500	0.5200	1.00		A
GA	1	6.0000	0.4500	1.15		A
GE	1	5.8400	0.0620	1.12		A
ID	1	5.3930	0.2760	1.03		A
IS	1	5.1400	1.4200	0.98		A
IT	1	5.6900	0.3900	1.09		A
NL	1	5.8500	1.4200	1.12		A
RA	1	5.6000	0.3000	1.07		A
SA	1	5.4300	0.2300	1.04		A
TI	1	3.9900	0.6000	0.76		W
TM	1	5.1900	0.5300	0.99		A
TN	1	4.6300	0.5600	0.88		W
TO	1	3.8300	0.2900	0.73		A

Total Number Reported: 19

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AC228

EML Value: 124.0000
EML Error: 4.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	159.0000	27.0000	1.28	A	A
AI	2	176.0000	6.4600	1.42	A	W
AI	3	176.0000	6.4600	1.42	A	W
AI	1	149.0000	13.1000	1.20	A	A
AM	1	118.3600	10.0000	0.95	A	A
AR	1	125.0000	27.5000	1.01	A	A
AS	1	119.1030	6.7750	0.96	A	A
AT	1	130.9000	30.5330	1.06		A
AU	1	148.0000	17.0000	1.19	A	A
BL	1	135.5000	11.5000	1.09	A	A
BN	1	95.5000	3.8000	0.77	A	N
BN	2	96.6000	3.9000	0.78	A	N
BN	3	101.4000	3.6000	0.82	A	W
BP	1	112.0000	5.0000	0.90		A
BQ	1	171.0000	15.0000	1.38	A	W
BU	1	120.0000	25.0000	0.97	A	A
BX	1	163.0000	12.0000	1.32	A	W
CD	1	140.0000	20.0000	1.13	A	A
CH	1	138.0000	3.5000	1.11	A	A
CL	1	127.0000	6.5000	1.02	A	A
CN	1	114.8000	9.3600	0.93	A	A
CR	1	140.1000	5.5000	1.13	A	A
EC	1	140.6000	2.9600	1.13	A	A
FE	2	138.5000	12.4000	1.12		A
FE	1	146.0000	12.6000	1.18		A
FE	3	130.9000	11.0000	1.06		A
FG	1	116.5000	20.0000	0.94	A	A
FL	1	118.0000	2.0000	0.95		A
FN	1	115.0000	7.0000	0.93		A
FR	1	130.0000	26.0000	1.05		A
FS	1	111.7000	1.2000	0.90	A	A
GC	1	124.2000		1.00	A	A
GE	1	131.0000	20.4000	1.06	A	A
HU	1	138.0000	5.0000	1.11	A	A
ID	1	142.1670	9.0270	1.15	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AC228

EML Value: 124.0000
EML Error: 4.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IE	1	147.7000	16.4000	1.19	A	A
IL	1	148.7000	3.6000	1.20	A	A
IN	1	109.0000	9.9000	0.88	A	A
IS	1	105.0000	4.0000	0.85	A	W
IT	1	160.0000	10.0000	1.29	A	A
LA	2	144.0000	16.0000	1.16	A	A
LA	1	174.0000	19.0000	1.40	A	W
LA	3	151.0000	17.0000	1.22	A	A
LB	1	102.0000	14.0000	0.82		W
LV	1	137.0000	4.0000	1.11	A	A
MA	1	122.0000	23.0000	0.98	A	A
ME	1	172.0000	2.5400	1.39	A	W
MH	1	136.4000	10.3000	1.10	A	A
NJ	1	131.0000	11.0000	1.06		A
NJ	2	133.0000	4.0000	1.07		A
NJ	3	138.0000	4.0000	1.11		A
NL	1	139.0000	11.4000	1.12	A	A
NQ	1	139.3000	15.2000	1.12	A	A
OB	1	121.0000	21.1000	0.98	A	A
OC	1	110.0000	14.0000	0.89	A	A
OH	1	106.0000		0.86		W
OT	1	110.0000	10.0000	0.89	A	A
OU	1	111.0000	6.6000	0.89	A	A
PK	1	116.3000	32.5000	0.94		A
PO	1	138.0000	5.0000	1.11	A	A
RA	1	114.0000	8.0000	0.92	A	A
RA	2	112.0000	5.0000	0.90	A	A
RE	1	123.0000	11.0000	0.99	A	A
RL	1	139.5000	12.0000	1.13	A	A
SB	1	153.0000	11.0000	1.23	A	A
SI	1	121.0000	4.0000	0.98		A
SN	1	147.0000	37.0000	1.18		A
SR	1	137.0000	7.0000	1.11	A	A
TE	1	127.3000	7.5000	1.03	A	A
TI	1	128.0000	13.0000	1.03		A
TM	1	173.1200	16.0000	1.40	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AC228

EML Value: 124.0000
EML Error: 4.8000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TP	1	123.9900	6.2200	1.00		A
TQ	1	132.0000	2.6000	1.07		A
TW	1	122.0000	4.0000	0.98	A	A
TX	1	136.0000	3.0000	1.10	A	A
UY	1	144.0000	15.0000	1.16	A	A
WA	1	1300.0000	50.0000	10.48	A	N
WE	1	121.0000	7.8000	0.98	A	A
WN	2	154.0000	5.0000	1.24	A	A
WN	1	149.0000	5.0000	1.20	A	A
WN	3	136.0000	3.0000	1.10	A	A
YA	1	150.4200	2.2000	1.21		A

Total Number Reported: 82

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AM241

EML Value: 1.4400
EML Error: 0.1900

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	2.4600	0.7200	1.71	A	W
AM	1	1.4400	0.0100	1.00	A	A
AN	1	1.8500	0.1800	1.28	A	A
AR	1	48.2000	7.7700	33.47	A	N
AR	2	62.5000	10.1000	43.40	A	N
AR	3	51.2000	8.4700	35.56	A	N
AS	1	0.2120	1.2480	0.15	A	N
AT	1	1.7290	0.9090	1.20	A	A
AU	1	3.6600	0.8500	2.54	A	N
BE	1	1.6300	0.4800	1.13	A	A
BP	1	1.9000	0.4000	1.32		A
BU	1	2.5100	0.2500	1.74		W
BX	1	8.5100	4.8100	5.91	W	N
CH	1	2.3700	0.2900	1.65	A	W
CL	1	2.6900	0.9000	1.87	A	W
EG	1	1.5600	0.1500	1.08	A	A
FE	1	1.7660	0.4000	1.23		A
FE	2	1.8930	0.5000	1.32		A
FE	3	3.8060	0.6000	2.64		N
FG	1	9.5150	0.0950	6.61		N
FL	1	1.8000	0.6000	1.25	A	A
GA	1	2.1000	0.2000	1.46	A	A
GE	1	1.6900	0.3110	1.17	A	A
GP	1	1.8000	0.7000	1.25	A	A
GT	1	1.7000	1.3000	1.18	A	A
HT	1	7.6800	0.7000	5.33	N	N
IN	1	1.5500	0.3500	1.08	A	A
IS	1	0.1120	0.0620	0.08		N
IT	1	2.1300	0.2300	1.48	A	A
LA	3	2.2600	0.3700	1.57	A	W
LA	2	1.8800	0.3700	1.31	A	A
LA	1	3.1300	0.3700	2.17	A	W
LV	1	2.0800	0.5800	1.44	W	A
LW	1	0.7000	0.9000	0.49	W	N
ME	1	3.9200	1.0700	2.72	W	N

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AM241

EML Value: 1.4400
EML Error: 0.1900

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NJ	1	0.8900	0.7800	0.62		N
NM	1	1.6200	0.1700	1.13	A	A
NM	2	2.0000	0.1900	1.39	A	A
NM	3	2.1200	0.1700	1.47	A	A
NQ	1	5.4600	0.7200	3.79	A	N
OT	1	17.0000	1.0000	11.81	A	N
SI	1	2.4000	0.4000	1.67		W
TM	1	2.5200	1.0400	1.75	A	W
TN	1	2.3070	1.4870	1.60	A	W
TO	1	2.1700	2.4600	1.51	A	W
UP	1	2.2400	0.7290	1.56	A	W
WA	1	2.0800	0.4900	1.44	A	A
WC	1	3.4700	1.8300	2.41	A	N
YA	1	1.9700	0.1900	1.37	A	A

Total Number Reported: 49

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI212

EML Value: 140.0000
EML Error: 14.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	158.0000	31.0000	1.13		W
AM	1	92.1700	9.2300	0.66		A
AR	1	167.0000	13.1000	1.19		W
AS	1	86.7280	11.8390	0.62		A
AU	1	140.0000	24.0000	1.00		A
BL	1	142.0000	13.0000	1.01		A
BN	3	72.9000	5.4000	0.52		A
BN	2	69.6000	5.7000	0.50		W
BN	1	69.2000	5.9000	0.49		W
BP	1	130.0000	5.0000	0.93		A
BQ	1	150.0000	36.0000	1.07		A
BU	1	120.0000	10.0000	0.86		A
BX	1	92.1000		0.66		A
CD	1	140.0000	20.0000	1.00		A
CH	1	160.0000	9.4000	1.14		W
CL	1	188.0000	9.4000	1.34		N
CM	1	76.0000	6.0000	0.54		A
CR	1	102.3000	9.6000	0.73		A
EC	1	159.1000	11.1000	1.14		W
FE	2	96.8100	11.5000	0.69		A
FE	1	90.4700	10.1000	0.65		A
FE	3	86.1600	7.9000	0.62		A
FG	1	122.2900	47.0000	0.87		A
FR	1	130.0000	26.0000	0.93		A
GA	1	112.0000	72.8000	0.80		A
GE	1	82.9000	14.2000	0.59		A
ID	1	62.6330	10.3990	0.45		W
IE	1	181.6000	38.8000	1.30		N
IL	1	110.2000	9.4000	0.79		A
IN	1	78.6000	9.2000	0.56		A
IS	1	136.0000	54.0000	0.97		A
LA	3	107.0000	14.0000	0.76		A
LA	1	119.0000	15.0000	0.85		A
LA	2	107.0000	13.0000	0.76		A
LV	1	85.6000	3.5000	0.61		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI212

EML Value: 140.0000
EML Error: 14.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MA	1	111.0000	38.0000	0.79		A
MH	1	80.8000	5.7000	0.58		A
NJ	1	144.0000	27.0000	1.03		A
NJ	2	146.0000	16.0000	1.04		A
NJ	3	140.0000	5.0000	1.00		A
NL	1	128.0000	12.7000	0.91		A
NQ	1	143.7000	19.6000	1.03		A
OB	1	146.0000	44.5000	1.04		A
OC	1	100.0000	22.0000	0.71		A
OH	1	120.4000		0.86		A
OT	1	130.0000	20.0000	0.93		A
PK	1	145.0000	23.2000	1.04		A
RA	1	115.0000	5.0000	0.82		A
RA	2	115.0000	5.0000	0.82		A
RE	1	129.0000	16.0000	0.92		A
SI	1	127.0000	4.0000	0.91		A
SN	1	88.5000	36.3000	0.63		A
SR	1	90.3000	13.9000	0.64		A
SY	1	98.0000	24.0000	0.70		A
TE	1	107.4000	2.6000	0.77		A
TP	1	134.0900	6.5200	0.96		A
TQ	1	89.8000	5.5000	0.64		A
TW	1	142.0000	9.0000	1.01		A
UY	1	126.0000	10.0000	0.90		A
WA	1	1270.0000	150.0000	9.07		N
WE	1	163.0000	18.1000	1.16		W

Total Number Reported: 61

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI214

EML Value: 69.5000
EML Error: 1.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	87.0000	15.0000	1.25	A	W
AI	1	81.2000	15.5000	1.17	A	A
AI	2	1090.0000	13.8500	15.68	A	N
AI	3	80.7000	12.2000	1.16	A	A
AM	1	74.5800	7.4200	1.07	A	A
AR	1	70.5000	6.1800	1.01	A	A
AS	1	67.6360	3.6470	0.97	A	A
AU	1	83.3000	7.8000	1.20	A	W
BE	1	104.0000	10.0000	1.50	A	N
BL	1	78.7000	6.5000	1.13	A	A
BN	2	77.0000	3.1000	1.11	A	A
BN	1	73.6000	3.2000	1.06	A	A
BN	3	74.7000	3.0000	1.08	A	A
BP	1	63.0000	6.0000	0.91		A
BQ	1	111.0000	8.0000	1.60	A	N
BU	1	76.0000	8.0000	1.09	A	A
BX	1	81.8000	3.7000	1.18	A	A
CD	1	80.0000	10.0000	1.15	A	A
CH	1	73.1000	1.8000	1.05	A	A
CL	1	85.6000	4.3000	1.23	A	W
CM	1	70.4000	3.5000	1.01		A
CN	1	77.9000	5.7600	1.12	A	A
CR	1	89.2000	5.2000	1.28	A	W
EC	1	66.6000	2.5900	0.96	A	A
FE	2	83.2500	6.9000	1.20		W
FE	1	76.4100	6.2000	1.10		A
FE	3	72.4900	5.6000	1.04		A
FG	1	90.1700	12.0000	1.30	A	W
FL	1	71.0000	1.0000	1.02		A
FR	1	88.0000	18.0000	1.27		W
FS	1	98.6000	1.3000	1.42	A	W
GA	1	91.5000	23.1000	1.32		W
GE	1	88.5000	11.3000	1.27	A	W
HU	1	71.0000	5.0000	1.02	A	A
ID	1	73.4000	4.5670	1.06	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI214

EML Value: 69.5000
EML Error: 1.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IE	1	82.4000	14.2000	1.19	A	W
IL	1	133.4000	4.9000	1.92	A	N
IN	1	85.5000	7.0000	1.23	A	W
IS	1	63.6000	12.8000	0.92	A	A
IT	1	83.0000	5.0000	1.19	A	W
LA	2	117.0000	13.0000	1.68	A	N
LA	1	92.0000	10.0000	1.32	A	W
LA	3	99.0000	11.0000	1.42	A	N
LV	1	85.3000	1.8000	1.23	A	W
MA	1	68.0000	7.0000	0.98	A	A
MH	1	74.5000	2.4000	1.07	A	A
NA	1	83.8000	2.4000	1.21	A	W
NJ	1	82.5000	5.2000	1.19		W
NJ	2	84.0000	5.2000	1.21		W
NJ	3	85.8000	4.1000	1.24		W
NL	1	96.3000	8.0000	1.39	A	W
NQ	1	75.2000	8.5000	1.08	A	A
OB	1	61.3000	12.9000	0.88		A
OC	1	91.0000	8.0000	1.31	A	W
OH	1	57.8000		0.83		A
OT	1	72.0000	14.0000	1.04	A	A
OU	1	64.4000	4.7000	0.93	A	A
PK	1	54.9900	3.7500	0.79		W
PO	1	80.0000	3.0000	1.15	A	A
RA	1	62.6000	7.0000	0.90	A	A
RA	2	64.3000	2.7000	0.93	A	A
RE	1	65.9000	6.1000	0.95	A	A
RL	1	100.7000	10.0000	1.45	A	N
SI	1	106.0000	12.0000	1.52		N
SN	1	68.1000	12.7000	0.98		A
SR	1	78.7000	6.2000	1.13	A	A
SY	1	90.0000	18.0000	1.29		W
TE	1	90.1000	4.2000	1.30	A	W
TI	1	84.3000	8.4000	1.21		W
TM	1	99.4000	8.3000	1.43	A	N
TN	1	63.9600	6.1500	0.92	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI214

EML Value: 69.5000
EML Error: 1.8000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TP	1	79.5800	5.8800	1.14		A
TQ	1	66.7000	2.4000	0.96		A
TW	1	82.5000	2.2000	1.19	A	W
TX	1	70.8000	1.8000	1.02	A	A
TY	1	86.0000	4.0000	1.24		W
UY	1	84.0000	10.0000	1.21	A	W
WA	1	731.0000	54.0000	10.52	A	N
WE	1	75.1000	3.4300	1.08	A	A
WN	2	81.0000	4.0000	1.16	A	A
WN	1	91.0000	4.0000	1.31	A	W
WN	3	88.0000	3.0000	1.27	A	W
WO	1	85.1000	18.5000	1.22	A	W
WO	2	92.5000	14.8000	1.33	A	W

Total Number Reported: 84

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: Bq U

EML Value: 401.0000
EML Error: 8.7000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	424.0000	35.0000	1.06	A	A
AI	2	465.0000	23.2000	1.16	A	A
AI	1	399.0000	20.0000	1.00	A	A
AI	3	432.0000	23.2000	1.08	A	A
AM	1	472.8100	66.6200	1.18	A	W
BL	1	541.0000	11.0000	1.35	A	W
BU	1	374.0000	19.0000	0.93	A	A
CH	1	385.0000	13.0000	0.96	A	A
CL	1	353.0000	70.6000	0.88	A	A
FG	1	401.3000	30.0000	1.00		A
GP	1	407.0000		1.01	A	A
HT	1	328.0000	21.0000	0.82	A	A
IE	1	127.5600	23.8000	0.32		N
LL	1	383.0000	12.0000	0.95		A
OT	1	370.0000	20.0000	0.92	A	A
SN	1	415.5000	67.1300	1.04	A	A
UP	1	444.0000	32.2000	1.11	A	A
UY	1	325.0000	38.0000	0.81	A	A
WA	1	361.0000	11.0000	0.90	A	A
WO	2	518.0000	74.0000	1.29	A	W
WO	1	592.0000	74.0000	1.48	A	N
WT	1	383.0000	52.4000	0.95		A
YA	1	431.0600	23.3300	1.08	A	A

Total Number Reported: 23

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 204.0000
EML Error: 5.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	271.0000	45.0000	1.33	A	N
AI	1	261.0000	9.4700	1.28	A	W
AI	3	292.0000	4.7000	1.43	A	N
AI	2	292.0000	4.7000	1.43	A	N
AM	1	216.4200	2.9800	1.06	A	A
AN	1	261.0000	32.0000	1.28	A	W
AR	1	225.0000	11.7000	1.10	A	A
AS	1	193.3990	3.3070	0.95	A	A
AT	1	215.4670	19.2330	1.06	A	A
AU	1	229.0000	12.0000	1.12	A	A
BA	1	218.0000	36.0000	1.07	A	A
BC	1	146.0000	9.0000	0.72	A	N
BE	1	254.0000	44.0000	1.25	A	W
BL	1	229.0000	16.0000	1.12	A	A
BM	1	205.0000	3.0200	1.00	A	A
BN	3	200.2000	16.7000	0.98	A	A
BN	1	178.7000	15.2000	0.88	A	W
BN	2	191.3000	16.0000	0.94	A	A
BP	1	179.0000	8.0000	0.88		W
BQ	1	224.0000	6.0000	1.10	A	A
BU	1	190.0000	10.0000	0.93	W	A
BX	1	279.0000	7.0000	1.37	A	N
CD	1	230.0000	30.0000	1.13	A	A
CF	3	221.0000	4.0000	1.08		A
CF	1	218.0000	4.0000	1.07		A
CF	2	216.0000	7.0000	1.06		A
CH	1	240.0000	1.8000	1.18	W	A
CL	1	177.0000	8.8000	0.87	A	W
CM	1	205.3000	3.3000	1.01		A
CN	1	218.9000	14.3000	1.07	A	A
CR	1	260.4000	19.5000	1.28	A	W
CS	1	237.4700	41.1400	1.16	A	A
DH	1	196.7000	1.0600	0.96	A	A
EC	1	255.3000	11.1000	1.25	A	W
EG	1	226.0000	17.0000	1.11	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 204.0000
EML Error: 5.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
FE	2	230.8000	18.0000	1.13		A
FE	3	220.1000	16.5000	1.08		A
FE	1	229.7000	17.9000	1.13		A
FG	1	215.5300	30.0000	1.06	A	A
FL	1	188.0000	1.0000	0.92	A	A
FN	1	201.0000	20.0000	0.99	A	A
FR	1	200.0000	30.0000	0.98		A
FS	1	211.1000	1.7000	1.03	A	A
GA	1	226.0000	21.7000	1.11	A	A
GC	1	221.0000		1.08	A	A
GD	1	221.0000	46.0000	1.08		A
GE	1	217.0000	24.2000	1.06	A	A
GP	1	210.0000	20.0000	1.03	A	A
GT	1	240.0000	78.0000	1.18	A	A
HU	1	227.0000	7.6000	1.11	A	A
ID	1	228.3000	11.7470	1.12	A	A
IL	1	204.2000	3.8000	1.00	A	A
IN	1	217.8000	7.4000	1.07	A	A
IS	1	217.0000	20.0000	1.06	A	A
IT	1	250.0000	13.0000	1.23	A	W
KA	1	203.6700	20.7800	1.00	A	A
KR	4	235.7000	16.8000	1.15		A
KR	1	229.3000	9.9000	1.12		A
KR	3	234.9000	16.4000	1.15		A
KR	5	222.0000	9.0000	1.09		A
KR	2	241.1000	10.2000	1.18		A
LA	3	262.0000	28.0000	1.28	W	W
LA	1	268.0000	28.0000	1.31	W	W
LA	2	236.0000	25.0000	1.16	W	A
LB	1	203.0000	20.0000	1.00	A	A
LL	1	187.0000	84.7000	0.92	A	A
LV	1	231.0000	8.0000	1.13	A	A
MA	1	202.0000	44.0000	0.99	A	A
ME	1	157.0000	7.2000	0.77	N	N
MH	1	236.6000	11.6000	1.16	A	A
NA	1	227.0000	2.7000	1.11	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 204.0000
EML Error: 5.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NJ	1	231.0000	13.0000	1.13		A
NJ	3	232.0000	11.0000	1.14		A
NJ	2	227.0000	11.0000	1.11		A
NL	1	226.0000	22.3000	1.11	A	A
NM	1	219.0000	11.0000	1.07	A	A
NQ	1	236.0000	28.0000	1.16	A	A
NR	1	198.0000	40.0000	0.97	A	A
NZ	2	224.0000	12.0000	1.10		A
NZ	1	238.0000	13.0000	1.17		A
OB	1	186.0000	34.4000	0.91	W	A
OC	1	210.0000	16.0000	1.03	A	A
OH	1	152.0000		0.75		N
OL	1	220.2000	4.9000	1.08	A	A
OT	1	190.0000	10.0000	0.93	A	A
OU	1	191.0000	9.5000	0.94	N	A
PK	1	237.6700	9.7000	1.16	A	A
PO	1	210.0000	16.0000	1.03	A	A
RA	1	200.0000	8.0000	0.98	A	A
RA	2	199.0000	8.0000	0.98	A	A
RC	1	216.0000	17.0000	1.06	A	A
RE	1	201.0000	16.0000	0.99	A	A
RI	1	294.0000	33.5000	1.44	W	N
RL	1	253.1000	16.0000	1.24	N	W
SA	1	211.0000	4.0000	1.03	A	A
SB	1	248.0000	26.0000	1.22	W	W
SE	1	207.0000	1.0000	1.01		A
SI	1	209.0000	8.0000	1.02		A
SN	1	209.0000	20.3000	1.02		A
SR	1	232.0000	24.0000	1.14	A	A
SY	1	211.0000	8.2000	1.03		A
TE	1	195.9000	4.0000	0.96	A	A
TI	1	228.0000	23.0000	1.12		A
TM	1	250.1800	5.5000	1.23	A	W
TN	1	187.7000	5.9000	0.92	W	A
TO	1	223.5500	37.2200	1.10	N	A
TP	1	205.3300	2.4400	1.01	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 204.0000
EML Error: 5.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TQ	1	225.0000	4.4000	1.10	A	A
TR	1	226.7300	9.4480	1.11	A	A
TW	1	217.0000	2.0000	1.06	A	A
TX	1	225.0000	2.0000	1.10	A	A
TY	1	239.0000	4.0000	1.17		A
UC	1	245.0000	1.5100	1.20	A	A
UP	1	255.0000	40.8000	1.25	A	W
UY	1	229.0000	17.0000	1.12	A	A
WA	1	2070.0000	60.0000	10.15	A	N
WC	1	222.0000	33.3000	1.09	A	A
WE	1	260.0000	13.0000	1.27	W	W
WN	1	231.0000	6.0000	1.13	A	A
WN	2	234.0000	6.0000	1.15	A	A
WN	3	239.0000	4.0000	1.17	A	A
WO	4	188.7000	18.5000	0.93	A	A
WO	3	192.4000	29.6000	0.94	A	A
WP	1	224.0000	23.0000	1.10		A
WS	1	187.2200	12.2100	0.92	A	A
YA	1	263.5700	2.0900	1.29	W	W

Total Number Reported: 126

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 780.0000
EML Error: 27.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	1000.0000	170.0000	1.28	A	W
AI	2	1040.0000	80.4000	1.33	A	W
AI	3	1040.0000	80.4000	1.33	A	W
AI	1	863.0000	120.0000	1.11	A	A
AM	1	877.7000	30.0200	1.13	A	A
AN	1	821.0000	22.0000	1.05	A	A
AR	1	894.0000	60.8000	1.15	A	A
AS	1	684.3150	28.5740	0.88	A	W
AT	1	862.3000	93.3670	1.11	A	A
AU	1	840.0000	49.0000	1.08	A	A
BC	1	1440.0000	123.0000	1.85	A	N
BE	1	1076.0000	118.0000	1.38	A	W
BL	1	850.0000	62.0000	1.09	A	A
BN	2	662.3000	52.5000	0.85	W	W
BN	1	643.8000	51.6000	0.82	W	W
BN	3	703.0000	55.7000	0.90	W	A
BP	1	738.0000	64.0000	0.95		A
BQ	1	960.0000	100.0000	1.23	A	A
BU	1	780.0000	80.0000	1.00	A	A
BX	1	1267.0000	3.0000	1.62	A	N
CD	1	910.0000	50.0000	1.17	A	A
CH	1	934.0000	14.0000	1.20	A	A
CL	1	584.0000	29.2000	0.75	W	N
CM	1	765.0000	3.9000	0.98		A
CN	1	819.8000	51.6000	1.05	A	A
CR	1	903.6000	85.3000	1.16	W	A
CS	1	922.6500	161.4400	1.18	A	A
DH	1	774.9000	15.9000	0.99	A	A
EC	1	928.7000	48.1000	1.19	A	A
EG	1	787.0000	67.0000	1.01	A	A
FE	1	934.7000	71.0000	1.20		A
FE	3	844.9000	63.1000	1.08		A
FE	2	935.9000	73.0000	1.20		A
FG	1	784.1800	150.0000	1.00	A	A
FL	1	748.0000	10.0000	0.96	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 780.0000
EML Error: 27.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
FN	1	768.0000	79.0000	0.99	A	A
FR	1	840.0000	170.0000	1.08		A
FS	1	807.4000	13.3000	1.03	A	A
GA	1	677.0000	174.0000	0.87		W
GC	1	900.0000		1.15	A	A
GD	1	846.0000	321.0000	1.09		A
GE	1	914.0000	97.3000	1.17	A	A
GP	1	845.0000	85.0000	1.08	A	A
GT	1	920.0000	52.0000	1.18	A	A
HU	1	890.0000	83.0000	1.14	W	A
ID	1	1010.2000	51.5870	1.29	W	W
IL	1	795.6000	49.0000	1.02	A	A
IN	1	853.6000	77.1000	1.09	A	A
IS	1	829.0000	102.0000	1.06	A	A
IT	1	954.0000	52.0000	1.22	A	A
KA	1	841.0000	106.0000	1.08	A	A
KR	2	899.4000	47.1000	1.15		A
KR	3	882.7000	64.2000	1.13		A
KR	5	823.5000	37.4000	1.06		A
KR	4	897.4000	68.9000	1.15		A
KR	1	847.1000	46.9000	1.09		A
LL	1	715.0000	256.0000	0.92	A	A
LV	1	884.0000	34.0000	1.13	A	A
MA	1	729.0000	82.0000	0.94	A	A
ME	1	673.0000	32.0000	0.86	N	W
MH	1	951.1000	43.9000	1.22	A	A
NA	1	854.0000	23.0000	1.10	A	A
NJ	3	847.0000	96.0000	1.09		A
NJ	2	877.0000	33.0000	1.12		A
NJ	1	862.0000	44.0000	1.11		A
NL	1	900.0000	91.0000	1.15	A	A
NQ	1	929.0000	110.0000	1.19	A	A
NZ	2	1060.0000	70.0000	1.36		W
NZ	1	1080.0000	70.0000	1.38		W
OB	1	809.0000	158.0000	1.04	W	A
OC	1	770.0000	120.0000	0.99	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 780.0000
EML Error: 27.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OH	1	580.0000		0.74		N
OL	1	903.9000	46.0000	1.16	A	A
OT	1	770.0000	50.0000	0.99	A	A
OU	1	684.0000	64.4000	0.88	W	W
PK	1	993.1000	73.1000	1.27	A	W
PO	1	833.0000	12.0000	1.07	A	A
RA	2	722.0000	59.0000	0.93	A	A
RA	1	670.0000	57.0000	0.86	A	W
RC	1	926.0000	92.0000	1.19	A	A
RE	1	807.0000	69.0000	1.03	A	A
RL	1	975.7000	31.0000	1.25	N	W
SA	1	836.0000	25.0000	1.07	A	A
SB	1	956.0000	96.0000	1.23	W	A
SE	1	662.0000	14.0000	0.85		W
SI	1	789.0000	30.0000	1.01		A
SN	1	991.0000	129.0000	1.27		W
SR	1	938.0000	91.0000	1.20	W	A
SY	1	874.0000	68.0000	1.12		A
TE	1	744.7000	37.7000	0.95	A	A
TI	1	871.0000	87.0000	1.12		A
TM	1	931.6600	61.2000	1.19	A	A
TN	1	715.3500	54.3700	0.92	A	A
TO	1	939.9200	269.8100	1.21	N	A
TP	1	803.7900	10.8300	1.03	A	A
TQ	1	854.0000	26.0000	1.10	A	A
TR	1	497.5900	15.7800	0.64	W	N
TW	1	819.0000	19.0000	1.05	A	A
TX	1	877.0000	16.0000	1.12	A	A
TY	1	969.0000	28.0000	1.24		A
UC	1	911.0000	13.4100	1.17	A	A
UY	1	830.0000	97.0000	1.06	A	A
WA	1	8630.0000	300.0000	11.06	A	N
WC	1	985.0000	117.0000	1.26	W	W
WE	1	832.0000	38.8000	1.07	W	A
WN	3	1399.0000	33.0000	1.79	A	N
WN	2	1438.0000	50.0000	1.84	A	N

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 780.0000
EML Error: 27.0000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
WN	1	1300.0000	47.0000	1.67	A	N
WO	3	814.0000	185.0000	1.04	A	A
WO	4	814.0000	111.0000	1.04	A	A
WP	1	847.0000	85.0000	1.09		A
WS	1	749.9000	56.1500	0.96	A	A
YA	1	995.1200	16.1000	1.28	A	W

Total Number Reported: 113

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB212

EML Value: 127.0000
EML Error: 4.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	173.0000	29.0000	1.36	A	N
AI	3	181.0000	5.0600	1.42	A	N
AI	2	78.1000	10.6000	0.62	A	N
AI	1	160.0000	8.5900	1.26	A	W
AM	1	140.9800	11.3600	1.11	A	A
AR	1	150.0000	30.7000	1.18	A	A
AS	1	114.8660	2.4450	0.90	A	W
AT	1	121.3330	30.8000	0.95		A
AU	1	145.0000	15.0000	1.14	A	A
BE	1	144.0000	14.0000	1.13	A	A
BL	1	147.0000	12.0000	1.16	A	A
BN	3	125.1000	7.6000	0.99	A	A
BN	1	111.0000	7.3000	0.87	A	W
BN	2	118.4000	7.3000	0.93	A	A
BP	1	112.0000	4.0000	0.88		W
BQ	1	132.0000	4.0000	1.04	A	A
BU	1	120.0000	10.0000	0.94	A	A
BX	1	164.0000	9.0000	1.29	A	W
CD	1	140.0000	20.0000	1.10	A	A
CH	1	144.0000	1.4000	1.13	A	A
CL	1	122.0000	6.1000	0.96	A	A
CM	1	130.5000	3.4000	1.03		A
CN	1	112.9000	8.1300	0.89		W
CR	1	109.3000	13.8000	0.86	A	W
EC	1	192.4000	11.1000	1.51	A	N
FE	3	133.2000	10.8000	1.05		A
FE	2	142.0000	11.5000	1.12		A
FE	1	139.0000	11.2000	1.09		A
FG	1	132.6900	15.0000	1.04	A	A
FL	1	113.7000	2.2000	0.89		W
FR	1	140.0000	28.0000	1.10		A
GA	1	143.0000	22.9000	1.13		A
GE	1	142.0000	16.1000	1.12	A	A
HU	1	133.5000	4.5000	1.05	A	A
ID	1	140.6330	7.7230	1.11	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB212

EML Value: 127.0000
EML Error: 4.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IE	1	168.0000	20.4000	1.32	A	W
IL	1	121.0000	1.8000	0.95	A	A
IN	1	139.0000	10.0000	1.09	A	A
IS	1	125.0000	4.0000	0.98	A	A
IT	1	166.0000	9.0000	1.31	A	W
LA	1	156.0000	17.0000	1.23	A	W
LA	2	138.0000	15.0000	1.09	A	A
LA	3	147.0000	16.0000	1.16	A	A
LB	1	115.0000	14.0000	0.91		W
LV	1	134.0000	7.0000	1.05	A	A
MA	1	125.0000	54.0000	0.98		A
MH	1	137.8000	9.6000	1.09	A	A
NA	1	142.2000	2.2000	1.12	A	A
NJ	2	137.0000	6.0000	1.08		A
NJ	1	136.0000	5.0000	1.07		A
NJ	3	137.0000	4.0000	1.08		A
NL	1	128.0000	12.7000	1.01	A	A
NQ	1	140.7000	17.0000	1.11	A	A
OB	1	123.0000	21.1000	0.97	A	A
OC	1	120.0000	12.0000	0.94	A	A
OH	1	93.9000		0.74		N
OT	1	130.0000	20.0000	1.02	A	A
OU	1	115.0000	2.7000	0.91	A	W
PK	1	109.3000	31.7000	0.86		W
RA	1	115.0000	6.0000	0.91	A	W
RA	2	111.0000	5.0000	0.87	A	W
RE	1	142.0000	12.0000	1.12	A	A
RL	1	143.6000	12.0000	1.13	A	A
SI	1	135.0000	4.0000	1.06		A
SN	1	128.0000	18.8000	1.01		A
SR	1	122.0000	8.0000	0.96	A	A
SY	1	119.0000	6.5000	0.94		A
TE	1	123.4000	3.7000	0.97	A	A
TI	1	131.0000	13.0000	1.03		A
TM	1	174.7900	5.5000	1.38	A	N
TN	1	124.5000	4.1000	0.98	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB212

EML Value: 127.0000
EML Error: 4.8000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TP	1	127.5900	1.2200	1.00		A
TQ	1	167.0000	3.7000	1.32		W
TW	1	134.0000	3.0000	1.05	A	A
TX	1	131.0000	2.0000	1.03	A	A
UY	1	136.0000	10.0000	1.07	A	A
WA	1	1230.0000	50.0000	9.69	A	N
WE	1	132.0000	11.7000	1.04	A	A
WN	2	139.0000	3.0000	1.09	A	A
WN	1	137.0000	3.0000	1.08	A	A
WN	3	135.0000	2.0000	1.06	A	A
WO	2	111.0000	7.4000	0.87	A	W
WO	1	140.6000	18.5000	1.11	A	A

Total Number Reported: 83

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB214

EML Value: 72.0000
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	99.0000	17.0000	1.38	A	W
AI	1	72.1000		1.00	A	A
AI	3	78.5000	9.5300	1.09	A	A
AI	2	13.4000		0.19	A	N
AM	1	92.4000	9.2400	1.28	A	W
AR	1	77.6000	6.6200	1.08	A	A
AS	1	66.9520	3.6550	0.93	A	A
AU	1	82.9000	9.3000	1.15	A	A
BE	1	105.0000	10.0000	1.46	A	N
BL	1	84.7000	6.5000	1.18	A	A
BN	3	85.5000	6.6000	1.19	A	A
BN	1	73.3000	5.9000	1.02	A	A
BN	2	80.3000	6.3000	1.12	A	A
BP	1	63.0000	4.0000	0.88		W
BQ	1	124.0000	9.0000	1.72	A	N
BU	1	77.0000	8.0000	1.07	A	A
BX	1	81.4000	4.1000	1.13	A	A
CD	1	80.0000	10.0000	1.11	A	A
CH	1	81.5000	1.9000	1.13	A	A
CL	1	92.6000	4.6000	1.29	A	W
CM	1	84.8000	3.5000	1.18		A
CN	1	78.4800	5.2600	1.09	A	A
CR	1	73.7000	6.1000	1.02	A	A
EC	1	85.1000	4.0700	1.18	A	A
FE	1	81.4700	6.3000	1.13		A
FE	2	85.3800	6.7000	1.19		A
FE	3	80.3700	6.2000	1.12		A
FG	1	75.3900	10.0000	1.05	A	A
FL	1	222.0000	3.0000	3.08		N
FR	1	100.0000	20.0000	1.39		W
FS	1	89.5000	2.1000	1.24	A	A
GE	1	102.0000	12.6000	1.42	A	W
HU	1	90.4000	3.6000	1.26	A	W
ID	1	74.9330	10.7370	1.04	A	A
IE	1	111.0000	11.9000	1.54	A	N

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB214

EML Value: 72.0000
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IL	1	133.4000	4.9000	1.85	A	N
IN	1	78.3000	5.7000	1.09	A	A
IS	1	69.5000	20.6000	0.96	A	A
IT	1	89.0000	5.0000	1.24	A	A
LA	1	87.0000	10.0000	1.21	A	A
LA	2	93.0000	10.0000	1.29	A	W
LA	3	85.0000	9.0000	1.18	A	A
LV	1	88.9000	3.9000	1.24	A	A
MA	1	70.0000	14.0000	0.97	A	A
ME	1	51.0000	1.9000	0.71	A	W
MH	1	84.2000	2.8000	1.17	A	A
NA	1	93.1000	2.2000	1.29	A	W
NJ	3	91.0000	4.1000	1.26		W
NJ	2	91.8000	3.3000	1.27		W
NJ	1	92.9000	5.2000	1.29		W
NL	1	99.5000	7.8400	1.38	A	W
NQ	1	78.5000	9.6000	1.09	A	A
OB	1	6.7900	8.3600	0.09	A	N
OC	1	110.0000	12.0000	1.53	A	N
OH	1	56.8000		0.79		W
OT	1	72.0000	14.0000	1.00	A	A
OU	1	73.5000	3.7000	1.02	A	A
PK	1	61.3600	17.2000	0.85		W
PO	1	81.0000	6.0000	1.13	A	A
RA	2	67.0000	3.1000	0.93	A	A
RA	1	64.0000	3.6000	0.89	A	W
RE	1	77.4000	7.0000	1.08	A	A
RL	1	103.0000	10.0000	1.43	A	W
SI	1	107.0000	7.0000	1.49		N
SN	1	70.1000	15.5000	0.97		A
SR	1	75.9000	5.8000	1.05	A	A
SY	1	87.0000	11.3000	1.21		A
TE	1	96.5000	5.0000	1.34	A	W
TI	1	94.1000	9.4000	1.31		W
TM	1	107.3600	8.3000	1.49	A	N
TP	1	79.8600	0.8000	1.11		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB214

EML Value: 72.0000
EML Error: 0.4200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TQ	1	94.1000	2.3000	1.31		W
TW	1	93.4000	2.8000	1.30	A	W
TX	1	78.7000	1.8000	1.09	A	A
TY	1	92.0000	9.0000	1.28		W
UY	1	85.0000	10.0000	1.18	A	A
WA	1	747.0000	36.0000	10.38	A	N
WE	1	72.9000	5.2700	1.01	A	A
WN	2	83.0000	4.0000	1.15	A	A
WN	3	80.0000	2.0000	1.11	A	A
WN	1	86.0000	4.0000	1.19	A	A
WO	1	88.8000	14.8000	1.23	A	A
WO	2	92.5000	7.4000	1.28	A	W

Total Number Reported: 83

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU238

EML Value: 0.3200
EML Error: 0.1300

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
CW	1	0.2860	0.0310	0.89	A	A
EG	1	0.2750	0.0400	0.86	A	A
FG	1	0.3780	0.0700	1.18		A
IE	1	0.1510	0.1560	0.47		N
KR	1	0.1350	0.0900	0.42		N
LL	1	0.1930	0.1350	0.60		W
LW	1	0.2500	0.1400	0.78		A
RA	1	1.1000	0.3000	3.44		N
TI	1	3.5000	1.3000	10.94		N

Total Number Reported: 9

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU239

EML Value: 3.2000
EML Error: 0.5000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	3.5000	0.7600	1.09	A	A
AI	2	77.3000		24.16	A	N
AI	1	89.0000		27.81	A	N
AI	3	83.2000		26.00	A	N
AM	1	3.3300	0.7300	1.04	W	A
AN	1	2.9400	0.1700	0.92	A	A
AR	2	1.7000	1.8100	0.53	A	N
AR	1	2.1800	1.7000	0.68	A	N
AU	1	2.7400	0.7300	0.86	N	W
BE	1	3.1100	0.5200	0.97	A	A
BL	2	2.5230	0.2270	0.79	A	W
BL	1	2.7090	0.2250	0.85	A	W
BM	1	2.7000	0.3200	0.84	A	W
BP	1	4.2000	0.5000	1.31		W
BU	1	3.6000	0.4000	1.13	A	A
BX	1	4.4400	1.8500	1.39	N	W
CH	1	3.1000	0.2500	0.97	A	A
CL	1	5.1200	2.2000	1.60	A	W
CW	1	2.8500	0.0900	0.89	A	W
EG	1	2.8000	0.1400	0.88	A	W
FG	1	4.4400	0.0700	1.39		W
GA	1	3.0000	1.6000	0.94	W	A
GE	1	2.7500	0.4190	0.86	A	W
GP	1	3.0000	0.8000	0.94	A	A
GT	1	3.2000	0.4000	1.00	A	A
HT	1	2.3400	0.2000	0.73	N	W
IE	1	0.3770	0.2040	0.12	A	N
IN	1	2.6700	0.7800	0.83	A	W
IS	1	0.1100	0.0530	0.03	A	N
IT	1	2.4700	0.3000	0.77	A	W
KA	1	3.0100	0.0600	0.94	A	A
KR	1	3.0100	0.6300	0.94		A
LA	2	9.5900	0.4900	3.00	A	N
LA	3	13.4100	0.6100	4.19	A	N
LL	1	2.9000	0.5370	0.91	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU239

EML Value: 3.2000
EML Error: 0.5000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LW	1	2.7600	0.4900	0.86	A	W
ML	1	2.6700	0.2600	0.83	W	W
NA	1	2.3000	1.2000	0.72	W	W
NM	2	2.2800	0.1600	0.71	W	W
NM	3	2.8600	0.2200	0.89	W	A
NM	1	2.3600	0.1600	0.74	W	W
NQ	1	3.7800	0.4600	1.18	W	A
NZ	2	52.0000	3.0000	16.25		N
NZ	1	51.0000	3.0000	15.94		N
OB	1	1.1100	0.5590	0.35		N
OT	1	2.8000	0.5000	0.88	A	W
RA	1	2.6000	0.5000	0.81	A	W
RE	1	2.8200	0.7300	0.88	A	W
SE	1	3.0800	0.1700	0.96		A
SN	1	3.1610	1.8430	0.99	A	A
SR	1	2.9700	0.6800	0.93	W	A
SY	1	2.9600	0.1000	0.93		A
TE	1	2.3100	0.5200	0.72	A	W
TI	1	86.0000	11.0000	26.88		N
TM	1	1.9600	1.0400	0.61	A	N
TN	1	2.3190	0.7800	0.73	A	W
TO	1	3.1900	0.9900	1.00	W	A
TX	1	2.9900	0.3000	0.93	A	A
UP	1	3.3000	0.9660	1.03	A	A
UY	1	2.6300	0.4200	0.82	W	W
WA	1	2.6100	0.4200	0.82	W	W
WC	1	3.2000	1.4100	1.00	A	A
YA	1	3.3600	0.2100	1.05	A	A

Total Number Reported: 63

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: SR90

EML Value: 13.0000
EML Error: 0.4700

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	13.5000	3.9000	1.04	A	A
AI	2	53.7264		4.13		N
AI	3	55.1083		4.24		N
AI	1	56.4901		4.34		N
AM	1	90.0000	10.0000	6.92	A	N
AN	1	14.6000	0.4000	1.12	A	A
AR	2	34.9000	21.7000	2.68	W	W
AR	1	17.4000	13.2000	1.34	W	A
AR	3	38.2000	22.6000	2.94	W	W
AU	1	16.3000	2.9000	1.25	A	A
BC	1	7.8100	0.1100	0.60	N	N
BE	1	11.9800	2.9900	0.92	A	A
BL	1	2.9800	3.7700	0.23	A	N
BM	1	10.9300	1.2000	0.84	A	A
BX	1	32.3000	5.1000	2.48	N	W
CH	1	16.5000	3.2000	1.27	A	A
CL	1	18.9000	5.2000	1.45	W	A
EG	1	13.0000	1.7000	1.00	A	A
FG	1	270.8000	2.5000	20.83		N
GE	1	9.8000	1.0700	0.75	A	W
GT	1	9.7000	3.0000	0.75	A	W
ID	1	12.1570	0.7570	0.94	A	A
IS	1	13.4000	1.7000	1.03	N	A
IT	1	11.5000	1.6000	0.88	A	A
KA	1	12.4700	2.2600	0.96	A	A
KR	2	12.1400	0.3500	0.93		A
KR	1	13.0600	0.3700	1.00		A
NM	3	14.7000	2.3000	1.13	A	A
NM	2	12.5000	1.8000	0.96	A	A
NM	1	13.5000	2.0000	1.04	A	A
NZ	1	43.0000	4.0000	3.31		W
NZ	2	44.0000	3.0000	3.38		W
OT	1	12.0000	2.0000	0.92	A	A
RA	1	18.0000	4.0000	1.38	A	A
RE	1	13.4000	2.2000	1.03	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: SR90

EML Value: 13.0000
EML Error: 0.4700

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SE	1	14.6000	1.2000	1.12		A
SR	1	21.0000	12.0000	1.62	A	A
TE	1	55.1000	3.6000	4.24	A	N
TI	1	10.0000	3.0000	0.77		A
TN	1	11.0750	5.9460	0.85	A	A
TO	1	64.1100	7.0300	4.93	A	N
TP	1	20.9454	2.9794	1.61	A	A
TX	1	19.0000	7.8000	1.46	A	A
UP	1	13.0000	9.6000	1.00	A	A
UY	1	9.4000	5.0000	0.72	W	W
WA	1	13.2000	2.1000	1.01	A	A
WC	1	77.8000	23.0000	5.99	W	N
WE	2	26.5000	10.0000	2.04	A	W
WE	1	46.7000	13.0000	3.59	A	W

Total Number Reported: 49

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: TH234

EML Value: 198.0000
EML Error: 5.6000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	318.0000	79.0000	1.61	A	W
AM	1	235.4300	10.0000	1.19	A	A
AS	1	203.9440	21.0190	1.03	A	A
AU	1	254.0000	29.0000	1.28	A	A
BL	1	269.0000	23.0000	1.36	A	A
BP	1	156.0000	19.0000	0.79		W
BQ	1	180.0000	27.0000	0.91	A	A
BX	1	206.0000	155.0000	1.04	A	A
CH	1	278.0000	41.0000	1.40	A	A
CL	1	253.0000	51.0000	1.28	A	A
CN	1	201.6000	11.6900	1.02	A	A
EC	1	292.3000	140.6000	1.48	A	A
FE	1	208.5000	17.7000	1.05		A
FE	3	208.9000	17.8000	1.05		A
FE	2	235.8000	20.5000	1.19		A
FN	1	206.0000	26.0000	1.04		A
FR	1	200.0000	140.0000	1.01		A
FS	1	198.8000	5.1000	1.00	A	A
GE	1	188.0000	45.0000	0.95	A	A
ID	1	269.5670	16.6780	1.36	A	A
IN	1	270.0000	41.6000	1.36	A	A
IS	1	85.9000	30.6000	0.43	A	N
IT	1	372.0000	99.0000	1.88	A	N
LA	2	562.0000	70.0000	2.84	A	N
LA	1	338.0000	39.0000	1.71	A	W
LA	3	423.0000	48.0000	2.14	A	N
LV	1	428.0000	61.0000	2.16	A	N
MA	1	170.0000	68.0000	0.86	A	A
MH	1	246.7000	12.8000	1.25	A	A
NJ	1	155.0000	16.0000	0.78		W
NJ	2	163.0000	24.0000	0.82		A
NJ	3	191.0000	14.0000	0.96		A
NL	1	186.0000	27.3000	0.94	A	A
NQ	1	217.4000	26.7000	1.10	A	A
OB	1	160.0000	36.1000	0.81		W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: TH234

EML Value: 198.0000
EML Error: 5.6000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OC	1	200.0000	22.0000	1.01		A
OU	1	167.0000	9.2000	0.84	A	A
PO	1	200.0000	30.0000	1.01		A
RA	1	150.0000	21.0000	0.76		W
RA	2	140.0000	26.0000	0.71		W
RL	1	282.4000	34.0000	1.43	A	A
SR	1	185.0000	28.0000	0.93	A	A
SY	1	215.0000	48.0000	1.09		A
TE	1	907.0000	22.2000	4.58	A	N
TI	1	370.0000	37.0000	1.87		N
TM	1	379.0300	32.2000	1.91	A	N
TX	1	244.0000	25.0000	1.23	A	A
UY	1	159.0000	18.0000	0.80	A	W
WA	1	1800.0000	330.0000	9.09	A	N
WE	1	143.0000	98.3000	0.72	A	W
WO	2	222.0000	111.0000	1.12	A	A
WO	1	22.2000	51.8000	0.11	A	N

Total Number Reported: 52

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U234

EML Value: 190.0000
EML Error: 5.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	207.0000	25.0000	1.09	A	A
AM	1	231.5900	35.1500	1.22	W	W
AN	1	168.0000	6.0000	0.88	A	A
AU	1	197.0000	23.0000	1.04	A	A
BC	1	227.0000	20.0000	1.20	A	W
BE	1	197.2000	15.8000	1.04	A	A
BL	1	271.0000	6.0000	1.43	A	N
BM	1	191.0000	28.4000	1.00	A	A
BU	1	176.0000	11.0000	0.93	A	A
BX	1	217.0000	13.0000	1.14	A	W
CD	1	80.0000	20.0000	0.42		N
CF	1	210.0000	13.0000	1.11		A
CF	2	208.0000	14.0000	1.10		A
CF	3	216.0000	13.0000	1.14		W
CH	1	186.0000	6.2000	0.98	A	A
CL	1	177.0000	16.0000	0.93	A	A
CW	1	204.0000	5.0000	1.07	A	A
EG	1	196.0000	16.0000	1.03	A	A
FG	1	161.4000	18.0000	0.85		A
GA	1	193.0000	16.0000	1.02	A	A
GE	1	183.0000	23.5000	0.96	A	A
GP	1	197.0000	20.0000	1.04	A	A
HT	1	162.7000	15.0000	0.86	A	A
ID	1	206.7670	11.4650	1.09	A	A
IE	1	61.5300	11.3600	0.32		N
IS	1	160.0000	14.0000	0.84		A
IT	1	151.0000	12.0000	0.80	A	A
LW	1	190.0000	20.0000	1.00	A	A
ML	1	188.6700	15.0200	0.99	A	A
NA	1	194.0000	11.0000	1.02	A	A
NF	1	211.1690	14.9660	1.11		W
NL	1	203.0000	46.0000	1.07	A	A
NQ	1	195.0000	11.3000	1.03	A	A
OB	1	168.0000	31.6000	0.88	A	A
OU	1	186.0000	2.3000	0.98		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U234

EML Value: 190.0000
EML Error: 5.2000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
RE	1	207.0000	24.0000	1.09	A	A
SE	1	193.0000	24.0000	1.02		A
TE	1	184.4000	8.5000	0.97	A	A
TM	1	192.0700	19.9000	1.01		A
TN	1	186.4000	9.1000	0.98	A	A
TO	1	206.7900	94.6000	1.09	A	A
TX	1	199.8400	3.0000	1.05	A	A
UP	1	216.0000	22.8000	1.14	A	W
UY	1	158.0000	17.0000	0.83	A	A
WA	1	174.0000	8.0000	0.92	A	A
WC	1	182.0000	56.1000	0.96		A

Total Number Reported: 46

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U238

EML Value: 202.0000
EML Error: 7.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	209.0000	25.0000	1.03	A	A
AM	1	241.2100	31.4500	1.19	A	W
AN	1	173.0000	6.0000	0.86	A	A
AU	1	203.0000	24.0000	1.00	A	A
BC	1	233.0000	20.0000	1.15	W	W
BE	1	201.6000	16.1000	1.00	A	A
BL	1	271.0000	6.0000	1.34	A	W
BM	1	191.4000	28.4000	0.95	A	A
BU	1	180.0000	14.0000	0.89	A	A
BX	1	233.0000	14.0000	1.15	A	W
CF	1	216.0000	14.0000	1.07		A
CF	2	207.0000	14.0000	1.02		A
CF	3	226.0000	14.0000	1.12		W
CH	1	190.0000	6.3000	0.94	A	A
CL	1	189.0000	18.0000	0.94	A	A
CW	1	211.0000	6.0000	1.04	A	A
EG	1	204.0000	16.0000	1.01	A	A
FG	1	257.2000	31.0000	1.27		W
FL	1	142.0000	7.0000	0.70	A	A
GA	1	200.0000	9.1000	0.99	A	A
GE	1	197.0000	25.1000	0.98	A	A
GP	1	203.0000	20.0000	1.00	A	A
GT	1	190.0000	37.0000	0.94	A	A
HT	1	157.8000	14.0000	0.78	A	A
ID	1	208.6000	10.8160	1.03	A	A
IE	1	62.6300	11.5600	0.31		N
IS	1	167.0000	8.0000	0.83		A
IT	1	159.0000	12.0000	0.79	A	A
LW	1	198.0000	26.0000	0.98	A	A
ML	1	198.9300	15.6900	0.99	A	A
NA	1	193.0000	11.0000	0.95	A	A
NF	1	207.1210	14.7700	1.02		A
NL	1	196.0000	45.0000	0.97	A	A
NQ	1	201.1000	11.7000	1.00	A	A
OB	1	186.0000	34.2000	0.92	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U238

EML Value: 202.0000
EML Error: 7.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OU	1	186.0000	2.3000	0.92		A
RE	1	219.0000	26.0000	1.08	A	A
SE	1	198.0000	25.0000	0.98		A
SI	1	216.0000	40.0000	1.07		A
TE	1	184.8000	8.5000	0.92	A	A
TM	1	195.3800	20.2000	0.97		A
TN	1	194.6500	9.4300	0.96	A	A
TO	1	208.2500	87.9900	1.03	A	A
TX	1	208.0500	3.1100	1.03	A	A
UP	1	216.0000	22.7000	1.07	A	A
UY	1	159.0000	18.0000	0.79	A	A
WA	1	177.0000	8.0000	0.88	A	A
WC	1	193.0000	59.5000	0.95		A
WE	1	279.0000	177.0000	1.38	N	W
WS	1	242.3500	51.0600	1.20	A	W

Total Number Reported: 50

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: UG/G U

EML Value: 16.3000
EML Error: 0.3000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AR	2	13.0800	1.5600	0.80		A
AR	3	12.7200	1.5190	0.78		A
AR	1	13.7200	1.6360	0.84		A
BE	1	13.6500		0.84		A
BL	1	14.6500	0.3000	0.90		A
BP	1	15.6000	1.0000	0.96		A
BQ	1	14.5000	0.3000	0.89	W	A
BU	1	15.5000	2.0000	0.95		A
CA	1	17.9000	1.8000	1.10		A
CH	1	15.0000	1.5000	0.92		A
CW	1	18.7000	0.2000	1.15		W
GA	1	16.0000	0.7800	0.98	A	A
GE	1	15.1000	0.1600	0.93	A	A
HT	1	12.8000	1.1000	0.79		A
ID	1	13.1670	3.1580	0.81		A
IT	1	15.7000	1.7000	0.96		A
LA	3	15.7200	1.5700	0.96		A
LA	2	16.0100	1.6000	0.98		A
LA	1	16.4600	1.6500	1.01		A
NL	1	15.9000	3.7000	0.98		A
OU	1	15.3000	0.1850	0.94		A
RA	1	16.3000	0.6000	1.00		A
RI	1	13.9000	0.3500	0.85		A
SA	1	15.9000	1.4000	0.98		A
SY	1	13.7000	2.4100	0.84		A
TI	1	22.1000	3.3000	1.36		N
TM	1	17.6000	2.4300	1.08		A
TN	1	14.3500	1.7400	0.88		A
TO	1	15.7900	1.3000	0.97		A
UP	1	15.9100	2.0000	0.98		A

Total Number Reported: 30

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: AM241

EML Value: 2.8800
EML Error: 0.2200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	3.3800	0.6300	1.17	A	A
AI	3	3.6700	0.3170	1.27	A	A
AI	2	3.4900	0.3270	1.21	A	A
AI	1	2.1500	0.2300	0.75	A	W
AM	1	3.5900	0.1800	1.25	N	A
AR	2	4.1400	1.2200	1.44	W	A
AR	3	3.5900	1.1100	1.25	W	A
AR	1	4.5100	1.2600	1.57	W	A
AT	1	2.5410	1.2010	0.88	W	W
AU	1	3.0800	0.5500	1.07	A	A
BE	1	3.0700	0.4800	1.07	A	A
BM	1	3.5400	0.7400	1.23	W	A
BU	1	3.2600	0.1600	1.13	A	A
BX	1	4.4400	2.9600	1.54	N	A
CH	1	2.8400	0.1600	0.99	W	A
CL	1	7.1700	2.6000	2.49	W	W
CN	1	4.3600	0.6200	1.51	A	A
CW	1	2.9100	0.1000	1.01	A	A
EG	1	3.0300	0.3000	1.05	A	A
FE	1	4.0510	0.5000	1.41		A
FE	2	3.2620	0.6000	1.13		A
FL	1	6.0000	0.8000	2.08	A	W
GA	1	4.4000	1.5000	1.53	A	A
GE	1	3.1300	0.4880	1.09	A	A
GP	1	3.0000	0.4000	1.04	A	A
GT	1	2.9000	0.7000	1.01	A	A
IS	1	3.3900	0.4200	1.18	A	A
IT	1	2.8500	0.2400	0.99	W	A
LA	2	2.8400	0.0900	0.99		A
LA	3	2.7600	0.1000	0.96		A
LA	1	2.9100	0.1000	1.01		A
LL	1	4.2400	1.5100	1.47	A	A
LV	1	5.6100	1.0000	1.95	W	W
MA	1	3.6000	2.4000	1.25	N	A
ME	1	3.1200	0.5400	1.08	N	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: AM241

EML Value: 2.8800
EML Error: 0.2200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ME	2	3.3900	1.2600	1.18	N	A
ME	3	2.5400	0.5200	0.88	N	W
MH	1	2.7300	0.4300	0.95	W	A
NF	1	3.0500	0.3760	1.06		A
NJ	3	3.1800	0.8900	1.10		A
NJ	1	3.6600	1.2600	1.27		A
NJ	2	3.4400	0.9200	1.19		A
OT	1	3.4000	0.3000	1.18	A	A
PO	1	3.4000	0.6000	1.18	A	A
RE	1	3.1400	0.3400	1.09	A	A
RI	1	2.9500	0.2240	1.02		A
SE	1	3.3400	0.2100	1.16		A
SI	1	3.1000	0.4000	1.08		A
SN	1	2.5360	1.1150	0.88	A	W
SR	1	3.6100	0.5100	1.25	A	A
TE	1	3.3000	0.8800	1.15	A	A
TI	1	2.8000	0.7000	0.97		A
TM	1	2.7400	0.4800	0.95	A	A
TN	1	2.9370	0.8610	1.02	A	A
TO	1	4.5400	2.4300	1.58	A	A
TX	1	2.6700	0.2200	0.93	A	A
UY	1	2.0400	0.4000	0.71	W	W
WA	1	2.6800	0.3800	0.93	A	A
WC	1	5.5500	2.4000	1.93	A	W
WN	1	4.8000	1.7000	1.67	A	W
WN	3	4.1000	1.7000	1.42	A	A
WN	2	3.1000	0.7000	1.08	A	A
YA	1	0.1170	0.0024	0.04	A	N

Total Number Reported: 63

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CM244

EML Value: 1.6100
EML Error: 0.3600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	1.8500	0.3500	1.15	W	A
AI	2	2.4300	0.3440	1.51	N	W
AI	3	2.3200	0.3110	1.44	N	W
AI	1	0.3540	0.0987	0.22	N	N
AM	1	1.8000	1.0000	1.12		A
BE	1	2.2500	0.3700	1.40	A	W
BU	1	1.9500	0.1000	1.21	W	A
BX	1	3.3300	2.2200	2.07	N	N
CH	1	1.8200	0.1200	1.13	A	A
CL	1	1.1300	0.7000	0.70	W	W
CW	1	1.8600	0.1000	1.15	A	A
EG	1	1.9200	0.1900	1.19	A	A
GA	1	2.6000	1.2000	1.62	A	W
GE	1	1.8500	0.3610	1.15	W	A
GP	1	1.9000	0.2000	1.18	A	A
GT	1	1.7000	0.5000	1.06		A
IS	1	1.7700	0.6000	1.10	N	A
IT	1	1.6200	0.1400	1.01	A	A
LL	1	2.3400	1.1300	1.45		W
NF	1	1.8380	0.2820	1.14		A
OT	1	2.0000	0.3000	1.24	W	A
RE	1	2.0500	0.2200	1.27	W	A
RI	1	2.0900	0.1820	1.30		A
SE	1	2.2000	0.1500	1.37		W
SN	1	1.8060	0.9320	1.12	A	A
SR	1	1.6500	0.2800	1.02	A	A
TE	1	2.1200	0.8600	1.32	N	A
TI	1	2.2000	0.6000	1.37		W
TM	1	1.0000	0.2600	0.62	W	W
TN	1	1.5780	1.2140	0.98	A	A
UY	1	1.1800	0.3000	0.73	A	W
WA	1	1.6500	0.3000	1.02	W	A
YA	1	0.0720	0.0017	0.05	A	N

Total Number Reported: 33

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 17.6000
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	18.4000	3.4000	1.04	A	A
AI	1	13.8000	1.2900	0.78	N	W
AM	1	18.3200	2.4000	1.04	A	A
AR	1	20.8000	3.9100	1.18	W	A
AT	1	19.0100	1.9570	1.08	A	A
AU	1	20.0000	2.0000	1.14	A	A
BA	1	17.7000	4.2000	1.01	A	A
BC	1	24.1000	1.6000	1.37	A	W
BE	1	22.0000	2.0000	1.25	A	W
BL	1	16.4000	1.5000	0.93	A	A
BM	1	18.1000	1.4000	1.03	A	A
BN	1	15.5000	1.3000	0.88	A	A
BN	3	16.4000	1.4000	0.93	A	A
BN	2	15.2000	1.0000	0.86	A	A
BP	1	14.9000	0.4000	0.85		W
BQ	1	64.0000	9.0000	3.64	N	N
BU	1	17.0000	1.0000	0.97	A	A
BX	1	22.4000	1.6000	1.27	A	W
CD	1	20.0000	2.0000	1.14	A	A
CF	1	25.5000	2.8000	1.45		W
CF	2	20.2000	4.0000	1.15		A
CF	3	23.2000	3.0000	1.32		W
CH	1	21.3000	0.9500	1.21	A	A
CL	1	17.5000	1.1000	0.99	N	A
CN	1	25.9600	1.9300	1.48	A	N
CR	1	20.3000	1.3000	1.15	A	A
CS	1	20.1700	6.8200	1.15	A	A
CW	1	19.5000	0.3000	1.11		A
EG	1	14.0000	2.0000	0.80	A	W
FE	1	21.4000	1.8700	1.22		A
FE	2	21.7000	2.1000	1.23		A
FL	1	21.1000	0.6000	1.20	A	A
FN	1	17.7000	1.5000	1.01	A	A
FR	1	19.0000	5.0000	1.08		A
GA	1	25.2000	9.0000	1.43	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 17.6000
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GC	1	18.9200		1.08	A	A
GE	1	18.4000	2.4900	1.04	A	A
GP	1	17.0000	2.0000	0.97	A	A
GT	1	19.0000	2.4000	1.08	A	A
HU	1	22.1000	1.2000	1.26	A	W
ID	1	20.1330	1.2560	1.14	A	A
IL	1	14.1000	0.8000	0.80	A	W
IN	1	17.2000	2.8000	0.98	A	A
IS	1	14.8000	2.5000	0.84	A	W
IT	1	18.3000	2.3000	1.04	A	A
KR	4	20.4000	1.8000	1.16		A
KR	5	19.5000	2.3000	1.11		A
KR	2	20.4000	1.7000	1.16		A
KR	1	18.6000	1.3000	1.06		A
KR	3	16.9000	1.8000	0.96		A
LA	2	17.6000	2.0000	1.00	N	A
LA	3	18.2000	2.0000	1.03	N	A
LA	1	17.2000	2.0000	0.98	N	A
LB	1	19.0000	3.0000	1.08	A	A
LL	1	15.6000	4.7000	0.89	A	A
LV	1	19.2000	1.3000	1.09	A	A
MA	1	17.0000	1.6000	0.97	W	A
ME	3	26.6000	1.0000	1.51	W	N
ME	1	15.5000	0.6600	0.88	W	A
ME	2	23.6000	0.8000	1.34	W	W
MH	1	18.8000	0.6000	1.07	A	A
NA	1	22.5000	0.9000	1.28	A	W
NJ	3	20.0000	1.1000	1.14		A
NJ	2	19.2000	1.5000	1.09		A
NJ	1	19.6000	1.5000	1.11		A
NR	1	16.8000	3.3600	0.95	A	A
NZ	2	20.5000	1.2000	1.16		A
NZ	1	18.6000	1.2000	1.06		A
OB	1	13.8000	2.7900	0.78	A	W
OC	1	17.0000	4.0000	0.97	W	A
OH	1	14.8000		0.84		W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 17.6000
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OL	1	19.2000	0.1300	1.09	A	A
OT	1	18.0000	3.0000	1.02	A	A
OU	1	13.2000	2.6000	0.75		W
PO	1	16.4000	0.8000	0.93	A	A
RA	2	14.1000	0.7000	0.80	A	W
RA	1	14.9000	0.9000	0.85	A	W
RE	1	17.5000	2.6000	0.99	A	A
RI	1	22.2000	6.2300	1.26	N	W
SB	1	19.0000	2.0000	1.08	N	A
SE	1	18.1000	1.0000	1.03		A
SI	1	19.0000	0.4000	1.08		A
SN	1	22.9000	3.0100	1.30		W
SR	1	20.4000	1.2000	1.16	A	A
SY	1	19.3000	1.5000	1.10		A
TE	1	17.6000	1.9000	1.00	A	A
TI	1	27.0000	2.7000	1.53		N
TM	1	18.8300	2.7600	1.07	A	A
TN	1	14.0900	3.1300	0.80	A	W
TO	1	22.2200	9.6500	1.26	W	W
TP	1	18.2200	0.8500	1.03	A	A
TQ	1	19.4000	0.8300	1.10	W	A
TR	1	20.2890	2.1720	1.15	N	A
TW	1	19.0000	0.7000	1.08	A	A
TX	1	19.6000	0.9000	1.11	A	A
UC	1	1.9600	0.0600	0.11	A	N
UY	1	20.8000	4.8000	1.18	W	A
WA	1	18.0000	1.0000	1.02	A	A
WC	1	18.9000	1.8900	1.07	W	A
WE	1	21.0000	2.0600	1.19	A	A
WN	3	22.1000	0.9000	1.26	W	W
WN	1	22.4000	0.8000	1.27	W	W
WN	2	22.2000	0.9000	1.26	W	W
WO	1	15.0000	4.0000	0.85	A	W
WO	2	17.0000	3.0000	0.97	A	A
WP	1	20.3000	2.0000	1.15		A
YA	1	20.4800	0.5200	1.16	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 17.6000
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
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Total Number Reported: 107

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 440.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	478.0000	79.0000	1.09	A	A
AI	1	347.0000	4.7100	0.79	A	N
AM	1	468.0500	4.6500	1.06	A	A
AR	1	550.0000	27.8000	1.25	W	A
AT	1	462.6000	41.2000	1.05	A	A
AU	1	479.0000	23.0000	1.09	A	A
BA	1	468.0000	56.0000	1.06	A	A
BC	1	551.0000	32.0000	1.25	A	W
BE	1	534.0000	94.0000	1.21	A	A
BL	1	450.0000	31.0000	1.02	A	A
BM	1	442.0000	5.8000	1.00	A	A
BN	1	421.8000	50.4000	0.96	A	A
BN	2	440.3000	37.6000	1.00	A	A
BN	3	469.9000	52.7000	1.07	A	A
BP	1	377.0000	8.0000	0.86		W
BQ	1	509.0000	10.0000	1.16	A	A
BU	1	390.0000	20.0000	0.89	A	W
BX	1	581.0000	30.0000	1.32	A	W
CA	1	464.0000	46.0000	1.05		A
CD	1	490.0000	20.0000	1.11	A	A
CF	2	495.0000	5.0000	1.13		A
CF	3	506.0000	5.0000	1.15		A
CF	1	489.0000	5.0000	1.11		A
CH	1	504.0000	2.8000	1.14	A	A
CL	1	417.0000	25.0000	0.95	A	A
CN	1	483.5000	31.1000	1.10	A	A
CR	1	527.3000	40.5000	1.20	A	A
CS	1	497.4200	166.9800	1.13	A	A
CW	1	480.0000	4.0000	1.09		A
EG	1	434.0000	30.0000	0.99	A	A
FE	1	535.5000	41.5000	1.22		A
FE	2	503.5000	37.9000	1.14		A
FL	1	533.0000	3.0000	1.21	A	A
FN	1	427.0000	43.0000	0.97	A	A
FR	1	460.0000	69.0000	1.04		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 440.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GA	1	475.0000	35.0000	1.08	A	A
GC	1	444.0000		1.01	A	A
GD	1	414.0000	50.0000	0.94		A
GE	1	459.0000	52.6000	1.04	A	A
GP	1	440.0000	40.0000	1.00	A	A
GT	1	490.0000	47.0000	1.11	A	A
HU	1	476.0000	13.4000	1.08	A	A
ID	1	483.4000	24.3270	1.10	N	A
IE	1	493.3000	71.9000	1.12	N	A
IL	1	429.9000	5.3000	0.98	A	A
IN	1	451.0000	2.0000	1.02	A	A
IS	1	481.0000	55.0000	1.09	A	A
IT	1	494.0000	25.0000	1.12	A	A
KR	2	498.5000	35.6000	1.13		A
KR	3	465.7000	32.6000	1.06		A
KR	4	472.3000	33.3000	1.07		A
KR	5	488.0000	32.5000	1.11		A
KR	1	480.4000	19.2000	1.09		A
LA	1	443.0000	47.0000	1.01	W	A
LA	3	448.0000	47.0000	1.02	W	A
LA	2	451.0000	48.0000	1.02	W	A
LB	1	451.0000	45.0000	1.02	A	A
LL	1	378.0000	40.0000	0.86	A	W
LV	1	480.0000	17.0000	1.09	A	A
MA	1	447.0000	93.0000	1.02	N	A
ME	2	585.0000	25.9000	1.33	N	W
ME	1	400.0000	19.2000	0.91	N	A
ME	3	331.0000	16.4000	0.75	N	N
MH	1	493.0000	24.1000	1.12	A	A
NA	1	585.8000	4.0000	1.33	W	W
NJ	3	488.0000	22.0000	1.11		A
NJ	1	485.0000	26.0000	1.10		A
NJ	2	477.0000	41.0000	1.08		A
NR	1	410.0000	82.0000	0.93	A	A
NZ	2	460.0000	20.0000	1.04		A
NZ	1	480.0000	20.0000	1.09		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 440.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OB	1	358.0000	66.9000	0.81	A	W
OC	1	420.0000	38.0000	0.95	W	A
OH	1	451.4000		1.03		A
OL	1	536.6000	13.7000	1.22	A	A
OT	1	410.0000	10.0000	0.93	A	A
OU	1	427.0000	23.0000	0.97		A
PK	1	394.0000	4.8000	0.89	A	W
PO	1	450.0000	50.0000	1.02	A	A
RA	1	430.0000	15.0000	0.98	A	A
RA	2	429.0000	19.0000	0.98	A	A
RE	1	413.0000	34.0000	0.94	A	A
RI	1	515.0000	24.7000	1.17	W	A
SB	1	491.0000	53.0000	1.12	N	A
SE	1	464.0000	2.0000	1.05		A
SI	1	460.0000	10.0000	1.04		A
SN	1	563.0000	56.6000	1.28		W
SR	1	484.0000	20.0000	1.10	A	A
SY	1	418.0000	18.0000	0.95		A
TE	1	414.6000	5.7000	0.94	A	A
TI	1	682.0000	68.0000	1.55		N
TM	1	496.1700	5.4000	1.13	A	A
TN	1	372.1500	7.4400	0.85	A	W
TO	1	525.2500	67.7300	1.19	W	A
TP	1	436.7500	8.5200	0.99	A	A
TQ	1	463.0000	8.3000	1.05	A	A
TR	1	454.3700	13.6300	1.03	N	A
TW	1	473.0000	4.0000	1.08	A	A
TX	1	482.0000	3.0000	1.10	A	A
UC	1	49.7000	0.2400	0.11	A	N
UY	1	490.0000	34.0000	1.11	A	A
WA	1	440.0000	14.0000	1.00	A	A
WC	1	473.0000	70.4000	1.08	A	A
WE	1	572.0000	26.6000	1.30	A	W
WN	3	562.0000	8.0000	1.28	W	W
WN	1	559.0000	9.0000	1.27	W	W
WN	2	552.0000	8.0000	1.25	W	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 440.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
WO	2	430.0000	40.0000	0.98	A	A
WO	1	410.0000	60.0000	0.93	A	A
WP	1	514.0000	52.0000	1.17		A
YA	1	556.4800	2.7200	1.26	A	W

Total Number Reported: 111

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: K40

EML Value: 513.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	514.0000	95.0000	1.00	A	A
AI	1	475.0000	0.2610	0.93	W	A
AM	1	516.7900	5.2000	1.01	A	A
AR	1	861.0000	62.8000	1.68	W	N
AT	1	541.0000	63.4330	1.05	A	A
AU	1	515.0000	33.0000	1.00	A	A
BC	1	593.0000	38.0000	1.16	A	A
BE	1	633.0000	76.0000	1.23	A	A
BL	1	484.0000	37.0000	0.94	A	A
BN	3	436.6000	46.3000	0.85	W	W
BN	2	455.1000	37.0000	0.89	W	W
BN	1	418.1000	45.1000	0.81	W	W
BP	1	438.0000	12.0000	0.85		W
BQ	1	580.0000	120.0000	1.13	W	A
BU	1	460.0000	50.0000	0.90	A	W
BX	1	638.0000	40.0000	1.24	A	W
CD	1	540.0000	30.0000	1.05	A	A
CH	1	592.0000	15.0000	1.15	W	A
CL	1	403.0000	20.3000	0.79	N	N
CN	1	503.0000	34.0000	0.98	A	A
CR	1	513.9000	79.3000	1.00	A	A
CS	1	580.4700	195.5900	1.13	A	A
CW	1	578.0000	10.0000	1.13		A
EG	1	465.0000	80.0000	0.91	A	A
FE	2	571.6000	46.0000	1.11		A
FE	1	597.6000	45.8000	1.16		A
FL	1	615.0000	10.0000	1.20	A	A
FN	1	447.0000	47.0000	0.87	A	W
FR	1	550.0000	110.0000	1.07		A
GA	1	459.0000	166.0000	0.89	W	W
GC	1	528.9000		1.03	A	A
GD	1	291.0000	230.0000	0.57		N
GE	1	579.0000	64.0000	1.13	A	A
GP	1	515.0000	50.0000	1.00	A	A
GT	1	550.0000	74.0000	1.07	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: K40

EML Value: 513.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
HU	1	630.0000	48.0000	1.23	A	A
ID	1	674.9330	128.7150	1.32	W	W
IE	1	263.3000	196.7000	0.51	N	N
IL	1	507.2000	46.1000	0.99	A	A
IN	1	509.4000	1.1000	0.99	A	A
IS	1	539.0000	44.0000	1.05	A	A
IT	1	570.0000	37.0000	1.11	A	A
KR	5	511.1000	46.0000	1.00		A
KR	2	503.0000	32.5000	0.98		A
KR	3	479.5000	41.6000	0.94		A
KR	4	511.1000	42.4000	1.00		A
KR	1	510.5000	26.8000	1.00		A
LA	3	460.0000	51.0000	0.90	N	W
LA	1	499.0000	55.0000	0.97	N	A
LA	2	489.0000	53.0000	0.95	N	A
LL	1	439.0000	169.0000	0.86	A	W
LV	1	511.0000	34.0000	1.00	A	A
MA	1	488.0000	47.0000	0.95	W	A
ME	2	644.0000	29.0000	1.25	W	W
ME	1	370.0000	24.3000	0.72	W	N
ME	3	566.0000	28.6000	1.10	W	A
MH	1	585.7000	27.4000	1.14	W	A
NA	1	646.0000	19.0000	1.26	A	W
NJ	2	529.0000	26.0000	1.03		A
NJ	3	525.0000	59.0000	1.02		A
NJ	1	533.0000	33.0000	1.04		A
NZ	1	810.0000	60.0000	1.58		N
NZ	2	760.0000	50.0000	1.48		N
OB	1	420.0000	82.1000	0.82	A	W
OC	1	480.0000	60.0000	0.94	A	A
OH	1	488.4000		0.95		A
OL	1	589.8000	20.4000	1.15	A	A
OT	1	460.0000	40.0000	0.90	A	W
OU	1	508.0000	73.3000	0.99		A
PK	1	275.5000	38.8000	0.54	A	N
PO	1	520.0000	13.0000	1.01	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: K40

EML Value: 513.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RA	1	410.0000	67.0000	0.80	A	W
RA	2	410.0000	71.0000	0.80	A	W
RE	1	619.0000	67.0000	1.21	W	A
SB	1	545.0000	62.0000	1.06	N	A
SE	1	293.0000	19.0000	0.57		N
SI	1	496.0000	16.0000	0.97		A
SN	1	681.0000	69.1000	1.33		W
SR	1	550.0000	32.0000	1.07	A	A
SY	1	520.0000	45.0000	1.01		A
TE	1	502.8000	34.7000	0.98	A	A
TI	1	734.0000	74.0000	1.43		N
TM	1	512.8000	37.1000	1.00	A	A
TN	1	423.6000	42.3600	0.83	W	W
TO	1	608.7100	204.0400	1.19	N	A
TP	1	526.5300	18.4500	1.03	A	A
TQ	1	520.0000	21.0000	1.01	A	A
TR	1	835.0100	26.4800	1.63	A	N
TW	1	539.0000	20.0000	1.05	A	A
TX	1	541.0000	16.0000	1.05	A	A
UY	1	540.0000	104.0000	1.05	A	A
WA	1	549.0000	21.0000	1.07	W	A
WC	1	267.0000	38.3000	0.52	W	N
WE	1	616.0000	43.8000	1.20	W	A
WN	3	1286.0000	26.0000	2.51	A	N
WN	2	1294.0000	26.0000	2.52	A	N
WN	1	1260.0000	26.0000	2.46	A	N
WO	2	540.0000	80.0000	1.05	A	A
WO	1	530.0000	120.0000	1.03	A	A
WP	1	559.0000	56.0000	1.09		A
YA	1	616.7900	11.6600	1.20	A	A

Total Number Reported: 101

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: PU238

EML Value: 0.5000
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
EG	1	0.2730	0.0270	0.55	W	N
GP	1	0.3900	0.0800	0.78		W
KR	1	0.1500	0.0600	0.30		N
LL	1	0.3130	0.1730	0.63		N
RA	1	0.4700	0.1200	0.94	A	A
SE	1	0.5290	0.0710	1.06		A
TO	1	0.6900	0.9600	1.38		A

Total Number Reported: 7

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: PU239

EML Value: 4.3000
EML Error: 0.4600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	3.8700	0.6800	0.90	A	A
AI	1	5.0400		1.17	W	A
AI	3	4.8500	0.4300	1.13	W	A
AI	2	4.8800	0.4910	1.13	W	A
AM	1	3.1300	0.2500	0.73	W	W
AR	1	3.3300	1.2200	0.77	W	W
AR	2	3.6600	1.3700	0.85	W	W
AR	3	4.5100	1.6300	1.05	W	A
AU	1	4.4600	0.8100	1.04	A	A
BE	1	4.7400	0.5900	1.10	A	A
BL	2	4.6880	0.2240	1.09	A	A
BL	1	4.3250	0.2360	1.01	A	A
BM	1	4.8700	0.5500	1.13	A	A
BU	1	4.5000	0.5000	1.05	W	A
BX	1	3.3300	1.1100	0.77	N	W
CH	1	4.5700	0.1800	1.06	A	A
CL	1	4.7000	2.7000	1.09	N	A
CW	1	4.4600	0.0800	1.04	A	A
EG	1	4.2600	0.2100	0.99	A	A
GA	1	5.9000	0.4200	1.37	A	W
GE	1	4.4800	0.6750	1.04	A	A
GP	1	4.4000	0.5000	1.02	A	A
GT	1	4.6000	1.1000	1.07	A	A
IE	1	7.2100	2.4500	1.68	A	N
IS	1	4.9400	0.7200	1.15	A	A
IT	1	4.6500	0.3900	1.08	A	A
KR	1	4.3500	0.5200	1.01		A
LA	1	4.0200	0.1300	0.94		A
LA	2	3.9800	0.1300	0.93		A
LA	3	4.0400	0.1400	0.94		A
LL	1	4.6600	0.7000	1.08	A	A
ML	1	4.1300	0.3400	0.96	A	A
NA	1	4.6000	0.4000	1.07	A	A
NF	1	5.9430	0.8570	1.38		W
NZ	1	4.6000	0.2000	1.07		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: PU239

EML Value: 4.3000
EML Error: 0.4600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NZ	2	4.8000	0.2000	1.12		A
OB	1	8.7000	2.4000	2.02		N
OT	1	4.3000	0.5000	1.00	A	A
RA	1	4.5000	0.9000	1.05	A	A
RE	1	4.1100	0.4200	0.96	W	A
RI	1	4.2700	0.2560	0.99	A	A
SE	1	5.1100	0.2500	1.19		A
SN	1	4.9830	1.4790	1.16	A	A
SR	1	5.2300	0.7300	1.22	A	A
SY	1	10.0000	0.4000	2.33		N
TE	1	4.1300	1.0000	0.96		A
TI	1	3.9000	0.8000	0.91		A
TM	1	4.6600	0.6700	1.08	A	A
TN	1	4.5970	1.0150	1.07	A	A
TO	1	0.1200	0.0600	0.03	W	N
TX	1	4.4500	0.3100	1.03	A	A
TY	1	2.9000	0.2000	0.67		N
UY	1	1.7800	0.3200	0.41	A	N
WA	1	3.5900	0.4400	0.83	N	W
WC	1	7.0700	2.7400	1.64	A	N
YA	1	0.1680	0.0054	0.04	A	N

Total Number Reported: 56

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: SR90

EML Value: 595.0000
EML Error: 29.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	614.0000	111.0000	1.03	A	A
AI	3	27.2723		0.05		N
AI	1	23.8480		0.04		N
AI	2	30.6465		0.05		N
AM	1	207.1800	12.2500	0.35	A	N
AR	1	634.0000	85.2000	1.07	A	A
AR	2	595.0000	80.9000	1.00	A	A
AU	1	645.0000	19.0000	1.08	A	A
BC	1	505.0000	24.0000	0.85	A	A
BE	1	600.0000	34.0000	1.01	A	A
BL	1	577.0000	15.0000	0.97	A	A
BM	1	775.0000	22.8000	1.30	A	W
BU	1	623.0000	62.0000	1.05	W	A
BX	1	515.0000	18.0000	0.87	A	A
CH	1	591.0000	7.1000	0.99	A	A
CL	1	397.0000	52.0000	0.67	W	W
EG	1	665.0000	46.0000	1.12	A	A
GE	1	586.0000	5.4500	0.99	A	A
GP	1	650.0000	70.0000	1.09	A	A
GT	1	490.0000	25.0000	0.82	A	A
ID	1	543.6070	28.8180	0.91	A	A
IS	1	693.0000	10.0000	1.16	A	W
IT	1	571.0000	77.0000	0.96	A	A
KR	2	456.1500	3.3200	0.77		A
KR	1	441.7500	3.3700	0.74		A
LA	3	639.0000	37.0000	1.07		A
LA	1	599.0000	34.0000	1.01		A
LA	2	558.0000	32.0000	0.94		A
NA	1	608.0000	10.0000	1.02	A	A
OT	1	590.0000	20.0000	0.99	W	A
RA	1	500.0000	100.0000	0.84	A	A
RE	1	616.0000	31.0000	1.03	A	A
RI	1	592.0000	18.4000	1.00	A	A
SE	1	631.0000	8.0000	1.06		A
SR	1	693.0000	51.0000	1.16	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: SR90

EML Value: 595.0000
EML Error: 29.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SY	1	497.0000	13.0000	0.83		A
TI	1	670.0000	100.0000	1.13		A
TM	1	573.2400	64.8000	0.96	A	A
TN	1	636.2700	26.1100	1.07	A	A
TO	1	318.2900	9.2900	0.54	W	W
TP	1	654.6354	12.6913	1.10	A	A
TQ	1	557.0000	62.0000	0.94	A	A
TX	1	572.0000	25.0000	0.96	A	A
UY	1	480.0000	20.0000	0.81	A	A
WA	1	649.0000	20.0000	1.09	W	A
WC	1	500.0000	98.3000	0.84	W	A
WE	2	599.0000	54.0000	1.01	A	A
WE	1	588.0000	54.0000	0.99	A	A
YA	1	21.4500	0.5600	0.04	A	N

Total Number Reported: 49

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: AM241

EML Value: 0.8500
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.9800	0.1300	1.15	A	A
AI	2	0.4800	0.0100	0.56	N	N
AI	1	0.4680	0.0100	0.55	N	N
AI	3	0.4740	0.0100	0.56	N	N
AM	1	0.9800	0.4200	1.15	A	A
AN	1	0.9400	0.0300	1.11	A	A
AR	1	0.8720	0.1520	1.03	W	A
AR	3	1.0200	0.1940	1.20	W	A
AR	2	1.0800	0.1800	1.27	W	W
AS	1	0.8950	0.6400	1.05	A	A
AT	1	1.1830	0.3670	1.39	A	W
AU	1	0.9140	0.1200	1.08	A	A
BE	1	0.9300	0.1100	1.09	A	A
BM	1	0.9140	0.1320	1.08	A	A
BP	1	0.8700	0.0400	1.02		A
BU	1	1.0000	0.0900	1.18	A	A
BX	1	1.1000	0.2300	1.29	A	W
CB	2	1.0140	0.4650	1.19	A	A
CB	1	0.9680	0.1210	1.14	A	A
CB	3	0.8540	0.1120	1.00	A	A
CH	1	0.8710	0.0620	1.02	A	A
CL	1	0.9300	0.1000	1.09	W	A
CW	1	0.9460	0.0140	1.11	A	A
EC	1	0.5920	0.3959	0.70		N
EG	1	0.9320	0.0380	1.10	A	A
FE	5	0.5936	0.1800	0.70		N
FE	2	0.9884	0.1700	1.16		A
FE	4	0.8870	0.2100	1.04		A
FE	3	0.9939	0.2300	1.17		A
FE	1	0.9905	0.1700	1.16		A
FG	1	1.0480	0.0100	1.23		A
FL	1	1.2000	0.4000	1.41	W	W
FM	1	0.9000	0.1000	1.06	A	A
GA	1	0.9600	0.0700	1.13	A	A
GE	1	0.9840	0.1390	1.16	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: AM241

EML Value: 0.8500
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GP	1	0.8700	0.1000	1.02	A	A
GT	1	0.8400	0.3000	0.99	A	A
IN	1	0.9000	0.0870	1.06	A	A
IS	1	0.8950	0.1040	1.05	A	A
IT	1	0.8220	0.0760	0.97	W	A
LA	2	0.9030	0.0260	1.06	A	A
LA	1	0.8450	0.0240	0.99	A	A
LA	3	0.8560	0.0240	1.01	A	A
LV	1	0.4800	0.3200	0.56	A	N
ME	2	0.8100	0.2000	0.95	A	A
ME	3	0.6700	0.1000	0.79	A	W
ME	1	0.7300	0.1300	0.86	A	W
NF	1	0.8050	0.0290	0.95		A
NQ	1	0.8060	0.0610	0.95	A	A
OD	1	0.7990	0.0950	0.94	A	A
OT	1	0.9100	0.0700	1.07	A	A
RE	1	1.0000	0.1200	1.18	A	A
RI	1	0.9840	0.0551	1.16	N	A
RL	1	1.0700	0.2500	1.26		W
SI	1	1.0000	0.1500	1.18		A
SN	1	0.9270	0.1710	1.09	A	A
SR	1	0.9500	0.0329	1.12	A	A
SY	1	0.8600	0.1200	1.01		A
TE	1	1.1300	0.2400	1.33	A	W
TI	1	0.9200	0.1700	1.08		A
TM	1	0.9100	0.1200	1.07	A	A
TN	1	0.8900	0.0430	1.05	A	A
TO	1	1.6500	0.4400	1.94	W	N
TX	1	0.8780	0.0530	1.03	A	A
UP	1	1.0500	0.1180	1.24	A	A
UY	1	0.8900	0.1000	1.05	A	A
WA	1	0.7900	0.0900	0.93	A	A
WC	1	0.9110	0.2850	1.07	A	A
YA	1	0.8800	0.0200	1.03	A	A

Total Number Reported: 69

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: Bq U

EML Value: 0.7600
EML Error: 0.0400

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.8600	0.1100	1.13	A	A
AM	1	0.2300	0.0400	0.30	A	N
BL	1	0.9028	0.0185	1.19	A	A
BU	1	0.8900	0.0500	1.17	A	A
CH	1	0.7590	0.0680	1.00	A	A
CL	1	0.9600	0.2000	1.26	A	A
FG	1	0.9600	0.0700	1.26	A	A
GP	1	0.8200		1.08	A	A
HT	1	0.4590	0.0400	0.60	W	N
LL	1	0.7560	0.0700	1.00		A
MJ	1	0.7500	0.1660	0.99		A
NS	1	0.6400	0.0100	0.84	W	W
OT	1	0.7900	0.0800	1.04	A	A
SN	1	0.8030	0.1640	1.06	A	A
UP	1	0.8160	0.0932	1.07		A
UY	1	0.7900	0.1000	1.04	A	A
WA	1	0.7500	0.1100	0.99	A	A
WO	1	0.9600	0.1500	1.26	W	A
WO	2	0.9600	0.1500	1.26	W	A
WT	1	0.7400	0.0400	0.97		A
YA	1	0.8500	0.0560	1.12	A	A

Total Number Reported: 21

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 52.4000
EML Error: 2.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	50.8000	8.4000	0.97	A	A
AI	1	23.3000	0.3700	0.44	A	N
AM	1	53.3000	0.5600	1.02	A	A
AN	1	54.0000	1.4000	1.03	A	A
AR	1	82.7000	6.0000	1.58	N	N
AS	1	57.2760	2.0250	1.09	W	A
AT	1	54.3230	3.5670	1.04	A	A
AU	1	55.1000	1.5000	1.05	A	A
BA	1	57.0000	2.4000	1.09	A	A
BC	1	56.2000	1.0000	1.07	A	A
BE	1	65.0000	16.0000	1.24	A	N
BL	1	52.4000	3.2000	1.00	A	A
BM	1	56.2000	4.3900	1.07	A	A
BN	3	54.8000	2.1000	1.05	A	A
BN	1	53.7000	2.1000	1.02	A	A
BN	2	53.3000	2.1000	1.02	A	A
BP	1	52.0000	1.0000	0.99		A
BQ	1	54.0000	2.0000	1.03	W	A
BU	1	55.0000	3.0000	1.05	A	A
BX	1	55.5000	1.8000	1.06	A	A
CA	1	53.7000	5.4000	1.02	A	A
CB	2	52.8200	2.1100	1.01	A	A
CB	1	50.8300	2.0200	0.97	A	A
CB	3	51.9900	2.0600	0.99	A	A
CD	1	48.0000	5.0000	0.92	A	A
CF	2	50.2000	0.7000	0.96		A
CF	3	49.2000	0.9000	0.94		A
CF	1	50.3000	0.9000	0.96		A
CH	1	54.7000	0.7700	1.04	A	A
CL	1	50.5000	2.5000	0.96	A	A
CM	1	47.1000	3.3000	0.90		W
CS	1	55.2900	4.4100	1.05	A	A
CW	1	53.1100	0.2900	1.01	A	A
DH	1	51.4800	0.8800	0.98	A	A
EC	1	63.0480	1.6798	1.20	A	N

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 52.4000
EML Error: 2.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EG	1	54.0000	4.0000	1.03	A	A
EP	1	55.4700	3.6800	1.06	A	A
FE	2	55.5700	4.2000	1.06		A
FE	4	52.6700	4.0000	1.00		A
FE	5	54.0000	4.1000	1.03		A
FE	1	53.9400	4.1000	1.03		A
FE	3	53.9500	4.0000	1.03		A
FG	1	55.2900	4.7000	1.05	A	A
FL	1	54.2000	0.4000	1.03	A	A
FM	1	51.9000	0.5000	0.99	A	A
FN	1	51.4000	3.7000	0.98	A	A
FR	1	54.0000	6.0000	1.03		A
GA	1	54.9000	7.4000	1.05	A	A
GC	1	54.5000		1.04	A	A
GD	1	46.6000	3.1700	0.89		W
GE	1	54.8000	5.9100	1.05	A	A
GP	1	54.0000	5.0000	1.03	A	A
GT	1	53.0000	6.0000	1.01	A	A
ID	1	53.1670	2.7550	1.01	A	A
IE	1	63.7800	6.2700	1.22	N	N
IL	1	53.9000	0.5000	1.03	A	A
IN	1	50.7000	1.0000	0.97	A	A
IS	1	57.4000	2.7000	1.10	W	A
IT	1	55.2000	3.2000	1.05	W	A
KA	1	52.7300	4.5000	1.01	A	A
LA	3	58.0000	6.2000	1.11	A	A
LA	1	59.1000	6.3000	1.13	A	A
LA	2	57.6000	6.2000	1.10	A	A
LB	1	54.0000	12.0000	1.03	A	A
LL	1	109.0000	15.0000	2.08	A	N
LN	1	55.0000	6.1400	1.05	W	A
LV	1	53.3000	1.0000	1.02	A	A
ME	2	57.7000	1.4900	1.10	A	A
ME	3	53.2000	1.3700	1.01	A	A
ME	1	46.8000	1.2000	0.89	A	W
MH	1	51.5000	1.6000	0.98	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 52.4000
EML Error: 2.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MJ	1	53.7000	2.5000	1.02		A
ML	1	49.0200	4.9000	0.94		A
NA	1	53.4000	0.6000	1.02	A	A
ND	1	51.0810	1.6060	0.98		A
NJ	3	53.0000	2.0000	1.01	A	A
NJ	2	53.0000	2.0000	1.01	A	A
NJ	1	53.0000	1.0000	1.01	A	A
NL	1	54.0000	3.9400	1.03	A	A
NP	1	61.3000	0.8000	1.17	A	W
NQ	1	55.6000	6.1000	1.06	A	A
NR	1	53.6000	10.7000	1.02	A	A
NZ	1	55.0000	3.0000	1.05		A
NZ	2	52.0000	3.0000	0.99		A
OB	1	60.2000	10.7000	1.15	N	W
OC	1	52.0000	3.0000	0.99	A	A
OD	1	52.6300	2.5600	1.00	A	A
OH	1	54.1000		1.03		A
OL	1	50.9000	0.7400	0.97	A	A
OS	1	59.6000	1.2000	1.14	W	A
OS	3	59.6000	1.2000	1.14	W	A
OS	2	54.8000	0.9000	1.05	W	A
OT	1	53.0000	2.0000	1.01	A	A
RC	1	51.0000	3.0000	0.97	A	A
RE	1	54.0000	5.4000	1.03	A	A
RI	1	56.8000	1.5500	1.08	A	A
RL	1	51.8800	7.2000	0.99	A	A
SA	1	56.1000	2.6000	1.07	A	A
SB	1	54.9000	3.7000	1.05	A	A
SI	1	51.0000	1.0000	0.97		A
SL	1	55.0000	4.0000	1.05	A	A
SN	1	50.9000	4.6000	0.97		A
SR	1	56.5000	4.3000	1.08	A	A
SY	1	52.0000	3.6000	0.99		A
TE	1	54.1000	1.1000	1.03	A	A
TI	1	49.2000	4.9000	0.94		A
TM	1	56.4800	0.7400	1.08	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 52.4000
EML Error: 2.2000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TN	1	55.1300	1.3100	1.05		A
TO	1	57.8400	4.2600	1.10	A	A
TP	1	50.4700	1.1300	0.96	A	A
TQ	1	52.8000	1.3000	1.01	A	A
TW	1	53.8000	0.9000	1.03	A	A
TX	1	54.7000	0.4000	1.04	A	A
UC	1	54.4000	0.4800	1.04	A	A
UP	1	53.2000	5.4800	1.01	A	A
US	1	54.0000	5.7110	1.03		A
UY	1	52.0000	3.9000	0.99	A	A
WA	1	59.0000	1.0000	1.13	A	A
WC	1	54.5000	4.2400	1.04	A	A
WE	1	56.1000	1.3000	1.07	A	A
WN	2	51.2000	1.2000	0.98	A	A
WN	1	52.2000	1.0000	1.00	A	A
WN	3	52.2000	1.2000	1.00	A	A
WO	1	56.0000	4.0000	1.07	A	A
WO	2	57.0000	10.0000	1.09	A	A
WP	1	50.3000	1.7000	0.96		A
WV	1	53.6000	1.1400	1.02	A	A
YA	1	51.8400	0.6400	0.99	A	A

Total Number Reported: 128

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 76.0000
EML Error: 3.4000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	80.0000	14.0000	1.05	A	A
AI	1	34.8000	0.5220	0.46	N	N
AM	1	80.7500	0.8000	1.06	A	A
AN	1	76.4000	0.9000	1.00	A	A
AR	1	124.0000	8.9400	1.63	N	N
AS	1	79.9940	1.9310	1.05	A	A
AT	1	78.9430	8.3170	1.04	A	A
AU	1	79.0000	4.0000	1.04	A	A
BA	1	86.1000	13.4000	1.13	A	A
BC	1	80.0000	1.2000	1.05	A	A
BE	1	73.0000	12.0000	0.96	A	A
BL	1	76.5000	4.7000	1.01	A	A
BM	1	84.6000	4.3300	1.11	A	A
BN	2	78.1000	4.4000	1.03	A	A
BN	3	78.8000	4.2000	1.04	A	A
BN	1	75.9000	4.1000	1.00	A	A
BP	1	77.0000	2.0000	1.01		A
BQ	1	69.0000	1.0000	0.91	A	A
BU	1	73.0000	7.0000	0.96	A	A
BX	1	77.7000	1.2000	1.02	A	A
CA	1	80.1000	8.0000	1.05	A	A
CB	2	79.1600	4.7100	1.04	A	A
CB	1	74.7400	4.3000	0.98	A	A
CB	3	78.7600	4.7900	1.04	A	A
CD	1	70.0000	7.0000	0.92	A	A
CF	1	74.1000	0.8000	0.98		A
CF	3	74.0000	0.8000	0.97		A
CF	2	73.6000	0.7000	0.97		A
CH	1	78.4000	0.7600	1.03	A	A
CL	1	75.8000	3.8000	1.00	A	A
CM	1	68.8000	3.3000	0.90		A
CS	1	83.0100	6.7500	1.09	A	A
CW	1	76.4100	0.5300	1.00	A	A
DH	1	73.9300	2.1300	0.97	A	A
EC	1	90.4280	2.8749	1.19	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 76.0000
EML Error: 3.4000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EG	1	80.0000	6.0000	1.05	A	A
EM	1	68.3210		0.90	A	W
EP	1	79.2900	5.6700	1.04	A	A
FE	3	75.8600	5.6000	1.00		A
FE	5	75.9200	5.7000	1.00		A
FE	4	76.0400	5.7000	1.00		A
FE	2	79.2100	6.2000	1.04		A
FE	1	78.5700	6.1000	1.03		A
FG	1	76.5200	4.9000	1.01	A	A
FL	1	78.4000	0.6000	1.03	A	A
FM	1	77.5000	1.0000	1.02	A	A
FN	1	74.8000	7.6000	0.98	A	A
FR	1	75.0000	8.0000	0.99		A
GA	1	82.9000	12.3000	1.09	A	A
GC	1	78.0000		1.03	A	A
GD	1	67.4000	3.3700	0.89		W
GE	1	77.6000	8.2400	1.02	A	A
GP	1	215.0000	20.0000	2.83	A	N
GT	1	78.0000	12.0000	1.03	A	A
ID	1	77.2000	3.9270	1.02	A	A
IE	1	95.6200	14.6300	1.26	N	W
IL	1	78.8000	1.1000	1.04	A	A
IN	1	75.1000	1.4000	0.99	A	A
IS	1	82.7000	7.1000	1.09	A	A
IT	1	79.5000	4.3000	1.05	W	A
KA	1	78.3300	4.8400	1.03	A	A
LA	1	90.7000	9.6000	1.19	A	W
LA	2	85.9000	9.1000	1.13	A	A
LA	3	87.6000	9.3000	1.15	A	A
LB	1	77.0000	14.0000	1.01	A	A
LL	1	163.0000	22.0000	2.14	A	N
LN	1	81.2000	7.5000	1.07	N	A
LV	1	76.8000	2.6000	1.01	A	A
ME	1	66.6000	3.3000	0.88	W	W
ME	3	78.1000	3.7700	1.03	W	A
ME	2	85.5000	4.1400	1.13	W	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 76.0000
EML Error: 3.4000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MH	1	75.7000	3.7000	1.00	A	A
MJ	1	80.6500	3.6700	1.06		A
ML	1	70.2400	7.0200	0.92		A
NA	1	79.5000	0.8000	1.05	A	A
ND	1	71.4090	3.6830	0.94		A
NJ	3	77.0000	4.0000	1.01	A	A
NJ	2	75.0000	4.0000	0.99	A	A
NJ	1	76.0000	4.0000	1.00	A	A
NL	1	81.1000	8.1200	1.07	A	A
NP	1	85.6000	1.1000	1.13	A	A
NQ	1	81.8000	9.3000	1.08	A	A
NR	1	79.1000	15.8000	1.04	A	A
NZ	2	78.0000	4.0000	1.03		A
NZ	1	81.0000	4.0000	1.07		A
OB	1	102.0000	19.5000	1.34	N	N
OC	1	76.0000	4.0000	1.00	A	A
OD	1	74.0600	5.0800	0.97	A	A
OH	1	77.2000		1.02		A
OL	1	71.9000	1.1000	0.95	A	A
OS	2	87.0000	4.3000	1.14	A	A
OS	1	85.9000	4.4000	1.13	A	A
OS	3	86.6700	4.4800	1.14	A	A
OT	1	79.0000	2.0000	1.04	A	A
OU	1	88.0000	6.3000	1.16	W	A
RC	1	74.0000	4.0000	0.97	A	A
RE	1	78.9000	7.3000	1.04	A	A
RI	1	82.2000	2.3200	1.08	A	A
RL	1	76.1400	8.8000	1.00	A	A
SA	1	80.9000	4.5000	1.06	A	A
SB	1	79.9000	8.7000	1.05	A	A
SI	1	73.0000	2.0000	0.96		A
SL	1	80.0000	4.0000	1.05	A	A
SN	1	71.0000	6.3100	0.93		A
SR	1	78.7000	8.2000	1.04	A	A
SY	1	79.3500	5.3000	1.04		A
TE	1	77.1000	1.4000	1.01	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 76.0000
EML Error: 3.4000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TI	1	72.6000	7.3000	0.95		A
TM	1	85.4000	0.7700	1.12	A	A
TN	1	82.5900	1.3400	1.09		A
TO	1	86.1700	10.7400	1.13	A	A
TP	1	73.3800	1.0700	0.97	A	A
TQ	1	79.5000	1.9000	1.05	A	A
TW	1	79.6000	1.4000	1.05	A	A
TX	1	79.0000	0.5000	1.04	A	A
UC	1	80.2000	0.7000	1.05	A	A
UP	1	77.6000	8.5500	1.02		A
US	1	74.9400	4.6980	0.99		A
UY	1	78.0000	11.0000	1.03	A	A
WA	1	82.0000	3.0000	1.08	A	A
WC	1	81.9000	11.0000	1.08	A	A
WE	1	83.6000	3.9000	1.10	A	A
WN	1	80.5000	1.7000	1.06	A	A
WN	3	78.4000	1.9000	1.03	A	A
WN	2	81.5000	1.9000	1.07	A	A
WO	1	79.0000	5.3000	1.04	A	A
WO	2	80.0000	10.8000	1.05	A	A
WP	1	75.4000	1.7000	0.99		A
WV	1	76.6000	1.0500	1.01	A	A
YA	1	77.7600	0.9300	1.02	A	A

Total Number Reported: 130

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: FE55

EML Value: 53.0000
EML Error: 2.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	39.1000	8.3000	0.74		A
BE	1	50.5000	1.3800	0.95	A	A
BL	1	44.5000	9.6000	0.84	A	A
BU	1	48.0000	4.0000	0.91	A	A
BX	1	49.6000	8.5000	0.94	A	A
CL	1	58.3000	17.2000	1.10	A	A
EG	1	33.3000	1.9000	0.63	A	A
GC	1	45.7000		0.86	A	A
GE	1	45.8000	10.6000	0.86	A	A
GP	1	44.0000	4.0000	0.83	A	A
HT	1	163.0000	15.0000	3.08	N	N
KA	1	49.6300	3.8200	0.94	A	A
SI	1	56.0000	4.0000	1.06		A
TE	1	48.6000	6.8000	0.92	A	A
TI	1	45.0000	14.0000	0.85		A
TN	1	51.2300	2.5400	0.97		A
TO	1	50.0600	17.8700	0.94	A	A
WE	1	124.0000	32.0000	2.34		N
YA	1	48.7200	4.7700	0.92	A	A

Total Number Reported: 19

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS ALPHA

EML Value:1580.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	1336.0000	56.0000	0.85	W	A
AI	3	1426.0000		0.90	A	A
AI	2	1266.0000		0.80	A	W
AI	1	1586.0000		1.00	A	A
AM	1	1471.3199	16.9200	0.93	W	A
AR	1	1526.0000	46.1000	0.97	A	A
AS	1	1254.7440	53.7170	0.79	A	W
AT	1	1252.5000	95.9250	0.79	A	W
AU	1	1473.0000	457.0000	0.93	A	A
BC	1	1269.0000	51.0000	0.80	A	W
BE	1	1367.0000	114.0000	0.87	A	A
BL	1	1306.0000	38.0000	0.83	A	W
BN	1	1481.6000	79.7000	0.94	A	A
BN	3	1613.3000	83.1000	1.02	A	A
BN	2	1612.2000	83.1000	1.02	A	A
BQ	1	1300.0000	33.0000	0.82	A	W
BU	1	1390.0000	80.0000	0.88	A	A
BU	2	1430.0000	100.0000	0.90	A	A
BX	1	1520.0000	58.0000	0.96	A	A
CA	1	811.0000	81.0000	0.51	N	N
CH	1	1898.0000	35.0000	1.20	A	W
CL	1	213.0000	21.3000	0.14		N
CM	1	880.5000	21.3000	0.56		N
DC	1	1332.4000	440.0000	0.84		A
DH	1	1397.0000	19.0000	0.88	N	A
EG	1	1364.0000	74.0000	0.86	W	A
FG	1	1565.0000	59.0000	0.99	A	A
FL	1	1655.4000	8.3000	1.05	A	A
GE	1	1790.0000	43.9000	1.13	A	A
GP	1	1400.0000	100.0000	0.89	A	A
GS	1	2014.7800	80.5800	1.27		W
GT	1	1500.0000	74.0000	0.95	A	A
HC	1	1495.0000	60.0000	0.95	A	A
IE	1	29.3500	0.3300	0.02	A	N
IL	1	1199.8000	13.9000	0.76	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS ALPHA

EML Value:1580.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IS	1	1770.0000	138.0000	1.12	W	A
IT	1	1440.0000	147.0000	0.91	W	A
KA	1	1536.7000	138.5000	0.97	A	A
LA	3	1676.0000	346.0000	1.06	W	A
LA	2	1713.0000	353.0000	1.08	W	A
LA	1	1772.0000	364.0000	1.12	W	A
LB	1	1386.0000	95.0000	0.88	N	A
LV	1	2040.0000	220.0000	1.29	A	W
LW	1	1414.0000	44.0000	0.89		A
MH	1	1866.8000	14.3000	1.18	W	W
MJ	1	1948.0000	55.0000	1.23		W
NJ	1	1510.0000	80.0000	0.96	A	A
NJ	2	1510.0000	80.0000	0.96	A	A
NJ	3	1580.0000	80.0000	1.00	A	A
NQ	1	58.6000	3.6000	0.04	A	N
NS	1	1607.1080	22.0180	1.02	A	A
NZ	2	1130.0000	40.0000	0.71		W
NZ	1	1160.0000	40.0000	0.73		W
OB	1	2340.0000	190.0000	1.48	N	N
OC	1	1200.0000	60.0000	0.76	A	W
OH	1	1662.0000		1.05		A
OT	1	1375.0000	100.0000	0.87	A	A
OU	1	1374.0000	188.0000	0.87		A
RE	1	1460.0000	73.0000	0.92	A	A
RG	1	1482.5000	54.1000	0.94	A	A
RL	1	855.0000	65.0000	0.54	A	N
SA	1	1453.0000	398.0000	0.92		A
SA	2	1519.0000	147.0000	0.96		A
SN	1	1616.0000	88.2400	1.02		A
SR	1	1500.0000	152.0000	0.95	A	A
TE	1	1543.0000	44.0000	0.98	A	A
TI	1	1000.0000	100.0000	0.63		W
TM	1	1703.0000	191.0000	1.08	N	A
TN	1	1062.0000	11.0000	0.67		W
TO	1	1888.3700	42.1800	1.20	A	W
TP	1	1163.9500	47.1640	0.74	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS ALPHA

EML Value:1580.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TQ	1	1100.0000	88.0000	0.70	W	W
TX	1	1404.0000	35.0000	0.89	A	A
UC	1	1473.9700	79.3700	0.93	A	A
UP	1	1610.0000	111.0000	1.02	A	A
UY	1	1584.0000	70.0000	1.00	A	A
WA	1	1480.0000	70.0000	0.94	W	A
WC	1	1390.0000	143.0000	0.88	A	A
WO	2	893.0000	67.0000	0.56	W	N
WO	1	885.0000	40.0000	0.56	W	N
WT	1	567.0000	52.0000	0.36		N
WV	1	1531.0000	93.5000	0.97	W	A
YA	1	1556.1000	27.7500	0.99		A

Total Number Reported: 83

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS BETA

EML Value: 740.0000
EML Error: 40.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	999.0000	37.0000	1.35	A	W
AI	3	883.0000		1.19	A	A
AI	1	720.0000		0.97	A	A
AI	2	1046.0000		1.41	A	W
AM	1	1282.2300	14.1100	1.73	A	N
AR	1	903.1000	26.3400	1.22	A	A
AS	1	619.3430	44.3590	0.84	A	A
AT	1	932.0000	70.4500	1.26	A	A
AU	1	959.0000	304.0000	1.30	A	A
BC	1	723.0000	28.0000	0.98	A	A
BE	1	825.0000	65.0000	1.12	A	A
BL	1	622.0000	33.0000	0.84	A	A
BN	3	700.3000	48.3000	0.95	A	A
BN	1	716.7000	48.8000	0.97	A	A
BN	2	690.6000	48.0000	0.93	A	A
BQ	1	970.0000	22.0000	1.31	A	A
BU	1	840.0000	80.0000	1.13	A	A
BX	1	836.0000	31.0000	1.13	A	A
CA	1	588.0000	59.0000	0.80	N	A
CD	1	1000.0000	100.0000	1.35	A	W
CH	1	850.0000	16.0000	1.15	A	A
CL	1	56.0000	3.5000	0.08		N
CM	1	934.8000	21.6000	1.26		A
DC	1	543.9000	210.0000	0.74		A
DH	1	949.0000	8.8000	1.28	N	A
EG	1	1090.0000	70.0000	1.47	A	W
FG	1	754.8000	55.5000	1.02	A	A
FL	1	1008.4000	4.5000	1.36	A	W
GE	1	969.0000	24.7000	1.31	A	A
GP	1	910.0000	90.0000	1.23	A	A
GS	1	1071.2500	42.2500	1.45		W
GT	1	970.0000	74.0000	1.31	A	A
HC	1	951.0000	38.0000	1.28	A	A
IE	1	12.8000	0.1100	0.02	A	N
IL	1	610.2000	8.9000	0.82	N	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq/L
Radionuclide: GROSS BETA

EML Value: 740.0000
EML Error: 40.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IS	1	989.0000	23.0000	1.34	A	W
IT	1	716.0000	52.0000	0.97	W	A
KA	1	876.0000	100.0000	1.18	A	A
LA	3	1021.0000	223.0000	1.38	A	W
LA	2	1006.0000	221.0000	1.36	A	W
LA	1	1043.0000	227.0000	1.41	A	W
LB	1	972.0000	31.0000	1.31	W	A
LV	1	901.0000	65.0000	1.22	W	A
LW	1	882.0000	21.0000	1.19		A
MH	1	1006.6000	6.6000	1.36	A	W
MJ	1	995.0000	25.0000	1.35		W
NJ	3	1110.0000	60.0000	1.50	A	W
NJ	1	1100.0000	60.0000	1.49	A	W
NJ	2	1060.0000	60.0000	1.43	A	W
NP	1	847.5000	12.1000	1.14	A	A
NQ	1	35.5000	4.4000	0.05	A	N
NS	1	953.9440	12.2680	1.29	A	A
NZ	2	850.0000	30.0000	1.15		A
NZ	1	840.0000	30.0000	1.13		A
OB	1	984.0000	105.0000	1.33	A	W
OC	1	780.0000	40.0000	1.05	A	A
OH	1	972.0000		1.31		A
OT	1	905.0000	35.0000	1.22	A	A
OU	1	983.0000	161.0000	1.33		W
RE	1	943.0000	47.0000	1.27	A	A
RG	1	734.6000	27.5000	0.99	A	A
RL	1	662.0000	34.0000	0.89	A	A
SA	2	907.0000	187.0000	1.23		A
SA	1	990.0000	376.0000	1.34		W
SN	1	974.0000	102.0000	1.32		A
SR	1	863.0000	100.0000	1.17	A	A
TE	1	1053.0000	31.0000	1.42	A	W
TI	1	1600.0000	100.0000	2.16		N
TM	1	605.0000	48.0000	0.82	A	A
TN	1	809.1000	8.1000	1.09		A
TO	1	1020.6600	23.1900	1.38	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq/L
Radionuclide: GROSS BETA

EML Value: 740.0000
EML Error: 40.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TP	1	914.3980	63.3000	1.24	A	A
TQ	1	757.0000	48.0000	1.02	A	A
TX	1	27.0000	16.0000	0.04	A	N
UC	1	738.8000	35.3800	1.00	A	A
UP	1	1038.0000	74.4000	1.40	A	W
UY	1	1062.0000	43.0000	1.43	A	W
WA	1	989.0000	44.0000	1.34	A	W
WC	1	896.0000	91.4000	1.21	N	A
WO	1	887.0000	27.0000	1.20	A	A
WO	2	822.0000	44.0000	1.11	A	A
WT	1	763.0000	54.0000	1.03		A
WV	1	1010.0000	56.9000	1.37	A	W
YA	1	693.1300	15.3000	0.94		A

Total Number Reported: 84

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: H3

EML Value: 80.7000
EML Error: 3.7000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	78.0000	11.0000	0.97	A	A
AI	3	204.7000		2.54	N	N
AI	1	184.9600		2.29	N	N
AI	2	224.4400		2.78	N	N
AM	1	140.7300	1.0200	1.74	N	W
AN	1	82.4000	1.8000	1.02	A	A
AR	1	47.3000	20.7000	0.59	N	N
AR	3	43.9000	19.6000	0.54	N	N
AR	2	44.1000	19.6000	0.55	N	N
AS	1	85.2320	5.0060	1.06	A	A
AT	1	81.9780	5.7620	1.02		A
AU	1	72.9000	12.1000	0.90	A	A
BE	1	97.7000	11.0000	1.21	A	A
BL	1	91.3000	8.5000	1.13	W	A
BN	3	72.1000	16.6000	0.89	W	A
BN	2	92.0000	18.6000	1.14	W	A
BN	1	69.2000	16.4000	0.86	W	A
BU	1	77.0500	1.4600	0.95	A	A
BX	1	127.9000	11.7000	1.59	A	W
CA	1	71.1000	7.1000	0.88	W	A
CD	1	70.0000	10.0000	0.87	A	A
CH	1	71.2000	3.8000	0.88	A	A
CL	1	74.3000	23.4000	0.92	N	A
CM	1	71.7000	3.6000	0.89		A
EG	1	76.4000	5.3000	0.95		A
EP	1	79.3900	5.9900	0.98	A	A
FG	1	161.3000	10.0000	2.00	W	N
FL	1	92.7400	3.2400	1.15	A	A
FN	1	84.1000	9.1000	1.04	A	A
GC	1	87.3000		1.08	A	A
GE	1	84.2000	9.3000	1.04	A	A
GP	1	150.0000	10.0000	1.86	A	N
GT	1	75.0000	7.0000	0.93	A	A
HC	1	82.3000	8.2000	1.02	A	A
IN	1	76.3000	26.0000	0.94		A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: H3

EML Value: 80.7000
EML Error: 3.7000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IS	1	65.6000	12.3000	0.81	A	W
IT	1	76.3000	2.7700	0.94	A	A
KA	1	90.6700	17.3200	1.12	A	A
LA	2	76.6000	27.4000	0.95	A	A
LA	3	80.0000	27.4000	0.99	A	A
LA	1	68.1000	26.6000	0.84	A	A
LB	1	90.0000	6.0000	1.12		A
LL	1	98.4000	5.3000	1.22	A	A
LN	1	433.0000	48.0000	5.37		N
LV	1	80.0000	6.6000	0.99	W	A
LW	1	84.0000	11.0000	1.04	A	A
ME	3	97.3000	4.4000	1.21	W	A
ME	1	98.2000	4.6000	1.22	W	A
ME	2	96.7000	4.5400	1.20	W	A
MH	1	83.8800	5.4000	1.04	W	A
MJ	1	85.4800	1.9100	1.06		A
ML	1	77.7900	4.2100	0.96	A	A
NA	1	87.3000	3.1000	1.08	A	A
NJ	2	93.0000	7.0000	1.15	A	A
NJ	3	94.0000	7.0000	1.16	A	A
NJ	1	100.0000	7.0000	1.24	A	W
NP	1	155.4000	40.7000	1.93	A	N
NS	1	79.7640	6.3360	0.99		A
OC	1	77.0000	4.0000	0.95		A
OD	1	57.4000	1.7200	0.71	W	W
OH	1	62.0000		0.77		W
OK	1	80.0000	9.7000	0.99	W	A
OT	1	99.0000	9.0000	1.23	A	W
OU	1	115.0000	6.5200	1.42		W
PR	1	78.9400	1.0700	0.98	A	A
RC	1	78.8000	8.0000	0.98	A	A
RE	1	80.0000	22.0000	0.99	A	A
RI	1	183.0000	15.6000	2.27	A	N
SA	1	98.0000	15.0000	1.21	A	A
SB	1	92.0000	8.4000	1.14	A	A
SL	1	76.0000	4.0000	0.94	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: H3

EML Value: 80.7000
EML Error: 3.7000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SR	1	86.1000	10.1000	1.07	A	A
ST	1	77.5300	5.7000	0.96	A	A
SY	1	128.0000	10.0000	1.59		W
TE	1	136.0000	25.0000	1.68	W	W
TI	1	74.0000	40.0000	0.92		A
TN	1	82.7800	10.5900	1.03		A
TO	1	103.7000	21.9200	1.28	A	W
TP	1	111.9100	4.9200	1.39	W	W
TQ	1	97.9000	3.3000	1.21	A	A
TX	1	91.3000	6.4000	1.13	A	A
UP	1	83.8000	22.2000	1.04	A	A
UY	1	78.0000	9.0000	0.97	A	A
WA	1	81.0000	4.0000	1.00	A	A
WC	1	90.0000	19.7000	1.12	A	A
WE	1	79.2000	11.0000	0.98	W	A
WE	2	93.9000	11.0000	1.16	W	A
WO	1	77.7000	7.3000	0.96	A	A
WO	2	79.5000	7.3000	0.99	A	A
WP	1	93.0000	7.4000	1.15		A
WV	1	83.3000	4.6700	1.03	A	A
YA	1	95.5800	5.1800	1.18	A	A

Total Number Reported: 92

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: NI63

EML Value: 114.0000
EML Error: 10.0000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
AG	1	113.0000	16.1000	0.99	A	A
BC	1	75.8000	12.6000	0.67		A
BE	1	109.8200	2.5200	0.96	A	A
BL	1	66.5000	6.4000	0.58	A	A
BX	1	99.5000	16.6000	0.87	A	A
CL	1	134.0000	33.2000	1.17	A	A
EG	1	110.0000	6.0000	0.96	A	A
GE	1	115.0000	2.6500	1.01	A	A
IT	1	120.0000	5.0000	1.05	A	A
TI	1	110.0000	10.0000	0.96		A
TN	1	110.9800	2.3000	0.97		A
TO	1	102.1100	6.4100	0.90	A	A
WA	1	238.0000	25.0000	2.09	A	N
WE	1	121.0000	10.0000	1.06		A
YA	1	124.9400	10.2400	1.10	A	A

Total Number Reported: 15

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU238

EML Value: 0.7900
EML Error: 0.0800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.8300	0.1200	1.05	A	A
AI	3	8.2100	0.3510	10.39	N	N
AI	1	9.0400	0.4660	11.44	N	N
AI	2	7.3700	0.3510	9.33	N	N
AM	1	0.1900	0.0300	0.24	A	N
AN	1	0.8000	0.0400	1.01	A	A
AR	3	0.9090	0.2850	1.15	A	W
AR	2	0.8130	0.1830	1.03	A	A
AR	1	0.7260	0.1620	0.92	A	A
AU	1	0.9310	0.1520	1.18	N	W
BA	1	0.6700	0.2200	0.85	N	W
BE	1	0.8000	0.0800	1.01	A	A
BL	1	0.9060	0.0680	1.15	A	W
BM	1	0.8290	0.0980	1.05	W	A
BP	1	0.8000	0.0800	1.01		A
BU	1	0.7600	0.0700	0.96	A	A
BX	1	0.8700	0.0900	1.10	A	A
CH	1	0.8870	0.0580	1.12	A	W
CL	1	0.7500	0.2000	0.95	A	A
CW	1	0.8200	0.0160	1.04	A	A
EG	1	0.8000	0.0320	1.01	A	A
FG	1	0.7785	0.0100	0.99		A
GA	1	0.7500	0.1200	0.95	A	A
GE	1	0.8570	0.1440	1.09	A	A
GP	1	0.8000	0.0800	1.01	A	A
GT	1	0.8200	0.2000	1.04	A	A
IE	1	0.1500	0.0820	0.19	A	N
IN	1	0.9300	0.0940	1.18	A	W
IS	1	0.8170	0.0450	1.03	W	A
IT	1	0.7870	0.0740	1.00	A	A
LA	1	0.7880	0.0220	1.00	A	A
LA	2	0.7660	0.0190	0.97	A	A
LA	3	0.7940	0.0197	1.00	A	A
LL	1	0.8000	0.1110	1.01	A	A
ML	1	0.7400	0.0500	0.94	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU238

EML Value: 0.7900
EML Error: 0.0800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NA	1	0.8100	0.0800	1.02	A	A
NF	1	0.8380	0.0310	1.06		A
NL	1	0.8160	0.1900	1.03	A	A
NQ	1	0.8870	0.0590	1.12	W	W
NZ	2	0.7700	0.0400	0.98		A
NZ	1	0.8400	0.0400	1.06		A
OB	1	0.7990	0.1450	1.01		A
OD	1	0.8280	0.0880	1.05	W	A
OT	1	0.8000	0.0500	1.01	A	A
OU	1	0.8370	0.1070	1.06		A
RE	1	0.7770	0.0890	0.98	A	A
RI	1	0.8330	0.0425	1.05	N	A
SN	1	0.8210	0.1340	1.04	A	A
SR	1	0.8790	0.3350	1.11	W	W
SY	1	0.9400	0.0800	1.19		W
TE	1	0.7800	0.0500	0.99	A	A
TI	1	2.1000	0.4000	2.66		N
TM	1	0.8200	0.1300	1.04	A	A
TN	1	0.8340	0.0620	1.06		A
TO	1	0.8970	0.1840	1.13	A	W
TX	1	0.8380	0.0290	1.06	A	A
UP	1	0.8560	0.1220	1.08	W	A
UY	1	0.8100	0.0860	1.02	A	A
WA	1	0.7500	0.1000	0.95	A	A
WC	1	0.8330	0.2590	1.05	A	A
YA	1	0.8900	0.0400	1.13	A	W

Total Number Reported: 61

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU239

EML Value: 0.8700
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.9300	0.1300	1.07	A	A
AI	1	9.7700	0.4960	11.23	N	N
AI	2	8.7900	0.4030	10.10	N	N
AI	3	9.2800	0.4030	10.67	N	N
AM	1	0.2000	0.0300	0.23	A	N
AN	1	0.8900	0.0300	1.02	A	A
AR	1	0.6690	0.1540	0.77	W	N
AR	3	0.9660	0.2980	1.11	W	A
AR	2	0.8610	0.1900	0.99	W	A
AU	1	0.9250	0.1460	1.06	N	A
BA	1	0.8340	0.2600	0.96	N	A
BE	1	0.8900	0.0900	1.02	A	A
BL	1	0.8770	0.0660	1.01	A	A
BM	1	0.9060	0.1100	1.04	A	A
BP	1	0.8700	0.0800	1.00		A
BU	1	0.8800	0.0500	1.01	A	A
BX	1	0.9600	0.1000	1.10	A	A
CH	1	0.9610	0.0650	1.11	A	A
CL	1	0.9700	0.2000	1.12	A	A
CW	1	0.8950	0.0170	1.03	A	A
EG	1	0.8870	0.0350	1.02	A	A
FG	1	0.9307	0.0100	1.07		A
GA	1	0.9100	0.2100	1.05	A	A
GE	1	0.9340	0.1550	1.07	A	A
GP	1	0.8900	0.0900	1.02	A	A
GT	1	0.8800	0.2000	1.01	A	A
IE	1	1.3880	0.3300	1.60	A	N
IN	1	0.8300	0.0890	0.95	A	A
IS	1	0.9110	0.0620	1.05	A	A
IT	1	0.9060	0.0830	1.04	A	A
KA	1	0.9600	0.0200	1.10	A	A
LA	3	0.8450	0.0210	0.97	A	A
LA	2	0.8300	0.0200	0.95	A	A
LA	1	0.8660	0.0240	1.00	A	A
LL	1	0.9340	0.1210	1.07	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU239

EML Value: 0.8700
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ML	1	0.8300	0.0600	0.95	A	A
NA	1	0.8700	0.0800	1.00	A	A
NF	1	0.8700	0.0320	1.00		A
NL	1	0.9080	0.2100	1.04	A	A
NQ	1	1.0220	0.0670	1.17	W	W
NZ	2	0.9100	0.0500	1.05		A
NZ	1	0.8600	0.0400	0.99		A
OB	1	0.9210	0.1640	1.06		A
OD	1	0.9010	0.0950	1.04	A	A
OT	1	0.9200	0.0600	1.06	A	A
OU	1	0.7120	0.0990	0.82		W
RE	1	0.8560	0.0960	0.98	A	A
RI	1	0.8900	0.0445	1.02	N	A
SN	1	0.9310	0.1470	1.07	A	A
SR	1	0.9620	0.0363	1.11	A	A
SY	1	1.0500	0.0800	1.21		W
TE	1	0.8400	0.0700	0.97	A	A
TI	1	3.6000	0.6000	4.14		N
TM	1	0.8300	0.1300	0.95	A	A
TN	1	0.9150	0.0650	1.05		A
TO	1	1.0200	0.2030	1.17	A	W
TX	1	0.9110	0.0270	1.05	A	A
UC	1	0.9000	0.0600	1.03		A
UP	1	0.9560	0.1330	1.10	A	A
UY	1	0.9000	0.0890	1.03	A	A
WA	1	0.9700	0.1000	1.12	A	A
WC	1	0.9220	0.2890	1.06	A	A
YA	1	0.9500	0.0420	1.09	A	A

Total Number Reported: 63

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: SR90

EML Value: 1.7200
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	1.7100	0.3100	0.99	W	A
AI	1	0.4430		0.26		N
AI	2	0.4680		0.27		N
AI	3	0.4555		0.26		N
AM	1	0.3500	0.0200	0.20	N	N
AN	1	1.6400	0.0400	0.95	A	A
AR	2	1.5300	0.4770	0.89	A	A
AR	1	2.0800	0.5320	1.21	A	A
AR	3	1.7700	0.4740	1.03	A	A
AS	1	1.4500	0.0920	0.84	W	W
AU	1	1.6400	0.1900	0.95	W	A
BC	1	1.3100	0.1400	0.76	W	W
BE	1	1.6100	0.2300	0.94	A	A
BL	1	1.2900	0.6800	0.75	A	N
BM	1	1.5700	0.2000	0.91	W	A
BN	1	1.2000	0.1000	0.70	N	N
BN	2	1.2000	0.1000	0.70	N	N
BN	3	1.3000	0.1000	0.76	N	W
BX	1	2.0300	0.2100	1.18	W	A
CB	1	1.9400	0.2600	1.13	A	A
CB	2	1.6700	0.2500	0.97	A	A
CH	1	2.2400	0.4000	1.30	W	W
CL	1	1.6600	0.5000	0.96	A	A
EG	1	1.5600	0.1900	0.91	A	A
EM	1	2.5710		1.50	A	W
FG	1	2.6600	0.0300	1.55		N
FL	1	1.3400	0.0200	0.78	N	W
GA	1	1.5000	0.1200	0.87	N	W
GC	1	1.7200		1.00	W	A
GE	1	1.7700	0.0660	1.03	W	A
GP	1	1.5000	0.6000	0.87	N	W
GT	1	1.5000	0.3000	0.87	N	W
ID	1	1.4700	0.1450	0.86	A	W
IN	1	1.6000	0.2500	0.93	A	A
IS	1	2.3600	0.2400	1.37	A	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: SR90

EML Value: 1.7200
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IT	1	1.5600	0.2500	0.91	A	A
KA	1	1.6300	0.3200	0.95	W	A
LA	2	1.7800	0.2100	1.03	A	A
LA	3	1.9500	0.2200	1.13	A	A
LA	1	1.6500	0.1800	0.96	A	A
MH	1	1.4670	0.2070	0.85	A	W
MJ	1	1.5000	0.0960	0.87		W
NA	1	2.6000	0.6000	1.51	N	N
NJ	1	1.5000	0.2000	0.87	A	W
NJ	2	1.4000	0.2000	0.81	A	W
NJ	3	1.7000	0.2000	0.99	A	A
NS	1	1.5300	0.0900	0.89	N	A
NZ	2	3.1400	0.1100	1.83		N
NZ	1	3.0400	0.1100	1.77		N
OC	1	2.0000	0.2000	1.16	N	A
OD	1	1.7800	0.2700	1.03	A	A
OH	1	1.7000		0.99		A
OT	1	1.5000	0.2000	0.87	A	W
OU	1	3.8400	0.6820	2.23		N
RE	1	1.6200	0.1900	0.94	W	A
RI	1	1.7500	0.1530	1.02	A	A
SR	1	1.6000	0.6000	0.93	N	A
TE	1	2.2000	1.0000	1.28	W	W
TI	1	1.6000	0.4000	0.93		A
TM	1	1.3300	0.3400	0.77	W	W
TN	1	1.7100	0.1100	0.99	A	A
TO	1	1.6700	0.2400	0.97	A	A
TP	1	2.3057	0.0774	1.34	A	W
TQ	1	1.4900	0.0630	0.87	W	W
TW	1	1.7000	0.0600	0.99	W	A
TX	1	1.8800	0.5400	1.09	A	A
UP	1	1.5200	0.2810	0.88	W	W
UY	1	1.6000	0.1800	0.93	W	A
WA	1	1.7000	0.4000	0.99	A	A
WC	1	2.2800	0.4150	1.33	W	W
WE	2	2.2500	0.7600	1.31	N	W

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: SR90

EML Value: 1.7200
EML Error: 0.1000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
WE	1	1.4700	0.7200	0.86	N	W
WO	1	1.1100	0.2500	0.64	A	N
WO	2	1.2400	0.2700	0.72	A	N
WV	1	1.4800	0.1640	0.86	A	W
YA	1	2.1200	0.2400	1.23	A	W

Total Number Reported: 76

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U234

EML Value: 0.3700
EML Error: 0.0200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.4690	0.0830	1.27	A	W
AM	1	0.1000	0.0200	0.27	A	N
AN	1	0.3900	0.0100	1.05	A	A
AU	1	0.3470	0.0840	0.94	A	A
BA	1	0.3920	0.0800	1.06	A	A
BC	1	0.5000	0.0700	1.35	W	W
BE	1	0.3700	0.0400	1.00	A	A
BL	1	0.4510	0.0090	1.22	A	A
BM	1	0.4100	0.0660	1.11	A	A
BU	1	0.4200	0.0300	1.13	A	A
BX	1	0.3300	0.0700	0.89	A	W
CF	1	0.5210	0.0600	1.41		N
CF	3	0.5270	0.0500	1.42		N
CF	2	0.5140	0.0400	1.39		W
CH	1	0.3780	0.0310	1.02	A	A
CL	1	0.4600	0.1000	1.24	A	W
CW	1	0.3950	0.0080	1.07	A	A
EG	1	0.4550	0.0460	1.23	A	W
FG	1	0.3110	0.0100	0.84	N	W
GA	1	0.4100	0.0310	1.11	A	A
GE	1	0.3860	0.0630	1.04	A	A
GP	1	0.4000	0.0500	1.08	A	A
HT	1	0.2270	0.0200	0.61	W	N
IE	1	0.3730	0.0730	1.01	A	A
IS	1	0.3390	0.0030	0.92		A
IT	1	0.3350	0.0380	0.90	A	A
MH	1	0.3840	0.0540	1.04	A	A
ML	1	0.3800	0.0300	1.03	A	A
NA	1	0.4250	0.0500	1.15	W	A
NF	1	0.4340	0.0210	1.17		A
NJ	1	0.4400	0.0300	1.19	A	A
NJ	2	0.4000	0.0300	1.08	A	A
NJ	3	0.4400	0.0300	1.19	A	A
NL	1	0.3890	0.0910	1.05	A	A
NQ	1	0.4050	0.0260	1.10	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U234

EML Value: 0.3700
EML Error: 0.0200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OB	1	0.2420	0.1030	0.65	A	N
OD	1	0.3840	0.0350	1.04	A	A
OU	1	0.3320	0.0330	0.90	N	W
RE	1	0.4170	0.0580	1.13	A	A
SR	1	0.3620	0.0187	0.98	A	A
TE	1	0.5000	0.0900	1.35	W	W
TM	1	0.2800	0.0500	0.76		N
TN	1	0.3750	0.0310	1.01		A
TO	1	0.5300	0.1300	1.43	A	N
TW	1	0.3860	0.0090	1.04	W	A
TX	1	0.3960	0.0160	1.07	A	A
UP	1	0.4080	0.0659	1.10		A
UY	1	0.3800	0.0048	1.03	A	A
WA	1	0.3800	0.0800	1.03	A	A
WC	1	0.4070	0.1300	1.10	N	A
YA	1	0.4200	0.0260	1.13	A	A

Total Number Reported: 51

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U238

EML Value: 0.3600
EML Error: 0.0200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.3770	0.0710	1.05	A	A
AM	1	0.1300	0.0300	0.36	N	N
AN	1	0.3800	0.0100	1.06	A	A
AU	1	0.4330	0.1010	1.20	A	W
BA	1	0.4420	0.0900	1.23	A	W
BC	1	0.4900	0.0700	1.36	N	N
BE	1	0.3600	0.0400	1.00	A	A
BL	1	0.4510	0.0090	1.25	A	W
BM	1	0.4130	0.0660	1.15	A	A
BU	1	0.3900	0.0300	1.08	A	A
BX	1	0.4200	0.0600	1.17	N	A
CF	3	0.5100	0.0500	1.42		N
CF	1	0.4310	0.0500	1.20		W
CF	2	0.4630	0.0400	1.29		N
CH	1	0.3610	0.0300	1.00	A	A
CL	1	0.4400	0.1000	1.22	A	W
CW	1	0.4040	0.0080	1.12	A	A
EG	1	0.4410	0.0460	1.23	W	W
FG	1	0.3460	0.0100	0.96	A	A
GA	1	0.3900	0.0530	1.08	W	A
GE	1	0.3900	0.0630	1.08	A	A
GP	1	0.4100	0.0600	1.14	A	A
GT	1	0.3900	0.1000	1.08	A	A
HT	1	0.2210	0.0200	0.61	A	N
IE	1	0.3830	0.0750	1.06	A	A
IS	1	0.3660	0.0390	1.02		A
IT	1	0.3950	0.0430	1.10	N	A
MH	1	0.3770	0.0530	1.05	A	A
ML	1	0.3700	0.0300	1.03	A	A
NA	1	0.4070	0.0470	1.13	A	A
NF	1	0.4150	0.0200	1.15		A
NJ	3	0.4100	0.0300	1.14	A	A
NJ	1	0.4000	0.0300	1.11	A	A
NJ	2	0.3700	0.0300	1.03	A	A
NL	1	0.3970	0.0920	1.10	A	A

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U238

EML Value: 0.3600
EML Error: 0.0200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NQ	1	0.4000	0.0260	1.11	A	A
OB	1	0.3220	0.1030	0.89	A	W
OD	1	0.3760	0.0340	1.04	A	A
OU	1	0.3450	0.0330	0.96	N	A
RE	1	0.4280	0.0570	1.19	W	W
SI	1	8.0000	4.0000	22.22		N
SR	1	0.3770	0.0187	1.05	A	A
TE	1	0.4600	0.0900	1.28	W	N
TM	1	0.3000	0.0500	0.83		W
TN	1	0.3720	0.0310	1.03		A
TO	1	0.4400	0.1100	1.22	A	W
TW	1	0.3830	0.0090	1.06	W	A
TX	1	0.3900	0.0180	1.08	A	A
UP	1	0.4080	0.0658	1.13	W	A
UY	1	0.3900	0.0048	1.08	A	A
WA	1	0.3500	0.0700	0.97	A	A
WC	1	0.3590	0.1190	1.00	N	A
YA	1	0.4120	0.0260	1.14	W	A

Total Number Reported: 53

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

QAP 51 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: UG/G U

EML Value: 0.0300
EML Error: 0.0100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AR	1	0.0325	0.0039	1.08		A
AR	2	0.0323	0.0038	1.08		A
AR	3	0.0319	0.0038	1.06		A
BE	1	0.0307		1.02		A
BL	1	24.4000	0.5000	** **		N
BP	1	0.0280	0.0030	0.93	A	A
BQ	1	0.0320	0.0010	1.07	A	A
BU	1	0.0400	0.0050	1.33		N
CA	1	0.0450	0.0050	1.50		N
CH	1	0.0278	0.0028	0.93		A
GA	1	0.0310	0.0040	1.03		A
GE	1	0.0320	0.0010	1.07	N	A
HT	1	0.0179	0.0020	0.60	A	N
ID	1	0.0330	0.0020	1.10		A
IS	1	0.0300	0.0010	1.00		A
IT	1	0.0335	0.0040	1.12	A	A
KA	1	0.0300	0.0020	1.00	A	A
NL	1	0.0322	0.0075	1.07		A
OU	1	0.0320	0.0000	1.07	A	A
RI	1	0.0280	0.0048	0.93		A
SA	1	0.0310	0.0020	1.03		A
SY	1	0.0300	0.0050	1.00		A
TI	1	0.0290	0.0040	0.97	A	A
TM	1	0.0330	0.0004	1.10	A	A
TN	1	0.0226	0.0028	0.75	A	N
TO	1	0.0290	0.0020	0.97	A	A
UP	1	0.0310	0.0030	1.03	A	A
YA	1	0.0262	0.0007	0.87	A	W

Total Number Reported: 28

Values for elemental Uranium are reported in µg/filter, g or mL. pCi/g or mL = Bq x 0.027

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

If the evaluation system is not appropriate for the types of analyses performed in your lab, apply site specific evaluation.

Participating Laboratories in EML QAP51**Laboratories Reporting Data**

Code	Laboratory Name
AC	Analytical Chemistry Laboratory, Argonne National Lab
AG	Paragon Analytics, Inc, Fort Collins, CO
AI	Nuclear Technology Services, Inc., Roswell, GA
AM	American Radiation Services, Inc., Baton Rouge
AN	Argonne National Laboratory
AR	Accu-Labs Research Inc., Golden, CO
AS	USACHPPM, Aberdeen Proving Ground, MD
AT	ATL International inc., Germantown, MD
AU	ORISE RSAT/ESSAP, Oak Ridge
BA	Bettis Atomic Power Lab, West Mifflin, PA
BC	BWX Technologies, Inc, Naval Nuclear Fuel Division, Lynchburg, VA
BE	RUST Geotech, Grand Junction, CO
BL	Barringer Laboratories Inc., Golden, CO
BM	Battelle Memorial Institute, Columbus, OH
BN	Brookhaven National Laboratory, Upton, NY
BP	Battelle Pacific Northwest National Laboratory
BQ	Becquerel Laboratories Inc., Mississauga, Ontario, Canada
BU	Autoridad Regulatoria, Buenos Aires, Argentina
BX	B&W Nuclear Envir. Services, Lynchburg, VA
CA	Atomic Energy Control Board, Ottawa, Canada
CB	Radiation Protection Bureau, Ontario, Canada
CD	Gentilly-2 Nuclear Power Plant, Quebec Canada
CF	Freshwater Institute Radiochemistry Winnipeg, Manitoba, Canada
CH	California State Dept. Health Serv., Sanitation & Radiation Laboratory
CL	Core Laboratories, Casper, WY
CM	Metropolitan Water Reclamation District of Greater Chicago
CN	China Institute for Radiation Protection
CR	Laboratorio de Fisica Nuclear Aplicada, Costa Rica
CS	Rocketdyne Propulsion & Power, Canoga Park, CA
CW	Carlsbad Environmental Monitoring Research Center, NM
DC	Datachem Laboratories, Salt Lake City
DH	Duke Engineering Services Hanford
EC	Envirocare of Utah
EG	LMITCO/INEL, Scoville
EM	3M, Empore Disks, St. Paul, MN
EP	US EPA, Las Vegas
FE	Fernald WPRAP Field Office, Ohio
FG	FGL Environmental, Santa Paula, CA
FL	Florida Dept of Health & Rehab. Serv., Orlando
FM	Florida Mobile Emergency Radiological Laboratory, Orlando
FN	Fermi Lab, Batavia, IL
FR	CEA/DAM - SPR/B3
FS	Florida State University, Tallahassee
GA	Lockheed Martin, Pikton, OH
GC	Georgia Power Company Environmental Lab
GD	GTS Duratek, Oak Ridge, TN
GE	General Engineering Labs, Charleston, SC
GP	GPU Nuclear, Inc., Harrisburg, PA
GS	USGS/NWQL, Arvada, CO
GT	Georgia Institute of Technology
HC	Lawrence Livermore Laboratory, California

Participating Laboratories in EML QAP51**Laboratories Reporting Data**

Code	Laboratory Name
HT	Technical University, Budapest, Hungary
HU	Water Resources Research Centre (VITUKI), Hungary
ID	Institute of Radiation Protection and Dosimetry, IRD/ CNEN, Brazil
IE	Severn Trent Laboratories, Whippany, NJ
IL	ISU Environmental Monitoring Program, Pocatello, ID
IN	Lockheed Martin Idaho Technical Corp., Analytical Laboratory
IS	Quanterra- St. Louis
IT	Quanterra- Richland Laboratory
KA	Knolls Atomic Power Lab, Schenectady
KR	Korea Atomic Energy Research Institute
LA	Los Alamos National Laboratory, NM
LB	Lawrence Berkeley Lab UCB
LL	LLNL Chemistry and Material Science/Environmental
LN	Los Alamos National Lab, ES&H
LV	UNLV, Dept of Health Physics
LW	Lawrence Livermore National Lab, Waste
MA	ORNL Health Sciences Research Div.
ME	Radiation Control Program, Jamaica Plain, MA
MH	Maine Health & Environmental Testing Laboratory
MJ	Mississippi State Department of Health, Jackson
ML	Babcock & Wilcox of Ohio, Mound, Miamisburg, Ohio
NA	US EPA NAREL, Montgomery, AL
ND	Dept. of Environmental Health and Safety, NC State University
NF	Nuclear Fuel Services, Erwin, TN
NJ	NJ Department of Health and Senior Services
NL	Fluor Daniel Fernald, Inc., Ohio
NM	Environmental Evaluation Group, Carlsbad, NM
NP	JAF Environmental Laboratory, New York Power Authority
NQ	New Mexico Department of Health, Albuquerque
NR	Naval Reactors Facility Chemistry, Scoville, ID
NS	State Lab of Public Health, North Carolina
NZ	National Radiation Laboratory, New Zealand
OB	OBG Laboratories, East Syracuse, NY
OC	Radiation Protection Service Laboratory, Ontario, Canada
OD	ORNL, Radiobioassay Lab
OH	Ohio Dept Of Health Laboratory, Columbus
OK	Southwest Laboratory of Oklahoma
OL	ORNL Environmental Sciences Div.
OS	Oregon Health Division Radiation Controls Section, Portland
OT	ORNL Radioactive Material Analysis Lab
OU	Outreach Laboratory, Broken Arrow, OK
PA	Mason & Hanger-Silas Mason Co., Inc., Battelle Pantex, Amarillo, TX
PK	Pakistan Institute of Nuclear Science & Technology
PO	Institute of Oceanology PAN, Poland
PR	Princeton Plasma Physics Lab
RA	V. G. Khlopin Radium Institute, St. Petersburg, Russia
RC	US NRC Region I Laboratory, PA
RE	Bechtel Nevada, Mercury, NV
RG	Thermo Nutech Rocky Flats Plant, Golden
RI	Waste Management Services of Hanford, Inc., 222S Lab
RK	Rock Island Arsenal, Illinois

Participating Laboratories in EML QAP51**Laboratories Reporting Data**

Code	Laboratory Name
RL	Bechtel Hanford-Radiological Counting Facility
SA	Sandia Labs Radioactive Sample Diag. Prog., NM
SB	SC Dept. of Health and Environment Control Radiological Lab
SE	Defence Research Establishment of Sweden (FOA)
SI	Jozef Stefan Institute, Slovenia
SL	Stanford Linear Accelerator Center
SN	Sanford Cohen Associates, Inc., Montgomery, AL
SR	Savannah River Environmental Laboratory
ST	SC DHEC, Aiken, South Carolina
SY	Syrian Arab Republic Atomic Energy Commission
TE	Teledyne Isotopes Midwest Lab, Northbrook, IL
TI	Teledyne Brown Engineering Environmental Services, Westwood, NJ
TK	Kevin Wright, Kingston, TN
TM	Thermo Nutech Albuquerque Lab, NM
TN	Thermo NuTech, Richmond, CA
TO	Thermo NUtech Oak Ridge Laboratory
TP	Taiwan Power Company, Taipei, Taiwan
TQ	Institute of Nuclear Energy Research, Taiwan
TR	University of Istanbul, Turkey
TW	Taiwan Radiation Monitoring Center
TX	Texas Dept. of Health/Laboratories, Austin
TY	Scientific Production Association, Russia
UC	United States Enrichment Corporation, Paducah, KY
UP	Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge
US	Interstate Nuclear Services, Springfield, MO
UY	Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge
WA	Environmental Radiation Lab, Off. of Public Health Labs. Seattle
WC	Waste Management Federal Services of Hanford
WE	Westinghouse Electric Corp., Madison, PA
WN	State Health Radiation Protection Section, Madison, WI
WO	Wisconsin State Lab of Hygiene
WP	Washington Public Power Supply System, Richland
WS	Weldon Springs Site, St Charles, MO
WT	Waste Stream Technology, Buffalo, NY
WV	West Valley Nuclear Services
YA	Duke Engineering & Sciences Environmental Lab, Westboro, MA
WW	West Valley Radiation Protection

Total Reporting Labs: 139

Participating Laboratories in EML QAP51**Laboratories NOT Reporting Data**

Code	Laboratory Name
AF	Air Force Analytical Lab, Brooks AFB
AL	Ames Laboratory, Ames, IA
AP	Aberdeen Proving Ground, Aberdeen, MD
AW	Argonne West National Lab
AY	Analytics, Inc. Atlanta, GA
BR	US Army Research Laboratory, Aberdeen Proving Ground
BS	B&W Nuclear Envir. Services, Leechburg, PA
CO	Bedford Institute of Oceanography, Dartmouth. Nova Scotia, Canada
DP	Duke Power Company, Huntersville, NC
EL	Energy Laboratories, Inc., Casper, WY
FJ	The University of the South Pacific, Fiji Islands
FT	USACECOM-DSRM, Fort Monmouth, NJ
HO	Rontgen Technische Dienst bv, The Netherlands
IA	Bhabha Atomic Research Centre, India
JE	Jacobs Engineering, Oak Ridge, TN
JL	Jefferson Lab, Newport News, VA
KO	Korea Institute of Nuclear Safety
LE	Lyle Environmental Management, Columbus, Ohio
LM	American Radiation Services of New Mexico, Los Alamos
MI	Massachusetts Institute of Technology
MS	Manufacturing Sciences Corporation, Oak Ridge
NW	Naval Reasearch LAb, Washington,DC
PS	PA-DEP Bureau of Radiation Protection, Harrisburg
SH	Savannah River Ecology Lab
SK	Savannah River Plant
SW	Southwest Research Institute, San Antonio, TX
TT	Tracer Technologies International, Inc., Cleveland
TU	Texas A&M University, Dept of Nuclear Engineering
UK	Lockheed Martin Energy Systems, Oak Ridge
WI	WIPP Site, Westinghouse Electric Corp.
YP	US Army Proving Ground, Yuma, AZ
YU	Institute of Occupational and Radiological Health, Serbia

Total Non-Reporting Labs: 32